

1

Appendix A

2

EA Distribution List

3

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EA DISTRIBUTION LIST

1	U.S. Army Corps of Engineers	49	Chief William Fisher
2	Buffalo District	50	Seneca-Cayuga Tribe of Oklahoma
3	1776 Niagara Street	51	R2301 E Steve Owens Blvd
4	Buffalo, NY 14207-3199	52	P.O. Box 1283
5		53	Miami, OK 74355
6	Border Patrol Facilities and	54	
7	Tactical Infrastructure	55	Chief Roger Hill
8	6650 Telecom Drive	56	Tonawanda Seneca Nation
9	Indianapolis, IN 46278	57	7027 Meadville Rd
10		58	via Basom, NY 14013
11	Ms. Felicia Johnson	59	
12	HQ AFRC	60	Chief Leo Henry
13	549 Pine Street, Bldg #549	61	Tuscarora Nation
14	Robins AFB, GA 31092	62	2006 Mt Hope Rd
15		63	via Lewiston, NY 14092
16	City of Niagara Falls	64	
17	P.O. Box 69	65	Ms. Ruth Pierpont, Director
18	Niagara Falls, NY 14302-0069	66	New York State Historic Preservation Office
19		67	Peebles Island Resource Center
20	Hon. Robert B. Cliffe, Supervisor	68	P.O. Box 189
21	Upper Level – Town Hall	69	Waterford, NY 12188-0189
22	2800 Church Road	70	
23	Wheatfield, NY 14120-1099	71	Mr. David A. Stilwell
24		72	Field Supervisor
25	Executive Director	73	U.S. Fish and Wildlife Service
26	Niagara County Historical Society	74	3817 Luker Road
27	215 Niagara St	75	Cortland, NY 13045
28	Lockport, NY 14094	76	
29		77	Tara Salerno
30	Executive Director	78	Information Services
31	Preservation Buffalo Niagara	79	New York State Department of
32	617 Main St	80	Environmental Conservation
33	Market Arcade, Suite M108	81	Division of Fish, Wildlife, and Marine
34	Buffalo, NY 14203	82	Resources
35		83	New York Natural Heritage Program–
36	Mr. Steven C. Richards, Supervisor	84	Information Services
37	Town of Niagara	85	625 Broadway, 5th Floor
38	7105 Lockport Road	86	Albany, NY 12233-4757
39	Niagara Falls, NY 14305	87	
40		88	Ms. Abby Snyder
41	Honorable Barry E. Snyder, Sr., President	89	Regional Director
42	Seneca Nation of Indians	90	New York State Department of
43	Wm. Seneca Building	91	Environmental Conservation–Region 9
44	12837 Route 438	92	270 Michigan Avenue
45	Irving, NY 14081	93	Buffalo, NY 14203
46		94	
47		95	
48		96	

Libraries

Niagara Falls Public Library
Earl W. Brydges Building
1425 Main Street
Niagara Falls, NY 14305

Niagara Falls Public Library
LaSalle Branch
8728 Buffalo Avenue
Niagara Falls, NY 14304

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Appendix B
Agency Correspondence

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MAY 09 2012



**U.S. Customs and
Border Protection**

Ms. Tara Salerno
Information Services
New York State Department of Environmental Conservation
Division of Fish, Wildlife, and Marine Resources
New York Natural Heritage Program—Information Services
625 Broadway, 5th Floor
Albany, NY 12233-4757

Dear Ms. Salerno:

U.S. Customs and Border Protection (CBP) proposes to construct, operate, and maintain a new Border Patrol Station (BPS) in the U.S. Border Patrol's Buffalo Sector, Niagara Area of Responsibility (AOR). The new BPS would replace the existing Niagara AOR BPS. CBP is requesting information regarding the known presence of threatened or endangered species or significant natural communities in the vicinity of three site alternatives that are being considered in the Town of Niagara, Niagara County, New York.

Site 1 is a 12.3-acre parcel located on the Niagara Falls Air Reserve Station in the Town of Niagara that is currently unused and is zoned Light Industrial. Site 2 is a 12-acre parcel located in the Town of Niagara on Williams Road south of the intersection of Williams Road and Niagara Falls Boulevard (US Route 62). The site is vacant, flat, and sparsely covered with grasses and some trees, and is zoned General Commercial. Site 3 is a 46.7-acre parcel located in the Town of Niagara on Tuscarora Road close to the preferred location. The site is vacant, flat, and grass covered. It is currently used as farmland and zoned Heavy Industrial. The boundaries of each site are depicted on the enclosed site map (enclosure 1). Approximate latitude and longitude coordinates for the sites are provided below.

Sites	Latitude	Longitude
Site 1 – Preferred Alternative - Air Reserve Station	43°07'11.5" N	-78°57'03.0" W
Site 2 – Alternative 2 - Williams Road	43°05'48.4" N	-78°56'32.9" W
Site 3 – Alternative 3 - Tuscarora Road	43°07'05.2" N	-78°57'17.5" W

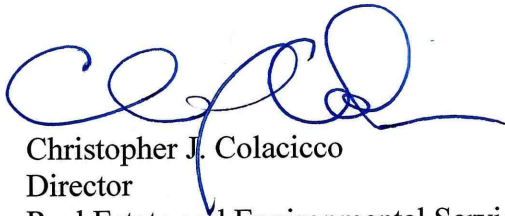
As part of the environmental review and planning process, CBP requests your input in identifying known threatened or endangered species or significant natural communities in the vicinity of the selected property. CBP is seeking similar information from the New York State Department of Environmental Conservation—Region 9 and the U.S. Fish and Wildlife Service.

If you require additional information or have any questions, please contact Ms. Loretta Whitacre at (202) 344-1726 or by e-mail at Loretta.Whitacre@dhs.gov, or at the address below.

U.S. Customs and Border Protection
Ms. Loretta L. Whitacre
EPA West / B155
1301 Constitution Ave. NW
Washington, DC 20004

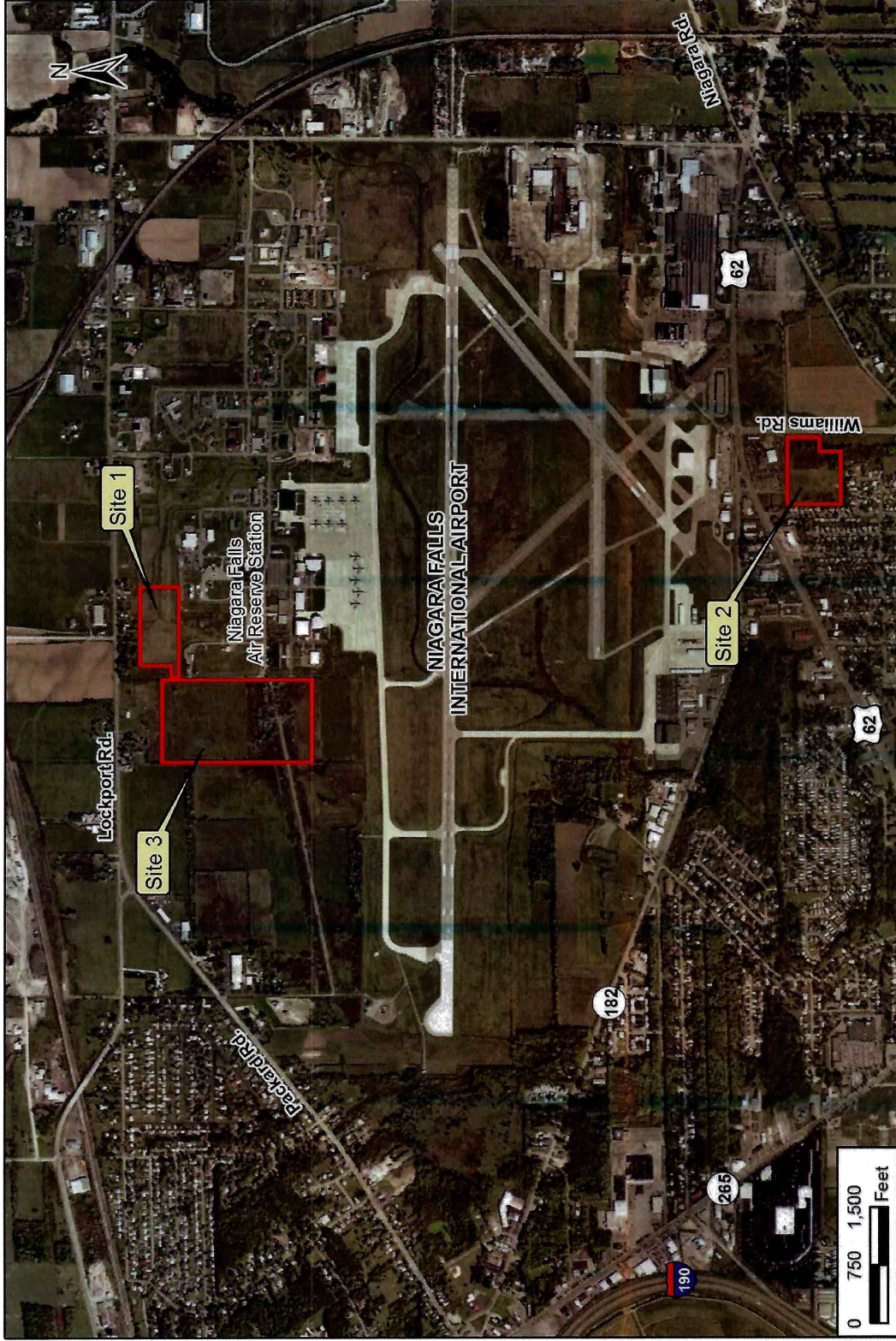
Thank you for your cooperation.

Sincerely,



Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure



Proposed Locations for New BPS Niagara, NY

Source: AEX 2007.

MAY 09 2012



**U.S. Customs and
Border Protection**

Ms. Abby Snyder
Regional Director
New York State Department of Environmental Conservation–Region 9
270 Michigan Avenue
Buffalo, NY 14203

Dear Ms. Snyder:

U.S. Customs and Border Protection (CBP) proposes to construct, operate, and maintain a new Border Patrol Station (BPS) in the U.S. Border Patrol's Buffalo Sector, Niagara Area of Responsibility (AOR). The new BPS would replace the existing Niagara AOR BPS. CBP is requesting information regarding the known presence of threatened or endangered species or significant natural communities in the vicinity of three site alternatives that are being considered in the Town of Niagara, Niagara County, New York..

Site 1 is a 12.3-acre parcel located on the Niagara Falls Air Reserve Station in the Town of Niagara that is currently unused and is zoned Light Industrial. Site 2 is a 12-acre parcel located in the Town of Niagara on Williams Road south of the intersection of Williams Road and Niagara Falls Boulevard (US Route 62). The site is vacant, flat, and sparsely covered with grasses and some trees, and is zoned General Commercial. Site 3 is a 46.7-acre parcel located in the Town of Niagara on Tuscarora Road close to the preferred location. The site is vacant, flat, and grass covered. It is currently used as farmland and zoned Heavy Industrial. The boundaries of each site are depicted on the enclosed site map (enclosure 1). Approximate latitude and longitude coordinates for the sites are provided below.

Sites	Latitude	Longitude
Site 1 – Preferred Alternative - Air Reserve Station	43°07'11.5" N	-78°57'03.0" W
Site 2 – Alternative 2 - Williams Road	43°05'48.4" N	-78°56'32.9" W
Site 3 – Alternative 3 - Tuscarora Road	43°07'05.2" N	-78°57'17.5" W

As part of the environmental review and planning process, CBP requests your input in identifying known threatened or endangered species or significant natural communities in the vicinity of the selected property. CBP is seeking similar information from the New York State Department of Environmental Conservation, Natural Heritage Program and the U.S. Fish and Wildlife Service.

Ms. Abby Snyder
Page 2

If you require additional information or have any questions, please contact Ms. Loretta Whitacre at (202) 344-1726 or by e-mail at Loretta.Whitacre@dhs.gov, or at the address below.

U.S. Customs and Border Protection
Ms. Loretta L. Whitacre
EPA West / B155
1301 Constitution Ave. NW
Washington, DC 20004

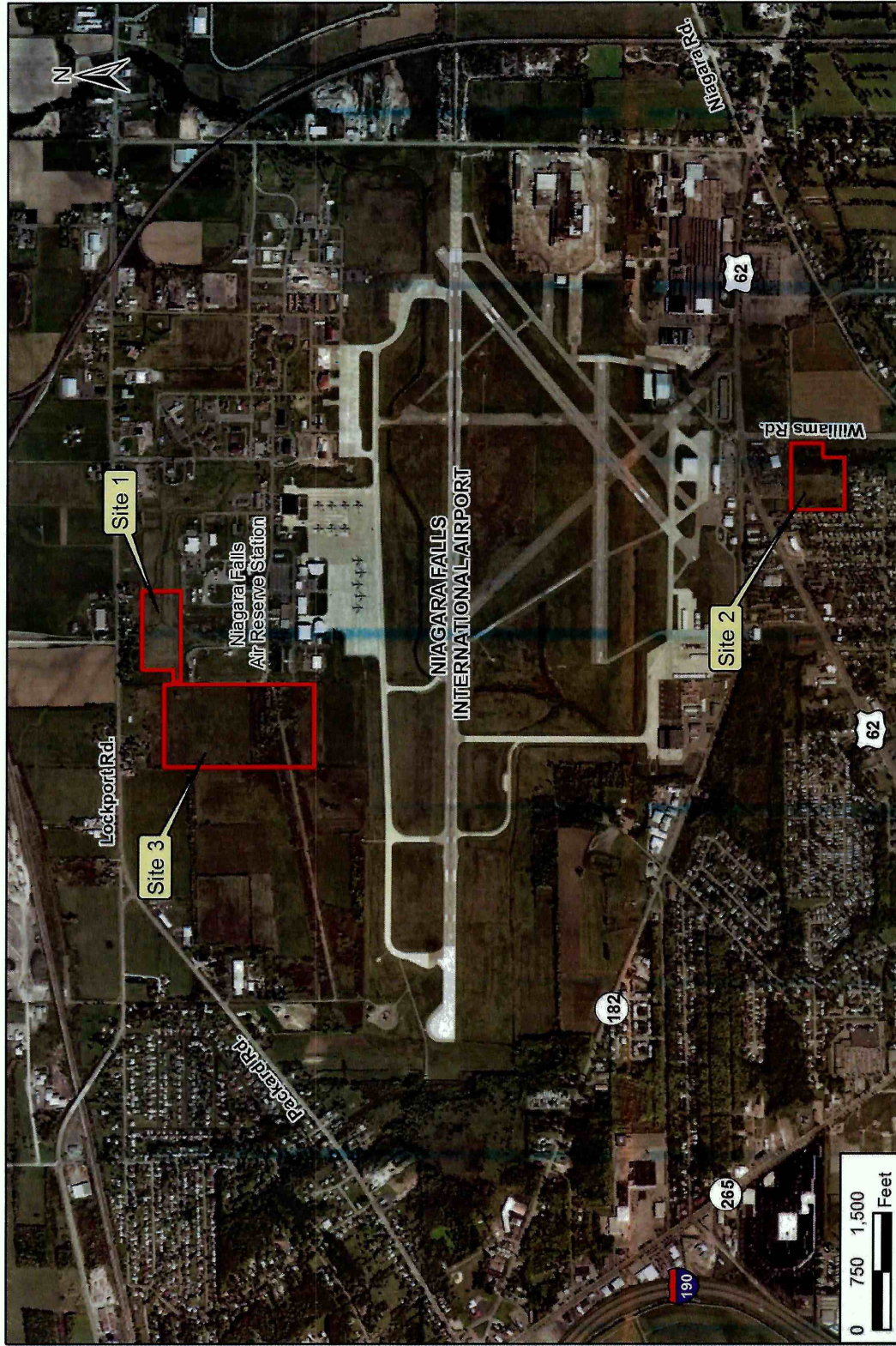
Thank you for your cooperation.

Sincerely,



Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure



Proposed Locations for New BPS Niagara, NY

Source: AEX 2007.



**U.S. Customs and
Border Protection**

Mr. David A. Stilwell
Field Supervisor
U.S. Fish and Wildlife Service
3817 Luker Road
Cortland, NY 13045

Dear Mr. Stilwell:

The U.S. Customs and Border Protection (CBP) proposes to construct, operate, and maintain a new Border Patrol Station (BPS) in the USBP's Buffalo Sector, Niagara Area of Responsibility (AOR). The new BPS would replace the existing Niagara AOR BPS. CBP is requesting information regarding the known presence of threatened or endangered species or significant natural communities in the vicinity of three site alternatives that are being considered in the Town of Niagara, Niagara County, New York.

Site 1 is a 12.3-acre parcel located on the Niagara Falls Air Reserve Station in the Town of Niagara that is currently unused and is zoned Light Industrial. Site 2 is a 12-acre parcel located in the Town of Niagara on Williams Road south of the intersection of Williams Road and Niagara Falls Boulevard (US Route 62). The site is vacant, flat, and sparsely covered with grasses and some trees, and is zoned General Commercial. Site 3 is a 46.7-acre parcel located in the Town of Niagara on Tuscarora Road near the preferred location. It is vacant, flat, and grass covered, is currently used as farmland, and is zoned Heavy Industrial. The boundaries of each site are depicted on the enclosed aerial location map (Figure 2-1). Approximate latitude and longitude coordinates for the sites are provided below.

Site	Latitude	Longitude
Site 1 – Preferred Alternative - Air Reserve Station	43°07'11.5" N	-78°57'03.0" W
Site 2 – Alternative 2 - Williams Road	43°05'48.4" N	-78°56'32.9" W
Site 3 – Alternative 3 - Tuscarora Road	43°07'05.2" N	-78°57'17.5" W

The Site 1 parcel is an approximately 12.3-acre vacant grass-covered lot within the boundaries of the Niagara Falls ARS (Figure 2-2). The habitat is primarily successional old field and includes some small tributaries with fringing palustrine emergent wetlands (PEM) in the center of the site, and a previously delineated PEM wetland located along the southern site boundary. Dominant species within the old field habitat include Timothy grass (*Phleum pratense*), red clover (*Trifolium pratense*), bull thistle (*Cirsium vulgare*), and other common lawn grasses. The parcel is mowed. Hydric vegetation is present along the margins of the drainages and within the emergent wetland. Hydric vegetation includes cattails (*Typha* spp.), soft rush (*Juncus effusus*), broom sedge (*Carex tribuloides*), and reedtop (*Agrostis gigantea*).

The Site 2 parcel is an approximately 12-acre vacant lot bordered to the north by Niagara Falls Boulevard and to the east by Williams Road. Site 2 is located south of the Niagara Falls ARS (Figure 2-3), immediately east of a highly developed residential area. Site 2 includes the following habitat types: successional old field, mowed lawn, successional northern hardwood, and brushy cleared land. The successional old field habitat, which comprises the majority of Site 2, is dominated by Timothy grass, red clover, and other common lawn grasses. Evidence of prior site development and disturbance was noted in the western portion of the site during the field reconnaissance survey (e.g., fire hydrant, utility poles). The mowed lawn habitat is adjacent to residential homes bordering the western boundary of the site and includes scattered trees. A small area of successional northern hardwood forest dominated by green ash (*Fraxinus pennsylvanica*), was identified in the southeast corner of the parcel; this portion of the parcel was inundated at the time of the survey, preventing identification of shrub and herbaceous understory species. The southwest corner was identified as shrubby cleared land dominated by honeysuckle (*Lonicera* spp.) and assorted turf grasses.

The Site 3 parcel is an approximately 46.7-acre parcel immediately west of the Niagara Falls ARS, on the west side of Tuscarora Road. Site 3 included cropland and brushy cleared land. The northern half of the site is cropland/field crop habitat and was growing wheat at the time of the survey. A drainage ditch in the center of this agricultural field flows from north to south, draining into a larger ditch running east-west in the central portion of the parcel (Figure 2-2). An abandoned drag racing strip and numerous associated impermeable surfaces are located in the southern half of the property. This portion of the site is covered with secondary successional growth, consisting of dense shrubs, which include gray dogwood (*Cornus racemosa*), honeysuckle, and black willow (*Salix nigra*). In addition, drainage and potential wetland areas are present throughout this half of Site 3, with cattails being the dominant species.

The CBP has contracted with Tetra Tech, Inc., to complete an environmental assessment of the three potential sites for the new BPS in compliance with the National Environmental Policy Act, and to conduct other required surveys and studies.

As part of that process, a USFWS online Endangered Species Program database search for the occurrence of Endangered Species Act (ESA)-listed species was conducted for Niagara County, New York. Although no ESA species were listed in the USFWS Endangered Species Program database, the List of Threatened, Endangered, Proposed, and Candidate Species in New York available on the New York Field Office website lists two species for Niagara County, including the bald eagle (*Haliaeetus leucocephalus*) and eastern prairie fringed orchid (*Platanthera leucophea*). The eastern prairie fringed orchid is listed as federally threatened, and the bald eagle has been delisted. However the bald eagle remains protected under the Bald and Golden Eagle Protection Act. Below are brief descriptions of suitable habitats for these species.

The bald eagle is a state-listed threatened species and a recently federally delisted species that is commonly found close to bays, rivers, lakes, or other bodies of water that reflect the general availability of their primary food sources – fish and waterfowl. They tend to avoid areas with nearby human activity (boat traffic, pedestrians) and development (buildings). Perch sites are typically in deciduous and coniferous trees. Nest trees include pines, spruce, firs, cottonwoods,

oaks, poplars, and beech. Wintering areas are most commonly associated with open water. During the winter, bald eagles may associate with waterfowl concentrations or congregate in areas with abundant dead fish. Roost sites are typically in conifers or other sheltered areas. Although there are two large reservoirs and the Niagara River located near the proposed BPS Sites, no suitable perching, roosting, or nesting habitat was observed. Based on a review of bald eagle habitat requirements and the site assessment, the proposed sites were determined to be unsuitable habitat for the Bald Eagle.

The eastern prairie fringed orchid is a federally listed threatened species. It is an herbaceous plant found in mesic to wet prairies and wet sedge meadows. Peripheral habitat includes sedge-sphagnum bog mats around neutral pH kettle lakes, and fallow agricultural fields. Wet ditches and railroad Right-of-Ways also serve as refugia. Based on a review of eastern prairie fringed orchid habitat requirements and habitat surveys, marginal habitat for the eastern prairie fringed orchid may be present within the wet ditches and cropland when fallow. However, based on the current and previous disturbance within the sites and historical nature of the listing, no impacts to the eastern prairie fringed orchid are expected as a result of the project.

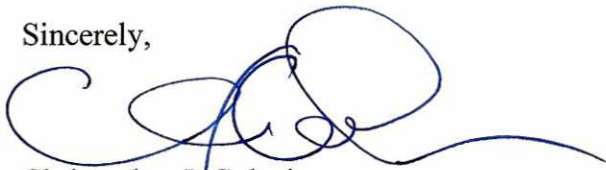
CBP is requesting your review and concurrence that the proposed project will not impact federally protected species, their critical habitat, or significant biological or geological features. To assist you with your evaluation we have also enclosed aerial photographs and a photographic log documenting site conditions.

If you require additional information or have any questions, please contact Loretta Whitacre at (202) 344-1726 or by e-mail at Loretta.Whitacre@dhs.gov, or at the address below.

U.S. Customs and Border Protection
Ms. Loretta L. Whitacre
EPA West / B155
1301 Constitution Ave. NW
Washington, DC 20004

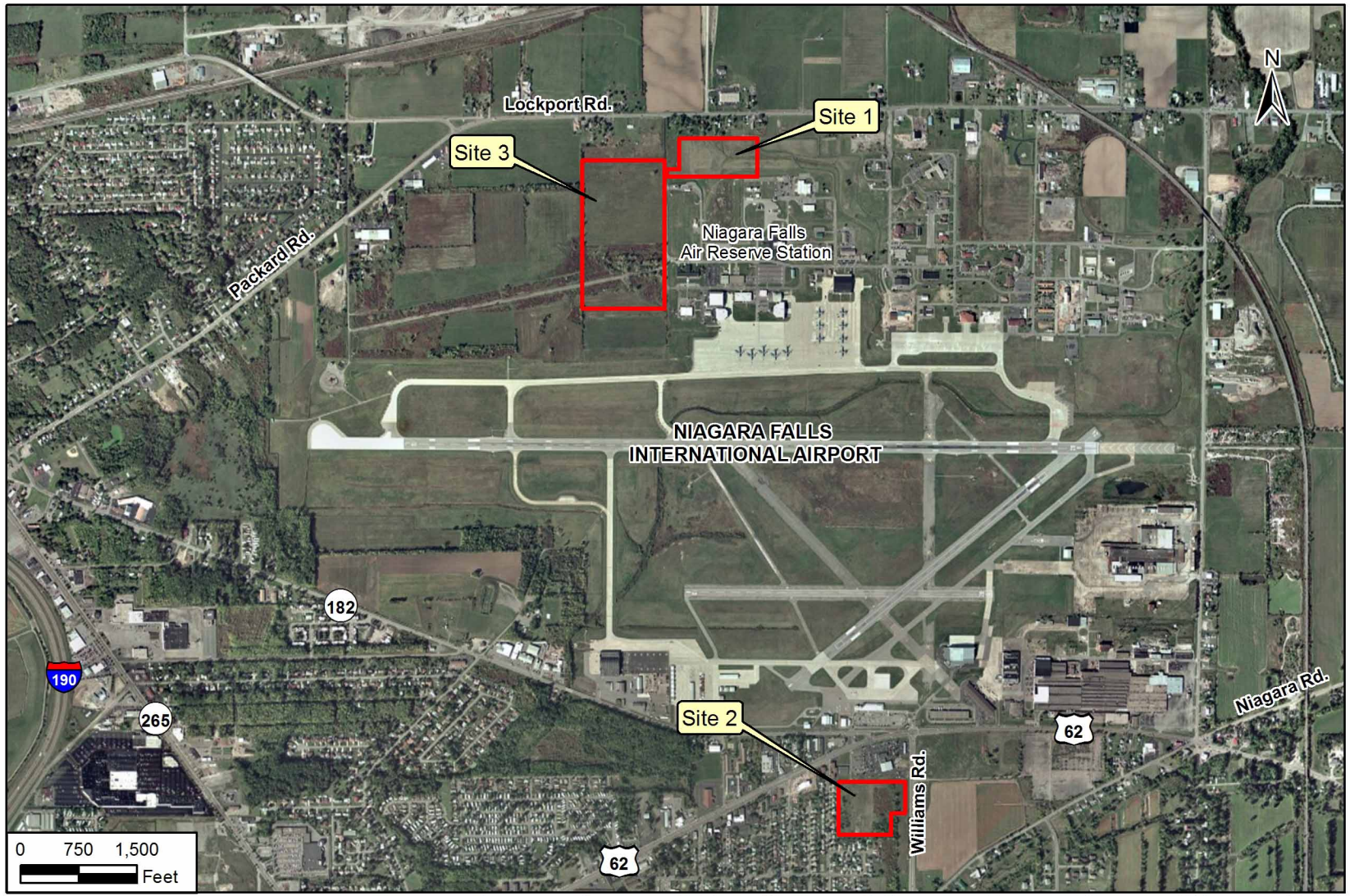
Thank you for your assistance in this matter.

Sincerely,



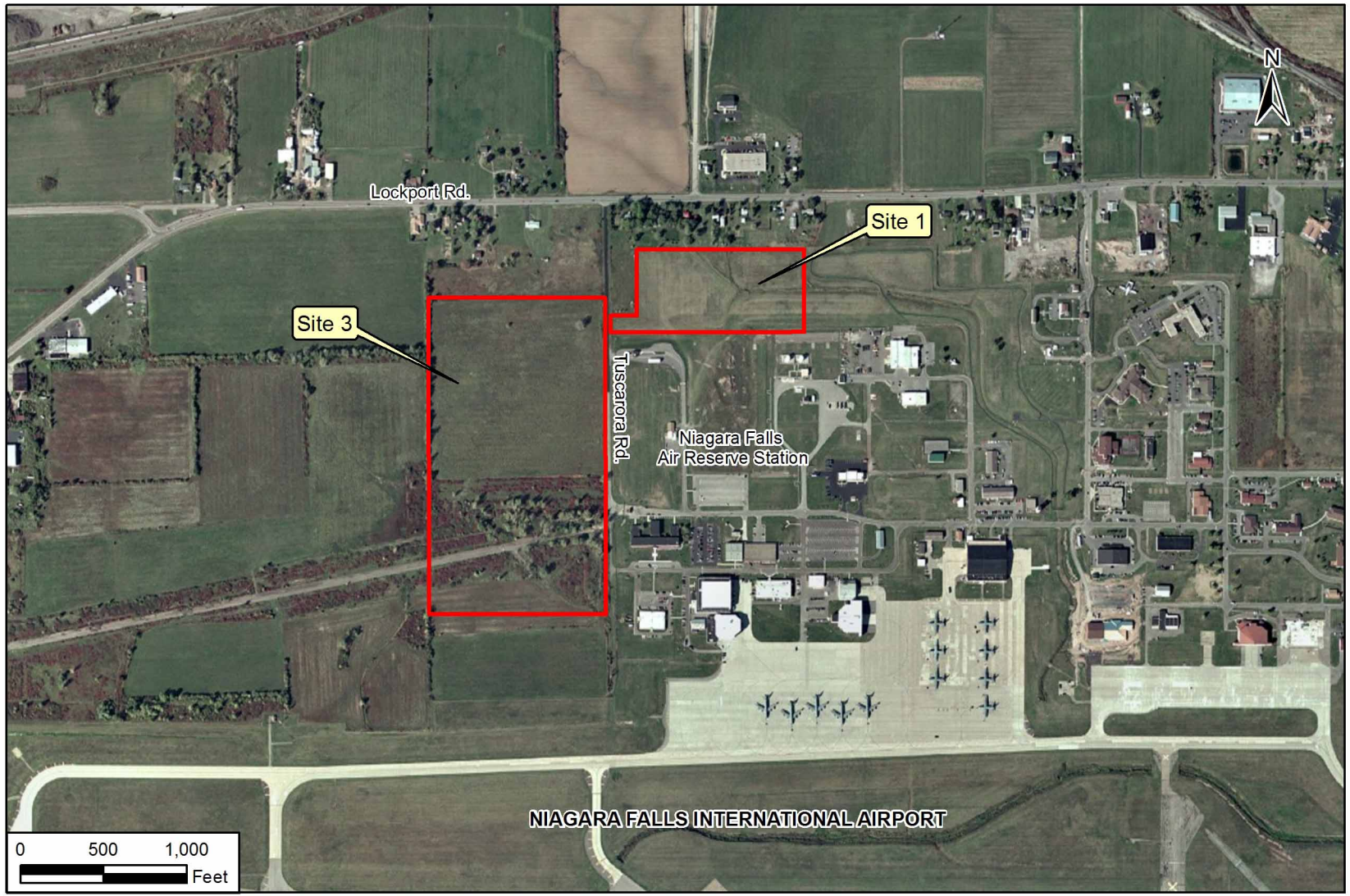
Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosures



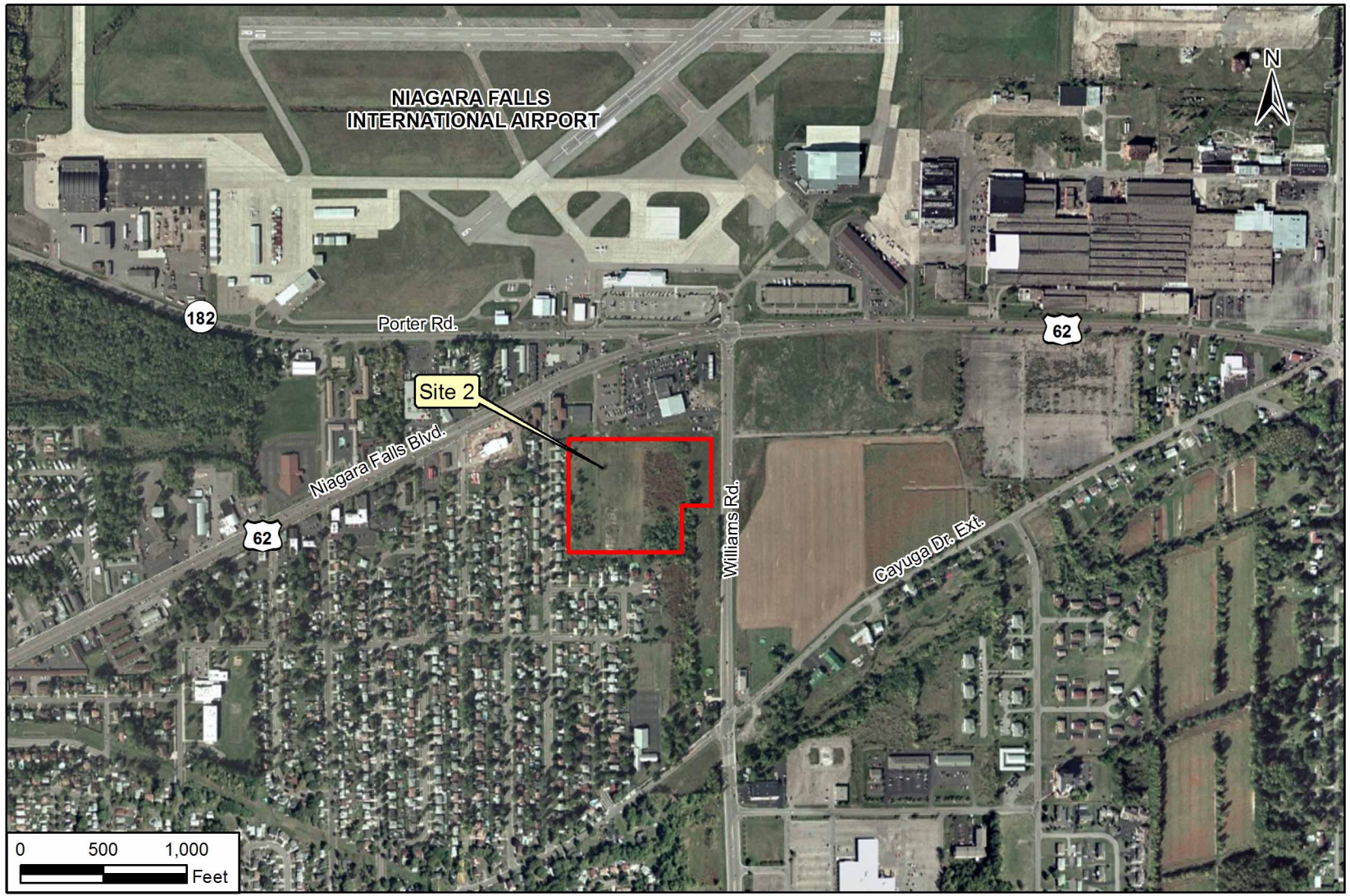
Location of Preferred Locations for a New BPS

Figure 2-1



Aerial View of the Alternative 1 Parcel (Niagara Falls Air Reserve Station) and the Alternative 3A Parcel (Tuscarora Road West)

Figure 2-2



Aerial View of Alternative 2 Parcel (Williams Road)

Figure 2-3

PHOTOGRAPHIC RECORD

Company: United States Customs and Border Protection
Project: Border Patrol Station, Niagara, New York



Photographer: B. Locking

Date: 05/08/2012

Photo No.: 1

Direction: E

Comments:

Site 1 - old field along drainage
in eastern portion of site.



Photographer: B. Locking

Date: 05/08/2012

Photo No.: 2

Direction: E

Comments:

Site 1 - previously delineated
wetland within southern portion
of site.

PHOTOGRAPHIC RECORD

Company: United States Customs and Border Protection
Project: Border Patrol Station, Niagara, New York



Photographer: B. Locking
Date: 05/08/2012
Photo No.: 3
Direction: E
Comments:

Site 2 – wooded area in southeast portion of site. Tree density becomes greater to the right of photograph.



Photographer: B. Locking
Date: 05/08/2012
Photo No.: 4
Direction: W
Comments:

Site 2 – residential area to west of site. Evidence of disturbance can be seen on left side of photograph in the background.

PHOTOGRAPHIC RECORD

Company: United States Customs and Border Protection
Project: Border Patrol Station, Niagara, New York



Photographer: B. Locking

Date: 05/08/2012

Photo No.: 5

Direction: W

Comments:

Site 3 – active agricultural field in northern portion of site.



Photographer: B. Locking

Date: 05/08/2012

Photo No.: 6

Direction: SW

Comments:

Site 3 – abandoned drag racing strip in southern portion of site. Presence of water is due to impermeable surface.



New York State Office of Parks, Recreation and Historic Preservation Historic Preservation Field Services Bureau

Peebles Island Resource Center, PO Box 189, Waterford, NY 12188-0189 (Mail)
Delaware Avenue, Cohoes 12047 (Delivery)

(518) 237-8643

PROJECT REVIEW COVER FORM

Rev. 5-05

Please complete this form and attach it to the top of **any and all information submitted to this office** for review.
Accurate and complete forms will assist this office in the timely processing and response to your request.

This information relates to a previously submitted project.

PROJECT NUMBER ____ PR ____

COUNTY Niagara

☐

If you have checked this box and noted the previous Project Review (PR) number assigned by this office you do not need to continue unless any of the required information below has changed.

2. This is a new project.

☒

If you have checked this box you will need to complete ALL of the following information.

Project Name New US Border Patrol Station - Niagara Falls

Location Site 1 - Niagara Falls Air Reserve Station, Site 2 - Williams Road & Niagara Falls Blvd, Site 3 - Tuscarora Road
You MUST include street number, street name and/or County, State or Interstate route number if applicable

City/Town/Village Town of Niagara
List the correct municipality in which your project is being undertaken. If in a hamlet you must also provide the name of the town.

County Niagara
If your undertaking* covers multiple communities/counties please attach a list defining all municipalities/counties included.

TYPE OF REVIEW REQUIRED/REQUESTED (Please answer both questions)

A. Does this action involve a permit approval or funding, now or ultimately from any other governmental agency?

☐ No ☒ Yes

If Yes, list agency name(s) and permit(s)/approval(s)

Agency involved	Type of permit/approval	State	Federal
<u>USACE</u>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

B. Have you consulted the NYSHPO web site at ****<http://nysparks.state.ny.us>** to determine the preliminary presence or absence of previously identified cultural resources within or adjacent to the project area? If yes:

☒ Yes ☐ No

Was the project site wholly or partially included within an identified archeologically sensitive area?

☒ Yes ☐ No

Does the project site involve or is it substantially contiguous to a property listed or recommended for listing in the NY State or National Registers of Historic Places?

☐ Yes ☒ No

CONTACT PERSON FOR PROJECT

Name Loretta Whitacre Title Environmental Planning

Firm/Agency US Customs and Border Protection

Address 1301 Constitution Ave, NW, Suite B-155 City Washington STATE DC Zip 20229

Phone (202) 344-1726 Fax () E-Mail LORETTA.Whitacre@dhs.gov

**<http://nysparks.state.ny.us> then select HISTORIC PRESERVATION then select On Line Resources



**U.S. Customs and
Border Protection**

Ms. Ruth Pierpont, Director
New York State Historic Preservation Office
Peebles Island Resource Center
P.O. Box 189
Waterford, NY 12188-0189

Dear Ms. Pierpont:

The U.S. Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects of the proposed construction, operation, and maintenance of a new U.S. Border Patrol Station (USBPS) in CBP Buffalo Sector, Niagara Area of Responsibility (AOR). The proposed USBPS is needed to remedy the current facilities that are inadequate to meet the increasing needs of agency mission to achieving border security. The proposed new station will substantially facilitate the overall efficiency of current operations and allow future expansion, if needed. The new USBPS would replace the existing Niagara AOR USBPS. The

CBP is considering three potential sites in the Town of Niagara, Niagara County, New York, as candidate sites for the new USBPS. Site 1 is a 12.3-acre parcel located on the Niagara Falls Air Reserve Station (ARS). Site 2 is a 12-acre parcel located on Williams Road south of the intersection of Williams Road and Niagara Falls Boulevard (US Route 62). Site 3 is a 46.7-acre parcel located in the Town of Niagara on Tuscarora Road near the preferred location. The proposed project boundary for each site is depicted on the enclosed U.S. Geological Survey (USGS) quadrangle map (Figure 1). Approximate latitude and longitude latitude coordinates for the sites are provided below.

Sites	Latitude	Longitude
Site 1 – Preferred Alternative - Air Reserve Station	43°07'11.5" N	-78°57'03.0" W
Site 2 – Alternative 2 - Williams Road	43°05'48.4" N	-78°56'32.9" W
Site 3 – Alternative 3 - Tuscarora Road	43°07'05.2" N	-78°57'17.5" W

The proposal to construct, operate, and maintain a USBPS in the Niagara AOR would be in compliance with the *U.S. Customs and Border Protection Design Standard for U.S. Border Patrol* (U.S. Department of Homeland Security, April 2009). The facility would be a modular building or set of buildings with approximately 40,000 square feet of office, garage, and storage space adequate to meet the mission needs of the agents assigned to the station, be designed to standards appropriate to northern climates (e.g., frost layer), and incorporate Leadership in Energy and Environmental Design (LEED) Silver Certified Construction Standards. Impacts will include surface and subsurface ground disturbance, including vegetation clearing and grubbing and topsoil stripping.

CBP has contracted with Tetra Tech, Inc. (Tetra Tech) to complete the aforementioned EA addressing the three potential sites for the new USBPS in compliance with the National Environmental Policy Act and Section 106 of the National Historic Preservation Act (NHPA), and to conduct other required surveys and studies. Tetra Tech has conducted a reconnaissance survey (visual assessment, site walkover, and photo-documentation) and background research (including site file search at the New York Office of Parks, Recreation, and Historic Preservation [OPRHP]) of all areas within the project's Area of Potential Effect (APE). No previously recorded sites are located within the project's APE or within the immediate vicinity.

The Preferred Alternative - Site 1 parcel is an approximately 12.3-acre vacant grass-covered lot within the boundaries of the Niagara Falls ARS. The parcel is located within a residential/rural/light industrial mix and bordered by homes to the north. The buildings immediately adjacent to the parcel are circa mid-20th century vernacular style houses. There are no properties listed or eligible for listing in State/National Register of Historic Places (S/NRHP) within or immediately adjacent to, Site 1 – Preferred Alternative. The nearest S/NRHP listed property is the Town of Niagara District School #2, which is located approximately 400 feet to the north across Lockport Road. The parcel was surveyed for cultural resources in 1998 by Pratt and Huth Associates, LLP (OPRHP Project Review No. 95PR2445). No cultural resources were identified within the parcel and no further cultural resources investigations were recommended. The OPRHP concurred with the recommendations in a letter dated May 12, 2000.

The Alternative Site 2 parcel is an approximately 12-acre vacant lot bordered to the east by Williams Road and to the north by Niagara Falls Boulevard. Alternative Site 2 is located directly adjacent to a highly developed residential/commercial area bordered by private residences to the west and south, an automobile dealership to the north and Williams Road to the east. The residential buildings are circa late-20th century vernacular style houses. There are no S/NRHP-listed or eligible properties within or immediately adjacent to, the Alternative 2 site. The nearest S/NRHP listed property is the Johann Williams Farm, which is located approximately 1,500 feet to the south across Cayuga Road.

No previous cultural resources surveys were conducted of the Alternative Site 2 parcel; however, several surveys have been conducted in the vicinity. Two previously identified archaeological sites or historic places were identified within 1-mile of the Alternative 2 site parcel (see Table 1). According to the OPRHP GIS-Public Access web site, the Alternative 2 parcel is located in an area of archeological sensitivity.

Table 1. Previously identified archaeological or historic places within 1-mile of Alternative Site 2

NYSOPRHP Site #	Additional Site #	Distance to APE m(ft)	Time Period	Site Type
06340.000366	John Williams site, NYSM 10529, UB 2867	485 (1591)	Unidentified precontact	No info
06340.0000365	John Croff Site, NYSM 10528, UB 2866	604 (1982)	Late Archaic, Brewerton	Surface evidence

Source: New York State Office of Parks, Recreation, and Historic Preservation 2012

Background research and field reconnaissance indicate that the APE at Alternative site 2 was cleared for crop land by at least the early 19th-century and later for residential/commercial development in the 20th-century. However, collaborating historic map research is inconclusive. USGS topographic maps from 1900 show no development within or adjacent to the parcel. The 1948 USGS topographic map depicts a two street cul-du-sac with a number of structures on both sides of the streets within the parcel. However, aerial photography from 1958 shows what appear to be parallel roads and cul-du-sac with two large structures but not multiple structures as shown on the USGS map. The two large structures and roads are visible in subsequent aerial photography from 1962 and 1963. The buildings are not visible in 1972 aerial photography but their former footprints are discernable. The parcel is depicted as vacant on the 1980 USGS topographic map. Today, the APE stands vacant although evidence of former development can be seen in the form of unwired utility poles, a fire hydrant in the middle of the field, and disturbances left from the former road (see Attachment B: Photographic Record).

An assessment for archaeological sensitivity of the Alternative 2 site was based on site characteristics (e.g., landform/terrain, soil characteristics, and proximity to water), the results of the reconnaissance survey, site file search, and background research. Also taken into consideration was the nature and level of observed disturbance or modification to the landscape in the project area due to historic and recent human development. Given the extent of 20th-century disturbances, there is no significant factor suggesting intact prehistoric archaeological material would be present. The Alternative 2 site was identified as containing areas with a high probability of containing historic archaeological sites. Given the uncertainties of the prior historic landuse, a high potential for historic archaeological sites related to the early to middle 20th-century is likely.

The Alternative Site 3 parcel is an approximately 46.7-acre parcel immediately west of the Niagara Falls ARS, on the east side of Tuscarora Road. The parcel is within a rural/industrial district and bordered by agricultural fields to the west, south, and north and the Niagara Falls ARS to the east. The north half of the site is active agricultural field. An abandoned automobile drag racing strip is located in the southern half of the property. Beyond the agricultural fields to the north several residential buildings are located along Lockport Road. The residential buildings are circa mid-20th century vernacular style houses. There are no S/NRHP-listed or eligible properties within or immediately adjacent to, the Alternative 3 site. The nearest S/NRHP is the Town of Niagara District School #2, which is located approximately 1,000 feet to the northeast across Lockport Road.

The parcel was studied as part of the New York State Shovel Ready Certification Program, which facilitates site development permitting processes. A Draft Generic Environmental Impact Statement was issued in 2011 by the Town of Niagara, the lead agency. As part of the Shovel Ready certification process, the OPRHP in a letter dated May 25, 2010, responded and opined that the “project” would have no effect on cultural resources in or eligible for inclusion in the S/NRHP.

CPB requests that the OPRHP review the enclosed project information and provide any comments on cultural resource concerns as a result of the proposed project activities. Enclosed is a USGS map of the project boundaries (Figure 1) and photographs of the existing parcels (Attachment A). Based on results of the reconnaissance surveys and background research

Ms. Ruth Pierpont

Page 4

described herein, the lack of cultural resources identified in the 1998 survey of Site 1, and OPRHP determination that future development at Site 3 would have no effect on cultural resources, CBP has determined that there would be no adverse effect to cultural resources as a result of the proposed project activities at Site 1 or Site 3. Based on results of the reconnaissance survey and background research CBP determined there is the potential for culturally or historically significant resources being present at Site 2. Should Alternative Site 2 be selected for the new USBPS, CBP would conduct the necessary consultations and surveys to fulfill its requirements under Section 106 of the NHPA. We request your concurrence on our finding.

Thank you for your assistance in this matter. If you require additional information or have any questions, please contact Loretta Whitacre at (202) 344-1726 or by e-mail at Loretta.Whitacre@dhs.gov, or at the address below.

U.S. Customs and Border Protection

Ms. Loretta L. Whitacre

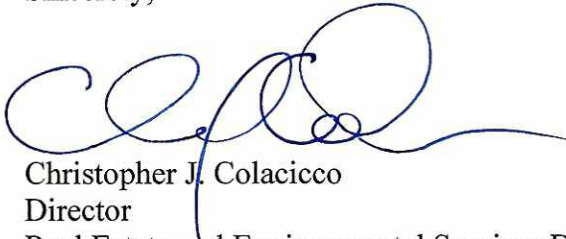
EPA West / B155

1301 Constitution Ave. NW

Washington, DC 20004

Thank you for your assistance in this matter.

Sincerely,

A handwritten signature in blue ink, consisting of a series of loops and flourishes, identifying Christopher J. Colacicco.

Christopher J. Colacicco

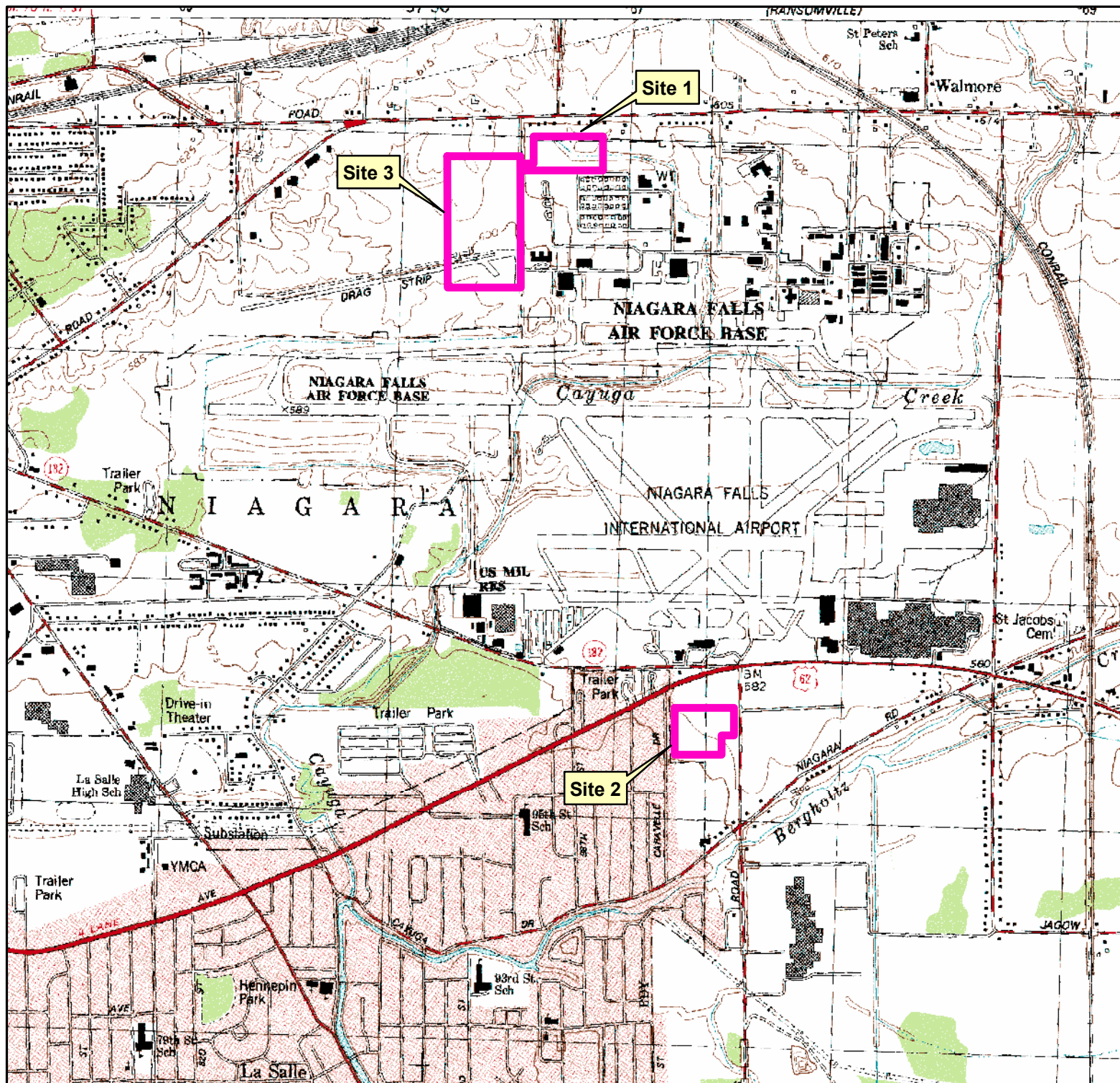
Director

Real Estate and Environmental Services Division

Border Patrol Facilities and Tactical Infrastructure

Program Management Office

Enclosures



Legend

Site Boundary



0 1,000 2,000 Feet

Figure 1. USGS Site Location for Niagara Falls CBP Station

Prepared For:
USACE-Buffalo District

Prepared By:



06/2012

Source: USGS 7.5" Digital Raster Graphic (DRG).
DRG used; Tonawanda West, New York 1980.

Coordinate System: North American Datum, 1983
Universal Transverse Mercator, Zone 17, North, Meter

ATTACHMENT B
PHOTOGRAPHIC RECORD

PHOTOGRAPHIC RECORD

Company: United States Customs and Border Protection
Project: Border Patrol Station, Niagara, New York



Photographer: B. Locking
Date: 05/08/2012
Photo No.: 1
Direction: West
Comments:

Preferred Alternative – Site 1.
View of Site 1 from the
approximate center of field
looking west.



Photographer: B. Locking
Date: 05/08/2012
Photo No.: 2
Direction: North
Comments:

Preferred Alternative – Site 1.
View of Site 1 from the
approximate center of field
looking north.

PHOTOGRAPHIC RECORD

Company: United States Customs and Border Protection
Project: Border Patrol Station, Niagara, New York



Photographer: B. Locking

Date: 05/08/2012

Photo No.: 3

Direction: East

Comments:

Preferred Alternative – Site 1.
View of Site one 1 the
approximate center of field
looking east.



Photographer: B. Locking

Date: 05/08/2012

Photo No.: 4

Direction: South

Comments:

Preferred Alternative – Site 1.
View of Site 1 from the
approximate center of field
looking south.

PHOTOGRAPHIC RECORD

Company: United States Customs and Border Protection
Project: Border Patrol Station, Niagara, New York



Photographer: B. Locking
Date: 05/08/2012
Photo No.: 5
Direction: West
Comments:

Alternative Site 2 – View of Site 2 from the eastern boundary looking west across the parcel. Ground conditions here show little disturbance.



Photographer: B. Locking
Date: 05/08/2012
Photo No.: 6
Direction: West
Comments:

Alternative Site 2 – View of Site 2 from the approximate center of the field looking west toward the parcel boundary. Ground conditions here are disturbed and contain fill, gravel, and some impervious surfaces. Note un-wired utility pole in field.

PHOTOGRAPHIC RECORD

Company: United States Customs and Border Protection
Project: Border Patrol Station, Niagara, New York



Photographer: B. Locking

Date: 05/08/2012

Photo No.: 7

Direction: North

Comments:

Alternative Site 2 – View of Site 2 from the approximate center of the field looking north toward the parcel boundary. Car dealership is shown in background. Ground conditions here are disturbed and contain fill, gravel, and some impervious surfaces. Note fire hydrate in field.



Photographer: B. Locking

Date: 05/08/2012

Photo No.: 8

Direction: South

Comments:

Alternative Site 2 – View of Site 2 from the approximate center of the field looking sljgn toward the parcel boundary. Ground conditions here are disturbed and contain fill, gravel, and some impervious surfaces. Note overgrown road and un-wired utility poles in field.

PHOTOGRAPHIC RECORD

Company: United States Customs and Border Protection
Project: Border Patrol Station, Niagara, New York



Photographer: B. Locking
Date: 05/08/2012
Photo No.: 9
Direction: North
Comments:

Alternative Site 2 – View of Site 2 from the approximate center of the field looking north toward the parcel boundary. Ground conditions here are disturbed and contain fill, gravel, and some impervious surfaces. Note un-wired utility pole in field. Niagara Falls airport control tower seen in background.



Photographer: B. Locking
Date: 05/08/2012
Photo No.: 10
Direction: West
Comments:

Alternative Site 3 – View of Site 3 from eastern boundary looking across the parcel. Active crop land occupies the north half of the parcel.

PHOTOGRAPHIC RECORD

Company: United States Customs and Border Protection
Project: Border Patrol Station, Niagara, New York



Photographer: B. Locking
Date: 05/08/2012
Photo No.: 11
Direction: West
Comments:

Alternative Site 3 – View of Site 3 from the eastern boundary looking across the parcel. Former drag strip shown. Southern half of parcel is occupied by the former racing facility. Ground conditions here are disturbed and contain fill, gravel, and impervious surfaces.



Photographer: B. Locking
Date: 05/08/2012
Photo No.: 12
Direction: North
Comments:

Alternative Site 3 – View of Site 3 from the southeast corner. Niagara Falls ARS is shown on the left. Ground conditions here are disturbed and contain fill, gravel, and impervious surfaces.



New York State Office of Parks, Recreation and Historic Preservation

Division for Historic Preservation • Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

www.nysparks.com

Andrew M. Cuomo
Governor

Rose Harvey
Commissioner

August 14, 2012

Ms. Loretta L. Whitacre
US Customs and Border Protection
EPA West/B155
1301 Constitution Avenue NW
Washington, DC 20004

RE: US Customs and Border Protection (DHS)
New US Border Patrol Station
Niagara Falls, Niagara County
12PR02835

Dear Ms. Jadrosich:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (SHPO) regarding the proposed construction of a border patrol facility in Niagara Falls. We have reviewed the submitted documentation in accordance with Section 106 of the National Historic Preservation Act of 1966 and the relevant implementing regulations.

Based on the information submitted, the SHPO concurs with the findings presented in Mr. Colacicco's letter dated July 2, 2012. Dr. Nancy Herter of our archaeology unit stated that she has no archaeological concerns for the three sites: Sites 1 and 3 were previously cleared by our office; Site 2 is disturbed. Additionally, we have no architectural or above ground concerns. Therefore, it is our opinion that the construction of a new facility at any of the sites described will have No Adverse Effect on historic and cultural resources in the Area of Potential Effect. Should you, during the construction phase of the project, come upon any previously unknown archaeological resources, please contact Dr. Herter at 518-237-8643, extension 3280.

Thank you for your thoughtful approach to the development of the sites. Please refer to the SHPO Project Review (PR) number in any future correspondence regarding your project.

Sincerely,

Elizabeth Martin
Historic Sites Restoration Coordinator

Via email only

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Appendix C
USDA NRCS Farmland Conversion Impact Rating

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May 16, 2012

Ms. Cathy Crotty
USDA NRCS State Office
441 South Salina Street, Suite 354
Syracuse, NY 13202-2450

**Re: Farmland Conversion Impact Rating Request for
US Customs Border Protection
Niagara Area of Responsibility Border Patrol Station, Niagara Falls, New York**

Dear Ms. Crotty:

Please find enclosed three (3) copies of the U.S. Department of Agricultural Farmland Conversion Impact Rating Form (AD-1006) and associated site maps for the proposed *US Customs Border Patrol Station Niagara Falls, New York*. We request a prime farmland determination for the three sites that are being evaluated for development.

Site A is an 12.3 acre site located on the Niagara Falls Air Reserve Station and is the preferred alternative for development. Site B is 12 acres, Site C is 46.7 acre and both are privately owned. All proposed sites are located on Odessa silty clay loam, 0 to 2 percent slopes which is considered prime farmland if drained. Site 2 has 1.59 acres of a non-prime farmland soil type.

Please see the enclosed site maps for the site locations for proposed development of a 40,000 square foot border patrol station. The building footprint was calculated to directly affect prime farmland soils for the purposes of this evaluation. The chosen site will also likely include parking, covered storage, and a K-9 facility including a kennel and dog runs; however the exact footprint has not been determined at this time.

If you have any questions, please contact Heather Conn at (225) 383-1780.

Regards,

Heather Conn, PLA
Landscape Architect | Environmental Scientist

cc: Sarah Hamilton – USACE, Buffalo District

Tetra Tech, Inc.

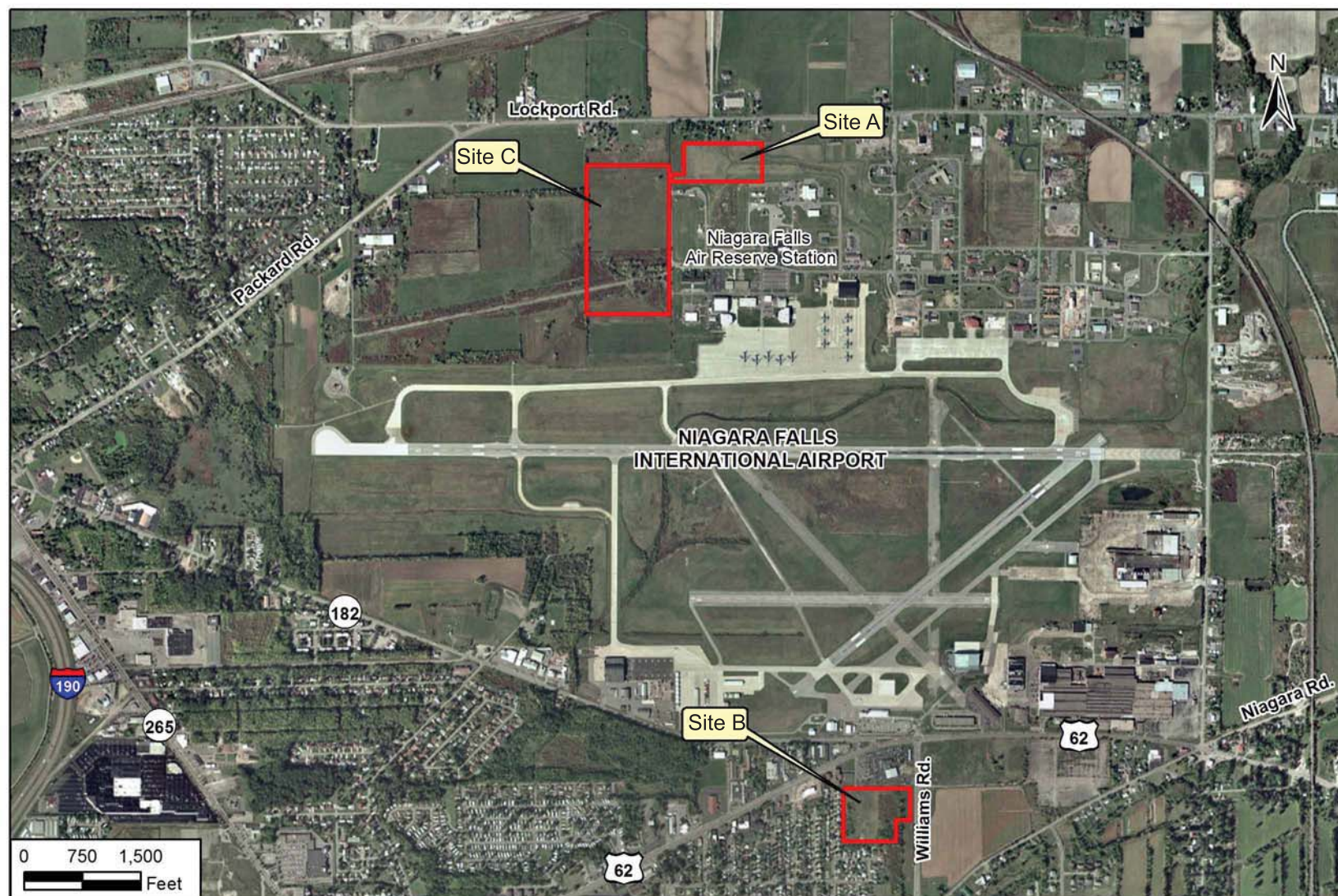
Physical 748 Main Street, Suite B, Baton Rouge, LA 70802

Mailing P.O. Box 2188, Baton Rouge, LA 70821

Tel 225.383.1780 Fax 225.387.0203 www.tetrattech.com

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 5/16/12			
Name Of Project US Customs Border Patrol Station Niagara Falls, N		Federal Agency Involved USACE, Buffalo District			
Proposed Land Use Niagara Area of Responsibility Border Patrol Sta		County And State Niagara County, New York			
PART II (To be completed by NRCS)		Date Request Received By NRCS			
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply -- do not complete additional parts of this form).		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %			Amount Of Farmland As Defined in FPPA Acres: %	
Name Of Land Evaluation System Used	Name Of Local Site Assessment System	Date Land Evaluation Returned By NRCS			
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		0.9	0.9	0.9	
B. Total Acres To Be Converted Indirectly		11.4	9.5	45.8	
C. Total Acres In Site		12.3	10.4	46.7	0.0
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide And Local Important Farmland					
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value					
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)		0	0	0	0
PART VI (To be completed by Federal Agency) Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))		Maximum Points			
1. Area In Nonurban Use					
2. Perimeter In Nonurban Use					
3. Percent Of Site Being Farmed					
4. Protection Provided By State And Local Government					
5. Distance From Urban Builtup Area					
6. Distance To Urban Support Services					
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Nonfarmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments					
11. Effects Of Conversion On Farm Support Services					
12. Compatibility With Existing Agricultural Use					
TOTAL SITE ASSESSMENT POINTS		160	0	0	0
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	0	0	0
Total Site Assessment (From Part VI above or a local site assessment)		160	0	0	0
TOTAL POINTS (Total of above 2 lines)		260	0	0	0
Site Selected:		Date Of Selection		Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Reason For Selection:					



Locations of Alternatives to be Evaluated for a New BPS

Figure 1



Aerial View of the Alternative 1 Parcel (Niagara Falls Air Reserve Station) and the Alternative 3A Parcel (Tuscarora Road West)

Figure 2



Aerial View of Alternative 2 Parcel (Williams Road)

Figure 3

United States Department of Agriculture



Natural Resources Conservation Service
The Galleries of Syracuse
441 S. Salina Street, Suite 354
Syracuse, NY 13202-2450

Telephone: (315) 477-6506
FAX: (315) 477-6550
Email: kathryn.duncan@ny.usda.gov

June 19, 2012

Tetra Tech
Heather Conn, PLA
P.O. Box 2188
Baton Rouge, LA 70821

Re: US Customs Border Patrol Station Niagara Falls, NY
NRCS FPPA review

Dear Ms. Conn,

This is a follow-up letter regarding our phone conversation on 6/18/2012. During our conversation you made me aware that this project will be used for national defense purposes. Due to this new information, the project and any alternative sites will be considered exempt from the Farmland Protection Policy Act based on section 1547(b) of the Act, 7 U.S.C. 4028(b) which states that acquisition or use of farmland by a Federal agency for national defense purposes is exempt from the Act.

The project information will be retained for future reference. If you have any questions about this determination please feel free to contact me.

A handwritten signature in dark ink that reads "Kathryn Duncan". The signature is fluid and cursive, with the first name and last name clearly distinguishable.

Kathryn Duncan
Cartographer

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Appendix D
Wetland Delineation Report
Border Patrol Station, Buffalo Sector
Niagara Area of Responsibility

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Wetland Delineation Report

for the

U.S. Customs and Border Protection

Buffalo Sector

Niagara Area of Responsibility Border Patrol Station

Niagara County, New York

Prepared by:

Susan Baker, Biologist

and

Melissa Tarasiewicz, Biologist

of the

US Army Corps of Engineers

Buffalo District

Technical Services Division

Regulatory Branch

1776 Niagara Street

Buffalo, New York 14207



**US Army Corps
of Engineers®**

Buffalo District

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Dated: 21 August 2013

Table of Contents

List of Attachments

List of Tables

List of Figures

1.0 Introduction and Background.....	1
1.1 Executive Summary.....	1
1.2 Off-Site Resource Review.....	2
1.2.1 Alternative 1 Parcel Resource Review.....	2
1.2.2 Alternative 2 Parcel Resource Review.....	3
1.2.3 Alternative 3 Parcel Resource Review.....	5
2.0 Delineation Methodology.....	8
3.0 Delineation Findings.....	11
3.1 Alternative 1 Parcel – Field Investigation.....	11
3.1.1 Hydrology.....	11
3.1.2 Vegetation Communities.....	11
3.1.3 Soils.....	11
3.1.4 Aquatic Resources Delineated.....	12
3.2 Alternative 2 Parcel – Field Investigation.....	13
3.2.1 Hydrology.....	13
3.2.2 Vegetation Communities.....	13
3.2.3 Soils.....	14
3.2.4 Aquatic Resources Delineated.....	14
3.3 Alternative 3 Parcel – Field Investigation.....	16
3.3.1 Hydrology.....	17
3.3.2 Vegetation Communities.....	17
3.3.3 Soils.....	17
3.3.4 Aquatic Resources Delineated.....	18
4.0 Conclusion and Recommendations.....	21
4.1 Conclusion.....	21
4.2 Recommendations.....	22

References

List of Attachments

Appendix A - Location Maps
Appendix B - Secondary Resource Maps
Appendix C - Wetland Delineation Maps
Appendix D - Photograph Location Maps and Site Photograph Logs
Appendix E – Wetland Determination Data Forms

List of Tables

Table 1. Summary of Alternative 1 on-site wetlands
Table 2. Summary of Alternative 1 on-site streams
Table 3. Summary of Alternative 2 on-site wetlands
Table 4. Summary of Alternative 3 on-site wetlands

List of Figures

Figure 1. Overview Location Map
Figure 2. Alternative 1 Parcel Location Map
Figure 3. Alternative 2 Parcel Location Map
Figure 4. Alternative 3 Parcel Location Map
Figure 5. Alternative 1 Parcel – Bing Aerial Photograph Map
Figure 6. Alternative 1 Parcel – USGS Quad Map
Figure 7. Alternative 1 Parcel – USFWS National Wetland Inventory (NWI) Map
Figure 8. Alternative 1 Parcel – USGS National Hydrography Dataset (NHD) Map
Figure 9. Alternative 1 Parcel – USDA Niagara County Soil Survey Map
Figure 10. Alternative 1 Parcel – FEMA Floodplain Map
Figure 11. Alternative 1 Parcel – NYSDEC Wetland and Stream Map
Figure 12. Alternative 2 Parcel – Bing Aerial Photograph Map
Figure 13. Alternative 2 Parcel – USGS Quad Map
Figure 14. Alternative 2 Parcel – USFWS National Wetland Inventory (NWI) Map
Figure 15. Alternative 2 Parcel – USGS National Hydrography Dataset (NHD) Map
Figure 16. Alternative 2 Parcel – USDA Niagara County Soil Survey Map
Figure 17. Alternative 2 Parcel – FEMA Floodplain Map
Figure 18. Alternative 2 Parcel – NYSDEC Wetland and Stream Map
Figure 19. Alternative 3 Parcel – Bing Aerial Photograph Map
Figure 20. Alternative 3 Parcel – USGS Quad Map
Figure 21. Alternative 3 Parcel – USFWS National Wetland Inventory (NWI) Map
Figure 22. Alternative 3 Parcel – USGS National Hydrography Dataset (NHD) Map
Figure 23. Alternative 3 Parcel – USDA Niagara County Soil Survey Map
Figure 24. Alternative 3 Parcel – FEMA Floodplain Map

Figure 25. Alternative 3 Parcel – NYSDEC Wetland and Stream Map

Figure 26. Alternative 1 Parcel – Aquatic Resource Map

Figure 27. Alternative 1 Parcel – Aquatic Resource Map (2)

Figure 28. Alternative 2 Parcel – Aquatic Resource Map

Figure 29. Alternative 2 Parcel – Aquatic Resource Map (2)

Figure 30. Alternative 3 Parcel – Aquatic Resource Map

Figure 31. Alternative 3 Parcel – Aquatic Resource Map (2)

Figure 32. Alternative 1 Parcel – Photograph Location Map

Figure 33. Alternative 2 Parcel – Photograph Location Map

Figure 34. Alternative 3 Parcel – Photograph Location Map

1.0 INTRODUCTION AND BACKGROUND

1.1 Executive Summary

The U.S. Customs and Border Protection (CBP) proposes to construct, operate, and maintain a new Border Patrol Station (BPS) in the Buffalo Sector, Niagara Area of Responsibility (AOR). The new BPS would provide the U.S. Border Patrol (USBP) with a larger, more modern facility that would alleviate constrained working conditions and accommodate more equipment.

The U.S. Army Corps of Engineers, Detroit District, Real Estate Division, conducted a survey of the designated area for the proposed Niagara AOR BPS to identify parcels that would meet the general criteria established by CBP (USACE Detroit District, 2011). From the survey results, three parcels were identified for further evaluation as potential parcels for the proposed new Niagara AOR BPS, all located in the Town of Niagara, Niagara County, New York.

The U.S. Army Corps of Engineers, Buffalo District, Regulatory Branch, applied methodology specified by the *Corps of Engineers Wetlands Delineation Manual* (USACE Environmental Laboratory, 1987) (1987 Manual) and U.S. Army Corps of Engineers *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Version 2.0). (USACE Environmental Laboratory, 2012) (Regional Supplement) to perform a delineation of Federal jurisdictional wetlands and other waters within the three identified alternative parcels. A summary of findings is described below.

Three emergent wetlands and one perennial stream were identified on the 12.3-acre Alternative 1 parcel which is located southeast of the intersection of Lockport Road and Tuscarora Road.

Two emergent wetlands, two forested wetlands, and one scrub-shrub wetland were identified on the 12-acre Alternative 2 parcel which is located southwest of the intersection of Williams Road and Niagara Falls Boulevard.

One scrub-shrub wetland and four mixed scrub-shrub and emergent wetlands were identified on the 46.7-acre Alternative 3 parcel which is located southwest of the intersection of Lockport Road and Tuscarora Road.

1.2 Off-Site Resource Review

1.2.1 Alternative 1 Parcel Resource Review

General Parcel Description

The Alternative 1 parcel is located in the town of Niagara, Niagara County, New York, approximately two miles east of Interstate (I)-190, seven miles from the U.S. and Canada border crossing at I-190, and 6.6 miles from the U.S. and Canada border crossing at Niagara Falls State Park. The Alternative 1 parcel is rectangular in shape and encompasses 12.3 acres. The main entrance to the Niagara Falls International Airport is located three miles from the Alternative 1 parcel. The parcel is in the northwest corner of the Niagara Falls Air Reserve Station (ARS) property and has 100 linear feet (LF) of frontage on Tuscarora Road to the west.

The parcel is a flat, vacant, grassy lot that is zoned light industrial. Land adjacent to the parcel is agricultural to the west, residential to the north, and the parcel belongs to the Niagara Falls Air Reserve Station (ARS) which continues to the south and east. Niagara Falls International Airport is south of the ARS. The surrounding area is primarily rural residential with suburban residential neighborhoods approximately one mile west of the parcel.

Hydrology

The Alternative 1 parcel is generally flat and includes fallow fields, drainage depressions, and an unnamed tributary to Cayuga Creek. Two main drainage features are located in the north-central and south-central portions of the site. Surface water flow in the drainage features converges at the center of the parcel and continues to flow east in a stream channel with wetland fringe, continues east and south off-site flowing through the center of the Niagara Falls ARS, and eventually drains into Cayuga Creek (a Section 10 navigable water of the U.S.). Cayuga Creek flows south and west into the Niagara River (a Section 10 navigable water of the U.S.) approximately 5 miles upstream of the American and Horseshoe Falls. The unnamed tributary on the Alternative 1 parcel functions as the primary stormwater conveyance for the Niagara Falls ARS (Tetra Tech, Inc., 2012) (Figures 6 and 8, Appendix B).

Vegetation

The Alternative 1 parcel is composed primarily of an old field vegetation community consisting of grasses and other herbaceous vegetation which is maintained via mowing. Hydrophytic vegetation forms a wetland fringe along the stream channel and drainageways in the central portion of the parcel. Hydrophytic vegetation also occurs in depressions in the northwest portion of the parcel. An active stormwater basin was recently constructed along the south-central parcel boundary and planted with vegetation (Microsoft Corporation, 2013) (Figure 5, Appendix B).

Soils

The Alternative 1 parcel consists of Odessa silty clay loam soil, 0 to 2 percent slopes. Odessa silty clay loam is formed from reddish clayey and silty glaciolacustrine deposits, is not known to flood or pond, and has depth to a restrictive feature of more than 80 inches. The soils are somewhat poorly drained, and the depth to water table in the soils is about 6 to 18 inches (USDA/NRCS, 2011a). Odessa silty clay loam, 0 to 2 percent is not designated as a hydric soil; however, Lakemont is a component of this soil type that if found in a depression, could qualify as a hydric soil (USDA/NRCS, 2011b) (Figure 9, Appendix B).

Alternative 1 Parcel - Resource Review Summary

The U.S. Fish and Wildlife Service National Wetland Inventory (USFWS NWI) map does not depict any wetlands on or directly adjacent to the Alternative 1 parcel; however, this resource does depict a Palustrine emergent (PEM) wetland located less than 0.05 mile west of the parcel on the west side of Tuscarora Road, as well as a large PEM wetland complex approximately one-half mile south of the parcel (USFWS, 2011) (Figure 7, Appendix B).

There are no New York State Department of Environmental Conservation (NYSDEC) freshwater wetlands or streams mapped on or immediately adjacent to the Alternative 1 parcel (NYSDEC, 2012b) (Figure 11, Appendix B).

One stream is mapped as flowing south and then east through the Alternative 1 parcel according to the U.S. Geological Survey National Hydrography Dataset (USGS NHD) (USGS, 2012) (Figure 8, Appendix B).

Part of the central and eastern portions of the Alternative 1 parcel are within a designated 100 Year Flood Zone as per FEMA mapping; the flood zone corresponds with the drainage depressions and wetland areas on the parcel (FEMA, 2012) (Figure 10, Appendix B).

The USGS Tonawanda West quadrangle does not identify any wetland or stream features on the Alternative 1 parcel (USGS, 2010) (Figure 6, Appendix B).

1.2.2 Alternative 2 Parcel Resource Review

General Parcel Description

The Alternative 2 parcel is located in the town of Niagara in Niagara County, New York, approximately three miles east of I-190, 7.5 miles from the U.S. and Canada border crossing at I-190, and 7 miles from the U.S. and Canada border crossing at Niagara Falls State Park. The main entrance to the Niagara Falls International Airport is located one-quarter mile from the Alternative 2 parcel. The parcel is situated south of the airport and has 400 LF of frontage on Williams Road to the east. The Alternative 2 parcel is roughly rectangular and measures 12 acres.

The Alternative 2 parcel is vacant, flat, sparsely covered with grasses, and is zoned general business (Niagara County, 2012; USACE Detroit District, 2011). Land adjacent to the parcel is agricultural to the east, residential to the west and south, and a commercial car dealership and automotive shop are located to the north of the parcel. The commercial area and the Alternative 2 parcel are owned by David Chevrolet Buick (Tetra Tech, Inc., 2012). Niagara International Falls Airport is less than 1,500 LF north of the site. The surrounding area is primarily rural to the east, and the city limits of Niagara Falls are one street south and west of the parcel.

Evidence of previous site development and disturbance includes a fire hydrant, utility poles, collapsed drain tile, evidence of grading and filling, and an old building foundation. The northwest corner of the site is currently undergoing filling and grading activities.

Hydrology

The Alternative 2 parcel is located approximately one-half mile north of Bergholtz Creek and approximately 1 mile south of Cayuga Creek (Microsoft Corporation, 2013; USGS, 2010; USGS, 2012). Hydrology on the Alternative 2 parcel was previously disturbed via drainage tile, culverts, and agricultural row cropping (furrows). Surface water on the parcel generally drains south through the site and continues south off-site. Stormwater appears to be piped under the residential development south of the Alternative 2 parcel (Microsoft Corporation, 2013). A culvert carries stormwater under Niagara Road and discharges into Bergholtz Creek. Bergholtz Creek is a direct tributary to Cayuga Creek, a Section 10 navigable water of the U.S. (Figures 12, 13, and 15, Appendix B).

Vegetation

The Alternative 2 parcel vegetation community is comprised of emergent, scrub-shrub, and forested vegetation. The western portion of the parcel and the area immediately adjacent to the eastern property line is composed primarily of herbaceous vegetation. Herbaceous vegetation on the parcel is maintained by mowing. A tract of scrub-shrub vegetation exists along the west-central and southern property lines. The east portion of the parcel is comprised primarily of forested vegetation (Microsoft Corporation, 2013) (Figure 12, Appendix B).

Soils

The Alternative 2 parcel primarily consists of Odessa silty clay loam soil, 0 to 2 percent slopes, and the south-central portion of the parcel consists of Canandaigua silty clay loam. Odessa silty clay loam, formed from reddish clayey and silty glaciolacustrine deposits, is not known to flood or pond, and has depth to a restrictive feature of more than 80 inches. Odessa silty clay loam is somewhat poorly drained, and the depth to water table in the soils is about 6 to 18 inches (USDA/NRCS 2011a, Figure 16, Appendix B). Odessa silty clay loam, 0 to 2 percent is not designated as a hydric soil, but Lakemont is a component of this soil type that if found in a depression, could qualify as a hydric soil (USDA/NRCS 2011b).

Canandaigua silty clay loam is formed from silty and clayey glaciolacustrine deposits, is not known to flood but frequently ponds, and has depth to a restrictive feature of more than 80 inches. The soil is very poorly drained, and the depth to water table in the soils is 0 inch. (USDA/NRCS 2011a, Figure 16, Appendix B). Canandaigua silty clay loam is designated as a hydric soil (USDA/NRCS 2011b).

Alternative 2 Parcel - Resource Review Summary

There are no USFWS NWI wetlands and no NYSDEC freshwater wetlands or streams identified on or adjacent to the Alternative 2 parcel (USFWS, 2011; NYSDEC, 2012b). The USFWS NWI map depicts a large Palustrine emergent wetland complex located approximately one-half mile north of the Alternative 2 parcel on the Niagara Falls ARS and the NYSDEC wetland mapper identifies a 43-acre New York State-regulated wetland is approximately one-half mile south of the Alternative 2 parcel (USFWS, 2012b; NYSDEC, 2012b) (Figures 14 and 18, Appendix B).

The USGS NHD does not identify any wetlands or streams on the Alternative 2 parcel (USGS, 2012) (Figure 15, Appendix B).

FEMA mapping does not identify the Alternative 2 parcel as being within a known flood zone (FEMA, 2012) (Figure 17, Appendix B).

The USGS Tonawanda West quadrangle does not identify any wetland or stream features on the Alternative 2 parcel (USGS, 2010) (Figure 13, Appendix B).

1.2.3 Alternative 3 Parcel Resource Review

General Parcel Description

The Alternative 3 parcel is located in the town of Niagara in Niagara County, New York, approximately two miles from I-190, 7 miles from the border crossing at I-190, and 6.6 miles from the border crossing at Niagara Falls State Park. The main entrance to the Niagara Falls International Airport is located three miles from the parcel. The Niagara Falls ARS and the Alternative 1 parcel are located east of the Alternative 3 parcel. The parcel has 2,600 LF of frontage on Tuscarora Road to the east. Lockport Road is located north of the parcel, with some residences and open land along Lockport Road separating the parcel from the road. The parcel is rectangular and measures 46.7 acres.

The parcel is a vacant, flat, grass and shrub covered property that is used as farmland but zoned as heavy industrial (Niagara County, 2012a). The adjacent land is agricultural to the north, south, and west, the Niagara Falls ARS is east of the site. The surrounding area is primarily rural residential with suburban residential neighborhoods approximately one mile west of the parcel. The Niagara Falls International Airport is south of the Niagara Falls ARS.

In 2009, URS Corporation (URS) delineated an approximately 200-acre area that included the 46.7-acre Alternative 3 parcel. URS identified 11 wetlands in the 200-acre area totaling 3.81 acres with the largest of these wetlands (1.49 acres) being adjacent to

the lower southwest portion of the Alternative 3 parcel boundary (URS, 2011). This wetland appears to have been created from drainage disruption on the north side of an abandoned automobile drag strip located in the south portion of the parcel. Three of the 11 URS-identified wetlands are located within the boundaries of the Alternative 3 parcel and occupy approximately one-quarter of an acre within the boundaries of the Alternative 3 parcel (URS, 2011).

An abandoned automobile drag strip and numerous associated impermeable surfaces occur in the south portion of the parcel. Several abandoned structures and foundations are visible in aerial imagery on the southern half of the parcel (Microsoft Corporation, 2013) (Figure 19, Appendix B).

Hydrology

The Alternative 3 parcel is generally flat and includes wetlands which have evidently formed in old agricultural furrows and depressional areas. Surface water generally drains east and south across the parcel. Hydrology on the parcel has been previously modified through the installation of culverts in drainageways, farming activities, an abandoned automobile drag strip, and associated impermeable surfaces on the parcel. There is a roadside drainage ditch parallel to the east parcel boundary. Surface water drains south in this ditch, flows south through several culverts, continues south off the parcel and discharges into an unnamed tributary to Cayuga Creek (a Section 10 navigable water of the U.S.). Cayuga Creek discharges into the Niagara River (a Section 10 navigable water of the U.S.) approximately 5 miles upstream of the American and Horseshoe Falls (Microsoft Corporation, 2013; USGS, 2010; USGS, 2012) (Figures 19, 20, and 22, Appendix B).

Vegetation

The north half of the Alternative 3 parcel is an active agricultural field bound by man-made drainages. The southern portion of the parcel is covered with secondary successional growth, consisting of dense shrubs and some trees. In the southern portion of the parcel there are four east-west spanning remnant farm furrows (Microsoft Corporation, 2013) (Figure 19, Appendix B).

Soils

The Alternative 3 parcel consists of Odessa silty clay loam soil, 0 to 2 percent slopes. Odessa silty clay loam is formed from reddish clayey and silty glaciolactustrine deposits, is not known to flood or pond, and has depth to a restrictive feature of more than 80 inches. The soils are somewhat poorly drained, and the depth to water table in the soils is about 6 to 18 inches (USDA/NRCS, 2011a) (Figure 23, Appendix B). Odessa silty clay loam, 0 to 2 percent is not designated as a hydric soil, but Lakemont is a component of this soil type that if found in a depression, could qualify as a hydric soil (USDA/NRCS, 2011b). The soil is designated as prime farmland if drained (USDA/NRCS, 2011a).

Alternative 3 Parcel - Resource Review Summary

There are no USFWS NWI wetlands and no NYSDEC freshwater wetlands or streams identified on the Alternative 3 parcel (USFWS, 2011; NYSDEC 2012b) (Figures 21 and 25, Appendix B). However, there is a USFWS NWI mapped wetland identified adjacent to the northeastern corner of the Alternative 3 parcel (USFWS, 2011) (Figure 21, Appendix B).

The USGS NHD does not identify any wetlands or streams on the Alternative 3 parcel (USGS, 2012) (Figure 22, Appendix B).

FEMA mapping does not identify the Alternative 3 parcel as being within a known flood zone (FEMA, 2012), (Figure 24, Appendix B).

The USGS Tonawanda West quadrangle does not identify any wetland or stream features on the Alternative 3 parcel (USGS, 2010) (Figure 20, Appendix B).

2.0 DELINEATION METHODOLOGY

2.0 Delineation Methodology

Wetland delineation field activities were conducted by U.S. Army Corps of Engineers, Buffalo District biologists on 23 April 2013, 24 April 2013, 25 April 2013, 7 May 2013, 17 May 2013, and 5 June 2013. The delineation was conducted in accordance with the U.S. Army Corps of Engineers (USACE) *Wetlands Delineation Manual* (USACE Environmental Laboratory, 1987) (1987 Manual) and the U.S. Army Corps of Engineers *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Version 2.0) (USACE Environmental Laboratory, 2012) (Regional Supplement).

Previously, wetland delineations were conducted for the Alternative 1 and Alternative 3 parcels and each of these parcels have currently valid USACE jurisdictional determinations. As such, existing delineation information and updated delineation information were compiled. The parcels were reinvestigated for any changes to on-site waters, additional data points were taken, and any changes to wetlands and other on-site features were mapped accordingly. Original and updated data are included in this report. Parcel 2 was not previously delineated; thus, new data were collected for this parcel.

The USACE and U.S. Environmental Protection Agency (USEPA) jointly define wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions [33 CFR 328.3(b), 40 CFR 230.3(t)]. Criteria used to identify a wetland, as defined therein, consist of the following:

- The prevalent vegetation is hydrophytic
- The soils observed have been classified as hydric, and/or anaerobic (reducing) conditions have developed in the soils
- The area is either permanently or periodically inundated, or the soil is permanently or periodically saturated to the surface during the growing season.

To make a positive wetland determination, a minimum of one wetland indicator from each criterion (vegetation, soil, and hydrology) must be identified. The Routine Determination Method outlined in the 1987 Manual was used in conjunction with procedures outlined in the Regional Supplement to identify and delineate wetlands within the parcel boundaries. Routine determinations involve simple, rapidly applied methods that result in sufficient qualitative data for identifying wetland and non-wetland areas. The Routine Determination Method consists of a combination of off-site data review and on-site inspection.

Off-site activities included an evaluation of available information regarding environmental conditions within the parcel boundaries. NRCS soil survey information (USDA/NRCS, 2011a), USFWS National Wetland Inventory mapping (USFWS, 2011), FEMA floodplain mapping (FEMA, 2012), USGS topographic mapping (USGS, 2010), aerial photographs (Microsoft Corporation, 2013) USGS National Hydrography Dataset mapping (USGS, 2012), and NYSDEC wetland and stream mapping (NYSDEC, 2012b)

were reviewed for each of the three parcels and are transposed into maps specific to each parcel, which are included in this report as Figures 5-25 (Appendix B). On-site activities consisted of collecting the field data required to identify and delineate wetland boundaries. Field data were gathered at sample plots (referred to herein as sample points) chosen in potential wetland areas, as well as in corresponding adjacent upland areas. Appended to this report are the Wetland Data Forms (Appendix E) generated during this effort and a photographic log (Appendix D) depicting the parcel characteristics observed. While information obtained from off-site sources such as the USFWS National Wetland Inventory Map (USFWS, 2011) and the USDA/NRCS Soil Map (USDA/NRCS, 2011a) were consulted during this wetland delineation, final wetland determinations were made based on information obtained in the field. The following describes the approach used to complete the wetland identification and delineation effort:

In regard to vegetation, the field investigation sought to determine the extent to which hydrophytic vegetation dominated any given area. A plant community dominated by hydrophytic vegetation is one of the three wetland parameters. Hydrophytic vegetation refers to plant species that thrive in wet soil conditions. Hydrophytic species are identified in the 2012 draft final USACE National Wetland Plant List (NWPL) (Lichvar and Kartesz, 2012). The NWPL identifies a plant's "indicator status" category, which is a ranking of the likelihood that a particular plant species will occur in a wetland environment. These categories include:

- Obligate wetland plants (OBL) – almost always occur in wetlands (wetland probability estimated at 99 percent or greater)
- Facultative wetland plants (FACW) – usually occur in wetlands (wetland probability estimated at 67-99 percent)
- Facultative plants (FAC) – are equally likely to occur in upland (non-wetland) areas (wetland probability estimated at 34-66 percent)
- Facultative upland plants (FACU) – typically occur in upland (non-wetland) areas (wetland probability estimated at 1-33 percent)
- Obligate upland plants (UPL) – almost always occur in upland areas (wetland probability estimated at less than 1 percent)

During the field wetland delineation, plant community types were visually recognized and their dominant component species were identified. Wetland indicator status was obtained, if available, for each plant species identified and recorded on a Wetland Determination Data Form (Appendix E). If greater than 50 percent of the dominant species in the plant community were observed to have an indicator status of facultative (FAC) or wetter (FACW or OBL), then a hydrophytic vegetative community was considered to be present.

Prospective wetland areas were examined for the presence of hydrology in the areas occupied by a hydrophytic plant community. If one or more primary wetland hydrologic indicator and/or if two or more secondary wetland hydrologic indicators were observed, then the area was considered to contain wetland hydrology.

Samples of the surface soil substrate in the prospective wetland areas were examined at each sample point location. The characteristics of the soil were compared to hydric soil indicators as prescribed by the 1987 Manual and Regional Supplement. If the soils were observed to have positive hydric soil indicators as per the NRCS Field Indicators of Hydric Soils in the United States, Version 7 (NRCS, 2010), then hydric soil was considered to be present.

If each of the above characteristics (hydrophytic vegetation, wetland hydrology, and hydric soils) were found to be present in a prospective wetland area, the area was considered wetland. If any of the above characteristics were found to be absent in a prospective wetland area, then the area was not considered a wetland. The point between the area where all three of these criteria were present and the area where at least one of these criteria was absent was identified as the wetland border.

3.0 DELINEATION FINDINGS

3.0 Delineation Findings

3.1 Alternative 1 Parcel – Field Investigation

Three (3) emergent wetlands and one (1) perennial stream were observed on the parcel. USACE biologists examined five sample points on the parcel, which were compiled with the two sample points previously examined by USFWS (USFWS, 2010) for a total of seven sample points on the parcel. Four of the seven sample points were found to possess upland characteristics, while the remaining three sample points met the definition of a wetland. The wetland and stream locations as well as all sample point locations are depicted on the Alternative 1 Parcel Wetland Delineation Map (Figures 26 and 27, Appendix C).

3.1.1 Hydrology

No indicators of wetland hydrology were observed at the upland sample points. Primary wetland hydrology indicators (e.g. saturation, oxidized rhizospheres on living roots, etc.) and secondary wetland hydrology indicators (e.g. drainage patterns, geomorphic position, etc.) were observed at the wetland sample points. Hydrology on-site appeared to have been previously modified as the perennial stream on-site was observed to be culverted at multiple locations and channelized. Additionally, the old field was likely previously tiled to promote agricultural drainage. Further details of the hydrology characteristics observed at the sample points are provided on the Wetland Determination Data Forms, which can be found in Appendix E.

3.1.2 Vegetation Communities

The upland areas of the parcel are composed primarily of turf grasses including *Poa pratensis* (Kentucky bluegrass) and *Agrostis gigantea* (redtop) as well as broadleaf species including *Taraxicum officinale* (common dandelion), *Solidago canadensis* (Canada goldenrod), and *Fragaria virginiana* (Virginia strawberry). The wetland areas are composed primarily of emergent species and grasses including *Typha* spp. (cattail), *Juncus effusus* (soft rush), *Phalaris arundinacea* (reed canary grass), and *Agrostis stolonifera* (creeping bentgrass). Mowed woody species including *Cornus racemosa* (gray dogwood) and *Fraxinus pennsylvanica* (green ash) were also observed on-site. The parcel was observed to have been planted with turf grasses and mowing is on-going at the site, particularly in the upland areas. Further vegetation characteristics observed at the sample points are provided on the Wetland Determination Data Forms, which can be found in Appendix E.

3.1.3 Soils

In general, soil characteristics observed were consistent with characteristics of the NRCS mapped soil type (Odessa silty clay (0 to 2 percent slopes)) (USDA/NRCS, 2011a). At upland sample point 1, soils displaying characteristic upland field indicators including high-chroma (bright) matrix colors and dry conditions were observed. However, at the remaining upland sample points, soils displayed characteristics consistent with field indicators of hydric soils and met the definition of Hydric soil indicator 'Redox Dark

Surface' (F6) or 'Depleted Matrix' (F3). In the wetland areas of the parcel, all sample points displayed characteristics of hydric soils including low chroma colors and redox features, meeting the definition of Hydric Soil Indicator 'Depleted Matrix' (F3) at each wetland sample point. Further soil characteristics observed at the sample points are provided on the Wetland Determination Data Forms, which can be found in Appendix E.

3.1.4 Aquatic Resources Delineated

Wetland 1 (0.015 acre (ac.)) and **Wetland 2 (0.038 ac.)** are Palustrine Emergent wetlands located in the northwest portion of the parcel. Wetlands 1 and 2 were observed to be located in shallow depressions. No connection was observed between Wetlands 1 and 2 and a Water of the U.S. (WOUS); therefore these wetlands appeared to be isolated. Wetlands 1 and 2 are low to medium quality wetlands possessing low plant species diversity and moderate levels of wetland functions and services including potential wildlife habitat, nutrient and pollutant attenuation and processing, and local floodwater storage.

Wetland 3 (0.415 ac.) is a Palustrine Emergent linear wetland located in the central portion of the parcel. A portion of Wetland 3 forms a riparian fringe on each side of Stream 1. During the site visits most of Wetland 3 was inundated and surface water was observed flowing through Wetland 3 and Stream 1. There is a culvert near the north boundary of the parcel, which appears to discharge into the northwest finger of Wetland 3. This portion of Wetland 3 has silted in, does not have a defined channel, and is functioning as a linear wetland primarily composed of cattails (*Typha spp.*), sedges (*Carex spp.* and *Schoenoplectus fluvialis*), and soft rush (*Juncus effusus*). There is also a water control structure located near the south boundary of the parcel adjacent to the south portion of Wetland 3. Surface water from Wetland 3 drains east into Stream 1, which flows east and south and continues south off-site. Wetland 3 is a low to medium quality wetland possessing moderate levels of wetland functions and services including wildlife habitat, nutrient and pollutant attenuation and processing, and local floodwater storage. Wetland 3 directly abuts Stream 1, a relatively permanent water, which has a surface water connection to Cayuga Creek, a Traditionally Navigable Waterway making Wetland 2 a federally jurisdictional WOUS.

Stream 1 (705.59 linear feet (LF), 7 feet wide) is a perennial stream which begins north of the subject parcel, flows south and east through Wetland 3, discharges into a culvert located at the east parcel boundary, and continues to flow south and east off-site. The depth of Stream 1 was observed during the site visits to vary between six inches and two feet deep and was observed to be flowing at the time of the site visits. Stream 1 is a low to medium quality stream, which provides functions and services including local stormwater storage, sediment detainment, and wildlife habitat for common organisms including birds, aquatic macro-invertebrates, and other insects, fish, and frogs. Stream 1 flows off-site and eventually outlets into Cayuga Creek a Section 10 navigable water of the U.S. Stream 1 is a federally regulated relatively permanent water of the U.S.

Wetland Identifier	Size (acres)	Cowardin Class (Palustrine)	Jurisdictional Status
Wetland 1	0.015	Emergent	Isolated
Wetland 2	0.038	Emergent	Isolated
Wetland 3	0.415	Emergent	Jurisdictional

Table 1. Summary of Alternative 1 Parcel on-site wetlands.

Stream Identifier	Length (linear feet)	Flow Regime	Jurisdictional Status
Stream 1	705.59	Perennial	Jurisdictional

Table 2. Summary of Alternative 1 Parcel on-site streams.

3.2 Alternative 2 Parcel – Field Investigation

Three (3) emergent wetlands, two (2) forested wetlands, and one (1) scrub-shrub wetland were observed on the Alternative 2 parcel. USACE biologists examined ten (10) sample points on the parcel. Five of the ten sample points were found to possess upland characteristics, while the remaining five sample points met the definition of a wetland. The wetland locations as well as all sample point locations are depicted on the Alternative 2 Parcel Wetland Delineation Map (Figures 28 and 29, Appendix C).

3.2.1 Hydrology

No indicators of wetland hydrology were observed at the upland sample points with the exception of sample point 2. Sample point 2 exhibited soil cracking which is likely due to a sparsely vegetated surface and recent precipitation followed by hot, dry, sunny weather. Primary wetland hydrology indicators (e.g. saturation, oxidized rhizospheres on living roots, etc.) and secondary wetland hydrology indicators (e.g. drainage patterns, geomorphic position, etc.) were observed at all wetland sample points. Hydrology on-site appeared to have been previously modified as indicated by the presence of collapsed drain tile and evident on-site filling and grading activities. Further details of the hydrology characteristics observed at the sample points are noted on the Wetland Determination Data Forms, which can be found in Appendix E.

3.2.2 Vegetation Communities

The upland areas of the parcel are composed primarily of turf grasses including *Lolium perenne* (perennial rye grass) and *Agrostis capillaris* (common bent grass) as well as broadleaf species including *Dipsacus sylvestris* (common teasel) and *Ranunculus ficaria* (lesser celandine). The tree stratum included *Acer rubrum* (red maple) and the shrub stratum included *Cornus foemina* (stiff dogwood), *Cornus alba* (red osier dogwood), and *Lonicera tatarica* (Tatarian honeysuckle). The parcel was observed to have been planted with turf grasses and mowing is on-going at the site, particularly in the upland and emergent wetland areas.

The emergent wetland areas of the parcel were primarily comprised of *Typha latifolia* (broadleaf cattail), *Phragmites australis* (common reed), *Agrostis capillaris* (common bent grass), *Lolium perenne* (perennial rye grass), *Juncus tenuis* (poverty rush), *Acer rubrum* (red maple), *Cornus alba* (red osier dogwood), *Ulmus americana* (American elm), and *Fraxinus pennsylvanica* (green ash). The scrub-shrub wetland areas consisted primarily of *Acer Rubrum* (red maple), *Ulmus americana* (American elm), *Cornus foemina* (stiff dogwood), and *Euthamia graminifolia* (flat-top goldenrod). Forested wetland areas consisted primarily of an over-story of *Populus tremuloides* (quaking aspen), *Ulmus americana* (American elm), *Quercus palustris* (pin oak) and an understory of *Agrostis capillaris* (common bent grass), *Phalaris arundinacea* (reed canary grass), *Glyceria striata* (fowl manna grass), and *Rumex crispus* (curly dock). Further vegetation characteristics observed at the sample points are provided on the Wetland Determination Data Forms, which can be found in Appendix E.

3.2.3 Soils

Fill material and site disturbance was evident at all sample points. Gravel, cobble, asphalt, crushed concrete, and the presence of graded or plow layers were found throughout the parcel. The overall soil characteristics observed were consistent with characteristics of the NRCS mapped soil types (Odessa silty clay (0 to 2 percent slopes and Canandaigua silt clay loam) (USDA/ NRCS, 2011a) despite the evidence of disturbance and presence of dissimilar fill material.

At upland sample points 2 and 9, soils displaying characteristic upland field indicators including higher-chroma (bright) matrix colors lacking redoximorphic features and dry conditions were observed. However, at the remaining upland sample points, soils displayed characteristics consistent with field indicators of hydric soils and met the definition of Hydric soil indicators 'Redox Dark Surface' (F6), 'Depleted Matrix' (F3), and/or 'Depleted Below Dark Surface' (A11). In the wetland areas of the parcel, all sample points displayed characteristics of hydric soils including low chroma colors and redoximorphic features, meeting the definition of Hydric Soil Indicators 'Depleted Matrix' (F3) and/or 'Redox Dark Surface' (F6) at the wetland sample points. Further soil characteristics observed at the sample points are provided on the Wetland Determination Data Forms, which can be found in Appendix E.

3.2.4 Aquatic Resources Delineated

Wetland 1 (0.018 acre) is a Palustrine Emergent wetland located in the southwest portion of the parcel. Wetland 1 lies within a shallow depression on the landscape at the base of a man-made gravel parking area. Wetland 1 is highly disturbed and has evidence of grading and filling activities. No connection was observed between Wetland 1 and a WOUS; therefore this wetland appeared to be isolated. Wetland 1 appears to receive hydrology from precipitation and stormwater runoff from the adjacent gravel parking area. The soil profile was consistent with the 'Depleted Matrix' (F3) indicator. Wetlands 1 is a low quality wetland possessing low plant species diversity and low levels of wetland functions and services including potential wildlife habitat, nutrient and pollutant

attenuation and processing, and local floodwater storage. A nesting mallard duck (*Anas platyrhynchos*) was observed in Wetland 1.

Wetland 2 (0.143 acre) is a Palustrine Forested wetland located in the northeast portion of the parcel. Wetland 2 lies within a shallow depression on the landscape. The area directly surrounding Wetland 2 has been modified by grading and mowing activities. Wetland 2 historically was connected to the Wetland 4 and Wetland 5 complex via a culvert which has since silted in and is partially collapsed. While the culvert is in disrepair, it still serves to hydrologically connect Wetland 2 to Wetlands 4 and 5. During the site visit most of Wetland 2 was inundated. Wetland 2 appears to receive its hydrology from precipitation and runoff from the adjacent uplands and impervious surfaces. The soil profile was consistent with the 'Redox Dark Surface' (F6) indicator. Wetland 2 is a low to moderate quality wetland providing wetland functions and services including wildlife habitat, nutrient and pollutant attenuation and processing, and local floodwater storage. Surface water in Wetland 2 drains south through a dilapidated culvert into the Wetland 4 and Wetland 5 complex, is conveyed through the Wetland 4 and 5 complex which drains south through the parcel, continues south off-site, is culverted under Niagara Road, and drains into Bergholtz Creek. During the 23 April 2013 site visit stormwater was observed discharging from the culvert into Bergholtz Creek. Bergholtz Creek is a direct tributary to Cayuga Creek, a Section 10 navigable water of the U.S. As such, Wetland 2 is a wetland adjacent to a Traditionally Navigable Waterway making Wetland 2 a federally jurisdictional WOUS.

Wetland 3 (0.040 acre) is a Palustrine Scrub-shrub wetland located in the southwest portion of the parcel. Wetland 3 lies within a shallow depression on the landscape. The area directly surrounding Wetland 3 has been modified by grading and mowing activities. Small fill piles were observed within Wetland 3. During the site visit portions of Wetland 3 were observed to be inundated. Wetland 3 appears to receive hydrology from precipitation and runoff from adjacent uplands, the housing development to the west, and impervious surfaces. The soil profile was consistent with the 'Depleted Matrix' (F3) hydric soil indicator. Wetland 3 is a low to moderate quality wetland providing wetland functions and services including wildlife habitat, nutrient and pollutant attenuation and processing, and local floodwater storage. The boundary of Wetland 3 was walked and no outlet of water was observed. Wetland 3 directly abuts a linear drainageway (discussed below); however, the drainageway does not appear to possess a connection to a WOUS; therefore, the drainageway and Wetland 3 appear to be isolated.

Wetland 4 (2.35 acres) is a Palustrine Forested wetland located within a depression on the landscape in the northeast corner of the parcel. Wetland 4 extends north from the southeast corner of the parcel. During the site visit most of Wetland 4 was observed to be inundated. The boundaries of Wetland 4 appeared to be disturbed, likely as a result of previous site grading activities. Wetland 4 is a moderate quality wetland providing wetland functions and services including wildlife habitat, nutrient and pollutant attenuation and processing, and local floodwater storage. Wetland 4 appears to receive hydrology from precipitation and runoff from adjacent uplands and impervious surfaces. The soil profile was consistent with the 'Redox Dark Surface' (F6) hydric soil indicator.

Wetland 4 and Wetland 5 are part of a wetland complex that has been previously disturbed. Wetland 5 appears to be a graded, filled, and cleared extension of Wetland 4.

Wetland 5 (0.333 acre) is a highly disturbed Palustrine Emergent wetland. Wetland 5 is a continuous mosaic of wetland and upland with wetland comprising approximately 40% of the cumulative acreage of the mosaic area. The Wetland 5 mosaic is presumably a result of historic filling and grading of the parcel which created alternating high and low spots throughout the wetland. Wetland 5 is evidently mowed on a regular basis and has been seeded with turf grasses; however, the native wetland seed bank has emerged and dominates the vegetative community. Wetland 5 appears to receive hydrology from precipitation and stormwater runoff from adjacent impervious surfaces. The soil profile was consistent with the 'Depleted Matrix' (F3) hydric soil indicator. Wetland 5 is a low to moderate quality wetland possessing wetland functions and services including potential wildlife habitat, nutrient and pollutant attenuation and processing, and local floodwater storage.

The Wetland 4 and Wetland 5 complex drains south through the parcel, continues south off-site, is culverted under Niagara Road, and drains into Bergholtz Creek. Bergholtz Creek is a direct tributary to Cayuga Creek, a Section 10 navigable water of the U.S. As such, Wetland 4 and Wetland 5 are wetlands adjacent to a Traditionally Navigable Waterway making Wetlands 4 and 5 federally jurisdictional WOUS.

During the field investigation the Corps observed an approximately 365.06 LF drainageway located in the southwest portion of the parcel abutting the east side of Wetland 3. An old silted in culvert was observed at the north end of the drainageway. The drainageway did not exhibit defined bed, banks, or presence of stream substrate. At the time of the site visit the drainageway was dry and did not appear to possess a connection to a WOUS; therefore, the drainageway appeared be isolated.

Wetland Identifier	Size (acres)	Cowardin Class (Palustrine)	Jurisdictional Status
Wetland 1	0.018	Emergent	Isolated
Wetland 2	0.143	Forested	Jurisdictional
Wetland 3	0.040	Scrub-shrub	Isolated
Wetland 4	2.350	Forested	Jurisdictional
Wetland 5	0.333	Emergent	Jurisdictional

Table 3. Summary of Alternative 2 Parcel on-site wetlands.

3.3 Alternative 3 Parcel – Field Investigation

One (1) scrub-shrub wetland and four (4) scrub-shrub/emergent mixed wetlands were observed on the Alternative 3 parcel. USACE biologists examined twelve (12) sample points on the parcel. Six of the twelve sample points were found to possess upland

characteristics, while the remaining six sample points met the definition of a wetland. The wetland locations as well as all sample point locations are depicted on the Alternative 3 Parcel Wetland Delineation Map (Figures 30 and 31, Appendix C).

3.3.1 Hydrology

No indicators of wetland hydrology were observed at the upland sample points with the exception of sample point 5. Sample point 5 exhibited soil cracking which is likely due to a very sparsely vegetated surface and recent precipitation followed by hot, dry, sunny weather; soil cracking is typical in agricultural fields. Primary wetland hydrology indicators (e.g. saturation, oxidized rhizospheres on living roots, etc.) and secondary wetland hydrology indicators (e.g. drainage patterns, geomorphic position, etc.) were observed at all wetland sample points. Hydrology on-site appeared to have been previously modified as indicated by the presence of culverts, manmade drainage features, and evidence of agricultural plowing; the parcel likely contains subterranean agricultural drain tile. Further details of the hydrology characteristics observed at the sample points are noted on the Wetland Determination Data Forms, which can be found in Appendix E.

3.3.2 Vegetation Communities

The Alternative 3 parcel vegetative community is variable. The northern half and the southernmost portion of the parcel is actively farmed; however, at the time of the 7 May 2013 site visit the land had not yet been planted for the season and was therefore sparsely vegetated. Remnants of prior corn crop and minimal volunteer species were observed scattered throughout the agricultural fields on-site. Hydrophytic vegetation was observed in portions of the manmade ditch located along the east parcel boundary, within the remnant furrows/drainageways in the south-central portion of the parcel, and in depressions in the southeast portion of the parcel. Much of the southern half of the property as well as the manmade ditches along the northern and western parcel boundaries consist of scrub-shrub communities dominated by *Salix bebbiana* (Bebb's willow), *Cornus foemina* (stiff dogwood), *Cornus racemosa* (gray dogwood), *Cornus amomum* (silky dogwood), *Rhamnus cathartica* (common buckthorn), and *Crataegus* spp. (Hawthorne). Emergent species such as *Lythrum salicaria* (Purple loosestrife), *Typha latifolia* (broadleaf cattail), *Phragmites australis* (common reed), and *Solidago canadensis* (Canada goldenrod) persist in the upland, wetland, and agricultural areas.

3.3.3 Soils

The overall soil characteristics observed were consistent with characteristics of the NRCS mapped soil type Odessa silty clay 0 to 2 percent slopes (USDA/NRCS 2011a). The northern half of the parcel was observed to have been previously disturbed as a result of agricultural activities including plowing and construction of drainage ditches.

With the exception of sample point 5, all upland soil sample points displayed characteristic upland field indicators including higher-chroma (bright) matrix colors lacking redoximorphic features and dry conditions were observed. However, at sample point 3, soils displayed characteristics consistent with the field indicator of hydric soil, 'Depleted Matrix' (F3).

In the wetland areas of the parcel, all sample points displayed characteristics of hydric soils including low chroma colors and redoximorphic features, consistent with the definition of Hydric Soil Indicator 'Depleted Matrix' (F3). Further soil characteristics observed at the sample points are provided on the Wetland Determination Data Forms, which can be found in Appendix E.

3.3.4 Aquatic Resources Delineated

Wetland 1 (0.024 acre) is a linear Palustrine Scrub-shrub wetland located in a depressional manmade drainage feature along the western edge of the parcel in the northwest corner of the parcel. The area surrounding Wetland 1 has been previously modified by agricultural activities. During the site visit, portions of Wetland 1 were observed to be inundated. Wetland 1 appears to receive hydrology from precipitation and runoff from the adjacent uplands; Wetland 1 developed in a manmade drainage feature. The soil profile observed in Wetland 1 was consistent with the 'Depleted Matrix' (F3) hydric soil indicator. Wetland 1 is of low to moderate quality providing wetland functions and services including wildlife habitat, nutrient and pollutant attenuation and processing, and local floodwater storage and drainage. Surface water in Wetland 1 drains west to a manmade drainage feature along the western edge of the parcel, is conveyed through Wetland 3 on-site which is culverted (off-site, draining south) under an abandoned automobile drag strip, and drains into an off-site tributary. The off-site tributary drains in a southerly direction into an off-site east-west ditch which outlets into Cayuga Creek, a Section 10 navigable water of the U.S., which flows to the Niagara River, a Section 10 navigable water of the U.S. As such, Wetland 1 is a wetland adjacent to a Traditionally Navigable Waterway making Wetland 1 a federally jurisdictional WOUS.

Wetland 2 (0.005 acre) is a Palustrine Scrub-shrub and Emergent mixed wetland located in a depressional manmade drainage feature in the northwest portion of the parcel. Wetland 2 extends west off-site. The area surrounding Wetland 2 has been previously modified by agricultural activities. During the site visit, portions of Wetland 2 were observed to be inundated. The presence of algae and the lack of flow in Wetland 2 suggests that much of Wetland 2 is ponded for long periods of time. The soil profile in Wetland 2 was consistent with the 'Depleted Matrix' (F3) hydric soil indicator. Wetland 2 is a low to moderate quality wetland providing wetland functions and services including wildlife habitat, nutrient and pollutant attenuation and processing, and local floodwater storage and drainage. Surface water in Wetland 2 drains south to Wetland 3 and continues south through Wetland 3 on-site. Surface water in Wetland 3 continues to drain south through a culvert under an abandoned automobile drag strip, and drains into an off-site tributary. The off-site tributary drains in a southerly direction into an off-site east-west ditch which outlets into Cayuga Creek, A Section 10 navigable water of the U.S., which eventually flows into the Niagara River, a Section 10 navigable water of the U.S. As such, Wetland 2 is a wetland adjacent to a Traditionally Navigable Waterway making Wetland 2 a federally jurisdictional WOUS.

Wetland 3 (0.086 acre) is a Palustrine Scrub-shrub and emergent wetland located in a depressional area in the southwest portion of the parcel and along the western parcel

boundary. Wetland 3 extends off-site to the west. The area surrounding Wetland 3 has been consistently modified by agricultural activities. The wetland appears to have been created when the drainage culvert beneath the drag strip (off-site) became plugged. The soil profile was consistent with the 'Depleted Matrix' (F3) hydric soil indicator. Wetland 3 appears to receive hydrology from precipitation, runoff from the adjacent uplands, and drainage from the manmade drainageways running along the northern and western property lines, including Wetlands 1 and 2. Wetland 3 is of low to moderate quality providing wetland functions and services including wildlife habitat, nutrient and pollutant attenuation and processing, and local floodwater storage and drainage. As discussed above, Wetland 3 drains south off-site through a culvert under an abandoned automobile drag strip, and continues into an off-site tributary. The off-site tributary drains in a southerly direction into an off-site east-west ditch which outlets into Cayuga Creek, a Section 10 navigable water of the U.S., which eventually flows into the Niagara River, a Section 10 navigable water of the U.S. As such, Wetland 3 is a wetland adjacent to a Traditionally Navigable Waterway making Wetland 3 a federally jurisdictional WOUS.

Wetland 4 (0.222 acre) is an L-shaped Palustrine Scrub-shrub and emergent wetland located in a depressional area in the southeast portion of the parcel. The area surrounding Wetland 4 has been previously modified by agricultural activities and by the abandoned automobile drag strip. The soil profile was consistent with the 'Depleted Matrix' (F3) indicator. Wetland 4 appears to receive hydrology from precipitation and runoff from the adjacent uplands and impervious abandoned automobile drag strip. Wetland 4 is a low to moderate quality wetland providing functions and services including wildlife habitat, nutrient and pollutant attenuation and processing, and local floodwater storage and drainage. Wetland 4 drains south via two drainageways (which include culverted sections) into an off-site east-west ditch which outlets into Cayuga Creek, a Section 10 navigable water of the U.S., which eventually flows into the Niagara River, a Section 10 navigable water of the U.S. As such, Wetland 4 is a wetland adjacent to a Traditionally Navigable Waterway making Wetland 4 a federally jurisdictional WOUS.

Wetland 5 (0.426 acre) is a Palustrine Scrub-shrub and emergent mixed wetland located within historic farm furrows/drainage features in the landscape. Four east-west furrows all connect to the man-made drainage ditch located along the eastern property line/Tuscarora Road. Portions of the drainage ditch met wetland criteria and were mapped and included in the wetland acreage. Though the northern two furrows are contiguous, the southern two non-contiguous portions are connected via culverts to the larger Wetland 5 system. The area surrounding Wetland 5 has been previously modified by agricultural activities, mowing, and historic road construction. The soil profile of Wetland 5 was consistent with the 'Depleted Matrix' (F3) hydric soil indicator. Wetland 5 appears to receive hydrology from precipitation and runoff from the adjacent uplands and impervious Tuscarora Road surface. Wetland 5 is of low to moderate quality providing wetland functions and services including wildlife habitat, nutrient and pollutant attenuation and processing, and local floodwater storage and drainage. Wetland 5 drains south via the roadside ditch (which includes culverted sections) into an off-site east-west ditch which outlets into Cayuga Creek, a Section 10 navigable water of the U.S., which eventually flows into the Niagara River, a Section 10 navigable water of the U.S. As

such, Wetland 5 is a wetland adjacent to a Traditionally Navigable Waterway making Wetland 5 a federally jurisdictional WOUS.

Wetland Identifier	Size (acres)	Cowardin Class (Palustrine)	Jurisdictional Status
Wetland 1	0.024	Scrub-shrub	Jurisdictional
Wetland 2	0.005	Scrub-shrub/Emergent	Jurisdictional
Wetland 3	0.086	Scrub-shrub/Emergent	Jurisdictional
Wetland 4	0.222	Scrub-shrub/Emergent	Jurisdictional
Wetland 5	0.426	Scrub-shrub/Emergent	Jurisdictional

Table 4. Summary of Alternative 3 Parcel on-site wetlands.

4.0 CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

USACE Biologists completed an in-office evaluation of available resources including U.S. Fish and Wildlife Service NWI maps, USGS quadrangle maps, Bing aerial photography, and USGS NHD maps, etc. to collect preliminary information regarding environmental conditions for three parcels located in the Town of Niagara, Niagara County, New York. Following review of in-office resources, wetland delineation field activities were conducted on 23 April 2013, 24 April 2013, 25 April 2013, 7 May 2013, 17 May 2013, and 5 June 2013. Data were collected and compiled with previous delineation data. Following the field delineation, wetland delineation maps were created to illustrate the findings. Findings for each of the three parcels are summarized below.

Alternative 1 Parcel

Three wetlands (Wetlands 1, 2, and 3) totaling approximately 0.468 ac. and one perennial stream (Stream 1) spanning 705.59 LF were identified on the parcel (Figures 26 and 27, Appendix C) during the course of a field investigation based upon the three parameter (vegetation, soils, and hydrology) wetland delineation conducted in accordance with the USACE 1987 Manual (USACE Environmental Laboratory, 1987) and Regional Supplement (USACE Environmental Laboratory, 2012). Wetland 3 and Stream 1 were found to have a connection to a WOUS and would therefore be considered federally jurisdictional. Wetlands 1 and 2 appeared to be hydrologically isolated without a connection to a WOUS and therefore, these wetlands would be considered isolated wetlands not regulated under Section 404 of the Clean Water Act.

Alternative 2 Parcel

Six wetlands (Wetlands 1, 2, 3, 4, 5, and 6) totaling approximately 3.248 ac. were identified on the parcel (Figures 28 and 29, Appendix C) during the course of a field investigation based upon the three parameter (vegetation, soils, and hydrology) wetland delineation conducted in accordance with the USACE 1987 Manual (USACE Environmental Laboratory, 1987) and Regional Supplement (USACE Environmental Laboratory, 2012). Wetlands 2, 4, and 5 were found to have a connection to WOUS and would therefore be considered federally jurisdictional. No connection was observed between Wetlands 1 and 3 and a WOUS; therefore, these wetlands would be considered isolated wetlands not regulated under Section 404 of the Clean Water Act.

Alternative 3 Parcel

Five wetlands (Wetlands 1, 2, 3, 4, and 5) totaling approximately 0.763 ac. were identified on the parcel (Figures 30 and 31, Appendix C) during the course of a field investigation based upon the three parameter (vegetation, soils, and hydrology) wetland delineation conducted in accordance with the USACE 1987 Manual (USACE Environmental Laboratory, 1987) and Regional Supplement (USACE Environmental Laboratory, 2012). Wetlands 1, 2, 3, 4, and 5 were found to have a connection to WOUS and would therefore be considered federally jurisdictional.

4.2 Recommendations

- (1) If any in-water work is proposed, the USACE recommends that CBP submit a written request for a jurisdictional determination for the project parcel to the USACE Buffalo District Office.
- (2) If it is determined that no impacts are proposed to federally jurisdictional waters, based on the results of the jurisdictional determination, the project may proceed without the need for a Corps Section 404 Permit.
- (3) If any wetland impacts are proposed based on the results of the jurisdictional determination, a Joint Permit Application package including supporting drawings, etc. should be submitted to the USACE Buffalo District Office and the New York State Department of Environmental Conservation.

APPENDIX A – SITE LOCATION MAPS

Figure 1. Overview Location Map

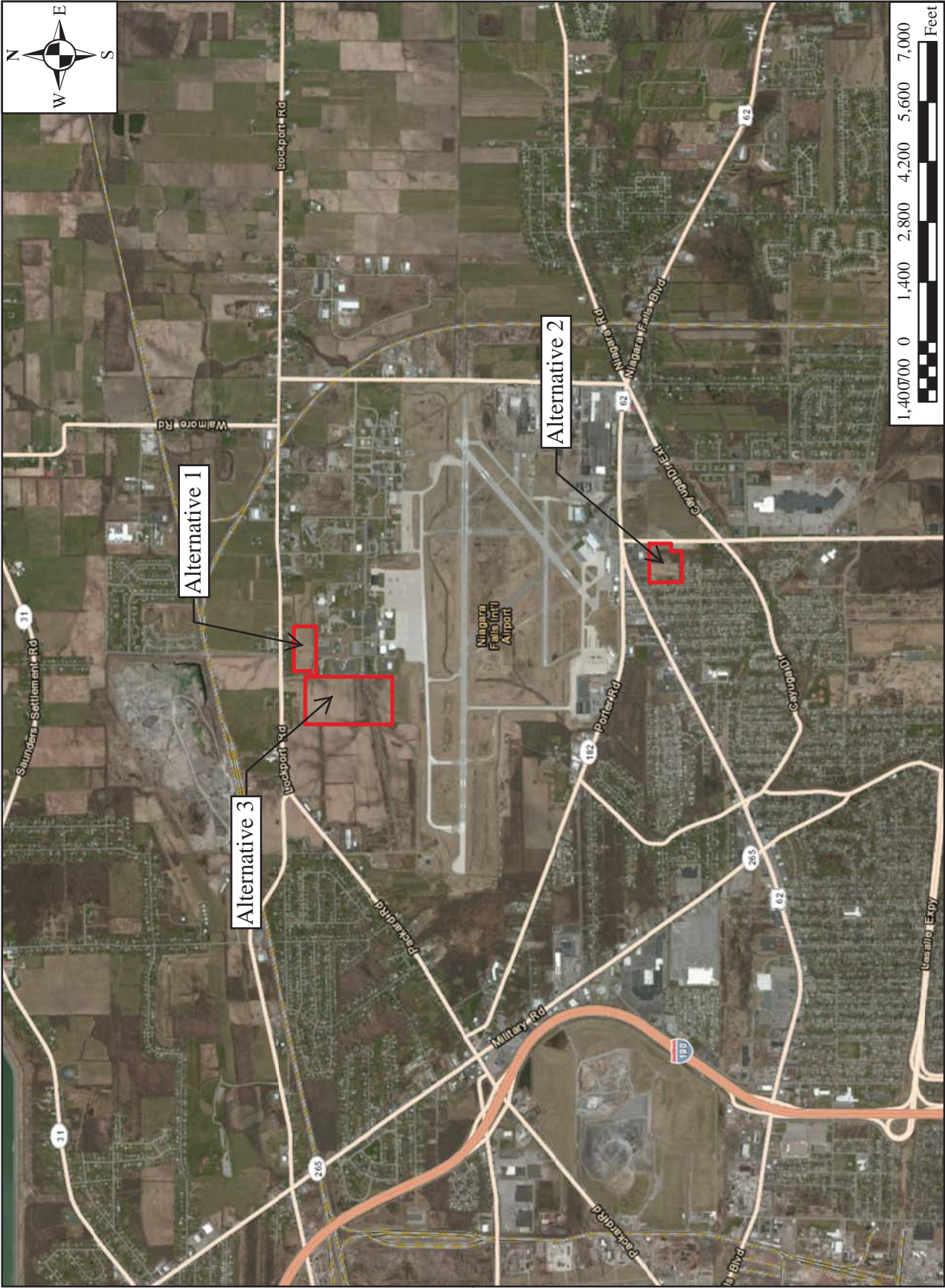
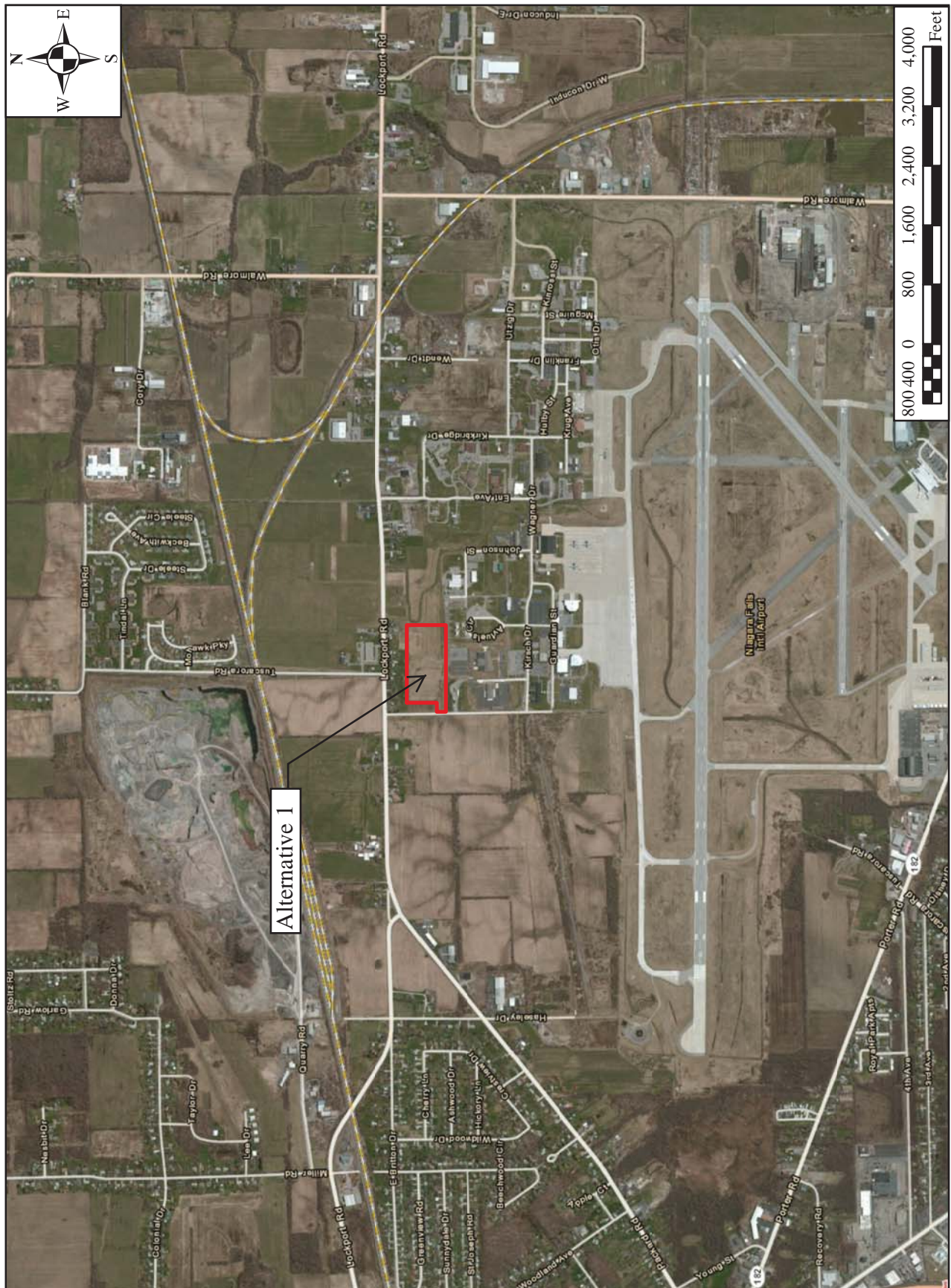


Figure 2. Alternative 1 Location Map



The map displays the Niagara Falls International Airport on the left side, with various runways and taxiways visible. To the right of the airport, a residential neighborhood is shown with numerous streets. A red rectangle highlights a specific area, and an arrow points to it from the text 'Alternative 2'. The map includes a compass rose in the top left corner and a scale bar in the top right corner. The scale bar is marked with distances from 0 to 4,000 feet. The map also shows several major roads, including Niagara Falls Blvd and Cayuga Dr.

Figure 4. Alternative 3 Parcel Location Map



APPENDIX B – SECONDARY RESOURCE MAPS

Figure 5. Alternative 1 Parcel - Bing Aerial Photograph Map



Figure 6. Alternative 1 Parcel - USGS Quad Map

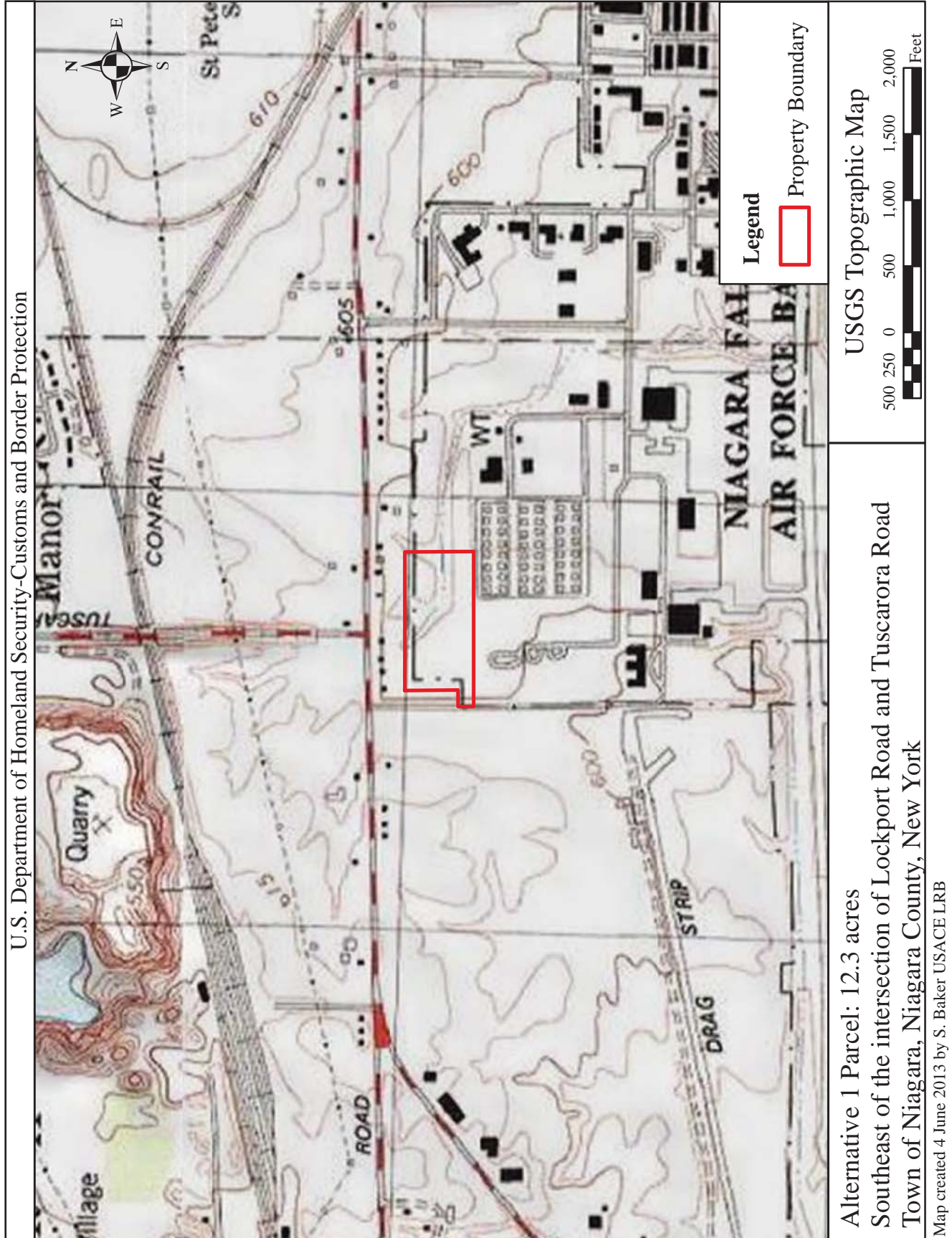


Figure 7. Alternative 1 Parcel - USFWS National Wetland Inventory (NWI) Map

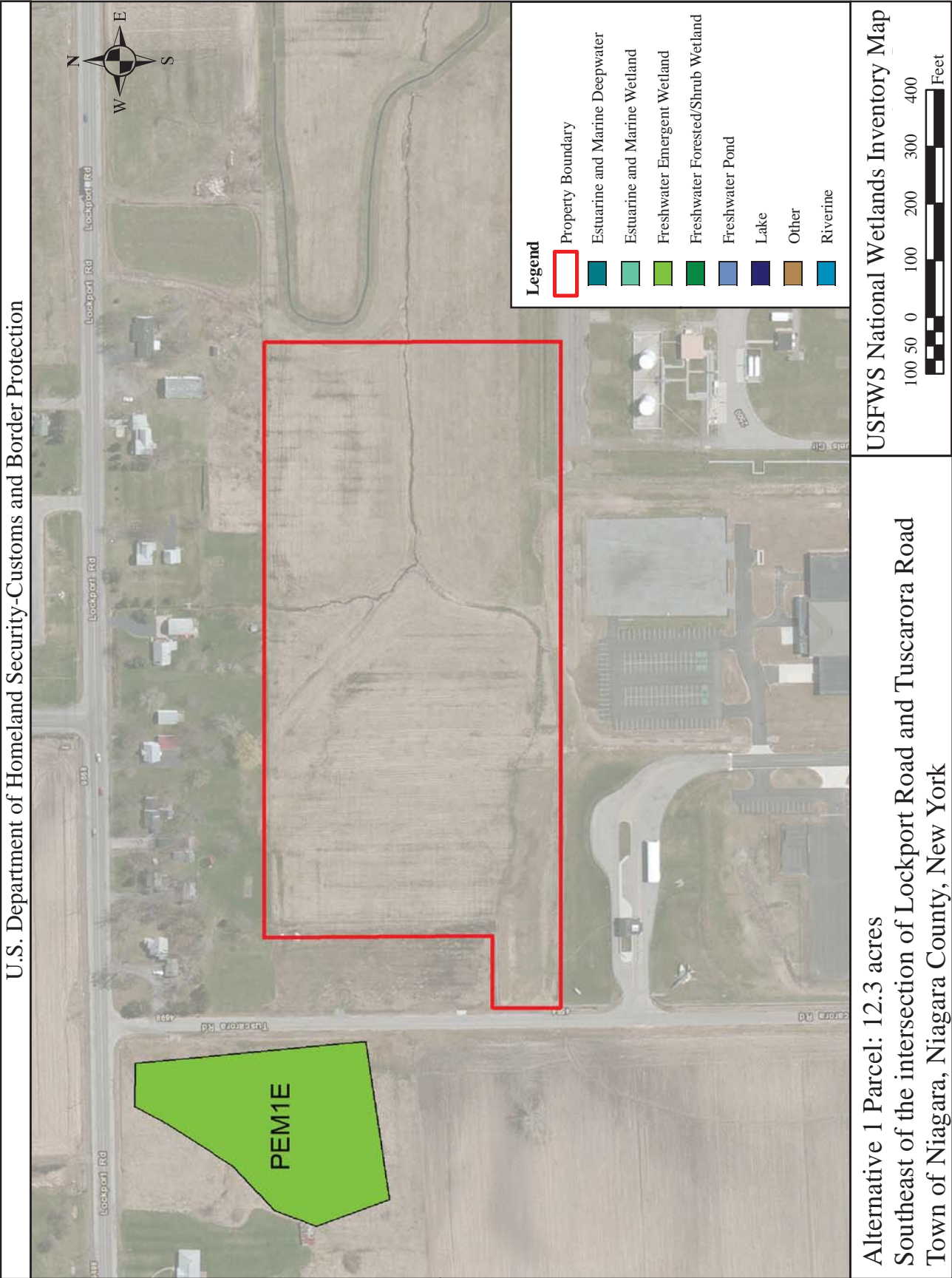


Figure 8. Alternative 1 Parcel - USGS National Hydrography Dataset (NHD) Map

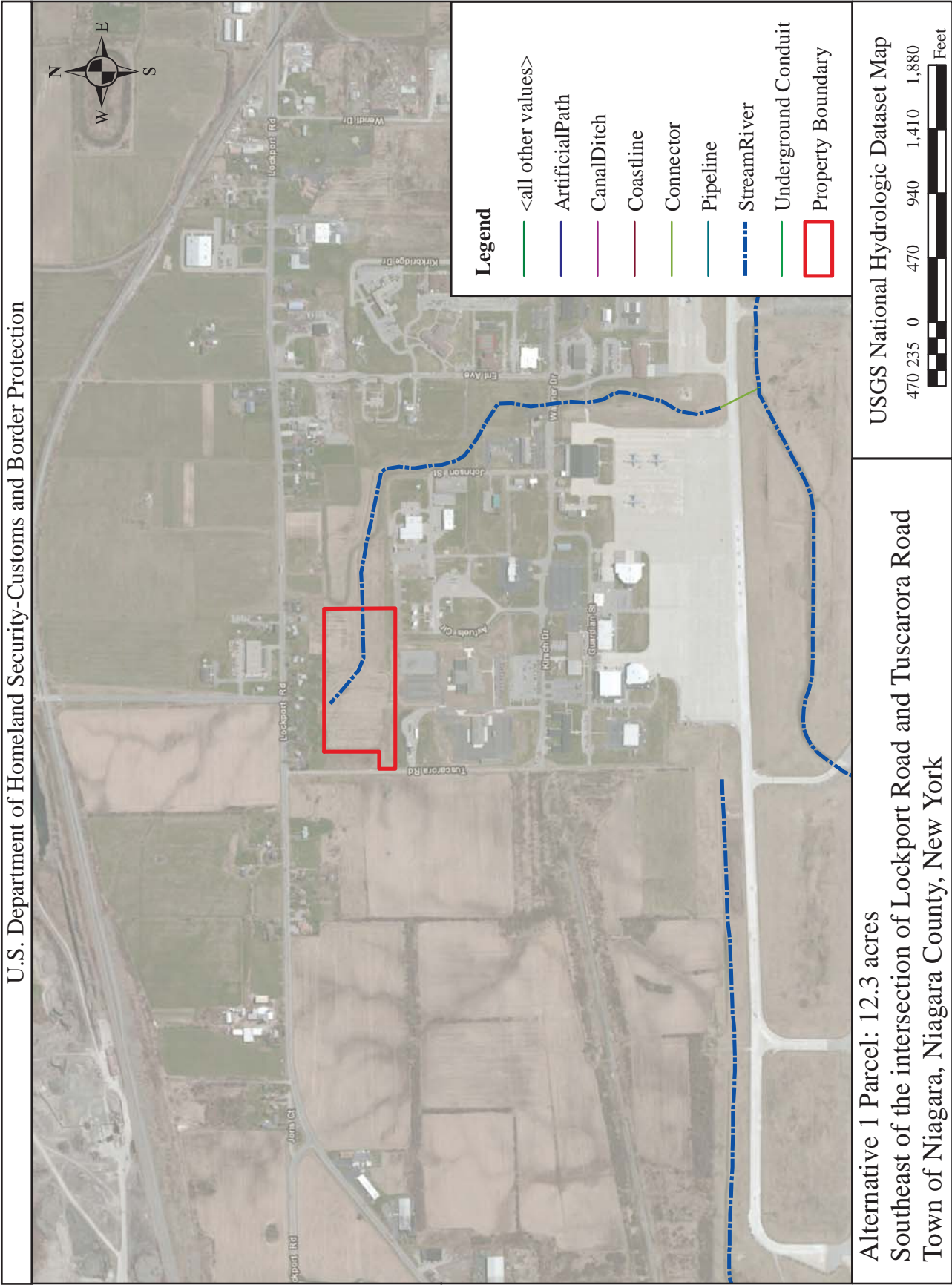


Figure 9. Alternative 1 Parcel - USDA Niagara County Soil Survey Map

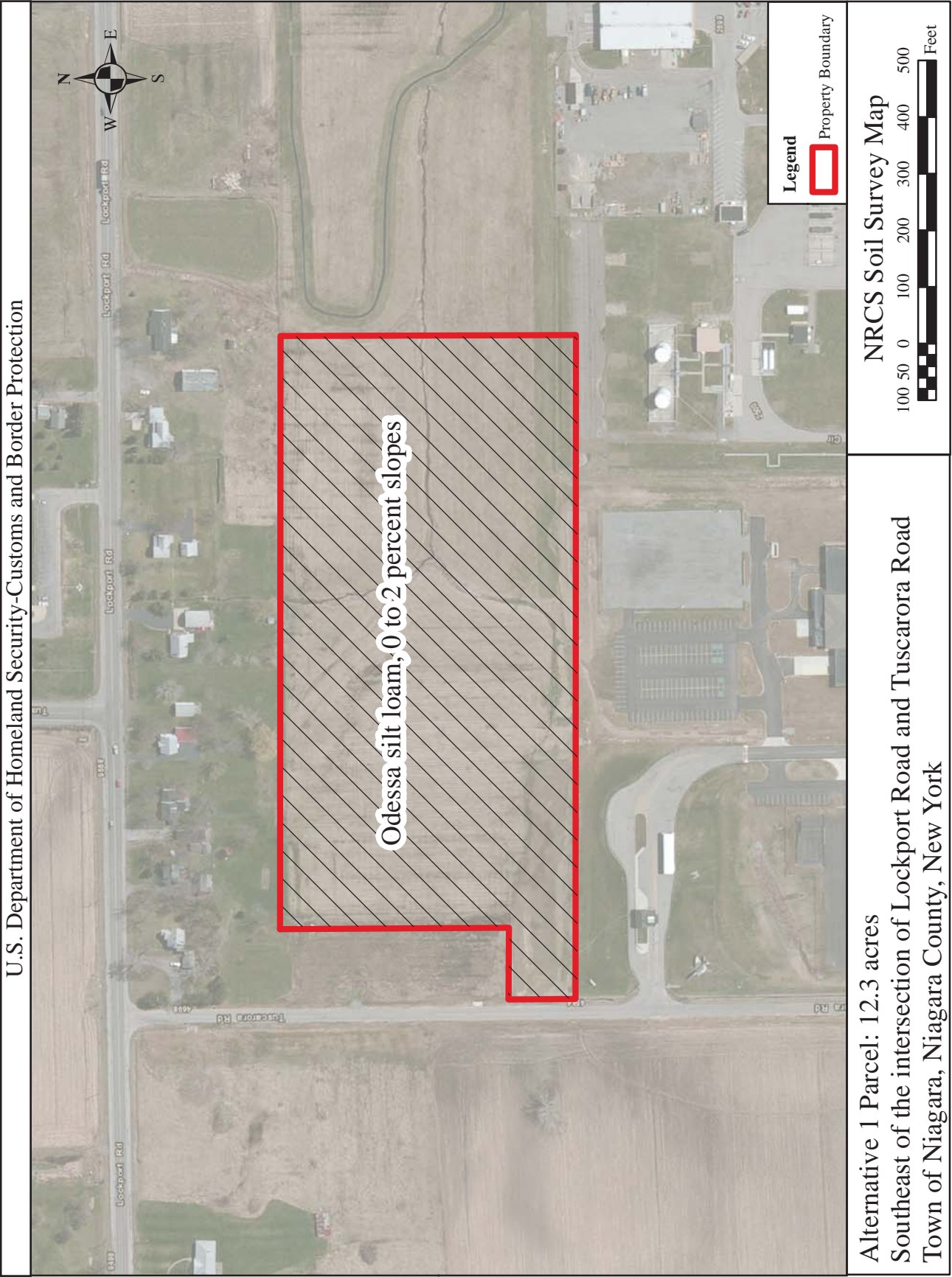


Figure 10. Alternative 1 Parcel - FEMA Floodplain Map

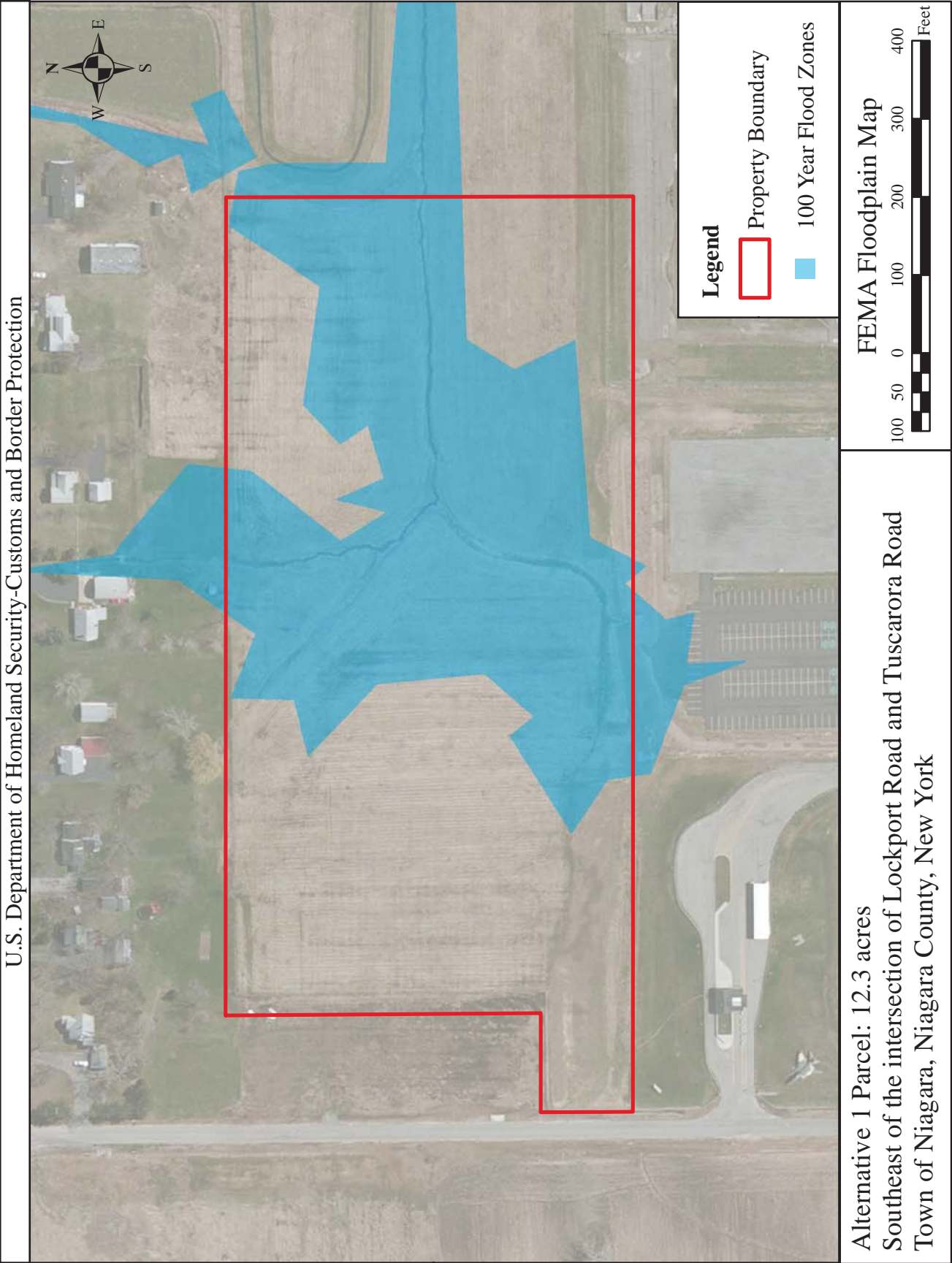
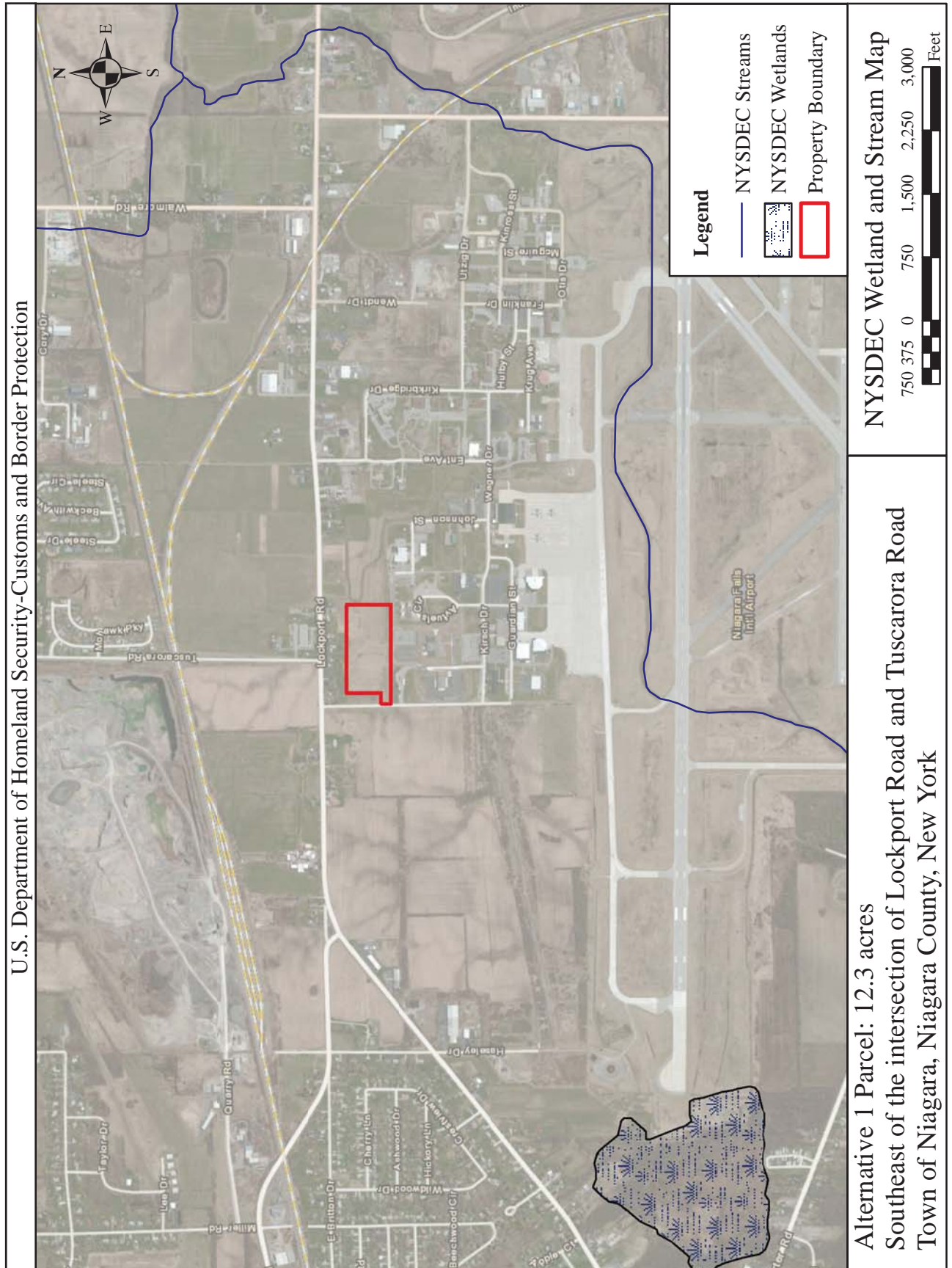


Figure 11. Alternative 1 Parcel - NYSDEC Wetland and Stream Map



Map created 4 June 2013 by S. Baker USACE LRB

Figure 12. Alternative 2 Parcel - Bing Aerial Photograph Map

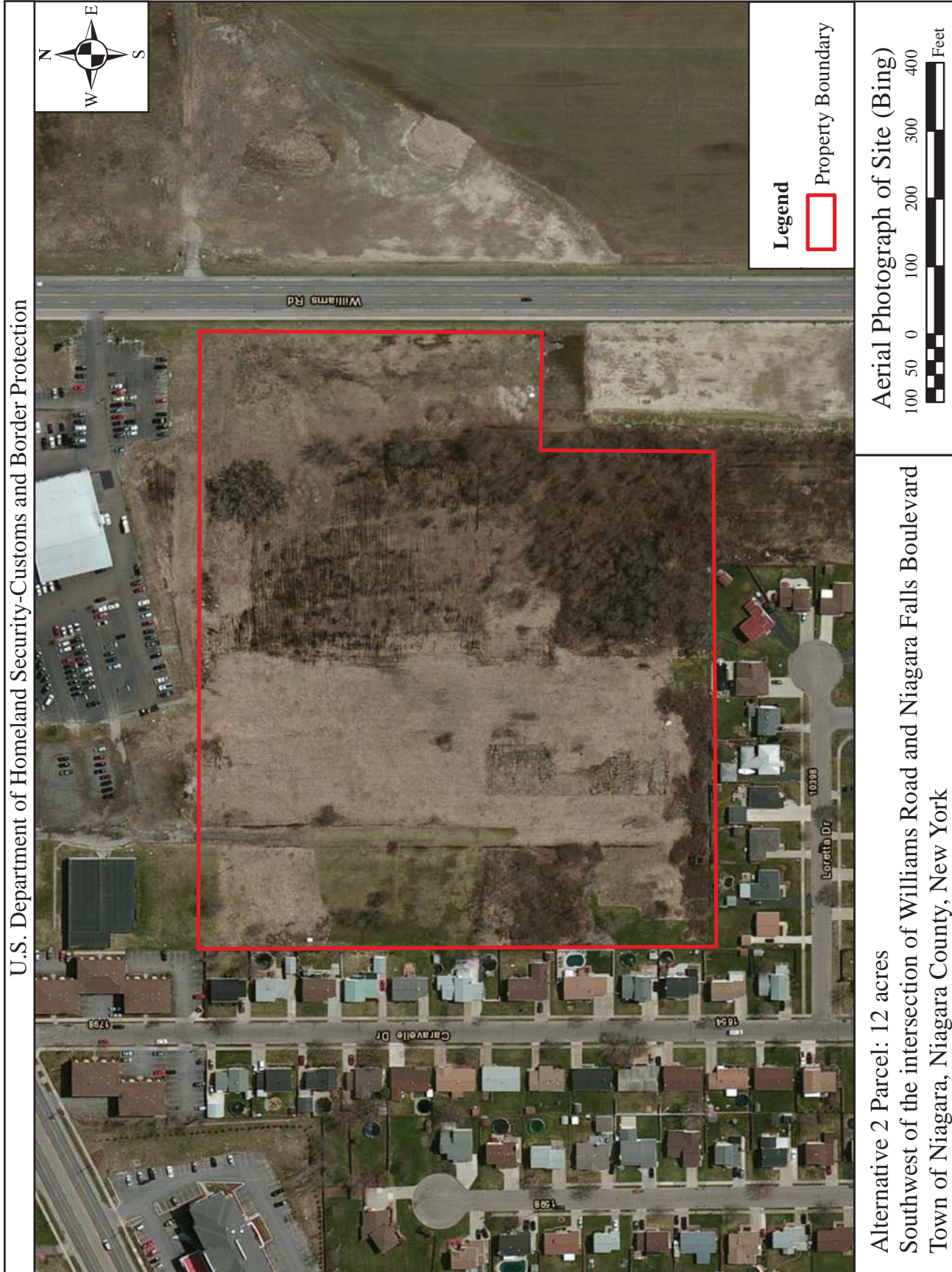


Figure 13. Alternative 2 Parcel - USGS Quad Map

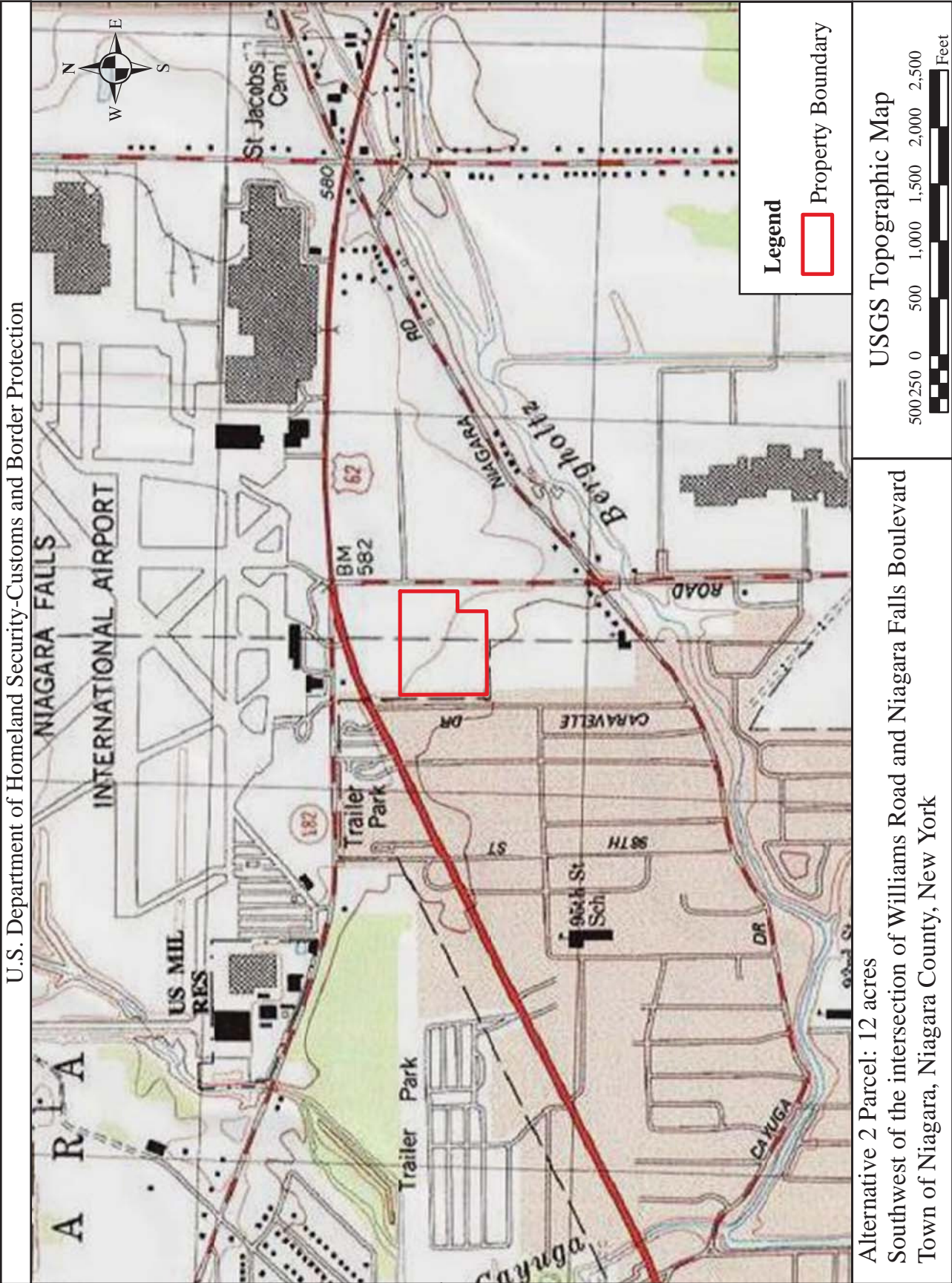


Figure 14. Alternative 2 Parcel - USFWS National Wetland Inventory (NWI) Map

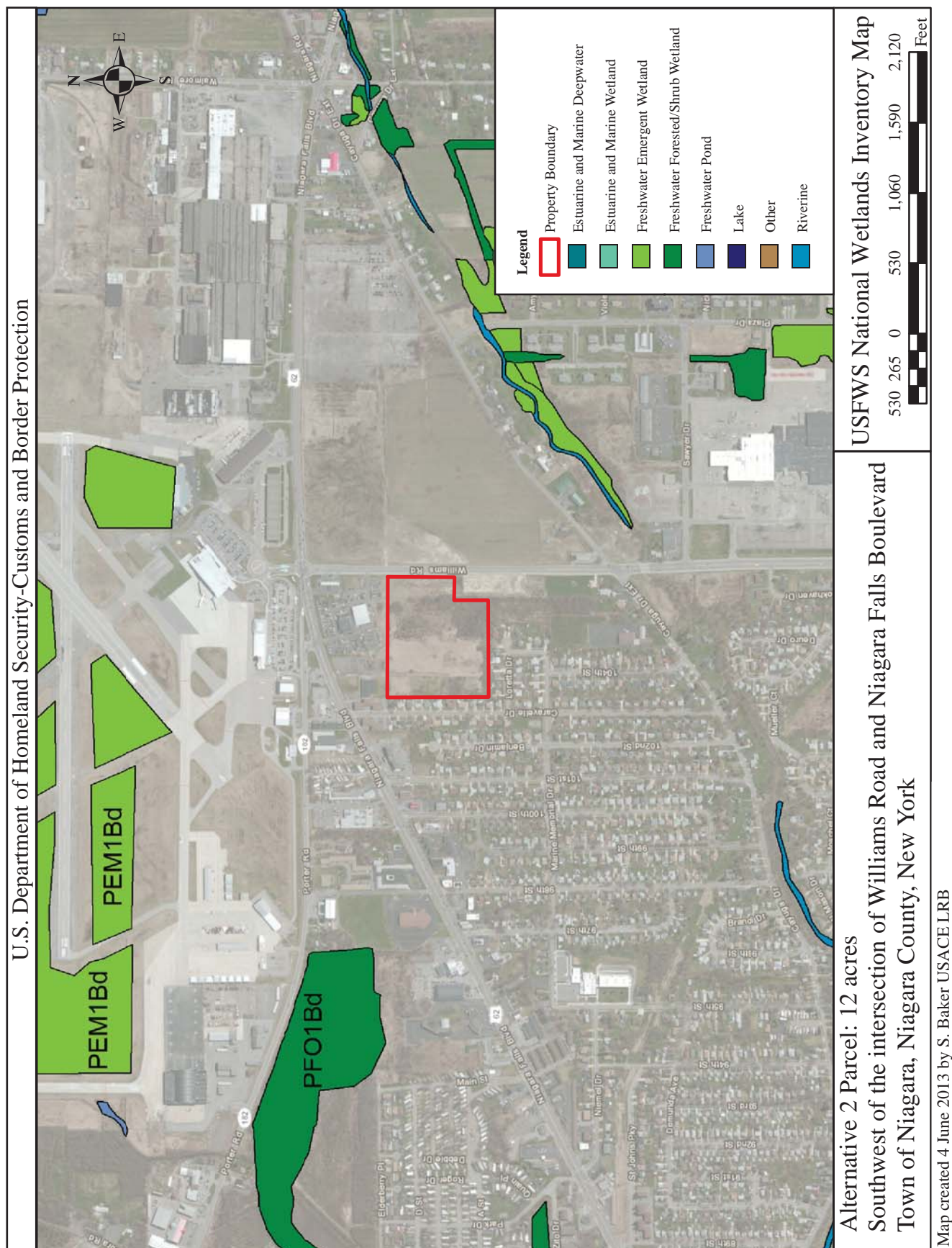


Figure 15. Alternative 2 Parcel - USGS National Hydrography Dataset (NHD) Map

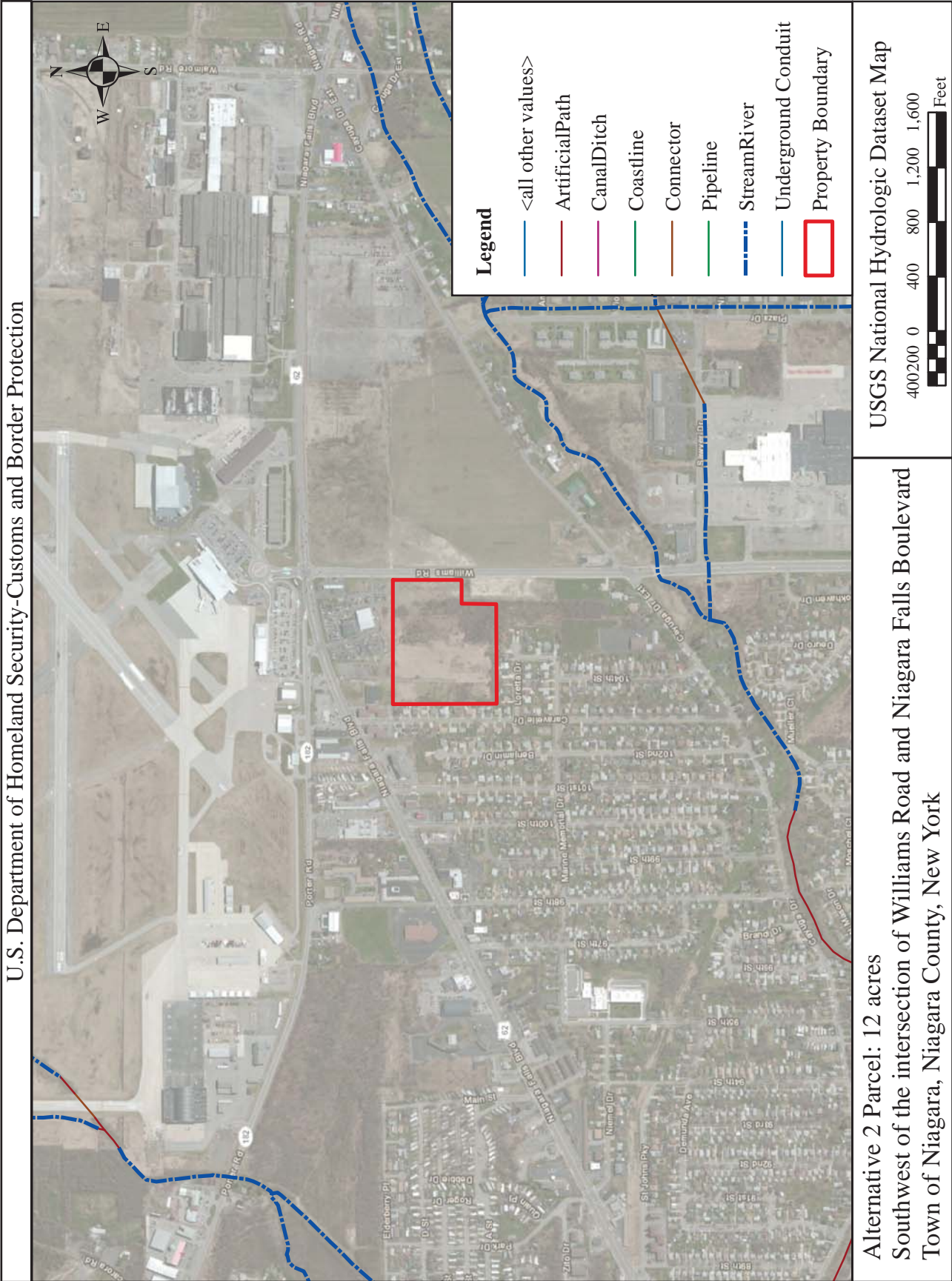


Figure 16. Alternative 2 Parcel - USDA Niagara County Soil Survey Map

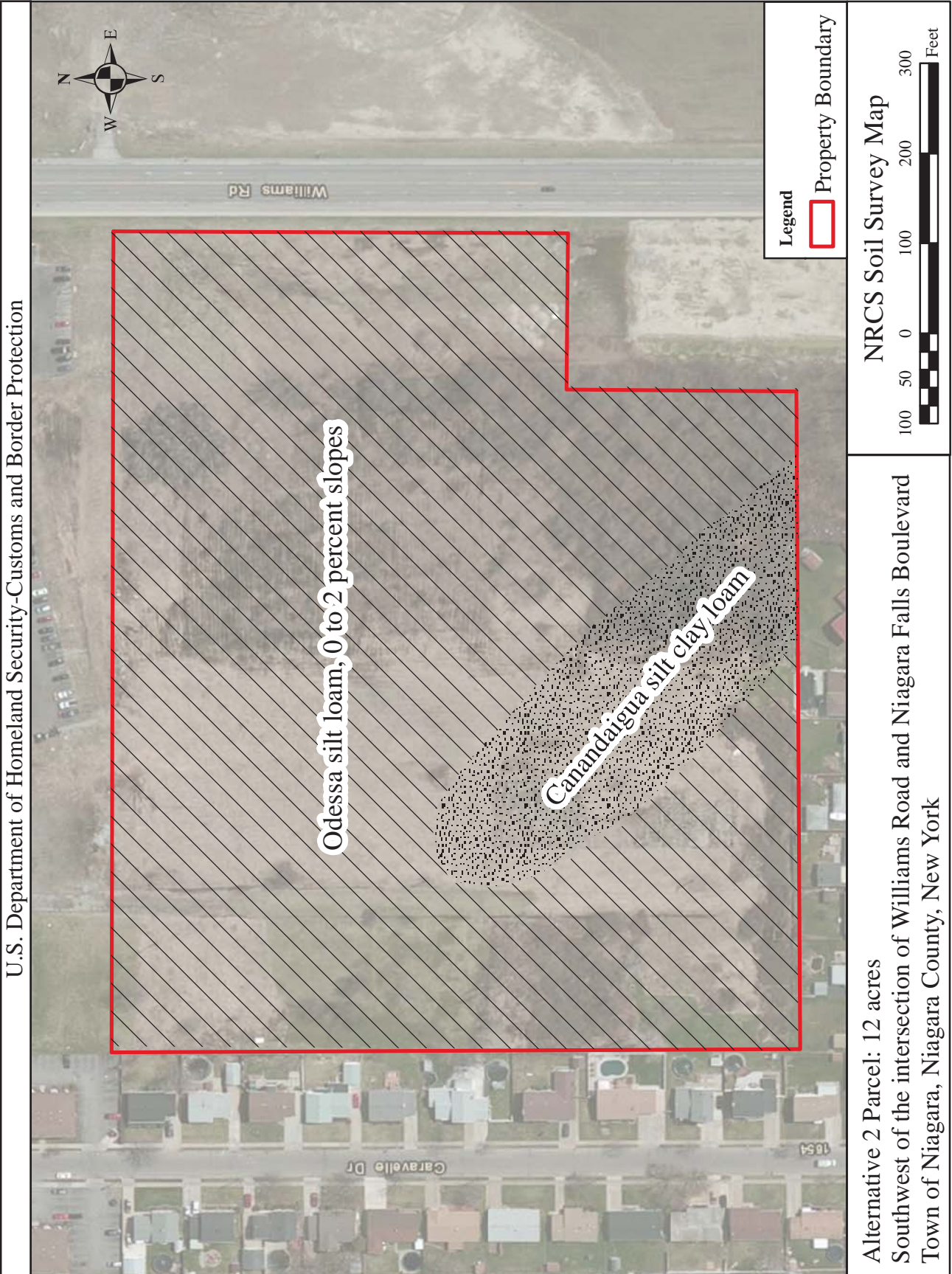


Figure 17. Alternative 2 Parcel - FEMA Floodplain Map



Figure 18. Alternative 2 Parcel - NYSDEC Wetland and Stream Map

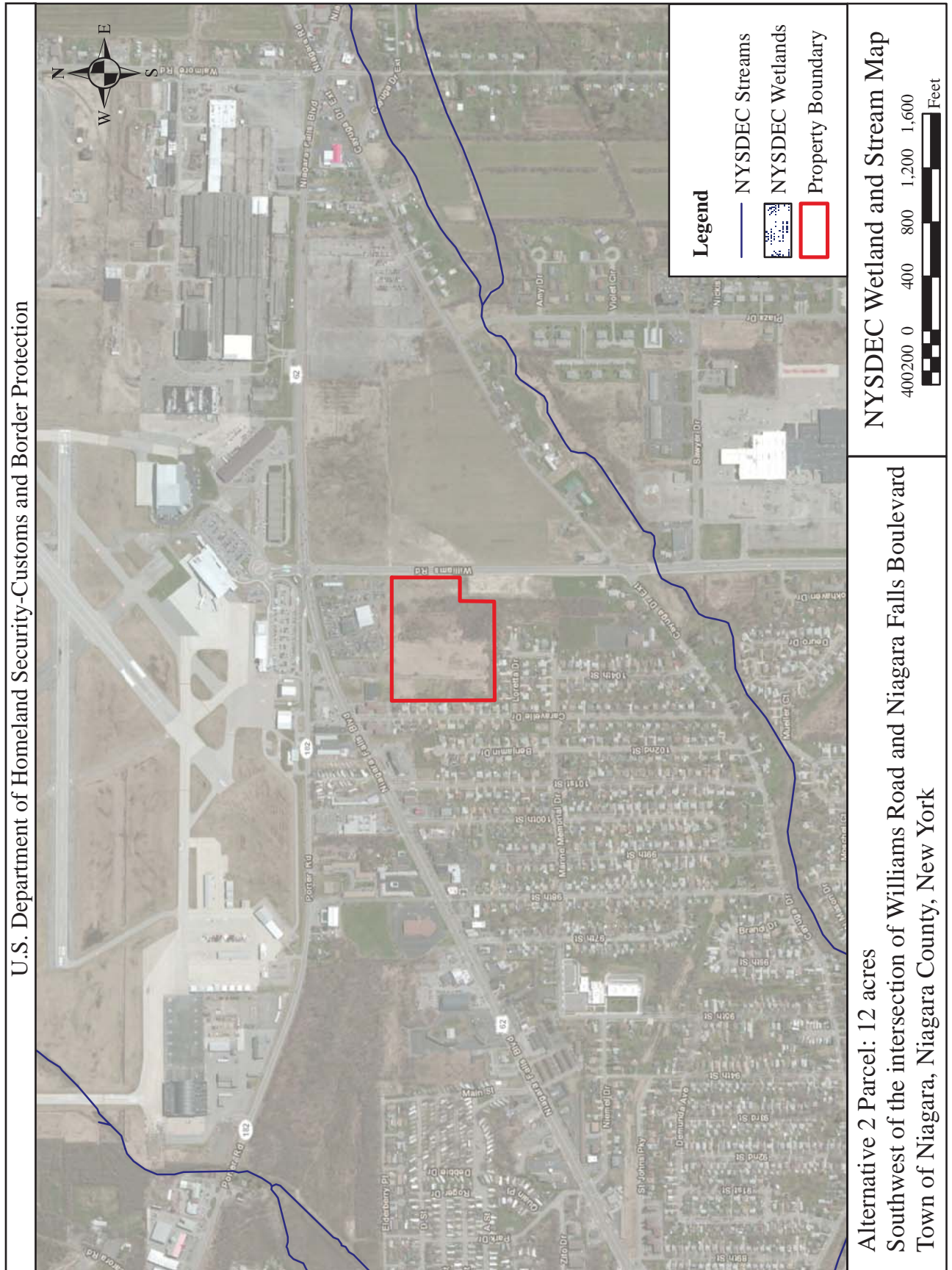


Figure 19. Alternative 3 Parcel - Bing Aerial Photograph Map



Map created 4 June 2013 by S. Baker USACE LRB

Figure 20. Alternative 3 Parcel - USGS Quad Map

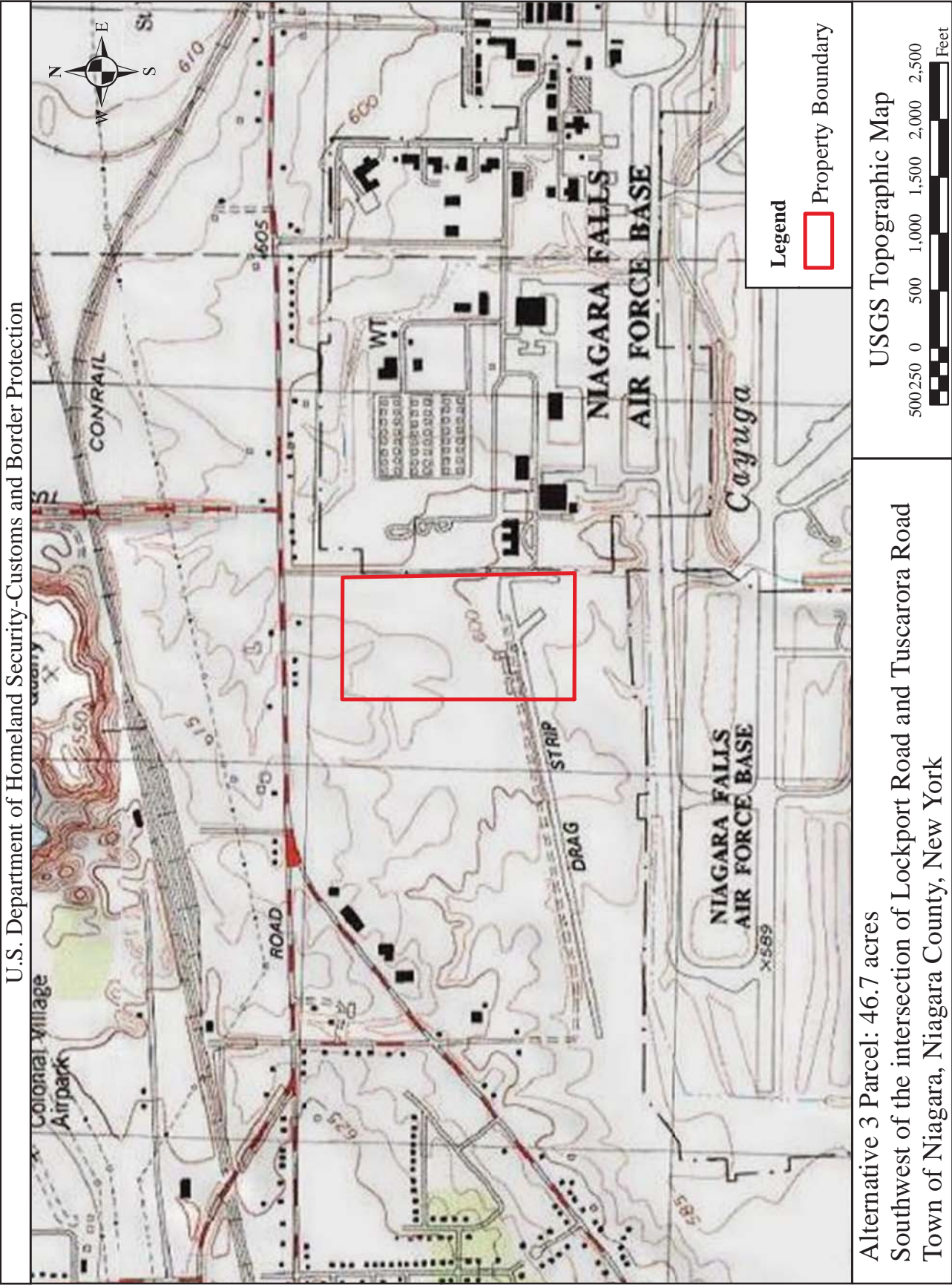
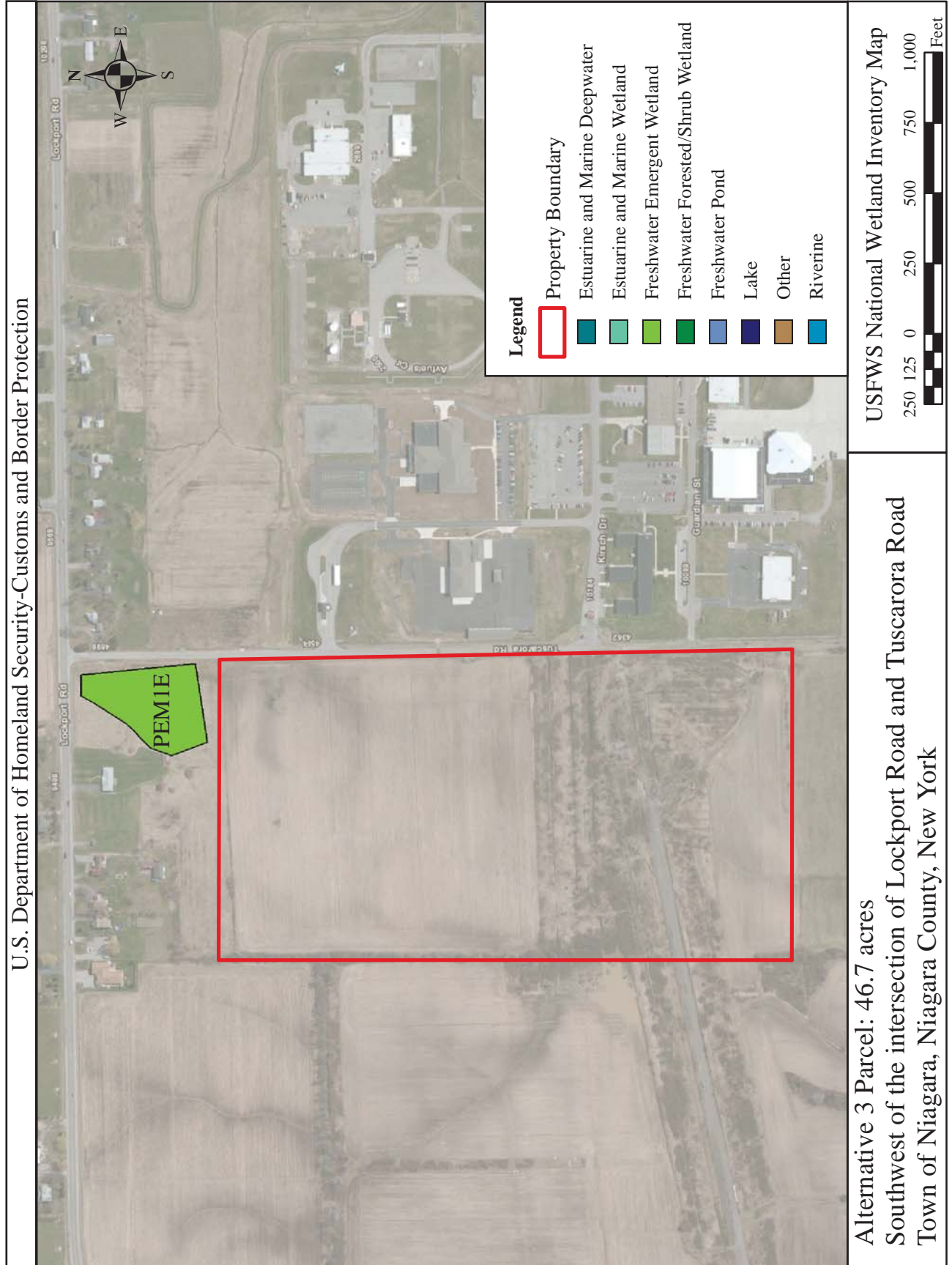


Figure 21. Alternative 3 Parcel - USFWS National Wetland Inventory (NWI) Map



Map created 4 June 2013 by S. Baker USACE LRB

Figure 22. Alternative 3 Parcel - USGS National Hydrography Dataset (NHD) Map

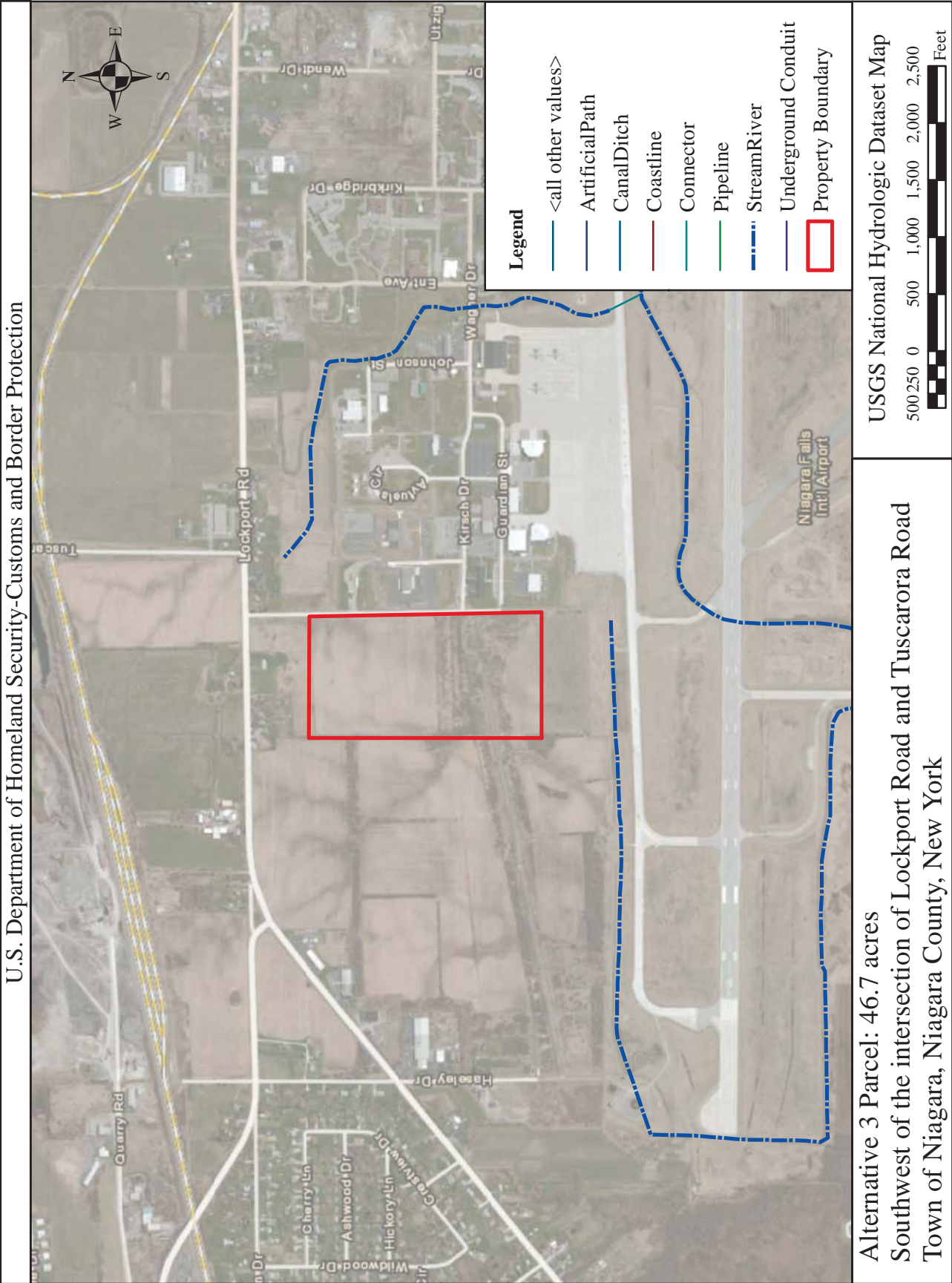
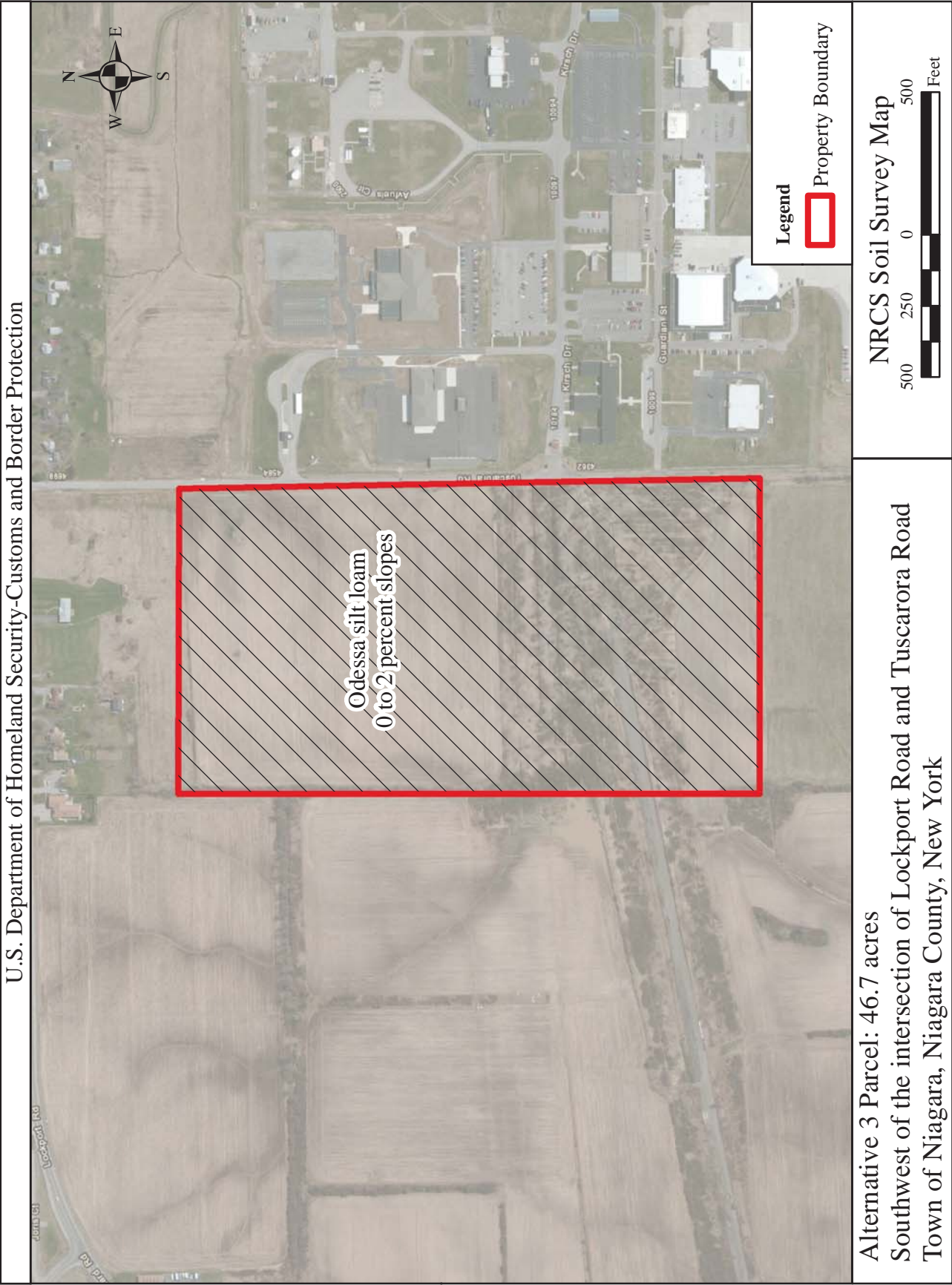


Figure 23. Alternative 3 Parcel - USDA Niagara County Soil Survey Map



Map created 4 June 2013 by S. Baker USACE LRB

Figure 24. Alternative 3 Parcel - FEMA Floodplain Map

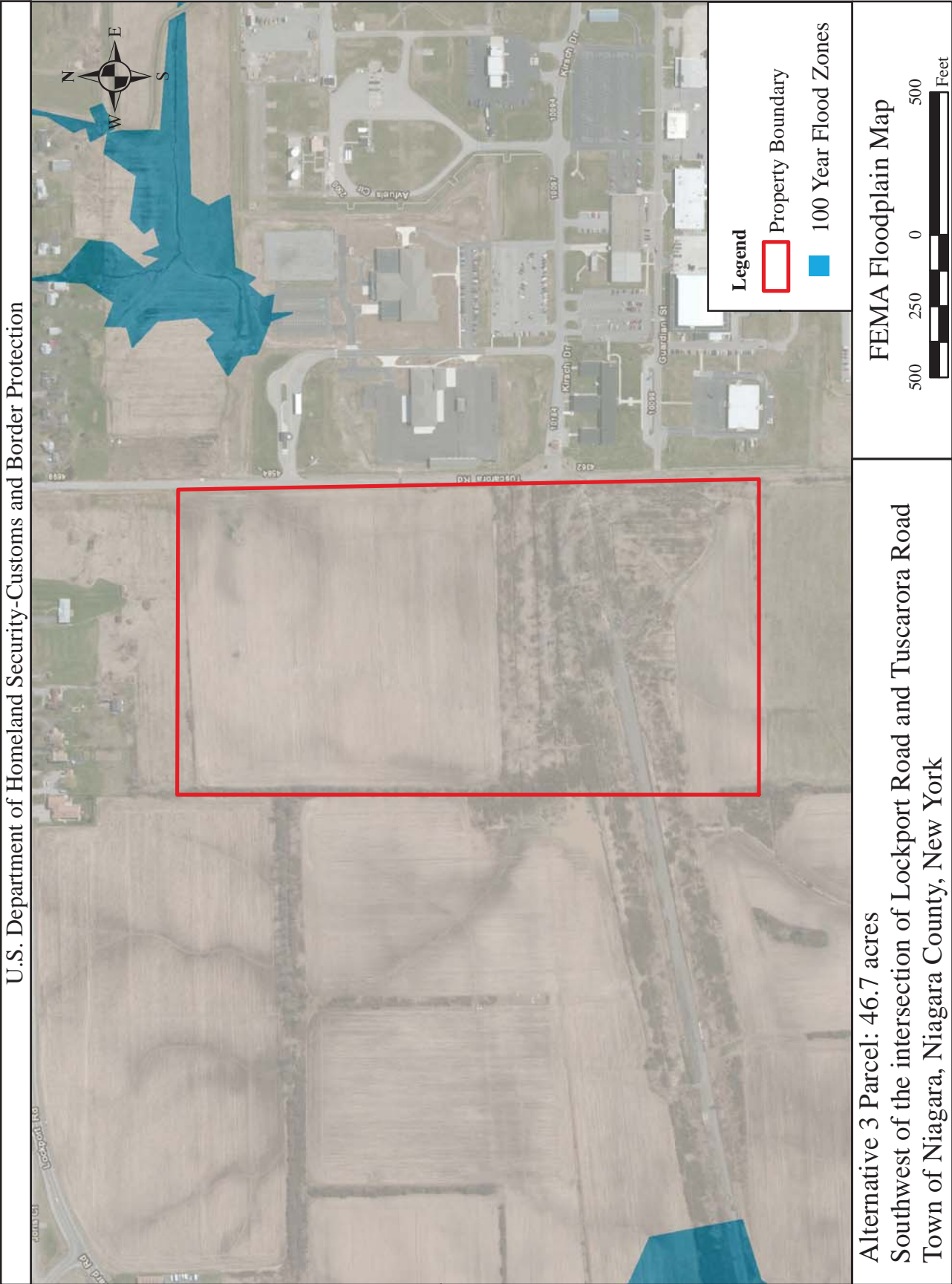
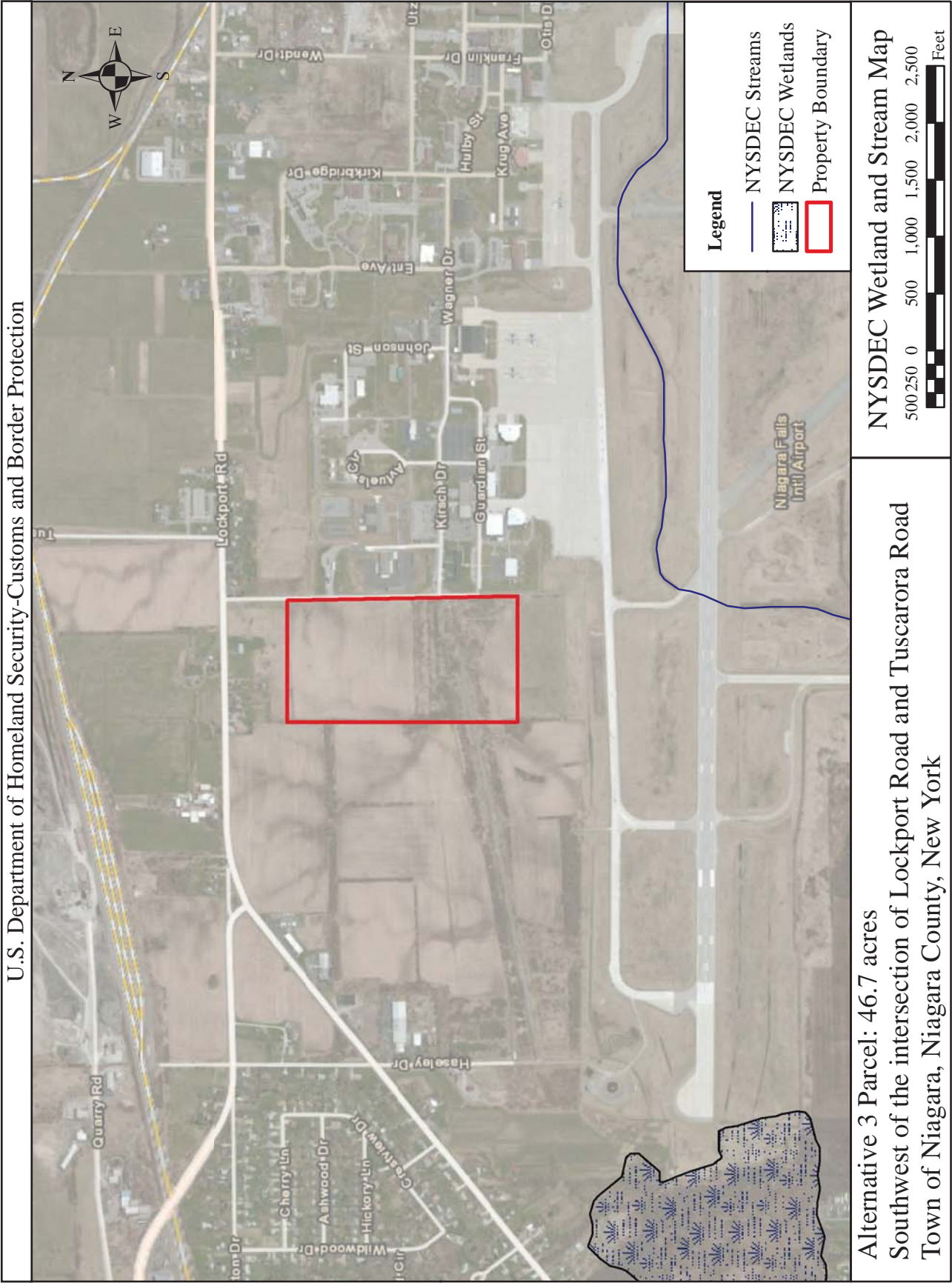


Figure 25. Alternative 3 Parcel - NYSDEC Wetland and Stream Map



APPENDIX C – WETLAND DELINEATION MAPS

Figure 26. Alternative 1 Parcel - Aquatic Resource Map

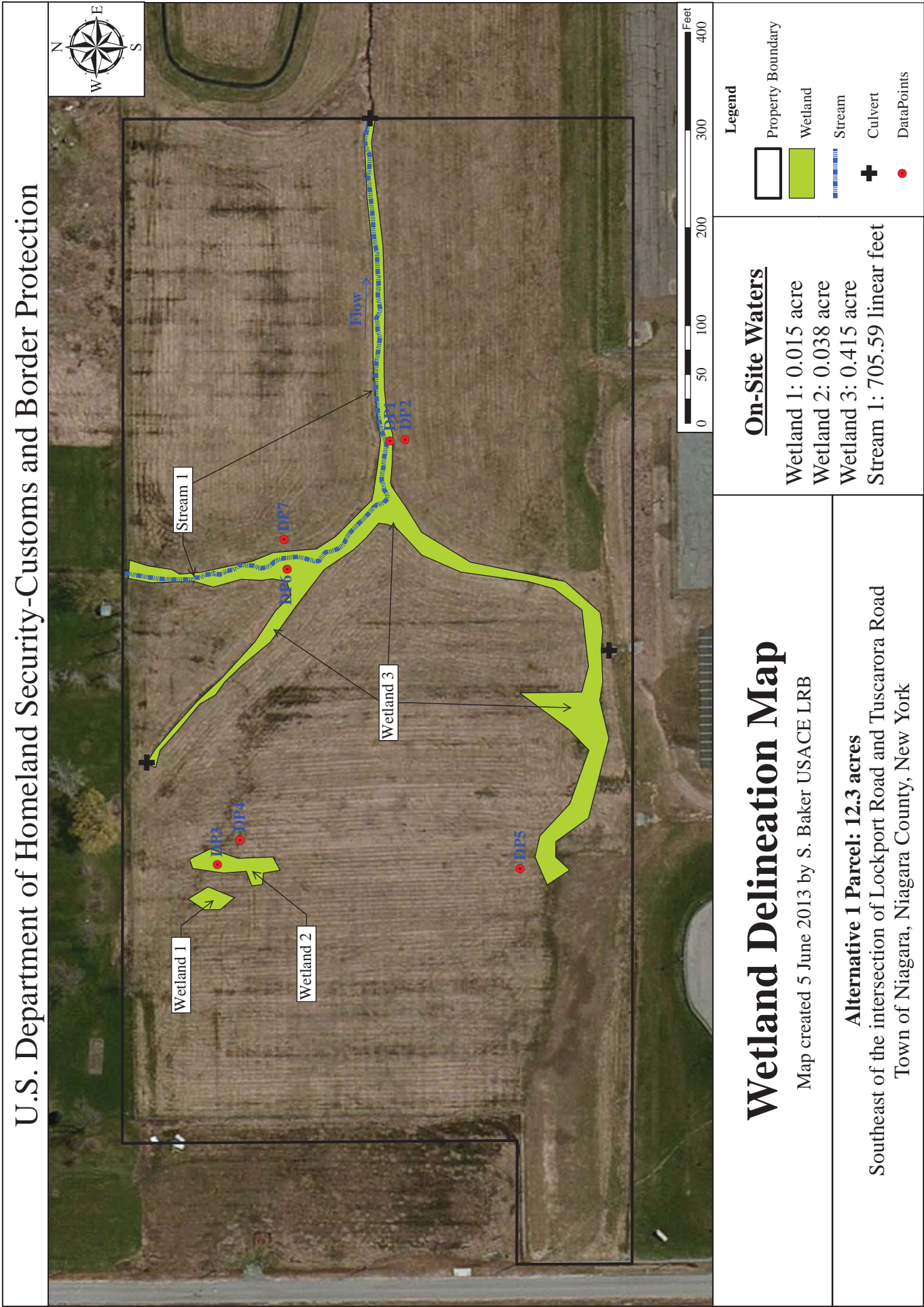


Figure 27. Alternative 1 Parcel - Aquatic Resource Map (2)

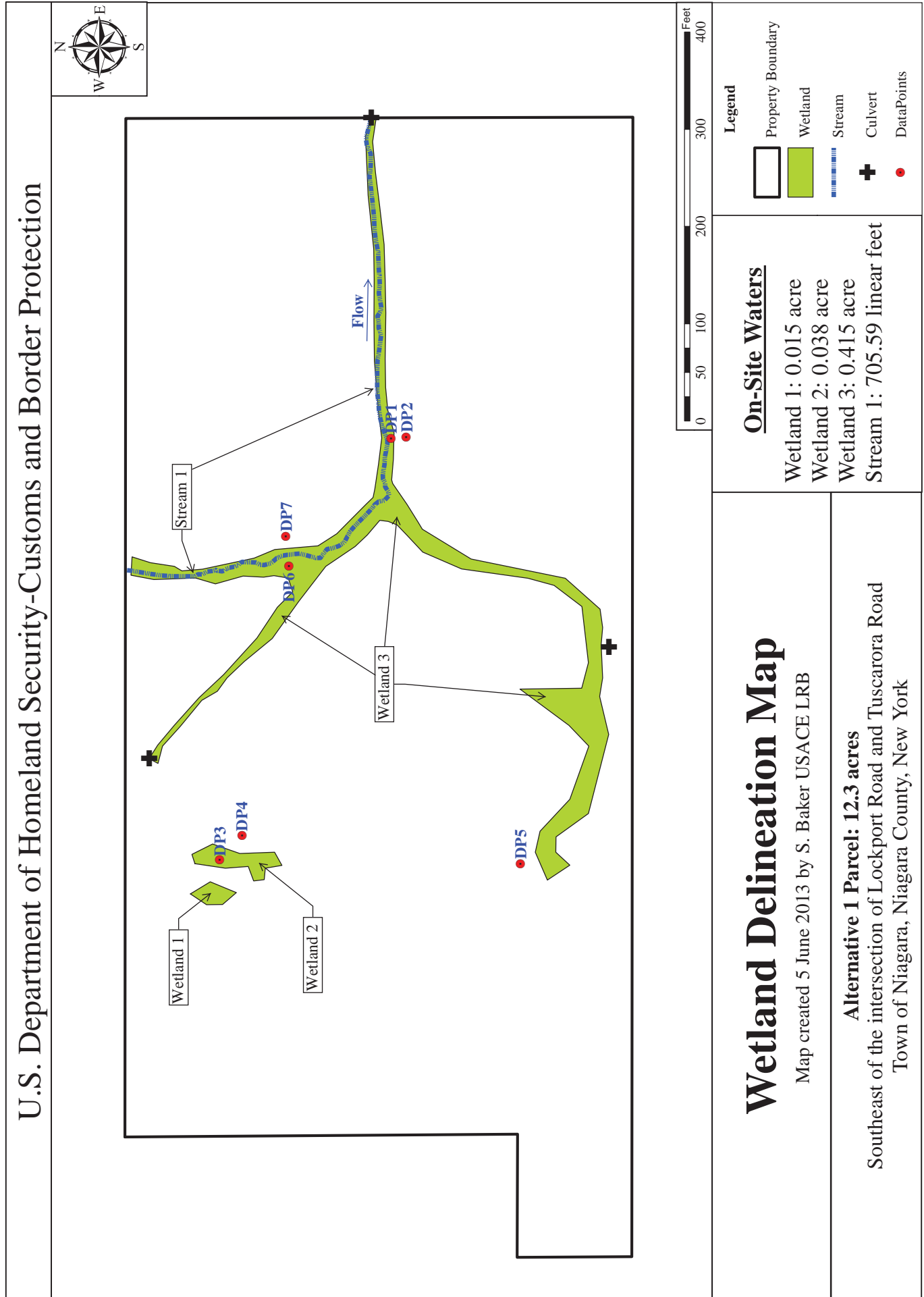


Figure 28. Alternative 2 Parcel - Aquatic Resource Map

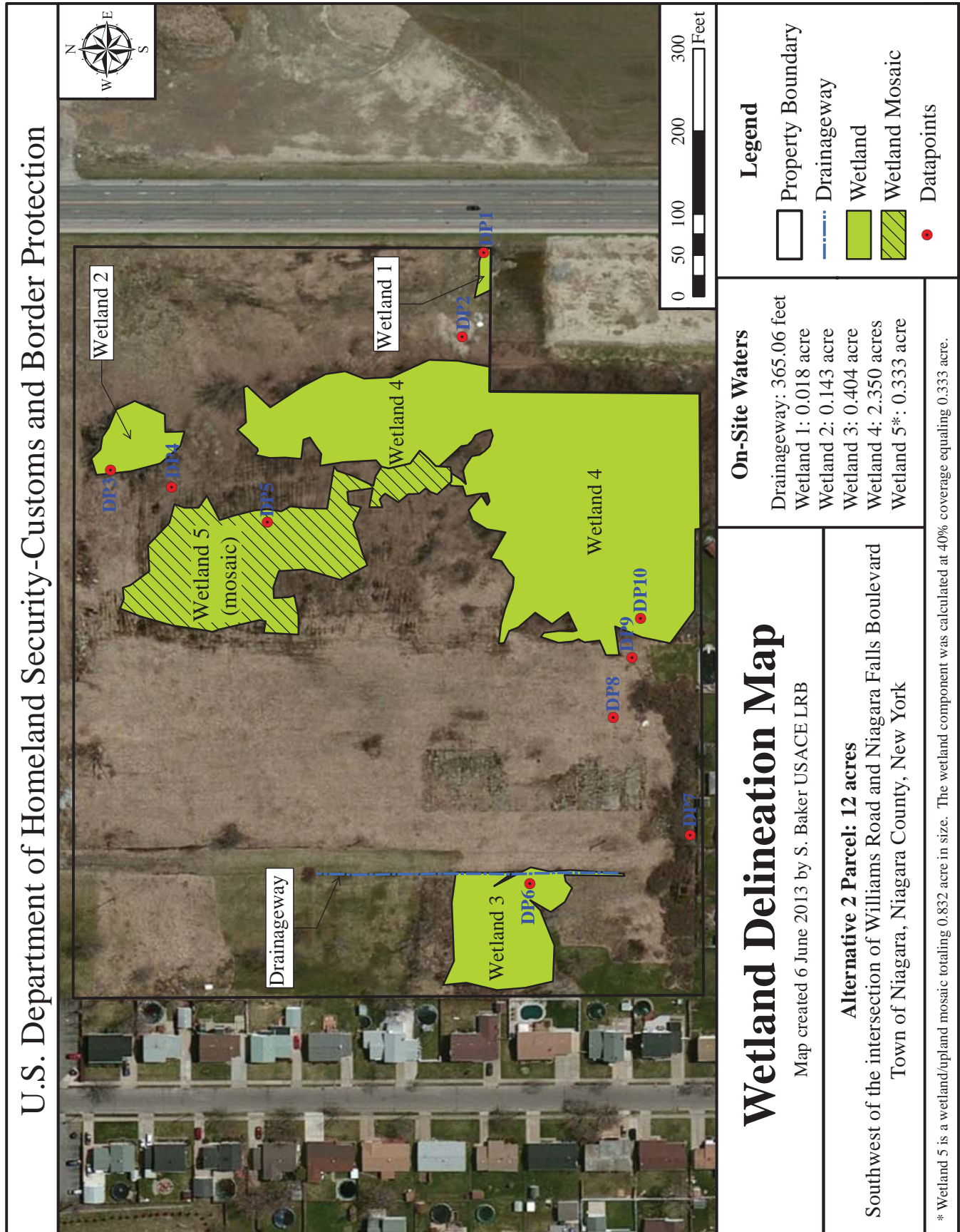


Figure 29. Alternative 2 Parcel - Aquatic Resource Map (2)

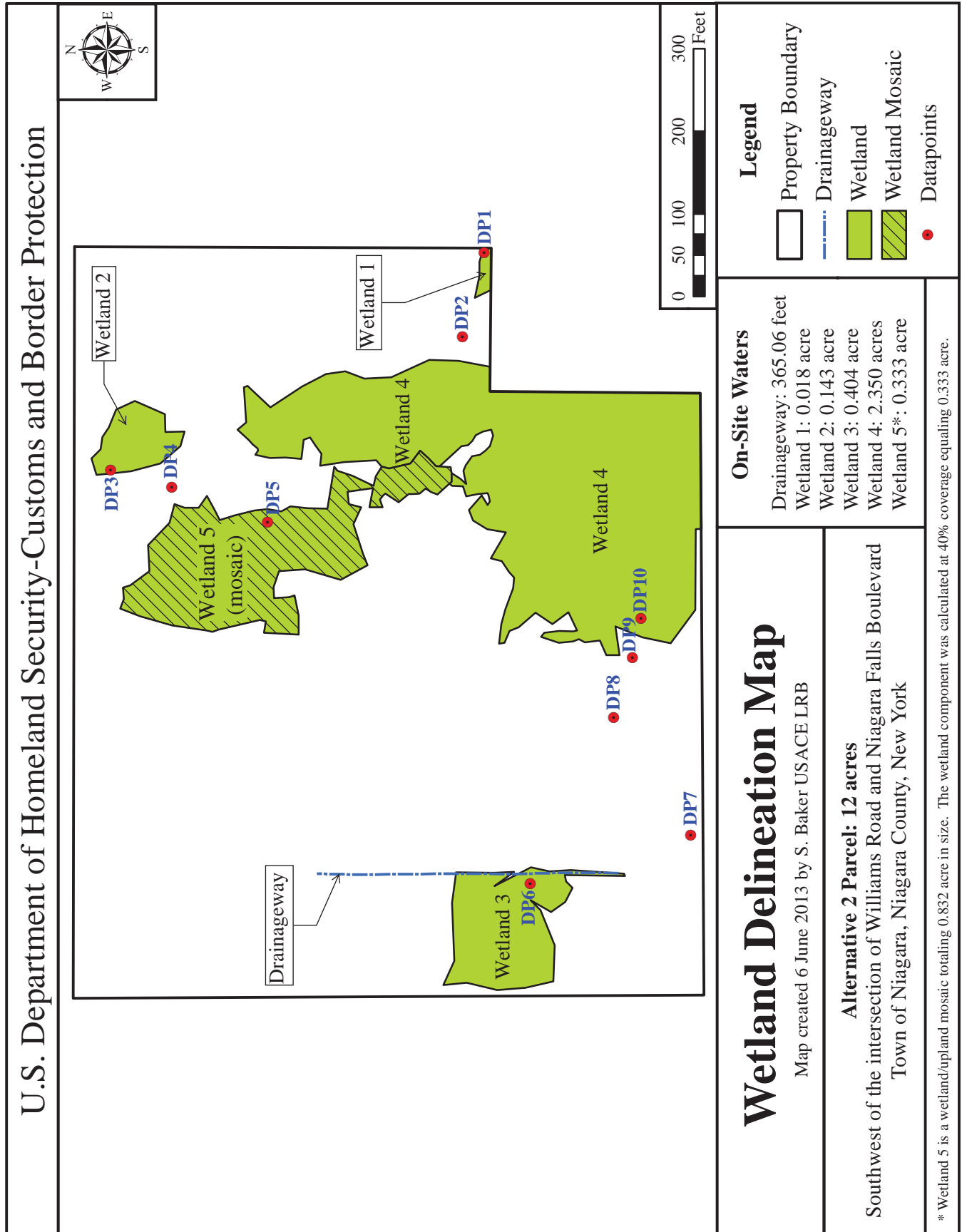


Figure 30. Alternative 3 Parcel - Aquatic Resource Map

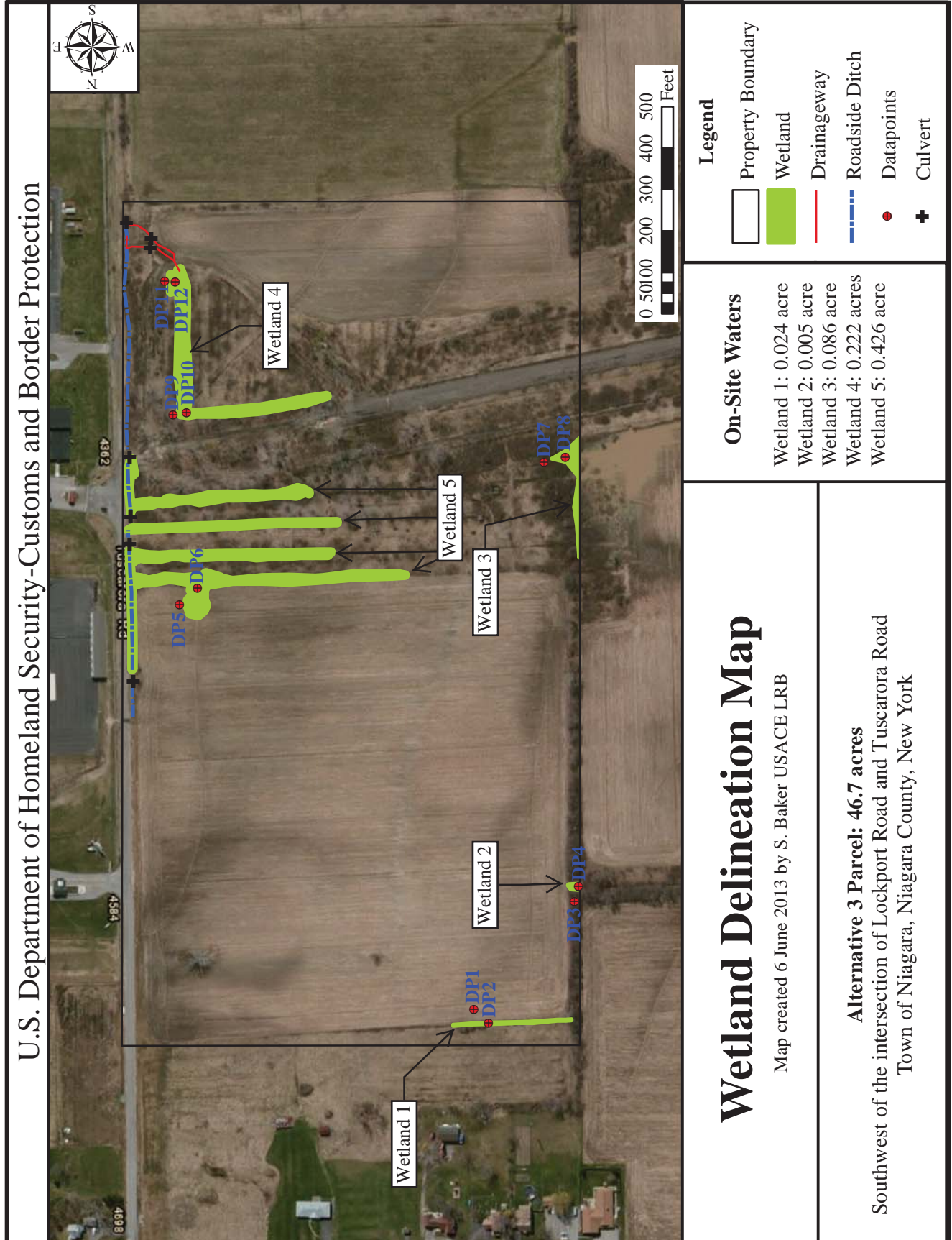
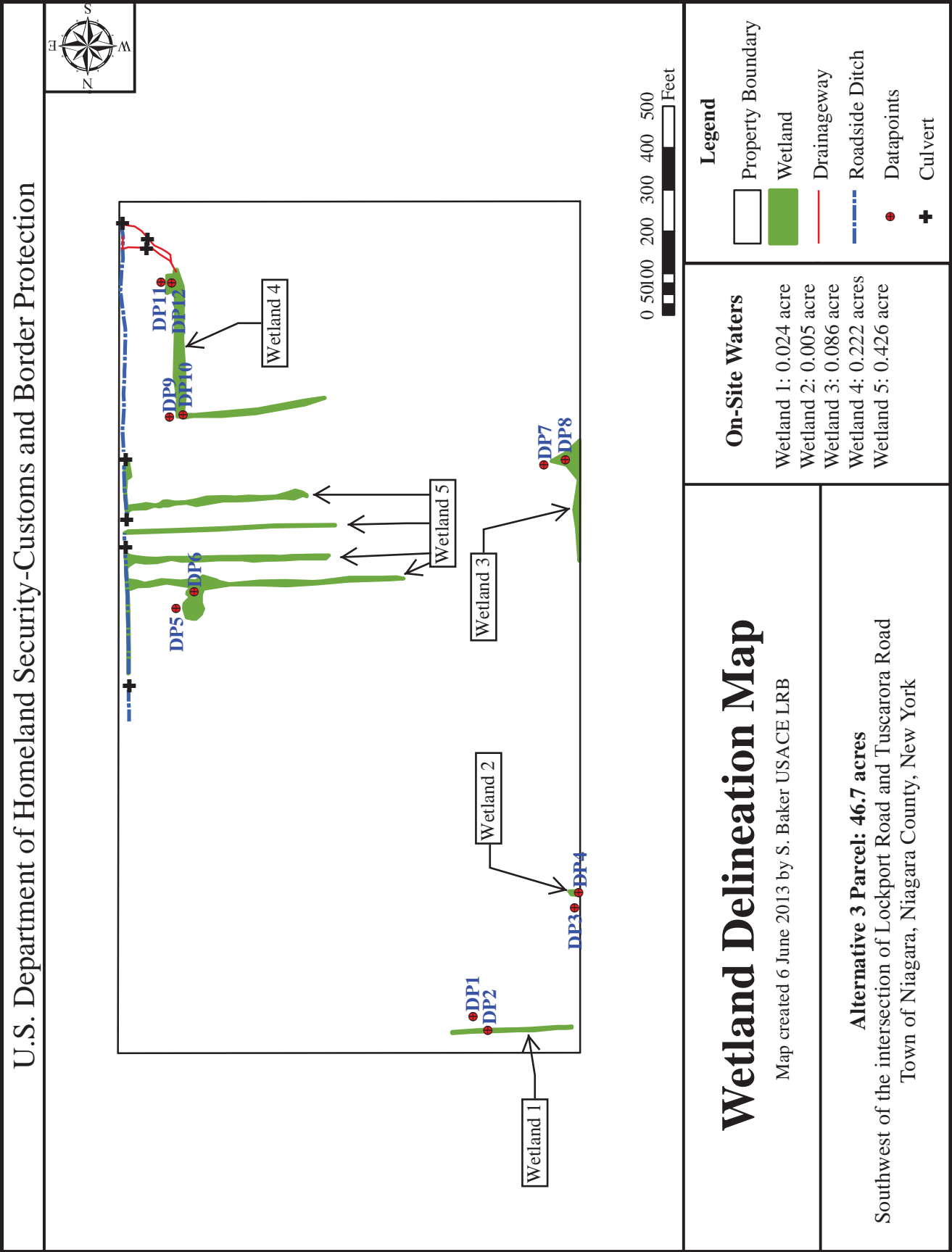


Figure 31. Alternative 3 Parcel - Aquatic Resource Map (2)



APPENDIX D – PHOTOGRAPH LOCATION MAPS AND SITE PHOTOGRAPH LOG

Figure 32. Alternative 1 Parcel - Photograph Location Map

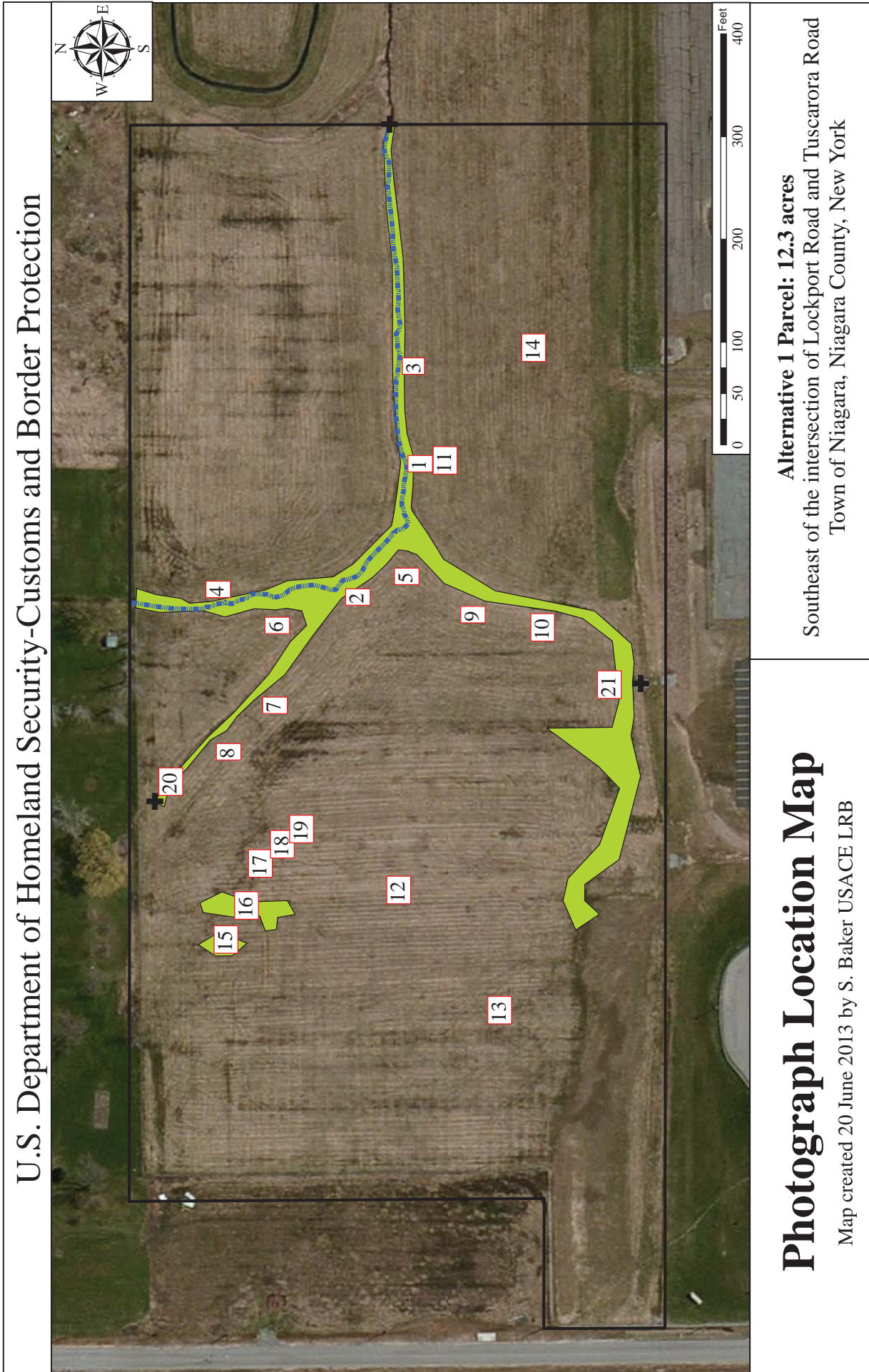


Figure 33. Alternative 2 Parcel - Photograph Location Map

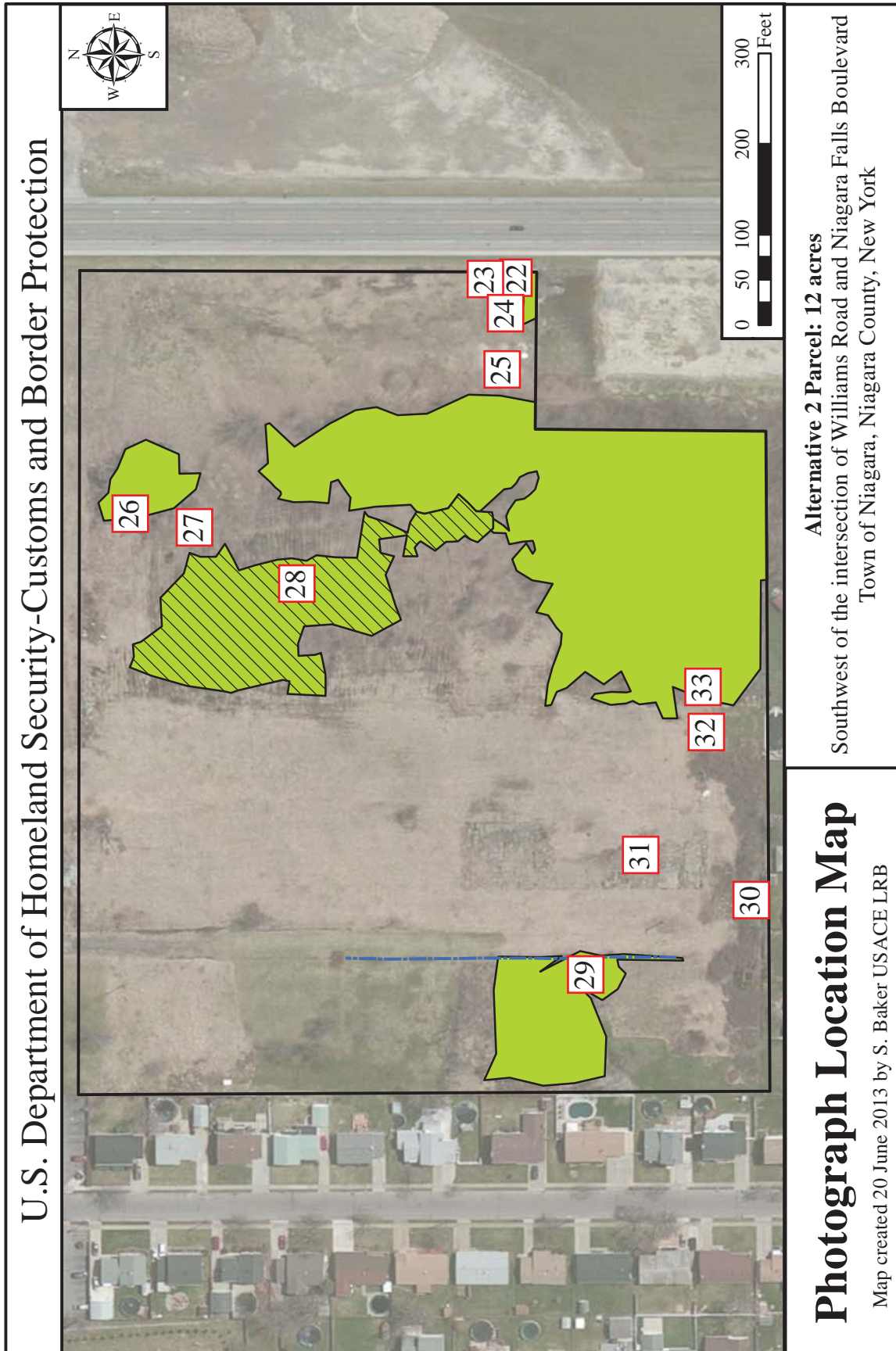
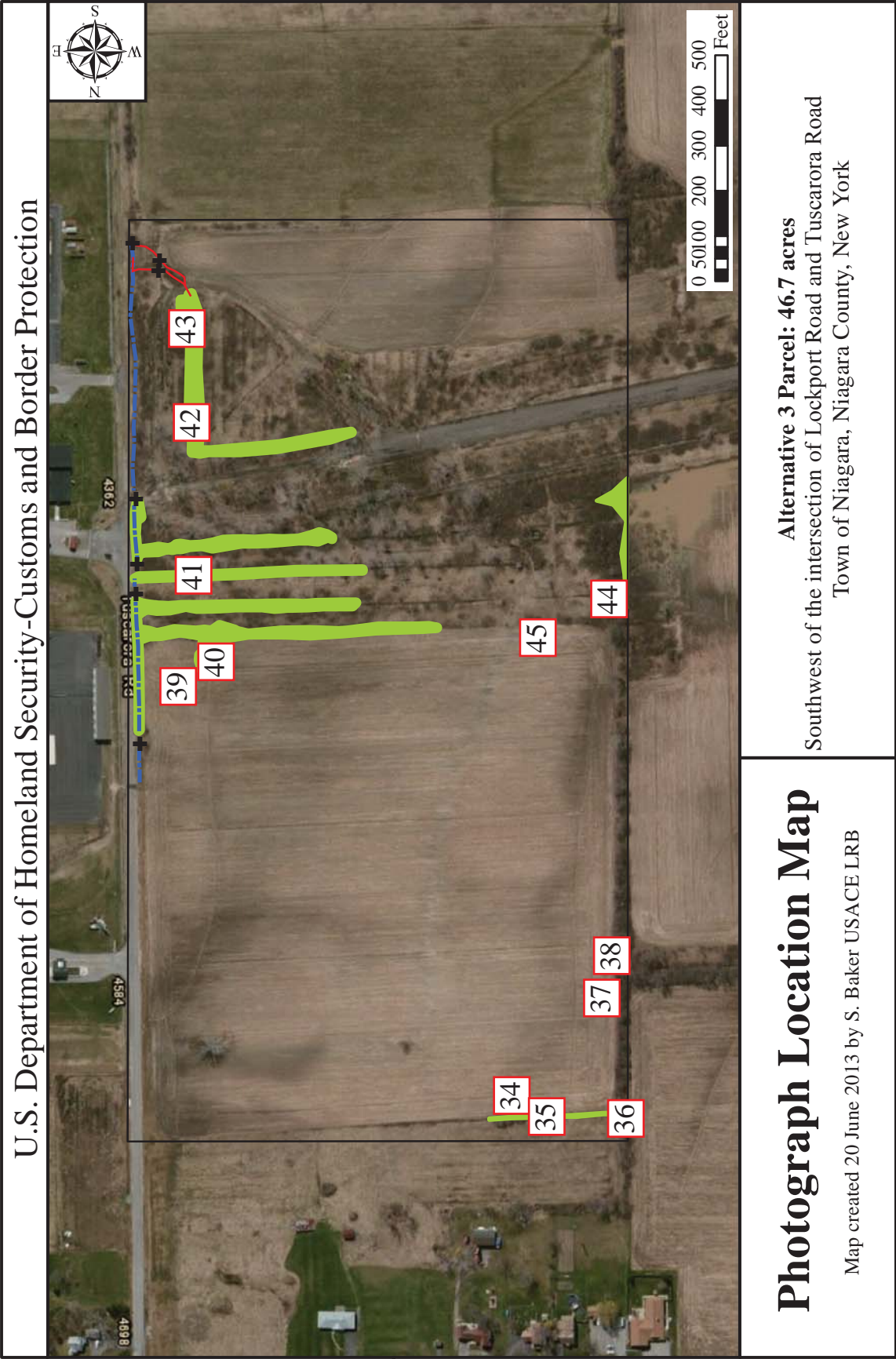


Figure 34. Alternative 3 Parcel - Photograph Location Map





Photograph 1: Site 1, DP 1, Wetland 3 and Stream 1, (Facing east)



Photograph 2: Site 1, Wetland 3 fringe and Stream 1, (Facing northwest)



Photograph 3: Site 1, Wetland 3 and Stream 1, (Facing east)



Photograph 4: Site 1, Wetland 3 east fork of wetland and Stream 1, (Facing north/northeast)



Photograph 5: Site 1, Wetland 3 east fork, (Facing east, near center of wetland)



Photograph 6: Site 1, Wetland 3 northeast fork of wetland and Stream 1, (Facing north/northwest)



Photograph 7: Site 1, Wetland 3 northwest fork of wetland, (Facing northwest)



Photograph 8: Site 1, Wetland 3 northwest fork of wetland, (Facing northwest)



Photograph 9: Site 1, Wetland 3 southern fork of wetland, (Facing southwest)



Photograph 10: Site 1, Wetland 3 southern fork of wetland, (Facing south)



Photograph 11: Site 1, Upland DP 2, (Facing west)



Photograph 12: Site 1, Upland Field in west central portion of site, (Facing north)



Photograph 13: Site 1, Upland field in southwest portion of site, (Facing southwest)



Photograph 14: Site 1, Upland field in southeast portion of site, (Facing east)



Photograph 15: Site 1, DP 3, Wetland 1



Photograph 16: Site 1, DP 3, Wetland 1



Photograph 17: Site 1, DP 4, Upland



Photograph 18: Site 1, DP 4, Upland



Photograph 19: Site 1, Upland field, (Facing south from DP 4)



Photograph 20: Site 1, north culvert



Photograph 21: Site 1, south culvert



Photograph 22: Site 2, DP 1, Wetland 1



Photograph 23: Site 2, DP1, Wetland 1



Photograph 24: Site 2, DP 1, Wetland 1



Photograph 25: Site 2, DP 2, Upland



Photograph 26: Site 2, DP 3, Wetland 2



Photograph 27: Site 2, DP 4, Upland



Photograph 28: Site 2, DP 5, Wetland 5



Photograph 29: Site 2, DP 6, Upland



Photograph 30: Site 2, DP 7, Upland



Photograph 31: Site 2, DP 8, Upland



Photograph 32: Site 2, DP 9, Upland



Photograph 33: Site 2, DP 10, Wetland 4



Photograph 34: Site 3, DP 1, Upland



Photograph 35: Site 3, DP 2, Wetland 1, (Facing north)



Photograph 36: Site 3, south portion of Wetland 1, (Facing west)



Photograph 37: Site 3, DP 3, Upland



Photograph 38: Site 3, DP 4, Wetland 2



Photograph 39: Site 3, DP 5, Upland, (Facing northwest)



Photograph 40: Site 3, DP 6, Wetland 5, (Facing southwest)



Photograph 41: Site 3, Wetland 5, Finger 3, (Facing west)



Photograph 42: Site 3, DPs 9 and 10, north portion of Wetland 4, (Facing west)
(Photo Credit: URS, 2011)



Photograph 43: Site 3, DPs 11 and 12, south portion of Wetland 4, (Facing north)
(Photo Credit: URS, 2011)



Photograph 44: Site 3, DP 8, Wetland 3



Photograph 45: Site 3, DP 7, Upland point Facing west towards Wetland 3

APPENDIX E- WETLAND DETERMINATION DATA FORMS

Site 1

Upland

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Air Reserve Station City/County: niagara Sampling Date: 17 MAY - 2013
 Applicant/Owner: _____ State: NY Sampling Point: DP1
 Investigator(s): TAVASIANILZ/BAVY Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): flat field Local relief (concave, convex, none): none Slope (%): 0-2%
 Subregion (LRR or MLRA): UPL 6 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silty clay 0-2% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☒, or Hydrology ☒ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ 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 <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

DP @ GPS 368

photo 1520

Old ag field. probably drained. field recently mowed

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (minimum of two required)

<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches):
Water Table Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches):
Saturation Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches):

Wetland Hydrology Present? Yes _____ No ☒

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

Remarks:

Field previously tilled?

VEGETATION – Use scientific names of plants.

Sampling Point: UPL 1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>N/A</u>			
2.			
3.			
4.			
5.			
6.			
7.			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = _____

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.

Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>N/A</u>			
2.			
3.			
4.			
5.			
6.			
7.			

Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Cornus racemosa</u>	<u>2</u>	<u>FAC</u>	<u>N</u>
2. <u>Fragaria virginiana</u>	<u>4</u>	<u>FACU</u>	<u>N</u>
3. <u>Lespedeza hirta</u>	<u>4</u>	<u>NI</u>	<u>N</u>
4. <u>Potentilla simplex</u>	<u>2</u>	<u>FACU</u>	<u>N</u>
5. <u>Taraxicum officinale</u>	<u>1</u>	<u>FACU</u>	<u>N</u>
6. <u>Agrostis capillaris</u>	<u>100</u>	<u>FAC</u>	<u>Y</u>
7. <u>Vicia cracca</u>	<u>1</u>	<u>NI</u>	<u>N</u>
8.			
9.			
10.			
11.			
12.			

Woody Vine Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>N/A</u>			
2.			
3.			
4.			

Hydrophytic Vegetation Present?

Yes X No ✓

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

plants mowed

FAC neutral test indicates the sampling point is upland

Sampling Point: UPL 1

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L, M) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

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

Type: none observed
Depth (inches):

Hydric Soil Present? Yes _____ No X

Remarks:

soils previously tilled

Site 1

Wetland 3

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Air Reserve Station City/County: Niagara Sampling Date: 17 MAY 2013
 Applicant/Owner: _____ State: NY Sampling Point: DP 23
 Investigator(s): Tarasiewicz / Bakw Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): along stream Local relief (concave, convex, none): TOE OF SLOPE Slope (%): 0-2
 Subregion (LRR or MLRA): LPP #1 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa Silty clay 0-2% slope NWI classification: Palustrine emergent
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology ☒ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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 <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

photo 1519
GPS 276 = DP

stream width ~ 7'
(varies 6'-8')

HYDROLOGY

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

Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>7"</u>	
Saturation Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>5"</u>	
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
stream culverted in multiple locations field adjacent probably tiled stream channelized		

VEGETATION – Use scientific names of plants.

Sampling Point: 10P21

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>N/A</u>			
2.			
3.			
4.			
5.			
6.			
7.			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A =

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 X No

Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>N/A</u>			
2.			
3.			
4.			
5.			
6.			
7.			

_____ = Total Cover

Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Fragaria virginiana</u>	<u>tr.</u>	<u>N</u>	<u>FACU</u>
2. <u>Cirsium altissimum</u>	<u>tr.</u>	<u>N</u>	<u>UPL</u>
3. <u>Agrostis stolonifera</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>
4. <u>Rumex crispus</u>	<u>1</u>	<u>N</u>	<u>FAC</u>
5. <u>Carex stipata</u>	<u>5</u>	<u>N</u>	<u>OBL</u>
6. <u>Typha angustifolia</u>	<u>20</u>	<u>Y</u>	<u>OBL</u>
7. <u>Phalaris arundinacea</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>
8. <u>Chrysanthemum parthenium</u>	<u>2</u>	<u>N</u>	<u>NI</u>
9. <u>Corallorhiza innominata</u>	<u>1</u>	<u>N</u>	<u>FAC</u>
10. <u>Lythrum spp</u>	<u>2</u>	<u>N</u>	<u>UPL</u>
11.			
12.			

81 = Total Cover

Woody Vine Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>N/A</u>			
2.			
3.			
4.			

_____ = Total Cover

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

split plot in half to cover fringe on each side of stream to get representative data

Sampling Point: DP2

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

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

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

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)
☐ Dark Surface (S7) (LRR K, L, M)
☐ 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)
☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: none observed

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Site 1

wet DP 3

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Air Reserve Site City/County: Niagara Sampling Date: 5 June 2013
 Applicant/Owner: BPS State: NY Sampling Point: DP3
 Investigator(s): Bauer / Tarabini Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silty clay 0-2% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation X Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 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 _____	Is the Sampled Area within a Wetland?	Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____		
Wetland Hydrology Present?	Yes <u>X</u> No _____	If yes, optional Wetland Site ID: _____	

Remarks: (Explain alternative procedures here or in a separate report.)

Field likely previously tilled
 small isolated wetland in depression area

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (minimum of two required)

<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> 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 <u>X</u> No _____	Depth (inches): <u>0</u>

Wetland Hydrology Present? Yes X No _____

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

Remarks:

soils are saturated to surface
 Sample point representative
 of wetland 1 and wetland 2

Air Reserve site

net DP 3

VEGETATION – Use scientific names of plants.

Sampling Point: 1

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals:	(A) (B)

Prevalence Index = B/A =

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

Sapling/Shrub Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. CORNUS racemosa	2	Y	FAC
2. FRAXINUS pennsylvanica	1	Y	FACW
3.			
4.			
5.			
6.			
7.			

= Total Cover

Herb Stratum (Plot size: 5')	Absolute % Cover	Dominant Species?	Indicator Status
1. CAREX festuacea	5	N	FAC
2. AGROSTIS gigantea	75	Y	FACW
3. SOLIDAGO spp	3	N	-
4. POA pratensis	10	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

3 = Total Cover

93 = Total Cover

Woody Vine Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. NA			
2.			
3.			
4.			

= Total Cover

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

vegetation previously mowed, old ag field, planted turf grasses present

Wet DP 3

Sampling Point:

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L, M) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

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

Type: none observed
Depth (inches): —

Hydric Soil Present? Yes ☒ No ☐

Remarks:

soil smells like sewage

Site 1

Air Base

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Air Reserve Site City/County: Niagara Falls, Niagara Co. Sampling Date: 6/5/13
 Applicant/Owner: _____ State: NY Sampling Point: DP 4
 Investigator(s): Baker, Tarasiewicz (USACE) Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none Slope (%) 0-2%
 Subregion (LRR or MLRA): L Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silty clay 0-2% slopes NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? NO Are "Normal Circumstances" present? Yes ☒ 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 <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <u>Upland next to two small wetlands (west)</u>		

VEGETATION – Use scientific names of plants.

Sampling Point: DP4

Tree Stratum (Plot size: 30')

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A =

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

Sapling/Shrub Stratum (Plot size: 15')

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Herb Stratum (Plot size: 5')

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>10</u>	<u>FAC</u>	<u>N</u>
2.	<u>50</u>	<u>FAC</u>	<u>Y</u>
3.	<u>20</u>	<u>FACU</u>	<u>N</u>
4.	<u>25</u>	<u>FACU</u>	<u>N</u>
5.	<u>2</u>	<u>NI</u>	<u>N</u>
6.	<u>5</u>	<u>FAC</u>	<u>N</u>
7.	<u>50</u>	<u>FACW</u>	<u>Y</u>
8.			
9.			
10.			
11.			
12.			

Woody Vine Stratum (Plot size: 15')

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			

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

veg. previously mowed + planted turf grasses present

UPV
t: DP4

DP4

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L, M) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

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

Type: _____ Name observed _____
Depth (Inches): _____ Hydric Soil Present? Yes ☒ No ☐

Remarks:

Site 1

upland DP 5

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Air Reserve Site City/County: niagara Sampling Date: 5 June - 2013
 Applicant/Owner: BPS State: NY Sampling Point: DP5
 Investigator(s): TARASWICZ / BAKW Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none Slope (%): 0-2%
 Subregion (LRR or MLRA): L Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silty clay 0-2% slopes NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒ Soil ☒ or Hydrology ☒ significantly disturbed? Are "Normal Circumstances" present? Yes _____ 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
If yes, optional Wetland Site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.) <u>old agricultural field</u> <u>likely tiled</u> <u>previously mowed</u>	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <u>Field likely tiled / previously drained</u>		

VEGETATION – Use scientific names of plants.

Sampling Point: DP5

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
_____ = Total Cover			

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Cornus racemosa</u>	<u>3</u>	<u>Y</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
<u>3</u> = Total Cover			

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Agrostis gigantea</u>	<u>75</u>	<u>Y</u>	<u>FACW</u>
2. <u>Taraxacum officinale</u>	<u>3</u>	<u>N</u>	<u>FACU</u>
3. <u>Solidago spp.</u>	<u>4</u>	<u>N</u>	_____
4. <u>Cirsium spp.</u>	<u>1</u>	<u>N</u>	_____
5. <u>Fragaria virginiana</u>	<u>2</u>	<u>N</u>	<u>FACU</u>
6. <u>Poa pratensis</u>	<u>15</u>	<u>N</u>	<u>FACU</u>
7. <u>Vicia cracca</u>	<u>tr.</u>	<u>N</u>	<u>NI</u>
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
<u>100</u> = Total Cover			

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>N/A</u>	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
_____ = Total Cover			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)Total Number of Dominant Species Across All Strata: 2 (B)Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

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

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

veg previously mowed & planted turf grasses

WPL DP 5
Sampling Point: DP 5

Sampling Point: D.P. 5

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L, M) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox-Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

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

Type: none observed
Depth (inches): —

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Site 1

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

PPG
Wetland 3

Project/Site: <u>Wetland X</u>	Date: <u>6-20-08</u>
Applicant/Owner: <u>NEARS</u>	County: <u>Niagara</u>
Investigator: <u>BT, EM, NR</u>	State: <u>NY</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: <u>Wetland X</u> Plot ID: <u>Wetland</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Agrostis alba</u>	<u>H</u>	<u>FACW</u>	9. _____	_____	_____
2. <u>Glyceria sp.</u>	<u>H</u>	<u>OBL</u>	10. _____	_____	_____
3. <u>Festuca rubra</u>	<u>H</u>	<u>FACW</u>	11. _____	_____	_____
4. <u>Agropyron repens</u>	<u>H</u>	<u>FACW</u>	12. _____	_____	_____
5. <u>Vicia tetrasperma</u>	<u>H</u>	<u>UPL</u>	13. _____	_____	_____
6. <u>Carex cristatella</u>	<u>H</u>	<u>FACW</u>	14. _____	_____	_____
7. <u>Carex vulpinoidea</u>	<u>H</u>	<u>OBL</u>	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC): 4/7 = 57%

Remarks: Area is periodically mowed, but not yet this season. Carex tribuloides, C. vulpinoidea, and Glyceria sp. growing up through large patches of Vicia tetrasperma. Upland was mowed after delineation was complete.

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs <input checked="" type="checkbox"/> Other _____ No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: _____ Inundated _____ Saturated in Upper 12 Inches _____ Water Marks _____ Drill Lines _____ Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches _____ Water-Stained Leaves _____ Local Soil Survey Data <input checked="" type="checkbox"/> FAC-Neutral Test 4:3 _____ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>72.0'</u> (in.) Depth to Free Water in Pit: <u>> 2.0'</u> (in.) Depth to Saturated Soil: <u>> 2.0'</u> (in.)	Remarks: <u>Relatively new building (107th side) constructed southwest of wetland and dump site southeast of wetland may be altering surface hydrology. Wetland appears to drain into ditch that flows to tributary of Cayuga Creek.</u>

SOILS

Map Unit Name (Series and Phase): <u>Odessa</u>		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	

Profile Description:		Matrix Color	Mottle Colors	Mottle Abundance/	Texture, Concretions,
Depth (Inches)	Horizon	(Munsell Moist)	(Munsell Moist)	Size/Contrast	Structure, etc.
0'-0.1'	O	N/A	N/A	N/A	
0.1'-0.9'	A	10YR 3/2	7.5YR 5/8	3%	silty clay loam
0.9'-2.0'	B	7.5YR 4/2	5YR 5/8	10%	sandy clay loam
			2.5YR 4/6	2%	sandy clay loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
---	--

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)
---	---

Remarks: Two small isolated wetlands approximately 100 yds north-northwest of main Wetland X.

GPS File: NFARS-X-P2 (soil core)

Boundary GPS: NFARS Wet 2008

Approved by HQUSACE 3/02

Site 1

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

DP 7
Upland

Project/Site: <u>Wetland X</u>	Date: <u>6-20-08</u>
Applicant/Owner: <u>NFARS</u>	County: <u>Niagara</u>
Investigator: <u>BT, EM, NR</u>	State: <u>NY</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>Wetland X</u> <u>Upland</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Vicia tetrasperma</u>	<u>H</u>	<u>VPL</u>	9. _____	_____	_____
2. <u>Agrostis alba</u>	<u>H</u>	<u>FACW</u>	10. _____	_____	_____
3. <u>Pastura rubra</u>	<u>H</u>	<u>FACU</u>	11. _____	_____	_____
4. <u>Phleum pratense</u>	<u>H</u>	<u>FACU</u>	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC): 1/4 = 25%

Remarks: Area is periodically mowed, but not yet this season.

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs <input checked="" type="checkbox"/> Other _____ No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: _____ Inundated _____ Saturated in Upper 12 Inches _____ Water Marks _____ Drift Lines _____ Sediment Deposits _____ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): _____ Oxidized Root Channels in Upper 12 Inches _____ Water-Stained Leaves _____ Local Soil Survey Data _____ FAC-Neutral Test _____ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>71.9'</u> (in.) Depth to Free Water in Pit: <u>71.9'</u> (in.) Depth to Saturated Soil: <u>71.9'</u> (in.)	
Remarks: _____	

Data Sheets

Upland X

SOILS

Map Unit Name
(Series and Phase):

Odessa

Drainage Class:

Field Observations

Taxonomy (Subgroup):

Confirm Mapped Type? Yes No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0'-0.2'	O	N/A	N/A	N/A	
0.2'-1.0'	A	10YR 4/2	7.5YR 5/8	2%	silty clay loam
1.0'-1.9'	B	7.5YR 4/3	7.5YR 5/8	15%	silty clay
			2.5YR 4/6	5%	silty clay

Hydric Soil Indicators:

- ☐ Histosol
☐ Hist. Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☒ Reducing Conditions
☒ Gleyed or Low-Chroma Colors

- ☒ Concretions
☐ High Organic Content in Surface Layer in Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?

Yes No (Circle)

Wetland Hydrology Present?

Yes No (Circle)

Hydric Soils Present?

Yes No (Circle)

(Circle)

Is this Sampling Point Within a Wetland?

Yes No (Circle)

Remarks:

GPS File: NFARS-X-P3 (soil core)

Approved by HQUSACE 3/92

SHE 2

Wetland 1

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Williams RD City/County: Niagara Falls Sampling Date: 23 APR 2013
 Applicant/Owner: _____ State: NY Sampling Point: DP1
 Investigator(s): BAKER/TARASWICZ Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): relatively flat Local relief (concave, convex, none): concave
 Slope (%): 4 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silty clay 0-2% slopes NWI classification: Palustrine emergent
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 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 _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

Fill in wetland - significantly disturbed wetland
 mallard nesting

Photo 1

GPS points 1-12
 DP1 @ GPS point 12

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

X Surface Water (A1) _____ Water-Stained Leaves (B9)
X High Water Table (A2) _____ Aquatic Fauna (B13) clam shells
X Saturation (A3) _____ Marl Deposits (B15)
 _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1)
 _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3)
 _____ Drift Deposits (B3) X 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)

Secondary Indicators (minimum of two required)

_____ 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)
X Geomorphic Position (D2)
 _____ Shallow Aquitard (D3)
 _____ Microtopographic Relief (D4)
 _____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches): 0-2"
 Water Table Present? Yes X No _____ Depth (inches): 7"
 Saturation Present? Yes X No _____ Depth (inches): 0"
 (includes capillary fringe)

Wetland Hydrology Present? Yes X No _____

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Typha latifolia</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>	
2. <u>Pumex crispus</u>	<u>3</u>	<u>N</u>	<u>FACW</u>	
3. <u>Phragmites australis</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>	
4. <u>Solidago canadensis</u>	<u>8</u>	<u>N</u>	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
<u>56</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☐ Rapid Test for Hydrophytic Vegetation

☐ Dominance Test is >50%

☐ Prevalence Index is ≤3.0¹

☐ 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 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 ☐

WET

Sampling Point: DP

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- ☐ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ☐ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ☐ 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)

- ☐ 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)
- ☐ Dark Surface (S7) (LRR K, L)
- ☐ 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)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Fill - Disturbed area

Site 2

Upland

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Williams RD City/County: Niagara Falls Sampling Date: 23-APR-2013
 Applicant/Owner: _____ State: NY Sampling Point: DP 2
 Investigator(s): Baker/Tarasiewicz Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Flat
 Slope (%): 41 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silty clay 0-2% slopes 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 X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 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>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

photo 3 soils disturbed by fill
eps point 13

HYDROLOGY

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

Field Observations:		Wetland Hydrology Present? Yes _____ No <u>X</u>
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)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

Williams PD

VEGETATION – Use scientific names of plants.

Sampling Point: DP2

Tree Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		_____ = Total Cover		

Sapling/Shrub Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		_____ = Total Cover		

Herb Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	Oxalis stricta	1	N	
2.	Mentha spp	1	N	
3.	Mirsium arvense	3	N	
4.	Dipsacus sylvestris	40	Y	UPL
5.	Plantago major	41	N	
6.	Artium lappa	3	N	
7.	Salinago canadensis	1	N	
8.	Taraxicum officinale	1	N	
9.	unk 1 (Forb clumping plant)	15	N	
10.	Lolium perenne	20	Y	FACU
11.				
12.				
		866 = Total Cover		

Woody Vine Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
		_____ = Total Cover		

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

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0¹
- ☐ 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 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 ☒

DP2

Site 2

Wetland 2

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Williams RD City/County: Niagara Falls Sampling Date: 23-APR-2013
 Applicant/Owner: _____ State: NY Sampling Point: DR3
 Investigator(s): Baker, Terebiewicz Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Relatively Flat Local relief (concave, convex, none): concave
 Slope (%): 0-2% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silty clay 0-2% slopes NWI classification: Palustrine Forested
 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 _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

photo 4 points 15-25 wetland boundary
GPS 14 = DP3

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u>X</u> Surface Water (A1)	<u>X</u> Water-Stained Leaves (B9)	____ Surface Soil Cracks (B6)
<u>X</u> High Water Table (A2)	____ Aquatic Fauna (B13)	____ Drainage Patterns (B10)
<u>X</u> Saturation (A3)	____ Marl Deposits (B15)	____ Moss Trim Lines (B16)
____ Water Marks (B1)	____ Hydrogen Sulfide Odor (C1)	____ Dry-Season Water Table (C2)
<u>X</u> Sediment Deposits (B2)	____ Oxidized Rhizospheres on Living Roots (C3)	<u>X</u> Saturation Visible on Aerial Imagery (C9)
____ Drift Deposits (B3)	____ Presence of Reduced Iron (C4)	____ Stunted or Stressed Plants (D1)
____ Algal Mat or Crust (B4)	____ Recent Iron Reduction in Tilled Soils (C6)	<u>X</u> Geomorphic Position (D2)
____ Iron Deposits (B5)	____ Thin Muck Surface (C7)	____ Shallow Aquitard (D3)
____ Inundation Visible on Aerial Imagery (B7)	____ Other (Explain in Remarks)	<u>X</u> Microtopographic Relief (D4)
____ Sparsely Vegetated Concave Surface (B8)		____ FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes <u>X</u> No _____	Depth (inches): <u>0-2"</u>	
Water Table Present? Yes <u>X</u> No _____	Depth (inches): _____	
Saturation Present? Yes <u>X</u> No _____	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:		
algae present in standing water in wetland		

williams RD

WET 2
DP3

VEGETATION – Use scientific names of plants.

Sampling Point:

Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Populus tremuloides</u>	<u>60</u>	<u>Y</u>	<u>FACU</u>
2.				
3.				
4.				
5.				
6.				
7.				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = _____

Sapling/Shrub Stratum (Plot size: <u>15'</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Cornus foemina</u>	<u>75</u>		<u>FACW</u>
2.				
3.				
4.				
5.				
6.				
7.				

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0¹
- ☐ 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 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.

Herb Stratum (Plot size: <u>5'</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Agrostis capillaris</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>
2.	<u>Phalaris arundinacea</u>	<u>2</u>	<u>Y</u>	<u>FACW</u>
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

Woody Vine Stratum (Plot size: <u>15'</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Vitis spp</u>	<u>1</u>		
2.				
3.				
4.				

Hydrophytic Vegetation Present?

Yes X No _____

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

WET 2

Sampling Point: DP 3

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

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**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ 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**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No

Remarks:

some fill mixed into soil
around edge of wetland

Site 2

Upland

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Williams PD City/County: Niagara Falls Sampling Date: 23 APR 2013
 Applicant/Owner: _____ State: NY Sampling Point: DP4
 Investigator(s): Baker/Tarasiewicz Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Relatively Flat Local relief (concave, convex, none): Flat Slope (%): 4
 Subregion (LRR or MLRA): L Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silty clay 0-2% slopes 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 X, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 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>	Is the Sampled Area within a Wetland? Yes _____ No <u>(X)</u>
Hydric Soil Present? Yes <u>(X)</u> No <u>(X)</u>	If yes, optional Wetland Site ID: <u>NP</u>
Wetland Hydrology Present? Yes _____ No <u>(X)</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

soils disturbed
previously site was in ag. (now planted w/ Lolium perenne)
vegetation mowed in previous growing season

HYDROLOGY

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

Field Observations:		Wetland Hydrology Present? Yes _____ No <u>(X)</u>
Surface Water Present? Yes _____ No <u>(X)</u>	Depth (inches): <u>14"</u>	
Water Table Present? Yes <u>(X)</u> No <u>(X)</u>	Depth (inches): <u>14"</u>	
Saturation Present? (includes capillary fringe) Yes <u>(X)</u> No <u>(X)</u>	Depth (inches): <u>14"</u>	

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

Remarks:

GLS 26
phao 5

VEGETATION – Use scientific names of plants.

Sampling Point: SP4

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

_____ = Total Cover

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>45</u>	<u>Y</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

_____ = Total Cover

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Trifolium hybridum</u>	<u>tr.</u>	<u>N</u>	<u>FACU</u>
2. <u>Vicia cracca</u>	<u>tr.</u>	<u>N</u>	<u>UPL</u>
3. <u>Solidago canadensis</u>	<u>1</u>	<u>N</u>	<u>FACU</u>
4. <u>Lolium perenne</u>	<u>80</u>	<u>Y</u>	<u>FACU</u>
5. <u>Cirsium arvense</u>	<u>tr.</u>	<u>N</u>	<u>FACU</u>
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

81 = Total Cover

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

_____ = Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (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>1</u>	x 3 = <u>3</u>
FACU species <u>4</u>	x 4 = <u>16</u>
UPL species <u>1</u>	x 5 = <u>5</u>
Column Totals: <u>6</u> (A)	<u>24</u> (B)

Prevalence Index = B/A = 4

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.)

Lolium perenne and Acer rubrum (mowed)
are dominant species
plants have been mowed (last growing season).

Sampling Point: SP 4

Sampling Point:

SP 4

[illegible]²Location: PL=Pore Lining, M=Matrix.

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)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ 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)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

Restrictive Layer (if observed):

Depth (inches): _____

DMZ OBSERVED

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Site 2

Wetland 5

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Williams PR City/County: Niagara Falls Sampling Date: 25-APR-2013
 Applicant/Owner: _____ State: NY Sampling Point: DP5
 Investigator(s): Baker/Tarasiewicz/Scalabrino Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): relatively flat Local relief (concave, convex, none): furrows
 Slope (%): < 1 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silt loam 0-2% slopes NWI classification: palustrine emergent
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒ Soil ☒ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ 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 <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Remarks: (Explain alternative procedures here or in a separate report.)	
<p>DP 8 is @ GPS point 14 photo 1451 site disturbed by previous ag. use and fill</p> <p>WET Boundary 15-79 UPL Boundary 80-88</p>	

HYDROLOGY wetland is a mosaic with furrows

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0-2"</u>		
Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u>		
(includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		

Remarks:

standing water in furrows
 saturation to surface in hummocks

VEGETATION – Use scientific names of plants.

Sampling Point: DPS

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Fraxinus pennsylvanica</i>	5	Y	FACW
2. <i>Ulmus americana</i>	8	Y	FACW
3. <i>Crataegus</i> spp.	2	N	
4. _____			
5. _____			
6. _____			
7. _____			
	15	= Total Cover	

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Cornus alba</i>	10	Y	FACW
2. <i>Acer rubrum</i>	15	Y	FAC
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
	25	= Total Cover	

Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Juncus tenuis</i>	4	Y	FAC
2. <i>Carex</i> spp.	3	Y	
3. <i>Galium perenne</i>	5	Y	FACU
4. <i>Agrostis capillaris</i>	3	Y	FAC
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
12. _____			
	15	= Total Cover	

Woody Vine Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Vitis</i> spp.	2	Y	
2. _____			
3. _____			
4. _____			
	2	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)Total Number of Dominant Species Across All Strata: 7 (B)Percent of Dominant Species That Are OBL, FACW, or FAC: 85 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
☐ Dominance Test is >50%
☐ Prevalence Index is $\leq 3.0^1$
☐ 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 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 X No _____

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

unk grass spp - yellow green - not flowering - turf grass
 unk grass spp - blue green - not flowering - turf grass
 unk carex spp - yellow green - not flowering

Sampling Point: DP 5

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

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**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ 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**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____.

Hydric Soil Present? Yes ☒ No ☐

Remarks:

SOILS disturbed
former ag. use
furrows present
soil contains fill

Site 2

Wetland 3

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Williams RD City/County: Niagara Falls Sampling Date: 23 APR 2013
 Applicant/Owner: _____ State: NY Sampling Point: DP6
 Investigator(s): Barry / Tarasiewicz Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Relatively Flat Local relief (concave, convex, none): Flat
 Slope (%): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silt loam 0-2% slopes NWI classification: Palustrine scrubshrub
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ 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 <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No _____	
Remarks: (Explain alternative procedures here or in a separate report.)		
Fill present		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No _____	Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Water Table Present? Yes _____ No _____	Depth (inches): _____	
Saturation Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>at 6"</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
adjacent area has surface water		

VEGETATION – Use scientific names of plants.

Sampling Point: DP6

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Acer rubrum</i>	2	Y	FAC
2. <i>Ulmus americana</i>	1	Y	FACW
3.			
4.			
5.			
6.			
7.			

3 = Total Cover

Sapling/Shrub Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Cornus foemina</i>	65	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			

65 = Total Cover

Herb Stratum (Plot size: 5')	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Euthamia graminifolia</i>	5	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

5 = Total Cover

Woody Vine Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Vitis spp</i>	3	-	-
2.			
3.			
4.			

3 = Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of: Multiply by:

OBL species x 1 =

FACW species x 2 =

FAC species x 3 =

FACU species x 4 =

UPL species x 5 =

Column Totals: (A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

☐ Rapid Test for Hydrophytic Vegetation

☐ Dominance Test is >50%

☐ Prevalence Index is ≤3.0¹

☐ 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 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 ☐

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

WET 3
Sampling Point DP6

Sampling Point:

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

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

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No

Remarks:

Fill mixed into soil

Site 2

GPS point 67 and 68
Drainage tie
UPLAND

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Williams RD City/County: Niagara Falls Sampling Date: 24 APR 2013
 Applicant/Owner: _____ State: N Sampling Point: DP 7
 Investigator(s): Baker, Tarasiewicz Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): gentle slope Slope (%): 1
 Subregion (LRR or MLRA): L Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silt loam NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Wetland Hydrology Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Remarks: (Explain alternative procedures here or in a separate report.)	
<p>photo 1443</p> <p>DP6 is located in a disturbed area containing fill</p>	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Water Table Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): _____	
Saturation Present? Yes _____ No _____	Depth (inches): _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
<p>STANDING WATER 51 FROM PIT</p> <p>Photo:</p> <p>GPS POINT 50</p> <p>51 - 66 GPS POINTS</p> <p>Recent precipitation</p>		

VEGETATION – Use scientific names of plants.

Sampling Point: WUPC DPT

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>
2. <u>Cornus foemina</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

30 = Total Cover

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Cornus foemina</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>
2. <u>Lonicera tatarica</u>	<u>5</u>	<u>N</u>	<u>FACU</u>
3. <u>Cornus alba</u>	<u>10</u>	<u>N</u>	<u>FACW</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

40 = Total Cover

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ranunculus ficaria</u>	<u>100</u>	<u>Y</u>	<u>FACW</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

_____ = Total Cover

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Vitis spp</u>	<u>5</u>	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

_____ = Total Cover

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

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is $\leq 3.0^1$
- ☐ 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 X No

WPL
DPT

DP7

[illegible]

²Location: PL=Pore Lining, M=Matrix.

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**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ 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**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

Restrictive Layer (if observed):

None observed

Hydric Soil Present? Yes _____ No _____

ON FIRE FIVE - SLOPE CLEARLY DRAINING

Site 2

Upland

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Williams PD City/County: Niagara Falls Sampling Date: 25 APR 2013
 Applicant/Owner: _____ State: NY Sampling Point: DP8
 Investigator(s): Baker/Tarasiewicz/Scalabrino Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Relatively Flat Local relief (concave, convex, none): Flat Slope (%): 0
 Subregion (LRR or MLRA): L Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Canandaigua silt clay loam NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒ Soil ☒ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ 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 <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)	
DP 10 at EPS point 90 veg regularly mowed	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No _____ Depth (inches): _____		
Water Table Present? Yes _____ No _____ Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Remarks:		
DP is near drainage tile		

VEGETATION – Use scientific names of plants.

Williams PD

Sampling Point: UPL DP8

Tree Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

_____ = Total Cover

Sapling/Shrub Stratum (Plot size: _____)

1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

_____ = Total Cover

Herb Stratum (Plot size: 5')

1. <i>Agrostis capillaris</i>	40	Y	FAC
2. <i>Lolium perenne</i>	60	Y	FACU
3. <i>Yunk forp (site 1)</i>	1		
4. <i>Acer rubrum</i>	3	N	FAC
5. <i>Taraxicum officinale</i>	tr	N	FACU
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

104 = Total Cover

Woody Vine Stratum (Plot size: _____)

1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

_____ = Total Cover

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

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A =

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 ☒

Sampling Point: DP 8

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

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)
☐ Dark Surface (S7) (LRR K, L, M)
☐ 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)
☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

Fill mixed into soil

Site 2

Upland

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Williams RD City/County: Niagara Falls Sampling Date: 24 APR 2013
 Applicant/Owner: _____ State: NY Sampling Point: DP 9
 Investigator(s): Baker / Tarasiewicz Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): relatively flat Local relief (concave, convex, none): flat Slope (%): 0
 Subregion (LRR or MLRA): L Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Canandaigua silt loam NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ 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 <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <input checked="" type="radio"/>	
Remarks: (Explain alternative procedures here or in a separate report.)	
<p>GPS data point 69 photo iphone 1444</p> <p>vegetation mowed soil contains fill</p>	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No _____	Depth (inches): _____	
Water Table Present? Yes _____ No _____	Depth (inches): _____	
Saturation Present? Yes _____ No _____	Depth (inches): _____	
(includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <input checked="" type="radio"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: UPL DP9

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																		
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)																		
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)																		
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																		
4. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species <u>1</u></td> <td>x 2 = <u>2</u></td> </tr> <tr> <td>FAC species <u>1</u></td> <td>x 3 = <u>3</u></td> </tr> <tr> <td>FACU species <u>1</u></td> <td>x 4 = <u>4</u></td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: <u>3</u> (A)</td> <td><u>9</u> (B)</td> </tr> <tr> <td colspan="4">Prevalence Index = B/A = <u>3</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species <u>1</u>	x 2 = <u>2</u>	FAC species <u>1</u>	x 3 = <u>3</u>	FACU species <u>1</u>	x 4 = <u>4</u>	UPL species _____	x 5 = _____	Column Totals: <u>3</u> (A)	<u>9</u> (B)	Prevalence Index = B/A = <u>3</u>			
Total % Cover of:	Multiply by:																					
OBL species _____	x 1 = _____																					
FACW species <u>1</u>	x 2 = <u>2</u>																					
FAC species <u>1</u>	x 3 = <u>3</u>																					
FACU species <u>1</u>	x 4 = <u>4</u>																					
UPL species _____	x 5 = _____																					
Column Totals: <u>3</u> (A)	<u>9</u> (B)																					
Prevalence Index = B/A = <u>3</u>																						
5. _____	_____	_____	_____																			
6. _____	_____	_____	_____																			
7. _____	_____	_____	_____																			
_____ = Total Cover				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.																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. <u>Acer rubrum</u> <u>tr</u> <u>FAC</u> 2. <u>Cornus foemina</u> <u>tr</u> <u>FACW</u> 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ _____ = Total Cover																						
Herb Stratum (Plot size: <u>5'</u>) 1. <u>Lolium perenne</u> <u>100</u> <u>FACU</u> 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ 12. _____ _____ = Total Cover																						
Woody Vine Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ _____ = Total Cover																						
Remarks: (Include photo numbers here or on a separate sheet.) <div style="text-align: center; font-size: 1.2em; margin-top: 20px;"> vegetation mowed consists primarily of planted grass </div>				Hydrophytic Vegetation Present? Yes <u> </u> No <u> </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.																		

Sampling Point: DP 9

Sampling Point:

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L, M) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

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

Hydric Soil Present? (Yes ~~_____~~ No _____)

US Army Corps of Engineers

Site 2

Wetland 4

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Williams PD City/County: Niagara Falls Sampling Date: 25 APR 2013
 Applicant/Owner: _____ State: NY Sampling Point: DP 10
 Investigator(s): Baker/Tarasiewicz/Scalabrino Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Relatively Flat Local relief (concave, convex, none): Depression Slope (%): 0
 Subregion (LRR or MLRA): L Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Canandaigua silt loam NWI classification: Palustrine Forested
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ 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 <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) DP 9 is GPS point 89	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Stunted or Stressed Plants (D1)
<input checked="" type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes <input checked="" type="checkbox"/> No <u>0-6</u> Depth (inches):		
Water Table Present? Yes <input checked="" type="checkbox"/> No <u>0</u> Depth (inches):		
Saturation Present? Yes <input checked="" type="checkbox"/> No <u>0</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: DP 10

Wet 4

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Ulmus americana</u>	<u>60</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. <u>Quercus palustris</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>70</u> = Total Cover				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Total % Cover of: _____ Multiply by: _____
1. _____	_____	_____	_____	OBL species _____ x 1 = _____
2. _____	_____	_____	_____	FACW species _____ x 2 = _____
3. _____	_____	_____	_____	FAC species _____ x 3 = _____
4. _____	_____	_____	_____	FACU species _____ x 4 = _____
5. _____	_____	_____	_____	UPL species _____ x 5 = _____
6. _____	_____	_____	_____	Column Totals: _____ (A) _____ (B)
7. _____	_____	_____	_____	Prevalence Index = B/A = _____
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators:
1. <u>Carex spp (crinita?)</u>	<u>2</u>	<u>Y</u>	<u>OBL</u>	___ 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Elyceria striata</u>	<u>3</u>	<u>Y</u>	<u>OBL</u>	___ 2 - Dominance Test is >50%
3. <u>Panicum crispus</u>	<u>tr</u>	<u>N</u>	<u>FAC</u>	___ 3 - Prevalence Index is ≤3.0 ¹
4. _____	_____	_____	_____	___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation ¹ (Explain)
6. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____	_____	_____	_____	Definitions of Vegetation Strata:
8. _____	_____	_____	_____	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9. _____	_____	_____	_____	Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10. _____	_____	_____	_____	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11. _____	_____	_____	_____	Woody vines – All woody vines greater than 3.28 ft in height.
12. _____	_____	_____	_____	
<u>5</u> = Total Cover				Hydrophytic Vegetation Present? Yes <u>X</u> No
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. <u>Vitis spp</u>	<u>1</u>	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>1</u> = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

WET 4b

DP 10

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

[illegible]

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)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (LRR R, MLRA 149B)

- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ 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)

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)
☐ Dark Surface (S7) (LRR K, L, M)
☐ 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)
☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No

Remarks:

Site 3

Wetland - Upland Point

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Tuscarora West City/County: Niagara Falls / Niagara Co. Sampling Date: 7-May-2013
 Applicant/Owner: _____ State: NY Sampling Point: DP 1
 Investigator(s): BAKER, TARASIEWICZ (USACE) Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): PLAIN Local relief (concave, convex, none): NONE Slope (%): 0-2
 Subregion (LRR or MLRA): 2 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silty clay 0-2% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (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 _____	Is the Sampled Area within a Wetland? Yes _____ No _____
Hydric Soil Present? Yes _____ No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No _____	

Remarks: (Explain alternative procedures here or in a separate report.)
Veg disturbed via ag. uses but has occurred so long it represents normal circumstances.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) _____ 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)		Secondary Indicators (minimum of two required) <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (Includes capillary fringe)	Wetland Hydrology Present? Yes _____ <input checked="" type="checkbox"/> No	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <u>Field may be tiled</u>		

VEGETATION – Use scientific names of plants.

Sampling Point: DPI

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

_____ = Total Cover

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

_____ = Total Cover

Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Corn</u>	<u>5%</u>	<u>Y</u>	<u>NI</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

_____ = Total Cover

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

_____ = Total Cover

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

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.)

Sampling Point: DPI

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L, M) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

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

Type: _____
Depth (inches): _____ *None observed*

Hydric Soil Present? Yes ☒ No ☐

Northcentral and Northeast Region – Version 2.0

Site 3

Wetland 1 - Wetland Point
WET1

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NUCARA West City/County: Magna Falls, MN Sampling Date: 7-MAY-2013
 Applicant/Owner: _____ State: MN Sampling Point: DP2
 Investigator(s): Baker Parasiewicz (USACE) Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): L Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silty clay 0-2% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes ☒ 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 <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

exp: sample point 1
boundary 2-9

photos 70-71

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
 Water Table Present? Yes ☒ No _____ Depth (inches): 2"
 Saturation Present? Yes ☒ No _____ Depth (inches): 0"
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

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

Remarks:

standing water near west end of wetland

tuscandra rd west

WET

VEGETATION – Use scientific names of plants.

Sampling Point: DP 2

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <i>SALIX bebranna</i>	60%	Y	FACW	
2.				
3.				
4.				
5.				
6.				
7.				

60 = Total Cover

Sapling/Shrub Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <i>FRAXINUS pennsylvanica</i>	2%	N	FACW	
2. <i>CORNUS racemosa</i>	7%	Y	FAC	
3. <i>CRATAEGUS spp</i>	1%	-	-	
4.				
5.				
6.				
7.				

10 = Total Cover

Herb Stratum (Plot size: 5')	Absolute % Cover	Dominant Species?	Indicator Status	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. <i>FRAXINUS pennsylvanica</i>	1%	Y	FACW	
2. <i>TARAXACUM officinale</i>	1%	N	FACU	
3. <i>SOLIDAGO spp</i>	1%	-	-	
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

2 = Total Cover

Woody Vine Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status	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 <input checked="" type="checkbox"/> No
1. <i>VITIS riparia</i>	1%	Y	FACW	
2.				
3.				
4.				

1% = Total Cover

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

modified plot shape = oval to stay in veg community
linear wetland

tuscandora pro west

Sampling Point: DP2

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L, M) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

Restrictive Layer (if observed):

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

US Army Corps of Engineers

Site 3

Wetland 2-Upland Point

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: SGL City/County: NIAGARA/NIAGARA Sampling Date: 4/29/10
 Applicant/Owner: SGL EQUITIES, LLC State: NY Sampling Point: 16A
 Investigator(s): TOM CONNARE Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): PLAIN Local relief (concave, convex, none): _____
 Slope (%): 0-5 Lat: 43.12 Long: 78.96 Datum: _____
 Soil Map Unit Name: ODESSA SIL NWI classification: none

DP-3

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? NO Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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 <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____	
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>		
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: W6A-U

DP 3

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. <u>CRATAEGUS SP</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
2. <u>CORNUS FOEMINA</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>40</u> = Total Cover				
Herb Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.) 				Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators 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 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 <u>X</u>

Sampling Point:

DP 3
~~WGA-U~~

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

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

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Site 3

Wetland 2-Wetland Point

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SGL City/County: NIAGARA/NIAGARA Sampling Date: 4/29/10
 Applicant/Owner: SGL EQUITIES, LLC State: NY Sampling Point: ~~1-61~~
 Investigator(s): TOM CONNARE Section, Township, Range: DP4
 Landform (hillslope, terrace, etc.): PLAIN Local relief (concave, convex, none):
 Slope (%): 0-5 Lat: 43.12 Long: 78.96 Datum:
 Soil Map Unit Name: ODESSA SIL NWI classification: none
 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? NO Are "Normal Circumstances" present? Yes X No
 Are Vegetation, Soil, or Hydrology naturally problematic? NO (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	Is the Sampled Area within a Wetland?	Yes <u>X</u> No
Hydric Soil Present?	Yes <u>X</u> No	If yes, optional Wetland Site ID:	
Wetland Hydrology Present?	Yes <u>X</u> No		

Remarks: (Explain alternative procedures here or in a separate report.)
DITCH
SITE PHOTOS 14-17

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
<u>X</u> Surface Water (A1)	<u>X</u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)	
<u>X</u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)	
<u>X</u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)	
<u>X</u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)	
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)	
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)	
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)	
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)	
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)	
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)	
		<u> </u> FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present? Yes <u>X</u> No	Depth (inches): <u>0-6</u>	Wetland Hydrology Present? Yes <u>X</u> No	
Water Table Present? Yes <u>X</u> No	Depth (inches): <u>0</u>		
Saturation Present? Yes <u>X</u> No	Depth (inches): <u>0</u>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION – Use scientific names of plants.

Sampling Point: W6A W 04

Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>QUERCUS BICOLOR</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>
2.				
3.				
4.				
5.				
6.				
7.				

Sapling/Shrub Stratum (Plot size: <u>15'</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>CORNUS AMOMUM</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>
2.				
3.				
4.				
5.				
6.				
7.				

Herb Stratum (Plot size: <u>5'</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>LYTHRUM SALICARIA</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>
2.	<u>PHRAGMITES AUSTRALIS</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

Woody Vine Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				

10 = Total Cover

20 = Total Cover

15 = Total Cover

15 = Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☒ Rapid Test for Hydrophytic Vegetation

☒ Dominance Test is >50%

☐ Prevalence Index is ≤3.0¹

☐ 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 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 ☐

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

Sampling Point:

W6A-W 114

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

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

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

SITE 3

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

UPL

Project/Site: NIAGARA RD WEST City/County: Niagara Falls, Niagara Co Sampling Date: 3-MAY-2013
 Applicant/Owner: _____ State: NY Sampling Point: DP5
 Investigator(s): Baker, Taraiewicz (USACE) Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): None Slope (%): 0-2
 Subregion (LRR or MLRA): 2 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silty clay 0-2' slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ 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 <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No _____
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	

Remarks: (Explain alternative procedures here or in a separate report.)

soils and veg disturbed by agriculture
 photo 73
 DP at GPS 62

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (minimum of two required)

☒ 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 ☒ Depth (inches): _____
 Water Table Present? Yes _____ No _____ Depth (inches): _____
 Saturation Present? Yes _____ No _____ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

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

Remarks:

field may be tilled

VEGETATION – Use scientific names of plants.

Sampling Point

UPL
DP 5

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>				
2.				
3.				
4.				
5.				
6.				
7.				
				= Total Cover
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>N/A</u>				
2.				
3.				
4.				
5.				
6.				
7.				
				= Total Cover
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>CORV</u>	<u>51.</u>	<u>Y</u>	<u>N</u>	
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
				= Total Cover
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. <u>N/A</u>				
2.				
3.				
4.				
				= Total Cover

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

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.)

Sampling Point: DP5

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

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

Type: none observed
Depth (inches): _____

Hydric Soil Present? Yes X No

Northcentral and Northeast Region – Version 2.0

Site 3

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

WET 5

Project/Site: TUGAARORA RD West City/County: Maya Falls, Mayara Sampling Date: DP 5
 Applicant/Owner: _____ State: NY Sampling Point: 7-MAY-2013
 Investigator(s): Baker, Taravievicz (USACE) Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): L Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Odessa silty clay 0-2 ft Slopes NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes ☒ 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 <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	

Remarks: (Explain alternative procedures here or in a separate report.)
DP at GPS point 10 Boundary GPS 11-61 green frogs
Ag drainage at edge of farm field common bird species
photo 72
Finger 4 = photo 74

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) _____ Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Aquatic Fauna (B13) <u>green frogs</u> <input checked="" type="checkbox"/> 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) <input checked="" type="checkbox"/> Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8) _____ FAC-Neutral Test (D5)		Secondary Indicators (minimum of two required) _____ Surface Soil Cracks (B6) <input checked="" type="checkbox"/> 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)
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0"</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0"</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0"</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <u>GPS 62-97 and 106-108 Finger wetland 2</u> <u>GPS 98-106 Roadside ditch/wetland (2' wide)</u> <u>GPS 109-112 1ft. wide</u> <u>113-116 2ft. wide</u> <u>117-123 3ft wide</u> <u>Finger 3</u>		

VEGETATION – Use scientific names of plants.

Sampling Point: WET DP 6

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>N/A</u>			
2.			
3.			
4.			
5.			
6.			
7.			

Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Phormium tenax</u>	<u>2</u>	<u>N</u>	<u>FAC</u>
2. <u>Cornus racemosa</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>
3.			
4.			
5.			
6.			
7.			

Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Typha spp.</u>	<u>50</u>	<u>Y</u>	<u>OBL</u>
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Woody Vine Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>N/A</u>			
2.			
3.			
4.			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals:	(A) (B)

Prevalence Index = B/A =

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 X No

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

algal mat

Sampling Point: **WET DP6**

Sampling Point:

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)
<input type="checkbox"/> Histic Epipedon (A2)
<input type="checkbox"/> Black Histic (A3)
<input type="checkbox"/> Hydrogen Sulfide (A4)
<input type="checkbox"/> Stratified Layers (A5)
<input type="checkbox"/> Depleted Below Dark Surface (A11)
<input type="checkbox"/> Thick Dark Surface (A12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)
<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)
<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input checked="" type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Dark Surface (S7) (LRR K, L, M)
<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)
<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks) |
|--|---|---|

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

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Site 3

Wetland 3 - Upland Point

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SGL City/County: NIAGARA/NIAGARA Sampling Date: 4/29/10
 Applicant/Owner: SGL EQUITIES, LLC State: NY Sampling Point: 454 **DE 7**
 Investigator(s): TOM CONNARE Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): PLAIN Local relief (concave, convex, none): _____
 Slope (%): 0-5 Lat: 43.12 Long: 78.96 Datum: _____
 Soil Map Unit Name: ODESSA SIL NWI classification: _____

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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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>	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	If yes, optional Wetland Site ID: _____	
Wetland Hydrology Present?	Yes _____ No <u>X</u>		
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)	
		<input type="checkbox"/> 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: W50 087

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20</u> (A/B)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>CRATAEGUS SP</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. <u>CORNUS FOEMINA</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
3. <u>RHAMNUS CATHARTICA</u>	<u>10</u>	<u>Y</u>	<u>U</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>30</u> = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>SOLIDAGO CANADENSIS</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>PHLEUM PRATENSE</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
<u>20</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

Sampling Point: W5-4 067

[illegible]

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)
- ___ Dark Surface (S7) (LRR K, L)
- ___ 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)
- ___ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

Hydric Soil Present? Yes _____ No ☒

Northcentral and Northeast Region – Interim Version

Site 3

Wetland 3 -
Wetland
Point

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: SGL City/County: NIAGARA/NIAGARA Sampling Date: 4/29/10
 Applicant/Owner: SGL EQUITIES, LLC State: NY Sampling Point: ~~10-13~~
 Investigator(s): TOM CONNARE Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): PLAIN Local relief (concave, convex, none): _____
 Slope (%): 0-5 Lat: 43.12 Long: 78.96 Datum: _____
 Soil Map Unit Name: ODESSA SIL NWI classification: _____

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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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 _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: (Explain alternative procedures here or in a separate report.)
SITE PHOTOS 10-13
AREA IS INUNDATED FOLLOWING PRECIPITATION EVENTS.
DRAINAGE OUTLET HAS BECOME PLUGGED - SLOPE FAILURE?

HYDROLOGY

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

Field Observations:	Wetland Hydrology Present? Yes <u>X</u> No _____
Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>0-4</u>	
Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>0-4</u>	
Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0-4</u> (includes capillary fringe)	

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WS-W DPS

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
Sapling/Shrub Stratum (Plot size: <u>15</u>) _____ = Total Cover				Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>CORNUS AMOMUM</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>	
2. <u>CORNUS FOEMINA</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>15</u>) _____ = 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 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>TYPHA LATIFOLIA</u>	<u>15</u>	<u>Y</u>	<u>OBL</u>	
2. <u>LYTHRUM SALICARIA</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: _____) _____ = Total Cover				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
Remarks: (Include photo numbers here or on a separate sheet.) <p style="text-align: center;">SOME WOODY VEGETATION HAS BEEN CUT DOWN. MUCH OF THE AREA THAT GETS INUNDATED IS NOT WETLAND.</p>				

Sampling Point: ~~W5-W~~ n18

[illegible]

- ☐ 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)
- ☐ Dark Surface (S7) (LRR K, L)
- ☐ 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)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

Hydric Soil Present? Yes ☒ No ☐

Northcentral and Northeast Region – Interim Version

Site 3

Wetland 4 - Upland Point
North

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SGL City/County: NIAGARA/NIAGARA Sampling Date: 4/29/10
 Applicant/Owner: SGL EQUITIES, LLC State: NY Sampling Point: W48-4
 Investigator(s): TOM CONNARE Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): PLAIN Local relief (concave, convex, none): _____
 Slope (%): 0-5 Lat: 43.12 Long: 78.96 Datum: _____
 Soil Map Unit Name: ODESSA SIL NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? NO Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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 <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____	
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>		
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

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

Field Observations:		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> (includes capillary fringe)	Depth (inches): _____	

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W4B-U 009

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Sapling/Shrub Stratum (Plot size: <u>15</u>) 1. <u>CORNUS FOEMINA</u> <u>15</u> <u>Y</u> <u>FAC</u> 2. <u>LONICERA TATARICA</u> <u>15</u> <u>Y</u> <u>FACU</u> 3. _____ 4. _____ 5. _____ 6. _____ 7. _____				
_____ = Total Cover				
Herb Stratum (Plot size: <u>5</u>) 1. <u>SOLIDAGO CANADENSIS</u> <u>10</u> <u>Y</u> <u>FACU</u> 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ 12. _____				
_____ = 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 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.
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ _____ = Total Cover				
Hydrophytic Vegetation Present? Yes _____ No <u>X</u>				
Remarks: (Include photo numbers here or on a separate sheet.) 				

Sampling Point:

W4B-U pp9

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

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

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

Site 3

Wetland 4 -
Wetland Point
North

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SGL City/County: NIAGARA/NIAGARA Sampling Date: 4/29/10
 Applicant/Owner: SGL EQUITIES LLC State: NY Sampling Point: W4B W
 Investigator(s): TOM CONNARE Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): PLAIN Local relief (concave, convex, none): DITCH
 Slope (%): 0-5 Lat: 43.12 Long: 78.96 Datum: _____
 Soil Map Unit Name: ODESSA SIL NWI classification: _____

DP10

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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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 _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) <u>DITCH</u> <u>SITE PHOTO 9</u>	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes <u>X</u> No _____	Depth (inches): <u>0-2</u>	Wetland Hydrology Present? Yes <u>X</u> No _____
Water Table Present? Yes <u>X</u> No _____	Depth (inches): <u>0-4</u>	
Saturation Present? Yes _____ No _____	Depth (inches): <u>0-4</u>	
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: DP10
W4B-W

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Indicators: _____ Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>SALIX SP.</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>20</u> = 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 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.
Herb Stratum (Plot size: <u>15'</u>)				
1. <u>LYTHRUM SALICARIA</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	
2. <u>CAREX SP.</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>35</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.) 				

Sampling Point: DP10
V48-W

[illegible]

- ☐ 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)
- ☐ Dark Surface (S7) (LRR K, L)
- ☐ 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)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

Hydric Soil Present? Yes ☒ No ☐

Northcentral and Northeast Region – Interim Version

Site 3

Wetland 4 -
Upland Point South

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SGL City/County: NIAGARA/NIAGARA Sampling Date: 4/29/10
 Applicant/Owner: SGL EQUITIES LLC State: NY Sampling Point: 444-12
 Investigator(s): TOM CONNARO Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): PLAIN Local relief (concave, convex, none): DITCH
 Slope (%): 0-5 Lat: 43.12 Long: 78.96 Datum: _____
 Soil Map Unit Name: ODESSA SIL NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? NO Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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 <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> (includes capillary fringe)	Depth (inches): _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: W44-U

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>CORNUS FOEMINA</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>15'</u>)				¹ Indicators 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 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>SOLIDAGO CANADENSIS</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	
2. <u>POA PRATENSIS</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.) 				

Sampling Point: W4A-U

[illegible]

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

Restrictive Layer (if observed):

Depth (inches): _____

Hydric Soil Present? Yes No ☒

Remarks:

Site 3

Wetland 4 - Wetland
Point South

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SGL City/County: NIAGARA/NIAGARA Sampling Date: 4/29/10
 Applicant/Owner: SGL EQUITIES LLC State: NY Sampling Point: W4A
 Investigator(s): TOM CONNARE Section, Township, Range: 000
 Landform (hillslope, terrace, etc.): PLAIN Local relief (concave, convex, none): DP12
 Slope (%): 0-5 Lat: 43.12 Long: 78.96 Datum:
 Soil Map Unit Name: ODESSA SIL NWI classification:
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes ☒ No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (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 <input checked="" type="checkbox"/> No <u></u>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <u></u>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <u></u>	If yes, optional Wetland Site ID: <u></u>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <u></u>		
Remarks: (Explain alternative procedures here or in a separate report.) <u>SMALL MARSH CONNECTED TO DITCH</u> <u>SITE PHOTO 8</u>			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
<input checked="" type="checkbox"/> Surface Water (A1)	<u></u> Water-Stained Leaves (B9)	<u></u> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<u></u> Aquatic Fauna (B13)	<u></u> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<u></u> Marl Deposits (B15)	<u></u> Moss Trim Lines (B16)	
<u></u> Water Marks (B1)	<u></u> Hydrogen Sulfide Odor (C1)	<u></u> Dry-Season Water Table (C2)	
<u></u> Sediment Deposits (B2)	<u></u> Oxidized Rhizospheres on Living Roots (C3)	<u></u> Crayfish Burrows (C8)	
<u></u> Drift Deposits (B3)	<u></u> Presence of Reduced Iron (C4)	<u></u> Saturation Visible on Aerial Imagery (C9)	
<u></u> Algal Mat or Crust (B4)	<u></u> Recent Iron Reduction in Tilled Soils (C6)	<u></u> Stunted or Stressed Plants (D1)	
<u></u> Iron Deposits (B5)	<u></u> Thin Muck Surface (C7)	<u></u> Geomorphic Position (D2)	
<u></u> Inundation Visible on Aerial Imagery (B7)	<u></u> Other (Explain in Remarks)	<u></u> Shallow Aquitard (D3)	
<u></u> Sparsely Vegetated Concave Surface (B8)		<u></u> Microtopographic Relief (D4)	
		<u></u> FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <u></u> Depth (inches): <u>0-2</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <u></u>	
Water Table Present?	Yes <input checked="" type="checkbox"/> No <u></u> Depth (inches): <u>0-5</u>		
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <u></u> Depth (inches): <u>0-5</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION – Use scientific names of plants.

Sampling Point: NP12
W4A-W

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ 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.
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____				
<u>90</u> = Total Cover				
Herb Stratum (Plot size: <u>5'</u>) 1. <u>TYPHA LATIFOLIA</u> 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ 12. _____				
<u>90</u> = 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 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.
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____				
_____ = Total Cover				
Hydrophytic Vegetation Present? Yes <u>X</u> No _____				
Remarks: (Include photo numbers here or on a separate sheet.) 				

Sampling Point: DP12
W4A-W

Sampling Point:

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

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

Hydric Soil Present? Yes ☒ No ☐

Depth (inches): _____

Remarks:

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