DEPARTMENT OF VETERANS AFFAIRS
Office of Construction and Facilities Management
Washington DC 20420

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

June 9, 2015

Pembroke Highway Department
Attn: Director
1145 Main Road
Corfu, New York, 14036

The U.S. Department of Veterans Affairs (VA) is conducting a Site Specific Environmental Assessment (SEA) as required by the National Environmental Policy Act (NEPA) to evaluate potential environmental impacts of the VA's Proposed Action, which is to construct and operate the new Western New York National Cemetery at 1232 Indian Falls Road, Genesee County, New York. The VA would like to invite the Pembroke Highway Department to participate with VA in our evaluation, an important program activity that may be of continued interest to you. The Pembroke Highway Department was contacted during the development of the Programmatic Environmental Assessment (PEA) for this project because your agency has either jurisdiction over the project or special expertise in respect to environmental issues related to the project. The PEA was recently finalized on May 9, 2014, with a Finding of No Significant Impact (FONSI). As described in the PEA, the VA is entering the next stage of the project, which involves preparing a Draft SEA document for subsequent public comment.

As we begin preparing the Draft SEA, please let us know if the Pembroke Highway Department has any new information available that would assist VA in the evaluation of the project, or if additional consultation is requested. Please review this request and RSVP within 30 days of receipt. Additionally, the VA plans to hold a public scoping meeting to discuss and inform the general public about the proposed project; once the scoping meeting date and time and location are determined, the VA will publish an announcement in the *Buffalo Times* newspaper and on the VA website inviting the public to attend.

Once the Draft SEA is complete and becomes available for a 30-day public comment period, your organization will be notified again and provided an opportunity to provide comments on that document. The VA will consider and incorporate those comments and responses in the subsequent Final SEA.

VA wishes to take every opportunity to work together in a relationship where a Federal, State or local agency has decision-making authority or special expertise that can enhance VA's decision making efforts. Once again, if you would like to provide comments or request additional information, please contact Mr. Glenn Elliott, U.S. Department of Veterans Affairs, Office of Construction & Facilities Management, 425 I (eye) Street, NW, Room 6W417a, Washington, D.C., 20001, or send via email to glenn.elliott@va.gov, or by telephone at (202) 632-5879.

Sincerely,

Glenn Elliott
Environmental Engineer
U.S. Department of Veterans Affairs
Office of Construction & Facilities Management

Agency	Attention	Street	City State Zip	Telephone
Pembroke Highway Department	Attn: Director	1145 Main Road	Corfu, New York, 14036	Phone: (585) 599-4892 Ext. 27
Pembroke Parks Department	Attn: Director	1145 Main Road	Corfu, New York, 14036	Phone: (585) 599-4892
Pembroke Zoning and Codes Department	Attn: Director	1145 Main Road	Corfu, New York, 14036	Phone: (585) 599-4892 Ext. 24
Genesee County Highway Department	Attn: Director	153 Cedar Street	Batavia, New York 14020	Phone: (585) 344-8508
Genesee County Parks, Recreation, and Forestry	Attn: Director	153 Cedar Street	Batavia, New York 1402	Phone: (585) 344-8508
Genesee County Soil and Water Conservation District	Attn: Director	29 Liberty Street, Suite #3	Batavia, New York 14020	Phone: (585) 343-2362
U.S. Fish and Wildlife Service - New York Field Office	Attn: Director	3817 Luker Road	Cortland, New York 13045	Phone: (607) 753-9334
Genesee County Public Health Department	Attn: Director	3837 West Main St.	Batavia, New York 14020	Phone: (585) 344-2580
New York Department of Environmental Conservation, Region 8	Attn: Director	6274 East Avon-Lima Road	Avon, New York 14414-9519	Phone: (585) 226-2466
Wyandotte Tribe of Oklahoma	Attn: Chief Billy Friend	64700 E. Highway 60	Wyandotte, Oklahoma 74370	
Seneca-Cayuga Nation	Attn: Chief LeRoy Howard	23701 South 655 Road	Grove, Oklahoma 74344	
Seneca Nation of Indians	Attn: Lana Watt, THPO	90 Ohi: Yo' Way	Salamanca, New York 14779	
Onondaga Nation of New York	Attn: Mr. Anthony Gonyea	RR 1, Box 319-B	Nedrow, New York 13120	
Seneca Nation of New York	Attn: Mr. Barry E. Snyder Sr.	1490 Rte. 438	Irving, New York 14081	
Oneida Tribe of Indians of Wisconsin	Attn: Mr. Ed Delgado	PO Box 365	Oneida, Wisconsin 54155	
Tuscarora Nation of New York	Attn: Mr. Leo R. Henry	2006 Mt. Hope Road	Lewiston, New York 14092	
St. Regis Band of Mohawk Indians of New York	Attn: Mr. Loran Thompson	412 State Route 37	Akwesasne, New York 13655	
Shinnecock Indian Nation	Attn: Mr. Randy King	P.O. Box 5006	Southhampton, New York 11969-0751	
Tonawanda Band of Seneca Indians of New York	Attn: Mr. Roger Hill	7027 Meadville Road	Basom, New York 14013	
Oneida Nation of New York	Attn: Mr. Tony Wonderley	223 Genesee Street	Oneida, New York 13421	
Genesee County Department of Planning	Attn: Director	County Building 2, 3837 West Main Street	Batavia, New York 14020	Phone: (585) 344-2580 Ext. 5467
New York State Department of Transportation, Genesee Valley Region	Attn: Director	1530 Jefferson Road	Rochester, NY 14623	Phone: (585) 272-3310
New York State Historic Preservation Office	Attn: Director	Peebles Island State Park, P.O. Box 189	Waterford, New York 12188-0189	Phone: (518) 237-8643
US Army Corps of Engineers - Buffalo District	Attn: Public Affairs Office	1776 Niagara Street	Buffalo, New York 14207	Phone: (716) 879-4410
US Environmental Protection Agency, Region 2	Attn: Western New York Public Information Office	186 Exchange Street	Buffalo, New York 14204	Phone: (877) 251-4575
Cayuga Nation of New York	Attn: Mr. Clint Halftown	2540 State Route 89, P.O. Box 803	Seneca Falls, New York 13148	

DEPARTMENT OF VETERANS AFFAIRS
Office of Construction & Facilities Management
Washington DC 20420

February 17, 2016

Attn: Ms. Nancy Herter
Coordinator and Native American Liaison
New York State Division for Historic Preservation
Peebles Island State Park
P.O. Box 189
Waterford, NY 12188-0189
RE: OPRHP No. 12PR02608 (Proposed Western New York National Cemetery)

Dear Ms. Herter,

The purpose of this letter is to request additional Section 106 consultation with the Office of Parks, Recreation and Historic Preservation (OPRHP) regarding the status of archaeological resources at the proposed Western New York National Cemetery.

In November 2015, Tetra Tech, Inc. produced the *Phase IB Archaeological Investigations Report, Western New York Veterans National Cemetery Extension Project* (Phase IB Report), on behalf of the US Department of Veterans Affairs (VA). The 2015 Phase IB report contained the following findings and recommendations:

- One historic archaeological loci with 59, 19th-century historic artifacts, recommended not eligible for National Register of Historic Places (NRHP) eligibility; no further archaeological testing required.
- Six prehistoric loci with a combined total of 350 prehistoric lithic artifacts; each loci was recommended potentially eligible for NRHP listing; recommended Phase II archaeological investigation.

As the lead federal agency for the proposed undertaking, the VA seeks consultation with the OPRHP regarding the project, proposed project impacts, and the documented archaeological resources reported in the 2015 Phase IB report. Currently, the proposed Western New York National Cemetery development is divided into five separate phases (Figure 1). For 2016-2026, the VA is only concerned with advancing development Phases IA/IB of the project. Working closely with our design team, the VA has designed a Master Plan to avoid the documented prehistoric archaeological resources reported in the 2015 Phase IB report. All structures, stormwater management areas and other permanent features have been shifted or redesigned to avoid the resource boundaries, as reported in the 2015 Phase IB report. However, fill will need to be introduced to a portion of one prehistoric locus in order to obtain the appropriate elevation for road construction; Figure 2 presents an overlay of the proposed fill area over the 2015 Phase IB resource boundary map. It is the understanding of the VA that the fill will not exceed five to eight feet in depth. The total area of the prehistoric locus that will be affected by soil deposition is approximately 30,000 square feet.

The VA seeks to consult with your office regarding this matter. It is the opinion of the VA that the addition of clean fill on an archaeological resource may be considered intentional site burial and is a form of preservation in place, a practice recognized by the National Park Service (Thorne 1991; http://www.nps.gov/archeology/pubs/techbr/tch5.htm). If conducted appropriately and with the necessary safeguards, this action would not be considered an adverse impact to the resource. Based on the results of the Phase IB survey, this locus has only produced lithic artifacts; no ceramic, bone, shell or other more fragile artifacts were recovered.

The VA would like to propose the following measures to protect these resources during and subsequent to construction in order to assure preservation of these resources:

- Erect temporary construction fencing at the limit of fill so that no construction personnel or vehicles enter the site area during or after construction;
- Install geo-textile fabric over the portion of the site onto which fill is to be introduced;
- Deposit fill onto the site area via mechanical equipment from outside the site area; no construction vehicles shall enter the limits of the site;
- Hire a professional archaeologist to monitor and document compliance with these measures during construction.

I look forward to discussing these recommendations at your earliest convenience and trust that we can arrive at a satisfactory preservation plan for these resources. As the project moves into subsequent phases of construction, we will continue to work closely with your office to determine the appropriate measures required to comply with Section 106 of the National Historic Preservation Act.

If you have any questions or require additional information, please do not hesitate to contact me at (202) 632-5879 or Glenn.Elliott@va.gov.

Sincerely,

2/17/2016

X Glenn Elliott

Glenn Elliott
Environmental Engineer
Signed by: Glenn M. Elliott 689970

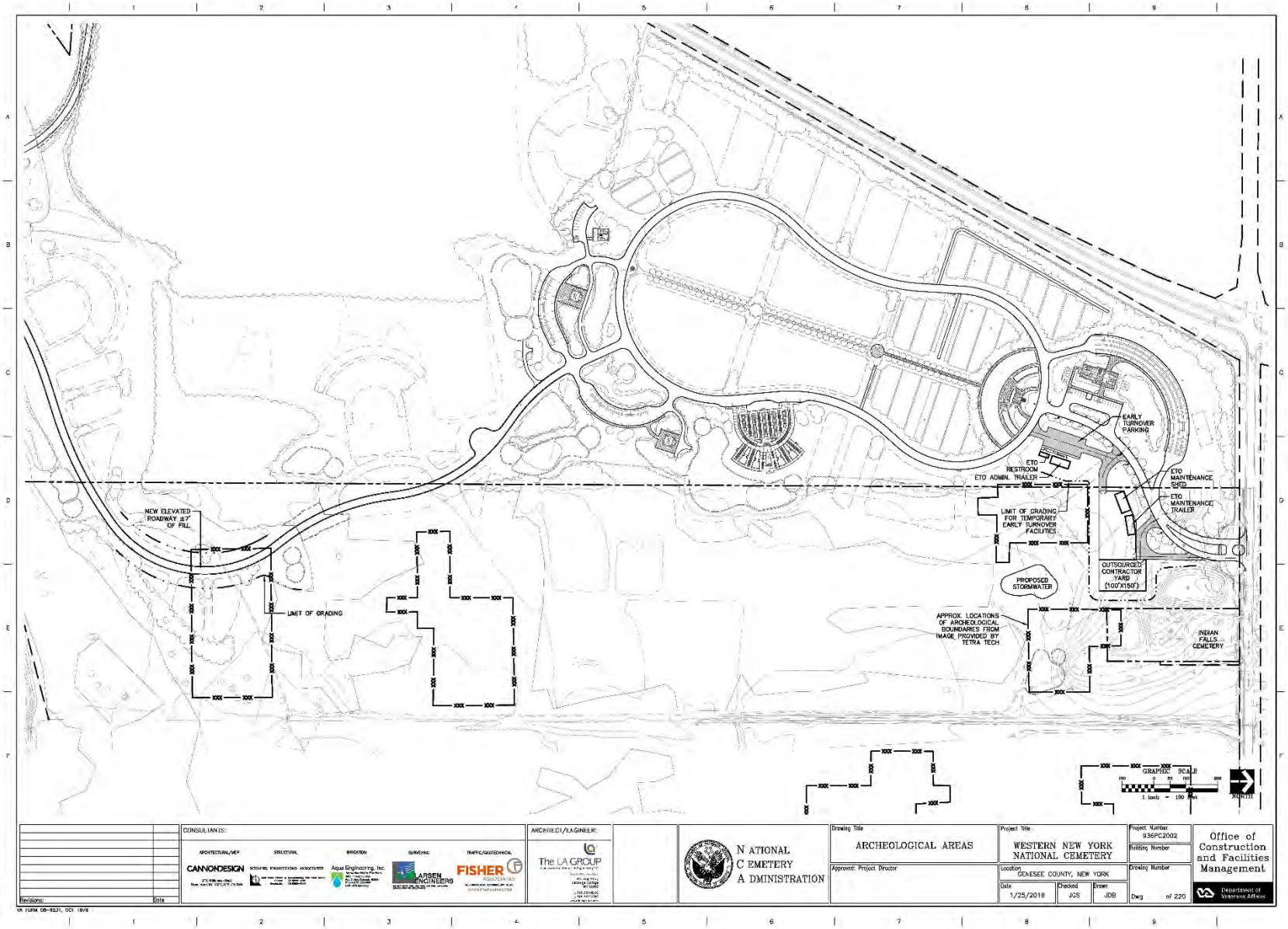
Glenn Elliott
Environmental Engineer, Program/Project Manager

Attachments: Figures 1 and 2

cc: Andrew Glucksman, Mabbett & Associates, Inc.
Kelley Peterman, AECOM
John Lawrence, AECOM

Figure 1. Proposed Western New York National Cemetery – Phasing Plan

Figure 2. Overlay of Proposed Development Fill Areas over the 2015 Phase IB Resource Boundary Map



NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

April 13, 2016

Mr. Glenn Elliott
Environmental Engineer, P P/M
U.S. Department of Veterans Affairs
Office of Construction & Facilities Management
425 I (eye) Street, NW, Room 6W417a
Washington , DC 20001

Re: VA
Proposed Western New York National Cemetery
Expansion (137 acres)
1232 Indian Falls Road, NY
12PR02608

Dear Mr. Elliott:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the *Phase IB Archaeological Investigation Report*, prepared by Tetra Tech and dated November 2015, in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources.

Based on this review, the SHPO understands that one Native American site was identified, the VA Expansion Pre-contact Site (Loci 1 through 6), and we recommend either a Phase II Site Evaluation Study or avoidance of this site. Given the similarity of this site to the Indian Falls VA Precontact Site (3712.000035), which was subjected to an extensive Phase III Data Recovery investigation, the SHPO recommend that any National Register eligibility discussion carefully considers whether this site can answer new research questions or if data redundancy has been achieved. We look forward to receiving either a Phase II Site Evaluation scope-of-work or an avoidance plan.

If the Tonawanda Seneca Nation would like to have a meeting to discuss the results of the Phase IB investigation, the SHPO would be pleased to participate. The SHPO would also like to note that the Tonawanda Seneca Nation may request the presence of a Native American monitor during the Phase II archaeological testing.

Sincerely,

Nancy Herter

Nancy Herter
Archeology Unit Program Coordinator

e-mail: nancy.herter@parks.ny.gov via e-mail only

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

April 28, 2016

Mr. Glenn Elliott
Environmental Engineer, P P/M
U.S. Department of Veterans Affairs
Office of Construction & Facilities Management
425 I (eye) Street, NW, Room 6W417a
Washington , DC 20001

Re: VA
Proposed Western New York National Cemetery
1232 Indian Falls Road
Town of Pembroke, Genesee County
12PR02608

Dear Mr. Elliott:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted letter proposing the burial of 30,000 square feet of the Indian Falls VA Precontact Site (3712.000035), located within Phase IA/IB of the project, in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources.

Based on a review of this letter, the SHPO concurs that the addition of clean fill on an archaeological resource is a form of preservation in place and with appropriate safeguards will not adversely impact the resource. The SHPO is satisfied that the below safeguards will assure long-term preservation of the 30,000 square feet of the Indian Fall VA Precontact site located in Phase IA/IB of the project.

- Erect temporary construction fencing at the limits of fill so that no construction personnel or vehicles enter the site area during construction;
- Install geo-textile fabric over the portion of the site onto which fill is to be placed;
- Deposit fill onto the site area via mechanical equipment from outside the site area; no construction vehicles shall enter the limits of the site;
- Hire a professional archaeologist to monitor and document compliance with these measures during construction;
- Note this area on appropriate facilities map and label as “Archaeologically Sensitive – Do Not Impact” or with some other appropriate language

If you have any questions, I can be reached at (518) 268-2179.

Sincerely,

Nancy Herter
Archeology Unit Program Coordinator
e-mail: nancy.herter@parks.ny.gov

via e-mail only

DEPARTMENT OF VETERANS AFFAIRS
Office of Construction & Facilities Management
Washington DC 20420

May 13, 2016

Attn: Ms. Nancy Herter
Coordinator and Native American Liaison
New York State Division for Historic Preservation
Peebles Island State Park
P.O. Box 189
Waterford, NY 12188-0189
RE: OPRHP No. 12PR02608 (Proposed Western New York National Cemetery)

Dear Ms. Herter,

The purpose of this letter is to reiterate the VA's avoidance plan for the roadway to be constructed as part of the Early-turnover development (referred to as the Phase I development) at the proposed Western New York National Cemetery located at 1232 Indian Falls Road, Pembroke, New York.

As discussed during our telephone conversation on April 19, 2016, and in response to your letter dated April 13, 2016, the VA believes that the fill associated with construction of the Phase I roadway will not disturb potential subsurface archaeological resources, specifically the 30,000 square feet of the Indian Falls VA Precontact Site (3712.000035). Additionally, if the VA develops areas outside of the Phase I cemetery boundary in the future, the VA, as the lead federal agency, will reinitiate consultation with your office and applicable Native American Tribes as part of the NEPA and Section 106 processes. Furthermore, the VA is committed to conducting a Phase II cultural resource investigation prior to any potential future development outside of the Phase I cemetery boundary. Therefore, the VA believes there should be no adverse effects associated with the construction and operation of the Phase I roadway.

As previously described in the VA's letter to your office dated February 17, 2016, and your letter dated April 28, 2016, the VA is committed to implementing the following measures to protect and assure long-term preservation of the 30,000 square feet of the Indian Falls VA Precontact Site:

- Erect temporary construction fencing at the limit of fill so that no construction personnel or vehicles enter the site area during or after construction;
- Install geo-textile fabric over the portion of the site onto which fill is to be introduced;
- Deposit fill onto the site area via mechanical equipment from outside the site area; no construction vehicles shall enter the limits of the site;

- Hire a professional archaeologist to monitor and document compliance with these measures during the construction phase associated with the burial of 30,000 square feet of the Indian Falls VA Precontact Site; and
- A cultural monitor will be provided both for the 132- and 60-acre areas for construction activities requiring excavation or earthwork ground disturbance of a depth in excess of 36 inches (consistent with the language in the Memorandum of Agreement [MOA] signed on May 29, 2014).

Additionally, per our meeting on May 5, 2016, the VA reiterates that it will implement the protective measures previously documented in the MOA signed on May 29, 2014. These MOA stipulations will apply both to the 132-acre parcel originally identified as the location for the cemetery, as well as the adjacent 60-acre parcel subsequently identified for cemetery development by the VA. The protective measures identified in the MOA and the NY SHPO's April 28, 2016 letter (as outlined above) will be will be documented as commitments in the forthcoming construction bid documents, Draft EA, and the potential Finding of No Significant Impact (FONSI) so all contractors and VA personnel are aware of these commitments when bidding on this project.

Furthermore, the NCA will restrict development in the areas identified and will not perform any ground disturbing activities in these areas without first formally consulting with the Tonawanda Seneca Nation and NY SHPO. Additionally, knowledge of the loci will be limited to and secured by the cemetery director and NCA leadership such that information about the loci is not available to the general public.

I look forward to receiving your response to this letter, which the VA will incorporate into the subsequent Environmental Assessment findings for this project and to document the VA's commitment to incorporating the appropriate measures required to comply with Section 106 of the National Historic Preservation Act.

If you have any questions or require additional information, please do not hesitate to contact me at (202) 632-5879 or Glenn.Elliott@va.gov.

Sincerely,

Glenn Elliott
Environmental Engineer, Program/Project Manager

From: Elliott, Glenn (CFM)
To: Glucksman, Andrew
Subject: FW: W NY National Cemetery (12PR2608)
Date: Wednesday, June 01, 2016 11:09:59 AM

FYI

From: Herter, Nancy (PARKS) [mailto:Nancy.Herter@parks.ny.gov]
Sent: Thursday, May 26, 2016 3:20 PM
To: Elliott, Glenn (CFM)
Subject: [EXTERNAL] RE: W NY National Cemetery (12PR2608)

Glenn,

Thank you for your letter of May 13, 2016. The New York State Historic Preservation Office (SHPO) has reviewed the commitments outlined in this letter. Based on this review, it is the SHPO's opinion that this undertaking will have no adverse effect on historic properties with the understanding that these commitments are documented in the forthcoming construction bid documents, Draft EA, and the potential Finding of No Significant Impact (FONSI).

Sincerely,
Nancy

Nancy Herter
Archaeology Unit Program Coordinator

New York State Parks, Recreation & Historic Preservation
PO Box 189, Peebles Island, Waterford, New York 12188-0189
(518) 268-2179 | nancy.herter@parks.ny.gov
www.nysparks.com

From: Elliott, Glenn (CFM) [mailto:Glenn.Elliott@va.gov]
Sent: Monday, May 16, 2016 10:08 AM
To: Herter, Nancy (PARKS)
Subject: W NY National Cemetery

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Nancy,
I was out of the office last week, here is the letter. I will also send you the letter we sent to Christine. If this letter does not clear up any questions you had I am in the office all day today. Also thank you for the documentation of the protecting the location/identity of the resources.
This letter will be uploaded also into the CHRIS system.

Glenn

Glenn Elliott
Environmental Engineer, P P/M
U.S. Department of Veterans Affairs
Office of Construction & Facilities Management
425 I (eye) Street, NW, Room 6W417a
Washington, D.C. 20001

ph. (202) 632-5879
fx. (202) 632-5832
bb. (202) 360-1243

DEPARTMENT OF VETERANS AFFAIRS
Office of Construction & Facilities Management
Washington DC 20420

May 13, 2016

Attn: Ms. Christine G. Abrams
On behalf of the Council of Chiefs
Tonawanda Seneca Nation
7027 Meadville Road
Basom, New York 14013
RE: Proposed Western New York National Cemetery

Dear Ms. Abrams,

The purpose of this letter is to reiterate the VA's avoidance plan for the roadway to be constructed as part of the Early-turnover development (referred to as the Phase I development) at the proposed Western New York National Cemetery located at 1232 Indian Falls Road, Pembroke, New York.

The VA believes that the fill associated with construction of the Phase I roadway will not disturb potential subsurface archaeological resources, specifically the 30,000 square feet of the Indian Falls VA Precontact Site (identified by the New York State Historic Preservation Office [NY SHPO] as 3712.000035). Additionally, if the VA develops areas outside of the Phase I cemetery boundary in the future, the VA, as the lead federal agency, will reinitiate consultation with the Tonawanda Seneca Nation and the NY SHPO as part of the NEPA and Section 106 processes. Furthermore, the VA is committed to conducting a Phase II cultural resource investigation prior to any potential future development outside of the Phase I cemetery boundary. Therefore, the VA believes there should be no adverse effects associated with the construction and operation of the Phase I roadway.

Following consultations among the VA, Tonawanda Seneca Nation, and SHPO on May 5, 2016, and in accordance with protective measures outlined by the NY SHPO in letter to the VA dated April 28, 2016, the VA is committed to implementing the following measures to protect and assure long-term preservation of the 30,000 square feet of the Indian Falls VA Precontact Site:

- Erect temporary construction fencing at the limit of fill associated with the Site so that no construction personnel or vehicles enter the Site area during or after construction;
- Install geo-textile fabric over the portion of the Site onto which fill is to be introduced;
- Deposit fill onto the Site area via mechanical equipment from outside the Site area; no construction vehicles shall enter the limits of the Site;

- Hire a professional archaeologist to monitor and document compliance with these measures during the construction phase associated with the burial of 30,000 square feet of the Indian Falls VA Precontact Site; and
- A cultural monitor will be provided both for the 132- and 60-acre areas for construction activities requiring excavation or earthwork ground disturbance of a depth in excess of 36 inches (consistent with the language in the Memorandum of Agreement [MOA] signed on May 29, 2014).

Additionally, per our meeting on May 5, 2016, the VA reiterates that it will implement the protective measures previously documented in the MOA signed on May 29, 2014. These MOA stipulations will apply both to the 132-acre parcel originally identified as the location for the cemetery, as well as the adjacent 60-acre parcel subsequently identified for cemetery development by the VA. The protective measures identified in the MOA and the NY SHPO's April 28, 2016 letter (as outlined above) will be will be documented as commitments in the forthcoming construction bid documents, Draft EA, and the potential Finding of No Significant Impact (FONSI) so all contractors and VA personnel are aware of these commitments when bidding on this project.

Furthermore, the NCA will restrict development in the areas identified and will not perform any ground disturbing activities in these areas without first formally consulting with the Tonawanda Seneca Nation and NY SHPO. Additionally, knowledge of the loci will be limited to and secured by the cemetery director and NCA leadership such that information about the loci is not available to the general public.

I look forward to receiving your response to this letter, which the VA will incorporate into the subsequent Environmental Assessment findings for this project and to document the VA's commitment to incorporating the appropriate measures required to comply with Section 106 of the National Historic Preservation Act.

If you have any questions or require additional information, please do not hesitate to contact me at (202) 632-5879 or Glenn.Elliott@va.gov.

Sincerely,

Glenn Elliott
Environmental Engineer, Program/Project Manager

From:	Elliott, Glenn (CFM)
To:	Glucksman, Andrew
Subject:	Fw: [EXTERNAL] Western New York National Cemetery - 1232 Indian Falls Rd.
Date:	Monday, July 06, 2015 1:31:54 PM
Attachments:	document2015-07-06-102439.pdf

FYI

From: Haley, Thomas P (DEC) [mailto:thomas.haley@dec.ny.gov]
Sent: Monday, July 06, 2015 04:28 AM
To: Elliott, Glenn (CFM)
Subject: [EXTERNAL] Western New York National Cemetery - 1232 Indian Falls Rd.

Mr. Elliott:

The Department has received your June 9, 2015 dated letter regarding the current status of the proposed Western New York National Cemetery. At this point the Department does not have many additional comments beyond those shared in our July 3, 2012 letter (attached). Since that time it is unclear whether or not a wetland delineation has been conducted.

Since 2012 there have been some changes in how the Department regulates water withdrawals. If the cemetery's irrigations system, and other groundwater uses, have a potential (system's pump capacity) which exceeds 100,000 gpd then the new water withdrawal permit program may apply. Please see the following link for additional information: http://www.dec.ny.gov/lands/55509.html

Please feel free to contact if you have any further questions. Also, please direct the Draft SEQ and future correspondence to my attention. Thank you!

Tom Haley
Deputy Regional Permit Administrator

New York State Department of Environmental Conservation, Region 8
6274 East Avon-Lima Rd., Avon, NY 14414
P: (585) 226-5393 | F: (585) 226-2830 | thomas.haley @dec.ny.gov

www.dec.ny.gov |

New York State Department of Environmental Conservation
Division of Environmental Permits, Region 8
6274 East Avon-Lima Road, Avon, New York 14414-9519
Phone: (585) 226-5400 • **Fax:** (585) 226-2830
Website: www.dec.ny.gov

Joe Martens
Commissioner

July 3, 2012

Paul Jackson
TTL Associates
44265 Plymouth Oaks Blvd.
Plymouth, MI 48170-2585

Dear Mr. Jackson:

The Department has conducted and environmental screening in response to your June 12, 2012 dated request related to the proposed Western New York National Cemetery. The Department has screened the three potential sites and organized our comments accordingly.

1) 1232 Indian Falls Road, Corfu, NY
   - Portions of the site are located within areas of potential cultural (archeological) significance. The Department recommends further consultation with the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) on the potential impacts to cultural resources. NYS OPRHP can be reached at 518-237-8643.
   - NYS Freshwater Wetland AK-14 is located on the proposed site. The wetlands need to be delineated early in the planning process to determine the actual wetland boundary. The US Department of Veterans Affairs may not be subject to the State's Article 24 Freshwater Wetland regulations but a 401 Water Quality Certification would likely be required for wetland disturbance. Consistent with the Article 24 regulations (6 NYCRR Part 663) the Department recommends that impacts to the wetland and 100 adjacent area be avoided to the extent practicable.
   - It would appear that there are federally regulated wetlands on the proposed site. We recommend that you contact the US Army Corps of Engineers Buffalo Regulatory Branch at 716-879-4330.
   - There are no known gas, oil and/or water wells on the project site but there are numerous gas wells surrounding the proposed site.
   - There is a Class C non-navigable waterway located near the southern property boundary along the NYS Thruway.
   - In a screening for potential NYS endangered and threatened species there was a hit for Northern wild comfrey, a NYS listed endangered plant species. The date last documented was June 4, 1922.

2) Main Road Site, Corfu, NY
   - The entire site is located within an area of potential cultural (archeological) significance. The Department recommends further consultation with the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) on the potential impacts to cultural resources. NYS OPRHP can be reached at 518-237-8643.

- NYS Freshwater Wetland AX-1 is located on the proposed site. The wetlands need to be delineated early in the planning process to determine the actual wetland boundary. The US Department of Veterans Affairs may not be subject to the State's Article 24 Freshwater Wetland regulations but a 401 Water Quality Certification would likely be required for wetland disturbance. Consistent with the Article 24 regulations (6 NYCRR Part 663) the Department recommends that impacts to the wetland and 100 adjacent area be avoided to the extent practicable.
- It would appear that there are federally regulated wetlands on the proposed site. We recommend that you contact the US Army Corps of Engineers Buffalo Regulatory Branch at 716-879-4330.
- There appears to be an active gas well on the proposed site. Please contact Linda Collart, NYSDEC Minerals, at 585-226-5376 for additional information on the gas well.
- A portion of the project site lies within a mapped 100 year FEMA floodplain.

3) <u>4106 Walden Avenue Lancaster, NY</u>
   - This site is located within NYSDEC Region 9. We recommend that you contact David Denk, NYSDEC Region 9 Regional Permit Administrator at 716-851-7165 for further information on this site. Though this site is located in Region 9 the following comments are provided based on the information available to the NYSDEC Region 8 office.
   - The entire site is located within an area of potential cultural (archeological) significance. The Department recommends further consultation with the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) on the potential impacts to cultural resources. NYS OPRHP can be reached at 518-237-8643.
   - It would appear that there are federally regulated wetlands on the proposed site. We recommend that you contact the US Army Corps of Engineers Buffalo Regulatory Branch at 716-879-4330.
   - The proposed site appears to contain a plugged gas well. Please contact NYSDEC Region 9 for further information.

If you have any questions regarding information contained in the letter please feel free to contact me at 585-226-5393.

Sincerely,

Thomas P. Haley
Deputy Regional Permit Administrator

New York State Department of Environmental Conservation

Notice of Incomplete Application - This is NOT a Permit

Application ID: 8-1842-00097/00001 *Batch Number*: 786474

Facility: WNY NATIONAL CEMETERY
1232 INDIAN FALLS RD
PEMBROKE, NY

Contact: GLENN ELLIOTT *Owner ID*: 1758667
US DEPT OF VETERANS AFFAIRS
425 I ST MW
WASHINGTON, DC 20001

Permit(s) Applied for: 1 - Section 401 - Clean Water Act Water Quality Certification

Project Location: in PEMBROKE in GENESEE COUNTY

Your application for Permit is incomplete. The following items are required:

The Department has completed the review of the submitted wetland delineation and accompanying application. Our Bureau of Habitat have determined that the boundaries illustrated in Figure 2, prepared by AECOM, accurately reflect the current wetland boundaries on the site.

The following items are needed to continue with the application review process:

1. The submitted application included a completed Short Environmental Assessment Form. Since this project is a State Environmental Quality Review (SEQR) Type 1 project, the applicant is required to submit the Full Environmental Assessment Form. Please forward a completed Full Environmental Assessment Form. A fillable FEAF form can be found at: http://www.dec.ny.gov/permits/6191.html.

2. Please forward detailed plans for the project. Plans should include the proposed limits of disturbance and clearly illustrate the extent of all fill, excavation, grading disturbance and clearing of vegetation. Dimensions for any proposed structures and buildings must be provided.

3. Please forward a stormwater pollution prevention plan (SWPPP) that meets the requirements of New York State's Stormwater Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002).

4. Please forward a copy of the determinations received from the NYS Office of Parks, Recreation and Historic Preservation along with a copy of the applicable Memorandum of Understanding(s).

5. The Department has reviewed the proposed project and the potential impacts on the Northern long-eared bat, a federally and state listed threatened species. The Department has determined that clearing of trees must be restricted to the time between November 1st and March 31st. Tree clearing outside of this window would necessitate bat surveys, obtaining a Part 182 Permit or both. We would recommend that tree clearing be restricted to the time between November 1st and March 31st, if possible.

---

cc: Bill Trembath, AECOM
Molly Connerton, USACE

Please submit requested information by 6-15-16
No further action can be taken until all of these materials are received.

Contact Person:

THOMAS P HALEY
NYSDEC
6274 E Avon-Lima Rd
Avon, NY 14414

Telephone Number: (585) 226-5393

Signature: Thomas P. Haley

Date: April 07, 2016

DEPARTMENT OF VETERANS AFFAIRS
Office of Construction & Facilities Management
Washington DC 20420

October 29, 2015

Mr. Steve Metivier
Chief of the New York Applications Regulatory Branch
U.S. Army Corps of Engineers
1776 Niagara Street
Buffalo, NY 14207

Re: Request for an Approved Wetland Jurisdictional Determination
United States Department of Veteran's Affairs
Proposed Western New York National Cemetery
Town of Pembroke, Genesee County, New York

Dear Mr. Metivier:

The United States Department of Veteran's Affairs (VA) is pleased to provide the enclosed wetland delineation report and is formally requesting an approved Jurisdictional Determination of wetlands located on three parcels of land located on Indian Falls Road in the Town of Pembroke, Genesee County, New York.

The 271 acre project site is comprised of three land parcels. Parcel 1 is approximately 132 acres and is located on the west side of the study area; parcel 2 is in the central section of the study area and is approximately 62 acres; and parcel 3 is located on the east side of the study area and is approximately 77 acres in size. Parcel 1 includes a large agriculture field in the north (planted with beans), a forested complex in the central and western sections, a reverting old field (saturated soils) in the east central section, and old reverting fields and shrublands in the southern section. Parcel 2 is predominantly successional old field transitioning to shrubland with minor areas of forested growth. Parcel 3 contains two (2) agriculture fields (corn and carrots) and two (2) shrub/forest mixed areas in the central and southern sections. There is a swale, classified as an intermittent stream, running through the middle of Parcel 3. The swale runs east to west until it reaches the edge of the parcel and then flows north along the western parcel boundary, where it then goes under Indian Falls Road and eventually into Tonawanda Creek.

Field surveys for wetland delineations and water resources were conducted on April 28 and 29, August 26, 27, 28 and 31, and September 8, 2015, within the project site. The field surveys performed in April were on the western section (Parcel 1) and the August and September surveys were performed on the central and eastern sections (Parcels 2

& 3). A total of six (6) wetlands totaling approximately 86.1 acres in size were delineated on the project site. One (1) intermittent stream was also delineated. The Wetland Delineation Report prepared by AECOM (with associated figures and appendices) is attached as Exhibit A.

The purpose of this letter is to request Corps staff review the extent of wetland jurisdiction in order to finalize a Jurisdictional Determination on the site. Joseph Lyons (AECOM) of the Buffalo office at AECOM can accompany Corps staff on our behalf.

We trust that the information provided in the wetland delineation will be sufficient for your review. If you have any questions or require additional information, please do not hesitate to contact me at (202) 632-5879 or Glenn.Elliott@va.gov or Joseph Lyons at (716) 856-5636 or Joseph.Lyons@aecom.com.

Yours truly,

Glenn Elliott
Environmental Engineer

cc: Andrew Glusksman, Mabbett & Associates, Inc.
Kelley Peterman, AECOM

Wetland Delineation Report for the Site Specific Environmental Assessment for the Proposed Western New York National Cemetery

Contact Number: VA101F-12-D-0056
Project Number: VA101F-15-J-0139
CLIN 0002/MOD 1

Prepared for:
US Department of Veterans Affairs
Office of Construction and Facilities Management (003C4B)
425 I Street, NW
Washington, DC 20001

Prepared by:
AECOM
257 West Genesee Street, Suite 400
Buffalo, New York 14202-2657

On behalf of:
Mabbett & Associates, Inc.
5 Alfred Circle
Bedford, MA 01730

October 19, 2015

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Attachment 2 2015 Wetland Data Sheets

1. Introduction

On behalf of Mabbett & Associates, Inc., AECOM has prepared this Wetland Delineation Report for the U.S. Department of Veterans Affairs (VA) proposed Western New York National Cemetery (Project). The purpose of the Project is to develop a new National Cemetery and ancillary facilities for veterans and their eligible family members in western New York.

The Project Study Area for this Wetland Delineation Report is an approximately 271-acre multiple land parcel site located at 1232 Indian Falls Road in the Town of Pembroke, Genesee County, New York (Figure 1). The purpose of this report is to identify regulated aquatic resources within the Project Study Area and to provide the results of the delineation along with related information for the United States Army Corps of Engineers (USACE) and New York State Department of Environmental Conservation (NYSDEC) to verify wetland delineation boundaries and to make and document Jurisdictional Determinations of the wetlands within the Project Study Area.

1.1. Project Overview

The purpose of this Wetland Delineation Report is to describe the methodology and results of the field investigation to identify and delineate aquatic resources that may be subject to regulation under federal and/or state jurisdiction at the Project Study Area. A secondary purpose of this report is to characterize those aquatic resources found and documented at the Project Study Area. The need for this wetland delineation arose because wetlands were identified during a preliminary wetland evaluation at the site at the time when the VA was still evaluating the adequacy of this site and two others for a new Western New York National Cemetery.

1.2. Regulatory Background

Article 24 of the Environmental Conservation Law, commonly known as the Freshwater Wetlands Act, protects New York's freshwater wetlands. Pursuant to Article 24, wetlands greater than 12.4 acres or wetlands of any size that possess unique qualities are regulated by New York State. In an attempt to preserve and protect wetlands, New York regulates areas adjacent to wetlands. Those areas are defined as land or water that is outside a wetland and within 100 feet of the wetland's boundary.

The USACE has regulatory jurisdiction over waters of the United States including wetlands pursuant to Section 404 of the Clean Water Act and Navigable Waters of the United States pursuant to Section 10 of the 1899 Rivers and Harbors Act.

2. Site Description and Location

2.1. Physiography

The Project Study Area is located within the Ontario-Erie Plain and Finger Lakes Region, which encompasses approximately 9,960 square miles. Most of this area is in the Eastern Lake Section of the Central Lowland Province of the Interior Plains. Bedrock underlying this area consists of alternating beds of limestone, dolomite, sandstone and shale of Ordovician to Devonian age. Most of the ground surface of this area consists of glacial till or lake sediments.

The 271 acre Study Area is comprised of three land parcels (Figure 1). Parcel 1 is approximately 132 acres and is located on the west side of the study area. Parcel 2 is in the central section of the study area and is approximately 62 acres. Parcel 3 is located on the east side of the study area and is approximately 77 acres in size. Parcel 1 includes a large agriculture field in the north (planted with beans), a forested complex in the central and western sections, a reverting old field (saturated soils) in the east central section, and old reverting fields and shrublands in the southern section (Figure 1). Parcel 2 is predominantly successional old field transitioning to shrubland with minor areas of forested growth. Parcel 3 contains two (2) agriculture fields (corn and carrots) and two (2) shrub/forest mixed areas in the central and southern sections. There is a swale, classified as an intermittent stream, running through the middle of Parcel 3. The swale runs east to west until it reaches the edge of the parcel and then heads north along the western parcel boundary, where it then goes under Indian Falls Road and eventually into Tonawanda Creek.

2.2. Hydrology

The Project Study Area is located within the Galloway Swamp-Tonawanda Creek watershed (HUC 041201040301) and Middle Murder Creek watershed (HUC 041201040202) (Figure 1).

2.3. Land Use

The site is dominated by past and present agricultural activities. Much of the site is abandoned agricultural fields reverting to old field successional growth. There are three (3) active agricultural fields on site. Two (2) are in Parcel 3, planted with corn and carrots, and the 3rd is in the northern section of Parcel 1 planted with beans. The major forested components on site are associated with wetland 2 in Parcel 1, and with wetland 3 and wetland 6 in Parcel 3. The site topography is relatively flat (Figure 1). The parcel is bounded by Allegany Road to the west, Indian Fall Road to the north, New York State Thruway I-90 to the south and undeveloped natural land to the east.

2.4. Wetland Ecosystems

Wetlands are an abundant resource within this region due to vegetative ecotypes, climactic conditions and landscape diversity. In this region, wetlands occur on the shores of lakes and ponds, broad flats on former glacial plains, depressions and blocked drainages formed by morainal deposits, outwash deposits of sand and gravel where groundwater discharges or is often near the surface, and deposits of unsorted glacial till that have created relatively impermeable subsoils on flats and slopes. The region also contains large river systems that periodically flood low lying areas creating floodplain wetlands of various types (USEPA-USACE 2011).

2.5. Vegetation

The presence and distribution of local vegetative communities is attributable to the socioeconomic development within the rural residential and agricultural landscape of the Town of Pembroke. The dispersion and density of land cover within this area is indicative of adjacent land use, development, and existing natural resources. The Town of Pembroke is predominantly farmland and an upland forest/wetland mosaic with some residential and commercial areas.

2.6. Soils

Soil information was obtained from the United State Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) (USDA-NRCS 2009). A list of soils present within the Project Study Area is presented in Table 1. Soils mapped in the Project Study Area by the NRCS are indicated in Figure 3. The dominant soils mapped in the Project Study Area include poorly drained Canandaigua silt loam, moderately well drained Phelps gravelly loam, well drained Ontario loam and somewhat poorly drained Ovid silt loam.

Poorly and very poorly drained soils are hydric soils. These areas typically support wetland plant communities. Areas mapped with somewhat poorly drained soils have the potential for hydric soil inclusions. Wetland areas can be found in association with these units.

Table 1. Soils Mapped within the Project Study Area

Soil Map Unit Symbol	Soil Map Unit Name	Drainage Class
ApA	Appleton silt loam, 0 to 3 percent slopes	Somewhat poorly drained
CaA	Canandaigua silt loam, 0 to 2 percent slopes	Poorly drained
DuB	Dunkirk silt loam, 2 to 6 percent slopes	Well drained
FpA	Fredon gravelly loam, 0 to 3 percent slopes	Somewhat poorly drained
GnA	Galen very fine sandy loam, 0 to 2 percent slopes	Moderately well drained
GnB	Galen very fine sandy loam, 2 to 6 percent slopes	Moderately well drained
HaA	Halsey silt loam, 0 to 4 percent slopes	Very poorly drained
Ld	Lamson very fine sandy loam	Poorly drained
Le	Lamson mucky very fine sandy loam	Very poorly drained
LmA	Lima silt loam, 0 to 3 percent slopes	Moderately well drained
LmB	Lima silt loam, 3 to 8 percent slopes	Moderately well drained
NgA	Niagara silt loam, 0 to 2 percent slopes	Somewhat poorly drained
OnA	Ontario loam, 0 to 3 percent slopes	Well drained
OnB	Ontario loam, 3 to 8 percent slopes	Well drained
OvB	Ovid silt loam, 3 to 8 percent slopes	Somewhat poorly drained
PhA	Palmyra gravelly loam, 0 to 3 percent slopes	Well drained
PhB	Palmyra gravelly loam, 3 to 8 percent slopes	Well drained
PhC	Palmyra gravelly loam, 8 to 15 percent slopes	Well drained
PsA	Phelps gravelly loam, 0 to 3 percent slopes	Moderately well drained

Table 2. Soils Mapped within the Project Study Area

Soil Map Unit Symbol	Soil Map Unit Name	Drainage Class

PsB	Phelps gravelly loam, 3 to 8 percent slopes	Moderately well drained
RsA	Romulus silt loam, 0 to 3 percent slopes	Poorly drained
Um	Udorthents, smoothed	Well drained

3. Methodology

3.1. Site Resources Review

A desktop analysis was conducted for the Project Study Area using existing information from federal and state agency databases, published literature review and state agency correspondence. The analysis was conducted to determine the presence and extent of biological and natural resources potentially occurring in the Project vicinity.

Vegetation cover types as defined by United States Geological Survey (USGS) Gap Analysis Program (GAP) Level 3 New York land cover data (USGS 2010b) were used to characterize vegetation communities at the site. Aerial photography was compared to GAP data to detect changes in vegetation structure and density associated with clearing of forested areas, development, restoration and land uses. Dominant vegetation communities were characterized according to the classification scheme presented in Ecological Communities of New York State, Second Edition (Edinger et al. 2002).

A review of existing information from NYSDEC Freshwater Wetland maps (CUGIR 2002) and United States Fish and Wildlife Service NWI wetland maps (USFWS 2009) was conducted to locate potential jurisdictional waters of the U.S. including wetlands (Figure 3). Current aerial imagery (NAIP 2009) and information from the NRCS soil survey (USDA-NRCS 2009) supplemented the review for potential wetland areas.

3.2. Field Surveys

3.2.1. Project Survey Area

The wetland delineation and surface waters survey in the Project Study Area were conducted by AECOM biologists in April, August and September 2015. The Project Study Area is shown on Figure 1.

3.2.2. Wetland Surveys

Wetlands in the Project Study Area were delineated using the routine methodology set forth in the USACE Wetland Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (USACE 2012). A three parameter approach is used with these methods: vegetation, soils, and hydrology are assessed to identify the presence of wetlands. Initial boundaries of wetlands are established through visual assessment of vegetation and hydrology. Soils are assessed to determine the final boundary. For each plant community, sampling plots were established and vegetation, soils and hydrology were characterized. The sections below describe the results of this sampling. Wetlands were determined to be present if the sample plots exhibited the qualifying criteria of a dominance of hydrophytic vegetation, hydric soils and wetland

hydrology. The wetland determination for difficult or problematic wetlands was made utilizing guidance in Section 5 of the Northcentral and Northeast Supplement (USACE 2012).

For each delineated wetland, data recorded on the USACE Wetland Determination Data Forms included:

- Sketch map of each wetland feature
- Drainage patterns
- Sample plot locations
- Photo point locations and direction of photo
- Plant, soil, hydrology and other relevant information to support the determination

Photographs taken for each wetland area investigated are presented in Attachment 1. The USACE Wetland Determination and Stream Data Forms are presented in Attachment 2. Field-delineated wetlands and streams are presented in Figure 2. The following sections describe the methods used to evaluate vegetation, soils and hydrology.

Vegetation

For each sample plot, herbaceous, shrub, tree and vine strata were analyzed and characterized based on absolute cover, plant dominance and plant indicator status. The percent cover by species was determined using a 5-foot radius for the herbaceous layer, a 15-foot radius for the shrub/sapling layer, and 30-foot radii for tree and vine strata where present. The wetland indicator status was determined for each dominant plant species based on the USACE National Wetland Plant List (Lichvar 2013) and the 2014 Update of Wetland Ratings (Lichvar 2014). Problematic areas of vegetation with irregular shapes or sizes were evaluated using an adjusted survey area but still with the same square footage: 2,827 sq. ft. for a 30-foot radius plot (tree) and 707 sq. ft. for a 15-foot radius plot (shrub/sapling). For potential wetland areas that were smaller than the recommended sampling plot areas, the area was considered on the whole due to the limits of square footage.

Soils

Two soil test pits were dug at each investigated wetland area with a “sharpshooter” (5” drain tile) shovel to a maximum depth of 20 inches. The first soil test pit was placed in an area of readily distinguishable wetland plant communities. The second soil pit was placed in an adjacent upland area. The results of the soil survey were used to verify and document the boundary between wetlands and adjacent uplands. Soil profiles were inspected for the presence of hydric soil indicators as described in the USACE Northcentral and Northeast Regional Supplement (USACE 2012). A Munsell Soil Color Chart (Macbeth 1994) was used to define the soil hue, value and chroma of the samples collected from each test pit.

Hydrology

A visual assessment of primary and secondary wetland indicators was conducted at each wetland. In this region, primary wetland hydrology indicators include surface water, high water table, soil saturation, water-stained leaves, sediment deposits, drift deposits, algal mats or crust

and others. Secondary wetland hydrology indicators include surface soil cracks, moss trim lines, drainage patterns, oxidized rhizospheres on living roots, FAC-neutral test and others. The soil pits were observed for the presence and stabilization of an apparent high water table.

3.2.3. Stream Surveys

AECOM biologists evaluated surface waters in the Project Study Area following guidance provided in the USACE Jurisdictional Determination Form Instruction Guidebook, joint U.S. Environmental Protection Agency (USEPA) and USACE guidance regarding Clean Water Act (CWA) jurisdiction after Rapanos, and joint guidance on identifying waters protected by CWA (USEPA-USACE 2007, 2008, 2011).

A visual interpretation of the ordinary high water mark (OHWM), as defined by USACE (2005), was conducted for all streams and drainages. The stream bank was evaluated for physical characteristics established by the fluctuations of water to determine the OHWM. These characteristics included a clear, natural line impressed on the bank, shelving along the bank, changes in the character of the soil, disturbed vegetation, and the presence and location of debris in vegetation along the bank.

Stream characteristics such as stream width, water depth, substrate composition, bank vegetation, stream flow direction and Cowardin Classification (Cowardin et al. 1979) were recorded on Routine Data Forms (provided in Attachment 2).

3.2.4. Mapping Procedures

Wetland boundaries were identified and marked in the field with pink wetland delineation "surveyor" flagging tape. The wetland boundaries were surveyed using a Trimble Geo® XH™ Global Positioning System (GPS). This GPS unit generally possesses sub-meter accuracy with increased accuracy in open areas with little tree canopy. Factors including environmental (weather), topography, satellite positioning and user error can contribute to poor capture results. None of these factors influenced the data gathered during the delineation.

4. Results and Discussion

4.1. Ecological Communities and Vegetation

The density and dispersion of existing natural resources in the Project Study Area site is similar to that of the surrounding areas. The Town of Pembroke consists mostly of agriculture fields, forested uplands, and wetland complexes with some residential and commercial areas.

Wetlands delineated in the Project Study Area consisted of emergent (wet meadow), scrub/shrub and forested wetland plant communities. Wetland 2 and Wetland 3 have similar ecological communities and are located in areas mapped with NYSDEC wetlands. The emergent wetland areas were primarily dominated by cattail (*Typha latifolia*), willow (*Salix* spp.), reed canary grass (*Phalaris arundinacea)*, sedges (*Carex and Scirpus spp.)* and sensitive fern (*Onoclea sensibilis*). Scrub-shrub wetland plant communities were dominated by red-osier dogwood (*Cornus sericea*) and willow as well as emergent species. The forested components of the wetlands include red

maple (*Acer rubrum*), silver maple (*Acer saccharinum*), green ash (*Fraxinus pensylvanica*) and willow.

No State or Federal listed rare, threatened or endangered species were observed during the field investigations. Further investigation for the presence of rare, threatened and endangered species or habitats within the project site occurred in May, August and September 2015. The results of that investigation will be presented in a separate biological assessment report currently in development.

4.2. Soils

Twenty-two soil units mapped by the NRCS occur within the Project Study Area, as listed in Table 2 and depicted in Figure 3. The dominant soils mapped in the delineated wetland areas are poorly drained (hydric) and somewhat poorly drained (potential for hydric soil inclusions) soils. Hydric soils are defined as soils that are formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register 1994). The hydric criteria for soils in the Northcentral and Northeast Region of the United States have been updated in the Regional Supplement (USACE 2012). Soil characteristics can be important indicators of wetland and upland boundaries. This is especially useful in cases where potential wetland vegetation is lacking or has been removed or impacted. Although hydrophytic vegetation and wetland hydrology indicators must be confirmed before a wetland determination can be made, hydric soils information is useful in determining the potential presence of wetlands.

4.3. Hydrology

Local hydrology is influenced by seasonal pooling of storm and melt water, rainfall runoff and perched groundwater. Surface water observed during the field work in the Project Study Area included a very small open water section in the southwest corner of Wetland 1 and ponded water towards the center of the forested area in Wetland 2. The emergent wetlands in Wetland 2 in the central sections were ponded to a depth of approximately 2 inches and the small ponded area in the corner of Wetland 1 was about 6 inches in depth. Wetland 4 contained areas of open water up to approximately 8 inches in depth, and Wetland 5 contained an open water “swale” with water depth ranging from 4-24 inches. Wetland 3 and 6 did not possess any standing water at the time of documentation but signs of past pooled water including crack surface soil and sedimentation deposits were observed.

The most prevalent indicators of wetland hydrology in the delineated wetlands were Surface Water (A1), Saturation (A3), Inundation Visible on Imagery (B7), Hydrogen Sulfide Odor (C1), and Oxidized Rhizospheres on Living Roots (C3).

4.4. Wetlands

Six (6) wetlands totaling approximately 86.1 acres were delineated within the Project Study Area, as summarized in Table 2 and depicted in Figure 2.

Based on the results of the field survey and the review of topographic maps, aerial imagery, and hydrology data, it appears some of the wetland areas delineated have a hydrologic connection to adjacent off-site wetland areas, as describing in the comment field in Table 2.

Table 3. Wetland Summary for the Project Study Area

Wetland	Cowardin Classification(1)	NYSDEC Wetland	Parcel 1	Parcel 2	Parcel 3	Size in Project Study Area (acres approx.)	Comments
W1	PEM/PSS	-	0.3	16.5		16.8	Large shrubland wetland with a complex of historic agricultural swales.
W2	PFO/PSS/ PEM	AK-14	42.0	4.6		46.6	Borders Alleghany Road to the west.
W3	PSS	AK-15	1.1	4.0	8.77	14.2	Attached hydrologically to NYSDEC AK-15 to the east.
W4	PFO/PSS	AK-14	2.8			3.1	Just south of Wetland 2, separated by a gravel access road.
W5	PFO/PSS	-	1.8			2.0	Connects to unnamed tributary of Murder Creek.
W6	PSS/PEM/ PFO	-			3.4	3.4	Part of NWI wetland.
Total			48.0	25.1	12.2	86.1	

Notes:
1 – Cowardin et al. 1979
NA – Not applicable

4.5. Streams

An intermittent stream separates the two active agricultural fields in the eastern section of Parcel 3 where it flows east to west until it reaches the central successional old field and flows north along the western boundary of Parcel 3. This feature crosses Indian Falls Road via a culvert. This stream connects with Tonawanda creek (NYSDEC class B Stream) approximately .3 miles north of the site. Water was only found in the northern most reach near Indian Falls Road. A drainage ditch complex in Parcel 2 spreads throughout Wetland 1 and connects with the intermittent stream approximately 600 feet from Indian Falls Road. This was dry during the time of the survey.

One small ditch was observed along a hedgerow separating the north and south fields, as depicted on Figure 2. The ditch varies from 2 to 5 feet wide, 1 to 2 feet deep and is approximately 284 feet in length. The majority of the ditch is vegetated with emergent and shrubby plants with a few trees along the top of bank. This feature is likely a remnant of the past agricultural activity and does not meet the criteria for regulation.

Off the southern boundary of the study area is an un-named tributary to Murder Creek. This feature was observed in the field but not mapped since it was not part of the project study area. It is a medium sized man-made swale that runs parallel to NYS Thruway I-90 (approximately 10 feet wide and 1 foot deep). Wetland W-5 outfalls into this feature in the southwest corner of the study area via a small man-made drainage swale (2 to 3 feet wide and 0.5 to 1 foot deep) that runs parallel to Allegany Road.

5. Discussion

Field surveys for wetland delineations and water resources were conducted on April 28 and 29, August 26, 27, 28 and 31, and September 8, 2015, within the USDVANCA Project Study Area. The field surveys performed in April were on the western section (Parcel 1) and the August and September surveys were performed on the central and eastern sections (Parcels 2 & 3) (Figure 2). Six (6) wetlands totaling approximately 86.1 acres in size were delineated in the Project Study Area. One (1) intermittent stream was delineated on site.

Based on the field investigation and a review of aerial imagery, topographic maps and hydrologic data, the delineated wetlands appear to have a hydrologic connection to Waters of the U.S. and are therefore likely federal jurisdictional wetlands.

Wetland 2 is included in mapped NYSDEC Wetland AK-14. All of delineated Wetland 2 and 100-foot adjacent buffer area would likely be regulated by the NYSDEC. Due to close proximity to Wetland 2 and NYSDEC State Wetland AK-14, Wetland 4 may also be considered by the NYSDEC as part of the mapped Wetland AK-14 complex and fall under State jurisdiction. Wetland 3 is connected to NYSDEC Wetland AK-15 and may fall under State jurisdiction.

It is anticipated that wetlands permits and Jurisdictional Determination will be required from the NYSDEC and USACE via a Joint Application for Permit in accordance with NYSDEC Article 24-Freshwater Wetlands, and Section 401-Water Quality Certification, and Section 404 of the Clean Water Act.

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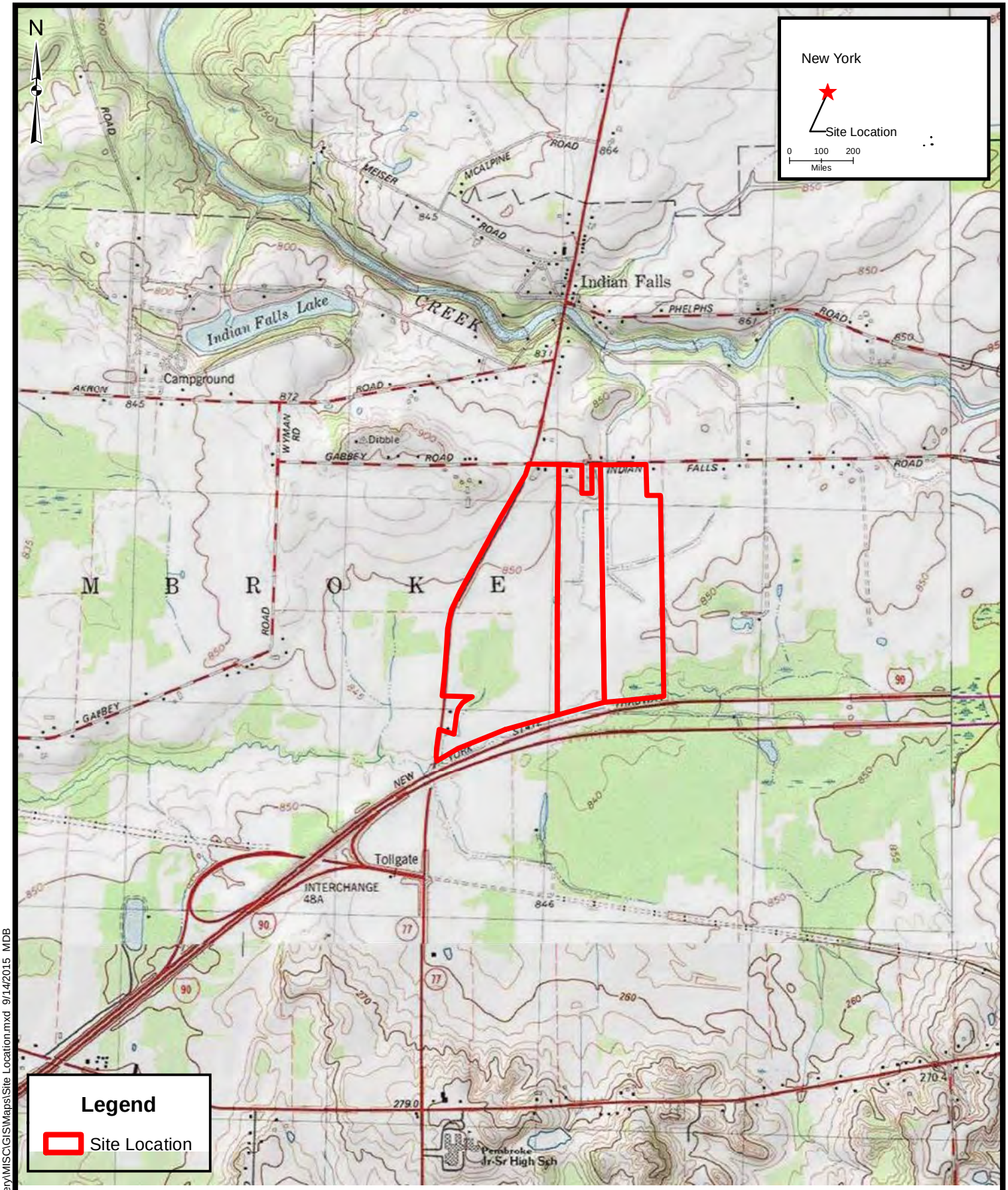
Figures



Source:
© 2013 National Geographic Society, i-cubed; 1:24:000-scale USGS Topographic Maps, Akron SE, Corfu NE, Oakfield SW, Alexander NW

2,000 0 2,000 Feet

AECOM

SITE LOCATION MAP
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\Site Location.mxd 9/14/2015 MDB

N

ALLEGHANY RD

PARCEL 1: 132 Acres

PARCEL 2: 60 Acres

PARCEL 3: 77 Acres

Wetland 1
16.81 Acres

Wetland 2
46.55 Acres

Wetland 3
14.24 Acres

Wetland 4
3.10 Acres

Wetland 5
2.01 Acres

Wetland 6
3.39 Acres

I 90

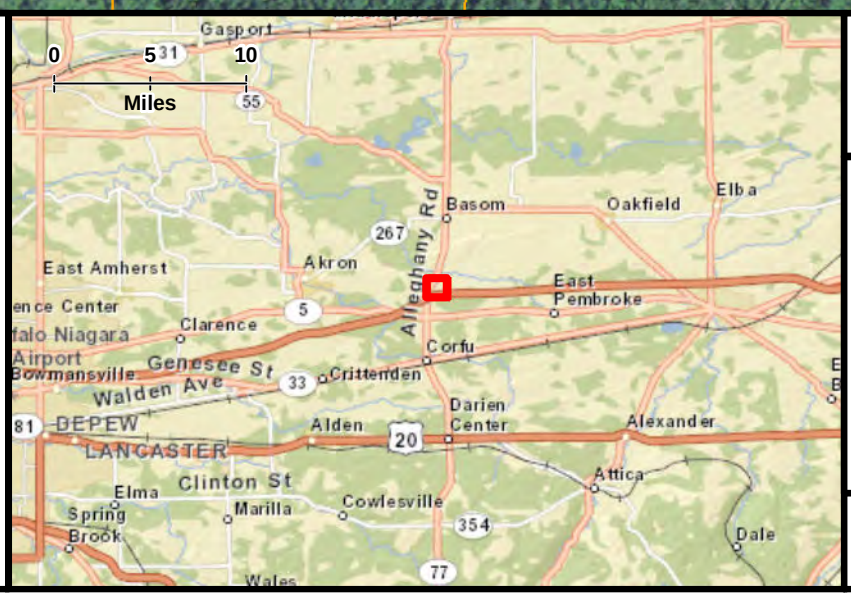
I 90

Legend

- Swale
- Wetland Continuation Line
- Stream
- Wetlands
- Site Location
- Parcel Boundary

Field Data Collection Information:

- *Data Collected on 4/28/15, 4/29/15, 8/26/15 - 8/31/15, 9/8/15*
- *Boundary coordinates were collected using a Trimble GeoXH with ESRI's ArcPad*
- *Data was Post-Processed using Trimble's GeoPathfinder Office*



WETLAND & STREAM DELINEATION
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

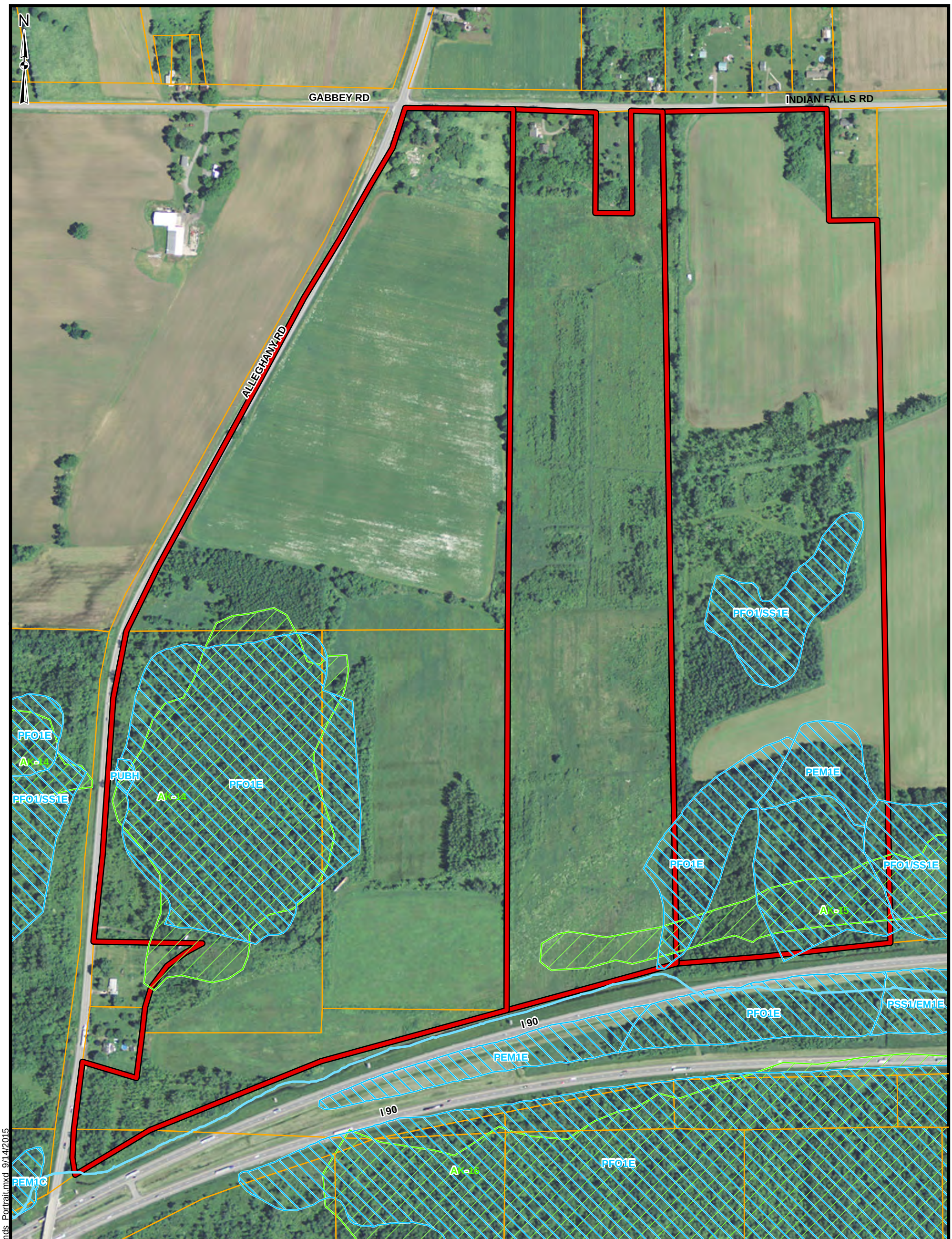
Sources:
Aerial Photo: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
NYSDEC Wetlands and Streams: NYS GIS Clearinghouse, NYSDEC 2002
USFWS Wetlands: USFWS National Wetlands Inventory 2014

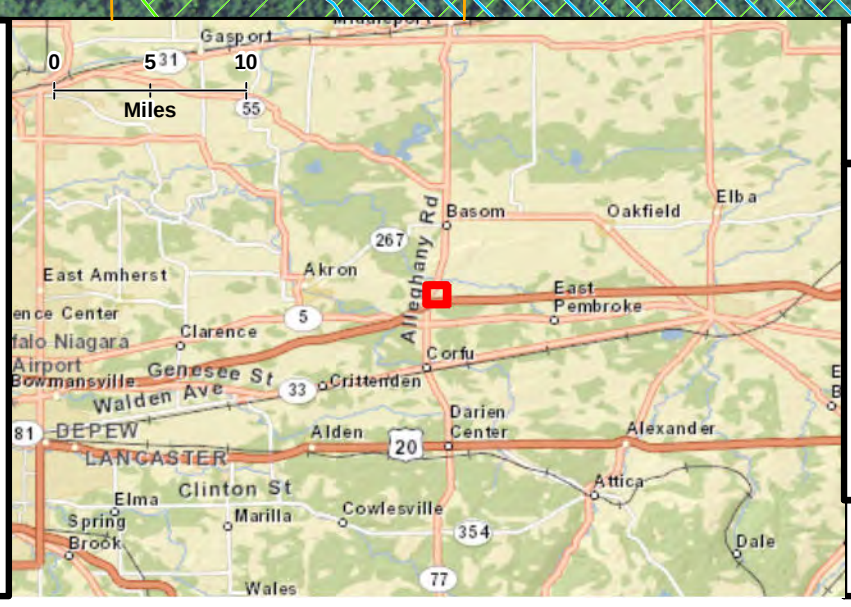
400 0 400 Feet

FIGURE 2

AECOM

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\DelineatedWetlands_Portrait_091815.mxd 10/14/2015





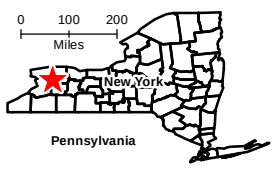
Legend

- NYSDEC Stream
- NYSDEC Wetlands
- USFWS NWI Wetlands
- Site Location
- Parcel Boundary

Field Data Collection Information:

- *Data Collected on 4/28/15, 4/29/15, 8/26/15 - 8/31/15, 9/8/15*
- *Boundary coordinates were collected using a Trimble GeoXH with ESRI's ArcPad*
- *Data was Post-Processed using Trimble's GeoPathfinder Office*

NWI & NYSDEC WETLANDS VA PROPOSED WESTERN NEW YORK NATIONAL CEMETERY PEMBROKE, NEW YORK



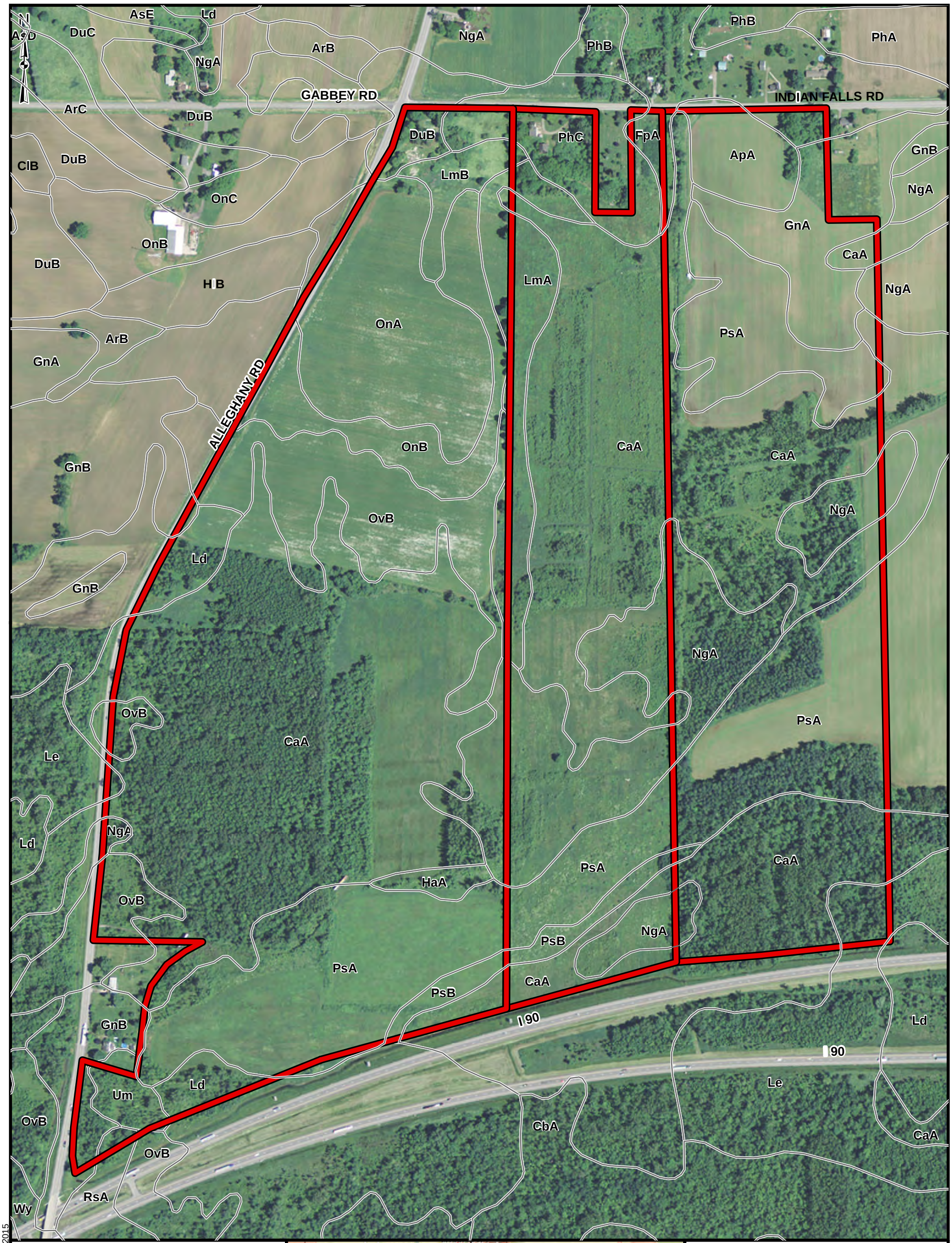
Sources:
Aerial Photo: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
NYSDEC Wetlands and Streams: NYS GIS Clearinghouse, NYSDEC 2002
USFWS Wetlands: USFWS National Wetlands Inventory 2014

400 0 400 Feet

FIGURE 3

AECOM

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\DEC_NWI_Wetlands_Portrait.mxd 9/14/2015



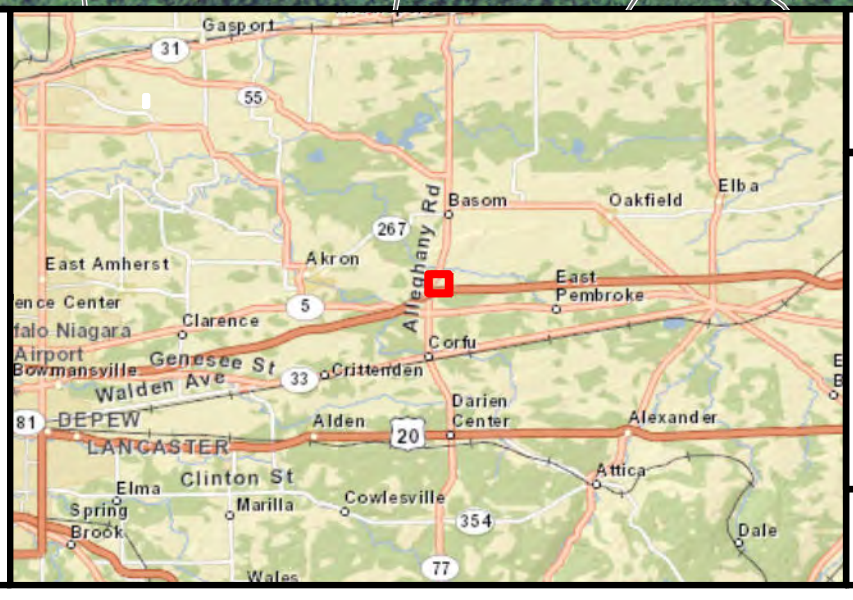
Legend

Site Location

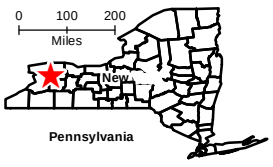
Soil Boundary

Soils within Site Location:

Symbol	Description
ApA	Appleton silt loam, 0 to 3 percent slopes
CaA	Canandaigua silt loam, 0 to 2 percent slopes
DuB	Dunkirk silt loam, 2 to 6 percent slopes
FpA	Fredon gravelly loam, 0 to 3 percent slopes
GnA	Galen very fine sandy loam, 0 to 2 percent slopes
GnB	Galen very fine sandy loam, 2 to 6 percent slopes
HaA	Halsey silt loam, 0 to 4 percent slopes
Ld	Lamson very fine sandy loam
Le	Lamson mucky very fine sandy loam
LmA	Lima silt loam, 0 to 3 percent slopes
LmB	Lima silt loam, 3 to 8 percent slopes
NgA	Niagara silt loam, 0 to 2 percent slopes
OnA	Ontario loam, 0 to 3 percent slopes
OnB	Ontario loam, 3 to 8 percent slopes
OvB	Ovid silt loam, 3 to 8 percent slopes
PhC	Palmyra gravelly loam, 8 to 15 percent slopes
PsA	Phelps gravelly loam, 0 to 3 percent slopes
PsB	Phelps gravelly loam, 3 to 8 percent slopes
RsA	Romulus silt loam, 0 to 3 percent slopes
Um	Udorthents, smoothed



SOILS MAP
VA PROPOSED WESTERN NEW YORK NATIONAL CEMETERY
PEMBROKE, NEW YORK



Sources:
Aerial Imagery: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
Soils: USDA NCRS Geospatial Data Gateway 2015

400 0 400 Feet

FIGURE 4

AECOM

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\Soils.mxd 9/14/2015

Attachment 1

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
1	28April15

Description:

Wetland W-1

Photo No.	Date:
2	28April15

Description:

Upland area for W-1

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
3	28April15

Description:

Wetland W-2 eastern portion

Photo No.	Date:
4	28April15

Description:

Upland area for W-2 eastern portion

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
5	28April15

Description:

Wetland W-3

Photo No.	Date:
6	28April15

Description:

Upland area for W-3

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
7	28April15

Description:

Wetland W-4

Photo No.	Date:
8	28April15

Description:

Upland area for W-4

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
9	28April15

Description:

Wetland W-5

Photo No.	Date:
10	28April15

Description:

Upland area for W-5

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
11	29April15

Description:

Wetland W-2 western portion

Photo No.	Date:
12	29April15

Description:

Upland for W-2 western portion

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
13	27AUG15

Description:

Wetland W-1 (ext)

Photo No.	Date:
14	27AUG15

Description:

Upland area for W-1 (ext)

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
15	31AUG15

Description:

Wetland W-2 (ext)

Photo No.	Date:
16	31AUG15

Description:

Upland for W-2 (ext)

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
17	26AUG15

Description:

Wetland W-3 (ext)

Photo No.	Date:
18	26AUG15

Description:

Upland area for W-3 (ext)

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
19	28AUG15

Description:

Wetland W-6

Photo No.	Date:
20	28AUG15

Description:

Upland for W-6

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
21	26AUG15

Description:
Stream S-1

Photo No.	Date:
22	26AUG15

Description:

Stream S-1-south central

Attachment 2

VA OCEM WNY

AECOM
257 West Genesee Street
Suite 400
Buffalo, New York 14202

DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076 Town: Pembroke Sampling Date: 28 April 2015

County: Genesee

Applicant: USDVA State: New York Community: PEM / PSS

Data Point ID (i.e. 2W@Wet. G): ~~WL-3~~ WL Nearest Flag to Data Point: WL-3

Investigator(s): J. Lyons

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 1-2

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

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

Secondary Indicators (min. - 2 required)

- ___ Surface Soil Cracks (B6)
- X 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 (D-1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes X No ___

Saturated Conditions? Yes X No ___

Depth of Water (inches): 2' +

Depth to Sat. Soil (inches): 0

Depth to Water (inches): 0

Stream Characteristics

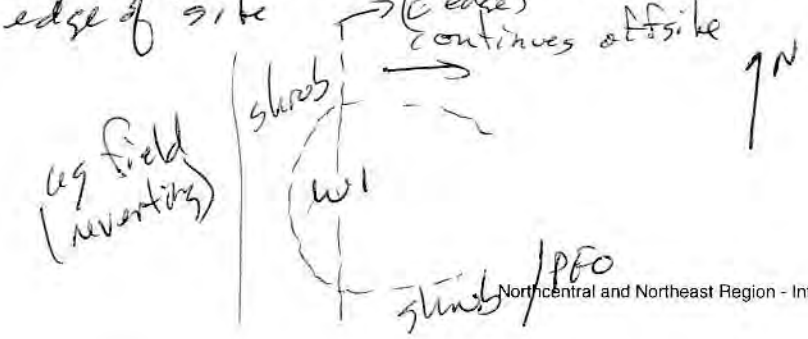
Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
___ Perennial	Bank Width	___	Gentle	___	Bed Rock	___	Sand	___	No Flow	___
___ Intermittent	Stream Width	___	Moderate	___	Boulder	___	Silt	___	Gentle	___
	Water Depth	___	Steep	___	Cobble	___	Clay	___	Moderate	___
					Gravel	___			Heavy	___

Adjacent Community Type: ___

Instream Conditions:

- ___ Obscurred Banks
- ___ Well Defined Banks
- ___ Eroded/Undercut Bank
- ___ Deep Pools
- ___ Riffles & Pools
- ___ Overhanging Vegetation
- ___ Vegetated Channel
- ___ Other ___

Remarks Small open water wetland (pool) with fringe saturated soils on the east edge of site



Project Number: 60345076 Sampling Date: 28 April 2015

Applicant: USDVA Data Point ID: W1

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Cornus ~~alba~~ sericea	15	Y	FACW
2. Salix spp.	5	N	FACW
3.			
4.			
5			
	20	= Total Cover	

Herb Stratum (Plot size: 5-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Typha spp.	20	Y	OBL
2. Phalaris arundinacea	15	Y	FACW
3.			
4.			
5			
6.			
7.			
8.			
9.			
10.			
	35	= Total Cover	

Woody Vine Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
		= 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:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (provide supporting data in remarks)

__ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

FA (filamentous algae on surface of water)

BHS on upland fringe

Project Number: 60345076 Sampling Date: 28 April 2015

Applicant: USDVA Data Point ID: W1

Soil Map Unit: LIMA SILT LOAM

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-18	10YR2/1	100					muck / silt loam
18-20	10YR 3/2	100					clay loam

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X 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)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

- X 2 cm Muck (A10)
- X Coast Prairie Redox (A16)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Iron-Manganese Masses (F12)
- ___ Piedmont Floodplain Soils F19)
- ___ Mesic Spodic (TA6)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

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

Remarks silty muck covered with 1-3" of water on edge of open water pool.

Wetland Determination

Hydrophytic Vegetation Present? (Yes) No

Hydric Soil Present? (Yes) No

Wetland Hydrology Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No

Hydrologic Connectivity to Off-site Wetlands? (Yes) No N/A

Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? (Yes) No N/A

Is this Wetland Potentially Isolated? Yes (No) N/A

Is the wetland mapped in the NWI? Yes (No) If yes, indicate classification _____

Is the wetland a mapped state wetland? Yes (No) If yes, indicate wetland ID _____

AECOM
257 West Genesee Street
Suite 400
Buffalo, New York 14202

DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076 Town: Pembroke Sampling Date: 28 April 2015

County: Genesee

Applicant: USDVA State: **New York** Community: ~~[illegible]~~ UPLAND

Data Point ID (i.e. 2W@Wet. G): WL UP-1 Nearest Flag to Data Point: _____

Investigator(s): J. Lyons

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian** (Ag field)

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Approximate Slope (%): 1-2

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

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

Secondary Indicators (min. - 2 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 (D-1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes ___ No X
Saturated Conditions? Yes ___ No X

Depth of Water (inches): —
Depth to Sat. Soil (inches): —
Depth to Water (inches): —

Stream Characteristics

Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
___ Perennial	Bank Width	___	Gentle	___	Bed Rock	___	Sand	___	No Flow	___
___ Intermittent	Stream Width	___	Moderate	___	Boulder	___	Silt	___	Gentle	___
	Water Depth	___	Steep	___	Cobble	___	Clay	___	Moderate	___
					Gravel	___			Heavy	___

Adjacent Community Type: _____

Instream Conditions:

___ Obscurred Banks
___ Well Defined Banks
___ Eroded/Undercut Bank
___ Deep Pools
___ Riffles & Pools
___ Overhanging Vegetation
___ Vegetated Channel
___ Other _____

Remarks

upland area is west of WL in reverting ag field. (successional growth visible)

Project Number: 60345076
Applicant: USDVA

Sampling Date: 28 April 2015
Data Point ID: UP-1

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)			
1.			
2.			
3.			
4.			
5			
	= Total Cover		

Herb Stratum (Plot size: 5-foot radius)			
1. Trifolium spp.	10	Y	FACU
2. Taraxacum officinale	10	Y	FACU
3. Phleum pratense	25	Y	FACU
4. Solidago canadensis ~~spp.~~ OR	5	Y	FACU
5			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)			
1.			
2.			
3.			
4.			
5			
	= 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:

- __ Rapid Test for Hydrophytic Vegetation
- __ Dominance Test >50%
- __ Prevalence Index is ≤3.0[1]
- __ Morphological Adaptations[1] (provide supporting data in remarks)
- __ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

bare ground & dead veg. from last year.

Project Number: 6034 5076

Applicant: USDVA

Sampling Date: 28 April 2015

Data Point ID: UP-1

Soil Map Unit: Ovid silt loam

Soils

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-16	10YR 3/3	100					silt loam w/ sand
16-20	10YR 5/8	100					sandy loam

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: 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)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

___ 2 cm Muck (A10)
___ Coast Prairie Redox (A16)
___ 5 cm Mucky Peat or Peat (S3)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Iron-Manganese Masses (F12)
___ Piedmont Floodplain Soils F19)
___ Mesic Spodic (TA6)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

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

Remarks Typical agfield soil - evidence of old plow depth.

Wetland Determination

Hydrophytic Vegetation Present? Yes (No)
Hydric Soil Present? Yes (No)
Wetland Hydrology Present? Yes (No)
Is this Sampling Point Within a Wetland? Yes (No)

Hydrologic Connectivity to Off-site Wetlands? Yes No (N/A)
Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes No (N/A)
Is this Wetland Potentially Isolated? Yes No (N/A)

Is the wetland mapped in the NWI? Yes (No)
Is the wetland a mapped state wetland? Yes (No)

If yes, indicate classification _____
If yes, indicate wetland ID _____

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076
Town: Pembroke
Sampling Date: 28 APRIL 2015 / 29 April 2015
County: Genesee
Applicant: USDVA
State: New York
Community: PEM / PSS / PFO
Data Point ID (i.e. 2W@Wet. G): W-2
Nearest Flag to Data Point:

Investigator(s): J. LYONS

Landform: Hillside/Seep Toe of Slope (Depressional) Riparian

Landscape Position: (Flat) Undulating Sloping Convex Concave

Are climatic/hydrologic conditions on the site typical for this time of year? (Yes) No

Do Normal Circumstances exist on site? (Yes) No

Is the area a potential problem area? Yes (No)

Is the site significantly disturbed? Yes (No)

Approximate Slope (%): 1-2

Hydrology

Primary Indicators (min. - 1 required; check all that apply)
- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- X Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- X Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- X Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain In Remarks)

Secondary Indicators (min. - 2 required)
- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- X Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D-1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes X No ___
Saturated Conditions? Yes X No ___

Depth of Water (inches): 1-6"
Depth to Sat. Soil (inches): 0
Depth to Water (inches): 0

Stream Characteristics

Stream type: ___ Perennial ___ Intermittent

Morphology: Bank Width ___ Stream Width ___ Water Depth ___

Stream Gradient: Gentle ___ Moderate ___ Steep ___

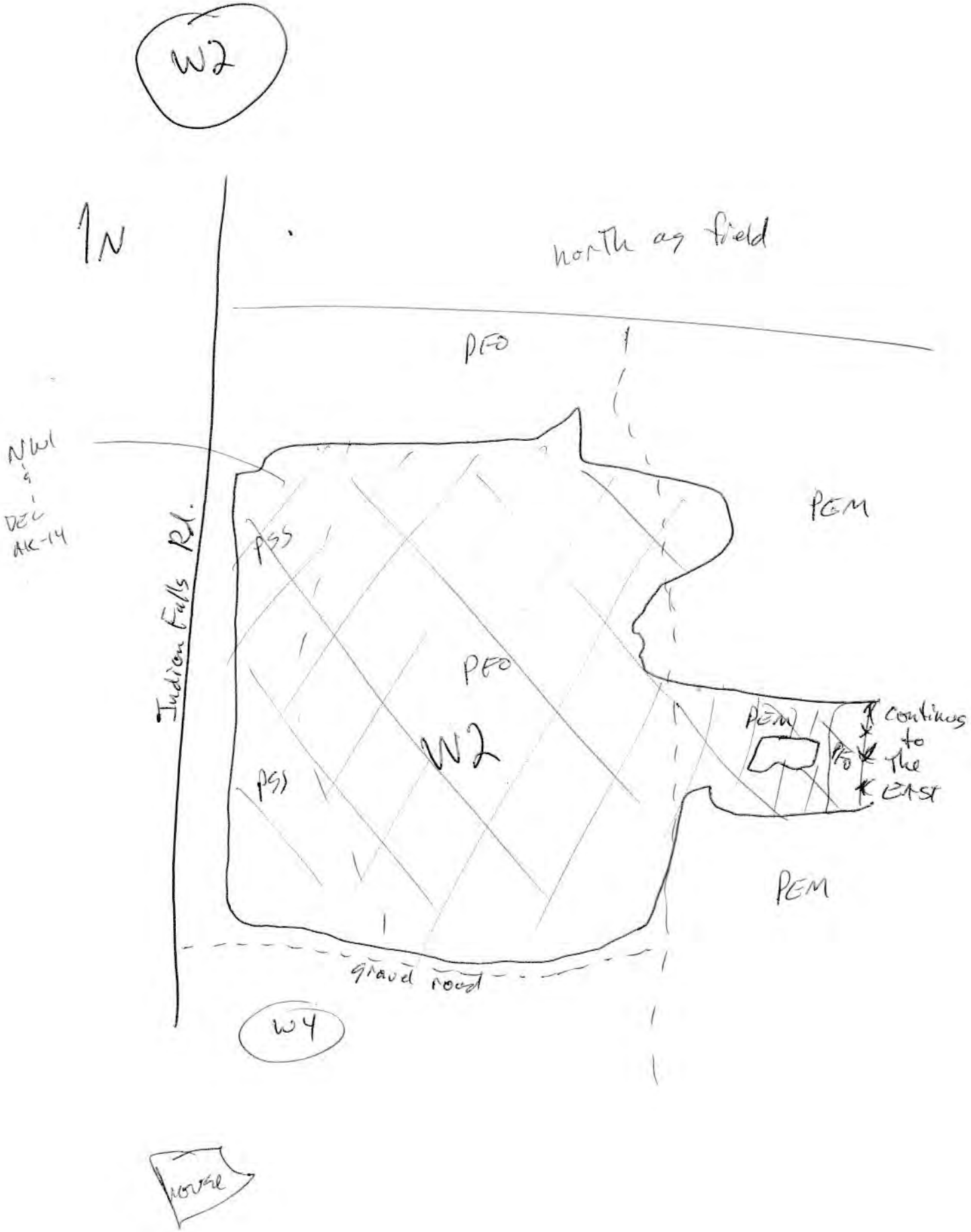
Substrate: Bed Rock ___ Boulder ___ Cobble ___ Gravel ___ Sand ___ Silt ___ Clay ___

Flow: No Flow ___ Gentle ___ Moderate ___ Heavy ___

Adjacent Community Type: ___

Instream Conditions:
- ___ Obscurred Banks
- ___ Well Defined Banks
- ___ Eroded/Undercut Bank
- ___ Deep Pools
- ___ Riffles & Pools
- ___ Overhanging Vegetation
- ___ Vegetated Channel
- ___ Other ___

Remarks W2 is a large complex with mainly PFO in the west & central areas. PEM/PSS in the central & east areas with a small PFO component to the far east side of the site. Several data points were taken due to the size & complexity of W2. Part of DEC & NWI wetlands.


W2
N
north ag field
PFO
NWI
&
DEC
AK-14
Indian Falls Rd.
PSS
PEM
PFO
W2
PEM
PFO
continues
to
the
EAST
PSS
PEM
gravel road
W4
house

Project Number: 60345076
Applicant: USDVA

Sampling Date: 28 APRIL 2015
Data Point ID: W2 & 29 April 15

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	5	Y	FAC
2. Acer saccharinum	5	Y	FACW
3. Populus tremuloides	5	Y	FACU
4.			
5			
small PFO component (Eside)	15 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix spp. (tall)	10	Y	FACW
2. Cornus ~~alba~~ sericea	5	Y	FACW
3.			
4.			
5			
	15 = Total Cover		

Herb Stratum (Plot size: 5-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Phalaris arundinacea	30	Y	FACW
2. Onoclea sensibilis	2	N	FACW
3.			
4.			
5			
6.			
7.			
8.			
9.			
10. (moss covered logs/rocks)	10	Y	FACW
	42 = Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	= 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:
__ Rapid Test for Hydrophytic Vegetation
__ Dominance Test >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (provide supporting data in remarks)
__ Problematic Hydrophytic Vegetation[1] (explain in remarks)
[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.

Remarks the central area (old ag field with surface saturation) is mostly RCG & Salix. Data presented is from east/central data points outside established NOC/NWI wetlands.

Veg in early stages of growth.

Project Number: 60345076 Sampling Date: 28 April 2015

Applicant: USDVA Data Point ID: W2 & 29 April 15

Soil Map Unit: mostly Canandaigua silt loam

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-18	10YR 2/2	98	10YR 5/6	F	C	M	silty loam with slight mottles & few small ox root zones. (Sand)
18-20	GLEY 1 5/10Y	100					clay

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: 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)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ✓ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

- ✓ 2 cm Muck (A10)
- ___ Coast Prairie Redox (A16)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Iron-Manganese Masses (F12)
- ___ Piedmont Floodplain Soils F19)
- ___ Mesic Spodic (TA6)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

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

Remarks Muddy soils with odor & a clay layer @ ~ 18". other data points had larger/more evident mottling.

Wetland Determination

Hydrophytic Vegetation Present? (Yes) No

Hydric Soil Present? (Yes) No

Wetland Hydrology Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No

Hydrologic Connectivity to Off-site Wetlands? (Yes) No N/A

Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? (Yes) No N/A

Is this Wetland Potentially Isolated? Yes (No) N/A

Is the wetland mapped in the NWI? (Yes) No If yes, indicate classification _____

Is the wetland a mapped state wetland? (Yes) No If yes, indicate wetland ID AK-14

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076
Town: Pembroke
Sampling Date: 28 April 2015 (29 April 15)
County: Genesee
Applicant: USDVA
State: New York
Community: UPLAND

Data Point ID (i.e. 2W@Wet. G): UP-2
Nearest Flag to Data Point: _____

Investigator(s): J. Lyons

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 1-2

Hydrology

Primary Indicators (min. - 1 required; check all that apply)
___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain In Remarks)

Secondary Indicators (min. - 2 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 (D-1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations
Inundation Present? Yes ___ No X
Saturated Conditions? Yes ___ No X

Depth of Water (inches): —
Depth to Sat. Soil (inches): —
Depth to Water (inches): —

Stream Characteristics

Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:
___ Perennial	Bank Width	___	Gentle	___	Bed Rock	___	Sand	___	No Flow ___
___ Intermittent	Stream Width	___	Moderate	___	Boulder	___	Silt	___	Gentle ___
	Water Depth	___	Steep	___	Cobble	___	Clay	___	Moderate ___
					Gravel	___			Heavy ___

Adjacent Community Type: _____

Instream Conditions:
___ Obscurred Banks
___ Well Defined Banks
___ Eroded/Undercut Bank
___ Deep Pools
___ Riffles & Pools
___ Overhanging Vegetation
___ Vegetated Channel
___ Other _____

Remarks data pt. to the north of eastern portion of W2 (PFO) similar to UP-1.

Project Number: 60345076
Applicant: USDVA

Sampling Date: 28 April 2015 & 29 April 15
Data Point ID: UP-2

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	—	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. ~~Trifolium spp.~~	~~15~~	~~Y~~	~~FACU~~
2.			
3.			
4.			
5			
	—	= Total Cover	

Herb Stratum (Plot size: 5-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Trifolium spp.	15	Y	FACU
2. Taraxacum officinale	5	Y	FACU
3. Phleum pratense	10	Y	FACU
4. Solidago canadensis	10	Y	FACU
5 (Grass)	10	Y	FACU
6.			
7.			
8.			
9.			
10.			
	50	= Total Cover	

Woody Vine Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	—	= 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:
__ Rapid Test for Hydrophytic Vegetation
__ Dominance Test >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (provide supporting data in remarks)
__ Problematic Hydrophytic Vegetation[1] (explain in remarks)
[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.

Remarks Some bare ground. - seems to be edge of successional field.

Project Number: 60345076

Applicant: USDVA

Sampling Date: 28 April 15 ; 29 April 15

Data Point ID: UP-2

Soil Map Unit: Phelps gravelly loam

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-16	10YR 3/3	100					silt loam with sand & few small nodes.
16-20	10YR 5/8	100					sandy loam

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: 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)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

___ 2 cm Muck (A10)
___ Coast Prairie Redox (A16)
___ 5 cm Mucky Peat or Peat (S3)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Iron-Manganese Masses (F12)
___ Piedmont Floodplain Soils F19)
___ Mesic Spodic (TA6)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

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

Remarks Similar to UP-1 — typical ag field / upland soils.

Wetland Determination

Hydrophytic Vegetation Present? **Yes** **No**
Hydric Soil Present? **Yes** **No**
Wetland Hydrology Present? **Yes** **No**
Is this Sampling Point Within a Wetland? **Yes** **No**

Hydrologic Connectivity to Off-site Wetlands? **Yes** **No** **N/A**
Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? **Yes** **No** **N/A**
Is this Wetland Potentially Isolated? **Yes** **No** **N/A**

Is the wetland mapped in the NWI? **Yes** **No**
Is the wetland a mapped state wetland? **Yes** **No**

If yes, indicate classification _____
If yes, indicate wetland ID _____

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DATA FORM
ROUTINE WETLAND DETERMINATION

Northcentral and Northeast Regional Supplement

Project Number: 60345076
Town: Pembroke
Sampling Date: 28 April 2015
County: Genesee
Applicant: USDVA
State: New York
Community: PEM/PSS
Data Point ID (i.e. 2W@Wet. G): W3
Nearest Flag to Data Point: _____

Investigator(s): J. Lyons

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 1-3

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

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

Secondary Indicators (min. - 2 required)

- ___ Surface Soil Cracks (B6)
- X 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 (D-1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes ___ No X
Saturated Conditions? Yes X No ___

Depth of Water (inches): 0
Depth to Sat. Soil (inches): 1-6" — multiple pits.
Depth to Water (inches): 1-6" — avg. (4)"

Stream Characteristics

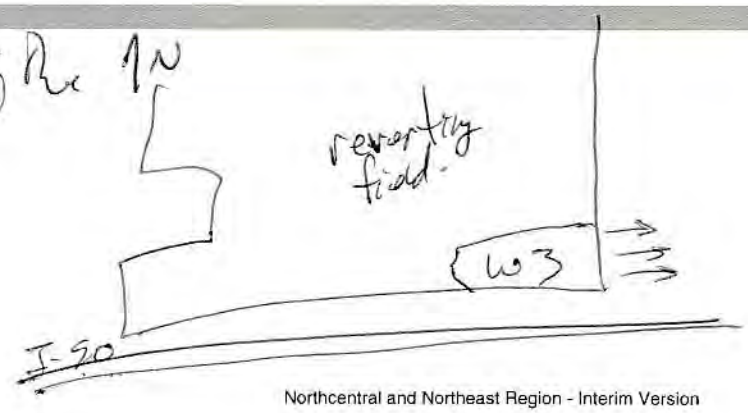
Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
___ Perennial	Bank Width	___	Gentle	___	Bed Rock	___	Sand	___	No Flow	___
___ Intermittent	Stream Width	___	Moderate	___	Boulder	___	Silt	___	Gentle	___
	Water Depth	___	Steep	___	Cobble	___	Clay	___	Moderate	___
					Gravel	___			Heavy	___

Adjacent Community Type: _____

Instream Conditions:

- ___ Obscurred Banks
- ___ Well Defined Banks
- ___ Eroded/Undercut Bank
- ___ Deep Pools
- ___ Riffles & Pools
- ___ Overhanging Vegetation
- ___ Vegetated Channel
- ___ Other _____

Remarks Small wetland in SE corner of the site extending to the east.



Project Number: 60345076
Applicant: USDVA

Sampling Date: 28 APRIL 2015
Data Point ID: W3

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix spp	5	Y	FACW
2. Cornus ~~alba~~ sericea	15	Y	FACW
3.			
4.			
5			
	20 = Total Cover		

Herb Stratum (Plot size: 5-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Phalaris arundinacea	50	Y	FACW
2. Salix spp.	10	Y	FACW
3. Onoclea sensibilis	5	Y	FACW
4. Scirpus (cyperinus) spp.	5	Y	OBL
5			
6.			
7.			
8.			
9.			
10.			
	70 = Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	— = 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:
__ Rapid Test for Hydrophytic Vegetation
__ Dominance Test >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (provide supporting data in remarks)
__ Problematic Hydrophytic Vegetation[1] (explain in remarks)
[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.

Remarks
PEM/PSS mix of veg. smaller salix in areas. (seems to be in a reverting stage)

Project Number: 60345076 Sampling Date: 28 April 2015

Applicant: USDVA Data Point ID: W3

Soil Map Unit: Canandaigua silt loam

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-14	10YR 2/2	90	10YR 5/6	F	C	M	silty loam ox root zones & odor

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X 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)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

- ___ 2 cm Muck (A10)
- ___ Coast Prairie Redox (A16)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Iron-Manganese Masses (F12)
- ___ Piedmont Floodplain Soils F19)
- ___ Mesic Spodic (TA6)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: Rock

Depth (inches): 14"

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

Remarks O horizon missing in spots - This area may have been impacted in the past. (?) may have rock fill in lower horizons.

Wetland Determination

Hydrophytic Vegetation Present? **Yes** No

Hydric Soil Present? **Yes** No

Wetland Hydrology Present? **Yes** No

Is this Sampling Point Within a Wetland? **Yes** No

Hydrologic Connectivity to Off-site Wetlands? **Yes** No N/A

Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? **Yes** No N/A

Is this Wetland Potentially Isolated? Yes No **N/A**

Is the wetland mapped in the NWI? Yes **No** If yes, indicate classification _____

Is the wetland a mapped state wetland? Yes **No** If yes, indicate wetland ID _____

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076
Town: Pembroke
Sampling Date: 28 April 2015
County: Genesee
Applicant: USDVA
State: New York
Community: UPLAND
Data Point ID (i.e. 2W@Wet. G): UP-3
Nearest Flag to Data Point:

Investigator(s): J. LYONS

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**
– level area

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 1-3

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

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

Secondary Indicators (min. - 2 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 (D-1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes ___ No X
Saturated Conditions? Yes ___ No X

Depth of Water (inches): —
Depth to Sat. Soil (inches): —
Depth to Water (inches): —

Stream Characteristics

Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
___ Perennial	Bank Width	___	Gentle	___	Bed Rock	___	Sand	___	No Flow	___
___ Intermittent	Stream Width	___	Moderate	___	Boulder	___	Silt	___	Gentle	___
	Water Depth	___	Steep	___	Cobble	___	Clay	___	Moderate	___
					Gravel	___			Heavy	___

Adjacent Community Type: ___

Instream Conditions:

___ Obscurred Banks
___ Well Defined Banks
___ Eroded/Undercut Bank
___ Deep Pools
___ Riffles & Pools
___ Overhanging Vegetation
___ Vegetated Channel
___ Other ___

Remarks Upland area north of W3 in successional growth field.

Project Number: 60345076
Applicant: US DVA

Sampling Date: 28 April 2015
Data Point ID: UP-3

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	— = Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)			
1.			
2.			
3.			
4.			
5			
	— = Total Cover		

Herb Stratum (Plot size: 5-foot radius)			
1. Taraxacum officinale	20	Y	FACU
2. Solidago canadensis	10	Y	FACU
3. Phleum pratense	20	Y	FACU
4. Trifolium spp.	5	N	FACU
5			
6.			
7.			
8.			
9.			
10.			
	55 = Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)			
1.			
2.			
3.			
4.			
5			
	— = 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:

- __ Rapid Test for Hydrophytic Vegetation
- __ Dominance Test >50%
- __ Prevalence Index is ≤3.0[1]
- __ Morphological Adaptations[1] (provide supporting data in remarks)
- __ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

reverting (hay) (ag) field.

some dead veg. (solidago) present
- bare ground.

Project Number: 60345076 Sampling Date: 28 April 15

Applicant: USDVA Data Point ID: Up-3

Soil Map Unit: Phelps gravelly loam

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-16	10YR 3/3	100					Sandy loam w/ few small rocks ≥ 1"

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: 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)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

___ 2 cm Muck (A10)
___ Coast Prairie Redox (A16)
___ 5 cm Mucky Peat or Peat (S3)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Iron-Manganese Masses (F12)
___ Piedmont Floodplain Soils F19)
___ Mesic Spodic (TA6)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: Rock

Depth (inches): 16

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

Remarks

upland soil w/ old ag. field.

Wetland Determination

Hydrophytic Vegetation Present? **Yes** **No**
Hydric Soil Present? **Yes** **No**
Wetland Hydrology Present? **Yes** **No**
Is this Sampling Point Within a Wetland? **Yes** **No**

Hydrologic Connectivity to Off-site Wetlands? **Yes** **No** **N/A**
Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? **Yes** **No** **N/A**
Is this Wetland Potentially Isolated? **Yes** **No** **N/A**

Is the wetland mapped in the NWI? **Yes** **No** If yes, indicate classification _____
Is the wetland a mapped state wetland? **Yes** **No** If yes, indicate wetland ID _____

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076
Town: Pembroke
Sampling Date: 28 April 2015
County: Genesee
Applicant: USDVA
State: New York
Community: ~~WETLAND~~ PEM/PSS small PFO
Data Point ID (i.e. 2W@Wet. G): W4
Nearest Flag to Data Point:

Investigator(s): J. LYONS

Landform: Hillside/Seep Toe of Slope Depressional Riparian

Landscape Position: Flat Undulating Sloping Convex Concave

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No

Do Normal Circumstances exist on site? Yes No

Is the area a potential problem area? Yes No

Is the site significantly disturbed? Yes No

Approximate Slope (%): 1-2

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

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

Secondary Indicators (min. - 2 required)

- ___ Surface Soil Cracks (B6)
- X 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 (D-1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes X No ___
Saturated Conditions? Yes X No ___

Depth of Water (inches): to 4" in spots
Depth to Sat. Soil (inches): 0
Depth to Water (inches): 0
for majority of W4.
very wet in western portion

Stream Characteristics

Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
___ Perennial	Bank Width	___	Gentle	___	Bed Rock	___	Sand	___	No Flow	___
___ Intermittent	Stream Width	___	Moderate	___	Boulder	___	Silt	___	Gentle	___
	Water Depth	___	Steep	___	Cobble	___	Clay	___	Moderate	___
					Gravel	___			Heavy	___

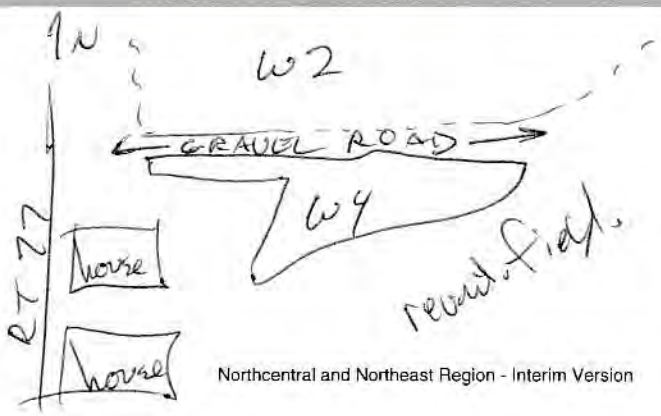
Adjacent Community Type: ___

Instream Conditions:

- ___ Obscurred Banks
- ___ Well Defined Banks
- ___ Eroded/Undercut Bank
- ___ Deep Pools
- ___ Riffles & Pools
- ___ Overhanging Vegetation
- ___ Vegetated Channel
- ___ Other ___

Remarks

W4 is separated from W2 by a hard gravel access road. Small section of fringe is PFO. Some open water areas & large stands of cattails



Project Number: 60345076

Applicant: USDVA

Sampling Date: 28 April 2015

Data Point ID: W4

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix spp.	5	N	FACW
2. Cornus alba sericea sp.	5	N	FACW
3.			
4.			
5			
	10 = Total Cover		

Herb Stratum (Plot size: 5-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Typha spp. (latifolia)	70	Y	OBL
2. Carex sp. (just emerged)	5	N	FACW/OBL
3.			
4.			
5			
6.			
7.			
8.			
9.			
10.			
	75 = Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	= 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:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (provide supporting data in remarks)

__ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

W4 interior has cattails - & fringe & westside ~~es~~ has open water to ~10".

Sample area within edge of cattail area.

Project Number: 60345076 Sampling Date: 28 April 2015

Applicant: USDVA Data Point ID: W4

Soil Map Unit: Canandaigua / OvB; BA

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-3	10YR 2/1	100					Muck
3-12	10YR 2/2	90	10YR 5/6	F	C	M	silty loam with very little sand.
12-20	10YR 2/2	90	10YR 5/6	F	C	M	silty loam

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X 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)
- X Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

- X 2 cm Muck (A10)
- ___ Coast Prairie Redox (A16)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Iron-Manganese Masses (F12)
- ___ Piedmont Floodplain Soils F19)
- ___ Mesic Spodic (TA6)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

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

Remarks alarge amount of leaf litter from cattails on surface with saturated soils - strong odor.

Wetland Determination

Hydrophytic Vegetation Present? (Yes) No

Hydric Soil Present? (Yes) No

Wetland Hydrology Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No

Hydrologic Connectivity to Off-site Wetlands? Yes (No) N/A

Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes (No) N/A

Is this Wetland Potentially Isolated? Yes No (N/A)

Is the wetland mapped in the NWI? (Yes) No

Is the wetland a mapped state wetland? Yes (No)

If yes, indicate classification _____

If yes, indicate wetland ID _____

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076
Town: Pembroke
Sampling Date: 28 APRIL 2015
County: Genesee
Applicant: USDVA
State: New York
Community: UPLAND
Data Point ID (i.e. 2W@Wet. G): UP-4
Nearest Flag to Data Point:

Investigator(s): J. LYONS

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 1

Hydrology

Primary Indicators (min. - 1 required; check all that apply)
- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain In Remarks)

Secondary Indicators (min. - 2 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 (D-1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes ___ No X
Saturated Conditions? Yes ___ No X

Depth of Water (inches): —
Depth to Sat. Soil (inches): —
Depth to Water (inches): —

Stream Characteristics

Stream type: ___ Perennial ___ Intermittent

Morphology: Bank Width ___ Stream Width ___ Water Depth ___

Stream Gradient: Gentle ___ Moderate ___ Steep ___

Substrate: Bed Rock ___ Boulder ___ Cobble ___ Gravel ___ Sand ___ Silt ___ Clay ___

Flow: No Flow ___ Gentle ___ Moderate ___ Heavy ___

Adjacent Community Type: ___

Instream Conditions:
- ___ Obscurred Banks
- ___ Well Defined Banks
- ___ Eroded/Undercut Bank
- ___ Deep Pools
- ___ Riffles & Pools
- ___ Overhanging Vegetation
- ___ Vegetated Channel
- ___ Other ___

Remarks

Upland reverting field. south of W4.
Dead veg.

Project Number: 60345076

Applicant: USDVA

Sampling Date: 28 April 15

Data Point ID: UP-4

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)			
1.			
2.			
3.			
4.			
5			
	= Total Cover		

Herb Stratum (Plot size: 5-foot radius)			
1. Solidago canadensis	20	Y	FACU
2. Taraxacum officinale	10	Y	FACU
3. Phleum pratense	10	Y	FACU
4.			
5			
6.			
7.			
8.			
9.			
10.			
	40 = Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)			
1.			
2.			
3.			
4.			
5			
	= 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:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (provide supporting data in remarks)

__ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

Project Number: 60345076 Sampling Date: 28 APRIL 2015

Applicant: USDVA Data Point ID: UP-4

Soil Map Unit: Phelps gravelly loam

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-20	10YR3/3	100					sandy loam with few rocks ≥ 1" & a few ≤ 1" "

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: 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)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

- ___ 2 cm Muck (A10)
- ___ Coast Prairie Redox (A16)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Iron-Manganese Masses (F12)
- ___ Piedmont Floodplain Soils F19)
- ___ Mesic Spodic (TA6)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

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

Remarks typical ag field soil. upslope from WY.

Western side is residential yards.

Wetland Determination

Hydrophytic Vegetation Present? Yes (No)
Hydric Soil Present? Yes (No)
Wetland Hydrology Present? Yes (No)
Is this Sampling Point Within a Wetland? Yes (No)

Hydrologic Connectivity to Off-site Wetlands? Yes No (N/A)
Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes No (N/A)
Is this Wetland Potentially Isolated? Yes No (N/A)

Is the wetland mapped in the NWI? Yes (No)
Is the wetland a mapped state wetland? Yes (No)

If yes, indicate classification _____
If yes, indicate wetland ID _____

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076
Town: Pembroke
Sampling Date: 28 April 2015
County: Genesee
Applicant: USDA
State: New York
Community: PSS / PFO
Data Point ID (i.e. 2W@Wet. G): W5
Nearest Flag to Data Point:

Investigator(s): J. Lyons

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 1-2

slight impact to open water channel from adj land owner logging.

Hydrology

Primary Indicators (min. - 1 required; check all that apply)
- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- X Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain In Remarks)

Secondary Indicators (min. - 2 required)
- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D-1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes X No ___
Saturated Conditions? Yes X No ___

Depth of Water (inches): to 1-2' in spots.
Depth to Sat. Soil (inches): 0
Depth to Water (inches): 0

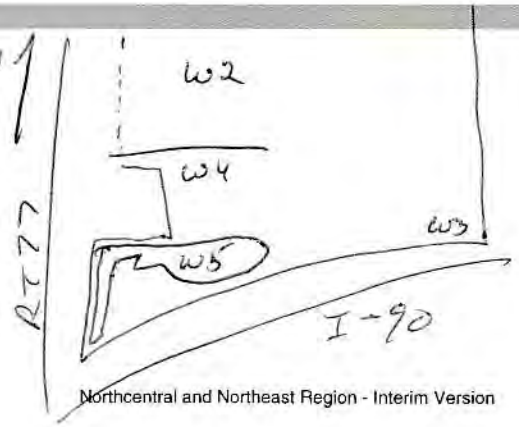
Stream Characteristics

Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
___ Perennial	Bank Width	___	Gentle	___	Bed Rock	___	Sand	___	No Flow	___
___ Intermittent	Stream Width	___	Moderate	___	Boulder	___	Silt	___	Gentle	___
	Water Depth	___	Steep	___	Cobble	___	Clay	___	Moderate	___
					Gravel	___			Heavy	___

Adjacent Community Type: ___

Instream Conditions:
- ___ Obscurred Banks
- ___ Well Defined Banks
- ___ Eroded/Undercut Bank
- ___ Deep Pools
- ___ Riffles & Pools
- ___ Overhanging Vegetation
- ___ Vegetated Channel
- ___ Other ___

Remarks W5 is a PSS/PFO complex with a drainage channel leading to a smaller one which drains south towards the I-90 into a major highway drainage. Open water areas



Project Number: 60345076

Applicant: USDUA

Sampling Date: 28 April 2015

Data Point ID: WS

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	—	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus incana	15	Y	FACW
2. Cornus ~~alba~~ or sericea	10	Y	FACW
3. Acer rubrum	2	N	FAC
4.			
5			
	27	= Total Cover	

Herb Stratum (Plot size: 5-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Onoclea sensibilis	5	Y	FACW
2. Typha spp.	5	Y	FACW
3. Carex spp. (young)	5	Y	FACW/obl.
4.			
5			
6.			
7.			
8.			
9.			
10.			
	15	= Total Cover	

Woody Vine Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	—	= 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:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (provide supporting data in remarks)

__ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

Small amounts of veg. present. FA on water surface & moss on logs.

Project Number: 60345076 Sampling Date: 28 April 2015

Applicant: USDA Data Point ID: WS

Soil Map Unit: Udorthents/Lamson (GnB) mixing

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-4	10YR 2/1	100					MUCK
4-16	10YR 2/2	95	10YR 5/6	F	C	M	silty loam w/
							some sand &
							veg. debris.
16-20	10YR 2/2	90	10YR 5/6	F	C	M	silty loam
			GLEY 2 4/5BG	F	C	M	some clay.

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X 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)
- X Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

- X 2 cm Muck (A10)
- ___ Coast Prairie Redox (A16)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Iron-Manganese Masses (F12)
- ___ Piedmont Floodplain Soils F19)
- ___ Mesic Spodic (TA6)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

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

Remarks varied degrees of open water & mucky soils. hummocky terrain in PFO sections

Wetland Determination

Hydrophytic Vegetation Present? **Yes** No

Hydric Soil Present? **Yes** No

Wetland Hydrology Present? **Yes** No

Is this Sampling Point Within a Wetland? **Yes** No

Hydrologic Connectivity to Off-site Wetlands? **Yes** No N/A

Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? **Yes** No N/A

Is this Wetland Potentially Isolated? Yes **No** N/A

Is the wetland mapped in the NWI? Yes **No**

Is the wetland a mapped state wetland? Yes **No**

If yes, indicate classification _____

If yes, indicate wetland ID _____

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076
Town: Pembroke
Sampling Date: 28 April 2015
County: Genesee
Applicant: USDVA
State: **New York**
Community: UPLAND
Data Point ID (i.e. 2W@Wet. G): UP-5
Nearest Flag to Data Point:

Investigator(s): J LYONS

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 1-2

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

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

Secondary Indicators (min. - 2 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 (D-1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes ___ No X
Saturated Conditions? Yes ___ No X

Depth of Water (inches): —
Depth to Sat. Soil (inches): —
Depth to Water (inches): —

Stream Characteristics

Stream type: ___ Perennial ___ Intermittent

Morphology: Bank Width ___ Stream Width ___ Water Depth ___

Stream Gradient: Gentle ___ Moderate ___ Steep ___

Substrate: Bed Rock ___ Boulder ___ Cobble ___ Gravel ___ Sand ___ Silt ___ Clay ___

Flow: No Flow ___ Gentle ___ Moderate ___ Heavy ___

Adjacent Community Type: ___

Instream Conditions:

___ Obscurred Banks
___ Well Defined Banks
___ Eroded/Undercut Bank
___ Deep Pools
___ Riffles & Pools
___ Overhanging Vegetation
___ Vegetated Channel
___ Other ___

Remarks

upland areas to south & west of WS.

Project Number: 60345076

Applicant: USDVA

Sampling Date: 28 April 2015

Data Point ID: UP-5

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	— = Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)			
1.			
2.			
3.			
4.			
5			
	— = Total Cover		

Herb Stratum (Plot size: 5-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Phleum pratense	20	Y	FACU
2. Fescue spp.	30	Y	FACU
3. Taraxacum officinale	5	Y	FACU
4. Trifolium spp.	5	Y	FACU
5			
6.			
7.			
8.			
9.			
10.			
	60 = Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)			
1.			
2.			
3.			
4.			
5			
	— = 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:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (provide supporting data in remarks)

__ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

Project Number: 60345076

Sampling Date: 28 April 2015

Applicant: USDVA

Data Point ID: UP-5

Soil Map Unit: Galen very fine sandy loam

Soils

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-17	10YR 3/3	100					sandy loam with rocks 21"

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: 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)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

___ 2 cm Muck (A10)
___ Coast Prairie Redox (A16)
___ 5 cm Mucky Peat or Peat (S3)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Iron-Manganese Masses (F12)
___ Piedmont Floodplain Soils F19)
___ Mesic Spodic (TA6)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: Rock

Depth (inches): 17

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

Remarks

upland area - somewhat maintained.

Wetland Determination

Hydrophytic Vegetation Present? **Yes** **No**
Hydric Soil Present? **Yes** **No**
Wetland Hydrology Present? **Yes** **No**
Is this Sampling Point Within a Wetland? **Yes** **No**

Hydrologic Connectivity to Off-site Wetlands? **Yes** **No** **N/A**
Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? **Yes** **No** **N/A**
Is this Wetland Potentially Isolated? **Yes** **No** **N/A**

Is the wetland mapped in the NWI? **Yes** **No**
Is the wetland a mapped state wetland? **Yes** **No**

If yes, indicate classification _____
If yes, indicate wetland ID _____

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076 Town: Pembroke Sampling Date: 27 AUG 2015
County: Genesee
Applicant: USDVA State: New York Community: PEM / PSS
Data Point ID (i.e. 2W@Wet. G): W1 (ext) Nearest Flag to Data Point:

Investigator(s): J. LYONS R. RUNG

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 2-4

Hydrology minor historic drainage swales.

Primary Indicators (min. - 1 required; check all that apply)
___ Surface Water (A1)
___ High Water Table (A2)
✓ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ Marl Deposits (B15)
✓ Hydrogen Sulfide Odor (C1)
✓ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain In Remarks)

Secondary Indicators (min. - 2 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 (D-1)
✓ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations
Inundation Present? Yes ___ No ✓
Saturated Conditions? Yes ✓ No ___
Depth of Water (inches): ___
Depth to Sat. Soil (inches): 18" in spots - (mostly no.)
Depth to Water (inches): 18+

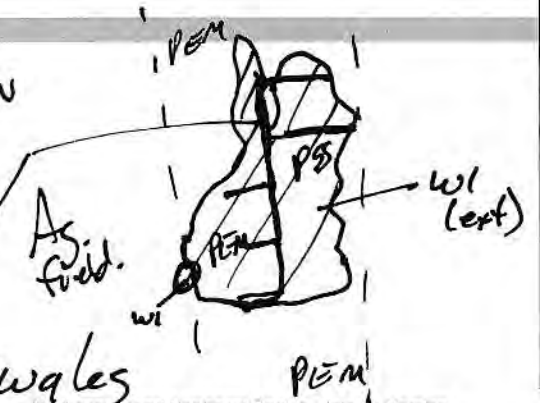
Stream Characteristics

Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
___ Perennial	Bank Width	___	Gentle	___	Bed Rock	___	Sand	___	No Flow	___
___ Intermittent	Stream Width	___	Moderate	___	Boulder	___	Silt	___	Gentle	___
	Water Depth	___	Steep	___	Cobble	___	Clay	___	Moderate	___
				N/A	Gravel	___			Heavy	___

Adjacent Community Type: ___

Instream Conditions:
___ Obscurred Banks
___ Well Defined Banks
___ Eroded/Undercut Bank
___ Deep Pools
___ Riffles & Pools
___ Overhanging Vegetation
___ Vegetated Channel
___ Other ___

Remarks
This wetland is an extension of a small pothole/CT wetland on the parcel edge. It is mostly PEM with a PSS fringe & few trees in the SE corner. Historic drainage swales are present.



Project Number: 60345076
Applicant: USDVA

Sampling Date: 27AUG2015
Data Point ID: W1 (ext)

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	—	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix spp	10	Y	FACW
2. Cornus sericea	10	Y	FACW
3.			
4.			
5			
	20	= Total Cover	

Herb Stratum (Plot size: 5-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Phalaris arundinacea	50	Y	FACW
2. Solidago canadensis	5	N	FACU
3. S. odora	2	N	N/L
4. S. gigantea	10	Y	FACW
5			
6.			
7.			
8.			
9.			
10.			
	67	= Total Cover	

Woody Vine Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
		= 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:

__ Rapid Test for Hydrophytic Vegetation
__ Dominance Test >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (provide supporting data in remarks)
__ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

distinctive veg changes - RCG w/s goldenrod (con.)

Common emergent spot picked for data.

Project Number: 60345076

Applicant: USDA

Sampling Date: 27 AUG 15

Data Point ID: W1 (cont)

Soil Map Unit: CgA

Soils

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-2	10YR 3/1	100					silty mucl (shear)
2-18	10YR 3/2	90	10YR 5/6	f	c	m	silty loam w/
			10R 3/6	ox root zones			some sand
18-20	10YR 5/3	95	10YR 6/8	f	cs	m	dry clay loam
							w/ sand inclusions

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- x Hydrogen Sulfide (A4) slight
- ___ 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)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- x Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

- ___ 2 cm Muck (A10)
- ___ Coast Prairie Redox (A16)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Iron-Manganese Masses (F12)
- ___ Piedmont Floodplain Soils F19)
- ___ Mesic Spodic (TA6)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

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

Remarks probably tilled in the past. clay bottom, ox. root zones some (SPR) reduction.

Wetland Determination

Hydrophytic Vegetation Present? (Yes) No

Hydric Soil Present? (Yes) No

Wetland Hydrology Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No

Hydrologic Connectivity to Off-site Wetlands? (Yes) No N/A

Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes (No) N/A

Is this Wetland Potentially Isolated? Yes (No) N/A

Is the wetland mapped in the NWI? Yes (No) If yes, indicate classification _____

Is the wetland a mapped state wetland? Yes (No) If yes, indicate wetland ID _____

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076 Town: Pembroke Sampling Date: 29AUG-2015

County: Genesee

Applicant: USDVA State: New York Community: UPLAND (EMRGT)

Data Point ID (i.e. 2W@Wet. G): UPL (ext) Nearest Flag to Data Point: _____

Investigator(s): J. LYONS R RUNG

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 2-5

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

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

Secondary Indicators (min. - 2 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 (D-1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes _____ No _____
Saturated Conditions? Yes _____ No _____

Depth of Water (inches): _____
Depth to Sat. Soil (inches): _____
Depth to Water (inches): _____

N/A

Stream Characteristics

Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
Perennial	Bank Width	_____	Gentle	_____	Bed Rock	_____	Sand	_____	No Flow	_____
Intermittent	Stream Width	_____	Moderate	_____	Boulder	_____	Silt	_____	Gentle	_____
	Water Depth	_____	Steep	_____	Cobble	_____	Clay	_____	Moderate	_____
					Gravel	_____			Heavy	_____

Adjacent Community Type: _____

Instream Conditions:

___ Obscurred Banks
___ Well Defined Banks
___ Eroded/Undercut Bank
___ Deep Pools
___ Riffles & Pools
___ Overhanging Vegetation
___ Vegetated Channel
___ Other _____

Remarks Upland area adjacent to PEM area of WL (ext). Canada goldenrod. Area has dom. of gray dogwood (~~herb~~) UPC (herb.) & shrub.

Project Number: 60345076
Applicant: USDVA

Sampling Date: 27 AUG 2015
Data Point ID: UPL (ext.)

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	—	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Cornus racemosa	15	Y	FACU
2.			
3.			
4.			
5			
	15	= Total Cover	

Herb Stratum (Plot size: 5-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Solidago canadensis	30	Y	FACU
2. Solidago altissima	10	Y	FACU
3. Solidago odora	5	N	N/L
4. Phalaris arundinacea	5	N	FACW
5 Daucus carota	3	N	UPL
6. Phleum pratense	5	N	FACU
7. Cornus racemosa	5	N	FACU
8. Asclepias syriaca	5	N	UPL
9.			
10.			
	60%	= Total Cover	

Woody Vine Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Vitis sp.	2	N	FACU
2.			
3.			
4.			
5			
	2	= 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:
__ Rapid Test for Hydrophytic Vegetation
__ Dominance Test >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (provide supporting data in remarks)
__ Problematic Hydrophytic Vegetation[1] (explain in remarks)
[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.

Remarks
Lots of veg. detritus on ground.
Upslope from wetland basin.

Project Number: 60345076

Applicant: USDVA

Soil Map Unit: LmA

Sampling Date: 27AUG15

Data Point ID: W1 (ext) UP1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-1	10YR 3/2	100					silty loam w/ roots
1-20	10YR 3/3	100					sandy loam w/ few small gravel.

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: 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)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

N/A

Problematic Hydric Soil Indicators[3]

___ 2 cm Muck (A10)
___ Coast Prairie Redox (A16)
___ 5 cm Mucky Peat or Peat (S3)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Iron-Manganese Masses (F12)
___ Piedmont Floodplain Soils F19)
___ Mesic Spodic (TA6)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: —

Depth (inches): —

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

Remarks Historic farmland - mixed horizons - homogenous.

Wetland Determination

Hydrophytic Vegetation Present? Yes (No)
Hydric Soil Present? Yes (No)
Wetland Hydrology Present? Yes (No)
Is this Sampling Point Within a Wetland? Yes (No)

Hydrologic Connectivity to Off-site Wetlands? Yes No (N/A)
Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes No (N/A)
Is this Wetland Potentially Isolated? Yes No (N/A)

Is the wetland mapped in the NWI? Yes (No) If yes, indicate classification ____
Is the wetland a mapped state wetland? Yes (No) If yes, indicate wetland ID ____

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076 Town: Pembroke Sampling Date: 31 AUG 2015
County: Genesee
Applicant: USDVA State: New York Community: PEM / PSS
Data Point ID (i.e. 2W@Wet. G): W2 (EXT) Nearest Flag to Data Point: _____

Investigator(s): J. LYONS R. PUNG

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 1-4

(VA OCFM WNY)

Hydrology

Primary Indicators (min. - 1 required; check all that apply)
___ Surface Water (A1)
___ High Water Table (A2)
X Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
X Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain In Remarks)

Secondary Indicators (min. - 2 required)
___ Surface Soil Cracks (B6)
X Drainage Patterns (B10)
___ Moss Trim Lines (B16)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
X Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D-1)
X Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations
Inundation Present? Yes ___ No X
Saturated Conditions? Yes X No ___
Depth of Water (inches): —
Depth to Sat. Soil (inches): 18
Depth to Water (inches): —

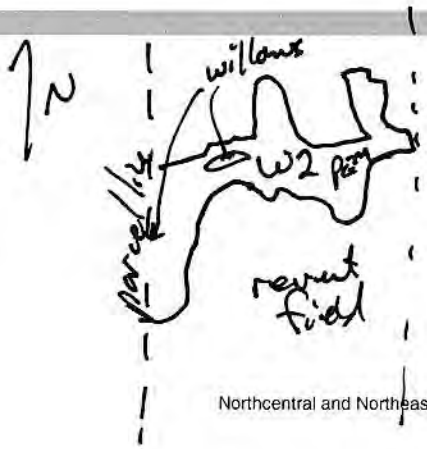
Stream Characteristics

Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
___ Perennial	Bank Width		Gentle		Bed Rock		Sand		No Flow	
___ Intermittent	Stream Width		Moderate		Boulder		Silt		Gentle	
	Water Depth		Steep		Cobble		Clay		Moderate	
					Gravel				Heavy	

Adjacent Community Type: N/A

Instream Conditions:
___ Obscurred Banks
___ Well Defined Banks
___ Eroded/Undercut Bank
___ Deep Pools
___ Riffles & Pools
___ Overhanging Vegetation
___ Vegetated Channel
___ Other _____

Remarks
Wetland W2 was extended from the land parcel to the west. It is a mix of PEM (mostly) & PSS with a line & small grove of willows



Project Number: 6034 5076
Applicant: USDVA

Sampling Date: 31AUG 2015
Data Point ID: W2 (EXT)

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	— = Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix spp	3	N	FACW
2.			
3.			
4.			
5			
	3 = Total Cover		

Herb Stratum (Plot size: 5-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Onoclea sensibilis	15	Y	FACW
2. Solidago odora	5	N	N/L
3. Solidago gigantea	10	Y	FACW
4. Scirpus cyperinus	2	N	OBL
5 Phalaris arundinacea	50	Y	FACW
6.			
7.			
8.			
9.			
10.			
	82 = Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	— = 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:

__ Rapid Test for Hydrophytic Vegetation
__ Dominance Test >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (provide supporting data in remarks)
__ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

mostly reed canary grass
- wetland area is in ~~[illegible]~~ low depressional area.
Veg. is thick/lush

Project Number: 60345076

Applicant: USDVA

Sampling Date: 31 AUG 2015

Data Point ID: W2 (UPL)

Soil Map Unit: NgA

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-1	10YR 3/2	100					silty loam w/roots
1-16	10YR 3/2	80	2.5YR 4/6	f	c	m	sandy loam
			10YR 5/4	f	c	m	
16-20		95	10YR 6/1				clay (dry)
			10YR 4/6	f	c	m	sand inclusions

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: 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)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- x Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

- ___ 2 cm Muck (A10)
- ___ Coast Prairie Redox (A16)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Iron-Manganese Masses (F12)
- ___ Piedmont Floodplain Soils F19)
- ___ Mesic Spodic (TA6)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

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

Remarks Soil is hydric but has maintained a homogenous structure more than likely from past plowing (ag. activities). depleted clay layer in lower horizon.

Wetland Determination

Hydrophytic Vegetation Present? (Yes) No

Hydric Soil Present? (Yes) No

Wetland Hydrology Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No

Hydrologic Connectivity to Off-site Wetlands? Yes (No) N/A

Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes (No) N/A

Is this Wetland Potentially Isolated? Yes (No) N/A — too big.

Is the wetland mapped in the NWI? Yes (No) If yes, indicate classification _____

Is the wetland a mapped state wetland? Yes (No) If yes, indicate wetland ID _____

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076 Town: Pembroke Sampling Date: 31AUG2015

County: Genesee

Applicant: USDVA State: New York Community: UPLAND

Data Point ID (i.e. 2W@Wet. G): UP 2 (EXT) Nearest Flag to Data Point:

Investigator(s): J. LYONS R. RUNG

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 2-4

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

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

N/A

Secondary Indicators (min. - 2 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 (D-1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes ___ No X
Saturated Conditions? Yes ___ No X

Depth of Water (inches): —
Depth to Sat. Soil (inches): —
Depth to Water (inches): —

Stream Characteristics

Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
Perennial	Bank Width		Gentle		Bed Rock		Sand		No Flow	
Intermittent	Stream Width		Moderate		Boulder		Silt		Gentle	
	Water Depth		Steep		Cobble		Clay		Moderate	
					Gravel				Heavy	

Adjacent Community Type: N/A

Instream Conditions:

___ Obscurred Banks
___ Well Defined Banks
___ Eroded/Undercut Bank
___ Deep Pools
___ Riffles & Pools
___ Overhanging Vegetation
___ Vegetated Channel
___ Other

Remarks

upland area adjacent to W2. UP 2 area is upslope in elevation from wetland - (historic ag field?)
Difference of dom. veg. & lighter soils colors.

Project Number: 60345076
Applicant: USDVA

Sampling Date: 31AUG-2015
Data Point ID: UP2 (CRT)

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	— = Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)			
1.			
2.			
3.			
4.			
5			
	— = Total Cover		

Herb Stratum (Plot size: 5-foot radius)			
1. Solidago canadensis	20	Y	FACU
2. S. odora	3	N	N/L
3. S. altissima	5	N	FACU
4. Phalaris arundinacea	10	Y	FACW
5 Daucus carota	7	Y	UPL
6. Asclepias syriaca	8	Y	UPL
7. Phleum pratense	10	Y	FACU
8. Cornus racemosa	10	Y	FAC
9.			
10.			
	73 = Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)			
1.			
2.			
3.			
4.			
5			
	— = 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:

__ Rapid Test for Hydrophytic Vegetation
__ Dominance Test >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (provide supporting data in remarks)
__ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

thick variety of veg. low/moisture in this area all emergent

Project Number: 60345076 Sampling Date: 31 AUG 2015

Applicant: USDVA Data Point ID: UP 2 (ext)

Soil Map Unit: PsA

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Redux Features Frequency[1]	Redux Features Type[2]	Redux Features Loc[3]	Texture, Structure, Other
0-20	10YR 3/3	100					Sandy loam w. small few gravel

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: 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)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

N/A

Problematic Hydric Soil Indicators[3]

___ 2 cm Muck (A10)
___ Coast Prairie Redox (A16)
___ 5 cm Mucky Peat or Peat (S3)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Iron-Manganese Masses (F12)
___ Piedmont Floodplain Soils F19)
___ Mesic Spodic (TA6)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: —

Depth (inches): —

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

Remarks Historic ag. field - lighter colored soils. lots of roots

Wetland Determination

Hydrophytic Vegetation Present? Yes (No)
Hydric Soil Present? Yes (No)
Wetland Hydrology Present? Yes (No)
Is this Sampling Point Within a Wetland? Yes (No)

Hydrologic Connectivity to Off-site Wetlands? Yes No (N/A)
Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes No (N/A)
Is this Wetland Potentially Isolated? Yes No (N/A)

Is the wetland mapped in the NWI? Yes No If yes, indicate classification ___
Is the wetland a mapped state wetland? Yes No If yes, indicate wetland ID ___

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076 | Town: Pembroke | Sampling Date: 26 AUG 2015
County: Genesee
Applicant: USDVA | State: New York | Community: PEM
Data Point ID (i.e. 2W@Wet. G): W3 (ext) | Nearest Flag to Data Point: _____

Investigator(s): J. Lyons R. Rung

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 2-4

Hydrology

Primary Indicators (min. - 1 required; check all that apply)
- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ✓ Hydrogen Sulfide Odor (C1)
- ✓ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain In Remarks)

Secondary Indicators (min. - 2 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 (D-1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes ___ No ✓
Saturated Conditions? Yes ✓ No ___

Depth of Water (inches): —
Depth to Sat. Soil (inches): 19
Depth to Water (inches): 19+

Stream Characteristics

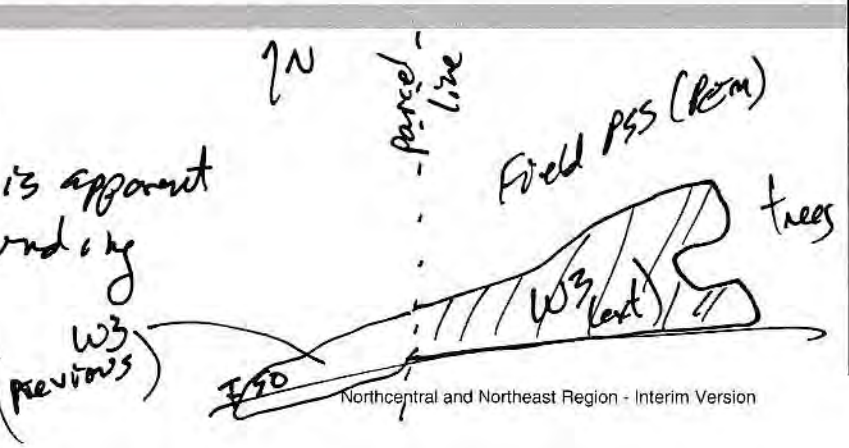
Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:
Perennial	Bank Width		Gentle		Bed Rock		Sand		No Flow
Intermittent	Stream Width		Moderate		Boulder		Silt		Gentle
	Water Depth		Steep		Cobble		Clay		Moderate
					Gravel				Heavy

Adjacent Community Type: N/A

Instream Conditions:
- ___ Obscurred Banks
- ___ Well Defined Banks
- ___ Eroded/Undercut Bank
- ___ Deep Pools
- ___ Riffles & Pools
- ___ Overhanging Vegetation
- ___ Vegetated Channel
- ___ Other _____

Remarks

Emergent wetland w/ small cattail component. Wetland basin is apparent & depressional from surrounding areas.



Project Number: 60345076
Applicant: USDVA

Sampling Date: 26AUG-15
Data Point ID: W3 (ext)

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	—	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-foot radius)			
1.			
2.			
3.			
4.			
5			
	—	= Total Cover	

Herb Stratum (Plot size: 5-foot radius)			
1. Phalaris arundinacea	30	Y	FACW
2. Juncus canadensis	15	Y	OBL
3. Scirpus cyperinus	10	Y	OBL
4. Cyperus strigosus	10	Y	FACW
5 Juncus spp.	5	N	FACW
6.			
7.			
8.			
9.			
10.			
	70	= Total Cover	

Woody Vine Stratum (Plot size: 30-foot radius)			
1.			
2.			
3.			
4.			
5			
		= 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:

- __ Rapid Test for Hydrophytic Vegetation
- __ Dominance Test >50%
- __ Prevalence Index is ≤3.0[1]
- __ Morphological Adaptations[1] (provide supporting data in remarks)
- __ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

Different vegetative components to this wetland (i.e. monoculture of CT)

Project Number: 60345026

Applicant: USDVA

Sampling Date: 26AUG2015

Data Point ID: W3 (ext)

Soil Map Unit: CaA

Soils

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-2	10YR2/1	100					muck / veg debris / organic
2-18	10YR3/2	90	2% 10YR5/6	f	c	m	silty loam w/
			8% 10R3/6				ox root zones
18-20	7.5YR5/1	90	~~7.5YR5/6~~ (PL)				dry ish clay
			(*) 10YR5/6	f	c	m	with colored
							(*) sand inclusions.

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: 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)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

- ✓ 2 cm Muck (A10)
- ___ Coast Prairie Redox (A16)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Iron-Manganese Masses (F12)
- ___ Piedmont Floodplain Soils F19)
- ___ Mesic Spodic (TA6)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

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

Remarks

clayish material in bottom horizon.

Wetland Determination

Hydrophytic Vegetation Present? **Yes** **No**

Hydric Soil Present? **Yes** **No**

Wetland Hydrology Present? **Yes** **No**

Is this Sampling Point Within a Wetland? **Yes** **No**

Is the wetland mapped in the NWI? **Yes** **No**

Is the wetland a mapped state wetland? **Yes** **No**

Hydrologic Connectivity to Off-site Wetlands? **Yes** **No** **N/A**

Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? **Yes** **No** **N/A**

Is this Wetland Potentially Isolated? **Yes** **No** **N/A**

If yes, indicate classification _____

If yes, indicate wetland ID AK-15

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076 Town: Pembroke Sampling Date: 26AUG2015
County: Genesee
Applicant: USDVA State: New York Community: UPLAND (EMG)
Data Point ID (i.e. 2W@Wet. G): UP 3 (ext) Nearest Flag to Data Point:

Investigator(s): J. LYONS R. RUNG

Landform: Hillside/Seep Toe of Slope Depressional Riparian

Landscape Position: Flat Undulating Sloping Convex Concave

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No

Do Normal Circumstances exist on site? Yes No

Is the area a potential problem area? Yes No

Is the site significantly disturbed? Yes No

Approximate Slope (%): 3-5

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

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

Secondary Indicators (min. - 2 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 (D-1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations

N/A

Inundation Present? Yes ____ No ____
Saturated Conditions? Yes ____ No ____

Depth of Water (inches): ____
Depth to Sat. Soil (inches): ____
Depth to Water (inches): ____

Stream Characteristics

Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
___ Perennial	Bank Width	____	Gentle	____	Bed Rock	____	Sand	____	No Flow	____
___ Intermittent	Stream Width	____	Moderate	____	Boulder	____	Silt	____	Gentle	____
	Water Depth	____	Steep	____	Cobble	____	Clay	____	Moderate	____
					Gravel	____			Heavy	____

Adjacent Community Type: ____

Instream Conditions:

___ Obscurred Banks
___ Well Defined Banks
___ Eroded/Undercut Bank
___ Deep Pools
___ Riffles & Pools
___ Overhanging Vegetation
___ Vegetated Channel
___ Other ____

Remarks

Upland area adj to W3 (ext) - north.
Area is emergent to shrubby & upslope from wetland area.

Project Number: 60345076
Applicant: USDVA

Sampling Date: 26 AUG 2015
Data Point ID: UP3 (ext)

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	—	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Cornus racemosa	5	N	FAC
2.			
3.			
4.			
5			
	5	= Total Cover	

Herb Stratum (Plot size: 5-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Solidago canadensis	50	Y	FACU
2. Phalaris arundinacea	5	N	FACW
3. Daucus carota	10	Y	UPL
4. Solidago odora	5	N	N/L
5 Phleum pratense	15	Y	FACU
6.			
7.			
8.			
9.			
10.			
	85	= Total Cover	

Woody Vine Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
		= 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:

__ Rapid Test for Hydrophytic Vegetation
__ Dominance Test >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (provide supporting data in remarks)
__ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

Upland veg. w/ some RC grass. all upslope.

Project Number: 60345076

Applicant: USDVA

Sampling Date: 26AUG15

Data Point ID: UP3

Soil Map Unit: PsB

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Redox Features Frequency[1]	Redox Features Type[2]	Redox Features Loc[3]	Texture, Structure, Other
0-18	10YR3/3	100					Sandy loam w/ some gravel.

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: 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)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

N/A

Problematic Hydric Soil Indicators[3]

- ___ 2 cm Muck (A10)
- ___ Coast Prairie Redox (A16)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Iron-Manganese Masses (F12)
- ___ Piedmont Floodplain Soils F19)
- ___ Mesic Spodic (TA6)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: Rock / clay?

Depth (inches): 18

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

Remarks Homogenous soil profile with little activity. (old ag. soils.)

Wetland Determination

Hydrophytic Vegetation Present? Yes **No**

Hydric Soil Present? Yes **No**

Wetland Hydrology Present? Yes **No**

Is this Sampling Point Within a Wetland? Yes **No**

Hydrologic Connectivity to Off-site Wetlands? Yes No **N/A**

Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes No **N/A**

Is this Wetland Potentially Isolated? Yes No **N/A**

Is the wetland mapped in the NWI? Yes **No**

Is the wetland a mapped state wetland? Yes **No**

If yes, indicate classification ___

If yes, indicate wetland ID ___

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DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076 Town: Pembroke Sampling Date: 28 AUG 2015

County: Genesee

Applicant: USDVA State: New York Community: PEM / PSS / PFO

Data Point ID (i.e. 2W@Wet. G): W6 Nearest Flag to Data Point: _____

Investigator(s): J. LYONS R. RUNG

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 1-3

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

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

Secondary Indicators (min. - 2 required)

X Surface Soil Cracks (B6)
X 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 (D-1)
X Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes ___ No X
Saturated Conditions? Yes X No ___

Depth of Water (inches): —
Depth to Sat. Soil (inches): 19
Depth to Water (inches): —

Stream Characteristics

Stream type: ___ Perennial ___ Intermittent

Morphology: Bank Width ___ Stream Width ___ Water Depth ___

Stream Gradient: Gentle ___ Moderate ___ Steep ___

Substrate: Bed Rock ___ Boulder ___ Cobble ___ Gravel ___ Sand ___ Silt ___ Clay ___

Flow: No Flow ___ Gentle ___ Moderate ___ Heavy ___

Adjacent Community Type: N/A

Instream Conditions:
___ Obscurred Banks
___ Well Defined Banks
___ Eroded/Undercut Bank
___ Deep Pools
___ Riffles & Pools
___ Overhanging Vegetation
___ Vegetated Channel
___ Other ___

Remarks W6 spans a PEM, PSS, & PFO area. - Forested component is hummocky w/ aspens - R.O. dogwood in PSS - & mostly S. fern in PEM. Access road cuts through the middle.

Project Number: 60345076

Applicant: USDVA

Sampling Date: 28AUG2015

Data Point ID: W6

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Cornus sericea	10	Y	FACW
2. Alnus incana	10	Y	FACW
3.			
4.			
5			
	20 = Total Cover		

Herb Stratum (Plot size: 5-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Onoclea sensibilis	20	Y	FACW
2. Cornus sericea	5	N	FACW
3. Solidago gigantea	10	Y	FACW
4. S. odora	3	N	N/L
5 S. canadensis	3	N	FACU
6. Rubus spp	2	N	FACW
7. Phalaris arundinacea	10	Y	FACW
8.			
9.			
10.			
	53 = Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Vitis spp.	3	N	FACU
2.			
3.			
4.			
5			
	3 = 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:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (provide supporting data in remarks)

__ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks

Area consists of PEM (accessed) & PFO component.

Project Number: 60345076

Applicant: USDA

Sampling Date: 28AUG2015

Data Point ID: W6

Soil Map Unit: NgA

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-2	10YR 2/1	100					dry muck, silty loam w/ organics
2-14	10YR 2/2	95	10R 3/6	MA	D	PL	sandy loam w/ ox root zones
14-20	10YR 5/1	90	10YR 4/6	f	c	M	→ depleted sandy loam

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4) → light
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- X Sandy Gleyed Matrix (S4) → 10YR 5/1
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

- ___ 2 cm Muck (A10)
- ___ Coast Prairie Redox (A16)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Iron-Manganese Masses (F12)
- ___ Piedmont Floodplain Soils F19)
- ___ Mesic Spodic (TA6)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: —

Depth (inches): —

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

Remarks

· (OR) a variety of soil areas - silty to sandy with clay to clayish fraction.

Wetland Determination

Hydrophytic Vegetation Present? Yes No

Hydric Soil Present? Yes No

Wetland Hydrology Present? Yes No

Is this Sampling Point Within a Wetland? Yes No

Is the wetland mapped in the NWI? Yes No

Is the wetland a mapped state wetland? Yes No

Hydrologic Connectivity to Off-site Wetlands? Yes No N/A

Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes No N/A

Is this Wetland Potentially Isolated? Yes No N/A

If yes, indicate classification PFO1. SSIC

If yes, indicate wetland ID —

AECOM
257 West Genesee Street
Suite 400
Buffalo, New York 14202

DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345076 Town: Pembroke Sampling Date: 28 AUG 2015

County: Genesee

Applicant: USDVA State: New York Community: UP (emergent)

Data Point ID (i.e. 2W@Wet. G): UP 6 Nearest Flag to Data Point: _____

Investigator(s): J. LYONS R. RUNG

Landform: **Hillside/Seep** **Toe of Slope** **Depressional** **Riparian**

Landscape Position: **Flat** **Undulating** **Sloping** **Convex** **Concave**

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** **No**

Do Normal Circumstances exist on site? **Yes** **No**

Is the area a potential problem area? **Yes** **No**

Is the site significantly disturbed? **Yes** **No**

Approximate Slope (%): 2-4

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

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

N/A

Secondary Indicators (min. - 2 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 (D-1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes ____ No X
Saturated Conditions? Yes ____ No X

Depth of Water (inches): —
Depth to Sat. Soil (inches): —
Depth to Water (inches): —

Stream Characteristics

Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
___ Perennial	Bank Width	____	Gentle	____	Bed Rock	____	Sand	____	No Flow	____
___ Intermittent	Stream Width	____	Moderate	____	Boulder	____	Silt	____	Gentle	____
	Water Depth	____	Steep	____	Cobble	____	Clay	____	Moderate	____
					Gravel	____			Heavy	____

Adjacent Community Type: _____ N/A

Instream Conditions:

___ Obscurred Banks
___ Well Defined Banks
___ Eroded/Undercut Bank
___ Deep Pools
___ Riffles & Pools
___ Overhanging Vegetation
___ Vegetated Channel
___ Other _____

Remarks

Upland area adjacent to W6. - slightly elevated from wetland basin.

upland areas include:
emergent
shrub
forested.

Project Number: 60345076
Applicant: USDA

Sampling Date: 28AUG2015
Data Point ID: UP6

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5			
	—	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-foot radius)			
1.			
2.			
3.			
4.			
5			
	—	= Total Cover	

Herb Stratum (Plot size: 5-foot radius)			
1. Solidago canadensis	25	Y	FACU
2. S. odora	5	N	N/L
3. Phalaris arundinacea	5	N	FACW
4. Daucus carota	10	Y	UPL
5 Phleum pratense	15	Y	FACU
6. Trifolium spp.	5	N	FACU
7. Taraxacum officinale	5	N	FACU
8.			
9.			
10.			
	70	= Total Cover	

Woody Vine Stratum (Plot size: 30-foot radius)			
1.			
2.			
3.			
4.			
5			
	—	= 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:

__ Rapid Test for Hydrophytic Vegetation
__ Dominance Test >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (provide supporting data in remarks)
__ Problematic Hydrophytic Vegetation[1] (explain in remarks)

[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.

Remarks Forested section has a quaking aspen canopy.
- Emergent area picked for data.
area has been mowed recently.

Project Number: 60345076

Applicant: USDVA

Sampling Date: 28 AUG 2015

Data Point ID: UP6

Soil Map Unit: CaA

Soils

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Redux Features Frequency[1]	Redux Features Type[2]	Redux Features Loc[3]	Texture, Structure, Other
0-2	10YR 3/2	100					sandy loam / roots
2-18	10YR 3/3	100					sandy loam w/ few small gravel

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common

[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

[3]Location: 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)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

N/A

Problematic Hydric Soil Indicators[3]

- ___ 2 cm Muck (A10)
- ___ Coast Prairie Redox (A16)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Iron-Manganese Masses (F12)
- ___ Piedmont Floodplain Soils F19)
- ___ Mesic Spodic (TA6)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: Rock / gravel

Depth (inches): 18

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

Remarks

Soil colors are lighter with some small gravel. May indicate past plowing/tilling activities. (horizon mixing).

Wetland Determination

Hydrophytic Vegetation Present? Yes (No)

Hydric Soil Present? Yes (No)

Wetland Hydrology Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No)

Hydrologic Connectivity to Off-site Wetlands? Yes No (N/A)

Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes No (N/A)

Is this Wetland Potentially Isolated? Yes No (N/A)

Is the wetland mapped in the NWI? Yes (No)

Is the wetland a mapped state wetland? Yes (No)

If yes, indicate classification ___

If yes, indicate wetland ID ___

AECOM
257 West Genesee Street
Suite 400
Buffalo, New York 14202

DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

Project Number: 60345026
Town: Pembroke
Sampling Date: 26 AUG 15
County: Genesee
Applicant: USDVA
State: New York
Community: STREAM
Data Point ID (i.e. 2W@Wet. G): S-1
Nearest Flag to Data Point: PEM/PSS/PFO

Investigator(s): J. LYONS R. RUNG

Landform: Hillside/Seep Toe of Slope (Depressional) Riparian

Landscape Position: Flat Undulating (Sloping) Convex Concave

Are climatic/hydrologic conditions on the site typical for this time of year? (Yes) No

Do Normal Circumstances exist on site? (Yes) No

Is the area a potential problem area? Yes (No)

Is the site significantly disturbed? Yes (No)

Approximate Slope (%): 3-5

Hydrology DRAINAGE SWALE FOR AG. LANDS.

Primary Indicators (min. - 1 required; check all that apply)
- X Surface Water (A1) in spots pooled
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain In Remarks)

Soils - CaA (P,A)

Secondary Indicators (min. - 2 required)
- X Surface Soil Cracks (B6)
- X 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 (D-1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes X No ___ in spots
Saturated Conditions? Yes X No ___

Depth of Water (inches): 1" pools
Depth to Sat. Soil (inches): 1-12"
Depth to Water (inches): 0-12"

Stream Characteristics

Stream type:	Morphology:		Stream Gradient:		Substrate:				Flow:	
___ Perennial	Bank Width	3'	Gentle	X	Bed Rock		Sand	X	No Flow	X at time of inspection
X Intermittent	Stream Width	3-12'	Moderate		Boulder		Silt	X	Gentle	
	Water Depth	0-1"	Steep		Cobble		Clay		Moderate	
					Gravel				Heavy	

Adjacent Community Type: ___

Instream Conditions:
- ___ Obscurred Banks
- X Well Defined Banks
- ___ Eroded/Undercut Bank
- ___ Deep Pools
- ___ Riffles & Pools
- X Overhanging Vegetation
- X Vegetated Channel in spots
- ___ Other ___

Remarks Moist soils under mostly dry channel → seasonally flowing during snowmelt & heavy rain events. Most likely connected to ag. field drain tiles. Man-made drainage feature - connects to drainage swales in the west. & is unnamed trib to TONAWANDA CREEK.

SEE FIG FOR LOCATION

DUCKS UNLIMITED

Great Lakes/Atlantic Regional Office
1220 Eisenhower Place
Ann Arbor, MI 48108-3281
(734) 623-2000 fax (734) 623-2035
www.ducks.org

January 15, 2016

Glenn Elliott
Department of Veterans Affairs
Office of Construction & Facilities Management
Washington DC 20420

RE: Wetland Mitigation Credit Availability in the Niagara River Service Area
Ducks Unlimited New York In-Lieu Fee Program

Dear Mr. Elliott:

This letter is non-binding and for informational purpose only that 1.0 Wetland Mitigation credits are available for purchase as of the date of this letter in the Niagara River service area for use by your agency.

Ducks Unlimited, Inc. is not responsible for holding, securing, or otherwise guaranteeing that these or any credits will be available to you at any future date. This letter does not constitute any agreement between Ducks Unlimited, Inc. and the US Department of Veterans Affairs for the purchase of said credits or their future availability. The Wetland Mitigation credits are only secured when purchased and the permanent transfer for the mitigation liability to Ducks Unlimited, Inc. is only completed once we have received full payment, verified there are available credits and Ducks Unlimited acknowledges by Credit Sales letter signed in writing by Ducks Unlimited, Inc.

Very Respectfully,

David Brakhage
Director of Operations
Great Lakes/Atlantic Region

CC: William Trembath – AECOM
Joseph Lyons – AECOM
File

DEPARTMENT OF VETERANS AFFAIRS
Office of Construction & Facilities Management
Washington DC 20420

February 2, 2016

Ms. Molly Connerton
US Army Corps of Engineers
Buffalo District Division of Regulatory Permits
1776 Niagara Street
Buffalo, NY 14207

Re: Joint Permit Application
US Department of Veterans Affairs
Office of Construction and Facilities Management (003C4B)
Western New York National Cemetery
Town of Pembroke, New York

Dear Ms. Connerton,

Enclosed please find the following items for your review and subsequent processing regarding the above-referenced project. The enclosures include the New York State Department Environmental Conservation/United States Army Corps of Engineers (NYSDEC/USACE) Joint Permit Application Form 09/10, Short Environmental Assessment Form, agency correspondence and the following supporting Figures and Exhibits:

Figure 1: Site Location Map
Figure 2: 2015 Field Delineated Wetlands
Figure 3: NYSDEC and National Wetlands Inventory (NWI) Wetlands Map
Figure 4: Soils Map
Exhibit A: Representative Photographs

Introduction

This Joint Permit Application and supporting material is submitted on behalf of the US Department of Veterans Affairs (VA) Office of Construction and Facilities Management (OCFM) to authorize construction of the proposed western New York National Cemetery (Project) in the town of Pembroke in Genesee County, New York (Figure 1).

Project Description

The purpose of the Project is to construct and operate the Western New York National Cemetery and ancillary facilities for veterans and their eligible family members in western New York. The Project totals approximately 270-acres and is comprised of three parcels located at 1232 Indian Falls Road in the Town of Pembroke, Genesee County, New York (Figure 1). Parcel 1 is approximately 132 acres and is located on the west side of the study area. Parcel 2 is in the central section of the study area and is

approximately 60 acres. Parcel 3 is located on the east side of the study area and is approximately 77 acres.

The Western New York National Cemetery will be developed in phases. The initial phase, Phase 1, will provide approximately 10 years of burial capacity and infrastructure, including a Public Information Center/Administration Building, Honor Guard Building, maintenance structure, access to public highways through a main entrance, and other supporting infrastructure including parking, irrigation, landscaping, visitor amenities and signage. Development of future phases of the Western New York National Cemetery would undergo separate environmental assessments prior to the construction and operation of those phases.

Project Impacts

The 2015 field delineated wetlands mapped along the project corridor are presented in Figure 2. State freshwater wetlands and U.S. Fish and Wildlife Service (USFWS) NWI wetlands mapped along the project corridor are presented in Figure 3. Soils mapped by the Natural Resources Conservation Service (NRCS) on the Project are shown in Figure 4.

Substantial efforts were made in planning and designing the Project to avoid and minimize environmental impacts during construction and operation of the Project. These efforts that will be implemented include the following:

- Reutilize suitable excavated on-site soils for fill or other construction needs.

- Minimize air quality impacts through dust control measures.

- The design to construct stormwater retention ponds that would contain aeration modules to maintain high water quality.

- Utilize construction best management practices and conformance with National Pollutant Discharge Elimination System (NPDES) permit requirements. In order to accomplish NPDES requirements, a variety of stormwater management devices and operational techniques will be constructed as part of the Project to result in acceptable post-construction stormwater discharge performance. Post-construction stormwater treatment and runoff reduction techniques may include, but are not limited to, bioretention basins, porous pavement, sheet flow to riparian buffers, stormwater planters, and capturing and reusing stormwater runoff for irrigation.

- Correspondence with the USFWS identified the northern long-eared bat as a federally listed species of concern. The VA will reduce and minimize potential impacts to this species by conducting site clearing activities between October 1 and March 31, outside of the roosting/nesting season.

- Minimal tree clearing will be performed on site, predominantly outside of the forested wetland area. Tree clearing on-site (approximately 5.3 acres total clearance in Phase 1) will only occur between October 1 and March 31 in order to minimize impacts to potential roosting and/or nesting habitat for the northern long-eared bat (*Myotis septentrionalis*).

- As part of the master planning process for development of the 132-acre parcel, a traffic study was conducted on May 11, 2015 (Fisher Associates, 2015). As indicated in the traffic study, Alleghany Road and Indian Falls Road were analyzed, and safe zones were established for

placement of cemetery access roads. The VA ultimately determined that a main entrance along Indian Falls Road would be a safer alternative compared with Alleghany Road.

Wetlands

AECOM ecologists performed field surveys for wetland delineations and water resources on April 28 and 29, August 26, 27, 28 and 31, and September 8, 2015. Wetlands on the Project were delineated using the routine methodology set forth in the USACE Wetland Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (USACE 2012). AECOM delineated streams and wetlands crossed by the Project are presented in Figure 2. State classified and NWI classified wetlands and streams are presents in Figure 3. The AECOM wetland delineation report was sent out to the USACE and NYSDEC. The on-site investigations found an intermittent stream that separates two active agricultural fields in the eastern section of Parcel 3 where it flows east to west until it reaches the central successional old field and flows north along the western boundary of Parcel 3. This feature crosses Indian Falls Road via a culvert. This stream connects with Tonawanda Creek (NYSDEC Class B Stream) approximately 0.3 miles north of the site. Water was only found in the northern most reach near Indian Falls Road.

Streams

Surveys performed on Parcel 1 in April 2015 did not identify any existing surface water ponds or streams on the property. According to Genesee County, the northern +/- 33 acres of Parcel 1 is located within the Middle Tonawanda Creek Watershed and the southern +/- 99 acres of the site is located within the Murder Creek Watershed. In addition, the entire 270-acre study area is located within the Niagara River/Lake Erie Regional Watershed.

During the Programmatic Site-Specific Environmental Assessment (PEA) site reconnaissance process in May 2013, a swale like feature, was observed in the southwestern portion of Parcel 1 and appeared to be surficially connected to a tributary to Murder Creek, located approximately 500 feet south of the property (VA, 2014). The closest surface water is on the northwest side of the intersection of I-90 and Route 77 (LAG, 2015). According to LA Group (LAG), there is a stream in this area that is fed by the 6’ x 10’ box culvert that flows under I-90. This stream receives discharge from the two package sewage treatment plants for the truck stops on the south side of the Thruway. There is flow in this stream year round as a result of these treatment plant discharges.

The on-site surveys found one intermittent stream that separates two active agricultural fields in the eastern section of Parcel 3 where it flows east to west until it reaches the central successional old field and flows north along the western boundary of Parcel 3. This feature crosses Indian Falls Road via a culvert. This stream connects with Tonawanda Creek (NYSDEC Class B Stream) approximately 0.3 miles north of the site. Water was only found in the northern most reach near Indian Falls Road. Off the southern boundary of the study area is an un-named tributary to Murder Creek. This feature was observed in the field but not mapped since it was not part of the Project area.

Although shallow groundwater occurs in the region, it is not anticipated that groundwater would be impacted by the Project. Groundwater is present at depths greater than 4-6 feet below ground surface in areas where cemetery operations are likely to occur. Deep excavation, significantly below the water table, is not anticipated. If limited areas of deeper excavation are required, or excavation is required in areas of the site where groundwater is shallower, appropriate groundwater engineering controls would be utilized during construction to ensure no long-term adverse impacts to groundwater. As such, construction-related groundwater impacts are anticipated to be less than significant.

Project Schedule

As previously described, the Western New York National Cemetery would be constructed and operated in phases. The first phase, Phase 1, will enable the VA to provide eligible Veterans and their families with a national cemetery of sufficient size and capacity to serve the projected needs in the Western New York region for at least the next 10 years. Phase 1 construction is anticipated to occur from 2016-2018. Future phases would undergo separate environmental assessments prior to design and construction of each phase.

Sediment and Erosion Control

A National Pollution Discharge Elimination System (NPDES) general permit will be sought from the state for the project for stormwater discharges. As part of the permit requirement, a Stormwater Pollution Prevention Plan (SWPPP) is in the process of being prepared for the Project by the VA and other contractors.

State Historic Preservation Office Consultation

Based on information available in the PEA Finding of No Significant Impact (FONSI), Phase I, II, and III cultural resource investigations have been conducted for Parcel 1. Additionally, the VA has negotiated a memorandum of understanding with the New York State Historic Preservation Office (SHPO) and the Tonawanda Seneca Nation specifying that the Nation will serve as the repository for any archeological resources/artifacts recovered at the Site (VA 2014). Furthermore, the VA has recently completed cultural resource investigations on Parcel 2. The findings were similar to the Parcel 1 (132-acre parcel) investigations; the VA is in the process of Section 106 consultations with the New York SHPO regarding the Parcel 2 findings.

As part of the Section 106 consultation, the VA will obtain written concurrence from the SHPO to document there will be no further concerns related to cultural resources.

Federal and New York State Listed Rare, Threatened and Endangered Species

According the NYSDEC Environmental Resource mapping tool, there are no rare plant or animals or significant natural communities mapped in the vicinity of the Project site. However, the website does indicate the potential for northern wild comfrey (*Cynoglossum virginianum* var. boreale), which is listed as a New York state-protected rare plant last documented in 1922. For any state or federal applications necessary for the project, written consultation seeking input from the NYSDEC Natural Heritage Program (for rare animals, rare plants, or significant natural communities) and USFWS (for federally-listed endangered and threatened species) must be conducted in order to obtain documented clearance. Results of the desktop analysis indicate the strong potential of four federally-listed species for the Project site; bog turtle (*Clemmys muhlenbergii*), eastern fringed orchid (*Platanthera leucophaea*), Houghton's goldenrod (*Solidago houghtonii*), and the norther long-eared bat.

A field investigation for the presence of these species or their habitat was conducted in April, August, and September 2015. None of the species identified during the desktop review were observed during field investigations. Some areas of potential habitat were identified for the norther long-eared bat including individual trees (hickory and dead standing wood) and tree stands of suitable size located within the beech/maple mesic forest and silver maple/ash swamp communities. Acceptable feeding/foraging range also exists within the project site forested areas and old field communities. The results of these assessments were formalized in a Biological Assessment Report for the Project and provided to the FWS on December 3, 2015 in order to formalize consultation through Section 7 of the Endangered Species Act (ESA).

The VA has designed the Project to avoid and minimize impacts to these communities to the greatest extent possible. As previously described, the VA will limit tree clearing activity to occur between October 1 and March 31 on the site to minimize any potential future impacts on the northern long-eared bat. As a result, the VA determined and the USFWS concurred that development of the project would result in an ESA determination of "may affect but not likely to adversely affect (MANLAA)" the northern long-eared bat. The concurrence of this ESA affect determination was obtained in December 2015 through formal consultation during the National Environmental Policy Act (NEPA) Specific Environmental Assessment (SEA) impact evaluation process and is included as **Attachment A**.

Wetland Mitigation

Wetland disturbance for this Phase 1 Project is anticipated to be 0.55 acres. Based on the ecological communities delineated in the field and the current Master Plan, approximately 0.11 acres of the total 0.55 acres are considered to be forested. Through correspondence with the USACE, wetland mitigation ratios for this site are anticipated to be 1:1 for emergent and shrub wetlands and 2:1 for forested wetlands; therefore, the VA anticipates that a total of 0.66 wetland mitigation credits will be needed. Ducks Unlimited has been contacted and has reserved 1.0 In-Lieu of Fee (ILF) credits in the Niagara Service Area to compensate for unavoidable impacts related to the Project.

Thank you for reviewing this application. If you need any additional information, please feel free to contact me at (202) 632-5879 or via email at Glenn.Elliott@va.gov for an immediate response, or William Trembath at (716) 923-1144 or via email at William.Trembath@aecom.com.

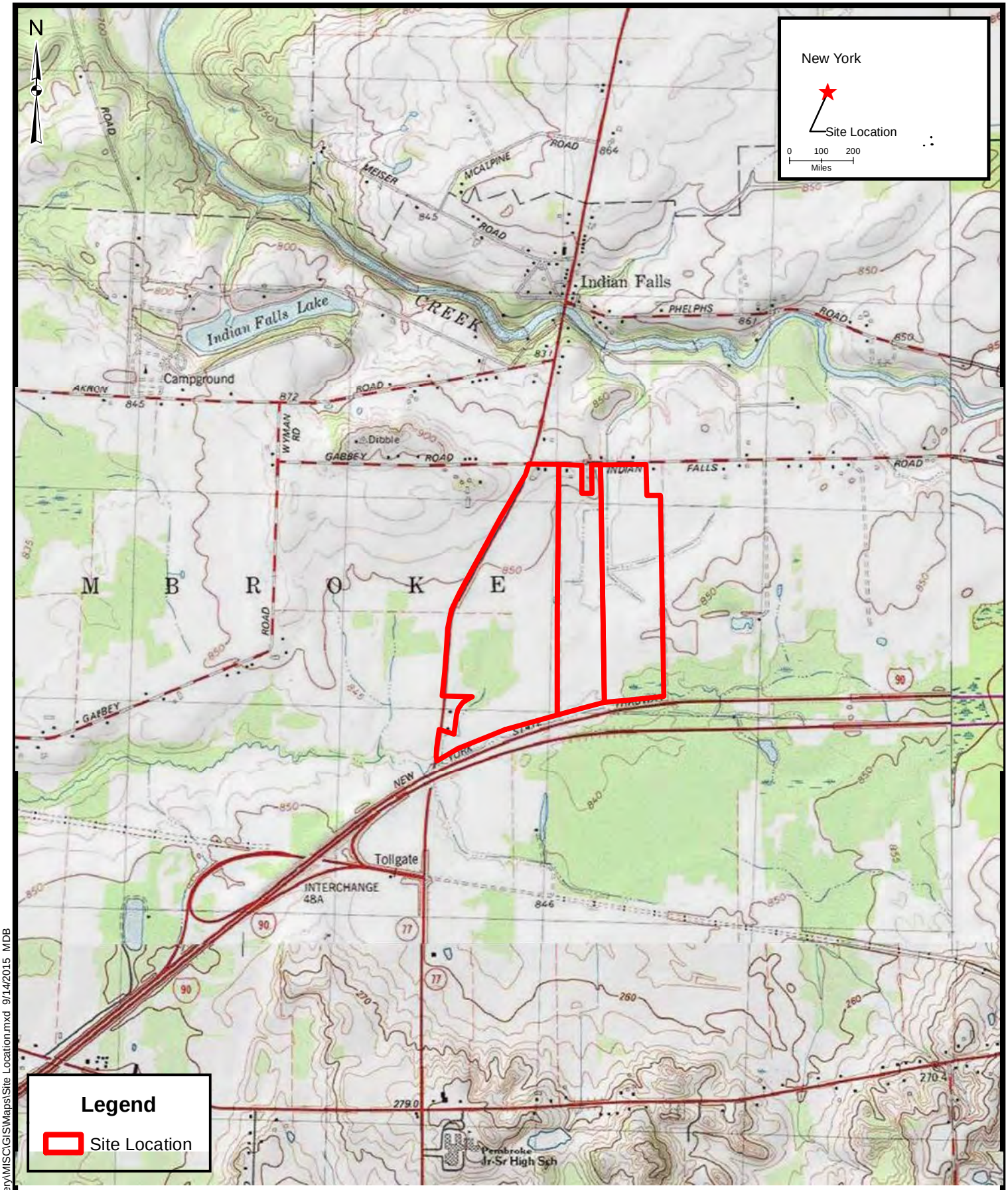
Sincerely,

Glenn Elliott
Environmental Engineer

William Trembath
Project Manager

Cc: Steve Metivier USACE Buffalo District
Tom Haley, Permitting- NYSDEC Region 8 Avon Office
Scott Jones, Wetland Biologist- NYSDEC Region 8 Avon Office
Andrew Glucksman, Mabbett & Associates, Inc
Kelley Peterman, AECOM

FIGURES



Source:
© 2013 National Geographic Society, i-cubed; 1:24:000-scale USGS Topographic Maps,
Akron SE, Corfu NE, Oakfield SW, Alexander NW

2,000 0 2,000 Feet

AECOM

SITE LOCATION MAP
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

FIGURE 1

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\Site Location.mxd 9/14/2015 MDB

N

ALLEGHANY RD

PARCEL 1: 132 Acres

PARCEL 2: 60 Acres

PARCEL 3: 77 Acres

Wetland 1
16.81 Acres

Wetland 2
46.55 Acres

Wetland 3
14.24 Acres

Wetland 4
3.10 Acres

Wetland 5
2.01 Acres

Wetland 6
3.39 Acres

I 90

I 90

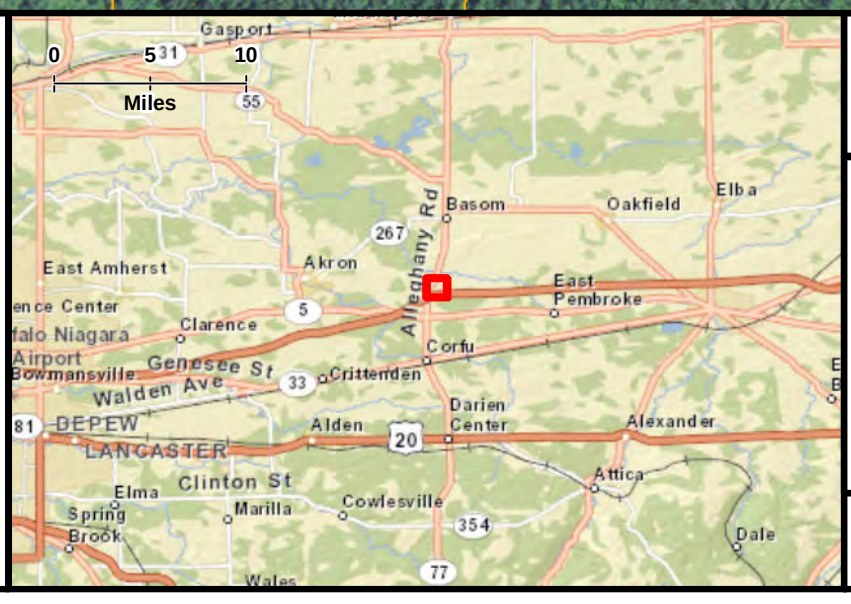
J:\Projects\60345076_VACemetery\MISC\GIS\Maps\DelineatedWetlands_Portrait_091815.mxd 10/14/2015

Legend

- Swale
- Wetland Continuation Line
- Stream
- Wetlands
- Site Location
- Parcel Boundary

Field Data Collection Information:

- *Data Collected on 4/28/15, 4/29/15, 8/26/15 - 8/31/15, 9/8/15*
- *Boundary coordinates were collected using a Trimble GeoXH with ESRI's ArcPad*
- *Data was Post-Processed using Trimble's GeoPathfinder Office*



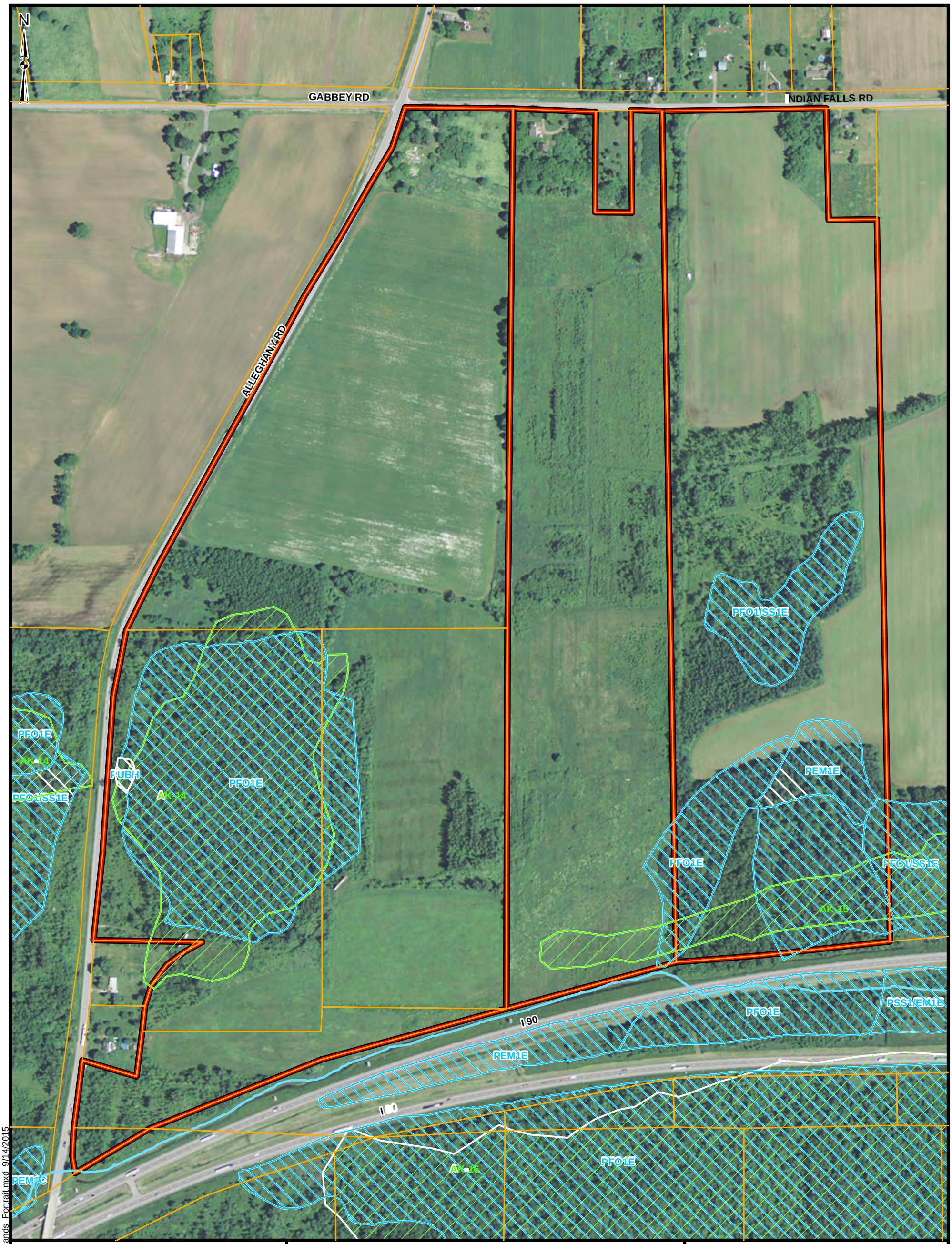
WETLAND & STREAM DELINEATION
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

Sources:
Aerial Photo: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
NYSDEC Wetlands and Streams: NYS GIS Clearinghouse, NYSDEC 2002
USFWS Wetlands: USFWS National Wetlands Inventory 2014

400 0 400 Feet

FIGURE 2

AECOM



Legend

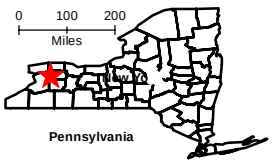
- NYSDEC Stream
- NYSDEC Wetlands
- USFWS NWI Wetlands
- Site Location
- Parcel Boundary

Field Data Collection Information:

- *Data Collected on 4/28/15, 4/29/15, 8/26/15 - 8/31/15, 9/8/15*
- *Boundary coordinates were collected using a Trimble GeoXH with ESRI's ArcPad*
- *Data was Post-Processed using Trimble's GeoPathfinder Office*

0 5 10
Miles

NWI & NYSDEC WETLANDS
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK



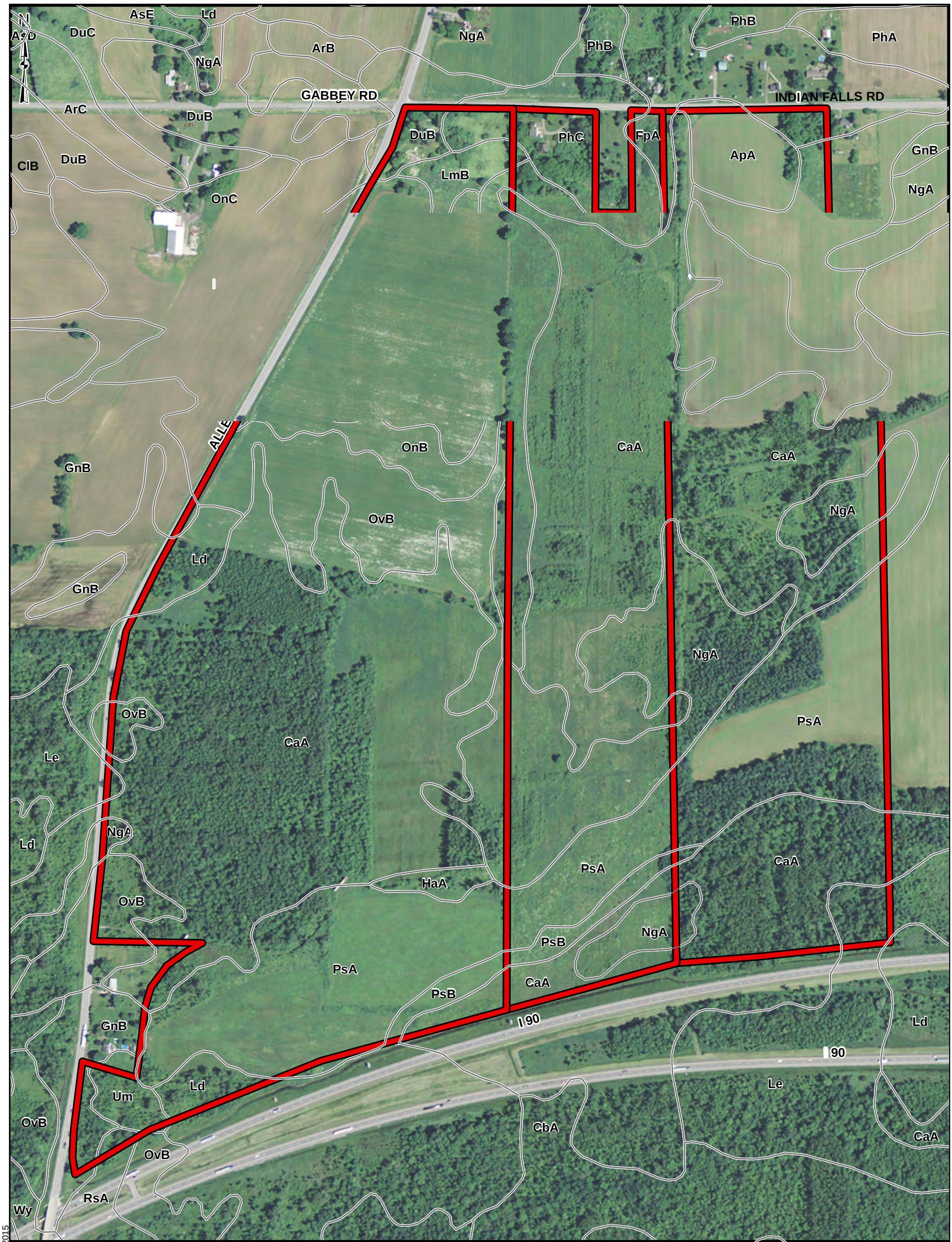
Sources:
Aerial Photo: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
NYSDEC Wetlands and Streams: NYS GIS Clearinghouse, NYSDEC 2002
USFWS Wetlands: USFWS National Wetlands Inventory 2014

400 0 400 Feet

FIGURE 3

AECOM

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\DEC_NWI_Wetlands_Portrait.mxd 9/14/2015



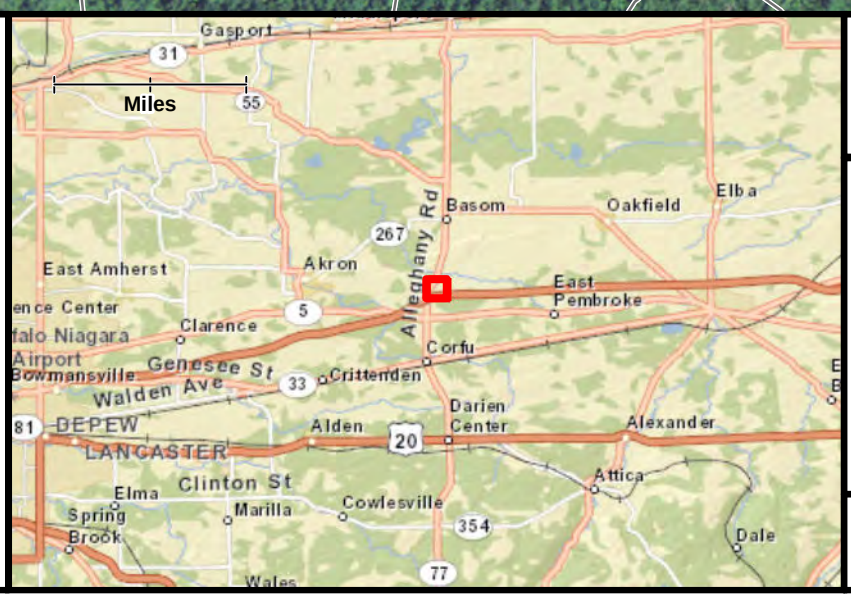
Legend

Site Location

Soil Boundary

Soils within Site Location:

Symbol	Description
ApA	Appleton silt loam, 0 to 3 percent slopes
CaA	Canandaigua silt loam, 0 to 2 percent slopes
DuB	Dunkirk silt loam, 2 to 6 percent slopes
FpA	Fredon gravelly loam, 0 to 3 percent slopes
GnA	Galen very fine sandy loam, 0 to 2 percent slopes
GnB	Galen very fine sandy loam, 2 to 6 percent slopes
HaA	Halsey silt loam, 0 to 4 percent slopes
Ld	Lamson very fine sandy loam
Le	Lamson mucky very fine sandy loam
LmA	Lima silt loam, 0 to 3 percent slopes
LmB	Lima silt loam, 3 to 8 percent slopes
NgA	Niagara silt loam, 0 to 2 percent slopes
OnA	Ontario loam, 0 to 3 percent slopes
OnB	Ontario loam, 3 to 8 percent slopes
OvB	Ovid silt loam, 3 to 8 percent slopes
PhC	Palmyra gravelly loam, 8 to 15 percent slopes
PsA	Phelps gravelly loam, 0 to 3 percent slopes
PsB	Phelps gravelly loam, 3 to 8 percent slopes
RsA	Romulus silt loam, 0 to 3 percent slopes
Um	Udorthents, smoothed



SOILS MAP
VA PROPOSED WESTERN NEW YORK NATIONAL CEMETERY
PEMBROKE, NEW YORK

Sources:
Aerial Imagery: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
Soils: USDA NCRS Geospatial Data Gateway 2015

400 0 400 Feet

FIGURE 4

AECOM

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\Soils.mxd 9/14/2015

EXHIBIT A

REPRESENTATIVE PHOTOGRAPHS

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
1	28April15

Description:

Wetland W-1

Photo No.	Date:
2	28April15

Description:

Upland area for W-1

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
3	28April15

Description:

Wetland W-2 eastern portion

Photo No.	Date:
4	28April15

Description:

Upland area for W-2 eastern portion

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
5	28April15

Description:

Wetland W-3

Photo No.	Date:
6	28April15

Description:

Upland area for W-3

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
7	28April15

Description:

Wetland W-4

Photo No.	Date:
8	28April15

Description:

Upland area for W-4

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
9	28April15

Description:

Wetland W-5

Photo No.	Date:
10	28April15

Description:

Upland area for W-5

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
11	29April15

Description:

Wetland W-2 western portion

Photo No.	Date:
12	29April15

Description:

Upland for W-2 western portion

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
13	27AUG15

Description:

Wetland W-1 (ext)

Photo No.	Date:
14	27AUG15

Description:

Upland area for W-1 (ext)

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
15	31AUG15

Description:

Wetland W-2 (ext)

Photo No.	Date:
16	31AUG15

Description:

Upland for W-2 (ext)

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
17	26AUG15

Description:

Wetland W-3 (ext)

Photo No.	Date:
18	26AUG15

Description:

Upland area for W-3 (ext)

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
19	28AUG15

Description:

Wetland W-6

Photo No.	Date:
20	28AUG15

Description:

Upland for W-6

PHOTOGRAPHIC LOG

AECOM

Title: USDVA Wetland Delineation	Location: Pembroke NY

Photo No.	Date:
21	26AUG15

Description:
Stream S-1

Photo No.	Date:
22	26AUG15

Description:

Stream S-1-south central

ATTACHMENT 1

Joint Permit Application Form

JOINT APPLICATION FORM

For Permits/Determinations to undertake activities affecting streams, waterways, waterbodies, wetlands, coastal areas and sources of water withdrawal.

New York State

You must separately apply for and obtain separate Permits/Determinations from each involved agency prior to proceeding with work. Please read all instructions.

US Army Corps of Engineers (USACE)

APPLICATIONS TO

1. NYS Department of Environmental Conservation

Check all permits that apply:

- ☐ Stream Disturbance
- ☐ Excavation and Fill in Navigable Waters
- ☐ Docks, Moorings or Platforms
- ☐ Dams and Impoundment Structures
- ☑ 401 Water Quality Certification
- ☐ Freshwater Wetlands
- ☐ Tidal Wetlands
- ☐ Coastal Erosion Management
- ☐ Wild, Scenic and Recreational Rivers
- ☐ Water Withdrawal
- ☐ Long Island Well
- ☐ Aquatic Vegetation Control
- ☐ Aquatic Insect Control
- ☐ Fish Control
- ☐ Incidental Take of Endangered/Threatened Species

☑ I am sending this application to this agency.

2. US Army Corps of Engineers

Check all permits that apply:

- ☑ Section 404 Clean Water Act
- ☐ Section 10 Rivers and Harbors Act
- ☐ Nationwide Permit(s) - Identify Number(s):

_____

_____

Preconstruction Notification - ☐ Y / ☐ N

☑ I am sending this application to this agency.

3. NYS Office of General Services

Check all permits that apply:

- ☐ State Owned Lands Under Water
  - ☐ Utility Easement (pipelines, conduits, cables, etc.)
  - ☐ Docks, Moorings or Platforms

☐ I am sending this application to this agency.

4. NYS Department of State

Check if this applies:

- ☐ Coastal Consistency Concurrence

☐ I am sending this application to this agency.

5. **Name of Applicant** (use full name)	**Applicant** must be:
U.S. Department of Veterans Affairs	☑ Owner ☐ Operator ☐ Lessee (check all that apply)
Mailing Address 425 I Street, NW	
Post Office City Washington, DC	Taxpayer ID (If applicant is NOT an individual):
State DC Zip Code 20001	
Telephone (daytime) 800-827-1000	Email

6. **Name of Facility or Property Owner** (if different than Applicant)	
Mailing Address	
Post Office City	
State	Zip Code
Telephone (daytime)	Email

7. **Contact/Agent Name**
Glenn Elliott
Company Name U.S. Department of Veterans Affairs
Mailing Address 425 I Street, NW
Post Office City Washington, DC
State DC Zip Code
Telephone (daytime) (202) 632-5879
Email Glenn.Elliott@va.gov

8. **Project / Facility Name**	Property Tax Map Section / Block / Lot Number
Western New York National Cemetery	10.-1-4 10.-1-29.2
Project Location - Provide directions and distances to roads, bridges and bodies of waters: The Indian Falls site is located on the southeast corner of Indian Falls Road and Alleghany Road (Route 77) in the Town of Pembroke.	
Street Address, if applicable 1232 Indian Falls Road	Post Office City NY State NY Zip Code 14036
Town / Village / City Pembroke	County Genesee
Name of USGS Quadrangle Map Akron SE	Stream/Water Body Name

Location Coordinates: Enter NYTMs in kilometers, **OR** Latitude/Longitude

NYTM-E	NYTM-N	Latitude	Longitude
		-78.396045	43.015354

For Agency Use Only DEC Application Number: USACE Number:

RESET

Submit this completed page as part of your Application.

9. **Project Description and Purpose:** Provide a complete narrative description of the proposed work and its purpose. Attach additional page(s) if necessary. Include: description of current site conditions and how the site will be modified by the proposed project; structures and fill materials to be installed; type and quantity of materials to be used (i.e., square ft of coverage and cubic yds of fill material and/or structures below ordinary/mean high water) area of excavation or dredging, volumes of material to be removed and location of dredged material disposal or use; work methods and type of equipment to be used; pollution control methods and mitigation activities proposed to compensate for resource impacts; and where applicable, the phasing of activities. **ATTACH PLANS ON SEPARATE PAGES.**

The purpose of the Project is to develop a new National Cemetery and ancillary facilities for veterans and their eligible family members in western New York. The Project Study Area is an approximately 271-acre multiple land parcel site located at 1232 Indian Falls Road in the Town of Pembroke, Genesee County, New York (Figure 1). The 271 acre Study Area is comprised of three land parcels. Parcel 1 is approximately 132 acres and is located on the west side of the study area. Parcel 2 is in the central section of the study area and is approximately 62 acres. Parcel 3 is located on the east side of the study area and is approximately 77 acres in size.

The proposed Project site is predominately reverting old agriculture fields, active agriculture fields and natural areas contauining some wetlands.

The proposed National Cemetery is expected to include a Public Information Center/Administration Building, Honor Guard Building, maintenance structure, access to public highways through a main entrance, and supporting infrastructure including parking, irrigation, landscaping, visitor amenities and signage.

Final construction and mitigation plans are presently in development.

Proposed Use: ☐ Private ☑ Public ☐ Commercial	Proposed Start Date: Oct 1 2016	Estimated Completion Date: April 1 2018

Has Work Begun on Project? ☐ Yes ☑ No If Yes, explain.

Will Project Occupy Federal, State or Municipal Land? ☑ Yes ☐ No If Yes, please specify.

US Department of Veterans Affairs

10. List Previous Permit / Application Numbers (if any) and Dates:

11. Will this project require additional Federal, State, or Local Permits including zoning changes? ☐ Yes ☑ No If yes, please list:

12. **Signatures.** If applicant is not the owner, both must sign the application.

I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than $10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

Signature of Applicant	Printed Name	Title	Date
	Glenn Elliott	CFM	2/9/16
Signature of Owner	Printed Name	Title	Date
Signature of Agent	Printed Name	Title	Date

For Agency Use Only **DETERMINATION OF NO PERMIT REQUIRED**

Agency Project Number _____

_____ (Agency Name) has determined that No Permit is required from this Agency for the project described in this application.

Agency Representative: Name (printed) _____ Title _____

Signature _____ Date _____

ATTACHMENT 2

ENVIRONMENTAL ASSESSMENT SHORT FORM

617.20
Appendix B
Short Environmental Assessment Form

Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information

U.S. Department of Veterans Affairs

Name of Action or Project:

Western New York National Cemetery

Project Location (describe, and attach a location map):

1232 Indian Falls Road, Pembroke NY 14036

Brief Description of Proposed Action:

The purpose of the Project is to develop a new National Cemetery and ancillary facilities for veterans and their eligible family members in western New York. The Project Study Area is an approximately 271-acre multiple land parcel site located at 1232 Indian Falls Road in the Town of Pembroke, Genesee County, New York (Figure 1). The 271 acre Study Area is comprised of three land parcels. Parcel 1 is approximately 132 acres and is located on the west side of the study area. Parcel 2 is in the central section of the study area and is approximately 62 acres. Parcel 3 is located on the east side of the study area and is approximately 77 acres in size.

Name of Applicant or Sponsor:	Telephone: (202) 632-5879
Glenn Elliott	E-Mail: Glenn.Elliott@va.gov

Address:

425 I Street, NW

City/PO:	State:	Zip Code:
Washington, D.C.	DC	20001

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: Joint Application for Permit: Section 404 of the Clean Water Act, and NYS Article 24 (Wetlands) USACE NYSDEC	☐	☑

3.a. Total acreage of the site of the proposed action? 271 acres
b. Total acreage to be physically disturbed? TBD acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 271 acres

4. Check all land uses that occur on, adjoining and near the proposed action.

☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☑ Residential (suburban)
☐ Forest ☑ Agriculture ☐ Aquatic ☐ Other (specify): _____
☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☐	☑
b. Consistent with the adopted comprehensive plan?	☐	☐	☑

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☑
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	☑	☐
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐
b. Are public transportation service(s) available at or near the site of the proposed action?	☐	☑
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	☑	☐
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	☐	☑
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____	☐	☑
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____	☐	☑
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	☑	☐
b. Is the proposed action located in an archeological sensitive area?	☑	☐
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☐	☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	☐	☑
It is anticipated that wetlands permits and Jurisdictional Determination will be required from the NYSDEC and USACE via a Joint Application with NYSDEC Article 24-Freshwater Wetlands, and Section 401-Water Quality Certification, and Section 404 of the Clean Water Act.		

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☑ Forest ☑ Agricultural/grasslands ☐ Early mid-successional

☑ Wetland ☐ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	☐	☑
16. Is the project site located in the 100 year flood plain?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,		
a. Will storm water discharges flow to adjacent properties? ☑ NO ☐ YES	☐	☑
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: ☑ NO ☐ YES		
A Stormwater Pollution and Prevention Plan is being prepared.		

	NO	YES
18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size:	✓	
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	✓	
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	✓	

I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor name: Glenn Elliott Date: 2/9/16

Signature:

Part 2 - Impact Assessment. The Lead Agency is responsible for the completion of Part 2. Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?		
2. Will the proposed action result in a change in the use or intensity of use of land?		
3. Will the proposed action impair the character or quality of the existing community?		
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?		
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?		
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?		
7. Will the proposed action impact existing: a. public / private water supplies?		
b. public / private wastewater treatment utilities?		
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?		
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?		

	No, or small impact may occur	Moderate to large impact may occur
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	☐	☐
11. Will the proposed action create a hazard to environmental resources or human health?	☐	☐

Part 3 - Determination of significance. The Lead Agency is responsible for the completion of Part 3. For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Name of Lead Agency	Date
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

PRINT

ATTACHMENT 3

CORRESPONDENCE

United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

December 11, 2015

Mr. Glenn Elliott
Environmental Engineer
Department of Veterans Affairs
Office of Construction and Facilities Management
Washington, DC 20420

Dear Mr. Elliott:

This responds to your December 3, 2015, letter regarding a proposed National Cemetery in the Town of Pembroke, Genesee County, New York.

Pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), the Department of Veterans Affairs previously consulted with the U.S. Fish and Wildlife Service (Service) on this project. However, we understand that the proposed action has slightly changed and two additional tracts may be acquired. The Department of Veterans Affairs has determined that the new proposed project may affect, but is not likely to adversely affect the federally-listed threatened northern long-eared bat (*Myotis septentrionalis*). Given the location (outside any known colony home range), extent of tree removal (<7 acres), and the proposed conservation measures (e.g., conducting tree removal between October 1 and March 31), we do not anticipate any measurable impacts to the northern long-eared bat. Therefore, we concur with your determination.

No further coordination or consultation under the ESA is required with the Service at this time. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of federally-listed and proposed endangered and threatened species in New York is available for your information. Until the proposed project is complete, we recommend that you check our website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed projects is current.*

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the ESA. This response does not preclude additional Service comments under other legislation.

Any additional information regarding the proposed project and its potential to impact listed species should be coordinated with both this office and with the New York State Department of Environmental Conservation.

Thank you for your time. If you require additional information or assistance please contact Robyn Niver at (607) 753-9334. Future correspondence with us on this project should reference project file 120401.

Sincerely,

Patricia Cole

for David A. Stilwell
Field Supervisor

*Additional information referred to above may be found on our website at: http://www.fws.gov/northeast/nyfo/es/section7.htm

cc: NYSDEC, Avon, NY (Env. Permits)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife and Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • Fax: (518) 402-8925
Website: www.dec.ny.gov

November 02, 2015

Robert Rung
AECOM
257 West Genesee St., Suite 400
Buffalo, NY 14202

Re: Pembroke Veterans Affairs Cemetery Project
Town/City: Pembroke. County: Genesee.

Dear Mr. Rung:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur, or may occur, on your site or in the immediate vicinity of your site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our database is continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

Andrea Chaloux

Andrea Chaloux
Environmental Review Specialist
New York Natural Heritage Program

1177

The following state-listed animals have been documented in the vicinity of your project site.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing..

For information about potential impacts of your project on these populations, how to avoid, minimize, or mitigate any impacts, and any permit considerations, contact the Wildlife Manager or the Fisheries Manager at the NYSDEC Regional Office for the region where the project is located. A listing of Regional Offices is at http://www.dec.ny.gov/about/558.html.

The following species have been documented within 4 mi of the project site. Individual animals may travel 5 mi from documented locations.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Mammals				
Northern Long-eared Bat *Hibernaculum*	*Myotis septentrionalis*	Threatened	Threatened	14148

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.

The following rare plants and rare animals have historical records at your project site, or in its vicinity.

The following rare plants and animals were documented in the vicinity of the project site at one time, but have not been documented there since 1979 or earlier, and/or there is uncertainty regarding their continued presence. There is no recent information on these plants and animals in the vicinity of the project site and their current status there is unknown. In most cases the precise location of the plant or animal in this vicinity at the time it was last documented is also unknown.

If suitable habitat for these plants or animals is present in the vicinity of the project site, it is possible that they may still occur there. We recommend that any field surveys to the site include a search for these species, particularly at sites that are currently undeveloped and may still contain suitable habitat.

COMMON NAME	*SCIENTIFIC NAME*	*NYS LISTING*	*HERITAGE CONSERVATION STATUS*
Vascular Plants			
Northern Wild Comfrey	*Cynoglossum virginianum var. boreale*	Endangered	Critically Imperiled in NYS
1922-06-04: Indian Falls.			2985

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife and Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • Fax: (518) 402-8925
Website: www.dec.ny.gov

September 04, 2015

Forest Rung
AECOM
257 West Genesee St., Suite 400
Buffalo, NY 14202

Re: Pembroke Veterans Affairs Cemetery Project
Town/City: Pembroke. County: Genesee.

Dear Forest Rung:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur, or may occur, on your site or in the immediate vicinity of your site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our database is continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

Andrea Chaloux

Andrea Chaloux
Environmental Review Specialist
New York Natural Heritage Program

921

The following state-listed animals have been documented in the vicinity of your project site.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing..

For information about potential impacts of your project on these populations, how to avoid, minimize, or mitigate any impacts, and any permit considerations, contact the Wildlife Manager or the Fisheries Manager at the NYSDEC Regional Office for the region where the project is located. A listing of Regional Offices is at http://www.dec.ny.gov/about/558.html.

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COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Mammals				
Northern Long-eared Bat *Hibernaculum*	*Myotis septentrionalis*	Threatened	Threatened	14148

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

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If suitable habitat for these plants or animals is present in the vicinity of the project site, it is possible that they may still occur there. We recommend that any field surveys to the site include a search for these species, particularly at sites that are currently undeveloped and may still contain suitable habitat.

COMMON NAME	*SCIENTIFIC NAME*	*NYS LISTING*	*HERITAGE CONSERVATION STATUS*
Vascular Plants			
Northern Wild Comfrey	*Cynoglossum virginianum var. boreale*	Endangered	Critically Imperiled in NYS
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United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 LUKER ROAD
CORTLAND, NY 13045
PHONE: (607)753-9334 FAX: (607)753-9699
URL: www.fws.gov/northeast/nyfo/es/section7.htm

Consultation Code: 05E1NY00-2015-SLI-1325 August 17, 2015
Event Code: 05E1NY00-2015-E-03739
Project Name: Pembroke Veterans Affairs Cemetery Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: http://www.fws.gov/northeast/nyfo/es/section7.htm

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (

http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Services wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: Pembroke Veterans Affairs Cemetery Project

Official Species List

Provided by:

New York Ecological Services Field Office
3817 LUKER ROAD
CORTLAND, NY 13045
(607) 753-9334
http://www.fws.gov/northeast/nyfo/es/section7.htm

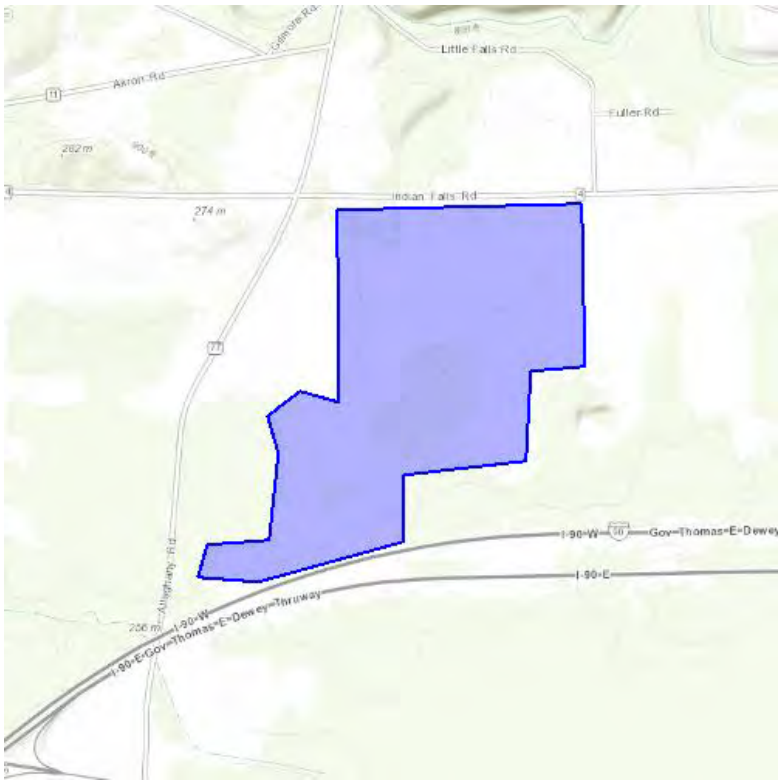
Consultation Code: 05E1NY00-2015-SLI-1325
Event Code: 05E1NY00-2015-E-03739

Project Type: ** OTHER **

Project Name: Pembroke Veterans Affairs Cemetery Project
Project Description: The U.S. Department of Veterans Affairs National Cemetery Administration proposes to develop a parcel of land to establish a National Veterans Cemetery. The parcel is located north of the NYS 90 Thruway, east of route 77 and south of Indian falls Road in the Town of Pembroke, Genesee County, New York. The proposed construction will include facilities and infrastructure associated with the operation and maintenance of the cemetery.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-78.40356826985952 43.00921506195097, -78.40108871430857 43.0090755876418, -78.3950805661152 43.01026110534387, -78.3950805661152 43.01228340704847, -78.39002609514864 43.012701805257585, -78.38983535970328 43.015421328926685, -78.3876419099397 43.01556078882552, -78.38773727504304 43.020441670433534, -78.39784622221487 43.02023249709406, -78.39775085711153 43.01444510459734, -78.39937210053903 43.014793757377845, -78.40070724865654 43.014026716349626, -78.4002304074238 43.01291100425088, -78.40061187831452 43.01033084119204, -78.40318679896882 43.01019136941653, -78.40356826985952 43.00921506195097)))

Project Counties: Genesee, NY

Endangered Species Act Species List

There are a total of 2 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Flowering Plants	**Status**	**Has Critical Habitat**	**Condition(s)**
Houghton's goldenrod *(Solidago houghtonii)*	Threatened		
Mammals			
Northern long-eared Bat *(Myotis septentrionalis)*	Threatened		

Critical habitats that lie within your project area

There are no critical habitats within your project area.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 LUKER ROAD
CORTLAND, NY 13045
PHONE: (607)753-9334 FAX: (607)753-9699
URL: www.fws.gov/northeast/nyfo/es/section7.htm

Consultation Code: 05E1NY00-2015-SLI-1420 September 02, 2015
Event Code: 05E1NY00-2015-E-04205
Project Name: Pembroke Veterans Affairs Cemetery Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: http://www.fws.gov/northeast/nyfo/es/section7.htm

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We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: Pembroke Veterans Affairs Cemetery Project

Official Species List

Provided by:

New York Ecological Services Field Office
3817 LUKER ROAD
CORTLAND, NY 13045
(607) 753-9334
http://www.fws.gov/northeast/nyfo/es/section7.htm

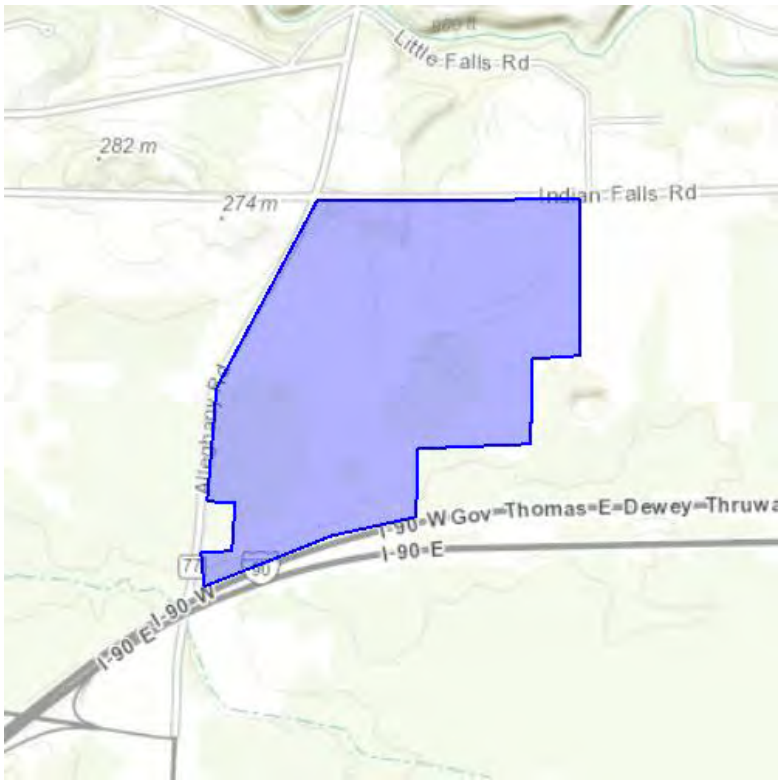
Consultation Code: 05E1NY00-2015-SLI-1420
Event Code: 05E1NY00-2015-E-04205

Project Type: ** OTHER **

Project Name: Pembroke Veterans Affairs Cemetery Project
Project Description: The U.S. Department of Veterans Affairs National Cemetery Administration proposes to develop a parcel of land to establish a National Veterans Cemetery. The parcel is located north of the NYS 90 Thruway, east of route 77 and south of Indian falls Road in the Town of Pembroke, Genesee County, New York. The proposed construction will include facilities and infrastructure associated with the operation and maintenance of the cemetery.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-78.40442658198299 43.00795281323182, -78.39868068913347 43.00958815364453, -78.3949851997022 43.01022623906601, -78.394880296255 43.01243682090201, -78.38983535839361 43.01260766744126, -78.38973999329028 43.01536205937926, -78.38761329752741 43.01545968124439, -78.38760376311257 43.020609009118665, -78.39936733202194 43.02053579827561, -78.40389728575246 43.014399778934546, -78.40430736643611 43.0107422816112, -78.40305328572867 43.0106899805617, -78.40318203045172 43.009099995261735, -78.40456485850154 43.00906512760651, -78.40442658198299 43.00795281323182)))

Project Counties: Genesee, NY

Endangered Species Act Species List

There are a total of 2 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Flowering Plants	**Status**	**Has Critical Habitat**	**Condition(s)**
Houghton's goldenrod *(Solidago houghtonii)*	Threatened		
Mammals			
Northern long-eared Bat *(Myotis septentrionalis)*	Threatened		

Critical habitats that lie within your project area

There are no critical habitats within your project area.

United States Department of the Interior

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New York Ecological Services Field Office
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CORTLAND, NY 13045
PHONE: (607)753-9334 FAX: (607)753-9699
URL: www.fws.gov/northeast/nyfo/es/section7.htm

Consultation Code: 05E1NY00-2015-SLI-1444 September 08, 2015
Event Code: 05E1NY00-2015-E-04251
Project Name: Pembroke N.Y. VA Cemetery Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: http://www.fws.gov/northeast/nyfo/es/section7.htm

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (

http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Services wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: Pembroke N.Y. VA Cemetery Project

Official Species List

Provided by:

New York Ecological Services Field Office
3817 LUKER ROAD
CORTLAND, NY 13045
(607) 753-9334
http://www.fws.gov/northeast/nyfo/es/section7.htm

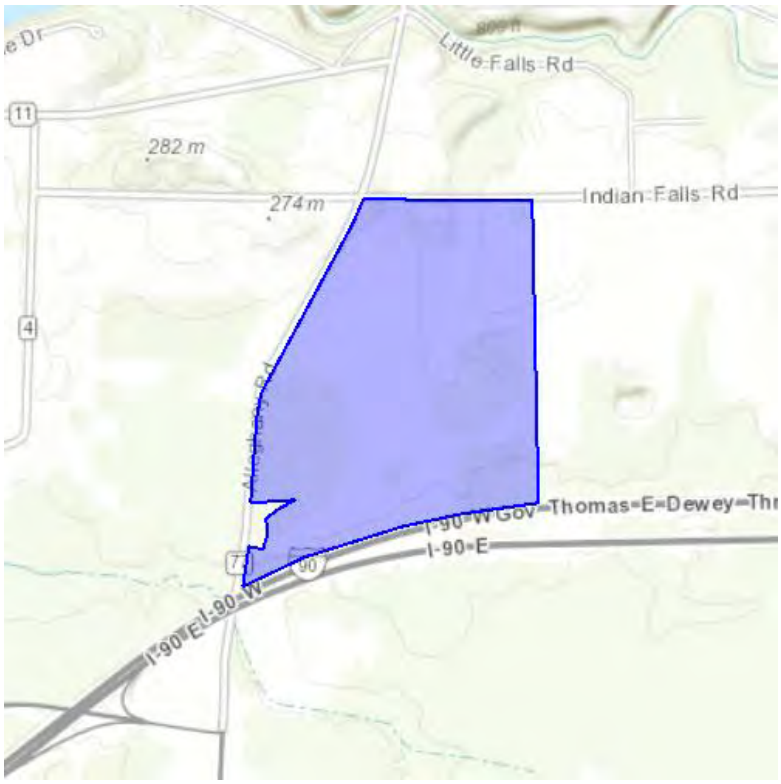
Consultation Code: 05E1NY00-2015-SLI-1444
Event Code: 05E1NY00-2015-E-04251

Project Type: ** OTHER **

Project Name: Pembroke N.Y. VA Cemetery Project
Project Description: The USDVANCA proposes to develop the land parcels and establish a National Veterans Cemetery at the site in the Town of Pembroke, Genesee County, New York. The proposed construction will include facilities and infrastructure associated with the operation and maintenance of the cemetery.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-78.39171886371332 43.02056368824487, -78.3914327625098 43.01059583613031, -78.3949136739102 43.01022972506025, -78.39756011970167 43.00979387495038, -78.40206623084669 43.00876525752037, -78.40483188694634 43.00782379576622, -78.40454578508796 43.009148811609805, -78.40390205492439 43.00906164058852, -78.40373516075488 43.009567232130664, -78.40375900334038 43.01005538548321, -78.40321064089949 43.01035176232607, -78.40244770042771 43.010683005453046, -78.40447425864113 43.01059583613031, -78.40418815678277 43.01340261779935, -78.40399742264708 43.014221964708895, -78.39984893980727 43.01978277478989, -78.39939594508904 43.02061946760678, -78.39171886371332 43.02056368824487)))

Project Counties: Genesee, NY

Endangered Species Act Species List

There are a total of 2 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Flowering Plants	**Status**	**Has Critical Habitat**	**Condition(s)**
Houghton's goldenrod *(Solidago houghtonii)*	Threatened		
Mammals			
Northern long-eared Bat *(Myotis septentrionalis)*	Threatened		

Critical habitats that lie within your project area

There are no critical habitats within your project area.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

October 6, 2015

Mr. Glenn Elliott
Environmental Engineer
U.S. Department of Veterans Affairs
Office of Construction and Facilities Management
Washington, DC 20420

Dear Mr. Elliott:

This responds to your October 1, 2015, letter regarding a proposed National Cemetery in the Town of Pembroke, Genesee County, New York.

Pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), the Department of Veterans Affairs has determined that the proposed project may affect, but is not likely to adversely affect, the federally-listed threatened northern long-eared bat (*Myotis septentrionalis*). Given the location (outside any known colony home range), extent of tree removal (~5.3 acres), and the proposed conservation measures (e.g., conducting tree removal between October 1 and March 31), we do not anticipate any measurable impacts to the northern long-eared bat. Therefore, we concur with your determination.

No further coordination or consultation under the ESA is required with the U.S. Fish and Wildlife Service (Service) at this time. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of federally-listed and proposed endangered and threatened species in New York is available for your information. Until the proposed project is complete, we recommend that you check our website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project is current.*

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the ESA. This response does not preclude additional Service comments under other legislation.

Any additional information regarding the proposed project and its potential to impact listed species should be coordinated with both this office and with the New York State Department of Environmental Conservation.

Thank you for your time. If you require additional information or assistance please contact Robyn Niver at 607-753-9334. Future correspondence with us on this project should reference project file 120401.

Sincerely,

Patricia Cole

for David A. Stilwell
Field Supervisor

*Additional information referred to above may be found on our website at: http://www.fws.gov/northeast/nyfo/es/section7.htm

cc: NYSDEC, Avon, NY (Env. Permits)

DEPARTMENT OF THE ARMY
BUFFALO DISTRICT, CORPS OF ENGINEERS
1776 NIAGARA STREET
BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF:

March 30, 2016

Regulatory Branch

SUBJECT: Acceptance of Wetland Delineation, Application No. 2016-00221.

Glenn Elliott
U.S. Department of Veterans Affairs
425 I Street NW
Washington, DC 20001

Dear Mr. Elliott:

This pertains to your request for a jurisdictional determination for the property located on the southeast corner of Indian Falls Road and Alleghany Road (Route 77), in the Town of Pembroke, Genesee County, New York.

The Corps of Engineers regulatory responsibilities under Section 404 of the Clean Water Act (CWA) establishes jurisdiction over the discharge of dredged or fill material into waters of the United States, including wetlands.

The wetland delineation you submitted confirms that wetlands under Federal jurisdiction exist on the property. I would like to point out that the Federal wetland boundary located on your property, as shown on the attached drawings, was confirmed on November 12, 2015, and will remain valid for a period of five (5) years from the date of this correspondence unless new information warrants revision of the delineation before the expiration. Further, this delineation/determination has been conducted to identify the limits of the Corps CWA jurisdiction for the particular site identified in this request. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are United States Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resource Conservation Service prior to starting work.

Based upon my review of the submitted delineation and on-site observations, I have determined that the wetlands (Wetland 1, Wetland 2/4, Wetland 3, Wetland 5 and Wetland 6) and the tributaries (Unnamed Non-RPW Tributary 1 to Tonawanda Creek, Unnamed Seasonal RPW Tributary to Tonawanda Creek and the Unnamed Seasonal RPW Tributary to Murder Creek) on the subject parcel are part of a surface water tributary system to a navigable water of the United States as noted on the attached Jurisdictional Determination (JD) form. Therefore, the wetlands and tributaries are regulated under Section 404 of the CWA. Department of the Army authorization is required if you propose a discharge of dredged or fill material in this area.

Regulatory Branch

SUBJECT: Acceptance of Wetland Delineation, Application No. 2016-0022.

Finally, this letter contains an approved JD for the subject parcel. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal the above determination, you must submit a completed RFA form within 60 days of the date on this letter to the Great Lakes/Ohio River Division Office at the following address:

Attn: Jacob Siegrist
Great Lakes and Ohio River Division
CELRD-PD-REG
550 Main Street, Room 10524
Cincinnati, OH 45202-3222
Phone: 513-684-2699; FAX: 513-684-2460

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete; that it meets the criteria for appeal under 33 C.F.R. part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by May 30, 2016.

It is not necessary to submit an RFA to the Division office if you do not object to the determination in this letter.

A copy of this correspondence has been sent to Joseph Lyons of AECOM.

Questions pertaining to this matter should be directed to me at 716-879-4304, by writing to the following address: U.S. Army Corps of Engineers, 1776 Niagara Street, Buffalo, New York 14207, or by e-mail at: molly.a.connerton@usace.army.mil

Sincerely,

Molly Connerton

Molly Connerton
Biologist

Enclosures

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: U.S. Department of Veterans Affairs		File Number: 2016-00221	Date: March 30, 2016
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
x	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact: Molly Connerton U.S. Army Corps of Engineers 1776 Niagara Street Buffalo, New York 14207 716-879-4304 molly.a.connerton@usace.army.mil	If you only have questions regarding the appeal process you may also contact: Attn: Jacob Siegrist Great Lakes and Ohio River Division CELRD-PD-REG 550 Main Street, Room 10524 Cincinnati, OH 45202-3222 513-684-2699; FAX 513-684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): March 30, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Buffalo District, U.S. Department of Veteran Affairs-National Cemetery, 2016-00221, JD Form 1 of 3, Wetland 1, Unnamed Non-RPW Tributary 1 to Tonawanda Creek

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:New York County/parish/borough: Erie City: Pembroke
Center coordinates of site (lat/long in degree decimal format): Lat. 43.01° N, Long. -78.39° W.
Universal Transverse Mercator: 17
Name of nearest waterbody: Unnamed Non-RPW Tributary 1 to Tonawanda Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Erie Canal
Name of watershed or Hydrologic Unit Code (HUC): Eastern Lake Erie

- ☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
- ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- ☒ Office (Desk) Determination. Date: February 29, 2016
- ☒ Field Determination. Date(s): November 12, 2015

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

- ☐ Waters subject to the ebb and flow of the tide.
- ☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
   - ☐ TNWs, including territorial seas
   - ☐ Wetlands adjacent to TNWs
   - ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
   - ☒ Non-RPWs that flow directly or indirectly into TNWs
   - ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
   - ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
   - ☒ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
   - ☐ Impoundments of jurisdictional waters
   - ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
   Non-wetland waters: 2348 (Unnamed Non-RPW Tributary 1 to Tonawanda Creek-which includes the three finger swales off of the main branch of the tributary) linear feet: width (ft) and/or acres.
   Wetlands: Wetland 1 (16.81) acres.

   c. **Limits (boundaries) of jurisdiction** based on: **1987 Delineation Manual**
   Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   - ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: .

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[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW: .

   Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

   (i) **General Area Conditions:**
   Watershed size: 2square miles
   Drainage area: 2 square miles
   Average annual rainfall: 40 inches
   Average annual snowfall: 90 inches

   (ii) **Physical Characteristics:**
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☒ Tributary flows through 3 tributaries before entering TNW.

   Project waters are 15-20 river miles from TNW.
   Project waters are 1 (or less) river miles from RPW.
   Project waters are 15-20 aerial (straight) miles from TNW.
   Project waters are 1 (or less) aerial (straight) miles from RPW.
   Project waters cross or serve as state boundaries. Explain: The Unnamed Non-RPW Tributary 1 to Tonawanda Creek doesn't cross or serve as state boundaries.

   Identify flow route to TNW[5]: Wetland 1 is directly abutting the Unnamed Non-RPW Tributary 1 to Tonawanda Creek (that has three finger swales branching off of the main branch tributary) which flows north through Wetland 1 for

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

approximately 2348 linear feet and empties directly into the Unnamed Seasonal RPW Tributary to Tonawanda Creek that flows north onsite and empties directly into an Unnamed RPW Tributary to Tonawanda Creek offsite which flows north for 2370 linear feet and empties into Tonawanda Creek, an RPW which then flows west for approximately 20 miles and empties into the Erie Canal, a TNW.
Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☒ Manipulated (man-altered). Explain: The Unnamed Non-RPW Trib 1 to Tonawanda Creek has been altered due mainly to farming activities.

Tributary properties with respect to top of bank (estimate):
Average width: 5 feet
Average depth: 5 feet
Average side slopes: **3:1**.

Primary tributary substrate composition (check all that apply):
☒ Silts ☐ Sands ☐ Concrete
☐ Cobbles ☐ Gravel ☐ Muck
☐ Bedrock ☒ Vegetation. Type/% cover:
☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: The Unnamed Non-RPW Trib 1 to Tonawanda Creek is stable.
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): 3 %

(c) Flow:
Tributary provides for: **Ephemeral flow**
Estimate average number of flow events in review area/year: **6-10**
Describe flow regime: The Unnamed Non-RPW Trib 1 toTonawanda Creek flows during snow melt, wet periods and following rain events.
Other information on duration and volume: .

Surface flow is: **Discrete and confined**. Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):
☐ clear, natural line impressed on the bank
☐ changes in the character of soil
☐ shelving
☒ vegetation matted down, bent, or absent
☐ leaf litter disturbed or washed away
☐ sediment deposition
☐ water staining
☐ other (list):
☐ the presence of litter and debris
☐ destruction of terrestrial vegetation
☐ the presence of wrack line
☐ sediment sorting
☐ scour
☐ multiple observed or predicted flow events
☒ abrupt change in plant community
☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
☐ High Tide Line indicated by:
☐ oil or scum line along shore objects
☐ fine shell or debris deposits (foreshore)
☐ physical markings/characteristics
☐ tidal gauges
☐ other (list):
☐ Mean High Water Mark indicated by:
☐ survey to available datum;
☐ physical markings;
☐ vegetation lines/changes in vegetation types.

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: The Unnamed Non-RPW Trib 1 to Tonawanda Creek is clear, no oily film or residue was observed.

Identify specific pollutants, if known: .

(iv) Biological Characteristics. Channel supports (check all that apply):

☐ Riparian corridor. Characteristics (type, average width): .

☐ Wetland fringe. Characteristics: .

☒ Habitat for:

☐ Federally Listed species. Explain findings: .

☐ Fish/spawn areas. Explain findings: .

☐ Other environmentally-sensitive species. Explain findings: .

☒ Aquatic/wildlife diversity. Explain findings: The tributary supports potential habitat for amphibians and throughout the subject parcel there is potential to support bird and small mammal species.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: Wetland 1 (16.81) acres

Wetland type. Explain: Scrub/Shrub wetland.

Wetland quality. Explain:Wetland 1 is of good quality.

Project wetlands cross or serve as state boundaries. Explain: Wetland 1 doesn't cross or serve ast state boundaries.

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: Wetland 1 was saturated on the day of the site visit and flows typically after rain events and during snow melt.

Surface flow is: **Discrete and confined**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

☒ Directly abutting

☐ Not directly abutting

☐ Discrete wetland hydrologic connection. Explain: .

☐ Ecological connection. Explain: .

☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **15-20** river miles from TNW.

Project waters are **15-20** aerial (straight) miles from TNW.

Flow is from: **Wetland to/from navigable waters**.

Estimate approximate location of wetland as within the **10 - 20-year** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: The wetland is clear, no oily film or residc was observed within the wetlands.

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian buffer. Characteristics (type, average width): .

☐ Vegetation type/percent cover. Explain: .

☒ Habitat for:

☐ Federally Listed species. Explain findings: .

☐ Fish/spawn areas. Explain findings: .

☐ Other environmentally-sensitive species. Explain findings: .

☒ Aquatic/wildlife diversity. Explain findings: On the day of the site visit on November 12, 2015 there was saturation within the wetlands and these wetlands are potential breeding habitat for amphibians. Throughout the subject parcel, there is potential to support bird and small mammal species.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 1

Approximately (16.81) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Yes	16.81		

Summarize overall biological, chemical and physical functions being performed: Wetland 1 performs the following functions with respect to the downstream navigable waterway (Buffalo River) A) habitat diversity B) water quality improvements C) and nutrient cycling.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Relevant Reach:

The relevant reach for this significant nexus determination is the Unnamed Non-RPW Tributary 1 to Tonawanda Creek (the main linear tributary and the finger swales branching off of the tributary), Wetland 1, the Unnamed Seasonl RPW Tributary to Tonawanda Creek (described on Form 3 of 3) to the confluence with Tonawanda Creek (offsite), a perennial RPW, which flows into the Erie Canal, a TNW.

The November 12, 2015 site visit showed Wetland 1 in a somewhat saturated condition. Flood attenuation/runoff storage, pollutant trapping/water quality, removal of suspended solids, dissolved solids, toxins and retention/treatment of nitrogen and phosphorus, functions are considered to be moderate for the subject wetland. Wildlife habitat functions are considered to be moderate.

Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?

Low to moderate appreciable lifecycle support functions, with respect to the Erie Canal are performed by the Unnamed Non-RPW Tributary 1 to Tonawanda Creek and its adjacent Wetland 1 for this relevant reach. There is habitat in the wetland to support aquatic species, amphibians, and insects that are also present in the Erie Canal (TNW). The wetland provides habitat for local communities of insects, birds, some amphibians and small mammals and avian species. The avian species which likely use this wetland and tributary could be closely associated with use of the Erie Canal.

Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?

Yes, the Unnamed Non-RPW Tributary 1 to Tonawanda Creek serves as a primary collector and processor of organic matter and nutrients for downstream waters which includes the Erie Canal (TNW). The Unnamed Non-RPW Tributary 1 to Tonawanda Creek carries nutrients and can transport organic debris to the navigable waterway. The Non-RPW Tributary 1 to Tonawanda Creek also transforms unusable organic matter (inorganic carbon) into food for aquatic organisms (organic carbon) that reside in the Erie Canal.

Conclusion:The Unnamed Non-RPW Tributary 1 to Tonawanda Creek and its adjacent wetland within the relevant reach were found to influence the chemical, physical, and biological integrity of downstream waters. Based upon the evaluation presented herein, there is a significant nexus between Wetland 1 to the downstream TNW, the Erie Canal.

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   - ☐ Tributary waters: linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
   - ☒ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional waters within the review area (check all that apply):
   - ☒ Tributary waters: **Unnamed Non-RPW Tributary 1 to Tonawanda Creek 2348** linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
   - ☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
     - ☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
     - ☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

   Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
   - ☒ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

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[8]See Footnote # 3.

Provide acreage estimates for jurisdictional wetlands in the review area: **Wetland 1 (16.81)** acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
   - [ ] Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.**[9]
   As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
   - [ ] Demonstrate that impoundment was created from "waters of the U.S.," or
   - [ ] Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
   - [ ] Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]

- [ ] which are or could be used by interstate or foreign travelers for recreational or other purposes.
- [ ] from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- [ ] which are or could be used for industrial purposes by industries in interstate commerce.
- [ ] Interstate isolated waters. Explain: .
- [ ] Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
- [ ] Tributary waters: linear feet width (ft).
- [ ] Other non-wetland waters: acres.
  Identify type(s) of waters: .
- [ ] Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- [ ] If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- [ ] Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
  - [ ] Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- [ ] Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- [ ] Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
- [ ] Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- [ ] Lakes/ponds: acres.
- [ ] Other non-wetland waters: acres. List type of aquatic resource: .
- [ ] Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
- [ ] Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- [ ] Lakes/ponds: acres.
- [ ] Other non-wetland waters: acres. List type of aquatic resource: .
- [ ] Wetlands: acres.

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[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[10] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:Wetland Delineation Report submitted by AECOM.
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☒ Office concurs with data sheets/delineation report.
  - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps: .
- ☐ Corps navigable waters' study: .
- ☒ U.S. Geological Survey Hydrologic Atlas:Eastern Lake Erie.
  - ☒ USGS NHD data.
  - ☐ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite scale & quad name:1:24,000, Akron.
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Genesee County Soil Survey.
- ☒ National wetlands inventory map(s). Cite name:USFWS-NWI Maps-NWI wetlands mapped onsite.
- ☒ State/Local wetland inventory map(s):NYSDEC wetland maps-NYSDEC wetlands exist onsite (AK-14, AK-15).
- ☐ FEMA/FIRM maps: .
- ☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): Review of Bing and Google orthoimagery.
  or ☒ Other (Name & Date):Review of photographs within wetland delineation report.
- ☐ Previous determination(s). File no. and date of response letter: .
- ☐ Applicable/supporting case law: .
- ☐ Applicable/supporting scientific literature: .
- ☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: The contents of this JD form represent the summary of field observations from a site visit conducted on November 12, 2015 and an office review of the data sources listed above. Based on the verified hydrological connection to Tonawanda Creek and the ecological services being performed, Wetland 1 and the Unnamed Non-RPW Tributary 1 to Tonawanda Creek have a significant effect on the physical, chemical, and biological integrity of downstream waters, including the Erie Canal. The regulation of these areas and those similar to it is vital to the goals and purpose of the Clean Water Act (CWA). Therefore, Wetland 1 and the Unnamed Non-RPW Tributary 1 to Tonawanda Creek are jurisdictional waters of the U.S.

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): March 30, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Buffalo District, U.S. Department of Veterans Affairs-National Cemetary, 2016-00221, JD Form 2 of 3, Wetland 2/4, Wetland 3, Wetland 5, Unnamed Seasonal RPW Tributary to Murder Creek

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:New York County/parish/borough: Erie City: Pembroke
Center coordinates of site (lat/long in degree decimal format): Lat. 43.01° N, Long. -78.39° W.
Universal Transverse Mercator: 17
Name of nearest waterbody: Unnamed RPW (Seasonal) Tributary to Murder Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Erie Canal
Name of watershed or Hydrologic Unit Code (HUC): Eastern Lake Erie

- ☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
- ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- ☒ Office (Desk) Determination. Date: February 29, 2016
- ☒ Field Determination. Date(s): November 12, 2015

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

- ☐ Waters subject to the ebb and flow of the tide.
- ☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
   - ☐ TNWs, including territorial seas
   - ☐ Wetlands adjacent to TNWs
   - ☒ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
   - ☐ Non-RPWs that flow directly or indirectly into TNWs
   - ☒ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
   - ☒ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
   - ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
   - ☐ Impoundments of jurisdictional waters
   - ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
   Non-wetland waters: Unnamed RPW (Seasonal) Tributary to Murder Creek 3,200 linear feet: width (ft) and/or acres.
   Wetlands: Wetland 2/4 (49.65), Wetland 3 ((14.24) Wetland 5 (2.01) acres.

   c. **Limits (boundaries) of jurisdiction** based on: **1987 Delineation Manual**
   Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   - ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: .

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[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW: .

   Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

I. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: 2square miles
Drainage area: 2 square miles
Average annual rainfall: 40 inches
Average annual snowfall: 90 inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☒ Tributary flows through 2 tributaries before entering TNW.

Project waters are 15-20 river miles from TNW.
Project waters are 1 (or less) river miles from RPW.
Project waters are 15-20 aerial (straight) miles from TNW.
Project waters are 1 (or less) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: Wetland 2/4 is considered to be one wetland (the two wetlands are only separated by an approximate 6 foot wide gravel road) and they are connected via a drainage conveyance ditch that runs from Wetland 2/4 south along Alleghany Road for approximately 1,100 linear feet to the Unnamed Seasonal RPW Tributary to Murder

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Creek (near the Allegheny Road overpass and the NYS Thruway intersection). The Unnamed Seasonal RPW Trib to Murder Creek is also adjacent to Wetland 3 and Wetland 5. It flows for approximately 3200 linear feet along side the NYS Thruway and then crosses Alleghany Road though a culvert and continnes to flow west for approximately 2 miles and empties into Murder Creek, an RPW Tributary which flows northwest for approximately 10 miles and empties into Tonawanda Creek, an RPW Tributary which flows west for approximately 17 miles and empties directly into the Erie Canal, a TNW .

Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☒ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: 6 feet
Average depth: 4 feet
Average side slopes: **2:1.**

Primary tributary substrate composition (check all that apply):

☒ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☒ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, slonghing banks]. Explain: The Unnamed Seasonal RPW Tributary to Murder Creek is stable.

Presence of run/riffle/pool complexes. Explain: .

Tributary geometry: **Meandering**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **6-10**

Describe flow regime: The Unnamed Seasonal RPW Tributary to Murder Creek flows during snow melt, wet periods and following rain events.

Other information on duration and volume: .

Surface flow is: **Discrete and confined.** Characteristics: .

Subsurface flow: **Pick List.** Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☒ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☒ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: The Unnamed Seasonal RPW Tributary to Murder Creek is clear, no oily film or residue was observed.

Identify specific pollutants, if known: .

(iv) Biological Characteristics. Channel supports (check all that apply):

☐ Riparian corridor. Characteristics (type, average width): .

☐ Wetland fringe. Characteristics: .

☒ Habitat for:

☐ Federally Listed species. Explain findings: .

☐ Fish/spawn areas. Explain findings: .

☐ Other environmentally-sensitive species. Explain findings: .

☒ Aquatic/wildlife diversity. Explain findings: The tributary supports potential habitat for amphibians and throughout the subject parcel there is potential to support bird and small mammal species.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size:Wetland 2/4 (49.65) Wetland 3 (14.24) Wetland 5 (2.01) acres

Wetland type. Explain: Forested and Scrub-Shrub wetlands.

Wetland quality. Explain: Wetlands are of good quality.

Project wetlands cross or serve as state boundaries. Explain: The wetlands don't cross or serve as state boundaries.

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: Wetland 2/4, 3 and 5 were saturated on the day of the site visit and flow during snow melt and after rain events.

Surface flow is: **Discrete and confined**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

☒ Directly abutting

☒ Not directly abutting

☒ Discrete wetland hydrologic connection. Explain: Wetland 3 and Wetland 5 directly abut the Unnamed Seasonal RPW Trib to Murder Creek. Wetland 2/4 is connected to a drainage conveyance along Allegheny Road that flows from the Wetland south for approximately 1,100 linear feet and then flows across Alleghany Road through a culvert and empties directly into the Unnamed Seasonal RPW Trib 1 to Murder Creek.

☐ Ecological connection. Explain: .

☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **15-20** river miles from TNW.

Project waters are **15-20** aerial (straight) miles from TNW.

Flow is from: **Wetland to/from navigable waters.**

Estimate approximate location of wetland as within the **10 - 20-year** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: The wetland is clear, no oily film or residue was observed within the wetland.

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian buffer. Characteristics (type, average width): .

☐ Vegetation type/percent cover. Explain: .

☒ Habitat for:

☐ Federally Listed species. Explain findings: .

☐ Fish/spawn areas. Explain findings: .

☐ Other environmentally-sensitive species. Explain findings: .

☒ Aquatic/wildlife diversity. Explain findings: On the day of the site visit on November 12, 2015 there was saturation within the wetlands and these wetlands are potential breeding habitat for amphibians. Throughout the subject parcel, there is potential to support bird and small mammal species.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 3

Approximately (65.9) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
N	Wetland 2/4 (49.65)		
Y	Wetland 3 (14.24)		
Y	Wetland 5 (2.01)		

Summarize overall biological, chemical and physical functions being performed: Wetland 2/4, Wetland 3 and Wetland 5 perform the following functions with respect to the downstream TNW (Erie Canal) A) habitat diversity B) water quality improvements C) and nntrient cycling.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, dnration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

The relevant reach for this significant nexus determination is the Unnamed Seasonal RPW Tributary to Murder Creek, Wetland 2/4, Wetland 3 and Wetland 5, to the confluence with Murder Creek (offsite), a perennial RPW, which flows into the Erie Canal, a TNW.

The November 12, 2015 site visit showed Wetland 2/4, Wetland 3 and Wetland 5 in a somewhat saturated condition. Flood attenuation/runoff storage, pollutant trapping/water quality, removal of suspended solids, dissolved solids, toxins and retention/treatment of nitrogen and phosphorus, functions are considered to be moderate for the subject wetlands. Wildlife habitat functions are considered to be moderate.

Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?

Low to moderate appreciable lifecycle support functions, with respect to the Erie Canal are performed by the Unnamed Seasonal RPW Tributary to Murder Creek and its adjacent Wetlands 2/4, 3 and 5 for this relevant reach. There is habitat in the wetlands to support aquatic species, amphibians, and insects that are also present in the Erie Canal (TNW). The wetlands provide habitat for

local communities of insects, birds, some amphibians and small mammals and avian species. The avian species which likely use these wetlands and tributary could be closely associated with use of the Erie Canal.

Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?

Yes, the Unnamed Seasonal RPW Tributary to Murder Creek serves as a primary collector and processor of organic matter and nutrients for downstream waters which includes the Erie Canal (TNW). The Unnamed Seasonal RPW Tributary to Murder Ceek carries nutrients and can transport organic debris to the navigable waterway. The Unnamed Seasonal RPW Tributary to Murder Creek also transforms unusable organic matter (inorganic carbon) into food for aquatic organisms (organic carbon) that reside in the Erie Canal.

Conclusion:The Unnamed Seasonal RPW Tributary to Murder Creek and its adjacent wetlands (Wetland 2/4, Wetland 3 and Wetland 5) within the relevant reach were found to influence the chemical, physical, and biological integrity of downstream waters. Based upon the evaluation presented herein, there is a significant nexus between the wetlands to the downstream TNW, the Erie Canal.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☒ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: The Unnamed Seasonal RPW Tributary to Murder Creek typically flows three months out of the year (during snow melt and after significant rain events). It was flowing on the day of the site visit on November 11, 2015. It flows southwest along the NYS Thruway-that is just adjacent to Wetland 3 and Wetland 5 and empties directly into Murder Creek, a perennial RPW, which flows into Tonawanda Creek, a perennial RPW, which flows into the Erie Canal, a TNW.

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   - ☒ Tributary waters: **3,200** linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
   - ☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional waters within the review area (check all that apply):
   - ☐ Tributary waters: linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
   - ☒ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
     - ☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
     - ☒ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Wetland 3 and Wetland 5 directly abut the Unnamed Seasonal RPW to Murder Creek which flows typically three months out of the year (during snow melt and after rain events). This tributary flows along the NYS Thruway (directly abutting Wetland 3 and Wetland 5) for approximatey 3,200 linear feet and empties directly into Murder Creek, a perennial RPW, which flows into Tonawanda Creek, a perennial RPW, which flows into the Erie Canal, a TNW .

[8]See Footnote # 3.

Provide acreage estimates for jurisdictional wetlands in the review area: **Wetland 3 (14.24), Wetland 5 (2.01)** acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
   ☒ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

   Provide acreage estimates for jnrisdictional wetlands in the review area: **Wetland 2/4 (49.65)** acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
   ☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.**[9]
   As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
   ☐ Demonstrate that impoundment was created from "waters of the U.S.," or
   ☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
   ☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
   Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
   ☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

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[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- ☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- ☐ Lakes/ponds: acres.
- ☐ Other non-wetland waters: acres. List type of aquatic resource: .
- ☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:Wetland Delination Report submitted by AECOM.
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☒ Office concurs with data sheets/delineation report.
  - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps: .
- ☐ Corps navigable waters' study: .
- ☒ U.S. Geological Survey Hydrologic Atlas:Eastern Lake Erie.
  - ☐ USGS NHD data.
  - ☒ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite scale & quad name:1:24,000, Genesee.
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Genesee County Soil Survey.
- ☒ National wetlands inventory map(s). Cite name:USFWS-NWI wetland exist onsite.
- ☒ State/Local wetland inventory map(s):NYSDEC wetlands exist onsite (AK-14, AK-15).
- ☐ FEMA/FIRM maps: .
- ☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): Review of Bing and Google orthoimagery.
  or ☒ Other (Name & Date):Review of photographs within the wetland delineation report.
- ☐ Previous determination(s). File no. and date of response letter: .
- ☐ Applicable/supporting case law: .
- ☐ Applicable/supporting scientific literature: .
- ☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: The contents of this JD form represent the summary of field observations from a site visit conducted on November 12, 2015 and an office review of the data sources listed above. Based on the verified hydrological connection to Murder Creek and the ecological services being performed, Wetland 2/4 and Wetland 3, Wetland 5 and the Unnamed Seasonal RPW to Murder Creek have a significant effect on the physical, chemical, and biological integrity of downstream waters, including the Erie Canal. The regulation of these areas and those similar to it is vital to the goals and purpose of the Clean Water Act (CWA). Therefore, Wetland 2/4, Wetland 3 and Wetland 5 and the Unnamed Seasonal RPW Tributary to Murder Creek are jurisdictional waters of the U.S.

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): March 30, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Buffalo District, U.S. Department of Veterans Affairs-National Cemetary, 2016-00221, JD Form 3 of 3, Wetland 6, Unnamed Seasonal RPW Tributary to Tonawanda Creek

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:New York County/parish/borough: Erie County City: Pembroke
Center coordinates of site (lat/long in degree decimal format): Lat. 43.01° N, Long. -78° W.
Universal Transverse Mercator: 17
Name of nearest waterbody: Unnamed Seasonal RPW Tributary to Tonawanda Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Erie Canal
Name of watershed or Hydrologic Unit Code (HUC): Eastern Lake Erie

- ☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
- ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- ☒ Office (Desk) Determination. Date: February 29, 2016
- ☒ Field Determination. Date(s): November 12, 2015

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

- ☐ Waters subject to the ebb and flow of the tide.
- ☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
   - ☐ TNWs, including territorial seas
   - ☐ Wetlands adjacent to TNWs
   - ☒ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
   - ☐ Non-RPWs that flow directly or indirectly into TNWs
   - ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
   - ☒ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
   - ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
   - ☐ Impoundments of jurisdictional waters
   - ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
   Non-wetland waters: Unnamed Seasonal RPW Tributary to Tonawanda Creek 2,473 linear feet: width (ft) and/or acres.
   Wetlands: Wetland 6 (3.39) acres.

   c. **Limits (boundaries) of jurisdiction** based on: **1987 Delineation Manual**
   Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   - ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: .

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[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW: .

   Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

   (i) **General Area Conditions:**
   Watershed size: 2square miles
   Drainage area: 2 square miles
   Average annual rainfall: 40 inches
   Average annual snowfall: 90 inches

   (ii) **Physical Characteristics:**
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☒ Tributary flows through 2 tributaries before entering TNW.

   Project waters are 15-20 river miles from TNW.
   Project waters are 1 (or less) river miles from RPW.
   Project waters are 15-20 aerial (straight) miles from TNW.
   Project waters are 1 (or less) aerial (straight) miles from RPW.
   Project waters cross or serve as state boundaries. Explain: .

   Identify flow route to TNW[5]: Wetland 6 is a forested wetland. It flows north into a non-regulated conveyance swale that flows north for approximately 123 linear feet. It flows directly into the Unnamed Seasonal RPW Tributary to Tonawanda Creek that flows north onsite for approximately 2,473 linear feet and continues offsite and empties directly into an

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Unnamed RPW Tributary to Tonawanda Creek which flows north for approximately 2000 linear feet and empties into Tonawanda Creek, an RPW which flows west for approximately 20 miles and empties into the Erie Canal, a TNW.
Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☒ Manipulated (man-altered). Explain: The Unnamed Seasonal RPW has been modified and altered due mainly to farming activities.

Tributary properties with respect to top of bank (estimate):
Average width: 5 feet
Average depth: 5 feet
Average side slopes: **3:1**.

Primary tributary substrate composition (check all that apply):
☒ Silts ☐ Sands ☐ Concrete
☐ Cobbles ☐ Gravel ☐ Muck
☐ Bedrock ☒ Vegetation. Type/% cover:
☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: The tributary is stable.
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **6-10**
Describe flow regime: The Unnamed Seasonal RPW Trib to Tonawanda Creek flows during snow melt, wet periods and following rain events.
Other information on duration and volume: .

Surface flow is: **Discrete and confined**. Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):
☐ clear, natural line impressed on the bank ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☒ water staining ☒ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
☐ High Tide Line indicated by: ☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects ☐ survey to available datum;
☐ fine shell or debris deposits (foreshore) ☐ physical markings;
☐ physical markings/characteristics ☐ vegetation lines/changes in vegetation types.
☐ tidal gauges
☐ other (list):

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: The Unnamed Seasonal RPW Trib to Tonawanda Creek is clear, no oily film or residue was observed.

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[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

Identify specific pollutants, if known:

(iv) Biological Characteristics. Channel supports (check all that apply):

☐ Riparian corridor. Characteristics (type, average width): .

☐ Wetland fringe. Characteristics: .

☒ Habitat for:

☐ Federally Listed species. Explain findings: .

☐ Fish/spawn areas. Explain findings: .

☐ Other environmentally-sensitive species. Explain findings: .

☒ Aquatic/wildlife diversity. Explain findings: The tributary supports potential habitat for amphibians and throughout the subject parcel there is potential to support bird and small mammal species.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size:Wetland 6 (14.24) acres

Wetland type. Explain: Forested.

Wetland quality. Explain: The wetalnd is of good quality.

Project wetlands cross or serve as state boundaries. Explain: Wetland 6 doesn't cross or serve as state boundaries.

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: The wetland flows during snow melt and after rain events.

Surface flow is: **Discrete and confined**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting

☒ Not directly abutting

☐ Discrete wetland hydrologic connection. Explain: .

☐ Ecological connection. Explain: .

☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **15-20** river miles from TNW.

Project waters are **15-20** aerial (straight) miles from TNW.

Flow is from: **Wetland to/from navigable waters.**

Estimate approximate location of wetland as within the **10 - 20-year** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian buffer. Characteristics (type, average width): .

☐ Vegetation type/percent cover. Explain: .

☒ Habitat for:

☐ Federally Listed species. Explain findings: .

☐ Fish/spawn areas. Explain findings: .

☐ Other environmentally-sensitive species. Explain findings: .

☒ Aquatic/wildlife diversity. Explain findings: On the day of the site visit on November 12, 2015 there was saturation within the wetlands and these wetlands are potential breeding habitat for amphibians. Throughout the subject parcel, there is potential to support bird and small mammal species.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 1

Approximately (3.39) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
N	3.39		

Summarize overall biological, chemical and physical functions being performed: Wetland 6 performs the following functions with respect to the downstream navigable waterway (Buffalo River) A) habitat diversity B) water quality improvements C) and nutrient cycling.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significaut nexus findings for non-RPW that has no adjacent wetlands aud flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

   Wetland 6 and the Unnamed Seasonal RPW Tributary to Tonawanda Creek have the ability to carry pollutants to the Erie Canal and to provide aquatic habitat that supports the biota in the Erie Canal. Wetland 6 and the Unnamed Seasonal RPW Tributary to Tonawanda Creek were found to influence the chemical, physical and biological integrity of the Erie Canal and therefore there is a significant nexus between Wetland 6 and the Unnamed Seasonal RPW Trib to Tonawanda Creek and the Erie Canal.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .

☒ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: The Unnamed Seasonal RPW Trib to Tonawanda Creek has been altered due to farming activities and flows typically three months each year. It is a linear tributary and flows onsite for approximately 2,473 linear feet north and empties into another Unnamed RPW perennial Trib to Tonawanda Creek which flows north for approximately 2,000 linear feet and empties directly into Tonawanda Creek, a perennial RPW, which flows west for approximately 20 miles and empties into the Erie Canal, a TNW.

Provide estimates for jurisdictional waters in the review area (check all that apply):
☒ Tributary waters: **2473** linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☒ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **Wetland 6 (3.39)** acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

---

[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]

- ☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
- ☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- ☐ which are or could be used for industrial purposes by industries in interstate commerce.
- ☐ Interstate isolated waters. Explain: .
- ☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- ☐ Tributary waters: linear feet width (ft).
- ☐ Other non-wetland waters: acres.
  - Identify type(s) of waters: .
- ☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- ☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
  - ☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- ☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- ☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- ☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- ☐ Lakes/ponds: acres.
- ☐ Other non-wetland waters: acres. List type of aquatic resource: .
- ☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- ☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- ☐ Lakes/ponds: acres.
- ☐ Other non-wetland waters: acres. List type of aquatic resource: .
- ☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:Wetland Delineation Report submitted by AECOM.
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☒ Office concurs with data sheets/delineation report.
  - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps: .
- ☐ Corps navigable waters' study: .
- ☒ U.S. Geological Survey Hydrologic Atlas: Eastern Lake Erie.
  - ☐ USGS NHD data.
  - ☒ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite scale & quad name:1:24,000, Akron.
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation:Genesee County Soil Survey.
- ☒ National wetlands inventory map(s). Cite name:USFWS-NWI Maps-NWI wetlands mapped onsite.
- ☒ State/Local wetland inventory map(s):NYSDEC wetland maps-NYSDEC wetlands exist onsite (AK-14, AK-15).
- ☐ FEMA/FIRM maps: .

---

[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): Review of Bing and Google orthoimagery.
or ☒ Other (Name & Date):Review of photographs within the wetland delineation report.
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

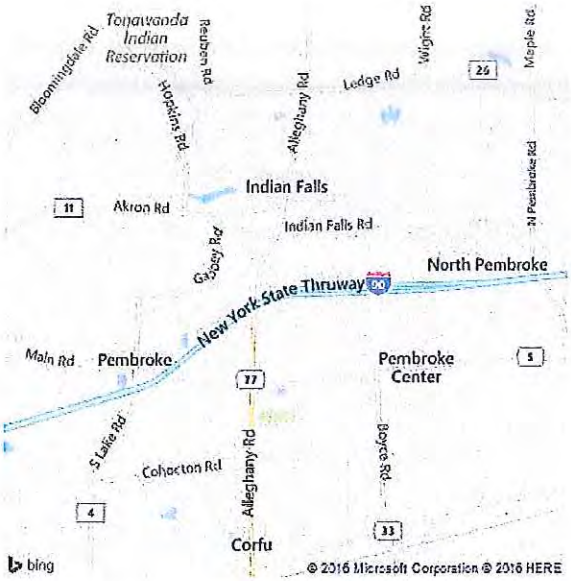
B. ADDITIONAL COMMENTS TO SUPPORT JD: The contents of this JD form represent the summary of field observations from a site visit conducted on November 12, 2015 and an office review of the data sources listed above. Based on the verified hydrological connection to Tonawanda Creek and the ecological services being performed, Wetland 6 and the Unnamed Seasonal RPW Tributary to Tonawanda Creek have a significant effect on the physical, chemical, and biological integrity of downstream waters, including the Erie Canal. The regulation of these areas and those similar to it is vital to the goals and purpose of the Clean Water Act (CWA). Therefore, Wetland 6 and the Unnamed Seasonal RPW Tributary to Tonawanda Creek are jurisdictional waters of the U.S.

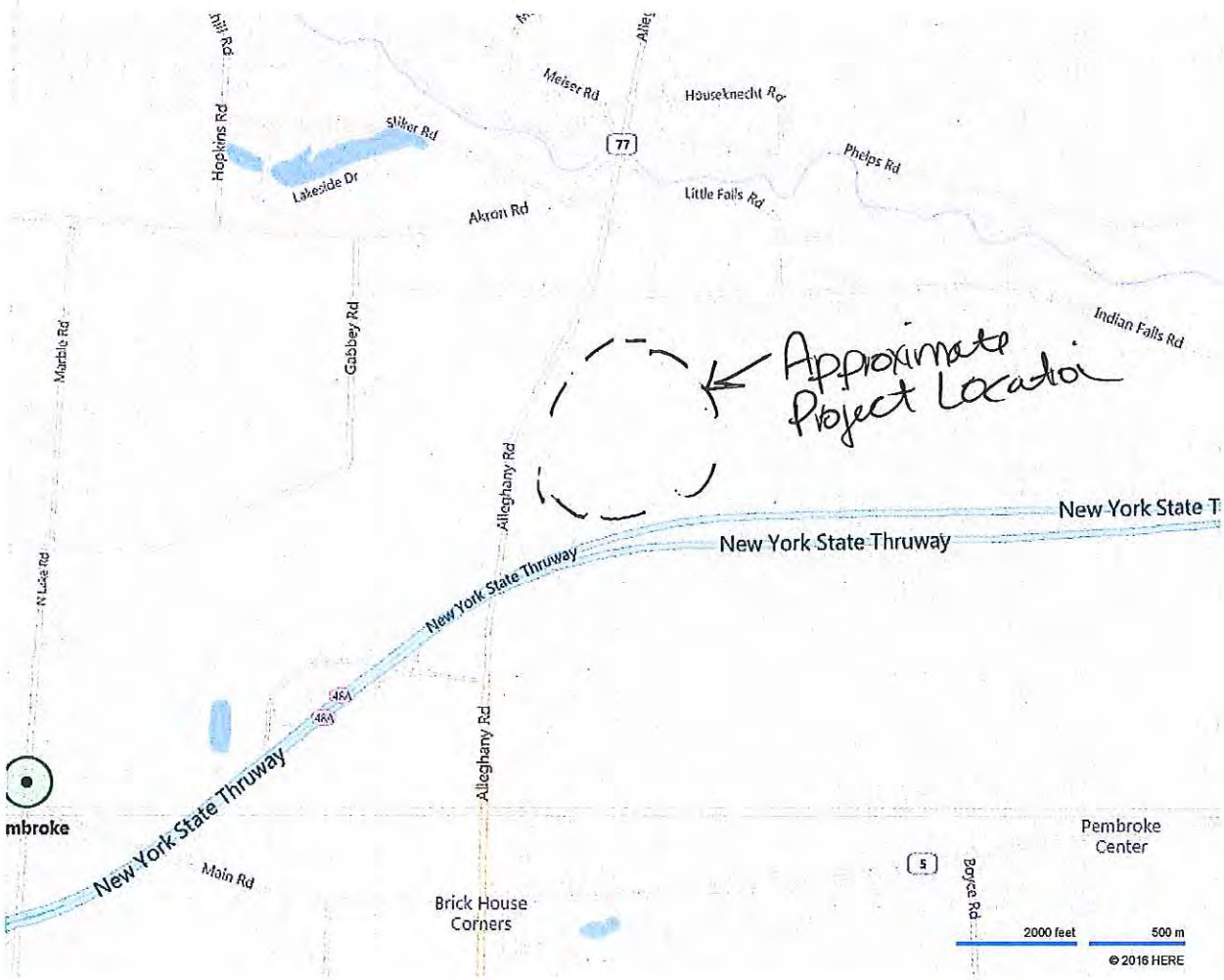
bing maps

Notes

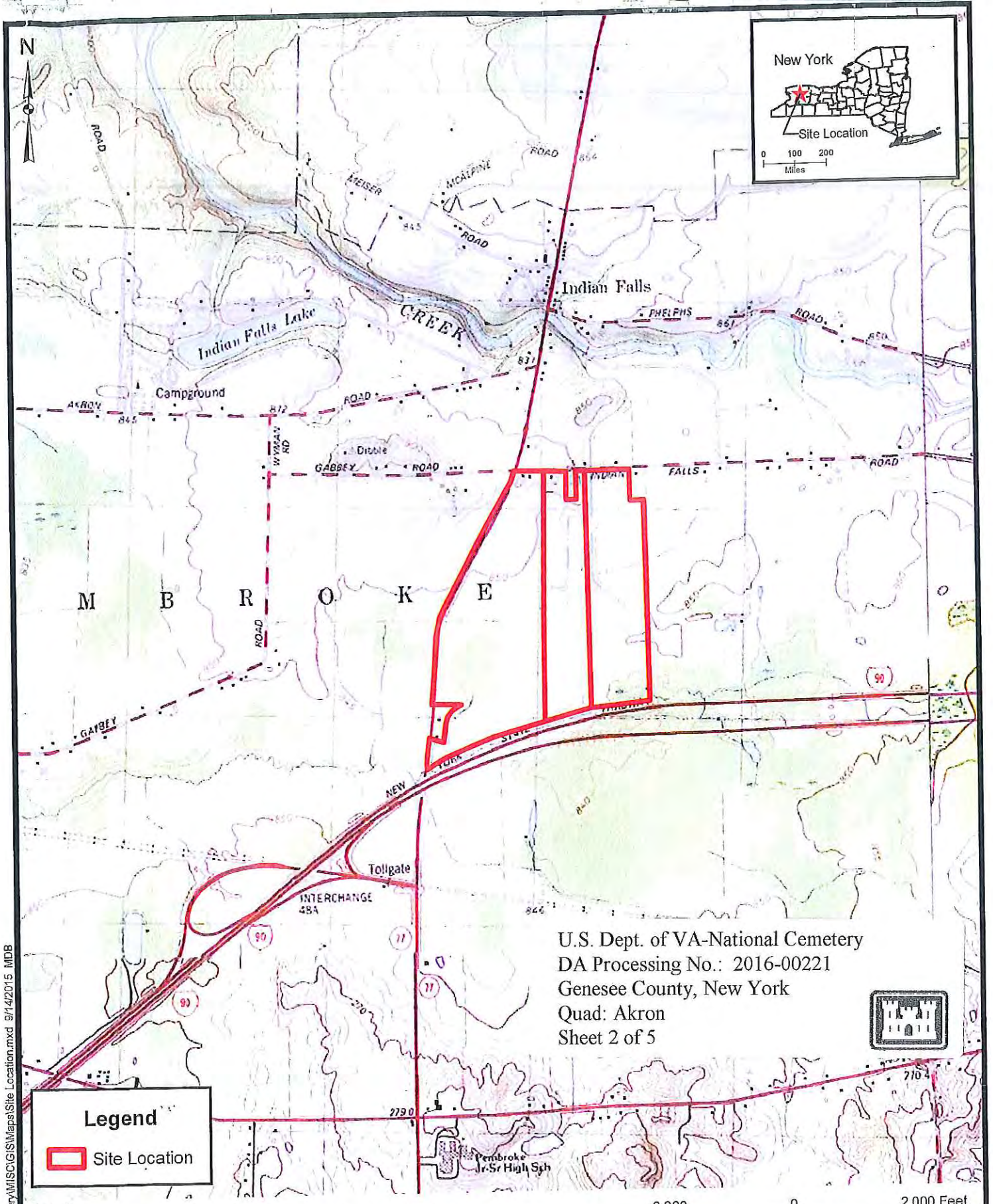
Type your notes here

Dept of Veterans Affairs - National Cemetery Project





U.S. Dept. of VA-National Cemetery
DA Processing No.: 2016-00221
Genesee County, New York
Quad: Akron
Sheet 1 of 5



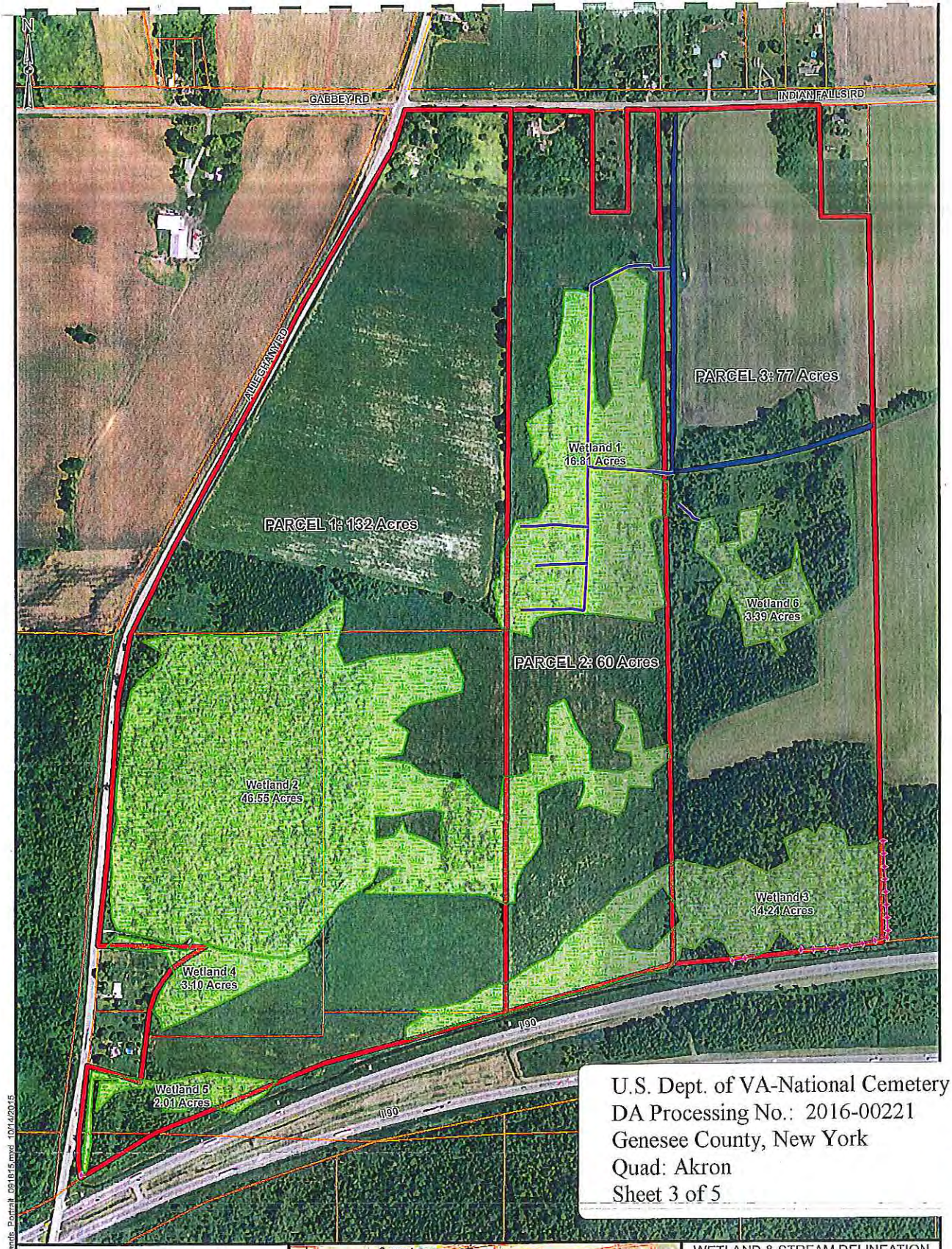
Source:
© 2013 National Geographic Society, i-cubed; 1:24:000-scale USGS Topographic Maps, Akron SE, Corfu NE, Oakfield SW, Alexander NW

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\Site Location.mxd 9/14/2015 MDB

AECOM

SITE LOCATION MAP
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

FIGURE 1



U.S. Dept. of VA-National Cemetery
DA Processing No.: 2016-00221
Genesee County, New York
Quad: Akron
Sheet 3 of 5

Legend

- Swale
- Wetland Continuation Line
- Stream
- Wetlands
- Site Location
- Parcel Boundary

Field Data Collection Information:
- *Data Collected on 4/28/15, 4/29/15, 8/26/15 - 8/31/15, 9/8/15*
- *Boundary coordinates were collected using a Trimble GeoXH with ESRI's ArcPad*
- *Data was Post-Processed using Trimble's GeoPathfinder Office*

WETLAND & STREAM DELINEATION
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

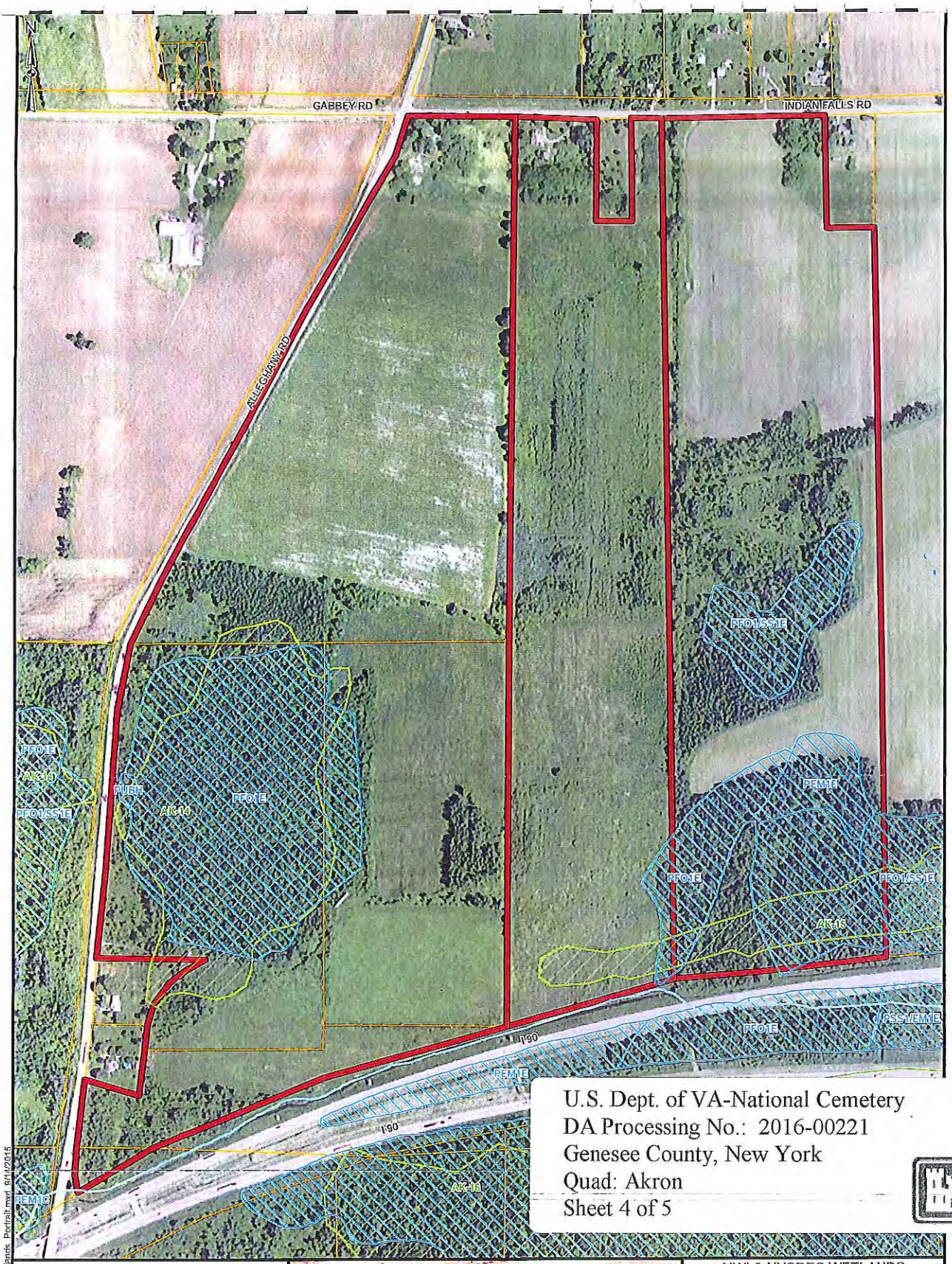
Sources:
Aerial Photo: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
NYSDEC Wetlands and Streams: NYS GIS Clearinghouse, NYSDEC 2002
USFWS Wetlands: USFWS National Wetland's Inventory 2014

400 0 400 Feet

FIGURE 2

AECOM

445076_VACemetery\MISC\GIS\Maps\Delineation\Wetlands_Portrait_091815.mxd 10/14/2015



U.S. Dept. of VA-National Cemetery
DA Processing No.: 2016-00221
Genesee County, New York
Quad: Akron
Sheet 4 of 5

Legend

NYSDEC Stream

NYSDEC Wetlands

USFWS NWI Wetlands

Site Location

Parcel Boundary

Field Data Collection Information:
- *Data Collected on 4/28/15, 4/29/15, 8/26/15 - 8/31/15, 9/8/15*
- *Boundary coordinates were collected using a Trimble GeoXH with ESRI's ArcPad*
- *Data was Post-Processed using Trimble's GeoPathfinder Office*

NWI & NYSDEC WETLANDS
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

Sources:
Aerial Photo: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
NYSDEC Wetlands and Streams: NYS GIS Clearinghouse, NYSDEC 2002
USFWS Wetlands: USFWS National Wetlands Inventory 2014

400 0 400 Feet

FIGURE 3

AECOM

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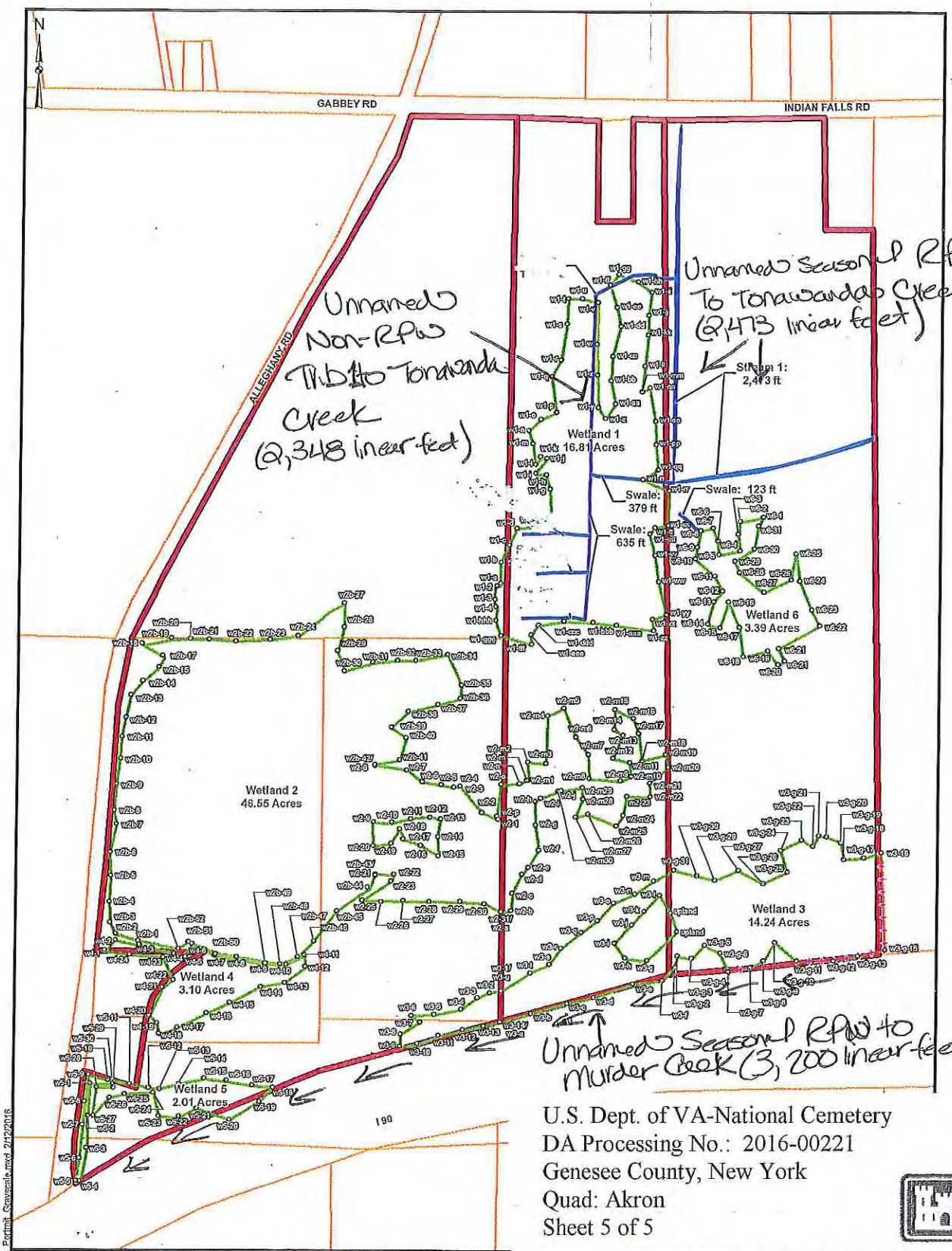


U.S. Dept. of VA-National Cemetery
DA Processing No.: 2016-00221
Genesee County, New York
Quad: Akron
Sheet 5 of 5

Legend

- Survey Points
- Swale/Stream
- Wetland Continuation Line
- Wetlands
- Site Location
- Parcel Boundary

Field Data Collection Information:
- *Data Collected on 4/28/15, 4/29/15, 8/26/15 - 8/31/15, 9/8/15*
- *Boundary coordinates were collected using a Trimble GeoXH with ESRI's ArcPad*
- *Data was Post-Processed using Trimble's GeoPathfinder Office*

WETLAND & STREAM DELINEATION
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

Sources:
Aerial Photo: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
NYSDEC Wetlands and Streams: NYS GIS Clearinghouse, NYSDEC 2002
USFWS Wetlands: USFWS National Wetlands Inventory 2014

400 0 400 Feet

FIGURE 2

AECOM

J:\Projects\60437274_MortimerMUSC\GIS\MapsDelineate\Wetlands_Portrait_Graveyards.mxd 2/12/2016

July 16, 2015

From: Glenn Elliott
U.S. Department of Veterans' Affairs
(202) 632-5879
Glenn.Elliott@va.gov

Kelley Peterman, PWS
AECOM Technical Services, Inc.
150 North Orange Ave., Suite 200
Orlando, FL 32801
(407) 284-4717
Kelley.Peterman@aecom.com

To: U. S. Fish & Wildlife Service
New York Field Office
3817 Luker Road
Cortland, NY 13045
Phone: 607.753.9334
Fax: 607.753.9699

RE: Online Project Review Request: Western New York National Cemetery
Genesee County, New York
IPaC Identifier: BSLKT-OVOUZ-FETOK-KEVZG-GPVXMA

We have reviewed the referenced project using the New York Field Office's online project review process and have followed all guidance and instructions in completing the review. We completed our review June 30, 2015 and are submitting our project review package in accordance with the instructions for further review.

The Department of Veterans Affairs (VA) recently acquired a 132 acre site for future establishment of a National Cemetery in western New York located in Pembroke, New York. The site is located at 1232 Indian Falls Road, on the east side of State Route 77 in Genesee County. The location of the project and the associated action area are depicted in **Figure 1**. All impacts and disturbances will be contained within the property, therefore the project area and action area are identical.

This project review is needed in order to identify, analyze, and document potential effects associated with the acquisition and establishment of a National Cemetery in this location. The VA conducted a Programmatic Environmental Assessment (PEA) in May 2014 and are currently in the process of conducting a tiered site Specific Environmental Assessment (SEA) in accordance with the National Environmental Policy Act of 1969 ([NEPA]; 42 United States Code [USC] 4321 et seq.), the President's Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and 38 CFR Part 26 (Environmental Effects of the Department of Veterans Affairs' Actions). The purpose of this review is to initiate formal agency action resulting in a Biological Opinion (BO) including an Endangered Species Act (ESA) determination for impacts to federally-listed species.

AECOM

Currently there is no site-specific design plans in place for this proposed cemetery. However, VA would follow the VA's National Cemetery Administration (NCA) *Facilities Design Guide* (VA, 2008, or tis successor) in developing the proposed cemetery design.

The enclosed project review package (**Attachment 1)** provides the information about the species, critical habitat, and bald eagles considered in our review. The species conclusions table included in the package identifies our determinations for the resources that may be affected by the project, as identified using the IPaC system.

We have enclosed our own Biological Assessment Report (**Attachment 2**), which summarizes the due diligence process already undertaken by the VA to determine listed species impact potential for the proposed project.

We look forward to working with you on this project. For any additional information, please contact us.

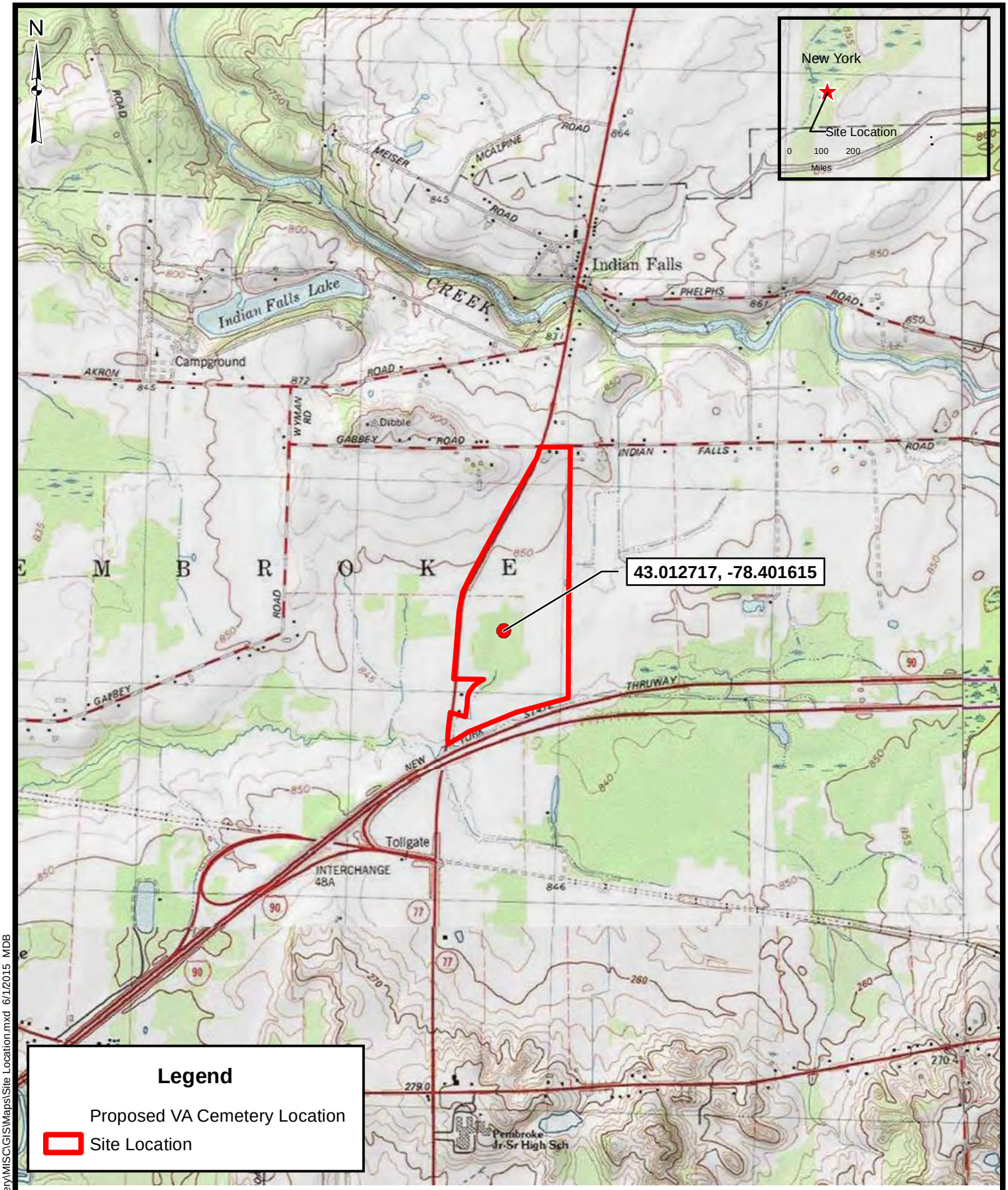
Sincerely,

Kelley Peterman, PWS
Senior Ecologist

Glenn Elliott
Department of Veterans Affairs

cc: Andrew Glucksman, Mabbett

Enclosures: Figure 1: Location Map
Attachment 1: Project Review Package
Attachment 2: Biological Assessment Report



Source:
© 2013 National Geographic Society, i-cubed; 1:24:000-scale USGS Topographic Maps, Akron SE, Corfu NE, Oakfield SW, Alexander NW

2,000 0 2,000 Feet

AECOM

SITE LOCATION MAP
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

FIGURE 1

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\Site Location.mxd 6/1/2015 MDB

ATTACHMENT 1

Project Review Package

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov

Joe Martens
Commissioner

June 29, 2015

Thomas Connare
AECOM

Re: Potential new cemetery, Allegheny Road/Route 77
Town/City: Pembroke. County: Genesee.

Dear Thomas Connare :

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities, that our database indicates occur, or may occur, on your site or in the immediate vicinity of your site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our database is continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

Andrea Chaloux

Andrea Chaloux
Environmental Review Specialist
New York Natural Heritage Program

626

The following state-listed animals have been documented in the vicinity of your project site.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing..

For information about potential impacts of your project on these populations, how to avoid, minimize, or mitigate any impacts, and any permit considerations, contact the Wildlife Manager or the Fisheries Manager at the NYSDEC Regional Office for the region where the project is located. A listing of Regional Offices is at http://www.dec.ny.gov/about/558.html.

The following species have been documented within 4 mi of the project site. Individual animals may travel 5 mi from documented locations.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Mammals				
Northern Long-eared Bat *Hibernaculum*	*Myotis septentrionalis*	Threatened	Threatened	14148

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.

The following rare plants and rare animals have historical records at your project site, or in its vicinity.

The following rare plants and animals were documented in the vicinity of the project site at one time, but have not been documented there since 1979 or earlier, and/or there is uncertainty regarding their continued presence. There is no recent information on these plants and animals in the vicinity of the project site and their current status there is unknown. In most cases the precise location of the plant or animal in this vicinity at the time it was last documented is also unknown.

If suitable habitat for these plants or animals is present in the vicinity of the project site, it is possible that they may still occur there. We recommend that any field surveys to the site include a search for these species, particularly at sites that are currently undeveloped and may still contain suitable habitat.

COMMON NAME	*SCIENTIFIC NAME*	*NYS LISTING*	*HERITAGE CONSERVATION STATUS*
Vascular Plants			
Northern Wild Comfrey	*Cynoglossum virginianum var. boreale*	Endangered	Critically Imperiled in NYS
1922-06-04: Indian Falls.			2985

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at www.natureserve.org/explorer, and from USDA's Plants Database at http://plants.usda.gov/index.html (for plants).

U.S. Fish & Wildlife Service

VA Western NY Natl Cemetery

IPaC Trust Resource Report

Generated June 30, 2015 08:12 AM MDT

US Fish & Wildlife Service

IPaC Trust Resource Report

Project Description

NAME

VA Western NY Natl Cemetery

PROJECT CODE

BSLKT-OVOUZ-FETOK-KEVZG-GPVXMA

LOCATION

Genesee County, New York

DESCRIPTION

No description provided

U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9349
(607) 753-9334

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the Endangered Species Program and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under Section 7 of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

Flowering Plants

Houghton's Goldenrod Solidago houghtonii **Threatened**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q2J5

Mammals

Northern Long-eared Bat Myotis septentrionalis **Threatened**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0JE

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

American Bittern Botaurus lentiginosus **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0F3

Bald Eagle Haliaeetus leucocephalus **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B008

Black Tern Chlidonias niger **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B09F

Black-billed Cuckoo Coccyzus erythropthalmus **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HI

Black-crowned Night-heron Nycticorax nycticorax **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0EU

Blue-winged Warbler Vermivora pinus **Bird of conservation concern**
Season: Breeding

Canada Warbler Wilsonia canadensis **Bird of conservation concern**
Season: Breeding

Cerulean Warbler Dendroica cerulea **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B09I

Common Tern Sterna hirundo **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B09G

Golden-winged Warbler Vermivora chrysoptera **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0G4

Least Bittern Ixobrychus exilis **Bird of conservation concern**
Season: Breeding

Pied-billed Grebe Podilymbus podiceps **Bird of conservation concern**
Season: Breeding

Red-headed Woodpecker Melanerpes erythrocephalus **Bird of conservation concern**

Season: Breeding

Short-eared Owl Asio flammeus **Bird of conservation concern**

Season: Wintering

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HD

Upland Sandpiper Bartramia longicauda **Bird of conservation concern**

Season: Breeding

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HC

Wood Thrush Hylocichla mustelina **Bird of conservation concern**

Season: Breeding

Refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

Impacts to NWI wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Wetland data is unavailable at this time.

Species Conclusions Table

Project Name: Veterans Administration: Western New York National Cemetery Project

Date: June 30, 2015

Species Name/Critical Habitat	Potential Habitat Present?	Species Present?	Critical Habitat Present?	ESA / Eagle Act Determination	Notes / Documentation Summary (include full rationale in your report)
Houghton's Goldenrod	N	N	N	N/A	Desktop and on-site evaluations were performed. No habitat was found nor species occurrences.
Northern Long-eared Bat	Y	Y	N	N/A	Desktop and on-site evaluations were performed. Areas of potential habitat were identified, along with suitable forage range within the project site. No species were observed.
Bald Eagle					Unlikely to disturb nesting bald eagles

ATTACHMENT 2

Biological Assessment Report

Biological Assessment Report for the Site Specific Environmental Assessment for the Western New York National Cemetery

Contact Number: VA101F-12-D-0056
Project Number: VA101F-15-J-0139
CLIN 0002

Prepared for:
US Department of Veterans Affairs
Office of Construction and Facilities Management (003C4B)
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Draft Submitted June 3, 2015

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1.0 Introduction

The U.S. Department of Veterans Affairs (VA) recently acquired a 132-acre site for the future establishment of a National Cemetery in Western New York. The site is located at 1232 Indian Falls Road, on the east side of State Route 77 in the Town of Pembroke in Genesee County (**Figure 1**). The proposed National Cemetery would provide additional gravesite capacity, improve access to veterans and their families, and help balance the geographic distribution of National Cemeteries within the State of New York. This report has been prepared by AECOM on behalf of Mabbett & Associates, Inc. (Mabbett), under Mabbett's contract with the VA.

Concurrent with the wetland delineation field work, AECOM conducted a biological assessment of the site and assessed habitat suitability for the federally listed bog turtle, eastern fringed orchid, Houghton's goldenrod, northern wild comfrey and northern long eared bat. As part of this assessment, AECOM biologists reviewed available background information including any previous environmental assessments and associated listed species survey data, as well as current and historic aerial photography, land use information, and physiographic and soils data. The results of the field surveys and habitat assessment are detailed in the subsequent sections of this report.

1.1 Project Background

In August 2013, Great Lakes Environmental & Safety Consultants, Inc. (Great Lakes), on behalf of the VA, prepared a Wetland Survey and Biological Resource Documentation Survey for the site. This report included the results of their literature and resource review and on-site field investigations for wetlands and federally or state listed threatened and endangered species and habitats. In addition, Great Lakes also researched the presence of existing known or proposed nature reserves, scenic rivers, unique ecological sites, geological features, breeding animal concentrations, champion trees, parks, forests, or wildlife areas within or near the site. In April and May of 2015, AECOM performed additional project-related activities, including a desktop analysis of available information and data, and investigative on-site field surveys.

Great Lakes reported observing wetland areas on site including a wetland that corresponded to New York State Department of Environmental Conservation (NYSDEC) mapped wetland AK-14 and recommended a wetland delineation be conducted on the site. Great Lakes indicated that three federally threatened or endangered species were listed for Genesee County: bog turtle (*Clemmys muhlenbergii)* – (threatened), eastern prairie fringed orchid (*Platanthera leucophaea*) (threatened), and Houghton's golden rod *(Solidago houghtonii)* (threatened). Furthermore, their research indicated the state endangered northern wild comfrey *(Cynoglossum virginianum)* was also a candidate species for protection by the United States Fish and Wildlife Service (USFWS). Great Lakes noted that none of the above listed species were observed during their field investigations in August 2013. The AECOM on-site field investigations on April 28-29, 2015, and on May 28, 2015, concurred with the 2013 Great Lakes report that no rare, threatened or endangered species (listed above) were observed on the site. In addition, the 2015 AECOM field investigations and desktop analysis concluded there are no existing known or proposed nature reserves, scenic rivers, unique ecological sites, geological features, breeding animal concentrations, champion trees, or parks on the site.

Proposed Project

The VA Office of Construction and Facilities Management is proposing to design and construct the Western New York National Cemetery to serve US military veterans with 10-years of burial capacity. Cemetery facilities are anticipated to include a Public Information Center/Administration Building, Honor Guard Building, maintenance structure, access to public highway through a main entrance, and supporting infrastructure including parking, irrigation, landscaping, visitor amenities and signage.

2.0 ENVIRONMENTAL SETTING

The 132-acre site for the proposed National Cemetery includes a large reverting (successional) agriculture field in the north section, a forested complex in the central and western sections, a reverting old field (saturated soils) in the east central section, and old reverting fields and shrublands in the southern section.

The site topography is relatively flat at 840-850 feet above mean sea level (amsl). The parcel is bounded by Allegany Road (RT 77) to the west, Indian Falls Road to the north and New York State Thruway I-90 to the south. Undeveloped natural areas border the site on the east.

The presence and distribution of local vegetative communities is attributable to the socioeconomic development within the rural residential and agricultural landscape of the Town of Pembroke. The dispersion and density of land cover within this area is indicative of adjacent land use, development, and existing natural resources. The Town of Pembroke is predominantly farmland and an upland forest/wetland mosaic with some residential and commercial areas.

2.1 Regional Setting

The Project study area is part of the Ontario-Erie Plain and Finger Lakes Region, which encompasses approximately 9,960 square miles. Most of this area is in the Eastern Lake Section of the Central Lowland Province of the Interior Plains. Bedrock underlying this area consists of alternating beds of limestone, dolomite, sandstone and shale of Ordovician to Devonian age. Most of the ground surface of this area consists of glacial till or lake sediments (USDA-NRCS 2006).

2.2 Historical Setting

Historically the study area has been used primarily for agricultural purposes. Field evidence including size and abundance of shrubby vegetation, suggests the agriculture fields in the north, central, and southeastern sections of the site have been fallow for approximately 5-8 years.

Two small residential areas are located adjacent to the site in the southwest section.

2.3 Soils

Soil information was obtained from the United State Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) (USDA-NRCS 2015). Soils mapped on the

project site by the NRCS are listed in Table 1 and shown in Figure 3. The dominant soils mapped on the project site include poorly drained Canandaigua silt loam, moderately well drained Phelps gravelly loam, well drained Ontario loam and somewhat poorly drained Ovid silt loam.

Approximately 40% of the soils mapped at the project site are Canandaigua Silt Loam, which are poorly drained soils (Table 1). Ovid silt loam, somewhat poorly drained (12%) and Ontario loam, well drained (12%) are also mapped on the site.

Table 1. Soils Mapped within the Project Study Area

Soil Map Unit Symbol	Soil Map Unit Name	Drainage Class
DuB	Dunkirk silt loam, 2 to 6 percent slopes	Well drained
PhC	Palmyra gravelly loam, 8 to 15 percent slopes	Well drained
LmB	Lima silt loam, 3 to 8 percent slopes	Moderately well drained
LmA	Lima silt loam, 0 to 3 percent slopes	Moderately well drained
OnA	Ontario loam, 0 to 3 percent slopes	Well drained
OnB	Ontario loam, 3 to 8 percent slopes	Well drained
OvB	Ovid silt loam, 3 to 8 percent slopes	Somewhat poorly drained
Ld	Lamson very fine sandy loam	Poorly drained
CaA	Canandaigua silt loam, 0 to 2 percent slopes	Poorly drained
NgA	Niagara silt loam, 0 to 2 percent slopes	Somewhat poorly drained
HaA	Halsey silt loam, 0 to 4 percent slopes	Very poorly drained
PsA	Phelps gravelly loam, 0 to 3 percent slopes	Moderately well drained
PsB	Phelps gravelly loam, 3 to 8 percent slopes	Moderately well drained
Um	Udorthents, smoothed	Well drained
GnB	Galen very fine sandy loam, 2 to 6 percent slopes	Moderately well drained
RsA	Romulus silt loam, 0 to 3 percent slopes	Poorly drained
Le	Lamson mucky very fine sandy loam	Very poorly drained

2.4 Ecological Communities

The project study area includes six basic ecological communities; silver maple/ash swamp, shallow emergent swamp, shrub swamp, successional shrubland, beech-maple mesic forest and successional old field (Edinger 2014) (Figure 4).

For ease of reference common names are used in the remainder of this report, scientific nomenclature of flora is included in Table 2 and fauna in Table 4.

Table 2. Vegetative Community Scientific Names Referenced

Common Name	Scientific Name
American beech	*Fagus grandifolia*
American elm	*Ulmus Americana*
American hornbeam	*Carpinus caroliniana*
black ash	*Fraxinus nigra*
blue flag iris	*Iris versicolor*

Common Name	Scientific Name
bluegrasses	*Poa pratensis, P. compressa*
boneset	*Eupatorium altissimum*
bulrushes	*Scirpus cyperinus*
buttercup	*Ranunculus* spp.
cattails	*Typha latifolia*
clover	*Trifolium* spp.
common chickweed	*Cerastium arvense*
Common thistle	*Cirsium* spp.
cottonwood	*Populus deltoids*
Dame's violet	*Hesperis matronalis*
dandelion	*Taraxacum officinale*
field horsetail	*Equisetum arvense*
fleabane	*Erigeron* spp.
golden rods	*Solidago rugosa, S. gigantean, Solidago altissima, S. nemoralis, S. Canadensis*
grapevine	*Vitis spp.*
grass-of-Parnassus	*Parnassia glauca*
green ash	*Fraxinus pennsylvanica*
hawkweeds	*Hieracium* spp.
hobblebush	*Viburnum lantanoides*
hop hornbeam	*Ostrya virginiana*
jewelweed	*Impatiens capensis*
milkweed	*Asclepias* spp.
New England aster	*Sympyotrichum novae-angliae*
orchard grass	*Dactylis glomerata*
oxeye daisy	*Leucanthemum_vulgare*
poison ivy	*Toxicodendron radicans*
poison sumac	*Toxicodendron vernix*
Queen-Anne's-lace	*Daucus carota*
ragweed	*Ambrosia artemisiifolia*
raspberries	*Rubus* spp.
red maple	*Acer rubrum*
reed canary grass	*Phalaris arundinacea*
sedges	*Carex spp.*
sensitive fern	*Onoclea sensibilis*
shagbark hickory	*Carya ovata*
shrubby cinquefoil	(*Dasiphora fruiticosa ssp. Floribunda=Potentilla fruiticosa*
shrubby dogwoods (red osier, gray, silky, alternate-leaved dogwood)	*Cornus racemosa, C. amomum, C. sericea,* and *Cornus alternifolia*
shubby honeysuckles	*Lonicera tatarica, L. morrowii, L. maacckii*
silver maple	*Acer saccharinum*
speckled alder	*Alnus incana* ssp. *rugose*
striped maple	*Acer pensylvanicum*

Common Name	Scientific Name
sugar maple	*Acer saccharum*
sumac	*Rhus typhina, R. glabra*
swamp white oak	*Quercus bicolor*
timothy	*Phleum pretense*
tussock sedge	*Carex stricta*
Viburnums (arrowwood)	*Viburnum dentatum* var. *lucidum, V. lentago,* and V. *nudum* var. *cassinoides*
water horsetail	*Equisetum fluviatile*
wheat	*Triticum* spp.
white ash	*Fraxinus americana*
wild strawberry	*Fragaria virginiana*
willows	*Salix spp.*
witch hazel	*Hamamelis virginiana*
woolgrass	*Scirpus cyperinus*
yellow birch	*Betula alleghaniensis*

Silver Maple/Ash Swamp

Silver maple/ash swamps are hardwood basin swamps that typically occur in poorly-drained depressions or along the borders of large lakes, and less frequently in poorly drained soils along rivers. These sites are characterized by uniformly wet conditions with minimal seasonal fluctuations in water levels. Distribution is in lowlands of central and western New York in the Appalachian Plateau and Great Lakes Plain ecozones, the St. Lawrence and Lake Champlain Valley ecozones, and the northernmost part of the Central Hudson subzone of the Hudson Valley ecozone.

The dominant trees are typically silver maple and green ash. Other trees include black ash, white ash, swamp white oak, red maple. Characteristic shrubs observed on site include various shrubby dogwoods, viburnums, speckled alder and sapling canopy trees. Characteristic vines observed on site include poison ivy and grapevine.

Shallow Emergent Marsh

A shallow emergent marsh (wet meadow) community occurs on mineral soil or deep muck soils (rather than true peat) that are permanently saturated and seasonally flooded. This marsh is better drained than a deep emergent marsh; water depths may range from 15 cm to 1 m (6 in to 3.3 ft) during flood stages, but the water level usually drops by mid to late summer and the substrate is exposed during an average year. This is a very broadly defined type that includes several distinct variants and many intermediates. Shallow emergent marshes are very common and quite variable. They may be co-dominated by a mixture of species, or have a single dominant species.

Shallow emergent marshes typically occur in lake basins and along streams often intergrading with deep emergent marshes, shrub swamps, and sedge meadows and they may occur together in a complex mosaic in a large wetland.

Commonly found herbaceous plants and those observed during the field investigations include cattail, bulrush, goldenrods, jewelweed, reed canary grass, blue flag iris, sensitive fern, speckled alder, shrubby dogwoods and willows.

Shrub Swamp

Shrub swamps are mostly inland wetlands dominated by tall shrubs that occur along the shore of a lake or river, in a wet depression or valley not associated with lakes, or as a transition zone between a marsh, fen, or bog and a swamp or upland community. The substrate is usually mineral soil or muck. This is a very broadly defined type that includes several distinct communities and many intermediates. Shrub swamps are very common and quite variable. They may be co-dominated by a mixture of species, or have a single dominant shrub species.

Shrub swamp species observed on site include alder, red osier dogwood, willows, northern arrowwood, and saplings of red maple, American elm and green ash.

Successional Old Field

A successional old field is characterized as a meadow, dominated by forbs and grasses, occurring on sites that have been cleared and plowed for farming or development and then abandoned. Fields that are mowed at an interval (*e.g.*, less than once per year) favor the growth of characteristic successional old field species. This is a relatively short-lived community that succeeds to a shrubland woodland, or forest community.

Characteristic vegetation includes goldenrods, bluegrasses, timothy, orchard grass, common chickweed, New England aster, wild strawberry, Queen-Anne's-lace, ragweed, hawkweeds, and dandelion.

Shrubs may be present, but collectively they have less than 50% cover in the community. Characteristic shrubs include gray dogwood, silky dogwood, arrowwood, raspberries, and sumac.

Successional Shrubland

Successional shrublands occur on sites that have been cleared (for farming, logging, development, etc.) or otherwise disturbed. Shrublands typically replace old field plant communities and have at least 50% cover of shrubs.

Characteristic shrubs include alder, red-osier dogwood, willows, arrowwood, and shubby honeysuckles.

Beech-Maple Mesic Forest

A beech-maple mesic forest is a northern hardwood forest with sugar maple and American beech co-dominant. This is a broadly defined community type with several regional and edaphic variants. These forests occur on moist, well-drained, usually acid soils. Common associates are yellow birch, white ash, hop hornbeam, and red maple.

Characteristic small trees or tall shrubs are hobblebush, American hornbeam, striped maple, witch hazel, and alternate-leaved dogwood. Typically there is also an abundance of tree seedlings, especially of sugar maple. American beech and sugar maple saplings are often the most abundant "shrubs" and small trees.

Table 3. Ecological Communities within the Project Study Area.

Ecological Community Type	Percentage of the Study Area
Silver Maple/Ash Swamp	30.5
Shallow Emergent Marsh	3.8
Shrub Swamp	1.5
Successional Old Field	50.4
Successional Shrubland	7.7
Beech-Maple Mesic Forest	6.1

3.0 SPECIES EVALUATIONS

The proposed project site was investigated for overall flora and fauna during site visits in April 2015 and May 2015. Plant species were observed within each ecological community and were found to be consistent with the Edinger descriptions (Edinger 2014).

The successional old field in the northern section of the study area contained clover, dandelion, wheat, thistle, Dame's violet, golden rods, grasses and daisy. This area also contained several large hickory trees along the field edges. The east-central portion of the study area was dominated more by reed canary grass, goldenrods, willows, and other grasses. The southern old successional field section contained more grasses and goldenrods along with wild strawberry, buttercup, and milkweed.

The successional shrubland areas are all very similar to each other and are dominated by red-osier dogwood, willows, goldenrods, ragweed, and bush honeysuckle.

The Beech-Maple mesic forest areas on site are dominated by maple and beech. The maple component ranged from large areas of saplings to old dead standing timber. There are some very tall cottonwoods on the fringe of the wetland/upland adding to the dense canopy. Ash trees were the dominant species in some areas. The fringe and pocket open areas of this community contained shrubby plants including dogwoods, willows, honeysuckle, and alders.

The silver maple/ash swamp community located within Wetland W-2 (Figure 2) is a classic mix of maple and ash trees. There were many maple saplings and quite a few old growth trees and large standing dead timber. Moss was plentiful on the tree trunks and fallen dead wood. Blue flag iris and water horsetail were observed in several small patches throughout this complex. In addition, poison ivy and grapevine were well established in areas. A large open water area is located in the central and southern sections of Wetland W-2. There is a dense forest canopy here allowing very little sunlight to penetrate. Cottonwoods are a co-dominant species in this area and extend to the wetland boundaries into adjacent shrublands. The shrubby component of this community consisted mostly of dogwood and alders. The other silver maple/ash swamp areas in the study area were similar but without the extent of open water and contained more cottonwood and maple (silver and red) saplings.

The shallow emergent marsh areas were dominated by reed canary grass, willow, and goldenrods with small populations of sensitive fern. Wetland W-4 (Figure 2) contained the largest area of cattails in the study area, where the cattails were represented as a monoculture.

The shrub swamp areas were dominated by maple and ash saplings, dogwoods, willow, and reed canary grass. Some goldenrod was observed but still in an early growth stage. Wetland W-4 contains an area of shrubby wetland with an open water component and cattails.

For additional information regarding the wetlands on site, please refer to the "Wetland Delineation Report for the Site Specific Environmental Assessment for the Western New York National Cemetery," dated June 3, 2015.

Table 4. Fauna Scientific Names Referenced

Common Name	Scientific Name
American robin	*Turdus migratorius*
common American toad	*Anaxyrus americanus*
eastern chipmunk	*Tamias striatus*
eastern gray squirrel	*Sciurus carolinensis*
green frog	*Rana clamitans*
red-tailed hawk	*Buteo jamaicensis*
red-winged black bird	*Agelaius phoeniceus*
spotted turtle	*Clemmys guttata*
turkey vulture	*Cathartes aura*
white-tailed deer	Odocoileus virginianus
wild turkey	*Meleagris gallopavo*

Animal species observed during the field investigations include, American robin, red-tailed hawk, wild turkey, turkey vulture, red-winged blackbird, common American toad, green frog, eastern chipmunk, eastern gray squirrel, and white-tailed deer.

As part of the plant and animal species surveys, rare, threatened and endangered species and unique habitats potentially present in the Project area were researched through desktop analysis and ground-truthed during on-site field investigations. As stated earlier in this report, no existing known or proposed nature reserves, scenic rivers, unique ecological sites, geological features, breeding animal concentrations, champion trees, or parks were mapped and/or observed on the site. A discussion of rare, threatened and endangered species that were identified with the potential to occur in literature is provided below.

3.1 Bog Turtle

The bog turtle is New York's smallest turtle, reaching a maximum length of 4.5 inches. It is one of seventeen species of turtles found in New York State, including marine turtles. A bright yellow or orange blotch on each side of its head and neck are a distinctive feature of this species. The body color is dark with an orange-red wash on the inside of the legs of some individuals. The carapace (upper shell) is domed and somewhat rectangular, often with prominent rings on the shell plates (scutes). In some older individuals, or those that burrow frequently in coarse substrates, the shell may become quite smooth and polished. Although generally black, the

carapace is sometimes highlighted by a chestnut sunburst pattern in each scute. The plastron (lower shell) is hingeless, with a pattern of cream and black blotches. As with most turtles, the plastron of the male is slightly concave while the female's is flat (NYSDEC 2015).

3.1.1 Life History

In New York, the bog turtle emerges from hibernation, often spent in an abandoned muskrat lodge or other burrow, by mid-April. In New York bog turtles often hibernate communally with other bog turtles and with spotted turtles. Generally both the air and water temperature must exceed 50 degrees F for the turtle to become active. Mating occurs primarily in the spring but may also occur in the fall and may be focused in or near the hibernaculum (winter shelter). In early to mid-June, a clutch of two to four eggs is laid in a nest which is generally located inside the upper part of an unshaded tussock. The eggs hatch around mid-September. Some young turtles spend the winter in the nest, emerging the following spring. The adults enter hibernation in late October. Sexual maturity may be reached at eight years or as late as eleven. A bog turtle may live for more than 30 years.

Bog Turtle
(stock photo courtesy of USFWS)

Although generally very secretive, the bog turtle can be seen basking in the open, especially in the early spring just after emerging from hibernation. It is an opportunistic feeder, eating what it can get, although it prefers invertebrates such as slugs, worms, and insects. Seeds, plant leaves, and carrion are also included in its diet.

3.1.2 Survey Methodology

The survey included desktop review of available and pertinent information, and an on-site field survey in April and May 2015. Areas within the study area possessing characteristics of bog turtle habitat including shallow surface water or soil saturation, soft mucky bottom substrate, and low grass/sedge emergent wetlands (often with a shrub component) were investigated for species presence and supporting data. The site meets the elevation requirement (below 1000 amsl) for potential bog turtle habitat and does possess areas of proper hydrologic conditions necessary to harbor a bog turtle population, however, no vegetation considered to be calciphiles (tussock sedge, grass-of-Parnassus, poison sumac, or shrubby cinquefoil) was observed during the April and May 2015 field investigations.

3.1.3 Results

No bog turtles or suitable habitat were observed on site during the April and May 2015 field surveys.

3.2 Eastern Fringed Orchid

The eastern fringed orchid is listed as federally threatened primarily due to loss of habitat. The eastern prairie fringed orchid occurs in a wide variety of habitats, from mesic prairie to wetlands such as sedge meadows, marsh edges, and even bogs. The plant requires full sun for optimum growth and flowering and a grassy habitat with little or no woody encroachment. A symbiotic relationship between the seed and soil fungi, called mycorrhizae, is necessary for seedlings to become established and assimilate nutrients in the soil (USFWS 2015).

Eastern Fringed Orchid
(stock photo: courtesy of USFWS)

This plant is 8 to 40 inches tall and has an upright leafy stem with a flower cluster called an inflorescence. The 3 to 8 inch lance-shaped leaves sheath the stem. Each plant has one single flower spike composed of 5 to 40 creamy white flowers. Each flower has a three-part fringed lip less than 1 inch long and a nectar spur (tube-like structure) which is about 1 to 2 inches long.

3.2.1 Life History

This orchid is a perennial herb that grows from an underground tuber. Flowering begins from late June to early July, and lasts for 7 to 10 days. Blossoms often rise just above the height of the surrounding grasses and sedges. The more exposed flower clusters are more likely to be visited by the hawkmoth pollinators, though they are also at greater risk of being eaten by deer. Seed capsules mature over the growing season and are dispersed by the wind from late August through September.

3.2.2 Survey Methodology

The survey techniques included a desktop review of available and pertinent information, and on-site field investigations in April and May 2015. Areas within the study area possessing characteristics of eastern fringe orchid habitat including low grass/sedge emergent wetlands and fringe meadows were investigated for species presence and supporting data.

3.2.3 Results

No eastern fringed orchids were observed on site during the April and May 2015 field investigations.

3.3 Houghton's Goldenrod

3.3.1 Life History

Houghton's goldenrod typically grows on moist sandy beaches and shallow depressions between low sand ridges along the shoreline. Houghton's goldenrod grows only in the wetlands along the Great Lakes shoreline. This habitat is called interdunal wetland. Fluctuating water levels of the Great Lakes play a role in maintaining this unique goldenrod. During high water years, colonies of Houghton's goldenrod may be submerged. When water levels recede some plants survive the inundation and new seedlings establish on the moist sand (USFWS 2015).

Other attractive plants that often grow with Houghton's goldenrod include the creamy white Grass-of-Parnassus, the delicate blue Kalm's lobelia, shrubby cinquefoil, twigrush, and other goldenrods. This habitat displays a tapestry of color and texture that continually changes throughout the seasons. It is a unique habitat within the Great Lakes ecosystem.

3.3.2 Survey Methodology

The survey techniques included desktop review of available and pertinent information, and on-site field surveys in April and May 2015.

3.3.3 Results

No Houghton's goldenrod was observed on site during the April and May 2015 field investigations. No areas exist within the study area possessing the characteristics of Houghton's goldenrod habitat.

3.4 Northern Wild Comfrey

3.4.1 Life History

This plant may be found along the borders of woods and thickets, along trails and pathways through woods, and within upland deciduous woods. It appears to prefer circumneutral or even calcareous areas. The soils are usually sandy or rocky (NYNHP 2015).

Northern Wild Comfrey
(stock photo courtesy of NYNHP)

This is a perennial wildflower that grows 1-2 feet high with leaves at the base of the plant that are 4-8 inches long and oval-shaped, with long petioles and a rough surface. The leaves are 1-3 inches wide. There

are also a few leaves on the flowering stems, which are more lanced-shaped. The upper leaves have heart-shaped bases that clasp the stem, the lower ones have short petioles. At the top of the leafless portion of the stem are a few branches with a group of small, 3/8" wide, five-petaled, blue flowers at the ends. The petal lobes are oblong and do not overlap. The fruit consists of four bristly nutlets.

3.4.2 Survey Methodology

The survey techniques included desktop review of available and pertinent information, and on-site field investigations in April and May 2015.

Areas within the study area possessing characteristics of northern wild comfrey habitat including woods edges and thickets were investigated for species presence and supporting data.

3.4.3 Results

According to the NYSDEC Environmental Resource mapping tool, there are no rare plant or animals or significant natural communities mapped in the vicinity of the project site. However, the website does indicate the potential for northern wild comfrey, which is listed as a NYS-Protect rare plant last documented in 1922.

No northern wild comfrey was observed on site during the 2015 field investigations.

3.5 Northern Long-Eared Bat

3.5.1 Life History

The northern long-eared bat is a medium-sized bat with a body length of 3 to 3.7 inches and a wingspan of 9 to 10 inches. Their fur color can be medium to dark brown on the back and tawny to pale-brown on the underside. As its name suggests, this bat is distinguished by its long ears, particularly as compared to other bats in its genus, *Myotis* (USFWS 2015).

Northern Long-Eared Bat
(stock photo courtesy of USFWS)

Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula. They use areas in various sized caves or mines with constant temperatures, high humidity, and no air currents. Within hibernacula, surveyors find them hibernating most often in small crevices or cracks, often with only the nose and ears visible.

During the summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities or in crevices of both live trees and snags (dead trees). Males and non-reproductive females may also roost in cooler places, like caves and mines. Northern long-eared bats seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or

provide cavities or crevices. This bat has also been found rarely roosting in structures, like barns and sheds.

Breeding begins in late summer or early fall when males begin to swarm near hibernacula. After copulation, females store sperm during hibernation until spring. In spring, they emerge from their hibernacula, ovulate and the stored sperm fertilizes an egg. This strategy is called delayed fertilization.

After fertilization, pregnant females migrate to summer areas where they roost in small colonies and give birth to a single pup. Maternity colonies of females and young generally have 30 to 60 bats at the beginning of the summer, although larger maternity colonies have also been seen. Numbers of individuals in roosts typically decreases from pregnancy to post-lactation. Most bats within a maternity colony give birth around the same time, which may occur from late May or early June to late July, depending where the colony is located within the species' range. Young bats start flying by 18 to 21 days after birth. Maximum lifespan for the northern long-eared bat is estimated to be up to 18.5 years.

Like most bats, northern long-eared bats emerge at dusk to feed. They primarily fly through the understory of forested areas feeding on moths, flies, leafhoppers, caddisflies, and beetles, which they catch while in flight using echolocation or by gleaning motionless insects from vegetation.

The northern long-eared bat's range includes much of the eastern and north central United States, and all Canadian provinces from the Atlantic Ocean west to the southern Yukon Territory and eastern British Columbia. The species' range includes the following 37 States and the District of Columbia: Alabama, Arkansas, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia, Wisconsin, and Wyoming.

3.5.2 Survey Methodology

It is not known if previous surveys for northern long-eared bat have occurred on site. The preliminary survey technique during the April and May 2015 field investigations consisted of observation and identification of suitable roosting habitat features including trees of the proper size and "texture", dead standing wood, and areas of roosting structure. Potential feeding habitats capable of sustaining an adequate insect population were also investigated.

3.5.3 Results

Some areas of potential habitat were identified including individual trees (hickory and dead standing wood) and tree stands of suitable size located within the beech/maple mesic forest and silver maple/ash swamp communities. Acceptable feeding/foraging range also exists within the project site's forested areas and old field communities. No northern long-eared bats were observed during the April and May 2015 field investigations, but additional consultation with

regulatory agencies (USFWS/NYSDEC) is recommended to determine if there is a need for additional investigation to assess species presence/absence.

4.0 RECOMMENDATIONS

For any State or federal applications necessary for the project, written consultation seeking input from the NYSDEC Natural Heritage Program (rare animals, rare plants, or significant natural communities) and USFWS (federally-listed endangered and threatened species) must be conducted in order to obtain documented clearance. This consists of a letter requesting information regarding rare, threatened and endangered species within or around the proposed project site. The results of the agency determination will provide the next steps in obtaining documented clearance.

5.0 SUMMARY

The proposed Western New York National Cemetery site at 1232 Indian Falls Road, Town of Pembroke, Genesee County, New York, warranted an evaluation of the potential for occurrence of the state- and federally-listed species discussed in this report. The site was assessed in accordance with the applicable state and federal guidelines for surveying these species. No rare, threatened or endangered species were observed during the April and May 2015 surveys. Potential habitat for the northern long-eared bat was observed on site and further consultation with the USFWS and NYSDEC through letters of information request is recommended.

6.0 REFERENCES

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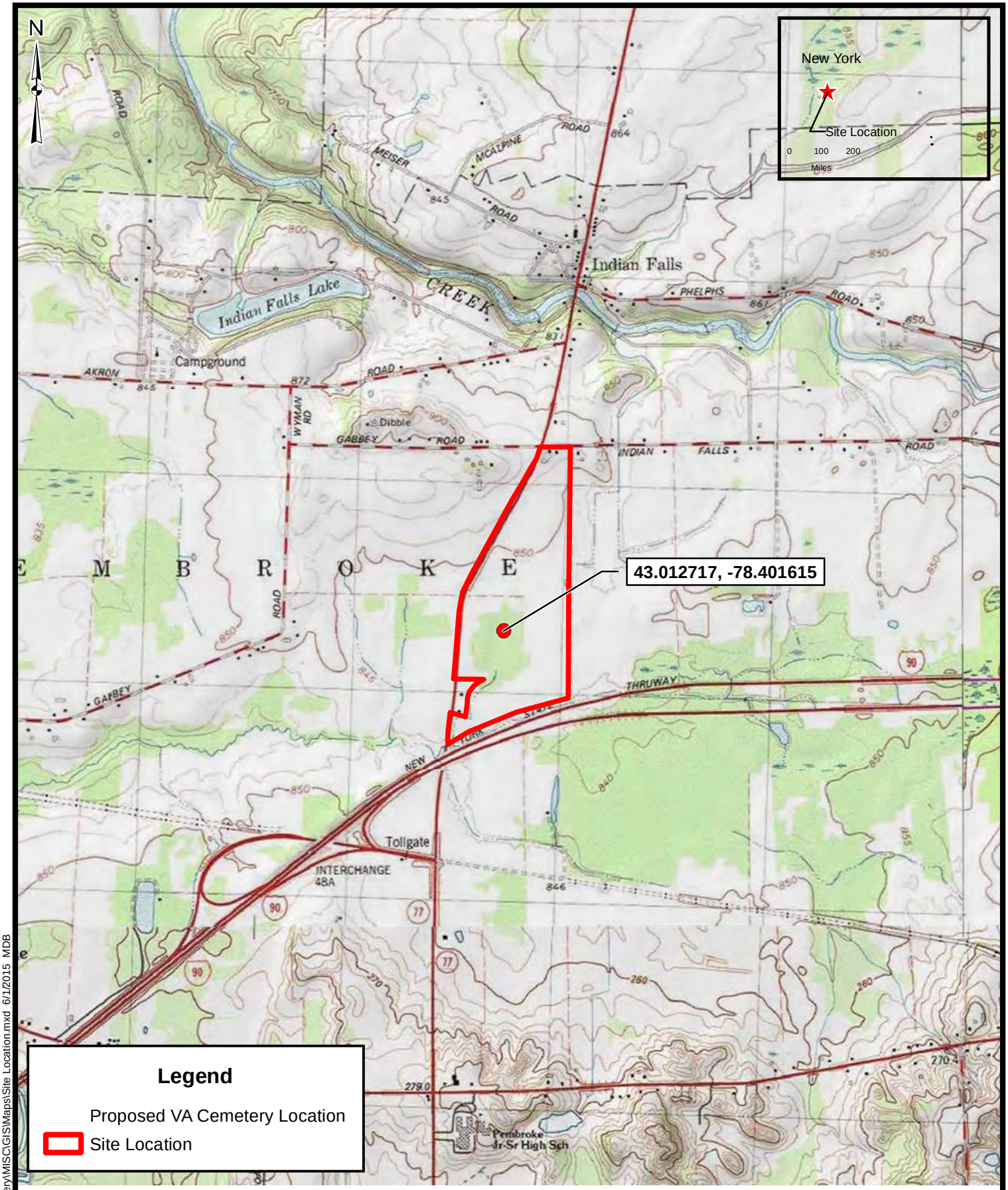


Source:
© 2013 National Geographic Society, i-cubed; 1:24:000-scale USGS Topographic Maps, Akron SE, Corfu NE, Oakfield SW, Alexander NW

2,000 0 2,000 Feet

AECOM

SITE LOCATION MAP
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

FIGURE 1

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\Site Location.mxd 6/1/2015 MDB

N

GABBEY RD

INDIAN FALLS RD

ALLEGHANY RD

Wetland 1

Wetland 2

Wetland 4

Wetland 3

I 90

Wetland 5

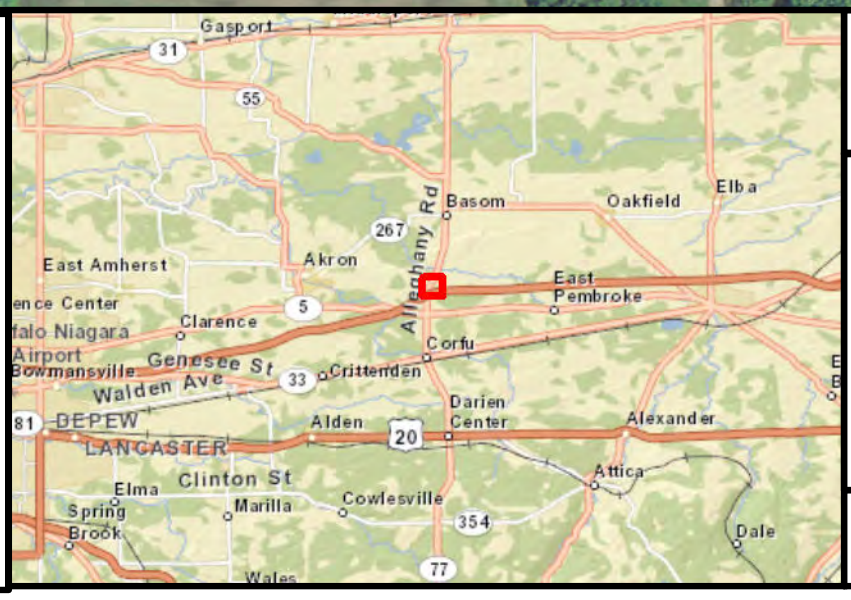
I 90

Murder Creek

Legend

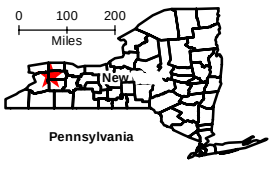
- Delineated Ditch*
- NYSDEC Stream
- Wetland Continuation Line
- Field Delineated Wetland*
- NYSDEC Wetlands
- USFWS NWI Wetlands
- Site Location

** Field Data Collection Information:*
- *Data Collected on 4/28/2015 & 4/29/2105*
- *Boundary coordinates were collected using a Trimble GeoXH with ESRI's ArcPad*
- *Data was Post-Processed using Trimble's GeoPathfinder Office*



WETLAND & STREAM DELINEATION
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

Notes:
Wetland 1 - 0.08 Acres
Wetland 2 - 41.76 Acres
Wetland 3 - 1.1 Acres
Wetland 4 - 3.1 Acres
Wetland 5 - 2.01 Acres
Ditch 1 - 284 Feet



Sources:
Aerial Photo: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
NYSDEC Wetlands and Streams: NYS GIS Clearinghouse, NYSDEC 2002
USFWS Wetlands: USFWS National Wetlands Inventory 2014

400 0 400 Feet

FIGURE 2

AECOM

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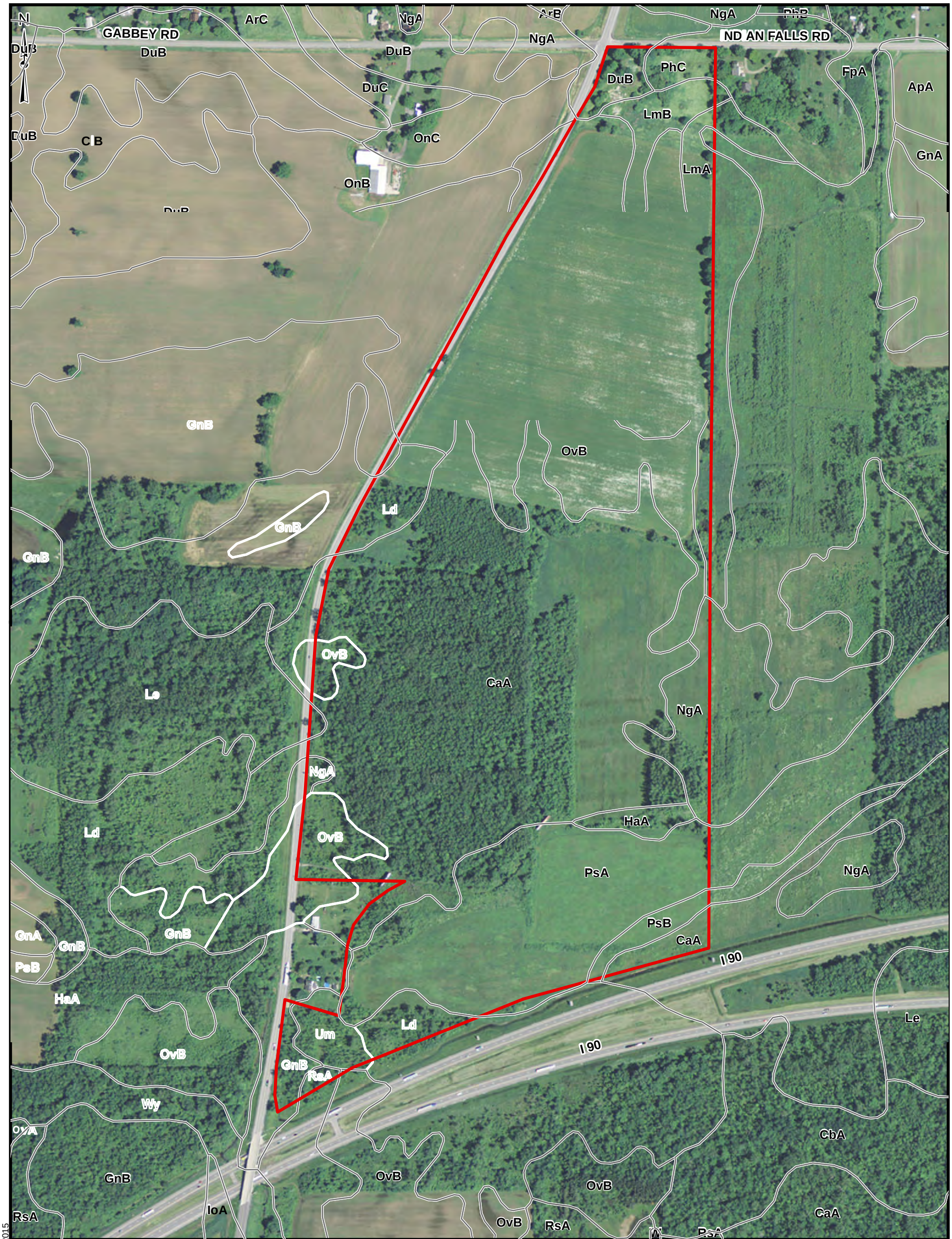


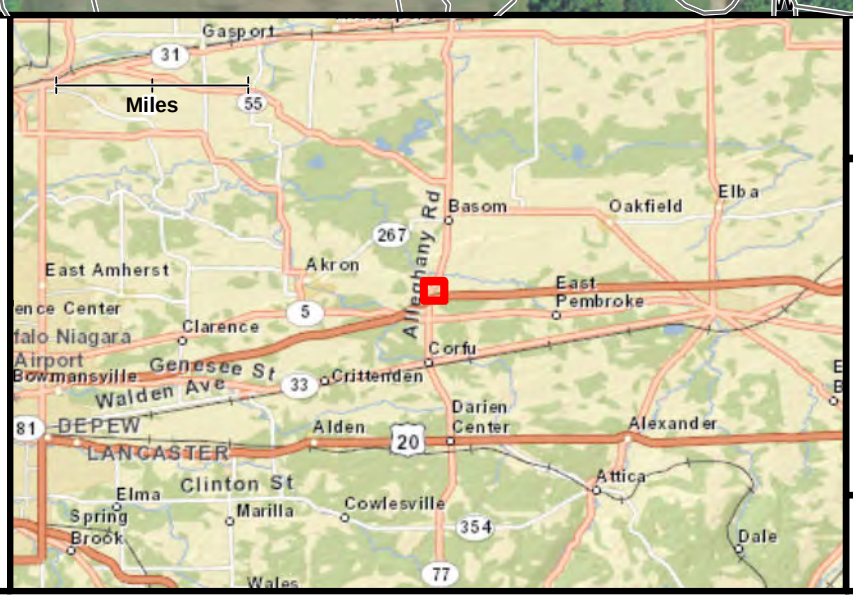
Legend

Site Location

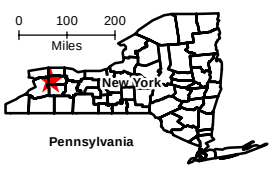
Soil Boundary

Soils within Site Location:

Symbol	Description
CaA	Canandaigua silt loam, 0 to 2 percent slopes
DuB	Dunkirk silt loam, 2 to 6 percent slopes
GnB	Galen very fine sandy loam, 2 to 6 percent slopes
HaA	Halsey silt loam, 0 to 4 percent slopes
Ld	Lamson very fine sandy loam
Le	Lamson mucky very fine sandy loam
LmA	Lima silt loam, 0 to 3 percent slopes
LmB	Lima silt loam, 3 to 8 percent slopes
NgA	Niagara silt loam, 0 to 2 percent slopes
OnA	Ontario loam, 0 to 3 percent slopes
OnB	Ontario loam, 3 to 8 percent slopes
OvB	Ovid silt loam, 3 to 8 percent slopes
PhC	Palmyra gravelly loam, 8 to 15 percent slopes
PsA	Phelps gravelly loam, 0 to 3 percent slopes
PsB	Phelps gravelly loam, 3 to 8 percent slopes
RsA	Romulus silt loam, 0 to 3 percent slopes
Um	Udorthents, smoothed



SOILS MAP
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK



Sources:
Aerial Imagery: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
Soils: USDA NCRS Geospatial Data Gateway 2015

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FIGURE 3

AECOM

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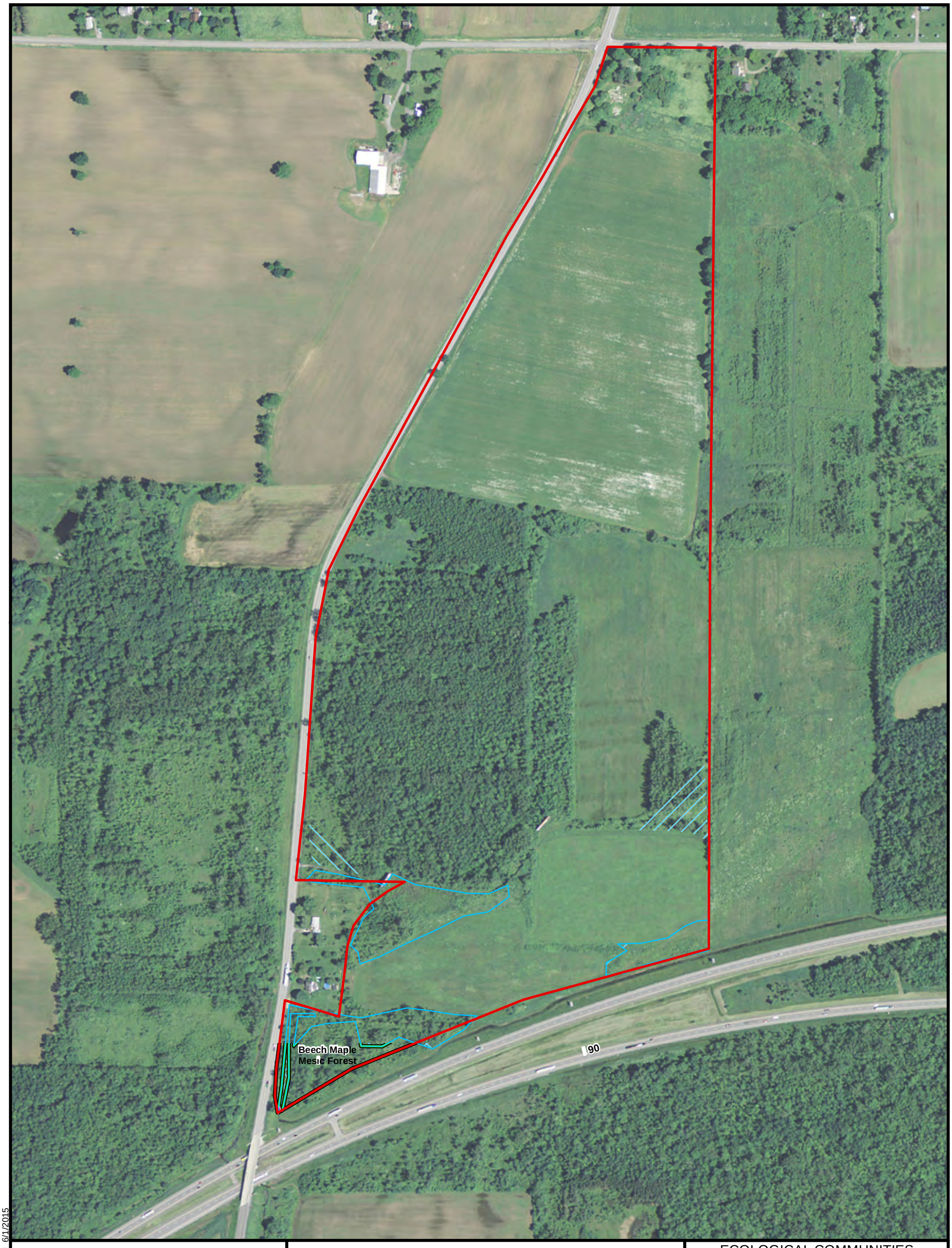


Legend

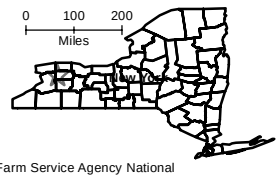
- Delineated Ditch*
- NYSDEC Stream
- Wetland Continuation Line
- Field Delineated Wetland*
- NYSDEC Wetlands
- USFWS NWI Wetlands
- Ecological Communities*
- Site Location

** Field Data Collection Information:*
- Wetland Delineation Completed on 4/28/2015 & 4/29/2105
- Ecological Community Survey Completed on 5/28/2015

0 5 10
Miles

ECOLOGICAL COMMUNITIES
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

Notes:
Beech Maple Mesic Forest - 7 Acres
Shallow Emergent Marsh - 5 Acres
Shrub Swamp - 2 Acres
Silver Maple Ash Swamp - 40 Acres
Successional Old Field - 69 Acres
Successional Shrubland - 9 Acres



Sources:
Aerial Photo: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
NYSDEC Wetlands and Streams: NYS GIS Clearinghouse, NYSDEC 2002
USFWS Wetlands: USFWS National Wetlands Inventory 2014

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FIGURE 4

AECOM

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DEPARTMENT OF VETERANS AFFAIRS
Office of Construction & Facilities Management
Washington DC 20420

October 1, 2015

Robyn Niver
U. S. Fish & Wildlife Service
New York Field Office
3817 Luker Road
Cortland, NY 13045
Phone: 607.753.9334
Fax: 607.753.9699

RE: Section 7 Consultation
Western New York National Cemetery
Genesee County, New York

Ms. Nyver:

As you may recall, the Department of Veterans Affairs (VA) acquired a 132 acre site for future establishment of a National Cemetery in western New York located in Pembroke, New York. We appreciate your guidance related to the evaluation of whether or not development of the project would adversely impact federally listed species. Habitat suitable for occupation by the northern long-eared bat (*Myotis septentrionalis*) was found on the subject property. The VA will conduct tree removal activity on the site between October 1 and March 31 to minimize impacts to this species. In addition, tree clearing activities on the site have been avoided and minimized to the greatest extent possible and totals 5.3 acres or 4% of the site. Based on FWS guidance, the results of our internal investigations, and the Best Management Practices (BMPs) defined during site design and implemented during construction, the VA has determined that development of the project would result in an Endangered Species Act (ESA) determination of "may affect but not likely to adversely affect (MANLAA)" the northern long-eared bat and requests your concurrence.

We appreciate your assistance with the planning of this project.

Sincerely,

Glenn Elliott
Environmental Engineer

cc: Andrew Glusksman, Mabbett & Associates, Inc.
Kelley Peterman, AECOM

From: Peterman, Kelley
To: Niver, Robyn
Cc: glenn.elliott@va.gov; John Wiley; Tim R Sullivan; Glucksman, Andrew
Subject: RE: Western NY National Cemetary
Date: Thursday, October 01, 2015 3:41:39 PM
Attachments: 20151001102643645_0001.pdf

Robin,

Please see the attached formal request from the VA regarding concurrence of the ESA determination related to the proposed project in western New York. Let me know if you have any questions.

Thank you,
Kelley

Kelley Samuels Peterman, PWS
Senior Ecologist
Design + Planning
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From: Niver, Robyn [mailto:robyn_niver@fws.gov]
Sent: Tuesday, September 29, 2015 9:42 AM
To: Peterman, Kelley
Cc: glenn.elliott@va.gov; John Wiley; Tim R Sullivan
Subject: Re: Western NY National Cemetary

Thank you for the additional information. We generally recommend conducting tree removal between October 1 and March 31. This window works for roosting bats and migratory birds (in case you are addressing migratory birds in any NEPA documents). In terms of wrapping up ESA consultation, the VA can send a final determination for the northern long-eared bat (probably may affect, not likely to adversely affect) with rationale (small acreage, winter tree removal) to our office and request our concurrence.

Please let me know if you have any further questions and thank you again for your

coordination and consideration of listed species.

Sincerely,
Robyn

On Tue, Sep 29, 2015 at 9:35 AM, Peterman, Kelley <Kelley.Peterman@aecom.com> wrote:
Hi Robin,

Thank you for the dialogue so far concerning the proposed VA National Cemetery in Pembrooke, Genesee County, New York. Based upon your correspondence we have narrowed the listed species considerations for this project exclusively to the northern long-eared bat (NLEB). In response to your questions regarding suitable habitat available and subsequent clearing activities, attached is a map summarizing the proposed clearing limits. The VA is still refining this design, however it should provide a firm example of the development activities that are proposed for this project. The forested habitat within the site is predominantly forested wetland, better described as a silver maple/ash swamp. Ecological community breakdown of the site is as follows:

Total Acreage of Site: 132 Acres
Silver Maple/Ash Swamp: 30.5% (of total area)
Shallow Emergent Marsh: 3.8%
Shrub Swamp: 1.5%
Successional Old Field: 50.4%
Successional Shrubland: 7.7%
Beech-Maple Mesic Forest: 6.1%

VA is designing the final master plan design to minimize and avoid wetland impacts, which includes minimizing the disturbance to this forested area. According to the current design, total vegetation and shrub clearing area within the total 132 acre parcel is 5.3 acres (this 5.3 acres is not entirely comprised of forested area, please refer to the Ecological Communities map also provided within this email). The forested areas to be cleared are predominantly within the outer fringe, and VA is willing to refrain from tree removal during the nesting season should conservation guidelines and/or consultation determine this to be an appropriate measure.

Please advise on any additional information you will require from the VA. We look forward to continuing the conversation.

Kelley

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From: Niver, Robyn [mailto:robyn_niver@fws.gov]
Sent: Wednesday, August 12, 2015 4:28 PM
To: glenn.elliott@va.gov; Peterman, Kelley
Cc: John Wiley; Tim R Sullivan
Subject: Re: Western NY National Cemetary

As a follow-up, John has reviewed the project and considered the available information and we find it unlikely that you have Houghton's goldenrod in the project area.

Robyn

On Fri, Aug 7, 2015 at 8:58 AM, Niver, Robyn <robyn_niver@fws.gov> wrote:
Good morning Glenn and Kelley,

Thank you for the July 16, 2015, submission to our office. I don't think you really mean to request formal consultation at this time. What adverse effects are you anticipating?

In terms of the field investigation - two species were identified from the FWS as having the potential to occur in the area - the Houghton's goldenrod and the northern long-eared bat. Additional information should be provided specifically on these two species. I am not surprised that no bats were seen during a diurnal survey - that is not a relevant justification for an effects analysis. However, it is unclear to me how much of the site is forested (acreage) and whether any tree removal is proposed at the site. Would you be able to provide that informaiton? Also, in NY, Houghton's goldenrod does not occur along the lakeshore. Surveys for this species should occur in August-October. I'll check with our Houghton's POC in this office to see if he has any additional information about Houghton's in this area but it would be good to plan for conducting surveys during this appropriate time period.

Let me know if you have any questions. Looking forward to your response.

Robyn
--
****
Robyn A. Niver
Endangered Species Biologist
Acting Deputy Field Supervisor
USFWS
New York Field Office
Cortland, NY 13045

607-299-0620

"Let us have faith that right makes might, and in that faith, let us to the end, dare to do our duty as we understand it." - Abraham Lincoln

--
****

Robyn A. Niver
Endangered Species Biologist
Acting Deputy Field Supervisor
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New York Field Office
Cortland, NY 13045
607-299-0620

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New York Field Office
Cortland, NY 13045
607-299-0620

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Biological Assessment Report for the Site Specific Environmental Assessment for the Western New York National Cemetery

Contact Number: VA101F-12-D-0056
Project Number: Va101F-15-J-0139
CLIN 0002/Mod 1

Prepared for:
US Department of Veterans Affairs
Office of Construction and Facilities Management (003C4B)
425 I Street, NW
Washington, DC 20001

Prepared by:
AECOM
257 West Genesee Street, Suite 400
Buffalo, New York 14202-2657

On behalf of:
Mabbett & Associates, Inc.
5 Alfred Circle
Bedford, MA 01730

FINAL
Submitted October 1, 2015

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1 Introduction

The U.S. Department of Veterans Affairs (VA) recently acquired a 271-acre multiple land parcel site for the future establishment of a National Cemetery in Western New York. The site is located on the east side of State Route 77 in the Town of Pembroke in Genesee County, New York (Figure 1). The proposed National Cemetery would provide additional gravesite capacity, improve access to veterans and their families, and help balance the geographic distribution of National Cemeteries within the State of New York.

1.1 Project Background

The Project site and study area are comprised of three land parcels. Parcel 1 is approximately 132 acres and is located on the west side of the study area. Parcel 2 is in the central section of the study area and is approximately sixty (60) acres. Parcel 3 is located on the east side of the study area and is approximately seventy-seven (77) acres in size.

In August 2013, Great Lakes Environmental & Safety Consultants, Inc. (Great Lakes), on behalf of the VA, prepared a Wetland Survey and Biological Resource Documentation Survey for Parcel 1 of the site. This report included the results of their literature and resource review and on-site field investigations for wetlands and federally or state listed threatened and endangered species and habitats. In addition, Great Lakes also researched the presence of existing known or proposed nature reserves, scenic rivers, unique ecological sites, geological features, breeding animal concentrations, champion trees, parks, forests, or wildlife areas within or near the site. In April, May, August and September of 2015 AECOM performed additional Project related activities including a desktop analysis of available information and data and investigative field surveys of Parcel 1 and, in addition, Parcels 2 and 3.

Great Lakes reported observing wetland areas on site, in Parcel 1, including a wetland that corresponded to New York State Department of Environmental Conservation (NYSDEC) mapped wetland AK-14 and recommended a wetland delineation be conducted on the site (figure 3). Great Lakes indicated that three federally threatened or endangered species were listed for Genesee County: bog turtle (*Clemmys muhlenbergii)* (threatened), eastern prairie fringed orchid (*Platanthera leucophaea*) (threatened), and Houghton's golden rod *(Solidago houghtonii)* (threatened). Furthermore, their research indicated the state endangered northern wild comfrey *(Cynoglossum virginianum)* was also a candidate species for protection by the United States Fish and Wildlife Service (USFWS). Great Lakes noted that none of the above listed species were observed during their field investigations in August 2013. The 2015 AECOM field investigations concurred with the 2013 Great Lakes report that no rare, threatened or endangered species (listed above) were observed on the site. In addition, the 2015 AECOM field investigations and desktop analysis concluded there are no existing known or proposed nature reserves, scenic rivers, unique ecological sites, geological features, breeding animal concentrations, champion trees, or parks on the site.

1.2 Proposed Project

The VA Office of Construction and Facilities Management is proposing to design and construct the Western New York National Cemetery to serve US military veterans with 10-years of burial capacity. Cemetery facilities are also expected to include a Public Information

Center/Administration Building, Honor Guard Building, maintenance structure, access to public highway through a main entrance, and supporting infrastructure including parking, irrigation, landscaping, visitor amenities and signage.

AECOM was contracted to conduct a wetland delineation on the site. Concurrent with the wetland delineation field work, AECOM conducted a biological assessment of the site and assessed habitat suitability for the federally listed bog turtle, eastern fringed orchid, Houghton's goldenrod, northern wild comfrey and northern long eared bat. As part of this assessment, AECOM biologists reviewed available background information including any previous environmental assessments and associated listed species survey data, as well as current and historic aerial photography, land use information, and physiographic and soils data. The results of the field surveys and habitat assessment are detailed in the subsequent sections of this report.

2 ENVIRONMENTAL SETTING

The proposed 271 acre site for the National Cemetery consists of three land parcels. Parcel 1 includes a large agriculture field in the north which was recently planted with beans, a forested complex in the central and western sections, a reverting old field (saturated soils) in the east central section, and old reverting fields and shrublands in the southern section (Figure 1). Parcel 2 is predominately successional old field transitioning to shrubland with minor areas of forested growth. Parcel 3 contains two (2) agriculture fields (corn and carrots) and a shrub/forest mixed area in the south and central section. There is a large swale, classified as an intermittent stream, running through the middle of (east to west) and then north along the western parcel boundary. It then goes under Indian Falls Road and eventually into Tonawanda Creek.

The site topography is relatively flat (840-850 amsl). The site is bounded by Allegany Road (RT 77) to the west, Indian Falls Road to the north and New York State Thruway I-90 to the south. Undeveloped natural areas and agricultural fields border the site on the east.

The presence and distribution of local vegetative communities is attributable to the socioeconomic development within the rural residential and agricultural landscape of the Town of Pembroke. The dispersion and density of land cover within this area is indicative of adjacent land use, development, and existing natural resources. The Town of Pembroke is predominantly farmland and an upland forest/wetland mosaic with some residential and commercial areas.

2.1 Regional Setting

The Project study area is part of the Ontario-Erie Plain and Finger Lakes Region which encompasses approximately 9,960 square miles. Most of this area is in the Eastern Lake Section of the Central Lowland Province of the Interior Plains. Bedrock underlying this area consists of alternating beds of limestone, dolomite, sandstone and shale of Ordovician to Devonian age. Most of the ground surface of this area consists of glacial till or lake sediments (USDA-NRCS 2006).

2.2 Historical Setting

Historically the study area has been used primarily for agricultural purposes. Field evidence including size and abundance of shrubby vegetation, suggests the agriculture fields in the north,

central, and southwestern sections of the site have been fallow for approximately 5-8 years. A series of drainage swales were observed in Parcel 2 which connect to intermittent Stream S-1.

Residential areas are located adjacent to the site in the southwest and northern sections of the site. There is also a small cemetery located on the northern boundary of Parcel 2.

2.3 Soils

Soil information was obtained from the United State Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) (USDA-NRCS 2015). Soils mapped on the Project study area by the NRCS are shown in Figure 4 and listed in Table 1. The dominant soils mapped on the Project study area include poorly drained Canandaigua silt loam, moderately well drained Phelps gravelly loam, well drained Ontario loam and somewhat poorly drained Ovid silt loam.

Approximately forty-two percent (42%) of the soils mapped at the project site are Canandaigua Silt Loam, which are poorly drained soils (Table 1). Phelps gravelly loam, moderately well drained (17%) and Niagara silt loam, well drained (10%) are also mapped on the site.

Table 1. Soils Mapped within the Project Study Area

Soil Map Unit Symbol	Soil Map Unit Name	Drainage Class
ApA	Appleton silt loam, 0 to 3 percent slopes	Somewhat poorly drained
CaA	Canandaigua silt loam, 0 to 2 percent slopes	Poorly drained
DuB	Dunkirk silt loam, 2 to 6 percent slopes	Well Drained
FpA	Fredon gravelly loam, 0 to 3 percent slopes	Somewhat poorly drained
GnA	Galen very fine sandy loam, 0 to 2 percent slopes	Moderately well drained
GnB	Galen very fine sandy loam, 2 to 6 percent slopes	Moderately well drained
HaA	Halsey silt loam, 0 to 4 percent slopes	Very poorly drained
Ld	Lamson very fine sandy loam	Poorly drained
Le	Lamson mucky very fine sandy loam	Very poorly drained
LmA	Lima silt loam, 0 to 3 percent slopes	Moderately well drained
LmB	Lima silt loam, 3 to 8 percent slopes	Moderately well drained
NgA	Niagara silt loam, 0 to 2 percent slopes	Somewhat poorly drained
OnA	Ontario loam, 0 to 3 percent slopes	Well Drained
OnB	Ontario loam, 3 to 8 percent slopes	Well Drained
OvB	Ovid silt loam, 3 to 8 percent slopes	Somewhat poorly drained
PhA	Palmyra gravelly loam, 0 to 3 percent slopes	Well drained
PhB	Palmyra gravelly loam, 3 to 8 percent slopes	Well drained
PhC	Palmyra gravelly loam, 8 to 15 percent slopes	Well drained
PsA	Phelps gravelly loam, 0 to 3 percent slopes	Moderately well drained

Soil Map Unit Symbol	Soil Map Unit Name	Drainage Class
PsB	Phelps gravelly loam, 3 to 8 percent slopes	Moderately well drained
RsA	Romulus silt loam, 0 to 3 percent slopes	Poorly Drained
Um	Udorthents, smoothed	Well Drained

2.4 Ecological Communities

The Project study area includes nine (9) basic ecological communities; silver maple/ash swamp, shallow emergent swamp, shrub swamp, successional shrubland, beech-maple mesic forest, cropland/row crops, ditch/artificial intermittent stream, successional northern hardwood, and successional old field (Edinger 2014) (Figure 5).

For ease of reference common names are used in the remainder of this report, scientific nomenclature of flora is included in Table 2 and fauna in Table 4.

Table 2. Vegetative Community Scientific Names Referenced

Common Name	Scientific Name
American Beech	*Fagus Grandifolia*
American Elm	*Ulmus Americana*
American Hornbeam	*Carpinus Caroliniana*
Balsam Poplar	*Populus balsamifera*
Bigtooth Aspen	*Populus grandidentata*
Black Ash	*Fraxinus Nigra*
Black Cherry	*Prunus serotina*
Blue Flag Iris	*Iris Versicolor*
Bluegrasses	*Poa Pratensis, P. Compressa*
Boneset	*Eupatorium Altissimum*
Bulrushes	*Scirpus Cyperinus*
Buttercup	*Ranunculus* Spp.
Cattails	*Typha Latifolia*
Clover	*Trifolium* Spp.
Common Chickweed	*Cerastium Arvense*
Common Thistle	*Cirsium* Spp.
Cottonwood	*Populus Deltoides*
Dame's Violet	*Hesperis Matronalis*
Dandelion	*Taraxacum Officinale*
European Common Reed	*Phragmites australis*
Fleabane	*Erigeron* Spp.
Golden Rods	*Solidago Rugosa, S. Gigantean, Solidago Altissima, S. Nemoralis, S. Canadensis*
Grapevine	*Vitis Spp.*
Gray Birch	*Betula populifolia*
Green Ash	*Fraxinus Pennsylvanica*
Hawkweeds	*Hieracium* Spp.
Hobblebush	*Viburnum Lantanoides*

Hop Hornbeam	*Ostrya Virginiana*
Field Horsetail	*Equisetum Arvense*
Water Horsetail	*Equisetum Fluviatile*
Jewelweed	*Impatiens Capensis*
Milkweed	*Asclepias* Spp.
New England Aster	*Sympyotrichum Novae-Angliae*
Orchard Grass	*Dactylis Glomerata*
Oxeye Daisy	*Leucanthemum_Vulgare*
Paper Birch	*Betula papyrifera*
Pin Cherry	*Prunus pensylvanica*
Poison Ivy	*Toxicodendron Radicans*
Purple Loosestrife	*Lythrum salicaria*
Quaking Aspen	*Populus tremuloides*
Queen-Anne's-Lace	*Daucus Carota*
Ragweed	*Ambrosia Artemisiifolia*
Raspberries	*Rubus* Spp.
Red Maple	*Acer Rubrum*
Reed Canary Grass	*Phalaris Arundinacea*
Sedges	*Carex Spp.*
Sensitive Fern	*Onoclea Sensibilis*
Shagbark Hickory	*Carya Ovata*
Shrubby Dogwoods (Red Osier, Gray, Silky, Alternate-Leaved Dogwood)	*Cornus Racemosa, C. Amomum, C. Sericea,* And *Cornus Alternifolia*
Shubby Honeysuckles	*Lonicera Tatarica, L. Morrowii, L. Maacckii*
Silver Maple	*Acer Saccharinum*
Speckled Alder	*Alnus Incana* Ssp. *Rugosa*
Striped Maple	*Acer Pensylvanicum*
Sugar Maple	*Acer Saccharum*
Sumac	*Rhus Typhina, R. Glabra*
Swamp White Oak	*Quercus Bicolor*
Timothy	*Phleum Pratense*
Viburnums (Arrowwood)	*Viburnum Dentatum* Var. *Lucidum, V. Lentago,* And V. *Nudum* Var. *Cassinoides*
Wheat	*Triticum* Spp.
White Ash	*Fraxinus Americana*
White Pine	*Pinus strobus*
Wild Strawberry	*Fragaria Virginiana*
Willows	*Salix Spp.*
Witch Hazel	*Hamamelis Virginiana*
Woolgrass	*Scirpus Cyperinus*
Yellow Birch	*Betula Alleghaniensis*
Tussock Sedge	*Carex Stricta*
Grass-Of-Parnassus	*Parnassia Glauca*
Poison Sumac	*Toxicodendron Vernix*
Shrubby Cinquefoil	(*Dasiphora Fruiticosa Ssp. Floribunda=Potentilla Fruiticosa*

Silver Maple/Ash Swamp

Silver maple/ash swamps are hardwood basin swamps that typically occur in poorly-drained depressions or along the borders of large lakes, and less frequently in poorly drained soils along rivers. These sites are characterized by uniformly wet conditions with minimal seasonal fluctuations in water levels. Distribution is in lowlands of central and western New York in the Appalachian Plateau and Great Lakes Plain ecozones, the St. Lawrence and Lake Champlain Valley ecozones, and the northernmost part of the Central Hudson subzone of the Hudson Valley ecozone.

The dominant trees are typically silver maple and green ash. Other trees include black ash, white ash, swamp white oak, red maple. Characteristic shrubs observed on site include various shrubby dogwoods, viburnums, speckled alder and sapling canopy trees. Characteristic vines observed on site include poison ivy and grapevine.

Ditch/artificial intermittent stream

The aquatic community of an artificial waterway constructed for drainage or irrigation of adjacent lands. Water levels either fluctuate in response to variations in precipitation and groundwater levels, or water levels are artificially controlled. The sides of ditches are often vegetated, with grasses and sedges usually dominant.

Non-native or weedy species are common. Purple loosestrife, European common reed, and reed canary grass often become established and may form dense, monospecific stands. Reed canary grass is often planted along ditches for erosion control. Other plants that are characteristic include sedges and cattails.

Shallow Emergent Marsh

A shallow emergent marsh (wet meadow) community occurs on mineral soil or deep muck soils (rather than true peat) that are permanently saturated and seasonally flooded. This marsh is better drained than a deep emergent marsh; water depths may range from 15 cm to 1 m (6 in to 3.3 ft) during flood stages, but the water level usually drops by mid to late summer and the substrate is exposed during an average year. This is a very broadly defined type that includes several distinct variants and many intermediates. Shallow emergent marshes are very common and quite variable. They may be co-dominated by a mixture of species, or have a single dominant species.

Shallow emergent marshes typically occur in lake basins and along streams often intergrading with deep emergent marshes, shrub swamps, and sedge meadows and they may occur together in a complex mosaic in a large wetland.

Commonly found herbaceous plants and those observed during the field investigations include cattail, bulrush, goldenrods, jewelweed, reed canary grass, blue flag iris, sensitive fern, speckled alder, shrubby dogwoods and willows.

Shrub Swamp

Shrub swamps are mostly inland wetlands dominated by tall shrubs that occur along the shore of a lake or river, in a wet depression or valley not associated with lakes, or as a transition zone

between a marsh, fen, or bog and a swamp or upland community. The substrate is usually mineral soil or muck. This is a very broadly defined type that includes several distinct communities and many intermediates. Shrub swamps are very common and quite variable. They may be co-dominated by a mixture of species, or have a single dominant shrub species.

Shrub swamp species observed on site include alder, red osier dogwood, willows, northern arrowwood, and saplings of red maple, American elm and green ash.

Successional Old Field

A successional old field is characterized as a meadow, dominated by forbs and grasses, that occurs on sites that have been cleared and plowed for farming or development and then abandoned. Fields that are mowed at an interval (*e.g.*, less than once per year) favor the growth of characteristic successional old field species. This is a relatively short-lived community that succeeds to a shrubland woodland, or forest community.

Characteristic vegetation includes goldenrods, bluegrasses, timothy, orchard grass, common chickweed, New England aster, wild strawberry, Queen-Anne's-lace, ragweed, hawkweeds, and dandelion.

Shrubs may be present, but collectively they have less than 50% cover in the community. Characteristic shrubs include gray dogwood, silky dogwood, arrowwood, raspberries, and sumac.

Successional Shrubland

Successional shrublands occur on sites that have been cleared (for farming, logging, development, etc.) or otherwise disturbed. Shrublands typically replace old field plant communities and have at least 50% cover of shrubs.

Characteristic shrubs include alder, red-osier dogwood, willows, arrowwood, and shrubby honeysuckles.

Cropland/row crops:

Croplands consist of agricultural fields planted in row crops such as corn, potatoes, and soybeans. These are currently under cultivation or recently abandoned. This community includes vegetable gardens in residential areas.

Beech-Maple Mesic Forest

A beech-maple mesic forest is a northern hardwood forest with sugar maple and American beech co-dominant. This is a broadly defined community type with several regional and edaphic variants. These forests occur on moist, well-drained, usually acid soils. Common associates are yellow birch, white ash, hop hornbeam, and red maple.

Characteristic small trees or tall shrubs are hobblebush, American hornbeam, striped maple, witch hazel, and alternate-leaved dogwood. Typically there is also an abundance of tree seedlings, especially of sugar maple. American beech and sugar maple saplings are often the most abundant “shrubs” and small trees.

Successional Northern Hardwoods

A hardwood or mixed forest that occurs on sites that have been cleared or otherwise disturbed. Characteristic trees and shrubs include any of the following: quacking aspen, bigtooth aspen, balsam poplar, paper birch, gray birch, pin cherry, black cherry, red maple, white pine, and lesser amounts of ashes and elms. Northern indicators include aspens, birches, and pin cherry. This is a broadly defined community dominated by light-requiring species that are well adapted to establishment following disturbance.

Table 3. Ecological Communities within the Project Study Area

Ecological Community Type	Acres within Study Area
Silver Maple/Ash Swamp	51.1
Shallow Emergent Marsh	16.3
Shrub Swamp	18.3
Successional Old Field	103.7
Successional Shrubland	9.6
Beech-Maple Mesic Forest	9.5
Successional Northern Hardwoods	24.4
Ditch/artificial intermittent stream	1.2
Cropland/row crops	33.2

3 SPECIES EVALUATIONS

The proposed Project study area was investigated for overall flora and fauna during site visits in April, May, August and September 2015. Plant species were observed within each ecological community and were found to be consistent with the Edinger descriptions.

The successional old field in the northern section of Parcel 1 contained clover, dandelion, wheat, thistle, Dame's violet, golden rods, grasses and daisy. This area also contained several large hickory trees along the field edges. The east-central portion of Parcel 1 was dominated more by reed canary grass, goldenrods, willows, and other grasses. The southern old successional field section of Parcel 1 contained more grasses and goldenrods along with wild strawberry, buttercup, and milkweed.

The successional shrubland areas within the site are all very similar to each other and are dominated by dogwoods, willows, goldenrods, ragweed, and bush honeysuckle.

The Beech-Maple mesic forest areas on site are dominated by maple and beech. The maple component ranged from large areas of saplings to old dead standing timber. There are some very tall cottonwoods on the fringe of the wetland/upland area adding to the dense canopy. Ash trees were the dominant species in some areas. The fringe and pocket open areas of this community contained shrubby plants including dogwoods, willows, honeysuckle, and alders.

The silver maple/ash swamp community located within Wetland W-2 (Figure 2) is a classic mix of maple and ash trees. There were many maple saplings and quite a few old growth trees and large standing dead timber. Moss was plentiful on the tree trunks and fallen dead wood. Blue flag iris and water horsetail were observed in several small patches throughout this complex. In addition, poison ivy and grapevine were well established in areas. A large open water area is located in the central and southern sections of W-2. There is a dense forest canopy here allowing

very little sunlight to penetrate. Cottonwoods are a co-dominant species in this area and extend to the wetland boundaries into adjacent shrublands. The shrubby component of this community consisted mostly of dogwood and alders. The other silver maple/ash swamp areas in the Project study area were similar but had less extensive open water components and contained more cottonwood and maple (silver and red) saplings.

The shallow emergent marsh areas were dominated by reed canary grass, willow, and goldenrods with small populations of sensitive fern and sparse patches of dogwood. These were found in the northeastern section of Wetland W-1, the eastern part of Wetlands W-3 and W-2 and in a small northern section of Wetland W-6. Wetland W-4, W-3, and intermittent stream S-1 (Figure 2) contained the largest area of cattails in the study area.

The shrub swamp areas are dominated by maple and ash saplings, dogwoods, willow, goldenrods and reed canary grass. Wetland W-4 contains an area of shrubby wetland with an open water component and cattails. Wetland W-1 Contains the larges section of shrub swamp with many patches of willow, dogwood, northern arrowwood and the occasional autumn olive.

Carrots and corn were planted in the Croplands of Parcel 3 and beans in Parcel 1. Poison ivy, queen-anne's-lace and ragweed are present around the edges.

The ditch/artificial intermittent stream community along the drainage stream is dominated by reed canary grass, cattails and dogwoods. Joe-pie weed and various sedges are found along with willows and the occasional maple and ash.

Successional northern hardwoods are found in small patches around the site and extend outward from the boarders in the southeastern sections. They are dominated by aspens, red maple and cherries with multiple patches of white pine. The understory includes saplings of maples, ashes and aspens along with virginia creeper and poison ivy.

For additional information regarding the wetlands on site please see the AECOM 2015 document, “Wetland Delineation Report for the Site Specific Environmental Assessment for the Western New York National Cemetery”.

Table 4. Fauna Scientific Names Referenced

Common Name	Scientific Name
American Robin	*Turdus migratorius*
Common American Toad	*Anaxyrus americanus*
Eastern Chipmunk	*Tamias striatus*
Eastern Gray Squirrel	*Sciurus carolinensis*
Green Frog	*Rana clamitans*
Northern Leopard Frog	*Rana pipiens*
Red-Tailed Hawk	*Buteo jamaicensis*
Red-Winged Black Bird	*Agelaius phoeniceus*
Turkey Vulture	*Cathartes aura*
White-Tailed Deer	*Odocoileus virginianus*
Wild Turkey	*Meleagris gallopavo*

Animal species observed during the field investigations include, American robin, red-tailed hawk, wild turkey, turkey vulture, red-winged blackbird, common American toad, Northern leopard frog, green frog, eastern chipmunk, eastern gray squirrel, and white-tailed deer.

As part of the plant and animal species surveys; rare, threatened and endangered species and unique habitats potentially present in the Project study area were researched through desktop analysis and groundtruthed during field investigations. As stated earlier in this report, no existing known or proposed nature reserves, scenic rivers, unique ecological sites, geological features, breeding animal concentrations, champion trees, or parks were mapped and/or observed on the site. A discussion of rare, threatened and endangered species that were identified in the literature as having the potential to occur in this study area is provided below.

3.1 Bog Turtle

The bog turtle is New York's smallest turtle, reaching a maximum length of 4.5 inches. It is one of seventeen species of turtles found in New York State, including marine turtles. A bright yellow or orange blotch on each side of its head and neck are a distinctive feature of this species.

The body color is dark with an orange-red wash on the inside of the legs of some individuals.
The carapace (upper shell) is domed and somewhat rectangular, often with prominent rings on the shell plates (scutes). In some older individuals, or those that burrow frequently in coarse substrates, the shell may become quite smooth and polished. Although generally black, the carapace is sometimes highlighted by a chestnut sunburst pattern in each scute. The plastron (lower shell) is hingeless, with a pattern of cream and black blotches. As with most turtles, the plastron of the male is slightly concave while the female's is flat (NYSDEC 2015).

Bog Turtle (stock photo courtesy of USFWS)

3.1.1 Life History

In New York, the bog turtle emerges from hibernation, often spent in an abandoned muskrat lodge or other burrow, by mid-April. In New York bog turtles often hibernate communally with other bog turtles and with spotted turtles. Generally both the air and water temperature must exceed 50 degrees F for the turtle to become active. Mating occurs primarily in the spring but may also occur in the fall and may be focused in or near the hibernaculum (winter shelter). In early to mid-June, a clutch of two to four eggs is laid in a nest which is generally located inside the upper part of an unshaded tussock. The eggs hatch around mid- September. Some young

turtles spend the winter in the nest, emerging the following spring. The adults enter hibernation in late October. Sexual maturity may be reached at eight years or as late as eleven. A bog turtle may live for more than 30 years.

Although generally very secretive, the bog turtle can be seen basking in the open, especially in the early spring just after emerging from hibernation. It is an opportunistic feeder, eating what it can get, although it prefers invertebrates such as slugs, worms, and insects. Seeds, plant leaves, and carrion are also included in its diet.

3.1.2 Survey Methodology

The survey included desktop review of available and pertinent information and 2015 field investigations. Areas within the Project study area possessing characteristics of bog turtle habitat including shallow surface water or soil saturation, soft mucky bottom substrate, and low grass/sedge emergent wetlands (often with a shrub component) were investigated for species presence and supporting data. The site meets the elevation requirement (below 1000 amsl) for potential bog turtle habitat and does possess areas of proper hydrologic conditions necessary to harbor a bog turtle population, however, no vegetation considered to be calciphiles (tussock sedge, grass-of-Parnassus, poison sumac, or shrubby cinquefoil) was observed during the 2015 field investigations

3.1.3 Results

No bog turtles or suitable habitat were observed on site during the 2015 field surveys.

3.2 Eastern Fringed Orchid

The eastern fringed orchid is listed as federally threatened primarily due to loss of habitat. The eastern prairie fringed orchid occurs in a wide variety of habitats, from mesic prairie to wetlands such as sedge meadows, marsh edges, and even bogs. The plant requires full sun for optimum growth and flowering and a grassy habitat with little or no woody encroachment. A symbiotic relationship between the seed and soil fungi, called mycorrhizae, is necessary for seedlings to become established and assimilate nutrients in the soil (USFWS 2015).

This plant is 8 to 40 inches tall and has an upright leafy stem with a flower cluster called an inflorescence. The 3 to 8 inch lance-shaped leaves sheath the stem. Each plant has one single flower spike composed of 5 to 40 creamy white flowers. Each flower has a three-part fringed lip less than 1 inch long and a nectar spur (tube-like structure) which is about 1 to 2 inches long.

Eastern Fringed Orchid ((stock photo: courtesy of USFWS)

3.2.1 Life History

This orchid is a perennial herb that grows from an underground tuber. Flowering begins from late June to early July, and lasts for 7 to 10 days. Blossoms often rise just above the height of the surrounding grasses and sedges. The more exposed flower clusters are more likely to be visited by the hawkmoth pollinators, though they are also at greater risk of being eaten by deer. Seed capsules mature over the growing season and are dispersed by the wind from late August through September.

3.2.2 Survey Methodology

The survey techniques included a desktop review of available and pertinent information and 2015 on-site field investigations. Areas within the Project study area possessing characteristics of eastern fringe orchid habitat including low grass/sedge emergent wetlands and fringe meadows were investigated for species presence and supporting data.

3.2.3 Results

No eastern fringed orchids were observed on site during the 2015 field investigations.

3.3 Houghton's Goldenrod

3.3.1 Life History

Houghton's goldenrod typically grows on moist sandy beaches and shallow depressions between low sand ridges along the shoreline. Houghton's goldenrod grows only in the wetlands along the Great Lakes shoreline. This habitat is called interdunal wetland. Fluctuating water levels of the Great Lakes play a role in maintaining this unique goldenrod. During high water years, colonies of Houghton's goldenrod may be submerged. When water levels recede some plants survive the inundation and new seedlings establish on the moist sand (USFWS 2015).

Other attractive plants that often grow with Houghton's goldenrod include the creamy white Grass-of-Parnassus, the delicate blue Kalm's lobelia, shrubby cinquefoil, twigrush, and other goldenrods. This habitat displays a tapestry of color and texture that continually changes throughout the seasons. It is a unique habitat within the Great Lakes ecosystem.

Houghton's Goldenrod
(stock photo courtesy of USFWS)

3.3.2 Survey Methodology

The survey techniques included desktop review of available and pertinent information and the 2015 on-site field investigations.

3.3.3 Results

No Houghton's goldenrod was observed on site during the 2015 field investigations. No areas exist within the study area possessing the characteristics of Houghton's goldenrod habitat.

3.4 Northern Wild Comfrey

3.4.1 Life History

This plant may be found along the borders of woods and thickets, along trails and pathways through woods, and within upland deciduous woods. It appears to prefer circumneutral or even calcareous areas. The soils are usually sandy or rocky (NYNHP 2015).

This is a perennial wildflower that grows 1-2 feet high with leaves at the base of the plant that are 4-8 inches long and oval-shaped, with long petioles and a rough surface. The leaves are 1-3 inches wide. There are also a few leaves on the flowering stems which are more lanced-shaped. The upper leaves have heart-shaped bases that clasp the stem, the lower ones have short petioles. At the top of the leafless portion of the stem are a few branches with a group of small, 3/8" wide, five-petaled, blue flowers at the ends. The petal lobes are oblong and do not overlap. The fruit consists of four bristly nutlets.

Northern Wild Comfrey (stock photo courtesy of NYNHP)

3.4.2 Survey Methodology

The survey techniques included desktop review of available and pertinent information and 2015 on-site field investigations.

Areas within the Project study area possessing characteristics of northern wild comfrey habitat including woods edges and thickets were investigated for species presence and supporting data.

3.4.3 Results

According to the NYSDEC Environmental Resource mapping tool, there are no rare plant or animals or significant natural communities mapped in the vicinity of the Project study area. However, the website does indicate the potential for northern wild comfrey, which is listed as a NYS-Protect rare plant last documented in 1922.

No northern wild comfrey was observed on site during the 2015 field investigations.

3.5 Northern Long Eared Bat

3.5.1 Life History

The northern long-eared bat is a medium-sized bat with a body length of 3 to 3.7 inches and a wingspan of 9 to 10 inches. Their fur color can be medium to dark brown on the back and tawny to pale-brown on the underside. As its name suggests, this bat is distinguished by its long ears, particularly as compared to other bats in its genus, *Myotis* (USFWS 2015).

Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula. They use areas in various sized caves or mines with constant temperatures, high humidity, and no air currents. Within hibernacula, surveyors find them hibernating most often in small crevices or cracks, often with only the nose and ears visible.

Northern Long Eared Bat (stock photo courtesy of USFWS)

During the summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities or in crevices of both live trees and snags (dead trees). Males and non-reproductive females may also roost in cooler places, like caves and mines. Northern long-eared bats seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or provide cavities or crevices. This bat has also been found rarely roosting in structures, like barns and sheds.

Breeding begins in late summer or early fall when males begin to swarm near hibernacula. After copulation, females store sperm during hibernation until spring. In spring, they emerge from their hibernacula, ovulate and the stored sperm fertilizes an egg. This strategy is called delayed fertilization.

After fertilization, pregnant females migrate to summer areas where they roost in small colonies and give birth to a single pup. Maternity colonies of females and young generally have 30 to 60 bats at the beginning of the summer, although larger maternity colonies have also been seen. Numbers of individuals in roosts typically decreases from pregnancy to post-lactation. Most bats within a maternity colony give birth around the same time, which may occur from late May or early June to late July, depending where the colony is located within the species' range. Young bats start flying by 18 to 21 days after birth. Maximum lifespan for the northern long-eared bat is estimated to be up to 18.5 years.

Like most bats, northern long-eared bats emerge at dusk to feed. They primarily fly through the understory of forested areas feeding on moths, flies, leafhoppers, caddisflies, and beetles, which they catch while in flight using echolocation or by gleaning motionless insects from vegetation.

The northern long-eared bat's range includes much of the eastern and north central United States, and all Canadian provinces from the Atlantic Ocean west to the southern Yukon Territory and eastern British Columbia. The species' range includes the following 37 States and the District of Columbia: Alabama, Arkansas, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia, Wisconsin, and Wyoming.

3.5.2 Survey Methodology

It is not known if previous surveys for northern long eared bat have occurred on site. The preliminary survey technique during the 2015 field investigations consisted of observation and identification of suitable roosting habitat features including trees of the proper size and "texture", dead standing wood, and areas of roosting structure. Potential feeding habitats capable of sustaining an adequate insect population were also investigated.

3.5.3 Results

Some areas of potential habitat were identified including individual trees (hickory and dead standing wood) and tree stands of suitable size located within the beech/maple mesic forest and silver maple/ash swamp communities. These potential habitats are located in the forested sections of the site; at the southern end and the denser sections of the central forested area in Parcel 3, and the large forested components in Parcel 1 (Figure 6). Acceptable feeding/foraging range also exists within the Project study area's forested regions and old field communities throughout much of the site. No northern long eared bats were observed during the 2015 field investigations but additional consultation with regulatory agencies (USFWS/NYSDEC) is recommended to determine if there is a need for additional species presence/absence investigation.

4 RECOMMENDATIONS

For any State or federal applications necessary for the Project, written consultation seeking input from the NYSDEC Natural Heritage Program (rare animals, rare plants, or significant natural communities) and USFWS (federally-listed endangered and threatened species) must be conducted in order to obtain documented clearance. This consists of a letter requesting information regarding rare, threatened and endangered species within or around the proposed Project site. The results of the agency determination will provide the next steps in obtaining documented clearance.

5 SUMMARY

The proposed Western New York National Cemetery site in Genesee County, New York warranted an evaluation of the potential for occurrence of the state- and federally-listed species discussed in this report. The site was assessed in accordance with the applicable state and federal guidelines for surveying these species. No rare, threatened or endangered species were observed during the 2015 surveys. Potential northern long eared bat habitat was observed and further consultation with the USFWS and NYSDEC through letters of information request is recommended. The VA can reduce and minimize potential impacts to this species by conducting site clearing activities between October 1 and March 31, outside of the roosting/nesting season, should potential Northern long-eared bat habitat be proposed for development.

6 REFERENCES

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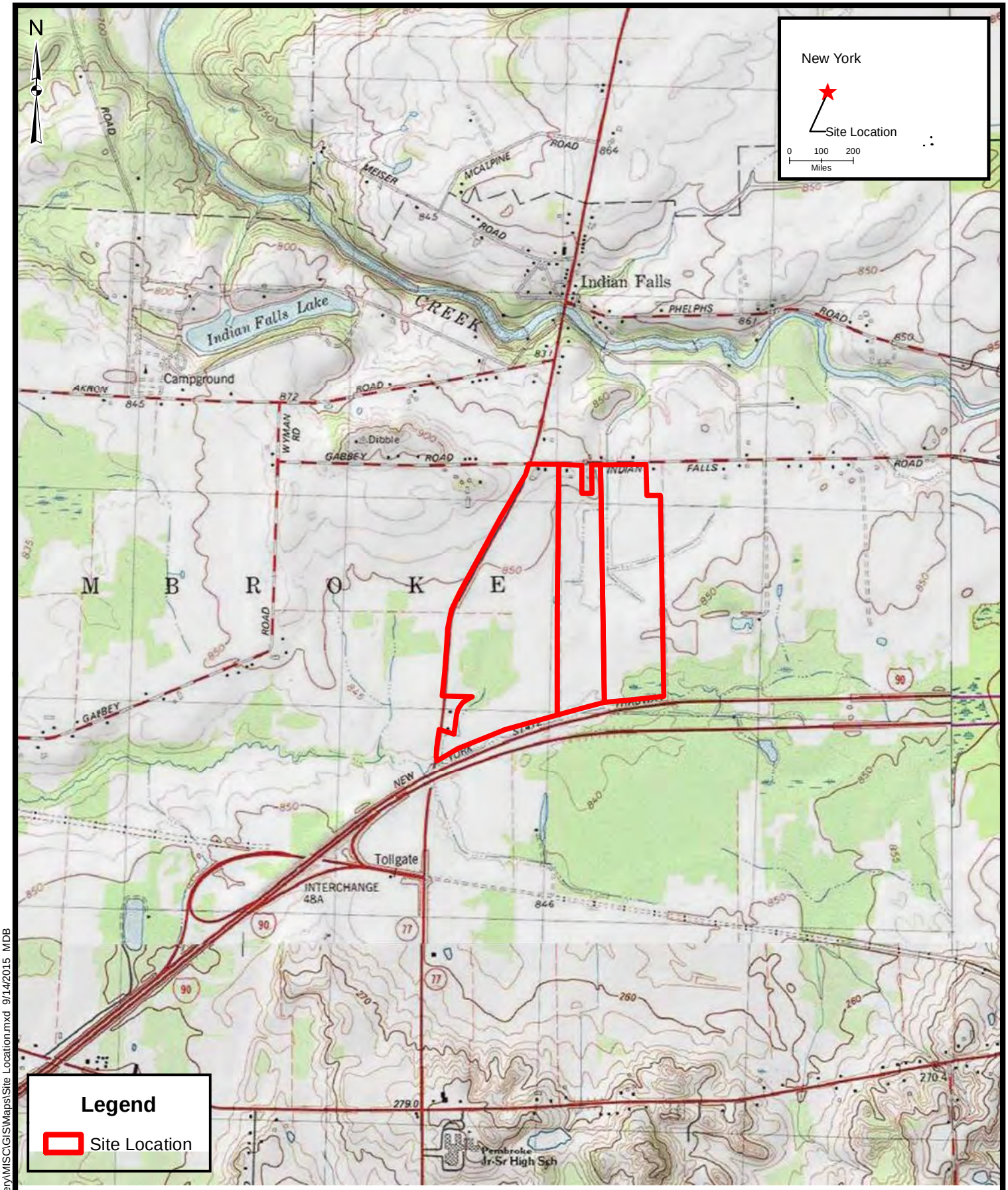
Figures



Source:
© 2013 National Geographic Society, i-cubed; 1:24:000-scale USGS Topographic Maps, Akron SE, Corfu NE, Oakfield SW, Alexander NW

2,000 0 2,000 Feet

AECOM

SITE LOCATION MAP
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

FIGURE 1

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\Site Location.mxd 9/14/2015 MDB

N

GABBEY RD

INDIAN FALLS RD

ALLEGHANY RD

PARCEL 1: 132 Acres

PARCEL 2: 60 Acres

PARCEL 3: 77 Acres

Ditch 1

Wetland 1
16.81 Acres

Wetland 2
46.55 Acres

Wetland 3
14.24 Acres

Wetland 4
3.1 Acres

Wetland 5
2.01 Acres

Wetland 6
3.39 Acres

I 90

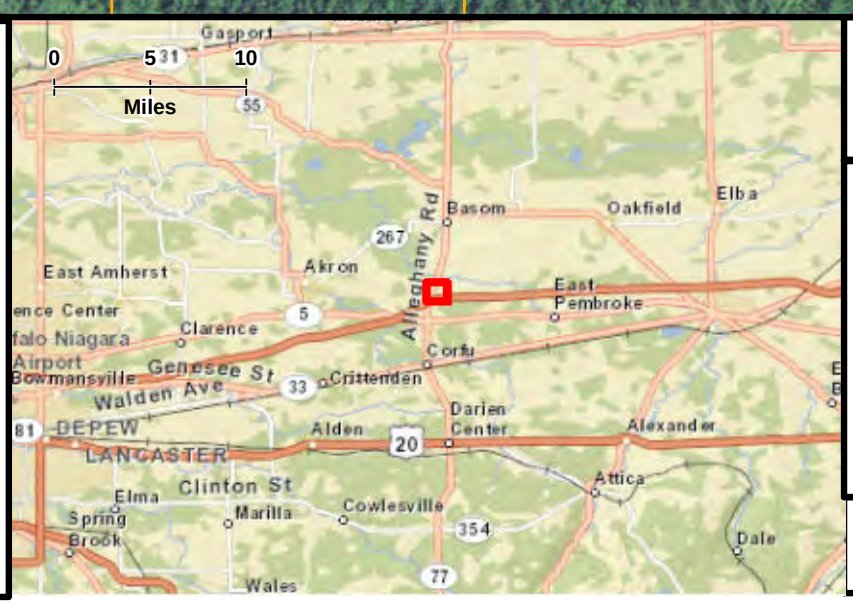
I 90

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\DelineatedWetlands_Portrait.mxd 9/9/2015

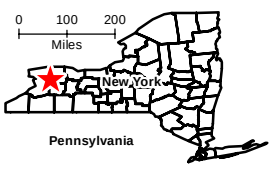
Legend

- Swale
- Ditch
- Wetland Continuation Line
- Streams
- Wetlands
- Site Location

** Field Data Collection Information:*
- *Data Collected on 4/28/2015 & 4/29/2105*
- *Boundary coordinates were collected using a Trimble GeoXH with ESRI's ArcPad*
- *Data was Post-Processed using Trimble's GeoPathfinder Office*



WETLAND & STREAM DELINEATION
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

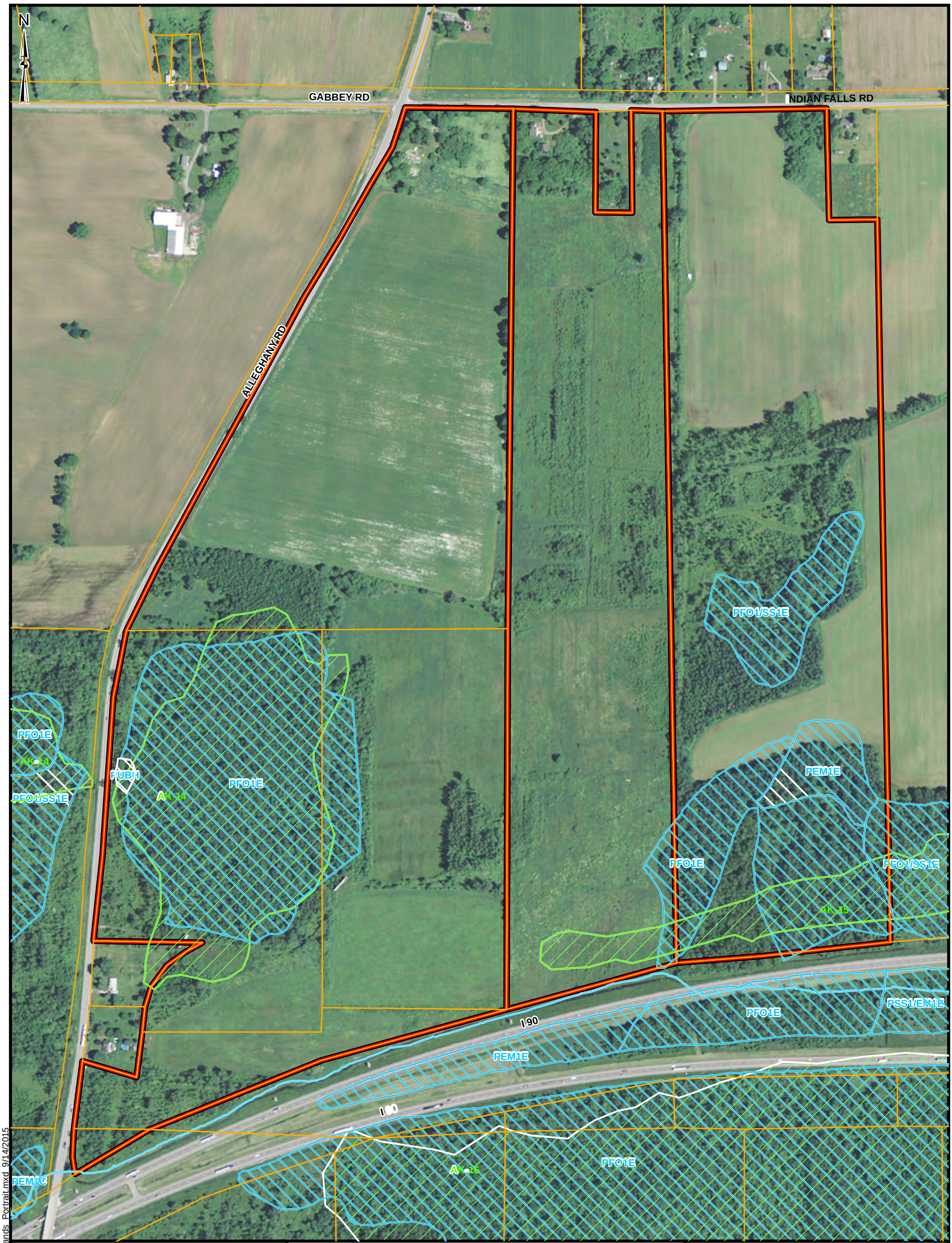


Sources:
Aerial Photo: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
NYSDEC Wetlands and Streams: NYS GIS Clearinghouse, NYSDEC 2002
USFWS Wetlands: USFWS National Wetlands Inventory 2014

400 0 400 Feet

FIGURE 2

AECOM



J:\Projects\60345076_VACemetery\MISC\GIS\Maps\DEC_NWI_Wetlands_Portrait.mxd 9/14/2015

Legend

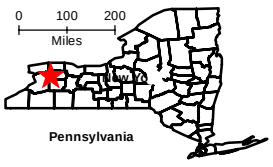
- NYSDEC Stream
- NYSDEC Wetlands
- USFWS NWI Wetlands
- Site Location
- Parcel Boundary

Field Data Collection Information:

- *Data Collected on 4/28/15, 4/29/15, 8/26/15 - 8/31/15, 9/8/15*
- *Boundary coordinates were collected using a Trimble GeoXH with ESRI's ArcPad*
- *Data was Post-Processed using Trimble's GeoPathfinder Office*

0 5 10
Miles

NWI & NYSDEC WETLANDS
VA PROPOSED WESTERN NEW YORK
NATIONAL CEMETERY
PEMBROKE, NEW YORK

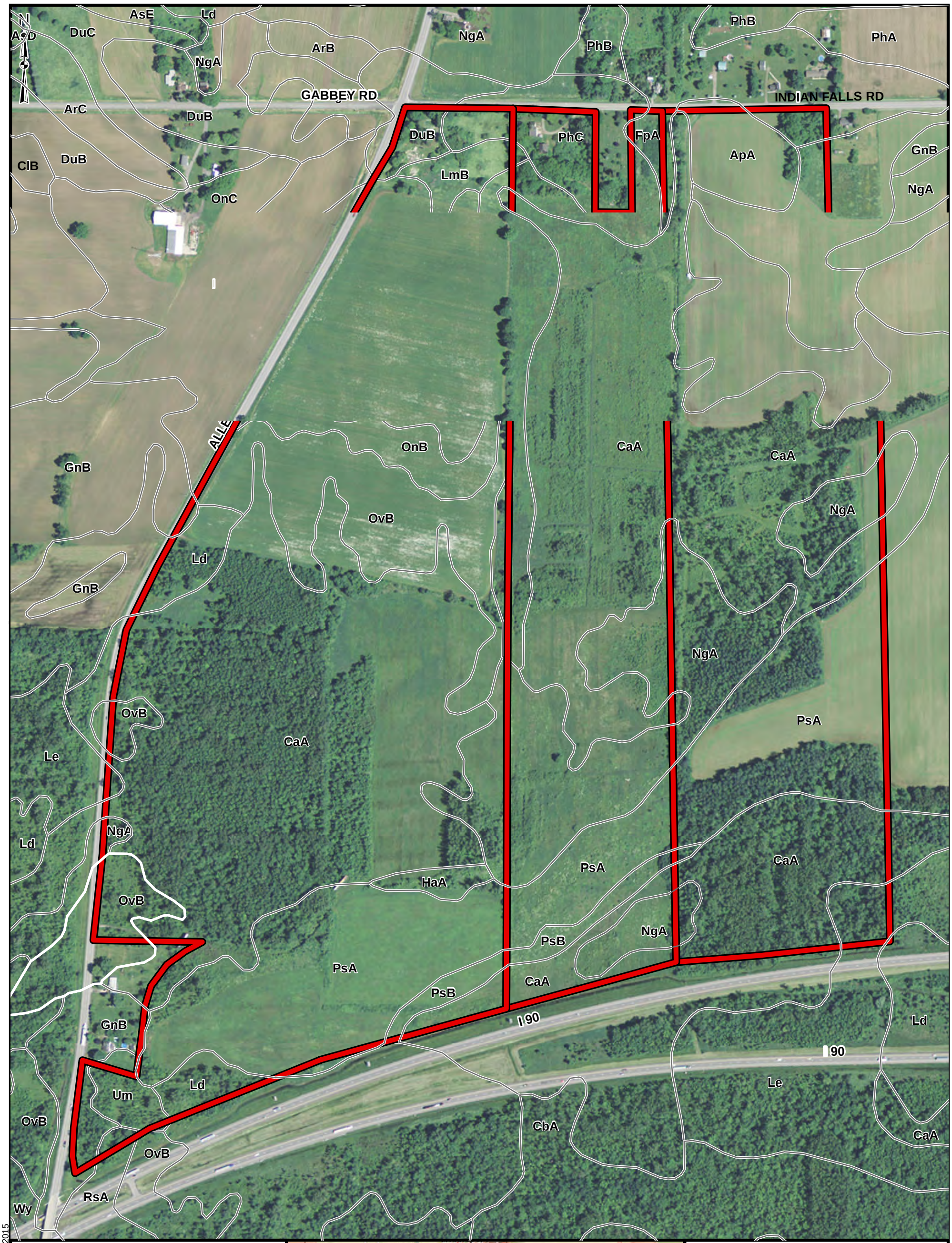


Sources:
Aerial Photo: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
NYSDEC Wetlands and Streams: NYS GIS Clearinghouse, NYSDEC 2002
USFWS Wetlands: USFWS National Wetlands Inventory 2014

400 0 400 Feet

FIGURE 3

AECOM



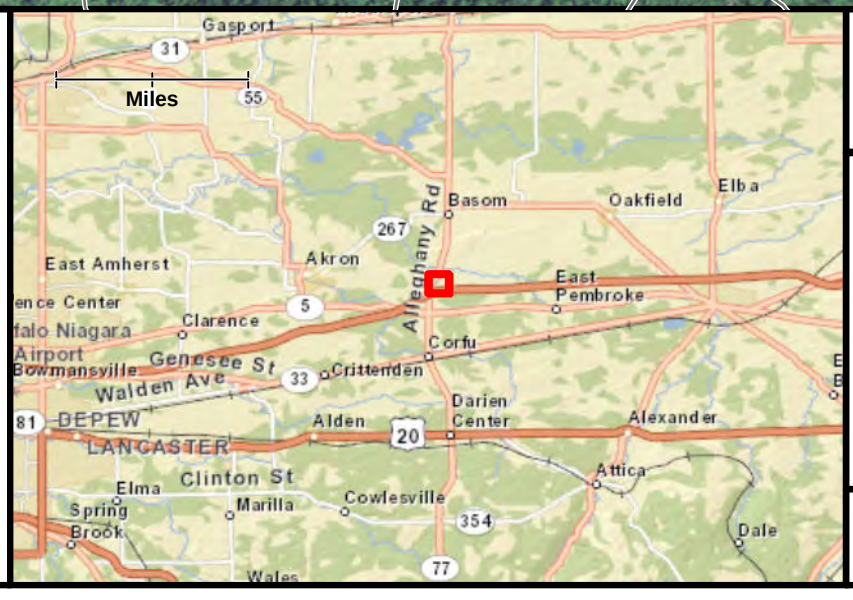
Legend

Site Location

Soil Boundary

Soils within Site Location:

Symbol	Description
ApA	Appleton silt loam, 0 to 3 percent slopes
CaA	Canandaigua silt loam, 0 to 2 percent slopes
DuB	Dunkirk silt loam, 2 to 6 percent slopes
FpA	Fredon gravelly loam, 0 to 3 percent slopes
GnA	Galen very fine sandy loam, 0 to 2 percent slopes
GnB	Galen very fine sandy loam, 2 to 6 percent slopes
HaA	Halsey silt loam, 0 to 4 percent slopes
Ld	Lamson very fine sandy loam
Le	Lamson mucky very fine sandy loam
LmA	Lima silt loam, 0 to 3 percent slopes
LmB	Lima silt loam, 3 to 8 percent slopes
NgA	Niagara silt loam, 0 to 2 percent slopes
OnA	Ontario loam, 0 to 3 percent slopes
OnB	Ontario loam, 3 to 8 percent slopes
OvB	Ovid silt loam, 3 to 8 percent slopes
PhC	Palmyra gravelly loam, 8 to 15 percent slopes
PsA	Phelps gravelly loam, 0 to 3 percent slopes
PsB	Phelps gravelly loam, 3 to 8 percent slopes
RsA	Romulus silt loam, 0 to 3 percent slopes
Um	Udorthents, smoothed



SOILS MAP
VA PROPOSED WESTERN NEW YORK NATIONAL CEMETERY
PEMBROKE, NEW YORK

Sources:
Aerial Imagery: ESRI World Imagery, USDA Farm Service Agency National Agriculture Imagery Program 2013
Soils: USDA NCRS Geospatial Data Gateway 2015

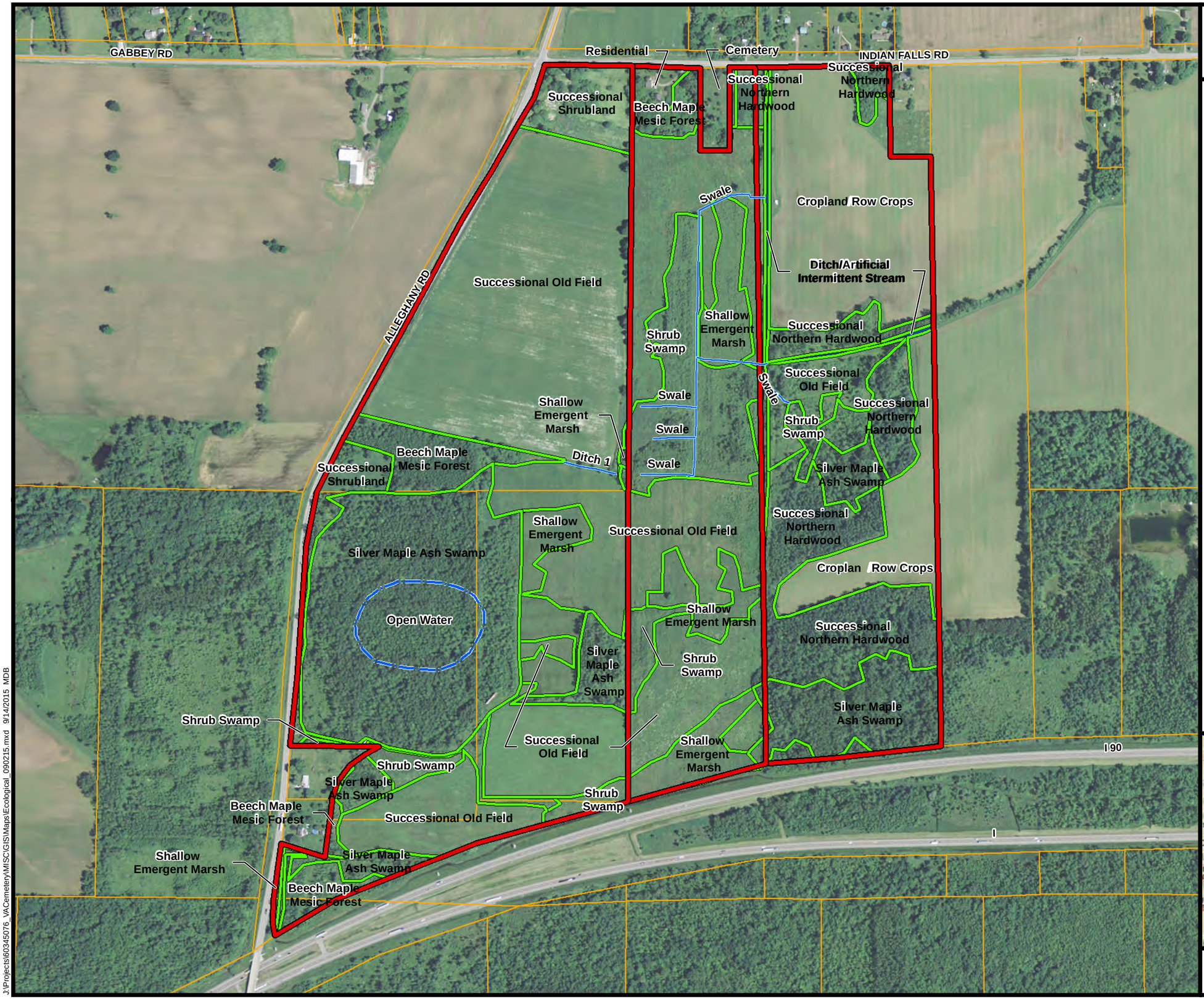
400 0 400 Feet

FIGURE 4

AECOM

J:\Projects\60345076_VACemetery\MISC\GIS\Maps\Soils.mxd 9/14/2015

ECOLOGICAL COMMUNITIES
VA PROPOSED WESTERN NEW YORK NATIONAL CEMETERY
PEMBROKE, NY - DRAFT



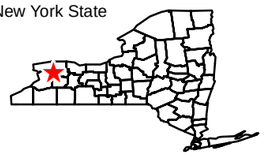
Legend

- Field Delineated Watercourse*
- Ecological Communities*
- Open Water
- Site Location
- Property Boundary
- Municipal Boundary

* Field Data Collection Information:
- Data Collected on 4/28/15 - 4/29/15, 8/26/15 - 8/31/15, 9/8/15
- Boundary coordinates were collected using a Trimble GeoXH with ESRI's ArcPad
- Data was Post-Processed using Trimble's GeoPathfinder Office

Sources:
- Esri World Imagery
- NYS Accident Location Information System (ALIS)

New York State



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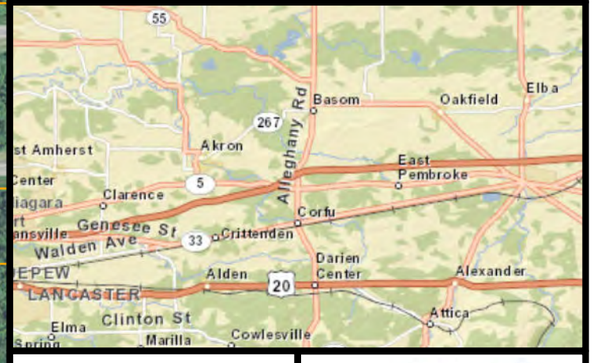

FIGURE 5

AECOM

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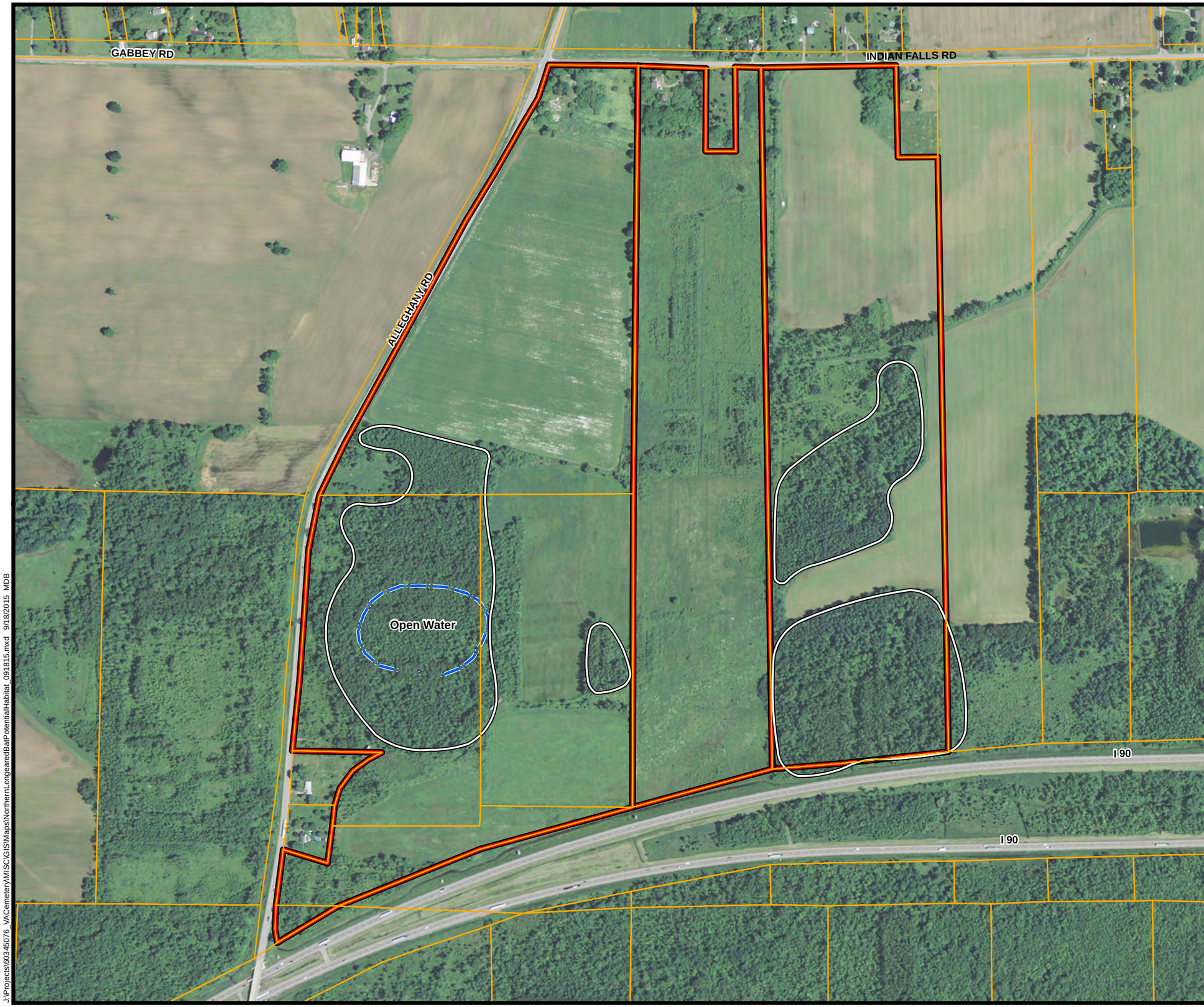
NORTHERN LONGEARED POTENTIAL HABITAT
VA PROPOSED WESTERN NEW YORK NATIONAL CEMETERY
PEMBROKE, NY - DRAFT



Legend

- Northern Longeared Bat Potential Habitat
- Open Water
- Site Location
- Property Boundary
- Municipal Boundary

Sources:
- Esri World Imagery
- NYS Accident Location Information System (ALIS)

New York State

500 0 500 Feet

N

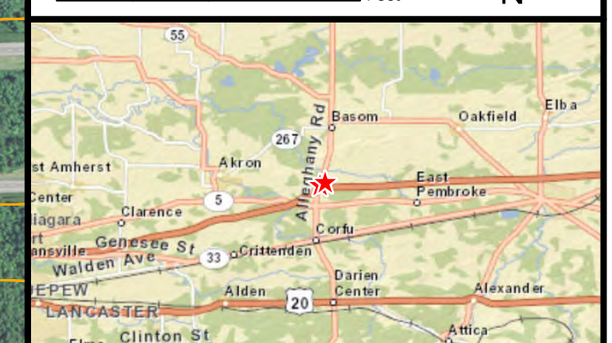


FIGURE 6

AECOM

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

October 6, 2015

Mr. Glenn Elliott
Environmental Engineer
U.S. Department of Veterans Affairs
Office of Construction and Facilities Management
Washington, DC 20420

Dear Mr. Elliott:

This responds to your October 1, 2015, letter regarding a proposed National Cemetery in the Town of Pembroke, Genesee County, New York.

Pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), the Department of Veterans Affairs has determined that the proposed project may affect, but is not likely to adversely affect, the federally-listed threatened northern long-eared bat (*Myotis septentrionalis*). Given the location (outside any known colony home range), extent of tree removal (~5.3 acres), and the proposed conservation measures (e.g., conducting tree removal between October 1 and March 31), we do not anticipate any measurable impacts to the northern long-eared bat. Therefore, we concur with your determination.

No further coordination or consultation under the ESA is required with the U.S. Fish and Wildlife Service (Service) at this time. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of federally-listed and proposed endangered and threatened species in New York is available for your information. Until the proposed project is complete, we recommend that you check our website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project is current.*

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the ESA. This response does not preclude additional Service comments under other legislation.

Any additional information regarding the proposed project and its potential to impact listed species should be coordinated with both this office and with the New York State Department of Environmental Conservation.

Thank you for your time. If you require additional information or assistance please contact Robyn Niver at 607-753-9334. Future correspondence with us on this project should reference project file 120401.

Sincerely,

Patricia Cole

for David A. Stilwell
Field Supervisor

*Additional information referred to above may be found on our website at: http://www.fws.gov/northeast/nyfo/es/section7.htm

cc: NYSDEC, Avon, NY (Env. Permits)

DEPARTMENT OF VETERANS AFFAIRS
Office of Construction & Facilities Management
Washington DC 20420

December 3, 2015

From: Glenn Elliott
U.S. Department of Veterans' Affairs
(202) 632-5879
Glenn.Elliott@va.gov

Kelley Peterman, PWS
AECOM Technical Services, Inc.
150 North Orange Ave., Suite 200
Orlando, FL 32801
(407) 284-4717
Kelley.Peterman@aecom.com

To: Robyn Niver
U. S. Fish & Wildlife Service
New York Field Office
3817 Luker Road
Cortland, NY 13045
Phone: 607.753.9334
Fax: 607.753.9699

RE: Online Project Review Request: Western New York National Cemetery: 60 and 77-acre Additional Tracts
Genesee County, New York
IPaC Identifier: 27FVZ-LQKZ5-D7NCA-FSARY-4TPMWQ

We have reviewed the referenced project using the New York Field Office's online project review process and have followed all guidance and instructions in completing the review. We completed our review and are submitting our project review package in accordance with the instructions for further review.

The Department of Veterans Affairs (VA) may acquire two additional tracts (60 acres and 77 acres respectively) adjacent to the previously evaluated 132 acre site for future establishment of a National Cemetery in western New York located in Pembroke, New York. VA recently received concurrence through Section 7 consultation process from the USFWS regarding this 132 acre parcel, the results of which concluded that the project may affect, but is not likely to adversely affect (MANLAA) the norther long-eared bat (*Myotis septentrionalis*) Endangered

Species Act (ESA) determination through your office (See **Attachment 3**).

As previously stated, the VA may acquire two additional parcels in conjunction with this project, located immediately to the east of the original parcel. The location of the project and the associated action area are depicted in **Figure 1**. All impacts and disturbances will be contained within the property; therefore the project area and action area are identical. Potential habitat for the northern long-eared bat on the additional parcels is limited to the forested sections of the 77-acre parcel at the southern end and denser sections of the centrally located forested area. Construction efforts have not been defined for the foreseeable future (10-year build out) but the VA is willing to limit tree clearing activity to occur between October 1 and March 31 on the site to minimize any potential future impacts as agreed to on the 132-acre parcel. As a result, the VA has determined that development of the project would result in an Endangered Species Act (ESA) determination of "may affect but not likely to adversely affect (MANLAA)" the northern long-eared bat and requests your concurrence.

This project review is needed in order to identify, analyze, and document potential effects associated with the acquisition and establishment of a National Cemetery in this location. The VA conducted a tiered Programmatic Environmental Assessment (PEA) in May 2013 and are currently in the process of conducting a Specific Environmental Assessment (SEA) in accordance with the National Environmental Policy Act of 1969 ([NEPA]; 42 United States Code [USC] 4321 et seq.), the President's Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and 38 CFR Part 26 (Environmental Effects of the Department of Veterans Affairs' Actions). The purpose of this review is to initiate formal agency action resulting in a Biological Opinion (BO) including an Endangered Species Act (ESA) determination for impacts to federally-listed species.

Figure 2 represents the most current masterplan design for the proposed project. This plan may be subject to additional changes, however VA would follow the VA's National Cemetery Administration (NCA) *Facilities Design Guide* (VA, 2008, or its successor) in developing the proposed cemetery design.

The enclosed project review package (**Attachment 1**) provides the information about the species, critical habitat, and bald eagles considered in our review. The species conclusions table included in the package identifies our determinations for the resources that may be affected by the project, as identified using the IPaC system.

We have enclosed our own Biological Assessment Report (**Attachment 2**), which summarizes the due diligence process already undertaken by the VA to determine listed species impact potential for the proposed project.

We look forward to working with you on this project. For any additional information, please contact us.

Sincerely,

Kelley Peterman

Glenn Elliott

Kelley Peterman, PWS
Senior Ecologist

Glenn Elliott
Department of Veterans Affairs

cc: Andrew Glucksman, Mabbett

Enclosures:
Figure 1: Location Map
Figure 2: Overall Master Plan
Attachment 1: Project Review Package
Attachment 2: Biological Assessment Report
Attachment 3: USFWS Biological Opinion (October 6, 2015)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

December 11, 2015

Mr. Glenn Elliott
Environmental Engineer
Department of Veterans Affairs
Office of Construction and Facilities Management
Washington, DC 20420

Dear Mr. Elliott:

This responds to your December 3, 2015, letter regarding a proposed National Cemetery in the Town of Pembroke, Genesee County, New York.

Pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), the Department of Veterans Affairs previously consulted with the U.S. Fish and Wildlife Service (Service) on this project. However, we understand that the proposed action has slightly changed and two additional tracts may be acquired. The Department of Veterans Affairs has determined that the new proposed project may affect, but is not likely to adversely affect the federally-listed threatened northern long-eared bat (*Myotis septentrionalis*). Given the location (outside any known colony home range), extent of tree removal (<7 acres), and the proposed conservation measures (e.g., conducting tree removal between October 1 and March 31), we do not anticipate any measurable impacts to the northern long-eared bat. Therefore, we concur with your determination.

No further coordination or consultation under the ESA is required with the Service at this time. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of federally-listed and proposed endangered and threatened species in New York is available for your information. Until the proposed project is complete, we recommend that you check our website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed projects is current.*

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the ESA. This response does not preclude additional Service comments under other legislation.

Any additional information regarding the proposed project and its potential to impact listed species should be coordinated with both this office and with the New York State Department of Environmental Conservation.

Thank you for your time. If you require additional information or assistance please contact Robyn Niver at (607) 753-9334. Future correspondence with us on this project should reference project file 120401.

Sincerely,

Patricia Cole

for David A. Stilwell
Field Supervisor

*Additional information referred to above may be found on our website at: http://www.fws.gov/northeast/nyfo/es/section7.htm

cc: NYSDEC, Avon, NY (Env. Permits)

NEW YORK STATE OF OPPORTUNITY. | Department of Transportation

ANDREW M. CUOMO
Governor

JOAN McDONALD
Commissioner

KEVIN BUSH, P.E.
Regional Director

June 22, 2015

Mr. Glenn Elliott
U.S. Department of Veterans Affairs
Office of Construction & Facilities Management
425 I Street, NW, Room 6W417a
Washington, DC 20001

Re: Western New York National Cemetery
1232 Indian Falls Road
Town of Pembroke, Genesee County

Dear Mr. Elliott:

Thank you very much for your June 9, 2015 letter regarding the subject project. It was a pleasure for Dan Stahley and me to meet with the project team last month and discuss issues regarding site access, traffic, and drainage on and approaching Route 77. As a permitting agency we look forward to reviewing a traffic impact study and providing guidance on the necessary permits.

If you or members of the project team have any question, please contact Mr. Robert Duennebacke of my staff at 585-272-3475.

Sincerely,

David C. Goehring

David C. Goehring, P.E.
Regional Traffic Engineer

DCG/RLD/bap

c: D. Stahley, Assistant Resident Engineer, Genesee County

From: Elliott, Glenn (CFM)
To: Glucksman, Andrew
Subject: FW: Greening Recommendations for Western New York National Cemetary (1232 Indian Falls Road, Genesee County, New York)
Date: Friday, July 17, 2015 7:05:18 AM

NCA is looking at a green burial policy but we will not be seeking green burial council certification.
Glenn

From: Ramakrishnan, Rajini [mailto:Ramakrishnan.Rajini@epa.gov]
Sent: Thursday, July 16, 2015 3:32 PM
To: Elliott, Glenn (CFM)
Cc: Musumeci, Grace
Subject: [EXTERNAL] Greening Recommendations for Western New York National Cemetary (1232 Indian Falls Road, Genesee County, New York)

Hi Mr. Elliott,
This e-mail is in reference to the Western New York National Cemetary project in Genesee County, New York. We would like to bring to your attention the existence of the Green Burial Council, an environmental certification organization which sets standards for green burial in North America. This includes funeral homes, cemeteries, and product manufacturers. Please see their website for further information: http://greenburialcouncil.org. As stated on their website, green burial involves protecting worker health, reducing carbon emissions, conserving natural resources, and preserving habitat.
We look forward to reviewing the Draft SEA for this project.

Warm regards,

Ms. Rajini Ramakrishnan
U.S. Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007

From: Ramakrishnan, Rajini
Sent: Thursday, July 02, 2015 5:46 PM
To: 'glenn.elliott@va.gov'
Subject: Western New York National Cemetary (1232 Indian Falls Road, Genesee County, New York)

Hello Mr. Elliott,
Hope you are doing well. Your letter to the U.S. EPA Region 2 office in Buffalo concerning the proposed Western New York National Cemetary has been forwarded to me for response. I am writing to ask for further project details (including a detailed project summary, maps, figures, funding sources etc.) on the proposed construction and operation of the Western New York National Cemetary. At this time, the only information we have received about the project is that it is

to be located at 1232 Indian Falls Road, Genesee County, New York (as stated in your letter). Please feel free to e-mail me this information. In addition, please send the Draft SEA document for this project to the attention of Ms. Grace Musumeci at U.S. Environmental Protection Agency, Region 2, 290 Broadway, New York, NY 10007.

Warm regards,

Ms. Rajini Ramakrishnan
U.S. Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007