TRANSPORTATION PROJECT REPORT

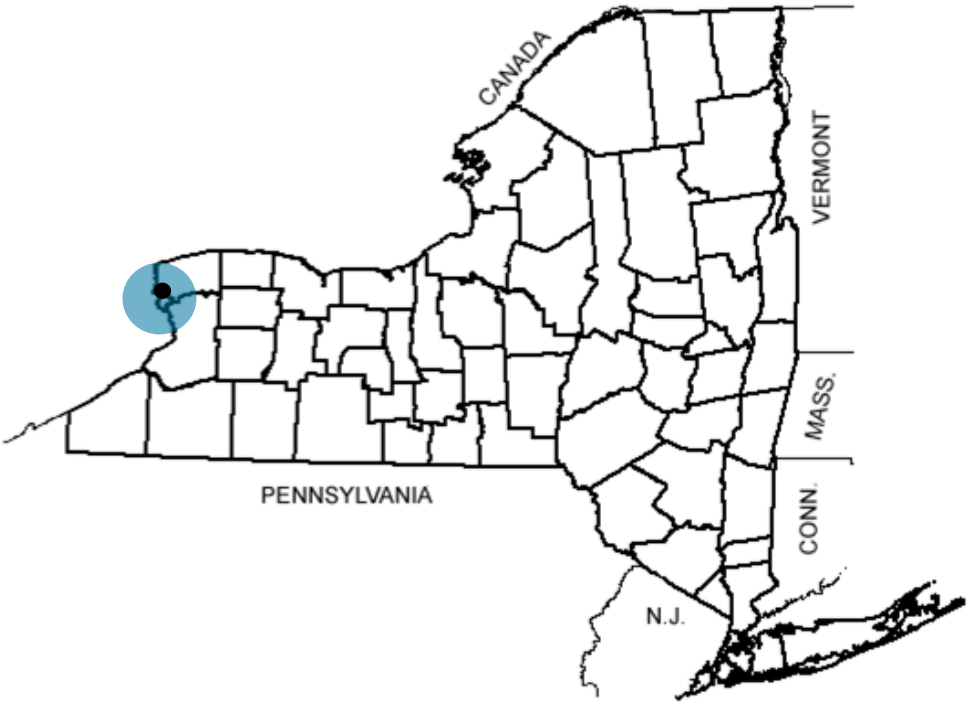
DRAFT DESIGN REPORT / DRAFT ENVIRONMENTAL IMPACT STATEMENT / DRAFT 4(f) EVALUATION

APPENDIX B3

Wetlands Assessment and Delineation Report

November 2016

PIN 5470.22
NYS Route 198 (Scajaquada Expressway Corridor)
Grant Street Interchange to Parkside Avenue Intersection
City of Buffalo
Erie County



NEW YORK STATE OF OPPORTUNITY. Department of Transportation

ANDREW M. CUOMO
Governor

MATTHEW J. DRISCOLL
Commissioner

U.S. Department of Transportation
Federal Highway Administration

Wetlands Assessment and Delineation Report

Prepared for the
NEW YORK STATE DEPARTMENT OF TRANSPORTATION

PIN 5470.22
Design Services for the NYS Route 198
Scajaquada Expressway Corridor
City of Buffalo, Erie County

Prepared by Watts Architecture & Engineering

September 2013
Updated May 2016

I. Introduction

This report has been prepared for the New York State Department of Transportation (NYSDOT) by Watts Architecture & Engineering, PC, (Watts) as a subconsultant to Bergmann Associates (Bergmann) under contract D015557. It presents the findings of a wetland assessment and delineation conducted by Watts in the summer of 2013 as an update to the delineation done in 2008 in support of the Reconstruction of NY Route 198, from Grant Street to Parkside Avenue, City of Buffalo, Erie County, New York (PIN 5470.22).

The study area includes the project corridor and those areas immediately adjacent to the corridor. The study area for analyses was developed based on appropriate protocols under NEPA and related laws, regulations and NYSDOT procedures.

This report describes the wetland resources located within the study area. The project study area includes both sides of Scajaquada Creek from the I-190 to the Kensington Expressway and the shores of Hoyt Lake adjacent to the Scajaquada Expressway. The project site location is depicted on the Project Location Maps presented in Attachment A.

Project Description

This project is located along a 2.0 mile segment of NYS Route 198, Scajaquada Expressway, in the City of Buffalo, Erie County, New York. The purpose of the project is to provide geometric and operational improvements to NYS Route 198 in its current location from the intersection of Grant Street to the intersection of Parkside Avenue, including the segment through Delaware Park. These improvements will be made while maintaining local connectivity and a critical transportation link between Interstate 190 and NYS Route 33, and providing enhanced compatibility with adjacent land uses. The feasible alternative being progressed at this time is Alternative 2. For more information on Alternative 2, refer to the Design Report for this project.

This wetland report has been prepared in support of the Design Report/Environmental Impact Statement (DR/EIS) in progress. The DR/EIS is evaluating one feasible alternative (Alternative 2) that would transform NYS Route 198 from an urban expressway into an urban boulevard with two travel lanes in each direction between Grant Street and Parkside Avenue, in its current location.

II. Methodology

2008

Prior to performing the delineation, a screening assessment of the project corridor was conducted to identify areas of potential wetland that could be affected by the build alternative. The screening consisted of a desktop search and evaluation of available resources, as well as a walkover inspection of the project corridor in June 2008. Background information in the form of aerial photos, USGS topographic maps, NWI mapping, and soil mapping are presented in Attachment A.

The field delineation was based upon the presence of hydrophytic vegetation, hydric soils, and indicators of wetland hydrology, as outlined in the US Army Corps of Engineers' 1987 Wetlands Delineation Manual. The routine on-site inspection methodology as set forth in the manual was employed. The field delineation was performed by Virginia L. Ursitti, QEP (Sr. Environmental Scientist at Watts), trained and experienced in the 1987 Manual's three-parameter methodology and the 2012 Regional Supplement for the Northcentral and Northeast Region. Additional assistance was provided by Mr. Michael Gerber, an experienced field biologist with Watts.

The wetland delineation took place in the areas identified in the screening as having potential to contain federal wetlands. Potential wetland areas were limited to the riparian zones of the waterbodies within the project limits. Two federally-defined wetland areas (labeled A and B) were found within the project corridor. Each wetland was labeled with an alpha-numeric code, in chronological order as the field work progressed. A wetland location map is shown in Attachment B.

2013

The field delineation update was performed on July 31st, 2013 by Virginia L. Ursitti with Lisa Connors, who is also trained and experienced in the 1987 three-parameter methodology. The previously defined wetlands were reviewed and the riparian zone was re-evaluated, particularly where it would be potentially impacted by the proposed design. This report documents the field work conducted in the summer of 2013, which was conducted for the following purposes:

1) The previous delineation was conducted 5 years ago. This is the length of time for which a delineation is generally considered valid. The wetlands delineated in 2008 were re-visited and the wetland characteristics and boundaries were reviewed.

2) Documentation has been updated using the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (January 2012). The 1987 Corps Manual addresses wetlands identification on a national basis. In recent years, a series of Regional Supplements has been published to improve the accuracy of wetland delineation procedures as applied in the various regions across the nation. The Supplements address wetland characteristics that differ based on regional differences such as climate, geology, and plant communities.

3) As the project progressed to the preliminary design phase, the number of project alternatives were reduced and the areas of impact more narrowly defined. The effort documented in this report was more targeted to the potential areas of impact, as well as reviewing the previously delineated wetland boundaries.

4) An evaluation of Scajaquada Creek was conducted in an effort to estimate the ordinary high water mark (OHWM) that would determine the limit of waters of the US regulated by the USACE.

III. Findings

Hydrology

The only surface water body in the project corridor is Scajaquada Creek. It is a channelized stream that has been highly modified along with urbanization of the area over the past two centuries. The Scajaquada Expressway (NYS Route 198) is generally parallel and adjacent to the Creek and crosses over it at two locations within the project corridor. Scajaquada Creek is tributary to the Niagara River and is defined as a water of the US.

The NYSDEC stream classification for Scajaquada Creek is Class B-Fresh Surface Waters, Standards B, pursuant to 6 NYCRR Part 701. The best usages for Class B waters are for primary and secondary contact recreation and fishing. The water quality must be suitable for fish propagation and survival. Disturbance to the bed or banks of this NYSDEC Part 608-protected stream requires consultation with NYSDEC regarding construction date restrictions and other conditions to protect the stream quality.

Scajaquada Creek flows west through the project area to its mouth in the Black Rock Canal section of the Niagara River. The watershed covers an area of 29 mi^2. The source of Scajaquada Creek is a spring in the Town of Lancaster, approximately 15 miles east of the project area. Historically, the creek was wide, shallow and meandering, surrounded by extensive marshes and meadows. Over time, the main channel became routed through underground tunnels, the largest of which resulted from the "Scajaquada Drain" project completed in 1928 that tunneled 3.5 miles of the creek underground. This tunnel outlets in Forest Lawn Cemetery, which is adjacent to the project corridor, then flows through Delaware Park, where it is impounded and becomes Hoyt Lake and Mirror Lake before continuing to flow an additional 1.5 miles east to the Niagara River. The Creek, including the impounded segments, has become channelized and hard-armored throughout the project corridor. The NWI mapping labels Scajaquada Creek within the inspection area as R2UBHx, a permanently flooded lower perennial stream with an unconsolidated bottom that lies within an excavated channel.

General Ecology

Recent aerial photographs of the project corridor show the riverine and riparian covertypes of Scajaquada Creek (along with various managed lawns, trees, and meadow covertypes in Delaware Park, Forest Lawn Cemetery, and the museum grounds) to be a "green belt" that also serves as a wildlife corridor within a large urban area of the City of Buffalo. The NWI mapping labels Scajaquada Creek within the project corridor as a riverine habitat, which the NWI defines as follows:

> "The Riverine system includes all wetlands and deepwater habitats contained in natural or artificial channels containing flowing water or which forms a connecting link between the two bodies of standing water. Upland islands or

> Palustrine wetlands may occur in the channel, but they are not part of the Riverine System."

The field inspection identified approximately six general habitat categories on or adjacent to the project corridor. They include: mowed lawn, successional field, successional shrub, successional forested uplands, unconsolidated bottom riverine and emergent marsh. The majority of the area inspected for potential wetlands consisted of mowed lawn and non-native successional vegetation on the steep creek banks, while emergent marsh vegetation was found only in small areas at the water's edge. The site inspection showed monocultures of invasive vegetative species to be prevalent in several locations. Japanese knotweed was seen in large colonies on the steep slopes of Scajaquada Creek, and European buckthorn is also common. Photographs on the data sheets in Attachment C illustrate these covertypes encountered on the Scajaquada Creek riparian corridor.

Soils

The Web Soil Survey indicates that four soil map units predominate along the riparian corridor. Although predominantly non-hydric, these soil map units may have inclusions of hydric soils in the depressions and lower terraces of the landform:

- East of Lincoln Parkway: SaA - Schoharie silt loam, 0 to 3% slopes; and SbC3 - Schoharie silty clay loam, 8 to15% slopes, severely eroded
- West of Lincoln Parkway: Uc - Udorthents, smoothed; and Ud - Urban land

Urban land and other highly disturbed soils cover the vast majority of the riparian area. This corresponds with the field inspection findings, which indicated non-native fill with very thin topsoil present in most areas. Alluvial soils were observed in narrow bands along the creek banks at the edge of water.

IV. Delineation

Wetland Delineation

2008: The field delineation was performed on August 27, 2008 by Ms. Ursitti (qualifications in Attachment D) after an initial walkover of the project corridor indicated potential wetlands were limited to the riparian zone of Scajaquada Creek. Observations were made at a data sampling point within each potential wetland area, and a data sheet for each representative data point was completed, summarizing the observations of hydrologic, vegetative, and soil indicators, or lack of them. Additional data points were recorded as needed for changes in habitat type and to confirm upland boundaries.

The boundaries of each wetland were marked in the field with pink wetland delineation flagging, and data points were marked with pink flags tied with blue ribbon. All flags were subsequently surveyed by Bergmann, and then plotted onto the project base mapping. The wetland boundaries and data point locations are depicted on the Wetland Delineation Maps in Figures W-1 and W-2 in Attachment B.

Wetlands delineated for this project meet the federal definition of wetlands, and these areas may be regulated by the U.S. Army Corps of Engineers (USACE) subject to their jurisdiction under Section 404 of the Clean Water Act. A review of the NYSDEC Freshwater Wetlands maps and subsequent corridor inspection indicate that there are no state-regulated wetlands located in the vicinity of the project corridor.

2013: The updated field delineation was performed on July 31st, 2013 by Ms. Ursitti (qualifications in Attachment D) and Ms. Connors. The field assessment was primarily targeted on the stream banks at locations of proposed construction as shown on the updated project mapping (most recently provided in June 2013), which indicated again that the potential for wetlands was limited to the banks of Scajaquada Creek.

Observations of the Creek shoreline indicated little change from the previous delineation. Wetlands were found to exist in a very narrow band along the water's edge in two locations, which were found to be the same areas delineated in 2008. Wetlands A and B boundaries were found to closely match those delineated in 2008. One previous wetland boundary flag was found in Wetland B. None were found in Wetland A, but the locations depicted on the hand-held GPS during field work, along with the 2008 photos and wetland map, indicated the previous wetlands are essentially unchanged from 2008.

Data was recorded at a sampling point within each wetland area, using the updated data forms. Additional data points were recorded to confirm upland boundaries, and the boundaries of each wetland were marked in the field with pink wetland delineation flagging. The data points were marked with pink flags tied with blue ribbon.

Wetland Characteristics

Delineated wetlands were found to be linear, along the toe of the creek banks on the north side of Scajaquada creek, opposite the Expressway.

The delineated wetlands perform functions typical of those along highway rights-of-way and/or riparian areas, particularly protection of surface water quality and flood attenuation. The wetland and non-wetland riparian areas additionally provide aquatic and wildlife habitat and open space functions. However, native vegetative species have been largely crowded out by exotic and invasive species, particularly Japanese knotweed and European buckthorn, reducing the ecological value of the upland side of these riparian areas. The individual wetland characteristics as found by this assessment are summarized in the following Table 1.

Table 1: Summary of Delineated Wetlands				
Delineated Wetland Label	Location	Field Description and Ecological Classification	NWI Symbol	NYSDEC ID and Class
A	North side of Scajaquada Creek adjacent to Wegman's property; on north bank of creek	Emergent vegetation in riparian area adjacent to European buckthorn colony on upland streambank slopes	R2UBHx	Scajaquada Creek, Class B
B	North side of Scajaquada Creek upstream side of finger dam; on north bank of creek	Black willow canopy in riparian area at toe of steep slope; little herbaceous cover	R2UBHx	Scajaquada Creek, Class B

Waterways

2013

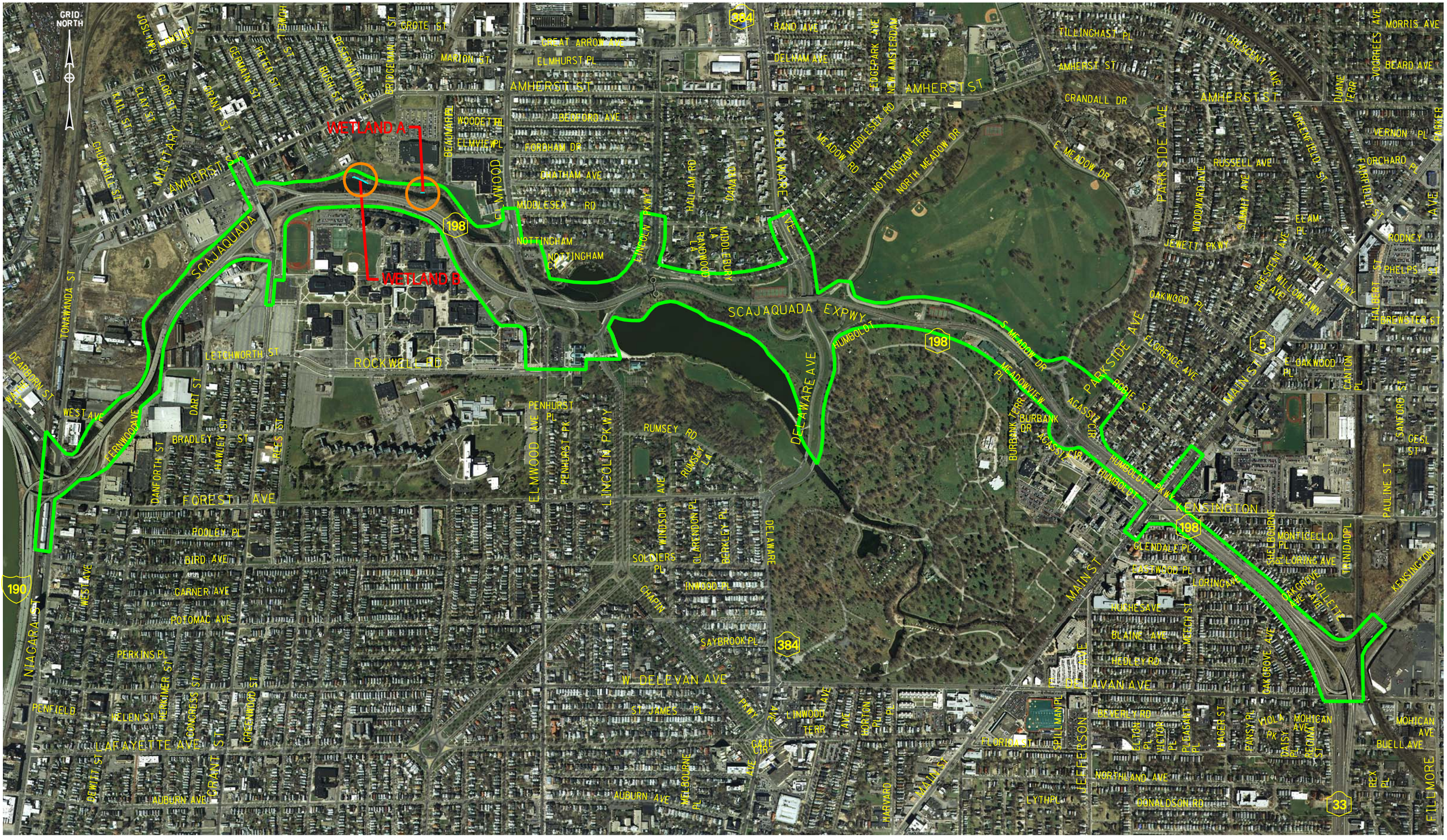
Impacts to waterways from the proposed construction would be limited to the banks of Scajaquada Creek downstream from Mirror Lake. They would be further limited to specific locations of several existing expressway ramps that cross the creek. The banks are typically steep with rip-rap visible along the water's edge. Access to the water's edge is difficult in this area due to the steep incline of the 10- to 20-ft. high banks, which are covered with thick vegetation consisting of successional woody and herbaceous species.

Observations in the field during the delineations in the summers of 2008 and 2013 did not include determination of an ordinary high water mark (OHWM). The banks of the creek are heavily vegetated and, although they may conceal evidence of high water above the existing water's edge, the existing rip rap at the water's edge is currently presumed to be the OHWM.

ATTACHMENT A

Project Location and Resource Maps

1 Project Location on 2005 NYSGIS Orthophotos
2 Project Location on USGS 7.5' Topographic Series
3 NWI Wetland Mapper
4 Web Soil Survey Soil Map



BASEMAP ORTHOPHOTO SOURCE: 2005 NYSGIS GATEWAY

LEGEND

WETLAND ASSESSMENT PROJECT STUDY AREA

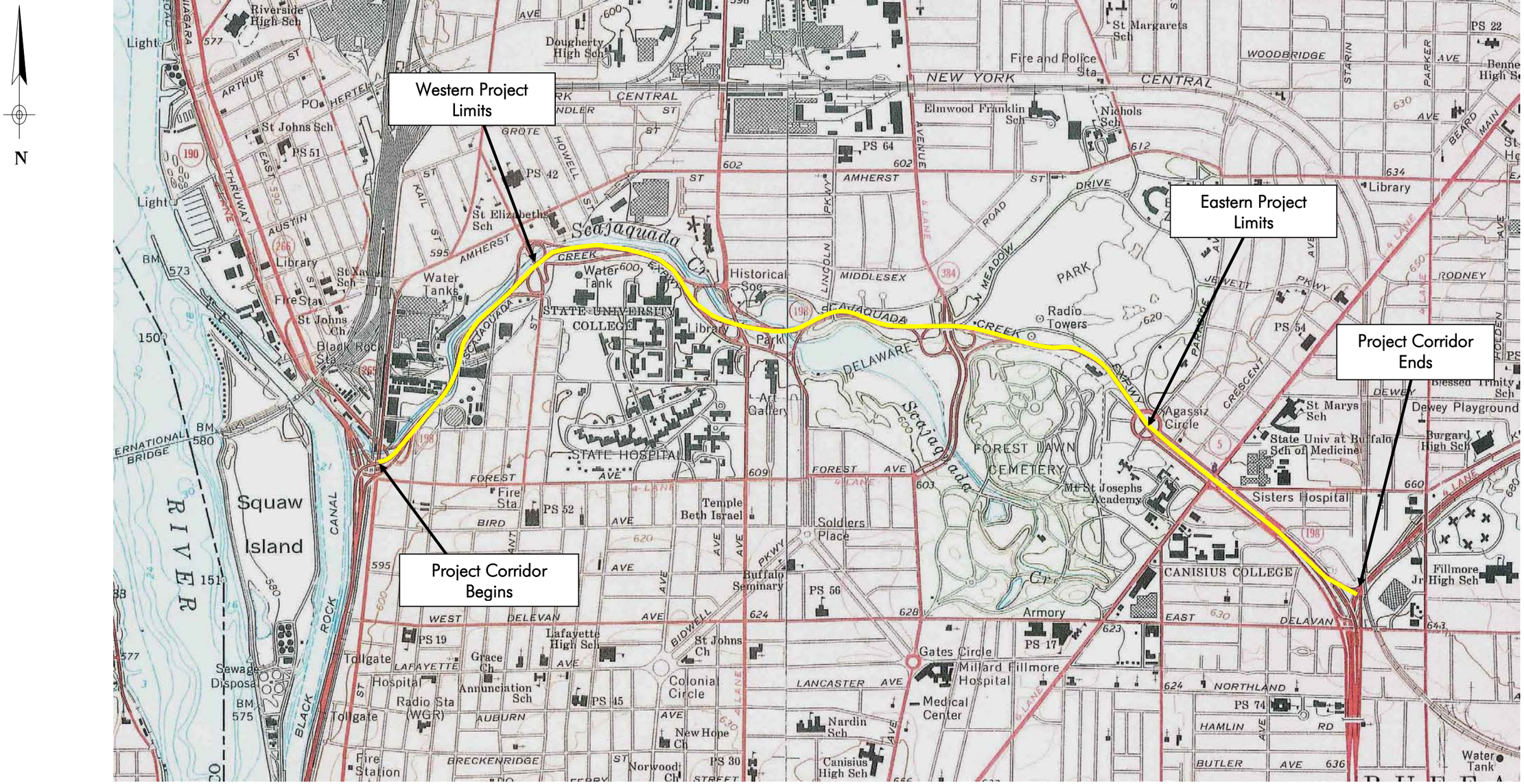
FIGURE 1

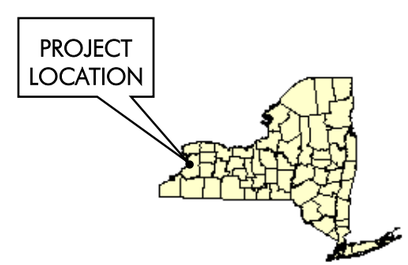
2005 AERIAL PHOTOGRAPH

NY 198 (SCAJAQUADA) CORRIDOR (PIN 5470.22)

CITY OF BUFFALO, ERIE COUNTY, NEW YORK

1:12,000 (11X17 PRINT) | DATE: DECEMBER 2008





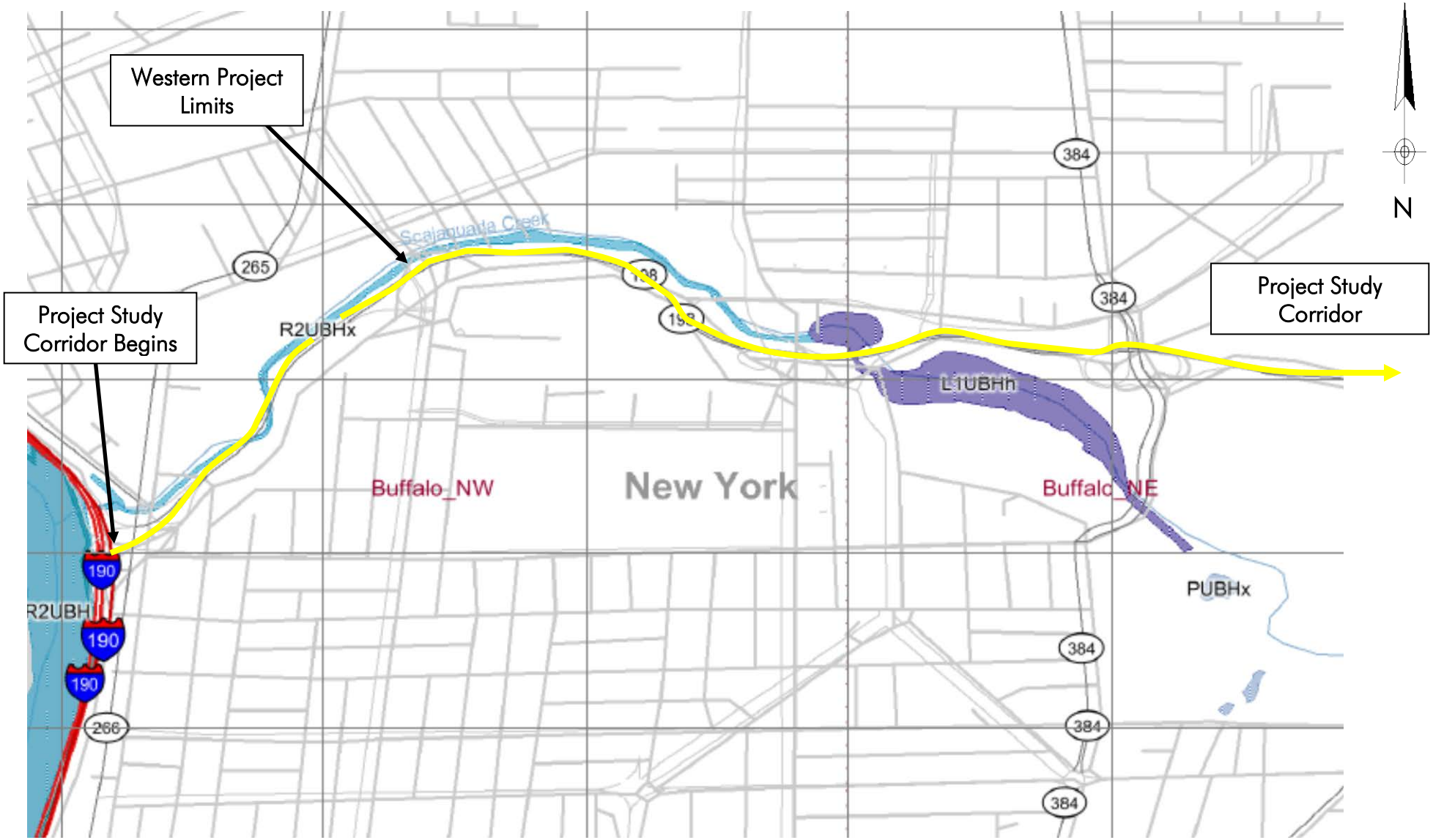
Watts Architecture & Engineering
95 Perry Street
Buffalo, New York

Source:
USGS 7.5 x 15' QUADRANGLES
"Buffalo, NE" and "Buffalo, NW"
1965

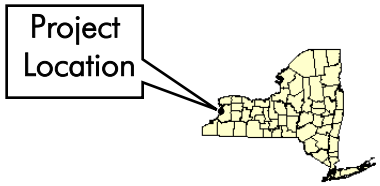
Figure 2 - Project Location Map

NYS Route 198 – Scajaquada Expressway
PIN 5470.22
Buffalo, Erie County, New York

Not to Scale | May 2016



SOURCE:
USF&WS
NWI Wetlands Mapper



Watts Architecture & Engineering
95 Perry Street
Buffalo, New York

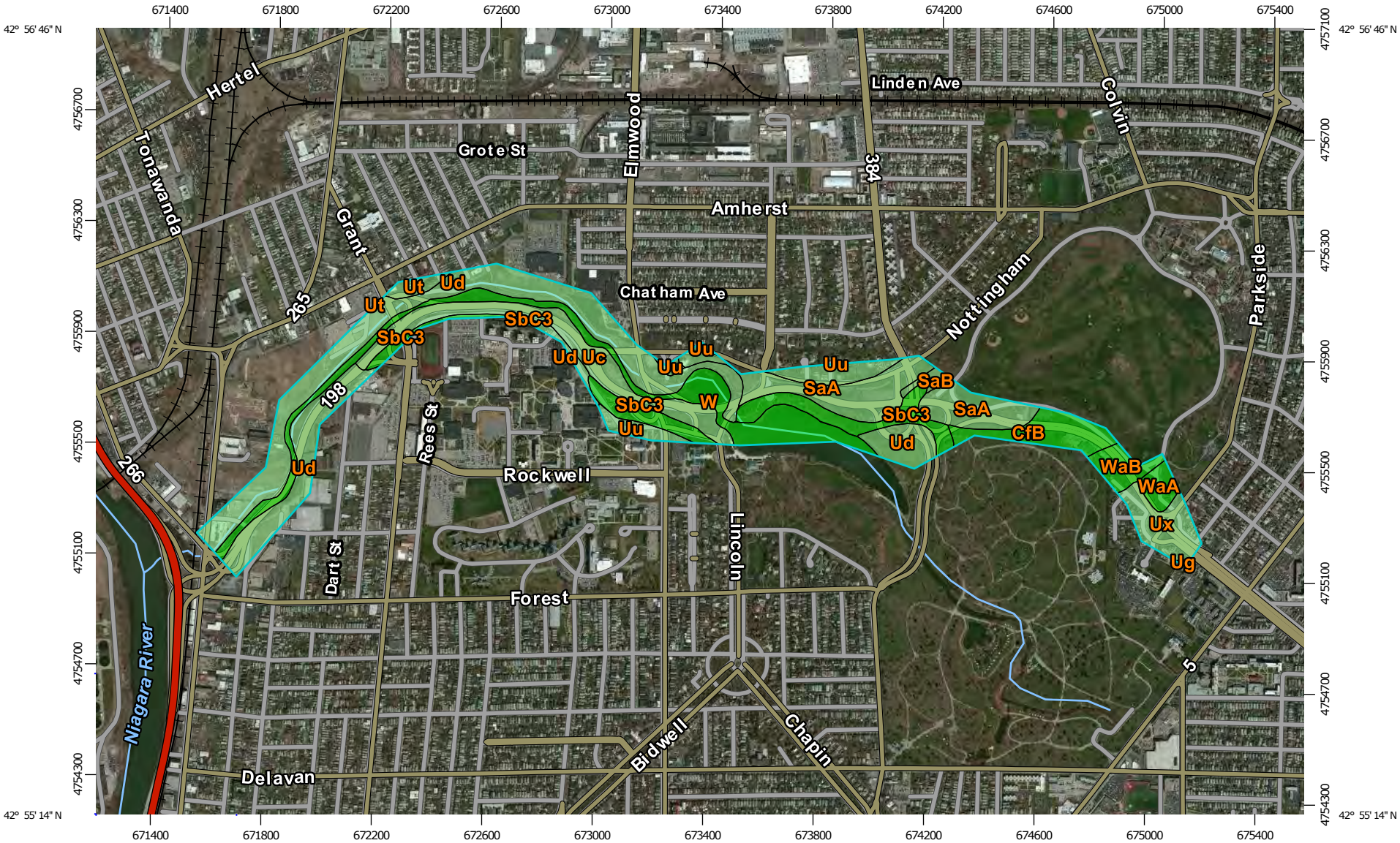
NWI Wetland Map

NYS Route 198 – Scajaquada Expressway
PIN 5470.22
Buffalo, Erie County, New York

Not to Scale

May 2016

Hydric Rating by Map Unit—Erie County, New York
(Scajaquada Creek & Expressway)



Map Scale: 1:20,000 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 250 500 1000 1500

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

Figure 4

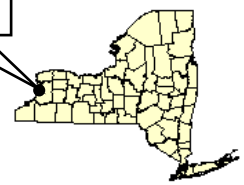
ATTACHMENT B

Wetland Delineation Site Plans

Wetland Location Map
Figure W-1: Wetland A
Figure W-2: Wetland B

BASEMAP SOURCE:
NYSGIS Gateway
2005

PROJECT LOCATION



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3826 Main Street
Buffalo, New York

Wetland Location Map

NYS Route 198 – Scajaquada Expressway
PIN 5470.22
Buffalo, Erie County, New York

Not to Scale

December 2008

WATTS LEGEND

+ DP — DATAPOINT LOCATION

A3 — WETLAND BOUNDARY & FLAG ID

U — UPLAND

MATCH LINE SEE FIGURE 2

PAVED PATH

U

DP-1

A-1

A-2

A-3

DP-2

DP-3

WATER'S EDGE

WETLAND A

SCAJAQUADA CREEK

RGW

NYS 198

NYS 198

ULP

CPBM

WB LANES

EB LANES

BFM

ULP

ULP

ULP

ULP

NOTE: BASEMAPPING INCLUDING WETLAND BOUNDARY FLAG SURVEY LOCATIONS PROVIDED BY BERGMANN ASSOCIATES PC.

WATTS ARCHITECTURE & ENGINEERING, P.C.
3826 Main Street
Buffalo, New York 14226
(716) 836-1540 | (716) 836-2402 Fax

FIGURE W-1
WETLAND A
WETLAND DELINEATION MAP

NY RTE 198 SCAJAQUADA CORRIDOR
PIN 5470.22
CITY OF BUFFALO, ERIE COUNTY

SCALE: 1:500 | NOVEMBER 2008

WATTS LEGEND

+ DP — DATAPOINT LOCATION

A3 — WETLAND BOUNDARY & FLAG ID

U — UPLAND

B-1
B-2
B-3
B-4
B-5
B-6
B-7
DP-4
+ DP-5
U
WETLAND B
PAVED PATH
WATER'S EDGE
SCAJAQUADA CREEK
FINGER DAM
ULP
RGB
RFM
WB LANES
EB LANES
NYS 198
GRANITE CURB
RGW
LS
UEMH
ASPHALT SIDEWALK
MATCH LINE SEE FIGURE 1

NOTE: BASEMAPPING INCLUDING WETLAND BOUNDARY FLAG SURVEY LOCATIONS PROVIDED BY BERGMANN ASSOCIATES PC.

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FIGURE W-2
WETLAND B
WETLAND DELINEATION MAP

NY RTE 198 SCAJAQUADA CORRIDOR
PIN 5470.22
CITY OF BUFFALO, ERIE COUNTY

SCALE: 1:500 | NOVEMBER 2008

Attachment C

Wetland Data Forms and Photos

2013 Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Route 198/Scajaquada Creek County/State Erie/NY Sampling Date: 7/31/2013

Applicant/Owner: NYSDOT (Bergmann Associates, P.C.) Municipality: City of Buffalo Sample Point ID: DP-1 UP

Investigator(s): V. Ursitti and L.Connors Property ID: N. Side of Creek WB 11+550

Subregion (LRR): L Lat: 42.938 Long: -78.884 Datum: Google Maps

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Soil Map Unit Name: Ud - Urban Land NWI classification: RU2BHx

Landform (hillslope, terrace, etc.): foot slope at stream edge Local relief (concave, convex, none): Convex Slope (%): 8-40

Are: Vegetation ____ Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are: Vegetation ____ Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

See Attached: ✓ Photos ____ Site map showing sample locations, transects, features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	Upland side of Wetland A
Wetland Hydrology Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?**
Hydric Soil Present?	Yes ✓	No ____	**Yes** ____ **No** ✓

Remarks:

Using 2013 vegetation list. Since 2008, Rhamnus cathartica changed from to FAC from FAC-

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 30r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus deltoides	5	Y	FAC
2.			
3.			
4.			
	5 = Total Tree Cover		

Sapling/Shrub Stratum (Plot size: 15 r)			
1. Rhamnus cathartica	80	Y	FAC
2. Fraxinus nigra	20	N	FACW
3. Ligustrum vulgare	5	N	FACU
4.			
	105 = Total Shrub Cover		

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Vine Cover		

Herb Stratum (Plot size: r5)			
1. Rhamnus cathartica	70	Y	FAC
2. Solidago gigantea	<2	N	FACW
3.			
4.			
5.			
6.			
7.			
8.			
% Bare Ground in Herb Stratum 25	70 = Total Herb Cover		

Dominance Test worksheet:

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

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

%of Dominant Species that are OBL/FACW/FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index (B/A) = ____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes** ✓ **No** ____

Remarks:

Dominant species all FAC; primarily invasive buckthorn.

SOIL

Sample Point ID: DP-1 UP

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR3/1							silt loam with roots
4-15	10YR3/1		10YR4/2	NA	(mixed	horizons)		silt loam
15-18	10YR4/2		10YR4/4	7				sandy clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]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) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR R, K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spofic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: fill?

Depth (inches): 15"

Hydric Soil Present? Yes ✓ No ___

Remarks:

Dry at 0-15" - historically disturbed profile

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is 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 (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✓

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

Remarks:

Dry; 15 feet from stream, 3-4 ft above surface water

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Route 198/Scajaquada Creek County/State Erie/NY Sampling Date: 7/31/2013

Applicant/Owner: NYSDOT (Bergmann Associates, P.C.) Municipality: City of Buffalo Sample Point ID: DP-2 Wet

Investigator(s): V. Ursitti and L.Connors Property ID: N. Side of Creek Offset: CL Sta: 135m East of Finger Dam

Subregion (LRR): L Lat: 42.938 Long: -78.885 Datum: Google Map

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Soil Map Unit Name: Ud - Urban Land NWI classification: RU2BHx

Landform (hillslope, terrace, etc.): footslope at stream edge Local relief (concave, convex, none): hummocky Slope (%): 5-25

Are: Vegetation ____ Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are: Vegetation ____ Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

See Attached: ✓ Photos ____ Site map showing sample locations, transects, features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	Wetland A
Wetland Hydrology Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?**
Hydric Soil Present?	Yes ✓	No ____	**Yes** ✓ **No** ____

Remarks:

Same as DP-2 (2008). Narrow riparian zone of creek is slightly wider here. Wetland flags A-1 to A-3

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 30r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus deltoides	10	Y	FAC
2.			
3.			
4.			
	10 = Total Tree Cover		

Sapling/Shrub Stratum (Plot size: 15 r)			
1. Acer negundo	33	Y	FAC
2. Ulmus rubrum	10	N	FAC
3. Rhamnus cathartica	10	N	FAC
4. Prunus sp.	<2	N	NI
	55 = Total Shrub Cover		

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	= Total Vine Cover		

Herb Stratum (Plot size: r5)			
1. Agrostis alba	60	Y	FACW
2. Lythrum salicaria	20	N	OBL
3. Phalaris arundinacea	45	Y	FACW
4. Sparganium americanum		N	OBL
5. Polygonum amphibium		N	OBL
6. Iris sp.		N	OBL
7. Ajuga reptans		N	NI
8.			
% Bare Ground in Herb Stratum ____	125 = Total Herb Cover		

Dominance Test worksheet:

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

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

%of Dominant Species that are OBL/FACW/FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index (B/A) = ____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes** ✓ **No** ____

Remarks:

Iris, Sparganium americanum, Polygonum amphibium and Ajuga reptans in vegetated shallows of creek.

SOIL

Sample Point ID: DP-2 Wet

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR3/2	99	7.5YR3/6	1		PL		topsoil loam with roots
4-7	7.5YR3/1	99					coarse	sand and silt, some grave;
7-13	7.5YR4/1	85	7.5YR4/9	1	C	M	coarse	sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]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) (**LRR R, MLRA 149B**)
- __ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- __ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- __ Loamy Mucky Mineral (F1) (**LRR R, K, L**)
- __ Loamy Gleyed Matrix (F2)
- __ Depleted Matrix (F3)
- __ Redox Dark Surface (F6)
- __ Depleted Dark Surface (F7)
- __ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- __ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- __ Coast Prairie Redox (A16) (**LRR K, L, R**)
- __ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- __ Dark Surface (S7) (**LRR K, L**)
- __ Polyvalue Below Surface (S8) (**LRR K, L**)
- __ Thin Dark Surface (S9) (**LRR K, L**)
- __ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- __ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- __ Mesic Spofic (TA6) (**MLRA 144A, 145, 149B**)
- __ Red Parent Material (TF2)
- __ Very Shallow Dark Surface (TF12)
- __ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): 20

Hydric Soil Present? Yes ✓ No ____

Remarks:

soft/void spaces, corer went full depth

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is 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 (minimum of two required)

- __ Surface Soil Cracks (B6)
- __ Drainage Patterns (B10)
- __ Moss Trim Lines (B16)
- __ Crayfish Burrows (C8)
- __ Saturation Visible on Aerial Imagery (C9)
- __ Stunted or Stressed Plants (D1)
- __ Geomorphic Position (D2)
- __ Shallow Aquitard (D3)
- __ Microtopographic Relief (D4)
- __ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✓ No ____ Depth (inches): within 3 ft

Water Table Present? Yes ✓ No ____ Depth (inches): 3

Saturation Present? (includes capillary fringe) Yes ✓ No ____ Depth (inches): 3

Wetland Hydrology Present? Yes ✓ No ____

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

Remarks:

GPS Photos DSC 01396 & 01397

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Route 198/Scajaquada Creek County/State Erie/NY Sampling Date: 7/31/2013

Applicant/Owner: NYSDOT (Bergmann Associates) Municipality: City of Buffalo Sample Point ID: DP 3

Investigator(s): V. Ursitti and L.Connors Property ID: N. Side of Creek Offset: CL Sta:

Subregion (LRR): L Lat: 42.938 Long: -78.884 Datum: Google Maps

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Soil Map Unit Name: Ud - Urban Land NWI classification: RU2BHx

Landform (hillslope, terrace, etc.): foot slope at stream edge Local relief (concave, convex, none): None Slope (%): 8-15

Are: Vegetation ____ Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are: Vegetation ____ Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

See Attached: ✓ Photos ____ Site map showing sample locations, transects, features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____
Wetland Hydrology Present?	Yes ✓	No ____
Hydric Soil Present?	Yes ✓	No ____

At edge of stream: not flagged as wetland

Is the Sampled Area within a Wetland? **Yes** ✓ **No** ✓

Remarks:

Includes land side and water side at shoreline, only. Extremely narrow (1ft wide) riparian area. Wild celery in deeper water. No flags.

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 30r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus deltoides	10	Y	FAC
2. Acer negundo	10	Y	FAC
3.			
4.			
	20 = Total Tree Cover		

Sapling/Shrub Stratum (Plot size: 15 r)			
1. Rhamnus cathartica	20	Y	FAC
2. Acer negundo	20	Y	FAC
3.			
4.			
	40% = Total Shrub Cover		

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	= Total Vine Cover		

Herb Stratum (Plot size: 1' x 20')			
1. Agrostis gigantea	50	Y	FACW
2. Persicaria hydropiper	10		OBL
3. Leersia oryzoides	25		OBL
4. Lythrum salicaria	10		OBL
5. Lemna sp.	10		OBL
6.			
7.			
8.			
% Bare Ground in Herb Stratum 25	110% = Total Herb Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

%of Dominant Species that are OBL/FACW/FAC: 88 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	1	x 1 =	1
FACW species	3	x 2 =	6
FAC species	3	x 3 =	9
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	7 **(A)**		16 **(B)**

Prevalence Index (B/A) = 2.3

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

✓ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes** ✓ **No** ____

Remarks:

herbaceous species growing in water or at water's edge, only. Up slope is nearly a monoculture of buckthorn

SOIL

Sample Point ID: DP 3

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/1		10YR 4/2	10	C	PL		mucky loam
4-10	10YR3/1							clayey silt loam
10-18	10YR3/1		10YR3/4		C	M		clayey loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]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) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR R, K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ✓ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spofic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

few inches from water's edge

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is 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 (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✓ No ___ Depth (inches): _____

Water Table Present? Yes ✓ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No ___

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

Remarks:

Water's edge is mapped at an elevation of approx. 175.2

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Route 198/Scajaquada Creek County/State Erie/NY Sampling Date: 7/31/2013

Applicant/Owner: NYSDOT (Bergmann Associates, P.C.) Municipality: City of Buffalo Sample Point ID: DP-4 Wet

Investigator(s): V. Ursitti and L.Connors Property ID: North Side of Creek CL Sta: WB 11+350

Subregion (LRR): L Lat: 42.938 Long: -78.885 Datum: Google Maps

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Soil Map Unit Name: Ud - Urban Land NWI classification: _____

Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): Concave Slope (%): 5-30

Are: Vegetation _____ Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are: Vegetation _____ Soil _____,or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

See Attached: ✓ Photos ____ Site map showing sample locations, transects, features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____
Wetland Hydrology Present?	Yes ✓	No _____
Hydric Soil Present?	Yes ✓	No _____

Wetland B

Is the Sampled Area within a Wetland? **Yes** ✓ **No** _____

Remarks:

Same as DP-4 (2008) ~ 150 feet E of trash rack

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 30r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix nigra	90	Y	OBL
2. Ulmus sp.	10	N	NI
3.			
4.			
	100 = Total Tree Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

%of Dominant Species that are OBL/FACW/FAC: 100 (A/B)

Sapling/Shrub Stratum (Plot size: 15 r)			
1. Rhamnus cathartica	20	Y	FAC
2. Acer negundo	10	Y	FAC
3. Fraxinus nigra	15	Y	FACW
4.			
	45 = Total Shrub Cover		

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Vine Cover		

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) = _____

Herb Stratum (Plot size: r5)			
1. Phalaris arundinacea	30	Y	FACW
2. Fraxinus nigra	<5	N	FACW
3. Rhamnus cathartica	<5	N	FAC
4. Solidago gigantea	<5	N	FAC
5.			
6.			
7.			
8.			
	45 = Total Herb Cover		

% Bare Ground in Herb Stratum 60

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes** ✓ **No** _____

Remarks:

Forested Floodplain

SOIL

Sample Point ID: DP-4 Wet

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR2/1							mucky clayey loam with organic
6-12	7.5YR3/1 and 7.5YR4/3							mucky clayey loam with organic

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]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) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ✓ Loamy Mucky Mineral (F1) (**LRR R, K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spofic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Fill

Depth (inches): 10"

Hydric Soil Present? Yes ✓ No ___

Remarks:

Refusal likely due to fill below 12". Accumulated soil layer.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is 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 (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No ___

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

Remarks:

Point is 5 feet from edge of water.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Route 198/Scajaquada Creek County/State Erie/NY Sampling Date: 7/31/2013

Applicant/Owner: NYSDOT (Bergmann Associates) Municipality: City of Buffalo Sample Point ID: DP-5 Up

Investigator(s): V. Ursitti and L.Connors Property ID: North Side of Creek CL Sta: WB 11+350

Subregion (LRR): L Lat: 42.938 Long: -78.885 Datum: Google Maps

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Soil Map Unit Name: Ud - Urban Land NWI classification: RU2HBx

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 25

Are: Vegetation ____ Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are: Vegetation ____ Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

See Attached: ✓ Photos ____ Site map showing sample locations, transects, features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?**
Hydric Soil Present?	Yes ____	No ✓	**Yes** ____ **No** ✓

Remarks:

Upland side of Wetland B. New data point. Typical of steep slope in this area.

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 30r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix nigra	90	Y	OBL
2. Ulmus rubrua	45	Y	FAC
3.			
4.			
	135%	= Total Tree Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 6 (B)

%of Dominant Species that are OBL/FACW/FAC: 67% (A/B)

Sapling/Shrub Stratum (Plot size: 15 r)			
1. Rhamnus cathartica	30	Y	FAC
2. Ulmus rubra	30	Y	FACU
3.			
4.			
	60%	= Total Shrub Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____	= Total Vine Cover	

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) = ____

Herb Stratum (Plot size: 5r)			
1. Fraxinus nigra	7	Y	FACW
2. Glechoma hederacea	10	Y	FACU
3. Solidago gigantea	<1	N	FACW
4.			
5.			
6.			
7.			
8.			
% Bare Ground in Herb Stratum 60	18%	= Total Herb Cover	

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes** ✓ **No** ____

Remarks:

SOIL

Sample Point ID: DP-5 Up

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 3/2 and							dry silt loam
	10YR 4/2							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]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) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR R, K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spofic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

very dry

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is 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 (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

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

Remarks:

Steep bank - Up slope 10 feet from Wetland B

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Route 198/Scajaquada Creek County/State Erie/NY Sampling Date: 7/31/2013

Applicant/Owner: NYSDOT (Bergmann Associates) Municipality: City of Buffalo Sample Point ID: DP-7 Up

Investigator(s): V. Ursitti and L.Connors Property ID: N. Side of Creek btw Grant St. ramps; CL Sta:

Subregion (LRR): L Lat: 42.938 Long: -78.886 Datum: Google Maps

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Soil Map Unit Name: Ud - Urban Land NWI classification: RU2HBx

Landform (hillslope, terrace, etc.): terrace part of bank slope Local relief (concave, convex, none): convex Slope (%): 8-15

Are: Vegetation ____ Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are: Vegetation ____ Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

See Attached: ✓ Photos ____ Site map showing sample locations, transects, features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?**
Wetland Hydrology Present?	Yes ____	No ✓	**Yes** ____ **No** ✓
Hydric Soil Present?	Yes ____	No ✓	

Remarks:

DP-6 was not assigned to a label.

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 30 r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer platanoides	25	Y	UPL
2. Rhus copallinum	55	Y	UPL
3.			
4.			
	80 = Total Tree Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 8 (B)

%of Dominant Species that are OBL/FACW/FAC: 38% (A/B)

Sapling/Shrub Stratum (Plot size: 15 r)			
1. Rhus copallinum	60	Y	UPL
2. Rhamnus cathartica	60	Y	FAC
3.			
4.			
	120 = Total Shrub Cover		

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Vine Cover		

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) = ____

Herb Stratum (Plot size: 5 r)			
1. Symphyotrichum racemosum	10	Y	FACW
2. Rhamnus cathartica	15	Y	FAC
3. Rhus copallinum	5	N	UPL
4. Glechoma hederacea	15	Y	FACU
5. Symphyotrichum pilosum	10	Y	FACU
6. Acer negundo	5	N	FAC
7.			
8.			
% Bare Ground in Herb Stratum ____	60% = Total Herb Cover		

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

____ Prevalence Index is ≤3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes** ____ **No** ✓

Remarks:

SOIL

Sample Point ID: DP-7 Up

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR4/2							medium sand and silt

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]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) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR R, K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spofic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: rock/fill

Depth (inches): 1-4

Hydric Soil Present? Yes ____ No ✓

Remarks:

Hard armor - large flat riprap paving (no mortar)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is 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 (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

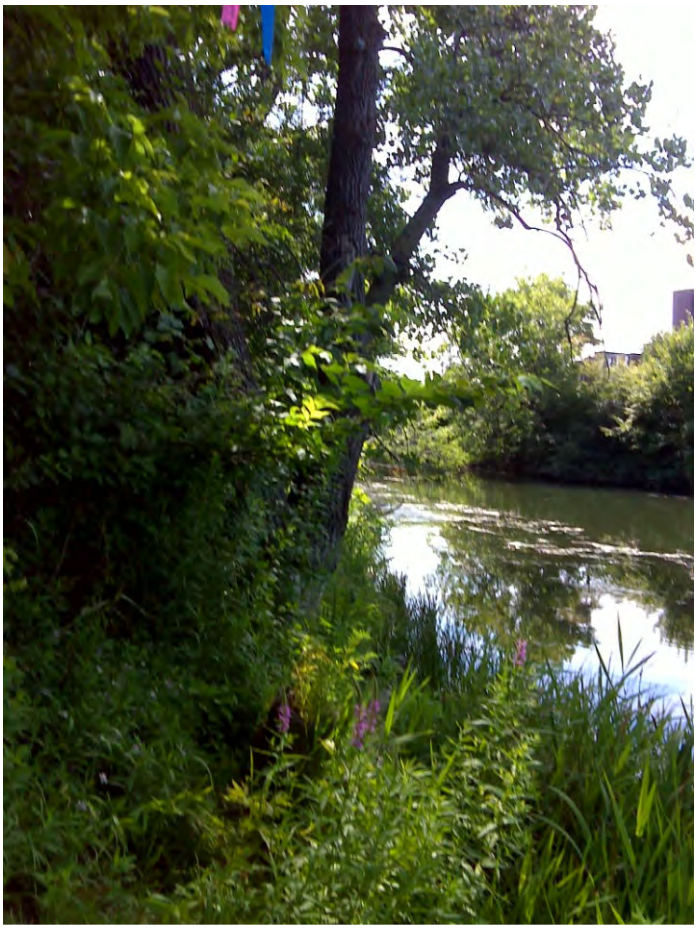
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Dry soil 5' above srface water elevation, 10' north of waters edge

Looking NE toward DP-1on the upland side of Wetland A. (2008)

Looking W toward DP-1on the upland side of Wetland A. Pink and blue ribbon marks data point. (2013)



Looking E along Scajaquada Creek at Wetland A. Pink and blue ribbon at top of photo marks DP-2. (2013)

Looking E along Scajaquada Creek, E of Wetland A. Extremely narrow (less than 1 foot wide) riparian wetland. No flags. (2008)

Looking W along Scajaquada Creek from DP-4 in Wetland B. Pink flagging at the center is wetland boundary. (2008)

Looking E at DP-5 on the upland side of Wetland B. Pink and blue ribbon marks the data point. (2013)

Attachment D

Qualifications

Resume for Ms. Ursitti

VIRGINIA L. URSITTI, Q.E.P.

Senior Environmental Scientist

EDUCATION

Bachelor of Arts, Environmental Studies and Anthropology, SUNY at Geneseo, 1983
Two Years Graduate Studies in Environmental Policy, 1987-1989
Certification Course / 1987 Corps of Engineers Wetland Delineation Manua,l 1996
Certification Course / Vegetation ID for Wetland Delineation, 1996
Certificate Courses/ Applications and Use of Geographic Information Systems, 2000-2001
Stream Ecosystem Restoration Workshop, University at Buffalo School of Engineering, 2007

PROFESSIONAL CERTIFICATIONS

Qualified Environmental Professional, 1995, Institute of Professional Environmental Practice

SUMMARY OF EXPERIENCE

Ms. Ursitti has more than 18 years of experience in environmental assessments, wetland assessments and delineations, regional planning and state legislation, hazardous waste remediation, regulatory guidance, and analytical dta interpretation. Ms. Ursitti is fully trained in wetlands delineation in accordance with the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual, allowing her to complete routine and comprehensive wetland delineations for the US Army Corps of Engineers or the NYSDEC wetlands program. Some of Ms. Ursitti's most recent projects are:

<u>NY Rte. 17 Access Modification, Chemung County</u> (design/permitting 2000-2007)
Conducted wetlands assessment and delineation for the NYSDOT covering 7 miles of forested corridor on each side of NY Route 17 and 6 miles of a parallel highway corridor (2000-2002). Reconfigured access and widening of Rte 17 and reconstruction/realignment of County Route 60 will bring an 11-mile segment of the NYS Southern Tier Expressway in Chemung County up to interstate highway standards for conversion to I-86. Realignment closer to the Chemung River, adjacent to the highway for the length of the project, is required due to numerous environmental constraints. Impacts to the Chemung River must be mitigated, particularly due to the presence of sensitive aquatic mussel species. Less than one acre of federally delineated wetland will be impacted over the length of this project. A Class 1 State wetland adjacent to the existing CR 60 will not be significantly affected. Wetland mitigation will be conducted off-site in a cooperative agreement with the Susquehanna River Coalition.

<u>Sweet Home Road, Town of Amherst</u> (2005)
Designed a mitigation wetland to compensate for wetland impacts from a NYSDOT road widening project through a rapidly developing area near the University at Buffalo North Campus in Erie County, New York. The mitigation design is complicated by the site's location (imposed by the project owners) on a segment of Ellicott Creek highly modified by a federal flood diversion project. The site was also required for construction of a new water line from an unrelated project. Construction of the new wetland was completed in 2007.

<u>US Route 62, Niagara Falls Boulevard, Town of Wheatfield</u> (2005)
Designed a wetland creation project to mitigate for wetland impacts from a NYSDOT 1.6-mile stream relocation project associated with the widening of Niagara Falls Boulevard in Niagara County, New York. Sawyer Creek is a highly modified stream aligned directly adjacent to Niagara Falls Boulevard for the length of the project in an rapidly developing corridor. The

mitigation site adjacent to the newly relocated stream was recommended by Ms. Ursitti after several site constraints were considered. All conceptual and detailed design of the was accepted by the USACE, and construction of the new wetland was completed in 2007. In addition to conceptual mitigation design, she also conducted the original delineation of the Sawyer Creek riparian zone, including federal wetlands, during preliminary design (2002-04).

NYS Thruway, Exit 57 to Exit 58, Southern Erie County (2004 to present)
Wetland assessment and delineation along 16 linear miles of divided highway through the Towns of Hamburg, Eden, Evans, and Brant, and the Cattaraugus Reservation of the Seneca Nation of Indians. This safety improvement project includes culvert extensions, slope flattening, and ditch reshaping on both sides of the Thruway, and the median. Avoidance during final design is resulted in minor impacts to federal and state wetlands. Ms. Ursitti is also leading the wetland mitigation conceptual design and is assisting NYSTA with regulatory coordination in the USACE nationwide and NYSDEC Article 24 permitting processes.

CarQuest Distribution Center, Town of Lancaster (2004)
Performed a SEQRA review and delineated wetlands on a 9.6-acre portion of the active Lancaster Airport on Walden Avenue proposed for a regional distribution center. The out-of-state buyers were not aware of regulated wetlands on site, found by the initial assessment. Ms. Ursitti was then retained to follow up with a delineation of nearly 4 acres of wetland, including hardwood swamp that could not be avoided by the project. Ms. Ursitti then started negotiations for off-site mitigation, as the FAA considered the wetlands as a source of nuisance wildlife hindering safety on the adjacent runway. Permitting and mitigation strategies were further complicated by land transfer issues, historical alteration of hydrology, and project requirements to fill and grade the entire site. As Project Manager, Ms. Ursitti coordinated the Corps' onsite inspection and acceptance of the delineation, after which she recommended a nearby project site with more manageable constraints.

Lehigh Valley Rails to Trails, Town of Amherst (2004)
Performed a wetland delineation to define the federally regulated area along 4 miles of the proposed Lehigh Valley Trailway project for the Town of Amherst in Erie County, New York. This federally-funded Rails-to-Trails project would create a multi-use path along an abandoned railroad line. Also Project Manager for the SEQR/NEPA assessment portion of the design, Ms. Ursitti performed the delineation in conjunction with a Hazardous Waste/Contaminated Material Assessment and obtaining environmental permits.

Ontario County CATS/Highway Maintenance Facility Town of Hopewell (2004)
Performed a wetland delineation to define the federally regulated area for the *17-acre site* of the proposed Ontario County CATS/Highway Maintenance Facility near Canandaigua in Ontario County, New York. Also Project Manager for the environmental assessment portion of the design, Ms. Ursitti performed the delineation in conjunction with a complete NEPA assessment to Federal Transit Authority standards.

Lancaster Industrial Park Expansion, Town of Lancaster (2003)
This proposed development in the Town of Lancaster covers *285 acres* of former railroad, airport, agricultural land uses now covered entirely covered by thick shrubs with difficult access. Ms. Ursitti *delineated nine wetlands totaling 17.5 acres including* a large ponded wetland to be utilized as an aesthetic focal point. As an enhancement to the proposed development, a The Town of Lancaster's Heritage Trail will be integrated into the industrial park, also using the wetland for a point of interest.

SUNY College at New Paltz (2002)
Performed a wetland assessment and delineation to define the federally regulated area for the proposed DASNY project at SUNY New Paltz in Ulster County, New York in conjunction with the *civil/site work* also done by Watts Engineers. The Section 404 permit for the College's master building plan required strict avoidance of further wetland impacts on the campus. Watts coordination with the New York District of the USACE resulted in an approved wetland boundary map for the proposed dormitory site, prompting a new schematic design to avoid filling the wetland portion.

NY Route 98, Town of Farmersville (2002)
Delineated federal and state-regulated wetlands at sites identified for culvert or bridge replacement along *9 miles of highway* in Cattaraugus County, New York. Most of the work is located on tributaries to Ischua Creek and Clear Creek, both valuable for their trout and trout spawning habitat. Avoidance and minimization reduce the impacts of the project to an insignificant level. The impact of construction will be minimal with the implementation of effective erosion and sedimentation controls; additional mitigation will not be required. 99068

NY Route 5, Main Street, City and Town of Batavia (2001-2002)
Conducted a wetland and surface waters assessment for a 3.0-mile highway corridor in Genesee County, New York that includes the bed and banks of Tonawanda Creek. *Delineated federally regulated wetlands* at proposed locations of the new storm drainage system to assist in design. Avoidance of all impacts to the wetlands was accomplished during final design, thus *avoiding additional permit requirements*. 99072

NYSTA, New Buffalo Division Headquarters (2001)
Performed wetland assessment confirming recent state and federal delineations of wetland boundaries on agency-owned land in the Town of Lancaster, Erie County, New York. The proposed NYSTA development was proposed to take place partially in a NYSDEC wetland. *Served as liaison with regulatory agencies,* NYSDOT, and a neighboring developer. Recommended a building footprint that avoided filling the high quality wetlands.

King Road Bridge over French Creek, Town of French Creek (2000)
Delineated riparian zone for a Chautauqua County federal-aid bridge replacement project. This segment of French Creek is a NYSDEC-protected stream with interstate importance recognized as having an intact ecosystem containing a number of *rare and protected species*. We *coordinated with NYSDEC on behalf of the County* to ensure incorporation of design elements and construction practices to best protect the stream ecology, important both regionally and to the local communities.

Daniels Road Bridge (2000)
Delineated riparian zone on East Branch Twelvemile Creek in the Town of Wilson, Niagara County, New York where a bridge is to be replaced. Wetlands were not found outside the banks of the subject stream, except on one quadrant contained wetland where the former stream channel had been filled during a channel realignment project in the 1940s. The new bridge will have a longer span, allowing for wider riparian area to develop under natural conditions. The impact of construction will be minimal; additional mitigation will not be required.