Sustainable Airport Master Plan

Appendix F

Wetlands & Waterways Delineation Report



WETLANDS & WATERWAYS DELINEATION REPORT

SUSTAINABLE MASTER PLAN UPDATE NIAGARA FALLS INTERNATIONAL AIRPORT NIAGARA FALLS, NIAGARA COUNTY, NEW YORK

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Prepared For:

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1 PROJECT BACKGROUND

1.1 Introduction

McFarland Johnson was contracted to conduct a wetlands and waterways delineation for the as part of the Sustainable Master Plan Update for Niagara Falls International Airport (NFIA). NFIA is a commercial service airport located in Niagara Falls, Niagara County, New York (Figure 1).

1.2 PROJECT DESCRIPTION

The NFIA Sustainable Master Plan Update is a comprehensive study that describes the short, medium-, and long-term development plans to meet the future aviation demands of the airport. In developing the NFIA Sustainable Master Plan Update, consideration was given to the potential environmental impacts of potential future development at the airport, with an emphasis on sustainability. This report was prepared to assist in creating development alternatives that had the least environmental impacts to wetland and waterways.

2 METHODS

2.1 AGENCY RESOURCE INFORMATION

Prior to the field survey of the PSAs, aerial photographs, various maps and other resources were reviewed. These included:

- a) United States Geological Survey (USGS) Topographic Map (Towarda West USGS 7.5 Minute Quadrangle), Appendix A- Figure 1.
- b) New York State Department of Environmental Conservation (NYSDEC) Environmental Resources Map (New York Environmental Resources Mapper, On-line: http://www.dec.ny.gov/imsmaps/ERM/viewer.htm), Appendix A Figure 2.
- c) National Wetlands Inventory (NWI) Map (NWI Wetlands Mapper, On-line: http://www.fws.gov/wetlands/Data/Mapper.html), Appendix A- Figure 3.
- d) Web Soil Survey Map provided by the Natural Resources Conservation Service (NRCS) (Appendix A- Figure 4)

2.2 FIELD DATA COLLECTION

Wetlands and waterways delineation site visits were conducted by McFarland Johnson on October 8-16, 2012.

Based on review of the NYSDEC Freshwater Wetlands Map, no NYSDEC regulated wetlands were located in the vicinity of the project area. Due to the lack of presence of NYSDEC regulated wetlands, the wetland delineation was conducted through field investigations of vegetation, soils and hydrology in accordance with the 1987 *United States Army Corps of Engineers Wetlands Delineation Manual* (1987 USACE Manual) and 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (2012 Regional Supplement).

Surveyor's flags were placed along the wetland boundaries based on observations of vegetation, hydric soil indicators, and hydrology conditions. In addition, the United States Army Corps of Engineers (USACE) ordinary high water (OHW) and NYSDEC mean high water (MHW) marks for streams located within the PSA were delineated using surveyor's flags.

The location of each flag was surveyed by New York State licensed surveyors with Frandina Engineering and Land Surveying, PC of 1807 Elmwood Avenue, Suite 176, Buffalo, NY. USACE Wetland Determination Forms and photographs were also compiled. Further descriptions on the field criteria and methods used to identify wetlands and waterways within the 694.7 acre Project Study Area (PSA) are described in the subsequent subsections.

2.2.1 WATERWAYS

The USACE OHW and NYSDEC MHW marks for any streams or other waterbodies located within the PSA were field delineated in accordance the definitional criteria as presented in Title 33, Code of Federal Regulations, Part 328 (33 CFR 328), and the procedures outlined in Title 6 of the Codes, Rules, and Regulations of the State of New York, Part 608, Use and Protection of Waters (6 NYCRR 608).

33 CFR 328 defines the OHW mark as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

6 NYCRR 608 defines the MHW mark as "...the approximate average...high water level for a given body of water at a given location, that distinguishes between predominantly aquatic and predominantly terrestrial habitat as determined, in order of use, by the following:

(1) available hydrologic data, calculations, and other relevant information concerning water levels (e.g. discharge, storage, tidal, and other recurrent water elevation data;

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- (2) vegetative characteristics (e.g., location, presence, absence or destruction of terrestrial or aquatic vegetation);
- (3) physical characteristics (e.g., clear natural line impressed on a bank, scouring, shelving, or the presence of sediments, litter or debris); and (4) other appropriate means that consider the characteristics of the surrounding area."

Based on the aforementioned information, the OHW and MHW marks are considered to be essentially the same for streams within the PSA.

2.2.2 WETLANDS

The 1987 USACE Manual and 2012 Regional Supplement require that hydrophytic vegetation primacy, hydric soils, and wetland hydrology are present in order for an area to meet the USACE definition of a wetland.

Hydrophytes are plants that are especially adapted to survive in wet soil conditions in predominantly anaerobic conditions. The publication *National List of Plant Species That Occur in Wetlands: Northeast (Region 1) 1988* assigns individual species to specific indicator statuses based on their estimated probability to occur in wetlands or uplands. Further information on the specific indicator statuses is provided below.

- \triangleright Obligate (OBL)- Occur wetlands ≥ 99% of the time
- Facultative Wet (FACW)- Occur in wetlands 67 to 99% of the time
- Facultative (FAC)- Occur in wetlands 34 to 66% of the time
- Facultative Upland (FACU)- Occur in uplands 67-99% of the time
- ➤ Obligate Upland (UPL)- Occur in uplands >99% of the time

A species is considered hydrophytic if it listed as FAC, FACW or OBL.

The 2012 Regional Supplement uses several tests, as needed, to analyze the primacy of hydrophytes in data collection plots based on plant species absolute percent covers, dominance, and morphological adaptations. Further information on these tests is provided below.

➤ Rapid Test – Hydrophytic dominance is confirmed when all dominant species across all stratums are OBL or FACW. Dominant plant species are determined by ranking species within a stratum based on their absolute percent cover as individuals, and then selecting those species in decreasing order who as

individuals, or cumulatively, immediately exceed 50% of the total absolute cover by all species in that stratum. Those species whose absolute percent cover individually exceed 20% of the total absolute cover by all species in that stratum are also considered dominants.

- ➤ Dominance Test Hydrophytic primacy is confirmed when greater than 50% of the dominant plants across all strata are OBL, FACW or FAC. Dominant plant species are determined by ranking species within a stratum based on their absolute percent cover as individuals, and then selecting those species in decreasing order who as individuals or cumulatively immediately exceed 50% of the total absolute cover by all species in that stratum. Those species whose absolute percent cover individually exceed 20% of the total absolute cover by all species in that stratum are also considered dominants.
- ➤ Prevalence Test Hydrophytic primacy is confirmed when the plot-based prevalence index is greater than 3.0. The prevalence index is calculated based on a weighted-average wetland indicator status of all species identified within a plot location. Dominant plant species are determined by a weighted average. Plants are given a numeric value based on the indicator status and abundance in the collection plot area. To meet the dominance category, the weighted average must be equal to or below 3.0.
- Morphological Adaptations Hydrophytic primacy is confirmed if upon indicator status reassignment and primacy is satisfied through reevaluation via the Dominance Test or Prevalence Test. If more than 50% of a FACU species located in an area exhibit morphological adaptations such as shallow root systems, adventitious roots, hypertrophied lenticels, multi-stemmed trunks due to prolonged soil inundation or saturation, then this species is reassigned as a FAC species, and the Dominance Test and Prevalence Test are recalculated.

The 1987 USACE Manual and 2012 Regional Supplement require permanent inundation, sufficient periodic inundation, or soil saturation within 12 inches of the soil surface during the growing season to meet the criteria of wetland hydrology. Since wetland evaluations are comparatively brief, hydrology evaluations utilize primary and or secondary indicators that are readily visible during a site assessment. The 1987 USACE Manual and 2012 Regional Supplement have established that a minimum of one primary indicator or two secondary indicators are required to meet the hydrology criterion.

Primary field indicators for hydrology include:

- Surface Water
- High Water Table
- Saturations
- Water Marks
- Sediment Deposits
- Drift Deposits
- Algal Mat of Crust
- Iron Deposits
- Inundation Visible on Aerial Imagery
- Sparsely Vegetated Concave Surfaces
- Water Stained Leaves

- Aquatic Fauna
- Marl Deposits
- Hydrogen Sulfide Odor
- Oxidized Rhizospheres of Live Roots
- Reduced Iron Spots
- Recent Iron Reduction in Tilled Soils
- Thin Muck Surface
- Other (Explain)

Secondary hydrological indicators include:

- Surface Soil Cracks
- Drainage Patterns
- Moss Trim Lines
- Dry-Season Water Table
- Crayfish Burrows
- Saturation Visible on Aerial Imagery
- Stunted or Stressed Plants
- Geomorphic Position
- Shallow Aquitard
- Microtopographic Relief
- FAC-Neutral Test

The 1987 USACE Manual and 2012 Regional Supplement indicate that hydric soils are those that exhibit certain characteristic morphologies as the result from repeated periods of saturation or inundation for extended periods of time. These morphological characteristics persist during saturated and unsaturated conditions and can serve in identifying hydric soils in the field. Evidence of hydric soils was determined in the field through soil test pits dug to a depth of 18 inches below grade or to a depth as subsurface conditions allowed. The soil stratums were then described in form of texture, saturation, matrix color, and redox features. The soil descriptions were then compared to the most current version of the USDA NRCS publication *Field Indicators of Hydric Soils in the United States* for determination of the presence of a hydric soil.

3 RESULTS

3.1 AGENCY RESOURCES INFORMATION

Review of the most current available USGS mapping of the PSA indicated that Cayuga Creek traversed the PSA (Figure 1).

The New York State Environmental Resource Map did not indicate the presence of any State-regulated wetlands within or adjacent the project area, however it indicated that Cayuga Creek was considered a Class C stream (Figure 2).

The NWI mapping indicates potential wetland areas that were identified by the US Fish and Wildlife Service (USFWS) using aerial photography. These maps do not have any regulatory consequence, but rather indicate areas that may meet federal wetland criteria. The NWI mapping of the PSA indicated that much of the project study was likely to contain wetlands (Figure 3).

Based on soils information provided by the NRCS (Figure 4), the PSA had the potential to contain soils that are considered partially hydric. The mapped partially hydric soils were indicated as Lakemont silty clay loam (Lc), Odessa silty clay loam (OdA and OdB), and Wayland silt loam (Wa).

3.2 WATERWAYS

Seven streams, hereafter referred to as Streams 1, 2, 3, 4, 5, 6, and 7, were identified within the PSA. The hydrological flows of the streams within the PSA were assigned based on a modification of the methodology established in the North Carolina Division of Water Quality's (NCDWQ) "Methodology for the Identification of Intermittent and Perennial Streams and Their Origins", Version 4.11. The Wetlands and Waterways Delineation Plan is included in Appendix B. Photographs of these streams are included in Appendix D.

Feature I.D.	Feature Type	Linear Feet	NYSDEC Jurisdiction	USACE Jurisdiction	Lat./ Long. Reference
Stream 1	Perennial Stream	11,539	No	Yes	43.1108°/ -78.9456°
Stream 2	Intermittent Stream	2,844	No	Yes	43.1103 °/ -78.9280 °
Stream 3	Ephemeral Stream	81	No	Yes	43.1115 °/ -78.9332 °
Stream 4	Intermittent Stream	1,345	No	Yes	43.1064°/ -78.9510°
Stream 5	Ephemeral Stream	226	No	Yes	43.1059°/ -78.9542°
Stream 6	Perennial Stream	1,249	No	Yes	43.1058°/ -78.9559°
Stream 7	Ephemeral Stream	97	No	Yes	43.1043 °/ -78.9563 °

3.2.1 NYSDEC JURISDICTION

Stream 1

Stream 1 has a NYSDEC water classification of C, and therefore it is not considered to be a "Protected Stream" under Article 15 of the Environmental Conservation Law (ECL). Stream 1 is not considered navigable by NYSDEC standards, and therefore is not considered to be "Navigable Waters of the State" under Article 15 of ECL.

Stream 2

Stream 2 has not been mapped with a NYSDEC water classification and does not have perennial flow. Based on this information, Stream 2 is considered to have a water classification of D, and is not considered to be a "Protected Stream" under Article 15 of the ECL. Stream 2 is not considered navigable by NYSDEC standards, and therefore is not considered to be a "Navigable Waters of the State" under Article 15 of the ECL.

Stream 3

Stream 3 has not been mapped with a NYSDEC water classification and does not have perennial flow. Based on this information, Stream 3 is considered to have a water classification of D, and is not considered to be a "Protected Stream" under Article 15 of the ECL. Stream 3 is not considered navigable by NYSDEC standards, and therefore is not considered to be a "Navigable Waters of the State" under Article 15 of the ECL.

Stream 4

Stream 4 has not been mapped with a NYSDEC water classification and does not have perennial flow. Based on this information, Stream 4 is considered to have a water classification of D, and is not considered to be a "Protected Stream" under Article 15 of the ECL. Stream 4 is not considered navigable by NYSDEC standards, and therefore is not considered to be a "Navigable Waters of the State" under Article 15 of the ECL.

Stream 5

Stream 5 has not been mapped with a NYSDEC water classification and does not have perennial flow. Based on this information, Stream 5 is considered to have a water classification of D, and is not considered to be a "Protected Stream" under Article 15 of the ECL. Stream 5 is not considered navigable by NYSDEC standards, and therefore is not considered to be a "Navigable Waters of the State" under Article 15 of the ECL.

Stream 6

Stream 6 has not been mapped with a NYSDEC water classification, however it does have perennial flow and directly discharges to Stream 6, which has a Water classification of C. Based on this information, Stream 6 is considered to have a water classification of C, and is not considered to be a "Protected Stream" under Article 15 of the ECL. Stream 6 is not considered navigable by NYSDEC standards, and therefore is not considered to be a "Navigable Waters of the State" under Article 15 of the ECL.

Stream 7

Stream 7 has not been mapped with a NYSDEC water classification, does not have perennial flow, and does not directly discharge to a waterway with a mapped NYSDEC water classification. Based on this information, Stream 7 is considered to have a water classification of D, and is not considered to be a "Protected Stream" under Article 15 of the ECL. Stream 7 is not considered navigable by NYSDEC standards, and therefore is not considered to be a "Navigable Waters of the State" under Article 15 of the ECL.

3.2.2 USACE JURISDICTION

Stream 1

Stream 1 represents the portion of Cayuga Creek that is located within the PSA. Stream 1 is a perennial stream that is considered a relatively permanent waters (RPW). Downstream of the PSA, Cayuga Creek is considered to be a traditionally navigable waters (TNW) of the Unites States under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. The portion of Cayuga Creek that is considered to be a TNW is from its confluence with the Little River to the Buffalo Avenue Bridge. Based on this information, Stream 1 is regulated by the USACE under Section 404 of the Clean Water Act (CWA), however it is not regulated under Section 10 of the Rivers and Harbors Appropriation Act (RHA).

Stream 2

Stream 2 is an intermittent stream that is considered to be a RPW. Stream 2 discharges directly to Stream 1. Based on this information, it can be inferred that Stream 2 has a significant nexus to a TNW and is regulated by the USACE under Section 404 of the CWA. Stream 2 is not regulated under Section 10 of the RHA.

Stream 3

Stream 3 is an ephemeral stream that is considered to be a non-relatively permanent waters (Non-RPW). Stream 3 discharges directly to Stream 1. Based on this

information, it can be inferred that Stream 3 has a significant nexus to a TNW and is regulated by the USACE under Section 404 of the CWA. Stream 3 is not regulated under Section 10 of the RHA.

Stream 4

Stream 4 is an intermittent stream that is considered to be a RPW. Stream 4 discharges directly to Stream 1. Based on this information, it can be inferred that Stream 4 has a significant nexus to a TNW and is regulated by the USACE under Section 404 of the CWA. Stream 4 is not regulated under Section 10 of the RHA.

Stream 5

Stream 5 is an ephemeral stream that is considered to be a Non-RPW. Stream 5 discharges directly to Stream 1. Based on this information, it can be inferred that Stream 5 has a significant nexus to a TNW and is regulated by the USACE under Section 404 of the CWA. Stream 32 is not regulated under Section 10 of the RHA.

Stream 6

Stream 6 is a perennial stream that is considered to be a RPW. Stream 6 discharges directly to Stream 1. Based on this information, it can be inferred that Stream 6 has a significant nexus to a TNW and is regulated by the USACE under Section 404 of the CWA. Stream 32 is not regulated under Section 10 of the RHA.

Stream 7

Stream 7 is ephemeral stream that is considered to be a Non-RPW. Stream 3 discharges to Stream 1. Based on this information, it can be inferred that Stream 3 has a significant nexus to a TNW and is regulated by the USACE under Section 404 of the CWA. Stream 32 is not regulated under Section 10 of the RHA.

3.3 WETLANDS

A total of 18 wetlands, hereafter referred to alphabetically as Wetland A through Wetland R, were delineated within the PSA.

Based on the U.S. Fish and Wildlife Service (USFWS) 1979 publication *Classification of Wetlands and Deepwater Habitats of the United States*, Wetlands B through Wetland R are considered to be palustrine emergent wetlands (PEM). Wetland A is a palustrine unconsolidated bottom wetland (PUB) with a PEM fringe. The Wetlands and Waterways Delineation Plan is included in Appendix B. Wetland datasheets are included in Appendix D and wetland photographs are provided in Appendix E.

Feature I.D.	Feature Type	Acreage	NYSDEC Jurisdiction	USACE Jurisdiction	Lat./ Long. Reference
Wetland A	PUB	3.89	No	Yes	43.1081°/ -78.9305°
Wetland B	PEM	0.07	No	Yes	43.1079°/ -78.9326°
Wetland C	PEM	0.39	No	Yes	43.1136°/ -78.9290°
Wetland D	PEM	0.12	No	No	43.1058°/ -78.9474°
Wetland E	PEM	0.09	No	No	43.1069°/ -78.9485°
Wetland F	PEM	0.25	No	No	43.1070°/ -78.9501°
Wetland G	PEM	0.06	No	Yes	43.1066°/ -78.9548°
Wetland H	PEM	0.19	No	Yes	43.1052°/ -78.9552°
Wetland I	PEM	0.92	No	Yes	43.1031°/ -78.9507°
Wetland J	PEM	0.39	No	No	43.1037°/ -78.9512°
Wetland K	PEM	0.11	No	No	43.1064°/ -78.9436°
Wetland L	PEM	0.11	No	No	43.1078°/ -78.9455°
Wetland M	PEM	1.77	No	No	43.1085°/ -78.9430°
Wetland N	PEM	0.81	No	Yes	43.1086°/ -78.9413°
Wetland O	PEM	0.73	No	Yes	43.1082°/ -78.9413°
Wetland P	PEM	0.45	No	Yes	43.1084°/ -78.9373°
Wetland Q	PEM	0.62	No	Yes	43.1147°/ -78.9275°
Wetland R	PEM	3.10	No	Yes	43.1108°/ -78.9247°

3.3.1 NYSDEC JURISDICTION

Review of the NYSDEC Freshwater Map of the area did not indicate the presence of NYSDEC jurisdictional freshwater wetlands within or adjacent to the PSA. Based on this information, none of the delineated wetlands are not subject to NYSDEC jurisdiction under Article 24 of the ECL.

3.3.2 USACE JURISDICTION

Wetland A

Wetland A is primarily an open water wetland with an emergent fringe. The wetland edge was dominated by broadleaf cattail (*Typha latifolia*), common reed (*Phragmites australis*), grey dogwood (*Cornus racemosa*), and sandbar willow (*Salix interior*) Hydrological conditions A2- High Water Table, A3- Saturation, B1- Watermarks, B7-Inundation Visible on Aerial Imagery, and D2- Geomorphic Position were observed along the fringe of Wetland A, while most of the wetland was inundated. The soils map shows the area of Wetland A mapped as water, surrounded by Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils along the fringe the wetland consisted of 10YR 2/1 muck to a depth of 6 inches overlain a 7.5YR 4/1 gravelly silty clay with 3% 7.5YR 3/4 redox concentrations to a depth of 16 inches. Based on this information, the soils within Wetland A meet the 2012 Regional Supplement hydric soils indicator F3-Depleted Matrix.

Two mallard ducks (*Anas platyrhynchos*) and 10 red-winged blackbirds (*Agelaius phoeniceus*) were observed utilizing the Wetland A during its delineation.

Wetland A drains into the airport's stormwater management system which discharges directly to Stream 1 (Cayuga Creek). It has been determined that Stream 1 has a significant nexus with a TNW, and therefore it is assumed that Wetland A is subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland B

Wetland B is dominated by broadleaf cattail. Hydrological conditions A2- High Water Table, A3- Saturation, B1- Watermarks, and D2- Geomorphic Position were observed within Wetland B. Wetland B is mapped as Odessa silt loam- 0-2% slope (OdA), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 4/1 silt loam to a depth of 6.5 inches overlain a 10YR 4/1 gravelly clay with 10% 7.5YR 4/6 redox concentrations to a depth of 11 inches. The soil layer from 11 to 16 inches consisted of 5YR 4/4 gravelly clay. Based on this information, the soils within Wetland B meet the 2012 Regional Supplement hydric soils indicator F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland B during the site visits conducted by McFarland Johnson.

Wetland B abuts Stream 1. It has been determined that Stream 1 has a significant nexus with a TNW, and therefore Wetland B is believed to be subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland C

Wetland C is dominated by sedges and Canada bluegrass (*Poa compressa*). Hydrological conditions B7- Inundation Visible on Aerial Imagery and D2- Geomorphic Position were observed in Wetland C. Wetland C is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 4/1 silty clay loam to a depth of 6 inches overlain a 10YR 4/1 silty clay loam with 10% 7.5YR 4/4 redox concentrations to a depth of 11 inches. The soil layer from 11 to 16 inches consisted of 10YR 4/2 silty clay. Based on this information, the soils within Wetland C meet the 2012 Regional Supplement hydric soils indicator F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland C during the site visits conducted by McFarland Johnson.

Wetland C has a surficial hydrological connection to Wetland A. It has been determined that Wetland A has a significant nexus with a TNW, and therefore it is inferred that Wetland C is subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland D

Wetland D is dominated by calico aster (*Symphyotrichum lateriflorum*), reed canary grass (*Phalaris arundinacea*), and Canada bluegrass. Hydrological conditions C9- Saturation Visible on Aerial Imagery and D2- Geomorphic Position were observed in Wetland D. Wetland D is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 4/1 silt loam to a depth of 6.5 inches overlain a 10YR 4/1 gravelly clay with 10% 7.5YR 4/6 redox concentrations to a depth of 11 inches. The soil layer from 11 to 16 inches consisted of 5YR 4/4 gravelly clay. Based on this information, the soils within Wetland B meet the 2012 Regional Supplement hydric soils indicator F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland D during the site visits conducted by McFarland Johnson.

Wetland D is a closed depressional wetland, with no discernible hydrological connection to a TNW. The wetland is 180 feet from the nearest down gradient airfield drainage

catch basin. Based on this information, it is believed that Wetland D is not subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland E

Wetland E is dominated by calico aster, Canada bluegrass, and sedges. Hydrological conditions C9- Saturation Visible on Aerial Imagery and D2- Geomorphic Position were observed in Wetland E. Wetland E is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 3/1 silt loam to a depth of 4 inches overlain a 10YR 5/2 clay loam with 20% 7.5YR 4/4 redox concentrations to a depth of 16 inches. Based on this information, the soils within Wetland E meet the 2012 Regional Supplement hydric soils indicators A11- Depleted Below Dark Surface and F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland D during the site visits conducted by McFarland Johnson.

Wetland E is a closed depressional wetland, with no discernible hydrological connection to a TNW. Based on this information, it is inferred that Wetland E is not subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland F

Wetland F is dominated by purple loosestrife (*Lythrum salicaria*) and common teasel (*Dipsacus fullonum*). Hydrological conditions B6- Surface Soil Cracks, C9- Saturation Visible on Aerial Imagery, and D2- Geomorphic Position were observed in Wetland F. Wetland F is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 4/1 silt loam with 1% 7.5YR 4/6 redox concentrations to a depth of 3 inches overlain a 10YR 4/2 silty clay loam with 2% 10YR 4/6 redox concentrations to a depth of 16 inches. Based on this information, the soils within Wetland F meet the 2012 Regional Supplement hydric soils indicator F3-Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland F during the site visits conducted by McFarland Johnson.

Wetland F is a closed depressional wetland, with no discernible hydrological connection to a TNW. The wetland is 144 feet from Stream 4. Based on this information, it is assumed that Wetland F is not subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland G

Wetland G is dominated by narrowleaf cattail (*Typha augustifolia*) and sedges. Hydrological conditions A2- High Water Table, A3- Saturation, and D2- Geomorphic Position were observed in Wetland G. Wetland G is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 4/1 silt loam to a depth of 4 inches overlain a 10YR 4/2 silty clay with 7% 7.5YR 4/6 redox concentrations to a depth of 16 inches. Based on this information, the soils within Wetland G meet the 2012 Regional Supplement hydric soils indicator F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland G during the site visits conducted by McFarland Johnson.

Wetland G is a linear wetland associated with Stream 5. Stream 5 is a non-RPW with a significant nexus to a TNW. Based on this information, it is inferred that Wetland G is subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland H

Wetland H is dominated by purple loosestrife, narrowleaf cattail, and Canada bluegrass. Hydrological conditions A2- High Water Table, A3- Saturation, and D2- Geomorphic Position were observed in Wetland H. Wetland H is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 4/1 silty clay with 5% 10YR 3/4 to a depth of 16 inches. Based on this information, the soils within Wetland H meet the 2012 Regional Supplement hydric soils indicator F3-Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland H during the site visits conducted by McFarland Johnson.

Wetland H is a linear wetland that abuts Stream 1. Based on this information, it is inferred that Wetland H is subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland I

Wetland I is dominated by purple loosestrife and sedges. Hydrological conditions A2-High Water Table, A3- Saturation, and D2- Geomorphic Position were observed in Wetland I is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 4/1 silt loam to a depth of 6

inches, overlain a 10YR 4/1 gravelly clay with 15% 7.5YR 4/6 redox concentrations to a depth of 16 inches. Based on this information, the soils within Wetland I meet the 2012 Regional Supplement hydric soils indicator F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland I during the site visits conducted by McFarland Johnson.

Wetland I is a linear wetland that abuts Stream 1. Based on this information, it is inferred that Wetland I is subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland J

Wetland J is dominated by Canada bluegrass and sedges. Hydrological conditions A1-Surface Water, C9- Saturation Visible on Aerial Imagery, and D2- Geomorphic Position were observed in Wetland J. Wetland J is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 3/2 silt loam with 5% 7.5YR 4/6 redox concentrations to a depth of 4 inches overlain a 10YR 3/3 silty clay with 25% 7.5YR 3/4 redox concentrations to a depth of 8 inches. The soil layer from 8 to 16 inches consisted of 10YR 4/2 silty clay with 10% 7.5YR 3/4 redox concentrations. Based on this information, the soils within Wetland J meet the 2012 Regional Supplement hydric soils indicators A11- Depleted Below Dark Surface and F3-Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland J during the site visits conducted by McFarland Johnson.

Wetland J is a closed depressional wetland, with no discernible hydrological connection to a TNW. Based on this information, it is assumed that Wetland J is not subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland K

Wetland K is dominated by sedges. Hydrological conditions C9- Saturation Visible on Aerial Imagery and D2- Geomorphic Position were observed in Wetland K. Wetland K is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 3/2 loam with 3% 10YR 3/4 redox concentrations to a depth of 5 inches overlain a 10YR 4/1 silty clay loam with 3% 5YR 3/4 redox concentrations to a depth of 9 inches. The soil layer from 9 to 16 inches consisted of 10YR 4/2 and 5YR 4/3 silty clay. Based on this information, the soils within Wetland J meet the 2012 Regional Supplement hydric soils indicators A11- Depleted Below Dark Surface and F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland K during the site visits conducted by McFarland Johnson.

Wetland K is a closed depressional wetland, with no discernible hydrological connection to a TNW. Based on this information, it is inferred that Wetland K is not subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland L

Wetland L is dominated by calico aster and narrowleaf cattail. Hydrological conditions A1- Surface Water, A3- Saturation, C9- Saturation Visible on Aerial Imagery, and D2-Geomorphic Position were observed in Wetland L. Wetland L is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 3/2 silty clay loam with 3% 10YR 3/4 redox concentrations to a depth of 3 inches overlain a 10YR 4/2 and 5YR 4/3 silty clay with 10% 10YR 4/6 redox concentrations to a depth of 16 inches. Based on this information, the soils within Wetland L meet the 2012 Regional Supplement hydric soils indicator F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland L during the site visits conducted by McFarland Johnson.

Wetland L is a closed depressional wetland, with no discernible hydrological connection to a TNW. Based on this information, it is believed that Wetland L is not subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland M

Wetland M is dominated by sedges. Hydrological conditions B6- Surface Soil Cracks, C9- Saturation Visible on Aerial Imagery, and D2- Geomorphic Position were observed in Wetland M. Wetland M is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 4/1 silty clay loam with 15% 7.5YR 4/6 redox concentrations to a depth of 16 inches. Based on this information, the soils within Wetland M meet the 2012 Regional Supplement hydric soils indicator F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland M during the site visits conducted by McFarland Johnson.

Wetland M is a closed depressional wetland, with no discernible hydrological connection to a TNW. Based on this information, it is inferred that Wetland M is not subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland N

Wetland N is dominated by Canada bluegrass, purple loosestrife, common teasel, and common spike rush (*Eleocharis palustris*). Hydrological conditions A3- Saturation, B6-Surface Soil Cracks, C9- Saturation Visible on Aerial Imagery, and D2- Geomorphic Position were observed in Wetland N. Wetland N is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 3/1 silt loam to a depth of 4 inches overlain a 7.5YR 4/2 silty clay loam with 5% 10YR 4/6 redox concentrations to a depth of 16 inches. Based on this information, the soils within Wetland N meet the 2012 Regional Supplement hydric soils indicators A11-Depleted Below Dark Surface and F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland N during the site visits conducted by McFarland Johnson.

During significant precipitation events, Wetland N drains into a catch basin which is part of the airport's stormwater management system. The airport's stormwater management system discharges directly to Stream 1. It has been determined that Stream 1 has a significant nexus with a TNW, and therefore it is assumed that Wetland N is subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland O

Wetland O is a by common reed, cattails, purple loosestrife, and sedges. Hydrological conditions B6- Surface Soil Cracks, B10- Drainage Patterns, C9- Saturation Visible on Aerial Imagery, and D2- Geomorphic Position were observed in Wetland O. Wetland O is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 4/1 silty clay loam with 25% 10YR 4/6 redox concentrations to a depth of 8 inches overlain a 7.5YR 4/3 and 10YR 4/1 gravelly silty clay loam to a depth of 16 inches. Based on this information, the soils within Wetland O meet the 2012 Regional Supplement hydric soils indicator F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland O during the site visits conducted by McFarland Johnson.

Wetland O is separated from Wetland N by a manmade berm (gravel drive). Wetland O drains surficially away from Wetland N and the catch basin to which Wetland N has the capability of discharging to during significant precipitation events. Based on this information, it is not believed that Wetland O has a significant nexus to a TNW, and therefore is not subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland P

Wetland P is a dominated by sedges. Hydrological conditions A3- Saturation, B6-Surface Soil Cracks, B10- Drainage Patterns, C9- Saturation Visible on Aerial Imagery, and D2- Geomorphic Position were observed in Wetland P. Wetland P is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 4/1 silt loam with 5% 7.5YR 4/6 redox concentrations to a depth of 6 inches overlain a 7.5YR 4/3 silty clay loam to a depth of 16 inches. Based on this information, the soils within Wetland P meet the 2012 Regional Supplement hydric soils indicator F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland P during the site visits conducted by McFarland Johnson.

During significant precipitation events, Wetland P drains into a catch basin which is part of the airport's stormwater management system. The airport's stormwater management system discharges directly to Stream 1. It has been determined that Stream 1 has a significant nexus with a TNW, and therefore it is assumed that Wetland P is subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland Q

Wetland Q is a riparian wetland dominated by common reed, cattails and purple loosestrife. Hydrological conditions A2- High Water Table, A3- Saturation, and D2-Geomorphic Position were observed in Wetland Q. Wetland Q is mapped as Wayland silt loam (Wa), a partially hydric soil type. Observed soils within the wetland consisted of 10YR 4/1 silt loam with 5% 5YR 3/4 redox concentrations to a depth of 16 inches. Based on this information, the soils within Wetland P meet the 2012 Regional Supplement hydric soils indicator F3- Depleted Matrix.

No wetland or other aquatic-dependent fauna where observed in Wetland Q during the site visits conducted by McFarland Johnson.

Wetland Q abuts Stream 1. It has been determined that Stream 1 has a significant nexus with a TNW, and therefore it is inferred that Wetland Q is subject to USACE jurisdiction under Section 404 of the Clean Water Act.

Wetland R

Wetland R is large emergent wetland area located on an out parcel owned by the airport. The dominant plants within the wetland as a whole were common reed, cattails, purple loosestrife, common teasel, goldenrods, asters, sedges, rushes, and dogwoods. Hydrological conditions A2- High Water Table, A3- Saturation, B6- Surface Soil Cracks,

and D2- Geomorphic Position were observed in Wetland R. Wetland R is mapped as Lakemont silty clay loam (Lc), a partially hydric soil type. Observed soils within the wetland consisted of 7.5YR 3/2 silty clay loam with 10% 7.5YR 4/6 redox concentrations to a depth of 6.5 inches overlain a 5YR 4/1 silty clay with 25% 7.5YR 5/8 to a depth of 16 inches. Based on this information, the soils within Wetland R meet the 2012 Regional Supplement hydric soils indicators A11- Depleted Below Dark Surface, F3- Depleted Matrix, F6- Redox Dark Surface, and F-8 Redox Depressions.

No wetland or other aquatic-dependent fauna where observed in Wetland R during the site visits conducted by McFarland Johnson.

Wetland R abuts Stream 2. Stream 2 is an RPW that is a tributary to Stream 1. It has been determined that Stream 1 has a significant nexus with a TNW, and therefore it is inferred that Wetland R is subject to USACE jurisdiction under Section 404 of the Clean Water Act.

4 **SUMMARY**

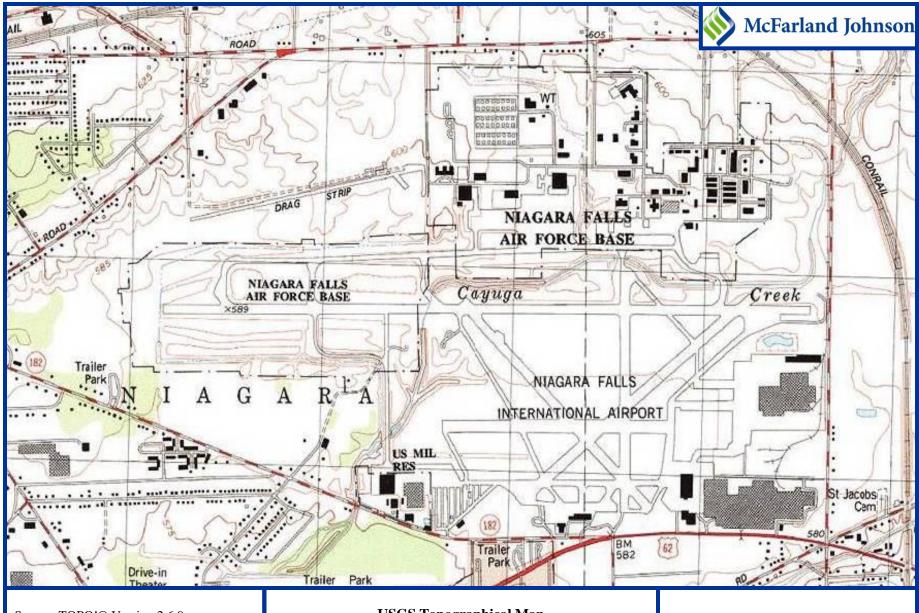
Based on the wetland delineations performed by McFarland-Johnson, a total of 18 wetlands, Wetlands A through R, were identified and delineated within the 694.7 acre PSA. All delineated wetlands, with the exception of Wetland A were considered to be primarily PEM wetlands. Wetland A is considered to be primarily a PUB wetland. In addition, a total of 7 streams, Streams 1 through 7, were identified within the PSA. Streams 1 and 6 have perennial flows, Streams 2 and 4 have intermittent flows, while Streams 3, 5 and 7 have ephemeral flows.

It is McFarland-Johnson's opinion that Wetlands A, B, C, G, H, I, N, O, P, Q, R, and S as delineated are regulated by the USACE under Section 404 of the CWA, while Wetlands D, E, F, J, K, L, and M are not. The Section 404 jurisdictional statuses of all of these wetlands will need to be confirmed by the USACE. Based on a review of the New York State Freshwater Wetland mapping of the PSA, none of the delineated wetlands are regulated by the NYSDEC under Article 24 of the ECL.

Streams 1 through 7 have NYSDEC water classifications of C or D and are not considered to be "Protected Streams" under Article 15 of the ECL. Furthermore, Streams 1 through 7 are not considered navigable by NYSDEC standards, and therefore are not considered to be a "Navigable Waters of the State" under Article 15 of the ECL. However, it is McFarland-Johnson's opinion that Streams 1 through 7 are regulated by the USACE under Section 404 of the CWA.

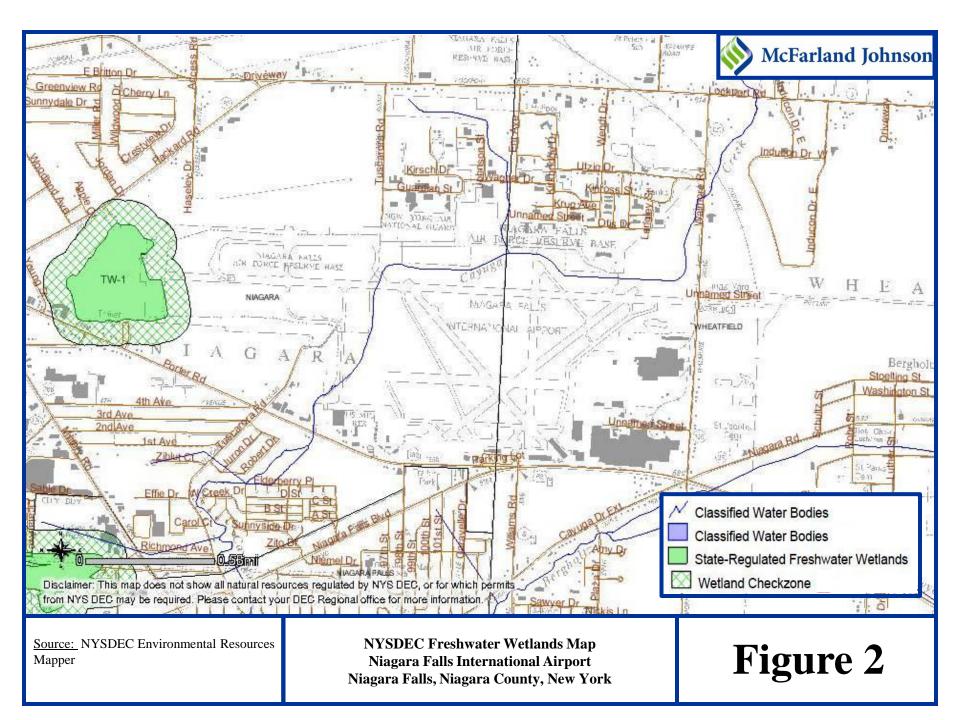
Appendix A

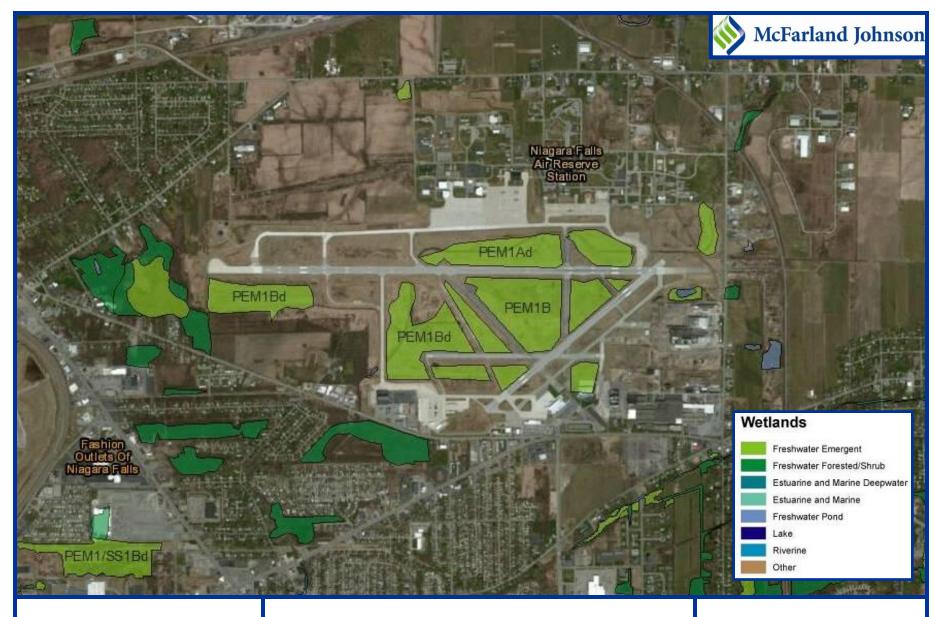
Figures



Source: TOPO!® Version 2.6.9 USGS 1:24,000Topographical Maps USGS Topographical Map Niagara Falls International Airport Niagara Falls, Niagara County, New York

Figure 1

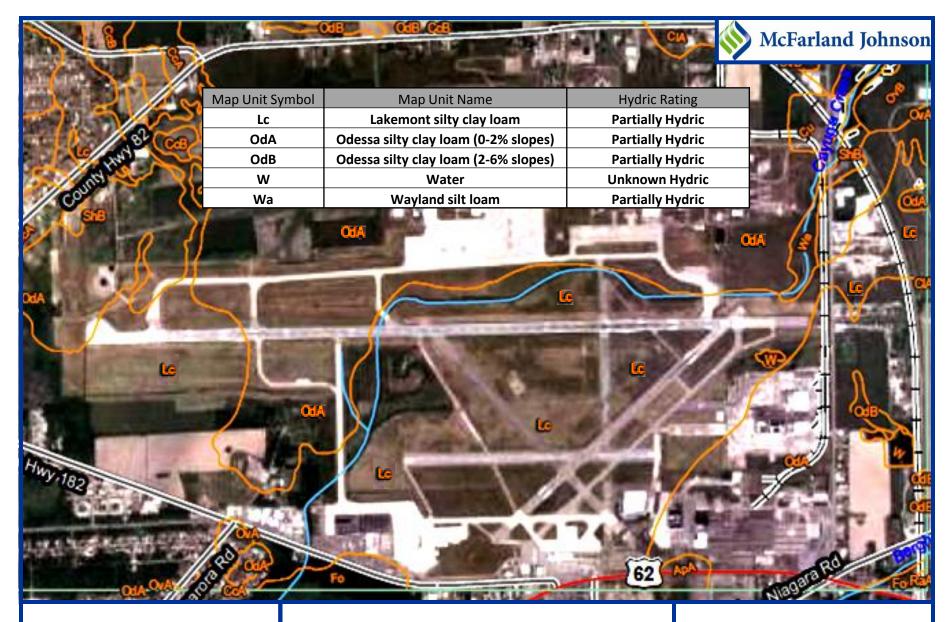




Source: USFWS NWI Mapping

NWI Wetlands Map Niagara Falls International Airport Niagara Falls, Niagara County, New York

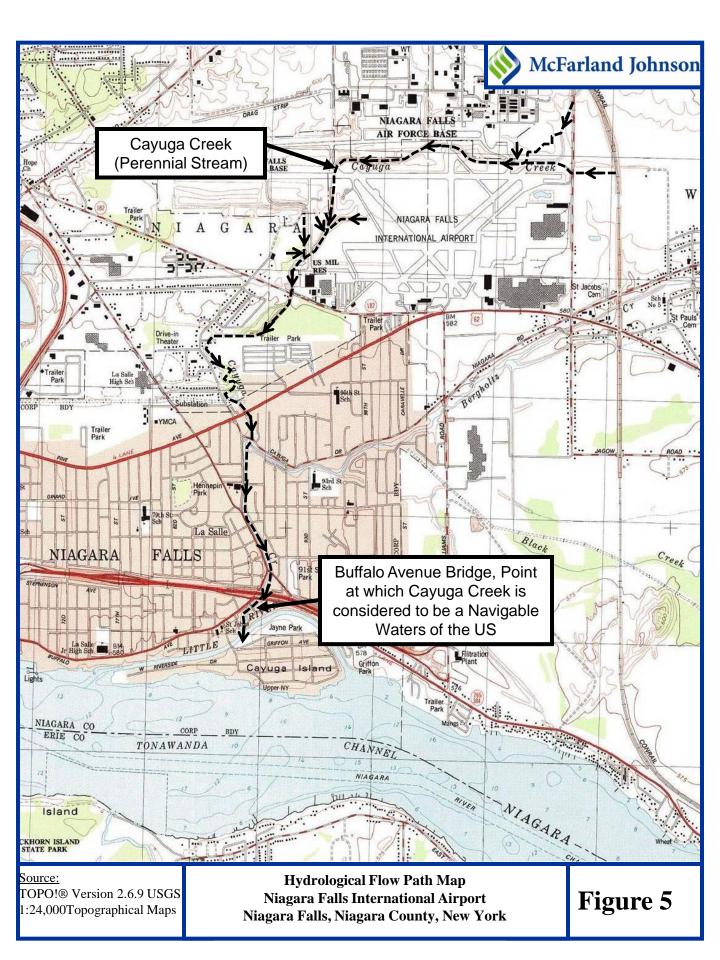
Figure 3



Source: USDA Soil Survey Maps

Soil Survey Map Niagara Falls International Airport Niagara Falls, Niagara County, New York

Figure 4



Appendix B

Wetland Delineation Plans

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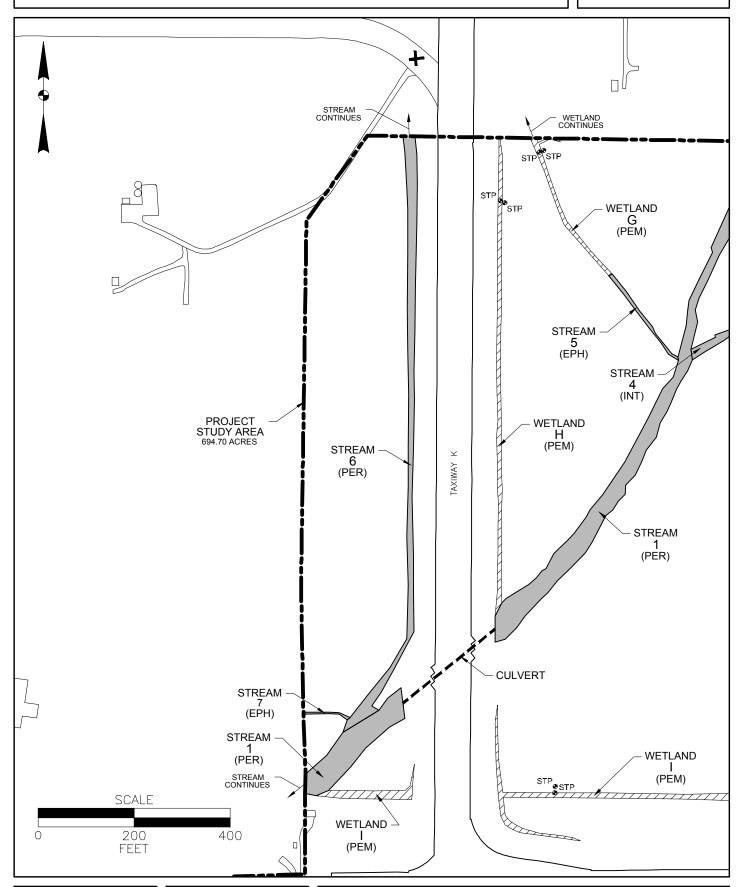
NIAGARA FALLS







PLAN WDP-3

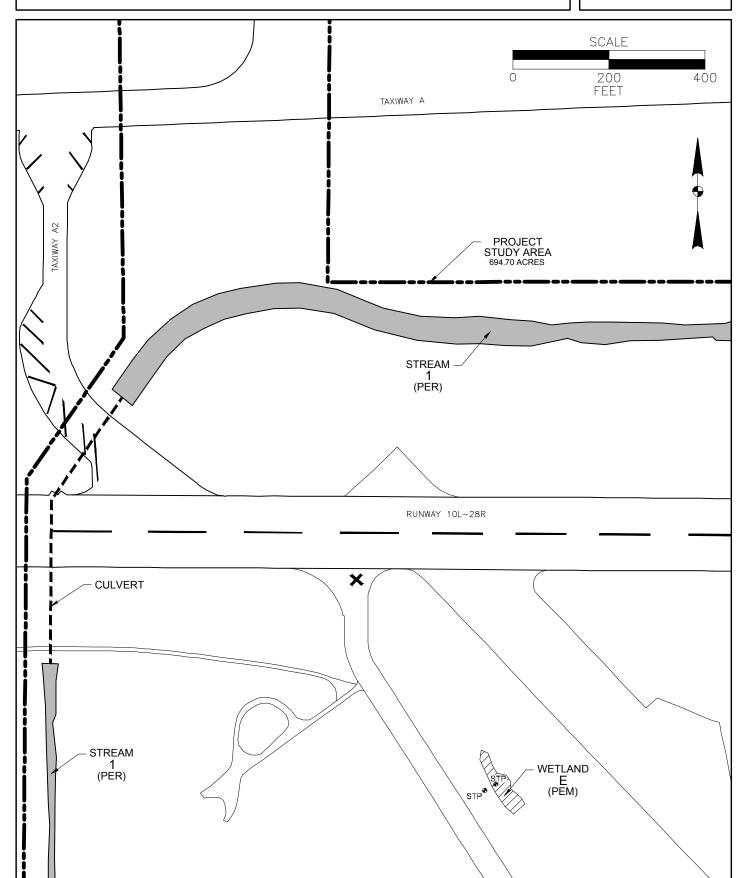








PLAN WDP-4





























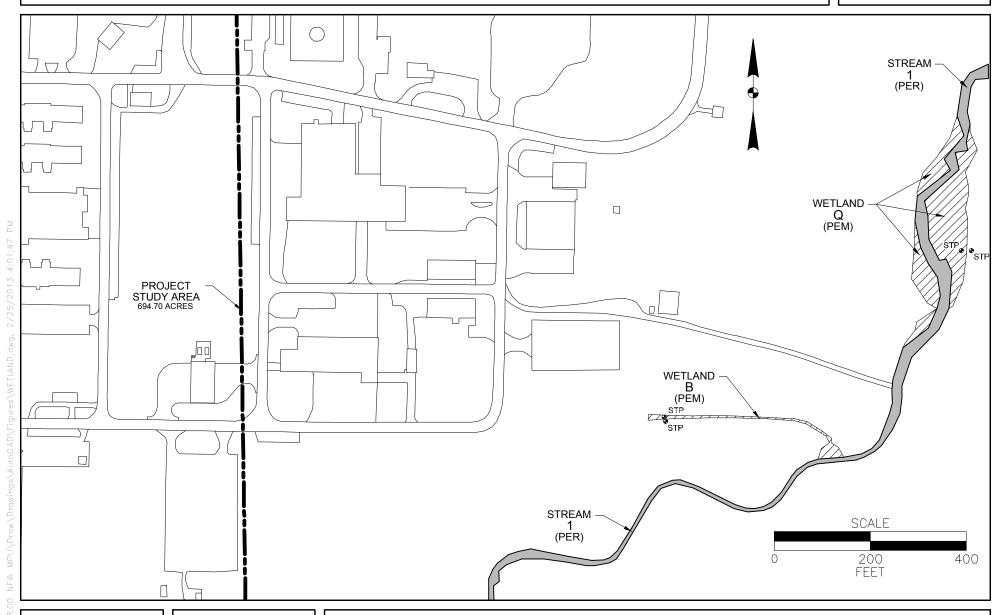










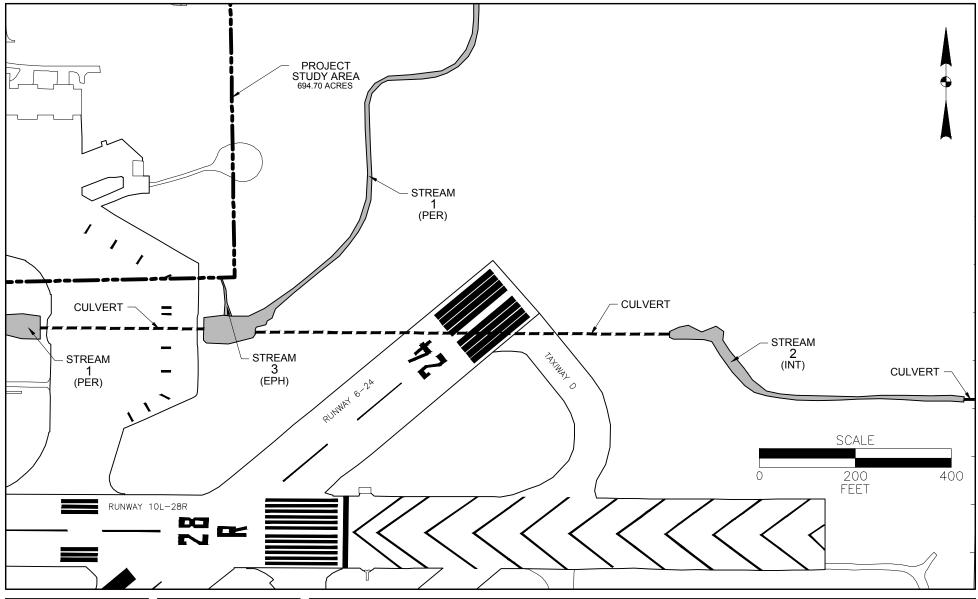








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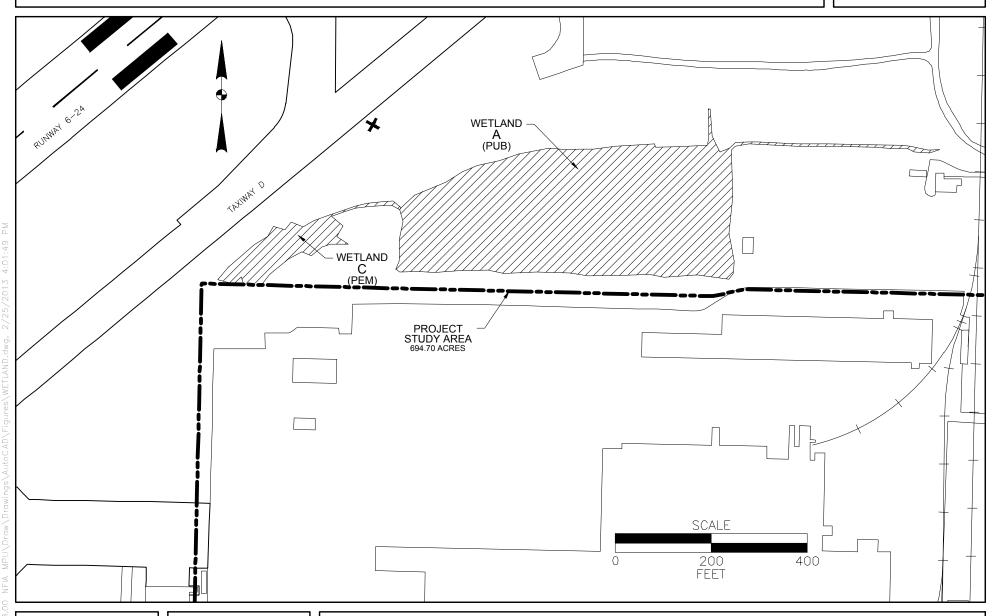


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NIAGARA FALLS

WETLANDS AND WATERWAYS DELINEATION - SUBSET PLAN

PLAN WDP-12

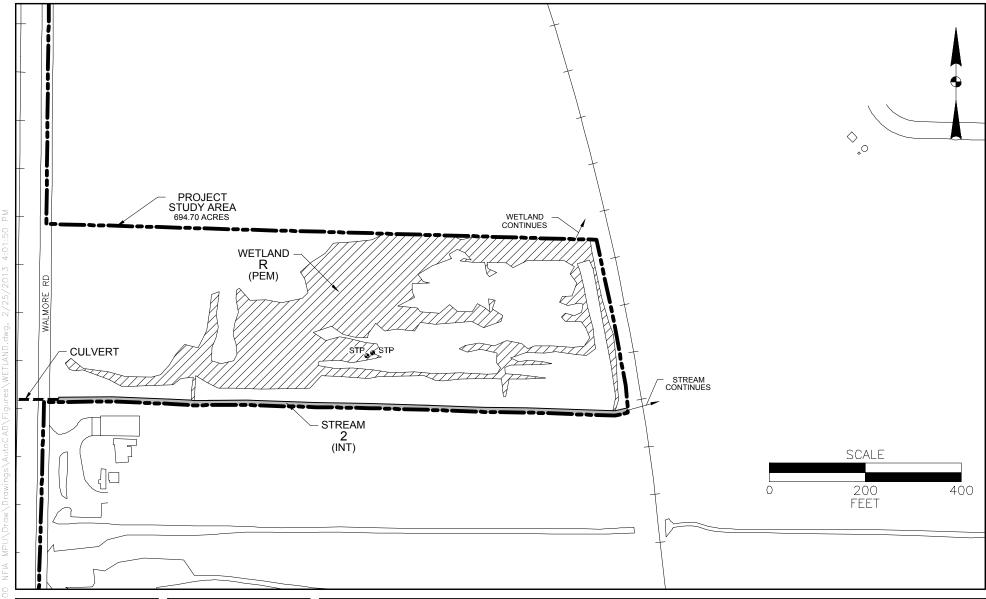








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NIAGARA FALLS

Appendix C

Wetland Datasheets

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling	Date: 10/9/2012
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sar	mpling Point: AU-1
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:	
-	ocal relief (concave, convex, none): Flat	Slope (%): 0
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A	Datum: N/A
<u> </u>		
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: UP	
Are climatic / hydrologic conditions on the site typical for this time of years.		i.)
Are Vegetation No, Soil No, or Hydrology No significant	tly disturbed? Are "Normal Circumstances" present?	Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally part of the No	problematic? (If needed, explain any answers in Remarks	s.)
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, importa	nt features, etc.
	1	
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area	
Hydric Soil Present? Yes X No	within a Wetland? Yes No X	
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a separate repo	rt.)	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (minin	num of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6	
Surface Water (A1) Water-Stained		
High Water Table (A2) Aquatic Fauna		
Saturation (A3) Marl Deposits		
	fide Odor (C1) Crayfish Burrows (C8)	()
I — — — 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ospheres on Living Roots (C3) Saturation Visible on A	erial Imagery (C9)
I 	Reduced Iron (C4) Stunted or Stressed Pla	
l ——	eduction in Tilled Soils (C6) Geomorphic Position (E	` ,
Iron Deposits (B5) Thin Muck Su	· /	,
Inundation Visible on Aerial Imagery (B7) Other (Explain		f (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)	
Field Observations:		
Surface Water Present? Yes No X Depth (inche	25).	
Water Table Present? Yes No _X Depth (inche	55).	
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Present? Yes	s No X
(includes capillary fringe)	Totalia Hydrology 1 1995iii 1995	, <u> </u>
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:	
Remarks:		

VEGETATION – Use scientific names of plants. Sampling Point: AU-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 4 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 50.0% Prevalence Index worksheet: Total % Cover of: Sapling/Shrub Stratum (Plot size: 15 OBL species x 1 = 30 Cornus racemosa FAC FACW species x 2 = Cornus stolonifera Yes **FACW** FAC species 30 x 3 = 3. **FACU** species 72 x 4 = 4. UPL species 0 x 5 = 5. Column Totals: 132 438 (A) (B) 6. Prevalence Index = B/A = 3.32 **Hydrophytic Vegetation Indicators:** 60 =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Dipsacus fullonum 60 Yes **FACU** Prevalence Index is ≤3.01 2. Solidago canadensis 10 No **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 2 Fragaria virginiana No **FACU** Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 72 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 15) Woody vines - All woody vines greater than 3.28 ft in 1. Vitis ripara height. Hydrophytic 3. Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

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

Depth Matrix Redox Features

10	3.5-8 7.5YR 4/2 97 7.5YR 4/6 3 C M Loamy/Clayey Prominent redox concentrations 8-16 7.5YR 4/3 100 Loamy/Clayey **Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix.** **Hydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils*: 2 cm Muck (A10) (LRR K, L, MLRA 149B) **Bilack Histic Epipedon (A2) MLRA 149B; Coast Prairie Redox (A16) (LRR K, L, R) **Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) **Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) **Depleted Below Dark Surface (A11) X Depleted Matrix (F2) **Depleted Below Dark Surface (A11) X Depleted Matrix (F3) **Thick Dark Surface (A12) Redox Dark Surface (F6) **Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) **Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) **Sandy Redox (S5) Redox Dark Surface (F1) (LRR K, L) **Sandy Redox (S5) Redox Dark Surface (F1) Chark Surface (S7) (LRR K, L4A44, 145, 149B) **Sandy Redox (S5) Redox Dark Surface (F1) Chark Surface (S7) (LRR K, MLRA 149B) **Sandy Redox (S5) Redox Dark Surface (S7) (LRR R, MLRA 149B) **Sandy Redox (S5) Redox Dark Surface (S7) (LRR R, MLRA 149B) **Sandy Redox (S5) Redox Dark Surface (S7) (LRR R, MLRA 149B) **Sandy Redox (S5) Redox Dark Surface (S7) (LRR R, MLRA 149B) **Sandy Redox (S6) Redox Dark Surface (S7) (LRR R, MLRA 149B) **Sandy Redox (S6) Redox Dark Surface (S7) (LRR R, MLRA 149B) **Other (Explain in Remarks) **Type:		Matrix Color (moist)	%	Color (moist)	x Featur	Type ¹	Loc ²	Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix. **Hydric Soil Indicators: Hydric Soil Indicators: Histosoi (A1) Polyvalue Below Surface (S8) (LRR R, Indicators for Problematic Hydric Soils*: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S8) (LRR K, L) Statified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (A12) Redox Dark Surface (F6) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Su	**Indicators: Indicators:** Indicators for Problematic Hydric Soils*: 2 cm Muck (A10) (LRR K, L) **Histic Epipedin (A2) MLRA 149B) Stratified Layers (A5) Loamy Gleyed Matrix (F2) **Depleted Below Dark Surface (A11) X Depleted Matrix (F3) **Thick Dark Surface (A12) Redox Dark Surface (F6) **Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) **Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) **Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) **Sandy Mucky Mineral (S1) Redox Dark Surface (F7) **Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) **Sandy Mucky Mineral (S1) Redox Depressions (F8) **Sandy Redox (S5) Red Parent Material (TF2) **Stripped Matrix (S4) Redox Depressions (F8) Red Parent Material (TF2) **Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) **Sandy Redox (S5) Red Parent Material (TF2) **Stripped Matrix (S8) Dark Surface (S7) (LRR R, MLRA 149B) **Stripped Matrix (S8) Red Parent Material (TF2) **Other (Explain in Remarks) **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.** **Type:** Depth (inches): Hydric Soil Present? Yes X No	0-3.5	10YR 3/2	100					Loamy/Clayey	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix. **Hydric Soil Indicators: Hydric Soil Indicators: Histosoi (A1) Polyvalue Below Surface (S8) (LRR R, Indicators for Problematic Hydric Soils*: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S8) (LRR K, L) Statified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (A12) Redox Dark Surface (F6) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Su	**Indicators: Indicators:** Indicators for Problematic Hydric Soils*: 2 cm Muck (A10) (LRR K, L) **Histic Epipedin (A2) MLRA 149B) Stratified Layers (A5) Loamy Gleyed Matrix (F2) **Depleted Below Dark Surface (A11) X Depleted Matrix (F3) **Thick Dark Surface (A12) Redox Dark Surface (F6) **Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) **Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) **Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) **Sandy Mucky Mineral (S1) Redox Dark Surface (F7) **Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) **Sandy Mucky Mineral (S1) Redox Depressions (F8) **Sandy Redox (S5) Red Parent Material (TF2) **Stripped Matrix (S4) Redox Depressions (F8) Red Parent Material (TF2) **Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) **Sandy Redox (S5) Red Parent Material (TF2) **Stripped Matrix (S8) Dark Surface (S7) (LRR R, MLRA 149B) **Stripped Matrix (S8) Red Parent Material (TF2) **Other (Explain in Remarks) **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.** **Type:** Depth (inches): Hydric Soil Present? Yes X No	3.5-8	7.5YR 4/2	97	7.5YR 4/6	3			Loamy/Clavey	Prominent redox concentrations
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Polyratic Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Indicators for Problematic Hydric Soils ² ; Histosol (A2) MILRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) *Indicators of Problematic. **Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S8) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: **Indicators of problematic Audious PL-Pore Lining, M=Matrix. **Location: PL=Pore Lining, M=Matrix. 2 com Muck (A10) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Polyvalue Below Surface (S7) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S8) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S8) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S8) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR	¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Public Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Islic Epipedon (A2) MLRA 149B) **Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) **Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) **Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) **Stratified Layers (A5) Loamy Gleyed Matrix (F2) Thin Dark Surface (S8) (LRR K, L) **Depleted Below Dark Surface (A11) Depleted Matrix (F2) Thin Dark Surface (S9) (LRR K, L) **Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) **Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) **Sandy Cleyed Matrix (S4) Redox Dark Surface (F8) Mesic Spodic (TA6) (MLRA 144B, 145, 149B) **Sandy Redox (S5) (LRR R, MLRA 149B) Order (S7) (LRR R, MLRA 149B) **Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) **Other (Explain in Remarks) Other (Explain in Remarks) **Junctional Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) **Junctional Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) **Junctional Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) **Junctional Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) **Junctional Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) **Junctional Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) **Junctional Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) **Junctional Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) **Junctional Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) **Junctional Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) **Junctional Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) **Junction									
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) 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 Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR K, L) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Slindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Indicators for Problematic Hydric Soils ³ : 1 cm Mucky (A10) (LRR K, L, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: ———————————————————————————————————	Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Black Histic Epipedon (A2) Mlra 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Bandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S4) Bandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) White Dark Surface (A12) Redox Depressions (F8) Bandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Stripped Matrix (S6) Dark Surface (S7) Wery Shallow Dark Surface (TF12) Other (Explain in Remarks) Hydric Soil Present? Yes X No	8-16	7.51R 4/3	100					Loamy/Clayey	
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) 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 Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR K, L) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) All other (Explain in Remarks) Polyvalue Below Surface (TF12) Depleted Dark Surface (S7) (LRR K, L) Piedmont Floodplain Soils (F12) (MLRA 144B) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) All other (Explain in Remarks) Polyvalue Below Surface (S8) (LRR K, L) Dark Surface (S7) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Polyvalue Below Surface (TF12) Other (Explain in Remarks)	Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Black Histic Epipedon (A2) Mlra 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Bandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S4) Bandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) White Dark Surface (A12) Redox Depressions (F8) Bandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Stripped Matrix (S6) Dark Surface (S7) Wery Shallow Dark Surface (TF12) Other (Explain in Remarks) Hydric Soil Present? Yes X No									
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Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L)				(, L)	Dark Sur	face (S7) (LRR K, L)		
Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Thick Dark Surface (F6) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)	Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Type: Depth (inches): Hydric Soil Present? Yes X No				Loamy Gleyed	Matrix (F	2)			
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 149B) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Depth (inches): Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144B, 145, 149B) Other (Explain in Remarks) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144B, 145, 149B) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144B, 145, 149B) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Nesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Nesic Spodic (TA6) (MLRA 1			ice (A11)						
Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No									
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Plant Surface (S7) (LRR R, MLRA 149B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Plant Surface (TF12) Other (Explain in Remarks) Restrictive Layer (if observed): Type:	Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No									
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No		-		Redox Depress	ions (F8)				
Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) 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 X No									
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	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 X No	Stringo		MLRA 14	9B)					
Restrictive Layer (if observed): Type:	Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No		ourrace (S7) (LRR R.		,					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Type:	Type:		ьипасе (S7) (LRR R ,				annt unio		had or problematic	
	Depth (inches): Hydric Soil Present? Yes X No	Dark S		ation and v	vetland hydrology mu	ust be pre	esent, unie	ss disturb	bed of problematic.	
Depth (inches): Hydric Soil Present? Yes X No		Dark S 3Indicators Restrictive	of hydrophytic veget		wetland hydrology mi	ust be pre	eseni, unie	ss disturi	ped of problematic.	
	Remarks:	Dark S 3Indicators Restrictive Type:	of hydrophytic veget Layer (if observed		wetland hydrology mi	ust be pre	esent, unie	ss disturt		
		Dark S 3Indicators Restrictive Type:	of hydrophytic veget Layer (if observed		wetland hydrology mu	ust be pre	esent, unie	ss disturi		
		Dark S Indicators Restrictive Type: Depth (in	of hydrophytic veget Layer (if observed		wetland hydrology m	ust be pre	esent, unie	ss disturi		
		Dark S Indicators Restrictive Type: Depth (in	of hydrophytic veget Layer (if observed		wetland hydrology m	ust be pre	eserii, uriie	ss disturi		
		Dark S Indicators Restrictive Type: Depth (in	of hydrophytic veget Layer (if observed		wetland hydrology m	ust be pre	esent, unie	ss disturi		
		Dark S Indicators Restrictive Type: Depth (in	of hydrophytic veget Layer (if observed		wetland hydrology m	ust be pre	eseni, unie	ss disturt		
		Dark S Indicators Restrictive Type: Depth (in	of hydrophytic veget Layer (if observed		wetland hydrology m	ust be pre	esent, unie	ss disturt		
		Dark S Indicators Restrictive Type: Depth (in	of hydrophytic veget Layer (if observed		wetland hydrology m	ust be pre	esent, unie	ss disturt		
		Dark S 3Indicators Restrictive Type: Depth (in	of hydrophytic veget Layer (if observed		wetland hydrology m	ust be pre	eseni, unie	ss disturt		
		Dark S 3Indicators Restrictive Type: Depth (in	of hydrophytic veget Layer (if observed		wetland hydrology m	ust be pre	esent, unie	ss disturt		
		Dark S 3Indicators Restrictive Type: Depth (in	of hydrophytic veget Layer (if observed		wetland hydrology m	ust be pre	esent, unie	ss disturi		
		Dark S 3Indicators Restrictive Type: Depth (in	of hydrophytic veget Layer (if observed		wetland hydrology m	ust be pre	eseni, unie	ss disturt		
		Dark S Indicators Restrictive Type: Depth (in	of hydrophytic veget Layer (if observed		wetland hydrology m	ust be pre	eseni, unie	ss disturt		

Project/Site: Niagara Falls International Airport City/County: Niagara Falls/ Niagara Sampling Date:
Applicant/Owner: Niagara Frontier Transportation Authority State: NY Sampling Point: AW-1
Investigator(s): T. Wirickx, V. Chase Section, Township, Range:
Landform (hillside, terrace, etc.): Lake Plain Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR or MLRA): LRR L Lat: Long: Datum:
Soil Map Unit Name: Water NWI classification: PUB
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No , Soil No , or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area
Hydric Soil Present? Yes X No within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: Wetland A
Remarks: (Explain alternative procedures here or in a separate report.)
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Notes (A4) Surface Notes (B40)
Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)
X High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) X Saturation (A3) Processes Water Table (C3)
X Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) X Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) X Thin Muck Surface (C7) Shallow Aquitard (D3)
X Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes No _ X _ Depth (inches):
Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): 2 Saturation Present? Yes X No Depth (inches): 0 Wetland Hydrology Present? Yes X No Depth (inches): 0
Saturation Present? Yes X No Depth (inches): 0 Wetland Hydrology Present? Yes X No
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: AW-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 4 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 75.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15 110 ___ OBL species x 1 = 110 32 x 2 = Cornus racemosa 30 Yes FAC FACW species x 3 = 2. Salix interior 30 Yes **FACW** FAC species 0 3. Cornus amomum **FACW FACU** species 0 x 4 = 0 4. UPL species x 5 = 5. Column Totals: 142 174 (A) (B) 6. Prevalence Index = B/A = 1.23 **Hydrophytic Vegetation Indicators:** 62 =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% Typha augustifolia 70 Yes OBL X Prevalence Index is ≤3.01 Phragmites australis 40 Yes OBL Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 Dipsacus fullonum No Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 115 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: AW-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) Loc² % Type¹ Texture Remarks 0-6 10YR 2/1 100 Muck 6-16 10YR 4/1 97 7.5YR 3/4 С Loamy/Clayey Prominent redox concentrations M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara	Sampling Date: 10/9/2012		
Applicant/Owner: Niagara Frontier Transportation Authority	State:	NY Sampling Point: BU-1		
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:	<u> </u>		
-	Local relief (concave, convex, none): Flat	Slope (%): 1		
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A	Datum: N/A		
Soil Map Unit Name: Odessa silty clay loam, 0-2 percent slope		ification: UPL		
Are climatic / hydrologic conditions on the site typical for this time of y	 `,`	n in Remarks.)		
Are Vegetation No, Soil No, or Hydrology No significan				
Are Vegetation No, Soil No, or Hydrology No naturally	problematic? (If needed, explain any answer	s in Remarks.)		
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects	s, important features, etc.		
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area	No. V		
Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X	within a Wetland? Yes If yes, optional Wetland Site ID:	No <u>X</u>		
Remarks: (Explain alternative procedures here or in a separate repo	ort.)			
HYDROLOGY				
Wetland Hydrology Indicators:	Secondary Indi	cators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)		pil Cracks (B6)		
Surface Water (A1) Water-Stained		Patterns (B10)		
	High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)			
Saturation (A3) Marl Deposits		on Water Table (C2)		
 -		urrows (C8)		
Sediment Deposits (B2) Oxidized Rhiz	cospheres on Living Roots (C3) Saturation	Visible on Aerial Imagery (C9)		
Drift Deposits (B3) Presence of F	Reduced Iron (C4) Stunted or	Stressed Plants (D1)		
Algal Mat or Crust (B4) Recent Iron R	Reduction in Tilled Soils (C6) Geomorph	ic Position (D2)		
Iron Deposits (B5) Thin Muck Su	urface (C7) Shallow Ad	quitard (D3)		
1 	n in Remarks) Microtopog	graphic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)	FAC-Neutr	ral Test (D5)		
Field Observations:				
Surface Water Present? Yes NoX Depth (inche	es):			
Water Table Present? Yes No X Depth (inche	es):			
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Presen	nt? Yes No _X		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial phot	los, previous inspections), if available:			
Remarks:				
Tromano.				

VEGETATION – Use scientific names of plants. Sampling Point: Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 0 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 102 x 4 = 2 UPL species x 5 = Column Totals: 104 418 (A) (B) 6. Prevalence Index = B/A = 4.02 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa pratensis 60 Yes **FACU** Prevalence Index is ≤3.01 2. Poa compressa 30 Yes **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10 3. Plantago lanceolata No **FACU** 2 UPL Problematic Hydrophytic Vegetation¹ (Explain) No Daucus carota 2 No FACU 5. Lotus corniculatus ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 104 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-7 10YR 4/3 100 Loamy/Clayey 7-16 5YR 4/3 100 Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/9/2012
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: BW-1
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:
Landform (hillside, terrace, etc.): Lake Plain	Local relief (concave, convex, none): concave Slope (%): 1
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:
Soil Map Unit Name: Odessa silty clay loam, 0-2 percent slope	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation No , Soil No , or Hydrology No signification	
Are Vegetation No, Soil No, or Hydrology No natural	y problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	ng sampling point locations, transects, important features, etc.
Hydrophytia Vogotation Propent?	le the Sampled Area
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland B
Remarks: (Explain alternative procedures here or in a separate re	
	po.u.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl	<u>—</u>
 -	ped Leaves (B9) Drainage Patterns (B10)
X High Water Table (A2) Aquatic Fau April Deposit	
X Saturation (A3) Marl Deposi X Water Marks (B1) Hydrogen S	its (B15) Dry-Season Water Table (C2) sulfide Odor (C1) Crayfish Burrows (C8)
 -	nizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	f Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)
	Surface (C7) Shallow Aquitard (D3)
l 	ain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inc	ehes):
Water Table Present? Yes X No Depth (inc	hes): 6
Saturation Present? Yes X No Depth (inc	thes): 0 Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	
Tromano.	

VEGETATION – Use scientific names of plants. Sampling Point: BW-1 Absolute Dominant Indicator Tree Stratum (Plot size: ____) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species 90 x 1 =0 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 10 x 4 = UPL species 0 x 5 = Column Totals: 100 130 (A) (B) 6. Prevalence Index = B/A = 1.30 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% Typha latifolia Yes OBL X Prevalence Index is ≤3.01 Lythrum salicaria No OBL Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Poa compressa 10 No **FACU** Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: BW-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Color (moist) Loc² (inches) % Type¹ Texture Remarks 0-6.5 10YR 4/1 100 Loamy/Clayey 10YR 4/1 90 7.5YR 4/6 10 С Prominent redox concentrations 6.5-11 M Loamy/Clayey 11-16 5YR 4/4 100 Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara	Sampling Date: 10/11/2012
Applicant/Owner: Niagara Frontier Transportation Authority	State:	NY Sampling Point: CU-1
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:	
	Local relief (concave, convex, none): Flat	Slope (%): 1
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A	Datum: N/A
Soil Map Unit Name: Lakemont silty clay loam		ification: UPL
Are climatic / hydrologic conditions on the site typical for this time of y Are Vegetation No , Soil No , or Hydrology No significant		n in Remarks.) resent? Yes X No
Are Vegetation No , Soil No , or Hydrology No naturally	, i	
SUMMARY OF FINDINGS – Attach site map showing		
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area	
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X	within a Wetland? Yes	NoX
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:	<u> </u>
Remarks: (Explain alternative procedures here or in a separate repo		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indi	icators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		oil Cracks (B6)
		Patterns (B10)
High Water Table (A2) Aquatic Fauna		Lines (B16)
Saturation (A3) Marl Deposits		on Water Table (C2)
		urrows (C8)
l 		Visible on Aerial Imagery (C9)
l 	` '	Stressed Plants (D1)
l 		nic Position (D2)
Iron Deposits (B5) Thin Muck Su Inundation Visible on Aerial Imagery (B7) Other (Explain		quitard (D3)
Sparsely Vegetated Concave Surface (B8)	· · · ·	graphic Relief (D4) ral Test (D5)
	I AC-Neuti	ai rest (D3)
Field Observations:		
Surface Water Present? Yes No X Depth (inche Water Table Present? Yes No X Depth (inche	38)	
Water Table Present? Yes No X Depth (inche Saturation Present? Yes No X Depth (inche Saturation Present)	es): Wetland Hydrology Preser	nt? Yes No X
(includes capillary fringe)	veiland riyarology i reser	163 NOX_
Describe Recorded Data (stream gauge, monitoring well, aerial phot	tos, previous inspections), if available:	
Remarks:		
Nemans.		

VEGETATION – Use scientific names of plants. Sampling Point: Absolute Dominant Indicator Tree Stratum (Plot size: ____) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 0.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 0 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 123 x 4 = 0 UPL species x 5 = Column Totals: 123 492 (A) (B) 6. Prevalence Index = B/A = 4.00 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa compressa 85 Yes **FACU** Prevalence Index is ≤3.01 Dipsacus fullonum **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 123 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-5 10YR 3/2 100 Loamy/Clayey 5-16 5YR 4/2 100 Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

Project/Site: Niagara Falls In	ternational Airport	C	city/County: Nia	gara Falls/ Niagara	а	Sampl	ling Date:	10/11/	2012
Applicant/Owner: Niagara Fro	ontier Transportation Au	thority			State:	NY	Sampling	Point:	CW-1
Investigator(s): T. Wirickx, V.			ection, Townshi	ip, Range:				•	
Landform (hillside, terrace, etc.		•		ve, convex, none):	concave		Slo	pe (%):	0
Subregion (LRR or MLRA): LR			(Long:			 Datur	· · · ·	
· · · · · · · · · · · · · · · · · · ·		•		Long.	NIVA/I alaaaii	fications		''-	
Soil Map Unit Name: Lakemon	•				NWI classif				
Are climatic / hydrologic conditi	• •	•			f no, explain				
	No , or Hydrology			Are "Normal Circum	·			X N	io
Are Vegetation No , Soil	No , or Hydrology	No naturally prob	blematic? (I	If needed, explain a	any answers	s in Rem	arks.)		
SUMMARY OF FINDING	S - Attach site m	nap showing s	ampling poi	int locations, t	transects	, impo	rtant fea	ıtures	, etc.
Hydrophytic Vegetation Prese	ent? Yes X	No	Is the Samp	alod Aroa					
Hydric Soil Present?	Yes X	No	within a We		Yes X	No			
Wetland Hydrology Present?	Yes X	No		nal Wetland Site ID	-	_			
Remarks: (Explain alternative									
Tremand. (Explain alternative	, procedures here or in t	a deparate report.)							
HYDROLOGY									
Wetland Hydrology Indicato	ors:			Sec	ondary Indi	cators (m	ninimum of	two rea	uired)
Primary Indicators (minimum	of one is required; chec	k all that apply)			Surface So	il Cracks	s (B6)		
Surface Water (A1)		_Water-Stained Le	eaves (B9)		Drainage P	atterns (B10)		
High Water Table (A2)		Aquatic Fauna (B	113)		Moss Trim	Lines (B	16)		
Saturation (A3)		Marl Deposits (B1	15)		Dry-Season	n Water ⁻	Table (C2)		
Water Marks (B1)		_ Hydrogen Sulfide	Odor (C1)		Crayfish Bu	ırrows (C	28)		
Sediment Deposits (B2)		Oxidized Rhizosp	heres on Living	Roots (C3) X	Saturation	Visible o	n Aerial Im	agery (C9)
Drift Deposits (B3)		Presence of Redu	uced Iron (C4)		Stunted or	Stressed	រ Plants (D	1)	
Algal Mat or Crust (B4)		Recent Iron Redu	action in Tilled S	Soils (C6) X	Geomorphi	c Positio	n (D2)		
Iron Deposits (B5)		Thin Muck Surfac	:e (С7)		Shallow Ad				
Inundation Visible on Aer	ial Imagery (B7)	Other (Explain in	Remarks)		Microtopog	raphic R	elief (D4)		
Sparsely Vegetated Conc	cave Surface (B8)				FAC-Neutr	al Test ([) 5)		
Field Observations:									
Surface Water Present?	Yes No X								
Water Table Present?	Yes No X	_			_	_			
Saturation Present?	Yes NoX	Depth (inches):		Wetland Hydrolo	ogy Presen	t?	Yes X	_ No	
(includes capillary fringe)				-ti> if! - - -	_				
Describe Recorded Data (stre	am gauge, monitoring v	veii, aeriai pnotos,	previous inspec	ctions), if available:	:				
Remarks:									

VEGETATION – Use scientific names of plants. Sampling Point: CW-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 41 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 41 x 4 = UPL species 0 x 5 = Column Totals: 85 249 (A) (B) 6. Prevalence Index = B/A = 2.93 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa compressa 38 Yes **FACU** X Prevalence Index is ≤3.01 2. Carex sp. 38 Yes **FACW** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3 Lythrum salicaria No OBL 3 **FACW** Problematic Hydrophytic Vegetation¹ (Explain) Juncus effusus No No _ 3 FACU 5. Rumex crispus ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 85 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

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

10	Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Featur %	Type ¹	Loc ²	Texture	Remarks
11-16 10YR 4/2 98 5YR 4/4 2 C M Loamy/Clayey Prominent redox concentrations 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 1-Type: C=Concentration. 1-Type: C=Concentrati	0-6	10YR 4/1	100					Loamy/Clayey	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Thistosol (A1) Polyvalue Below Surface (S8) (LRR R, Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Indicators for Problematic Hydric Soils³: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A1) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Redox (S8) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Thin Dark Surface (TF12) Other (Explain in Remarks) Thin Coate Training M=Matrix And Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Thin Dark Surface (TF12) Other (Explain in Remarks) The Strictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	6-11	10YR 4/1	98	7.5YR 4/4	2	С	М	Loamy/Clayey	Prominent redox concentrations
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) 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 X No	11-16	10YR 4/2	98	5YR 4/4	2	С	М	Loamy/Clayey	Prominent redox concentrations
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No									
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Allocators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Indicators for Problematic Hydric Soil Present? Indicators of Problematic Hydric Soils: Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Indicators of Problematic Hydric Soil Present? Indicators of Problematic Hydric Soils: Indicators of Problematic Hydric Soils: Indicators of Hydric Soil Present? Indicators Of Mucky Mineral (F1) (LRR K, L) Indicators Of Mucky Mineral (F1) (LRR K, L) Indicators Of Mucky Mineral (F1) (LRR K, L) Indicators Of Mucky									
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Allocators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Indicators for Problematic Hydric Soil Present? Indicators of Problematic Hydric Soils: Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Indicators of Problematic Hydric Soil Present? Indicators of Problematic Hydric Soils: Indicators of Problematic Hydric Soils: Indicators of Hydric Soil Present? Indicators Of Mucky Mineral (F1) (LRR K, L) Indicators Of Mucky Mineral (F1) (LRR K, L) Indicators Of Mucky Mineral (F1) (LRR K, L) Indicators Of Mucky									
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) 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 X No									
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) 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 X No									
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Black Histic (A3)	Histose	ol (A1)		Polyvalue Belov	v Surface	e (S8) (LR I	R R,	2 cm Muc	ck (A10) (LRR K, L, MLRA 149B)
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Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) **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 X No									, ,
3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No									
Restrictive Layer (if observed): Type:	Bark C	difface (07) (LINE)	INIEIXA 14	<i>3</i> 2)				Other (Ex	plant in Nemarkoj
Type:				wetland hydrology mu	ıst be pre	esent, unle	ss distu	rbed or problematic.	
Depth (inches): Hydric Soil Present? Yes X No		Layer (if observed	l):						
		· ·							10 V V V
Remarks:		icnes):						Hydric Soil Pre	sent? Yes X No
	Remarks:								

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara	Sampling Date: 10/12/2012
Applicant/Owner: Niagara Frontier Transportation Authority	State:	NY Sampling Point: DU-1
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:	
-	Local relief (concave, convex, none): Flat	Slope (%): 1
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A	Datum: N/A
Soil Map Unit Name: Lakemont silty clay loam		fication: UPL
Are climatic / hydrologic conditions on the site typical for this time of y Are Vegetation No , Soil No , or Hydrology No significan		in Remarks.) esent? Yes X No
Are Vegetation No , Soil No , or Hydrology No naturally	·	
SUMMARY OF FINDINGS – Attach site map showing		
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area	
Hydric Soil Present? Yes X No	within a Wetland?	No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:	<u> </u>
Remarks: (Explain alternative procedures here or in a separate repo		
	,	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary India	cators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface So	il Cracks (B6)
Surface Water (A1) Water-Stained	d Leaves (B9) Drainage P	atterns (B10)
High Water Table (A2) Aquatic Fauna	a (B13) Moss Trim	Lines (B16)
Saturation (A3) Marl Deposits		n Water Table (C2)
I — — — 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	fide Odor (C1) Crayfish Bu	
I — — — — — — — — — — — — — — — — — — —		Visible on Aerial Imagery (C9)
	` '	Stressed Plants (D1)
I — · · · · · —		c Position (D2)
Iron Deposits (B5) Thin Muck Su		
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain		raphic Relief (D4) al Test (D5)
	FAC-Neutr	31 Test (D3)
Field Observations:		
Surface Water Present? Yes No X Depth (inche Water Table Present? Yes No X Depth (inche	98).	
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Presen	t? Yes No X
(includes capillary fringe)	Welland Hydrology 1 100011	105 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:	
Remarks:		

VEGETATION – Use scientific names of plants. Sampling Point: Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 1 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 30 x 2 = 1. FACW species 2. FAC species 3 x 3 = **FACU** species 66 x 4 = 0 UPL species x 5 = Column Totals: 99 333 (A) (B) 6. Prevalence Index = B/A = 3.36 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa compressa 63 Yes **FACU** Prevalence Index is ≤3.01 2. Phalaris arundinacea 15 No **FACW** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 15 3. Symphyotrichum novae-angliae No **FACW** 3 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) No 4. Cirsium vulgare Symphyotrichum lateriflorum 3 FAC 5. No ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 99 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 0-9 10YR 3/2 100 Loamy/Clayey 9-16 10YR 4/2 80 7.5YR 4/6 20 Prominent redox concentrations Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) X Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/12/2012
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: DW-1
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:
	Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation No, Soil No, or Hydrology No significan	
Are Vegetation No, Soil No, or Hydrology No naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.
Hudrock da Vandadar Danas do Van	In the Committed Area
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland D
Remarks: (Explain alternative procedures here or in a separate repo	rt.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	X Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained	d Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna	a (B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits	(B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sul	fide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhiz	ospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of F	Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron R	eduction in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Su	rface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches	PS):
Water Table Present? Yes No X Depth (inches	es):
Saturation Present? Yes No X Depth (inche	Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	

VEGETATION – Use scientific names of plants. Sampling Point: DW-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 3 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 66.7% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 25 x 2 = 1. FACW species 2. FAC species 20 x 3 = **FACU** species 25 x 4 = UPL species 0 x 5 = Column Totals: 73 (A) 213 (B) 6. Prevalence Index = B/A = 2.92 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% Symphyotrichum lateriflorum 20 Yes FAC X Prevalence Index is ≤3.01 2. Poa compressa 15 Yes **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 15 3. Phalaris arundinacea Yes **FACW** 10 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) No 4. Dipsacus fullonum 10 **FACW** 5. Juncus effusus No ¹Indicators of hydric soil and wetland hydrology must 6. Lythrum salicaria 3 No OBL be present, unless disturbed or problematic. 7. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 73 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: DW-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) Loc² % Type¹ Texture Remarks 10YR 4/2 98 7.5YR 4/6 2 Loamy/Clayey Prominent redox concentrations 0-16 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Samp	oling Date: 10/11/2012
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY	Sampling Point: EU-1
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:	<u> </u>
<u>-</u>	oal relief (concave, convex, none): Flat	Slope (%): 1
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A	Datum: N/A
Soil Map Unit Name: Lakemont silty clay loam	NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of your Are Vegetation No , Soil No , or Hydrology No significant		Yes X No
Are Vegetation No , Soil No , or Hydrology No naturally p	· ·	
SUMMARY OF FINDINGS – Attach site map showing		
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area	
Hydric Soil Present? Yes X No	•	X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a separate repo		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (n	ninimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks	s (B6)
Surface Water (A1) Water-Stained	d Leaves (B9) Drainage Patterns ((B10)
High Water Table (A2) Aquatic Fauna	a (B13) Moss Trim Lines (B	316)
Saturation (A3) Marl Deposits		
I — — — 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	fide Odor (C1) Crayfish Burrows (C	
I 		on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed	` '
I ·	eduction in Tilled Soils (C6) Geomorphic Positio	
Iron Deposits (B5) Thin Muck Sui		
Inundation Visible on Aerial Imagery (B7) Other (Explain		` '
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (I	<u> </u>
Field Observations:		
Surface Water Present? Yes No X Depth (inche	(S):	
Water Table Present? Yes No X Depth (inche Saturation Present? Yes No X Depth (inche Saturation Present)	es): Wetland Hydrology Present?	Yes No X
(includes capillary fringe)	wettallu riyurology Fresent!	162 NO X
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:	
3.13.1 3.1 3.1 4.1 4.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Remarks:		

VEGETATION – Use scientific names of plants. Sampling Point: Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 1 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 0.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 15 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 88 x 4 = 0 UPL species x 5 = Column Totals: 103 382 (A) (B) 6. Prevalence Index = B/A = 3.71 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa compressa 85 Yes **FACU** Prevalence Index is ≤3.01 2. Cornus stolonifera 15 **FACW** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3 Dipsacus fullonum No **FACU** 3 Problematic Hydrophytic Vegetation¹ (Explain) Linaria vulgaris No NI 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 106 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-12 7.5YR 2.5/1 100 Loamy/Clayey 12-16 2.5YR 3/1 80 10YR 4/1 20 Prominent redox concentrations Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) X Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/11/2012
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: EW-1
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:
	Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:
	NWI classification: PEM
Soil Map Unit Name: Lakemont silty clay loam	
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation No, Soil No, or Hydrology No significan	
Are Vegetation No, Soil No, or Hydrology No naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.
Livedrooks tile Venetation Duscost?	In the Committed Area
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	within a Wetland? Yes X No If yes, optional Wetland Site ID: Wetland E
Remarks: (Explain alternative procedures here or in a separate repo	л.,
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	· · · · · · · · · · · · · · · · · · ·
Surface Water (A1) Water-Stained	
High Water Table (A2) Aquatic Fauna	
Saturation (A3) Marl Deposits	
 -	fide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhiz	ospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of F	Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron R	eduction in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Su	rface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inche	es):
Water Table Present? Yes No X Depth (inche	es):
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	
Nemans.	

VEGETATION – Use scientific names of plants. Sampling Point: EW-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 3 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 66.7% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 18 x 2 = 1. FACW species 2. FAC species 20 x 3 = **FACU** species 15 x 4 = UPL species 0 x 5 = Column Totals: 53 156 (A) (B) 6. Prevalence Index = B/A = 2.94 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: _ 5) X Dominance Test is >50% Symphyotrichum lateriflorum 20 Yes FAC X Prevalence Index is ≤3.01 2. Poa compressa 15 Yes **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 15 Carex sp. Yes **FACW** 3 **FACW** Problematic Hydrophytic Vegetation¹ (Explain) Cornus stolonifera No 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 53 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: EW-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-4 10YR 3/1 100 Loamy/Clayey 4-16 10YR 5/2 100 7.5YR 4/4 20 Prominent redox concentrations Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) X Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara	Sampling Date: 10/12/2012
Applicant/Owner: Niagara Frontier Transportation Authority	State:	NY Sampling Point: FU-1
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:	
<u>-</u>	Local relief (concave, convex, none): Flat	Slope (%): 1
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A	Datum: N/A
Soil Map Unit Name: Lakemont silty clay loam		sification: UPL
Are climatic / hydrologic conditions on the site typical for this time of y Are Vegetation No , Soil No , or Hydrology No significan		in in Remarks.) present? Yes X No
Are Vegetation No , Soil No , or Hydrology No naturally	,	
SUMMARY OF FINDINGS – Attach site map showing		
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area	
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X	within a Wetland? Yes	NoX
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:	<u> </u>
Remarks: (Explain alternative procedures here or in a separate repo		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Inc	licators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface S	oil Cracks (B6)
Surface Water (A1) Water-Stained	d Leaves (B9) Drainage	Patterns (B10)
High Water Table (A2) Aquatic Fauna		n Lines (B16)
Saturation (A3) Marl Deposits		on Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)		
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Geomorphic Position (D2) Shallow Aquitard (D3)		
 -		
I 		graphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neut	ral Test (D5)
Field Observations:		
Surface Water Present? Yes No X Depth (inche	es):	
Water Table Present? Yes No X Depth (inche Saturation Present? Yes No X Depth (inche Saturation Present)	es):	nt2 Van Na V
(includes capillary fringe)	es): Wetland Hydrology Prese	nt? Yes No _X
Describe Recorded Data (stream gauge, monitoring well, aerial phot	tos previous inspections) if available:	
gaage, nemening nem, as an price	(a)	
Remarks:		-

VEGETATION – Use scientific names of p	iants.			Sar	mpling Point:	FU-	<u>l</u>
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work	sheet:		
1. 2.				Number of Dominant Sp That Are OBL, FACW, o		0	(A)
3.				Total Number of Domina	ant	-	_ ` `
4				Species Across All Stra	ta:	1	_(B)
5. 6.				Percent of Dominant Sp That Are OBL, FACW, of		0.0%	(A/B)
7.				Prevalence Index worl	ksheet:		
		=Total Cover		Total % Cover of:	٨	fultiply by:	
Sapling/Shrub Stratum (Plot size:)			OBL species 0			_
1.				FACW species 0	x 2 =	0	
2.				FAC species 0		0	
3.				FACU species 100		-	
4.	-			UPL species 0		0	
5.	<u>-</u>	·		Column Totals: 100		400	— (B)
6.				Prevalence Index	` '		— ` ′
7.				Hydrophytic Vegetation			
		=Total Cover					
Herb Stratum (Plot size: 5)		- Total Gover		Rapid Test for Hydrophytic Vegetation Dominance Test is >50%			
1. Dipsacus fullonum	85	Yes	FACU	Prevalence Index is			
'						wido ounne	ortina
2. Poa compressa3.	15	No No	FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
4				Problematic Hydrophytic Vegetation ¹ (Explain)			
5.				Indicators of hydric soil and wetland hydrology must			
6.				be present, unless disturbed or problematic.			
7.		· ——		Definitions of Vegetation Strata:			
8. 9.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.			
10.				 Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. 			
11				and greater than 3.28 ft	(1 m) tall.		
12.	100	=Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
1	-	· ——		height.			
2.	-			Hydrophytic			
3				Vegetation			
4				Present? Y	es	No X	
		=Total Cover					
Remarks: (Include photo numbers here or on a sep	parate sheet.)						

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-10 10YR 3/1 100 Loamy/Clayey 10-16 7.5YR 4/3 99 5YR 4/6 Prominent redox concentrations Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/12/2012	
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: FW-1	
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:	
	Local relief (concave, convex, none): concave Slope (%): 0	
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:	
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM	
Are climatic / hydrologic conditions on the site typical for this time of y		
Are Vegetation No, Soil No, or Hydrology No significant		
Are Vegetation No, Soil No, or Hydrology No naturally	problematic? (If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.	
Hudrock da Vandadan Darando Van V	In the Country of Amer	
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No	
Hydric Soil Present? Yes X No		
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland F	
Remarks: (Explain alternative procedures here or in a separate repo	ort.)	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)	X Surface Soil Cracks (B6)	
Surface Water (A1) Water-Stained	d Leaves (B9) Drainage Patterns (B10)	
High Water Table (A2) Aquatic Fauna		
Saturation (A3) Marl Deposits		
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)		
l ——	zospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)	
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2)		
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)		
	n in Remarks) Microtopographic Relief (D4)	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)	
Field Observations:		
	06):	
Surface Water Present? Yes No X Depth (inche Water Table Present? Yes No X Depth (inche	25)	
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Present? Yes X No	
l ————————————————————————————————————	es): Wetland Hydrology Present? Yes X No	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	too provious inspections) if available:	
Describe Recorded Data (stream gauge, monitoring well, aerial prior	os, previous inspections), ii available.	
Remarks:		
Remarks.		

VEGETATION – Use scientific names of plants. Sampling Point: FW-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) 15 OBL species x 1 = 6 x 2 = 1. FACW species 12 2. FAC species 3 x 3 = **FACU** species 18 x 4 = 0 UPL species x 5 = Column Totals: 42 108 (A) (B) 6. Prevalence Index = B/A = 2.57 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Lythrum salicaria 15 Yes OBL X Prevalence Index is ≤3.0¹ 2. Dipsacus fullonum 15 Yes **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3 3. Carex sp. No **FACW** 3 FAC Problematic Hydrophytic Vegetation¹ (Explain) Populus deltoides No 4. 5. 3 **FACW** Juncus effusus No ¹Indicators of hydric soil and wetland hydrology must 6. Poa compressa 3 No **FACU** be present, unless disturbed or problematic. 7. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 42 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Color (moist) Loc² (inches) % Type¹ Texture Remarks 0-3 10YR 4/1 99 7.5YR 4/6 1 Loamy/Clayey Prominent redox concentrations 3-16 10YR 4/2 98 10YR 4/6 Loamy/Clayey Prominent redox concentrations ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/12/2012	
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: GU-1	
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:	
Landform (hillside, terrace, etc.): Lake Plain	Local relief (concave, convex, none): Flat Slope (%): 1	
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A Datum: N/A	
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: UPL	
Are climatic / hydrologic conditions on the site typical for this time of		
Are Vegetation No , Soil No , or Hydrology No significa	· ——	
Are Vegetation No, Soil No, or Hydrology No naturally SUMMARY OF FINDINGS – Attach site map showir	y problematic? (If needed, explain any answers in Remarks.) ng sampling point locations, transects, important features, etc.	
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area	
Hydric Soil Present? Yes No X Westland Hydrology Present?	within a Wetland? Yes No X	
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a separate rep	port.)	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply	y) Surface Soil Cracks (B6)	
Surface Water (A1) Water-Staine	ed Leaves (B9) Drainage Patterns (B10)	
High Water Table (A2) Aquatic Faul	na (B13) Moss Trim Lines (B16)	
Saturation (A3) Marl Deposit	ts (B15) Dry-Season Water Table (C2)	
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)		
l ——	izospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)	
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)		
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)		
	ain in Remarks) Microtopographic Relief (D4)	
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)		
Field Observations:		
Surface Water Present? Yes No X Depth (incl	nes):	
Water Table Present? Yes No X Depth (incl	hes):	
Saturation Present? Yes No X Depth (incl	hes): Wetland Hydrology Present? Yes No _X	
(includes capillary fringe)	ate and the land the second the s	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), il avallable:	
Damarka		
Remarks:		

VEGETATION – Use scientific names of plants. Sampling Point: GU-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 0.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 0 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 127 x 4 = UPL species 0 x 5 = Column Totals: 127 508 (A) (B) 6. Prevalence Index = B/A = 4.00 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa compressa 80 Yes **FACU** Prevalence Index is ≤3.01 2. Phleum pratense Yes **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 Dipsacus fullonum No **FACU** 2 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Vicia sp No 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 127 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: GU-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-5 10YR 3/2 100 Loamy/Clayey 5-16 10YR 4/2 100 Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/12/2012		
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: GW-1		
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:		
Landform (hillside, terrace, etc.): Lake Plain	Local relief (concave, convex, none): concave Slope (%): 0		
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:		
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM		
Are climatic / hydrologic conditions on the site typical for this time of			
• •	· — · · · · · · · · · · · · · · · · · ·		
Are Vegetation No, Soil No, or Hydrology No signification in the second signification			
Are Vegetation No, Soil No, or Hydrology No naturally	y problematic? (If needed, explain any answers in Remarks.)		
SUMMARY OF FINDINGS – Attach site map showing	ng sampling point locations, transects, important features, etc.		
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area		
Hydric Soil Present? Yes X No	within a Wetland? Yes X No		
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland G		
Remarks: (Explain alternative procedures here or in a separate rep			
	,		
HYDROLOGY			
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)		
	Leaves (B9) Drainage Patterns (B10)		
X High Water Table (A2) Aquatic Fau			
X Saturation (A3) Marl Deposi			
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)			
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imager			
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4) Recent Iron	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)		
Iron Deposits (B5) Thin Muck S	Surface (C7) Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7) Other (Expla	ain in Remarks) Microtopographic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)		
Field Observations:			
Surface Water Present? Yes No X Depth (incl			
Water Table Present? Yes X No Depth (incl			
Saturation Present? Yes X No Depth (incl	hes): 0 Wetland Hydrology Present? Yes X No		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos previous inspections) if available:		
Describe Necorded Bata (Stream gauge, monitoring well, acrial pile	503, previous inspections), ii available.		
Remarks:			

VEGETATION – Use scientific names of plants. Sampling Point: GW-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) 75 OBL species x 1 = 32 x 2 = 1. FACW species 64 2. FAC species 0 x 3 = **FACU** species 5 x 4 = 0 UPL species x 5 = Column Totals: 112 159 (A) (B) 6. Prevalence Index = B/A = 1.42 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% Typha augustifolia 70 Yes OBL X Prevalence Index is ≤3.01 2. Carex sp. 30 Yes **FACW** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 Dipsacus fullonum No **FACU** 5 OBL Problematic Hydrophytic Vegetation¹ (Explain) Lythrum salicaria No No 2 **FACW** 5. Juncus effusus ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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. 112 =Total Cover Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: GW-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-4 10YR 4/1 Loamy/Clayey 4-16 10YR 4/1 93 7.5YR 4/6 Prominent redox concentrations Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/12/2012	
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: HU-1	
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:	
	Local relief (concave, convex, none): Flat Slope (%): 0	
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A Datum: N/A	
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: UPL	
•		
Are climatic / hydrologic conditions on the site typical for this time of y		
Are Vegetation No , Soil No , or Hydrology No significar	· —	
Are Vegetation No, Soil No, or Hydrology No naturally SUMMARY OF FINDINGS – Attach site map showing	problematic? (If needed, explain any answers in Remarks.) g sampling point locations, transects, important features, etc.	
	<u> </u>	
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area	
Hydric Soil Present? Wetland Hydrology Present? Yes No X No X	within a Wetland? Yes No X	
	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a separate repr	on.)	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)	
Surface Water (A1) Water-Staine	d Leaves (B9) Drainage Patterns (B10)	
High Water Table (A2) Aquatic Faun	ma (B13) Moss Trim Lines (B16)	
Saturation (A3) Marl Deposits	S (B15) Dry-Season Water Table (C2)	
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)		
Sediment Deposits (B2) Oxidized Rhiz	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)	
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)		
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)		
	in in Remarks) Microtopographic Relief (D4)	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)	
Field Observations:		
Surface Water Present? Yes No X Depth (inche	es).	
Water Table Present? Yes No X Depth (inche	es).	
Saturation Present? Yes No X Depth (inches	es): Wetland Hydrology Present? Yes No X	
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos	tos, previous inspections), if available:	
	,, ,,	
Remarks:		

VEGETATION – Use scientific names of plants. Sampling Point: HU-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 3 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 0.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 0 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 100 x 4 = 0 UPL species x 5 = Column Totals: 100 400 (A) (B) 6. Prevalence Index = B/A = 4.00 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa compressa 30 Yes **FACU** Prevalence Index is ≤3.01 2. Lolium perenne 30 Yes **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 30 3. Poa pratensis Yes **FACU** 5 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) No Vicia sp 5 No FACU 5. Lotus corniculatus ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-7 10YR 3/2 100 Loamy/Clayey 7-16 10YR 4/2 85 7.5YR 4/6 15 Prominent redox concentrations Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Polyvalue Below Surface (S8) (LRR K, L) X Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/12/2012
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: HW-1
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:
Landform (hillside, terrace, etc.): Lake Plain	Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of	
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· — · · · · · · · — ·	
Are Vegetation No, Soil No, or Hydrology No naturally	
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland H
Remarks: (Explain alternative procedures here or in a separate rep	port.)
LIVERELLEGY	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	<u> </u>
 -	ed Leaves (B9) Drainage Patterns (B10)
X High Water Table (A2) Aquatic Faur	
X Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)	
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Ovidized Phizospheres on Living Poots (C3) Saturation Visible on Aerial Images	
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)	
	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)	
l 	ain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inch	nes):
Water Table Present? Yes X No Depth (inch	
Saturation Present? Yes X No Depth (inch	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Percentus	
Remarks:	

VEGETATION – Use scientific names of plants. Sampling Point: HW-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 3 (B) Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 66.7% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 17 x 2 = 1. FACW species x 3 = 2. FAC species 0 **FACU** species 25 x 4 = UPL species 0 x 5 = Column Totals: 97 189 (A) (B) 6. Prevalence Index = B/A = 1.95 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% Lythrum salicaria 30 Yes OBL X Prevalence Index is ≤3.01 2. Typha augustifolia 25 Yes OBL Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 25 Poa compressa Yes **FACU** 15 **FACW** Problematic Hydrophytic Vegetation¹ (Explain) Carex tribuloides No 2 No _ **FACW** 5. Juncus effusus ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 97 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: HW-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) Loc² % Type¹ Texture Remarks 10YR 4/1 95 10YR 3/4 5 С Μ Loamy/Clayey Distinct redox concentrations 0-16 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City	/County: Niagara Falls/ Niag	gara	Sampling Date:	10/12/2012
Applicant/Owner: Niagara Frontier Transportation Aut	thority		State:	— NY Sampling F	Point: IU-1
Investigator(s): T. Wirickx, V. Chase	Sec	tion, Township, Range:			
Landform (hillside, terrace, etc.): Lake Plain		relief (concave, convex, non	ne): side ban	k Slop	e (%): 30
	: N/A	Long: N/A	′ 	 Datum	` ′
Soil Map Unit Name: Lakemont silty clay loam	14// 1		NIMI classit	fication: UPL	. 1077
Are climatic / hydrologic conditions on the site typical for	or this time of year?	Yes X No		in Remarks.)	
Are Vegetation No , Soil No , or Hydrology	•		- `	Ť	X No
Are Vegetation No , Soil No , or Hydrology					<u> </u>
SUMMARY OF FINDINGS – Attach site m			,	,	tures, etc.
Hydrophytic Vegetation Present? Yes	No X	Is the Sampled Area			
Hydric Soil Present? Yes		within a Wetland?	Yes	No X	
Wetland Hydrology Present? Yes	No X	If yes, optional Wetland Site			
Remarks: (Explain alternative procedures here or in a	a separate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		<u> </u>	Secondary India	cators (minimum of t	wo required)
Primary Indicators (minimum of one is required; check				il Cracks (B6)	
Surface Water (A1) Water-Stained Leaves (B9					
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Li					
Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Notes Marks (B1) Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery		(CO)			
Drift Deposits (B2) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery Stunted or Stressed Plants (D1)					
		reduction in Tilled Soils (C6) Geomorphic Position (D2)		,	
Iron Deposits (B5)	Thin Muck Surface	_	Shallow Ag	, ,	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Re	-		raphic Relief (D4)	
Sparsely Vegetated Concave Surface (B8)	_	_		al Test (D5)	
Field Observations:					
Surface Water Present? Yes NoX	Depth (inches):				
Water Table Present? Yes No X					
Saturation Present? Yes No _X	Depth (inches):	Wetland Hyd	rology Presen	t? Yes	No X
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, pr	evious inspections), if availa	ıble:		
Remarks:					
Tromano.					

VEGETATION – Use scientific names of plants. Sampling Point: Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 1 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 0.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 0 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 117 x 4 = UPL species 0 x 5 = Column Totals: 117 468 (A) (B) 6. Prevalence Index = B/A = 4.00 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa pratensis Yes **FACU** Prevalence Index is ≤3.01 2. Alliaria petiolata 15 No **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10 3. Phleum pratense No **FACU** 2 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Cirsium vulgare No 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 117 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-5 10YR 3/2 100 Loamy/Clayey 5-16 10YR 4/2 100 Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/12/2012
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: IW-1
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:
	Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation No, Soil No, or Hydrology No significan	 -
Are Vegetation No, Soil No, or Hydrology No naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydrophytic Vegetation Present? Yes X No Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland I
Remarks: (Explain alternative procedures here or in a separate repo	
Tremane. (Explain alternative procedures here of in a separate repe	<i>yc)</i>
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained	d Leaves (B9) Drainage Patterns (B10)
X High Water Table (A2) Aquatic Fauna	
X Saturation (A3) Marl Deposits	
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)	
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)	
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)	
Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Geomorphic Position (D2) Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain	n in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)
	FAC-Neutral Test (D3)
Field Observations:	
Surface Water Present? Yes No X Depth (inche Water Table Present? Yes X No Depth (inche	25)
Saturation Present? Yes X No Depth (inche	es): 1 Wetland Hydrology Present? Yes X No
(includes capillary fringe)	Wollding Hydrology Frederic.
Describe Recorded Data (stream gauge, monitoring well, aerial phot	tos, previous inspections), if available:
Remarks:	

VEGETATION – Use scientific names of plants. Sampling Point: IW-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 4 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: Total % Cover of: Sapling/Shrub Stratum (Plot size: ___ 15 OBL species 10 x 1 = 30 x 2 = Fraxinus pennsylvanica 10 **FACW** FACW species Cornus stolonifera **FACW** FAC species 0 x 3 = 3. **FACU** species 5 x 4 = 4. UPL species 0 x 5 = 5. Column Totals: 45 (A) (B) 6. Prevalence Index = B/A = 2.00 **Hydrophytic Vegetation Indicators:** 15 =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% Lythrum salicaria 10 Yes OBL X Prevalence Index is ≤3.01 2. Carex sp. 10 Yes **FACW** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 Lysimachia nummularia No **FACW** 5 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Dipsacus fullonum No 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 30 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Color (moist) Loc² (inches) % Type¹ Texture Remarks 0-6 10YR 4/1 100 Loamy/Clayey 6-16 10YR 4/1 85 7.5YR 4/6 15 С Prominent redox concentrations M Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/12/2012	
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: IW-1	
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:	
	Local relief (concave, convex, none): concave Slope (%): 0	
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:	
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM	
Are climatic / hydrologic conditions on the site typical for this time of		
	· · · · · · · · · · · · · · · · · · ·	
Are Vegetation No , Soil No , or Hydrology No significant		
Are Vegetation No, Soil No, or Hydrology No naturally		
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.	
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area	
Hydric Soil Present? Yes X No	within a Wetland? Yes X No	
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland I	
Remarks: (Explain alternative procedures here or in a separate rep	port.)	
	,	
LIVEROLOGY		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply Surface Water (A1) Water-Staine	Surface Soil Cracks (B6) d Leaves (B9) Drainage Patterns (B10)	
X High Water Table (A2) X High Water Table (A2) Aquatic Faun		
 -		
X Saturation (A3)		
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery		
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4) Recent Iron F	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)	
Iron Deposits (B5) Thin Muck St	urface (C7) Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7) Other (Explain	in in Remarks) Microtopographic Relief (D4)	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)	
Field Observations:		
Surface Water Present? Yes No _X Depth (inch		
Water Table Present? Yes X No Depth (inch		
Saturation Present? Yes X No Depth (inch	nes): 1 Wetland Hydrology Present? Yes X No	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	stop provious inspections) if available:	
Describe Necorded Data (Stream gauge, monitoring well, denai pho	itos, previous inspections), ii available.	
Remarks:		

VEGETATION – Use scientific names of plants. Sampling Point: Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 4 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: Total % Cover of: Sapling/Shrub Stratum (Plot size: 15 10 OBL species x 1 = 30 x 2 = Fraxinus pennsylvanica 10 **FACW** FACW species Cornus stolonifera **FACW** FAC species 0 x 3 = 3. **FACU** species 5 x 4 = 0 4. UPL species x 5 = 5. Column Totals: 45 (A) (B) 6. Prevalence Index = B/A = 2.00 **Hydrophytic Vegetation Indicators:** 15 =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% Lythrum salicaria 10 Yes OBL X Prevalence Index is ≤3.01 2. Carex sp. 10 Yes **FACW** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 Lysimachia nummularia No **FACW** 5 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Dipsacus fullonum No 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 30 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 0-6 10YR 4/1 100 Loamy/Clayey 6-16 10YR 4/1 85 7.5YR 4/6 15 С Prominent redox concentrations M Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara	Sampling Date: 10/15/2012	
Applicant/Owner: Niagara Frontier Transportation Authority	State: N	NY Sampling Point: JU-1	
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:		
	Local relief (concave, convex, none): Flat	Slope (%): 0	
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A	Datum: N/A	
Soil Map Unit Name: Lakemont silty clay loam	NWI classifica		
Are climatic / hydrologic conditions on the site typical for this time of y			
Are Vegetation No , Soil No , or Hydrology No significan			
Are Vegetation No, Soil No, or Hydrology No naturally			
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, i	mportant features, etc.	
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area		
Hydric Soil Present? Yes No X	within a Wetland? Yes	No X	
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:		
Remarks: (Explain alternative procedures here or in a separate repo			
	,		
HYDROLOGY			
Wetland Hydrology Indicators:	Secondary Indicat	tors (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil 0	Cracks (B6)	
Surface Water (A1) Water-Stained	d Leaves (B9) Drainage Pat	terns (B10)	
High Water Table (A2) Aquatic Fauna	a (B13) Moss Trim Lir	nes (B16)	
Saturation (A3) Marl Deposits	(B15) Dry-Season V	Water Table (C2)	
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)			
Sediment Deposits (B2) Oxidized Rhiz			
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)		Position (D2)	
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)		ard (D3)	
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks) Microtopogra	phic Relief (D4)	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral	Test (D5)	
Field Observations:			
Surface Water Present? Yes NoX Depth (inche	es):		
Water Table Present? Yes No X Depth (inche	es):		
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Present?	Yes No _X	
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:		
Deventor			
Remarks:			

VEGETATION – Use scientific names of plants. Sampling Point: JU-1 Absolute Dominant Indicator Tree Stratum (Plot size: ____) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 1 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 0.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 0 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 100 x 4 = 0 UPL species x 5 = Column Totals: 100 400 (A) (B) 6. Prevalence Index = B/A = 4.00 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa compressa 85 Yes **FACU** Prevalence Index is ≤3.01 Phleum pratense FACU Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-5 10YR 3/2 100 Loamy/Clayey 5-16 7.5YR 4/3 70 7.5YR 5/8 30 С Prominent redox concentrations M Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/15/2012
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: JW-1
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:
	Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation No, Soil No, or Hydrology No significan	
Are Vegetation No, Soil No, or Hydrology No naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland J
Remarks: (Explain alternative procedures here or in a separate repo	ort.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
X Surface Water (A1) Water-Stained	
High Water Table (A2) Aquatic Fauna	
Saturation (A3) Marl Deposits	
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)	
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)	
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)	
	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)	
 -	n in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes X No Depth (inche	es): 0.13
Water Table Present? Yes No X Depth (inche	es):
Water Table Present? Yes No X Depth (inche Saturation Present? Yes No X Depth (inche	Ses): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	

VEGETATION – Use scientific names of plants. Sampling Point: Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____15) OBL species x 1 = 50 x 2 = 1. FACW species 100 2. FAC species 10 x 3 = **FACU** species 30 x 4 = 0 UPL species x 5 = Column Totals: 90 250 (A) (B) 6. Prevalence Index = B/A = 2.78 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% 30 Yes **FACW** X Prevalence Index is ≤3.01 Carex sp. 2. Poa compressa 30 Yes **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Juncus effusus 10 No **FACW** 10 FAC Problematic Hydrophytic Vegetation¹ (Explain) Symphyotrichum lateriflorum No 10 No **FACW** 5. Lythrum salicaria ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 90 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Color (moist) Loc² (inches) % Type¹ Texture Remarks 0-4 10YR 3/2 95 7.5YR 4/6 5 С Μ Loamy/Clayey Prominent redox concentrations 4-8 10YR 3/3 75 7.5YR 3/4 25 С Μ Loamy/Clayey Prominent redox concentrations 8-16 10YR 4/2 90 7.5YR 3/4 10 С M Loamy/Clayey Prominent redox concentrations ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) X Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) X Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/15/2012	
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: KU-	
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:	
	Local relief (concave, convex, none): Flat Slope (%): 0	
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A Datum: N/A	
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: UPL	
Are climatic / hydrologic conditions on the site typical for this time of y		
Are Vegetation No , Soil No , or Hydrology No significar	· ——	
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.		
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area	
Hydric Soil Present? Yes No X Westland Liverglagy Present?	within a Wetland? Yes No X	
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a separate repo	ort.)	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required	
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)	
Surface Water (A1) Water-Stainer	d Leaves (B9) Drainage Patterns (B10)	
High Water Table (A2) Aquatic Faun	ma (B13) Moss Trim Lines (B16)	
Saturation (A3) Marl Deposits	s (B15) Dry-Season Water Table (C2)	
 -	ulfide Odor (C1) Crayfish Burrows (C8)	
l — — — 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)	
I 	Reduced Iron (C4) Stunted or Stressed Plants (D1)	
l 	Reduction in Tilled Soils (C6) Geomorphic Position (D2)	
Iron Deposits (B5) Thin Muck Su		
	in in Remarks) Microtopographic Relief (D4)	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)	
Field Observations:		
Surface Water Present? Yes No X Depth (inche	es):	
Water Table Present? Yes No X Depth (inche	es):	
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Present? Yes No _X	
(includes capillary fringe)	Annual continue to an artificial Manual labor.	
Describe Recorded Data (stream gauge, monitoring well, aerial phot	tos, previous inspections), ii available:	
Demonto		
Remarks:		

VEGETATION – Use scientific names of plants. Sampling Point: KU-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 1 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) 5 x 1 = OBL species 0 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 99 x 4 = 0 UPL species x 5 = Column Totals: 104 401 (A) (B) 6. Prevalence Index = B/A = 3.86 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa compressa 80 Yes **FACU** Prevalence Index is ≤3.01 2. Lolium perenne 10 No **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 3. Lythrum salicaria No OBL 5 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Festuca arundinacea No 4. 5. 2 Barbarea vulgaris No FAC ¹Indicators of hydric soil and wetland hydrology must 6. Cirsium vulgare 2 No **FACU** be present, unless disturbed or problematic. 2 7. Taraxacum officinale No **FACU Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. 10 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 106 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-3 10YR 3/2 100 Loamy/Clayey 3-16 10YR 4/2 60 Loamy/Clayey 5YR 4/3 40 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/15/2012				
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: KW-1				
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:				
	Local relief (concave, convex, none): concave Slope (%): 0				
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:				
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM				
•					
Are climatic / hydrologic conditions on the site typical for this time of					
Are Vegetation No, Soil No, or Hydrology No significan					
Are Vegetation No, Soil No, or Hydrology No naturally	problematic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area				
Hydric Soil Present? Yes X No	within a Wetland? Yes X No				
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland K				
Remarks: (Explain alternative procedures here or in a separate rep					
(,p	,				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply					
 -	d Leaves (B9) Drainage Patterns (B10) Maca Trim Lines (B10)				
High Water Table (A2) Aquatic Faun Aquatic Faun					
Saturation (A3) Marl Deposit	sits (B15) Dry-Season Water Table (C2) Sulfide Odor (C1) Crayfish Burrows (C8)				
 -	zospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)				
	Reduced Iron (C4) Stunted or Stressed Plants (D1)				
	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)				
Iron Deposits (B5) Thin Muck St	· · · · · · · · · · · · · · · · · · ·				
1 	in in Remarks) Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? Yes X No Depth (inch	es): 0.13				
Water Table Present? Yes No X Depth (inch	es):				
Saturation Present? Yes No X Depth (inch					
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:				
Remarks:					
Remarks.					

VEGETATION – Use scientific names of plants. Sampling Point: KW-1 Absolute Dominant Indicator Tree Stratum (Plot size: ____) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____15) OBL species x 1 = 80 x 2 = 1. FACW species 160 2. FAC species 0 x 3 = **FACU** species 30 x 4 = 0 UPL species x 5 = Column Totals: 110 280 (A) (B) 6. Prevalence Index = B/A = 2.55 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% 60 Yes **FACW** X Prevalence Index is ≤3.01 Carex sp. 2. Poa compressa 20 No **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 20 Juncus effusus No **FACW** 10 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Lolium perenne No 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 110 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: KW-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix			Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-5	10YR 3/2	97	10YR 3/4	3	С	M	Loamy/Clayey	Distinct redox concentrations
5-9	10YR 4/1	97	5YR 3/4	3	С	M	Loamy/Clayey	Prominent redox concentrations
9-16	10YR 4/2	50					Loamy/Clayey	
	5YR 4/3	50						
1			M. Dadward Matrix Of				21	
-		pletion, R	M=Reduced Matrix, CS	S=Cover	red or Coa	ated Sand		cation: PL=Pore Lining, M=Matrix.
_	oil Indicators: sol (A1)		Polyvalue Below	Surface	(S8) (I R	R R		or Problematic Hydric Soils ³ : lck (A10) (LRR K, L, MLRA 149B)
	Epipedon (A2)		MLRA 149B)	Ouriacc	, (00) (LI	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		rairie Redox (A16) (LRR K, L, R)
	Histic (A3)		Thin Dark Surfac	e (S9) (LRR R, M	ILRA 149		icky Peat or Peat (S3) (LRR K, L, R)
	ogen Sulfide (A4)		Loamy Mucky M					rface (S7) (LRR K, L)
	fied Layers (A5)		Loamy Gleyed M			-, -,		e Below Surface (S8) (LRR K, L)
	eted Below Dark Surfa	ce (A11)	X Depleted Matrix		,			k Surface (S9) (LRR K, L)
	Dark Surface (A12)	(,	Redox Dark Surf)			nganese Masses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)						nt Floodplain Soils (F19) (MLRA 149B)		
	y Gleyed Matrix (S4)		Redox Depression					podic (TA6) (MLRA 144A, 145, 149B)
	y Redox (S5))o (i. o)				ent Material (TF2)
	ed Matrix (S6)							allow Dark Surface (TF12)
	Surface (S7) (LRR R,	MLRA 14	19B)					xplain in Remarks)
³ Indicators	s of hydrophytic vegeta	ation and	wetland hydrology mus	st be pre	esent, unle	ess distur	bed or problematic	
Restrictiv	e Layer (if observed)							
Type:	nahaa);						Unadala Call Da	
Remarks:	nches):						Hydric Soil Pro	esent? Yes X No
rtemants.								

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/16/2012		
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: LU-1		
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:		
<u>-</u>	Local relief (concave, convex, none): Flat Slope (%): 0		
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A Datum: N/A		
, <u> </u>			
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: UPL		
Are climatic / hydrologic conditions on the site typical for this time of y			
Are Vegetation No, Soil No, or Hydrology No significan	tly disturbed? Are "Normal Circumstances" present? Yes X No		
Are Vegetation No, Soil No, or Hydrology No naturally	problematic? (If needed, explain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.		
			
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area		
Hydric Soil Present? Yes X No	within a Wetland? Yes No X		
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:		
Remarks: (Explain alternative procedures here or in a separate repo	ort.)		
HYDROLOGY			
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)			
Surface Water (A1) Water-Stained	<u>—</u>		
High Water Table (A2) Aquatic Fauna Aquatic Fauna			
Saturation (A3) Marl Deposits			
 -	fide Odor (C1) Crayfish Burrows (C8)		
I — — — 1 1 1	cospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)		
<u> </u>	Reduced Iron (C4) Stunted or Stressed Plants (D1)		
l 	Reduction in Tilled Soils (C6) Geomorphic Position (D2)		
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)			
 -			
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)			
Field Observations:	TAO Neutral Test (50)		
Surface Water Present? Yes No X Depth (inche	ac).		
Water Table Present? Yes No X Depth (inche)	ac):		
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Present? Yes No X		
(includes capillary fringe)	Wetialia Hydrology Present? Tes No		
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:		
gangs, manning man, action pro-			
Remarks:			

VEGETATION – Use scientific names of plants. Sampling Point: LU-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 3 (B) Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size:) OBL species x 1 = 0 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 121 x 4 = UPL species 0 x 5 = Column Totals: 121 484 (A) (B) 6. Prevalence Index = B/A = 4.00 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa compressa 30 Yes **FACU** Prevalence Index is ≤3.01 2. Lolium perenne 30 Yes **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Poa pratensis 30 Yes **FACU** 15 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) No 4. Lotus corniculatus 5. 10 Dipsacus fullonum No **FACU** ¹Indicators of hydric soil and wetland hydrology must 6. Cirsium vulgare 2 No **FACU** be present, unless disturbed or problematic. 2 Taraxacum officinale No **FACU Definitions of Vegetation Strata:** 8. Festuca arundinacea 2 No **FACU** Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. 10. 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 121 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 2 7.5YR 4/2 91 10YR 5/8 С Μ Loamy/Clayey 0-16 7.5YR 4/6 С Μ Prominent redox concentrations ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) ? Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/16/2012				
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: LW-1				
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:				
Landform (hillside, terrace, etc.): Lake Plain	Local relief (concave, convex, none): concave Slope (%): 0				
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:				
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM				
Are climatic / hydrologic conditions on the site typical for this time of					
Are Vegetation No, Soil No, or Hydrology No signification					
Are Vegetation No, Soil No, or Hydrology No naturally	y problematic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing	ng sampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes X No No	Is the Sampled Area				
Hydric Soil Present? Yes X No	within a Wetland? Yes X No				
Wetland Hydrology Present? Yes X No No	If yes, optional Wetland Site ID: Wetland L				
Remarks: (Explain alternative procedures here or in a separate rep	oort.)				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply	· · · · · · · · · · · · · · · · · · ·				
	ed Leaves (B9) Drainage Patterns (B10)				
High Water Table (A2) Aquatic Faul					
X Saturation (A3) Marl Deposit					
	ulfide Odor (C1) Crayfish Burrows (C8)				
l — — — — — — — — — — — — — — — — — — —	izospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)				
	Reduced Iron (C4) Stunted or Stressed Plants (D1)				
	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)				
	Surface (C7) Shallow Aquitard (D3)				
 -	ain in Remarks) Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:	<u></u>				
Surface Water Present? Yes X No Depth (inch	nes): 0.25"				
Water Table Present? Yes No X Depth (inch	nes)				
Water Table Present? Yes No X Depth (inches Saturation Present? Yes X No Depth (inches Saturation Present?	nes): 0-3" Wetland Hydrology Present? Yes X No				
(includes capillary fringe)	Wettand Trydrology Fresent: 165 X NO				
Describe Recorded Data (stream gauge, monitoring well, aerial pho	totos, previous inspections), if available:				
3 1,111	·····				
Remarks:					
Ponded water					

VEGETATION – Use scientific names of plants. Sampling Point: LW-1 Absolute Dominant Indicator Tree Stratum (Plot size: ____) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____15) OBL species 20 x 1 = 10 x 2 = 1. FACW species 20 x 3 = 2. FAC species **FACU** species 10 x 4 = UPL species 0 x 5 = Column Totals: 100 260 (A) (B) 6. Prevalence Index = B/A = 2.60 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% Symphyotrichum lateriflorum 60 Yes FAC X Prevalence Index is ≤3.01 Typha augustifolia 20 Yes OBL Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10 Lotus corniculatus No **FACU** 10 **FACW** Problematic Hydrophytic Vegetation¹ (Explain) No Carex sp. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

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

Depth Matrix Redox Features

Depth	Matrix		Redo	x Feature	es			,		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-3	10YR 3/2	97	10YR 3/4	3	С	M	Loamy/Clayey	Distinct redox concentrations		
3-16	10YR 4/2	45	10YR 4/6	10	С	M	Loamy/Clayey	Prominent redox concentrations		
	5YR 4/3	45								
										
										
¹ Type: C=0	Concentration, D=De	epletion, RN	/=Reduced Matrix, C	S=Cover	ed or Coa	ted San	d Grains. ² Lo	cation: PL=Pore Lining, M=Matrix.		
	I Indicators:		,					or Problematic Hydric Soils ³ :		
Histoso			Polyvalue Below	/ Surface	(S8) (LR	R R,		ıck (A10) (LRR K, L, MLRA 149B)		
Histic E	Epipedon (A2)	•	MLRA 149B)					rairie Redox (A16) (LRR K, L, R)		
Black H	Histic (A3)		Thin Dark Surfa	ce (S9) (I	LRR R, M	LRA 149	9B) 5 cm Mu			
	gen Sulfide (A4)	•	Loamy Mucky M	lineral (F	1) (LRR k	(, L)	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)			
	ed Layers (A5)	•	Loamy Gleyed N			,				
	ed Below Dark Surfa	ice (A11)	X Depleted Matrix							
	Dark Surface (A12)		Redox Dark Sur)					
	Mucky Mineral (S1)	•	Depleted Dark S					Piedmont Floodplain Soils (F19) (MLRA 149B)		
	Gleyed Matrix (S4)	•	Redox Depressi		.,			podic (TA6) (MLRA 144A, 145, 149B)		
	Redox (S5)		RCGOX Depicssi	0113 (1 0)				ent Material (TF2)		
	ed Matrix (S6)							allow Dark Surface (TF12)		
	urface (S7) (LRR R ,	MLRA 149	9B)					Explain in Remarks)		
3Indicators	of hydrophytic yegot	ation and w	otland bydrology my	et ha nra	oont unk	oo diatur	had ar problematic			
	Layer (if observed		vetland hydrology mu	ist be pre	sent, unit	ess distui				
Type:	Layer (II Observed	.,.								
Depth (in	ches):						Hydric Soil Pro	esent? Yes X No No		
Remarks:							•			

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/16/2012		
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: MU-1		
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:		
	Local relief (concave, convex, none): Flat Slope (%): 0		
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A Datum: N/A		
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: UPL		
•			
Are climatic / hydrologic conditions on the site typical for this time of y			
Are Vegetation No , Soil No , or Hydrology No significant	· —		
Are Vegetation No, Soil No, or Hydrology No naturally SUMMARY OF FINDINGS – Attach site map showing	problematic? (If needed, explain any answers in Remarks.) g sampling point locations, transects, important features, etc.		
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area		
Hydric Soil Present? Yes No X Westland Livid relative Present?	within a Wetland? Yes No X		
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:		
Remarks: (Explain alternative procedures here or in a separate repo	ort.)		
HYDROLOGY			
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1) Water-Stained	d Leaves (B9) Drainage Patterns (B10)		
High Water Table (A2) Aquatic Faun	a (B13) Moss Trim Lines (B16)		
Saturation (A3) Marl Deposits	s (B15) Dry-Season Water Table (C2)		
	Ifide Odor (C1) Crayfish Burrows (C8)		
l — — — 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)		
I 	Reduced Iron (C4) Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)			
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)			
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)		
Field Observations:			
Surface Water Present? Yes No X Depth (inche	es):		
Water Table Present? Yes No X Depth (inche	es):		
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Present? Yes No _X		
(includes capillary fringe)	Assessment of the second of th		
Describe Recorded Data (stream gauge, monitoring well, aerial phot	tos, previous inspections), il avallable:		
Demonto			
Remarks:			

VEGETATION – Use scientific names of plants. Sampling Point: MU-1 Absolute Dominant Indicator Tree Stratum (Plot size: ____) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 0.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 0 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 100 x 4 = 0 UPL species x 5 = Column Totals: 100 400 (A) (B) 6. Prevalence Index = B/A = 4.00 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa compressa 75 Yes **FACU** Prevalence Index is ≤3.01 Dipsacus fullonum 25 Yes **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 2 Cornus racemosa No Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 102 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: MU-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-3.5 10YR 3/2 100 Loamy/Clayey 3.5-16 5YR 4/3 100 Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/16/2012				
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: MW-1				
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:				
	Local relief (concave, convex, none): concave Slope (%): 0				
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:				
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM				
Are climatic / hydrologic conditions on the site typical for this time of y					
					
Are Vegetation No , Soil No , or Hydrology No significan	· — —				
Are Vegetation No, Soil No, or Hydrology No naturally					
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area				
Hydric Soil Present? Yes X No	within a Wetland? Yes X No				
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland M				
Remarks: (Explain alternative procedures here or in a separate repo					
(,				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)	X Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained	d Leaves (B9) Drainage Patterns (B10)				
High Water Table (A2) Aquatic Fauna	a (B13) Moss Trim Lines (B16)				
Saturation (A3) Marl Deposits	Dry-Season Water Table (C2)				
Water Marks (B1) Hydrogen Sul	lfide Odor (C1) Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidized Rhiz	zospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3) Presence of F	Reduced Iron (C4) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)Recent Iron R	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)				
Iron Deposits (B5) Thin Muck Su					
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks) Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? Yes No _X Depth (inche	es):				
Water Table Present? Yes No X Depth (inche	es):				
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Present? Yes X No				
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:				
Remarks:					
Nemans.					

VEGETATION – Use scientific names of plants. Sampling Point: MW-1 Absolute Dominant Indicator Tree Stratum (Plot size: ____) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____15) 15 OBL species x 1 = 80 x 2 = 1. FACW species 160 2. FAC species 0 x 3 = **FACU** species 0 x 4 = UPL species 0 x 5 = Column Totals: 95 175 (A) (B) 6. Prevalence Index = B/A = 1.84 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% 70 Yes **FACW** X Prevalence Index is ≤3.01 Carex sp. Lythrum salicaria 15 No OBL Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 Juncus effusus No **FACW** 5 **FACW** Problematic Hydrophytic Vegetation¹ (Explain) Polygonium sp. No 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 95 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: MW-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) Loc² % Type¹ Texture Remarks 10YR 4/1 85 7.5YR 4/6 15 С Μ Loamy/Clayey Prominent redox concentrations 0-16 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/17/2012		
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: NU-1		
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:		
Landform (hillside, terrace, etc.): Lake Plain	Local relief (concave, convex, none): Flat Slope (%): 0		
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A Datum: N/A		
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: UPL		
Are climatic / hydrologic conditions on the site typical for this time of			
Are Vegetation No , Soil No , or Hydrology No significal	· —		
Are Vegetation No, Soil No, or Hydrology No naturally SUMMARY OF FINDINGS – Attach site map showin	problematic? (If needed, explain any answers in Remarks.) If sampling point locations, transects, important features, etc.		
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area		
Hydric Soil Present? Yes No X Westland Liverslags Present?	within a Wetland? Yes No X		
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:		
Remarks: (Explain alternative procedures here or in a separate rep	oort.)		
HYDROLOGY			
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply	y) Surface Soil Cracks (B6)		
Surface Water (A1) Water-Staine	ed Leaves (B9) Drainage Patterns (B10)		
High Water Table (A2) Aquatic Faur	ma (B13) Moss Trim Lines (B16)		
Saturation (A3) Marl Deposit	Dry-Season Water Table (C2)		
	ulfide Odor (C1) Crayfish Burrows (C8)		
l ——	izospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)		
	Reduced Iron (C4) Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)			
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)			
	in in Remarks) Microtopographic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)		
Field Observations:			
Surface Water Present? Yes No X Depth (inch	les):		
Water Table Present? Yes No X Depth (inch	les):		
Saturation Present? Yes No X Depth (inch	nes): Wetland Hydrology Present? Yes No _X		
(includes capillary fringe)	Assertation to the second state of the second		
Describe Recorded Data (stream gauge, monitoring well, aerial pho	nos, previous inspections), ir available:		
Demonto			
Remarks:			

VEGETATION – Use scientific names of plants. Sampling Point: NU-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 1 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 0.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 0 x 2 = 1. FACW species 2. FAC species 5 x 3 = 15 **FACU** species 42 x 4 = UPL species 60 x 5 = 300 Column Totals: 107 483 (A) (B) 6. Prevalence Index = B/A = 4.51 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Danthonia spicata Yes UPL Prevalence Index is ≤3.01 2. Dipsacus fullonum 20 No **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 20 3. Poa compressa No **FACU** 5 FAC Problematic Hydrophytic Vegetation¹ (Explain) Symphyotrichum lateriflorum No 4. Achillea millefolium 2 No 5. **FACU** ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 107 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Color (moist) % Loc² (inches) Type¹ Texture Remarks 0-5 10YR 3/2 100 Loamy/Clayey 5-7 7.5YR 4/2 80 10YR 5/6 20 Prominent redox concentrations Loamy/Clayey 7-16 7.5YR 4/2 100 Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/17/2012				
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: NW-1				
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:				
	Local relief (concave, convex, none): concave Slope (%): 0				
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:				
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM				
Are climatic / hydrologic conditions on the site typical for this time of y					
Are Vegetation No, Soil No, or Hydrology No significan					
Are Vegetation No , Soil No , or Hydrology No naturally	problematic? (If needed, explain any answers in Remarks.)				
	g sampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area				
Hydric Soil Present? Yes X No	within a Wetland? Yes X No				
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland N				
Remarks: (Explain alternative procedures here or in a separate repo					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)					
1 	d Leaves (B9) X Drainage Patterns (B10) According Lines (B10)				
High Water Table (A2) Aquatic Fauna And Reposition					
X Saturation (A3) Marl Deposits					
1 	Ifide Odor (C1) Crayfish Burrows (C8)				
	zospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plant					
	x Geomorphic Position (D2) Surface (C7) Shallow Aquitant (D2)				
Iron Deposits (B5) Thin Muck Su					
1 	n in Remarks) Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? Yes No X Depth (inche	es):				
Water Table Present? Yes No X Depth (inche Saturation Present? Yes X No Depth (inche	es):				
	es):0-6 Wetland Hydrology Present? YesX No				
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photo	los, previous inspections), if available:				
Remarks: Ponded water					

VEGETATION – Use scientific names of plants. Sampling Point: NW-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 4 (B) Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15) OBL species x 1 = 17 x 2 = 1. FACW species x 3 = 2. FAC species 2 **FACU** species 40 x 4 = UPL species 2 x 5 = Column Totals: 105 254 (A) (B) 6. Prevalence Index = B/A = 2.42 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Poa compressa 20 Yes **FACU** X Prevalence Index is ≤3.01 2. Lythrum salicaria 20 Yes OBL Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Eleocharis palustris 20 Yes OBL 20 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Dipsacus fullonum Yes 4. **FACW** 5. 15 No Carex sp. ¹Indicators of hydric soil and wetland hydrology must 6. Phragmites australis 2 No OBL be present, unless disturbed or problematic. 2 7. Juncus effusus No **FACW Definitions of Vegetation Strata:** 8. Danthonia spicata 2 No UPL Tree - Woody plants 3 in. (7.6 cm) or more in Typha augustifolia 2 No OBL diameter at breast height (DBH), regardless of height. 2 10. Symphyotrichum lateriflorum No FAC Sapling/shrub - Woody plants less than 3 in. DBH 11. and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 105 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X_ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: NW-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) Loc² % Type¹ Texture Remarks 0-4 10YR 3/1 Loamy/Clayey 4-16 7.5YR 4/2 95 10YR 4/6 С Prominent redox concentrations M Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Polyvalue Below Surface (S8) (LRR K, L) X Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara	Sampling Date: 10/18/2012	
Applicant/Owner: Niagara Frontier Transportation Authority	State:	NY Sampling Point: OU-1	
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:		
	Local relief (concave, convex, none): Flat	Slope (%): 0	
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A	Datum: N/A	
Soil Map Unit Name: Lakemont silty clay loam		sification: UPL	
•			
Are climatic / hydrologic conditions on the site typical for this time of y		in in Remarks.)	
Are Vegetation No , Soil No , or Hydrology No significant	, ,		
Are Vegetation No, Soil No, or Hydrology No naturally SUMMARY OF FINDINGS – Attach site map showing			
	T	<u> </u>	
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X	Is the Sampled Area within a Wetland? Yes	No. V	
Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X	within a Wetland? Yes If yes, optional Wetland Site ID:	No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate repo	л.,		
HYDROLOGY			
Wetland Hydrology Indicators:	Secondary Ind	dicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)	Surface S	Soil Cracks (B6)	
Surface Water (A1) Water-Stained	d Leaves (B9) Drainage	Patterns (B10)	
High Water Table (A2) Aquatic Faun	a (B13) Moss Trin	n Lines (B16)	
Saturation (A3) Marl Deposits	(B15) Dry-Sease	on Water Table (C2)	
		Burrows (C8)	
		n Visible on Aerial Imagery (C9)	
l 		r Stressed Plants (D1)	
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)			
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)			
Sparsely Vegetated Concave Surface (B8)		tral Test (D5)	
Field Observations:	,		
Surface Water Present? Yes No X Depth (inche	es):		
Water Table Present? Yes No X Depth (inche	es):		
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Prese	nt? Yes No X	
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:		
Remarks:			
Remarks.			

VEGETATION – Use scientific names of plants. Sampling Point: OU-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 1 (B) Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size:) 0 x 1 = OBL species 0 x 2 = 1. FACW species x 3 = 2. FAC species 5 **FACU** species 94 x 4 = UPL species 10 x 5 = Column Totals: 109 441 (A) (B) 6. Prevalence Index = B/A = 4.05 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Dipsacus fullonum 60 Yes **FACU** Prevalence Index is ≤3.01 2. Poa compressa 20 No **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Danthonia spicata 10 No UPL 10 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Achillea millefolium No 4. 5 5. Symphyotrichum lateriflorum No FAC ¹Indicators of hydric soil and wetland hydrology must 6. Fragaria virginiana 2 No **FACU** be present, unless disturbed or problematic. 2 Festuca arundinacea No **FACU Definitions of Vegetation Strata:** 8. 2 No **FCAU** Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. 10 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. 111 =Total Cover Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

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

Depth Matrix Redox Features
(inches) Color (moist) % Type¹ Loc² Texture Remarks

Depth	Matrix		Redox	k Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10YR 3/2	100					Loamy/Clayey	
3-16	7.5YR 4/2	97	10YR 4/6	3		_	Loamy/Clayey	Prominent redox concentrations
		<u> </u>		_	<u> </u>	<u> </u>		
		pletion, RN	/I=Reduced Matrix, C	S=Cove	red or Coa	ated Sand		ocation: PL=Pore Lining, M=Matrix.
Histos Histic Black Hydrog Stratifi X Deplet Thick Sandy Sandy Strippe Dark S	e Layer (if observed	MLRA 14st	MLRA 149B) Thin Dark Surface Loamy Mucky M Loamy Gleyed M X Depleted Matrix Redox Dark Surface Depleted Dark S Redox Depression	Thin Dark Surface (S9) (LRR R, MLRA 149 Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)			2 cm Mu Coast P 5 cm Mu Dark Su Polyvalu Thin Dar Iron-Mar Piedmor Mesic S Red Par Very Sh Other (E	
Remarks:								

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/17/2012				
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: OW-1				
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:				
	Local relief (concave, convex, none): concave Slope (%): 0				
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:				
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM				
Are climatic / hydrologic conditions on the site typical for this time of y					
Are Vegetation No, Soil No, or Hydrology No significan					
Are Vegetation No, Soil No, or Hydrology No naturally	problematic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.				
Libration by the Manager December 1	In the Countried Area				
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No				
Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	within a Wetland? Yes X No If yes, optional Wetland Site ID: Wetland O				
Remarks: (Explain alternative procedures here or in a separate repo	σπ.)				
HYDROLOGY					
	Secondary Indicators (minimum of two required)				
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)				
Surface Water (A1) Water-Stained	en e				
High Water Table (A2) Aquatic Fauna And Reposition					
Saturation (A3)Marl Deposits					
	ffide Odor (C1) Crayfish Burrows (C8)				
l 	cospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)				
	Reduced Iron (C4) Stunted or Stressed Plants (D1)				
	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)				
Iron Deposits (B5)Thin Muck Su					
l 	m in Remarks) Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? Yes No _X Depth (inche	es):				
Water Table Present? Yes No X Depth (inche	es):				
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Present? Yes X No				
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:				
Remarks:					
Tremarko.					

VEGETATION – Use scientific names of plants. Sampling Point: OW-1 Absolute Dominant Indicator Tree Stratum (Plot size: ____) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____15) OBL species 20 x 1 = 85 x 2 = 1. FACW species 170 2. FAC species 0 x 3 = **FACU** species 0 x 4 = 0 UPL species x 5 = Column Totals: 105 190 (A) (B) 6. Prevalence Index = B/A = 1.81 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% Phragmites australis Yes **FACW** X Prevalence Index is ≤3.01 Lythrum salicaria 20 OBL Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 Carex sp. No **FACW** Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 105 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: OW-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Color (moist) Loc² (inches) % Type¹ Texture Remarks 0-8 10YR 4/1 75 10YR 4/6 25 С Μ Loamy/Clayey Prominent redox concentrations 8-16 7.5YR 4/3 50 Loamy/Clayey 10YR 4/1 50 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No

Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara S	ampling Date: 10/17/2012	
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY	Y Sampling Point: PU-1	
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:		
	Local relief (concave, convex, none): Flat	Slope (%): 0	
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A	Datum: N/A	
Soil Map Unit Name: Lakemont silty clay loam	NWI classificat		
•			
Are climatic / hydrologic conditions on the site typical for this time of y			
Are Vegetation No , Soil No , or Hydrology No significar	, ,		
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.			
	<u> </u>		
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area	N- V	
Hydric Soil Present? Yes No X Westland Liverglagy Present?	within a Wetland? Yes	No X	
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:		
Remarks: (Explain alternative procedures here or in a separate repo	ort.)		
HYDROLOGY			
Wetland Hydrology Indicators:	Secondary Indicato	rs (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)) Surface Soil Cr	acks (B6)	
Surface Water (A1) Water-Stainer	d Leaves (B9) Drainage Patte	rns (B10)	
High Water Table (A2) Aquatic Faun	a (B13) Moss Trim Line	es (B16)	
Saturation (A3) Marl Deposits	S (B15) Dry-Season Wa	ater Table (C2)	
Water Marks (B1) Hydrogen Sul	lfide Odor (C1) Crayfish Burrov	ws (C8)	
Sediment Deposits (B2) Oxidized Rhiz	zospheres on Living Roots (C3) Saturation Visit	ble on Aerial Imagery (C9)	
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)		ssed Plants (D1)	
Algal Mat or Crust (B4) Recent Iron F	Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)		
Iron Deposits (B5) Thin Muck Su	urface (C7) Shallow Aquita	rd (D3)	
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks) Microtopograph	nic Relief (D4)	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Te	est (D5)	
Field Observations:			
Surface Water Present? Yes No _X Depth (inche	es):		
Water Table Present? Yes No X Depth (inche	es):		
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Present?	Yes No X	
(includes capillary fringe)	, <u> </u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos	tos, previous inspections), if available:		
Remarks:			
1			

VEGETATION – Use scientific names of plants. Sampling Point: Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 1 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 0 x 2 = 1. FACW species 2. FAC species 2 x 3 = **FACU** species 102 x 4 = 0 UPL species x 5 = Column Totals: 104 414 (A) (B) 6. Prevalence Index = B/A = 3.98 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Festuca arundinacea 75 Yes **FACU** Prevalence Index is ≤3.01 2. Poa compressa 20 No **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 3. Lotus corniculatus No **FACU** 2 FAC Problematic Hydrophytic Vegetation¹ (Explain) Symphyotrichum lateriflorum No 4. Achillea millefolium 2 No FACU 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 104 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) % Loc² Type¹ Texture Remarks 0-8 10YR 3/1 100 Loamy/Clayey 8-16 7.5YR 4/3 100 Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/17/2012		
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: PW-1		
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:		
	Local relief (concave, convex, none): concave Slope (%): 0		
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:		
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: PEM		
•			
Are climatic / hydrologic conditions on the site typical for this time of y			
Are Vegetation No , Soil No , or Hydrology No significant	· — —		
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.			
Somman of Findings - Attach site map showing	j sampling point locations, transects, important leatures, etc.		
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area		
Hydric Soil Present? Yes X No	within a Wetland? Yes X No No		
Wetland Hydrology Present? Yes X No No	If yes, optional Wetland Site ID: Wetland P		
Remarks: (Explain alternative procedures here or in a separate repo	ort.)		
HYDROLOGY			
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)			
	d Leaves (B9) X Drainage Patterns (B10)		
High Water Table (A2) Aquatic Fauna	en e		
X Saturation (A3) Marl Deposits			
	fide Odor (C1) Crayfish Burrows (C8)		
l — — — 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	cospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)		
I 	Reduced Iron (C4) Stunted or Stressed Plants (D1)		
l 	Reduction in Tilled Soils (C6) X Geomorphic Position (D2)		
Iron Deposits (B5) Thin Muck Su			
			
Sparsely Vegetated Concave Surface (B8)	n in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)		
	FAC-Neutral Test (D5)		
Field Observations:			
Surface Water Present? Yes No X Depth (inche) \$):		
Water Table Present? Yes No X Depth (inche	es):		
Saturation Present? Yes X No Depth (inches	es): 0-6 Wetland Hydrology Present? Yes X No		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:		
Domorko			
Remarks: Ponded Water			
i olided water			

VEGETATION – Use scientific names of plants. Sampling Point: PW-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____15) OBL species x 1 = 70 x 2 = 1. FACW species 140 2. FAC species 0 x 3 = **FACU** species 14 x 4 = UPL species 0 x 5 = Column Totals: 89 201 (A) (B) 6. Prevalence Index = B/A = 2.26 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% 70 Yes **FACW** X Prevalence Index is ≤3.01 Carex sp. 2. Symphyotrichum lateriflorum 20 No FAC Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10 Festuca arundinacea No **FACU** 5 OBL Problematic Hydrophytic Vegetation¹ (Explain) Lythrum salicaria No 4. 5. 2 FACU Dipsacus fullonum No ¹Indicators of hydric soil and wetland hydrology must 6. Lotus corniculatus 2 No **FACU** be present, unless disturbed or problematic. 7. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 109 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: PW-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Color (moist) Loc² (inches) % Type¹ Texture Remarks 0-6 10YR 4/1 95 7.5YR 4/6 5 С Μ Loamy/Clayey Prominent redox concentrations 6-16 7.5YR 4/3 100 Loamy/Clayey ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/18/2012		
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: QU-		
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:		
<u>-</u>	Local relief (concave, convex, none): Flat Slope (%): 0		
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A Datum: N/A		
Soil Map Unit Name: Lakemont silty clay loam	NWI classification: UPL		
Are climatic / hydrologic conditions on the site typical for this time of your Are Vegetation No , Soil No , or Hydrology No significant	 -		
<u> </u>	· — —		
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.			
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area		
Hydric Soil Present? Yes X No	within a Wetland? Yes No _X_		
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:		
Remarks: (Explain alternative procedures here or in a separate repo			
HYDROLOGY			
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required		
Primary Indicators (minimum of one is required; check all that apply)	<u>—</u>		
Surface Water (A1) Water-Stained			
High Water Table (A2) Aquatic Fauna			
Saturation (A3)Marl Deposits			
I — — — 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	fide Odor (C1) Crayfish Burrows (C8)		
I 	cospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)			
I ·	Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Thin Muck Surface (C7) Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7) Other (Explain			
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)		
Field Observations:			
Surface Water Present? Yes NoX Depth (inche	25).		
Water Table Present? Yes No X Depth (inche	es):		
Saturation Present? Yes No X Depth (inche	Wetland Hydrology Present? Yes No X		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:		
Remarks:			

VEGETATION – Use scientific names of plants. Sampling Point: QU-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 3 (B) Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 2 x 2 = 1. FACW species 2. FAC species 0 x 3 = **FACU** species 95 x 4 = 0 UPL species x 5 = Column Totals: 97 384 (A) (B) 6. Prevalence Index = B/A = 3.96 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Festuca arundinacea 30 Yes **FACU** Prevalence Index is ≤3.01 2. Poa compressa 30 Yes **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 30 3. Lolium perenne Yes **FACU** 5 **FACU** Problematic Hydrophytic Vegetation¹ (Explain) Taraxacum officinale No 2 **FACW** 5. Lysimachia nummularia No ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 97 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

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

Depth Matrix Redox Features
(inches) Color (moist) % Type¹ Loc² Texture Remarks

Depth Matrix		Redox Features						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 3/2	100					Loamy/Clayey	
6-16	10YR 4/2	97	7.5YR 3/4	3	С	М	Loamy/Clayey	Prominent redox concentrations
¹ Type: C=	=Concentration, D=Dep	letion R	M=Reduced Matrix C	S=Cove	red or Coa	ted San	d Grains ² I o	ocation: PL=Pore Lining, M=Matrix.
	oil Indicators:	netion, ix	ivi–rteduced iviatrix, C	0-C0VE	rea or coa	iteu San		for Problematic Hydric Soils ³ :
-			Polyvalue Below	olyvalue Below Surface (S8) (LRR R,				uck (A10) (LRR K, L, MLRA 149B)
Histosol (A1) Histic Epipedon (A2)			MLRA 149B)	Ouridoc	, (00) (LI	1 1 1 1,		Prairie Redox (A16) (LRR K, L, R)
			Thin Dark Surface	ce (S9) (LRR R, M	LRA 149		ucky Peat or Peat (S3) (LRR K, L, R)
Black Histic (A3) Hydrogen Sulfide (A4)			Loamy Mucky Mineral (F1) (LRR K, L)					urface (S7) (LRR K, L)
	fied Layers (A5)		Loamy Gleyed Matrix (F2)					ue Below Surface (S8) (LRR K, L)
	eted Below Dark Surfac	e (A11)	X Depleted Matrix (F3)					irk Surface (S9) (LRR K, L)
Thick Dark Surface (A11)			Redox Dark Surface (F6)					inganese Masses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1)			Depleted Dark S					nt Floodplain Soils (F19) (MLRA 149B)
Sandy Mucky Milleral (31) Sandy Gleyed Matrix (S4)			Redox Depressi					Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)				(. 0)				rent Material (TF2)
Stripped Matrix (S6)								nallow Dark Surface (TF12)
	Surface (S7) (LRR R, I	MLRA 14	9B)					Explain in Remarks)
	, , , ,		,					,
³ Indicators	s of hydrophytic vegeta	tion and	wetland hydrology mu	st be pre	esent, unle	ss distur	bed or problemation	C.
Restrictiv	e Layer (if observed)	•						
Type:								
Depth (i	inches):						Hydric Soil Pr	resent? Yes X No
Remarks:							•	

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/18/2012					
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: QW-1					
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:					
	Local relief (concave, convex, none): concave Slope (%): 0					
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:					
Soil Map Unit Name: Wayland silt loam	NWI classification: PEM					
Are climatic / hydrologic conditions on the site typical for this time of y						
Are Vegetation No , Soil No , or Hydrology No significan						
Are Vegetation No , Soil No , or Hydrology No naturally	· — —					
	g sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes X No					
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland Q					
Remarks: (Explain alternative procedures here or in a separate repo						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)Water-Stained	d Leaves (B9) Drainage Patterns (B10)					
X High Water Table (A2) Aquatic Fauna	Moss Trim Lines (B16)					
X Saturation (A3) Marl Deposits	s (B15) Dry-Season Water Table (C2)					
I — — — 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	fide Odor (C1) Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhiz	izospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)					
	Reduced Iron (C4) Stunted or Stressed Plants (D1)					
 -	eduction in Tilled Soils (C6) X Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Su						
Inundation Visible on Aerial Imagery (B7)Other (Explain						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present? Yes No X Depth (inche Water Table Present? Yes X No Depth (inche	es):					
Water Table Present? Yes X No Depth (inche	2S): 9					
Saturation Present? Yes X No Depth (inche	es): 6 Wetland Hydrology Present? Yes X No					
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	os previous inspections) if available:					
Bootise (total bala (ellealit gaage, memoring troit, actial prior	ss, provided indipositions, in divalidation					
Remarks:						

VEGETATION – Use scientific names of plants. Sampling Point: QW-1 Absolute Dominant Indicator Tree Stratum (Plot size: ____) % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____15) 110 OBL species x 1 = 110 0 1. FACW species x 2 = 2. FAC species 0 x 3 = **FACU** species 0 x 4 = 0 UPL species x 5 = Column Totals: 110 110 (A) (B) 6. Prevalence Index = B/A = 1.00 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) X Dominance Test is >50% Typha augustifolia Yes OBL X Prevalence Index is ≤3.01 Typha latifolia No OBL Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10 Lythrum salicaria No Problematic Hydrophytic Vegetation¹ (Explain) 4. 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 110 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: QW-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) Loc² % Type¹ Texture Remarks 10YR 4/1 98 5YR 3/4 5 С Μ Loamy/Clayey Prominent redox concentrations 0-16 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Niagara Falls International Airport City/County: Niagara Falls/ Niagara Sampling Date: 10/18/20								
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: RU-							
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:							
<u>-</u>	Local relief (concave, convex, none): Flat Slope (%): 0							
Subregion (LRR or MLRA): LRR L Lat: N/A	Long: N/A Datum: N/A							
, <u> </u>								
Soil Map Unit Name: Lakemont silty clay loam NWI classification: UPL								
Are climatic / hydrologic conditions on the site typical for this time of y								
Are Vegetation No , Soil No , or Hydrology No significan	· —							
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area							
Hydric Soil Present? Yes No X Westerd Hydrology Present?	within a Wetland? Yes No X							
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate repo	ort.)							
HYDROLOGY								
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required							
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)							
Surface Water (A1) Water-Stained	d Leaves (B9) Drainage Patterns (B10)							
High Water Table (A2) Aquatic Fauna	a (B13) Moss Trim Lines (B16)							
Saturation (A3) Marl Deposits	Dry-Season Water Table (C2)							
Water Marks (B1) Hydrogen Suli	lfide Odor (C1) Crayfish Burrows (C8)							
Sediment Deposits (B2) Oxidized Rhiz	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)							
Drift Deposits (B3) Presence of R	Reduced Iron (C4) Stunted or Stressed Plants (D1)							
Algal Mat or Crust (B4) Recent Iron R	Reduction in Tilled Soils (C6) Geomorphic Position (D2)							
Iron Deposits (B5) Thin Muck Su	urface (C7) Shallow Aquitard (D3)							
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks) Microtopographic Relief (D4)							
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)							
Field Observations:								
Surface Water Present? Yes No _X Depth (inche	es):							
Water Table Present? Yes No X Depth (inche	es):							
Saturation Present? Yes No X Depth (inche	es): Wetland Hydrology Present? Yes No X							
(includes capillary fringe)								
Describe Recorded Data (stream gauge, monitoring well, aerial photo	tos, previous inspections), if available:							
Remarks:								

VEGETATION – Use scientific names of plants. Sampling Point: RU-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 3 (B) 5. Percent of Dominant Species (A/B) 6. That Are OBL, FACW, or FAC: 0.0% Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____) OBL species x 1 = 0 1. FACW species x 2 = 2. FAC species 0 x 3 = **FACU** species 140 x 4 = 0 UPL species x 5 = Column Totals: 145 565 (A) (B) 6. Prevalence Index = B/A = 3.90 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: 5) Dominance Test is >50% Solidago canadensis 70 Yes **FACU** Prevalence Index is ≤3.01 2. Dipsacus fullonum 40 Yes **FACU** Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. Poa compressa 30 Yes **FACU** 5 OBL Problematic Hydrophytic Vegetation¹ (Explain) Lythrum salicaria No 2 No 5. Cornus racemosa FAC ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 147 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features (inches) Color (moist) % Color (moist) Loc² % Type¹ Texture Remarks ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Niagara Falls International Airport	City/County: Niagara Falls/ Niagara Sampling Date: 10/18/2012					
Applicant/Owner: Niagara Frontier Transportation Authority	State: NY Sampling Point: RW-1					
Investigator(s): T. Wirickx, V. Chase	Section, Township, Range:					
	Local relief (concave, convex, none): concave Slope (%): 0					
Subregion (LRR or MLRA): LRR L Lat:	Long: Datum:					
Soil Map Unit Name: Wayland silt loam	NWI classification: PEM					
· · · · · · · · · · · · · · · · · · ·						
Are climatic / hydrologic conditions on the site typical for this time of y						
Are Vegetation No, Soil No, or Hydrology No significan	 -					
Are Vegetation No , Soil No , or Hydrology No naturally	problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No					
Hydric Soil Present? Yes X No						
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland R					
Remarks: (Explain alternative procedures here or in a separate rep	ort.)					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Staine	d Leaves (B9) X Drainage Patterns (B10)					
High Water Table (A2) Aquatic Faun	na (B13) Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits	S (B15) Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Su	ulfide Odor (C1) Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhiz	zospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of F	Reduced Iron (C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron F	Reduction in Tilled Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Su	urface (C7) Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explai	n in Remarks) Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:	-					
Surface Water Present? Yes No X Depth (inch	es):					
Water Table Present? Yes No X Depth (inch	es):					
Saturation Present? Yes No X Depth (inches	es): Wetland Hydrology Present? Yes X No					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:					
	,					
Remarks:						

VEGETATION – Use scientific names of plants. Sampling Point: RW-1 Absolute Dominant Indicator <u>Tree Stratum</u> (Plot size: % Cover **Dominance Test worksheet:** Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) **Total Number of Dominant** Species Across All Strata: 2 (B) Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: _____15) OBL species x 1 = 20 x 2 = 1. FACW species 40 2. FAC species 10 x 3 = **FACU** species 40 x 4 = UPL species 0 x 5 = Column Totals: 100 260 (A) (B) 6. Prevalence Index = B/A = 2.60 **Hydrophytic Vegetation Indicators:** =Total Cover Rapid Test for Hydrophytic Vegetation Herb Stratum (Plot size: _____ 5 Dominance Test is >50% Dipsacus fullonum Yes **FACU** X Prevalence Index is ≤3.0¹ 2. Lythrum salicaria 30 Yes OBL Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Juncus effusus 10 No **FACW** 10 **FACW** Problematic Hydrophytic Vegetation¹ (Explain) Carex tribuloides No 4. 5 FAC 5. Symphyotrichum lateriflorum No ¹Indicators of hydric soil and wetland hydrology must 6. Cornus racemosa 5 No FAC be present, unless disturbed or problematic. 7. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. 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 100 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X _ No ____ =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: RW-1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features % Color (moist) % Color (moist) Loc² (inches) Type¹ Texture Remarks 0-6.5 7.5YR 3/2 90 7.5YR 4/6 10 С Μ Loamy/Clayey Prominent redox concentrations 6.5-16 5YR 4/1 75 7.5YR 5/8 25 С Μ Loamy/Clayey Prominent redox concentrations ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) X Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) X Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) X Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (TF2) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** No Remarks:

US Army Corps of Engineers

Appendix D

Wetland and Stream Photographs





Representative Photograph of Wetland A



Representative Photograph of Wetland B





Representative Photograph of Wetland C



Representative Photograph of Wetland D





Representative Photograph of Wetland E



Representative Photograph of Wetland F





Representative Photograph of Wetland G



Representative Photograph of Wetland H





Representative Photograph of Wetland I



Representative Photograph of Wetland J





Representative Photograph of Wetland K



Representative Photograph of Wetland L





Representative Photograph of Wetland M



Representative Photograph of Wetland N





Representative Photograph of Wetland O



Representative Photograph of Wetland P





Representative Photograph of Wetland Q



Representative Photograph of Wetland R





Representative Photograph of Stream 1, Northeast End of Airport



Representative Photograph of Stream 1, Southwest End of Airport





Representative Photograph of Stream 2



Representative Photograph of Stream 3





Representative Photograph of Stream 4



Representative Photograph of Stream 5