

**General Electric Company** 

## DATA SUMMARY REPORT FOR TRIBUTARY T11A REMOVAL ACTION UNDER PARAGRAPH 47.f

Dewey Loeffel Landfill Superfund Site Nassau, New York

May 2018

## **CONTENTS**

| 1 | Intro | oductior | n and               | Background   | 1  |
|---|-------|----------|---------------------|--|----|
|   | 1.1   | Tributa  | ary T1              | 1A   | 1  |
|   | 1.2   | North    | west D              | Drainage Ditch and Former Mead Road Pond Area                | 3  |
| 2 | Stre  | am Mo    | rpholo              | ogy and Bank Vegetation                                      | 5  |
|   | 2.1   | 2002 /   | Asses               | sment of Stream Morphology                                   | 5  |
|   | 2.2   | Summ     | nary of             | f 2017 Habitat Assessment Activities                         | 6  |
|   | 2.3   | Aquat    | ic and              | Riparian Habitat Assessment Results                          | 8  |
|   |       | 2.3.1    | Surv                | ey of Features Installed Following 2002/2003 Remedial Action | 8  |
|   |       | 2.3.2    | Docu                | umentation of Key Stream Characteristics                     | 10 |
|   |       | 2.3      | .2.1                | Local Hydrology  | 10 |
|   |       | 2.3      | .2.2                | Qualitative Notes and SVAP Scoring                           | 11 |
|   |       | 2.3      | .2.3                | Stream Cross Sections  | 12 |
|   |       | 2.3      | .2.4                | 2010 vs. 2017 Survey Comparison                              | 13 |
|   |       | 2.3.3    | Tree                | Community Assessment   | 13 |
|   |       | 2.3.4    | Vege                | etation Assessment   | 14 |
|   |       | 2.3.5    | Char                | acterization of Substrate                                    | 14 |
|   |       | 2.3      | .5.1                | Pebble Counts  | 15 |
|   |       | 2.3      | .5.2                | Geotechnical Grain Size Results                              | 15 |
|   |       | 2.3      | .5.3                | Large Woody Debris Assessment                                | 16 |
|   | 2.4   | Summ     | nary                |  | 16 |
| 3 | Sum   | nmary c  | of 201 <sup>°</sup> | 7 and 2018 Soil/Sediment Sampling Activities                 | 18 |
|   | 3.1   | Tributa  | ary T1              | 1A   | 19 |
|   | 3.2   | North    | west D              | Drainage Ditch and Former Mead Road Pond Area                | 21 |
| 4 | Sum   | nmary c  | of Soil             | /Sediment Sampling Activities SINC 2002/2003 Remedial Action | 23 |
|   | 4.1   | Tributa  | ary T1              | 1A   | 23 |
|   | 4.2   | North    | west D              | Drainage Ditch and Former Mead Road Pond Area                | 23 |
| 5 | Rep   | orting a | and So              | chedule  | 24 |
| 6 | Refe  | erences  | s                   |  |    |

#### DATA SUMMARY REPORT

## **TABLES**

- Table 1
   Tributary T11A Stream Enhancement Features' Condition and Current Function (in text)
- Table 2 SVAP Scores for Tributary T11A
- Table 3
   Stream Width and Habitat Type for Pebble Count Reach
- Table 4
   Percent Particle Size for Each Pebble Count Reach
- Table 5
   List of Samples Collected November 2017 Using Initial Sampling Method
- Table 6November 2017 and January and March 2018 Sediment and Soil Sampling Summary
- Table 7Data for 2017 and 2018 Samples
- Table 8
   Summary of Total PCB Data for 2017 and 2018 Sediment and Soil Samples

## **FIGURES**

| Figure 1A | Tributary T11A PCB Results (0- to 6-Inch Interval)  |
|-----------|---|
| Figure 1B | Tributary T11A PCB Results (6- to 12-Inch Interval)   |
| Figure 1C | Tributary T11A PCB Results (12- to 18-Inch Interval)  |
| Figure 1D | Tributary T11A PCB Results (18- to 24-Inch Interval)  |
| Figure 2A | Northwest Drainage Ditch and Former Mead Road Pond Area PCB Results (0- to 6-Inch Interval)       |
| Figure 2B | Northwest Drainage Ditch and Former Mead Road Pond Area PCB Results (6- to 12-Inch Interval)      |
| Figure 2C | Northwest Drainage Ditch and Former Mead Road Pond Area PCB Results (12- to 18-<br>Inch Interval) |
| Figure 2D | Northwest Drainage Ditch and Former Mead Road Pond Area PCB Results (18- to 20-<br>Inch Interval) |
| Figure 3  | Tributary T11A Habitat Assessment   |
| Figure 4  | Northwest Drainage Ditch and Former Mead Road Pond Area Habitat Assessment                        |
| Figure 5  | Count of Tree Species in Tributary T11A Investigation Area  |
| Figure 6  | Normalized Distribution of Tree Trunk DBH in Tributary T11A Investigation Area                    |
| Figure 7  | Normalized Distribution of Particle Sizes Per Habitat in Tributary T11A                           |
| Figure 8  | Particle Size Distribution in Tributary T11A  |
| Figure 9  | Frequency of LWD, Coarse Organics, and Fine Organics Observed in Tributary T11A                   |

## **APPENDICES**

- Appendix A Historical PCB Data for Tributary T11A and Northwest Drainage Ditch Area
- Appendix B Photographs of Habitat Assessment Activities
- Appendix C Tributary T11A Enhancement Structure Cross Sections
- Appendix D Wetland Determination and SVAP Data Forms
- Appendix E Stream Cross Sections
- Appendix F Tree Survey Results
- Appendix G Vegetative Assessment Species List

## **1 INTRODUCTION AND BACKGROUND**

This Data Summary Report summarizes data collected during the habitat assessment and additional sediment and soil sampling in Tributary T11A of the Valatie Kill and the upstream Former Mead Road Pond Area and Northwest Drainage Ditch, located in the Town of Nassau, Rensselaer County, New York. Sampling and analysis was performed in accordance with the Sampling and Analysis Plan submitted to the United States Environmental Protection Agency (EPA) on October 26, 2017 and approved by the EPA that same day (Arcadis of New York, Inc. [Arcadis] 2017). Both the Sampling and Analysis Plan and this Data Summary Report have been prepared under Paragraph 47.f of the Administrative Settlement Agreement and Order on Consent for a Removal Action (Comprehensive Environmental Response, Compensation, and Liability Act Index No. 02-2012-2005; Removal Order) pursuant to the Revised Proposal Under Paragraph 47.f submitted by General Electric Company (GE) and accepted by the EPA on September 7, 2017 (GE 2017). Solely on behalf of GE, Arcadis performed the sampling and analysis activities as outlined below.

The remainder of this section provides background information regarding the areas of interest, which are Tributary T11A, Northwest Drainage Ditch, and Former Mead Road Pond Area.

## 1.1 Tributary T11A

Tributary T11A is a small stream that flows northwesterly through a steep-sided, wooded ravine from the Former Mead Road Pond Area to the Valatie Kill (Figure 1). Tributary T11A is approximately 1,900 feet long and slopes at an approximate 7% grade. Tributary T11A often has low and, in the upper reach, intermittent flow rates, although the flow is highly variable based on precipitation and snowmelt events. The total watershed area for Tributary T11A is approximately 75 acres as measured at its confluence with the Valatie Kill.

Sediment/soil sampling events, which included total polychlorinated biphenyl Aroclors (PCBs) analysis, were performed in Tributary T11A in 1989 and again during the previous Remedial Investigation (RI) between 1993 and 1996 conducted under the direction of the New York State Department of Environmental Conservation (NYSDEC). Additionally, sediment/soil sampling was again conducted in 2002 during pre-design activities associated with the excavation of fine-grained sediment in Tributary T11A.

PCBs in sediment samples collected in Tributary T11A before the 2002/2003 remedial action ranged from non-detect (ND) to 230 parts per million (ppm; which is equivalent to milligrams per kilogram). Approximately 1,200 tons (760 cubic yards [cy]) of fine-grained sediment was removed from Tributary T11A in October 2002 through January 2003 to depths ranging from approximately 0.5 to 2.4 feet (approximately 1 foot on average). During the excavation activities, and as directed by the NYSDEC, GE collected four confirmation samples to confirm the limits of the excavations. PCBs in these samples ranged from ND to 5 ppm. Based on the PCB results, additional excavation was completed at three of the four sample locations. Another six confirmation samples were planned, but these samples could not be collected due to a lack of sediment (i.e., excavation into the native till) at the proposed sample locations.

In 2009, in response to fish and suspended sediment sample results, the NYSDEC collected four soil samples in Tributary T11A. PCBs were detected in each of the four soil samples at concentrations

#### DATA SUMMARY REPORT

ranging from 2.1 to 22 ppm, quantified as Aroclor 1260. At the NYSDEC's request, in 2009 the EPA collected six sediment samples from Tributary T11A.<sup>1</sup> PCBs in these samples ranged from 0.19 to 0.77 ppm, also quantified as Aroclor 1260.

Given the 2009 results, GE collected a total of 51 sediment samples and 115 soil samples from Tributary T11A in April and August 2010. The work was completed in accordance with the Supplemental Investigation of Tributary T11A Statement of Work (Arcadis 2010a), which was approved by the NYSDEC on February 10, 2010. Sediment PCBs from the 2010 investigation ranged from 0.30 to 23 ppm, while soil PCBs ranged from 0.05 to 407 ppm. Results of the April and August sampling events are summarized in letter reports submitted to the NYSDEC (Arcadis 2010b, 2010c).

As a follow-up to the 2010 sampling, GE submitted a Statement of Work for additional soil sampling to the NYSDEC in December 2010. The objective was to further assess the presence of PCBs in locations in and adjacent to Tributary T11A where PCBs at or greater than 50 ppm had been detected earlier in 2010. Following NYSDEC approval, GE collected 47 additional soil samples in June 2011, with PCB concentrations ranging from 0.12 to 1,340 ppm. The results are summarized in a letter report submitted to the NYSDEC (Arcadis 2011). Also, in August 2012, the results of hydraulic modeling of Tributary T11A were submitted to the NYSDEC to define the approximate extent of Tributary T11A during various rain storms, including 25-year, 24-hour and 50-year, 24-hour storm events (Arcadis 2012). Based on the observations made during the 2017 habitat assessment (discussed in Sections 2.2 and 2.3), the results of the 2012 hydraulic modeling of Tributary T11A are considered relevant, and no further updates are required at this time.

In March 2011 at the NYSDEC's request, the EPA listed Dewey Loeffel Landfill on the National Priorities List, otherwise known as Superfund. GE has entered into three agreements with the EPA: the Removal Order in 2012, the RI/Feasibility Study (FS) Order for landfill and groundwater in 2013, and the RI/FS Order for the drainageways also in 2013.

In January 2014, GE collected 91 soil and sediment samples in Tributary T11A in accordance with Paragraph 47.f of the Removal Order. These samples were collected from Sample Site F, areas outside the extent of stream (OES) based on the 25-year, 24-hour rainfall event, and areas inside extent of stream (IES) based on a 25-year, 24-hour rainfall event. For the 18 Sample Site F soil samples, PCBs ranged from ND to 274 ppm. For the 60 OES soil samples, PCBs ranged from ND to 107 ppm. Finally, for the 13 soil or sediment samples collected from IES, PCBs ranged from 0.25 to 264 ppm.

In summary, for the 58 sediment samples and 256 soil samples collected between 2009 and 2014 (i.e., after the 2002/2003 remediation), sediment PCBs ranged from 0.19 to 23 ppm (average [i.e., arithmetic mean] of 4.7 ppm; median of 3.2 ppm) and soil PCBs ranged from ND to 1,340 ppm (average of 29 ppm; median of 2.3 ppm).<sup>2</sup> The samples with the highest detected PCBs (i.e., those samples with PCBs greater than 50 ppm) were from the top 6-inch and 6- to 12-inch intervals. No locations deeper than 12 inches

<sup>&</sup>lt;sup>1</sup> A seventh sample, DDL-SED47A, was also collected, with a PCB concentration of 1.0 ppm. However, this sample could not be located in the field based on the survey coordinates provided by the EPA; therefore, it is not included in summary tables/figures and the discussion related to historical sampling for Tributary T11A.

<sup>&</sup>lt;sup>2</sup> For development of statistics presented in this report, blind duplicate samples were not counted individually in the quantity of samples, and duplicate results were averaged with the parent sample. Additionally, half the reporting limit was used for ND data when developing summary statistics.

had PCBs greater than 5 ppm. Appendix A, Tables A-1 and A-2 provide the historical soil and sediment PCBs for Tributary T11A, and results are illustrated by sample depth interval on Figures 1A through 1D.

## **1.2** Northwest Drainage Ditch and Former Mead Road Pond Area

The Former Mead Road Pond Area is located to the northwest and west of Dewey Loeffel Landfill (Figure 2). Most of the surface water runoff from the landfill flows under Mead Road through two 30-inch-diameter culvert pipes into the Northwest Drainage Ditch, which travels in a westerly direction approximately 400 feet before passing the Low-Lying Area, a small 1-acre wet area just northeast of the Former Mead Road Pond Area. The drainage channel extends another 400 feet (through the inlet to the Former Mead Road Pond Area, the Former Mead Road Pond Area, and the outlet from the Former Mead Road Pond Area) before entering Tributary T11A. Based on qualitative historical visual observations, the drainage channel through the Former Mead Road Pond Area has low and intermittent flow rates, although flow is highly variable based on precipitation and snowmelt events. The watershed area is approximately 25 acres, as measured at the end of the outlet from the Former Mead Road Pond (inlet to Tributary T11A).

Sediment/soil sampling was performed in the Former Mead Road Pond Area between 1988 and 1991, and again during the previous RI between 1992 and 1996. In 2000, several sampling events were also performed during pre-design activities associated with the Former Mead Road Pond Interim Remedial Measures (IRM).

Prior to the performance of the 2001 IRM in the Former Mead Road Pond Area, PCBs in sediment and soil samples in the Northwest Drainage Ditch, Low-Lying Area, Former Mead Road Pond Area spoil banks, and outlet from the Former Mead Road Pond Area (all of which had a higher concentration of PCBs than the pond itself) were up to 470 ppm, 18 ppm, 410 ppm, and 180 ppm, respectively. During the IRM, the NYSDEC and/or GE collected a total of 24 confirmation samples to guide additional excavations in select areas and to confirm the actual limits of excavation. The IRM included the removal of approximately 9,600 tons (6,400 cy) of PCB-impacted sediment and soil. For the Northwest Drainage Ditch and Low-Lying Area, excavation depths ranged from 1 foot to 2 feet, while the Former Mead Road Pond Area excavation ranged from 1 foot to 7 feet.

In 2009, at the NYSDEC's request, the EPA collected four sediment/soil samples from the drainage channel in the Former Mead Road Pond Area. PCBs were ND in two samples, 0.17 ppm in one sample, and an estimated concentration of 3.5 ppm in one sample (collected from the inlet to the Former Mead Road Pond). These results were all well below pre-IRM levels. All detected PCBs were quantified as Aroclor 1260.

As part of the December 2010 Statement of Work for additional sampling, which was approved by the NYSDEC in June 2011, GE collected 16 sediment samples from the drainage channel in the Former Mead Road Pond Area to further assess the potential for transport of PCBs into Tributary T11A. PCBs in those sediment samples ranged from ND to 12.8 ppm. These results are summarized in a letter report submitted to the NYSDEC (Arcadis 2011). The average and median for these samples were 1.8 ppm and 0.57 ppm, respectively. Detected PCBs were all quantified as including Aroclor 1260. Additionally, five sediment samples contained PCBs that were quantified as including Aroclor 1248.

On December 18, 2013, GE collected 41 additional sediment/soil samples in the Former Mead Road Pond Area in accordance with Paragraph 47.f of the Removal Order. PCBs ranged from ND to 18.1 ppm. The average and median for these samples were 1.7 ppm and 0.35 ppm, respectively.

#### DATA SUMMARY REPORT

For the 61 samples collected between 2009 and 2013, PCBs ranged from ND to 18.1 ppm, with an average of 1.7 ppm and a median of 0.40 ppm. Appendix A, Tables A-3 and A-4 provide the historical soil and sediment PCBs for the Northwest Drainage Ditch and Former Mead Road Pond Area (including the Low-Lying Area), and Figures 2A through 2D illustrate the results, by sample depth interval.

## **2 STREAM MORPHOLOGY AND BANK VEGETATION**

This section describes the historical wetland assessment and stream restoration design activities that have been performed for Tributary T11A and summarizes the results of the additional habitat assessment work completed in 2017.

## 2.1 2002 Assessment of Stream Morphology

In 2002, GE submitted to the NYSDEC the Tributary T11A Remedial Action Work Plan for the Loeffel Site Environs (Work Plan; Blasland, Bouck & Lee, Inc. 2002). The Work Plan presents a wetland assessment and stream restoration design to be installed after completion of the 2002/2003 Tributary T11A removal activities, the details of which were presented in Attachment G of the Work Plan (*Tributary T11A Stream Restoration/Enhancement Plan* [SR/EP]). A copy of Attachment G of the Work Plan is provided as Appendix B to the Sampling and Analysis Plan.

Based on the Rosgen stream classification, Tributary T11A is located within a channel colluvial valley (Type II valley formation) and is a B3 stream, which is characterized by moderate entrenchment, channel gradients of 2 to 4%, and sinuosity (stream length/straight-line distance) greater than 1.2; with some A3 attributes, which include higher entrenchment and channel incision, channel gradients of 4 to 10%, with lower sinuosity of less than 1.2, and primarily step-pool and cascading channel with natural debris dams. The bed morphology is classified as a step-pool system, meaning Tributary T11A is characterized by large cobble and boulders organized into discrete, channel-spanning accumulations that form a series of steps separating pools containing finer materials. Large woody debris (LWD) is also an important influence on the channel morphology in Tributary T11A.

The step-pool morphology is associated with steep gradient, coarse bed material with a large particle size relative to channel depth, and a small width-to-depth ratio. The Tributary T11A channel is dominated by cobble material with occasional boulders. Lesser amounts of gravels and sands are stored in irregular-spaced pools. Tributary T11A also has a limited floodplain due to its location in a steep ravine. Other observations made in 2002 include:

- Riparian Vegetation deciduous overstory moderate to heavy
- Flow Regime perennial with seasonal domination by both snowmelt and storm flow
- Debris extensive to dominating, with occasional damming of active channel and one area of apparent avulsion caused by LWD
- Stream Size bankfull 5 to 15 feet wide
- Order first order stream
- Stream Bank Erosion Potential low to moderate
- Channel Stability rating stability fair for B3 stream
- Depositional Patterns not applicable with dispositional features from flow effect of constrictions
- Meander Patterns not applicable and not readily observed with channel dominated by large clasts and LWD
- Aggradation/Degradation Trends stable bed with some gravels and fines in pools
- Altered Channel Features no significant altered channel features, with some excess LWD from recent natural activity.

Based on the characterization of existing conditions in 2002, channel restoration and enhancement features were selected to maintain, replace, or enhance the morphologically and ecologically significant in-stream structures that were disturbed by remedial activities in the stream. In general, LWD were preferred over boulders for installed in-stream enhancement structures during restoration. The specific structures installed as part of 2002/2003 restoration activities are illustrated on Figure 3.

## 2.2 Summary of 2017 Habitat Assessment Activities

The Sampling and Analysis Plan specified field surveys to build upon historical restoration-related information presented in the 2002 SR/EP and evaluate current conditions to support future removal action design and restoration to be performed under Paragraph 47.f. The field surveys and assessment objectives performed in 2017 included three main elements:

- <u>Enhancement Structures</u>: Assess enhancement structures installed following the 2002/2003 remedial action, and evaluate condition, functionality, and potential use and/or design modifications to improve habitat for aquatic life and physical functioning for stream stability and obtaining dynamic equilibrium (i.e., balance of erosion and depositional processes that occur as the natural stream channel evolves).
- Key Stream Characteristics and Characterization of Substrate: Assess stream condition using the United States Department of Agriculture's (USDA's) Stream Visual Assessment Protocol (SVAP) to evaluate existing stream health and function in support of aquatic life use. Collect semi-quantitative and qualitative notes on key elements and function to support restoration design. Additionally, assess stream morphology using updated cross section, habitat-specific pebble count data, and streambed grain size evaluation to update existing geomorphic and hydraulic modeling information to support restoration design.
- <u>Riparian Habitat Assessment (Tree and Vegetation)</u>: Assess riparian habitat (including trees, shrubs, herbaceous communities, wetlands) to inventory existing tree species, characterize dominant vegetative species, and delineate wetlands and floodplain habitats that may be disturbed during future removal activities. The inventory of 2017 conditions will be used to help design future habitat restoration activities within the riparian zone.

The 2017 aquatic and riparian habitat assessment was performed in general accordance with the scope proposed in the Sampling and Analysis Plan; however, some minor variations were incorporated based on field observations and collaborative conversations with the NYSDEC and EPA throughout the investigation process. These variations are described below:

The initial aquatic field survey approach included the use of three aquatic reaches to characterize stream health and function with SVAP methods and to evaluate existing substrates through reachwide pebble counts. However, during the October 30, 2017 site walk with representatives from GE, the NYSDEC, and Louis-Berger (on behalf of EPA), observations were made of potentially larger inchannel substrates and habitat conditions in the lower portion of Tributary T11A. Based on those observations, a separate aquatic reach was added. Similarly, in a follow-up e-mail from the NYSDEC dated October 31, 2017, one additional aquatic reach was requested in the upper portion of Tributary T11A. This additional area is a transitional area between the Former Mead Road Pond Area restoration and the beginning of Tributary T11A. As such, in total, five aquatic reaches in Tributary

T11A were evaluated in 2017 using SVAP methods, and substrates in the five reaches were characterized with reach-wide pebble counts. These five reaches were established from downstream to upstream and are illustrated on Figures 3 and 4. Note, the reaches were established specifically for use in performing pebble counts and SVAP characterization; the habitat assessment and wetland determinations / delineations were completed for the entire length of the Former Mead Road Pond Area, Northwest Drainage Ditch, and Tributary T11A system.

- During the October 2017 site walk, eight cross sections in Tributary T11A were established to perform a detailed survey. In a follow up e-mail from the NYSDEC, one additional cross section was requested for the upper portion of Tributary T11A, within the same transitional area described above. As such, in total, nine cross sections were evaluated in 2017. These cross sections are shown on Figures 3 and 4.
- The Sampling and Analysis Plan originally specified the sampling of terrestrial hydrological conditions via completion of the United States Army Corps of Engineers (USACE) Northcentral and Northeast Wetland Determination Data Form Hydrology Section (USACE 2011) at a minimum of five locations along Tributary T11A and one location along the Northwest Drainage Ditch. During the October 2017 site walk, it was observed that there was little data to be acquired from the hydrology of upland areas surrounding the stream channel. Therefore, hydrological characteristics were only collected in areas meeting the characteristics of wetlands, which included two locations in Tributary T11A and five locations along the Former Mead Road Pond Area and Northwest Drainage Ditch.

Additionally, based on conversations with EPA in spring 2018, additional site work was performed in April 2018 to further clarify the wetland determinations and delineations and develop additional documentation to support those determinations/delineations. Final delineation of the wetlands was performed using methods of the USACE 1987 Wetland Delineation Manual (USACE 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0 (USACE 2011). In April 2018 two USACE Northcentral and Northeast Wetland Determination Data Forms (USACE 2011) were completed for every wetland area (i.e., one for the wetland and one for the adjacent upland). Wetland boundary coordinates and elevation were recorded with a Trimble Unit of sub-meter accuracy; where appropriate and necessary datums recorded on the field forms (Appendix D1) were converted to the site coordinate system of North American Vertical Datum of 1988. Additional details regarding the final wetland delineation/determination are included in Section 2.3.2.1. Wetland area polygons are shown on Figures 3 and 4.

Characterization of the vegetative community was originally planned to be taken at a minimum of five locations along Tributary T11A and one location along the Northwest Drainage Ditch via completion of the USACE Wetland Determination Data Form Vegetation Section. Instead, these data were collected where significant changes in the vegetation community occurred and in areas of spatial or ecological importance. After the site walk in October 2017, additional data collection points were planned, and the vegetative community was characterized at a total of 10 locations along Tributary T11A and five locations along the Former Mead Road Pond Area and Northwest Drainage Ditch. The locations of the vegetation plots (Veg Plots) are shown on Figures 3 and 4.

## 2.3 Aquatic and Riparian Habitat Assessment Results

An evaluation of aquatic and riparian habitat in Tributary T11A and the Northwest Drainage Ditch was performed in late October and early November 2017. As mentioned above, five representative aquatic reaches were established in Tributary T11A from downstream to upstream (i.e., identified as Reaches 1 to 5), as illustrated on Figures 3 and 4. The following section summarizes the results from the aquatic and riparian habitat assessment surveys.

#### 2.3.1 Survey of Features Installed Following 2002/2003 Remedial Action

Stream enhancement features were designed as part of the 2002/2003 remedial action to stabilize stream grade, maintain channel geomorphology during storm events, and provide increased ecological function to support aquatic life. Nine enhancement features were incorporated into the 2002 restoration design, and included rock bendway weirs, log/rock check dams, rock vortex weirs, step-pool complexes, and riffle complexes.

The functionality of each enhancement feature was qualitatively assessed to evaluate the impact the structure has had in the stream process upstream and downstream of the respective structure. Each feature was surveyed for elevation at the beginning, middle (if applicable), and end of each structure. The location of the features is shown on Figure 3, and photographs of the enhancement features are provided in Appendix B1. Surveyed data for the enhancement features in the form of cross sections and longitudinal profiles are provided in Appendix C. Table 1 (below) details the current condition and function of the man-made enhancement structures within Tributary T11A.

| Feature | Туре        | Condition | Current<br>Function | Notes   |
|---------|-------------|-----------|---------------------|---|
| ES-1    | Rock        | Partially | Low-                | Two of the three weirs are partially intact. Downstream   |
|         | Bendway     | Intact    | Moderate            | weir is blown out. Bed has naturally braided with larger  |
|         | Weir        |           |                     | materials. Redesign would require more frequent weirs or deflector structures (e.g., root wads, rock piles) to move |
|         |             |           |                     | flow off bank.  |
| ES-2    | Rock Vortex | Mostly    | Moderate-           | Channel flow centered. Minimal disruption to  |
|         | Weir        | Intact    | High                | downstream/upstream banks. Redesign to higher   |
|         |             |           |                     | potential storm event/bankfull elevation.   |
| ES-3    | Rock Check  | Intact    | Moderate-           | Some downstream erosion on left bank. Needs a   |
|         | Dam         |           | High                | transition area and toe protection to redirect flows towards  |
|         |             |           |                     | that way in confined area.  |
| ES-4    | Log Check   | Intact    | Low-                | Flow undermined above structure. Nine-inch drop to pool   |
|         | Dam         |           | Moderate            | elevation, possible fish barrier. Some upstream erosion on  |
|         |             |           |                     | right bank. Redesign would require consideration for fish   |
|         |             |           |                     | passage.  |
| ES-5    | Step-Pool   | Mostly    | Moderate-           | Most steps intact (4 of 5 in good condition), small pools   |
|         | Complex     | Intact    | High                | evident, grade stable.  |

Table 1. Tributary T11A Stream Enhancement Features' Condition and Current Function

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| Feature | Туре              | Condition           | Current<br>Function | Notes   |
|---------|-------------------|---------------------|---------------------|---|
| ES-6    | Rock Check<br>Dam | Partially<br>intact | Low                 | Most stones are displaced, only bankfull footings remain.<br>Flow is not moving through structure as designed. Some<br>downstream bank erosion evidence from structures<br>collapse. Redesign may require larger footer stones to<br>anchor structure within the channel. |
| ES-7    | Log Check<br>Dam  | Intact              | Low                 | Seven-inch gap from weir notch to pool elevation.<br>Potential fish barrier at base flow. Redesign would require<br>consideration for fish passage.   |
| ES-8    | Rock Check<br>Dam | Mostly<br>Intact    | Moderate            | Large boulders have shifted from bankfull and center<br>channel. Flow is still moving roughly through center of<br>structure. Upstream right bank disturbance with increased<br>erosion. Remove structure or place transitional bendway<br>weirs on upstream bend.        |
| ES-9    | Riffle<br>Complex | Partially<br>Intact | Low-<br>Moderate    | Upstream natural log weir has disrupted riffle in upper<br>portion. Created deposition and scour pool and shifted<br>flow and grade. Only one third of complex remains stable.  |

Based on the 2017 conditional and functional assessment of the enhancement features, the following general conclusions can be drawn to support the forthcoming restoration design:

- Log check dams are currently acting as potential fish barriers and preventing migration. Elevation
  differences between the log height for stream flow and the stream bed surfaces below the structures
  were approximately 9 to 11 inches. This elevation is approximately twice as high as the 2002/2003
  as-built specifications of 4 inches between log height and stream bed elevation. Their use within the
  future restoration, if any, requires consideration of structural design modifications to maintain fish
  movement and pool development.
- The placement of rock vortex weirs is important for the long-term stability and function of Tributary T11A. The original design objective of the rock vortex weir was to converge flow into the center of the channel and develop a scour pool below the structure. These design objectives have been fairly met from the past restoration. Additional consideration to structure design at bankfull or higher conditions for stability should be evaluated for future implementation within Tributary T11A. Use of rock vortex weirs in the current restoration design may be enhanced to allow additional fish passage at base-flow or low-flow conditions, and increased bank and bank toe protection during high-flow events through different design configurations (e.g., J-Hook vane). Potential usage and placement in Tributary T11A will be based on areas that may require grade control, are transitional areas with slope changes, require bank stability, or are within an outer meander of the stream.
- Observations of bank erosion and channel down-cutting identifies the need for transition bank protection and modifications on design of enhancement structures to meet functionality for grade control and energy dissipation.

The results of the assessment will be used to help design the forthcoming restoration.

#### 2.3.2 Documentation of Key Stream Characteristics

Assessment of key stream characteristics is used to describe existing conditions and support the physical and functional objectives of the restoration design. This includes the local hydrology to identify the interaction of the floodplain with the stream channel, presence of wetland habitats, existing in-stream substrates and habitat features, and general hydraulics and geomorphology conditions. As noted above, the Hydrology Section of the USACE Wetland Determination Data Form was completed only in areas meeting the characteristics of wetlands, notably two locations in Tributary T11A and three locations along the Northwest Drainage Ditch. In addition, five aquatic reaches in Tributary T11A were evaluated using SVAP methods. A total of nine cross sections were also evaluated.

#### 2.3.2.1 Local Hydrology

The Hydrology Section of the USACE Wetland Determination Data Form was taken in eight locations (two in 2017 [C and E] and six in 2018) along Tributary T11A where wetlands were identified in the corridor.<sup>3</sup> Data were collected in thirteen locations (five in 2017 and eight in 2018) along the Former Mead Road Pond Area and Northwest Drainage Ditch. Additionally, the stream wetted width in this area was obtained. Wetland Determination Data Forms are included in Appendix D1.

The final April 2018 delineation/determination survey was completed outside of the growing season, and therefore vegetation cover data is limited. Existing data from the vegetation survey completed in October 2017 was used in instances where Veg Plots were located within the wetland or adjacent upland (i.e. for April 2018 A-Up, the information on the October 2017 form for Veg Plot C was used, April 2018 B-Wet used the information on the October 2017 form for Veg Plot E, April 2018 C-Wet used the information on the October 2017 form for Veg Plot E, April 2018 C-Wet used the information on the October 2017 form for Veg Plot D). In the remaining data points, plants within the sampling plots were identified in their dormant state and listed with their wetland indicator status. The number of wetland plants, as defined by their USACE Regional Wetland Indicator status versus the number of upland plants was used to determine if the area met qualifications for hydrophytic vegetation (USACE 1987, 2011). Specifically, the status defined in the USACE Regional Wetland Indicator includes the following designations, which are indicated on the forms included in Appendix D1 (USACE 1987):

- Facultative Wetland plants [FACW] grow in wetlands at least 66.7% of the time;
- Obligate Wetland plants [OBL] grow in a wetland greater than 99% of the time;
- Facultative Upland plants [FACU] grow in wetlands less than 33.3% of the time; and
- Upland plants [UPL] grow in wetlands less than 1% of the time.

Where appropriate, the soils were determined using the Munsell Soil Color Book and Field Indicators of Hydric Soils for the Northcentral and Northeast Region in the USACE Regional Supplement Manual (USACE 2011). As noted on the Wetland Determination Data Forms, shovel refusal prevented soils from being surveyed down to the established 18-inch depth in several locations (i.e. A-Wet at 13 inches, B-Wet

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<sup>&</sup>lt;sup>3</sup> The vegetation section of the USACE Wetland Determination Data Form was completed for an additional eight areas along the Tributary T11A corridor, as discussed in Section 2.3.4.

at 6 inches, C-Wet at 8 inches, H1-Up at 6 inches, and H2-Wet at 12 inches). These instances are noted on Page 3 of the respective Wetland Determination Data Forms.

The total wetland area observed in Tributary T11A is approximately 1,300 square feet (0.031 acre), and includes the following three areas, upstream to downstream:

- Wetland B approximately 0.012 acres
- Wetland J approximately 0.014 acres
- Wetland A approximately 0.0048 acres

For the Former Mead Road Pond Area and Northwest Drainage Ditch, the total wetland area observed extended beyond our investigation area; however, an area of approximately 5,300 square feet (0.123 acre) is expected to be within the footprint of the removal action for the Northwest Drainage Ditch area to be developed in the forthcoming Removal Action Design Report. Photographs of the wetlands and adjacent uplands (with soil samples) are provided in Appendix B2.

General wetland hydrology characteristics included high water table, saturation, standing water, waterstained leaves, drainage patterns, and shallow-buttressed tree trunks. Overall, the locations along Tributary T11A and the banks of the Former Mead Road Pond Area and Northwest Drainage Ditch met the hydrological characteristics of wetlands that are fed by overland runoff and groundwater seepage to the stream basin. Saturation to the surface was observed in every location sampled. The water table depth for locations surveyed along the stream bank ranged from 14 inches below ground surface to standing water of 1 inch. The wetted width of the stream ranged from 24 to 66 inches in the Former Mead Road Pond Area and Northwest Drainage Ditch.

#### 2.3.2.2 Qualitative Notes and SVAP Scoring

Qualitative notes of the stream conditions were acquired using SVAP assessment methodology (USDA 2009). Information obtained from these notes included conditions on substrate, significant bends in the stream corridor, drift deposits, channel substrate sizes, signs of erosion, width of the stream, bank slope, presence of sand bars/gravel bars, potential entrenchment, dominant substrate, LWD affecting stream flow, and man-made structures affecting stream flow. A separate page of notes was completed for each of the five SVAP reaches. As shown on Figure 3, the reaches were established from downstream to upstream (i.e., Reach 1 is the farthest downstream and Reach 5 is the farthest upstream).

During the qualitative SVAP assessment, a significant amount of bank erosion was observed. Generally, along stream bends, stretches approximately 5 to 20 feet long had vertically shorn banks that were often undercut by the stream by several inches. Locations and sizes of coarse woody debris were anecdotally noted along the corridor. Generally, these were fallen or downed logs along the banks of the stream. Sizes of these logs ranged from 3 to 18 inches in diameter and were generally between 5 to 15 feet long. Bank erosion was significantly less in areas where woody debris had accumulated. In some instances, the downed debris led to accumulation of sediment and smaller debris within the channel. At times, fallen logs within the stream channel created natural step-pool complexes. Photos and descriptions of stream conditions are in Appendix B3.

Conditions along Tributary T11A were quantified using the SVAP procedure of scoring, which quantifies the physical, chemical, and biological conditions of a stream, and indicates the overall function and

#### DATA SUMMARY REPORT

ecological health of the waterbody. The SVAP assessment provides a preliminary assessment of stream condition, which can be used to compare to applicable regional reference stream conditions to further quantify the overall function and ecological health. The SVAP assessment conducted for Tributary T11A was completed within base-flow conditions, as specified by the protocol, SVAP categories that represent the physical conditions of the stream include Channel Condition, Hydrologic Alteration, Bank Condition, Pools, Barriers to Movement, and Riffle Embeddedness. These conditions provide insight on the structure of the stream corridor and its susceptibility to impairment from erosion, bank undercutting, and destabilization. SVAP categories that represent chemical conditions, such as Water Appearance, Nutrient Enrichment, and Manure or Human Waste, are important for understanding issues related to water clarity and plant or algae growth. Biological conditions considered by the SVAP assessment include Riparian Area Quality and Quantity, Canopy Cover, Fish Habitat Complexity, and Aquatic Invertebrate Habitat and Community categories. These conditions detail the overall ecological health of the stream and its ability to support the aquatic and surrounding terrestrial community. Given the physical nature of Tributary T11A, as a first-order stream, the existing benthic community may score slightly lower based on intermittent stream conditions and natural processes that reduce species richness and lower community indices (NYSDEC 2014); therefore, this scoring element is considered optional (USDA 2009). There is necessary overlap between these categories of stream condition, and it is expected that their state will be intertwined. The 15 categories of the tributary conditions were assessed in each of the five reaches and given scores between 1 (severely degraded) and 10 (excellent). The scores assigned to each stream condition category in all five reaches are presented in Table 2 and the completed SVAP Forms are included in Appendix D2.

Generally, overall function and ecological health conditions along Tributary T11A were observed to improve moving downstream to the confluence with the Valatie Kill. Little to no algae or signs of accelerated eutrophication were observed along the tributary, resulting in excellent ratings in the categories of Manure or Human Waste and Nutrient Enrichment, and a good rating in the category of Water Appearance. Other categories that on average achieved a good rating include Hydrologic Alteration, Bank Condition, Riparian Area Quality and Quantity, and Canopy Cover.

The lowest average score was observed in the category of Barriers to Movement. Both man-made enhancement features and fallen woody debris were observed to act as potential barriers in the stream channel that could prevent fish movement in moderate to low-flow conditions. The Aquatic Invertebrate Habitat and Community and Fish Habitat Complexity were also scored to be in relatively poor and fair conditions, indicating that establishment of proper conditions for lower trophic level organisms and habitat will need to be included in future restoration plans. Finally, the quality of Pools and Riffle Embeddedness were also scored relatively low, with an average fair rating. It is likely that improving these physical features of the stream could improve the quality of habitat for invertebrates, fish, or other aquatic organisms.

Overall, the surrounding vegetative community of the stream is in good condition, but the forthcoming Removal Action Design Report will likely consider restoration methods to improve the physically impaired portions of the stream and suitability of habitat for fish and lower trophic organisms.

#### 2.3.2.3 Stream Cross Sections

Nine stream cross sections were measured in Tributary T11A in areas that were determined to be of spatial or ecological importance or representative of conditions along the entire length. Measurement at

these cross sections included identification of the bankfull height of the stream, the relative (to bankfull) stream depth at locations along the transect of the stream, and the normal floodprone width (twice the distance between lowest point and bankfull height). Bankfull widths ranged from 8.9 to 31.7 feet, with an average of 14.7 feet. Bankfull depths ranged from 0.80 to 2.0 feet, with an average of 1.4 feet. The nine stream cross-section diagrams are in Appendix E1, and the location of each section in Tributary T11A is illustrated on Figure 3. Cross-sectional data were also collected from several of the enhancement features established in 2002/2003, including elevations of substrate within the remaining structures, as detailed in Appendix C.

## 2.3.2.4 2010 vs. 2017 Survey Comparison

A detailed survey of Tributary T11A and the Northwest Drainage Ditch and Former Mead Road Pond Area was completed in 2010 and was previously provided to the NYSDEC and EPA. In addition, at the request of the NYSDEC and EPA during discussions regarding the Sampling and Analysis Plan, to supplement the survey data collected in 2010, GE collected additional survey information at the same nine stream cross sections in Tributary T11A, as summarized above in Section 2.3.2.3.

As illustrated in Appendix E2, the survey information collected in 2017 at discrete points in Tributary T11A aligned well with the smoothed contours created with the 2010 survey data points. In one instance, the 2017 survey indicated a gravel bar had formed in the cross section (Cross Section 1A); this gravel bar was noted during the habitat assessment and relative information regarding such additional features will be considered, as appropriate, during the design process.

## 2.3.3 Tree Community Assessment

Tree surveys were performed on October 16 to 18, 2017 within areas that may be impacted by future removal activities within the riparian zone of Tributary T11A to document current conditions and aid in the restoration design. The preliminary boundary for future disturbance of Tributary T11A (i.e., the 50-year, 24-hour storm events [Arcadis 2012]) plus an approximately 10-foot wide buffer on either bank (depending on topography) was used to determine the extent of trees to be surveyed. For the purposes of the tree community assessment, Tributary T11A was divided into approximate 400-foot sections, resulting in five sections of the stream measured from upstream (0 feet) to downstream (2,000 feet), as illustrated on Figure 3.

Within this boundary, trees greater than 3-inch Diameter at Breast Height (DBH) and alive at the time of the assessment were located, identified by species, measured, and catalogued. Trees with multiple trunks that split from the base were measured and counted separately. Trees and individual trunks greater than 18-inch DBH were located by a surveyor on November 9 and 10, 2017 and included on Figure 3. For the tagged/labeled trees between 3- and 18-inch DBH, the general location of the trees was noted based on the riverbank (right or left, looking in the direction of flow) and section of the stream in which they are located (i.e., "left riverbank Section 1"). In addition, within each of these groupings the total number of each tree size was noted.

A total of 493 individual trees greater than 3-inch DBH were located during the assessment, including 540 separate trunks. Appendix F provides a table summarizing the individual trees by species and DBH. A total of 208 trees were located on the right bank (looking downstream), and 285 trees were located on the left bank. Figure 5 presents the total number of each individual tree species trunk greater than 3-inch

DBH in the Tributary T11A investigation area. The most common tree species in the investigation area is hemlock (*Tsuga canadensis*), followed by black birch (*Betula lenta*), and yellow birch (*Betula allegheniensis*). The average DBH of trees in the investigation area is 8.7 inches and the median DBH is 7.0 inches. Figure 6 presents a normal distribution of tree trunk's DBH in the Tributary T11A investigation area.

A total of 39 trees/individual trunks were identified to have a DBH greater than or equal to 18 inches. The species with the highest frequency of these larger-diameter trees were hemlock and sugar maple (*Acer saccharum*), with total counts of 11 and 10, respectively, within the investigation area. The average DBH of these 39 larger-diameter trees/individual trunks is 22.5 inches and the median DBH is 21.6 inches.

The data acquired from the tree community assessment will facilitate development of a forthcoming Removal Action Design Report. Information on tree species, densities, and the locations of larger (greater than 18-inch DBH) trunks will be evaluated and included in the design, and the information will be considered to ensure minimal disturbance to the tree community and re-establishment of the vegetation community.

#### 2.3.4 Vegetation Assessment

A vegetation assessment was performed within representative areas of the riparian zone of Tributary T11A and the Northwest Drainage Ditch to document current species and community structure. The vegetative communities along Tributary T11A and the Northwest Drainage Ditch were characterized in areas of spatial or ecological importance, or in instances where there was a notable change in the species or cover composition. The Vegetation Section of the USACE Wetland Determination Data Forms was completed in 10 locations along Tributary T11A and five locations along the Northwest Drainage Ditch (Figures 3 and 4). In these locations, a representative plot for four separate vegetative strata (Trees, Shrubs/Sapling, Herbaceous, and Vines) was sampled and the areal percent cover of each species was recorded. Appendix G lists every species identified in the vegetation survey of Tributary T11A and the Northwest Drainage Ditch. The full list of individual species of vegetation cover can be found in the Wetland Determination Data Forms in Appendix D1.

The herbaceous vegetative community outside of the immediate stream corridor is dominated by New York fern (*Thelypteris noveboracensis*), northern lady fern (*Athyrium filix-femina*), and Christmas fern (*Polystichum acrostichoides*). Wetland herbaceous vegetation was dominated by plantain sedge (*Carex plantaginea*), fowl bluegrass (*Poa palustris*), giant goldenrod (*Solidago gigantean*), scouring rush (*Equisetum hyemale*), and field horsetail (*Equisetum arvense*). *Phragmites* was observed to be colonizing a wetland area in the Northwest Drainage Ditch. Photos of the vegetative community along Tributary T11A and the Northwest Drainage Ditch are in Appendix B4.

The species observed in 2017 to be present in Tributary T11A and the Northwest Drainage Ditch will be considered during development of the forthcoming Removal Action Design Report.

## 2.3.5 Characterization of Substrate

To better understand surface substrate size and dominant particles, pebble counts were performed in Tributary T11A. In addition, geotechnical grain size samples were collected within a representative Pool, Riffle/Plain Bed, and Step channel habitat within the length of Tributary T11A to evaluate the subsurface

bed substrates. Finally, to identify existing physical and ecological conditions, LWD in Tributary T11A was identified and characterized.

#### 2.3.5.1 Pebble Counts

Pebble counts were performed in the same five reaches in Tributary T11A used for the SVAP evaluation (Figures 3 and 4) and spanned the length of the stream approximately 20 to 30 times the channel width at bankfull. In each pebble count reach, 10 transects across the reach were measured and 10 pebbles in each transect were collected at equidistant locations along the streams perpendicular width. The width of the stream at each transect and the habitat type (i.e., Pool, Riffle, Step) were recorded and are summarized in Table 3.

The width of each collected particle was measured in millimeters (mm) using a gravelometer and placed into the appropriate substrate category. Table 4 provides the percent of particles from each pebble count reach in each substrate/size category, including average, 95% confidence interval, and median sizes. Average particle size by reach ranged from 77 mm in Reach 5 (farthest upstream) to 127 mm in Reach 1 (farthest downstream). The median ( $D_{50}$ ) particle size per reach ranged from 36 mm in Reach 5 to 70 mm in Reach 3.

The 50 transects across five reaches covered a total of 16 Pools, 16 Riffles, and 18 Steps during the pebble count. A summary of the particle sizes and their normalized distribution in each habitat type is illustrated on Figure 7. The average particle size for Pools was  $63 \pm 17$  mm (95% confidence interval), with a D<sub>50</sub> of 16 mm. The average particle size for Riffles was  $61 \pm 10$  mm, with a D<sub>50</sub> of 38 mm. The average size of Steps was  $147 \pm 110$  mm, with a D<sub>50</sub> of 38 mm. Generally, the trend was for a greater number of small particles (Small Cobbles or smaller) in Pools, the widest distribution of sizes in Riffles, and the largest particles (Large Cobbles to Boulders) in Steps.

The dominant substrates within Tributary T11A, defined as encompassing at least 50% of the observed surface substrate, include finer depositional materials of Very Coarse Sand (with smaller particles), transient materials of Fine Gravel, and more stable particles consisting of Very Coarse Gravel and Small Boulder. Figure 8 illustrates the particle size distribution by dominant substrate category. The D<sub>50</sub> observed throughout Tributary T11A is 42 mm (Very Coarse Gravel), with an average particle size of 93 ± 11 mm (95% confidence interval).

## 2.3.5.2 Geotechnical Grain Size Results

To better understand the subsurface material composition in Tributary T11A, samples of subsurface channel substrates were collected at three representative habitat locations within Tributary T11A and analyzed for grain size using ASTM International Method D422 by Pace Analytical. The bulk grain size samples were collected up to 1 foot below the surface substrates. One of the samples, collected in a Step habitat, approximately 175 feet upstream from the outlet to the Valatie Kill, indicated dominant substrates as coarse to fine gravels (71%), with a D<sub>50</sub> of approximately 16 mm. The sample collected in a Pool habitat approximately halfway (1,200 feet) down Tributary T11A indicated dominant substrates as coarse to fine gravels (79%), with a D<sub>50</sub> of approximately 19 mm. The third sample, collected in a Riffle (Plain Bed) habitat approximately 300 feet downstream of the headwater of Tributary T11A, indicated dominant substrates of coarse to fine gravels (54%), with coarse to fine sands (44%) nearly as dominant. The D<sub>50</sub>

#### DATA SUMMARY REPORT

of approximately 5.7 mm was significantly lower than the D<sub>50</sub> sizes observed within the Step and Pool habitats.

Overall, the subsurface channel substrates in Tributary T11A primarily consist of coarse to fine gravels, with lesser percentages of sands and fines found in Step and Pool habitats. Riffle (Plain Bed) habitat indicates a larger percentage of sands and fines found within the subsurface channel substrates.

#### 2.3.5.3 Large Woody Debris Assessment

In addition to the cataloguing of pebbles and inorganic substrate, the number of organic materials, including LWD, Coarse Particulate Organics, and Fine Particulate Organics, was recorded along each of the 10 transects in each of the five Pebble Count reaches. LWD was also qualitatively noted during the SVAP procedure outlined in Section 2.3.2.2. Figure 9 illustrates the frequency of these organic materials found during pebble counts in separate reaches and habitats. Pools had the lowest amount of LWD and Steps had the greatest number. Riffles had the greatest number of Coarse Particulate Organics and Pools had the least.

Considering the substrate together with organics and LWD provides insight about depositional patterns along Tributary T11A. The presence of LWD was likely due to the spatial arrangement of the stream, as opposed to habitat. LWD, such as logs, were observed in greater numbers along elevated shelves and floodplains in the stream corridor, as expected in areas where items could settle during times of high flow. Fewer instances of bank undercutting and erosion were observed where LWD had deposited, indicating these debris provide the benefit of physical stabilization.

Deposition of Coarse Particulate Organics appeared to be dominated by the type of habitat. As shown on Figure 9, the different sizes of organic materials were most widely represented in Riffle habitat, as opposed to Pool or Step. This heterogeneous deposition of inorganic substrate allowed a greater number of Coarse Particulate Organics items, such as leaves and smaller sticks, to be captured in these areas. The forthcoming Removal Action Design Report will consider installation of transitional Riffle areas during restoration efforts to promote similar organic deposition, an important feature in providing suitable fish and invertebrate habitat.

Deposition of Fine Particulate Organics was influenced both spatially across the five reaches and by habitat. There was a greater amount of Fine Particulate Organics in Pools than in Riffles and Steps, and Fine Particulate Organics were only observed in the lowest two reaches (Reaches 1 and 2). Pools are quiescent, which naturally allow for deposition of materials. Step-pool habitat was better defined in the lower two reaches, compared with upstream. In areas of high stream gradient, this resulted in the formation of deeper pools and the collection of Fine Particulate Organics transported downstream during high-flow events.

## 2.4 Summary

Enhancement structures were assessed for existing function and condition. Overall, the conditions of the structures were found to be mostly intact. Function was highest for the rock vortex weir (ES-2), rock check dams (ES-3 and ES-8), and step-pool complex (ES-5). The rock bendway weir (ES-1), rock check dam (ES-6), and riffle complex (ES-9) were found to be partially intact with low to moderate functioning. Log

#### DATA SUMMARY REPORT

check dams were intact, but due to large drops between water surfaces that have created barriers to prevent fish migration, were observed to be the least functional.

Key stream characteristics were detailed through evaluation of local hydrology and assessment of stream conditions using the SVAP framework. Within the floodplain of Tributary T11A, three wetlands were identified. Wetland hydrology characteristics were also met at each of the locations assessed in the Northwest Drainage Ditch. Average SVAP ratings for each reach assessed in Tributary T11A ranged from fair to good, with conditions improving from upstream to downstream. Overall, the Tributary T11A stream condition was assessed as good. The largest differences observed between assessment reaches included scoring for presence of Pools, Fish Habitat Complexity, Aquatic Invertebrate Habitat, and Aquatic Invertebrate Community.

Pebble counts performed in Tributary T11A indicated a greater number of small particles (Small Cobbles or smaller) in Pools, the widest distribution of sizes in Riffles, and the largest particles (Large Cobbles to Boulders) in Steps. The D<sub>50</sub> and average particle sizes found throughout Tributary T11A are 42 mm (Very Coarse Gravel) and 93 mm (Medium Cobble), respectively. LWD and coarse and fine particulate organic matter were most widely represented in Riffle (plain bed) habitats, as opposed to Pools and Steps.

Cross-section data were collected at representative areas and at existing enhancement structures within Tributary T11A. Channel characteristics indicate areas with substrate aggradation (i.e., deposition) that have formed gravel bars. In some cases, this has caused braided stream flow or has pushed stream flow to one side of the channel.

Habitat assessments to document tree and vegetative communities within the Tributary T11A stream corridor indicated a forested canopy consisting of more than 20 tree species with hemlock, black birch, and yellow birch being the most common. The most common larger trees (greater than 18-inch DBH) were hemlock and sugar maple. The Tributary T11A vegetative communities were dominated by canopies of hemlock and sugar maple, shrub layers consisting of American beech (*Fagus grandifolia*), green ash, and sugar maple, and herbaceous layers consisting of New York fern and Christmas fern. The Northwest Drainage Ditch vegetative communities were dominated by canopies of black willow (*Salix nigra*), black birch, and paper birch (*Betula papyrifera*), herbaceous layers consisting of giant goldenrod and lurid sedge (*Carex lurida*), and woody vine layer consisting of nightshade (*Solanaceae*).

## 3 SUMMARY OF 2017 AND 2018 SOIL/SEDIMENT SAMPLING ACTIVITIES

Additional soil and sediment sampling was performed between November 6 and 16, 2017 and January 15 and 17 and March 27 and 28, 2018. The objective of the sampling was to further delineate sediment and bank soil removal limits for Tributary T11A, and to further assess PCBs present in upstream areas (e.g., the Northwest Drainage Ditch and Former Mead Road Pond Area), such that these areas do not serve as a future source of PCBs to Tributary T11A. The sampling approach focused on the following objectives: 1) define horizontal boundary limits, 2) confirm extent of soil/sediment with PCBs greater than 50 ppm, 3) define vertical extent, and 4) refine excavation limits in certain areas to minimize habitat disturbance. The sample locations were selected to delineate PCB levels to 1 ppm and minimize the need for confirmation sampling during construction implementation.

Sampling was performed in general accordance with the approved Sampling and Analysis Plan. However, based on field observations during collection and processing of the first 28 samples collected in November 2017, a field test was performed to assess the possibility of compaction in the shallow overburden soils of the downstream floodplain area of Tributary T11A. Representatives from Arcadis and Louis-Berger (on behalf of EPA) performed a series of borings in different soil/sediment environments within the stream system and floodplain of Tributary T11A to try to correlate the thickness of the recovered material with the measured penetration depth.

Although the field tests yielded various results, it was observed at some locations that the upper foot of overburden soils (generally consisting of an organic-rich silty sand with gravel) on the floodplain of Tributary T11A near the confluence Valatie Kill (where the grade flattens out) compressed up to 50% at some locations. Unlike the loose shallow overburden, the same amount of compaction was not observed in the underlying overburden clayey silt and gravels and the sand and gravel sediment exposed at the surface within the streambed. However, although negligible compaction appeared to be occurring in these materials, full recoveries where still not being achieved, likely due to a large piece of gravel or chunk of cobble lodging in the sampling device, such that the soils/sediment were driven aside rather than being collected inside the sample liner.

Based on the results of the field test, Arcadis and Louis-Berger agreed in the field that the best way to obtain representative samples moving forward would be to complete the future borings using a "two-barrel" advancement approach, as described below:

#### Sample Collection

- 1. At overburden boring locations (soil matrix locations), the Macro-Core® sampling device was advanced 12 inches into the overburden soil. The sampling barrel was then retrieved from the borehole. The liner was then removed from the Macro-Core® and labeled 0 to 12 inches and was considered representative of the first two sampling intervals (0- to 6-inch and 6-to 12-inch).
- 2. The open borehole was then gauged to ensure no soil fell out of the sampling barrel during retrieval and no cave-in had occurred.
- 3. A Macro-Core® sampling device containing a new liner was then placed in the existing open borehole and the barrel was driven until refusal was encountered. The collection crew then removed the barrel

and the second liner was labeled for the 12- to X-inch interval. Depth of increased density other than refusal was noted if encountered.

#### Sample Processing

- First liner: If no significant stratigraphy or density changes were observed in the first liner (0 to 12 inches), the recovered soil was split evenly to represent the 0- to 6-inch and 6-to 12-inch samples for analysis, regardless of recovery. This approach takes the compaction observed during field pilot test into consideration. If a significant density change was noted during sample collection, the processing crew took this into consideration when processing the samples.
- 2. Second liner: Because it appeared during the field test that minimal compaction was occurring below 12 inches, and rather it appeared that the underlying stratigraphy of gravel/cobbles and denser soils were packing the cutting shoe (and not allowing deeper soils to enter the Macro-Core® barrel), the sampling intervals from the second liner below 12 inches was processed without taking compaction into consideration. For example; if 6 inches of material was recovered in the sample liner, even though the Macro-Core® barrel was advanced from 12 inches to 30-inch (refusal), only one sample would be collected (composite from the entire recovery) and identified as 12 to 18 inches.

Compaction and the "two-barrel" advancement process was not taken into consideration/completed for sediment samples located in the stream bed. This is because during the field test, negligible compaction of the stream bed material was observed at these locations.

A list of the first 28 locations where samples were collected and processed using the initial sampling approach as specified in the Sampling and Analysis Plan is provided in Table 5. The remaining samples collected in November 2017 and those collected in January and March 2018 were collected and processed with the method outlined above.

As noted in the Sampling and Analysis Plan, for the purposes of this sampling event, sediment (SED) samples identify samples located below the apparent typical water level, and soil (SL) samples identify samples located above the apparent typical water level. The typical water level elevation was visually estimated in the field by the sampling crew at the time of sampling.

#### Sample Analysis

All samples were analyzed by SGS Accutest in Dayton, New Jersey. The number of sediment and soil samples collected and analyzed are summarized in Table 6. All samples not held as "archive" were analyzed for PCB Aroclors by EPA Method 8082A and a subset of approximately 10% of the November 2017 samples was analyzed for Total Organic Carbon (TOC) by the Lloyd Kahn method.

## 3.1 Tributary T11A

A total of 223 locations were targeted for sample collection in Tributary T11A (see Figure 1), including 32 judgmental locations identified in the field during sampling activities. The judgmental locations were selected to either be downstream from historical samples with results greater than 50 ppm (samples with "J" in the identification number [ID]) or next to large mature trees or other major ecological features observed in Tributary T11A (samples with "JT" in the ID).

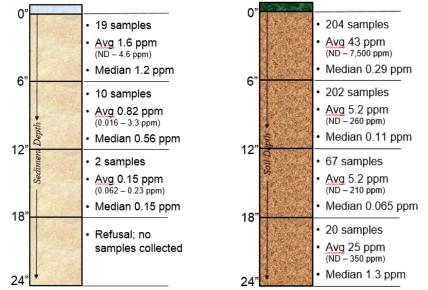
The samples collected from the 0- to 6-inch and 6- to 12-inch depth intervals were submitted for PCB Aroclor analysis, with analysis of a subset of the samples for TOC. For the deeper depth intervals, some

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\\arcadis-us.com\officedata\Syracuse-NY\GE\PRJ\GE\_Loeffel\_Drainageways\_RIFS\Reports and Presentations\2018\05-24 T11A data summary report Final\DL 47.f T11A Data Rpt Txt Final.docx 19 samples were archived based on the designation in the Sampling and Analysis Plan. The number of samples archived or submitted for each analysis is summarized in Table 6. The PCB and TOC laboratory results provided in Table 7, and the PCB concentrations are illustrated by depth interval on Figures 1A through 1D. Table 8 summarizes the PCB results by location and depth and provides the average, median, and range for each sample area. Data and statistics presented in the remainder of this section are rounded to two significant figures.

PCB concentrations for the 524 Tributary T11A samples collected and analyzed in 2017 and 2018 range from ND to 7,500 ppm, with an average of 21 ppm (median of 0.22 ppm). A total of 54 samples (10%) were ND, and an additional 344 samples (66%) exhibited detectable PCB concentrations but less than 1.0 ppm. A summary of sample results (i.e., average, median, maximum, percent ND, and percent detected less than 1.0 ppm), by depth, for Tributary T11A is provided in Table 8.

For the 2017 and 2018 493 soil samples collected from Tributary T11A and analyzed for PCBs, PCB concentrations range from ND to 7,500 ppm, with an average of 22 ppm (median of 0.20 ppm), and the PCB concentrations for the 31 sediment samples range from ND to 4.6 ppm, with an average of 1.3 ppm (median of 0.76 ppm). A summary of sample results (i.e., average, median, and range), by depth, is provided on the below figures – sediment on the left, soil on the right.



The results indicate that PCB concentrations in Tributary T11A were predominantly less than 1.0 ppm, with 76% of the samples less than 1.0 ppm. However, note that the intent of the 2017 and 2018 sampling programs was meant to delineate the area with PCB impacts, so it is expected that most results would be less than 1.0 ppm.

As noted above, a subset of approximately 10% of the samples collected in November 2017 were analyzed for TOC. Of the 33 samples analyzed for TOC, the range in results is 790 ppm to 75,000 ppm, with an average of 19,000 ppm (median of 13,000 ppm).

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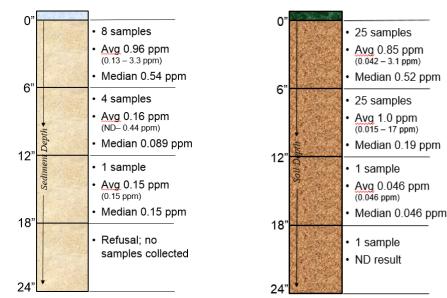
## 3.2 Northwest Drainage Ditch and Former Mead Road Pond Area

The November 2017 and January and March 2018 sampling in the Northwest Drainage Ditch and Former Mead Road Pond Area included the collection of additional samples at 33 locations, including six judgmental samples (samples with "J" in the ID) located during sampling activities in depositional areas in the Northwest Drainage Ditch and Former Mead Road Pond Area (Figure 2).

The samples collected from the 0- to 6-inch and 6- to 12-inch depth intervals were submitted for PCB Aroclor analysis, with analysis of a subset of the samples for TOC. For the deeper depth intervals, some samples were archived based on the designation in the Sampling and Analysis Plan. The number of samples archived or submitted for each analysis is summarized in Table 6. The PCB and TOC laboratory results are provided in Table 7, and the PCB concentrations are illustrated by depth interval on Figures 2A through 2C. Table 8 summarizes the PCB results by location and depth and provides the average, median, and range for each sample area. Data and statistics presented in the remainder of this section are rounded to two significant figures.

PCB concentrations for the 65 Northwest Drainage Ditch and Former Mead Road Pond Area samples collected and analyzed in 2017 and 2018 range from ND to 17 ppm, with an average of 0.84 ppm (median of 0.23 ppm). A total of three samples (5%) were ND, and an additional 51 samples (78%) were detected at concentrations above ND but less than 1.0 ppm. A summary of sample results (i.e., average, median, maximum, percent ND, and percent detected less than 1.0 ppm), by depth, for the Northwest Drainage Ditch and Former Mead Road Pond Area is provided in Table 8.

For the 2017 and 2018 52 soil samples collected from the Northwest Drainage Ditch and Former Mead Road Pond Area and analyzed for PCBs, PCB concentrations ranged from ND to 17 ppm, with an average of 0.89 ppm (median of 0.23 ppm), and the PCBs for the 13 sediment samples ranged from ND to 3.3 ppm, with an average of 0.65 ppm (median of 0.25 ppm). A summary of sample results (i.e., average, median, and range), by depth, is provided on the below figures – sediment on the left, soil on the right.



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#### DATA SUMMARY REPORT

In general, results indicate PCB concentrations in the Northwest Drainage Ditch and Former Mead Road Pond Area were predominantly less than 1.0 ppm, with 83% of the samples less than 1.0 ppm. However, note that the intent of the 2017 and 2018 sampling programs was meant to delineate the area with PCB impacts, so it is expected that most results would be less than 1.0 ppm.

As noted above, a subset of approximately 10% of the samples collected in November 2017 were analyzed for TOC. Of the nine samples analyzed for TOC, the range in results is 1,640 ppm to 59,200 ppm, with an average of 36,800 ppm (median of 39,700 ppm).

## 4 SUMMARY OF SOIL/SEDIMENT SAMPLING ACTIVITIES SINC 2002/2003 REMEDIAL ACTION

This section provides a compiled summary of the post-remediation sampling activities discussed in Section 2 and the recent sampling activities summarized in Section 3 for Tributary T11A and the Northwest Drainage Ditch and Former Mead Road Pond Area.

## 4.1 Tributary T11A

As discussed in Section 2, 58 sediment samples and 256 soil samples were collected between 2009 and 2014 (i.e., after the 2002/2003 remediation). The sediment PCBs ranged from 0.19 to 23 ppm (average of 4.7 ppm; median of 3.2 ppm), and soil PCBs ranged from ND to 1,300 ppm (average of 29 ppm; median of 2.3 ppm). Similarly, as summarized in Section 3, 31 sediment samples and 494 soil samples were collected in 2017 and 2018. The sediment PCBs ranged from ND to 4.6 ppm (average of 1.3 ppm; median of 0.76 ppm), and soil PCBs ranged from ND to 7,500 ppm (average of 22 ppm; median of 0.20 ppm). In comparing the dataset of the 2009 to 2014 samples with the dataset of the 2017 and 2018 samples, the average and median for the more recent soil and sediment samples are slightly lower, in part because the 2017 and 2018 samples were meant to delineate the area with PCB impacts.

Of the 244 samples analyzed for TOC prior to 2017, the range in results is 660 ppm to 270,000 ppm, with an average of 30,600 ppm (median of 20,000 ppm). As noted above in Section 3, the TOC results for the 33 2017 samples are generally similar to the concentrations recorded during prior sampling activities, but with a slightly lower average and median. Specifically, in 2017 results ranged from 790 ppm to 74,800 ppm, with an average of 18,500 ppm (median of 12,500 ppm).

## 4.2 Northwest Drainage Ditch and Former Mead Road Pond Area

As discussed in Section 2, 61 samples were collected between 2009 and 2013 (i.e., after the IRM was completed). The PCBs ranged from ND to 18.1 ppm, with an average of 1.7 ppm and a median of 0.40 ppm. Similarly, as summarized in Section 3, 13 sediment samples and 52 soil samples were collected in 2017 and 2018. The sediment PCBs ranged from ND to 3.3 ppm (average of 0.65 ppm; median of 0.25 ppm), and soil PCBs ranged from ND to 17 ppm (average of 0.89 ppm; median of 0.23 ppm). In comparing the dataset of the 2009 to 2013 samples with the dataset of the 2017 and 2018 samples, the average and median for the more recent soil and sediment samples are slightly lower, in part because the 2017 and 2018 samples were meant to delineate the area with PCB impacts.

Of the 41 samples analyzed for TOC prior to 2017, the range in results is 2,000 ppm to 98,300 ppm, with an average of 34,500 ppm (median of 27,300 ppm). As noted above in Section 3, the TOC results for the nine 2017 samples are generally similar to the concentrations recorded during prior sampling activities, but with a slightly higher average and median. Specifically, in 2017 results ranged from 1,640 ppm to 59,200 ppm, with an average of 36,800 ppm (median of 39,700 ppm).

## **5 REPORTING AND SCHEDULE**

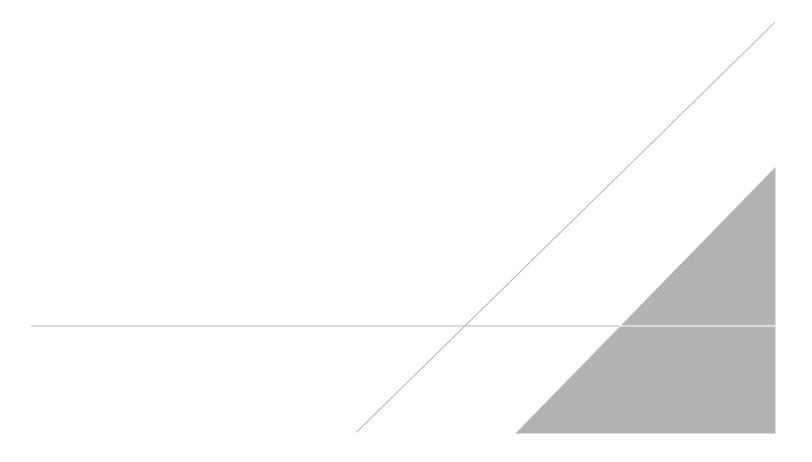
This Data Summary Report summarize the results of the habitat assessment and sample collection activities performed historically and recently in Tributary T11A and the Northwest Drainage Ditch and Former Mead Road Pond Area. GE has provided the data received from the laboratory to the EPA in monthly progress reports for the Drainageways. In addition, as preliminary results became available from the laboratory, GE prepared draft figures and tables for circulation to and discussion with EPA and other agency representatives. Finally, following submittal of this Data Summary Report, GE will provide EPA with Level 4 data summary packages for the 2017 and 2018 results and a corresponding database providing the location, medium, and analytical results for each sample collected in 2017 and 2018.

GE is currently evaluating the information presented herein and will be initiating development of a Removal Action Design Report. In accordance with the EPA-approved proposal under Paragraph 47.f (GE 2017), GE will submit the Removal Action Design Report to EPA for review and approval within 60 days of approval of this Data Summary Report.

## **6 REFERENCES**

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## **TABLES**



#### CARCADIS Design & Consultancy for natural and built assets

#### SVAP Scores for Tributary T11A Data Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

#### Dewey Loeffel Landfill Superfund Site - Nassau, New York

|                                    |               | SVAP/Pe       |               |               |               |                 |
|------------------------------------|---------------|---------------|---------------|---------------|---------------|-----------------|
| SVAP Category                      | 1             | 2             | 3             | 4             | 5             | Average         |
| 1. Channel Condition               | 6             | 7             | 6             | 6             | 7             | 6.4 (Fair)      |
| 2. Hydrologic Alteration           | 8             | 7             | 6             | 8             | 8             | 7.4 (Good)      |
| 3. Bank Condition                  | 8             | 8             | 6             | 6             | 7             | 7.0 (Good)      |
| 4. Riparian Area Quantity          | 10            | 8             | 8             | 6             | 7             | 7.8 (Good)      |
| 5. Riparian Area Quality           | 9             | 7             | 8             | 8             | 6             | 7.6 (Good)      |
| 6. Canopy Cover                    | 9             | 9             | 9             | 7             | 5             | 7.8 (Good)      |
| 7. Water Appearance                | 9             | 9             | 10            | 8             | 8             | 8.8 (Good)      |
| 8. Nutrient Enrichment             | 10            | 10            | 8             | 9             | 9             | 9.2 (Excellent) |
| 9. Manure or Human Waste           | 10            | 10            | 10            | 10            | 10            | 10 (Excellent)  |
| 10. Pools                          | 9             | 6             | 4             | 6             | 4             | 5.8 (Fair)      |
| 11. Barriers to Movement           | 6             | 5             | 3             | 5             | 4             | 4.6 (Poor)      |
| 12. Fish Habitat Complexity        | 8             | 7             | 4             | 6             | 2             | 5.4 (Fair)      |
| 13. Aquatic Invertebrate Habitat   | 8             | 6             | 5             | 8             | 2             | 5.8 (Fair)      |
| 14. Aquatic Invertebrate Community | 8             | 4             | 6             | 4             | 2             | 4.8 (Poor)      |
| 15. Riffle Embeddedness            | 6             | 4             | 4             | 7             | 6             | 5.4 (Fair)      |
| Overall Score                      | 8.3<br>(Good) | 7.1<br>(Good) | 6.5<br>(Fair) | 6.9<br>(Fair) | 5.8<br>(Fair) | 6.9<br>(Good)   |

Notes:

Table 2

1. Stream Visual Assessment Protocol (SVAP) assessment forms for individual Tributary T11A stream reaches are provided in Appendix 4.

#### Ratings for each score range:

1 to 2.9 = Severely Degraded 3 to 4.9 = Poor

- 5 to 6.9 = Fair
- 5 10 6.9 = Fair
- 7 to 8.9 = Good
- 9 to 10 = Excellent



# Table 3 Stream Width and Habitat Type for Pebble Count Reach Data Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

#### Dewey Loeffel Landfill Superfund Site - Nassau, New York

| Reach Features                                      |                        | SVAP/Pebble Count Reach |            |                  |                |             |  |  |  |
|---|------------------------|-------------------------|------------|------------------|----------------|-------------|--|--|--|
|   |                        | 1                       | 2          | 3                | 4              | 5           |  |  |  |
| Stream Transect Wid                                 | th (feet) <sup>1</sup> | 7.5 - 11 (8.3)          | 6-12 (8.2) | 3.5 - 10.5 (6.1) | 4.5 - 12 (7.5) | 3 - 6 (5.1) |  |  |  |
| Stream Reach Length (feet) <sup>2</sup>             |                        | 365                     | 345        | 288              | 245            | 105         |  |  |  |
|   | Pool                   | 4                       | 3          | 3                | 1              | 5           |  |  |  |
| Number of Habitat Types<br>Represented <sup>3</sup> | Riffle                 | 2                       | 3          | 5                | 6              | 0           |  |  |  |
| Represented   | Step                   | 4                       | 4          | 2                | 3              | 5           |  |  |  |

Notes:

1. Active stream width is indicated by minimum and maximum, with average width provided in parentheses.

2. Stream reach length measured in the field along thalweg of channel using a flexible tape measure.

3. Within each reach, 10 transects were evaluated by representative habitat types (Pools, Riffles, and Steps).

SVAP = stream visual assessment protocol



#### Table 4 Percent Particle Size for Each Pebble Count Reach Data Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

#### Dewey Loeffel Landfill Superfund Site - Nassau, New York

| Substrate Category           | Particle Size | SVAP/Pebble Count Reach (%) |                       |                |                       |                       |  |  |  |
|------------------------------|---------------|-----------------------------|-----------------------|----------------|-----------------------|-----------------------|--|--|--|
| outstrate outegory           | (mm)          | 1                           | 2                     | 3              | 4                     | 5                     |  |  |  |
| V. Coarse Sand               | 1 to 2        | 10                          | 10                    | 13             | 8                     | 9                     |  |  |  |
| V. Fine Gravel               | 2 to 4        | 1                           |                       | 3              | 2                     | 4                     |  |  |  |
| Fine Gravel                  | 4 to 6        | 7                           | 10                    | 5              | 6                     | 2                     |  |  |  |
| Fine Gravel                  | 6 to 8        | 8                           | 7                     | 9              | 7                     | 4                     |  |  |  |
| Medium Gravel                | 8 to 11       | 2                           | 3                     | 2              | 4                     | 5                     |  |  |  |
| Medium Gravel                | 11 to 16      | 6                           | 5                     | 1              | 1                     | 10                    |  |  |  |
| Coarse Gravel                | 16 to 22      | 1                           | 4                     | 5              | 4                     | 6                     |  |  |  |
| Coarse Gravel                | 22 to 32      | 7                           | 2                     | 4              | 9                     | 8                     |  |  |  |
| V. Coarse Gravel             | 32 to 45      | 7                           | 9                     | 4              | 7                     | 9                     |  |  |  |
| V. Coarse Gravel             | 45 to 64      | 3                           | 4                     | 3              | 5                     | 9                     |  |  |  |
| Small Cobble                 | 64 to 90      | 5                           | 13                    | 11             | 4                     | 11                    |  |  |  |
| Medium Cobble                | 90 to 128     | 9                           | 14                    | 7              | 13                    | 5                     |  |  |  |
| Large Cobble                 | 128 to 180    | 6                           | 9                     | 16             | 14                    | 7                     |  |  |  |
| V. Large Cobble              | 180 to 256    | 8                           | 5                     | 9              | 6                     | 4                     |  |  |  |
| Small Boulder                | 256 to 362    | 14                          | 5                     | 3              | 8                     | 4                     |  |  |  |
| Small Boulder                | 362 to 512    | 1                           |                       | 3              | 1                     | 2                     |  |  |  |
| Medium Boulder               | 512 to 1024   | 5                           |                       | 2              | 1                     | 1                     |  |  |  |
| Large Boulder                | 1024 to 2048  |                             |                       |                |                       |                       |  |  |  |
| V. Large Boulder             | 2048 to 4096  |                             |                       |                |                       |                       |  |  |  |
| Average Size (mm)            |               | 127                         | 74                    | 100            | 90                    | 77                    |  |  |  |
| 95% Confidence Interval      | (mm)          | ±31                         | ±16                   | ±25            | ±20                   | ±24                   |  |  |  |
| 95% Confidence Interval (mm) |               | (96 – 158)                  | (58 – 90)             | (75 – 125)     | (70 – 110)            | (53 – 101)            |  |  |  |
|                              |               | 52                          | 43                    | 71             | 48                    | 36                    |  |  |  |
| D50 (mm)                     |               | (V. Coarse<br>Gravel)       | (V. Coarse<br>Gravel) | (Small Cobble) | (V. Coarse<br>Gravel) | (V. Coarse<br>Gravel) |  |  |  |

Notes:

SVAP = stream visual assessment protocol D50 = median particle size mm = millimeters V = very % = percent

# Table 5List of Samples Collected November 2017 Using Initial Sampling MethodData Summary Report for Tributary T11A Removal Action Under Paragraph 47.f



#### Dewey Loeffel Landfill Superfund Site - Nassau, New York

|                     | Figure |          |       | Sample Inte | erval (inches) |         |
|---------------------|--------|----------|-------|-------------|----------------|---------|
| Location Name       | ID     | Matrix   | 0 - 6 | 6 - 12      | 12 - 18        | 18 - 22 |
| T11A17-SL-1         | 1      | Soil     | Х     | Refusal     | Refusal        | Refusal |
| T11A17-SL-2         | 2      | Soil     | Х     | Х           | Х              | Refusal |
| T11A17-SL-3         | 3      | Soil     | Х     | Х           | Х              | Refusal |
| T11A17-SL-4         | 4      | Soil     | Х     | Х           | Refusal        | Refusal |
| T11A17-SL-5         | 5      | Soil     | Х     | Х           | Х              | Refusal |
| T11A17-SL-6         | 6      | Soil     | Х     | Х           | Х              | Refusal |
| T11A17-SL-7         | 7      | Soil     | Х     | Х           | Х              | Refusal |
| T11A17-SL-8         | 8      | Soil     | Х     | Х           | Х              | Refusal |
| T11A17-SL-9         | 9      | Soil     | Х     | Х           | Refusal        | Refusal |
| T11A17-SL-10        | 10     | Soil     | Х     | Х           | Refusal        | Refusal |
| T11A17-SL-11        | 11     | Soil     | Х     | Х           | Refusal        | Refusal |
| T11A17-SL-12        | 12     | Soil     | Х     | Х           | Х              | Refusal |
| T11A17-SL-13        | 13     | Soil     | Х     | Х           | Refusal        | Refusal |
| T11A17-SL-14        | 14     | Soil     | Х     | Х           | Refusal        | Refusal |
| T11A17-SL-15        | 15     | Soil     | Х     | Х           | Refusal        | Refusal |
| T11A17-SL-16        | 16     | Soil     | Х     | Х           | Х              | Refusal |
| T11A17-SL-17        | 17     | Soil     | Х     | Х           | Х              | Refusal |
| T11A17-SL-18        | 18     | Soil     | Х     | Х           | Х              | Refusal |
| T11A17-SL-19        | 19     | Soil     | Х     | Х           | Х              | Refusal |
| T11A17-SL-20        | 20     | Soil     | Х     | Х           | Refusal        | Refusal |
| T11A17-SL-21        | 21     | Soil     | Х     | Х           | Х              | Х       |
| T11A17-SL-35        | 35     | Soil     | Х     | Х           | Х              | Refusal |
| T11A17-SED-J-1      | J-1    | Soil     | Х     | Х           | Refusal        | Refusal |
| T11A17-SED-J-2      | J-2    | Sediment | Х     | Х           | Refusal        | Refusal |
| T11A17-SED-J-3      | J-3    | Sediment | Х     | Х           | Refusal        | Refusal |
| T11A17-SL-JT-1A     | JT-1A  | Soil     | Х     | Х           | Refusal        | Refusal |
| T11A17-SL-JT-1B     | JT-1B  | Soil     | Х     | Х           | Refusal        | Refusal |
| T11A17-SL-JT-2      | JT-2   | Soil     | Х     | Х           | Х              | Refusal |
| Total Samples Colle | cted   |          | 28    | 27          | 14             | 1       |

#### Notes:

1. X indicates sample interval was collected during processing. Grey shading indicates sample was archived and has not been analyzed.

2. No samples were collected below 22 inches.

3. The 12- to 18-inch sample interval for T11A17-SL-3 was collected at a later date using the modified collection method.



Table 6November 2017 and January and March 2018 Sediment and Soil Sampling SummaryData Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

#### Dewey Loeffel Landfill Superfund Site - Nassau, New York

| Location Name  |          | Sample Interval (inches) <sup>1</sup> |         |         |         |         |  |  |
|----------------|----------|---------------------------------------|---------|---------|---------|---------|--|--|
|                | Matrix   | 0 - 6                                 | 6 - 12  | 12 - 18 | 18 - 24 | 24+     |  |  |
| Tributary T11A |          |                                       |         |         |         |         |  |  |
| T11A17-SL-1    | Soil     | Х                                     | Refusal | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-2    | Soil     | X                                     | X       | X       | Refusal | Refusal |  |  |
| T11A17-SL-3    | Soil     | X                                     | X       | X       | Refusal | Refusal |  |  |
| T11A17-SL-4    | Soil     | X                                     | X       | Refusal | Refusal | Refusal |  |  |
|                |          |                                       |         |         |         |         |  |  |
| T11A17-SL-5    | Soil     | X                                     | X       | X       | Refusal | Refusal |  |  |
| T11A17-SL-6    | Soil     | X                                     | X       | X       | Refusal | Refusal |  |  |
| T11A17-SL-7    | Soil     | Х                                     | Х       | Х       | Refusal | Refusal |  |  |
| T11A17-SL-8    | Soil     | XX                                    | XX      | XX      | Refusal | Refusal |  |  |
| T11A17-SL-9    | Soil     | XX                                    | XX      | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-10   | Soil     | Х                                     | Х       | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-11   | Soil     | Х                                     | Х       | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-12   | Soil     | Х                                     | Х       | Х       | Refusal | Refusal |  |  |
| T11A17-SL-13   | Soil     | Х                                     | Х       | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-14   | Soil     | XX                                    | XX      | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-15   | Soil     | X                                     | X       | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-16   | Soil     | X                                     | X       | X       | Refusal | Refusal |  |  |
| T11A17-SL-17   | Soil     | XX                                    | XX      | XX      | Refusal | Refusal |  |  |
| T11A17-SL-17   |          |                                       |         |         |         |         |  |  |
|                | Soil     | X                                     | X       | X       | Refusal | Refusal |  |  |
| T11A17-SL-19   | Soil     | Х                                     | X       | X       | Refusal | Refusal |  |  |
| T11A17-SL-20   | Soil     | Х                                     | Х       | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-21   | Soil     | Х                                     | Х       | Х       | Х       | Refusal |  |  |
| T11A17-SL-22   | Soil     | Х                                     | Х       | Х       | Refusal | Refusal |  |  |
| T11A17-SL-23   | Soil     | Х                                     | Х       | Х       | Refusal | Refusal |  |  |
| T11A17-SL-24   | Soil     | Х                                     | Х       | Х       | Х       | Refusal |  |  |
| T11A17-SL-25   | Soil     | Х                                     | Х       | Х       | Refusal | Refusal |  |  |
| T11A17-SL-26   | Soil     | Х                                     | Х       | Х       | Х       | Refusal |  |  |
| T11A17-SL-27   | Soil     | X                                     | X       | X       | x       | Refusal |  |  |
| T11A17-SL-28   | Soil     | X                                     | X       | X       | Refusal | Refusal |  |  |
| T11A17-SL-29   | Soil     | X                                     | X       | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-29   | Soil     | X                                     | X       | X       | X       | Refusal |  |  |
|                |          |                                       |         |         |         |         |  |  |
| T11A17-SED-31  | Sediment | X                                     | Refusal | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-32   | Soil     | X                                     | X       | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-33   | Soil     | Х                                     | Х       | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-34   | Soil     | Х                                     | Х       | Х       | Refusal | Refusal |  |  |
| T11A17-SL-35   | Soil     | Х                                     | Х       | Х       | Refusal | Refusal |  |  |
| T11A17-SL-36   | Soil     | Х                                     | Х       | Х       | Х       | Refusal |  |  |
| T11A17-SL-37   | Soil     | Х                                     | Х       | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-38   | Soil     | Х                                     | Х       | Х       | Х       | Refusal |  |  |
| T11A17-SL-39   | Soil     | Х                                     | Х       | Х       | Refusal | Refusal |  |  |
| T11A17-SED-40  | Sediment | Х                                     | Refusal | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-41   | Soil     | X                                     | X       | X       | X       | Refusal |  |  |
| T11A17-SL-42   | Soil     | X                                     | X       | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-43   | Soil     | X                                     | X       | X       | Refusal | Refusal |  |  |
| T11A17-SL-43   | Soil     |                                       |         | X       | Refusal | Refusal |  |  |
|                |          | X                                     | X       |         |         |         |  |  |
| T11A17-SL-45   | Soil     | X                                     | X       | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-46   | Soil     | X                                     | X       | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-47   | Soil     | X                                     | X       | X       | Refusal | Refusal |  |  |
| T11A17-SL-48   | Soil     | Х                                     | Х       | Х       | Х       | Refusal |  |  |
| T11A17-SED-49  | Sediment | Х                                     | Refusal | Refusal | Refusal | Refusal |  |  |
| T11A17-SL-50   | Soil     | Х                                     | Х       | Х       | Refusal | Refusal |  |  |
| T11A17-SL-51   | Soil     | XX                                    | XX      | XX      | XX      | Refusal |  |  |
| T11A17-SL-52   | Soil     | X                                     | X       | X       | Refusal | Refusal |  |  |
| T11A17-SL-53   | Soil     | XX                                    | XX      | XX      | XX      | Refusal |  |  |
| T11A17-SL-54   | Soil     | X                                     | X       | X       | X       | Refusal |  |  |
| T11A17-SL-55   | Soil     | X                                     | X       | X       | X       | Refusal |  |  |



Table 6November 2017 and January and March 2018 Sediment and Soil Sampling SummaryData Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

#### Dewey Loeffel Landfill Superfund Site - Nassau, New York

|                            |        | Sample Interval (inches) <sup>1</sup> |         |         |              |         |  |  |
|----------------------------|--------|---------------------------------------|---------|---------|--------------|---------|--|--|
| Location Name              | Matrix | 0 - 6                                 | 6 - 12  | 12 - 18 | 18 - 24      | 24+     |  |  |
| Tributary T11A (continued) |        |                                       |         | 12 10   |              |         |  |  |
| T11A17-SL-56               | Soil   | Х                                     | Х       | Х       | Х            | Refusal |  |  |
| T11A17-SL-57               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-58               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-59               | Soil   | X                                     | X       | X       | X            | Refusal |  |  |
| T11A17-SL-60               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-61               | Soil   | X                                     | X       | X       | X            | Refusal |  |  |
| T11A17-SL-62               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-63               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-64               | Soil   | X                                     | X       | X       | X            | Refusal |  |  |
| T11A17-SL-65               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-66               | Soil   | XX                                    | XX      | XX      | Refusal      | Refusal |  |  |
| T11A17-SL-67               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-68               | Soil   | X                                     | X       | X       | X            | Refusal |  |  |
| T11A17-SL-69               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
|                            |        |                                       | X       | Refusal |              |         |  |  |
| T11A17-SL-70               | Soil   | X                                     | X       |         | Refusal      | Refusal |  |  |
| T11A17-SL-71               | Soil   | X                                     |         | Х       | Refusal      | Refusal |  |  |
| T11A17-SL-72               | Soil   | Х                                     | X       | Х       | Refusal      | Refusal |  |  |
| T11A17-SL-73               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-74               | Soil   | X                                     | X       | X       | X            | Refusal |  |  |
| T11A17-SL-75               | Soil   | XX                                    | XX      | Refusal | Refusal      | Refusal |  |  |
| T11A17-SL-76               | Soil   | Х                                     | Refusal | Refusal | Refusal      | Refusal |  |  |
| T11A17-SL-77               | Soil   | Х                                     | X       | Х       | Х            | Refusal |  |  |
| T11A17-SL-78               | Soil   | Х                                     | Х       | Х       | Х            | Refusal |  |  |
| T11A17-SL-79               | Soil   | XX                                    | XX      | XX      | Refusal      | Refusal |  |  |
| T11A17-SL-80               | Soil   | Х                                     | Х       | Х       | Refusal      | Refusal |  |  |
| T11A17-SL-81               | Soil   | Х                                     | Х       | Х       | Х            | Refusal |  |  |
| T11A17-SL-82               | Soil   | Х                                     | Х       | Х       | Refusal      | Refusal |  |  |
| T11A17-SL-83               | Soil   | Х                                     | Х       | Х       | Refusal      | Refusal |  |  |
| T11A17-SL-84               | Soil   | Х                                     | Х       | Х       | Refusal      | Refusal |  |  |
| T11A17-SL-85               | Soil   | Х                                     | Х       | Х       | Х            | Refusal |  |  |
| T11A17-SL-86               | Soil   | Х                                     | Х       | Х       | Х            | Refusal |  |  |
| T11A17-SL-87               | Soil   | XX                                    | XX      | XX      | Refusal      | Refusal |  |  |
| T11A17-SL-88               | Soil   | Х                                     | Х       | Х       | Refusal      | Refusal |  |  |
| T11A17-SL-89               | Soil   | Х                                     | Х       | Х       | Refusal      | Refusal |  |  |
| T11A17-SL-90               | Soil   | Х                                     | Х       | Х       | Х            | Refusal |  |  |
| T11A17-SL-91               | Soil   | Х                                     | Х       | Х       | Refusal      | Refusal |  |  |
| T11A17-SL-92               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-93               | Soil   | X                                     | X       | X       | X            | Refusal |  |  |
| T11A17-SL-94               | Soil   | XX                                    | XX      | XX      | Refusal      | Refusal |  |  |
| T11A17-SL-95               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-96               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-97               | Soil   | X                                     | X       | x       | Refusal      | Refusal |  |  |
| T11A17-SL-97               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-90               | Soil   | X                                     | X       | X       | X            | Refusal |  |  |
| T11A17-SL-99               | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-100              | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-102              | Soil   | X                                     | X       | X       | X            | Refusal |  |  |
| T11A17-SL-109              | Soil   |                                       | X       | X       | ∧<br>Refusal | Refusal |  |  |
|                            |        | X                                     |         |         |              |         |  |  |
| T11A17-SL-111              | Soil   | X                                     | X       | Refusal | Refusal      | Refusal |  |  |
| T11A17-SL-115              | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-121              | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-124              | Soil   | X                                     | X       | X       | Х            | Refusal |  |  |
| T11A17-SL-125              | Soil   | X                                     | X       | X       | Refusal      | Refusal |  |  |
| T11A17-SL-126              | Soil   | Х                                     | X       | Х       | Refusal      | Refusal |  |  |
| T11A17-SL-127              | Soil   | Х                                     | Х       | Х       | Х            | Refusal |  |  |



Table 6November 2017 and January and March 2018 Sediment and Soil Sampling SummaryData Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

|                                    |              | Sample Interval (inches) <sup>1</sup> |         |         |              |                    |  |  |
|------------------------------------|--------------|---------------------------------------|---------|---------|--------------|--------------------|--|--|
| Location Name                      | Matrix       | 0 - 6                                 | 6 - 12  | 12 - 18 | 18 - 24      | 24+                |  |  |
| Tributary T11A (continued)         |              |                                       |         |         |              |                    |  |  |
| T11A17-SL-128                      | Soil         | Х                                     | Х       | Х       | Refusal      | Refusal            |  |  |
| T11A17-SL-129                      | Soil         | Х                                     | Х       | Х       | Refusal      | Refusal            |  |  |
| T11A17-SL-130                      | Soil         | Х                                     | Х       | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SL-131                      | Soil         | Х                                     | Х       | Х       | Refusal      | Refusal            |  |  |
| T11A17-SL-132                      | Soil         | Х                                     | Х       | Х       | Х            | Refusal            |  |  |
| T11A17-SL-133                      | Soil         | Х                                     | Х       | Х       | Refusal      | Refusal            |  |  |
| T11A17-SL-134                      | Soil         | Х                                     | Х       | Х       | Х            | Refusal            |  |  |
| T11A17-SL-135                      | Soil         | Х                                     | Х       | Х       | Х            | Refusal            |  |  |
| T11A17-SL-136                      | Soil         | Х                                     | Х       | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SL-137                      | Soil         | XX                                    | XX      | XX      | XX           | Refusal            |  |  |
| T11A17-SL-138                      | Soil         | Х                                     | Х       | Х       | Х            | Refusal            |  |  |
| T11A17-SL-139                      | Soil         | Х                                     | Х       | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SL-140                      | Soil         | Х                                     | Х       | Х       | Х            | Х                  |  |  |
| T11A17-SL-141                      | Soil         | X                                     | X       | X       | Refusal      | Refusal            |  |  |
| T11A17-SL-142                      | Soil         | XX                                    | XX      | XX      | XX           | Refusal            |  |  |
| T11A17-SL-143                      | Soil         | X                                     | X       | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SL-144                      | Soil         | X                                     | X       | X       | Refusal      | Refusal            |  |  |
| T11A17-SED-J-1                     | Soil         | X                                     | X       | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SED-J-2                     | Sediment     | X                                     | X       | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SED-J-3                     | Sediment     | XX                                    | XX      | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SED-J-4                     | Sediment     | X                                     | Refusal | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SED-J-5                     | Sediment     | XX                                    | Refusal | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SED-J-6                     | Sediment     | X                                     | Refusal | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SED-J-7                     | Sediment     | X                                     | Refusal | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SED-J-8                     | Sediment     | X                                     | Refusal | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SED-J-9                     | Sediment     | X                                     | Refusal | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SED-J-10                    | Sediment     | X                                     | X       | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SED-J-10                    | Soil         | X                                     | X       | X       | X            | Refusal            |  |  |
| T11A17-SL-J-12                     | Soil         | X                                     | X       | X       | Refusal      | Refusal            |  |  |
| T11A17-SL-J-12                     | Soil         | X                                     | X       | X       | X            | Refusal            |  |  |
| T11A17-SL-J-13                     | Soil         | X                                     | X       | X       | ∧<br>Refusal | Refusal            |  |  |
| T11A17-SL-J-14<br>T11A17-SL-J-15   | Soil         | X                                     | X       | X       | X            | Refusal            |  |  |
|                                    |              | X                                     | X       | X       | ×<br>Refusal |                    |  |  |
| T11A17-SL-J-16<br>T11A17-SL-JT-1A  | Soil         | X                                     | X       | Refusal | Refusal      | Refusal<br>Refusal |  |  |
| T11A17-SL-JT-1A<br>T11A17-SL-JT-1B | Soil<br>Soil | X                                     | X       | Refusal | Refusal      | Refusal            |  |  |
| -                                  |              |                                       |         |         |              |                    |  |  |
| T11A17-SL-JT-2                     | Soil         | X                                     | X<br>X  | X       | Refusal      | Refusal<br>Refusal |  |  |
| T11A17-SL-JT-3                     | Soil         | X<br>X                                | X       | X       | X            | Refusal            |  |  |
| T11A17-SL-JT-4                     | Soil         |                                       |         |         | Refusal      |                    |  |  |
| T11A17-SL-JT-5                     | Soil         | X                                     | X       | X       | Refusal      | Refusal            |  |  |
| T11A17-SL-JT-6                     | Soil         | X                                     | X       | X       | Refusal      | Refusal            |  |  |
| T11A17-SL-JT-7                     | Soil         | X                                     | X       | X       | Refusal      | Refusal            |  |  |
| T11A17-SL-JT-8                     | Soil         | X                                     | X       | Х       | Refusal      | Refusal            |  |  |
| T11A17-SL-JT-9                     | Soil         | X                                     | X       | X       | X            | Refusal            |  |  |
| T11A17-SL-JT-10                    | Soil         | X                                     | X       | X       | Refusal      | Refusal            |  |  |
| T11A17-SL-JT-11                    | Soil         | X                                     | X       | Х       | X            | Refusal            |  |  |
| T11A17-SL-JT-12                    | Soil         | X                                     | X       | X       | Refusal      | Refusal            |  |  |
| T11A17-SL-JT-13                    | Soil         | X                                     | X       | Х       | Refusal      | Refusal            |  |  |
| T11A17-SL-JT-14                    | Soil         | X                                     | X       | Refusal | Refusal      | Refusal            |  |  |
| T11A17-SL-JT-15                    | Soil         | X                                     | X       | Х       | Х            | Refusal            |  |  |
| T11A18-SL-145                      | Soil         | Х                                     | Х       | Х       | Refusal      | Refusal            |  |  |
| T11A18-SL-146                      | Soil         | Х                                     | Х       | Х       | Refusal      | Refusal            |  |  |
| T11A18-SL-147                      | Soil         | Х                                     | Х       | Х       | Refusal      | Refusal            |  |  |
| T11A18-SL-148                      | Soil         | Х                                     | Х       | Refusal | Refusal      | Refusal            |  |  |
| T11A18-SL-149                      | Soil         | Х                                     | Х       | Х       | Х            | Refusal            |  |  |
| T11A18-SL-150                      | Soil         | Х                                     | Х       | Х       | Х            | Refusal            |  |  |



Table 6November 2017 and January and March 2018 Sediment and Soil Sampling SummaryData Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

|                            |          |          | Samp   | le Interval (ii | nches) <sup>1</sup> |         |
|----------------------------|----------|----------|--------|-----------------|---------------------|---------|
| Location Name              | Matrix   | 0 - 6    | 6 - 12 | 12 - 18         | 18 - 24             | 24+     |
| Tributary T11A (continued) |          |          |        | 1 12 10         |                     |         |
| T11A18-SL-151              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SED-152             | Sediment | X        | X      | Refusal         | Refusal             | Refusal |
| T11A18-SL-153              | Soil     | X        | X      | X               | Refusal             | Refusal |
| T11A18-SED-154             | Sediment | X        | X      | Refusal         | Refusal             | Refusal |
| T11A18-SED-155             | Sediment | X        | X      | X               | Refusal             | Refusal |
| T11A18-SL-156              | Soil     | X        | X      | X               | X                   | X       |
| T11A18-SL-157              | Soil     | X        | X      | X               | x                   | Refusal |
| T11A18-SL-158              | Soil     | X        | X      | X               | Refusal             | Refusal |
| T11A18-SL-159              | Soil     | X        | X      | X               | Refusal             | Refusal |
| T11A18-SL-160              | Soil     | X        | X      | X               | X                   | X       |
| T11A18-SL-161              | Soil     | X        | X      | X               | Refusal             | Refusal |
| T11A18-SL-162              | Soil     | X        | X      | X               | X                   | Refusal |
| T11A18-SED-163             | Sediment | X        | X      | X               | Refusal             | Refusal |
| T11A18-SL-164              | Sediment | X        | X      | X               | Refusal             | Refusal |
| T11A18-SL-165              | Soil     | <u>х</u> | X      | X               | X                   | Refusal |
| T11A18-SL-166              | Soil     | X X      | X      | X               | X                   | Refusal |
| T11A18-SED-167             | Soli     | X        | X      | Refusal         | ×<br>Refusal        | Refusal |
|                            |          |          |        |                 |                     |         |
| T11A18-SL-168              | Soil     | X        | X      | Х               | Refusal             | Refusal |
| T11A18-SL-169              | Soil     | X        | Х      | Х               | X                   | Refusal |
| T11A18-SL-170              | Soil     | Х        | X      | Х               | Х                   | Refusal |
| T11A18-SL-171              | Soil     | X        | X      | X               | Refusal             | Refusal |
| T11A18-SL-172              | Soil     | Х        | X      | X               | X                   | Refusal |
| T11A18-SL-173              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-174              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-175              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-176              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-177              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-178              | Soil     | Х        | Х      | Х               | See Note 4          | Х       |
| T11A18-SL-179              | Soil     | Х        | Х      | Х               | Refusal             | Refusal |
| T11A18-SL-180              | Soil     | Х        | Х      | Х               | Refusal             | Refusal |
| T11A18-SL-181              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-182              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-183              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-184              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-185              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-186              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SED-187             | Sediment | Х        | Х      | Refusal         | Refusal             | Refusal |
| T11A18-SL-188              | Soil     | Х        | Х      | Х               | Refusal             | Refusal |
| T11A18-SL-189              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-190              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-191              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-192              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-193              | Soil     | Х        | Х      | Х               | Refusal             | Refusal |
| T11A18-SL-194              | Soil     | Х        | Х      | Х               | Х                   | Refusal |
| T11A18-SL-195              | Soil     | Х        | Х      | Х               | Х                   | Х       |
| T11A18-SL-196              | Soil     | X        | X      | X               | X                   | Refusal |
| T11A18-SL-197              | Soil     | X        | X      | X               | Refusal             | Refusal |
| T11A18-SL-198              | Soil     | X        | X      | X               | Refusal             | Refusal |
| T11A18-SL-207              | Soil     | X        | X      | X               | Refusal             | Refusal |
| T11A18-SL-208              | Soil     | X        | X      | X               | X                   | Refusal |
| T11A18-SL-209              | Soil     | X        | X      | X               | X                   | Refusal |
| T11A18-SL-210              | Soil     | X        | X      | X               | X                   | Refusal |
| T11A18-SL-210A             | Soil     | X        | X      | X               | Refusal             | Refusal |
| T11A18-SL-210A             | Soil     | X        | X      | X               | X                   | Refusal |
| T11A18-SL-212              | Soil     | X        | X      | X               | X                   | Refusal |
| 111A10-0L-212              | 3011     | ^        | ^      | ^               | ^                   | Reiusai |



Table 6November 2017 and January and March 2018 Sediment and Soil Sampling SummaryData Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

## Dewey Loeffel Landfill Superfund Site - Nassau, New York

|                                      |          |        | Sample     | e Interval (in | ches) <sup>1</sup> |              |
|--------------------------------------|----------|--------|------------|----------------|--------------------|--------------|
| Location Name                        | Matrix   | 0 - 6  | 6 - 12     | 12 - 18        | 18 - 24            | 24+          |
| Tributary T11A (continued)           |          |        |            |                |                    |              |
| T11A18-SL-213                        | Soil     | Х      | Х          | Х              | Х                  | Refusal      |
| T11A18-SL-214                        | Soil     | Х      | Х          | Х              | Refusal            | Refusal      |
| T11A18-SL-215                        | Soil     | Х      | Х          | Х              | Refusal            | Refusal      |
| Samples Collected                    |          | 223    | 212        | 178            | 80                 | 5            |
| Samples Collected and Archived       |          | 0      | 0          | 109            | 60                 | 5            |
| Samples Collected and Analyzed for F | PCBs     | 223    | 212        | 69             | 20                 | 0            |
| Samples Collected and Analyzed for 1 |          | 15     | 14         | 3              | 1                  | 0            |
| Northwest Drainage Ditch and Forme   |          |        |            |                |                    |              |
| NWDD17-SL-105                        | Soil     | XX     | XX         | XX             | XX                 | XX           |
| NWDD17-SL-110                        | Soil     | Х      | Х          | Х              | Refusal            | Refusal      |
| NWDD17-SL-103                        | Soil     | Х      | Х          | Х              | Х                  | Х            |
| NWDD17-SL-104                        | Soil     | X      | X          | X              | X                  | X            |
| NWDD17-SL-101                        | Soil     | XX     | XX         | XX             | XX                 | Refusal      |
| NWDD17-SL-119                        | Soil     | X      | X          | X              | Refusal            | Refusal      |
| NWDD17-SL-122                        | Soil     | X      | X          | x              | Refusal            | Refusal      |
| NWDD17-SL-112                        | Soil     | X      | X          | X              | Refusal            | Refusal      |
| NWDD17-SL-123                        | Soil     | X      | X          | x              | X                  | Refusal      |
| NWDD17-SL-113                        | Soil     | X      | X          | x              | x                  | X            |
| NWDD17-SL-116                        | Soil     | X      | X          | x              | x                  | X            |
| NWDD17-SL-118                        | Soil     | X      | X          | X              | Refusal            | Refusal      |
| NWDD17-SL-120                        | Soil     | X      | X          | X              | X                  | X            |
| NWDD17-SL-117                        | Soil     | X      | X          | x              | Refusal            | Refusal      |
| NWDD17-SL-107                        | Soil     | XX     | XX         | XX             | XX                 | Refusal      |
| NWDD17-SL-108                        | Soil     | X      | X          | X              | X                  | Refusal      |
| NWDD17-SL-108                        | Soil     | X      | X          | X              | Refusal            | Refusal      |
| NWDD17-3L-114<br>NWDD18-SL-199       | Soil     | X      | X          | X              | X                  | X            |
| NWDD18-SL-199<br>NWDD18-SL-200       | Soil     | X      | X          | X              | x                  | Refusal      |
| NWDD18-SED-201                       | Sediment | X      | X          | Refusal        | Refusal            | Refusal      |
| NWDD18-SED-202                       | Sediment | X      | X          | X              | X                  | Refusal      |
| NWDD18-SED-202<br>NWDD18-SL-203      | Sediment | X      | X          | X              | X                  | X            |
| NWDD18-SL-203<br>NWDD18-SL-204       | Soil     | X      | X          | X              | X                  | X            |
|                                      |          | X      | X          | X              | <br>Refusal        | ∧<br>Refusal |
| NWDD18-SL-205                        | Soil     | X X    | X          | X              |                    |              |
| NWDD18-SL-206                        | Soil     | X<br>X | X          | X<br>X         | Refusal            | Refusal      |
| NWDD18-SL-216                        | Soil     |        |            | X<br>X         | X<br>X             | Refusal      |
| NWDD18-SL-217                        | Soil     | X      | X          |                |                    | Refusal      |
| NWDD17-SED-J-4                       | Sediment | X      | X          | X              | Refusal            | Refusal      |
| NWDD17-SED-J-5                       | Sediment | X      | XX         | Refusal        | Refusal            | Refusal      |
| NWDD17-SED-J-6                       | Sediment | X      | See Note 4 | X              | X                  | Refusal      |
| MRP17-SED-J-1                        | Sediment | X      | Refusal    | Refusal        | Refusal            | Refusal      |
| MRP17-SED-J-2                        | Sediment | Х      | Refusal    | Refusal        | Refusal            | Refusal      |
| MRP17-SED-J-3                        | Sediment | Х      | Refusal    | Refusal        | Refusal            | Refusal      |
| Samples Collected                    |          | 33     | 29         | 28             | 18                 | 9            |
| Samples Collected and Archived       |          | 0      | 0          | 26             | 17                 | 9            |
| Samples Collected and Analyzed for F |          | 33     | 29         | 2              | 1                  | 0            |
| Samples Collected and Analyzed for 1 | OC       | 3      | 4          | 1              | 1                  | 0            |

## Notes:

1. Sample Interval represents the target range of inches below ground surface. At some locations refusal was met before the bottom of the target interval, and the actual depth is shallower than the target.

2. X and XX indicate sample interval was collected during processing. X indicates sample interval marked for PCB analysis only, XX indicates sample interval marked for PCB and TOC analysis.

3. Grey shading indicates sample was archived and has not been analyzed.

4. No recovery was achieved in the 6- to 12-inch interval at location NWDD17-SED-J-6 or from the 18- to 24-inch interval at location T11A18-SL-178.

Table 7 Data for 2017 and 2018 Samples Tributary T11A Removal Action Under Paragraph 47.f



| Sample Location: | MRP17-SED-J-01 | MRP17-SED-J-02 | MRP17-SED-J-03 | NWDD17-SED-J-04 | NWDD17-SED-J-04 | NWDD17-SED-J-05 | NWDD17-SED-J-05 | NWDD17-SED-J-06 | NWDD17-SED-J-06 | NWDD17-SL-101 |
|------------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|
| Sample Depth:    | 0 - 3          | 0 - 3          | 0 - 6          | 0 - 6           | 6 - 12          | 0 - 6           | 6 - 11          | 0 - 6           | 12 - 18         | 0 - 6         |
| Date:            | 11/16/17       | 11/16/17       | 11/16/17       | 11/16/17        | 11/16/17        | 11/16/17        | 11/16/17        | 11/16/17        | 11/16/17        | 11/16/17      |
| PCBs             |                |                |                |                 |                 |                 |                 |                 |                 |               |
| Aroclor 1016     | ND(0.084)      | ND(0.11)       | ND(0.045)      | ND(0.054)       | ND(0.039)       | ND(0.04)        | ND(0.057)       | ND(0.043)       | ND(0.036)       | ND(0.062)     |
| Aroclor 1221     | ND(0.084)      | ND(0.11)       | ND(0.045)      | ND(0.054)       | ND(0.039)       | ND(0.04)        | ND(0.057)       | ND(0.043)       | ND(0.036)       | ND(0.062)     |
| Aroclor 1232     | ND(0.084)      | ND(0.11)       | ND(0.045)      | ND(0.054)       | ND(0.039)       | ND(0.04)        | ND(0.057)       | ND(0.043)       | ND(0.036)       | ND(0.062)     |
| Aroclor 1242     | ND(0.084)      | ND(0.11)       | ND(0.045)      | ND(0.054)       | ND(0.039)       | ND(0.04)        | ND(0.057)       | ND(0.043)       | ND(0.036)       | ND(0.062)     |
| Aroclor 1248     | ND(0.084)      | ND(0.11)       | ND(0.045)      | ND(0.054)       | ND(0.039)       | ND(0.04)        | ND(0.057)       | ND(0.043)       | ND(0.036)       | ND(0.062)     |
| Aroclor 1254     | ND(0.084)      | ND(0.11)       | ND(0.045)      | ND(0.054)       | ND(0.039)       | ND(0.04)        | ND(0.057)       | ND(0.043)       | ND(0.036)       | ND(0.062)     |
| Aroclor 1260     | 0.536          | 0.254          | 3.27           | 0.133           | ND(0.039)       | 0.947           | 0.147           | 1.86            | 0.147           | 2.3           |
| Aroclor-1262     | ND(0.084)      | ND(0.11)       | ND(0.045)      | ND(0.054)       | ND(0.039)       | ND(0.04)        | ND(0.057)       | ND(0.043)       | ND(0.036)       | ND(0.062)     |
| Aroclor-1268     | ND(0.084)      | ND(0.11)       | ND(0.045)      | ND(0.054)       | ND(0.039)       | ND(0.04)        | ND(0.057)       | ND(0.043)       | ND(0.036)       | ND(0.062)     |
| Total PCBs       | 0.536          | 0.254          | 3.27           | 0.133           | ND              | 0.947           | 0.147           | 1.86            | 0.147           | 2.3           |
| Miscellaneous    |                |                |                |                 |                 |                 |                 |                 |                 |               |
| TOC              | NA             | NA             | NA             | NA              | NA              | NA              | 58,800          | NA              | NA              | 39,700        |



|               | NWDD17-SL-101 | NWDD17-SL-101 | NWDD17-SL-101 |           | NWDD17-SL-103 |           | NWDD17-SL-104 | NWDD17-SL-105 | NWDD17-SL-105 |           | NWDD17-SL-107 |
|---------------|---------------|---------------|---------------|-----------|---------------|-----------|---------------|---------------|---------------|-----------|---------------|
| Sample Depth: | 6 - 12        | 12 - 18       | 18 - 20       | 0 - 6     | 6 - 12        | 0 - 6     | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6     | 6 - 12        |
| Date:         | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17  | 11/16/17      | 11/16/17  | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17  | 11/16/17      |
| PCBs          |               |               |               |           |               |           |               |               |               |           |               |
| Aroclor 1016  | ND(0.045)     | ND(0.042)     | ND(0.039)     | ND(0.048) | ND(0.048)     | ND(0.054) | ND(0.037)     | ND(0.04)      | ND(0.051)     | ND(0.065) | ND(0.054)     |
| Aroclor 1221  | ND(0.045)     | ND(0.042)     | ND(0.039)     | ND(0.048) | ND(0.048)     | ND(0.054) | ND(0.037)     | ND(0.04)      | ND(0.051)     | ND(0.065) | ND(0.054)     |
| Aroclor 1232  | ND(0.045)     | ND(0.042)     | ND(0.039)     | ND(0.048) | ND(0.048)     | ND(0.054) | ND(0.037)     | ND(0.04)      | ND(0.051)     | ND(0.065) | ND(0.054)     |
| Aroclor 1242  | ND(0.045)     | ND(0.042)     | ND(0.039)     | ND(0.048) | ND(0.048)     | ND(0.054) | ND(0.037)     | ND(0.04)      | ND(0.051)     | ND(0.065) | ND(0.054)     |
| Aroclor 1248  | ND(0.045)     | ND(0.042)     | ND(0.039)     | ND(0.048) | ND(0.048)     | ND(0.054) | ND(0.037)     | ND(0.04)      | ND(0.051)     | ND(0.065) | ND(0.054)     |
| Aroclor 1254  | ND(0.045)     | ND(0.042)     | ND(0.039)     | ND(0.048) | ND(0.048)     | ND(0.054) | ND(0.037)     | ND(0.04)      | ND(0.051)     | ND(0.065) | ND(0.054)     |
| Aroclor 1260  | 17.3          | 0.0458        | ND(0.039)     | 0.519     | 0.227         | 2.19      | 0.0288 J      | 3.09          | 0.602         | 0.717     | 0.22          |
| Aroclor-1262  | ND(0.045)     | ND(0.042)     | ND(0.039)     | ND(0.048) | ND(0.048)     | ND(0.054) | ND(0.037)     | ND(0.04)      | ND(0.051)     | ND(0.065) | ND(0.054)     |
| Aroclor-1268  | ND(0.045)     | ND(0.042)     | ND(0.039)     | ND(0.048) | ND(0.048)     | ND(0.054) | ND(0.037)     | ND(0.04)      | ND(0.051)     | ND(0.065) | ND(0.054)     |
| Total PCBs    | 17.3          | 0.0458        | ND            | 0.519     | 0.227         | 2.19      | 0.0288 J      | 3.09          | 0.602         | 0.717     | 0.22          |
| Miscellaneous |               |               |               |           |               |           |               |               |               |           |               |
| TOC           | 31,200        | 2,940         | 1,640         | NA        | NA            | NA        | NA            | 59,200        | 31,200        | 52,900    | 53,900        |

Table 7 Data for 2017 and 2018 Samples Tributary T11A Removal Action Under Paragraph 47.f



| Sample Location: | NWDD17-SL-108 | NWDD17-SL-108 | NWDD17-SL-110 | NWDD17-SL-110 | NWDD17-SL-112 | NWDD17-SL-112 | NWDD17-SL-113 | NWDD17-SL-113 | NWDD17-SL-114 | NWDD17-SL-114 | NWDD17-SL-116 |
|------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Sample Depth:    | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6         |
| Date:            | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      |
| PCBs             |               |               |               |               |               |               |               |               |               |               |               |
| Aroclor 1016     | ND(0.046)     | ND(0.051)     | ND(0.04)      | ND(0.036)     | ND(0.073)     | ND(0.055)     | ND(0.051)     | ND(0.043)     | ND(0.043)     | ND(0.045)     | ND(0.041)     |
| Aroclor 1221     | ND(0.046)     | ND(0.051)     | ND(0.04)      | ND(0.036)     | ND(0.073)     | ND(0.055)     | ND(0.051)     | ND(0.043)     | ND(0.043)     | ND(0.045)     | ND(0.041)     |
| Aroclor 1232     | ND(0.046)     | ND(0.051)     | ND(0.04)      | ND(0.036)     | ND(0.073)     | ND(0.055)     | ND(0.051)     | ND(0.043)     | ND(0.043)     | ND(0.045)     | ND(0.041)     |
| Aroclor 1242     | ND(0.046)     | ND(0.051)     | ND(0.04)      | ND(0.036)     | ND(0.073)     | ND(0.055)     | ND(0.051)     | ND(0.043)     | ND(0.043)     | ND(0.045)     | ND(0.041)     |
| Aroclor 1248     | ND(0.046)     | ND(0.051)     | ND(0.04)      | ND(0.036)     | ND(0.073)     | ND(0.055)     | ND(0.051)     | ND(0.043)     | ND(0.043)     | ND(0.045)     | ND(0.041)     |
| Aroclor 1254     | ND(0.046)     | ND(0.051)     | ND(0.04)      | ND(0.036)     | ND(0.073)     | ND(0.055)     | ND(0.051)     | ND(0.043)     | ND(0.043)     | ND(0.045)     | ND(0.041)     |
| Aroclor 1260     | 1.22          | 0.856         | 1.15          | 0.498         | 2.95          | 0.817         | 0.143         | 0.0304 J      | 1.3           | 0.864         | 0.111         |
| Aroclor-1262     | ND(0.046)     | ND(0.051)     | ND(0.04)      | ND(0.036)     | ND(0.073)     | ND(0.055)     | ND(0.051)     | ND(0.043)     | ND(0.043)     | ND(0.045)     | ND(0.041)     |
| Aroclor-1268     | ND(0.046)     | ND(0.051)     | ND(0.04)      | ND(0.036)     | ND(0.073)     | ND(0.055)     | ND(0.051)     | ND(0.043)     | ND(0.043)     | ND(0.045)     | ND(0.041)     |
| Total PCBs       | 1.22          | 0.856         | 1.15          | 0.498         | 2.95          | 0.817         | 0.143         | 0.0304 J      | 1.3           | 0.864         | 0.111         |
| Miscellaneous    |               |               |               |               |               |               |               |               |               |               |               |
| TOC              | NA            |



|               | NWDD17-SL-116 | NWDD17-SL-117 | NWDD17-SL-117 | NWDD17-SL-118 | NWDD17-SL-118 | NWDD17-SL-119 | NWDD17-SL-119 | NWDD17-SL-120 | NWDD17-SL-120 |           | NWDD17-SL-122 |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------|---------------|
| Sample Depth: | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6     | 6 - 12        |
| Date:         | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17  | 11/16/17      |
| PCBs          |               |               |               |               |               |               |               |               |               |           |               |
| Aroclor 1016  | ND(0.04)      | ND(0.048)     | ND(0.051)     | ND(0.049)     | ND(0.046)     | ND(0.056)     | ND(0.041)     | ND(0.036)     | ND(0.039)     | ND(0.038) | ND(0.039)     |
| Aroclor 1221  | ND(0.04)      | ND(0.048)     | ND(0.051)     | ND(0.049)     | ND(0.046)     | ND(0.056)     | ND(0.041)     | ND(0.036)     | ND(0.039)     | ND(0.038) | ND(0.039)     |
| Aroclor 1232  | ND(0.04)      | ND(0.048)     | ND(0.051)     | ND(0.049)     | ND(0.046)     | ND(0.056)     | ND(0.041)     | ND(0.036)     | ND(0.039)     | ND(0.038) | ND(0.039)     |
| Aroclor 1242  | ND(0.04)      | ND(0.048)     | ND(0.051)     | ND(0.049)     | ND(0.046)     | ND(0.056)     | ND(0.041)     | ND(0.036)     | ND(0.039)     | ND(0.038) | ND(0.039)     |
| Aroclor 1248  | ND(0.04)      | ND(0.048)     | ND(0.051)     | ND(0.049)     | ND(0.046)     | ND(0.056)     | ND(0.041)     | ND(0.036)     | ND(0.039)     | ND(0.038) | ND(0.039)     |
| Aroclor 1254  | ND(0.04)      | ND(0.048)     | ND(0.051)     | ND(0.049)     | ND(0.046)     | ND(0.056)     | ND(0.041)     | ND(0.036)     | ND(0.039)     | ND(0.038) | ND(0.039)     |
| Aroclor 1260  | 0.123         | 0.483         | 0.111         | 0.135         | 0.118         | 0.89          | 0.917         | 0.0727        | 0.187         | 0.231     | 0.09          |
| Aroclor-1262  | ND(0.04)      | ND(0.048)     | ND(0.051)     | ND(0.049)     | ND(0.046)     | ND(0.056)     | ND(0.041)     | ND(0.036)     | ND(0.039)     | ND(0.038) | ND(0.039)     |
| Aroclor-1268  | ND(0.04)      | ND(0.048)     | ND(0.051)     | ND(0.049)     | ND(0.046)     | ND(0.056)     | ND(0.041)     | ND(0.036)     | ND(0.039)     | ND(0.038) | ND(0.039)     |
| Total PCBs    | 0.123         | 0.483         | 0.111         | 0.135         | 0.118         | 0.89          | 0.917         | 0.0727        | 0.187         | 0.231     | 0.09          |
| Miscellaneous |               |               |               |               |               |               |               |               |               |           |               |
| TOC           | NA            | NA        | NA            |



| Sample Location: | NWDD17-SL-123 | NWDD17-SL-123 | NWDD18-SED-201 | NWDD18-SED-201 | NWDD18-SED-202 | NWDD18-SED-202 | NWDD18-SL-199 | NWDD18-SL-199 | NWDD18-SL-200        | NWDD18-SL-200 |
|------------------|---------------|---------------|----------------|----------------|----------------|----------------|---------------|---------------|----------------------|---------------|
| Sample Depth:    | 0 - 6         | 6 - 12        | 0 - 6          | 6 - 12         | 0 - 6          | 6 - 12         | 0 - 6         | 6 - 12        | 0 - 6                | 6 - 12        |
| Date:            | 11/16/17      | 11/16/17      | 01/17/18       | 01/17/18       | 01/17/18       | 01/17/18       | 01/17/18      | 01/17/18      | 01/17/18             | 01/17/18      |
| PCBs             |               |               |                |                |                |                |               |               |                      |               |
| Aroclor 1016     | ND(0.038)     | ND(0.037)     | ND(0.052)      | ND(0.06)       | ND(0.06)       | ND(0.048)      | ND(0.044)     | ND(0.044)     | ND(0.046) [ND(0.11)] | ND(0.041)     |
| Aroclor 1221     | ND(0.038)     | ND(0.037)     | ND(0.052)      | ND(0.06)       | ND(0.06)       | ND(0.048)      | ND(0.044)     | ND(0.044)     | ND(0.046) [ND(0.11)] | ND(0.041)     |
| Aroclor 1232     | ND(0.038)     | ND(0.037)     | ND(0.052)      | ND(0.06)       | ND(0.06)       | ND(0.048)      | ND(0.044)     | ND(0.044)     | ND(0.046) [ND(0.11)] | ND(0.041)     |
| Aroclor 1242     | ND(0.038)     | ND(0.037)     | ND(0.052)      | ND(0.06)       | ND(0.06)       | ND(0.048)      | ND(0.044)     | ND(0.044)     | ND(0.046) [ND(0.11)] | ND(0.041)     |
| Aroclor 1248     | ND(0.038)     | ND(0.037)     | ND(0.052)      | ND(0.06)       | ND(0.06)       | ND(0.048)      | ND(0.044)     | ND(0.044)     | ND(0.046) [ND(0.11)] | ND(0.041)     |
| Aroclor 1254     | ND(0.038)     | ND(0.037)     | ND(0.052)      | ND(0.06)       | ND(0.06)       | ND(0.048)      | ND(0.044)     | ND(0.044)     | ND(0.046) [ND(0.11)] | ND(0.041)     |
| Aroclor 1260     | 0.722         | 0.778         | 0.156          | ND(0.06)       | 0.547          | 0.44           | 0.0702        | 0.0479        | 0.168 [0.222]        | 0.04 J        |
| Aroclor-1262     | ND(0.038)     | ND(0.037)     | ND(0.052)      | ND(0.06)       | ND(0.06)       | ND(0.048)      | ND(0.044)     | ND(0.044)     | ND(0.046) [ND(0.11)] | ND(0.041)     |
| Aroclor-1268     | ND(0.038)     | ND(0.037)     | ND(0.052)      | ND(0.06)       | ND(0.06)       | ND(0.048)      | ND(0.044)     | ND(0.044)     | ND(0.046) [ND(0.11)] | ND(0.041)     |
| Total PCBs       | 0.722         | 0.778         | 0.156          | ND             | 0.547          | 0.44           | 0.0702        | 0.0479        | 0.168 [0.222]        | 0.04 J        |
| Miscellaneous    |               |               |                |                |                |                |               |               |                      |               |
| TOC              | NA            | NA            | NA             | NA             | NA             | NA             | NA            | NA            | NA                   | NA            |



|               | NWDD18-SL-203 | NWDD18-SL-203 | NWDD18-SL-204 | NWDD18-SL-204 | NWDD18-SL-205 | NWDD18-SL-205 | NWDD18-SL-206 | NWDD18-SL-206 | NWDD18-SL-216         | NWDD18-SL-216 | NWDD18-SL-217 |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------------|---------------|---------------|
| Sample Depth: | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6                 | 6 - 12        | 0 - 6         |
| Date:         | 01/17/18      | 01/17/18      | 01/17/18      | 01/17/18      | 01/17/18      | 01/17/18      | 01/17/18      | 01/17/18      | 03/28/18              | 03/28/18      | 03/28/18      |
| PCBs          |               |               |               |               |               |               |               |               |                       |               |               |
| Aroclor 1016  | ND(0.09)      | ND(0.043)     | ND(0.043)     | ND(0.056)     | ND(0.054)     | ND(0.041)     | ND(0.045)     | ND(0.045)     | ND(0.058) [ND(0.056)] | ND(0.047)     | ND(0.048)     |
| Aroclor 1221  | ND(0.09)      | ND(0.043)     | ND(0.043)     | ND(0.056)     | ND(0.054)     | ND(0.041)     | ND(0.045)     | ND(0.045)     | ND(0.058) [ND(0.056)] | ND(0.047)     | ND(0.048)     |
| Aroclor 1232  | ND(0.09)      | ND(0.043)     | ND(0.043)     | ND(0.056)     | ND(0.054)     | ND(0.041)     | ND(0.045)     | ND(0.045)     | ND(0.058) [ND(0.056)] | ND(0.047)     | ND(0.048)     |
| Aroclor 1242  | ND(0.09)      | ND(0.043)     | ND(0.043)     | ND(0.056)     | ND(0.054)     | ND(0.041)     | ND(0.045)     | ND(0.045)     | ND(0.058) [ND(0.056)] | ND(0.047)     | ND(0.048)     |
| Aroclor 1248  | ND(0.09)      | ND(0.043)     | ND(0.043)     | ND(0.056)     | ND(0.054)     | ND(0.041)     | ND(0.045)     | ND(0.045)     | ND(0.058) [ND(0.056)] | ND(0.047)     | ND(0.048)     |
| Aroclor 1254  | ND(0.09)      | ND(0.043)     | ND(0.043)     | ND(0.056)     | ND(0.054)     | ND(0.041)     | ND(0.045)     | ND(0.045)     | ND(0.058) [ND(0.056)] | ND(0.047)     | ND(0.048)     |
| Aroclor 1260  | 1.34          | 0.165         | 0.0415 J      | 0.0564        | 0.07          | 0.236         | 0.172         | 0.431         | 0.29 [0.592]          | 0.161         | 0.783         |
| Aroclor-1262  | ND(0.09)      | ND(0.043)     | ND(0.043)     | ND(0.056)     | ND(0.054)     | ND(0.041)     | ND(0.045)     | ND(0.045)     | ND(0.058) [ND(0.056)] | ND(0.047)     | ND(0.048)     |
| Aroclor-1268  | ND(0.09)      | ND(0.043)     | ND(0.043)     | ND(0.056)     | ND(0.054)     | ND(0.041)     | ND(0.045)     | ND(0.045)     | ND(0.058) [ND(0.056)] | ND(0.047)     | ND(0.048)     |
| Total PCBs    | 1.34          | 0.165         | 0.0415 J      | 0.0564        | 0.07          | 0.236         | 0.172         | 0.431         | 0.29 [0.592]          | 0.161         | 0.783         |
| Miscellaneous |               |               |               |               |               |               |               |               |                       |               |               |
| TOC           | NA                    | NA            | NA            |



| Sample Location: |                       | T11A17-SED-31 | T11A17-SED-40 | T11A17-SED-49 | T11A17-SED-J-1 | T11A17-SED-J-1 | T11A17-SED-J-10 | T11A17-SED-J-10 | T11A17-SED-J-2 | T11A17-SED-J-2 | T11A17-SED-J-3 |
|------------------|-----------------------|---------------|---------------|---------------|----------------|----------------|-----------------|-----------------|----------------|----------------|----------------|
| Sample Depth:    |                       | 0 - 6         | 0 - 6         | 0 - 6         | 0 - 6          | 6 - 12         | 0 - 6           | 6 - 10          | 0 - 6          | 6 - 8          | 0 - 6          |
| Date:            | 03/28/18              | 11/09/17      | 11/09/17      | 11/10/17      | 11/08/17       | 11/08/17       | 11/16/17        | 11/16/17        | 11/08/17       | 11/08/17       | 11/08/17       |
| PCBs             |                       |               |               |               |                |                |                 |                 |                |                |                |
| Aroclor 1016     | ND(0.049) [ND(0.048)] | ND(0.037)     | ND(0.043)     | ND(0.036)     | ND(0.038)      | ND(0.035)      | ND(0.035)       | ND(0.039)       | ND(0.038)      | ND(0.04)       | ND(0.039)      |
| Aroclor 1221     | ND(0.049) [ND(0.048)] | ND(0.037)     | ND(0.043)     | ND(0.036)     | ND(0.038)      | ND(0.035)      | ND(0.035)       | ND(0.039)       | ND(0.038)      | ND(0.04)       | ND(0.039)      |
| Aroclor 1232     | ND(0.049) [ND(0.048)] | ND(0.037)     | ND(0.043)     | ND(0.036)     | ND(0.038)      | ND(0.035)      | ND(0.035)       | ND(0.039)       | ND(0.038)      | ND(0.04)       | ND(0.039)      |
| Aroclor 1242     | ND(0.049) [ND(0.048)] | ND(0.037)     | ND(0.043)     | ND(0.036)     | ND(0.038)      | ND(0.035)      | ND(0.035)       | ND(0.039)       | ND(0.038)      | ND(0.04)       | ND(0.039)      |
| Aroclor 1248     | ND(0.049) [ND(0.048)] | ND(0.037)     | ND(0.043)     | ND(0.036)     | ND(0.038)      | ND(0.035)      | ND(0.035)       | ND(0.039)       | ND(0.038)      | ND(0.04)       | ND(0.039)      |
| Aroclor 1254     | ND(0.049) [ND(0.048)] | ND(0.037)     | ND(0.043)     | ND(0.036)     | ND(0.038)      | ND(0.035)      | ND(0.035)       | ND(0.039)       | ND(0.038)      | ND(0.04)       | ND(0.039)      |
| Aroclor 1260     | ND(0.049) [ND(0.048)] | 2.91          | 1.18          | 3.22          | 3.65           | 1.29           | 0.609           | 0.535           | 1.85           | 0.329          | 0.962          |
| Aroclor-1262     | 0.0154 J [0.0205 J]   | ND(0.037)     | ND(0.043)     | ND(0.036)     | ND(0.038)      | ND(0.035)      | ND(0.035)       | ND(0.039)       | ND(0.038)      | ND(0.04)       | ND(0.039)      |
| Aroclor-1268     | ND(0.049) [ND(0.048)] | ND(0.037)     | ND(0.043)     | ND(0.036)     | ND(0.038)      | ND(0.035)      | ND(0.035)       | ND(0.039)       | ND(0.038)      | ND(0.04)       | ND(0.039)      |
| Total PCBs       | 0.0154 J [0.0205 J]   | 2.91          | 1.18          | 3.22          | 3.65           | 1.29           | 0.609           | 0.535           | 1.85           | 0.329          | 0.962          |
| Miscellaneous    |                       |               |               |               |                |                |                 |                 |                |                |                |
| TOC              | NA                    | NA            | NA            | NA            | NA             | NA             | NA              | NA              | NA             | NA             | 1,320          |

Table 7 Data for 2017 and 2018 Samples Tributary T11A Removal Action Under Paragraph 47.f



| Sample Location: | T11A17-SED-J-3 | T11A17-SED-J-4 | T11A17-SED-J-5 | T11A17-SED-J-6 | T11A17-SED-J-7 | T11A17-SED-J-8 | T11A17-SED-J-9 | T11A17-SL-1 | T11A17-SL-10 | T11A17-SL-10 | T11A17-SL-100 | T11A17-SL-100 |
|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------|--------------|--------------|---------------|---------------|
| Sample Depth:    | 6 - 8          | 0 - 6          | 0 - 6          | 0 - 6          | 0 - 6          | 0 - 3          | 0 - 4          | 0 - 6       | 0 - 6        | 6 - 12       | 0 - 6         | 6 - 12        |
| Date:            | 11/08/17       | 11/09/17       | 11/09/17       | 11/09/17       | 11/14/17       | 11/14/17       | 11/14/17       | 11/07/17    | 11/08/17     | 11/08/17     | 11/14/17      | 11/14/17      |
| PCBs             |                |                |                |                |                |                |                |             |              |              |               |               |
| Aroclor 1016     | ND(0.036)      | ND(0.039)      | ND(0.036)      | ND(0.038)      | ND(0.038)      | ND(0.04)       | ND(0.037)      | ND(0.038)   | ND(0.14)     | ND(0.042)    | ND(0.041)     | ND(0.042)     |
| Aroclor 1221     | ND(0.036)      | ND(0.039)      | ND(0.036)      | ND(0.038)      | ND(0.038)      | ND(0.04)       | ND(0.037)      | ND(0.038)   | ND(0.14)     | ND(0.042)    | ND(0.041)     | ND(0.042)     |
| Aroclor 1232     | ND(0.036)      | ND(0.039)      | ND(0.036)      | ND(0.038)      | ND(0.038)      | ND(0.04)       | ND(0.037)      | ND(0.038)   | ND(0.14)     | ND(0.042)    | ND(0.041)     | ND(0.042)     |
| Aroclor 1242     | ND(0.036)      | ND(0.039)      | ND(0.036)      | ND(0.038)      | ND(0.038)      | ND(0.04)       | ND(0.037)      | ND(0.038)   | ND(0.14)     | ND(0.042)    | ND(0.041)     | ND(0.042)     |
| Aroclor 1248     | ND(0.036)      | ND(0.039)      | ND(0.036)      | ND(0.038)      | ND(0.038)      | ND(0.04)       | ND(0.037)      | ND(0.038)   | ND(0.14)     | ND(0.042)    | ND(0.041)     | ND(0.042)     |
| Aroclor 1254     | ND(0.036)      | ND(0.039)      | ND(0.036)      | ND(0.038)      | ND(0.038)      | ND(0.04)       | ND(0.037)      | ND(0.038)   | ND(0.14)     | ND(0.042)    | ND(0.041)     | ND(0.042)     |
| Aroclor 1260     | 0.572          | 1.28           | 0.561          | 1.53           | 4.32           | 0.596          | 0.135          | 0.0589      | 36.7         | 114          | 0.245         | 0.101         |
| Aroclor-1262     | ND(0.036)      | ND(0.039)      | ND(0.036)      | ND(0.038)      | ND(0.038)      | ND(0.04)       | ND(0.037)      | ND(0.038)   | ND(0.14)     | ND(0.042)    | ND(0.041)     | ND(0.042)     |
| Aroclor-1268     | ND(0.036)      | ND(0.039)      | ND(0.036)      | ND(0.038)      | ND(0.038)      | ND(0.04)       | ND(0.037)      | ND(0.038)   | ND(0.14)     | ND(0.042)    | ND(0.041)     | ND(0.042)     |
| Total PCBs       | 0.572          | 1.28           | 0.561          | 1.53           | 4.32           | 0.596          | 0.135          | 0.0589      | 36.7         | 114          | 0.245         | 0.101         |
| Miscellaneous    |                |                |                |                |                |                |                |             |              |              |               |               |
| TOC              | 1,210          | NA             | 2,290          | NA             | NA             | NA             | NA             | NA          | NA           | NA           | NA            | NA            |

Table 7 Data for 2017 and 2018 Samples Tributary T11A Removal Action Under Paragraph 47.f



| Sample Location: | T11A17-SL-102 | T11A17-SL-102 | T11A17-SL-106 | T11A17-SL-106 | T11A17-SL-109 | T11A17-SL-109 | T11A17-SL-109 | T11A17-SL-11 | T11A17-SL-11 | T11A17-SL-111 | T11A17-SL-111 | T11A17-SL-115         |
|------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|---------------|---------------|-----------------------|
| Sample Depth:    | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12        | 12 - 18       | 0 - 6        | 6 - 12       | 0 - 6         | 6 - 11        | 0 - 6                 |
| Date:            | 11/14/17      | 11/14/17      | 11/14/17      | 11/14/17      | 11/14/17      | 11/14/17      | 11/14/17      | 11/08/17     | 11/08/17     | 11/16/17      | 11/16/17      | 11/14/17              |
| PCBs             |               |               |               |               |               |               |               |              |              |               |               |                       |
| Aroclor 1016     | ND(0.041)     | ND(0.04)      | ND(0.047)     | ND(0.04)      | ND(0.049)     | ND(0.043)     | ND(0.043)     | ND(0.038)    | ND(0.035)    | ND(0.038)     | ND(0.038)     | ND(0.047) [ND(0.044)] |
| Aroclor 1221     | ND(0.041)     | ND(0.04)      | ND(0.047)     | ND(0.04)      | ND(0.049)     | ND(0.043)     | ND(0.043)     | ND(0.038)    | ND(0.035)    | ND(0.038)     | ND(0.038)     | ND(0.047) [ND(0.044)] |
| Aroclor 1232     | ND(0.041)     | ND(0.04)      | ND(0.047)     | ND(0.04)      | ND(0.049)     | ND(0.043)     | ND(0.043)     | ND(0.038)    | ND(0.035)    | ND(0.038)     | ND(0.038)     | ND(0.047) [ND(0.044)] |
| Aroclor 1242     | ND(0.041)     | ND(0.04)      | ND(0.047)     | ND(0.04)      | ND(0.049)     | ND(0.043)     | ND(0.043)     | ND(0.038)    | ND(0.035)    | ND(0.038)     | ND(0.038)     | ND(0.047) [ND(0.044)] |
| Aroclor 1248     | ND(0.041)     | ND(0.04)      | ND(0.047)     | ND(0.04)      | ND(0.049)     | ND(0.043)     | ND(0.043)     | ND(0.038)    | ND(0.035)    | ND(0.038)     | ND(0.038)     | ND(0.047) [ND(0.044)] |
| Aroclor 1254     | ND(0.041)     | ND(0.04)      | ND(0.047)     | ND(0.04)      | ND(0.049)     | ND(0.043)     | ND(0.043)     | ND(0.038)    | ND(0.035)    | ND(0.038)     | ND(0.038)     | ND(0.047) [ND(0.044)] |
| Aroclor 1260     | 0.155         | 0.0924        | 0.189         | 0.0503        | 0.479         | 0.26          | 0.21          | 0.203        | ND(0.035)    | 4.74          | 13            | 0.845 [0.782]         |
| Aroclor-1262     | ND(0.041)     | ND(0.04)      | ND(0.047)     | ND(0.04)      | ND(0.049)     | ND(0.043)     | ND(0.043)     | ND(0.038)    | ND(0.035)    | ND(0.038)     | ND(0.038)     | ND(0.047) [ND(0.044)] |
| Aroclor-1268     | ND(0.041)     | ND(0.04)      | ND(0.047)     | ND(0.04)      | ND(0.049)     | ND(0.043)     | ND(0.043)     | ND(0.038)    | ND(0.035)    | ND(0.038)     | ND(0.038)     | ND(0.047) [ND(0.044)] |
| Total PCBs       | 0.155         | 0.0924        | 0.189         | 0.0503        | 0.479         | 0.26          | 0.21          | 0.203        | ND           | 4.74          | 13            | 0.845 [0.782]         |
| Miscellaneous    |               |               |               |               |               |               |               |              |              |               |               |                       |
| TOC              | NA            | NA           | NA           | NA            | NA            | NA                    |



| Sample Location: | T11A17-SL-115 | T11A17-SL-12 | T11A17-SL-12 | T11A17-SL-121 | T11A17-SL-121 | T11A17-SL-121 | T11A17-SL-124 | T11A17-SL-124 | T11A17-SL-125 | T11A17-SL-125         | T11A17-SL-125 | T11A17-SL-126 |
|------------------|---------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------------|---------------|---------------|
| Sample Depth:    | 6 - 12        | 0 - 6        | 6 - 12       | 0 - 6         | 6 - 12        | 12 - 18       | 0 - 6         | 6 - 12        | 0 - 6         | 6 - 12                | 12 - 18       | 0 - 6         |
| Date:            | 11/14/17      | 11/08/17     | 11/08/17     | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17              | 11/16/17      | 11/16/17      |
| PCBs             |               |              |              |               |               |               |               |               |               |                       |               |               |
| Aroclor 1016     | ND(0.04)      | ND(0.041)    | ND(0.036)    | ND(0.042)     | ND(0.038)     | ND(0.042)     | ND(0.037)     | ND(0.042)     | ND(0.042)     | ND(0.036) [ND(0.037)] |               | ND(0.045)     |
| Aroclor 1221     | ND(0.04)      | ND(0.041)    | ND(0.036)    | ND(0.042)     | ND(0.038)     | ND(0.042)     | ND(0.037)     | ND(0.042)     | ND(0.042)     | ND(0.036) [ND(0.037)] | ND(0.04)      | ND(0.045)     |
| Aroclor 1232     | ND(0.04)      | ND(0.041)    | ND(0.036)    | ND(0.042)     | ND(0.038)     | ND(0.042)     | ND(0.037)     | ND(0.042)     | ND(0.042)     | ND(0.036) [ND(0.037)] | ND(0.04)      | ND(0.045)     |
| Aroclor 1242     | ND(0.04)      | ND(0.041)    | ND(0.036)    | ND(0.042)     | ND(0.038)     | ND(0.042)     | ND(0.037)     | ND(0.042)     | ND(0.042)     | ND(0.036) [ND(0.037)] | ND(0.04)      | ND(0.045)     |
| Aroclor 1248     | ND(0.04)      | ND(0.041)    | ND(0.036)    | ND(0.042)     | ND(0.038)     | ND(0.042)     | ND(0.037)     | ND(0.042)     | ND(0.042)     | ND(0.036) [ND(0.037)] | ND(0.04)      | ND(0.045)     |
| Aroclor 1254     | ND(0.04)      | ND(0.041)    | ND(0.036)    | ND(0.042)     | ND(0.038)     | ND(0.042)     | ND(0.037)     | ND(0.042)     | ND(0.042)     | ND(0.036) [ND(0.037)] | ND(0.04)      | ND(0.045)     |
| Aroclor 1260     | 0.0322 J      | 0.238        | ND(0.036)    | 0.155         | ND(0.038)     | ND(0.042)     | 0.172         | ND(0.042)     | 0.143         | ND(0.036) [ND(0.037)] | ND(0.04)      | 0.534         |
| Aroclor-1262     | ND(0.04)      | ND(0.041)    | ND(0.036)    | ND(0.042)     | ND(0.038)     | ND(0.042)     | ND(0.037)     | ND(0.042)     | ND(0.042)     | ND(0.036) [ND(0.037)] | ND(0.04)      | ND(0.045)     |
| Aroclor-1268     | ND(0.04)      | ND(0.041)    | ND(0.036)    | ND(0.042)     | ND(0.038)     | ND(0.042)     | ND(0.037)     | ND(0.042)     | ND(0.042)     | ND(0.036) [ND(0.037)] | ND(0.04)      | ND(0.045)     |
| Total PCBs       | 0.0322 J      | 0.238        | ND           | 0.155         | ND            | ND            | 0.172         | ND            | 0.143         | ND [ND]               | ND            | 0.534         |
| Miscellaneous    |               |              |              |               |               |               |               |               |               |                       |               |               |
| TOC              | NA            | NA           | NA           | NA            | NA            | NA            | NA            | NA            | NA            | NA                    | NA            | NA            |



| Sample Location:<br>Sample Depth: | T11A17-SL-126<br>6 - 12 | T11A17-SL-127<br>0 - 6 | T11A17-SL-127<br>6 - 12 | T11A17-SL-128<br>0 - 6 | T11A17-SL-128<br>6 - 12 | T11A17-SL-129<br>0 - 6 | T11A17-SL-129<br>6 - 12 | T11A17-SL-13<br>0 - 6 | T11A17-SL-13<br>6 - 12 | T11A17-SL-130<br>0 - 6 | T11A17-SL-130<br>6 - 11 | T11A17-SL-131<br>0 - 6 |
|-----------------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|-----------------------|------------------------|------------------------|-------------------------|------------------------|
| Date:                             | 11/16/17                | 11/16/17               | 11/16/17                | 11/16/17               | 11/16/17                | 11/16/17               | 11/16/17                | 11/08/17              | 11/08/17               | 11/16/17               | 11/16/17                | 11/16/17               |
| PCBs                              |                         |                        |                         |                        |                         |                        |                         |                       |                        |                        |                         |                        |
| Aroclor 1016                      | ND(0.043)               | ND(0.041)              | ND(0.047)               | ND(0.051)              | ND(0.037)               | ND(0.049)              | ND(0.039)               | ND(0.044)             | ND(0.037)              | ND(0.095)              | ND(0.066)               | ND(0.048)              |
| Aroclor 1221                      | ND(0.043)               | ND(0.041)              | ND(0.047)               | ND(0.051)              | ND(0.037)               | ND(0.049)              | ND(0.039)               | ND(0.044)             | ND(0.037)              | ND(0.095)              | ND(0.066)               | ND(0.048)              |
| Aroclor 1232                      | ND(0.043)               | ND(0.041)              | ND(0.047)               | ND(0.051)              | ND(0.037)               | ND(0.049)              | ND(0.039)               | ND(0.044)             | ND(0.037)              | ND(0.095)              | ND(0.066)               | ND(0.048)              |
| Aroclor 1242                      | ND(0.043)               | ND(0.041)              | ND(0.047)               | ND(0.051)              | ND(0.037)               | ND(0.049)              | ND(0.039)               | ND(0.044)             | ND(0.037)              | ND(0.095)              | ND(0.066)               | ND(0.048)              |
| Aroclor 1248                      | ND(0.043)               | ND(0.041)              | ND(0.047)               | ND(0.051)              | ND(0.037)               | ND(0.049)              | ND(0.039)               | ND(0.044)             | ND(0.037)              | ND(0.095)              | ND(0.066)               | ND(0.048)              |
| Aroclor 1254                      | ND(0.043)               | ND(0.041)              | ND(0.047)               | ND(0.051)              | ND(0.037)               | ND(0.049)              | ND(0.039)               | ND(0.044)             | ND(0.037)              | ND(0.095)              | ND(0.066)               | ND(0.048)              |
| Aroclor 1260                      | ND(0.043)               | 0.0282 J               | ND(0.047)               | 1.9                    | 0.628                   | 0.136                  | 0.0262 J                | 314                   | 10.8                   | 30.6                   | 16.5                    | 6.57                   |
| Aroclor-1262                      | ND(0.043)               | ND(0.041)              | ND(0.047)               | ND(0.051)              | ND(0.037)               | ND(0.049)              | ND(0.039)               | ND(0.044)             | ND(0.037)              | ND(0.095)              | ND(0.066)               | ND(0.048)              |
| Aroclor-1268                      | ND(0.043)               | ND(0.041)              | ND(0.047)               | ND(0.051)              | ND(0.037)               | ND(0.049)              | ND(0.039)               | ND(0.044)             | ND(0.037)              | ND(0.095)              | ND(0.066)               | ND(0.048)              |
| Total PCBs                        | ND                      | 0.0282 J               | ND                      | 1.9                    | 0.628                   | 0.136                  | 0.0262 J                | 314                   | 10.8                   | 30.6                   | 16.5                    | 6.57                   |
| Miscellaneous                     |                         |                        |                         |                        |                         |                        |                         |                       |                        |                        |                         |                        |
| TOC                               | NA                      | NA                     | NA                      | NA                     | NA                      | NA                     | NA                      | NA                    | NA                     | NA                     | NA                      | NA                     |



| Sample Location:<br>Sample Depth: | T11A17-SL-131<br>6 - 12 | T11A17-SL-132<br>0 - 6 | T11A17-SL-132<br>6 - 12 | T11A17-SL-133<br>0 - 6 | T11A17-SL-133<br>6 - 12 | T11A17-SL-134<br>0 - 6 | T11A17-SL-134<br>6 - 12 | T11A17-SL-135<br>0 - 6 | T11A17-SL-135<br>6 - 12 | T11A17-SL-136<br>0 - 6 | T11A17-SL-136<br>6 - 12 | T11A17-SL-137<br>0 - 6 |
|-----------------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|
| Date:                             | 11/16/17                | 11/16/17               | 11/16/17                | 11/16/17               | 11/16/17                | 11/16/17               | 11/16/17                | 11/16/17               | 11/16/17                | 11/16/17               | 11/16/17                | 11/16/17               |
| PCBs                              |                         |                        |                         |                        |                         |                        |                         |                        |                         |                        |                         |                        |
| Aroclor 1016                      | ND(0.037)               | ND(0.043)              | ND(0.035)               | ND(0.045)              | ND(0.038)               | ND(0.039)              | ND(0.04)                | ND(0.049)              | ND(0.045)               | ND(0.042)              | ND(0.039)               | ND(0.042) [ND(0.049)]  |
| Aroclor 1221                      | ND(0.037)               | ND(0.043)              | ND(0.035)               | ND(0.045)              | ND(0.038)               | ND(0.039)              | ND(0.04)                | ND(0.049)              | ND(0.045)               | ND(0.042)              | ND(0.039)               | ND(0.042) [ND(0.049)]  |
| Aroclor 1232                      | ND(0.037)               | ND(0.043)              | ND(0.035)               | ND(0.045)              | ND(0.038)               | ND(0.039)              | ND(0.04)                | ND(0.049)              | ND(0.045)               | ND(0.042)              |                         | ND(0.042) [ND(0.049)]  |
| Aroclor 1242                      | ND(0.037)               | ND(0.043)              | ND(0.035)               | ND(0.045)              | ND(0.038)               | ND(0.039)              | ND(0.04)                | ND(0.049)              | ND(0.045)               | ND(0.042)              | ND(0.039)               | ND(0.042) [ND(0.049)]  |
| Aroclor 1248                      | ND(0.037)               | ND(0.043)              | ND(0.035)               | ND(0.045)              | ND(0.038)               | ND(0.039)              | ND(0.04)                | ND(0.049)              | ND(0.045)               | ND(0.042)              | ND(0.039)               | ND(0.042) [ND(0.049)]  |
| Aroclor 1254                      | ND(0.037)               | ND(0.043)              | ND(0.035)               | ND(0.045)              | ND(0.038)               | ND(0.039)              | ND(0.04)                | ND(0.049)              | ND(0.045)               | ND(0.042)              | ND(0.039)               | ND(0.042) [ND(0.049)]  |
| Aroclor 1260                      | 0.784                   | 0.0597                 | ND(0.035)               | 0.481                  | 0.222                   | 0.117                  | 0.0705                  | 0.199                  | 0.076                   | 0.22                   | 0.198                   | 0.273 [0.401]          |
| Aroclor-1262                      | ND(0.037)               | ND(0.043)              | ND(0.035)               | ND(0.045)              | ND(0.038)               | ND(0.039)              | ND(0.04)                | ND(0.049)              | ND(0.045)               | ND(0.042)              | ND(0.039)               | ND(0.042) [ND(0.049)]  |
| Aroclor-1268                      | ND(0.037)               | ND(0.043)              | ND(0.035)               | ND(0.045)              | ND(0.038)               | ND(0.039)              | ND(0.04)                | ND(0.049)              | ND(0.045)               | ND(0.042)              | ND(0.039)               | ND(0.042) [ND(0.049)]  |
| Total PCBs                        | 0.784                   | 0.0597                 | ND                      | 0.481                  | 0.222                   | 0.117                  | 0.0705                  | 0.199                  | 0.076                   | 0.22                   | 0.198                   | 0.273 [0.401]          |
| Miscellaneous                     |                         |                        |                         |                        |                         |                        |                         |                        |                         |                        |                         |                        |
| TOC                               | NA                      | NA                     | NA                      | 30,000 [38,100]        |



| Sample Location: |           | T11A17-SL-138 |           |           |           | T11A17-SL-139 |           |           |           | T11A17-SL-140 |           |           |
|------------------|-----------|---------------|-----------|-----------|-----------|---------------|-----------|-----------|-----------|---------------|-----------|-----------|
| Sample Depth:    | 6 - 12    | 0 - 6         | 6 - 12    | 12 - 18   | 18 - 22   | 0 - 6         | 6 - 12    | 0 - 6     | 6 - 12    | 0 - 6         | 6 - 12    | 0 - 6     |
| Date:            | 11/16/17  | 11/16/17      | 11/16/17  | 11/16/17  | 11/16/17  | 11/16/17      | 11/16/17  | 11/07/17  | 11/07/17  | 11/16/17      | 11/16/17  | 11/16/17  |
| PCBs             |           |               |           |           |           |               |           |           |           |               |           |           |
| Aroclor 1016     | ND(0.036) | ND(0.052)     | ND(0.045) | ND(0.046) | ND(0.042) | ND(0.037)     | ND(0.034) | ND(0.037) | ND(0.035) | ND(0.037)     | ND(0.037) | ND(0.042) |
| Aroclor 1221     | ND(0.036) | ND(0.052)     | ND(0.045) | ND(0.046) | ND(0.042) | ND(0.037)     | ND(0.034) | ND(0.037) | ND(0.035) | ND(0.037)     | ND(0.037) | ND(0.042) |
| Aroclor 1232     | ND(0.036) | ND(0.052)     | ND(0.045) | ND(0.046) | ND(0.042) | ND(0.037)     | ND(0.034) | ND(0.037) | ND(0.035) | ND(0.037)     | ND(0.037) | ND(0.042) |
| Aroclor 1242     | ND(0.036) | ND(0.052)     | ND(0.045) | ND(0.046) | ND(0.042) | ND(0.037)     | ND(0.034) | ND(0.037) | ND(0.035) | ND(0.037)     | ND(0.037) | ND(0.042) |
| Aroclor 1248     | ND(0.036) | ND(0.052)     | ND(0.045) | ND(0.046) | 1.38      | ND(0.037)     | ND(0.034) | ND(0.037) | ND(0.035) | ND(0.037)     | ND(0.037) | ND(0.042) |
| Aroclor 1254     | ND(0.036) | ND(0.052)     | ND(0.045) | ND(0.046) | ND(0.042) | ND(0.037)     | ND(0.034) | ND(0.037) | ND(0.035) | ND(0.037)     | ND(0.037) | ND(0.042) |
| Aroclor 1260     | 0.0343 J  | 1.52          | 1.37      | 16.5      | 23.8      | 0.0718        | ND(0.034) | 0.187     | ND(0.035) | ND(0.037)     | ND(0.037) | 0.138     |
| Aroclor-1262     | ND(0.036) | ND(0.052)     | ND(0.045) | ND(0.046) | ND(0.042) | ND(0.037)     | ND(0.034) | ND(0.037) | ND(0.035) | ND(0.037)     | ND(0.037) | ND(0.042) |
| Aroclor-1268     | ND(0.036) | ND(0.052)     | ND(0.045) | ND(0.046) | ND(0.042) | ND(0.037)     | ND(0.034) | ND(0.037) | ND(0.035) | ND(0.037)     | ND(0.037) | ND(0.042) |
| Total PCBs       | 0.0343 J  | 1.52          | 1.37      | 16.5      | 25.18     | 0.0718        | ND        | 0.187     | ND        | ND            | ND        | 0.138     |
| Miscellaneous    |           |               |           |           |           |               |           |           |           |               |           |           |
| TOC              | 7,820     | NA            | NA        | NA        | NA        | NA            | NA        | 14,600    | 790       | NA            | NA        | NA        |



| Sample Location: | T11A17-SL-141 | T11A17-SL-142 | T11A17-SL-142 | T11A17-SL-143        | T11A17-SL-143 | T11A17-SL-144 | T11A17-SL-144 | T11A17-SL-15 | T11A17-SL-15 | T11A17-SL-16 | T11A17-SL-16 | T11A17-SL-16 |
|------------------|---------------|---------------|---------------|----------------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|
| Sample Depth:    | 6 - 12        | 0 - 6         | 6 - 12        | 0 - 6                | 6 - 11        | 0 - 6         | 6 - 12        | 0 - 6        | 6 - 12       | 0 - 6        | 6 - 12       | 12 - 13      |
| Date:            | 11/16/17      | 11/16/17      | 11/16/17      | 11/16/17             | 11/16/17      | 11/16/17      | 11/16/17      | 11/08/17     | 11/08/17     | 11/08/17     | 11/08/17     | 11/08/17     |
| PCBs             |               |               |               |                      |               |               |               |              |              |              |              |              |
| Aroclor 1016     | ND(0.041)     | ND(0.045)     | ND(0.038)     | ND(0.04) [ND(0.038)] | ND(0.036)     | ND(0.038)     | ND(0.038)     | ND(0.039)    | ND(0.035)    | ND(0.039)    | ND(0.038)    | ND(0.036)    |
| Aroclor 1221     | ND(0.041)     | ND(0.045)     | ND(0.038)     | ND(0.04) [ND(0.038)] | ND(0.036)     | ND(0.038)     | ND(0.038)     | ND(0.039)    | ND(0.035)    | ND(0.039)    | ND(0.038)    | ND(0.036)    |
| Aroclor 1232     | ND(0.041)     | ND(0.045)     | ND(0.038)     | ND(0.04) [ND(0.038)] | ND(0.036)     | ND(0.038)     | ND(0.038)     | ND(0.039)    | ND(0.035)    | ND(0.039)    | ND(0.038)    | ND(0.036)    |
| Aroclor 1242     | ND(0.041)     | ND(0.045)     | ND(0.038)     | ND(0.04) [ND(0.038)] | ND(0.036)     | ND(0.038)     | ND(0.038)     | ND(0.039)    | ND(0.035)    | ND(0.039)    | ND(0.038)    | ND(0.036)    |
| Aroclor 1248     | ND(0.041)     | ND(0.045)     | ND(0.038)     | ND(0.04) [ND(0.038)] | ND(0.036)     | ND(0.038)     | ND(0.038)     | ND(0.039)    | ND(0.035)    | ND(0.039)    | ND(0.038)    | ND(0.036)    |
| Aroclor 1254     | ND(0.041)     | ND(0.045)     | ND(0.038)     | ND(0.04) [ND(0.038)] | ND(0.036)     | ND(0.038)     | ND(0.038)     | ND(0.039)    | ND(0.035)    | ND(0.039)    | ND(0.038)    | ND(0.036)    |
| Aroclor 1260     | 0.0231 J      | 0.465         | 0.0154 J      | 0.195 [0.192]        | 0.0743        | 0.366         | 0.451         | 0.476        | 0.0889       | 0.286        | 0.0531       | 0.0244 J     |
| Aroclor-1262     | ND(0.041)     | ND(0.045)     | ND(0.038)     | ND(0.04) [ND(0.038)] | ND(0.036)     | ND(0.038)     | ND(0.038)     | ND(0.039)    | ND(0.035)    | ND(0.039)    | ND(0.038)    | ND(0.036)    |
| Aroclor-1268     | ND(0.041)     | ND(0.045)     | ND(0.038)     | ND(0.04) [ND(0.038)] | ND(0.036)     | ND(0.038)     | ND(0.038)     | ND(0.039)    | ND(0.035)    | ND(0.039)    | ND(0.038)    | ND(0.036)    |
| Total PCBs       | 0.0231 J      | 0.465         | 0.0154 J      | 0.195 [0.192]        | 0.0743        | 0.366         | 0.451         | 0.476        | 0.0889       | 0.286        | 0.0531       | 0.0244 J     |
| Miscellaneous    |               |               |               |                      |               |               |               |              |              |              |              |              |
| TOC              | NA            | 24,500        | 13,900        | NA                   | NA            | NA            | NA            | NA           | NA           | NA           | NA           | NA           |



| Sample Location: | T11A17-SL-17 | T11A17-SL-17 | T11A17-SL-17 | T11A17-SL-18 | T11A17-SL-18 | T11A17-SL-18 | T11A17-SL-19 | T11A17-SL-19 | T11A17-SL-19 | T11A17-SL-2 | T11A17-SL-2 | T11A17-SL-20 | T11A17-SL-20          |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|--------------|-----------------------|
| Sample Depth:    | 0 - 6        | 6 - 12       | 12 - 14      | 0 - 6        | 6 - 12       | 12 - 14      | 0 - 6        | 6 - 12       | 12 - 14      | 0 - 6       | 6 - 12      | 0 - 6        | 6 - 12                |
| Date:            | 11/08/17     | 11/08/17     | 11/08/17     | 11/08/17     | 11/08/17     | 11/08/17     | 11/08/17     | 11/08/17     | 11/08/17     | 11/07/17    | 11/07/17    | 11/08/17     | 11/08/17              |
| PCBs             |              |              |              |              |              |              |              |              |              |             |             |              |                       |
| Aroclor 1016     | ND(0.046)    | ND(0.038)    | ND(0.043)    | ND(0.039)    | ND(0.038)    | ND(0.04)     | ND(0.04)     | ND(0.04)     | ND(0.035)    | ND(0.038)   | ND(0.037)   | ND(0.037)    | ND(0.036) [ND(0.034)] |
| Aroclor 1221     | ND(0.046)    | ND(0.038)    | ND(0.043)    | ND(0.039)    | ND(0.038)    | ND(0.04)     | ND(0.04)     | ND(0.04)     | ND(0.035)    | ND(0.038)   | ND(0.037)   | ND(0.037)    | ND(0.036) [ND(0.034)] |
| Aroclor 1232     | ND(0.046)    | ND(0.038)    | ND(0.043)    | ND(0.039)    | ND(0.038)    | ND(0.04)     | ND(0.04)     | ND(0.04)     | ND(0.035)    | ND(0.038)   | ND(0.037)   | ND(0.037)    | ND(0.036) [ND(0.034)] |
| Aroclor 1242     | ND(0.046)    | ND(0.038)    | ND(0.043)    | ND(0.039)    | ND(0.038)    | ND(0.04)     | ND(0.04)     | ND(0.04)     | ND(0.035)    | ND(0.038)   | ND(0.037)   | ND(0.037)    | ND(0.036) [ND(0.034)] |
| Aroclor 1248     | ND(0.046)    | ND(0.038)    | ND(0.043)    | ND(0.039)    | ND(0.038)    | ND(0.04)     | ND(0.04)     | ND(0.04)     | ND(0.035)    | ND(0.038)   | ND(0.037)   | ND(0.037)    | ND(0.036) [ND(0.034)] |
| Aroclor 1254     | ND(0.046)    | ND(0.038)    | ND(0.043)    | ND(0.039)    | ND(0.038)    | ND(0.04)     | ND(0.04)     | ND(0.04)     | ND(0.035)    | ND(0.038)   | ND(0.037)   | ND(0.037)    | ND(0.036) [ND(0.034)] |
| Aroclor 1260     | 423          | 60.8         | 10.9         | 0.192        | 0.0405       | 0.0301 J     | 0.286        | 0.016 J      | ND(0.035)    | 0.152       | ND(0.037)   | 0.0655       | ND(0.036) [ND(0.034)] |
| Aroclor-1262     | ND(0.046)    | ND(0.038)    | ND(0.043)    | ND(0.039)    | ND(0.038)    | ND(0.04)     | ND(0.04)     | ND(0.04)     | ND(0.035)    | ND(0.038)   | ND(0.037)   | ND(0.037)    | ND(0.036) [ND(0.034)] |
| Aroclor-1268     | ND(0.046)    | ND(0.038)    | ND(0.043)    | ND(0.039)    | ND(0.038)    | ND(0.04)     | ND(0.04)     | ND(0.04)     | ND(0.035)    | ND(0.038)   | ND(0.037)   | ND(0.037)    | ND(0.036) [ND(0.034)] |
| Total PCBs       | 423          | 60.8         | 10.9         | 0.192        | 0.0405       | 0.0301 J     | 0.286        | 0.016 J      | ND           | 0.152       | ND          | 0.0655       | ND [ND]               |
| Miscellaneous    |              |              |              |              |              |              |              |              |              |             |             |              |                       |
| TOC              | 66,000       | 23,200       | 9,260        | NA           | NA           | NA           | NA           | NA           | NA           | NA          | NA          | NA           | NA                    |



|                        |                   | T11A17-SL-21       |                   | T11A17-SL-22       |                       | T11A17-SL-23       |                   |                    |                     | T11A17-SL-25      |                    |                       |
|------------------------|-------------------|--------------------|-------------------|--------------------|-----------------------|--------------------|-------------------|--------------------|---------------------|-------------------|--------------------|-----------------------|
| Sample Depth:<br>Date: | 0 - 6<br>11/09/17 | 6 - 12<br>11/09/17 | 0 - 6<br>11/09/17 | 6 - 12<br>11/09/17 | 0 - 6<br>11/16/17     | 6 - 12<br>11/16/17 | 0 - 6<br>11/16/17 | 6 - 12<br>11/16/17 | 12 - 18<br>11/16/17 | 0 - 6<br>11/09/17 | 6 - 12<br>11/09/17 | 0 - 6<br>11/16/17     |
| PCBs                   |                   |                    |                   |                    |                       |                    |                   |                    |                     |                   |                    |                       |
| Aroclor 1016           | ND(0.047)         | ND(0.038)          | ND(0.037)         | ND(0.033)          | ND(0.042) [ND(0.042)] | ND(0.038)          | ND(0.043)         | ND(0.041)          | ND(0.038)           | ND(0.038)         | ND(0.035)          | ND(0.037) [ND(0.041)] |
| Aroclor 1221           | ND(0.047)         | ND(0.038)          | ND(0.037)         | ND(0.033)          | ND(0.042) [ND(0.042)] | ND(0.038)          | ND(0.043)         | ND(0.041)          | ND(0.038)           | ND(0.038)         | ND(0.035)          | ND(0.037) [ND(0.041)] |
| Aroclor 1232           | ND(0.047)         | ND(0.038)          | ND(0.037)         | ND(0.033)          | ND(0.042) [ND(0.042)] | ND(0.038)          | ND(0.043)         | ND(0.041)          | ND(0.038)           | ND(0.038)         | ND(0.035)          | ND(0.037) [ND(0.041)] |
| Aroclor 1242           | ND(0.047)         | ND(0.038)          | ND(0.037)         | ND(0.033)          | ND(0.042) [ND(0.042)] | ND(0.038)          | ND(0.043)         | ND(0.041)          | ND(0.038)           | ND(0.038)         | ND(0.035)          | ND(0.037) [ND(0.041)] |
| Aroclor 1248           | ND(0.047)         | ND(0.038)          | ND(0.037)         | ND(0.033)          | ND(0.042) [ND(0.042)] | ND(0.038)          | ND(0.043)         | ND(0.041)          | ND(0.038)           | ND(0.038)         | ND(0.035)          | ND(0.037) [ND(0.041)] |
| Aroclor 1254           | ND(0.047)         | ND(0.038)          | ND(0.037)         | ND(0.033)          | ND(0.042) [ND(0.042)] | ND(0.038)          | ND(0.043)         | ND(0.041)          | ND(0.038)           | ND(0.038)         | ND(0.035)          | ND(0.037) [ND(0.041)] |
| Aroclor 1260           | 0.331             | 0.119              | ND(0.037)         | ND(0.033)          | 0.124 [0.121]         | 0.0352 J           | 4.55              | 2.27               | ND(0.038)           | 0.0577            | 0.0199 J           | 0.186 [0.274]         |
| Aroclor-1262           | ND(0.047)         | ND(0.038)          | ND(0.037)         | ND(0.033)          | ND(0.042) [ND(0.042)] | ND(0.038)          | ND(0.043)         | ND(0.041)          | ND(0.038)           | ND(0.038)         | ND(0.035)          | ND(0.037) [ND(0.041)] |
| Aroclor-1268           | ND(0.047)         | ND(0.038)          | ND(0.037)         | ND(0.033)          | ND(0.042) [ND(0.042)] | ND(0.038)          | ND(0.043)         | ND(0.041)          | ND(0.038)           | ND(0.038)         | ND(0.035)          | ND(0.037) [ND(0.041)] |
| Total PCBs             | 0.331             | 0.119              | ND                | ND                 | 0.124 [0.121]         | 0.0352 J           | 4.55              | 2.27               | ND                  | 0.0577            | 0.0199 J           | 0.186 [0.274]         |
| Miscellaneous          |                   |                    |                   |                    |                       |                    |                   |                    |                     |                   |                    |                       |
| TOC                    | NA                | NA                 | NA                | NA                 | NA                    | NA                 | NA                | NA                 | NA                  | NA                | NA                 | NA                    |



| Sample Location: | T11A17-SL-26 | T11A17-SL-27 | T11A17-SL-27 | T11A17-SL-28 | T11A17-SL-28 | T11A17-SL-29          | T11A17-SL-29 | T11A17-SL-3 | T11A17-SL-3 | T11A17-SL-3 | T11A17-SL-30 | T11A17-SL-30 | T11A17-SL-32 |
|------------------|--------------|--------------|--------------|--------------|--------------|-----------------------|--------------|-------------|-------------|-------------|--------------|--------------|--------------|
| Sample Depth:    | 6 - 12       | 0 - 6        | 6 - 12       | 0 - 6        | 6 - 12       | 0 - 6                 | 6 - 12       | 0 - 6       | 6 - 12      | 12 - 18     | 0 - 6        | 6 - 12       | 0 - 6        |
| Date:            | 11/16/17     | 11/16/17     | 11/16/17     | 11/09/17     | 11/09/17     | 11/16/17              | 11/16/17     | 11/07/17    | 11/07/17    | 11/16/17    | 11/09/17     | 11/09/17     | 11/09/17     |
| PCBs             |              |              |              |              |              |                       |              |             |             |             |              |              |              |
| Aroclor 1016     | ND(0.039)    | ND(0.044)    | ND(0.042)    | ND(0.042)    | ND(0.04)     | ND(0.042) [ND(0.043)] | ND(0.039)    | ND(0.041)   | ND(0.036)   | ND(0.033)   | ND(0.041)    | ND(0.037)    | ND(0.042)    |
| Aroclor 1221     | ND(0.039)    | ND(0.044)    | ND(0.042)    | ND(0.042)    | ND(0.04)     | ND(0.042) [ND(0.043)] | ND(0.039)    | ND(0.041)   | ND(0.036)   | ND(0.033)   | ND(0.041)    | ND(0.037)    | ND(0.042)    |
| Aroclor 1232     | ND(0.039)    | ND(0.044)    | ND(0.042)    | ND(0.042)    | ND(0.04)     | ND(0.042) [ND(0.043)] | ND(0.039)    | ND(0.041)   | ND(0.036)   | ND(0.033)   | ND(0.041)    | ND(0.037)    | ND(0.042)    |
| Aroclor 1242     | ND(0.039)    | ND(0.044)    | ND(0.042)    | ND(0.042)    | ND(0.04)     | ND(0.042) [ND(0.043)] | ND(0.039)    | ND(0.041)   | ND(0.036)   | ND(0.033)   | ND(0.041)    | ND(0.037)    | ND(0.042)    |
| Aroclor 1248     | ND(0.039)    | ND(0.044)    | ND(0.042)    | ND(0.042)    | ND(0.04)     | ND(0.042) [ND(0.043)] | ND(0.039)    | ND(0.041)   | ND(0.036)   | ND(0.033)   | ND(0.041)    | ND(0.037)    | ND(0.042)    |
| Aroclor 1254     | ND(0.039)    | ND(0.044)    | ND(0.042)    | ND(0.042)    | ND(0.04)     | ND(0.042) [ND(0.043)] | ND(0.039)    | ND(0.041)   | ND(0.036)   | ND(0.033)   | 0.0373 J     | ND(0.037)    | ND(0.042)    |
| Aroclor 1260     | 0.908        | 0.523        | 0.523        | 10.4         | 0.269        | 4.5 [5.41]            | 1.57         | 9.34        | 1.28        | 2.22        | 0.0659       | 0.0201 J     | 1.91         |
| Aroclor-1262     | ND(0.039)    | ND(0.044)    | ND(0.042)    | ND(0.042)    | ND(0.04)     | ND(0.042) [ND(0.043)] | ND(0.039)    | ND(0.041)   | ND(0.036)   | ND(0.033)   | ND(0.041)    | ND(0.037)    | ND(0.042)    |
| Aroclor-1268     | ND(0.039)    | ND(0.044)    | ND(0.042)    | ND(0.042)    | ND(0.04)     | ND(0.042) [ND(0.043)] | ND(0.039)    | ND(0.041)   | ND(0.036)   | ND(0.033)   | ND(0.041)    | ND(0.037)    | ND(0.042)    |
| Total PCBs       | 0.908        | 0.523        | 0.523        | 10.4         | 0.269        | 4.5 [5.41]            | 1.57         | 9.34        | 1.28        | 2.22        | 0.1032 J     | 0.0201 J     | 1.91         |
| Miscellaneous    |              |              |              |              |              |                       |              |             |             |             |              |              |              |
| TOC              | NA           | NA           | NA           | NA           | NA           | NA                    | NA           | NA          | NA          | NA          | NA           | NA           | NA           |



Table 7 Data for 2017 and 2018 Samples Tributary T11A Removal Action Under Paragraph 47.f

| Sample Location:<br>Sample Depth:<br>Date: | T11A17-SL-32<br>6 - 12<br>11/09/17 | T11A17-SL-33<br>0 - 6<br>11/09/17 | T11A17-SL-33<br>6 - 12<br>11/09/17 | T11A17-SL-34<br>0 - 6<br>11/09/17 | T11A17-SL-34<br>6 - 12<br>11/09/17 | T11A17-SL-34<br>12 - 18<br>11/09/17 | T11A17-SL-35<br>0 - 6<br>11/09/17 | T11A17-SL-35<br>6 - 12<br>11/09/17 | T11A17-SL-36<br>0 - 6<br>11/09/17 | T11A17-SL-36<br>6 - 12<br>11/09/17 | T11A17-SL-37<br>0 - 6<br>11/16/17 | T11A17-SL-37<br>6 - 12<br>11/16/17 |
|--|------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|------------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|------------------------------------|
| PCBs                                       |                                    |                                   | 11100/11                           |                                   | 11100/11                           | 11/00/11                            | 11100/11                          | 11/00/11                           |                                   |                                    |                                   |                                    |
| Aroclor 1016                               | ND(0.04)                           | ND(0.046)                         | ND(0.039)                          | ND(0.045)                         | ND(0.037)                          | ND(0.038) [ND(0.039)]               | ND(0.044)                         | ND(0.038)                          | ND(0.04)                          | ND(0.034)                          | ND(0.049) [ND(0.13)]              | ND(0.04)                           |
| Aroclor 1221                               | ND(0.04)                           | ND(0.046)                         | ND(0.039)                          | ND(0.045)                         | ND(0.037)                          | ND(0.038) [ND(0.039)]               | ND(0.044)                         | ND(0.038)                          | ND(0.04)                          | ND(0.034)                          | ND(0.049) [ND(0.13)]              | ND(0.04)                           |
| Aroclor 1232                               | ND(0.04)                           | ND(0.046)                         | ND(0.039)                          | ND(0.045)                         | ND(0.037)                          | ND(0.038) [ND(0.039)]               | ND(0.044)                         | ND(0.038)                          | ND(0.04)                          | ND(0.034)                          | ND(0.049) [ND(0.13)]              | ND(0.04)                           |
| Aroclor 1242                               | ND(0.04)                           | ND(0.046)                         | ND(0.039)                          | ND(0.045)                         | ND(0.037)                          | ND(0.038) [ND(0.039)]               | ND(0.044)                         | ND(0.038)                          | ND(0.04)                          | ND(0.034)                          | ND(0.049) [ND(0.13)]              | ND(0.04)                           |
| Aroclor 1248                               | ND(0.04)                           | ND(0.046)                         | ND(0.039)                          | ND(0.045)                         | ND(0.037)                          | ND(0.038) [ND(0.039)]               | ND(0.044)                         | ND(0.038)                          | ND(0.04)                          | ND(0.034)                          | ND(0.049) [ND(0.13)]              | ND(0.04)                           |
| Aroclor 1254                               | ND(0.04)                           | ND(0.046)                         | ND(0.039)                          | ND(0.045)                         | ND(0.037)                          | ND(0.038) [ND(0.039)]               | ND(0.044)                         | ND(0.038)                          | ND(0.04)                          | ND(0.034)                          | ND(0.049) [ND(0.13)]              | 0.0464                             |
| Aroclor 1260                               | 0.334                              | 35.3                              | 27.9                               | 4.05                              | 0.539                              | 0.0503 [0.0793]                     | 0.76                              | 0.0226 J                           | 0.367                             | 0.0118 J                           | 0.149 [0.405]                     | 0.0353 J                           |
| Aroclor-1262                               | ND(0.04)                           | ND(0.046)                         | ND(0.039)                          | ND(0.045)                         | ND(0.037)                          | ND(0.038) [ND(0.039)]               | ND(0.044)                         | ND(0.038)                          | ND(0.04)                          | ND(0.034)                          | ND(0.049) [ND(0.13)]              | ND(0.04)                           |
| Aroclor-1268                               | ND(0.04)                           | ND(0.046)                         | ND(0.039)                          | ND(0.045)                         | ND(0.037)                          | ND(0.038) [ND(0.039)]               | ND(0.044)                         | ND(0.038)                          | ND(0.04)                          | ND(0.034)                          | ND(0.049) [ND(0.13)]              | ND(0.04)                           |
| Total PCBs                                 | 0.334                              | 35.3                              | 27.9                               | 4.05                              | 0.539                              | 0.0503 [0.0793]                     | 0.76                              | 0.0226 J                           | 0.367                             | 0.0118 J                           | 0.149 [0.405]                     | 0.0817 J                           |
| Miscellaneous                              |                                    |                                   |                                    |                                   |                                    |                                     |                                   |                                    |                                   |                                    |                                   |                                    |
| TOC  | NA                                 | NA                                | NA                                 | NA                                | NA                                 | NA                                  | NA                                | NA                                 | NA                                | NA                                 | NA                                | NA                                 |



| Sample Location: | T11A17-SL-38 | T11A17-SL-38 | T11A17-SL-39        | T11A17-SL-39 | T11A17-SL-4 | T11A17-SL-4 | T11A17-SL-41 | T11A17-SL-41 | T11A17-SL-42 | T11A17-SL-42 | T11A17-SL-43 | T11A17-SL-43 | T11A17-SL-44 |
|------------------|--------------|--------------|---------------------|--------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Sample Depth:    | 0 - 6        | 6 - 12       | 0 - 6               | 6 - 12       | 0 - 6       | 6 - 12      | 0 - 6        | 6 - 12       | 0 - 6        | 6 - 12       | 0 - 6        | 6 - 12       | 0 - 6        |
| Date:            | 11/16/17     | 11/16/17     | 11/09/17            | 11/09/17     | 11/07/17    | 11/07/17    | 11/09/17     | 11/09/17     | 11/09/17     | 11/09/17     | 11/09/17     | 11/09/17     | 11/09/17     |
| PCBs             |              |              |                     |              |             |             |              |              |              |              |              |              |              |
| Aroclor 1016     | ND(0.046)    | ND(0.041)    | ND(0.11) [ND(0.12)] | ND(0.039)    | ND(0.039)   | ND(0.043)   | ND(0.061)    | ND(0.04)     | ND(0.042)    | ND(0.041)    | ND(0.044)    | ND(0.038)    | ND(0.048)    |
| Aroclor 1221     | ND(0.046)    | ND(0.041)    | ND(0.11) [ND(0.12)] | ND(0.039)    | ND(0.039)   | ND(0.043)   | ND(0.061)    | ND(0.04)     | ND(0.042)    | ND(0.041)    | ND(0.044)    | ND(0.038)    | ND(0.048)    |
| Aroclor 1232     | ND(0.046)    | ND(0.041)    | ND(0.11) [ND(0.12)] | ND(0.039)    | ND(0.039)   | ND(0.043)   | ND(0.061)    | ND(0.04)     | ND(0.042)    | ND(0.041)    | ND(0.044)    | ND(0.038)    | ND(0.048)    |
| Aroclor 1242     | ND(0.046)    | ND(0.041)    | ND(0.11) [ND(0.12)] | ND(0.039)    | ND(0.039)   | ND(0.043)   | ND(0.061)    | ND(0.04)     | ND(0.042)    | ND(0.041)    | ND(0.044)    | ND(0.038)    | ND(0.048)    |
| Aroclor 1248     | ND(0.046)    | ND(0.041)    | ND(0.11) [ND(0.12)] | ND(0.039)    | ND(0.039)   | ND(0.043)   | ND(0.061)    | ND(0.04)     | ND(0.042)    | ND(0.041)    | ND(0.044)    | ND(0.038)    | ND(0.048)    |
| Aroclor 1254     | ND(0.046)    | ND(0.041)    | ND(0.11) [ND(0.12)] | ND(0.039)    | ND(0.039)   | ND(0.043)   | ND(0.061)    | ND(0.04)     | ND(0.042)    | ND(0.041)    | ND(0.044)    | ND(0.038)    | ND(0.048)    |
| Aroclor 1260     | 0.293        | 0.156        | 0.376 [0.309]       | ND(0.039)    | 11.9        | 3.38        | 0.611        | 0.335        | 0.124        | 0.0131 J     | 6.32         | 0.379        | 0.227        |
| Aroclor-1262     | ND(0.046)    | ND(0.041)    | ND(0.11) [ND(0.12)] | ND(0.039)    | ND(0.039)   | ND(0.043)   | ND(0.061)    | ND(0.04)     | ND(0.042)    | ND(0.041)    | ND(0.044)    | ND(0.038)    | ND(0.048)    |
| Aroclor-1268     | ND(0.046)    | ND(0.041)    | ND(0.11) [ND(0.12)] | ND(0.039)    | ND(0.039)   | ND(0.043)   | ND(0.061)    | ND(0.04)     | ND(0.042)    | ND(0.041)    | ND(0.044)    | ND(0.038)    | ND(0.048)    |
| Total PCBs       | 0.293        | 0.156        | 0.376 [0.309]       | ND           | 11.9        | 3.38        | 0.611        | 0.335        | 0.124        | 0.0131 J     | 6.32         | 0.379        | 0.227        |
| Miscellaneous    |              |              |                     |              |             |             |              |              |              |              |              |              |              |
| TOC              | NA           | NA           | NA                  | NA           | NA          | NA          | NA           | NA           | NA           | NA           | NA           | NA           | NA           |



|                        |                    |                   |                    |                   |                    | T11A17-SL-47      | T11A17-SL-47       | T11A17-SL-48      |                    |                   | T11A17-SL-5        |                   |                    |
|------------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|
| Sample Depth:<br>Date: | 6 - 12<br>11/09/17 | 0 - 6<br>11/09/17 | 6 - 12<br>11/09/17 | 0 - 6<br>11/09/17 | 6 - 12<br>11/09/17 | 0 - 6<br>11/10/17 | 6 - 12<br>11/10/17 | 0 - 6<br>11/10/17 | 6 - 12<br>11/10/17 | 0 - 6<br>11/08/17 | 6 - 12<br>11/08/17 | 0 - 6<br>11/10/17 | 6 - 12<br>11/10/17 |
| PCBs                   |                    |                   |                    |                   |                    |                   |                    |                   |                    |                   |                    |                   |                    |
| Aroclor 1016           | ND(0.041)          | ND(0.044)         | ND(0.041)          | ND(0.043)         | ND(0.036)          | ND(0.037)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.045)         | ND(0.046)          |
| Aroclor 1221           | ND(0.041)          | ND(0.044)         | ND(0.041)          | ND(0.043)         | ND(0.036)          | ND(0.037)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.045)         | ND(0.046)          |
| Aroclor 1232           | ND(0.041)          | ND(0.044)         | ND(0.041)          | ND(0.043)         | ND(0.036)          | ND(0.037)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.045)         | ND(0.046)          |
| Aroclor 1242           | ND(0.041)          | ND(0.044)         | ND(0.041)          | ND(0.043)         | ND(0.036)          | ND(0.037)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.045)         | ND(0.046)          |
| Aroclor 1248           | ND(0.041)          | ND(0.044)         | ND(0.041)          | ND(0.043)         | ND(0.036)          | ND(0.037)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.045)         | ND(0.046)          |
| Aroclor 1254           | ND(0.041)          | ND(0.044)         | ND(0.041)          | ND(0.043)         | ND(0.036)          | ND(0.037)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.045)         | ND(0.046)          |
| Aroclor 1260           | 0.167              | 0.618             | 0.112              | 0.74              | 0.16               | 0.072             | 0.0187 J           | 0.144             | 0.0695             | 0.144             | ND(0.037)          | 1.33              | 1.24               |
| Aroclor-1262           | ND(0.041)          | ND(0.044)         | ND(0.041)          | ND(0.043)         | ND(0.036)          | ND(0.037)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.045)         | ND(0.046)          |
| Aroclor-1268           | ND(0.041)          | ND(0.044)         | ND(0.041)          | ND(0.043)         | ND(0.036)          | ND(0.037)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.039)         | ND(0.037)          | ND(0.045)         | ND(0.046)          |
| Total PCBs             | 0.167              | 0.618             | 0.112              | 0.74              | 0.16               | 0.072             | 0.0187 J           | 0.144             | 0.0695             | 0.144             | ND                 | 1.33              | 1.24               |
| Miscellaneous          |                    |                   |                    |                   |                    |                   |                    |                   |                    |                   |                    |                   |                    |
| TOC                    | NA                 | NA                | NA                 |



|                        |                     |                   |                    | T11A17-SL-52      |                    | T11A17-SL-52        |                   |                    |                       | T11A17-SL-54      |                    | T11A17-SL-55      |
|------------------------|---------------------|-------------------|--------------------|-------------------|--------------------|---------------------|-------------------|--------------------|-----------------------|-------------------|--------------------|-------------------|
| Sample Depth:<br>Date: | 12 - 18<br>11/10/17 | 0 - 6<br>11/16/17 | 6 - 12<br>11/16/17 | 0 - 6<br>11/10/17 | 6 - 12<br>11/10/17 | 12 - 18<br>11/10/17 | 0 - 6<br>11/10/17 | 6 - 12<br>11/10/17 | 12 - 18<br>11/10/17   | 0 - 6<br>11/10/17 | 6 - 12<br>11/10/17 | 0 - 6<br>11/13/17 |
| PCBs                   |                     |                   |                    |                   |                    |                     |                   |                    |                       |                   |                    |                   |
| Aroclor 1016           | ND(0.037)           | ND(0.04)          | ND(0.036)          | ND(0.045)         | ND(0.045)          | ND(0.043)           | ND(0.04)          | ND(0.038)          | ND(0.036) [ND(0.035)] | ND(0.055)         | ND(0.049)          | ND(0.057)         |
| Aroclor 1221           | ND(0.037)           | ND(0.04)          | ND(0.036)          | ND(0.045)         | ND(0.045)          | ND(0.043)           | ND(0.04)          | ND(0.038)          | ND(0.036) [ND(0.035)] | ND(0.055)         | ND(0.049)          | ND(0.057)         |
| Aroclor 1232           | ND(0.037)           | ND(0.04)          | ND(0.036)          | ND(0.045)         | ND(0.045)          | ND(0.043)           | ND(0.04)          | ND(0.038)          | ND(0.036) [ND(0.035)] | ND(0.055)         | ND(0.049)          | ND(0.057)         |
| Aroclor 1242           | ND(0.037)           | ND(0.04)          | ND(0.036)          | ND(0.045)         | ND(0.045)          | ND(0.043)           | ND(0.04)          | ND(0.038)          | ND(0.036) [ND(0.035)] | ND(0.055)         | ND(0.049)          | ND(0.057)         |
| Aroclor 1248           | ND(0.037)           | ND(0.04)          | ND(0.036)          | ND(0.045)         | ND(0.045)          | ND(0.043)           | ND(0.04)          | ND(0.038)          | ND(0.036) [ND(0.035)] | ND(0.055)         | ND(0.049)          | ND(0.057)         |
| Aroclor 1254           | ND(0.037)           | ND(0.04)          | ND(0.036)          | ND(0.045)         | ND(0.045)          | ND(0.043)           | ND(0.04)          | ND(0.038)          | ND(0.036) [ND(0.035)] | ND(0.055)         | ND(0.049)          | ND(0.057)         |
| Aroclor 1260           | 0.0929              | 0.0785            | 0.0346 J           | 9.74              | 11.1               | 16.8                | 0.449             | 0.214              | 0.028 J [0.0233 J]    | 6.29              | 0.322              | 0.337             |
| Aroclor-1262           | ND(0.037)           | ND(0.04)          | ND(0.036)          | ND(0.045)         | ND(0.045)          | ND(0.043)           | ND(0.04)          | ND(0.038)          | ND(0.036) [ND(0.035)] | ND(0.055)         | ND(0.049)          | ND(0.057)         |
| Aroclor-1268           | ND(0.037)           | ND(0.04)          | ND(0.036)          | ND(0.045)         | ND(0.045)          | ND(0.043)           | ND(0.04)          | ND(0.038)          | ND(0.036) [ND(0.035)] | ND(0.055)         | ND(0.049)          | ND(0.057)         |
| Total PCBs             | 0.0929              | 0.0785            | 0.0346 J           | 9.74              | 11.1               | 16.8                | 0.449             | 0.214              | 0.028 J [0.0233 J]    | 6.29              | 0.322              | 0.337             |
| Miscellaneous          |                     |                   |                    |                   |                    |                     |                   |                    |                       |                   |                    |                   |
| TOC                    | NA                  | 20,500            | 5,950              | NA                | NA                 | NA                  | 19,100            | 10,100             | 4,880 [3,750]         | NA                | NA                 | NA                |



| Sample Location:<br>Sample Depth: | T11A17-SL-55<br>6 - 12 | T11A17-SL-56<br>0 - 6 | T11A17-SL-56<br>6 - 12 | T11A17-SL-56<br>12 - 18 | T11A17-SL-57<br>0 - 6 | T11A17-SL-57<br>6 - 12 | T11A17-SL-57<br>12 - 16 | T11A17-SL-58<br>0 - 6 | T11A17-SL-58<br>6 - 12 | T11A17-SL-58<br>12 - 16 | T11A17-SL-59<br>0 - 6 | T11A17-SL-59<br>6 - 12 |
|-----------------------------------|------------------------|-----------------------|------------------------|-------------------------|-----------------------|------------------------|-------------------------|-----------------------|------------------------|-------------------------|-----------------------|------------------------|
| Date:                             | 11/13/17               | 11/10/17              | 11/10/17               | 11/10/17                | 11/10/17              | 11/10/17               | 11/10/17                | 11/10/17              | 11/10/17               | 11/10/17                | 11/10/17              | 11/10/17               |
| PCBs                              |                        |                       |                        |                         |                       |                        |                         |                       |                        |                         |                       |                        |
| Aroclor 1016                      | ND(0.046)              | ND(0.047)             | ND(0.042) [ND(0.039)]  | ND(0.038)               | ND(0.041)             | ND(0.039)              | ND(0.037)               | ND(0.045)             | ND(0.04)               | ND(0.039)               | ND(0.046)             | ND(0.041)              |
| Aroclor 1221                      | ND(0.046)              | ND(0.047)             | ND(0.042) [ND(0.039)]  | ND(0.038)               | ND(0.041)             | ND(0.039)              | ND(0.037)               | ND(0.045)             | ND(0.04)               | ND(0.039)               | ND(0.046)             | ND(0.041)              |
| Aroclor 1232                      | ND(0.046)              | ND(0.047)             | ND(0.042) [ND(0.039)]  | ND(0.038)               | ND(0.041)             | ND(0.039)              | ND(0.037)               | ND(0.045)             | ND(0.04)               | ND(0.039)               | ND(0.046)             | ND(0.041)              |
| Aroclor 1242                      | ND(0.046)              | ND(0.047)             | ND(0.042) [ND(0.039)]  | ND(0.038)               | ND(0.041)             | ND(0.039)              | ND(0.037)               | ND(0.045)             | ND(0.04)               | ND(0.039)               | ND(0.046)             | ND(0.041)              |
| Aroclor 1248                      | ND(0.046)              | ND(0.047)             | ND(0.042) [ND(0.039)]  | ND(0.038)               | ND(0.041)             | ND(0.039)              | ND(0.037)               | ND(0.045)             | ND(0.04)               | ND(0.039)               | ND(0.046)             | ND(0.041)              |
| Aroclor 1254                      | ND(0.046)              | ND(0.047)             | ND(0.042) [ND(0.039)]  | ND(0.038)               | ND(0.041)             | ND(0.039)              | ND(0.037)               | ND(0.045)             | ND(0.04)               | ND(0.039)               | ND(0.046)             | ND(0.041)              |
| Aroclor 1260                      | ND(0.046)              | 0.214                 | 0.0982 [0.0977]        | ND(0.038)               | 1.09                  | 1.07                   | 3.01                    | 14                    | 17.6                   | ND(0.039)               | 6.36                  | 0.536                  |
| Aroclor-1262                      | ND(0.046)              | ND(0.047)             | ND(0.042) [ND(0.039)]  | ND(0.038)               | ND(0.041)             | ND(0.039)              | ND(0.037)               | ND(0.045)             | ND(0.04)               | ND(0.039)               | ND(0.046)             | ND(0.041)              |
| Aroclor-1268                      | ND(0.046)              | ND(0.047)             | ND(0.042) [ND(0.039)]  | ND(0.038)               | ND(0.041)             | ND(0.039)              | ND(0.037)               | ND(0.045)             | ND(0.04)               | ND(0.039)               | ND(0.046)             | ND(0.041)              |
| Total PCBs                        | ND                     | 0.214                 | 0.0982 [0.0977]        | ND                      | 1.09                  | 1.07                   | 3.01                    | 14                    | 17.6                   | ND                      | 6.36                  | 0.536                  |
| Miscellaneous                     |                        |                       |                        |                         |                       |                        |                         |                       |                        |                         |                       |                        |
| TOC                               | NA                     | NA                    | NA                     | NA                      | NA                    | NA                     | NA                      | NA                    | NA                     | NA                      | NA                    | NA                     |



| Sample Location: | T11A17-SL-59         | T11A17-SL-6 | T11A17-SL-6           | T11A17-SL-6 | T11A17-SL-60 | T11A17-SL-60 | T11A17-SL-60 | T11A17-SL-61 | T11A17-SL-61 | T11A17-SL-61 | T11A17-SL-62 | T11A17-SL-62 |
|------------------|----------------------|-------------|-----------------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Sample Depth:    | 12 - 18              | 0 - 6       | 6 - 12                | 12 - 14     | 0 - 6        | 6 - 12       | 12 - 18      | 0 - 6        | 6 - 12       | 12 - 18      | 0 - 6        | 6 - 12       |
| Date:            | 11/10/17             | 11/07/17    | 11/07/17              | 11/07/17    | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     |
| PCBs             |                      |             |                       |             |              |              |              |              |              |              |              |              |
| Aroclor 1016     | ND(0.039) [ND(0.04)] | ND(0.04)    | ND(0.035) [ND(0.035)] | ND(0.033)   | ND(0.039)    | ND(0.041)    | ND(0.039)    | ND(0.056)    | ND(0.036)    | ND(0.038)    | ND(0.047)    | ND(0.041)    |
| Aroclor 1221     | ND(0.039) [ND(0.04)] | ND(0.04)    | ND(0.035) [ND(0.035)] | ND(0.033)   | ND(0.039)    | ND(0.041)    | ND(0.039)    | ND(0.056)    | ND(0.036)    | ND(0.038)    | ND(0.047)    | ND(0.041)    |
| Aroclor 1232     | ND(0.039) [ND(0.04)] | ND(0.04)    | ND(0.035) [ND(0.035)] | ND(0.033)   | ND(0.039)    | ND(0.041)    | ND(0.039)    | ND(0.056)    | ND(0.036)    | ND(0.038)    | ND(0.047)    | ND(0.041)    |
| Aroclor 1242     | ND(0.039) [ND(0.04)] | ND(0.04)    | ND(0.035) [ND(0.035)] | ND(0.033)   | ND(0.039)    | ND(0.041)    | ND(0.039)    | ND(0.056)    | ND(0.036)    | ND(0.038)    | ND(0.047)    | ND(0.041)    |
| Aroclor 1248     | ND(0.039) [ND(0.04)] | ND(0.04)    | ND(0.035) [ND(0.035)] | ND(0.033)   | ND(0.039)    | ND(0.041)    | ND(0.039)    | ND(0.056)    | ND(0.036)    | ND(0.038)    | ND(0.047)    | ND(0.041)    |
| Aroclor 1254     | ND(0.039) [ND(0.04)] | ND(0.04)    | ND(0.035) [ND(0.035)] | ND(0.033)   | ND(0.039)    | ND(0.041)    | ND(0.039)    | ND(0.056)    | ND(0.036)    | ND(0.038)    | ND(0.047)    | ND(0.041)    |
| Aroclor 1260     | 0.0549 [0.0478]      | 0.163       | ND(0.035) [ND(0.035)] | ND(0.033)   | 0.202        | 0.0652       | 0.0157 J     | 0.204        | 0.0268 J     | ND(0.038)    | 0.291        | 0.292        |
| Aroclor-1262     | ND(0.039) [ND(0.04)] | ND(0.04)    | ND(0.035) [ND(0.035)] | ND(0.033)   | ND(0.039)    | ND(0.041)    | ND(0.039)    | ND(0.056)    | ND(0.036)    | ND(0.038)    | ND(0.047)    | ND(0.041)    |
| Aroclor-1268     | ND(0.039) [ND(0.04)] | ND(0.04)    | ND(0.035) [ND(0.035)] | ND(0.033)   | ND(0.039)    | ND(0.041)    | ND(0.039)    | ND(0.056)    | ND(0.036)    | ND(0.038)    | ND(0.047)    | ND(0.041)    |
| Total PCBs       | 0.0549 [0.0478]      | 0.163       | ND [ND]               | ND          | 0.202        | 0.0652       | 0.0157 J     | 0.204        | 0.0268 J     | ND           | 0.291        | 0.292        |
| Miscellaneous    |                      |             |                       |             |              |              |              |              |              |              |              |              |
| TOC              | NA                   | NA          | NA                    | NA          | NA           | NA           | NA           | NA           | NA           | NA           | NA           | NA           |



| Sample Location: | T11A17-SL-62 | T11A17-SL-63 | T11A17-SL-63 | T11A17-SL-63 | T11A17-SL-64 | T11A17-SL-64 | T11A17-SL-64 | T11A17-SL-64 | T11A17-SL-65 | T11A17-SL-65 | T11A17-SL-66 | T11A17-SL-66 | T11A17-SL-66 |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Sample Depth:    | 12 - 16      | 0 - 6        | 6 - 12       | 12 - 18      | 0 - 6        | 6 - 12       | 12 - 18      | 18 - 22      | 0 - 6        | 6 - 12       | 0 - 6        | 6 - 12       | 12 - 18      |
| Date:            | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     | 11/10/17     |
| PCBs             |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Aroclor 1016     | ND(0.035)    | ND(0.043)    | ND(0.038)    | ND(0.038)    | ND(0.039)    | ND(0.042)    | ND(0.039)    | ND(0.036)    | ND(0.042)    | ND(0.039)    | ND(0.037)    | ND(0.039)    | ND(0.037)    |
| Aroclor 1221     | ND(0.035)    | ND(0.043)    | ND(0.038)    | ND(0.038)    | ND(0.039)    | ND(0.042)    | ND(0.039)    | ND(0.036)    | ND(0.042)    | ND(0.039)    | ND(0.037)    | ND(0.039)    | ND(0.037)    |
| Aroclor 1232     | ND(0.035)    | ND(0.043)    | ND(0.038)    | ND(0.038)    | ND(0.039)    | ND(0.042)    | ND(0.039)    | ND(0.036)    | ND(0.042)    | ND(0.039)    | ND(0.037)    | ND(0.039)    | ND(0.037)    |
| Aroclor 1242     | ND(0.035)    | ND(0.043)    | ND(0.038)    | ND(0.038)    | ND(0.039)    | ND(0.042)    | ND(0.039)    | ND(0.036)    | ND(0.042)    | ND(0.039)    | ND(0.037)    | ND(0.039)    | ND(0.037)    |
| Aroclor 1248     | ND(0.035)    | ND(0.043)    | ND(0.038)    | ND(0.038)    | ND(0.039)    | ND(0.042)    | ND(0.039)    | ND(0.036)    | ND(0.042)    | ND(0.039)    | ND(0.037)    | ND(0.039)    | ND(0.037)    |
| Aroclor 1254     | ND(0.035)    | ND(0.043)    | ND(0.038)    | ND(0.038)    | ND(0.039)    | ND(0.042)    | ND(0.039)    | ND(0.036)    | ND(0.042)    | ND(0.039)    | ND(0.037)    | ND(0.039)    | ND(0.037)    |
| Aroclor 1260     | 0.0113 J     | 0.056        | ND(0.038)    | 0.0302 J     | ND(0.039)    | ND(0.042)    | ND(0.039)    | ND(0.036)    | 0.289        | 0.034 J      | 0.189        | 0.234        | 0.123        |
| Aroclor-1262     | ND(0.035)    | ND(0.043)    | ND(0.038)    | ND(0.038)    | ND(0.039)    | ND(0.042)    | ND(0.039)    | ND(0.036)    | ND(0.042)    | ND(0.039)    | ND(0.037)    | ND(0.039)    | ND(0.037)    |
| Aroclor-1268     | ND(0.035)    | ND(0.043)    | ND(0.038)    | ND(0.038)    | ND(0.039)    | ND(0.042)    | ND(0.039)    | ND(0.036)    | ND(0.042)    | ND(0.039)    | ND(0.037)    | ND(0.039)    | ND(0.037)    |
| Total PCBs       | 0.0113 J     | 0.056        | ND           | 0.0302 J     | ND           | ND           | ND           | ND           | 0.289        | 0.034 J      | 0.189        | 0.234        | 0.123        |
| Miscellaneous    |              |              |              |              |              |              |              |              |              |              |              |              |              |
| TOC              | NA           | 20,100       | 12,000       | 12,500       |



| Sample Location: |                       | T11A17-SL-67       | T11A17-SL-68      |                    |                   |                      | T11A17-SL-69        |                   | T11A17-SL-7        |                   |                    | T11A17-SL-71      |
|------------------|-----------------------|--------------------|-------------------|--------------------|-------------------|----------------------|---------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
| Sample Depth:    | 0 - 6<br>11/10/17     | 6 - 12<br>11/10/17 | 0 - 6<br>11/13/17 | 6 - 12<br>11/13/17 | 0 - 6<br>11/13/17 | 6 - 12<br>11/13/17   | 12 - 18<br>11/13/17 | 0 - 6<br>11/07/17 | 6 - 12<br>11/07/17 | 0 - 6<br>11/13/17 | 6 - 12<br>11/13/17 | 0 - 6<br>11/10/17 |
| Date:            | 11/10/17              | 11/10/17           | 11/13/17          | 11/13/17           | 11/13/17          | 11/13/17             | 11/13/17            | 11/07/17          | 11/07/17           | 11/13/17          | 11/13/17           | 11/10/17          |
| PCBs             |                       |                    |                   |                    |                   |                      |                     |                   |                    |                   |                    |                   |
| Aroclor 1016     | ND(0.045) [ND(0.044)] | ND(0.043)          | ND(0.042)         | ND(0.034)          | ND(0.095)         | ND(0.04) [ND(0.041)] | ND(0.034)           | ND(0.04)          | ND(0.034)          | ND(0.08)          | ND(0.047)          | ND(0.046)         |
| Aroclor 1221     | ND(0.045) [ND(0.044)] | ND(0.043)          | ND(0.042)         | ND(0.034)          | ND(0.095)         | ND(0.04) [ND(0.041)] | ND(0.034)           | ND(0.04)          | ND(0.034)          | ND(0.08)          | ND(0.047)          | ND(0.046)         |
| Aroclor 1232     | ND(0.045) [ND(0.044)] | ND(0.043)          | ND(0.042)         | ND(0.034)          | ND(0.095)         | ND(0.04) [ND(0.041)] | ND(0.034)           | ND(0.04)          | ND(0.034)          | ND(0.08)          | ND(0.047)          | ND(0.046)         |
| Aroclor 1242     | ND(0.045) [ND(0.044)] | ND(0.043)          | ND(0.042)         | ND(0.034)          | ND(0.095)         | ND(0.04) [ND(0.041)] | ND(0.034)           | ND(0.04)          | ND(0.034)          | ND(0.08)          | ND(0.047)          | ND(0.046)         |
| Aroclor 1248     | ND(0.045) [ND(0.044)] | ND(0.043)          | ND(0.042)         | ND(0.034)          | ND(0.095)         | ND(0.04) [ND(0.041)] | ND(0.034)           | ND(0.04)          | ND(0.034)          | ND(0.08)          | ND(0.047)          | ND(0.046)         |
| Aroclor 1254     | ND(0.045) [ND(0.044)] | ND(0.043)          | ND(0.042)         | ND(0.034)          | ND(0.095)         | ND(0.04) [ND(0.041)] | ND(0.034)           | ND(0.04)          | ND(0.034)          | ND(0.08)          | ND(0.047)          | ND(0.046)         |
| Aroclor 1260     | 0.256 [0.238]         | 0.0205 J           | 0.2               | ND(0.034)          | 1.03              | 0.0552 [0.0846]      | ND(0.034)           | 0.282             | ND(0.034)          | 1.5               | 0.332              | 0.639             |
| Aroclor-1262     | ND(0.045) [ND(0.044)] | ND(0.043)          | ND(0.042)         | ND(0.034)          | ND(0.095)         | ND(0.04) [ND(0.041)] | ND(0.034)           | ND(0.04)          | ND(0.034)          | ND(0.08)          | ND(0.047)          | ND(0.046)         |
| Aroclor-1268     | ND(0.045) [ND(0.044)] | ND(0.043)          | ND(0.042)         | ND(0.034)          | ND(0.095)         | ND(0.04) [ND(0.041)] | ND(0.034)           | ND(0.04)          | ND(0.034)          | ND(0.08)          | ND(0.047)          | ND(0.046)         |
| Total PCBs       | 0.256 [0.238]         | 0.0205 J           | 0.2               | ND                 | 1.03              | 0.0552 [0.0846]      | ND                  | 0.282             | ND                 | 1.5               | 0.332              | 0.639             |
| Miscellaneous    |                       |                    |                   |                    |                   |                      |                     |                   |                    |                   |                    |                   |
| TOC              | NA                    | NA                 | NA                | NA                 | NA                | NA                   | NA                  | NA                | NA                 | NA                | NA                 | NA                |



|               | T11A17-SL-71 | T11A17-SL-72 | T11A17-SL-72 | T11A17-SL-73 | T11A17-SL-73 |           | T11A17-SL-74 |          | T11A17-SL-74 |           |           |           |          |
|---------------|--------------|--------------|--------------|--------------|--------------|-----------|--------------|----------|--------------|-----------|-----------|-----------|----------|
| Sample Depth: | 6 - 12       | 0 - 6        | 6 - 12       | 0 - 6        | 6 - 12       | 12 - 18   | 0 - 6        | 6 - 12   | 12 - 18      | 18 - 20   | 0 - 6     | 6 - 11    | 0 - 6    |
| Date:         | 11/10/17     | 11/13/17     | 11/13/17     | 11/13/17     | 11/13/17     | 11/13/17  | 11/13/17     | 11/13/17 | 11/13/17     | 11/13/17  | 11/13/17  | 11/13/17  | 11/13/17 |
| PCBs          |              |              |              |              |              |           |              |          |              |           |           |           |          |
| Aroclor 1016  | ND(0.039)    | ND(0.044)    | ND(0.037)    | ND(0.04)     | ND(0.035)    | ND(0.039) | ND(0.037)    | ND(0.05) | ND(0.043)    | ND(0.035) | ND(0.061) | ND(0.057) | ND(0.04) |
| Aroclor 1221  | ND(0.039)    | ND(0.044)    | ND(0.037)    | ND(0.04)     | ND(0.035)    | ND(0.039) | ND(0.037)    | ND(0.05) | ND(0.043)    | ND(0.035) | ND(0.061) | ND(0.057) | ND(0.04) |
| Aroclor 1232  | ND(0.039)    | ND(0.044)    | ND(0.037)    | ND(0.04)     | ND(0.035)    | ND(0.039) | ND(0.037)    | ND(0.05) | ND(0.043)    | ND(0.035) | ND(0.061) | ND(0.057) | ND(0.04) |
| Aroclor 1242  | ND(0.039)    | ND(0.044)    | ND(0.037)    | ND(0.04)     | ND(0.035)    | ND(0.039) | ND(0.037)    | ND(0.05) | ND(0.043)    | ND(0.035) | ND(0.061) | ND(0.057) | ND(0.04) |
| Aroclor 1248  | ND(0.039)    | ND(0.044)    | ND(0.037)    | ND(0.04)     | ND(0.035)    | ND(0.039) | ND(0.037)    | ND(0.05) | ND(0.043)    | ND(0.035) | ND(0.061) | ND(0.057) | ND(0.04) |
| Aroclor 1254  | ND(0.039)    | ND(0.044)    | ND(0.037)    | ND(0.04)     | ND(0.035)    | ND(0.039) | ND(0.037)    | ND(0.05) | ND(0.043)    | ND(0.035) | ND(0.061) | ND(0.057) | ND(0.04) |
| Aroclor 1260  | 0.333        | 0.104        | 0.0692       | 0.167        | 0.0331 J     | 0.0222 J  | 1.26         | 68.8     | 42.5         | 27.9      | 129       | 258       | 0.967    |
| Aroclor-1262  | ND(0.039)    | ND(0.044)    | ND(0.037)    | ND(0.04)     | ND(0.035)    | ND(0.039) | ND(0.037)    | ND(0.05) | ND(0.043)    | ND(0.035) | ND(0.061) | ND(0.057) | ND(0.04) |
| Aroclor-1268  | ND(0.039)    | ND(0.044)    | ND(0.037)    | ND(0.04)     | ND(0.035)    | ND(0.039) | ND(0.037)    | ND(0.05) | ND(0.043)    | ND(0.035) | ND(0.061) | ND(0.057) | ND(0.04) |
| Total PCBs    | 0.333        | 0.104        | 0.0692       | 0.167        | 0.0331 J     | 0.0222 J  | 1.26         | 68.8     | 42.5         | 27.9      | 129       | 258       | 0.967    |
| Miscellaneous |              |              |              |              |              |           |              |          |              |           |           |           |          |
| TOC           | NA           | NA           | NA           | NA           | NA           | NA        | NA           | NA       | NA           | NA        | 37,100    | 39,400    | NA       |



|               |           |           |                       | T11A17-SL-77 | T11A17-SL-78 |           |           | T11A17-SL-79 |                       | T11A17-SL-79 |           |           |
|---------------|-----------|-----------|-----------------------|--------------|--------------|-----------|-----------|--------------|-----------------------|--------------|-----------|-----------|
| Sample Depth: | 0 - 6     | 6 - 12    | 12 - 18               | 18 - 24      | 0 - 6        | 6 - 12    | 12 - 18   | 0 - 6        | 6 - 12                | 12 - 18      | 0 - 6     | 6 - 12    |
| Date:         | 11/13/17  | 11/13/17  | 11/13/17              | 11/13/17     | 11/13/17     | 11/13/17  | 11/13/17  | 11/13/17     | 11/13/17              | 11/13/17     | 11/07/17  | 11/07/17  |
| PCBs          |           |           |                       |              |              |           |           |              |                       |              |           |           |
| Aroclor 1016  | ND(0.036) | ND(0.034) | ND(0.039) [ND(0.036)] | ND(0.039)    | ND(0.045)    | ND(0.041) | ND(0.037) | ND(0.041)    | ND(0.036) [ND(0.036)] | ND(0.035)    | ND(0.036) | ND(0.034) |
| Aroclor 1221  | ND(0.036) | ND(0.034) | ND(0.039) [ND(0.036)] | ND(0.039)    | ND(0.045)    | ND(0.041) | ND(0.037) | ND(0.041)    | ND(0.036) [ND(0.036)] | ND(0.035)    | ND(0.036) | ND(0.034) |
| Aroclor 1232  | ND(0.036) | ND(0.034) | ND(0.039) [ND(0.036)] | ND(0.039)    | ND(0.045)    | ND(0.041) | ND(0.037) | ND(0.041)    | ND(0.036) [ND(0.036)] | ND(0.035)    | ND(0.036) | ND(0.034) |
| Aroclor 1242  | ND(0.036) | ND(0.034) | ND(0.039) [ND(0.036)] | ND(0.039)    | ND(0.045)    | ND(0.041) | ND(0.037) | ND(0.041)    | ND(0.036) [ND(0.036)] | ND(0.035)    | ND(0.036) | ND(0.034) |
| Aroclor 1248  | ND(0.036) | ND(0.034) | ND(0.039) [ND(0.036)] | ND(0.039)    | ND(0.045)    | ND(0.041) | ND(0.037) | ND(0.041)    | ND(0.036) [ND(0.036)] | ND(0.035)    | ND(0.036) | ND(0.034) |
| Aroclor 1254  | ND(0.036) | ND(0.034) | ND(0.039) [ND(0.036)] | ND(0.039)    | ND(0.045)    | ND(0.041) | ND(0.037) | ND(0.041)    | ND(0.036) [ND(0.036)] | ND(0.035)    | ND(0.036) | ND(0.034) |
| Aroclor 1260  | 0.07      | 0.0578    | 0.101 [0.0285 J]      | ND(0.039)    | 0.236        | 0.104     | ND(0.037) | 0.215        | 0.0931 [0.119]        | 0.45         | 0.0962    | ND(0.034) |
| Aroclor-1262  | ND(0.036) | ND(0.034) | ND(0.039) [ND(0.036)] | ND(0.039)    | ND(0.045)    | ND(0.041) | ND(0.037) | ND(0.041)    | ND(0.036) [ND(0.036)] | ND(0.035)    | ND(0.036) | ND(0.034) |
| Aroclor-1268  | ND(0.036) | ND(0.034) | ND(0.039) [ND(0.036)] | ND(0.039)    | ND(0.045)    | ND(0.041) | ND(0.037) | ND(0.041)    | ND(0.036) [ND(0.036)] | ND(0.035)    | ND(0.036) | ND(0.034) |
| Total PCBs    | 0.07      | 0.0578    | 0.101 [0.0285 J]      | ND           | 0.236        | 0.104     | ND        | 0.215        | 0.0931 [0.119]        | 0.45         | 0.0962    | ND        |
| Miscellaneous |           |           |                       |              |              |           |           |              |                       |              |           |           |
| TOC           | NA        | NA        | NA                    | NA           | NA           | NA        | NA        | 14,700       | 4,660 [4,800]         | 7,140        | 8,920     | 3,460     |



| Sample Location:       |                   |                    | T11A17-SL-81      | T11A17-SL-81       |                   | T11A17-SL-82       |                     |                   | T11A17-SL-83       |                   |                    |                       |
|------------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|---------------------|-------------------|--------------------|-------------------|--------------------|-----------------------|
| Sample Depth:<br>Date: | 0 - 6<br>11/13/17 | 6 - 12<br>11/13/17 | 0 - 6<br>11/13/17 | 6 - 12<br>11/13/17 | 0 - 6<br>11/13/17 | 6 - 12<br>11/13/17 | 12 - 17<br>11/13/17 | 0 - 6<br>11/13/17 | 6 - 12<br>11/13/17 | 0 - 6<br>11/13/17 | 6 - 12<br>11/13/17 | 0 - 6<br>11/14/17     |
| PCBs                   |                   |                    |                   |                    |                   |                    |                     |                   |                    |                   |                    |                       |
| Aroclor 1016           | ND(0.039)         | ND(0.04)           | ND(0.04)          | ND(0.035)          | ND(0.04)          | ND(0.044)          | ND(0.042)           | ND(0.046)         | ND(0.04)           | ND(0.059)         | ND(0.043)          | ND(0.045) [ND(0.041)] |
| Aroclor 1221           | ND(0.039)         | ND(0.04)           | ND(0.04)          | ND(0.035)          | ND(0.04)          | ND(0.044)          | ND(0.042)           | ND(0.046)         | ND(0.04)           | ND(0.059)         | ND(0.043)          | ND(0.045) [ND(0.041)] |
| Aroclor 1232           | ND(0.039)         | ND(0.04)           | ND(0.04)          | ND(0.035)          | ND(0.04)          | ND(0.044)          | ND(0.042)           | ND(0.046)         | ND(0.04)           | ND(0.059)         | ND(0.043)          | ND(0.045) [ND(0.041)] |
| Aroclor 1242           | ND(0.039)         | ND(0.04)           | ND(0.04)          | ND(0.035)          | ND(0.04)          | ND(0.044)          | ND(0.042)           | ND(0.046)         | ND(0.04)           | ND(0.059)         | ND(0.043)          | ND(0.045) [ND(0.041)] |
| Aroclor 1248           | ND(0.039)         | ND(0.04)           | ND(0.04)          | ND(0.035)          | ND(0.04)          | ND(0.044)          | ND(0.042)           | ND(0.046)         | ND(0.04)           | ND(0.059)         | ND(0.043)          | ND(0.045) [ND(0.041)] |
| Aroclor 1254           | ND(0.039)         | ND(0.04)           | ND(0.04)          | ND(0.035)          | ND(0.04)          | ND(0.044)          | ND(0.042)           | ND(0.046)         | ND(0.04)           | ND(0.059)         | ND(0.043)          | ND(0.045) [ND(0.041)] |
| Aroclor 1260           | 0.31              | 0.235              | 0.399             | 0.0138 J           | 0.769             | 1.42               | 3.6                 | 0.198             | 0.0217 J           | 0.243             | 0.127              | 0.826 [0.898]         |
| Aroclor-1262           | ND(0.039)         | ND(0.04)           | ND(0.04)          | ND(0.035)          | ND(0.04)          | ND(0.044)          | ND(0.042)           | ND(0.046)         | ND(0.04)           | ND(0.059)         | ND(0.043)          | ND(0.045) [ND(0.041)] |
| Aroclor-1268           | ND(0.039)         | ND(0.04)           | ND(0.04)          | ND(0.035)          | ND(0.04)          | ND(0.044)          | ND(0.042)           | ND(0.046)         | ND(0.04)           | ND(0.059)         | ND(0.043)          | ND(0.045) [ND(0.041)] |
| Total PCBs             | 0.31              | 0.235              | 0.399             | 0.0138 J           | 0.769             | 1.42               | 3.6                 | 0.198             | 0.0217 J           | 0.243             | 0.127              | 0.826 [0.898]         |
| Miscellaneous          |                   |                    |                   |                    |                   |                    |                     |                   |                    |                   |                    |                       |
| TOC                    | NA                | NA                 | NA                | NA                 | NA                | NA                 | NA                  | NA                | NA                 | NA                | NA                 | NA                    |



|               | T11A17-SL-85       |                     |                     |                   |                    |                   | T11A17-SL-87       | T11A17-SL-88      |                    |                   |                    |                   | T11A17-SL-9        |
|---------------|--------------------|---------------------|---------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|
| Sample Depth: | 6 - 12<br>11/14/17 | 12 - 18<br>11/14/17 | 18 - 22<br>11/14/17 | 0 - 6<br>11/14/17 | 6 - 12<br>11/14/17 | 0 - 6<br>11/07/17 | 6 - 10<br>11/07/17 |
| Date:         | 11/14/17           | 11/14/17            | 11/14/17            | 11/14/17          | 11/14/17           | 11/14/17          | 11/14/17           | 11/14/17          | 11/14/17           | 11/14/17          | 11/14/17           | 11/07/17          | 11/07/17           |
| PCBs          |                    |                     |                     |                   |                    |                   |                    |                   |                    |                   |                    |                   |                    |
| Aroclor 1016  | ND(0.034)          | ND(0.036)           | ND(0.035)           | ND(0.04)          | ND(0.044)          | ND(0.034)         | ND(0.037)          | ND(0.035)         | ND(0.036)          | ND(0.042)         | ND(0.04)           | ND(0.059)         | ND(0.046)          |
| Aroclor 1221  | ND(0.034)          | ND(0.036)           | ND(0.035)           | ND(0.04)          | ND(0.044)          | ND(0.034)         | ND(0.037)          | ND(0.035)         | ND(0.036)          | ND(0.042)         | ND(0.04)           | ND(0.059)         | ND(0.046)          |
| Aroclor 1232  | ND(0.034)          | ND(0.036)           | ND(0.035)           | ND(0.04)          | ND(0.044)          | ND(0.034)         | ND(0.037)          | ND(0.035)         | ND(0.036)          | ND(0.042)         | ND(0.04)           | ND(0.059)         | ND(0.046)          |
| Aroclor 1242  | ND(0.034)          | ND(0.036)           | ND(0.035)           | ND(0.04)          | ND(0.044)          | ND(0.034)         | ND(0.037)          | ND(0.035)         | ND(0.036)          | ND(0.042)         | ND(0.04)           | ND(0.059)         | ND(0.046)          |
| Aroclor 1248  | ND(0.034)          | ND(0.036)           | ND(0.035)           | ND(0.04)          | ND(0.044)          | ND(0.034)         | ND(0.037)          | ND(0.035)         | ND(0.036)          | ND(0.042)         | ND(0.04)           | ND(0.059)         | ND(0.046)          |
| Aroclor 1254  | ND(0.034)          | ND(0.036)           | ND(0.035)           | ND(0.04)          | ND(0.044)          | ND(0.034)         | ND(0.037)          | ND(0.035)         | ND(0.036)          | ND(0.042)         | ND(0.04)           | ND(0.059)         | ND(0.046)          |
| Aroclor 1260  | 3.19               | 214                 | 348                 | 0.23              | 0.247              | 0.0869            | 0.142              | ND(0.035)         | 0.521              | 0.258             | 0.19               | 49.4              | 10.9               |
| Aroclor-1262  | ND(0.034)          | ND(0.036)           | ND(0.035)           | ND(0.04)          | ND(0.044)          | ND(0.034)         | ND(0.037)          | ND(0.035)         | ND(0.036)          | ND(0.042)         | ND(0.04)           | ND(0.059)         | ND(0.046)          |
| Aroclor-1268  | ND(0.034)          | ND(0.036)           | ND(0.035)           | ND(0.04)          | ND(0.044)          | ND(0.034)         | ND(0.037)          | ND(0.035)         | ND(0.036)          | ND(0.042)         | ND(0.04)           | ND(0.059)         | ND(0.046)          |
| Total PCBs    | 3.19               | 214                 | 348                 | 0.23              | 0.247              | 0.0869            | 0.142              | ND                | 0.521              | 0.258             | 0.19               | 49.4              | 10.9               |
| Miscellaneous |                    |                     |                     |                   |                    |                   |                    |                   |                    |                   |                    |                   |                    |
| TOC           | NA                 | NA                  | NA                  | NA                | NA                 | 6,790             | 5,550              | NA                | NA                 | NA                | NA                 | 74,800            | 61,400             |



| Sample Location:<br>Sample Depth: | T11A17-SL-90<br>0 - 6 | T11A17-SL-90<br>6 - 12 | T11A17-SL-91<br>0 - 6 | T11A17-SL-91<br>6 - 12 | T11A17-SL-92<br>0 - 6 | T11A17-SL-92<br>6 - 12 | T11A17-SL-93<br>0 - 6 | T11A17-SL-93<br>6 - 12 | T11A17-SL-94<br>0 - 6 | T11A17-SL-94<br>6 - 12 | T11A17-SL-95<br>0 - 6 | T11A17-SL-95<br>6 - 12 | T11A17-SL-96<br>0 - 6 |
|-----------------------------------|-----------------------|------------------------|-----------------------|------------------------|-----------------------|------------------------|-----------------------|------------------------|-----------------------|------------------------|-----------------------|------------------------|-----------------------|
| Date:                             | 11/14/17              | 11/14/17               | 11/14/17              | 11/14/17               | 11/14/17              | 11/14/17               | 11/14/17              | 11/14/17               | 11/14/17              | 11/14/17               | 11/14/17              | 11/14/17               | 11/14/17              |
| PCBs                              |                       |                        |                       |                        |                       |                        |                       |                        |                       |                        |                       |                        |                       |
| Aroclor 1016                      | ND(0.038)             | ND(0.041)              | ND(0.04)              | ND(0.038)              | ND(0.038)             | ND(0.037)              | ND(0.04)              | ND(0.035)              | ND(0.041)             | ND(0.039)              | ND(0.036)             | ND(0.036)              | ND(0.043)             |
| Aroclor 1221                      | ND(0.038)             | ND(0.041)              | ND(0.04)              | ND(0.038)              | ND(0.038)             | ND(0.037)              | ND(0.04)              | ND(0.035)              | ND(0.041)             | ND(0.039)              | ND(0.036)             | ND(0.036)              | ND(0.043)             |
| Aroclor 1232                      | ND(0.038)             | ND(0.041)              | ND(0.04)              | ND(0.038)              | ND(0.038)             | ND(0.037)              | ND(0.04)              | ND(0.035)              | ND(0.041)             | ND(0.039)              | ND(0.036)             | ND(0.036)              | ND(0.043)             |
| Aroclor 1242                      | ND(0.038)             | ND(0.041)              | ND(0.04)              | ND(0.038)              | ND(0.038)             | ND(0.037)              | ND(0.04)              | ND(0.035)              | ND(0.041)             | ND(0.039)              | ND(0.036)             | ND(0.036)              | ND(0.043)             |
| Aroclor 1248                      | ND(0.038)             | ND(0.041)              | ND(0.04)              | ND(0.038)              | ND(0.038)             | ND(0.037)              | ND(0.04)              | ND(0.035)              | ND(0.041)             | ND(0.039)              | ND(0.036)             | ND(0.036)              | ND(0.043)             |
| Aroclor 1254                      | ND(0.038)             | ND(0.041)              | ND(0.04)              | ND(0.038)              | ND(0.038)             | ND(0.037)              | ND(0.04)              | ND(0.035)              | ND(0.041)             | ND(0.039)              | ND(0.036)             | ND(0.036)              | ND(0.043)             |
| Aroclor 1260                      | 0.14                  | 0.0486                 | 0.423                 | 0.442                  | 0.682                 | 0.197                  | 0.242                 | 0.0447                 | 0.77                  | 0.321                  | 0.175                 | 0.0183 J               | 0.675                 |
| Aroclor-1262                      | ND(0.038)             | ND(0.041)              | ND(0.04)              | ND(0.038)              | ND(0.038)             | ND(0.037)              | ND(0.04)              | ND(0.035)              | ND(0.041)             | ND(0.039)              | ND(0.036)             | ND(0.036)              | ND(0.043)             |
| Aroclor-1268                      | ND(0.038)             | ND(0.041)              | ND(0.04)              | ND(0.038)              | ND(0.038)             | ND(0.037)              | ND(0.04)              | ND(0.035)              | ND(0.041)             | ND(0.039)              | ND(0.036)             | ND(0.036)              | ND(0.043)             |
| Total PCBs                        | 0.14                  | 0.0486                 | 0.423                 | 0.442                  | 0.682                 | 0.197                  | 0.242                 | 0.0447                 | 0.77                  | 0.321                  | 0.175                 | 0.0183 J               | 0.675                 |
| Miscellaneous                     |                       |                        |                       |                        |                       |                        |                       |                        |                       |                        |                       |                        |                       |
| TOC                               | NA                    | NA                     | NA                    | NA                     | NA                    | NA                     | NA                    | NA                     | 25,700                | 16,700                 | NA                    | NA                     | NA                    |



| Sample Location: | T11A17-SL-96 | T11A17-SL-97 | T11A17-SL-97 | T11A17-SL-98 | T11A17-SL-98 | T11A17-SL-98 | T11A17-SL-99 | T11A17-SL-99 | T11A17-SL-J-11 | T11A17-SL-J-11 | T11A17-SL-J-12 | T11A17-SL-J-12 |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|
| Sample Depth:    | 6 - 12       | 0 - 6        | 6 - 12       | 0 - 6        | 6 - 12       | 12 - 15      | 0 - 6        | 6 - 12       | 0 - 6          | 6 - 12         | 0 - 6          | 6 - 12         |
| Date:            | 11/14/17     | 11/16/17     | 11/16/17     | 11/14/17     | 11/14/17     | 11/14/17     | 11/14/17     | 11/14/17     | 11/16/17       | 11/16/17       | 11/16/17       | 11/16/17       |
| PCBs             |              |              |              |              |              |              |              |              |                |                |                |                |
| Aroclor 1016     | ND(0.037)    | ND(0.045)    | ND(0.035)    | ND(0.04)     | ND(0.039)    | ND(0.035)    | ND(0.038)    | ND(0.036)    | ND(0.037)      | ND(0.039)      | ND(0.042)      | ND(0.041)      |
| Aroclor 1221     | ND(0.037)    | ND(0.045)    | ND(0.035)    | ND(0.04)     | ND(0.039)    | ND(0.035)    | ND(0.038)    | ND(0.036)    | ND(0.037)      | ND(0.039)      | ND(0.042)      | ND(0.041)      |
| Aroclor 1232     | ND(0.037)    | ND(0.045)    | ND(0.035)    | ND(0.04)     | ND(0.039)    | ND(0.035)    | ND(0.038)    | ND(0.036)    | ND(0.037)      | ND(0.039)      | ND(0.042)      | ND(0.041)      |
| Aroclor 1242     | ND(0.037)    | ND(0.045)    | ND(0.035)    | ND(0.04)     | ND(0.039)    | ND(0.035)    | ND(0.038)    | ND(0.036)    | ND(0.037)      | ND(0.039)      | ND(0.042)      | ND(0.041)      |
| Aroclor 1248     | ND(0.037)    | ND(0.045)    | ND(0.035)    | ND(0.04)     | ND(0.039)    | ND(0.035)    | ND(0.038)    | ND(0.036)    | ND(0.037)      | ND(0.039)      | ND(0.042)      | ND(0.041)      |
| Aroclor 1254     | ND(0.037)    | ND(0.045)    | ND(0.035)    | ND(0.04)     | ND(0.039)    | ND(0.035)    | ND(0.038)    | ND(0.036)    | ND(0.037)      | ND(0.039)      | ND(0.042)      | ND(0.041)      |
| Aroclor 1260     | 0.336        | 0.124        | 0.0139 J     | 0.108        | 0.0231 J     | ND(0.035)    | 0.174        | 0.421        | 0.0128 J       | ND(0.039)      | 8.01           | 3.46           |
| Aroclor-1262     | ND(0.037)    | ND(0.045)    | ND(0.035)    | ND(0.04)     | ND(0.039)    | ND(0.035)    | ND(0.038)    | ND(0.036)    | ND(0.037)      | ND(0.039)      | ND(0.042)      | ND(0.041)      |
| Aroclor-1268     | ND(0.037)    | ND(0.045)    | ND(0.035)    | ND(0.04)     | ND(0.039)    | ND(0.035)    | ND(0.038)    | ND(0.036)    | ND(0.037)      | ND(0.039)      | ND(0.042)      | ND(0.041)      |
| Total PCBs       | 0.336        | 0.124        | 0.0139 J     | 0.108        | 0.0231 J     | ND           | 0.174        | 0.421        | 0.0128 J       | ND             | 8.01           | 3.46           |
| Miscellaneous    |              |              |              |              |              |              |              |              |                |                |                |                |
| TOC              | NA             | NA             | NA             | NA             |

Table 7 Data for 2017 and 2018 Samples Tributary T11A Removal Action Under Paragraph 47.f



| Sample Location:<br>Sample Depth: | T11A17-SL-J-12<br>12 - 17 | T11A17-SL-J-13<br>0 - 6 | T11A17-SL-J-13<br>6 - 12 | T11A17-SL-J-14<br>0 - 6 | T11A17-SL-J-14<br>6 - 12 | T11A17-SL-J-15<br>0 - 6 | T11A17-SL-J-15<br>6 - 12 | T11A17-SL-J-16<br>0 - 6 | T11A17-SL-J-16<br>6 - 12 | T11A17-SL-JT-10<br>0 - 6 | T11A17-SL-JT-10<br>6 - 12 |
|-----------------------------------|---------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|--------------------------|---------------------------|
| Date:                             | 11/16/17                  | 11/16/17                | 11/16/17                 | 11/16/17                | 11/16/17                 | 11/16/17                | 11/16/17                 | 11/16/17                | 11/16/17                 | 11/14/17                 | 11/14/17                  |
| PCBs                              |                           |                         |                          |                         |                          |                         |                          |                         |                          |                          |                           |
| Aroclor 1016                      | ND(0.036)                 | ND(0.039)               | ND(0.041)                | ND(0.039)               | ND(0.038)                | ND(0.05)                | ND(0.041)                | ND(0.033)               | ND(0.033)                | ND(0.042)                | ND(0.042) [ND(0.043)]     |
| Aroclor 1221                      | ND(0.036)                 | ND(0.039)               | ND(0.041)                | ND(0.039)               | ND(0.038)                | ND(0.05)                | ND(0.041)                | ND(0.033)               | ND(0.033)                | ND(0.042)                | ND(0.042) [ND(0.043)]     |
| Aroclor 1232                      | ND(0.036)                 | ND(0.039)               | ND(0.041)                | ND(0.039)               | ND(0.038)                | ND(0.05)                | ND(0.041)                | ND(0.033)               | ND(0.033)                | ND(0.042)                | ND(0.042) [ND(0.043)]     |
| Aroclor 1242                      | ND(0.036)                 | ND(0.039)               | ND(0.041)                | ND(0.039)               | ND(0.038)                | ND(0.05)                | ND(0.041)                | ND(0.033)               | ND(0.033)                | ND(0.042)                | ND(0.042) [ND(0.043)]     |
| Aroclor 1248                      | ND(0.036)                 | ND(0.039)               | ND(0.041)                | ND(0.039)               | ND(0.038)                | ND(0.05)                | ND(0.041)                | ND(0.033)               | ND(0.033)                | ND(0.042)                | ND(0.042) [ND(0.043)]     |
| Aroclor 1254                      | ND(0.036)                 | ND(0.039)               | ND(0.041)                | ND(0.039)               | ND(0.038)                | ND(0.05)                | ND(0.041)                | ND(0.033)               | ND(0.033)                | ND(0.042)                | ND(0.042) [ND(0.043)]     |
| Aroclor 1260                      | 0.144                     | 0.171                   | 0.0402 J                 | 0.128                   | 0.0665                   | 0.247                   | 0.166                    | 0.0928                  | 0.011 J                  | 0.659                    | 0.0918 [0.0569]           |
| Aroclor-1262                      | ND(0.036)                 | ND(0.039)               | ND(0.041)                | ND(0.039)               | ND(0.038)                | ND(0.05)                | ND(0.041)                | ND(0.033)               | ND(0.033)                | ND(0.042)                | ND(0.042) [ND(0.043)]     |
| Aroclor-1268                      | ND(0.036)                 | ND(0.039)               | ND(0.041)                | ND(0.039)               | ND(0.038)                | ND(0.05)                | ND(0.041)                | ND(0.033)               | ND(0.033)                | ND(0.042)                | ND(0.042) [ND(0.043)]     |
| Total PCBs                        | 0.144                     | 0.171                   | 0.0402 J                 | 0.128                   | 0.0665                   | 0.247                   | 0.166                    | 0.0928                  | 0.011 J                  | 0.659                    | 0.0918 [0.0569]           |
| Miscellaneous                     |                           |                         |                          |                         |                          |                         |                          |                         |                          |                          |                           |
| TOC                               | NA                        | NA                      | NA                       | NA                      | NA                       | NA                      | NA                       | NA                      | NA                       | NA                       | NA                        |

Table 7 Data for 2017 and 2018 Samples Tributary T11A Removal Action Under Paragraph 47.f



| Sample Location:<br>Sample Depth: |           | T11A17-SL-JT-11<br>0 - 6 | T11A17-SL-JT-11<br>6 - 12 | T11A17-SL-JT-12<br>0 - 6 | T11A17-SL-JT-12<br>6 - 12 | T11A17-SL-JT-12<br>12 - 18 | T11A17-SL-JT-13<br>0 - 6 | T11A17-SL-JT-13<br>6 - 12 | T11A17-SL-JT-14<br>0 - 6 | T11A17-SL-JT-14<br>6 - 11 |
|-----------------------------------|-----------|--------------------------|---------------------------|--------------------------|---------------------------|----------------------------|--------------------------|---------------------------|--------------------------|---------------------------|
| Date:                             | 11/14/17  | 11/16/17                 | 11/16/17                  | 11/16/17                 | 11/16/17                  | 11/16/17                   | 11/16/17                 | 11/16/17                  | 11/16/17                 | 11/16/17                  |
| PCBs                              |           |                          |                           |                          |                           |                            |                          |                           |                          |                           |
| Aroclor 1016                      | ND(0.034) | ND(0.059)                | ND(0.042)                 | ND(0.045)                | ND(0.039) [ND(0.04)]      | ND(0.04)                   | ND(0.038)                | ND(0.04)                  | ND(0.046)                | ND(0.041)                 |
| Aroclor 1221                      | ND(0.034) | ND(0.059)                | ND(0.042)                 | ND(0.045)                | ND(0.039) [ND(0.04)]      | ND(0.04)                   | ND(0.038)                | ND(0.04)                  | ND(0.046)                | ND(0.041)                 |
| Aroclor 1232                      | ND(0.034) | ND(0.059)                | ND(0.042)                 | ND(0.045)                | ND(0.039) [ND(0.04)]      | ND(0.04)                   | ND(0.038)                | ND(0.04)                  | ND(0.046)                | ND(0.041)                 |
| Aroclor 1242                      | ND(0.034) | ND(0.059)                | ND(0.042)                 | ND(0.045)                | ND(0.039) [ND(0.04)]      | ND(0.04)                   | ND(0.038)                | ND(0.04)                  | ND(0.046)                | ND(0.041)                 |
| Aroclor 1248                      | ND(0.034) | ND(0.059)                | ND(0.042)                 | ND(0.045)                | ND(0.039) [ND(0.04)]      | ND(0.04)                   | ND(0.038)                | ND(0.04)                  | ND(0.046)                | ND(0.041)                 |
| Aroclor 1254                      | ND(0.034) | ND(0.059)                | ND(0.042)                 | ND(0.045)                | ND(0.039) [ND(0.04)]      | ND(0.04)                   | ND(0.038)                | ND(0.04)                  | ND(0.046)                | ND(0.041)                 |
| Aroclor 1260                      | 0.152     | 0.631                    | 0.16                      | 0.799                    | 3.37 [3.49]               | 0.738                      | 0.524                    | 0.202                     | 10.4                     | 10.3                      |
| Aroclor-1262                      | ND(0.034) | ND(0.059)                | ND(0.042)                 | ND(0.045)                | ND(0.039) [ND(0.04)]      | ND(0.04)                   | ND(0.038)                | ND(0.04)                  | ND(0.046)                | ND(0.041)                 |
| Aroclor-1268                      | ND(0.034) | ND(0.059)                | ND(0.042)                 | ND(0.045)                | ND(0.039) [ND(0.04)]      | ND(0.04)                   | ND(0.038)                | ND(0.04)                  | ND(0.046)                | ND(0.041)                 |
| Total PCBs                        | 0.152     | 0.631                    | 0.16                      | 0.799                    | 3.37 [3.49]               | 0.738                      | 0.524                    | 0.202                     | 10.4                     | 10.3                      |
| Miscellaneous                     |           |                          |                           |                          |                           |                            |                          |                           |                          |                           |
| TOC                               | NA        | NA                       | NA                        | NA                       | NA                        | NA                         | NA                       | NA                        | NA                       | NA                        |



| Sample Location:<br>Sample Depth: | T11A17-SL-JT-15<br>0 - 6 | T11A17-SL-JT-15<br>6 - 12 | T11A17-SL-JT-1A<br>0 - 6 | T11A17-SL-JT-1A<br>6 - 12 | T11A17-SL-JT-1B<br>0 - 6 | T11A17-SL-JT-1B<br>6 - 10 | T11A17-SL-JT-2<br>0 - 6 | T11A17-SL-JT-2<br>6 - 12 | T11A17-SL-JT-2<br>12 - 18 | T11A17-SL-JT-3<br>0 - 6 | T11A17-SL-JT-3<br>6 - 12 |
|-----------------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|-------------------------|--------------------------|---------------------------|-------------------------|--------------------------|
| Date:                             | 11/16/17                 | 11/16/17                  | 11/07/17                 | 11/07/17                  | 11/08/17                 | 11/08/17                  | 11/09/17                | 11/09/17                 | 11/09/17                  | 11/09/17                | 11/09/17                 |
| PCBs                              |                          |                           |                          |                           |                          |                           |                         |                          |                           |                         |                          |
| Aroclor 1016                      | ND(0.037)                | ND(0.037)                 | ND(0.038)                | ND(0.039)                 | ND(0.038)                | ND(0.036)                 | ND(0.13)                | ND(0.041)                | ND(0.041)                 | ND(0.15)                | ND(0.04)                 |
| Aroclor 1221                      | ND(0.037)                | ND(0.037)                 | ND(0.038)                | ND(0.039)                 | ND(0.038)                | ND(0.036)                 | ND(0.13)                | ND(0.041)                | ND(0.041)                 | ND(0.15)                | ND(0.04)                 |
| Aroclor 1232                      | ND(0.037)                | ND(0.037)                 | ND(0.038)                | ND(0.039)                 | ND(0.038)                | ND(0.036)                 | ND(0.13)                | ND(0.041)                | ND(0.041)                 | ND(0.15)                | ND(0.04)                 |
| Aroclor 1242                      | ND(0.037)                | ND(0.037)                 | ND(0.038)                | ND(0.039)                 | ND(0.038)                | ND(0.036)                 | ND(0.13)                | ND(0.041)                | ND(0.041)                 | ND(0.15)                | ND(0.04)                 |
| Aroclor 1248                      | ND(0.037)                | ND(0.037)                 | ND(0.038)                | ND(0.039)                 | ND(0.038)                | ND(0.036)                 | ND(0.13)                | ND(0.041)                | ND(0.041)                 | ND(0.15)                | ND(0.04)                 |
| Aroclor 1254                      | ND(0.037)                | ND(0.037)                 | ND(0.038)                | ND(0.039)                 | ND(0.038)                | ND(0.036)                 | ND(0.13)                | ND(0.041)                | ND(0.041)                 | ND(0.15)                | ND(0.04)                 |
| Aroclor 1260                      | 0.433                    | 0.249                     | 0.196                    | 0.172                     | 0.0807                   | 0.0414                    | 18.2                    | 41.9                     | 9.38                      | 7,510                   | 180                      |
| Aroclor-1262                      | ND(0.037)                | ND(0.037)                 | ND(0.038)                | ND(0.039)                 | ND(0.038)                | ND(0.036)                 | ND(0.13)                | ND(0.041)                | ND(0.041)                 | ND(0.15)                | ND(0.04)                 |
| Aroclor-1268                      | ND(0.037)                | ND(0.037)                 | ND(0.038)                | ND(0.039)                 | ND(0.038)                | ND(0.036)                 | ND(0.13)                | ND(0.041)                | ND(0.041)                 | ND(0.15)                | ND(0.04)                 |
| Total PCBs                        | 0.433                    | 0.249                     | 0.196                    | 0.172                     | 0.0807                   | 0.0414                    | 18.2                    | 41.9                     | 9.38                      | 7,510                   | 180                      |
| Miscellaneous                     |                          |                           |                          |                           |                          |                           |                         |                          |                           |                         |                          |
| TOC                               | NA                       | NA                        | NA                       | NA                        | NA                       | NA                        | NA                      | NA                       | NA                        | NA                      | NA                       |



| Sample Location:       | T11A17-SL-JT-3      | T11A17-SL-JT-3      |                   | T11A17-SL-JT-4     | T11A17-SL-JT-4      | T11A17-SL-JT-5    | T11A17-SL-JT-5     | T11A17-SL-JT-6    | T11A17-SL-JT-6     |                     |                   |
|------------------------|---------------------|---------------------|-------------------|--------------------|---------------------|-------------------|--------------------|-------------------|--------------------|---------------------|-------------------|
| Sample Depth:<br>Date: | 12 - 18<br>11/09/17 | 18 - 21<br>11/09/17 | 0 - 6<br>11/10/17 | 6 - 12<br>11/10/17 | 12 - 18<br>11/10/17 | 0 - 6<br>11/13/17 | 6 - 12<br>11/13/17 | 0 - 6<br>11/13/17 | 6 - 12<br>11/13/17 | 12 - 18<br>11/13/17 | 0 - 6<br>11/13/17 |
| PCBs                   |                     |                     |                   |                    |                     |                   |                    |                   |                    |                     |                   |
| Aroclor 1016           | ND(0.038)           | ND(0.036)           | ND(0.041)         | ND(0.041)          | ND(0.039)           | ND(0.044)         | ND(0.04)           | ND(0.04)          | ND(0.037)          | ND(0.045)           | ND(0.037)         |
| Aroclor 1221           | ND(0.038)           | ND(0.036)           | ND(0.041)         | ND(0.041)          | ND(0.039)           | ND(0.044)         | ND(0.04)           | ND(0.04)          | ND(0.037)          | ND(0.045)           | ND(0.037)         |
| Aroclor 1232           | ND(0.038)           | ND(0.036)           | ND(0.041)         | ND(0.041)          | ND(0.039)           | ND(0.044)         | ND(0.04)           | ND(0.04)          | ND(0.037)          | ND(0.045)           | ND(0.037)         |
| Aroclor 1242           | ND(0.038)           | ND(0.036)           | ND(0.041)         | ND(0.041)          | ND(0.039)           | ND(0.044)         | ND(0.04)           | ND(0.04)          | ND(0.037)          | ND(0.045)           | ND(0.037)         |
| Aroclor 1248           | ND(0.038)           | ND(0.036)           | ND(0.041)         | ND(0.041)          | ND(0.039)           | ND(0.044)         | ND(0.04)           | ND(0.04)          | ND(0.037)          | ND(0.045)           | ND(0.037)         |
| Aroclor 1254           | ND(0.038)           | ND(0.036)           | ND(0.041)         | ND(0.041)          | ND(0.039)           | ND(0.044)         | ND(0.04)           | ND(0.04)          | ND(0.037)          | ND(0.045)           | ND(0.037)         |
| Aroclor 1260           | 0.755               | 0.153               | 0.118             | 0.0349 J           | 2.16                | 2.51              | 0.546              | 0.118             | 0.129              | 0.135               | 0.122             |
| Aroclor-1262           | ND(0.038)           | ND(0.036)           | ND(0.041)         | ND(0.041)          | ND(0.039)           | ND(0.044)         | ND(0.04)           | ND(0.04)          | ND(0.037)          | ND(0.045)           | ND(0.037)         |
| Aroclor-1268           | ND(0.038)           | ND(0.036)           | ND(0.041)         | ND(0.041)          | ND(0.039)           | ND(0.044)         | ND(0.04)           | ND(0.04)          | ND(0.037)          | ND(0.045)           | ND(0.037)         |
| Total PCBs             | 0.755               | 0.153               | 0.118             | 0.0349 J           | 2.16                | 2.51              | 0.546              | 0.118             | 0.129              | 0.135               | 0.122             |
| Miscellaneous          |                     |                     |                   |                    |                     |                   |                    |                   |                    |                     |                   |
| TOC                    | NA                  | NA                  | NA                | NA                 | NA                  | NA                | NA                 | NA                | NA                 | NA                  | NA                |



| Sample Location:<br>Sample Depth: | T11A17-SL-JT-7<br>6 - 12 | T11A17-SL-JT-8<br>0 - 6 | T11A17-SL-JT-8<br>6 - 12 | T11A17-SL-JT-9<br>0 - 6 | T11A17-SL-JT-9<br>6 - 12 | T11A18-SED-152<br>0 - 6 | T11A18-SED-152<br>6 - 9 | T11A18-SED-154<br>0 - 6 | T11A18-SED-154<br>6 - 12 | T11A18-SED-155<br>0 - 6 | T11A18-SED-155<br>6 - 12 |
|-----------------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|
| Date:                             | 11/13/17                 | 11/14/17                | 11/14/17                 | 11/14/17                | 11/14/17                 | 01/15/18                | 01/15/18                | 01/15/18                | 01/17/18                 | 01/15/18                | 01/15/18                 |
| PCBs                              |                          |                         |                          |                         |                          |                         |                         |                         |                          |                         |                          |
| Aroclor 1016                      | ND(0.036)                | ND(0.047)               | ND(0.038)                | ND(0.04)                | ND(0.041)                | ND(0.1)                 | ND(0.04)                | ND(0.04)                | ND(0.036)                | ND(0.037)               | ND(0.037)                |
| Aroclor 1221                      | ND(0.036)                | ND(0.047)               | ND(0.038)                | ND(0.04)                | ND(0.041)                | ND(0.1)                 | ND(0.04)                | ND(0.04)                | ND(0.036)                | ND(0.037)               | ND(0.037)                |
| Aroclor 1232                      | ND(0.036)                | ND(0.047)               | ND(0.038)                | ND(0.04)                | ND(0.041)                | ND(0.1)                 | ND(0.04)                | ND(0.04)                | ND(0.036)                | ND(0.037)               | ND(0.037)                |
| Aroclor 1242                      | ND(0.036)                | ND(0.047)               | ND(0.038)                | ND(0.04)                | ND(0.041)                | ND(0.1)                 | ND(0.04)                | ND(0.04)                | ND(0.036)                | ND(0.037)               | ND(0.037)                |
| Aroclor 1248                      | ND(0.036)                | ND(0.047)               | ND(0.038)                | ND(0.04)                | ND(0.041)                | ND(0.1)                 | ND(0.04)                | ND(0.04)                | ND(0.036)                | ND(0.037)               | ND(0.037)                |
| Aroclor 1254                      | ND(0.036)                | ND(0.047)               | ND(0.038)                | ND(0.04)                | ND(0.041)                | ND(0.1)                 | ND(0.04)                | ND(0.04)                | ND(0.036)                | ND(0.037)               | ND(0.037)                |
| Aroclor 1260                      | 0.0542                   | 2.45                    | 0.313                    | 0.542                   | 0.0906                   | 1.87                    | 3.26                    | 0.334                   | 0.0762                   | 1.07                    | 0.78                     |
| Aroclor-1262                      | ND(0.036)                | ND(0.047)               | ND(0.038)                | ND(0.04)                | ND(0.041)                | ND(0.1)                 | ND(0.04)                | ND(0.04)                | ND(0.036)                | ND(0.037)               | ND(0.037)                |
| Aroclor-1268                      | ND(0.036)                | ND(0.047)               | ND(0.038)                | ND(0.04)                | ND(0.041)                | ND(0.1)                 | ND(0.04)                | ND(0.04)                | ND(0.036)                | ND(0.037)               | ND(0.037)                |
| Total PCBs                        | 0.0542                   | 2.45                    | 0.313                    | 0.542                   | 0.0906                   | 1.87                    | 3.26                    | 0.334                   | 0.0762                   | 1.07                    | 0.78                     |
| Miscellaneous                     |                          |                         |                          |                         |                          |                         |                         |                         |                          |                         |                          |
| TOC                               | NA                       | NA                      | NA                       | NA                      | NA                       | NA                      | NA                      | NA                      | NA                       | NA                      | NA                       |



| Sample Location: |           | T11A18-SED-163 |           |           | T11A18-SED-167 | T11A18-SED-167        | T11A18-SED-187 | T11A18-SED-187        | T11A18-SL-145 |           |           |
|------------------|-----------|----------------|-----------|-----------|----------------|-----------------------|----------------|-----------------------|---------------|-----------|-----------|
| Sample Depth:    | 12 - 15   | 0 - 6          | 6 - 12    | 12 - 15   | 0 - 6          | 6 - 12                | 0 - 6          | 6 - 12                | 0 - 6         | 6 - 12    | 12 - 18   |
| Date:            | 01/17/18  | 01/17/18       | 01/17/18  | 01/17/18  | 01/16/18       | 01/16/18              | 01/16/18       | 01/16/18              | 01/15/18      | 01/15/18  | 01/15/18  |
| PCBs             |           |                |           |           |                |                       |                |                       |               |           |           |
| Aroclor 1016     | ND(0.034) | ND(0.041)      | ND(0.037) | ND(0.035) | ND(0.037)      | ND(0.037) [ND(0.038)] | ND(0.042)      | ND(0.036) [ND(0.039)] | ND(0.041)     | ND(0.036) | ND(0.037) |
| Aroclor 1221     | ND(0.034) | ND(0.041)      | ND(0.037) | ND(0.035) | ND(0.037)      | ND(0.037) [ND(0.038)] | ND(0.042)      | ND(0.036) [ND(0.039)] | ND(0.041)     | ND(0.036) | ND(0.037) |
| Aroclor 1232     | ND(0.034) | ND(0.041)      | ND(0.037) | ND(0.035) | ND(0.037)      | ND(0.037) [ND(0.038)] | ND(0.042)      | ND(0.036) [ND(0.039)] | ND(0.041)     | ND(0.036) | ND(0.037) |
| Aroclor 1242     | ND(0.034) | ND(0.041)      | ND(0.037) | ND(0.035) | ND(0.037)      | ND(0.037) [ND(0.038)] | ND(0.042)      | ND(0.036) [ND(0.039)] | ND(0.041)     | ND(0.036) | ND(0.037) |
| Aroclor 1248     | ND(0.034) | ND(0.041)      | ND(0.037) | ND(0.035) | ND(0.037)      | ND(0.037) [ND(0.038)] | ND(0.042)      | ND(0.036) [ND(0.039)] | ND(0.041)     | ND(0.036) | ND(0.037) |
| Aroclor 1254     | ND(0.034) | ND(0.041)      | ND(0.037) | ND(0.035) | ND(0.037)      | ND(0.037) [ND(0.038)] | ND(0.042)      | ND(0.036) [ND(0.039)] | ND(0.041)     | ND(0.036) | ND(0.037) |
| Aroclor 1260     | 0.232     | 0.386          | 0.541     | 0.0623    | ND(0.037)      | ND(0.037) [0.0139 J]  | 4.64           | 1 [0.525]             | 6.15          | 2.83      | 0.639     |
| Aroclor-1262     | ND(0.034) | ND(0.041)      | ND(0.037) | ND(0.035) | ND(0.037)      | ND(0.037) [ND(0.038)] | ND(0.042)      | ND(0.036) [ND(0.039)] | ND(0.041)     | ND(0.036) | ND(0.037) |
| Aroclor-1268     | ND(0.034) | ND(0.041)      | ND(0.037) | ND(0.035) | ND(0.037)      | ND(0.037) [ND(0.038)] | ND(0.042)      | ND(0.036) [ND(0.039)] | ND(0.041)     | ND(0.036) | ND(0.037) |
| Total PCBs       | 0.232     | 0.386          | 0.541     | 0.0623    | ND             | ND [0.0139 J]         | 4.64           | 1 [0.525]             | 6.15          | 2.83      | 0.639     |
| Miscellaneous    |           |                |           |           |                |                       |                |                       |               |           |           |
| TOC              | NA        | NA             | NA        | NA        | NA             | NA                    | NA             | NA                    | NA            | NA        | NA        |



| Sample Location:       | T11A18-SL-146        |                    |                   |                    | T11A18-SL-147       | T11A18-SL-148     | T11A18-SL-148      |                   |                    |                   |                    | T11A18-SL-151     |
|------------------------|----------------------|--------------------|-------------------|--------------------|---------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
| Sample Depth:<br>Date: | 0 - 6<br>01/15/18    | 6 - 12<br>01/15/18 | 0 - 6<br>01/15/18 | 6 - 12<br>01/15/18 | 12 - 18<br>01/15/18 | 0 - 6<br>01/15/18 | 6 - 12<br>01/15/18 | 0 - 6<br>01/15/18 | 6 - 12<br>01/15/18 | 0 - 6<br>01/15/18 | 6 - 12<br>01/15/18 | 0 - 6<br>01/15/18 |
| PCBs                   |                      |                    |                   |                    |                     |                   |                    | 01110/10          |                    |                   |                    |                   |
| Aroclor 1016           | ND(0.11) [ND(0.055)] | ND(0.042)          | ND(0.1)           | ND(0.039)          | ND(0.034)           | ND(0.077)         | ND(0.46)           | ND(0.1)           | ND(0.05)           | ND(0.13)          | ND(0.037)          | ND(0.046)         |
| Aroclor 1221           | ND(0.11) [ND(0.055)] | ND(0.042)          | ND(0.1)           | ND(0.039)          | ND(0.034)           | ND(0.077)         | ND(0.46)           | ND(0.1)           | ND(0.05)           | ND(0.13)          | ND(0.037)          | ND(0.046)         |
| Aroclor 1232           | ND(0.11) [ND(0.055)] | ND(0.042)          | ND(0.1)           | ND(0.039)          | ND(0.034)           | ND(0.077)         | ND(0.46)           | ND(0.1)           | ND(0.05)           | ND(0.13)          | ND(0.037)          | ND(0.046)         |
| Aroclor 1242           | ND(0.11) [ND(0.055)] | ND(0.042)          | ND(0.1)           | ND(0.039)          | ND(0.034)           | ND(0.077)         | ND(0.46)           | ND(0.1)           | ND(0.05)           | ND(0.13)          | ND(0.037)          | ND(0.046)         |
| Aroclor 1248           | ND(0.11) [ND(0.055)] | ND(0.042)          | ND(0.1)           | ND(0.039)          | ND(0.034)           | ND(0.077)         | ND(0.46)           | ND(0.1)           | ND(0.05)           | ND(0.13)          | ND(0.037)          | ND(0.046)         |
| Aroclor 1254           | ND(0.11) [ND(0.055)] | ND(0.042)          | ND(0.1)           | ND(0.039)          | ND(0.034)           | ND(0.077)         | ND(0.46)           | ND(0.1)           | ND(0.05)           | ND(0.13)          | ND(0.037)          | ND(0.046)         |
| Aroclor 1260           | 0.236 [0.16]         | 0.0393 J           | 10.5              | 2.14               | 1.07                | 3.29              | 3.96               | 0.0737 J          | 0.0861             | 0.393             | 0.0372             | 0.128             |
| Aroclor-1262           | ND(0.11) [ND(0.055)] | ND(0.042)          | ND(0.1)           | ND(0.039)          | ND(0.034)           | ND(0.077)         | ND(0.46)           | ND(0.1)           | ND(0.05)           | ND(0.13)          | ND(0.037)          | ND(0.046)         |
| Aroclor-1268           | ND(0.11) [ND(0.055)] | ND(0.042)          | ND(0.1)           | ND(0.039)          | ND(0.034)           | ND(0.077)         | ND(0.46)           | ND(0.1)           | ND(0.05)           | ND(0.13)          | ND(0.037)          | ND(0.046)         |
| Total PCBs             | 0.236 [0.16]         | 0.0393 J           | 10.5              | 2.14               | 1.07                | 3.29              | 3.96               | 0.0737 J          | 0.0861             | 0.393             | 0.0372             | 0.128             |
| Miscellaneous          |                      |                    |                   |                    |                     |                   |                    |                   |                    |                   |                    |                   |
| TOC                    | NA                   | NA                 | NA                | NA                 | NA                  | NA                | NA                 | NA                | NA                 | NA                | NA                 | NA                |



| Sample Location:       |                    |                   | T11A18-SL-153      | T11A18-SL-153       | T11A18-SL-156     |                    |                   |                    | T11A18-SL-158     |                    |                   |                    |
|------------------------|--------------------|-------------------|--------------------|---------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|
| Sample Depth:<br>Date: | 6 - 12<br>01/15/18 | 0 - 6<br>01/16/18 | 6 - 12<br>01/16/18 | 12 - 18<br>01/16/18 | 0 - 6<br>01/15/18 | 6 - 12<br>01/15/18 | 0 - 6<br>01/15/18 | 6 - 12<br>01/15/18 | 0 - 6<br>01/15/18 | 6 - 12<br>01/15/18 | 0 - 6<br>01/16/18 | 6 - 12<br>01/16/18 |
| PCBs                   |                    |                   |                    |                     |                   |                    |                   |                    |                   |                    |                   |                    |
| Aroclor 1016           | ND(0.038)          | ND(0.043)         | ND(0.039)          | ND(0.035)           | ND(0.05)          | ND(0.043)          | ND(0.088)         | ND(0.039)          | ND(0.11)          | ND(0.042)          | ND(0.04)          | ND(0.039)          |
| Aroclor 1221           | ND(0.038)          | ND(0.043)         | ND(0.039)          | ND(0.035)           | ND(0.05)          | ND(0.043)          | ND(0.088)         | ND(0.039)          | ND(0.11)          | ND(0.042)          | ND(0.04)          | ND(0.039)          |
| Aroclor 1232           | ND(0.038)          | ND(0.043)         | ND(0.039)          | ND(0.035)           | ND(0.05)          | ND(0.043)          | ND(0.088)         | ND(0.039)          | ND(0.11)          | ND(0.042)          | ND(0.04)          | ND(0.039)          |
| Aroclor 1242           | ND(0.038)          | ND(0.043)         | ND(0.039)          | ND(0.035)           | ND(0.05)          | ND(0.043)          | ND(0.088)         | ND(0.039)          | ND(0.11)          | ND(0.042)          | ND(0.04)          | ND(0.039)          |
| Aroclor 1248           | ND(0.038)          | ND(0.043)         | ND(0.039)          | ND(0.035)           | ND(0.05)          | ND(0.043)          | ND(0.088)         | ND(0.039)          | ND(0.11)          | ND(0.042)          | ND(0.04)          | ND(0.039)          |
| Aroclor 1254           | ND(0.038)          | ND(0.043)         | ND(0.039)          | ND(0.035)           | ND(0.05)          | ND(0.043)          | ND(0.088)         | ND(0.039)          | ND(0.11)          | ND(0.042)          | ND(0.04)          | ND(0.039)          |
| Aroclor 1260           | 0.0225 J           | 0.21              | 0.0773             | 0.0182 J            | 0.0753            | 0.0185 J           | 0.273             | ND(0.039)          | 0.0915 J          | 0.118              | 0.0381 J          | 0.0386 J           |
| Aroclor-1262           | ND(0.038)          | ND(0.043)         | ND(0.039)          | ND(0.035)           | ND(0.05)          | ND(0.043)          | ND(0.088)         | ND(0.039)          | ND(0.11)          | ND(0.042)          | ND(0.04)          | ND(0.039)          |
| Aroclor-1268           | ND(0.038)          | ND(0.043)         | ND(0.039)          | ND(0.035)           | ND(0.05)          | ND(0.043)          | ND(0.088)         | ND(0.039)          | ND(0.11)          | ND(0.042)          | ND(0.04)          | ND(0.039)          |
| Total PCBs             | 0.0225 J           | 0.21              | 0.0773             | 0.0182 J            | 0.0753            | 0.0185 J           | 0.273             | ND                 | 0.0915 J          | 0.118              | 0.0381 J          | 0.0386 J           |
| Miscellaneous          |                    |                   |                    |                     |                   |                    |                   |                    |                   |                    |                   |                    |
| TOC                    | NA                 | NA                | NA                 | NA                  | NA                | NA                 | NA                | NA                 | NA                | NA                 | NA                | NA                 |



| Sample Location:       |                   |                    |                   | T11A18-SL-161      | T11A18-SL-162     | T11A18-SL-162      |                   |                    |                     |                   |                    |                     |
|------------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|---------------------|-------------------|--------------------|---------------------|
| Sample Depth:<br>Date: | 0 - 6<br>01/16/18 | 6 - 12<br>01/16/18 | 12 - 18<br>01/16/18 | 0 - 6<br>01/16/18 | 6 - 12<br>01/16/18 | 12 - 18<br>01/16/18 |
| PCBs                   |                   |                    |                   |                    |                   |                    |                   |                    |                     |                   |                    |                     |
| Aroclor 1016           | ND(0.051)         | ND(0.036)          | ND(0.037)         | ND(0.038)          | ND(0.047)         | ND(0.042)          | ND(0.044)         | ND(0.039)          | ND(0.04)            | ND(0.052)         | ND(0.049)          | ND(0.04)            |
| Aroclor 1221           | ND(0.051)         | ND(0.036)          | ND(0.037)         | ND(0.038)          | ND(0.047)         | ND(0.042)          | ND(0.044)         | ND(0.039)          | ND(0.04)            | ND(0.052)         | ND(0.049)          | ND(0.04)            |
| Aroclor 1232           | ND(0.051)         | ND(0.036)          | ND(0.037)         | ND(0.038)          | ND(0.047)         | ND(0.042)          | ND(0.044)         | ND(0.039)          | ND(0.04)            | ND(0.052)         | ND(0.049)          | ND(0.04)            |
| Aroclor 1242           | ND(0.051)         | ND(0.036)          | ND(0.037)         | ND(0.038)          | ND(0.047)         | ND(0.042)          | ND(0.044)         | ND(0.039)          | ND(0.04)            | ND(0.052)         | ND(0.049)          | ND(0.04)            |
| Aroclor 1248           | ND(0.051)         | ND(0.036)          | ND(0.037)         | ND(0.038)          | ND(0.047)         | ND(0.042)          | ND(0.044)         | ND(0.039)          | ND(0.04)            | ND(0.052)         | ND(0.049)          | ND(0.04)            |
| Aroclor 1254           | ND(0.051)         | ND(0.036)          | ND(0.037)         | ND(0.038)          | ND(0.047)         | ND(0.042)          | ND(0.044)         | ND(0.039)          | ND(0.04)            | ND(0.052)         | ND(0.049)          | ND(0.04)            |
| Aroclor 1260           | 0.652             | 0.286              | 0.873             | 0.344              | 0.485             | 0.507              | 0.102             | ND(0.039)          | 0.0297 J            | 16.9              | 13.4               | 0.046               |
| Aroclor-1262           | ND(0.051)         | ND(0.036)          | ND(0.037)         | ND(0.038)          | ND(0.047)         | ND(0.042)          | ND(0.044)         | ND(0.039)          | ND(0.04)            | ND(0.052)         | ND(0.049)          | ND(0.04)            |
| Aroclor-1268           | ND(0.051)         | ND(0.036)          | ND(0.037)         | ND(0.038)          | ND(0.047)         | ND(0.042)          | ND(0.044)         | ND(0.039)          | ND(0.04)            | ND(0.052)         | ND(0.049)          | ND(0.04)            |
| Total PCBs             | 0.652             | 0.286              | 0.873             | 0.344              | 0.485             | 0.507              | 0.102             | ND                 | 0.0297 J            | 16.9              | 13.4               | 0.046               |
| Miscellaneous          |                   |                    |                   |                    |                   |                    |                   |                    |                     |                   |                    |                     |
| TOC                    | NA                | NA                 | NA                | NA                 | NA                | NA                 | NA                | NA                 | NA                  | NA                | NA                 | NA                  |



| Sample Location:       |                     |                   |                    | T11A18-SL-168         | T11A18-SL-168      |                   |                    |                   |                    |                   | T11A18-SL-171      |                   |
|------------------------|---------------------|-------------------|--------------------|-----------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
| Sample Depth:<br>Date: | 18 - 24<br>01/16/18 | 0 - 6<br>01/16/18 | 6 - 12<br>01/16/18 | 0 - 6<br>01/16/18     | 6 - 12<br>01/16/18 | 0 - 6<br>01/16/18 | 6 - 12<br>01/16/18 | 0 - 6<br>01/16/18 | 6 - 12<br>01/16/18 | 0 - 6<br>01/16/18 | 6 - 12<br>01/16/18 | 0 - 6<br>01/16/18 |
|                        | 01/10/10            | 01/10/10          | 01/10/10           | 01/10/10              | 01/10/10           | 01/10/10          | 01/10/10           | 01/10/10          | 01/10/10           | 01/10/10          | 01/10/10           | 01/10/10          |
| PCBs                   |                     |                   |                    |                       |                    |                   |                    |                   |                    |                   |                    |                   |
| Aroclor 1016           | ND(0.038)           | ND(0.056)         | ND(0.04)           | ND(0.055) [ND(0.046)] | ND(0.038)          | ND(0.31)          | ND(0.054)          | ND(0.11)          | ND(0.043)          | ND(0.07)          | ND(0.039)          | ND(0.096)         |
| Aroclor 1221           | ND(0.038)           | ND(0.056)         | ND(0.04)           | ND(0.055) [ND(0.046)] | ND(0.038)          | ND(0.31)          | ND(0.054)          | ND(0.11)          | ND(0.043)          | ND(0.07)          | ND(0.039)          | ND(0.096)         |
| Aroclor 1232           | ND(0.038)           | ND(0.056)         | ND(0.04)           | ND(0.055) [ND(0.046)] | ND(0.038)          | ND(0.31)          | ND(0.054)          | ND(0.11)          | ND(0.043)          | ND(0.07)          | ND(0.039)          | ND(0.096)         |
| Aroclor 1242           | ND(0.038)           | ND(0.056)         | ND(0.04)           | ND(0.055) [ND(0.046)] | ND(0.038)          | ND(0.31)          | ND(0.054)          | ND(0.11)          | ND(0.043)          | ND(0.07)          | ND(0.039)          | ND(0.096)         |
| Aroclor 1248           | ND(0.038)           | ND(0.056)         | ND(0.04)           | ND(0.055) [ND(0.046)] | ND(0.038)          | ND(0.31)          | ND(0.054)          | ND(0.11)          | ND(0.043)          | ND(0.07)          | ND(0.039)          | ND(0.096)         |
| Aroclor 1254           | ND(0.038)           | ND(0.056)         | ND(0.04)           | ND(0.055) [ND(0.046)] | ND(0.038)          | ND(0.31)          | ND(0.054)          | ND(0.11)          | ND(0.043)          | ND(0.07)          | ND(0.039)          | ND(0.096)         |
| Aroclor 1260           | ND(0.038)           | 1.33              | 0.217              | 0.111 [0.0913]        | ND(0.038)          | 1.55              | 0.858              | 1.12              | 0.0447             | 0.57              | 0.151              | 0.201             |
| Aroclor-1262           | ND(0.038)           | ND(0.056)         | ND(0.04)           | ND(0.055) [ND(0.046)] | ND(0.038)          | ND(0.31)          | ND(0.054)          | ND(0.11)          | ND(0.043)          | ND(0.07)          | ND(0.039)          | ND(0.096)         |
| Aroclor-1268           | ND(0.038)           | ND(0.056)         | ND(0.04)           | ND(0.055) [ND(0.046)] | ND(0.038)          | ND(0.31)          | ND(0.054)          | ND(0.11)          | ND(0.043)          | ND(0.07)          | ND(0.039)          | ND(0.096)         |
| Total PCBs             | ND                  | 1.33              | 0.217              | 0.111 [0.0913]        | ND                 | 1.55              | 0.858              | 1.12              | 0.0447             | 0.57              | 0.151              | 0.201             |
| Miscellaneous          |                     |                   |                    |                       |                    |                   |                    |                   |                    |                   |                    |                   |
| TOC                    | NA                  | NA                | NA                 | NA                    | NA                 | NA                | NA                 | NA                | NA                 | NA                | NA                 | NA                |



| Sample Location:       | T11A18-SL-172<br>6 - 12 | T11A18-SL-173<br>0 - 6 | T11A18-SL-173<br>6 - 12 | T11A18-SL-174<br>0 - 6 | T11A18-SL-174<br>6 - 12 | T11A18-SL-175<br>0 - 6 | T11A18-SL-175<br>6 - 12 | T11A18-SL-176<br>0 - 6 | T11A18-SL-176<br>6 - 12 | T11A18-SL-177<br>0 - 6 | T11A18-SL-177<br>6 - 12 | T11A18-SL-177<br>12 - 18 |
|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|--------------------------|
| Sample Depth:<br>Date: | 01/16/18                | 01/16/18               | 01/16/18                | 01/16/18               | 01/16/18                | 01/16/18               | 01/16/18                | 01/16/18               | 01/16/18                | 01/16/18               | 01/16/18                | 01/16/18                 |
| PCBs                   |                         |                        |                         |                        |                         |                        |                         |                        |                         |                        |                         |                          |
| Aroclor 1016           | ND(0.039)               | ND(0.059)              | ND(0.049)               | ND(0.048)              | ND(0.042)               | ND(0.091)              | ND(0.042)               | ND(0.3)                | ND(0.052)               | ND(0.071)              | ND(0.044)               | ND(0.035)                |
| Aroclor 1221           | ND(0.039)               | ND(0.059)              | ND(0.049)               | ND(0.048)              | ND(0.042)               | ND(0.091)              | ND(0.042)               | ND(0.3)                | ND(0.052)               | ND(0.071)              | ND(0.044)               | ND(0.035)                |
| Aroclor 1232           | ND(0.039)               | ND(0.059)              | ND(0.049)               | ND(0.048)              | ND(0.042)               | ND(0.091)              | ND(0.042)               | ND(0.3)                | ND(0.052)               | ND(0.071)              | ND(0.044)               | ND(0.035)                |
| Aroclor 1242           | ND(0.039)               | ND(0.059)              | ND(0.049)               | ND(0.048)              | ND(0.042)               | ND(0.091)              | ND(0.042)               | ND(0.3)                | ND(0.052)               | ND(0.071)              | ND(0.044)               | ND(0.035)                |
| Aroclor 1248           | ND(0.039)               | ND(0.059)              | ND(0.049)               | ND(0.048)              | ND(0.042)               | ND(0.091)              | ND(0.042)               | ND(0.3)                | ND(0.052)               | ND(0.071)              | ND(0.044)               | ND(0.035)                |
| Aroclor 1254           | ND(0.039)               | ND(0.059)              | ND(0.049)               | ND(0.048)              | ND(0.042)               | ND(0.091)              | ND(0.042)               | ND(0.3)                | ND(0.052)               | ND(0.071)              | ND(0.044)               | ND(0.035)                |
| Aroclor 1260           | 0.0569                  | 0.301                  | 0.0409 J                | 0.216                  | 0.101                   | ND(0.091)              | 0.461                   | 0.299 J                | 0.11                    | 0.172                  | 0.0941                  | 0.0392                   |
| Aroclor-1262           | ND(0.039)               | ND(0.059)              | ND(0.049)               | ND(0.048)              | ND(0.042)               | ND(0.091)              | ND(0.042)               | ND(0.3)                | ND(0.052)               | ND(0.071)              | ND(0.044)               | ND(0.035)                |
| Aroclor-1268           | ND(0.039)               | ND(0.059)              | ND(0.049)               | ND(0.048)              | ND(0.042)               | ND(0.091)              | ND(0.042)               | ND(0.3)                | ND(0.052)               | ND(0.071)              | ND(0.044)               | ND(0.035)                |
| Total PCBs             | 0.0569                  | 0.301                  | 0.0409 J                | 0.216                  | 0.101                   | ND                     | 0.461                   | 0.299 J                | 0.11                    | 0.172                  | 0.0941                  | 0.0392                   |
| Miscellaneous          |                         |                        |                         |                        |                         |                        |                         |                        |                         |                        |                         |                          |
| TOC                    | NA                      | NA                       |



| Sample Location:<br>Sample Depth: | T11A18-SL-178<br>0 - 6 | T11A18-SL-178<br>6 - 12 | T11A18-SL-178<br>12 - 18 | T11A18-SL-179<br>0 - 6 | T11A18-SL-179<br>6 - 12 | T11A18-SL-180<br>0 - 6 | T11A18-SL-180<br>6 - 12 | T11A18-SL-181<br>0 - 6 | T11A18-SL-181<br>6 - 12 | T11A18-SL-181<br>12 - 18 | T11A18-SL-181<br>18 - 24 | T11A18-SL-182<br>0 - 6 |
|-----------------------------------|------------------------|-------------------------|--------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|--------------------------|--------------------------|------------------------|
| Date:                             | 01/16/18               | 01/16/18                | 01/16/18                 | 01/16/18               | 01/16/18                | 01/16/18               | 01/16/18                | 01/16/18               | 01/16/18                | 01/16/18                 | 01/16/18                 | 01/16/18               |
| PCBs                              |                        |                         |                          |                        |                         |                        |                         |                        |                         |                          |                          |                        |
| Aroclor 1016                      | ND(0.046)              | ND(0.043)               | ND(0.037)                | ND(0.044)              | ND(0.044)               | ND(0.038)              | ND(0.035)               | ND(0.041)              | ND(0.036)               | ND(0.034)                | ND(0.033)                | ND(0.13)               |
| Aroclor 1221                      | ND(0.046)              | ND(0.043)               | ND(0.037)                | ND(0.044)              | ND(0.044)               | ND(0.038)              | ND(0.035)               | ND(0.041)              | ND(0.036)               | ND(0.034)                | ND(0.033)                | ND(0.13)               |
| Aroclor 1232                      | ND(0.046)              | ND(0.043)               | ND(0.037)                | ND(0.044)              | ND(0.044)               | ND(0.038)              | ND(0.035)               | ND(0.041)              | ND(0.036)               | ND(0.034)                | ND(0.033)                | ND(0.13)               |
| Aroclor 1242                      | ND(0.046)              | ND(0.043)               | ND(0.037)                | ND(0.044)              | ND(0.044)               | ND(0.038)              | ND(0.035)               | ND(0.041)              | ND(0.036)               | ND(0.034)                | ND(0.033)                | ND(0.13)               |
| Aroclor 1248                      | ND(0.046)              | ND(0.043)               | ND(0.037)                | ND(0.044)              | ND(0.044)               | ND(0.038)              | ND(0.035)               | ND(0.041)              | ND(0.036)               | ND(0.034)                | ND(0.033)                | ND(0.13)               |
| Aroclor 1254                      | ND(0.046)              | ND(0.043)               | ND(0.037)                | ND(0.044)              | ND(0.044)               | ND(0.038)              | ND(0.035)               | ND(0.041)              | ND(0.036)               | ND(0.034)                | ND(0.033)                | ND(0.13)               |
| Aroclor 1260                      | 0.0533                 | 0.032 J                 | ND(0.037)                | 0.358                  | 0.147                   | 0.0974                 | 0.0241 J                | 0.0396 J               | 0.0321 J                | 0.0487                   | ND(0.033)                | 9.57                   |
| Aroclor-1262                      | ND(0.046)              | ND(0.043)               | ND(0.037)                | ND(0.044)              | ND(0.044)               | ND(0.038)              | ND(0.035)               | ND(0.041)              | ND(0.036)               | ND(0.034)                | ND(0.033)                | ND(0.13)               |
| Aroclor-1268                      | ND(0.046)              | ND(0.043)               | ND(0.037)                | ND(0.044)              | ND(0.044)               | ND(0.038)              | ND(0.035)               | ND(0.041)              | ND(0.036)               | ND(0.034)                | ND(0.033)                | ND(0.13)               |
| Total PCBs                        | 0.0533                 | 0.032 J                 | ND                       | 0.358                  | 0.147                   | 0.0974                 | 0.0241 J                | 0.0396 J               | 0.0321 J                | 0.0487                   | ND                       | 9.57                   |
| Miscellaneous                     |                        |                         |                          |                        |                         |                        |                         |                        |                         |                          |                          |                        |
| TOC                               | NA                     | NA                      | NA                       | NA                     | NA                      | NA                     | NA                      | NA                     | NA                      | NA                       | NA                       | NA                     |



| Sample Location:<br>Sample Depth: | T11A18-SL-182<br>6 - 12 | T11A18-SL-182<br>12 - 18 | T11A18-SL-182<br>18 - 24 | T11A18-SL-183<br>0 - 6 | T11A18-SL-183<br>6 - 12 | T11A18-SL-183<br>12 - 18 | T11A18-SL-183<br>18 - 21 | T11A18-SL-184<br>0 - 6 | T11A18-SL-184<br>6 - 12 | T11A18-SL-184<br>12 - 18 | T11A18-SL-184<br>18 - 23 | T11A18-SL-185<br>0 - 6 |
|-----------------------------------|-------------------------|--------------------------|--------------------------|------------------------|-------------------------|--------------------------|--------------------------|------------------------|-------------------------|--------------------------|--------------------------|------------------------|
| Date:                             | 01/16/18                | 01/16/18                 | 01/16/18                 | 01/16/18               | 01/16/18                | 01/16/18                 | 01/16/18                 | 01/16/18               | 01/16/18                | 01/16/18                 | 01/16/18                 | 01/16/18               |
| PCBs                              |                         |                          |                          |                        |                         |                          |                          |                        |                         |                          |                          |                        |
| Aroclor 1016                      | ND(0.038)               | ND(0.034)                | ND(0.034)                | ND(0.049)              | ND(0.044)               | ND(0.036)                | ND(0.037)                | ND(0.047)              | ND(0.051)               | ND(0.043)                | ND(0.044)                | ND(0.044)              |
| Aroclor 1221                      | ND(0.038)               | ND(0.034)                | ND(0.034)                | ND(0.049)              | ND(0.044)               | ND(0.036)                | ND(0.037)                | ND(0.047)              | ND(0.051)               | ND(0.043)                | ND(0.044)                | ND(0.044)              |
| Aroclor 1232                      | ND(0.038)               | ND(0.034)                | ND(0.034)                | ND(0.049)              | ND(0.044)               | ND(0.036)                | ND(0.037)                | ND(0.047)              | ND(0.051)               | ND(0.043)                | ND(0.044)                | ND(0.044)              |
| Aroclor 1242                      | ND(0.038)               | ND(0.034)                | ND(0.034)                | ND(0.049)              | ND(0.044)               | ND(0.036)                | ND(0.037)                | ND(0.047)              | ND(0.051)               | ND(0.043)                | ND(0.044)                | ND(0.044)              |
| Aroclor 1248                      | ND(0.038)               | ND(0.034)                | ND(0.034)                | ND(0.049)              | ND(0.044)               | ND(0.036)                | ND(0.037)                | ND(0.047)              | ND(0.051)               | 1.55                     | 0.861                    | ND(0.044)              |
| Aroclor 1254                      | ND(0.038)               | ND(0.034)                | ND(0.034)                | ND(0.049)              | ND(0.044)               | ND(0.036)                | ND(0.037)                | ND(0.047)              | ND(0.051)               | ND(0.043)                | ND(0.044)                | ND(0.044)              |
| Aroclor 1260                      | 93.8                    | 3.6                      | 37                       | 0.39                   | 0.0866                  | 0.417                    | 2.28                     | 11.8                   | 12.1                    | 2.66                     | 0.649                    | 3.07                   |
| Aroclor-1262                      | ND(0.038)               | ND(0.034)                | ND(0.034)                | ND(0.049)              | ND(0.044)               | ND(0.036)                | ND(0.037)                | ND(0.047)              | ND(0.051)               | ND(0.043)                | ND(0.044)                | ND(0.044)              |
| Aroclor-1268                      | ND(0.038)               | ND(0.034)                | ND(0.034)                | ND(0.049)              | ND(0.044)               | ND(0.036)                | ND(0.037)                | ND(0.047)              | ND(0.051)               | ND(0.043)                | ND(0.044)                | ND(0.044)              |
| Total PCBs                        | 93.8                    | 3.6                      | 37                       | 0.39                   | 0.0866                  | 0.417                    | 2.28                     | 11.8                   | 12.1                    | 4.21                     | 1.51                     | 3.07                   |
| Miscellaneous                     |                         |                          |                          |                        |                         |                          |                          |                        |                         |                          |                          |                        |
| TOC                               | NA                      | NA                       | NA                       | NA                     | NA                      | NA                       | NA                       | NA                     | NA                      | NA                       | NA                       | NA                     |



| Sample Location:<br>Sample Depth: | T11A18-SL-185<br>6 - 12 | T11A18-SL-186<br>0 - 6 | T11A18-SL-186<br>6 - 12 | T11A18-SL-186<br>12 - 18 | T11A18-SL-186<br>18 - 24 | T11A18-SL-188<br>0 - 6 | T11A18-SL-188<br>6 - 12 | T11A18-SL-188<br>12 - 18 | T11A18-SL-189<br>0 - 6 | T11A18-SL-189<br>6 - 12 | T11A18-SL-189<br>12 - 18 | T11A18-SL-190<br>0 - 6 |
|-----------------------------------|-------------------------|------------------------|-------------------------|--------------------------|--------------------------|------------------------|-------------------------|--------------------------|------------------------|-------------------------|--------------------------|------------------------|
| Date:                             | 01/16/18                | 01/16/18               | 01/16/18                | 01/16/18                 | 01/16/18                 | 01/16/18               | 01/16/18                | 01/16/18                 | 01/16/18               | 01/16/18                | 01/16/18                 | 01/16/18               |
| PCBs                              |                         |                        |                         |                          |                          |                        |                         |                          |                        |                         |                          |                        |
| Aroclor 1016                      | ND(0.039)               | ND(0.055)              | ND(0.052)               | ND(0.044)                | ND(0.041)                | ND(0.055)              | ND(0.047)               | ND(0.044)                | ND(0.047)              | ND(0.045)               | ND(0.037)                | ND(0.042)              |
| Aroclor 1221                      | ND(0.039)               | ND(0.055)              | ND(0.052)               | ND(0.044)                | ND(0.041)                | ND(0.055)              | ND(0.047)               | ND(0.044)                | ND(0.047)              | ND(0.045)               | ND(0.037)                | ND(0.042)              |
| Aroclor 1232                      | ND(0.039)               | ND(0.055)              | ND(0.052)               | ND(0.044)                | ND(0.041)                | ND(0.055)              | ND(0.047)               | ND(0.044)                | ND(0.047)              | ND(0.045)               | ND(0.037)                | ND(0.042)              |
| Aroclor 1242                      | ND(0.039)               | ND(0.055)              | ND(0.052)               | ND(0.044)                | ND(0.041)                | ND(0.055)              | ND(0.047)               | ND(0.044)                | ND(0.047)              | ND(0.045)               | ND(0.037)                | ND(0.042)              |
| Aroclor 1248                      | 0.401                   | ND(0.055)              | ND(0.052)               | ND(0.044)                | ND(0.041)                | ND(0.055)              | ND(0.047)               | ND(0.044)                | ND(0.047)              | ND(0.045)               | ND(0.037)                | ND(0.042)              |
| Aroclor 1254                      | ND(0.039)               | ND(0.055)              | ND(0.052)               | ND(0.044)                | ND(0.041)                | ND(0.055)              | ND(0.047)               | ND(0.044)                | ND(0.047)              | ND(0.045)               | ND(0.037)                | ND(0.042)              |
| Aroclor 1260                      | 0.233                   | 4.01                   | 1.24                    | 0.114                    | 1.14                     | 15.4                   | 28.8                    | 6.81                     | 0.17                   | 0.298                   | 0.0447                   | 0.234                  |
| Aroclor-1262                      | ND(0.039)               | ND(0.055)              | ND(0.052)               | ND(0.044)                | ND(0.041)                | ND(0.055)              | ND(0.047)               | ND(0.044)                | ND(0.047)              | ND(0.045)               | ND(0.037)                | ND(0.042)              |
| Aroclor-1268                      | ND(0.039)               | ND(0.055)              | ND(0.052)               | ND(0.044)                | ND(0.041)                | ND(0.055)              | ND(0.047)               | ND(0.044)                | ND(0.047)              | ND(0.045)               | ND(0.037)                | ND(0.042)              |
| Total PCBs                        | 0.634                   | 4.01                   | 1.24                    | 0.114                    | 1.14                     | 15.4                   | 28.8                    | 6.81                     | 0.17                   | 0.298                   | 0.0447                   | 0.234                  |
| Miscellaneous                     |                         |                        |                         |                          |                          |                        |                         |                          |                        |                         |                          |                        |
| TOC                               | NA                      | NA                     | NA                      | NA                       | NA                       | NA                     | NA                      | NA                       | NA                     | NA                      | NA                       | NA                     |



| Sample Location:<br>Sample Depth: | T11A18-SL-190<br>6 - 12 | T11A18-SL-190<br>12 - 18 | T11A18-SL-190<br>18 - 24 | T11A18-SL-191<br>0 - 6 | T11A18-SL-191<br>6 - 12 | T11A18-SL-191<br>12 - 18 | T11A18-SL-191<br>18 - 22 | T11A18-SL-192<br>0 - 6 | T11A18-SL-192<br>6 - 12 | T11A18-SL-192<br>12 - 18 | T11A18-SL-192<br>18 - 21 |                   |
|-----------------------------------|-------------------------|--------------------------|--------------------------|------------------------|-------------------------|--------------------------|--------------------------|------------------------|-------------------------|--------------------------|--------------------------|-------------------|
| Date:                             | 01/16/18                | 01/16/18                 | 01/16/18                 | 01/16/18               | 01/16/18                | 01/16/18                 | 01/16/18                 | 01/16/18               | 01/16/18                | 01/16/18                 | 01/16/18                 | 0 - 6<br>01/17/18 |
| PCBs                              |                         |                          |                          |                        |                         |                          |                          |                        |                         |                          |                          |                   |
| Aroclor 1016                      | ND(0.039)               | ND(0.042) [ND(0.039)]    | ND(0.039)                | ND(0.04)               | ND(0.036)               | ND(0.035)                | ND(0.036)                | ND(0.18)               | ND(0.042)               | ND(0.037)                | ND(0.037)                | ND(0.064)         |
| Aroclor 1221                      | ND(0.039)               | ND(0.042) [ND(0.039)]    | ND(0.039)                | ND(0.04)               | ND(0.036)               | ND(0.035)                | ND(0.036)                | ND(0.18)               | ND(0.042)               | ND(0.037)                | ND(0.037)                | ND(0.064)         |
| Aroclor 1232                      | ND(0.039)               | ND(0.042) [ND(0.039)]    | ND(0.039)                | ND(0.04)               | ND(0.036)               | ND(0.035)                | ND(0.036)                | ND(0.18)               | ND(0.042)               | ND(0.037)                | ND(0.037)                | ND(0.064)         |
| Aroclor 1242                      | ND(0.039)               | ND(0.042) [ND(0.039)]    | ND(0.039)                | ND(0.04)               | ND(0.036)               | ND(0.035)                | ND(0.036)                | ND(0.18)               | ND(0.042)               | ND(0.037)                | ND(0.037)                | ND(0.064)         |
| Aroclor 1248                      | ND(0.039)               | ND(0.042) [ND(0.039)]    | ND(0.039)                | ND(0.04)               | ND(0.036)               | ND(0.035)                | ND(0.036)                | ND(0.18)               | ND(0.042)               | ND(0.037)                | ND(0.037)                | ND(0.064)         |
| Aroclor 1254                      | ND(0.039)               | ND(0.042) [ND(0.039)]    | ND(0.039)                | ND(0.04)               | ND(0.036)               | ND(0.035)                | ND(0.036)                | ND(0.18)               | ND(0.042)               | ND(0.037)                | ND(0.037)                | ND(0.064)         |
| Aroclor 1260                      | 0.524                   | 6.8 [2.63]               | 38.2                     | 0.205                  | 0.125                   | 0.447                    | 0.0773                   | 0.734                  | 0.74                    | 0.958                    | 4.11                     | 0.641             |
| Aroclor-1262                      | ND(0.039)               | ND(0.042) [ND(0.039)]    | ND(0.039)                | ND(0.04)               | ND(0.036)               | ND(0.035)                | ND(0.036)                | ND(0.18)               | ND(0.042)               | ND(0.037)                | ND(0.037)                | ND(0.064)         |
| Aroclor-1268                      | ND(0.039)               | ND(0.042) [ND(0.039)]    | ND(0.039)                | ND(0.04)               | ND(0.036)               | ND(0.035)                | ND(0.036)                | ND(0.18)               | ND(0.042)               | ND(0.037)                | ND(0.037)                | ND(0.064)         |
| Total PCBs                        | 0.524                   | 6.8 [2.63]               | 38.2                     | 0.205                  | 0.125                   | 0.447                    | 0.0773                   | 0.734                  | 0.74                    | 0.958                    | 4.11                     | 0.641             |
| Miscellaneous                     |                         |                          |                          |                        |                         |                          |                          |                        |                         |                          |                          |                   |
| TOC                               | NA                      | NA                       | NA                       | NA                     | NA                      | NA                       | NA                       | NA                     | NA                      | NA                       | NA                       | NA                |



| Sample Location: | T11A18-SL-193 |           |           | T11A18-SL-195 |           | T11A18-SL-195         |          |           | T11A18-SL-197 | T11A18-SL-197 | T11A18-SL-197 | T11A18-SL-198 |
|------------------|---------------|-----------|-----------|---------------|-----------|-----------------------|----------|-----------|---------------|---------------|---------------|---------------|
| Sample Depth:    | 6 - 12        | 0 - 6     | 6 - 12    | 0 - 6         | 6 - 12    | 12 - 18               | 0 - 6    | 6 - 12    | 0 - 6         | 6 - 12        | 12 - 15       | 0 - 6         |
| Date:            | 01/17/18      | 01/17/18  | 01/17/18  | 01/17/18      | 01/17/18  | 01/17/18              | 01/17/18 | 01/17/18  | 01/17/18      | 01/17/18      | 01/17/18      | 01/17/18      |
| PCBs             |               |           |           |               |           |                       |          |           |               |               |               |               |
| Aroclor 1016     | ND(0.046)     | ND(0.058) | ND(0.046) | ND(0.072)     | ND(0.076) | ND(0.039) [ND(0.039)] | ND(0.1)  | ND(0.044) | ND(0.086)     | ND(0.045)     | ND(0.042)     | ND(0.13)      |
| Aroclor 1221     | ND(0.046)     | ND(0.058) | ND(0.046) | ND(0.072)     | ND(0.076) | ND(0.039) [ND(0.039)] | ND(0.1)  | ND(0.044) | ND(0.086)     | ND(0.045)     | ND(0.042)     | ND(0.13)      |
| Aroclor 1232     | ND(0.046)     | ND(0.058) | ND(0.046) | ND(0.072)     | ND(0.076) | ND(0.039) [ND(0.039)] | ND(0.1)  | ND(0.044) | ND(0.086)     | ND(0.045)     | ND(0.042)     | ND(0.13)      |
| Aroclor 1242     | ND(0.046)     | ND(0.058) | ND(0.046) | ND(0.072)     | ND(0.076) | ND(0.039) [ND(0.039)] | ND(0.1)  | ND(0.044) | ND(0.086)     | ND(0.045)     | ND(0.042)     | ND(0.13)      |
| Aroclor 1248     | ND(0.046)     | ND(0.058) | ND(0.046) | ND(0.072)     | ND(0.076) | ND(0.039) [ND(0.039)] | ND(0.1)  | ND(0.044) | ND(0.086)     | ND(0.045)     | ND(0.042)     | ND(0.13)      |
| Aroclor 1254     | ND(0.046)     | ND(0.058) | ND(0.046) | ND(0.072)     | ND(0.076) | ND(0.039) [ND(0.039)] | ND(0.1)  | ND(0.044) | ND(0.086)     | ND(0.045)     | ND(0.042)     | ND(0.13)      |
| Aroclor 1260     | 0.352         | 0.856     | 0.208     | 0.36          | 0.0991    | 0.0477 [0.0607]       | 0.141    | 0.026 J   | 0.335         | 1.02          | 0.0165 J      | 1.53          |
| Aroclor-1262     | ND(0.046)     | ND(0.058) | ND(0.046) | ND(0.072)     | ND(0.076) | ND(0.039) [ND(0.039)] | ND(0.1)  | ND(0.044) | ND(0.086)     | ND(0.045)     | ND(0.042)     | ND(0.13)      |
| Aroclor-1268     | ND(0.046)     | ND(0.058) | ND(0.046) | ND(0.072)     | ND(0.076) | ND(0.039) [ND(0.039)] | ND(0.1)  | ND(0.044) | ND(0.086)     | ND(0.045)     | ND(0.042)     | ND(0.13)      |
| Total PCBs       | 0.352         | 0.856     | 0.208     | 0.36          | 0.0991    | 0.0477 [0.0607]       | 0.141    | 0.026 J   | 0.335         | 1.02          | 0.0165 J      | 1.53          |
| Miscellaneous    |               |           |           |               |           |                       |          |           |               |               |               |               |
| TOC              | NA            | NA        | NA        | NA            | NA        | NA                    | NA       | NA        | NA            | NA            | NA            | NA            |



| Sample Location:       |                    |                   | T11A18-SL-207      | T11A18-SL-208     | T11A18-SL-208      |                     |                     |                   |                    |                     |                     |                   |
|------------------------|--------------------|-------------------|--------------------|-------------------|--------------------|---------------------|---------------------|-------------------|--------------------|---------------------|---------------------|-------------------|
| Sample Depth:<br>Date: | 6 - 12<br>01/17/18 | 0 - 6<br>03/27/18 | 6 - 12<br>03/27/18 | 0 - 6<br>03/27/18 | 6 - 12<br>03/27/18 | 12 - 18<br>03/27/18 | 18 - 20<br>03/27/18 | 0 - 6<br>03/27/18 | 6 - 12<br>03/27/18 | 12 - 18<br>03/27/18 | 18 - 21<br>03/27/18 | 0 - 6<br>03/27/18 |
| PCBs                   | 01/17/10           | 03/2//10          | 03/21/10           | 03/21/10          | 03/21/10           | 03/21/10            | 03/21/10            | 03/27/10          | 03/21/10           | 03/2//10            | 03/21/10            | 03/21/10          |
| Aroclor 1016           | ND(0.045)          | ND(0.049)         | ND(0.037)          | ND(0.044)         | ND(0.041)          | ND(0.043)           | ND(0.039)           | ND(0.041)         | ND(0.042)          | ND(0.045)           | ND(0.041)           | ND(0.046)         |
| Aroclor 1221           | ND(0.045)          | ND(0.049)         | ND(0.037)          | ND(0.044)         | ND(0.041)          | ND(0.043)           | ND(0.039)           | ND(0.041)         | ND(0.042)          | ND(0.045)           | ND(0.041)           | ND(0.046)         |
| Aroclor 1232           | ND(0.045)          | ND(0.049)         | ND(0.037)          | ND(0.044)         | ND(0.041)          | ND(0.043)           | ND(0.039)           | ND(0.041)         | ND(0.042)          | ND(0.045)           | ND(0.041)           | ND(0.046)         |
| Aroclor 1242           | ND(0.045)          | ND(0.049)         | ND(0.037)          | ND(0.044)         | ND(0.041)          | ND(0.043)           | ND(0.039)           | ND(0.041)         | ND(0.042)          | ND(0.045)           | ND(0.041)           | ND(0.046)         |
| Aroclor 1248           | ND(0.045)          | ND(0.049)         | ND(0.037)          | ND(0.044)         | ND(0.041)          | ND(0.043)           | ND(0.039)           | ND(0.041)         | 0.57               | 0.38                | ND(0.041)           | ND(0.046)         |
| Aroclor 1254           | ND(0.045)          | ND(0.049)         | ND(0.037)          | ND(0.044)         | ND(0.041)          | ND(0.043)           | ND(0.039)           | ND(0.041)         | ND(0.042)          | ND(0.045)           | ND(0.041)           | ND(0.046)         |
| Aroclor 1260           | 0.76               | 0.245             | 0.149              | 0.127             | ND(0.041)          | 0.0564              | ND(0.039)           | 1.65              | 1.47               | 0.929               | 14.3                | 1.8               |
| Aroclor-1262           | ND(0.045)          | ND(0.049)         | ND(0.037)          | ND(0.044)         | ND(0.041)          | ND(0.043)           | ND(0.039)           | ND(0.041)         | ND(0.042)          | ND(0.045)           | ND(0.041)           | ND(0.046)         |
| Aroclor-1268           | ND(0.045)          | ND(0.049)         | ND(0.037)          | ND(0.044)         | ND(0.041)          | ND(0.043)           | ND(0.039)           | ND(0.041)         | ND(0.042)          | ND(0.045)           | ND(0.041)           | ND(0.046)         |
| Total PCBs             | 0.76               | 0.245             | 0.149              | 0.127             | ND                 | 0.0564              | ND                  | 1.65              | 2.04               | 1.309               | 14.3                | 1.8               |
| Miscellaneous          |                    |                   |                    |                   |                    |                     |                     |                   |                    |                     |                     |                   |
| TOC                    | NA                 | NA                | NA                 | NA                | NA                 | NA                  | NA                  | NA                | NA                 | NA                  | NA                  | NA                |



| Sample Location: |           |           |           |           |           | T11A18-SL-210A |           | T11A18-SL-211 | T11A18-SL-211 | T11A18-SL-211 |           | T11A18-SL-212 |
|------------------|-----------|-----------|-----------|-----------|-----------|----------------|-----------|---------------|---------------|---------------|-----------|---------------|
| Sample Depth:    | 6 - 12    | 12 - 18   | 18 - 21   | 0 - 6     | 6 - 12    | 12 - 16        | 0 - 6     | 6 - 12        | 12 - 18       | 18 - 20       | 0 - 6     | 6 - 12        |
| Date:            | 03/27/18  | 03/27/18  | 03/27/18  | 03/27/18  | 03/27/18  | 03/27/18       | 03/27/18  | 03/27/18      | 03/27/18      | 03/27/18      | 03/27/18  | 03/27/18      |
| PCBs             |           |           |           |           |           |                |           |               |               |               |           |               |
| Aroclor 1016     | ND(0.048) | ND(0.038) | ND(0.035) | ND(0.037) | ND(0.037) | ND(0.035)      | ND(0.043) | ND(0.043)     | ND(0.045)     | ND(0.042)     | ND(0.062) | ND(0.042)     |
| Aroclor 1221     | ND(0.048) | ND(0.038) | ND(0.035) | ND(0.037) | ND(0.037) | ND(0.035)      | ND(0.043) | ND(0.043)     | ND(0.045)     | ND(0.042)     | ND(0.062) | ND(0.042)     |
| Aroclor 1232     | ND(0.048) | ND(0.038) | ND(0.035) | ND(0.037) | ND(0.037) | ND(0.035)      | ND(0.043) | ND(0.043)     | ND(0.045)     | ND(0.042)     | ND(0.062) | ND(0.042)     |
| Aroclor 1242     | ND(0.048) | ND(0.038) | ND(0.035) | ND(0.037) | ND(0.037) | ND(0.035)      | ND(0.043) | ND(0.043)     | ND(0.045)     | ND(0.042)     | ND(0.062) | ND(0.042)     |
| Aroclor 1248     | ND(0.048) | ND(0.038) | ND(0.035) | ND(0.037) | ND(0.037) | ND(0.035)      | ND(0.043) | ND(0.043)     | ND(0.045)     | ND(0.042)     | ND(0.062) | ND(0.042)     |
| Aroclor 1254     | ND(0.048) | ND(0.038) | ND(0.035) | ND(0.037) | ND(0.037) | ND(0.035)      | ND(0.043) | ND(0.043)     | ND(0.045)     | ND(0.042)     | ND(0.062) | ND(0.042)     |
| Aroclor 1260     | 3.04      | 2.91      | 2.01      | 0.145     | 0.103     | 0.441          | 0.246     | 0.0569        | ND(0.045)     | ND(0.042)     | 0.713     | 0.472         |
| Aroclor-1262     | ND(0.048) | ND(0.038) | ND(0.035) | ND(0.037) | ND(0.037) | ND(0.035)      | ND(0.043) | ND(0.043)     | ND(0.045)     | ND(0.042)     | ND(0.062) | ND(0.042)     |
| Aroclor-1268     | ND(0.048) | ND(0.038) | ND(0.035) | ND(0.037) | ND(0.037) | ND(0.035)      | ND(0.043) | ND(0.043)     | ND(0.045)     | ND(0.042)     | ND(0.062) | ND(0.042)     |
| Total PCBs       | 3.04      | 2.91      | 2.01      | 0.145     | 0.103     | 0.441          | 0.246     | 0.0569        | ND            | ND            | 0.713     | 0.472         |
| Miscellaneous    |           |           |           |           |           |                |           |               |               |               |           |               |
| TOC              | NA        | NA        | NA        | NA        | NA        | NA             | NA        | NA            | NA            | NA            | NA        | NA            |



| Sample Location:<br>Sample Depth: | T11A18-SL-212<br>12 - 18 | T11A18-SL-213<br>0 - 6 | T11A18-SL-213<br>6 - 12 | T11A18-SL-213<br>12 - 18 | T11A18-SL-213<br>18 - 21 | T11A18-SL-214<br>0 - 6 | T11A18-SL-214<br>6 - 12 | T11A18-SL-215<br>0 - 6 | T11A18-SL-215<br>6 - 12 |
|-----------------------------------|--------------------------|------------------------|-------------------------|--------------------------|--------------------------|------------------------|-------------------------|------------------------|-------------------------|
| Date:                             | 03/27/18                 | 03/27/18               | 03/27/18                | 03/27/18                 | 03/27/18                 | 03/27/18               | 03/27/18                | 03/27/18               | 03/27/18                |
| PCBs                              |                          |                        |                         |                          |                          |                        |                         |                        |                         |
| Aroclor 1016                      | ND(0.035)                | ND(0.039)              | ND(0.04)                | ND(0.036)                | ND(0.037)                | ND(0.041)              | ND(0.038)               | ND(0.042)              | ND(0.038)               |
| Aroclor 1221                      | ND(0.035)                | ND(0.039)              | ND(0.04)                | ND(0.036)                | ND(0.037)                | ND(0.041)              | ND(0.038)               | ND(0.042)              | ND(0.038)               |
| Aroclor 1232                      | ND(0.035)                | ND(0.039)              | ND(0.04)                | ND(0.036)                | ND(0.037)                | ND(0.041)              | ND(0.038)               | ND(0.042)              | ND(0.038)               |
| Aroclor 1242                      | ND(0.035)                | ND(0.039)              | ND(0.04)                | ND(0.036)                | ND(0.037)                | ND(0.041)              | ND(0.038)               | ND(0.042)              | ND(0.038)               |
| Aroclor 1248                      | ND(0.035)                | ND(0.039)              | ND(0.04)                | ND(0.036)                | ND(0.037)                | ND(0.041)              | ND(0.038)               | ND(0.042)              | ND(0.038)               |
| Aroclor 1254                      | ND(0.035)                | ND(0.039)              | ND(0.04)                | ND(0.036)                | ND(0.037)                | ND(0.041)              | ND(0.038)               | ND(0.042)              | ND(0.038)               |
| Aroclor 1260                      | ND(0.035)                | ND(0.039)              | ND(0.04)                | ND(0.036)                | ND(0.037)                | 0.146                  | ND(0.038)               | 0.993                  | 0.18                    |
| Aroclor-1262                      | 0.0095 J                 | 0.0963                 | 0.0701                  | 0.0102 J                 | 0.0418                   | ND(0.041)              | 0.0078 J                | ND(0.042)              | ND(0.038)               |
| Aroclor-1268                      | ND(0.035)                | ND(0.039)              | ND(0.04)                | ND(0.036)                | ND(0.037)                | ND(0.041)              | ND(0.038)               | ND(0.042)              | ND(0.038)               |
| Total PCBs                        | 0.0095 J                 | 0.0963                 | 0.0701                  | 0.0102 J                 | 0.0418                   | 0.146                  | 0.0078 J                | 0.993                  | 0.18                    |
| Miscellaneous                     |                          |                        |                         |                          |                          |                        |                         |                        |                         |
| TOC                               | NA                       | NA                     | NA                      | NA                       | NA                       | NA                     | NA                      | NA                     | NA                      |

#### Definitions:

Lab Qualifiers:

J - The compound was positively identified; however, the associated numerical value is an estimated concentration only.

ND - The compound was analyzed for but not detected. The associated value is the compound quantitation/reporting limit.

Sample IDs: MRP - Former Mead Road Pond Area; NWDD - Northwest Drainage Ditch; T11A - Tributary T11A.

Matrix: SL - Soil; SED - Sediment.

Constituents: PCB - Polychlorinated Biphenyls; TOC - Total Organic Carbon.

Other: NA - Not sampled for the given constituent.

#### Notes:

1. Samples collected by Arcadis December 2017 and January and March 2018 and submitted to SGS Accutest (Dayton) for analysis.

2. All sample depths are presented in inches. All sample results are presented in parts per million.

3. Samples results presented in brackets ("[]") are for duplicate samples.

4. Total PCBs are the sum of individual Aroclors or Congeners, as appropriate.

# Table 8 Summary of Total PCB Data for 2017 and 2018 Sediment and Soil Samples Data Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

|                |          | Sample Interval (inches) <sup>1</sup> |              |           |                    |                    |  |  |  |
|----------------|----------|---------------------------------------|--------------|-----------|--------------------|--------------------|--|--|--|
| Location Name  | Matrix   | 0 - 6                                 | 6 - 12       | 12 - 18   | 18 - 24            | 24+                |  |  |  |
| Tributary T11A |          |                                       |              |           |                    |                    |  |  |  |
| T11A17-SL-1    | Soil     | 0.06                                  | Refusal      | Refusal   | Refusal            | Refusal            |  |  |  |
| T11A17-SL-2    | Soil     | 0.15                                  | ND           | X         | Refusal            | Refusal            |  |  |  |
| T11A17-SL-3    | Soil     | 9.34                                  | 1.28         | 1.17      | Refusal            | Refusal            |  |  |  |
| T11A17-SL-4    | Soil     | 11.9                                  | 3.38         | Refusal   | Refusal            | Refusal            |  |  |  |
| T11A18-SL-148  | Soil     | 3.29                                  | 3.96         | Refusal   | Refusal            | Refusal            |  |  |  |
| T11A18-SL-207  | Soil     | 0.25                                  | 0.15         | X         | Refusal            | Refusal            |  |  |  |
| T11A17-SL-5    | Soil     | 0.14                                  | ND           | X         | Refusal            | Refusal            |  |  |  |
| T11A17-SL-5    | Soil     | 0.14                                  | ND           | ND        | Refusal            | Refusal            |  |  |  |
|                |          |                                       |              |           |                    |                    |  |  |  |
| T11A17-SL-7    | Soil     | 0.28                                  | ND           | X         | Refusal            | Refusal            |  |  |  |
| T11A17-SL-8    | Soil     | 0.10                                  | ND           | X         | Refusal            | Refusal            |  |  |  |
| T11A17-SL-9    | Soil     | 49.4                                  | 10.9         | Refusal   | Refusal            | Refusal            |  |  |  |
| T11A18-SL-145  | Soil     | 6.15                                  | 2.83         | 0.64      | Refusal            | Refusal            |  |  |  |
| T11A18-SL-146  | Soil     | 0.20                                  | 0.04         | Х         | Refusal            | Refusal            |  |  |  |
| T11A18-SL-147  | Soil     | 10.5                                  | 2.14         | 1.07      | Refusal            | Refusal            |  |  |  |
| T11A17-SL-10   | Soil     | 36.7                                  | 114          | Refusal   | Refusal            | Refusal            |  |  |  |
| T11A18-SED-152 | Sediment | 1.87                                  | 3.26         | Refusal   | Refusal            | Refusal            |  |  |  |
| T11A18-SL-153  | Soil     | 0.21                                  | 0.08         | 0.02      | Refusal            | Refusal            |  |  |  |
| T11A17-SL-11   | Soil     | 0.20                                  | ND           | Refusal   | Refusal            | Refusal            |  |  |  |
| T11A17-SL-12   | Soil     | 0.24                                  | ND           | X         | Refusal            | Refusal            |  |  |  |
| T11A18-SL-150  | Soil     | 0.39                                  | 0.04         | X         | X                  | Refusal            |  |  |  |
| T11A17-SL-13   | Soil     | 314                                   | 10.8         | Refusal   | Refusal            | Refusal            |  |  |  |
| T11A18-SED-154 | Sediment | 0.33                                  | 0.08         | Refusal   | Refusal            | Refusal            |  |  |  |
|                |          |                                       |              |           |                    |                    |  |  |  |
| T11A17-SL-14   | Soil     | 0.19                                  | ND           | Refusal   | Refusal            | Refusal            |  |  |  |
| T11A17-SL-15   | Soil     | 0.48                                  | 0.09         | Refusal   | Refusal            | Refusal            |  |  |  |
| T11A17-SL-16   | Soil     | 0.29                                  | 0.05         | 0.02      | Refusal            | Refusal            |  |  |  |
| T11A17-SL-17   | Soil     | 423                                   | 60.8         | 10.9      | Refusal            | Refusal            |  |  |  |
| T11A18-SED-155 | Sediment | 1.07                                  | 0.78         | 0.23      | Refusal            | Refusal            |  |  |  |
| T11A17-SL-18   | Soil     | 0.19                                  | 0.04         | 0.03      | Refusal            | Refusal            |  |  |  |
| T11A17-SL-19   | Soil     | 0.29                                  | 0.02         | ND        | Refusal            | Refusal            |  |  |  |
| T11A17-SL-20   | Soil     | 0.07                                  | ND           | Refusal   | Refusal            | Refusal            |  |  |  |
| T11A17-SL-21   | Soil     | 0.33                                  | 0.12         | Х         | Х                  | Refusal            |  |  |  |
| T11A17-SL-22   | Soil     | ND                                    | ND           | Х         | Refusal            | Refusal            |  |  |  |
| T11A18-SL-156  | Soil     | 0.02                                  | 0.08         | Х         | Х                  | Х                  |  |  |  |
| T11A17-SL-23   | Soil     | 0.12                                  | 0.04         | X         | Refusal            | Refusal            |  |  |  |
| Г11А17-SL-24   | Soil     | 4.55                                  | 2.27         | ND        | X                  | Refusal            |  |  |  |
| T11A18-SL-157  | Soil     | 0.27                                  | ND           | X         | X                  | Refusal            |  |  |  |
| T11A17-SL-25   | Soil     | 0.06                                  | 0.02         | X         | Refusal            | Refusal            |  |  |  |
|                |          |                                       |              |           |                    |                    |  |  |  |
| T11A17-SL-26   | Soil     | 0.23                                  | 0.91         | X         | X                  | Refusal            |  |  |  |
| Г11А18-SL-158  | Soil     | 0.09                                  | 0.12         |           | Refusal            | Refusal            |  |  |  |
| T11A17-SL-27   | Soil     | 0.52                                  | 0.52         | X         | X                  | Refusal            |  |  |  |
| Г11А17-SL-28   | Soil     | 10.4                                  | 0.27         | X         | Refusal            | Refusal            |  |  |  |
| T11A18-SL-159  | Soil     | 0.04                                  | 0.04         | Х         | Refusal            | Refusal            |  |  |  |
| T11A17-SL-29   | Soil     | 4.96                                  | 1.57         | Refusal   | Refusal            | Refusal            |  |  |  |
| T11A18-SL-162  | Soil     | 0.49                                  | 0.51         | Х         | Х                  | Refusal            |  |  |  |
| Г11А17-SL-30   | Soil     | 0.10                                  | 0.02         | Х         | Х                  | Refusal            |  |  |  |
| Г11А18-SL-173  | Soil     | 0.30                                  | 0.04         | Х         | Х                  | Refusal            |  |  |  |
| [11A17-SED-31  | Sediment | 2.91                                  | Refusal      | Refusal   | Refusal            | Refusal            |  |  |  |
| Γ11A18-SL-171  | Soil     | 0.57                                  | 0.15         | X         | Refusal            | Refusal            |  |  |  |
| T11A17-SL-32   | Soil     | 1.91                                  | 0.33         | Refusal   | Refusal            | Refusal            |  |  |  |
| Г11А18-SL-166  | Soil     | 1.33                                  | 0.22         | X         | X                  | Refusal            |  |  |  |
| T11A18-SL-208  | Soil     | 0.13                                  | ND           | 0.0564    | ND                 | Refusal            |  |  |  |
|                |          | 35.3                                  |              |           |                    | Refusal            |  |  |  |
| F11A17-SL-33   | Soil     |                                       | 27.9         | Refusal   | Refusal            |                    |  |  |  |
| Г11А18-SL-160  | Soil     | 0.65                                  | 0.29         | X         | X                  | X                  |  |  |  |
| T11A18-SL-161  | Soil     | 0.87                                  | 0.34<br>0.54 | X<br>0.06 | Refusal<br>Refusal | Refusal<br>Refusal |  |  |  |

Table 8 Summary of Total PCB Data for 2017 and 2018 Sediment and Soil Samples Data Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

|                            |          | Sample Interval (inches) <sup>1</sup> |         |         |         |         |  |  |  |
|----------------------------|----------|---------------------------------------|---------|---------|---------|---------|--|--|--|
| Location Name              | Matrix   | 0 - 6                                 | 6 - 12  | 12 - 18 | 18 - 24 | 24+     |  |  |  |
| Tributary T11A (continued) |          |                                       |         |         |         |         |  |  |  |
| T11A18-SL-172              | Soil     | 0.20                                  | 0.06    | Х       | Х       | Refusal |  |  |  |
| T11A17-SL-35               | Soil     | 0.76                                  | 0.02    | X       | Refusal | Refusal |  |  |  |
| T11A17-SL-36               | Soil     | 0.37                                  | 0.01    | X       | X       | Refusal |  |  |  |
| T11A17-SL-37               | Soil     | 0.28                                  | 0.08    | Refusal | Refusal | Refusal |  |  |  |
| T11A17-SL-38               | Soil     | 0.29                                  | 0.16    | X       | X       | Refusal |  |  |  |
| T11A17-SL-39               | Soil     | 0.34                                  | ND      | X       | Refusal | Refusal |  |  |  |
| T11A17-SED-40              | Sediment | 1.18                                  | Refusal | Refusal | Refusal | Refusal |  |  |  |
| T11A17-SL-41               | Soil     | 0.61                                  | 0.34    | X       | X       | Refusal |  |  |  |
| T11A17-SL-42               | Soil     | 0.12                                  | 0.01    | Refusal | Refusal | Refusal |  |  |  |
| T11A17-SL-42               | Soil     | 6.32                                  | 0.38    | X       | Refusal | Refusal |  |  |  |
|                            |          |                                       |         | X       |         |         |  |  |  |
| T11A18-SL-175              | Soil     | ND                                    | 0.46    |         | X       | Refusal |  |  |  |
| T11A17-SL-44               | Soil     | 0.23                                  | 0.17    | X       | Refusal | Refusal |  |  |  |
| T11A17-SL-45               | Soil     | 0.62                                  | 0.11    | Refusal | Refusal | Refusal |  |  |  |
| T11A17-SL-46               | Soil     | 0.74                                  | 0.16    | Refusal | Refusal | Refusal |  |  |  |
| T11A17-SL-47               | Soil     | 0.07                                  | 0.02    | Х       | Refusal | Refusal |  |  |  |
| T11A17-SL-48               | Soil     | 0.14                                  | 0.07    | Х       | Х       | Refusal |  |  |  |
| T11A17-SED-49              | Sediment | 3.22                                  | Refusal | Refusal | Refusal | Refusal |  |  |  |
| T11A17-SL-50               | Soil     | 1.33                                  | 1.24    | 0.09    | Refusal | Refusal |  |  |  |
| T11A18-SL-176              | Soil     | 0.30                                  | 0.11    | Х       | Х       | Refusal |  |  |  |
| T11A17-SL-51               | Soil     | 0.08                                  | 0.03    | Х       | Х       | Refusal |  |  |  |
| T11A17-SL-52               | Soil     | 9.74                                  | 11.1    | 16.8    | Refusal | Refusal |  |  |  |
| T11A17-SL-53               | Soil     | 0.45                                  | 0.21    | 0.03    | Х       | Refusal |  |  |  |
| T11A17-SL-54               | Soil     | 6.29                                  | 0.32    | X       | Х       | Refusal |  |  |  |
| T11A17-SL-55               | Soil     | 0.34                                  | ND      | X       | X       | Refusal |  |  |  |
| T11A17-SL-56               | Soil     | 0.21                                  | 0.10    | ND      | X       | Refusal |  |  |  |
| T11A17-SL-57               | Soil     | 1.09                                  | 1.07    | 3.01    | Refusal | Refusal |  |  |  |
| T11A18-SL-177              | Soil     | 0.17                                  | 0.09    | 0.04    | X       | Refusal |  |  |  |
| T11A17-SL-58               | Soil     | 14.0                                  | 17.6    | ND      | Refusal | Refusal |  |  |  |
| T11A17-SL-59               | Soil     | 6.36                                  | 0.54    | 0.05    | X       | Refusal |  |  |  |
|                            |          |                                       |         |         |         |         |  |  |  |
| T11A17-SL-60               | Soil     | 0.20                                  | 0.07    | 0.02    | Refusal | Refusal |  |  |  |
| T11A17-SL-61               | Soil     | 0.20                                  | 0.03    | ND      | X       | Refusal |  |  |  |
| T11A17-SL-62               | Soil     | 0.29                                  | 0.29    | 0.01    | Refusal | Refusal |  |  |  |
| T11A17-SL-63               | Soil     | 0.06                                  | ND      | 0.03    | Refusal | Refusal |  |  |  |
| T11A17-SL-64               | Soil     | ND                                    | ND      | ND      | ND      | Refusal |  |  |  |
| T11A17-SL-65               | Soil     | 0.29                                  | 0.03    | Х       | Refusal | Refusal |  |  |  |
| T11A17-SL-66               | Soil     | 0.19                                  | 0.23    | 0.12    | Refusal | Refusal |  |  |  |
| T11A17-SL-67               | Soil     | 0.25                                  | 0.02    | Х       | Refusal | Refusal |  |  |  |
| T11A17-SL-68               | Soil     | 0.20                                  | ND      | Х       | Х       | Refusal |  |  |  |
| T11A17-SL-69               | Soil     | 1.03                                  | 0.07    | ND      | Refusal | Refusal |  |  |  |
| T11A17-SL-70               | Soil     | 1.50                                  | 0.33    | Refusal | Refusal | Refusal |  |  |  |
| T11A17-SL-71               | Soil     | 0.64                                  | 0.33    | Х       | Refusal | Refusal |  |  |  |
| T11A17-SL-72               | Soil     | 0.10                                  | 0.07    | Х       | Refusal | Refusal |  |  |  |
| T11A17-SL-73               | Soil     | 0.17                                  | 0.03    | 0.02    | Refusal | Refusal |  |  |  |
| T11A17-SL-74               | Soil     | 1.26                                  | 68.8    | 42.5    | 27.9    | Refusal |  |  |  |
| T11A18-SL-181              | Soil     | 0.04                                  | 0.03    | 0.05    | ND      | Refusal |  |  |  |
| T11A18-SL-182              | Soil     | 9.57                                  | 93.8    | 3.60    | 37.0    | Refusal |  |  |  |
| T11A18-SL-183              | Soil     | 0.39                                  | 0.09    | 0.42    | 2.28    | Refusal |  |  |  |
| T11A18-SL-184              | Soil     | 11.80                                 | 12.10   | 4.21    | 1.51    | Refusal |  |  |  |
| T11A18-SL-209              | Soil     | 1.65                                  | 2.04    | 1.31    | 14.30   | Refusal |  |  |  |
| T11A18-SL-209              | Soil     | 1.80                                  | 3.04    | 2.91    | 2.01    | Refusal |  |  |  |
|                            |          |                                       |         |         |         |         |  |  |  |
| T11A18-SL-210A             | Soil     | 0.15                                  | 0.10    | 0.441   | Refusal | Refusal |  |  |  |
| T11A17-SL-75               | Soil     | 129                                   | 258     | Refusal | Refusal | Refusal |  |  |  |
| T11A18-SL-185              | Soil     | 3.07                                  | 0.63    | X       | X       | Refusal |  |  |  |
| T11A18-SL-186              | Soil     | 4.01                                  | 1.24    | 0.11    | 1.14    | Refusal |  |  |  |
| T11A18-SED-187             | Sediment | 4.64                                  | 0.76    | Refusal | Refusal | Refusal |  |  |  |

# Table 8 Summary of Total PCB Data for 2017 and 2018 Sediment and Soil Samples Data Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

|                            |        | Sample Interval (inches) <sup>1</sup> |         |         |           |         |  |  |  |  |
|----------------------------|--------|---------------------------------------|---------|---------|-----------|---------|--|--|--|--|
| Location Name              | Matrix | 0 - 6                                 | 6 - 12  | 12 - 18 | 18 - 24   | 24+     |  |  |  |  |
| Tributary T11A (continued) |        |                                       |         |         |           |         |  |  |  |  |
| T11A18-SL-188              | Soil   | 15.4                                  | 28.8    | 6.81    | Refusal   | Refusal |  |  |  |  |
| T11A18-SL-211              | Soil   | 0.25                                  | 0.06    | ND      | ND        | Refusal |  |  |  |  |
| T11A18-SL-212              | Soil   | 0.71                                  | 0.47    | 0.01    | Х         | Refusal |  |  |  |  |
| T11A17-SL-76               | Soil   | 0.97                                  | Refusal | Refusal | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-77               | Soil   | 0.07                                  | 0.06    | 0.06    | ND        | Refusal |  |  |  |  |
| T11A17-SL-78               | Soil   | 0.24                                  | 0.10    | ND      | X         | Refusal |  |  |  |  |
| T11A17-SL-79               | Soil   | 0.22                                  | 0.11    | 0.45    | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-80               | Soil   | 0.31                                  | 0.24    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-81               | Soil   | 0.40                                  | 0.01    | X       | X         | Refusal |  |  |  |  |
| T11A17-SL-82               | Soil   | 0.77                                  | 1.42    | 3.60    | Refusal   | Refusal |  |  |  |  |
| T11A18-SL-189              | Soil   | 0.17                                  | 0.30    | 0.04    | X         | Refusal |  |  |  |  |
| T11A17-SL-83               | Soil   | 0.20                                  | 0.02    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-84               | Soil   | 0.24                                  | 0.13    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-85               | Soil   | 0.86                                  | 3.19    | 214     | 348       | Refusal |  |  |  |  |
| T11A18-SL-190              | Soil   | 0.23                                  | 0.52    | 4.72    | 38.2      | Refusal |  |  |  |  |
| T11A18-SL-213              | Soil   | 0.10                                  | 0.07    | 0.01    | 0.042     | Refusal |  |  |  |  |
| T11A18-SL-191              | Soil   | 0.10                                  | 0.13    | 0.45    | 0.042     | Refusal |  |  |  |  |
| T11A18-SL-192              | Soil   | 0.73                                  | 0.74    | 0.96    | 4.11      | Refusal |  |  |  |  |
| T11A17-SL-86               | Soil   | 0.23                                  | 0.25    | X       | 4.11<br>X | Refusal |  |  |  |  |
| T11A17-SL-80               | Soil   | 0.09                                  | 0.25    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-88               | Soil   | ND                                    | 0.14    | X       | Refusal   | Refusal |  |  |  |  |
|                            |        |                                       | 0.52    | X       |           | Refusal |  |  |  |  |
| T11A17-SL-89               | Soil   | 0.26                                  |         | X       | Refusal   |         |  |  |  |  |
| T11A17-SL-90               | Soil   | 0.14                                  | 0.05    |         | X         | Refusal |  |  |  |  |
| T11A17-SL-91               | Soil   | 0.42                                  | 0.44    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-92               | Soil   | 0.68                                  | 0.20    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-93               | Soil   | 0.24                                  | 0.04    | X       | X         | Refusal |  |  |  |  |
| T11A17-SL-94               | Soil   | 0.77                                  | 0.32    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-95               | Soil   | 0.18                                  | 0.02    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-96               | Soil   | 0.68                                  | 0.34    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-97               | Soil   | 0.12                                  | 0.01    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-98               | Soil   | 0.11                                  | 0.02    | ND      | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-99               | Soil   | 0.17                                  | 0.42    | X       | X         | Refusal |  |  |  |  |
| T11A17-SL-100              | Soil   | 0.25                                  | 0.10    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-102              | Soil   | 0.16                                  | 0.09    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-106              | Soil   | 0.19                                  | 0.05    | Х       | X         | Refusal |  |  |  |  |
| T11A17-SL-109              | Soil   | 0.48                                  | 0.26    | 0.21    | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-111              | Soil   | 4.74                                  | 13.0    | Refusal | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-115              | Soil   | 0.81                                  | 0.03    | Х       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-121              | Soil   | 0.16                                  | ND      | ND      | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-124              | Soil   | 0.17                                  | ND      | X       | X         | Refusal |  |  |  |  |
| T11A17-SL-125              | Soil   | 0.14                                  | ND      | ND      | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-126              | Soil   | 0.53                                  | ND      | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-127              | Soil   | 0.03                                  | ND      | X       | X         | Refusal |  |  |  |  |
| T11A17-SL-128              | Soil   | 1.90                                  | 0.63    | X       | Refusal   | Refusal |  |  |  |  |
| T11A18-SL-193              | Soil   | 0.64                                  | 0.35    | X       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-129              | Soil   | 0.14                                  | 0.03    | Х       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-130              | Soil   | 30.6                                  | 16.5    | Refusal | Refusal   | Refusal |  |  |  |  |
| T11A18-SL-194              | Soil   | 0.86                                  | 0.21    | X       | X         | Refusal |  |  |  |  |
| T11A17-SL-131              | Soil   | 6.57                                  | 0.78    | Х       | Refusal   | Refusal |  |  |  |  |
| T11A18-SL-196              | Soil   | 0.14                                  | 0.03    | Х       | Х         | Refusal |  |  |  |  |
| T11A18-SL-197              | Soil   | 0.34                                  | 1.02    | 0.02    | Refusal   | Refusal |  |  |  |  |
| T11A18-SL-198              | Soil   | 1.53                                  | 0.76    | Х       | Refusal   | Refusal |  |  |  |  |
| T11A18-SL-214              | Soil   | 0.15                                  | 0.01    | Х       | Refusal   | Refusal |  |  |  |  |
| T11A18-SL-215              | Soil   | 0.99                                  | 0.18    | Х       | Refusal   | Refusal |  |  |  |  |
| T11A17-SL-132              | Soil   | 0.06                                  | ND      | Х       | Х         | Refusal |  |  |  |  |

Data Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

Table 8

|                                  |          | Sample Interval (inches) <sup>1</sup> |         |         |            |         |  |  |  |  |
|----------------------------------|----------|---------------------------------------|---------|---------|------------|---------|--|--|--|--|
| Location Name                    | Matrix   | 0 - 6                                 | 6 - 12  | 12 - 18 | 18 - 24    | 24+     |  |  |  |  |
| Tributary T11A (continued)       |          |                                       |         |         |            |         |  |  |  |  |
| T11A17-SL-133                    | Soil     | 0.48                                  | 0.22    | Х       | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-134                    | Soil     | 0.12                                  | 0.07    | Х       | Х          | Refusal |  |  |  |  |
| T11A17-SL-135                    | Soil     | 0.20                                  | 0.08    | Х       | Х          | Refusal |  |  |  |  |
| T11A17-SL-136                    | Soil     | 0.22                                  | 0.20    | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-137                    | Soil     | 0.34                                  | 0.03    | Х       | Х          | Refusal |  |  |  |  |
| T11A17-SL-138                    | Soil     | 1.52                                  | 1.37    | 16.50   | 25.18      | Refusal |  |  |  |  |
| T11A18-SL-195                    | Soil     | 0.36                                  | 0.10    | 0.05    | Х          | Х       |  |  |  |  |
| T11A17-SL-139                    | Soil     | 0.07                                  | ND      | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-140                    | Soil     | ND                                    | ND      | Х       | Х          | Х       |  |  |  |  |
| T11A17-SL-141                    | Soil     | 0.14                                  | 0.02    | Х       | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-142                    | Soil     | 0.47                                  | 0.02    | Х       | Х          | Refusal |  |  |  |  |
| T11A17-SL-143                    | Soil     | 0.19                                  | 0.07    | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-144                    | Soil     | 0.37                                  | 0.45    | X       | Refusal    | Refusal |  |  |  |  |
| T11A17-SED-J-1                   | Sediment | 3.65                                  | 1.29    | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A18-SL-149                    | Soil     | 0.07                                  | 0.09    | X       | X          | Refusal |  |  |  |  |
| T11A17-SED-J-2                   | Sediment | 1.85                                  | 0.33    | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A18-SL-151                    | Soil     | 0.13                                  | 0.02    | X       | X          | Refusal |  |  |  |  |
| T11A17-SED-J-3                   | Sediment | 0.96                                  | 0.57    | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A17-SED-J-4                   | Sediment | 1.28                                  | Refusal | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A17-SED-J-5                   | Sediment | 0.56                                  | Refusal | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A17-SED-J-6                   | Sediment | 1.53                                  | Refusal | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A17-SED-J-7                   | Sediment | 4.32                                  | Refusal | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A17-SED-J-7<br>T11A17-SED-J-8 | Sediment | 0.60                                  | Refusal | Refusal | Refusal    | Refusal |  |  |  |  |
|                                  |          |                                       |         |         |            |         |  |  |  |  |
| T11A17-SED-J-9                   | Sediment | 0.14                                  | Refusal | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A17-SED-J-10                  | Sediment | 0.61                                  | 0.54    | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-J-11                   | Soil     | 0.01                                  | ND      | X       | X          | Refusal |  |  |  |  |
| T11A17-SL-J-12                   | Soil     | 8.01                                  | 3.46    | 0.14    | Refusal    | Refusal |  |  |  |  |
| T11A18-SL-174                    | Soil     | 0.22                                  | 0.10    | X       | X          | Refusal |  |  |  |  |
| T11A17-SL-J-13                   | Soil     | 0.17                                  | 0.04    | X       | X          | Refusal |  |  |  |  |
| T11A17-SL-J-14                   | Soil     | 0.13                                  | 0.07    | X       | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-J-15                   | Soil     | 0.25                                  | 0.17    | X       | X          | Refusal |  |  |  |  |
| T11A17-SL-J-16                   | Soil     | 0.09                                  | 0.01    | X       | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-JT-1A                  | Soil     | 0.20                                  | 0.17    | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-JT-1B                  | Soil     | 0.08                                  | 0.04    | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-JT-2                   | Soil     | 18.2                                  | 41.9    | 9.4     | Refusal    | Refusal |  |  |  |  |
| T11A18-SED-163                   | Sediment | 0.39                                  | 0.54    | 0.06    | Refusal    | Refusal |  |  |  |  |
| T11A18-SL-164                    | Soil     | 0.10                                  | ND      | 0.03    | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-JT-3                   | Soil     | 7510                                  | 180     | 0.76    | 0.15       | Refusal |  |  |  |  |
| T11A18-SL-165                    | Soil     | 16.9                                  | 13.4    | 0.05    | ND         | Refusal |  |  |  |  |
| T11A18-SED-167                   | Sediment | ND                                    | 0.02    | Refusal | Refusal    | Refusal |  |  |  |  |
| T11A18-SL-168                    | Soil     | 0.10                                  | ND      | X       | Refusal    | Refusal |  |  |  |  |
| T11A18-SL-169                    | Soil     | 1.55                                  | 0.86    | Х       | X          | Refusal |  |  |  |  |
| T11A18-SL-170                    | Soil     | 1.12                                  | 0.04    | Х       | Х          | Refusal |  |  |  |  |
| T11A17-SL-JT-4                   | Soil     | 0.12                                  | 0.03    | 2.16    | Refusal    | Refusal |  |  |  |  |
| T11A18-SL-178                    | Soil     | 0.05                                  | 0.03    | ND      | see Note 5 | Х       |  |  |  |  |
| T11A17-SL-JT-5                   | Soil     | 2.51                                  | 0.55    | Х       | Refusal    | Refusal |  |  |  |  |
| T11A18-SL-179                    | Soil     | 0.36                                  | 0.15    | Х       | Refusal    | Refusal |  |  |  |  |
| T11A18-SL-180                    | Soil     | 0.10                                  | 0.02    | Х       | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-JT-6                   | Soil     | 0.12                                  | 0.13    | 0.14    | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-JT-7                   | Soil     | 0.12                                  | 0.05    | Х       | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-JT-8                   | Soil     | 2.45                                  | 0.31    | Х       | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-JT-9                   | Soil     | 0.54                                  | 0.09    | Х       | Х          | Refusal |  |  |  |  |
| T11A17-SL-JT-10                  | Soil     | 0.66                                  | 0.07    | 0.15    | Refusal    | Refusal |  |  |  |  |
| T11A17-SL-JT-11                  | Soil     | 0.63                                  | 0.16    | X       | Х          | Refusal |  |  |  |  |
| T11A17-SL-JT-12                  | Soil     | 0.80                                  | 3.43    | 0.74    | Refusal    | Refusal |  |  |  |  |

|                                 |                   |       | Samp       | le Interval (inc | hes) <sup>1</sup> |              |
|---------------------------------|-------------------|-------|------------|------------------|-------------------|--------------|
| Location Name                   | Matrix            | 0 - 6 | 6 - 12     | 12 - 18          | 18 - 24           | 24+          |
| Tributary T11A (continued)      |                   |       |            |                  |                   |              |
| T11A17-SL-JT-13                 | Soil              | 0.52  | 0.20       | Х                | Refusal           | Refusal      |
| T11A17-SL-JT-14                 | Soil              | 10.4  | 10.3       | Refusal          | Refusal           | Refusal      |
| T11A17-SL-JT-15                 | Soil              | 0.25  | 0.43       | Х                | Х                 | Refusal      |
| Samples Analyzed                |                   | 223   | 212        | 69               | 20                | 0            |
| Average                         |                   | 40    | 5.0        | 5.1              | 25                |              |
| Median                          |                   | 0.33  | 0.12       | 0.065            | 1.3               |              |
| Maximum                         |                   | 7510  | 258        | 214              | 348               |              |
| % ND                            |                   | 3%    | 13%        | 20%              | 30%               |              |
| % Detected <1 ppm               |                   | 70%   | 69%        | 55%              | 15%               |              |
| Northwest Drainage Ditch and    | d Former Mead Roa |       |            |                  |                   |              |
| MRP17-SED-J-1                   | Sediment          | 0.54  | Refusal    | Refusal          | Refusal           | Refusal      |
| MRP17-SED-J-2                   | Sediment          | 0.25  | Refusal    | Refusal          | Refusal           | Refusal      |
| MRP17-SED-J-3                   | Sediment          | 3.27  | Refusal    | Refusal          | Refusal           | Refusal      |
| NWDD17-SL-105                   | Soil              | 3.09  | 0.60       | X                | X                 | X            |
| NWDD17-SE-105<br>NWDD18-SED-201 | Sediment          | 0.16  | ND         | Refusal          | Refusal           | Refusal      |
| NWDD18-SED-201<br>NWDD17-SL-108 | Sediment          | 1.22  | 0.86       | X                | X                 | Refusal      |
| NWDD17-SL-100<br>NWDD17-SL-110  | Soil              | 1.22  | 0.50       | × X              | Refusal           | Refusal      |
| NWDD17-SL-110<br>NWDD17-SL-114  |                   |       |            | X                |                   |              |
|                                 | Soil<br>Soil      | 1.30  | 0.86       |                  | Refusal           | Refusal<br>X |
| NWDD18-SL-199                   |                   | 0.07  | 0.05       | X                | X                 |              |
| NWDD18-SL-200                   | Soil              | 0.20  | 0.04       | X                | X                 | Refusal      |
| NWDD17-SL-101                   | Soil              | 2.30  | 17.3       | 0.05             | ND                | Refusal      |
| NWDD18-SL-216                   | Soil              | 0.29  | 0.16       | X                | X                 | Refusal      |
| NWDD17-SL-103                   | Soil              | 0.52  | 0.23       | X                | X                 | X            |
| NWDD17-SL-104                   | Soil              | 2.19  | 0.03       | Х                | X                 | Х            |
| NWDD17-SL-107                   | Soil              | 0.72  | 0.22       | Х                | Х                 | Refusal      |
| NWDD18-SED-202                  | Sediment          | 0.55  | 0.44       | Х                | Х                 | Refusal      |
| NWDD18-SL-203                   | Soil              | 1.34  | 0.17       | Х                | Х                 | Х            |
| NWDD18-SL-217                   | Soil              | 0.78  | 0.02       | Х                | Х                 | Refusal      |
| NWDD17-SL-122                   | Soil              | 0.23  | 0.09       | Х                | Refusal           | Refusal      |
| NWDD17-SL-119                   | Soil              | 0.89  | 0.92       | Х                | Refusal           | Refusal      |
| NWDD17-SED-J-4                  | Sediment          | 0.13  | ND         | Х                | Refusal           | Refusal      |
| NWDD17-SED-J-5                  | Sediment          | 0.95  | 0.15       | Refusal          | Refusal           | Refusal      |
| NWDD17-SED-J-6                  | Sediment          | 1.86  | see Note 5 | 0.15             | Х                 | Refusal      |
| NWDD18-SL-204                   | Soil              | 0.04  | 0.06       | Х                | Х                 | Х            |
| NWDD18-SL-205                   | Soil              | 0.07  | 0.24       | Х                | Refusal           | Refusal      |
| NWDD17-SL-113                   | Soil              | 0.14  | 0.03       | Х                | Х                 | Х            |
| NWDD17-SL-116                   | Soil              | 0.11  | 0.12       | Х                | Х                 | Х            |
| NWDD17-SL-118                   | Soil              | 0.14  | 0.12       | Х                | Refusal           | Refusal      |
| NWDD17-SL-117                   | Soil              | 0.48  | 0.11       | X                | Refusal           | Refusal      |
| NWDD17-SL-112                   | Soil              | 2.95  | 0.82       | X                | Refusal           | Refusal      |
| NWDD18-SL-206                   | Soil              | 0.17  | 0.43       | X                | Refusal           | Refusal      |
| NWDD17-SL-120                   | Soil              | 0.07  | 0.19       | X                | X                 | X            |
| NWDD17-SL-123                   | Soil              | 0.72  | 0.78       | X                | X                 | Refusal      |
| Samples Analyzed                | 501               | 33    | 29         | 2                | 1                 | 0            |
| Average                         |                   | 0.88  | 0.88       | 0.10             | ND                |              |
| Median                          |                   | 0.54  | 0.17       | 0.10             | ND                |              |
| Maximum                         |                   | 3.3   | 17         | 0.15             | ND                |              |
| % ND                            |                   | 0%    | 7%         | 0%               | 100%              |              |
| % Detected <1 ppm               |                   | 70%   | 90%        | 100%             | 0%                |              |

# Table 8 Summary of Total PCB Data for 2017 and 2018 Sediment and Soil Samples Data Summary Report for Tributary T11A Removal Action Under Paragraph 47.f

# Dewey Loeffel Landfill Superfund Site - Nassau, New York

### Abbreviations, Notes, and Definitions:

1. Sample Interval represents the target range of inches below ground surface. At some locations refusal was met before the bottom of the target interval, and the actual depth is shallower than the target.

3. An X indicates sample was collected but archived, and has not been analyzed.

4. Laboratory qualifiers are not included in the representation of results presented in this table, and where applicable duplicate samples have been averaged with the parent sample. When calculating statistics, half the reporting limit was used for ND results.

5. No recovery was achieved in the 6- to 12-inch interval at location NWDD17-SED-J-6 or from the 18- to 24-inch interval at location T11A18-SL-178.

6. Shading indicates the following PCB Concentrations:

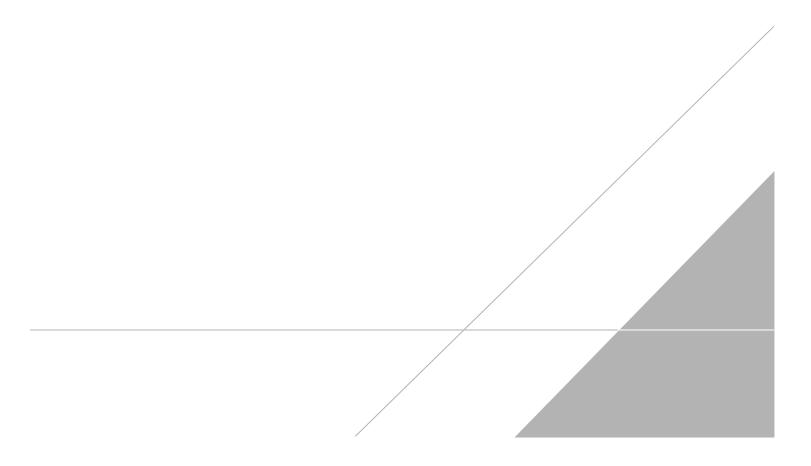
- = Total PCB results between 1 and 5 ppm
- = Total PCB results between 5 and 10 ppm
- = Total PCB results between 10 and 50 ppm
- = Total PCB results greater than 50 ppm

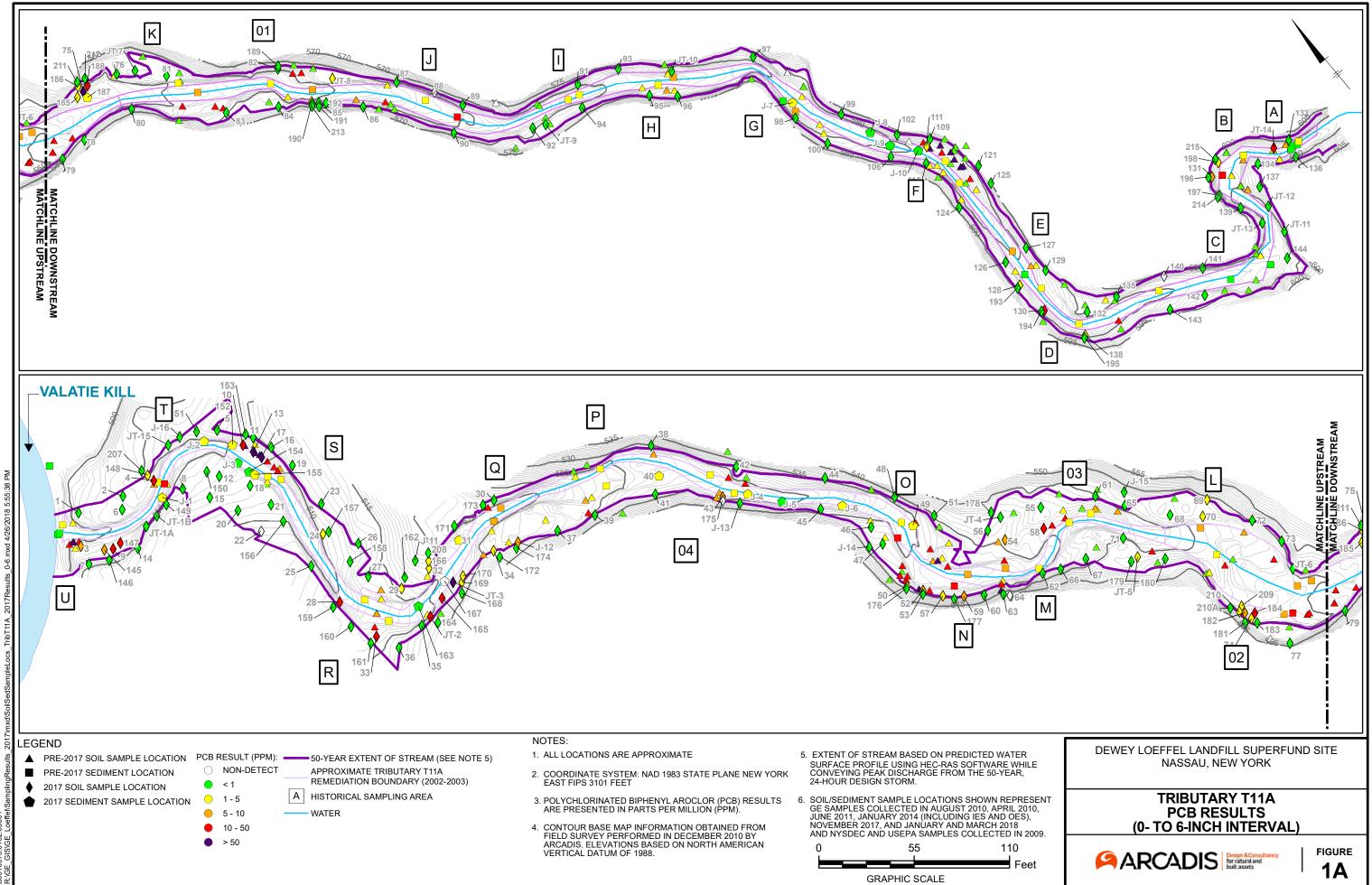
7. PCB = polychlorinated biphenyl Aroclor.

- ND = non-detect.
- 9. ppm = parts per million.
- 10. < = less than
- 11. % = percent

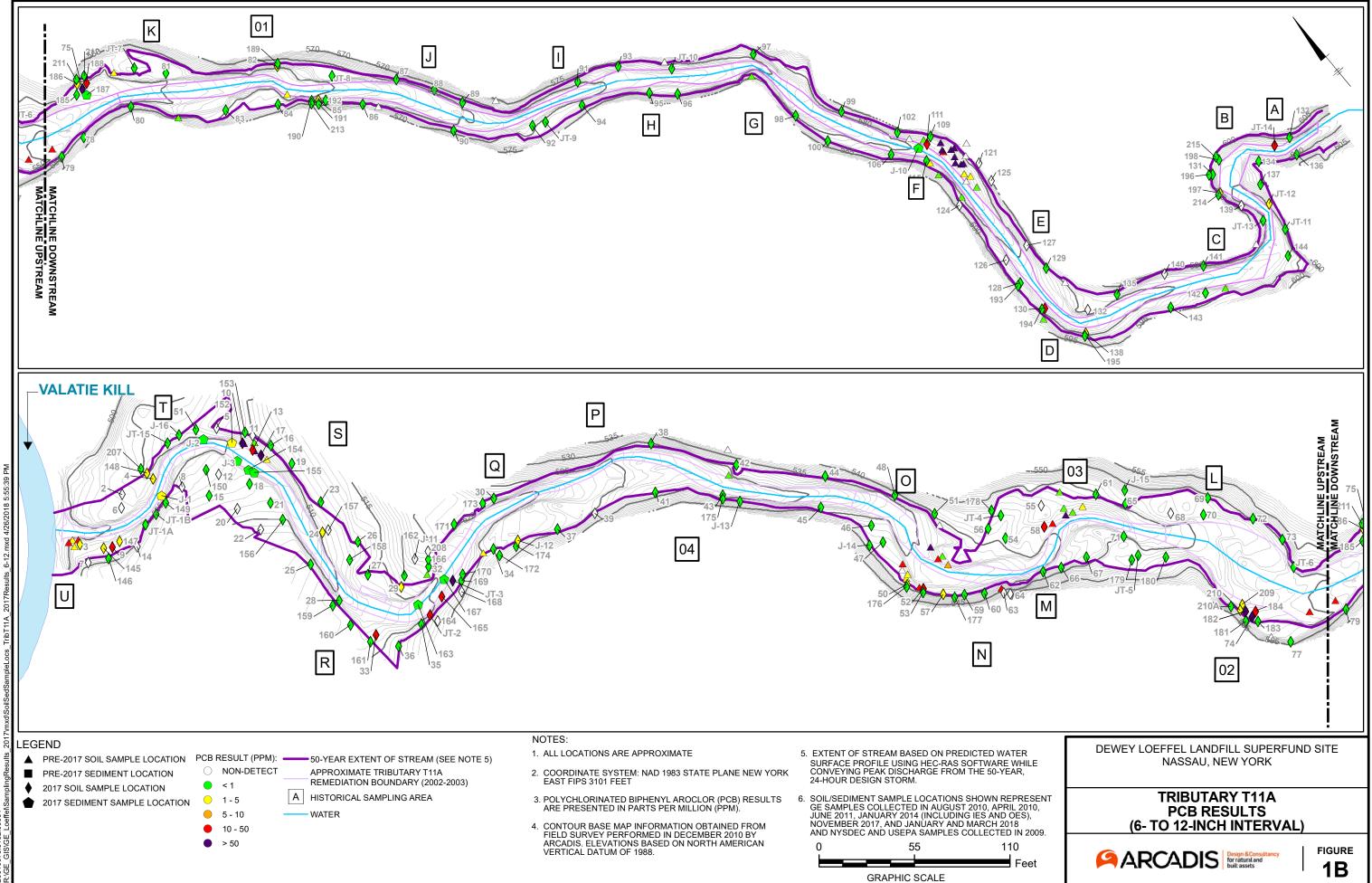


# **FIGURES**

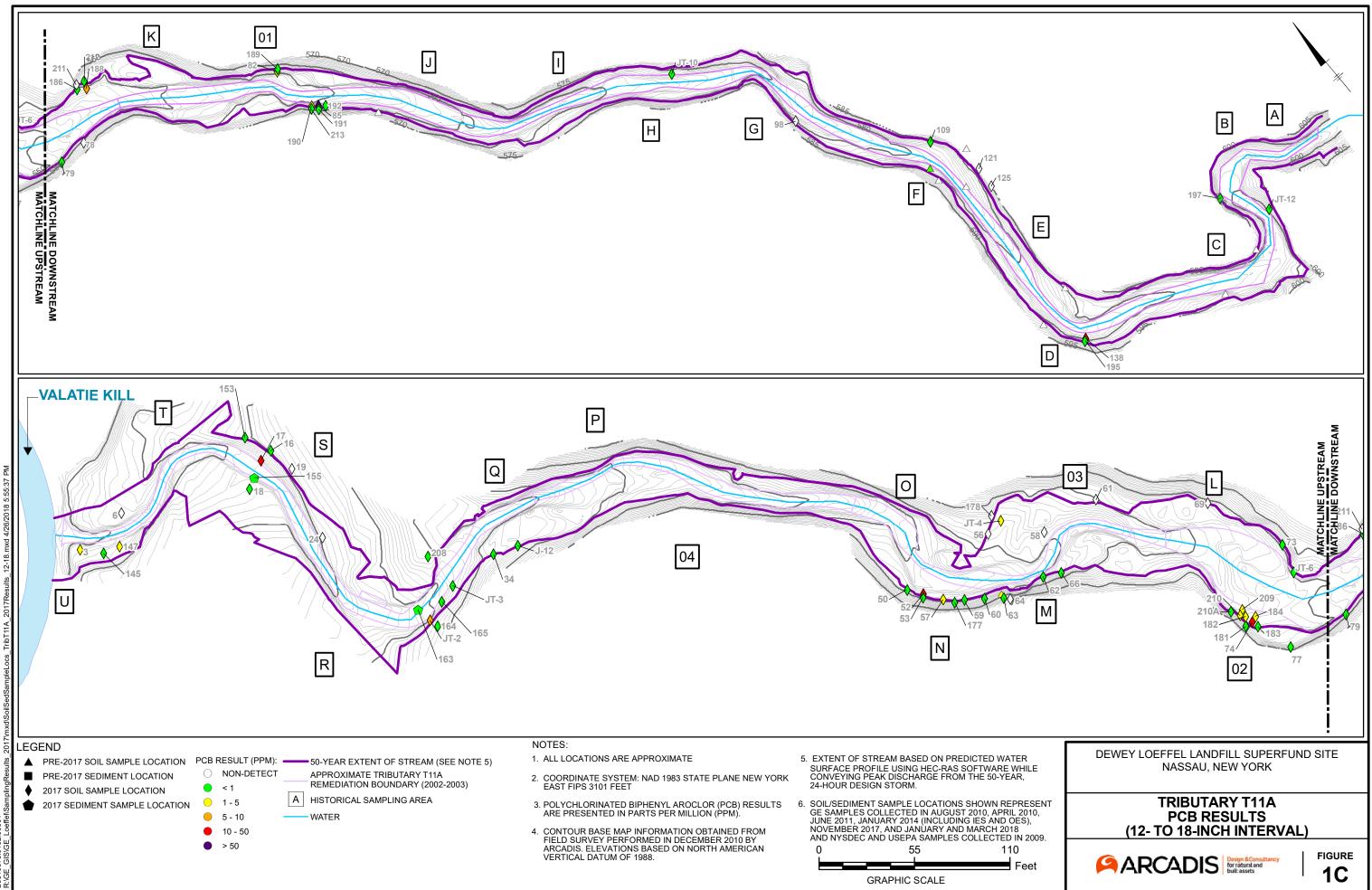




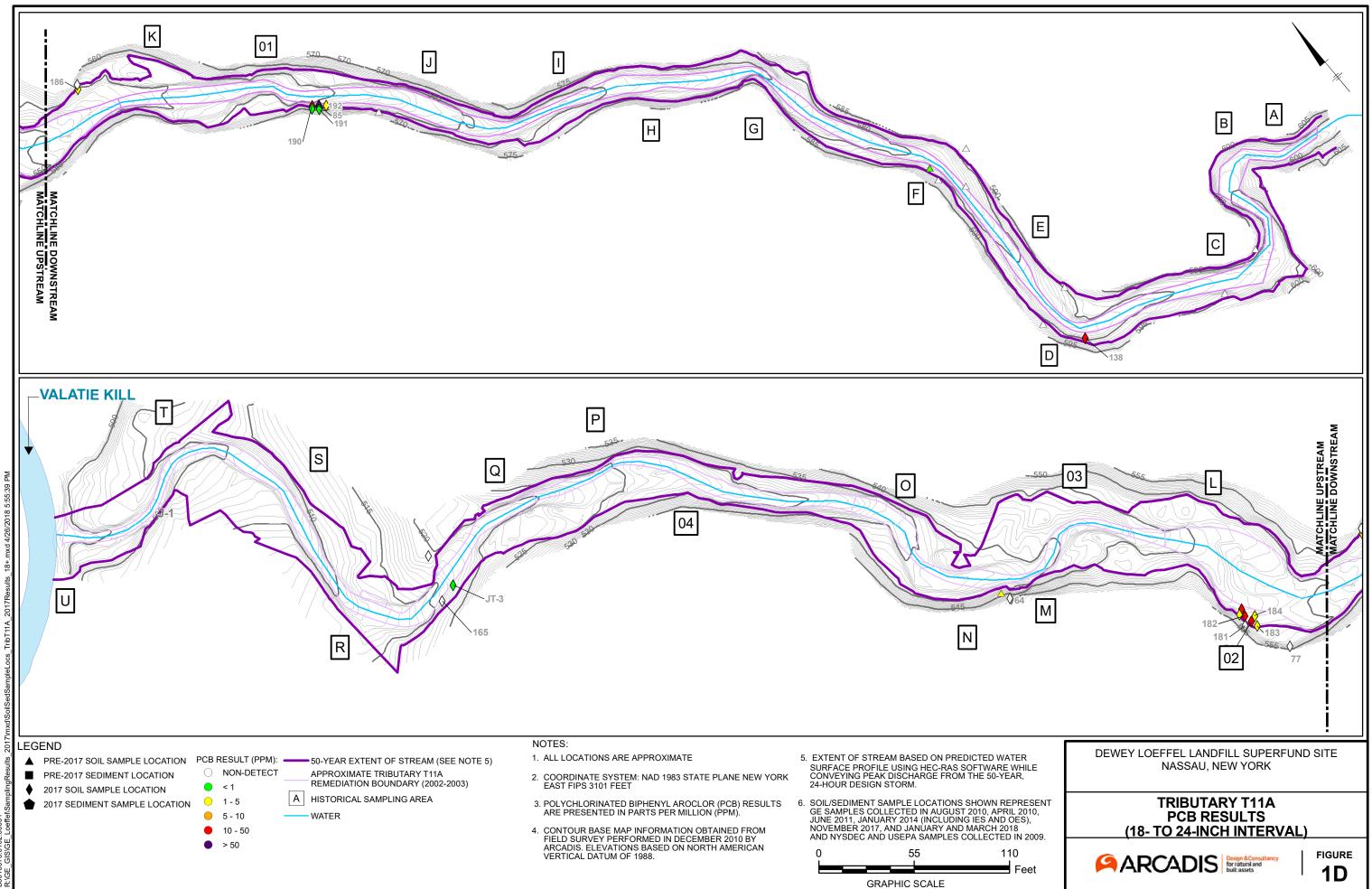
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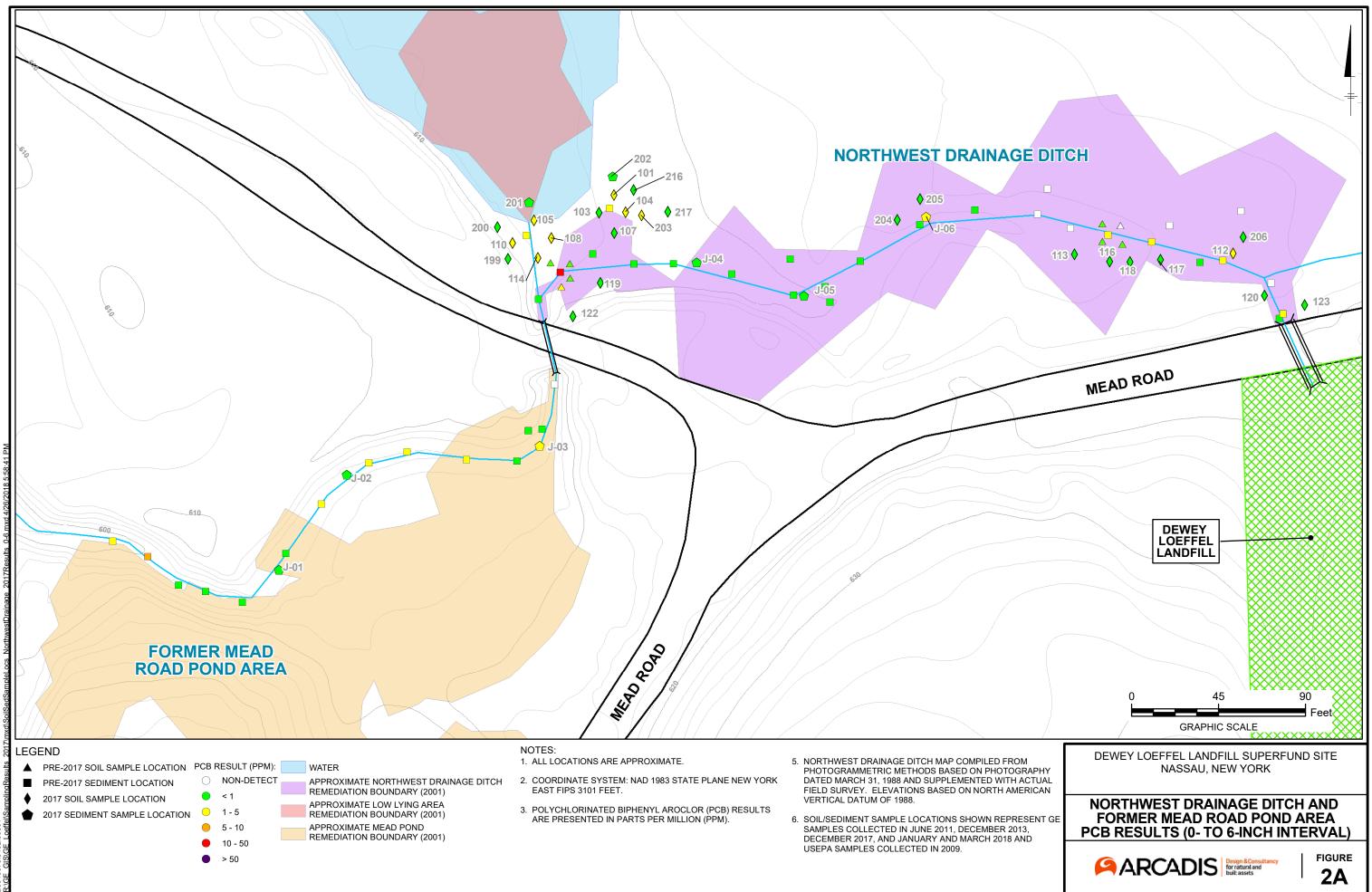
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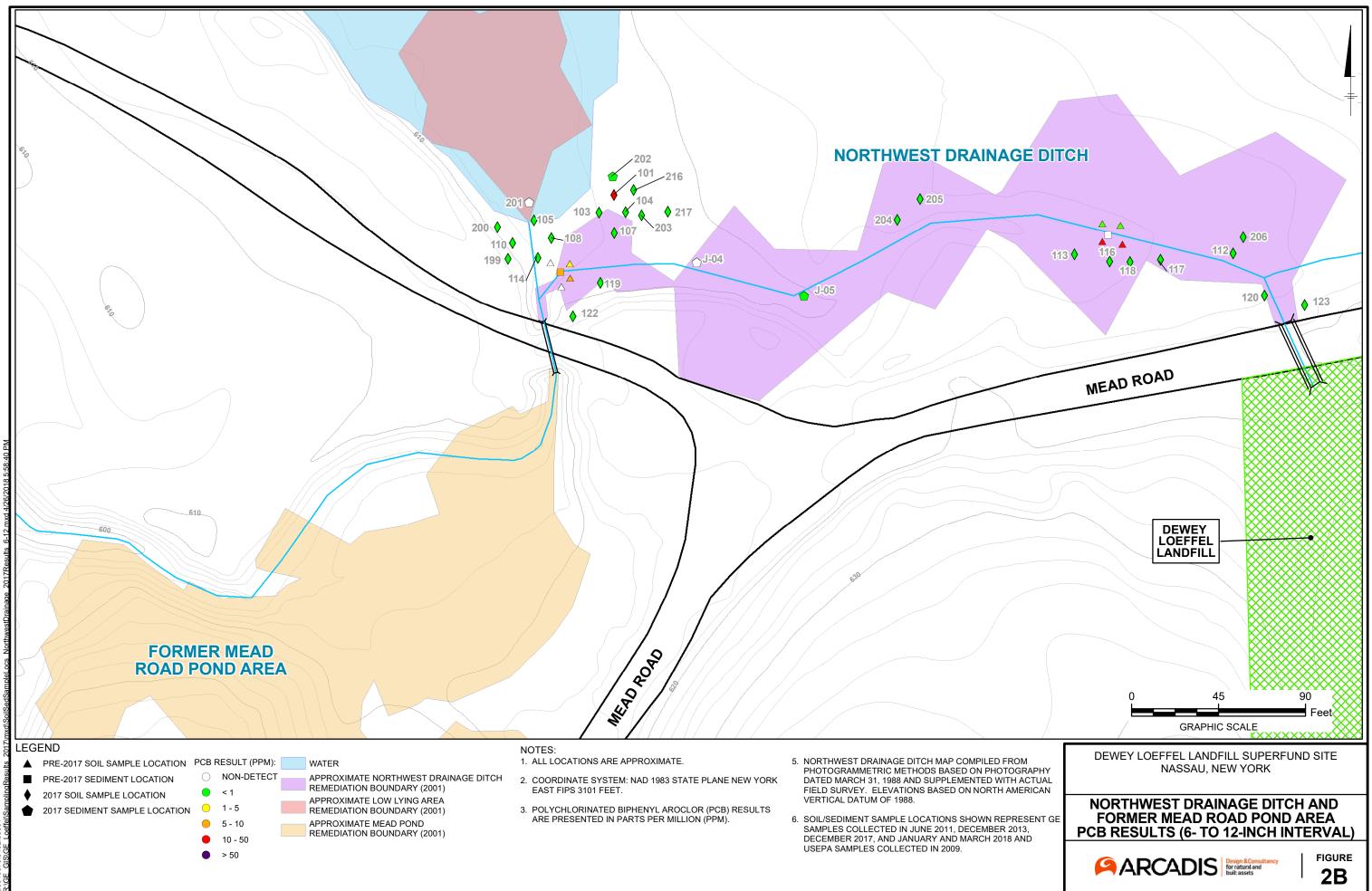
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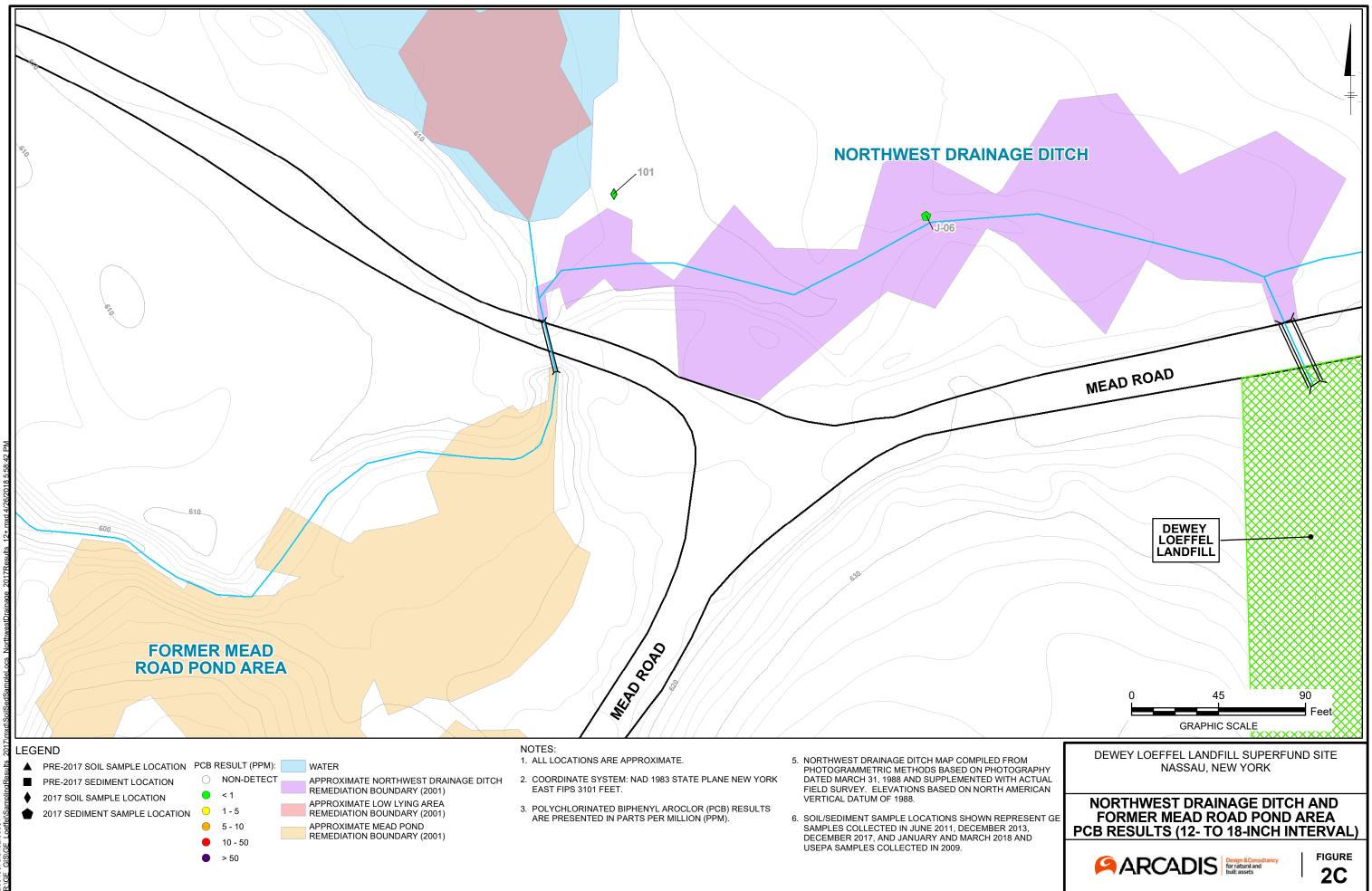
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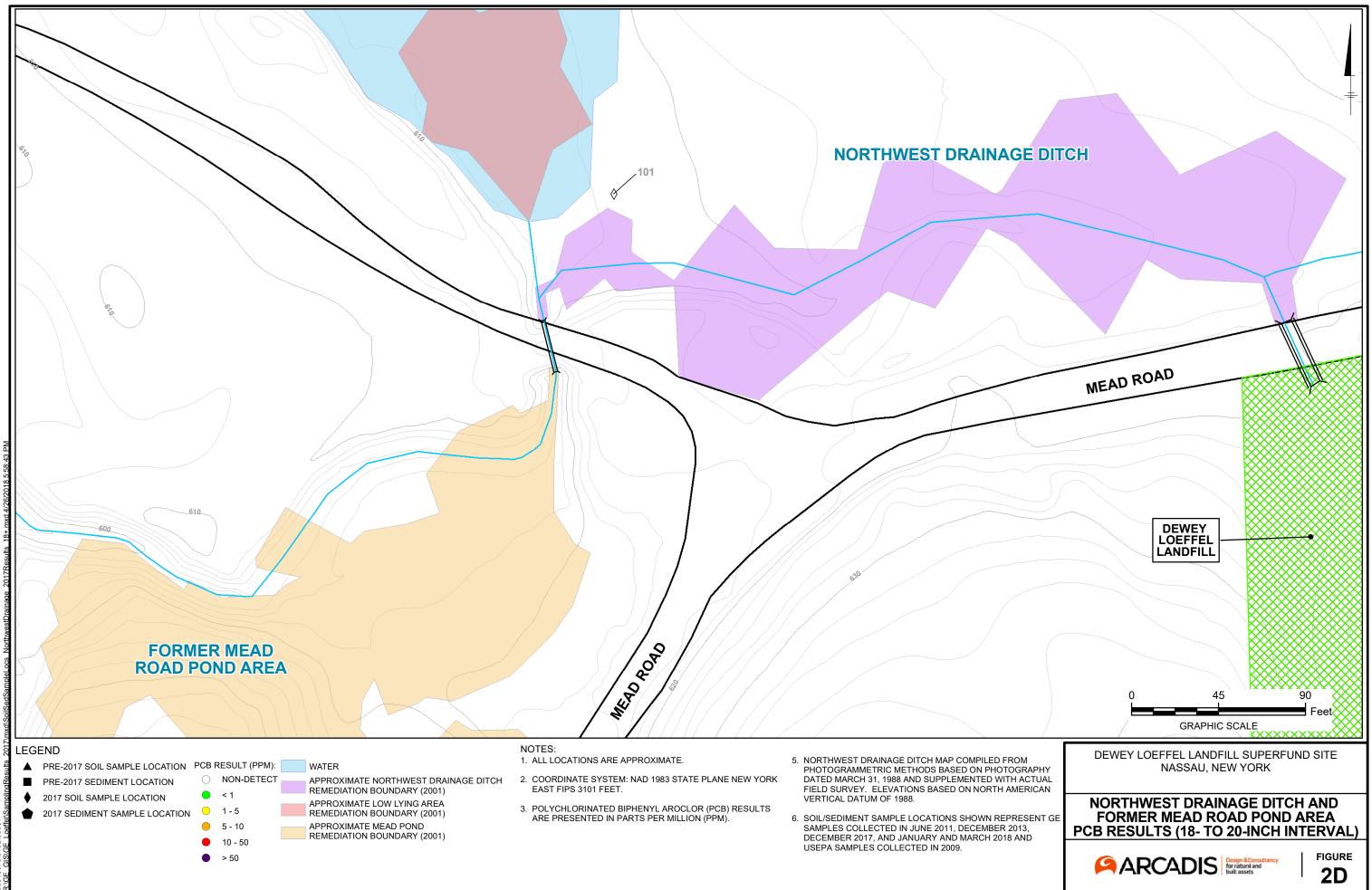
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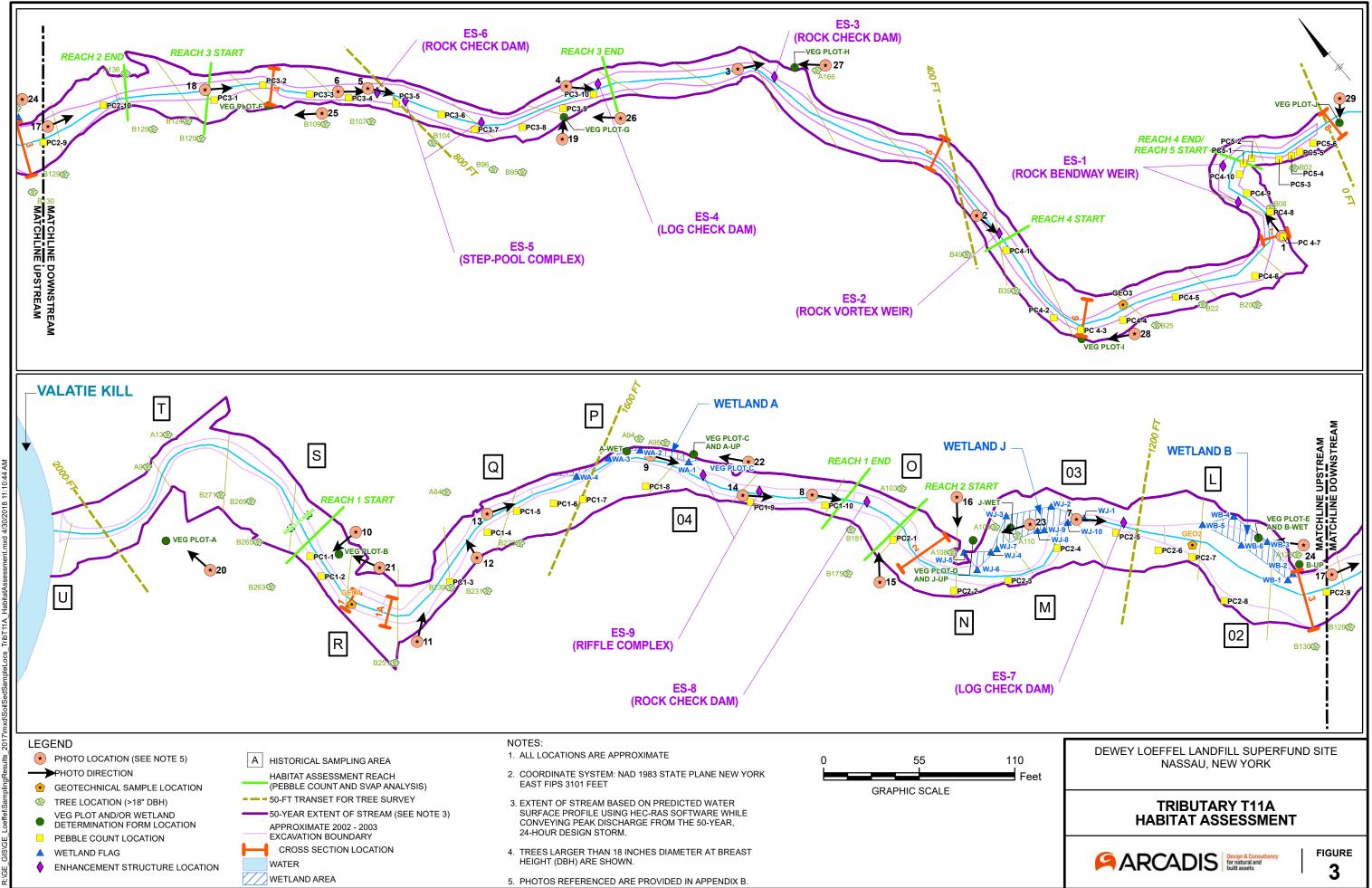
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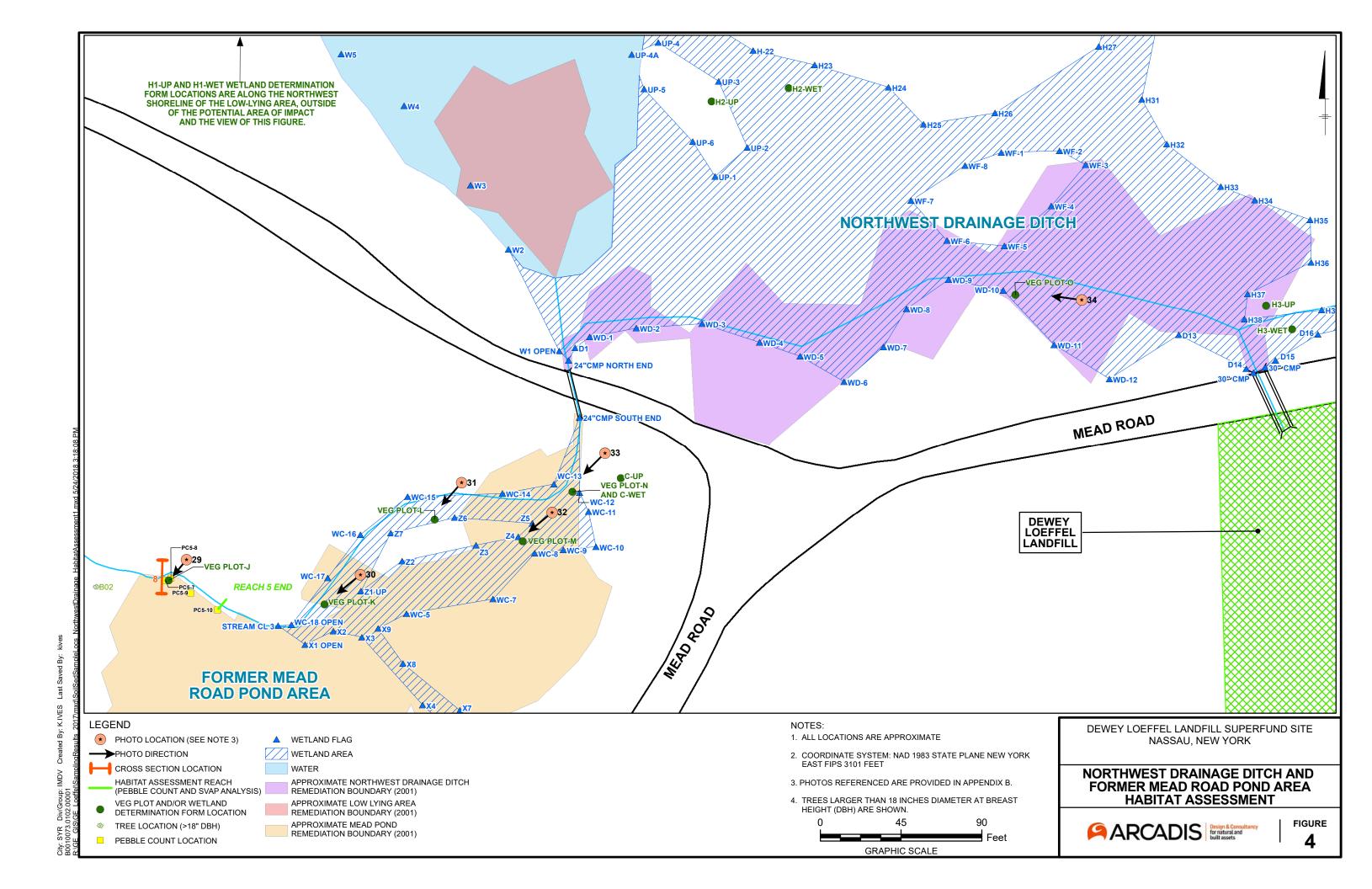
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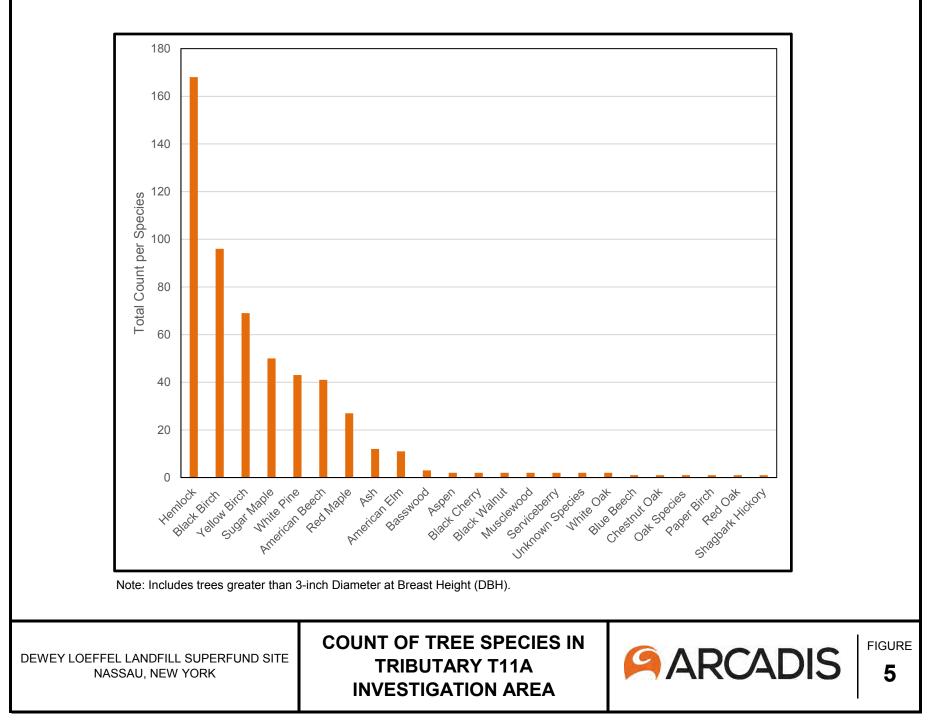


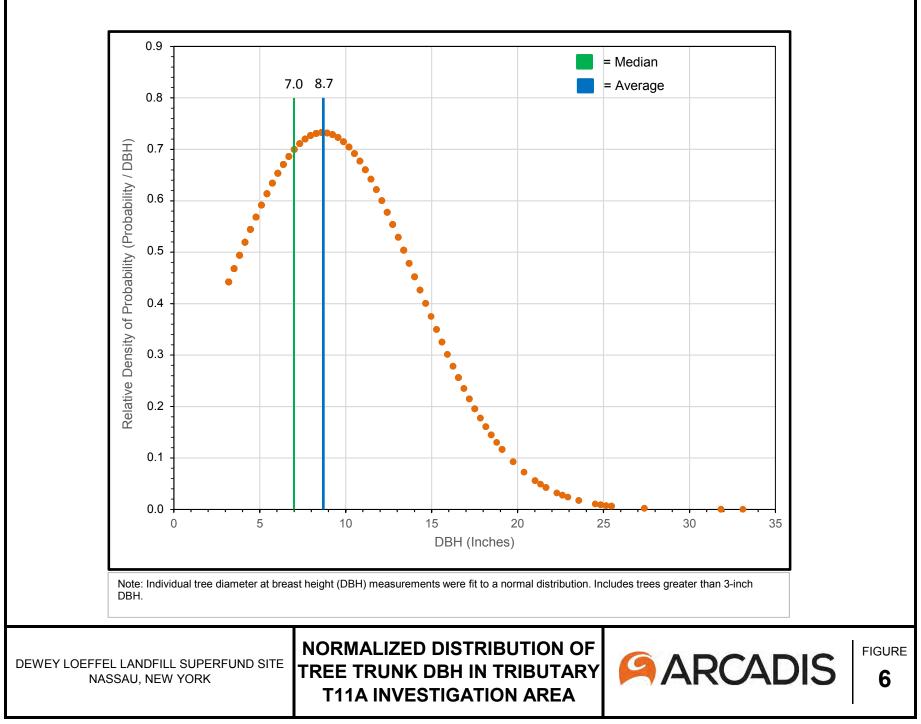
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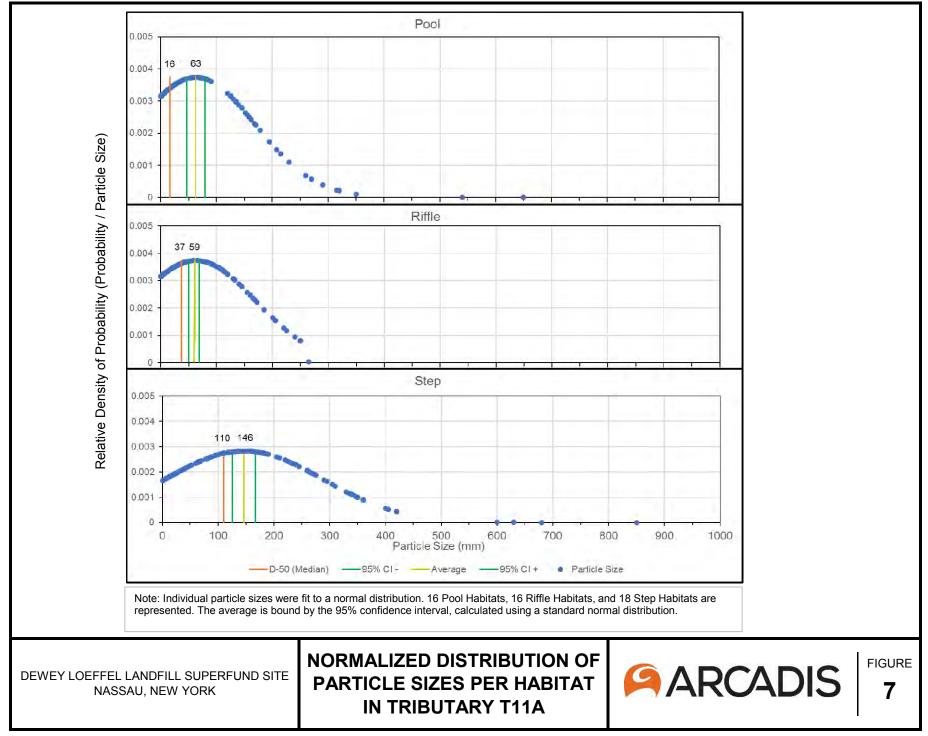


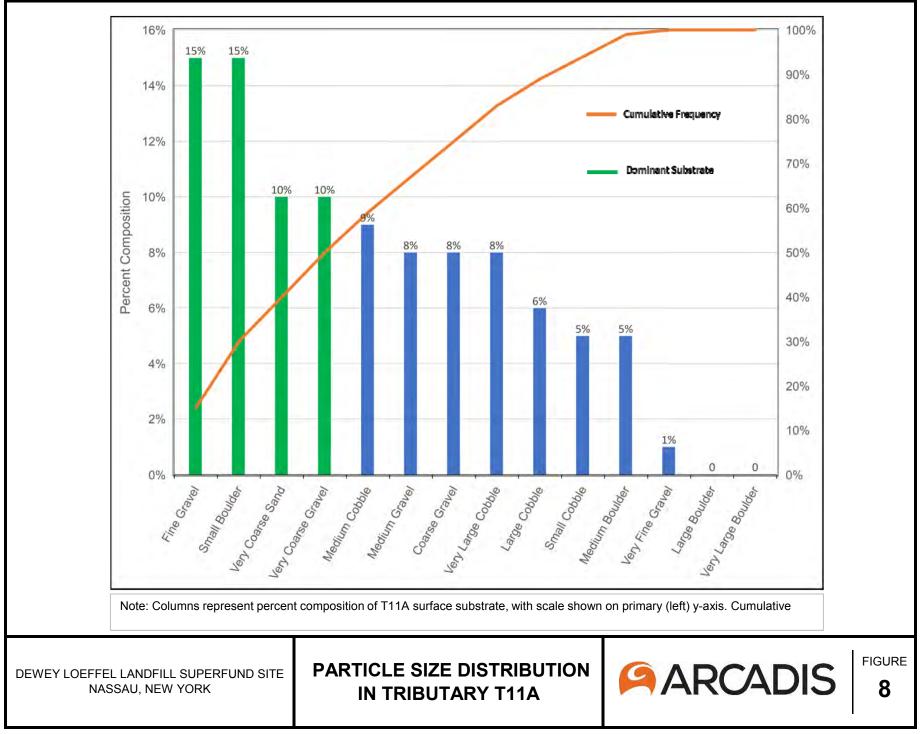
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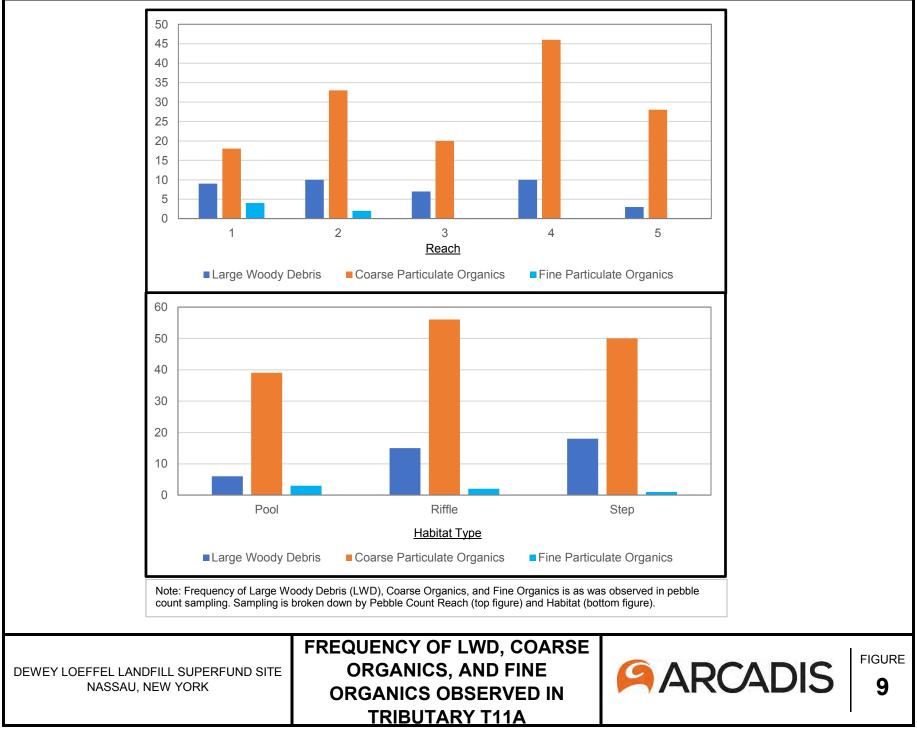








Figures 5-9\_03202018 - 3/20/2018



Figures 5-9\_03202018 - 3/20/2018

# **APPENDIX A**

Historical PCB Data for Tributary T11A and Northwest Drainage Ditch Area

### Tributary T11A 2009 Total PCB Aroclor Data Dewey Loeffel Landfill Superfund Site - Nassau, New York



| Sample Location     | Sample Identification | Date      | Matrix   | Sample Interval<br>(inches) | Result<br>(ppm) | Comment        |
|---------------------|-----------------------|-----------|----------|-----------------------------|-----------------|----------------|
| Western Drainageway |                       |           |          |                             |                 |                |
|                     | Soil/Sed #1           | 7/28/2009 | Soil     | 0-6                         | 2.1             | NYSDEC Samples |
|                     | Soil/Sed #2           | 7/28/2009 | Soil     | 0-6                         | 22              | NYSDEC Samples |
|                     | Site 1                | 8/7/2009  | Soil     | 0-6                         | 5.2             | NYSDEC Samples |
|                     | Site 2                | 8/7/2009  | Soil     | 0-6                         | 3.8             | NYSDEC Samples |
| Tributon, T11A      | DLL-SED09             | 6/8/2009  | Sediment | 0-6                         | 0.25 J          | EPA Samples    |
| Tributary T11A      | DLL-SED09A            | 8/7/2009  | Sediment | 0-6                         | 0.68 D          | EPA Samples    |
|                     | DLL-SED10             | 6/9/2009  | Sediment | 0-6                         | 0.34            | EPA Samples    |
|                     | DLL-SED10A            | 8/8/2009  | Sediment | 0-6                         | 0.77            | EPA Samples    |
|                     | DLL-SED11             | 6/9/2009  | Sediment | 0-6                         | 0.19            | EPA Samples    |
|                     | DLL-SED11A            | 8/8/2009  | Sediment | 0-6                         | 0.56            | EPA Samples    |

### Abbreviations, Notes, and Definitions:

1. PCB = Polychlorinated Biphenyl Aroclor.

2. ppm = parts per million.

3. J - The compound was positively identified; however, the associated numerical value is an estimated concentration only.

4. D - The reported value is based on a diluted sample analysis.

### Table A-2 Tributary T11A Post-2009 Total PCB Aroclor Data



Dewey Loeffel Landfill Superfund Site - Nassau, New York

| Sample Location     | Sample Identification Date Matrix Sample Interval (inches) |        | Result<br>(ppm) | Comment |             |   |
|---------------------|--|--------|-----------------|---------|-------------|---|
| Western Drainageway |  |        |                 |         |             |   |
|                     | SS-A-1   | 8/2010 | Soil            | 0-6     | 9.4         |   |
|                     | SS-A-2   | 8/2010 | Soil            | 0-6     | 1.6         |   |
| А                   | SS-A-3   | 8/2010 | Soil            | 0-6     | 2.7         |   |
|                     | SED-A-1  | 8/2010 | Sediment        | 0-6     | 4.9         |   |
|                     | SED-A-2  | 8/2010 | Sediment        | 0-6     | 0.297       |   |
|                     | SS-B-1 [DUP-7]   | 8/2010 | Soil            | 0-6     | 0.79 [0.87] |   |
|                     | SS-B-2   | 8/2010 | Soil            | 0-6     | 2.4         |   |
|                     | SS-B-3 [DUP-10]  | 8/2010 | Soil            | 0-6     | 0.41 [0.38] |   |
| В                   | SS-B-4   | 8/2010 | Soil            | 0-6     | 7.8         |   |
|                     | SS-B-5   | 8/2010 | Soil            | 0-6     | 9.6         |   |
|                     | SED-B-1  | 8/2010 | Sediment        | 0-6     | 1.6         |   |
|                     | SED-B-2  | 8/2010 | Sediment        | 0-6     | 17          |   |
|                     | SS-C-1   | 8/2010 | Soil            | 0-6     | 0.28        |   |
|                     | SS-C-2   | 8/2010 | Soil            | 0-6     | 2.5         |   |
| 0                   | SS-C-3   | 8/2010 | Soil            | 0-6     | 0.37        |   |
| С                   | SS-C-4   | 8/2010 | Soil            | 0-6     | 0.75        |   |
|                     | SED-C-1  | 8/2010 | Sediment        | 0-6     | 0.44        |   |
|                     | SED-C-2  | 8/2010 | Sediment        | 0-6     | 0.35        |   |
| D                   | SS-D-1   | 8/2010 | Soil            | 0-6     | 0.45        |   |
|                     | SS-D-2   | 8/2010 | Soil            | 0-6     | 1.1         |   |
|                     | SS-D-3   | 8/2010 | Soil            | 0-6     | 0.11        |   |
|                     | SS-D-4   | 8/2010 | Soil            | 0-6     | 21          |   |
|                     | SS-D-5   | 8/2010 | Soil            | 0-6     | 0.56        |   |
|                     | SED-D-1  | 8/2010 | Sediment        | 0-6     | 1.9         |   |
|                     | SED-D-2  | 8/2010 | Sediment        | 0-6     | 4.9         |   |
|                     | SS-E-1   | 8/2010 | Soil            | 0-6     | 2.4         |   |
|                     | SS-E-2   | 8/2010 | Soil            | 0-6     | 6.6         |   |
| Е                   | SS-E-3   | 8/2010 | Soil            | 0-6     | 3.0         |   |
|                     | SED-E-1  | 8/2010 | Sediment        | 0-6     | 9.4         |   |
|                     | SED-E-2  | 8/2010 | Sediment        | 0-6     | 1.5         |   |
|                     | SS-F-1 [DUP-8]   | 8/2010 | Soil            | 0-6     | 96 [115]    |   |
|                     | SS-F-1 (6-12)  | 6/2011 | Soil            | 6-12    | 1,340       |   |
|                     | SS-F-2   | 8/2010 | Soil            | 0-6     | 82          |   |
|                     | SS-F-2 (6-12)  | 6/2011 | Soil            | 6-12    | 94          |   |
|                     | SS-F-3   | 8/2010 | Soil            | 0-6     | 2.3         |   |
|                     | SS-F-4   | 8/2010 | Soil            | 0-6     | 2.3         |   |
|                     | SS-F-5   | 6/2011 | Soil            | 0-6     | 16          |   |
|                     | SS-F-5 (6-12)  | 6/2011 | Soil            | 6-12    | 3.0         |   |
| F                   | SS-F-6   | 6/2011 | Soil            | 0-6     | 443         |   |
|                     | SS-F-6 (6-12)  | 6/2011 | Soil            | 6-12    | 349         |   |
|                     | SS-F-7   | 6/2011 | Soil            | 0-6     | 95          |   |
|                     | SS-F-7 (6-12)  | 6/2011 | Soil            | 6-12    | 264         |   |
|                     | SS-F-8 [DUP-13]  | 6/2011 | Soil            | 0-6     | 0.11 [0.13] |   |
|                     | SS-F-8 (6-12)  | 6/2011 | Soil            | 6-12    | 60          | 1 |
|                     | SS-F-8 (0-12)  | 6/2011 | Soil            | 0-6     | 166         | 1 |
|                     | SS-F-9 (6-12)  | 6/2011 | Soil            | 6-12    | 1,120       | 1 |
|                     | SED-F-1  | 8/2011 | Sediment        | 0-6     | 4.0         |   |

#### Table A-2 Tributary T11A Post-2009 Total PCB Aroclor Data Dewey Loeffel Landfill Superfund Site - Nassau, New York



Sample Interval Result Sample Location Sample Identification Date Matrix Comment (inches) (ppm) Western Drainageway SED-F-2 8/2010 Sediment 0-6 1.7 0-6 4.80 Soil SS-F-10 January 2014 Soil 6-10 0.3962 Soil 0-6 0.0657 SS-F-11 January 2014 Soil 6-12 ND (0.0638) Soil 12-15 ND (0.0612) SS-F-12 0.940 January 2014 Soil 0-4 0-6 18.90 Soil SS-F-13 January 2014 Soil 6-9 51.1 SS-F-14 January 2014 Soil 0-6 274.2 F 0-6 12.4 Soil SS-F-15 January 2014 6-10 0.545 Soil 0-6 ND (0.0692) Soil SS-F-16 January 2014 6-12 ND (0.0670) Soil Soil 0-6 1.5672 SS-F-17 January 2014 6-12 0.1319 Soil Soil 0-6 2.28 SS-F-18 Soil 6-12 1.17 January 2014 [DUP-4] 0.165 Soil 12-18 [0.1462] Soil SS-G-1 [DUP-9] 8/2010 0-6 0.17 [0.15] Soil 8/2010 SS-G-2 0-6 2.1 Soil SS-G-3 8/2010 0-6 48 G Soil SS-G-4 8/2010 0-6 2.2 Sediment SED-G-1 8/2010 0-6 0.97 Sediment SED-G-2 8/2010 0-6 5.6 Soil SS-H-1 8/2010 0-6 1.1 Soil 8/2010 SS-H-2 0-6 2.6 SS-H-3 8/2010 Soil 0-6 1.2 Н Soil SS-H-4 8/2010 0-6 6.4 Sediment SED-H-1 8/2010 0-6 1.7 8/2010 Sediment SED-H-2 0-6 6.2 Soil 8/2010 0.49 SS-I-1 0-6 Soil 8/2010 0.24 SS-I-2 0-6 Soil SS-I-3 8/2010 0-6 0.21 I Soil SS-I-4 8/2010 0-6 0.68 SED-I-1 8/2010 Sediment 0-6 2.9 Sediment SED-I-2 8/2010 0-6 2.7 Soil 8/2010 SS-J-1 0-6 3.2 SS-J-2 8/2010 Soil 0-6 12 Soil SS-J-3 8/2010 0-6 0.95 J Soil 8/2010 0-6 0.44 SS-J-4 Sediment SED-J-1 8/2010 0-6 3.4 Sediment SED-J-2 8/2010 0-6 16

# Table A-2Tributary T11A Post-2009 Total PCB Aroclor DataDewey Loeffel Landfill Superfund Site - Nassau, New York



| Sample Location     | Location Sample Identification Date Matrix Sample Interval (inches) |        | Result<br>(ppm) | Comment |         |  |
|---------------------|---|--------|-----------------|---------|---------|--|
| Western Drainageway |   |        |                 |         |         |  |
|                     | SS-01A  | 4/2010 | Soil            | 0-6     | 9.3     |  |
|                     | SS-01B  | 4/2010 | Soil            | 0-6     | 3.3     |  |
|                     | SS-01B (6-11)   | 8/2010 | Soil            | 6-11    | 3.3     |  |
| 1                   | SS-01C  | 8/2010 | Soil            | 0-6     | 0.45    |  |
|                     | SS-01D  | 8/2010 | Soil            | 0-6     | 37      |  |
|                     | SED-01A   | 4/2010 | Sediment        | 0-6     | 4.5     |  |
|                     | SED-01B   | 4/2010 | Sediment        | 0-6     | 7.4     |  |
|                     | SS-K-1  | 8/2010 | Soil            | 0-6     | 0.22    |  |
|                     | SS-K-2  | 8/2010 | Soil            | 0-6     | 0.052   |  |
| К                   | SS-K-3  | 8/2010 | Soil            | 0-6     | 35      |  |
|                     | SS-K-4  | 8/2010 | Soil            | 0-6     | 38      |  |
|                     | SED-K-1   | 8/2010 | Sediment        | 0-6     | 2.2     |  |
|                     | SED-K-2   | 8/2010 | Sediment        | 0-6     | 5.3     |  |
|                     | SS-02A  | 4/2010 | Soil            | 0-6     | 28      |  |
|                     | SS-02A (6-9)  | 8/2010 | Soil            | 6-9     | 13      |  |
|                     | SS-02B [DUP-1]  | 4/2010 | Soil            | 0-6     | 32 [30] |  |
| 2                   | SS-02B (6-10)   | 8/2010 | Soil            | 6-10    | 12      |  |
|                     | SS-02C  | 8/2010 | Soil            | 0-6     | 29      |  |
|                     | SS-02D  | 8/2010 | Soil            | 0-6     | 0.40    |  |
|                     | SS-02E  | 8/2010 | Soil            | 0-6     | 25      |  |
|                     | SED-02A   | 4/2010 | Sediment        | 0-6     | 10      |  |
|                     | SED-02B   | 4/2010 | Sediment        | 0-6     | 5.8     |  |
|                     | SED-02C   | 4/2010 | Sediment        | 0-6     | 9.5     |  |
|                     | SS-L-1  | 8/2010 | Soil            | 0-6     | 6.4     |  |
|                     | SS-L-2  | 8/2010 | Soil            | 0-6     | 0.78    |  |
|                     | SS-L-3  | 8/2010 | Soil            | 0-6     | 30      |  |
| L                   | SS-L-4  | 8/2010 | Soil            | 0-6     | 4.4     |  |
|                     | SS-L-5  | 8/2010 | Soil            | 0-6     | 0.84    |  |
|                     | SED-L-1   | 8/2010 | Sediment        | 0-6     | 5.6     |  |
|                     | SED-L-2   | 8/2010 | Sediment        | 0-6     | 5.0     |  |
|                     | SS-03A  | 4/2010 | Soil            | 0-6     | 7.4     |  |
|                     | SS-03B  | 4/2010 | Soil            | 0-6     | 18      |  |
|                     | SS-03B (6-9)  | 8/2010 | Soil            | 6-9     | 63      |  |
|                     | SS-03C  | 8/2010 | Soil            | 0-6     | 0.38    |  |
|                     | SS-03D  | 8/2010 | Soil            | 0-6     | 6.4     |  |
|                     | SS-03E  | 8/2010 | Soil            | 0-6     | 0.93    |  |
| 3                   | SS-03F  | 6/2011 | Soil            | 0-6     | 0.32    |  |
| 5                   | SS-03F (6-12)   | 6/2011 | Soil            | 6-12    | 3.7     |  |
|                     | SS-03G  | 6/2011 | Soil            | 0-6     | 1.7     |  |
|                     | SS-03G (6-12)   | 6/2011 | Soil            | 6-12    | 0.52    |  |
|                     | SS-03H  | 6/2011 | Soil            | 0-6     | 33      |  |
|                     | SS-03H (6-12)   | 6/2011 | Soil            | 6-12    | 35      |  |
|                     | SED-03A   | 4/2010 | Sediment        | 0-6     | 1.8     |  |
|                     | SED-03B   | 4/2010 | Sediment        | 0-6     | 3.3     |  |

### Table A-2 Tributary T11A Post-2009 Total PCB Aroclor Data





| Sample Location     | Sample Identification | Date   | Matrix   | Sample Interval<br>(inches) | Result<br>(ppm) | Comment |
|---------------------|-----------------------|--------|----------|-----------------------------|-----------------|---------|
| Western Drainageway |                       |        |          |                             |                 |         |
|                     | SS-M-1                | 8/2010 | Soil     | 0-6                         | 7.9             |         |
|                     | SS-M-2                | 8/2010 | Soil     | 0-6                         | 10              |         |
|                     | SS-M-3                | 8/2010 | Soil     | 0-6                         | 1.2             |         |
| М                   | SS-M-4                | 8/2010 | Soil     | 0-6                         | 12              |         |
|                     | SED-M-1               | 8/2010 | Sediment | 0-6                         | 6.5             |         |
|                     | SED-M-2               | 8/2010 | Sediment | 0-6                         | 3.1             |         |
|                     | SS-N-1                | 8/2010 | Soil     | 0-6                         | 3.1             |         |
|                     | SS-N-2                | 8/2010 | Soil     | 0-6                         | 79              |         |
|                     | SS-N-2 (6-12)         | 6/2011 | Soil     | 6-12                        | 44              |         |
|                     | SS-N-3                | 8/2010 | Soil     | 0-6                         | 50              |         |
|                     | SS-N-3 (6-12)         | 6/2011 | Soil     | 6-12                        | 5.0             |         |
|                     | SS-N-4                | 8/2010 | Soil     | 0-6                         | 10              |         |
|                     | SS-N-5                | 8/2010 | Soil     | 0-6                         | 0.20            |         |
|                     | SS-N-6                | 6/2011 | Soil     | 0-6                         | 11              |         |
|                     | SS-N-6 (6-12)         | 6/2011 | Soil     | 6-12                        | 7.1             |         |
|                     | SS-N-7                | 6/2011 | Soil     | 0-6                         | 1.8             |         |
| Ν                   | SS-N-7 (6-12)         | 6/2011 | Soil     | 6-12                        | 0.33            |         |
|                     | SS-N-8                | 6/2011 | Soil     | 0-6                         | 21              |         |
|                     | SS-N-8 (6-12)         | 6/2011 | Soil     | 6-12                        | 50              |         |
|                     | SS-N-9                | 6/2011 | Soil     | 0-6                         | 53              |         |
|                     | SS-N-9 (6-12)         | 6/2011 | Soil     | 6-12                        | 50              |         |
|                     | SS-N-10 [DUP-12]      | 6/2011 | Soil     | 0-6                         | 11 [11]         |         |
|                     | SS-N-10 (6-12)        | 6/2011 | Soil     | 6-12                        | 2.4             |         |
|                     | SS-N-11               | 6/2011 | Soil     | 0-6                         | 12              |         |
|                     | SS-N-11 (6-12)        | 6/2011 | Soil     | 6-12                        | 11              |         |
|                     | SED-N-1               | 8/2010 | Sediment | 0-6                         | 5.2             |         |
|                     | SED-N-2               | 8/2010 | Sediment | 0-6                         | 19              |         |
|                     | SS-0-1                | 8/2010 | Soil     | 0-6                         | 0.22            |         |
|                     | SS-0-2                | 8/2010 | Soil     | 0-6                         | 2.7             |         |
| 0                   | SS-O-3                | 8/2010 | Soil     | 0-6                         | 3.0             |         |
|                     | SED-O-1               | 8/2010 | Sediment | 0-6                         | 4.2             |         |
|                     | SED-O-2               | 8/2010 | Sediment | 0-6                         | 22.6            |         |
|                     | SS-04A                | 4/2010 | Soil     | 0-6                         | 5.4             |         |
|                     | SS-04B                | 4/2010 | Soil     | 0-6                         | 31              |         |
|                     | SS-04B (6-10)         | 8/2010 | Soil     | 6-10                        | 0.78            |         |
| 4                   | SS-04C                | 8/2010 | Soil     | 0-6                         | 0.32            |         |
|                     | SS-04D                | 8/2010 | Soil     | 0-6                         | 16              |         |
|                     | SED-04A               | 4/2010 | Sediment | 0-6                         | 2.6             |         |
|                     | SED-04B               | 4/2010 | Sediment | 0-6                         | 2.9             |         |
|                     | SS-P-1                | 8/2010 | Soil     | 0-6                         | 0.37            |         |
|                     | SS-P-2                | 8/2010 | Soil     | 0-6                         | 3.6             |         |
| 5                   | SS-P-3                | 8/2010 | Soil     | 0-6                         | 6.4             |         |
| Р                   | SS-P-4                | 8/2010 | Soil     | 0-6                         | 28              |         |
|                     | SED-P-1               | 8/2010 | Sediment | 0-6                         | 2.0             |         |
|                     | SED-P-2               | 8/2010 | Sediment | 0-6                         | 3.2             |         |

### Table A-2 Tributary T11A Post-2009 Total PCB Aroclor Data



Dewey Loeffel Landfill Superfund Site - Nassau, New York

| Sample Location     | Sample Identification | Date   | Matrix   | Sample Interval<br>(inches) | Result<br>(ppm) | Comment |
|---------------------|-----------------------|--------|----------|-----------------------------|-----------------|---------|
| Western Drainageway |                       |        |          |                             |                 |         |
|                     | SS-Q-1                | 8/2010 | Soil     | 0-6                         | 13              |         |
|                     | SS-Q-2                | 8/2010 | Soil     | 0-6                         | 1.5             |         |
| Q                   | SS-Q-3                | 8/2010 | Soil     | 0-6                         | 4.7             |         |
| Q                   | SS-Q-4                | 8/2010 | Soil     | 0-6                         | 3.4             |         |
|                     | SED-Q-1               | 8/2010 | Sediment | 0-6                         | 6.3             |         |
|                     | SED-Q-2 [DUP-2]       | 8/2010 | Sediment | 0-6                         | 4.0 [7.1]       |         |
|                     | SS-R-1                | 8/2010 | Soil     | 0-6                         | 5.9             |         |
|                     | SS-R-2                | 8/2010 | Soil     | 0-6                         | 2.4             |         |
| R                   | SS-R-3 [DUP-5]        | 8/2010 | Soil     | 0-6                         | 5.3 [8.0]       |         |
| ĸ                   | SS-R-4                | 8/2010 | Soil     | 0-6                         | 23              |         |
|                     | SED-R-1               | 8/2010 | Sediment | 0-6                         | 1.8             |         |
|                     | SED-R-2 [DUP-3]       | 8/2010 | Sediment | 0-6                         | 2.0 [2.3]       |         |
|                     | SS-S-1                | 8/2010 | Soil     | 0-6                         | 5.3             |         |
| S                   | SS-S-2                | 8/2010 | Soil     | 0-6                         | 39              |         |
|                     | SS-S-3                | 8/2010 | Soil     | 0-6                         | 4.4             |         |
|                     | SS-S-4                | 8/2010 | Soil     | 0-6                         | 0.33            |         |
|                     | SED-S-1               | 8/2010 | Sediment | 0-6                         | 2.4             |         |
|                     | SED-S-2               | 8/2010 | Sediment | 0-6                         | 3.6             |         |
|                     | SS-T-1                | 8/2010 | Soil     | 0-6                         | 10              |         |
| т                   | SS-T-2 [DUP-4]        | 8/2010 | Soil     | 0-6                         | 2.1 [2.4]       |         |
| Т                   | SED-T-1               | 8/2010 | Sediment | 0-6                         | 3.2             |         |
|                     | SED-T-2               | 8/2010 | Sediment | 0-6                         | 10              |         |
|                     | SS-U-1                | 8/2010 | Soil     | 0-6                         | 2.2             |         |
|                     | SS-U-2 [DUP-6]        | 8/2010 | Soil     | 0-6                         | 88 [10]         |         |
|                     | SS-U-2                | 6/2011 | Soil     | 0-6                         | 22              |         |
|                     | SS-U-2 (6-12)         | 6/2011 | Soil     | 6-12                        | 3.3             |         |
|                     | SS-U-3                | 6/2011 | Soil     | 0-6                         | 14              |         |
|                     | SS-U-3 (6-12)         | 6/2011 | Soil     | 6-12                        | 12              |         |
| U                   | SS-U-4                | 6/2011 | Soil     | 0-6                         | 2.3             |         |
|                     | SS-U-4 (6-12)         | 6/2011 | Soil     | 6-12                        | 2.1             |         |
|                     | SS-U-5                | 6/2011 | Soil     | 0-6                         | 11              |         |
|                     | SS-U-5 (6-12)         | 6/2011 | Soil     | 6-12                        | 20              |         |
|                     | SED-U-1               | 8/2010 | Sediment | 0-6                         | 1.1             |         |
|                     | SED-U-2               | 8/2010 | Sediment | 0-6                         | 0.80            |         |

# Table A-2Tributary T11A Post-2009 Total PCB Aroclor DataDewey Loeffel Landfill Superfund Site - Nassau, New York



| Sample Location          | ocation Sample Identification Date Matrix Sample Interval (inches) |              | Result<br>(ppm) | Commen |                              |  |
|--------------------------|--|--------------|-----------------|--------|------------------------------|--|
| Vestern Drainageway      |  |              |                 |        |                              |  |
|                          | SS-JDG-1   | 8/2010       | Soil            | 0-6    | 407                          |  |
|                          | SS-JDG-1 (6-12)  | 6/2011       | Soil            | 6-12   | 222                          |  |
|                          | SS-JDG-1A  | 6/2011       | Soil            | 0-6    | 29                           |  |
|                          | SS-JDG-1A (6-12)   | 6/2011       | Soil            | 6-12   | 4.7                          |  |
|                          | SS-JDG-1B  | 6/2011       | Soil            | 0-6    | 1.4                          |  |
|                          | SS-JDG-1B (6-12)<br>[DUP-11]                                       | 6/2011       | Soil            | 6-12   | 0.49<br>[0.49]               |  |
|                          | SS-JDG-1C  | 6/2011       | Soil            | 0-6    | 144                          |  |
|                          | SS-JDG-1C (6-12)   | 6/2011       | Soil            | 6-12   | 82                           |  |
|                          | SS-JDG-12 (0-12)   | 8/2010       | Soil            | 0-6    | 3.7                          |  |
| Judgmental               |  |              | Soil            |        |                              |  |
|                          | SS-JDG-3   | 8/2010       | Soil            | 0-6    | 6.8                          |  |
|                          | SS-JDG-4   | 8/2010       | Soil            | 0-6    | 10                           |  |
|                          | SS-JDG-5   | 8/2010       | Soil            | 0-6    | 0.19                         |  |
|                          | SS-JDG-6   | 8/2010       | Soil            | 0-6    | 15                           |  |
|                          | SS-JDG-7   | 8/2010       |                 | 0-6    | 12                           |  |
|                          | SS-JDG-8   | 8/2010       | Soil            | 0-6    | 0.45                         |  |
|                          | SS-JDG-9   | 8/2010       | Soil            | 0-6    | 9.2                          |  |
|                          | SS-JDG-10  | 8/2010       | Soil            | 0-6    | 0.27                         |  |
|                          | SS-JDG-11  | 8/2010       | Soil            | 0-6    | 0.27                         |  |
|                          | 050 N 4  |              | Soil            | 0-6    | 0.594                        |  |
|                          | OES-N-1  | January 2014 | Soil            | 6-12   | ND (0.0587)                  |  |
|                          |  |              | Soil            | 12-16  | ND (0.0581)                  |  |
|                          |  |              | Soil            | 0-6    | 0.0557 J                     |  |
|                          | OES-N-2  | January 2014 | Soil            | 6-12   | ND (0.0632)                  |  |
|                          |  |              | Soil            | 12-16  | ND (0.0623)                  |  |
|                          | OES-N-3  | January 2014 | Soil            | 0-6    | 0.277                        |  |
|                          |  | ,            | Soil            | 6-12   | ND (0.0681)                  |  |
|                          | OES-N-4 J  | January 2014 | Soil            | 0-6    | 0.169                        |  |
|                          |  |              | Soil            | 6-12   | ND (0.0670)                  |  |
|                          | 050 N 5  |              | Soil            | 12-18  | ND (0.0636)                  |  |
|                          | OES-N-5<br>[DUP-5]   | January 2014 | Soil            | 0-6    | 0.33<br>[0.511]              |  |
|                          | OES-N-6  | January 2014 | Soil            | 0-6    | 0.0447 J                     |  |
|                          | OES-N-7<br>[DUP-7]   | January 2014 | Soil            | 0-6    | ND (0.0563)<br>[ND (0.0546)] |  |
|                          |  |              | Soil            | 0-6    | 0.0555 J                     |  |
| Outside Extent of Stream | OES-N-8  | January 2014 | Soil            | 6-8    | ND (0.0621)                  |  |
|                          | 050 N 0  |              | Soil            | 0-6    | ND (0.0629)                  |  |
|                          | OES-N-9  | January 2014 | Soil            | 6-8    | ND (0.0550)                  |  |
|                          | OES-N-10   | January 2014 | Soil            | 0-6    | 0.211                        |  |
|                          |  |              | Soil            | 0-6    | 1.42                         |  |
|                          | OES-N-11   | January 2014 | Soil            | 6-11   | 1.34                         |  |
|                          | OES-N-12   | January 2014 | Soil            | 0-7    | 0.461                        |  |
|                          |  |              | Soil            | 0-6    | 0.954                        |  |
|                          | OES-N-13   | January 2014 | Soil            | 6-11   | 0.179                        |  |
|                          |  |              | Soil            | 0-6    | 0.075                        |  |
|                          | OES-N-14   | January 2014 | Soil            | 6-13   | ND (0.0582)                  |  |
|                          |  |              | Soil            | 0-6    | 0.0751                       |  |
|                          | OES-N-15   | January 2014 | Soil            | 6-11   | ND (0.0559)                  |  |
|                          | OES-N-16   | January 2014 | Soil            | 0-7    | 0.0525 J                     |  |
|                          |  | January 2014 | Soil            | 0-6    | 2.10                         |  |
|                          | OES-N-17   | January 2014 | Soil            | 6-12   | 0.145                        |  |
|                          |  |              | Soil            | 0-6    | 0.145                        |  |

### Table A-2 Tributary T11A Post-2009 Total PCB Aroclor Data



Dewey Loeffel Landfill Superfund Site - Nassau, New York

| Sample Location          | Sample Identification | Date         | Matrix   | Sample Interval<br>(inches) | Result<br>(ppm) | Comment |
|--------------------------|-----------------------|--------------|----------|-----------------------------|-----------------|---------|
| Western Drainageway      |                       |              |          |                             |                 |         |
|                          | OES-S-1               | January 2014 | Soil     | 6-12                        | 0.0326 J        |         |
|                          |                       |              | Soil     | 12-16                       | ND (0.0587)     |         |
|                          |                       |              | Soil     | 0-6                         | 0.144 J         |         |
|                          | OES-S-2               | January 2014 | Soil     | 6-12                        | 0.136 J         |         |
|                          |                       |              | Soil     | 12-14                       | ND (0.0677)     |         |
|                          |                       |              | Soil     | 0-6                         | 0.237           |         |
|                          | OES-S-3               | January 2014 | Soil     | 6-12                        | 0.101           |         |
|                          |                       |              | Soil     | 12-14                       | ND (0.0634)     |         |
|                          | 050.0.4               | 0014         | Soil     | 0-6                         | 0.356           |         |
|                          | OES-S-4               | January 2014 | Soil     | 6-11                        | 0.44            |         |
|                          | OES-S-5               | January 2014 | Soil     | 0-5                         | 0.0298 J        |         |
|                          |                       |              | Soil     | 0-6                         | 0.126           |         |
|                          | OES-S-6               | January 2014 | Soil     | 6-12                        | ND (0.0578)     |         |
| Outside Extent of Stream |                       |              | Soil     | 12-14                       | ND (0.0615)     |         |
|                          |                       |              | Soil     | 0-6                         | 0.286           |         |
|                          | OES-S-7               | January 2014 | Soil     | 6-12                        | 0.0735          |         |
|                          |                       |              | Soil     | 0-6                         | ND (0.0608)     |         |
|                          | OES-S-8               | January 2014 | Soil     | 6-9                         | ND (0.0575)     |         |
|                          | OES-S-9               | January 2014 | Soil     | 0-5                         | 0.189           |         |
|                          |                       |              | Soil     | 0-6                         | 107             |         |
|                          | OES-S-10<br>[DUP-8]   | January 2014 | Soil     | 6-12                        | 37.1<br>[28.4]  |         |
|                          |                       |              | Soil     | 12-15                       | 1.96            |         |
|                          | 050.0.44              |              | Soil     | 0-6                         | 0.0714          |         |
|                          | OES-S-11              | January 2014 | Soil     | 6-11                        | ND (0.0865)     |         |
|                          | OES-S-12              | January 2014 | Soil     | 0-7                         | 0.0474 J        |         |
|                          | 050.0.40              |              | Soil     | 0-6                         | 8.24            |         |
|                          | OES-S-13              | January 2014 | Soil     | 6-12                        | 2.89            |         |
|                          | OES-S-14              | January 2014 | Soil     | 0-5                         | 0.545           |         |
|                          | IES-1                 | January 2014 | Soil     | 6-12                        | 3.99            |         |
|                          | IES-2                 | January 2014 | Soil     | 6-12                        | 264             |         |
|                          | IES-3 [DUP-6]         | January 2014 | Soil     | 6-12                        | 22.7 [26.8]     |         |
|                          | IES-4                 | January 2014 | Soil     | 0-6                         | 1.15            |         |
| Inside Extent of Stream  | IES-5                 | January 2014 | Soil     | 0-6                         | 37              |         |
|                          | IES-6                 | January 2014 | Soil     | 0-6                         | 18.3            |         |
|                          | IES-7                 | January 2014 | Sediment | 0-6                         | 14.2            |         |
|                          | IES-8                 | January 2014 | Soil     | 6-12                        | 0.253           |         |
|                          | IES-9                 | January 2014 | Soil     | 0-6                         | 11.9            |         |
|                          | IES-10                | January 2014 | Soil     | 0-6                         | 5.87            |         |
|                          | IES-11                | January 2014 | Soil     | 0-6                         | 1.06            |         |
|                          | IES-12                | January 2014 | Soil     | 0-6                         | 12.5            |         |
|                          | IES-13                | January 2014 | Soil     | 0-6                         | 52.4            |         |

#### Abbreviations, Notes, and Definitions:

1. PCB = Polychlorinated Biphenyl Aroclor.

2. ppm = parts per million.

3. Samples results presented in brackets ("[]") are for duplicate samples.

4. J - The compound was positively identified; however, the associated numerical value is an estimated concentration only.

5. ND - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

Northwest Drainage Ditch 2009 Total PCB Aroclor Data Dewey Loeffel Landfill Superfund Site - Nassau, New York



| Sample Location          | Sample Identification | Date     | Matrix   | Sample Interval<br>(inches) | Result<br>(ppm) | Comment     |
|--------------------------|-----------------------|----------|----------|-----------------------------|-----------------|-------------|
| Western Drainageway      |                       |          |          |                             |                 |             |
| Northwest Drainage Ditch | DLL-SED12             | 6/9/2009 | Sediment | 0-6                         | 0.17            | EPA Samples |
|                          | DLL-SED12A            | 8/8/2009 | Sediment | 0-6                         | 3.5 C           | EPA Samples |
|                          | DLL-SED13             | 6/9/2009 | Sediment | 0-6                         | ND (0.042)      | EPA Samples |
|                          | DLL-SED13A            | 8/8/2009 | Sediment | 0-6                         | ND (0.037)      | EPA Samples |

### Abbreviations, Notes, and Definitions:

1. PCB = Polychlorinated Biphenyl Aroclor.

2. ppm = parts per million.

3. ND - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

Northwest Drainage Ditch Post-2009 Total PCB Aroclor Data Dewey Loeffel Landfill Superfund Site - Nassau, New York



| Sample Location          | Sample Identification      | Date               | Matrix   | Sample Interval<br>(inches) | Result<br>(ppm)             | Comment |
|--------------------------|----------------------------|--------------------|----------|-----------------------------|-----------------------------|---------|
| Western Drainageway      |                            |                    |          | , <u>,</u>                  |                             |         |
|                          | NWDD-SED-A3                | December 2013      | Sediment | 0-6                         | ND (0.119)                  |         |
|                          | NWDD-SED-A4<br>[DUP-1]     | December 2013      | Sediment | 0-6                         | ND (0.0974)<br>[ND (0.100)] |         |
|                          | NWDD-SED-B1                | December 2013      | Sediment | 6-10                        | ND (0.108)                  |         |
|                          | NWDD-SED-B3                | December 2013      | Sediment | 0-6                         | ND (0.0944)                 |         |
|                          | NWDD-SED-B4                | December 2013      | Sediment | 0-6                         | 0.3499                      |         |
|                          | NWDD-SED-B5                | December 2013      | Sediment | 0-6                         | 0.535                       |         |
|                          | NWDD-SS-B1                 | December 2013      | Soil     | 0-6                         | ND (0.0970)                 |         |
|                          | NWDD-33-B1                 | December 2013      | 3011     | 6-11                        | 0.0998                      |         |
|                          |                            | December 2012      | Call     | 0-6                         | 0.199                       |         |
|                          | NWDD-SS-B2                 | December 2013      | Soil     | 6-12                        | 0.494                       |         |
|                          |                            | December 2012      | Call     | 0-6                         | 0.565                       |         |
|                          | NWDD-SS-B3                 | December 2013      | Soil     | 6-12                        | 18.1                        |         |
|                          |                            | December 2012      | Soil     | 0-6                         | 0.483                       |         |
|                          | NWDD-SS-B4                 | December 2013      | Soil     | 6-12                        | 14.3                        |         |
|                          | NWDD-SED-C3                | December 2013      | Sediment | 0-6                         | 0.138                       |         |
|                          | NWDD-SED-C4                | December 2013      | Sediment | 0-6                         | 0.163                       |         |
|                          | NWDD-SED-D3                | December 2013      | Sediment | 0-6                         | 0.239                       |         |
|                          | NWDD-SED-E1                | December 2013      | Sediment | 6-9                         | 8.42                        |         |
|                          | NWDD-SED-E3                | December 2013      | Sediment | 0-6                         | 1.481                       |         |
|                          |                            |                    |          | 0-6                         | 0.657                       |         |
|                          | NWDD-SS-E1                 | December 2013      | Soil     | 6-12                        | 1.39                        |         |
|                          |                            | 2 December 2013 So |          | 0-6                         | 0.138                       |         |
|                          | NWDD-SS-E2                 |                    | Soil     | 6-12                        | ND (0.0695)                 |         |
| Northwest Drainage Ditch |                            | December 2013 S    | Soil     | 0-6                         | 0.632                       |         |
|                          | NWDD-SS-E3                 |                    |          | 6-12                        | 5.82                        |         |
|                          |                            |                    | Soil     | 0-6                         | 1.19                        |         |
|                          | NWDD-SS-E4                 | December 2013      |          | 6-11                        | ND (0.0704)                 |         |
|                          | NWDD-SED-F3                | December 2013      | Sediment | 0-6                         | ND (0.0547)                 |         |
|                          | NWDD-SED-F4                | December 2013      | Sediment | 0-6                         | 1.111                       |         |
|                          | NWDD-SED-G3                |                    |          |                             | 1.278                       |         |
|                          | [DUP-2]                    | December 2013      | Sediment | 0-6                         | [0.456]                     |         |
|                          | NWDD-SED-G4                | December 2013      | Sediment | 0-6                         | 0.741                       |         |
|                          | NWDD-SED-H3                | December 2013      | Sediment | 0-6                         | 0.156                       |         |
|                          | NWDD-SED-H4                | December 2013      | Sediment | 0-6                         | 9.19                        |         |
|                          | NWDD-SED-H5                | December 2013      | Sediment | 0-6                         | 1.15                        |         |
|                          | NWDD-JDG-1                 | December 2013      | Sediment | 0-6                         | ND (0.0834)                 |         |
|                          | NWDD-JDG-2                 | December 2013      | Sediment | 0-6                         | 0.0928                      |         |
|                          | NWDD-JDG-3                 | December 2013      | Sediment | 0-6                         | 1.01                        |         |
|                          | NWDD-JDG-4                 | December 2013      | Sediment | 0-6                         | ND (0.0825)                 |         |
|                          | NWDD-JDG-5                 | December 2013      | Sediment | 0-6                         | 0.201                       |         |
|                          | NWDD-JDG-6                 | December 2013      | Sediment | 0-6                         | 0.110                       |         |
|                          | NWDD-JDG-7                 | December 2013      | Sediment | 0-6                         | 1.23                        |         |
|                          | NWDD-SED-A1                | June 2011          | Sediment | 0-6                         | 0.118                       |         |
|                          |                            | June 2011          |          | 0-6                         | 2.91                        |         |
|                          | NWDD-SED-A2<br>NWDD-SED-B1 | Julie 2011         | Sediment |                             | 4.96                        |         |
|                          | [DUP-3]                    | June 2011          | Sediment | 0-6                         | [6.07]                      |         |
|                          | NWDD-SED-B2                | June 2011          | Sediment | 0-6                         | ND (0.0648)                 |         |

#### Northwest Drainage Ditch Post-2009 Total PCB Aroclor Data Dewey Loeffel Landfill Superfund Site - Nassau, New York



| Sample Location          | Sample Identification | Date      | Matrix   | Sample Interval<br>(inches) | Result<br>(ppm) | Comment |
|--------------------------|-----------------------|-----------|----------|-----------------------------|-----------------|---------|
| Western Drainageway      |                       |           |          |                             |                 |         |
|                          | NWDD-SED-C1           | June 2011 | Sediment | 0-6                         | 0.618           |         |
|                          | NWDD-SED-C2           | June 2011 | Sediment | 0-6                         | 0.3486          |         |
|                          | NWDD-SED-D1           | June 2011 | Sediment | 0-6                         | 0.557           |         |
|                          | NWDD-SED-D2           | June 2011 | Sediment | 0-6                         | 0.584           |         |
|                          | NWDD-SED-E1           | June 2011 | Sediment | 0-6                         | 12.76           |         |
| Northwest Drainage Ditch | NWDD-SED-E2           | June 2011 | Sediment | 0-6                         | 0.73            |         |
| Northwest Drainage Dich  | NWDD-SED-F1           | June 2011 | Sediment | 0-6                         | 0.0925          |         |
|                          | NWDD-SED-F2           | June 2011 | Sediment | 0-6                         | 0.3959          |         |
|                          | NWDD-SED-G1           | June 2011 | Sediment | 0-6                         | 2.18            |         |
|                          | NWDD-SED-G2           | June 2011 | Sediment | 0-6                         | 1.63            |         |
|                          | NWDD-SED-H1           | June 2011 | Sediment | 0-6                         | 0.2158          |         |
|                          | NWDD-SED-H2           | June 2011 | Sediment | 0-6                         | 0.0874          |         |

#### Abbreviations, Notes, and Definitions:

1. PCB = Polychlorinated Biphenyl Aroclor.

2. ppm = parts per million.

3. Samples results presented in brackets ("[]") are for duplicate samples.

4. ND - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

#### Table A-5 Summary of Historic PCB Data Dewey Loeffel Landfill Superfund Site - Nassau, New York



| Sample Dates | Table<br>Reference | Sample Area              | Number of<br>Samples | Percentage<br>Non-Detect | Minimum<br>Result | Maximum<br>Result | Average | Median |
|--------------|--------------------|--------------------------|----------------------|--------------------------|-------------------|-------------------|---------|--------|
| 2009         | A-3                | Northwest Drainage Ditch | 4                    | 50%                      | ND                | 3.50              | 0.93    | 0.096  |
| 2009         | A-1                | Tributary T11A           | 10                   | 0%                       | 0.19              | 22                | 3.6     | 0.73   |
| Deat 2000    | A-4                | Northwest Drainage Ditch | 57                   | 23%                      | ND                | 18                | 1.8     | 0.48   |
| Post-2009    | A-2                | Tributary T11A           | 304                  | 8%                       | ND                | 1,340             | 25      | 2.7    |

#### Abbreviations, Notes, and Definitions:

1. PCB = Polychlorinated Biphenyl Aroclor.

2. Samples results are presented as parts per million.

3. ND - The compound was analyzed for but not detected.

# **APPENDIX B**

**Photographs of Habitat Assessment Activities** 

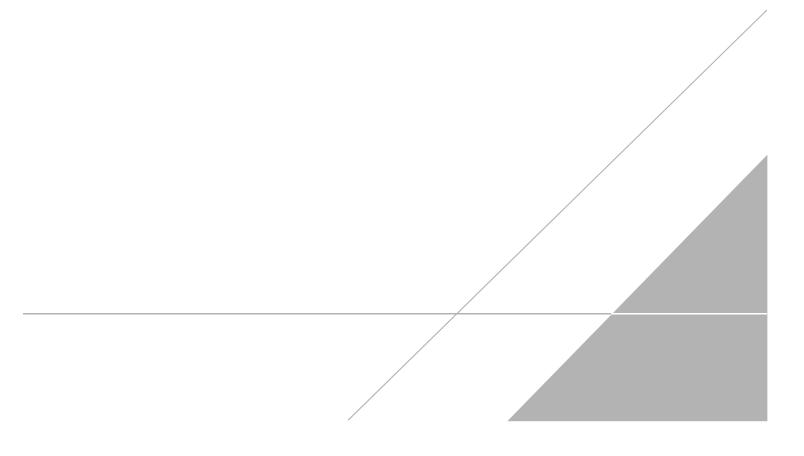
Appendix B1 – Wetland Delineation

Appendix B2 – Enhancement Structures

Appendix B3 – Bank Conditions and LWD

**Appendix B4 – Vegetation Conditions** 

**B1 - Wetland Delineation** 





| Photo No.<br>1 | <b>Date</b><br>4/17/2018             |  |
|----------------|--------------------------------------|--|
|                | n <b>Photo Taken:</b><br>stream/West |  |
|                | scription:<br>Data Point "A-Wet"     |  |



| Photo No.<br>2 | <b>Date</b><br>4/17/2018      |  |
|----------------|-------------------------------|--|
|                | <b>n Photo Taken:</b><br>Down |  |
|                | scription:<br>land A soil     |  |



| Photo No.<br>3         | <b>Date</b><br>4/17/2018             |  |
|------------------------|--------------------------------------|--|
|                        | n <b>Photo Taken:</b><br>tream/East  |  |
|                        | escription:                          |  |
| Uplands surrour<br>Poi | nding Wetland A – Data<br>int "A-Up" |  |



| Photo No.<br>4 | <b>Date</b><br>4/17/2018          |  |
|----------------|-----------------------------------|--|
|                | <b>n Photo Taken:</b><br>Down     |  |
|                | scription:<br>rrounding Wetland A |  |



| Photo No.<br>5 | <b>Date</b><br>4/17/2018          |  |
|----------------|-----------------------------------|--|
| Downs          | <b>Photo Taken:</b><br>tream/West |  |
|                | scription:<br>Data Point "B-Wet"  |  |

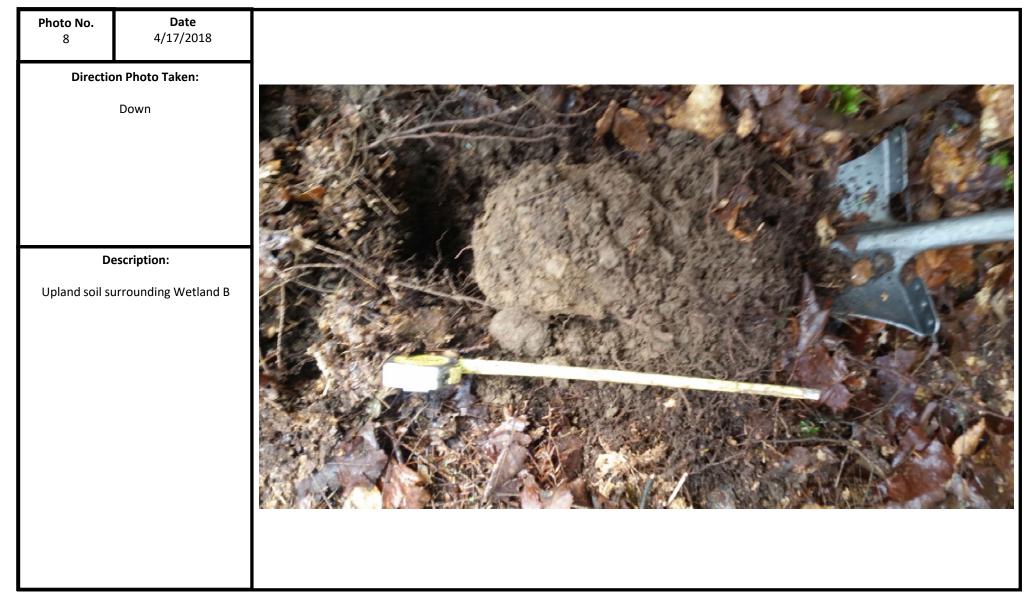


| Photo No.<br>6                 | <b>Date</b><br>4/17/2018 |  |
|--------------------------------|--------------------------|--|
|                                | n Photo Taken:<br>Down   |  |
| Description:<br>Wetland B soil |                          |  |

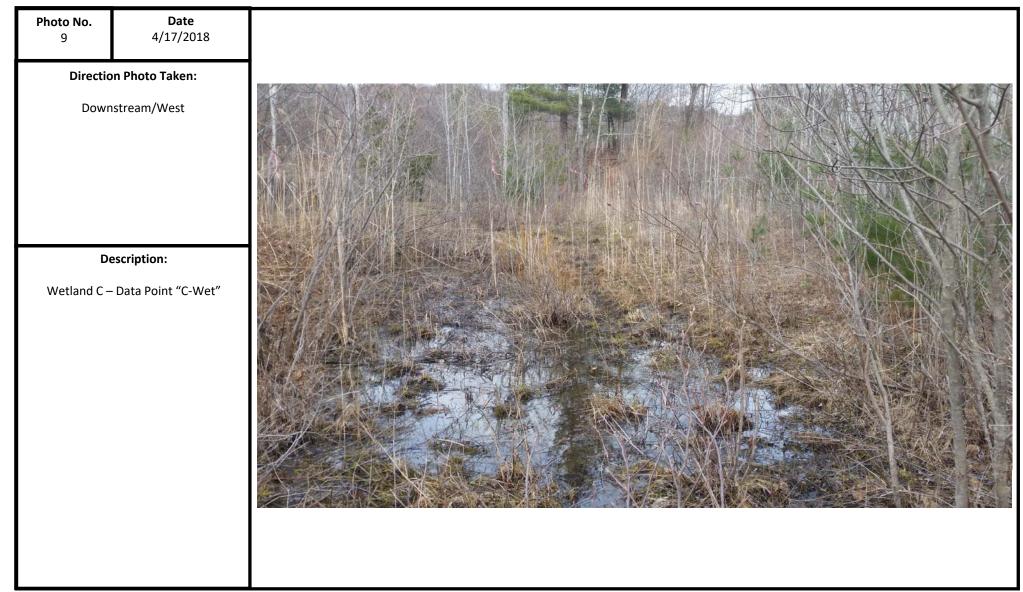








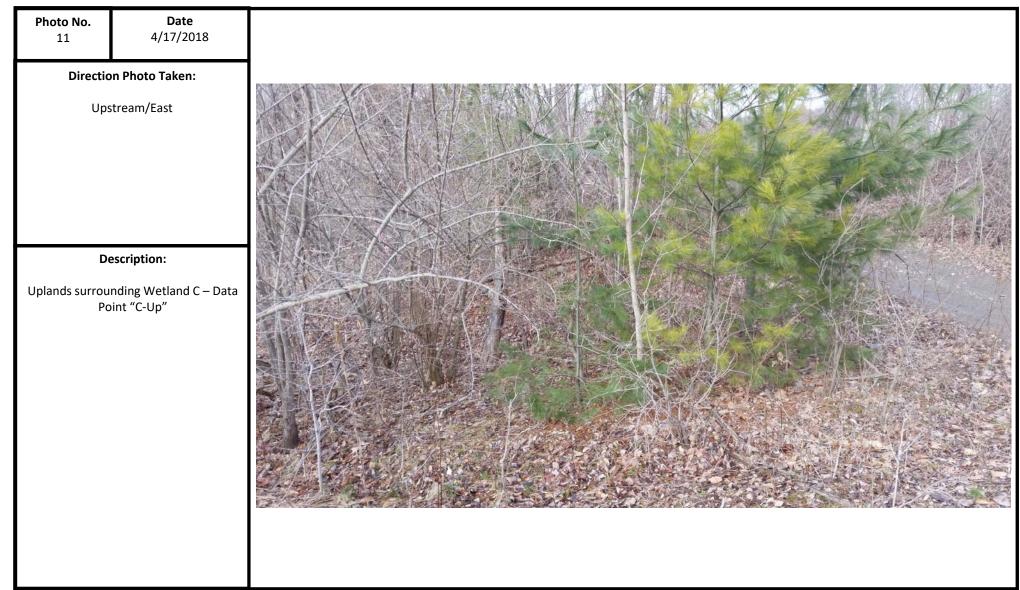




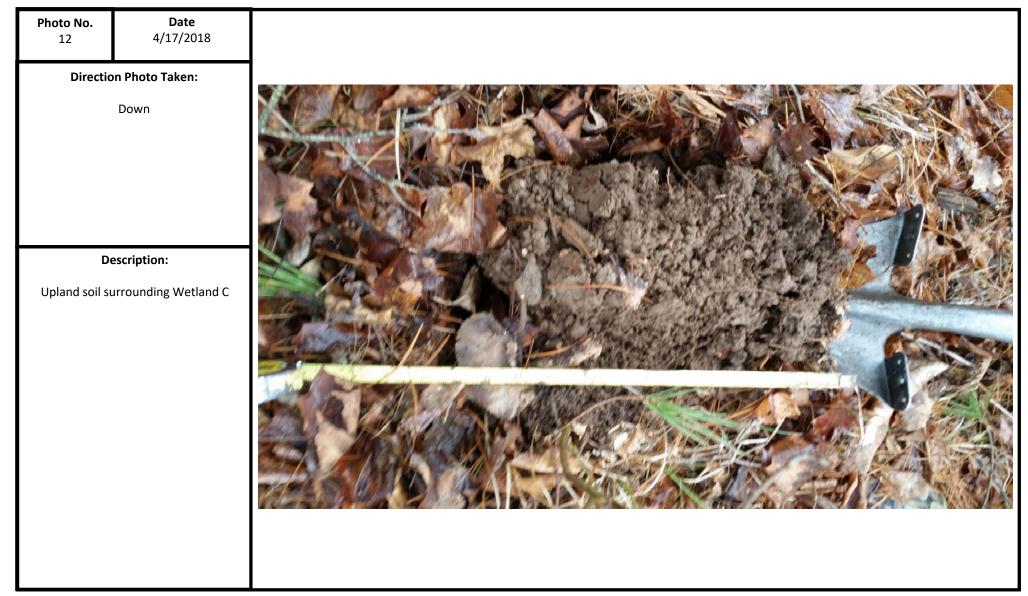


| Photo No.<br>10 | <b>Date</b><br>4/17/2018            |  |
|-----------------|-------------------------------------|--|
|                 | on Photo Taken:<br>Down             |  |
|                 | <b>escription:</b><br>etland C soil |  |
|                 |                                     |  |



















| <b>Photo No.</b><br>15 | <b>Date</b><br>4/17/2018                           |  |
|------------------------|--|--|
|                        | <b>n Photo Taken:</b><br>ortheast                  |  |
| Uplands surroun        | scription:<br>Iding Wetland H – Data<br>It "H1-Up" |  |



| Photo No.<br>16         | <b>Date</b><br>4/17/2018   |          |
|-------------------------|--|----------|
| De:<br>Upland soil surr | n Photo Taken:<br>Down<br>scription:<br>rounding Wetland H –<br>oint "H1-Up" | <image/> |

Photo No.

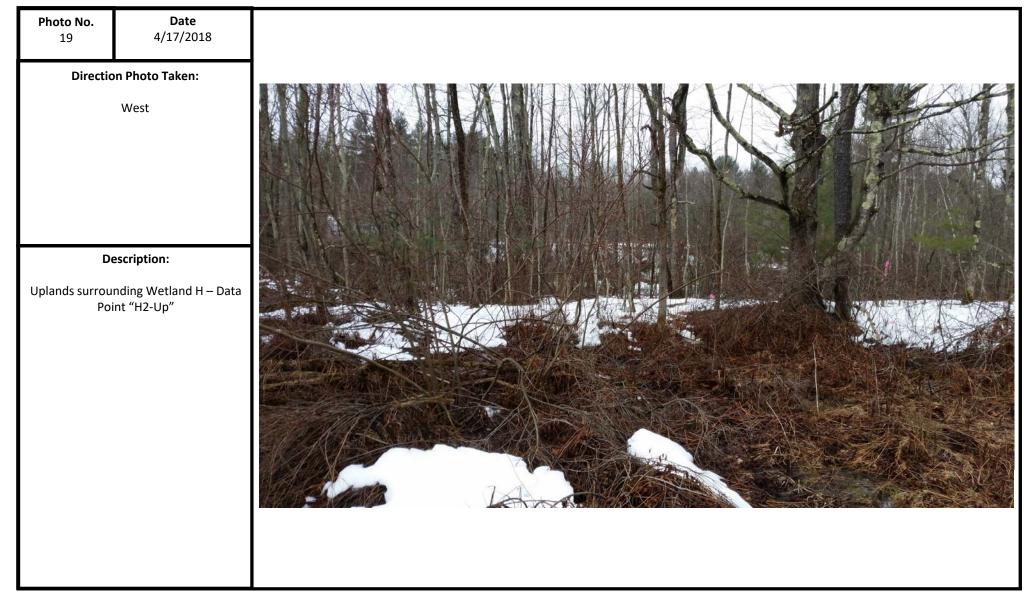
17





| <b>Photo No.</b><br>18 4   | <b>Date</b><br>4/17/2018 |          |
|--|--------------------------|----------|
| Direction Photo<br>Down<br>Descriptio<br>Wetland H soil – Data P | n<br>ion:                | <image/> |







| Photo No.<br>20                                   | <b>Date</b><br>4/17/2018                           |  |
|---|--|--|
| Direction<br>Direction<br>Des<br>Upland soil surr | scription:<br>rounding Wetland H –<br>oint "H2-Up" |  |







| Photo No.<br>22 | <b>Date</b><br>4/17/2018                                      |  |
|-----------------|---|--|
| De              | n Photo Taken:<br>Down<br>scription:<br>– Data Point "H3-Wet" |  |



| Photo No.<br>23   | <b>Date</b><br>4/17/2018 |  |
|---|--------------------------|--|
| Direction Photo Taken:<br>Northwest                                   |                          |  |
| Description:<br>Uplands surrounding Wetland H – Data<br>Point "H3-Up" |                          |  |



| Photo No.<br>24                                | <b>Date</b><br>4/17/2018                          |  |
|--|---|--|
| Direction Photo Taken:<br>Down<br>Description: |   |  |
| Upland soil surr                               | scription:<br>ounding Wetland H –<br>oint "H3-Up" |  |



| <b>Photo No.</b><br>25               | <b>Date</b><br>4/17/2018               |  |
|--------------------------------------|--|--|
| Direction Photo Taken:<br>Downstream |  |  |
|                                      | <b>ccription:</b><br>Data Point "J-Wet |  |

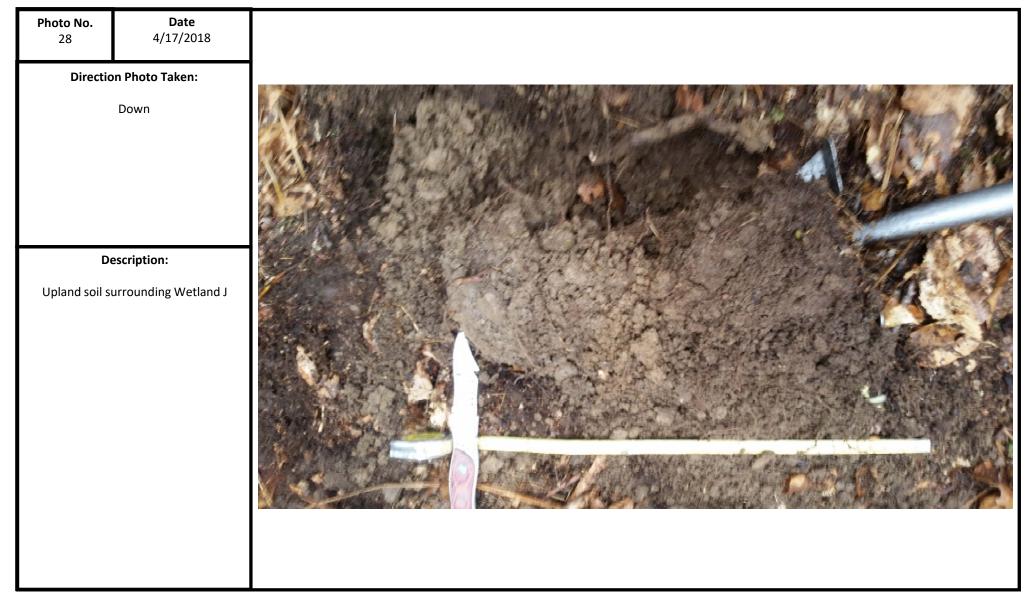


| Photo No.<br>26 | <b>Date</b><br>4/17/2018 |  |
|-----------------|--------------------------|--|
| Direction       | n Photo Taken:           |  |
|                 | Down                     |  |
| Des             | scription:               |  |
| Wet             | tland J soil             |  |

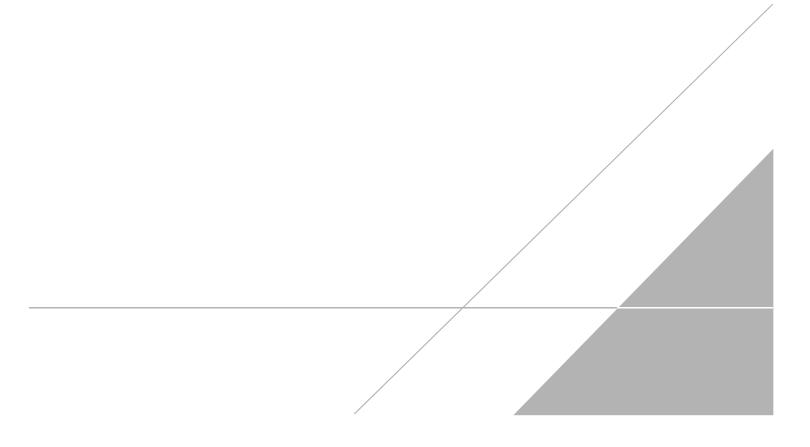


| <b>Photo No.</b><br>27   | <b>Date</b><br>4/17/2018 |  |
|--|--------------------------|--|
| Direction Photo Taken:<br>Downstream                                 |                          |  |
| Description:<br>Uplands surrounding Wetland J – Data<br>Point "J-Up" |                          |  |

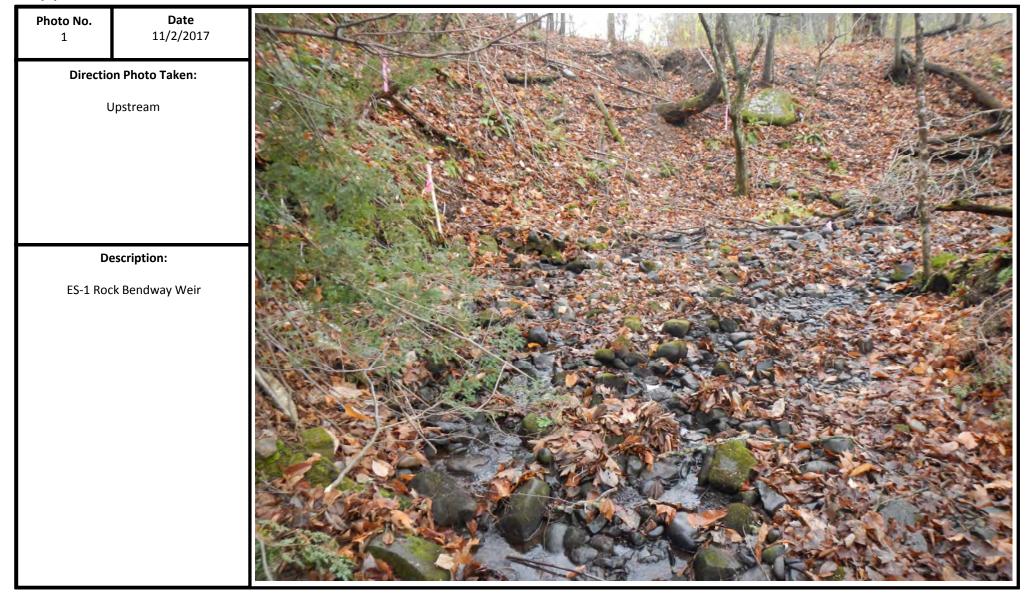




**B2 - Enhancement Structures** 









| Photo No.<br>2 | <b>Date</b><br>11/2/2017 |  |
|----------------|--------------------------|--|
| Direction      | n Photo Taken:           |  |
| U              | pstream                  |  |
|                |                          |  |
| De             | scription:               |  |
| ES-2 Roo       | ck Vortex Weir           |  |
|                |                          |  |







| Photo No.<br>4 | <b>Date</b><br>11/2/2017         |  |
|----------------|----------------------------------|--|
|                | <b>n Photo Taken:</b><br>pstream |  |
|                | scription:<br>og Check Dam       |  |
|                |                                  |  |



| Photo No.<br>5 | <b>Date</b><br>11/2/2017 | States and the states that the |
|----------------|--------------------------|--------------------------------|
| Direction      | n Photo Taken:           |                                |
| U              | pstream                  |                                |
| De             | scription:               |                                |
| ES-5 Step      | p Pool Complex           |                                |



| Photo No.<br>6 | <b>Date</b><br>11/2/2017 | A CA | 1/10  |                       | A CONTRACT | TEAL |            |
|----------------|--------------------------|------|-------|-----------------------|------------|------|------------|
| Direction      | n Photo Taken:           |      | J. J. |                       | SIT U      |      |            |
| Ur             | pstream                  |      |       |                       |            |      |            |
| Des            | scription:               |      |       | and the second second |            |      | The second |
| ES-6 Roc       | ck Vortex Weir           |      |       |                       |            |      |            |



| Photo No.<br>7 | <b>Date</b><br>11/2/2017         |  |
|----------------|----------------------------------|--|
|                | <b>n Photo Taken:</b><br>pstream |  |
| De             | scription:                       |  |
| ES-7 Lo        | og Check Dam                     |  |
|                |                                  |  |
|                |                                  |  |

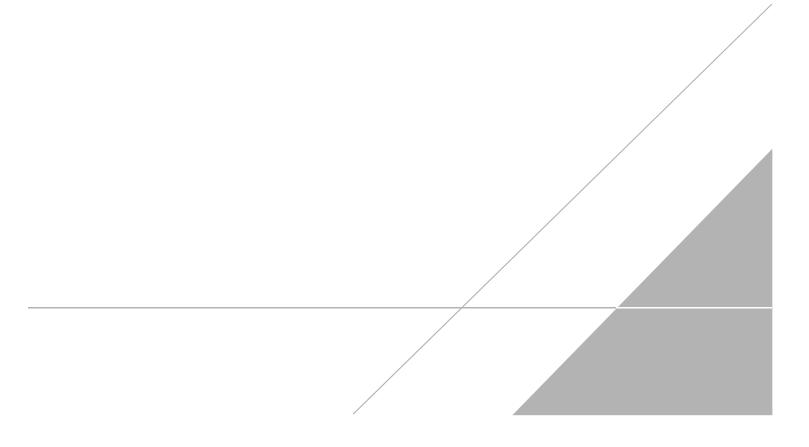
ARCADIS Graduard for a transformation of the set of the

| Photo No.<br>8 | <b>Date</b><br>11/2/2017         |          |
|----------------|----------------------------------|----------|
|                | <b>n Photo Taken:</b><br>ostream |          |
|                | scription:<br>ck Check Dam       | <image/> |



| <b>Photo No.</b><br>9 | <b>Date</b><br>11/2/2017 |  |
|-----------------------|--------------------------|--|
| Direction             | n Photo Taken:           |  |
| Uţ                    | ostream                  |  |
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|                       |                          |  |
| Des                   | scription:               |  |
| ES-9 Ri               | ffle Complex             |  |
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|                       |                          | The second s   |
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|                       |                          |  |
|                       |                          | and the second |
|                       |                          |  |

**B3 - Bank Conditions and LWD** 





| Photo No.<br>10 | <b>Date</b><br>11/2/2017         |  |
|-----------------|----------------------------------|--|
| Direction       | n Photo Taken:                   |  |
| Le              | eft Bank                         |  |
| De              | scription:                       |  |
| LWD protect     | tion to help prevent<br>erosion. |  |



| Photo No.<br>11 | <b>Date</b><br>11/2/2017          |  |
|-----------------|-----------------------------------|--|
|                 | <b>n Photo Taken:</b><br>ght Bank |  |
|                 |                                   |  |
|                 | scription:                        |  |
| Large root wad  | d providing shade and cover.      |  |
|                 |                                   |  |
|                 |                                   |  |
|                 |                                   |  |



| Photo No.<br>12 | <b>Date</b><br>11/2/2017               |  |
|-----------------|--|--|
| Direction       | n Photo Taken:                         |  |
|                 |  |  |
| Ri              | ght Bank                               |  |
|                 |  |  |
|                 |  |  |
|                 |  |  |
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|                 |  |  |
|                 |  |  |
| De              | scription:                             |  |
| E               |  |  |
| Functional roo  | t wad providing bank<br>on right bank. |  |
| ,               |  |  |
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| Photo No.<br>14 | <b>Date</b><br>11/2/2017         |  |
|-----------------|----------------------------------|--|
|                 | n Photo Taken:                   |  |
| U               | Jpstream                         |  |
| De              | escription:                      | Sector and the sector of the sector of |
| LWD functi      | ioning as cover and<br>ubstrate. |  |

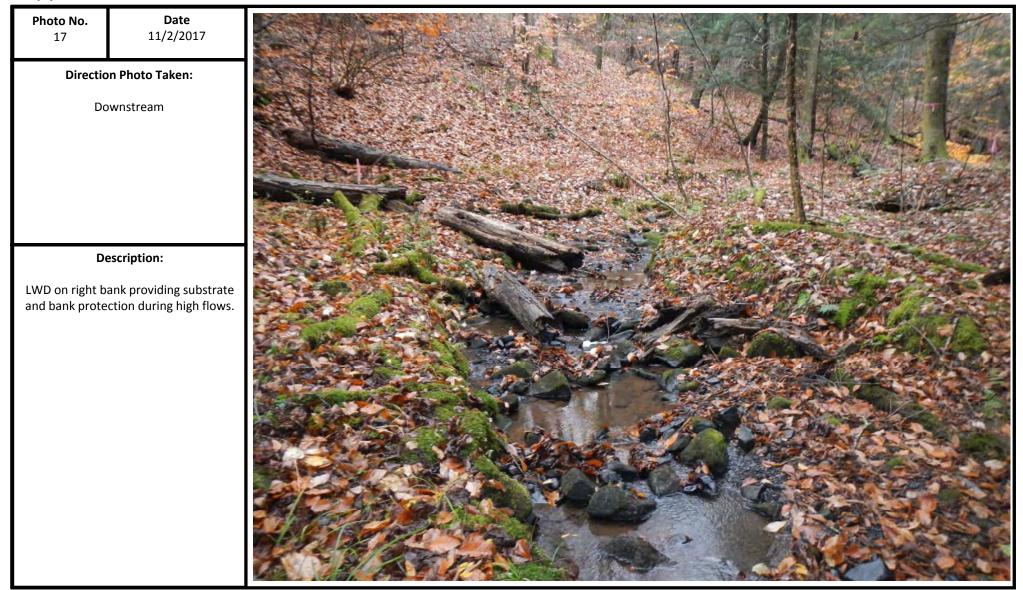


| Photo No.<br>15             | <b>Date</b><br>11/2/2017               |  |                | K            | 11     | 16951     |
|-----------------------------|--|--|----------------|--------------|--------|-----------|
|                             | <b>n Photo Taken:</b><br>pstream       |  | and the second |              |        |           |
|                             |  |  |                |              |        |           |
| Des                         | scription:                             |  |                | A Carlos And |        | 1-2001036 |
| Right bank erosio<br>for be | on area; potential area<br>ndway weir. |  |                |              |        |           |
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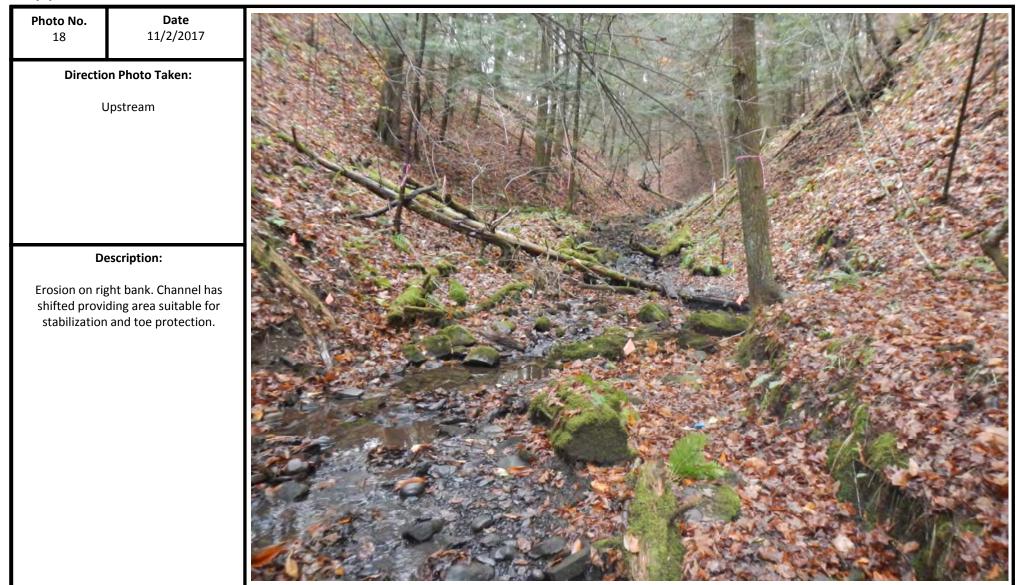








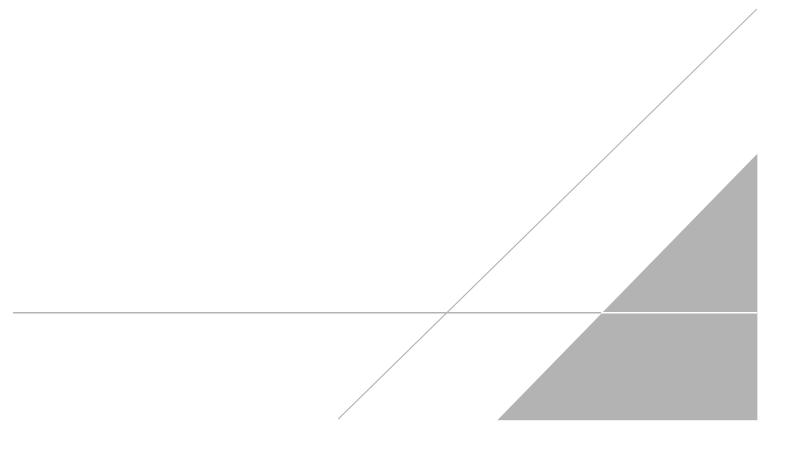






| <b>Photo No.</b><br>19 | <b>Date</b><br>11/2/2017                                   | CONTRACTOR ALS HEALT THE REAL |
|------------------------|--|-------------------------------|
|                        | <b>n Photo Taken:</b><br>pstream                           |                               |
| Erosion on rig         | scription:<br>tht bank and area for<br>bank stabilization. |                               |

**B4 - Vegetation Conditions** 





| Photo No.<br>20                   | <b>Date</b><br>10/11/2017 |  |
|-----------------------------------|---------------------------|--|
| Directio                          | on Photo Taken:           |  |
| Downstream                        |                           |  |
| D                                 | escription:               |  |
| Vegetation Monitoring Location: A |                           |  |



| Photo No.<br>21 | <b>Date</b><br>10/11/2017   |  |
|-----------------|---|--|
| Dov             | n Photo Taken:<br>wnstream<br>scription:<br>onitoring Location: B |  |



| Photo No.<br>22                                   | <b>Date</b><br>10/11/2017 |  |
|---|---------------------------|--|
| Direction Photo Taken:<br>Downstream              |                           |  |
| Description:<br>Vegetation Monitoring Location: C |                           |  |



| Photo No.<br>23 | <b>Date</b><br>10/11/2017             |  |
|-----------------|---------------------------------------|--|
|                 | on Photo Taken:                       |  |
|                 | escription:<br>Aonitoring Location: D |  |



| Photo No.<br>24 | <b>Date</b><br>10/11/2017           |  |
|-----------------|-------------------------------------|--|
|                 | <b>Photo Taken:</b><br>vnstream     |  |
|                 | scription:<br>onitoring Location: E |  |
|                 |                                     |  |



| Photo No.<br>25 | <b>Date</b><br>10/11/2017 |  |
|-----------------|---------------------------|--|
|                 | n Photo Taken:            |  |
| Dov             | wnstream                  |  |
| Des             | scription:                |  |
| Vegetation Mo   | onitoring Location: F     |  |
|                 |                           |  |
|                 |                           |  |
|                 |                           |  |



|                 | 0                         |  |
|-----------------|---------------------------|--|
| Photo No.<br>26 | <b>Date</b><br>10/11/2017 |  |
| Directio        | n Photo Taken:            |  |
|                 |                           |  |
| Dov             | wnstream                  |  |
| De              | scription:                |  |
| De              |                           |  |
| Vegetation M    | onitoring Location: G     |  |



| Photo No.         Date           27         10/11/2017 |  |
|--|--|
| Direction Photo Taken:                                 |  |
|  |  |
| Downstream   |  |
|  |  |
|  |  |
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|  |  |
| Description:   |  |
| Vegetation Monitoring Location: H                      |  |
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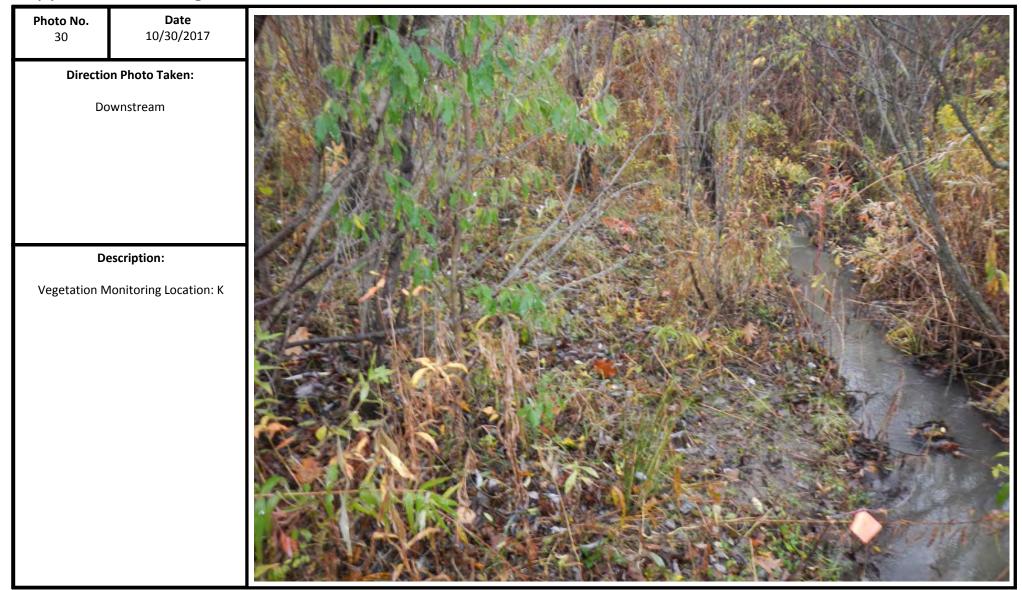


| Photo No.<br>28 | <b>Date</b><br>10/11/2017         |  |
|-----------------|-----------------------------------|--|
|                 | n <b>Photo Taken:</b><br>wnstream |  |
| De              | scription:                        |  |
| Vegetation M    | onitoring Location: I             |  |

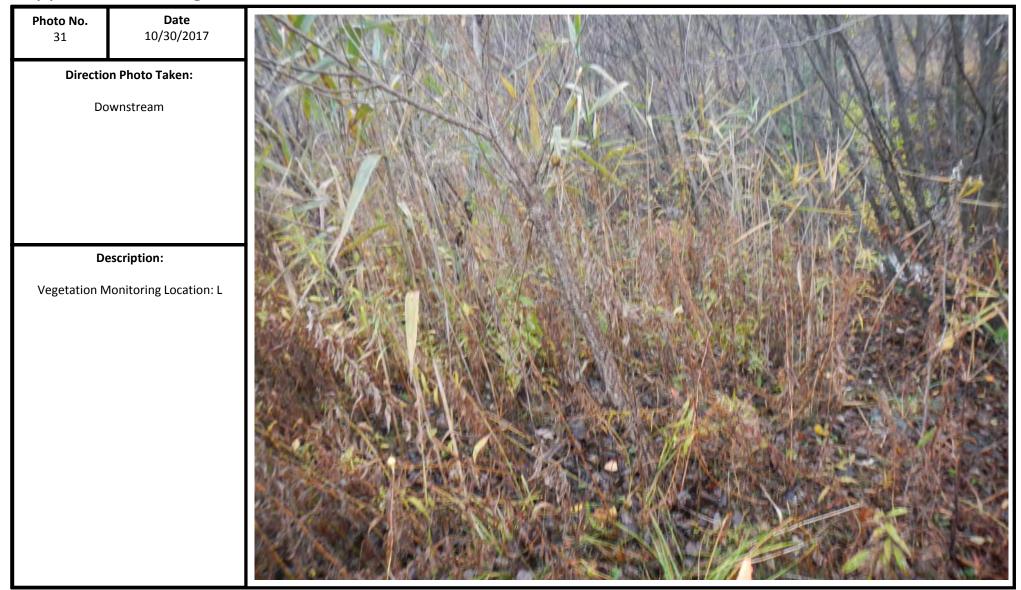


| Photo No.<br>29 | <b>Date</b><br>10/11/2017 |  |
|-----------------|---------------------------|--|
| Directio        | n Photo Taken:            |  |
| Do              | wnstream                  |  |
| De              | escription:               |  |
| Vegetation M    | Ionitoring Location: J    |  |

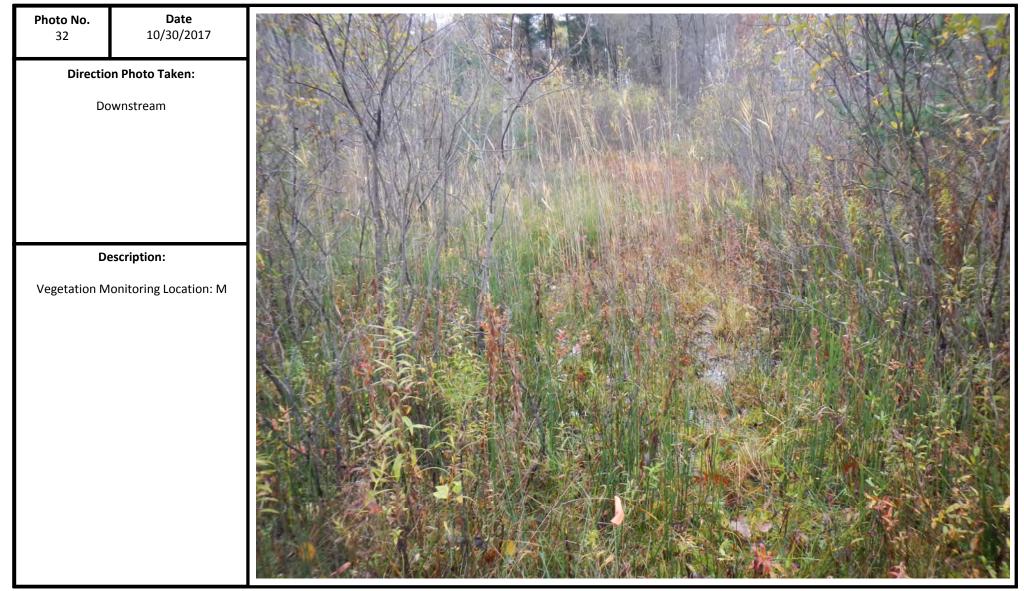




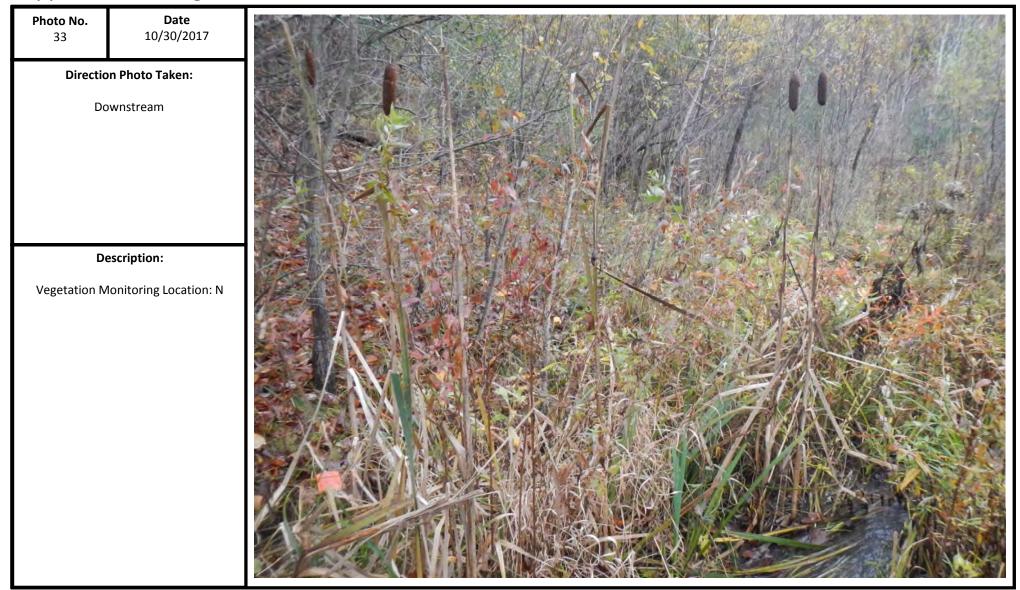










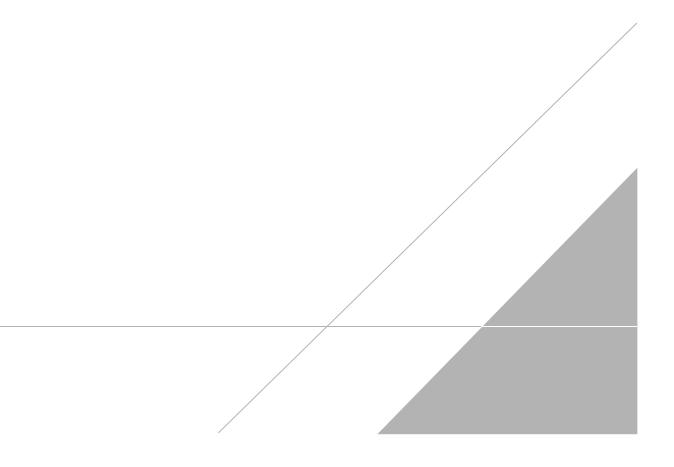




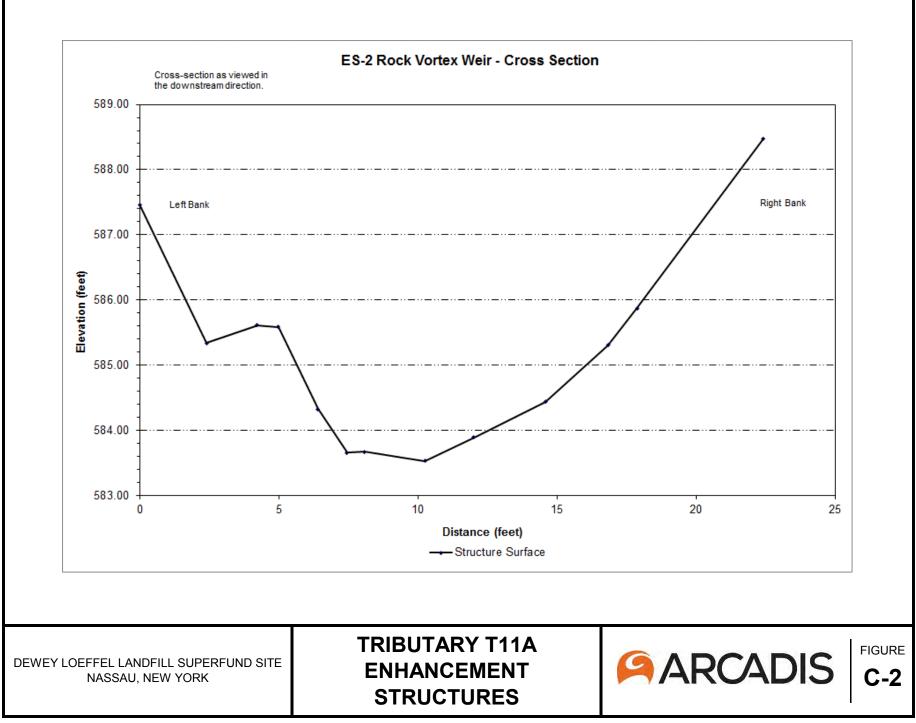
| Photo No.<br>34 | <b>Date</b><br>10/30/2017 |          |
|-----------------|---------------------------|----------|
| Directio        | n Photo Taken:            |          |
| Do              | ownstream                 |          |
| De              | escription:               |          |
| Vegetation M    | lonitoring Location: O    | <image/> |

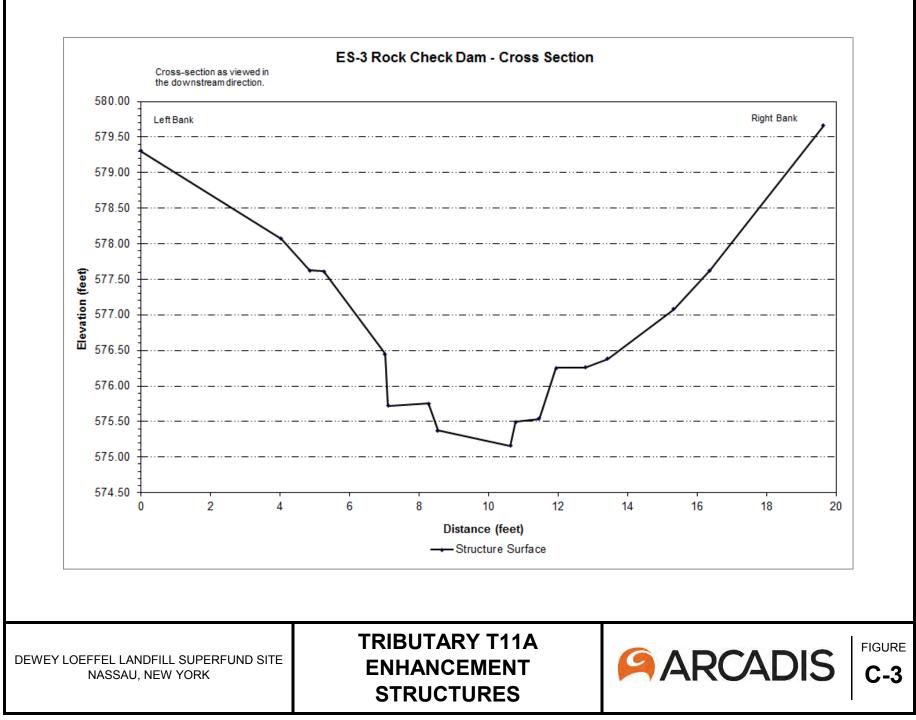
# **APPENDIX C**

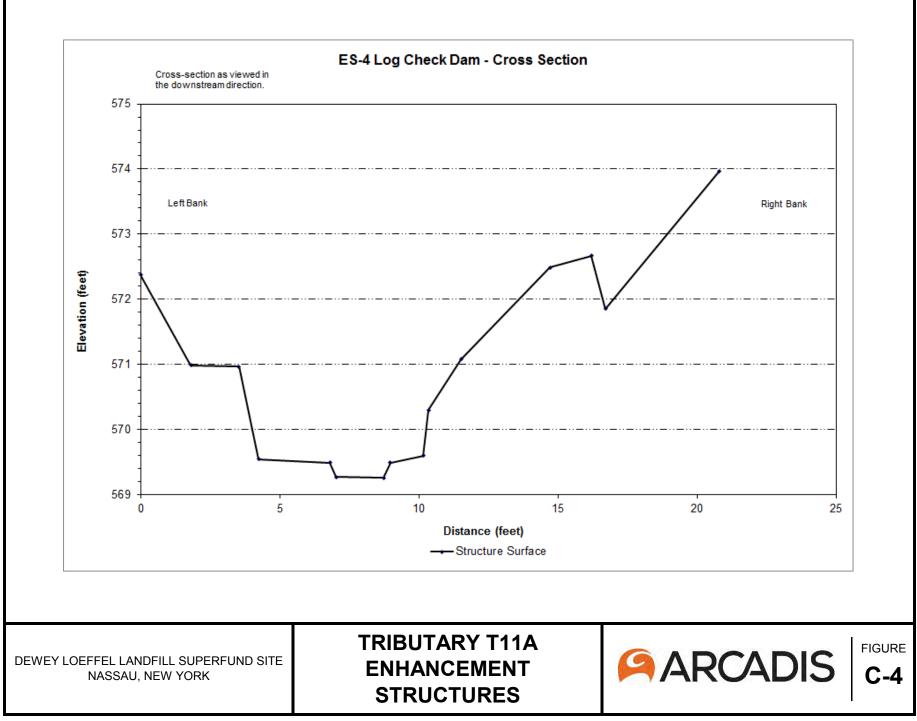
**Tributary T11A Enhancement Structure Cross Sections** 

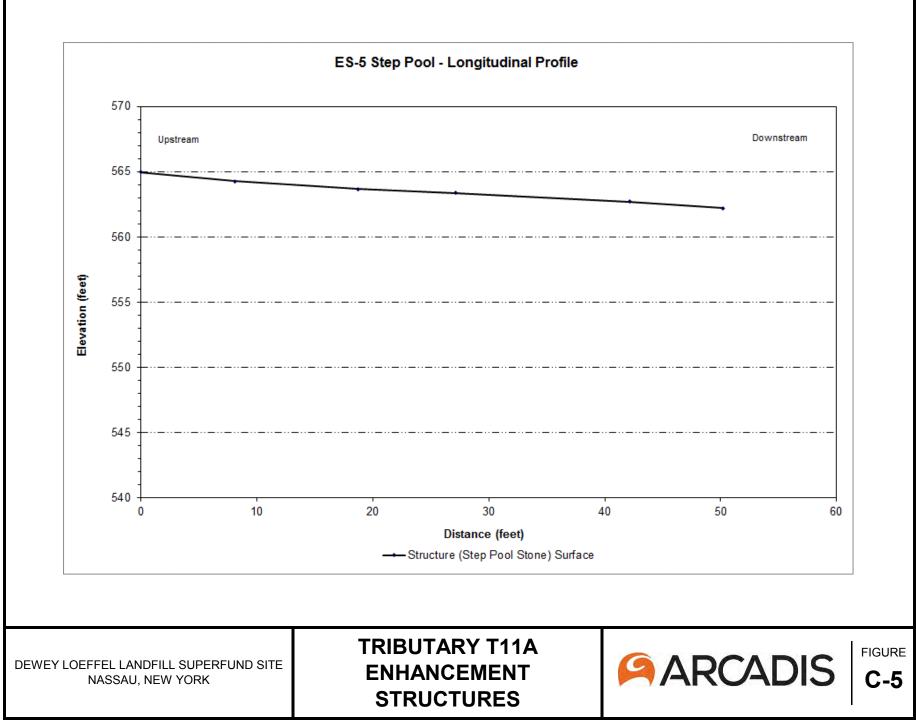


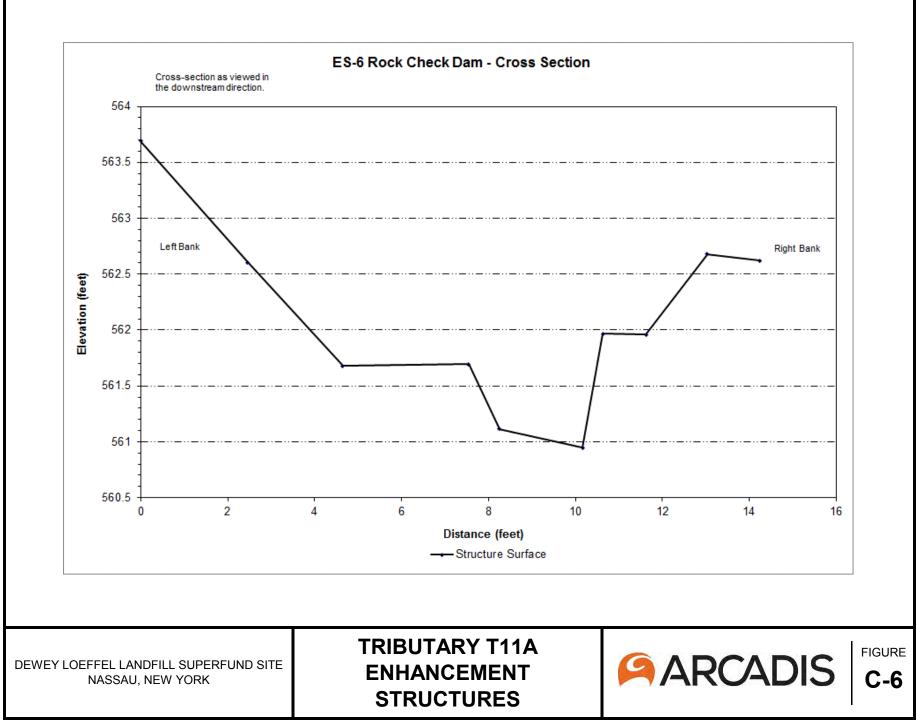


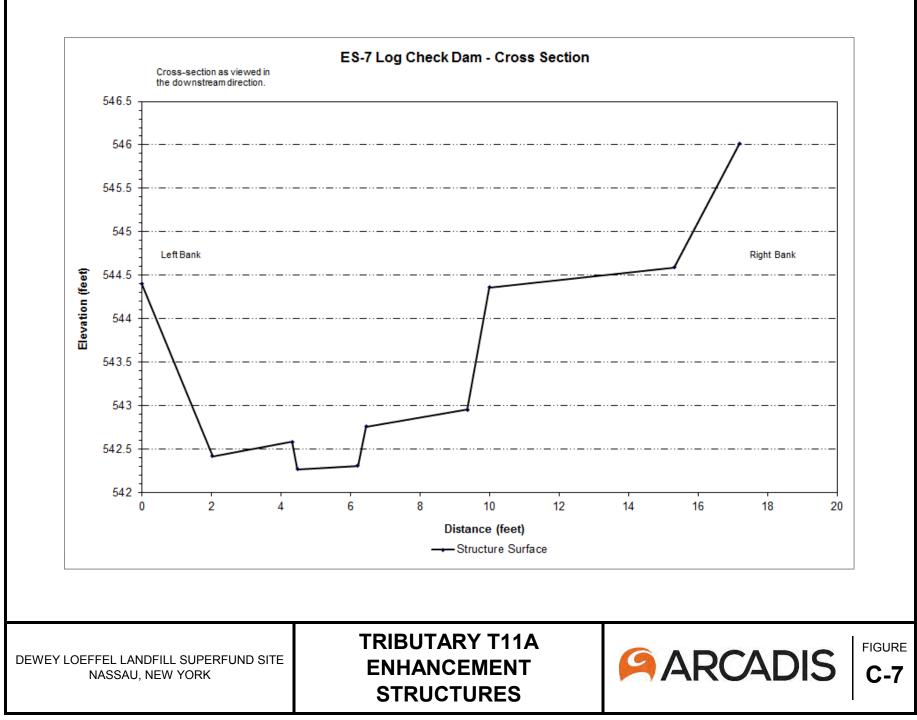


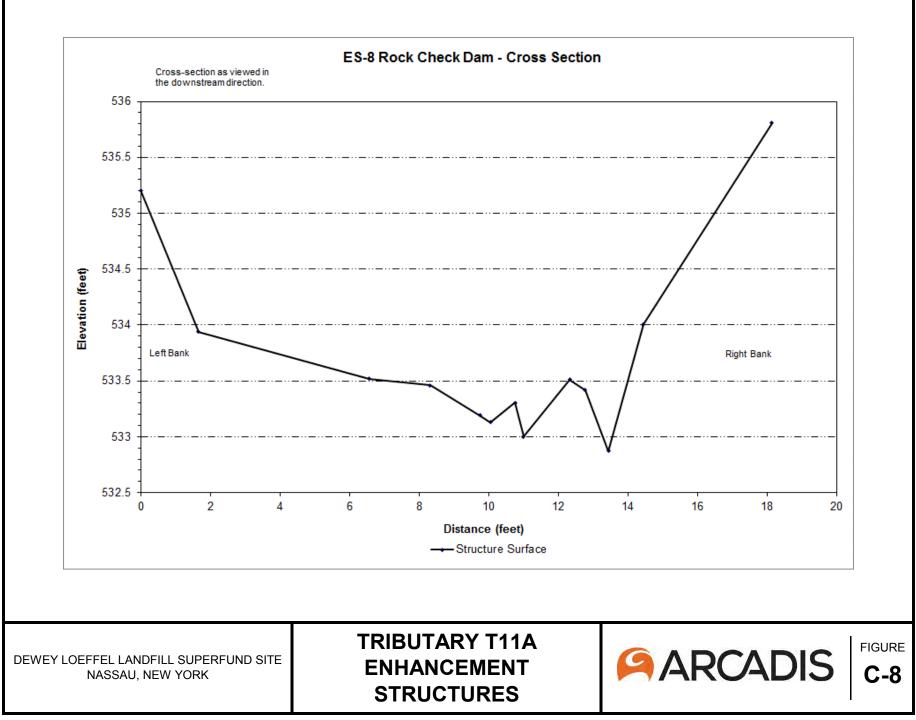


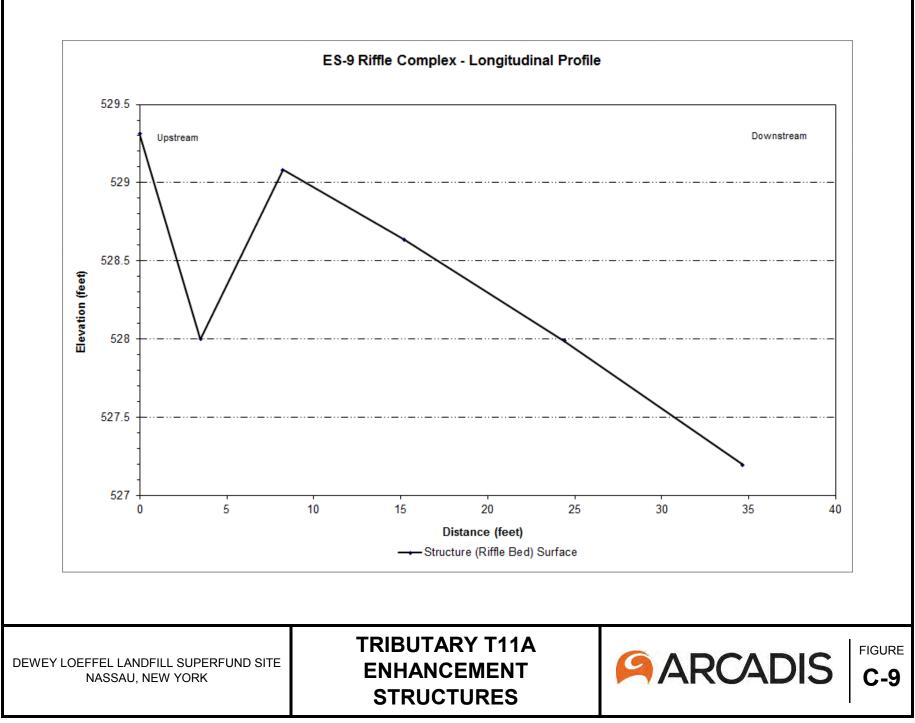






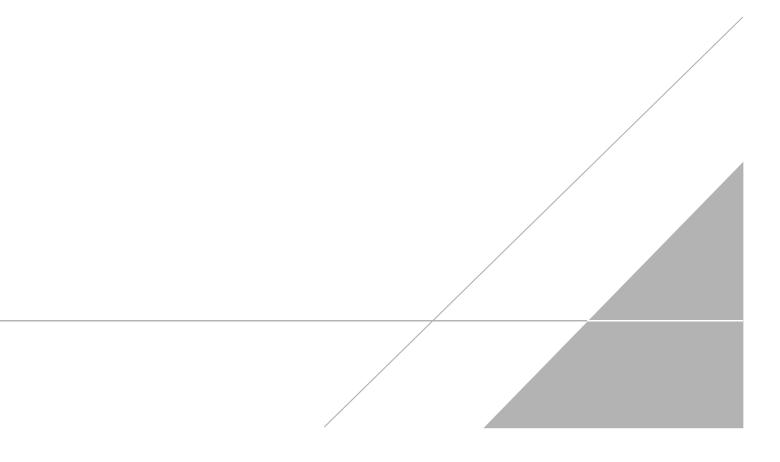






# **APPENDIX D**

Wetland Determination and SVAP Data Forms Appendix D1 – Wetland Determination Data Forms Appendix D2 – SVAP Forms D1 - Wetland Determination Data Forms



October 2017 Forms



### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: Loeffel Trib T11A City/County: Nassau, Rennselaer |                  |                          |                    |                |                       |                | Sampling Date | 10 0             | ct. 17  |      |
|---|------------------|--------------------------|--------------------|----------------|-----------------------|----------------|---------------|------------------|---------|------|
| Applicant/Owner:  | GE/Arcadi        | iis                      |                    |                |                       | State:         | NY            | Sampling Po      | int:    | А    |
| Investigator(s): JK, J  | М                |                          |                    | Section, Towns | ship, Range: <u>N</u> | I/A            |               |                  |         |      |
| Landform (hillside, terr  | Local relief (co | ncave, convex, n         | none): <u>None</u> |                | Slo                   | pe %:          | 0-5           |                  |         |      |
| Subregion (LRR or ML  | _RA): <u>LR</u>  | <u>RR</u>                | _at:               |                | Long:                 |                |               | Datum:           |         |      |
| Soil Map Unit Name:   | HoC - Hor        | osick Sandy, Gravely     | Loam,              |                |                       | NWI classifi   | cation:       | N/A              |         |      |
| Are climatic / hydrologi  | ic conditior     | ns on the site typical f | or this time of    | year?          | Yes X                 | No             | (If no, ex    | cplain in Rema   | ′ks.)   |      |
| Are Vegetation  | , Soil           | , or Hydrology           | significan         | tly disturbed? | Are "Normal           | Circumstances  | s" presen     | nt? Yes <u>X</u> | No      |      |
| Are Vegetation  | , Soil           | , or Hydrology           | naturally          | problematic?   | (If needed, ex        | xplain any ans | wers in F     | Remarks.)        |         |      |
| SUMMARY OF FI   | INDINGS          | a – Attach site m        | ap showin          | ig sampling p  | oint location         | ns, transect   | ts, imp       | ortant featu     | ures, e | etc. |
| Hydrophytic Vegetatio   | on Present       | t? Yes                   | No                 | Is the         | Sampled Area          |                |               |                  |         |      |
| Hydric Soil Present?  |                  | Yes                      | No                 |                | n a Wetland?          | Yes            |               | No               |         |      |
| Wetland Hydrology P   | resent?          | Yes                      | No                 | If yes         | , optional Wetlan     | nd Site ID:    |               |                  |         |      |
| Remarks: (Explain al  | iternative p     | procedures here or in    | a separate rer     | port.)         |                       |                |               |                  |         |      |

#### HYDROLOGY

| Wetland Hydrology Indicators:  |   |                          | Secondary Indicators (minimum of two required) |  |  |
|--|---|--------------------------|--|--|--|
| Primary Indicators (minimum of one is require                        |   | Surface Soil Cracks (B6) |  |  |  |
| Surface Water (A1)   | Water-Stained Leaves (B9)                     |                          | Drainage Patterns (B10)                        |  |  |
| High Water Table (A2)  | Aquatic Fauna (B13)                           |                          | Moss Trim Lines (B16)                          |  |  |
| Saturation (A3)  | Marl Deposits (B15)                           |                          | Dry-Season Water Table (C2)                    |  |  |
| Water Marks (B1)   | Hydrogen Sulfide Odor (C1)                    |                          | Crayfish Burrows (C8)                          |  |  |
| Sediment Deposits (B2)   | Oxidized Rhizospheres on Living Ro            | oots (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         | s (C6)                   | Geomorphic Position (D2)                       |  |  |
| Iron Deposits (B5)   | Iron Deposits (B5) Thin Muck Surface (C7)     |                          |  |  |  |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) |   |                          | Microtopographic Relief (D4)                   |  |  |
| Sparsely Vegetated Concave Surface (B                                | 8)  |                          | FAC-Neutral Test (D5)                          |  |  |
| Field Observations:  |   |                          |  |  |  |
| Surface Water Present? Yes   | No Depth (inches):                            |                          |  |  |  |
| Water Table Present? Yes   | No Depth (inches):                            |                          |  |  |  |
| Saturation Present? Yes  | No Depth (inches):                            | Wetlan                   | nd Hydrology Present? Yes No                   |  |  |
| (includes capillary fringe)  |   |                          |  |  |  |
| Describe Recorded Data (stream gauge, mor                            | nitoring well, aerial photos, previous inspec | ctions), if a            | vailable:                                      |  |  |
|  |   |                          |  |  |  |
| Remarks:   |   |                          |  |  |  |
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|  |   |                          |  |  |  |

#### **VEGETATION** – Use scientific names of plants.

| <u>Tree Stratum</u> (Plot size: 10 Meters )  | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:  |            |                        |         |
|--|---------------------|----------------------|---------------------|--|------------|------------------------|---------|
| 1. Pinus strobus (White Pine)                | 30                  | Yes                  |                     |  |            |                        |         |
| 2. Betula lenta (Black Birch)                | 10                  | Yes                  |                     | Number of Dominant Species<br>That Are OBL, FACW, or FAC                       | :          | 0                      | (A)     |
| 3. Acer saccharinum (Sugar Maple)            | 10                  | Yes                  |                     |  |            |                        | _`´     |
| 4. Tsuga canadensis (Eastern Hemlock)        | 5                   | No                   |                     | Total Number of Dominant<br>Species Across All Strata:                         |            | 8                      | (B)     |
| 5. Fagus grandifolia (American Beech)        | 5                   | No                   |                     |  |            |                        | _``     |
| )  |                     |                      |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC                      | :          | 0.0%                   | (A/E    |
| 7  |                     | ·                    |                     | Prevalence Index worksheet   | t:         |                        |         |
|  | 60                  | =Total Cover         |                     | Total % Cover of:  | М          | ultiply by:            |         |
| Sapling/Shrub Stratum (Plot size: 3 Meters   | )                   |                      |                     | OBL species 0  | x 1 =      | 0                      |         |
| Carpinus caroliniana (Blue Beech)            | 5                   | Yes                  |                     | FACW species 0   | x 2 =      | 0                      |         |
| 2. Fagus grandifolia (American Beech)        | 5                   | Yes                  |                     | FAC species 0  | x 3 =      | 0                      |         |
| 3. (Oak Species)                             | 1                   | No                   |                     | FACU species 0   | x 4 =      | 0                      |         |
| . (Maple Species)                            | 1                   | No                   |                     | UPL species 0  | x 5 =      | 0                      |         |
| 5. Amelanchier canadensis (Serviceberry)     | 5                   | Yes                  |                     | Column Totals: 0   | (A)        | 0                      | (E      |
| 5. Carya ovata (Shagbark Hickory)            | 1                   | No                   |                     | Prevalence Index = B/  | A =        |                        |         |
| ·····  | _                   |                      |                     | Hydrophytic Vegetation Indi  | cators:    |                        |         |
|  |                     | =Total Cover         |                     | 1 - Rapid Test for Hydrop  |            | getation               |         |
| <u>Herb Stratum</u> (Plot size: 1 Meter )    |                     | •                    |                     | 2 - Dominance Test is >50  | -          | 0                      |         |
| . Mitchella repens (Partridgeberry)          | 5                   | No                   |                     | ## 3 - Prevalence Index is ≤3  |            |                        |         |
| 2. <u>Carex plantaginea (Plantain Sedge)</u> | <br>15              | Yes                  |                     | 4 - Morphological Adaptat  |            | rovide sup             | portir  |
| 3. Carex sp. (Carex Species)                 | <u>10</u>           | Yes                  |                     | data in Remarks or on  |            |                        |         |
| I. Vaccinium sp. (Blueberry Species)         | 1                   | No                   |                     | Problematic Hydrophytic V  | leaetati   | on <sup>1</sup> (Evola | in)     |
| 5. (Maple Species)                           | 2                   | No                   |                     |  | -          |                        |         |
|  |                     |                      |                     | <sup>1</sup> Indicators of hydric soil and w<br>present, unless disturbed or p |            |                        | must    |
| 7  |                     | ·                    |                     | Definitions of Vegetation Str  | rata:      |                        |         |
| 3  |                     |                      |                     | <b>Tree</b> – Woody plants 3 in. (7.6  | S cm) or   | more in di             | iamet   |
| )  |                     | ·                    |                     | at breast height (DBH), regard   | lless of I | height.                |         |
| 10   |                     | ·                    |                     | Sapling/shrub – Woody plant  |            |                        | BH a    |
| 11   |                     | ·                    |                     | greater than or equal to 3.28 f  | t (1 m) t  | all.                   |         |
| 12.  |                     | ·                    |                     | Herb – All herbaceous (non-w   |            |                        | ardles  |
|  | 33                  | =Total Cover         |                     | of size, and woody plants less   | than 3.    | 28 ft tall.            |         |
| Noody Vine Stratum (Plot size: 3 Meters      | )                   |                      |                     | Woody vines – All woody vine   | es great   | er than 3.2            | 28 ft i |
| 1  |                     | ·                    |                     | height.  |            |                        |         |
| 2  | _                   | <u></u>              |                     | Hadara ka Ca   |            |                        |         |
| 3.   |                     | ·                    |                     | Hydrophytic<br>Vegetation  |            |                        |         |
|  |                     | ·                    |                     | Present? Yes   | No         |                        |         |
| 4.   | -                   |                      |                     |  |            |                        |         |

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: Loeffel Trib T11A City/County: Nassau, Rennselaer Sampling Date: |  |   |  |                         |                         | 10 Oct. 17  |   |
|--|--|---|--|-------------------------|-------------------------|---|---|
| GE/Arcadis   |  |   |  | State:                  | NY                      | Sampling Point  | t: <u> </u>   |
| 1  |  |   | Section, To  | wnship, Range: <u>N</u> | N/A                     |   |   |
| ice, etc.):  | Flat, Floodplain   | Local re  | əlief (concave, conve  | x, none): <u>None</u>   |                         | Slope   | e %: <u>0-5</u>   |
| ₹A): <u>LRR F</u>  | <u>R</u> Lat:  |   | Long:  |                         |                         | Datum:  |   |
| HoC - Hoosic   | ck Sandy, Gravely Lo   | am,   |  | NWI classifi            | ication: <u>N</u>       | √/A   |   |
| conditions c   | on the site typical for t  | his time of year?   | Yes X  | No                      | (If no, exp             | olain in Remarks  | s.)   |
| , Soil   | , or Hydrology   | significantly disturbe  | ed? Are "Norr  | nal Circumstance        | s" present              | i? Yes X  | No  |
| , Soil   | , or Hydrology   | _naturally problemat <sup>i</sup>   | ic? (If neede <sup>,</sup>   | d, explain any ans      | swers in R              | emarks.)  |   |
| IDINGS -   | Attach site map  | showing samp  | ling point locat   | ions, transec           | ts, impo                | ortant featur   | res, etc.   |
| n Present?   | Yes  | No  | Is the Sampled A   | rea                     |                         |   |   |
|  | Yes  | No  | within a Wetland   | ? Yes                   | !                       | No  |   |
| esent?   | Yes  | No  | If yes, optional We  | tland Site ID:          |                         |   |   |
| ernative proc  | edures here or in a se   | eparate report.)  |  |                         |                         |   |   |
|  | GE/Arcadis           I           Ice, etc.):           RA):         LRR F           HoC - Hoosic           conditions c           Soil | GE/Arcadis         I         Ice, etc.):       Flat, Floodplain         RA):       LRR R       Lat:         HoC - Hoosick Sandy, Gravely Load       Conditions on the site typical for the site typ | GE/Arcadis         I         Ice, etc.):       Flat, Floodplain       Local registration         RA):       LRR R       Lat: | GE/Arcadis              | GE/Arcadis       State: | GE/Arcadis       State: NY         I       Section, Township, Range: N/A         Icce, etc.):       Flat, Floodplain       Local relief (concave, convex, none): None         RA):       LRR R       Lat:       Long:         HoC - Hoosick Sandy, Gravely Loam,       NWI classification: N         c conditions on the site typical for this time of year?       Yes X       No | GE/Arcadis       State: NY       Sampling Point         I       Section, Township, Range: N/A         Icce, etc.):       Flat, Floodplain       Local relief (concave, convex, none): None       Slope         RA):       LRR R       Lat:       Long:       Datum:         HoC - Hoosick Sandy, Gravely Loam,       NWI classification: N/A       N/A         c conditions on the site typical for this time of year?       Yes X       No (If no, explain in Remarks, Soil, or Hydrology significantly disturbed?       Are "Normal Circumstances" present?       Yes X         NDINGS – Attach site map showing sampling point locations, transects, important feature within a Wetland?       Yes |

#### HYDROLOGY

| Wetland Hydrology Indicat                         | Wetland Hydrology Indicators:  |                                |                               |               | Secondary Indicators (minimum of two required) |                     |  |
|---|--|--------------------------------|-------------------------------|---------------|--|---------------------|--|
| Primary Indicators (minimum                       | n of one is require  |                                | Surface Soil Cracks (B6)      |               |  |                     |  |
| Surface Water (A1)                                |  | Water-                         | Stained Leaves (B9)           |               | Drainage Patterns (B10)                        |                     |  |
| High Water Table (A2)                             |  | Aquati                         | c Fauna (B13)                 |               | Moss Trim Lines (B16                           | i)                  |  |
| Saturation (A3) Marl Deposits (B15)               |  |                                |                               |               | Dry-Season Water Ta                            | ble (C2)            |  |
| Water Marks (B1) Hydrogen Sulfide Odor (C1)       |  |                                |                               |               | Crayfish Burrows (C8)                          | )                   |  |
| Sediment Deposits (B2)                            | ts (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C |                                |                               |               |  | Aerial Imagery (C9) |  |
| Drift Deposits (B3) Presence of Reduced Iron (C4) |  |                                |                               |               | Stunted or Stressed P                          | Plants (D1)         |  |
| Algal Mat or Crust (B4)                           | Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)                         |                                |                               |               |  | (D2)                |  |
| Iron Deposits (B5)                                |  | Thin Muck Surface (C7) Shallow |                               |               |  | )                   |  |
| Inundation Visible on Ae                          | rial Imagery (B7)  |                                |                               |               | ef (D4)  |                     |  |
| Sparsely Vegetated Cor                            | ncave Surface (B   | 8)                             |                               |               | FAC-Neutral Test (D5                           | )                   |  |
| Field Observations:                               |  |                                |                               |               |  |                     |  |
| Surface Water Present?                            | Yes  | No                             | Depth (inches):               |               |  |                     |  |
| Water Table Present?                              | Yes  | No                             | Depth (inches):               |               |  |                     |  |
| Saturation Present?                               | Yes  | No                             | Depth (inches):               | Wetlar        | d Hydrology Present?                           | Yes No              |  |
| (includes capillary fringe)                       |  |                                |                               |               |  |                     |  |
| Describe Recorded Data (st                        | ∶eam gauge, mor  | nitoring well,                 | aerial photos, previous inspe | ctions), if a | vailable:                                      |                     |  |
| Remarks:  |  |                                |                               |               |  |                     |  |
|   |  |                                |                               |               |  |                     |  |
|   |  |                                |                               |               |  |                     |  |
|   |  |                                |                               |               |  |                     |  |
|   |  |                                |                               |               |  |                     |  |
|   |  |                                |                               |               |  |                     |  |
|   |  |                                |                               |               |  |                     |  |
|   |  |                                |                               |               |  |                     |  |
|   |  |                                |                               |               |  |                     |  |
|   |  |                                |                               |               |  |                     |  |

#### **VEGETATION** – Use scientific names of plants.

Sampling Point: B

| <u>Tree Stratum</u> (Plot size: <u>10 Meters</u> )      | Absolute<br>% Cover                   | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:  |                             |          |
|---|---------------------------------------|----------------------|---------------------|--|-----------------------------|----------|
| 1. Juglans nigra (Black Walnut)                         | 15                                    | Yes                  |                     | Number of Dominant Species   |                             |          |
| 2. Betula lenta (Black Birch)                           | 15                                    | Yes                  |                     | That Are OBL, FACW, or FAC:  | 0                           | (A)      |
| 3. Acer saccharinum (Sugar Maple)                       | 20                                    | Yes                  |                     | Total Number of Dominant   |                             |          |
| 4.  |                                       |                      |                     | Species Across All Strata:   | 6                           | (B)      |
| 5.  |                                       |                      |                     | Deveent of Deminent Species  |                             |          |
| 6.  |                                       |                      |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC:                           | 0.0%                        | (A/E     |
| 7.  |                                       |                      |                     | Prevalence Index worksheet:  |                             |          |
|   | 50                                    | =Total Cover         |                     | Total % Cover of:  | Multiply by:                |          |
| Sapling/Shrub Stratum (Plot size: 3 Meters              | )                                     |                      |                     | OBL species 0 x  | (1= 0                       |          |
| 1. Fagus grandifolia (American Beech)                   | 20                                    | Yes                  |                     | FACW species 0 x   | (2 = 0                      |          |
| 2. Fraxinus pennsylvanica (Green Ash)                   | 25                                    | Yes                  |                     | FAC species 0 x  | (3 = 0                      |          |
| 3. Carpinus caroliniana (Blue Beech)                    | 5                                     | No                   |                     |  | (4 = 0                      |          |
| 4. Carya ovata (Shagbark Hickory)                       | 10                                    | No                   |                     | ·  | x 5 = 0                     |          |
| 5. Crataegus monogyna (Hawthorn)                        | 5                                     | No                   |                     | · · ·  | A) 0                        | (E       |
| 6. Lonicera japonica (Honeysuckle)                      | 5                                     | No                   |                     | Prevalence Index = B/A =   |                             |          |
| 7.  |                                       |                      |                     | Hydrophytic Vegetation Indica  | -                           |          |
|   | 70                                    | =Total Cover         |                     | 1 - Rapid Test for Hydrophyt   |                             |          |
| <u>Herb Stratum</u> (Plot size: 1 Meter )               |                                       |                      |                     | 2 - Dominance Test is >50%   | -                           |          |
| 1. Thelypteris noveboracensis (New York Fern)           | 30                                    | Yes                  |                     | ## 3 - Prevalence Index is ≤3.0  |                             |          |
| 2. (Maple Species)                                      | 5                                     | No                   |                     | 4 - Morphological Adaptation   |                             | nnortii  |
| 3.  |                                       |                      |                     | data in Remarks or on a s  | •                           |          |
| 4.  |                                       | ·                    |                     | Problematic Hydrophytic Ve   | netation <sup>1</sup> (Eval | ain)     |
| 5.  |                                       | ·                    |                     |  |                             |          |
| 6.  |                                       | ·                    |                     | <sup>1</sup> Indicators of hydric soil and weth<br>present, unless disturbed or prob |                             | must     |
| 7.  |                                       | ·                    |                     | Definitions of Vegetation Strate   |                             |          |
| 3.  |                                       | ·                    |                     | Demitions of vegetation strat  | a.                          |          |
|   | · · · · · · · · · · · · · · · · · · · | ·                    |                     | Tree – Woody plants 3 in. (7.6 cr  |                             | liamet   |
| 9   |                                       | ·                    |                     | at breast height (DBH), regardles  | ss of neight.               |          |
| 10  |                                       | ·                    |                     | Sapling/shrub – Woody plants l   |                             | OBH a    |
| 11  |                                       | ·                    |                     | greater than or equal to 3.28 ft (1  | i m) tali.                  |          |
| 12  |                                       |                      |                     | Herb – All herbaceous (non-woo   |                             | ardles   |
|   | 35                                    | =Total Cover         |                     | of size, and woody plants less th  | an 3.28 ft tall.            |          |
| <u>Woody Vine Stratum</u> (Plot size: <u>3 Meters</u> ) |                                       |                      |                     | Woody vines – All woody vines  | greater than 3.             | .28 ft i |
| 1   |                                       | ·                    |                     | height.  |                             |          |
| 2   |                                       | ·                    |                     | Hydrophytic  |                             |          |
| 3.  |                                       | ·                    |                     | Vegetation   |                             |          |
| 4.  | ·                                     | ·                    |                     | Present? Yes X   | No                          |          |
|   |                                       | =Total Cover         |                     |  |                             |          |

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: Loeffel    | Trib T11A          |                     |                        | City/County: Nassau, Renr     | nselaer             | Samp              | ling Date:  | 10 Oct. 17        |
|--------------------------|--------------------|---------------------|------------------------|-------------------------------|---------------------|-------------------|-------------|-------------------|
| Applicant/Owner:         | GE/Arcadis         |                     |                        |                               | State:              | NY San            | npling Poin | it: <u>C</u>      |
| Investigator(s): JK, JI  | М                  |                     |                        | Section, Township             | , Range: <u>N//</u> | A                 |             |                   |
| Landform (hillside, terr | ace, etc.):        | Slope, Ravine       | Local                  | relief (concave, convex, none | e): <u>None</u>     |                   | Slop        | e %: <u>20-30</u> |
| Subregion (LRR or ML     | .RA): <u>LRR F</u> | र                   | Lat: TBD               | Long: TBD                     |                     |                   | Datum:      | WGS 1984          |
| Soil Map Unit Name:      | HoC - Hoosic       | ck Sandy, Gravel    | y Loam,                | N                             | WI classifica       | ation: <u>N/A</u> |             |                   |
| Are climatic / hydrologi | ic conditions c    | on the site typical | for this time of year? | Yes <u>X</u>                  | No (I               | f no, explain     | in Remark   | (s.)              |
| Are Vegetation           | , Soil             | , or Hydrology      | significantly distu    | rbed? Are "Normal Circ        | cumstances"         | present?          | Yes X       | No                |
| Are Vegetation           | , Soil             | , or Hydrology      | naturally problem      | atic? (If needed, expla       | ain any answ        | vers in Rema      | ırks.)      |                   |
| SUMMARY OF FI            | NDINGS -           | Attach site r       | nap showing sam        | pling point locations,        | transects           | s, importa        | nt featu    | res, etc.         |
| Hydrophytic Vegetatio    | on Present?        | Yes                 | No                     | Is the Sampled Area           |                     |                   |             |                   |
| Hydric Soil Present?     |                    | Yes                 | No                     | within a Wetland?             | Yes                 | No                |             |                   |
| Wetland Hydrology P      | resent?            | Yes                 | No                     | If yes, optional Wetland S    | Site ID:            |                   |             |                   |
| Remarks: (Explain al     | Iternative proc    | edures here or ir   | ו a separate report.)  |                               |                     |                   |             |                   |

#### HYDROLOGY

| Wetland Hydrology Indicate   | ors:              |                         |                               |                       | Secondary Indicators (min   | <u>imum of two required)</u> |  |  |
|------------------------------|-------------------|-------------------------|-------------------------------|-----------------------|-----------------------------|------------------------------|--|--|
| Primary Indicators (minimum  | of one is require | ed; check all           | that apply)                   |                       | Surface Soil Cracks (       | 36)                          |  |  |
| Surface Water (A1)           |                   | Water-                  | Stained Leaves (B9)           |                       | Drainage Patterns (B1       | 10)                          |  |  |
| High Water Table (A2)        |                   |                         | Moss Trim Lines (B16          | i)                    |                             |                              |  |  |
| Saturation (A3)              |                   | Marl D                  | eposits (B15)                 |                       | Dry-Season Water Table (C2) |                              |  |  |
| Water Marks (B1)             |                   | Hydrog                  | gen Sulfide Odor (C1)         | Crayfish Burrows (C8) |                             |                              |  |  |
| Sediment Deposits (B2)       |                   | Saturation Visible on A | Aerial Imagery (C9)           |                       |                             |                              |  |  |
| Drift Deposits (B3)          |                   | Stunted or Stressed P   | Plants (D1)                   |                       |                             |                              |  |  |
| Algal Mat or Crust (B4)      |                   | Geomorphic Position     | (D2)                          |                       |                             |                              |  |  |
| Iron Deposits (B5)           |                   | Shallow Aquitard (D3)   | )                             |                       |                             |                              |  |  |
| Inundation Visible on Ae     | rial Imagery (B7) | Other (                 | (Explain in Remarks)          |                       | Microtopographic Reli       | ef (D4)                      |  |  |
| Sparsely Vegetated Con       | cave Surface (B   | 8)                      |                               |                       | FAC-Neutral Test (D5        | )                            |  |  |
| Field Observations:          |                   |                         |                               | ſ                     |                             |                              |  |  |
| Surface Water Present?       | Yes               | No                      | Depth (inches):               |                       |                             |                              |  |  |
| Water Table Present?         | Yes               | No                      | Depth (inches):               |                       |                             |                              |  |  |
| Saturation Present?          | Yes               | No                      | Depth (inches):               | Wetlan                | d Hydrology Present?        | Yes No                       |  |  |
| (includes capillary fringe)  |                   |                         |                               |                       |                             |                              |  |  |
| Describe Recorded Data (stre | eam gauge, mor    | nitoring well,          | aerial photos, previous inspe | ctions), if a         | vailable:                   |                              |  |  |
|                              |                   |                         |                               |                       |                             |                              |  |  |
| Remarks:                     |                   |                         |                               |                       |                             |                              |  |  |
|                              |                   |                         |                               |                       |                             |                              |  |  |
|                              |                   |                         |                               |                       |                             |                              |  |  |
|                              |                   |                         |                               |                       |                             |                              |  |  |
|                              |                   |                         |                               |                       |                             |                              |  |  |
|                              |                   |                         |                               |                       |                             |                              |  |  |
|                              |                   |                         |                               |                       |                             |                              |  |  |
|                              |                   |                         |                               |                       |                             |                              |  |  |
|                              |                   |                         |                               |                       |                             |                              |  |  |
|                              |                   |                         |                               |                       |                             |                              |  |  |

### **VEGETATION** – Use scientific names of plants.

Sampling Point:

С

| <u>Tree Stratum</u> (Plot size: <u>10 Meters</u> )     | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:   |
|--|---------------------|----------------------|---------------------|---|
| . Tsuga canadensis (Eastern Hemlock)                   | 80                  | Yes                  |                     |   |
| 2  |                     |                      |                     | Number of Dominant Species           That Are OBL, FACW, or FAC:         0         (A)                      |
| 3  |                     |                      |                     | Total Number of Dominant  |
| i  |                     |                      |                     | Species Across All Strata: <u>5</u> (B)   |
| 5<br>5   |                     | ·                    |                     | Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/E   |
| 7  |                     |                      |                     | Prevalence Index worksheet:   |
|  | 80                  | =Total Cover         |                     | Total % Cover of: Multiply by:  |
| Sapling/Shrub Stratum (Plot size: 3 Meters )           |                     |                      |                     | OBL species 0 x 1 = 0   |
| . Fagus grandifolia (American Beech)                   | 10                  | Yes                  |                     | FACW species 0 x 2 = 0  |
| 2.   |                     |                      |                     | FAC species 0 x 3 = 0   |
| 3.   |                     |                      |                     | FACU species 0 x 4 = 0  |
| k  |                     |                      |                     | UPL species 0 x 5 = 0   |
| j.   |                     |                      |                     | Column Totals: 0 (A) 0 (A   |
| S  |                     |                      |                     | Prevalence Index = B/A =  |
|  |                     |                      |                     | Hydrophytic Vegetation Indicators:  |
|  | 10                  | =Total Cover         |                     | 1 - Rapid Test for Hydrophytic Vegetation   |
| <u>lerb Stratum</u> (Plot size: <u>1 Meter</u> )       |                     |                      |                     | 2 - Dominance Test is >50%  |
| . Polystichum acrostichoides (Christmas Fern)          | 10                  | Yes                  |                     | <u>##</u> 3 - Prevalence Index is ≤3.0 <sup>1</sup>   |
| 2. Thelypteris noveboracensis (New York Fern)          | 5                   | Yes                  |                     | 4 - Morphological Adaptations <sup>1</sup> (Provide supporti  |
| 3. Dryopteris marginalis (Marginal Woodfern)           | 5                   | Yes                  |                     | data in Remarks or on a separate sheet)   |
| ł  |                     | <u></u>              |                     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 5  |                     |                      |                     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must present, unless disturbed or problematic. |
|  |                     | ·                    |                     | Definitions of Vegetation Strata:   |
| ·  |                     |                      |                     | Demittons of Vegetation Otrata.   |
| ).   |                     | ·                    |                     | <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diame at breast height (DBH), regardless of height.    |
| 0  |                     |                      |                     | Sapling/shrub – Woody plants less than 3 in. DBH a  |
| 1  |                     |                      |                     | greater than or equal to 3.28 ft (1 m) tall.  |
| 2  |                     |                      |                     | Herb – All herbaceous (non-woody) plants, regardles   |
|  | 20                  | =Total Cover         |                     | of size, and woody plants less than 3.28 ft tall.   |
| Noody Vine Stratum (Plot size: <u>3 Meters</u> )<br>I. |                     |                      |                     | Woody vines – All woody vines greater than 3.28 ft height.  |
| 2  |                     |                      |                     |   |
| 3  |                     | . <u> </u>           |                     | Hydrophytic<br>Vegetation   |
| 4.   |                     |                      |                     | Present? Yes <u>####</u> No <u>####</u>   |
|  |                     | =Total Cover         |                     |   |

#### SOIL

| Lionth   | • • • •   | o the dep  |  |  |  | or or co                           | onfirm the absence of indi   | calors.j   |
|--|---|------------|--|--|--|------------------------------------|--|--|
| Depth  | Matrix  |            |  | x Featur   |  | 2                                  | <b>T</b> (   | D  |
| (inches)   | Color (moist)   | %          | Color (moist)  | %  | Type <sup>1</sup>  | Loc <sup>2</sup>                   | Texture  | Remarks  |
| 0-4  | 10YR 2/2  | 100        |  |  |  |                                    | Mucky Loam/Clay  | Organic  |
| 4-12   | 2.5YR 2.5/2   | 95         | 5YR 4/6  | 5  | RM   | М                                  | Sandy  | Organic  |
|  |   | <u> </u>   |  |  |  |                                    |  |  |
|  |   |            |  |  |  |                                    |  |  |
|  |   |            |  |  |  |                                    |  |  |
|  |   |            |  |  |  |                                    |  |  |
|  |   |            |  |  |  |                                    |  |  |
|  |   | . <u> </u> |  |  |  |                                    |  |  |
|  |   |            |  |  |  |                                    |  |  |
|  |   |            |  |  |  |                                    |  |  |
|  |   |            |  |  |  |                                    |  |  |
|  |   | <u> </u>   |  |  |  |                                    |  |  |
| <sup>1</sup> Type: C=Conc  | entration. D=Deple  | etion. RM= | Reduced Matrix, M  | S=Mask   | ed Sand  | Grains.                            | <sup>2</sup> Location: PL=P  | ore Lining, M=Matrix.  |
| Hydric Soil Indi   |   | ,          | ,  |  |  |                                    |  |  |
| Tryunc Son mu  | licators:   |            |  |  |  |                                    |  |  |
| Histosol (A1   |   |            | Polyvalue Belo   | w Surfa  | ce (S8) ( <b>L</b>   |                                    | Indicators for P   | roblematic Hydric Soils <sup>3</sup> :<br>A10) (LRR K, L, MLRA 149B)   |
| Histosol (A1   | 1)  |            | Polyvalue Belo<br>MLRA 149B  |  | ce (S8) ( <b>L</b>   |                                    | Indicators for P<br>2 cm Muck (  | roblematic Hydric Soils <sup>3</sup> :<br>A10) ( <b>LRR K, L, MLRA 149B</b> )  |
| -  | 1)<br>edon (A2)   |            |  | )  |  | .RR R,                             | Indicators for P<br>2 cm Muck (<br>Coast Prairie   | roblematic Hydric Soils <sup>3</sup> :   |
| Histosol (A1   | 1)<br>edon (A2)<br>: (A3)   |            | MLRA 149B  | )<br>ace (S9)  | (LRR R,  | .RR R,<br>MLRA                     | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>149B) 5 cm Mucky   | roblematic Hydric Soils <sup>3</sup> :<br>A10) (LRR K, L, MLRA 149B)<br>⊵ Redox (A16) (LRR K, L, R)  |
| Histosol (A1<br>Histic Epipe<br>Black Histic<br>Hydrogen S   | 1)<br>edon (A2)<br>s (A3)<br>Sulfide (A4)   |            | MLRA 149B<br>Thin Dark Surf<br>High Chroma S   | )<br>ace (S9)<br>Sands (S  | (LRR R,<br>511) (LRF   | .RR R,<br>MLRA<br>R K, L)          | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>149B) 5 cm Mucky<br>Polyvalue Be   | roblematic Hydric Soils <sup>3</sup> :           A10) (LRR K, L, MLRA 149B)           Redox (A16) (LRR K, L, R)           Peat or Peat (S3) (LRR K, L, R)           Plow Surface (S8) (LRR K, L)   |
| Histosol (A1<br>Histic Epipe<br>Black Histic<br>Hydrogen S<br>Stratified La  | 1)<br>edon (A2)<br>: (A3)<br>Sulfide (A4)<br>ayers (A5)   | (A11)      | MLRA 149B Thin Dark Surf High Chroma S Loamy Mucky   | )<br>ace (S9)<br>Sands (S<br>Mineral   | ) ( <b>LRR R,</b><br>511) ( <b>LRF</b><br>(F1) ( <b>LRF</b>  | .RR R,<br>MLRA<br>R K, L)          | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>5 cm Mucky<br>Polyvalue Be<br>Thin Dark Su   | roblematic Hydric Soils <sup>3</sup> :           A10) (LRR K, L, MLRA 149B)           Redox (A16) (LRR K, L, R)           Peat or Peat (S3) (LRR K, L, R)           elow Surface (S8) (LRR K, L)           urface (S9) (LRR K, L)  |
| Histosol (A1<br>Histic Epipe<br>Black Histic<br>Hydrogen S<br>Stratified La<br>Depleted Be   | 1)<br>edon (A2)<br>: (A3)<br>Sulfide (A4)<br>ayers (A5)<br>elow Dark Surface  | (A11)      | MLRA 149B Thin Dark Surf High Chroma S Loamy Mucky Loamy Gleyed  | )<br>ace (S9)<br>Sands (S<br>Mineral<br>Matrix (   | ) ( <b>LRR R,</b><br>511) ( <b>LRF</b><br>(F1) ( <b>LRF</b>  | .RR R,<br>MLRA<br>R K, L)          | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>5 cm Mucky<br>Polyvalue Be<br>Thin Dark Su<br>Iron-Mangan  | roblematic Hydric Soils <sup>3</sup> :           A10) (LRR K, L, MLRA 149B)           ⇒ Redox (A16) (LRR K, L, R)           Peat or Peat (S3) (LRR K, L, R)           elow Surface (S8) (LRR K, L)           urface (S9) (LRR K, L)           wese Masses (F12) (LRR K, L, R)  |
| Histosol (A1<br>Histic Epipe<br>Black Histic<br>Hydrogen S<br>Stratified La<br>Depleted Be<br>Thick Dark   | 1)<br>edon (A2)<br>; (A3)<br>Sulfide (A4)<br>ayers (A5)<br>elow Dark Surface<br>Surface (A12)   | (A11)      | MLRA 149B Thin Dark Surf High Chroma S Loamy Mucky Loamy Gleyed Depleted Matri   | )<br>ace (S9)<br>Sands (S<br>Mineral<br>Matrix (<br>X (F3)   | ( <b>LRR R,</b><br>11) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>F2)  | .RR R,<br>MLRA<br>R K, L)          | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>5 cm Mucky<br>Polyvalue Be<br>Thin Dark Su<br>Iron-Mangan<br>Piedmont Flo  | roblematic Hydric Soils <sup>3</sup> :           A10) (LRR K, L, MLRA 149B)           Redox (A16) (LRR K, L, R)           Peat or Peat (S3) (LRR K, L, R)           elow Surface (S8) (LRR K, L)           urface (S9) (LRR K, L)           uese Masses (F12) (LRR K, L, R)           podplain Soils (F19) (MLRA 149E  |
| Histosol (A1<br>Histic Epipe<br>Black Histic<br>Hydrogen S<br>Stratified La<br>Depleted Be<br>Thick Dark S<br>X Sandy Muck   | 1)<br>edon (A2)<br>c (A3)<br>Sulfide (A4)<br>ayers (A5)<br>elow Dark Surface<br>Surface (A12)<br>ky Mineral (S1)  | (A11)      | MLRA 149B<br>Thin Dark Surf<br>High Chroma S<br>Loamy Mucky<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su   | )<br>Sands (S<br>Mineral (<br>Matrix (<br>X (F3)<br>urface (F  | ( <b>LRR R,</b><br>611) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>F2)<br>6)                                       | .RR R,<br>MLRA<br>R K, L)          | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>5 cm Mucky<br>Polyvalue Be<br>Thin Dark Su<br>Iron-Mangan<br>Piedmont Fle<br>Mesic Spodi   | roblematic Hydric Soils <sup>3</sup> :         A10) (LRR K, L, MLRA 149B)         Redox (A16) (LRR K, L, R)         Peat or Peat (S3) (LRR K, L, R)         elow Surface (S8) (LRR K, L)         urface (S9) (LRR K, L)         ese Masses (F12) (LRR K, L, R)         podplain Soils (F19) (MLRA 1449         c (TA6) (MLRA 144A, 145, 149B   |
| Histosol (A1<br>Histic Epipe<br>Black Histic<br>Hydrogen S<br>Stratified La<br>Depleted Be<br>Thick Dark S<br>X Sandy Muck<br>Sandy Gley   | 1)<br>edon (A2)<br>Sulfide (A4)<br>ayers (A5)<br>elow Dark Surface<br>Surface (A12)<br>ky Mineral (S1)<br>ved Matrix (S4)   | (A11)      | MLRA 149B<br>Thin Dark Surf<br>High Chroma S<br>Loamy Mucky<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su<br>Depleted Dark                                    | )<br>Sands (S<br>Mineral (<br>Matrix (<br>Matrix (<br>r(F3)<br>urface (F<br>Surface                                    | ) ( <b>LRR R,</b><br>11) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F7) | .RR R,<br>MLRA<br>R K, L)          | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>5 cm Mucky<br>Polyvalue Be<br>Thin Dark Su<br>Iron-Mangan<br>Piedmont Fle<br>Mesic Spodi<br>Red Parent I                                 | roblematic Hydric Soils <sup>3</sup> :<br>A10) (LRR K, L, MLRA 149B)<br>Redox (A16) (LRR K, L, R)<br>Peat or Peat (S3) (LRR K, L, R)<br>elow Surface (S8) (LRR K, L)<br>urface (S9) (LRR K, L)<br>ese Masses (F12) (LRR K, L, R)<br>podplain Soils (F19) (MLRA 149E<br>c (TA6) (MLRA 144A, 145, 149B)<br>Material (F21)  |
| Histosol (A1<br>Histic Epipe<br>Black Histic<br>Hydrogen S<br>Stratified La<br>Depleted Be<br>Thick Dark S<br>X Sandy Much<br>Sandy Gley<br>Sandy Redo                                 | 1)<br>edon (A2)<br>5 (A3)<br>Sulfide (A4)<br>ayers (A5)<br>elow Dark Surface<br>Surface (A12)<br>ky Mineral (S1)<br>ved Matrix (S4)<br>ox (S5)  | (A11)      | MLRA 149B<br>Thin Dark Surf<br>High Chroma S<br>Loamy Mucky<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su<br>Depleted Dark<br>Redox Deprese                   | )<br>Sands (S<br>Mineral (<br>Matrix (<br>x (F3)<br>ırface (F<br>Surface<br>sions (F8                                  | ) ( <b>LRR R,</b><br>11) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F7) | .RR R,<br>MLRA<br>R K, L)          | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>5 cm Mucky<br>Polyvalue Be<br>Thin Dark Su<br>Iron-Mangan<br>Piedmont Fle<br>Mesic Spodi<br>Red Parent I<br>Very Shallow                 | roblematic Hydric Soils <sup>3</sup> :         A10) (LRR K, L, MLRA 149B)         Redox (A16) (LRR K, L, R)         Peat or Peat (S3) (LRR K, L, R)         elow Surface (S8) (LRR K, L)         urface (S9) (LRR K, L)         ese Masses (F12) (LRR K, L, R)         boodplain Soils (F19) (MLRA 149E)         c (TA6) (MLRA 144A, 145, 149B)         w Dark Surface (F22)                   |
| Histosol (A1<br>Histic Epipe<br>Black Histic<br>Hydrogen S<br>Stratified La<br>Depleted Be<br>Thick Dark S<br>X Sandy Muck<br>Sandy Gley   | 1)<br>edon (A2)<br>; (A3)<br>Sulfide (A4)<br>ayers (A5)<br>elow Dark Surface<br>Surface (A12)<br>ky Mineral (S1)<br>red Matrix (S4)<br>ox (S5)<br>atrix (S6)  | (A11)      | MLRA 149B<br>Thin Dark Surf<br>High Chroma S<br>Loamy Mucky<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su<br>Depleted Dark                                    | )<br>Sands (S<br>Mineral (<br>Matrix (<br>x (F3)<br>ırface (F<br>Surface<br>sions (F8                                  | ) ( <b>LRR R,</b><br>11) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F7) | .RR R,<br>MLRA<br>R K, L)          | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>5 cm Mucky<br>Polyvalue Be<br>Thin Dark Su<br>Iron-Mangan<br>Piedmont Fle<br>Mesic Spodi<br>Red Parent I<br>Very Shallow                 | roblematic Hydric Soils <sup>3</sup> :<br>A10) (LRR K, L, MLRA 149B)<br>Redox (A16) (LRR K, L, R)<br>Peat or Peat (S3) (LRR K, L, R)<br>elow Surface (S8) (LRR K, L)<br>urface (S9) (LRR K, L)<br>ese Masses (F12) (LRR K, L, R)<br>podplain Soils (F19) (MLRA 149E<br>c (TA6) (MLRA 144A, 145, 149B)<br>Material (F21)  |
| Histosol (A1<br>Histic Epipe<br>Black Histic<br>Hydrogen S<br>Stratified La<br>Depleted Ba<br>Thick Dark S<br>X Sandy Much<br>Sandy Gley<br>Sandy Redo<br>Stripped Ma<br>X Dark Surfac | 1)<br>edon (A2)<br>c (A3)<br>Sulfide (A4)<br>ayers (A5)<br>elow Dark Surface<br>Surface (A12)<br>ky Mineral (S1)<br>red Matrix (S4)<br>ox (S5)<br>atrix (S6)<br>ce (S7)   |            | MLRA 149B<br>Thin Dark Surf<br>High Chroma S<br>Loamy Mucky<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su<br>Depleted Dark<br>Redox Depress<br>Marl (F10) (LR | )<br>Sands (S9)<br>Sands (S<br>Mineral I<br>Matrix (<br>X (F3)<br>Irface (F<br>Surface<br>sions (Fł<br><b>R K, L</b> ) | 6) ( <b>LRR R,</b><br>111) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F2)<br>(F2)<br>(F7)<br>(F7)                 | .RR R,<br>MLRA (<br>K, L)<br>K, L) | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>5 cm Mucky<br>Polyvalue Be<br>Thin Dark Su<br>Iron-Mangan<br>Piedmont Fle<br>Mesic Spodi<br>Red Parent I<br>Very Shallow<br>Other (Expla | roblematic Hydric Soils <sup>3</sup> :         A10) (LRR K, L, MLRA 149B)         Redox (A16) (LRR K, L, R)         Peat or Peat (S3) (LRR K, L, R)         elow Surface (S8) (LRR K, L)         urface (S9) (LRR K, L)         ese Masses (F12) (LRR K, L, R)         boodplain Soils (F19) (MLRA 149E)         c (TA6) (MLRA 144A, 145, 149B)         w Dark Surface (F22)                   |
| Histosol (A1<br>Histic Epipe<br>Black Histic<br>Hydrogen S<br>Stratified La<br>Depleted Be<br>Thick Dark S<br>X Sandy Muck<br>Sandy Gley<br>Sandy Redo<br>Stripped Ma<br>X Dark Surfac | 1)<br>edon (A2)<br>c (A3)<br>Sulfide (A4)<br>ayers (A5)<br>elow Dark Surface<br>Surface (A12)<br>ky Mineral (S1)<br>ved Matrix (S4)<br>ox (S5)<br>atrix (S6)<br>ce (S7)   |            | MLRA 149B<br>Thin Dark Surf<br>High Chroma S<br>Loamy Mucky<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su<br>Depleted Dark<br>Redox Depress<br>Marl (F10) (LR | )<br>Sands (S9)<br>Sands (S<br>Mineral I<br>Matrix (<br>X (F3)<br>Irface (F<br>Surface<br>sions (Fł<br><b>R K, L</b> ) | 6) ( <b>LRR R,</b><br>111) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F2)<br>(F2)<br>(F7)<br>(F7)                 | .RR R,<br>MLRA (<br>K, L)<br>K, L) | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>5 cm Mucky<br>Polyvalue Be<br>Thin Dark Su<br>Iron-Mangan<br>Piedmont Fle<br>Mesic Spodi<br>Red Parent I<br>Very Shallow                 | roblematic Hydric Soils <sup>3</sup> :           A10) (LRR K, L, MLRA 149B)           Redox (A16) (LRR K, L, R)           Peat or Peat (S3) (LRR K, L, R)           elow Surface (S8) (LRR K, L)           urface (S9) (LRR K, L)           ese Masses (F12) (LRR K, L, R)           boodplain Soils (F19) (MLRA 149E)           c (TA6) (MLRA 144A, 145, 149E)           w Dark Surface (F22) |
| Histosol (A1<br>Histic Epipe<br>Black Histic<br>Hydrogen S<br>Stratified La<br>Depleted Be<br>Thick Dark S<br>X Sandy Muck<br>Sandy Gley<br>Sandy Redo<br>Stripped Ma<br>X Dark Surfac | 1)<br>edon (A2)<br>c (A3)<br>Sulfide (A4)<br>ayers (A5)<br>elow Dark Surface<br>Surface (A12)<br>ky Mineral (S1)<br>red Matrix (S4)<br>ox (S5)<br>atrix (S6)<br>ce (S7)   | on and we  | MLRA 149B<br>Thin Dark Surf<br>High Chroma S<br>Loamy Mucky<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su<br>Depleted Dark<br>Redox Depress<br>Marl (F10) (LR | )<br>Sands (S9)<br>Sands (S<br>Mineral I<br>Matrix (<br>X (F3)<br>Irface (F<br>Surface<br>sions (Fł<br><b>R K, L</b> ) | 6) ( <b>LRR R,</b><br>111) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F2)<br>(F2)<br>(F7)<br>(F7)                 | .RR R,<br>MLRA (<br>K, L)<br>K, L) | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>5 cm Mucky<br>Polyvalue Be<br>Thin Dark Su<br>Iron-Mangan<br>Piedmont Fle<br>Mesic Spodi<br>Red Parent I<br>Very Shallow<br>Other (Expla | roblematic Hydric Soils <sup>3</sup> :           A10) (LRR K, L, MLRA 149B)           Redox (A16) (LRR K, L, R)           Peat or Peat (S3) (LRR K, L, R)           elow Surface (S8) (LRR K, L)           urface (S9) (LRR K, L)           ese Masses (F12) (LRR K, L, R)           boodplain Soils (F19) (MLRA 149E)           c (TA6) (MLRA 144A, 145, 149E)           w Dark Surface (F22) |
| Histosol (A1<br>Histic Epipe<br>Black Histic<br>Hydrogen S<br>Stratified La<br>Depleted Be<br>Thick Dark S<br>X Sandy Muck<br>Sandy Gley<br>Sandy Redo<br>Stripped Ma<br>X Dark Surfac | 1)<br>edon (A2)<br>c (A3)<br>Sulfide (A4)<br>ayers (A5)<br>elow Dark Surface<br>Surface (A12)<br>ky Mineral (S1)<br>red Matrix (S4)<br>ox (S5)<br>atrix (S6)<br>ce (S7)<br>rdrophytic vegetation<br>rer (if observed):<br>Roc | on and we  | MLRA 149B<br>Thin Dark Surf<br>High Chroma S<br>Loamy Mucky<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su<br>Depleted Dark<br>Redox Depress<br>Marl (F10) (LR | )<br>Sands (S9)<br>Sands (S<br>Mineral I<br>Matrix (<br>X (F3)<br>Irface (F<br>Surface<br>sions (Fł<br><b>R K, L</b> ) | 6) ( <b>LRR R,</b><br>111) ( <b>LRF</b><br>(F1) ( <b>LRF</b><br>(F2)<br>(F2)<br>(F7)<br>(F7)                 | .RR R,<br>MLRA (<br>K, L)<br>K, L) | Indicators for P<br>2 cm Muck (<br>Coast Prairie<br>5 cm Mucky<br>Polyvalue Be<br>Thin Dark Su<br>Iron-Mangan<br>Piedmont Fle<br>Mesic Spodi<br>Red Parent I<br>Very Shallow<br>Other (Expla | roblematic Hydric Soils <sup>3</sup> :           A10) (LRR K, L, MLRA 149B)           Redox (A16) (LRR K, L, R)           Peat or Peat (S3) (LRR K, L, R)           elow Surface (S8) (LRR K, L)           urface (S9) (LRR K, L)           ese Masses (F12) (LRR K, L, R)           boodplain Soils (F19) (MLRA 149E)           c (TA6) (MLRA 144A, 145, 149E)           w Dark Surface (F22) |

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs142p2\_051293.docx)

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: Loeffel    | Trib T11A       |                     |                          | City/County: Nassau, Ren   | nnselaer              | Samp              | ling Date:  | 10 Oct         | . 17 |
|--------------------------|-----------------|---------------------|--------------------------|----------------------------|-----------------------|-------------------|-------------|----------------|------|
| Applicant/Owner:         | GE/Arcadis      |                     |                          |                            | State:                | NY San            | npling Poin | t: <u> </u>    | )    |
| Investigator(s): JK, JI  | М               |                     |                          | Section, Townsh            | nip, Range: <u>N/</u> | A                 |             |                |      |
| Landform (hillside, terr | ace, etc.):     | Slope, Ravine       | Local re                 | elief (concave, convex, no | one): <u>None</u>     |                   | Slop        | e %: <u>20</u> | )-30 |
| Subregion (LRR or ML     | .RA): LRR F     | र                   | Lat: TBD                 | Long: TBD                  | C                     |                   | Datum:      | WGS 1          | 984  |
| Soil Map Unit Name:      | HoC - Hoosid    | ck Sandy, Gravel    | y Loam,                  |                            | NWI classifica        | ation: <u>N/A</u> |             |                |      |
| Are climatic / hydrolog  | ic conditions o | on the site typical | l for this time of year? | Yes X                      | No (I                 | lf no, explain    | in Remark   | s.)            |      |
| Are Vegetation           | , Soil          | , or Hydrology      | significantly disturb    | ed? Are "Normal C          | ircumstances"         | ' present?        | Yes X       | No             |      |
| Are Vegetation           | , Soil          | , or Hydrology      | naturally problemat      | ic? (If needed, exp        | plain any answ        | vers in Rema      | rks.)       |                |      |
| SUMMARY OF F             | INDINGS -       | Attach site i       | map showing samp         | ling point locations       | s, transects          | s, importa        | nt featui   | res, et        | c.   |
| Hydrophytic Vegetatio    | on Present?     | Yes                 | No                       | Is the Sampled Area        |                       |                   |             |                |      |
| Hydric Soil Present?     |                 | Yes                 | No                       | within a Wetland?          | Yes                   | No                |             |                |      |
| Wetland Hydrology P      | resent?         | Yes                 | No                       | If yes, optional Wetland   | I Site ID:            |                   |             |                |      |
| Remarks: (Explain a      | Iternative proc | cedures here or in  | n a separate report.)    |                            |                       |                   |             |                |      |

#### HYDROLOGY

| Wetland Hydrology Indicat   | tors:               |                         |                               |               | Secondary Indicators (min   | <u>imum of two required)</u> |  |  |
|-----------------------------|---------------------|-------------------------|-------------------------------|---------------|-----------------------------|------------------------------|--|--|
| Primary Indicators (minimum | n of one is require | Surface Soil Cracks (   | 36)                           |               |                             |                              |  |  |
| Surface Water (A1)          |                     | Water-                  | Stained Leaves (B9)           |               | Drainage Patterns (B1       | 10)                          |  |  |
| High Water Table (A2)       |                     |                         | Moss Trim Lines (B16)         |               |                             |                              |  |  |
| Saturation (A3)             |                     | Marl D                  | eposits (B15)                 |               | Dry-Season Water Table (C2) |                              |  |  |
| Water Marks (B1)            |                     | Hydro                   | Crayfish Burrows (C8)         |               |                             |                              |  |  |
| Sediment Deposits (B2)      |                     | Saturation Visible on / | Aerial Imagery (C9)           |               |                             |                              |  |  |
| Drift Deposits (B3)         |                     | Stunted or Stressed P   | Plants (D1)                   |               |                             |                              |  |  |
| Algal Mat or Crust (B4)     |                     | Geomorphic Position     | (D2)                          |               |                             |                              |  |  |
| Iron Deposits (B5)          |                     | Shallow Aquitard (D3)   | )                             |               |                             |                              |  |  |
| Inundation Visible on Ae    | rial Imagery (B7)   | Microtopographic Reli   | ef (D4)                       |               |                             |                              |  |  |
| Sparsely Vegetated Cor      | ncave Surface (B    | 8)                      |                               |               | FAC-Neutral Test (D5        | )                            |  |  |
| Field Observations:         |                     |                         |                               |               |                             |                              |  |  |
| Surface Water Present?      | Yes                 | No                      | Depth (inches):               |               |                             |                              |  |  |
| Water Table Present?        | Yes                 | No                      | Depth (inches):               |               |                             |                              |  |  |
| Saturation Present?         | Yes                 | No                      | Depth (inches):               | Wetlar        | d Hydrology Present?        | Yes No                       |  |  |
| (includes capillary fringe) |                     |                         |                               |               |                             |                              |  |  |
| Describe Recorded Data (st  | ∶eam gauge, mor     | nitoring well,          | aerial photos, previous inspe | ctions), if a | vailable:                   |                              |  |  |
| Remarks:                    |                     |                         |                               |               |                             |                              |  |  |
|                             |                     |                         |                               |               |                             |                              |  |  |
|                             |                     |                         |                               |               |                             |                              |  |  |
|                             |                     |                         |                               |               |                             |                              |  |  |
|                             |                     |                         |                               |               |                             |                              |  |  |
|                             |                     |                         |                               |               |                             |                              |  |  |
|                             |                     |                         |                               |               |                             |                              |  |  |
|                             |                     |                         |                               |               |                             |                              |  |  |
|                             |                     |                         |                               |               |                             |                              |  |  |
|                             |                     |                         |                               |               |                             |                              |  |  |

### **VEGETATION** – Use scientific names of plants.

Sampling Point: D

| Tree Stratum (Plot size: 10 Meters )                    | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test  | worksheet:    |                |                        |          |
|---|---------------------|----------------------|---------------------|---|---------------|----------------|------------------------|----------|
| 1. Tsuga canadensis (Eastern Hemlock)                   | 50                  | Yes                  |                     | Number of Demine  |               |                |                        |          |
| 2. Betula alleghaniensis (Yellow Birch)                 | 30                  | Yes                  |                     | Number of Domina<br>That Are OBL, FAC                   |               |                | 0                      | (A)      |
| 3   |                     |                      |                     | Total Number of D                                       | ominant       |                |                        |          |
| 4   |                     | <u> </u>             |                     | Species Across All                                      | Strata:       |                | 7                      | (B)      |
| 5   |                     | <u> </u>             |                     | Percent of Domina                                       | nt Species    |                |                        |          |
| 6   |                     | . <u> </u>           |                     | That Are OBL, FAC                                       |               |                | 0.0%                   | _(A/B    |
| 7   |                     | <u> </u>             |                     | Prevalence Index  | worksheet     | :              |                        |          |
|   | 80                  | =Total Cover         |                     | Total % Cove  | er of:        | М              | ultiply by:            |          |
| Sapling/Shrub Stratum (Plot size: 3 Meters )            |                     |                      |                     | OBL species   | 0             | x 1 =          | 0                      |          |
| 1. Betula alleghaniensis (Yellow Birch)                 | 10                  | Yes                  |                     | FACW species  | 0             | x 2 =          | 0                      |          |
| 2. Fraxinus pennsylvanica (Green Ash)                   | 5                   | Yes                  |                     | FAC species   | 0             | x 3 =          | 0                      |          |
| 3. Acer saccharinum (Sugar Maple)                       | 5                   | Yes                  |                     | FACU species  | 0             | x 4 =          | 0                      |          |
| 4. Rubus sp. (Raspberry/Blackberry Species)             | 2                   | No                   |                     | UPL species   | 0             | x 5 =          | 0                      |          |
| 5.  |                     |                      |                     | Column Totals:  | 0             | (A)            | 0                      | (E       |
| 6.  |                     |                      |                     | Prevalence  | Index = B/A   | <u> +</u>      |                        |          |
| 7.  |                     |                      |                     | Hydrophytic Vege  | tation Indi   | ators:         |                        |          |
|   | 22                  | =Total Cover         |                     | 1 - Rapid Test  |               |                | aetation               |          |
| Herb Stratum (Plot size: 1 Meter )                      |                     | -                    |                     | 2 - Dominance   |               |                | 5                      |          |
| 1. Polystichum acrostichoides (Christmas Fern)          | 40                  | Yes                  |                     | ## 3 - Prevalence                                       | Index is ≤3   | 0 <sup>1</sup> |                        |          |
| <ol> <li>Amphicarpaea bracteata (Hog peanut)</li> </ol> | 20                  | Yes                  |                     | 4 - Morphologi  |               |                | rovide sur             | portin   |
| 3. (Maple Species)                                      | 2                   | <u> </u>             |                     | data in Rem   | •             | •              |                        | •        |
| A. Thelypteris noveboracensis (New York Fern)           | 15                  | No No                |                     | Problematic H   | vdronhytic V  | enetati        | on <sup>1</sup> (Expla | ain)     |
| 5. Spahgnum sp. (Moss)                                  | 10                  | No No                |                     |   | yaropitytio v | ogotati        |                        |          |
| 6   | 10                  |                      |                     | <sup>1</sup> Indicators of hydri<br>present, unless dis |               |                |                        | must l   |
| 7   |                     |                      |                     | Definitions of Veg                                      | etation Str   | ata:           |                        |          |
| 8   |                     |                      |                     | <b>Tree</b> – Woody plar                                | nts 3 in (76  | cm) or         | more in d              | iamete   |
| 9.  |                     |                      |                     | at breast height (D                                     | •             | '              |                        | amen     |
| 10.   |                     |                      |                     | Sapling/shrub – V                                       | Voody plant   | e loce th      | an 3 in F              | )BH ai   |
| 11.   |                     |                      |                     | greater than or equ                                     | • •           |                |                        | Juita    |
| 12.   |                     |                      |                     |   | (             |                |                        |          |
|   | 87                  | =Total Cover         |                     | Herb – All herbace<br>of size, and woody                |               |                |                        | ardies   |
| Woody Vine Stratum (Plot size: 3 Meters                 |                     | -                    |                     |   |               |                |                        |          |
| 1,  |                     |                      |                     | Woody vines – All<br>height.                            | woody vine    | s great        | er than 3.2            | 28 ft ir |
| 0   |                     |                      |                     |   |               |                |                        |          |
| 3.  |                     | <u></u>              |                     | Hydrophytic   |               |                |                        |          |
| 4.  |                     |                      |                     | Vegetation<br>Present?                                  | Yes ####      | No             | ####                   |          |
| ····  |                     | -Total Course        |                     |   |               | NO             | immit                  |          |
|   |                     | =Total Cover         |                     |   |               |                |                        |          |

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: Loeffel    | Trib T11A        |                         |                  | City/Cou         | nty: <u>Nassau,</u> | Rennselaer         |               | Sa                    | ampling Date:  | 10 O   | )ct. 17 |
|--------------------------|------------------|-------------------------|------------------|------------------|---------------------|--------------------|---------------|-----------------------|----------------|--------|---------|
| Applicant/Owner:         | GE/Arcadis       |                         |                  |                  |                     | Sta                | te: <u> </u>  | NY S                  | Sampling Poir  | nt:    | Е       |
| Investigator(s): JK, J   | М                |                         |                  |                  | Section, Tow        | nship, Rang        | e: <u>N/A</u> | ۹                     |                |        |         |
| Landform (hillside, terr | race, etc.):     | Flat, Floodplain        | L                | ocal relief (con | cave, convex        | , none): <u>No</u> | ne            |                       | Slop           | be %:  | 0-5     |
| Subregion (LRR or ML     | _RA): <u>LRR</u> | R Lat                   | t: TBD           |                  | Long:               | TBD                |               |                       | Datum:         | WGS    | S 1984  |
| Soil Map Unit Name:      | HoC - Hoosi      | ck Sandy, Gravely L     | oam,             |                  |                     | NWI cla            | ssifica       | tion: N               | /A             |        |         |
| Are climatic / hydrolog  | jic conditions   | on the site typical for | this time of yea | r?               | Yes X               | No                 | (If           | <sup>,</sup> no, expl | lain in Remarl | ks.)   |         |
| Are Vegetation           | , Soil           | , or Hydrology          | significantly d  | isturbed?        | Are "Norma          | al Circumsta       | nces"         | present?              | ? Yes X        | No     |         |
| Are Vegetation           | , Soil           | , or Hydrology          | naturally prob   | lematic?         | (If needed,         | explain any        | answe         | ers in Re             | emarks.)       |        |         |
| SUMMARY OF F             | INDINGS -        | - Attach site ma        | p showing s      | ampling po       | oint locatio        | ons, trans         | sects         | , impo                | rtant featu    | res, o | etc.    |
| Hydrophytic Vegetati     | on Present?      | Yes                     | No               | Is the           | Sampled Are         | ea                 |               |                       |                |        |         |
| Hydric Soil Present?     |                  | Yes                     | No               |                  | a Wetland?          |                    | Yes           | N                     | lo             |        |         |
| Wetland Hydrology P      | 'resent?         | Yes                     | No               | If yes,          | optional Wetl       | and Site ID:       |               |                       |                |        |         |
| Remarks: (Explain a      | Iternative proc  | cedures here or in a    | separate report. | )                |                     |                    |               |                       |                |        |         |

#### HYDROLOGY

| Wetland Hydrology Indicators:  |                                       |                                 | Secondary Indicators (minimum of two required) |  |  |  |
|--|---------------------------------------|---------------------------------|--|--|--|--|
| Primary Indicators (minimum of one is require                            | ed; check all that apply)             |                                 | Surface Soil Cracks (B6)                       |  |  |  |
| Surface Water (A1)   | Water-Stained Leaves (B9)             |                                 | Drainage Patterns (B10)                        |  |  |  |
| High Water Table (A2)  | Aquatic Fauna (B13)                   |                                 | Moss Trim Lines (B16)                          |  |  |  |
| Saturation (A3)  | Marl Deposits (B15)                   |                                 | Dry-Season Water Table (C2)                    |  |  |  |
| Water Marks (B1)   | Hydrogen Sulfide Odor (C1)            |                                 | Crayfish Burrows (C8)                          |  |  |  |
| Sediment Deposits (B2)   | Oxidized Rhizospheres on Living Ro    | oots (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 | 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 (B                                    | 8)                                    |                                 | FAC-Neutral Test (D5)                          |  |  |  |
| Field Observations:  |                                       |                                 |  |  |  |  |
| Surface Water Present? Yes   | No Depth (inches):                    |                                 |  |  |  |  |
| Water Table Present? Yes   | No Depth (inches):                    |                                 |  |  |  |  |
|  |                                       |                                 |  |  |  |  |
| Saturation Present? Yes  | No Depth (inches):                    | Wetlan                          | d Hydrology Present? Yes No                    |  |  |  |
| Saturation Present? Yes<br>(includes capillary fringe)                   | · · · /                               | Wetlan                          | d Hydrology Present? Yes <u>No</u>             |  |  |  |
|  | No Depth (inches):                    |                                 |  |  |  |  |
| (includes capillary fringe)  | No Depth (inches):                    |                                 |  |  |  |  |
| (includes capillary fringe)  | No Depth (inches):                    |                                 |  |  |  |  |
| (includes capillary fringe)  | No Depth (inches):                    |                                 |  |  |  |  |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, mor | No Depth (inches):                    |                                 |  |  |  |  |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, mor | No Depth (inches):                    |                                 |  |  |  |  |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, mor | No Depth (inches):                    |                                 |  |  |  |  |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, mor | No Depth (inches):                    |                                 |  |  |  |  |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, mor | No Depth (inches):                    |                                 |  |  |  |  |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, mor | No Depth (inches):                    |                                 |  |  |  |  |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, mor | No Depth (inches):                    |                                 |  |  |  |  |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, mor | No Depth (inches):                    |                                 |  |  |  |  |

### **VEGETATION** – Use scientific names of plants.

Sampling Point:

Е

| <u>Tree Stratum</u> (Plot size: <u>10 Meters</u> )  | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test  | worksheet:    |                     |                        |         |
|---|---------------------|----------------------|---------------------|---|---------------|---------------------|------------------------|---------|
| 1. Fagus grandifolia (American Beech)               | 25                  | Yes                  |                     | Number of Domina  | nt Species    |                     |                        |         |
| 2. Acer saccharum (Sugar Maple)                     | 40                  | Yes                  |                     | That Are OBL, FA  |               |                     | 0                      | (A)     |
| 3. Tsuga canadensis (Eastern Hemlock)               | 20                  | Yes                  |                     | Total Number of D                                       | ominant       |                     |                        |         |
| ł   |                     |                      |                     | Species Across Al                                       |               |                     | 6                      | (B)     |
| 5   |                     |                      |                     | Percent of Domina                                       | nt Species    |                     |                        |         |
| 6   |                     | <b>_</b>             |                     | That Are OBL, FA  |               |                     | 0.0%                   | (A/I    |
| 7   |                     |                      |                     | Prevalence Index  | worksheet     | :                   |                        |         |
|   | 85                  | =Total Cover         |                     | Total % Cov   | ər of:        | М                   | ultiply by:            |         |
| Sapling/Shrub Stratum (Plot size: <u>3 Meters</u> ) |                     |                      |                     | OBL species   | 0             | x 1 =               | 0                      |         |
| 1. Fagus grandifolia (American Beech)               | 10                  | Yes                  |                     | FACW species  | 0             | x 2 =               | 0                      |         |
| 2   |                     |                      |                     | FAC species   | 0             | x 3 =               | 0                      |         |
| 3   |                     |                      |                     | FACU species  | 0             | x 4 =               | 0                      |         |
| 1   |                     |                      |                     | UPL species   | 0             | x 5 =               | 0                      |         |
| 5.  |                     |                      |                     | Column Totals:  | 0             | (A)                 | 0                      | (       |
| б   |                     |                      |                     | Prevalence  | Index = B/A   | <i>\</i> =          |                        |         |
| ,   |                     |                      |                     | Hydrophytic Veg   | etation India | cators:             |                        |         |
|   | 10                  | =Total Cover         |                     | 1 - Rapid Test  | for Hydroph   | iytic Ve            | getation               |         |
| <u>Herb Stratum</u> (Plot size: 1 Meter )           |                     | -                    |                     | 2 - Dominance   | e Test is >50 | %                   |                        |         |
| 1. Sphagnum sp. (Moss)                              | 20                  | Yes                  |                     | ## 3 - Prevalence                                       | e Index is ≤3 | .0 <sup>1</sup>     |                        |         |
| 2. Pilea pumila (Clearweed)                         | 10                  | No                   |                     | 4 - Morpholog   | ical Adaptati | ons <sup>1</sup> (P | rovide sup             | oporti  |
| 3. Polygonum sagittatum (Arrowleaf Tearthumb)       | 10                  | No                   |                     | data in Ren   | narks or on a | a separa            | ate sheet)             | -       |
| Carex sp. (Sedge species)                           | 20                  | Yes                  |                     | Problematic H   | ydrophytic V  | /egetati            | on <sup>1</sup> (Expla | ain)    |
| 5. Malva neglecta (Common Mallow)                   | 5                   | No                   |                     |   |               | -                   |                        |         |
| 6. Solidago sp. (Goldenrod species)                 | 2                   | No                   |                     | <sup>1</sup> Indicators of hydri<br>present, unless dis |               |                     |                        | must    |
| 7.  |                     |                      |                     | Definitions of Ve                                       | getation Str  | ata:                |                        |         |
| 3.  |                     |                      |                     |   | ata 2 in (7 G | om) or              | moro in d              | iomo    |
| Э.  |                     |                      |                     | <b>Tree</b> – Woody plan<br>at breast height (D         |               |                     |                        | ame     |
| 10.   |                     |                      |                     | Sapling/shrub – \                                       | Noody plant   |                     | on 2 in F              | , חסר   |
| 11.   |                     |                      |                     | greater than or equ                                     | • •           |                     |                        |         |
| 12.   |                     |                      |                     |   | ,             |                     |                        |         |
|   | 67                  | =Total Cover         |                     | Herb – All herbace<br>of size, and woody                |               |                     |                        | ardies  |
| Woody Vine Stratum (Plot size: 3 Meters )           |                     | -                    |                     | Weedu vines   |               |                     | ar than 2              | 00 # :  |
| 1.  |                     |                      |                     | Woody vines – Al<br>height.                             | woody vine    | s great             | er man 5.              | 20 11 1 |
| 2.  |                     |                      |                     |   |               |                     |                        |         |
| 3.  |                     | <u> </u>             |                     | Hydrophytic   |               |                     |                        |         |
| 4.  |                     | . <u> </u>           |                     | Vegetation<br>Present?                                  | Yes ####      | No                  | ####                   |         |
|   |                     | =Total Cover         |                     |   |               |                     |                        |         |
| Remarks: (Include photo numbers here or on a sepa   |                     | -                    |                     | 1   |               |                     |                        |         |

#### SOIL

Sampling Point:

| Depth<br>(inches)          | Matrix<br>Color (moist)    | %          | Color (moist)          | x Feature<br>% | Type <sup>1</sup> | Loc <sup>2</sup> | Texture                    | Remarks                                     |
|----------------------------|----------------------------|------------|------------------------|----------------|-------------------|------------------|----------------------------|---|
| (inches)                   |                            | 70         |                        |                | Туре              | LUC              | Texture                    | Kellaks                                     |
| 0-4                        | 10YR 3/1                   | 100        |                        |                |                   |                  | Mucky Loam/Clay            | Organic                                     |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
|                            |                            |            |                        |                |                   |                  |                            |   |
| Type: C=Co                 | ncentration, D=Depl        | etion, RM: | =Reduced Matrix, M     | IS=Mask        | ed Sand           | Grains.          | <sup>2</sup> Location: PL= | Pore Lining, M=Matrix.                      |
| Hydric Soil I              | ndicators:                 |            |                        |                |                   |                  | Indicators for             | Problematic Hydric Soils <sup>3</sup> :     |
| Histosol                   | ,                          |            | Polyvalue Belo         |                | ce (S8) (L        | .RR R,           |                            | (A10) ( <b>LRR K, L, MLRA 149B</b> )        |
| Histic Ep                  | ipedon (A2)                |            | MLRA 149B              | ,              |                   |                  |                            | rie Redox (A16) ( <b>LRR K, L, R</b> )      |
| Black His                  | ( )                        |            | Thin Dark Surf         |                |                   |                  |                            | xy Peat or Peat (S3) ( <b>LRR K, L, R</b> ) |
| Hydroger                   | n Sulfide (A4)             |            | High Chroma            | Sands (S       | 11) ( <b>LRR</b>  | R Κ, L)          | Polyvalue                  | Below Surface (S8) ( <b>LRR K, L</b> )      |
|                            | Layers (A5)                |            | Loamy Mucky            |                |                   | R K, L)          | Thin Dark                  | Surface (S9) ( <b>LRR K, L</b> )            |
| Depleted                   | Below Dark Surface         | (A11)      | Loamy Gleyed           | Matrix (F      | -2)               |                  | Iron-Mang                  | anese Masses (F12) ( <b>LRR K, L, R</b> )   |
| Thick Da                   | rk Surface (A12)           |            | Depleted Matri         | x (F3)         |                   |                  | Piedmont                   | Floodplain Soils (F19) ( <b>MLRA 149E</b>   |
| Sandy M                    | ucky Mineral (S1)          |            | Redox Dark Su          | urface (F      | 6)                |                  | Mesic Spo                  | dic (TA6) ( <b>MLRA 144A, 145, 149B</b>     |
| Sandy G                    | leyed Matrix (S4)          |            | Depleted Dark          | Surface        | (F7)              |                  | Red Parer                  | t Material (F21)                            |
| Sandy Re                   | edox (S5)                  |            | Redox Depres           | sions (F8      | 3)                |                  | Very Shall                 | ow Dark Surface (F22)                       |
| Stripped                   | Matrix (S6)                |            | Marl (F10) ( <b>LR</b> | R K, L)        |                   |                  | Other (Exp                 | olain in Remarks)                           |
| X Dark Sur                 | face (S7)                  |            |                        |                |                   |                  |                            |   |
|                            | h                          |            |                        |                |                   |                  |                            |   |
| <sup>3</sup> Indiantara of | nydropnylic vegetali       | on and we  | eliand hydrology mu    | ist be pre     | sent, uni         | ess alsu         |                            |   |
| <sup>3</sup> Indicators of | aver (if observed).        |            |                        |                |                   |                  |                            |   |
| Restrictive L              | ayer (if observed):<br>Roc | k          |                        |                |                   |                  |                            |   |
|                            | Roc                        | k          |                        |                |                   |                  | Hydric Soil Present        | ? Yes X No                                  |

| Project/Site: Loeffel    | Trib T11A        |                     |                          | City/County: Nassau, R    | Rennselaer            | Samp              | ling Date:   | 10 O   | ct. 17 |
|--------------------------|------------------|---------------------|--------------------------|---------------------------|-----------------------|-------------------|--------------|--------|--------|
| Applicant/Owner:         | GE/Arcadis       |                     |                          |                           | State:                | NY San            | npling Point | t:     | F      |
| Investigator(s): JK, J   | М                |                     |                          | Section, Towns            | ship, Range: <u>N</u> | /A                |              |        |        |
| Landform (hillside, terr | race, etc.):     | Slope, Ravine       | Local r                  | elief (concave, convex, r | none): None           |                   | Slope        | e %:   | 0-5    |
| Subregion (LRR or ML     | RA): LRR I       | R                   | Lat: TBD                 | Long: TI                  | BD                    |                   | Datum:       | WGS    | 5 1984 |
| Soil Map Unit Name:      | HoC - Hoosi      | ck Sandy, Gravel    | y Loam,                  |                           | NWI classific         | ation: <u>N/A</u> |              |        |        |
| Are climatic / hydrolog  | ic conditions of | on the site typical | l for this time of year? | Yes X                     | No (                  | If no, explain    | in Remarks   | s.)    |        |
| Are Vegetation           | , Soil           | , or Hydrology      | significantly disturb    | ed? Are "Normal           | Circumstances         | " present?        | Yes X        | No     |        |
| Are Vegetation           | , Soil           | , or Hydrology      | naturally problemat      | ic? (If needed, e         | explain any answ      | wers in Rema      | rks.)        |        |        |
| SUMMARY OF F             | INDINGS -        | Attach site r       | map showing samp         | ling point location       | ns, transect          | s, importa        | nt featur    | res, e | etc.   |
| Hydrophytic Vegetati     | on Present?      | Yes                 | No                       | ls the Sampled Area       | l                     |                   |              |        |        |
| Hydric Soil Present?     |                  | Yes                 | No                       | within a Wetland?         | Yes                   | No                |              |        |        |
| Wetland Hydrology P      | Present?         | Yes                 | No                       | If yes, optional Wetlar   | nd Site ID:           |                   |              |        |        |
| Remarks: (Explain a      | Iternative proc  | cedures here or in  | n a separate report.)    |                           |                       |                   |              |        |        |

| Wetland Hydrology Indica    | ators:                   |              |                                 |                 | Secondary Indicators (min | imum of two required) |
|-----------------------------|--------------------------|--------------|---------------------------------|-----------------|---------------------------|-----------------------|
| Primary Indicators (minimu  | <u>m of one is requi</u> | red; check a | all that apply)                 |                 | Surface Soil Cracks (B    | 36)                   |
| Surface Water (A1)          |                          | Wat          | er-Stained Leaves (B9)          |                 | Drainage Patterns (B1     | 0)                    |
| High Water Table (A2)       |                          | Aqu          | atic Fauna (B13)                |                 | Moss Trim Lines (B16      | )                     |
| Saturation (A3)             |                          | Mar          | l Deposits (B15)                |                 | Dry-Season Water Ta       | ble (C2)              |
| Water Marks (B1)            |                          | Hyd          | rogen Sulfide Odor (C1)         |                 | Crayfish Burrows (C8)     | )                     |
| Sediment Deposits (B2       | 2)                       | Oxic         | dized Rhizospheres on Living    | Roots (C3)      | Saturation Visible on A   | Aerial Imagery (C9)   |
| Drift Deposits (B3)         |                          | Pres         | sence of Reduced Iron (C4)      |                 | Stunted or Stressed P     | lants (D1)            |
| Algal Mat or Crust (B4)     | )                        | Rec          | ent Iron Reduction in Tilled S  | oils (C6)       | Geomorphic Position       | (D2)                  |
| Iron Deposits (B5)          |                          | Thin         | Muck Surface (C7)               |                 | Shallow Aquitard (D3)     |                       |
| Inundation Visible on A     | verial Imagery (B        | 7) Othe      | er (Explain in Remarks)         |                 | Microtopographic Reli     | ef (D4)               |
| Sparsely Vegetated Co       | oncave Surface (         | B8)          |                                 |                 | FAC-Neutral Test (D5      | )                     |
| Field Observations:         |                          |              |                                 |                 |                           |                       |
| Surface Water Present?      | Yes                      | No           | Depth (inches):                 |                 |                           |                       |
| Water Table Present?        | Yes                      | No           | Depth (inches):                 | -               |                           |                       |
| Saturation Present?         | Yes                      | No           | Depth (inches):                 | Wetla           | nd Hydrology Present?     | Yes No                |
| (includes capillary fringe) |                          |              |                                 | -               |                           |                       |
| Describe Recorded Data (s   | itream gauge, mo         | onitoring we | II, aerial photos, previous ins | pections), if a | available:                |                       |
| Remarks:                    |                          |              |                                 |                 |                           |                       |
|                             |                          |              |                                 |                 |                           |                       |
|                             |                          |              |                                 |                 |                           |                       |
|                             |                          |              |                                 |                 |                           |                       |
|                             |                          |              |                                 |                 |                           |                       |
|                             |                          |              |                                 |                 |                           |                       |
|                             |                          |              |                                 |                 |                           |                       |
|                             |                          |              |                                 |                 |                           |                       |
|                             |                          |              |                                 |                 |                           |                       |
|                             |                          |              |                                 |                 |                           |                       |

Sampling Point:

F

| <u>Tree Stratum</u> (Plot size: 10 Meters )             | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:  |
|---|---------------------|----------------------|---------------------|--|
| 1. Acer saccharum (Sugar Maple)                         | 20                  | Yes                  |                     | Number of Dominant Crossies  |
| 2. Tsuga canadensis (Eastern Hemlock)                   | 40                  | Yes                  |                     | Number of Dominant SpeciesThat Are OBL, FACW, or FAC:0(A)            |
| 3. Fagus grandifolia (American Beech)                   | 5                   | No                   |                     | Total Number of Deminent   |
| 4. Betula lenta (Black Birch)                           | 5                   | No                   |                     | Total Number of DominantSpecies Across All Strata:6(B)               |
| 5.  |                     |                      |                     | Demont of Deminant Species   |
| <br>Э.  |                     |                      |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC: 0.0% (A/F |
| ·   |                     |                      |                     | Prevalence Index worksheet:  |
|   | 70                  | =Total Cover         |                     | Total % Cover of: Multiply by:                                       |
| Sapling/Shrub Stratum (Plot size:3 Meters)              |                     |                      |                     | OBL species 0 x 1 = 0  |
| . Fraxinus pennsylvanica (Green Ash)                    | 10                  | Yes                  |                     | FACW species 0 x 2 = 0   |
| 2. Fagus grandifolia (American Beech)                   | 5                   | Yes                  |                     | FAC species 0 x 3 = 0  |
| 3. Acer saccharinum (Sugar Maple)                       | 10                  | Yes                  |                     | FACU species 0 x 4 = 0   |
| н   |                     |                      |                     | UPL species 0 x 5 = 0  |
| 5.  |                     |                      |                     | Column Totals: 0 (A) 0 (I  |
| )   |                     |                      |                     | Prevalence Index = B/A =   |
| ·   |                     |                      |                     | Hydrophytic Vegetation Indicators:                                   |
|   | 25                  | =Total Cover         |                     | 1 - Rapid Test for Hydrophytic Vegetation                            |
| <u>lerb Stratum</u> (Plot size:1 Meter)                 |                     |                      |                     | 2 - Dominance Test is >50%   |
| Thelypteris noveboracensis (New York Fern)              | 20                  | Yes                  |                     | 3 - Prevalence Index is ≤3.0 <sup>1</sup>                            |
| 2. Polystichum acrostichoides (Christmas Fern)          | 2                   | No                   |                     | 4 - Morphological Adaptations <sup>1</sup> (Provide supportion       |
| 3. Sphagnum sp. (Moss)                                  | 5                   | No                   |                     | data in Remarks or on a separate sheet)                              |
| 4.  |                     |                      |                     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)            |
| 5.  |                     |                      |                     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must    |
| S   |                     |                      |                     | present, unless disturbed or problematic.                            |
| ,   |                     |                      |                     | Definitions of Vegetation Strata:                                    |
| 3   |                     |                      |                     | <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diamet          |
| ).  |                     |                      |                     | at breast height (DBH), regardless of height.                        |
| 10  |                     |                      |                     | Sapling/shrub – Woody plants less than 3 in. DBH a                   |
| 11  |                     |                      |                     | greater than or equal to 3.28 ft (1 m) tall.                         |
| 2.  |                     |                      |                     | Herb – All herbaceous (non-woody) plants, regardles                  |
|   | 27                  | =Total Cover         |                     | of size, and woody plants less than 3.28 ft tall.                    |
| <u>Noody Vine Stratum</u> (Plot size: <u>3 Meters</u> ) |                     |                      |                     | Woody vines – All woody vines greater than 3.28 ft i                 |
| I   |                     |                      |                     | height.  |
| 2.  |                     |                      |                     |  |
| 3.  |                     |                      |                     | Hydrophytic<br>Vegetation  |
| 4.  |                     |                      |                     | Present? Yes <u>####</u> No ####                                     |
|   |                     | =Total Cover         |                     |  |

| Project/Site: Loeffel    | Trib T11A        |                     |                        | City/County: Nassau, Re     | ennselaer            | Samp              | ling Date:   | 10 Oct. 17      |
|--------------------------|------------------|---------------------|------------------------|-----------------------------|----------------------|-------------------|--------------|-----------------|
| Applicant/Owner:         | GE/Arcadis       |                     |                        |                             | State:               | NY Sam            | npling Point | t: <u> </u>     |
| Investigator(s): JK, J   | М                |                     |                        | Section, Townsł             | hip, Range: <u>N</u> | /A                |              |                 |
| Landform (hillside, terr | race, etc.):     | Slope, Ravine       | Local                  | relief (concave, convex, no | one): None           |                   | Slope        | e %: <u>0-5</u> |
| Subregion (LRR or ML     | RA): LRR F       | R I                 | Lat: TBD               | Long: TB                    | D                    |                   | Datum:       | WGS 1984        |
| Soil Map Unit Name:      | HoC - Hoosi      | ck Sandy, Gravely   | / Loam,                |                             | NWI classific        | ation: <u>N/A</u> |              |                 |
| Are climatic / hydrolog  | ic conditions of | on the site typical | for this time of year? | Yes X                       | No (                 | (If no, explain   | in Remarks   | s.)             |
| Are Vegetation           | , Soil           | , or Hydrology      | significantly distur   | bed? Are "Normal C          | Circumstances        | " present?        | Yes X        | No              |
| Are Vegetation           | , Soil           | , or Hydrology      | naturally problema     | tic? (If needed, ex         | plain any ans        | wers in Rema      | rks.)        |                 |
| SUMMARY OF F             | INDINGS -        | Attach site n       | nap showing sam        | pling point location        | s, transect          | s, importa        | nt featur    | es, etc.        |
| Hydrophytic Vegetation   | on Present?      | Yes                 | No                     | Is the Sampled Area         |                      |                   |              |                 |
| Hydric Soil Present?     |                  | Yes                 | No                     | within a Wetland?           | Yes                  | No                |              |                 |
| Wetland Hydrology P      | Present?         | Yes                 | No                     | If yes, optional Wetland    | d Site ID:           |                   |              |                 |
| Remarks: (Explain a      | Iternative proc  | cedures here or in  | a separate report.)    |                             |                      |                   |              |                 |

| Wetland Hydrology Indicators:                 |   |               | Secondary Indicators (minimum of two required) |
|---|---|---------------|--|
| Primary Indicators (minimum of one is require | ed; check all that apply)                     |               | Surface Soil Cracks (B6)                       |
| Surface Water (A1)                            | Water-Stained Leaves (B9)                     |               | Drainage Patterns (B10)                        |
| High Water Table (A2)                         | Aquatic Fauna (B13)                           |               | Moss Trim Lines (B16)                          |
| Saturation (A3)                               | Marl Deposits (B15)                           |               | Dry-Season Water Table (C2)                    |
| Water Marks (B1)                              | Hydrogen Sulfide Odor (C1)                    |               | Crayfish Burrows (C8)                          |
| Sediment Deposits (B2)                        | Oxidized Rhizospheres on Living Ro            | ots (C3)      | Saturation Visible on Aerial Imagery (C9)      |
| Drift Deposits (B3)                           | Presence of Reduced Iron (C4)                 |               | Stunted or Stressed Plants (D1)                |
| Algal Mat or Crust (B4)                       | Recent Iron Reduction in Tilled Soils         | (C6)          | Geomorphic Position (D2)                       |
| Iron Deposits (B5)                            | Thin Muck Surface (C7)                        |               | Shallow Aquitard (D3)                          |
| Inundation Visible on Aerial Imagery (B7)     | Other (Explain in Remarks)                    |               | Microtopographic Relief (D4)                   |
| Sparsely Vegetated Concave Surface (B         | 8)  |               | FAC-Neutral Test (D5)                          |
| Field Observations:                           |   |               |  |
| Surface Water Present? Yes                    | No Depth (inches):                            |               |  |
| Water Table Present? Yes                      | No Depth (inches):                            |               |  |
| Saturation Present? Yes                       | No Depth (inches):                            | Wetland       | d Hydrology Present? Yes No                    |
| (includes capillary fringe)                   |   |               |  |
| Describe Recorded Data (stream gauge, mor     | nitoring well, aerial photos, previous inspec | tions), if av | vailable:                                      |
| Remarks:                                      |   |               |  |
|   |   |               |  |
|   |   |               |  |
|   |   |               |  |
|   |   |               |  |
|   |   |               |  |
|   |   |               |  |

Sampling Point:

G

| <u>Tree Stratum</u> (Plot size:10 Meters)             | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test  | worksheet:     |             |                       |         |
|---|---------------------|----------------------|---------------------|---|----------------|-------------|-----------------------|---------|
| 1. Betula alleghaniensis (Yellow Birch)               | 5                   | No                   |                     | Number (D)  |                |             |                       |         |
| 2. Fagus grandifolia (American Beech)                 | 20                  | Yes                  |                     | Number of Domin<br>That Are OBL, FA                   |                | :           | 0                     | (A)     |
| 3. Tsuga canadensis (Eastern Hemlock)                 | 60                  | Yes                  |                     | Total Number of F                                     | lominant       |             |                       | -       |
| 4.  |                     |                      |                     | Total Number of E<br>Species Across A                 |                |             | 5                     | (B)     |
| 5.  |                     |                      |                     |   |                |             |                       | _ ` `   |
| 6.  |                     | • •                  |                     | Percent of Domina<br>That Are OBL, FA                 |                | : (         | 0.0%                  | (A/E    |
| 7.  |                     | • <u> </u>           |                     | Prevalence Index                                      |                | _           | -                     |         |
|   | 85                  | =Total Cover         |                     | Total % Cov   | er of:         | Mu          | ltiply by:            |         |
| Sapling/Shrub Stratum (Plot size: 3 Meters )          |                     | -                    |                     | OBL species   | 0              | x 1 =       | 0                     |         |
| 1. Fagus grandifolia (American Beech)                 | 5                   | Yes                  |                     | FACW species  | 0              | x 2 =       | 0                     |         |
| 2. Acer rubrum (Red Maple)                            | 20                  | Yes                  |                     | FAC species   | 0              | x 3 =       | 0                     |         |
| 3.  |                     | • <u> </u>           |                     | FACU species  | 0              | x 4 =       | 0                     |         |
| 4.  |                     |                      |                     | UPL species   | 0              | x 5 =       | 0                     |         |
| 5   |                     |                      |                     | Column Totals:  | 0              | (A)         | 0                     | (E      |
|   |                     |                      |                     |   | e Index = B//  |             | -                     |         |
| ,   |                     |                      |                     | Hydrophytic Veg                                       |                |             |                       | _       |
|   | 25                  | =Total Cover         |                     | 1 - Rapid Tes   |                |             | etation               |         |
| <u>Herb Stratum</u> (Plot size: 1 Meter )             |                     |                      |                     | 2 - Dominanc  |                |             | clation               |         |
| I. Thelypteris noveboracensis (New York Fern)         | 25                  | Yes                  |                     | ## 3 - Prevalence                                     |                |             |                       |         |
|   |                     | 165                  |                     | 4 - Morpholog   |                |             | wido cup              | nortir  |
|   |                     |                      |                     |   | marks or on a  |             |                       | portin  |
|   |                     |                      |                     | Problematic H   | hydrophytic \  | /ogotatio   | n <sup>1</sup> (Evolo | in)     |
|   |                     | ·                    |                     |   |                | eyelalio    | п (схріа              | ,       |
| 6.  |                     |                      |                     | <sup>1</sup> Indicators of hydr<br>present, unless di |                |             |                       | must    |
| 7   |                     |                      |                     | Definitions of Ve                                     |                |             | 0.                    |         |
| 7<br>3.   |                     | • •                  |                     |   | -              |             |                       |         |
| )   |                     |                      |                     | <b>Tree</b> – Woody pla<br>at breast height (I        |                |             |                       | amet    |
| 10  |                     |                      |                     | Sapling/shrub –                                       | Woody plant    | s less tha  | an 3 in. D            | BH a    |
| 11  |                     |                      |                     | greater than or eq                                    | ual to 3.28 ft | : (1 m) tal | Ι.                    |         |
| 12  |                     |                      |                     | Herb – All herbac                                     | eous (non-w    | oody) pla   | ints, rega            | rdles   |
|   | 25                  | =Total Cover         |                     | of size, and wood                                     |                |             |                       |         |
| Woody Vine Stratum (Plot size: <u>3 Meters</u> )<br>1 |                     |                      |                     | Woody vines – A<br>height.                            | ll woody vine  | es greate   | r than 3.2            | 28 ft i |
| 2.  |                     |                      |                     |   |                |             |                       |         |
|   |                     | • •                  |                     | Hydrophytic   |                |             |                       |         |
| 4.  |                     |                      |                     | Vegetation<br>Present?                                | Yes ####       | No          | ####                  |         |
| <del>*</del>  |                     |                      |                     | Fiesent:  |                |             | <del>mm</del>         |         |
|   |                     | =Total Cover         |                     |   |                |             |                       |         |

| Project/Site: Loeffel    | Trib T11A       |                     |                          | City/County: <u>Nassau, I</u> | Rennselaer             | Samp              | ling Date:   | 10 O  | ct. 17 |
|--------------------------|-----------------|---------------------|--------------------------|-------------------------------|------------------------|-------------------|--------------|-------|--------|
| Applicant/Owner:         | GE/Arcadis      |                     |                          |                               | State:                 | NY San            | npling Point | t:    | Н      |
| Investigator(s): JK, J   | М               |                     |                          | Section, Towr                 | nship, Range: <u>N</u> | /A                |              |       |        |
| Landform (hillside, terr | race, etc.):    | Slope, Ravine       | Local re                 | elief (concave, convex,       | none): None            |                   | Slope        | e %:  | 0-5    |
| Subregion (LRR or ML     | RA): LRR F      | R                   | Lat: TBD                 | Long: T                       | ſBD                    |                   | Datum:       | WGS   | 5 1984 |
| Soil Map Unit Name:      | HoC - Hoosi     | ck Sandy, Gravel    | y Loam,                  |                               | NWI classific          | ation: <u>N/A</u> |              |       |        |
| Are climatic / hydrolog  | ic conditions o | on the site typical | l for this time of year? | Yes X                         | No (                   | (If no, explain   | in Remarks   | s.)   |        |
| Are Vegetation           | , Soil          | , or Hydrology      | significantly disturb    | ed? Are "Norma                | l Circumstances        | " present?        | Yes X        | No    |        |
| Are Vegetation           | , Soil          | , or Hydrology      | naturally problemat      | ic? (If needed,               | explain any ans        | wers in Rema      | rks.)        |       |        |
| SUMMARY OF F             | INDINGS -       | Attach site r       | map showing samp         | oling point locatio           | ns, transect           | s, importa        | nt featur    | es, e | etc.   |
| Hydrophytic Vegetation   | on Present?     | Yes                 | No                       | Is the Sampled Area           | a                      |                   |              |       |        |
| Hydric Soil Present?     |                 | Yes                 | No                       | within a Wetland?             | Yes                    | No                |              |       |        |
| Wetland Hydrology P      | Present?        | Yes                 | No                       | If yes, optional Wetla        | and Site ID:           |                   |              |       |        |
| Remarks: (Explain a      | Iternative proc | cedures here or in  | n a separate report.)    |                               |                        |                   |              |       |        |

| Wetland Hydrology Indica    | ators:            |                |                                   |                 | Secondary Indicators (min | <u>nimum of two required)</u> |
|-----------------------------|-------------------|----------------|-----------------------------------|-----------------|---------------------------|-------------------------------|
| Primary Indicators (minimu  | m of one is requi | red; check al  | l that apply)                     |                 | Surface Soil Cracks (I    | B6)                           |
| Surface Water (A1)          |                   | Wate           | r-Stained Leaves (B9)             |                 | Drainage Patterns (B      | 10)                           |
| High Water Table (A2)       |                   | Aqua           | tic Fauna (B13)                   |                 | Moss Trim Lines (B16      | 6)                            |
| Saturation (A3)             |                   | Marl           | Deposits (B15)                    |                 | Dry-Season Water Ta       | ble (C2)                      |
| Water Marks (B1)            |                   | Hydro          | ogen Sulfide Odor (C1)            |                 | Crayfish Burrows (C8      | )                             |
| Sediment Deposits (B2       | 2)                | Oxidi          | zed Rhizospheres on Living        | Roots (C3)      | Saturation Visible on     | Aerial Imagery (C9)           |
| Drift Deposits (B3)         |                   | Prese          | ence of Reduced Iron (C4)         |                 | Stunted or Stressed F     | Plants (D1)                   |
| Algal Mat or Crust (B4)     | )                 | Rece           | nt Iron Reduction in Tilled Se    | oils (C6)       | Geomorphic Position       | (D2)                          |
| Iron Deposits (B5)          |                   | Thin           | Muck Surface (C7)                 |                 | Shallow Aquitard (D3)     | )                             |
| Inundation Visible on A     | erial Imagery (B  | 7) Other       | <sup>-</sup> (Explain in Remarks) |                 | Microtopographic Reli     | ief (D4)                      |
| Sparsely Vegetated Co       | oncave Surface (  | B8)            |                                   |                 | FAC-Neutral Test (D5      | 5)                            |
| Field Observations:         |                   |                |                                   |                 |                           |                               |
| Surface Water Present?      | Yes               | No             | Depth (inches):                   |                 |                           |                               |
| Water Table Present?        | Yes               | No             | Depth (inches):                   | -               |                           |                               |
| Saturation Present?         | Yes               | No             | Depth (inches):                   | -<br>Wetlar     | nd Hydrology Present?     | Yes No                        |
| (includes capillary fringe) |                   |                |                                   | -               |                           |                               |
| Describe Recorded Data (s   | tream gauge, m    | onitoring well | , aerial photos, previous insį    | pections), if a | available:                |                               |
| Remarks:                    |                   |                |                                   |                 |                           |                               |
|                             |                   |                |                                   |                 |                           |                               |
|                             |                   |                |                                   |                 |                           |                               |
|                             |                   |                |                                   |                 |                           |                               |
|                             |                   |                |                                   |                 |                           |                               |
|                             |                   |                |                                   |                 |                           |                               |
|                             |                   |                |                                   |                 |                           |                               |
|                             |                   |                |                                   |                 |                           |                               |
|                             |                   |                |                                   |                 |                           |                               |
|                             |                   |                |                                   |                 |                           |                               |

Sampling Point:

Н

| 3.  | <u>Tree Stratum</u> (Plot size: <u>10 Meters</u> ) | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status               | Dominance Test     | worksheet     |                      |                        |         |
|---|--|---------------------|----------------------|-----------------------------------|--------------------|---------------|----------------------|------------------------|---------|
| 2.         Acer saccharum (Sugar Maple)         50         Yes         That Are OBL, FACW, or FAC:         0         (A)           5.   | . Tsuga canadensis (Eastern Hemlock)               | 65                  | Yes                  |                                   | Number of Domin    | ant Spaciae   |                      |                        |         |
| 1.       Total Number of Dominant         5.       Species Across Al Strata:       6       (B)         5.       Species Across Al Strata:       6       (C)         7.       Species Across Al Strata:       6       (C)         7.       Species Across Al Strata:       6       (C)         7.       Species Across Al Strata:       6       (C)         8.       Species Across Al Strata:       6       (C)         9.       Acer saccharum (Sugar Maple)       30       Yes       FAC Species       0       x 1 =       0         8.       Species Q       x 3 =       0       FAC Species       0       x 4 =       0         9.       Acer saccharum (Sugar Maple)       30       Yes       FAC Species       0       x 4 =       0         9.       Column Totals:       0       (A)       0       (C)       Prevalence Index = B/A =   | 2. Acer saccharum (Sugar Maple)                    | 50                  | Yes                  |                                   |                    |               |                      | 0                      | (A)     |
| 3.  | 3  |                     | <b>.</b>             |                                   | Total Number of D  | ominant       |                      |                        |         |
| 3.  |  |                     | ·                    |                                   | Species Across Al  | ll Strata:    |                      | 6                      | (B)     |
| I15         =Total Cover         Total % Cover of:         Multiply by:           Sapling/Shrub Stratum         (Plot size:   |  |                     | ·                    |                                   |                    |               | :                    | 0.0%                   | _(A/E   |
| Sapling/Shrub Stratum       (Plot size:   | 7  |                     |                      |                                   | Prevalence Index   | workshee      | t:                   |                        |         |
| 1.       Fagus grandiolia (American Beech)       20       Yes       FACW species       0       x 2 =       0         2.       Acer saccharum (Sugar Maple)       30       Yes       FACW species       0       x 3 =       0         3.   |  | 115                 | =Total Cover         |                                   | Total % Cov        | er of:        | М                    | ultiply by:            |         |
| 2.       Acer saccharum (Sugar Maple)       30       Yes       FAC species       0       x 3 =       0         3.   | Sapling/Shrub Stratum (Plot size:3 Meters)         |                     |                      |                                   | OBL species        | 0             | x 1 =                | 0                      |         |
| 3.  | 1. Fagus grandifolia (American Beech)              | 20                  | Yes                  |                                   | FACW species       | 0             | x 2 =                | 0                      |         |
| 4.  | 2. Acer saccharum (Sugar Maple)                    | 30                  | Yes                  |                                   | FAC species        | 0             | x 3 =                | 0                      |         |
| 5.  | 3.   |                     |                      |                                   | FACU species       | 0             | x 4 =                | 0                      |         |
| 5.  | 4.   |                     |                      |                                   | UPL species        | 0             | x 5 =                | 0                      |         |
| 3.  | 5  |                     |                      |                                   | Column Totals:     | 0             | (A)                  | 0                      | (E      |
| 7.  |  |                     |                      |                                   | Prevalence         | Index = B/    | A =                  |                        |         |
|   | 7  |                     |                      |                                   | Hydrophytic Veg    | etation Ind   | cators:              |                        |         |
| Herb Stratum       (Plot size:1 Meter)         1.       Thelypteris noveboracensis (New York Fern)       35       Yes         2.       Sphagnum sp. (Moss)       10       Yes         3.       10       Yes       4       Morphological Adaptations <sup>1</sup> (Provide supportidations)         3.       10       Yes       4       Morphological Adaptations <sup>1</sup> (Provide supportidations)         5.       10       Yes       4       Morphological Adaptations <sup>1</sup> (Provide supportidations)         5.       10       Yes       4       Morphological Adaptations <sup>1</sup> (Provide supportidations)         5.       10       10       Yes       10       Yes         3.       10       Yes       10       Yes       10         5.       10       10       Yes       10       Yes       10         5.       10       10       10       Yes       Yes       Yes       10         6.       10       10       10       Yes       Yes       Yes       Yes       Yes         10.       10       10       Yes       Yes |  | 50                  | =Total Cover         |                                   | 1 - Rapid Tes      | t for Hydrop  | hytic Ve             | getation               |         |
| 2.       Sphagnum sp. (Moss)       10       Yes       4 - Morphological Adaptations <sup>1</sup> (Provide supportidata in Remarks or on a separate sheet)         3.  | Herb Stratum (Plot size: 1 Meter )                 |                     | -                    |                                   |                    |               | -                    | -                      |         |
| 2.       Sphagnum sp. (Moss)       10       Yes       4 - Morphological Adaptations <sup>1</sup> (Provide supportidata in Remarks or on a separate sheet)         3.  | 1. Thelypteris noveboracensis (New York Fern)      | 35                  | Yes                  |                                   | ## 3 - Prevalence  | e Index is ≤3 | 3.0 <sup>1</sup>     |                        |         |
| 3.  |  | 10                  | Yes                  |                                   | 4 - Morpholog      | ical Adaptat  | ions <sup>1</sup> (P | rovide sup             | oportii |
| 5.  |  |                     |                      |                                   | data in Rer        | marks or on   | a separa             | ate sheet)             |         |
| 6.  |  |                     |                      |                                   | Problematic H      | lydrophytic ' | Vegetati             | on <sup>1</sup> (Expla | ain)    |
| 7.  |  |                     | ·                    |                                   | -                  |               |                      |                        | must    |
| 9.  | _  |                     |                      |                                   | Definitions of Ve  | getation St   | rata:                |                        |         |
| 9.  | 8.   |                     |                      |                                   | Tree – Woody pla   | nts 3 in (7 f | S cm) or             | more in d              | iamet   |
| 11.   | 9.   |                     |                      |                                   |                    | •             | ,                    |                        | amet    |
| 11.   | 10   |                     |                      |                                   | Sapling/shrub – \  | Woody plan    | ts less th           | nan 3 in T             | )BH a   |
| 45       =Total Cover         Woody Vine Stratum       (Plot size: 3 Meters )         1.  | 11   |                     |                      |                                   |                    |               |                      |                        | bira    |
| Woody Vine Stratum       (Plot size: 3 Meters )       Woody vines - All woody vines greater than 3.28 ft         1.   | 12   |                     |                      |                                   |                    |               |                      |                        | ardles  |
| Woody vines - All woody vines greater than 3.28 ft         1.   |  | 45                  | =Total Cover         |                                   | of size, and woody | y plants less | than 3.              | 28 ft tall.            |         |
| 2.  | ,,,,,  |                     |                      |                                   | -                  | ll woody vin  | es great             | er than 3.             | 28 ft i |
| 3.  |  |                     | ·                    |                                   |                    |               |                      |                        |         |
| 4 Vegetation Vegetation Vegetation Present? Yes <u>####</u> No <u>####</u>  |  |                     | ·                    |                                   |                    |               |                      |                        |         |
|   |  |                     | ·                    |                                   | -                  | Yes ####      | No                   | ####                   |         |
|   |  |                     |                      | nt tes <u>####</u> NO <u>####</u> |                    |               |                      |                        |         |

| Project/Site: Loeffel    | Trib T11A       |                       |                       | City/Cou        | nty: <u>Nassau, R</u> | ennselaer             | San                | npling Date: | 10 Oct. 17         |
|--------------------------|-----------------|-----------------------|-----------------------|-----------------|-----------------------|-----------------------|--------------------|--------------|--------------------|
| Applicant/Owner:         | GE/Arcadis      |                       |                       |                 |                       | State:                | NY Sa              | ampling Poir | nt: <u>I</u>       |
| Investigator(s): JK, JI  | М               |                       |                       |                 | Section, Towns        | ship, Range: <u>N</u> | I/A                |              |                    |
| Landform (hillside, terr | ace, etc.):     | Slope, Ravine         | Lo                    | cal relief (con | cave, convex, n       | none): <u>None</u>    |                    | Slop         | be %: <u>20-30</u> |
| Subregion (LRR or ML     | .RA): LRR F     | <u>२</u> ।            | _at: <u>TBD</u>       |                 | Long: TE              | 3D                    |                    | Datum:       | WGS 1984           |
| Soil Map Unit Name:      | HoC - Hoosid    | ck Sandy, Gravely     | <sup>,</sup> Loam,    |                 |                       | NWI classifi          | cation: <u>N/A</u> | N N          |                    |
| Are climatic / hydrolog  | ic conditions o | on the site typical f | for this time of year | ?               | Yes X                 | No                    | (lf no, expla      | in in Remarl | ks.)               |
| Are Vegetation           | , Soil          | , or Hydrology        | significantly dis     | sturbed?        | Are "Normal           | Circumstances         | s" present?        | Yes X        | No                 |
| Are Vegetation           | , Soil          | , or Hydrology        | naturally proble      | ematic?         | (If needed, e         | xplain any ans        | wers in Ren        | narks.)      |                    |
| SUMMARY OF F             | INDINGS -       | Attach site m         | nap showing sa        | ampling po      | oint location         | ns, transect          | ts, import         | ant featu    | res, etc.          |
| Hydrophytic Vegetatio    | on Present?     | Yes                   | No                    | Is the          | Sampled Area          |                       |                    |              |                    |
| Hydric Soil Present?     |                 | Yes                   | No                    | within          | a Wetland?            | Yes                   | No                 |              |                    |
| Wetland Hydrology P      | resent?         | Yes                   | No                    | If yes,         | optional Wetlan       | nd Site ID:           |                    |              |                    |
| Remarks: (Explain a      | Iternative proc | edures here or in     | a separate report.)   |                 |                       |                       |                    |              |                    |

| Wetland Hydrology Indicat   | ors:              |                |                                  |               | Secondary Indicators (min | imum of two required) |
|-----------------------------|-------------------|----------------|----------------------------------|---------------|---------------------------|-----------------------|
| Primary Indicators (minimum | of one is require | ed; check all  | that apply)                      |               | Surface Soil Cracks (     | 36)                   |
| Surface Water (A1)          |                   | Water-         | Stained Leaves (B9)              |               | Drainage Patterns (B1     | 0)                    |
| High Water Table (A2)       |                   | Aquati         | c Fauna (B13)                    |               | Moss Trim Lines (B16      | )                     |
| Saturation (A3)             |                   | Marl D         | eposits (B15)                    |               | Dry-Season Water Ta       | ble (C2)              |
| Water Marks (B1)            |                   | Hydrog         | gen Sulfide Odor (C1)            |               | Crayfish Burrows (C8)     | )                     |
| Sediment Deposits (B2)      |                   | Oxidize        | ed Rhizospheres on Living Ro     | oots (C3)     | Saturation Visible on /   | Aerial Imagery (C9)   |
| Drift Deposits (B3)         |                   | Preser         | nce of Reduced Iron (C4)         |               | Stunted or Stressed P     | lants (D1)            |
| Algal Mat or Crust (B4)     |                   | Recen          | t Iron Reduction in Tilled Soils | s (C6)        | Geomorphic Position       | (D2)                  |
| Iron Deposits (B5)          |                   | Thin M         | uck Surface (C7)                 |               | Shallow Aquitard (D3)     | 1                     |
| Inundation Visible on Ae    | rial Imagery (B7) | Other          | (Explain in Remarks)             |               | Microtopographic Reli     | ef (D4)               |
| Sparsely Vegetated Con      | cave Surface (B   | 8)             |                                  |               | FAC-Neutral Test (D5      | )                     |
| Field Observations:         |                   |                |                                  |               |                           |                       |
| Surface Water Present?      | Yes               | No             | Depth (inches):                  |               |                           |                       |
| Water Table Present?        | Yes               | No             | Depth (inches):                  |               |                           |                       |
| Saturation Present?         | Yes               | No             | Depth (inches):                  | Wetlan        | d Hydrology Present?      | Yes No                |
| (includes capillary fringe) |                   |                |                                  |               |                           |                       |
| Describe Recorded Data (str | eam gauge, mor    | nitoring well, | aerial photos, previous inspe    | ctions), if a | vailable:                 |                       |
| Remarks:                    |                   |                |                                  |               |                           |                       |
| Remarks.                    |                   |                |                                  |               |                           |                       |
|                             |                   |                |                                  |               |                           |                       |
|                             |                   |                |                                  |               |                           |                       |
|                             |                   |                |                                  |               |                           |                       |
|                             |                   |                |                                  |               |                           |                       |
|                             |                   |                |                                  |               |                           |                       |
|                             |                   |                |                                  |               |                           |                       |
|                             |                   |                |                                  |               |                           |                       |
|                             |                   |                |                                  |               |                           |                       |
|                             |                   |                |                                  |               |                           |                       |

Sampling Point:

T

| <u>Tree Stratum</u> (Plot size: <u>10 Meters</u> )           | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test  | worksheet:      |           |                        |         |
|--|---------------------|----------------------|---------------------|---|-----------------|-----------|------------------------|---------|
| 1. Betula alleghaniensis (Yellow Birch)                      | 10                  | No                   |                     | Number of Domin                                       | ant Spacias     |           |                        |         |
| 2. Hamamelis virginiana (Witch Hazel)                        | 25                  | Yes                  |                     | That Are OBL, FA                                      | •               | :         | 0                      | (A)     |
| 3. Fagus grandifolia (American Beech)                        | 50                  | Yes                  |                     | Total Number of D                                     | Dominant        |           |                        |         |
| 4  |                     |                      |                     | Species Across A                                      |                 |           | 6                      | (B)     |
| 5<br>6   |                     |                      |                     | Percent of Domin<br>That Are OBL, FA                  | •               | :         | 0.0%                   | _(A/E   |
| 7.   |                     |                      |                     | Prevalence Index                                      | k worksheet     | :         |                        |         |
|  | 85                  | =Total Cover         |                     | Total % Cov   | ver of:         | М         | ultiply by:            |         |
| Sapling/Shrub Stratum (Plot size:3 Meters)                   |                     | -                    |                     | OBL species   | 0               | x 1 =     | 0                      |         |
| 1. Betula alleghaniensis (Yellow Birch)                      | 10                  | Yes                  |                     | FACW species  | 0               | x 2 =     | 0                      |         |
| 2. Acer rubrum (Red Maple)                                   | 10                  | Yes                  |                     | FAC species   | 0               | x 3 =     | 0                      |         |
| 3.   |                     |                      |                     | FACU species  | 0               | x 4 =     | 0                      |         |
| 4.   |                     |                      |                     | UPL species   | 0               | x 5 =     | 0                      |         |
| 5.   |                     |                      |                     | Column Totals:  | 0               | (A)       | 0                      | (E      |
| 6.   |                     | •                    |                     | Prevalence  | e Index = B//   |           |                        |         |
| 7.   |                     | ·                    |                     | Hydrophytic Veg                                       | etation Indi    | cators:   |                        |         |
|  | 20                  | =Total Cover         |                     | 1 - Rapid Tes   |                 |           |                        |         |
| Herb Stratum (Plot size: 1 Meter )                           |                     |                      |                     | 2 - Dominanc  |                 | -         | 5                      |         |
| 1. Thelypteris noveboracensis (New York Fern)                | 30                  | Yes                  |                     | ## 3 - Prevalenc                                      |                 |           |                        |         |
| 2. Polystichum acrostichoides (Christmas Fern)               | 25                  | Yes                  |                     | 4 - Morpholog   |                 |           | rovide sur             | portir  |
| 3. Sphagnum sp. (Moss)                                       | 5                   | No                   |                     |   | marks or on a   |           |                        |         |
| 4  |                     | ·                    |                     | Problematic H   | lydrophytic ∖   | /egetati  | on <sup>1</sup> (Expla | ain)    |
| 5<br>6.  |                     |                      |                     | <sup>1</sup> Indicators of hydr<br>present, unless di |                 |           |                        | must    |
| 7.   |                     |                      |                     | Definitions of Ve                                     | getation Str    | ata:      |                        |         |
| 3  |                     |                      |                     | <b>Tree</b> – Woody pla                               | ints 3 in. (7.6 | cm) or    | more in d              | iamet   |
| 9  |                     | •                    |                     | at breast height (I                                   | OBH), regard    | less of I | neight.                |         |
| 10<br>11.  |                     |                      |                     | Sapling/shrub –<br>greater than or eq                 | • •             |           |                        | )BH a   |
| 12.  |                     | -T-t-10              |                     | <b>Herb</b> – All herbac                              | ``              | ,,,       | , 0                    | ardles  |
|  | 60                  | =Total Cover         |                     | of size, and wood                                     | y plants less   | inan 3.   | ∠o π tall.             |         |
| <u>Woody Vine Stratum</u> (Plot size: <u>3 Meters</u> )<br>1 |                     |                      |                     | Woody vines – A<br>height.                            | ll woody vine   | es great  | er than 3.:            | 28 ft i |
| 2.   |                     |                      |                     |   |                 |           |                        |         |
| 3.   |                     |                      |                     | Hydrophytic<br>Vegetation                             |                 |           |                        |         |
| 4.   |                     |                      |                     | Present?  | Yes ####        | No        | ####                   |         |
|  |                     | =Total Cover         |                     |   |                 |           |                        |         |

| Project/Site: Loeffel   | Trib T11A          |                           |                        | City/County: Nassa     | u, Rennselaer         |               | Sampling Date:    | 10 O   | ct. 17 |
|-------------------------|--------------------|---------------------------|------------------------|------------------------|-----------------------|---------------|-------------------|--------|--------|
| Applicant/Owner:        | GE/Arcadis         |                           |                        |                        | Stat                  | te: <u>NY</u> | Sampling Poin     | nt:    | J      |
| Investigator(s): JK, J  | М                  |                           |                        | Section, To            | wnship, Range         | e: <u>N/A</u> |                   |        |        |
| Landform (hillside, ter | race, etc.):       | Flat, Floodplain          | Local                  | relief (concave, conve | ex, none): <u>Nor</u> | ne            | Slop              | e %:   | 0-5    |
| Subregion (LRR or ML    | _RA): <u>LRR F</u> | <u>२</u> ।                | Lat: TBD               | Long:                  | TBD                   |               | Datum:            | WGS    | 5 1984 |
| Soil Map Unit Name:     | HoC - Hoosid       | ck Sandy, Gravel <u>y</u> | / Loam,                |                        | NWI cla               | ssification:  | N/A               |        |        |
| Are climatic / hydrolog | jic conditions o   | on the site typical       | for this time of year? | Yes <u>X</u>           | No                    | (If no, e     | explain in Remark | (s.)   |        |
| Are Vegetation          | , Soil             | , or Hydrology            | significantly distur   | bed? Are "Nor          | nal Circumsta         | nces" prese   | ent? Yes X        | No     |        |
| Are Vegetation          | , Soil             | , or Hydrology            | naturally problema     | atic? (If neede        | d, explain any        | answers in    | Remarks.)         |        |        |
| SUMMARY OF F            | INDINGS –          | Attach site n             | nap showing sam        | pling point locat      | ions, trans           | ects, imp     | portant featu     | res, e | etc.   |
| Hydrophytic Vegetati    | on Present?        | Yes                       | No                     | Is the Sampled A       | rea                   |               |                   |        |        |
| Hydric Soil Present?    |                    | Yes                       | No                     | within a Wetland       | ? Y                   | /es           | No                |        |        |
| Wetland Hydrology F     | 'resent?           | Yes                       | No                     | If yes, optional We    | etland Site ID:       |               |                   |        |        |
| Remarks: (Explain a     | Iternative proc    | edures here or in         | a separate report.)    |                        |                       |               |                   |        |        |

| Wetland Hydrology Indicators:                 |  | Secondary Indicators (minimum of two required)     |
|---|--|--|
| Primary Indicators (minimum of one is require | ed; check all that apply)                      | Surface Soil Cracks (B6)                           |
| Surface Water (A1)                            | Water-Stained Leaves (B9)                      | Drainage Patterns (B10)                            |
| High Water Table (A2)                         | Aquatic Fauna (B13)                            | Moss Trim Lines (B16)                              |
| Saturation (A3)                               | Marl Deposits (B15)                            | Dry-Season Water Table (C2)                        |
| Water Marks (B1)                              | Hydrogen Sulfide Odor (C1)                     | Crayfish Burrows (C8)                              |
| Sediment Deposits (B2)                        | Oxidized Rhizospheres on Living Ro             | oots (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          | s (C6) Geomorphic Position (D2)                    |
| Iron Deposits (B5)                            | Thin Muck Surface (C7)                         | Shallow Aquitard (D3)                              |
| Inundation Visible on Aerial Imagery (B7      | <ol> <li>Other (Explain in Remarks)</li> </ol> | Microtopographic Relief (D4)                       |
| Sparsely Vegetated Concave Surface (B         | 38)  | FAC-Neutral Test (D5)                              |
| Field Observations:                           |  |  |
| Surface Water Present? Yes                    | No Depth (inches):                             |  |
| Water Table Present? Yes                      | No Depth (inches):                             |  |
| Saturation Present? Yes                       | No Depth (inches):                             | Wetland Hydrology Present? Yes No                  |
| (includes capillary fringe)                   |  |  |
| Describe Recorded Data (stream gauge, mo      | nitoring well, aerial photos, previous inspec  | ctions), if available:                             |
|   |  |  |
| Remarks:                                      |  |  |
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Sampling Point: J

| Tree Stratum (Plot size: 10 Meters )            | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test   | worksheet:          |                 |                        |           |
|---|---------------------|----------------------|---------------------|--|---------------------|-----------------|------------------------|-----------|
| 1. Quercus rubra (Red Oak)                      | 50                  | Yes                  |                     | Number of Domin  | ant Spaciae         |                 |                        |           |
| 2. Fagus grandifolia (American Beech)           | 5                   | No                   |                     | Number of Dominant Species<br>That Are OBL, FACW, or FAC:  |                     |                 | 0                      | (A)       |
| 3. Acer saccharum (Sugar Maple)                 | 20                  | Yes                  |                     | Total Number of D  | ominant             |                 |                        |           |
| 4   |                     |                      |                     | Species Across Al  |                     |                 | 8                      | (B)       |
| 5   |                     |                      |                     | Percent of Domina  |                     |                 |                        |           |
| 6   |                     |                      |                     | That Are OBL, FA   |                     |                 | 0.0%                   | _(A/E     |
| 7   |                     |                      |                     | Prevalence Index   |                     |                 |                        |           |
|   | 75                  | =Total Cover         |                     | Total % Cov  |                     |                 | ultiply by:            |           |
| Sapling/Shrub Stratum (Plot size: 3 Meters )    |                     |                      |                     | OBL species  | 0                   | x 1 =           | 0                      |           |
| 1. Rosa multiflora (Multiflora Rose)            | 15                  | Yes                  |                     | FACW species   | 0                   | x 2 =           | 0                      |           |
| 2. Amelanchier canadensis (Serviceberry)        | 10                  | Yes                  |                     | FAC species  | 0                   | x 3 =           | 0                      |           |
| 3. Lonicera japonica (Honeysuckle)              | 5                   | No                   |                     | FACU species   | 0                   | x 4 =           | 0                      |           |
| 4. Hamamelis virginiana (Witch Hazel)           | 10                  | Yes                  |                     | UPL species  | 0                   | x 5 =           | 0                      |           |
| 5. Fagus grandifolia (American Beech)           | 15                  | Yes                  |                     | Column Totals:   | 0                   | (A)             | 0                      | (E        |
| 6. Quercus rubra (Red Oak)                      | 5                   | No                   |                     | Prevalence   | Index = B/A         | <u>+</u> =      |                        |           |
| 7   |                     |                      |                     | Hydrophytic Veg  | etation Indio       | cators:         |                        |           |
|   | 60                  | =Total Cover         |                     | 1 - Rapid Test   | for Hydroph         | nytic Ve        | getation               |           |
| Herb Stratum (Plot size: 1 Meter )              |                     |                      |                     | 2 - Dominance  | e Test is >50       | 1%              |                        |           |
| 1. Lycopus americana (Water Horehound)          | 10                  | No                   |                     | ## 3 - Prevalence  | e Index is ≤3       | .0 <sup>1</sup> |                        |           |
| 2. <u>Pilea pumila (Clearweed)</u>              | 10                  | No                   |                     | 4 - Morphological Adaptations <sup>1</sup> (Provide suppo  |                     |                 |                        |           |
| 3. Thelypteris noveboracensis (New York Fern)   | 15                  | Yes                  |                     | data in Remarks or on a separate sheet)  |                     |                 |                        | )         |
| 4. Osmunda claytoniana (Interrupted Fern)       | 5                   | No                   |                     | Problematic H  | lydrophytic V       | /egetati        | on <sup>1</sup> (Expla | ain)      |
| 5. Echinochloa crus-galli (Barnyardgrass)       | 40                  | Yes                  |                     | <ul> <li><sup>1</sup>Indicators of hydric soil and wetland hydrology mu</li> </ul>   |                     |                 |                        | must      |
| 6. Carex sp. (Sedge Species)                    | 2                   | No                   |                     | present, unless dis  |                     |                 |                        | must      |
| 7. Rosa multiflora (Multiflora Rose)            | 5                   | No                   |                     | Definitions of Ve  | getation Str        | ata:            |                        |           |
| 8. Galium palustris (Marsh Bedstraw)            | 2                   | No                   |                     | <b>Tree</b> – Woody pla  | nto 2 in 176        |                 | mara in a              | liamat    |
| 9. Lythrum salicaria (Purple Loosestrife)       | 2                   | No                   |                     | at breast height (D  | ```                 | '               |                        | lameu     |
| 10. Polystichum acrostichoides (Christmas Fern) | 2                   | No                   |                     |  |                     |                 | -                      |           |
| 11. Sphagnum sp. (Moss)                         | 5                   | No                   |                     | Sapling/shrub – V greater than or equilater than |                     |                 |                        | лен а     |
| 12.   |                     |                      |                     |  |                     | . ,             |                        |           |
| ····  | 98                  | =Total Cover         |                     | Herb – All herbace<br>of size, and woody   |                     |                 |                        | ardles    |
| Woody Vine Stratum (Plot size: 3 Meters )       |                     |                      |                     | -  |                     |                 |                        |           |
| <u> </u>  |                     |                      |                     | Woody vines – Al<br>height.  | l woody vine        | es great        | er than 3.             | .28 ft ir |
| 2.  |                     |                      |                     |  |                     |                 |                        |           |
| 3.  |                     |                      |                     | Hydrophytic  |                     |                 |                        |           |
| 4.  |                     |                      |                     | Vegetation<br>Present?   | Yes ####            | No              | ####                   |           |
| +   |                     |                      |                     | Fiesent:   | 103 <del>####</del> | NO              | <del></del>            |           |
|   |                     | =Total Cover         |                     |  |                     |                 |                        |           |

| Project/Site: Loeffel   | Trib T11A        |                     |          |                        | City/County: Na   | assau, Ren    | nselaer            | San                | npling Date:  | 30 O   | ct. 17  |
|-------------------------|------------------|---------------------|----------|------------------------|-------------------|---------------|--------------------|--------------------|---------------|--------|---------|
| Applicant/Owner:        | GE/Arcadis       |                     |          |                        |                   |               | State:             | NY S               | ampling Poin  | nt:    | К       |
| Investigator(s): JK     |                  |                     |          |                        | Sectio            | n, Township   | p, Range: <u>N</u> | /A                 |               |        |         |
| Landform (hillside, ter | race, etc.):     | Stream Bank         |          | Local re               | elief (concave, c | convex, non   | ie): <u>None</u>   |                    | Slop          | e %:   | 0-5     |
| Subregion (LRR or ML    | _RA): <u>LRR</u> | R                   | Lat:     | TBD                    | L                 | ong: TBD      |                    |                    | Datum:        | WGS    | \$ 1984 |
| Soil Map Unit Name:     | HoC - Hoos       | ick Sandy, Gravel   | y Loai   | ım,                    |                   | 1             | NWI classific      | cation: <u>N/A</u> | 4             |        |         |
| Are climatic / hydrolog | jic conditions   | on the site typical | l for th | is time of year?       | Yes               | х             | No (               | (If no, expla      | iin in Remark | (s.)   |         |
| Are Vegetation          | , Soil           | , or Hydrology      | :        | significantly disturbe | ed? Are           | "Normal Cir   | rcumstances        | " present?         | Yes X         | No     |         |
| Are Vegetation          | , Soil           | , or Hydrology      | I        | naturally problemati   | ic? (If no        | eeded, expl   | lain any ansv      | wers in Ren        | narks.)       |        |         |
| SUMMARY OF F            | INDINGS -        | - Attach site i     | map      | showing samp           | ling point lo     | ocations,     | , transect         | s, impor           | tant featu    | res, e | etc.    |
| Hydrophytic Vegetati    | on Present?      | Yes                 | х        | No                     | Is the Sampl      | ed Area       |                    |                    |               |        |         |
| Hydric Soil Present?    |                  | Yes                 |          | No                     | within a Wet      | land?         | Yes                | No                 | » <u> </u>    |        |         |
| Wetland Hydrology F     | resent?          | Yes                 | Х        | No                     | If yes, optiona   | al Wetland \$ | Site ID:           |                    |               |        |         |
| Remarks: (Explain a     | Iternative pro   | cedures here or in  | n a se   | parate report.)        |                   |               |                    |                    |               |        |         |
|                         |                  |                     |          |                        |                   |               |                    |                    |               |        |         |
|                         |                  |                     |          |                        |                   |               |                    |                    |               |        |         |
|                         |                  |                     |          |                        |                   |               |                    |                    |               |        |         |
|                         |                  |                     |          |                        |                   |               |                    |                    |               |        |         |

| 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) X Water-Stained Leaves (B9)   | X Drainage Patterns (B10)                      |
| X High Water Table (A2) Aquatic Fauna (B13)  | Moss Trim Lines (B16)                          |
| X Saturation (A3) Marl Deposits (B15)  | Dry-Season Water Table (C2)                    |
| Water Marks (B1) Hydrogen Sulfide Odor (C1)  | Crayfish Burrows (C8)                          |
| Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C                                       | 3) Saturation Visible on Aerial Imagery (C9)   |
| Drift Deposits (B3) Presence of Reduced Iron (C4)  | Stunted or Stressed Plants (D1)                |
| Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)                                   | Geomorphic Position (D2)                       |
| Iron Deposits (B5) Thin Muck Surface (C7)  | Shallow Aquitard (D3)                          |
| Inundation Visible on Aerial Imagery (B7) X 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):  |  |
| Water Table Present? Yes X No Depth (inches): 5  |  |
| Saturation Present? Yes X No Depth (inches): 0 We  | tland Hydrology Present? Yes X No              |
| (includes capillary fringe)  |  |
|  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections)          | , if available:                                |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections)          | , if available:                                |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections)          | , if available:                                |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections) Remarks: | , if available:                                |
|  | , if available:                                |
| Remarks:   | , if available:                                |

Sampling Point: K

| Tree Stratum (Plot size: 10 Meters )          | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test work   | sheet:                    |                           |        |
|---|---------------------|----------------------|---------------------|---|---------------------------|---------------------------|--------|
| 1<br>2  |                     |                      |                     | Number of Dominant S<br>That Are OBL, FACW,                       |                           | 2                         | (A)    |
| 3   |                     |                      |                     | Total Number of Domin   | ant                       |                           |        |
| 4   |                     |                      |                     | Species Across All Stra   |                           | 5                         | (B)    |
| 5<br>6  |                     |                      |                     | Percent of Dominant Sp<br>That Are OBL, FACW,                     |                           | 40.0%                     | _(A/E  |
| 7   |                     |                      |                     | Prevalence Index wor  | ksheet:                   |                           |        |
|   |                     | =Total Cover         |                     | Total % Cover of:   |                           | Multiply by:              |        |
| Sapling/Shrub Stratum (Plot size:5 Meters)    |                     |                      |                     | OBL species 55  | 5 <u>x</u> 1=             | = 55                      |        |
| 1. Fagus grandifolia (American Beech)         | 15                  | Yes                  | FACU                | FACW species 10   | ) x 2 =                   | = 20                      |        |
| 2. Betula lenta (Black Birch)                 | 20                  | Yes                  | FACU                | FAC species 2   | x 3 =                     | = 6                       |        |
| 3. Betula papyrifera (Paper Birch)            | 10                  | No                   | FACU                | FACU species 80   | ) x 4 =                   | 320                       |        |
| 4. Salix nigra (Black Willow)                 | 25                  | Yes                  | OBL                 | UPL species 5   | x 5 =                     | = 25                      | _      |
| 5   |                     |                      |                     | Column Totals: 15   | 2 (A)                     | 426                       | (      |
| 5.  |                     |                      |                     | Prevalence Inde   | x = B/A =                 | 2.80                      |        |
| ,   |                     |                      |                     | Hydrophytic Vegetation  | on Indicators             | 5:                        |        |
|   | 70                  | =Total Cover         |                     | 1 - Rapid Test for H  | lydrophytic √             | egetation                 |        |
| <u>lerb Stratum</u> (Plot size: 1 Meter )     |                     |                      |                     | 2 - Dominance Tes   | t is >50%                 |                           |        |
| Juncus effusus (Soft Rush)                    | 30                  | Yes                  | OBL                 | ## 3 - Prevalence Inde  | ex is ≤3.0 <sup>1</sup>   |                           |        |
| 2. Plantago major (Common Plantain)           | 10                  | No                   | FACU                | 4 - Morphological A   | daptations <sup>1</sup> ( | Provide sup               | oporti |
| 3. Fragaria vesca (Wild Strawberry)           | 5                   | No                   | UPL                 | data in Remarks   | or on a sepa              | arate sheet)              |        |
| A. Alliaria petiolata (Garlic Mustard)        | 5                   | No                   | FACU                | Problematic Hydro   | ohytic Vegeta             | ition <sup>1</sup> (Expla | ain)   |
| 5. Athyrium filix-femina (Northern Lady Fern) | 2                   | No                   | FAC                 | <sup>1</sup> Indicators of budris asi                             | l and watland             | l hudrologu               |        |
| 6. Fallopia japonica (Japanese Knotweed)      | 5                   | No                   | FACU                | <sup>1</sup> Indicators of hydric soi<br>present, unless disturbe |                           | , ,,                      | musi   |
| 7. Elymus repens (Quack Grass)                | 15                  | Yes                  | FACU                | Definitions of Vegetat  | ion Strata:               |                           |        |
| 3. Onoclea sensiblis (Sensitive Fern)         | 10                  | No                   | FACW                |   |                           |                           |        |
| ).  |                     |                      |                     | <b>Tree</b> – Woody plants 3 at breast height (DBH),              |                           |                           | lame   |
| 0.  |                     |                      |                     |   | -                         | -                         |        |
| 11.   |                     |                      |                     | Sapling/shrub – Wood<br>greater than or equal to                  |                           |                           | рвн а  |
| 12.   |                     |                      |                     |   | . ,                       |                           |        |
|   | 82                  | =Total Cover         |                     | Herb – All herbaceous of size, and woody plan                     |                           |                           | ardle  |
| Noody Vine Stratum (Plot size: 5 Meters )     |                     |                      |                     |   |                           |                           | 00 5   |
|   |                     |                      |                     | Woody vines – All woo<br>height.                                  | dy vines gre              | ater than 3.              | 28 ft  |
| <u></u>                                       |                     | ·                    |                     |   |                           |                           |        |
| 3.  |                     | ·                    |                     | Hydrophytic   |                           |                           |        |
| 4.  |                     |                      |                     | Vegetation<br>Present? Yes  | #### N                    | o ####                    |        |
|   |                     | =Total Cover         |                     |   | <u></u> N                 |                           |        |
|   |                     | = I otal Cover       |                     |   |                           |                           |        |

| Project/Site: Loeffel    | Trib T11A        |                     |        |                        | City/County: <u>Nassau</u> | ı, Rennselae       | er            |           | Sampling Date:   | 30 C                         | )ct. 17 |
|--------------------------|------------------|---------------------|--------|------------------------|----------------------------|--------------------|---------------|-----------|------------------|------------------------------|---------|
| Applicant/Owner:         | GE/Arcadis       |                     |        |                        |                            | St                 | tate:         | NY        | Sampling Poir    | nt:                          | L       |
| Investigator(s): JK      |                  |                     |        |                        | Section, To                | wnship, Rar        | nge: <u>N</u> | I/A       |                  |                              |         |
| Landform (hillside, terr | ace, etc.):      | Stream Bank         |        | Local re               | lief (concave, conve       | x, none): <u>N</u> | one           |           | Slop             | be %:                        | 0-5     |
| Subregion (LRR or ML     | .RA): <u>LRR</u> | २                   | Lat:   | TBD                    | Long:                      | TBD                |               |           | Datum:           | WGS                          | S 1984  |
| Soil Map Unit Name:      | HoC - Hoosi      | ck Sandy, Gravel    | y Loa  | ım,                    |                            | NWI c              | lassifi       | cation:   | N/A              |                              |         |
| Are climatic / hydrolog  | ic conditions    | on the site typical | for th | nis time of year?      | Yes <u>X</u>               | No                 |               | (If no, e | xplain in Remarl | <s.)< td=""><td></td></s.)<> |         |
| Are Vegetation           | , Soil           | , or Hydrology      |        | significantly disturbe | ed? Are "Norn              | nal Circums        | tances        | s" prese  | nt? Yes <u>X</u> | No                           |         |
| Are Vegetation           | , Soil           | , or Hydrology      |        | naturally problemati   | c? (If needed              | d, explain ar      | ny ans        | wers in   | Remarks.)        |                              |         |
| SUMMARY OF F             | INDINGS -        | Attach site ı       | nap    | showing samp           | ling point locati          | ions, trar         | nsect         | ts, imp   | portant featu    | res,                         | etc.    |
| Hydrophytic Vegetati     | on Present?      | Yes                 | х      | No                     | Is the Sampled A           | rea                |               |           |                  |                              |         |
| Hydric Soil Present?     |                  | Yes                 |        | No                     | within a Wetland?          | ?                  | Yes           |           | No               |                              |         |
| Wetland Hydrology P      | resent?          | Yes                 | Х      | No                     | If yes, optional We        | tland Site ID      | ):            |           |                  |                              |         |
| Remarks: (Explain a      | Iternative pro   | cedures here or in  | n a se | eparate report.)       |                            |                    |               |           |                  |                              |         |
|                          |                  |                     |        |                        |                            |                    |               |           |                  |                              |         |
|                          |                  |                     |        |                        |                            |                    |               |           |                  |                              |         |
|                          |                  |                     |        |                        |                            |                    |               |           |                  |                              |         |

| Wetland Hydrology Indicators:                 |   | Secondary Indicators (minimum of two required) |
|---|---|--|
| Primary Indicators (minimum of one is require | ed; check all that apply)                           | Surface Soil Cracks (B6)                       |
| Surface Water (A1)                            | X Water-Stained Leaves (B9)                         | X Drainage Patterns (B10)                      |
| High Water Table (A2)                         | Aquatic Fauna (B13)                                 | Moss Trim Lines (B16)                          |
| X Saturation (A3)                             | Marl Deposits (B15)                                 | Dry-Season Water Table (C2)                    |
| Water Marks (B1)                              | Hydrogen Sulfide Odor (C1)                          | Crayfish Burrows (C8)                          |
| Sediment Deposits (B2)                        | Oxidized Rhizospheres on Living Roots (C            | C3)Saturation Visible on Aerial Imagery (C9)   |
| Drift Deposits (B3)                           | Presence of Reduced Iron (C4)                       | Stunted or Stressed Plants (D1)                |
| Algal Mat or Crust (B4)                       | Recent Iron Reduction in Tilled Soils (C6)          | Geomorphic Position (D2)                       |
| Iron Deposits (B5)                            | Thin Muck Surface (C7)                              | Shallow Aquitard (D3)                          |
| Inundation Visible on Aerial Imagery (B7)     | Other (Explain in Remarks)                          | Microtopographic Relief (D4)                   |
| Sparsely Vegetated Concave Surface (B         | 8)  | X FAC-Neutral Test (D5)                        |
| Field Observations:                           |   |  |
| Surface Water Present? Yes                    | No X Depth (inches):                                |  |
| Water Table Present? Yes                      | No X Depth (inches): 0                              |  |
| Saturation Present? Yes X                     | No Depth (inches): 4 We                             | etland Hydrology Present? Yes X No             |
| (includes capillary fringe)                   |   |  |
| Describe Recorded Data (stream gauge, mor     | nitoring well, aerial photos, previous inspections) | ), if available:                               |
|   |   |  |
|   |   |  |
| Remarks:                                      |   |  |
| Stream wetted width of 50 inches.             |   |  |
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Sampling Point:

L

| Tree Stratum (Plot size: 10 Meters )                | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:  |  |  |  |  |
|---|---------------------|----------------------|---------------------|--|--|--|--|--|
| 1   |                     |                      |                     | Number of Dominant Species   |  |  |  |  |
| 2   |                     |                      |                     | That Are OBL, FACW, or FAC:3 (A)   |  |  |  |  |
| 3.  |                     |                      |                     | Total Number of Dominant   |  |  |  |  |
| 4   |                     |                      |                     | Species Across All Strata: 5 (B)   |  |  |  |  |
| 5   |                     |                      |                     | Percent of Dominant Species  |  |  |  |  |
| 6   |                     |                      |                     | That Are OBL, FACW, or FAC: 60.0% (A/B   |  |  |  |  |
| 7   |                     |                      |                     | Prevalence Index worksheet:  |  |  |  |  |
|   |                     | =Total Cover         |                     | Total % Cover of: Multiply by:   |  |  |  |  |
| Sapling/Shrub Stratum (Plot size: <u>5 Meters</u> ) |                     |                      |                     | OBL species         40         x 1 =         40  |  |  |  |  |
| 1. Ulmus americana (American Elm)                   | 20                  | Yes                  | FACW                | FACW species <u>115</u> x 2 = <u>230</u>   |  |  |  |  |
| 2. Betula lenta (Black Birch)                       | 30                  | Yes                  | FACU                | FAC species 7 x 3 = 21   |  |  |  |  |
| 3. Betula papyrifera (Paper Birch)                  | 15                  | Yes                  | FACU                | FACU species x 4 = 180   |  |  |  |  |
| 4. Salix nigra (Black Willow)                       | 5                   | No                   | OBL                 | UPL species <u>5</u> x 5 = <u>25</u>   |  |  |  |  |
| 5   |                     |                      |                     | Column Totals: 212 (A) 496 (E  |  |  |  |  |
| ð   |                     |                      |                     | Prevalence Index = B/A = 2.34  |  |  |  |  |
| 7   |                     |                      |                     | Hydrophytic Vegetation Indicators:   |  |  |  |  |
|   | 70                  | =Total Cover         |                     | 1 - Rapid Test for Hydrophytic Vegetation  |  |  |  |  |
| Herb Stratum (Plot size: 1 Meter )                  |                     |                      |                     | X 2 - Dominance Test is >50%   |  |  |  |  |
| 1. Solidago gigantea (Giant Goldenrod)              | 45                  | Yes                  | FACW                | <u>##</u> 3 - Prevalence Index is $\leq 3.0^{1}$   |  |  |  |  |
| 2. <u>Carex lurida (Lurid Sedge)</u>                | 20                  | No                   | OBL                 | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)       |  |  |  |  |
| 3. Galium palustre (Marsh Bedstraw)                 | 10                  | No                   | OBL                 |  |  |  |  |  |
| 4. Phragmites australis (Common Reed)               | 20                  | No                   | FACW                | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |  |  |  |  |
| 5. Fragaria fresca (Wild Strawberry)                | 5                   | No                   | UPL                 | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |  |  |  |  |
| 6. Poa palustris (Fowl Bluegrass)                   | 30                  | Yes                  | FACW                | present, unless disturbed or problematic.  |  |  |  |  |
| 7. Symphyotrichum ericoides (White Aster)           | 2                   | No                   | FAC                 | Definitions of Vegetation Strata:  |  |  |  |  |
| 3. Lythrum salicaria (Purple Loosestrife)           | 5                   | No                   | OBL                 | <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diamet  |  |  |  |  |
| 9. Euthamnia gramnifolia (Grass-Leaved Goldenrod)   | 5                   | No                   | FAC                 | at breast height (DBH), regardless of height.  |  |  |  |  |
| 10.   |                     |                      |                     | Sapling/shrub – Woody plants less than 3 in. DBH a   |  |  |  |  |
| 11.   |                     |                      |                     | greater than or equal to 3.28 ft (1 m) tall.   |  |  |  |  |
| 12.   |                     |                      |                     |  |  |  |  |  |
|   | 142                 | =Total Cover         |                     | <b>Herb</b> – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall. |  |  |  |  |
| Woody Vine Stratum (Plot size: 5 Meters )           |                     | -                    |                     |  |  |  |  |  |
| 1.  |                     |                      |                     | Woody vines – All woody vines greater than 3.28 ft in height.  |  |  |  |  |
| 2.  |                     |                      |                     |  |  |  |  |  |
| 3.  |                     |                      |                     | Hydrophytic  |  |  |  |  |
| 4.  |                     |                      |                     | Vegetation<br>Present? Yes No  |  |  |  |  |
|   |                     | =Total Cover         |                     |  |  |  |  |  |
|   |                     |                      |                     |  |  |  |  |  |

| Project/Site: Loeffel   | Trib T11A       |                     |                  |               | City/County: Na  | assau, Re       | ennselaer           |            | Sampling Date:    | 30 O   | ct. 17 |
|-------------------------|-----------------|---------------------|------------------|---------------|------------------|-----------------|---------------------|------------|-------------------|--------|--------|
| Applicant/Owner:        | GE/Arcadis      |                     |                  |               |                  |                 | State:              | NY         | Sampling Poir     | nt:    | М      |
| Investigator(s): JK     |                 |                     |                  |               | Section          | n, Towns'       | hip, Range:         | N/A        |                   |        |        |
| Landform (hillside, ter | race, etc.):    | Stream Bank         |                  | Local re      | lief (concave, c | convex, n       | one): <u>Conc</u> a | ave        | Slop              | be %:  | 0-5    |
| Subregion (LRR or ML    | RA): LRR F      | र                   | Lat: TBD         |               | L                | _ong: <u>TB</u> | BD                  |            | Datum:            | WGS    | 5 1984 |
| Soil Map Unit Name:     | HoC - Hoosic    | k Sandy, Gravel     | y Loam,          |               |                  |                 | NWI class           | ification: | N/A               |        |        |
| Are climatic / hydrolog | ic conditions c | on the site typical | for this time of | f year?       | Yes              | Х               | No                  | (If no, e  | explain in Remarl | ks.)   |        |
| Are Vegetation          | , Soil          | , or Hydrology      | significar       | ntly disturbe | d? Are           | "Normal (       | Circumstanc         | es" prese  | ent? Yes X        | No     |        |
| Are Vegetation          | , Soil          | , or Hydrology      | naturally        | problemati    | c? (If ne        | eeded, e>       | kplain any ar       | nswers in  | Remarks.)         |        |        |
| SUMMARY OF F            | INDINGS –       | Attach site r       | nap showir       | ng samp       | ling point lo    | ocation         | s, transe           | cts, imp   | portant featu     | res, e | etc.   |
| Hydrophytic Vegetati    | on Present?     | Yes                 | X No             |               | Is the Sampl     | ed Area         |                     |            |                   |        |        |
| Hydric Soil Present?    |                 | Yes                 | No               |               | within a Wet     | land?           | Ye                  | s          | No                |        |        |
| Wetland Hydrology P     | Present?        | Yes                 | X No             |               | If yes, optiona  | al Wetlan       | d Site ID:          |            |                   |        |        |
| Remarks: (Explain a     | Iternative proc | edures here or ir   | n a separate re  | port.)        |                  |                 |                     |            |                   |        |        |

|  | Secondary Indicators (minimum of two required)  |
|--|---|
| red; check all that apply)                     | Surface Soil Cracks (B6)  |
| X Water-Stained Leaves (B9)                    | Drainage Patterns (B10)   |
| Aquatic Fauna (B13)                            | Moss Trim Lines (B16)   |
| Marl Deposits (B15)                            | Dry-Season Water Table (C2)   |
| Hydrogen Sulfide Odor (C1)                     | Crayfish Burrows (C8)   |
| Oxidized Rhizospheres on Living Ro             | ots (C3) Saturation Visible on Aerial Imagery (C9)  |
| Presence of Reduced Iron (C4)                  | Stunted or Stressed Plants (D1)   |
| Recent Iron Reduction in Tilled Soils          | (C6) Geomorphic Position (D2)   |
| Thin Muck Surface (C7)                         | Shallow Aquitard (D3)   |
| 7)Other (Explain in Remarks)                   | Microtopographic Relief (D4)  |
| B8)  | X FAC-Neutral Test (D5)   |
|  |   |
| No Depth (inches): 1                           |   |
| No Depth (inches):0                            |   |
| No Depth (inches): 0                           | Wetland Hydrology Present? Yes X No   |
|  |   |
| onitoring well, aerial photos, previous inspec | tions), if available:   |
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|  | X       Water-Stained Leaves (B9)         Aquatic Fauna (B13)         Marl Deposits (B15)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres on Living Ro         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils         Thin Muck Surface (C7)         Other (Explain in Remarks)         38)         No       Depth (inches):         No       Depth (inches):         0       Depth (inches): |

Sampling Point: M

| <u>Tree Stratum</u> (Plot size: <u>10 Meters</u> )            | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:  |
|---|---------------------|----------------------|---------------------|--|
|   |                     |                      |                     | Number of Dominant Species<br>That Are OBL, FACW, or FAC:3(A   |
|   |                     |                      |                     | Total Number of Dominant Species Across All Strata:5(E   |
| j   |                     | ·                    |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC: 60.0% (A  |
| · · · · · · · · · · · · · · · · · · ·                         |                     |                      |                     | Prevalence Index worksheet:  |
|   |                     | =Total Cover         |                     | Total % Cover of: Multiply by:   |
| Sapling/Shrub Stratum (Plot size: 5 Meters )                  |                     |                      |                     | OBL species 60 x 1 = 60  |
| . Salix nigra (Black Willow)                                  | 20                  | Yes                  | OBL                 | FACW species 25 x 2 = 50   |
| Pinus strobus (White Pine)                                    | 30                  | Yes                  | FACU                | FAC species 52 x 3 = 156   |
| Betula papyrifera (Paper Birch)                               | 15                  | Yes                  | FACU                | FACU species 45 x 4 = 180  |
|   |                     |                      |                     | UPL species $0 \times 5 = 0$   |
|   |                     | ·                    |                     | Column Totals: 182 (A) 446   |
|   |                     | ·                    |                     | Prevalence Index = $B/A = 2.45$  |
|   |                     | ·                    |                     | Hydrophytic Vegetation Indicators:   |
|   | 65                  | =Total Cover         |                     | 1 - Rapid Test for Hydrophytic Vegetation  |
| l <u>erb Stratum</u> (Plot size: 1 Meter )                    |                     |                      |                     | X 2 - Dominance Test is >50%   |
| . Equisetum hyemale (Scouring Rush)                           | 50                  | Yes                  | FAC                 | ## 3 - Prevalence Index is $\leq 3.0^{1}$  |
| Lythrum salicaria (Purple Loosestrife)                        | 15                  | No                   | OBL                 | 4 - Morphological Adaptations <sup>1</sup> (Provide suppor   |
| . Galium palustre (Marsh Bedstraw)                            | 15                  | No                   | OBL                 | data in Remarks or on a separate sheet)  |
| Panicum capillare (Witch Grass)                               | 2                   | No                   | FAC                 | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 5. Salix nigra (Black Willow)                                 | 10                  | No                   | OBL                 |  |
| Carex Iurida (Lurid Sedge)                                    | 20                  | Yes                  | FACW                | <sup>1</sup> Indicators of hydric soil and wetland hydrology muspresent, unless disturbed or problematic.      |
| Solidago gigantea (Giant Goldenrod)                           | 5                   | No                   | FACW                | Definitions of Vegetation Strata:  |
|   |                     |                      |                     |  |
|   |                     |                      |                     | <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diam at breast height (DBH), regardless of height.        |
| 0<br>1  |                     |                      |                     | <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH greater than or equal to 3.28 ft (1 m) tall.           |
| 2   | 117                 | =Total Cover         |                     | <b>Herb</b> – All herbaceous (non-woody) plants, regardle<br>of size, and woody plants less than 3.28 ft tall. |
| <u>Woody Vine Stratum</u> (Plot size: <u>5 Meters</u> )<br>I. |                     |                      |                     | Woody vines – All woody vines greater than 3.28 f height.  |
|   |                     | ·                    |                     |  |
| 3.  |                     |                      |                     | Hydrophytic  |
|   |                     | ·                    |                     | Vegetation<br>Present? Yes No  |
|   |                     | =Total Cover         |                     |  |

| Project/Site: Loeffel    | Trib T11A        |                     |          | City/County: Nassau, Rennselaer Sampling Date: 30 Oct. 17 |                    |         |            |                |           |                  |         | Oct. 17 |
|--------------------------|------------------|---------------------|----------|---|--------------------|---------|------------|----------------|-----------|------------------|---------|---------|
| Applicant/Owner:         | GE/Arcadis       |                     |          |   |                    |         |            | State:         | NY        | Sampling Poi     | nt:     | Ν       |
| Investigator(s): JK      |                  |                     |          |   | Section            | n, Towr | nship, Ra  | ange: <u>N</u> | I/A       |                  |         |         |
| Landform (hillside, terr | ace, etc.):      | Stream Bank         |          | Local r   | elief (concave, co | onvex,  | none): I   | None           |           | Slo              | pe %:   | 0-5     |
| Subregion (LRR or ML     | .RA): LRR I      | २                   | Lat:     | TBD   | Lo                 | ong:    | TBD        |                |           | Datum:           | WGS     | S 1984  |
| Soil Map Unit Name:      | HoC - Hoosi      | ck Sandy, Gravel    | y Loa    | m,  |                    |         | NWI        | classifi       | cation:   | N/A              |         |         |
| Are climatic / hydrolog  | ic conditions of | on the site typical | l for th | nis time of year?   | Yes                | х       | No         |                | (lf no, e | explain in Remar | ks.)    |         |
| Are Vegetation           | , Soil           | , or Hydrology      |          | significantly disturb                                     | ed? Are "          | Norma   | al Circum  | stances        | s" prese  | ent? Yes X       | No      |         |
| Are Vegetation           | , Soil           | , or Hydrology      |          | naturally problemat                                       | ic? (If ne         | eded,   | explain a  | any ans        | wers in   | Remarks.)        |         |         |
| SUMMARY OF FI            | NDINGS -         | Attach site r       | map      | showing samp  | oling point lo     | catio   | ons, tra   | nsect          | ts, im    | portant featu    | ires, o | etc.    |
| Hydrophytic Vegetatio    | on Present?      | Yes                 | х        | No  | Is the Sample      | ed Are  | a          |                |           |                  |         |         |
| Hydric Soil Present?     |                  | Yes                 |          | No  | within a Wetla     | and?    |            | Yes            |           | No               |         |         |
| Wetland Hydrology P      | resent?          | Yes                 | Х        | No  | If yes, optiona    | I Wetla | and Site I | ID:            |           |                  |         |         |
| Remarks: (Explain al     | Iternative proc  | edures here or i    | n a se   | eparate report.)  |                    |         |            |                |           |                  |         |         |
|                          |                  |                     |          |   |                    |         |            |                |           |                  |         |         |
|                          |                  |                     |          |   |                    |         |            |                |           |                  |         |         |

| Wetland Hydrology Indicators:   | Secondary Indicators (minimum of two required) |  |  |  |
|---|--|--|--|--|
| Primary Indicators (minimum of one is required; check all that apply)   | Surface Soil Cracks (B6)                       |  |  |  |
| X Surface Water (A1) X Water-Stained Leaves (B9)  | Drainage Patterns (B10)                        |  |  |  |
| X High Water Table (A2) Aquatic Fauna (B13)   | Moss Trim Lines (B16)                          |  |  |  |
| 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 (   | Saturation Visible on Aerial Imagery (C9)      |  |  |  |
| Drift Deposits (B3) Presence of Reduced Iron (C4)   | Stunted or Stressed Plants (D1)                |  |  |  |
| Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)  | Geomorphic Position (D2)                       |  |  |  |
| Iron Deposits (B5) Thin Muck Surface (C7)   | Shallow Aquitard (D3)                          |  |  |  |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  | Microtopographic Relief (D4)                   |  |  |  |
| Sparsely Vegetated Concave Surface (B8)   | X FAC-Neutral Test (D5)                        |  |  |  |
| Field Observations:   |  |  |  |  |
| Surface Water Present? Yes X No Depth (inches): 0.5   |  |  |  |  |
| Water Table Present? Yes X No Depth (inches): 0   |  |  |  |  |
| Saturation Present? Yes X No Depth (inches): 0 W  | etland Hydrology Present? Yes X No             |  |  |  |
|   |  |  |  |  |
| (includes capillary fringe)   |  |  |  |  |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections | ), if available:                               |  |  |  |
|   | ), if available:                               |  |  |  |
|   | ), if available:                               |  |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections<br>Remarks:                    | ), if available:                               |  |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections                                | ), if available:                               |  |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections<br>Remarks:                    | ), if available:                               |  |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections<br>Remarks:                    | ), if available:                               |  |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections<br>Remarks:                    | ), if available:                               |  |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections<br>Remarks:                    | ), if available:                               |  |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections<br>Remarks:                    | ), if available:                               |  |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections<br>Remarks:                    | ), if available:                               |  |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections<br>Remarks:                    | ), if available:                               |  |  |  |

Sampling Point:

Ν

| <u>Tree Stratum</u> (Plot size:10 Meters)               | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test                                     | worksheet:            |                      |                         |        |
|---|---------------------|----------------------|---------------------|--|-----------------------|----------------------|-------------------------|--------|
| 1. Betula lenta (Black Birch)                           | 10                  | Yes                  | FACU                | Number of Do                                       | ant Cr:-              |                      |                         |        |
| 2. Pinus strobus (White Pine)                           | 20                  | Yes                  | FACU                | Number of Domin<br>That Are OBL, FA                |                       | :                    | 5                       | (A)    |
| 3. Acer saccharinum (Silver Maple)                      | 10                  | Yes                  | FACW                | Total Number of F                                  |                       |                      |                         | _      |
| 4.  |                     |                      |                     | Total Number of E<br>Species Across A              |                       |                      | 8                       | (B)    |
| 5   |                     | <u></u>              |                     | Percent of Domin                                   | ant Species           |                      |                         |        |
| ð   |                     |                      |                     | That Are OBL, FA                                   | •                     | :                    | 62.5%                   | _(A/I  |
| 7   |                     |                      |                     | Prevalence Index                                   | x worksheet           | t:                   |                         |        |
|   | 40                  | =Total Cover         |                     | Total % Cov  | /er of:               | M                    | lultiply by:            |        |
| Sapling/Shrub Stratum (Plot size: <u>5 Meters</u> )     |                     |                      |                     | OBL species  | 100                   | x 1 =                | 100                     |        |
| 1. Salix nigra (Black Willow)                           | 30                  | Yes                  | OBL                 | FACW species                                       | 35                    | x 2 =                | 70                      |        |
| 2. Acer saccharinum (Silver Maple)                      | 10                  | No                   | FACW                | FAC species  | 22                    | x 3 =                | 66                      |        |
| Betula lenta (Black Birch)                              | 5                   | No                   | FACU                | FACU species                                       | 50                    | x 4 =                | 200                     |        |
| . Quercus rubra (Red Oak)                               | 15                  | Yes                  | FACU                | UPL species  | 0                     | x 5 =                | 0                       |        |
| 5   |                     |                      |                     | Column Totals:                                     | 207                   | (A)                  | 436                     | (      |
| S   |                     |                      |                     | Prevalence   | e Index = B/          | A =                  | 2.11                    |        |
| ·   |                     |                      |                     | Hydrophytic Veg                                    | etation Indi          | cators:              |                         |        |
|   | 60                  | =Total Cover         |                     | 1 - Rapid Tes                                      | t for Hydrop          | hytic Ve             | getation                |        |
| <u>lerb Stratum</u> (Plot size: 1 Meter )               |                     |                      |                     | X 2 - Dominanc                                     | e Test is >50         | 0%                   |                         |        |
| . Sparganium americanum (American Burr Reed)            | 30                  | Yes                  | OBL                 | ## 3 - Prevalenc                                   | e Index is ≤3         | 3.0 <sup>1</sup>     |                         |        |
| 2. Typha latifolia (Broad Leaf Cattail)                 | 35                  | Yes                  | OBL                 | 4 - Morpholog                                      | gical Adaptat         | ions <sup>1</sup> (P | rovide sup              | oporti |
| 3. Solidago gigantea (Giant Goldenrod)                  | 10                  | No                   | FACW                | data in Rei  | marks or on           | a separ              | ate sheet)              |        |
| . Equisetum arvense (Field Horsetail)                   | 2                   | No                   | FAC                 | Problematic H                                      | -<br>-<br>Hydrophytic | √egetati             | ion <sup>1</sup> (Expla | ain)   |
| 5. Echinochloa crus-galli (Barnyard Grass)              | 5                   | No                   | FAC                 | 1  |                       |                      |                         |        |
| 5. Poa palustris (Fowl Bluegrass)                       | 5                   | No                   | FACW                | <sup>1</sup> Indicators of hydropresent, unless di |                       |                      | , ,,                    | musi   |
| 7. Euthamnia gramnifolia (Grass-Leaved Goldenrod)       | 5                   | No                   | FAC                 | Definitions of Ve                                  | getation St           | rata:                |                         |        |
| 3. Lythrum salicaria (Purple Loosestrife)               | 5                   | No                   | OBL                 | Tree Marchen                                       | -                     |                      |                         |        |
| )   |                     |                      |                     | <b>Tree</b> – Woody pla<br>at breast height ([     |                       |                      |                         | lame   |
| 10.   |                     |                      |                     | Sapling/shrub –                                    | Woody plant           | ts less ti           | han 3 in T              | BH :   |
| 11  |                     |                      |                     | greater than or eq                                 |                       |                      |                         |        |
| 12  |                     |                      |                     | Herb – All herbac                                  | eous (non-w           | a (yboov             | lants, rea              | ardles |
|   | 97                  | =Total Cover         |                     | of size, and wood                                  | •                     |                      |                         |        |
| <u>Moody Vine Stratum</u> (Plot size: <u>5 Meters</u> ) |                     |                      |                     | Woody vines – A                                    | ll woody vine         | es great             | ter than 3.             | 28 ft  |
| 1. Solanum dulcamara (Nightshade)                       | 10                  | Yes                  | FAC                 | height.  | ,                     | 5-24                 |                         |        |
| 2   |                     | <u></u>              |                     |  |                       |                      |                         |        |
| 3.  |                     |                      |                     | Hydrophytic<br>Vegetation                          |                       |                      |                         |        |
| 4.  |                     |                      |                     | Present?   | Yes ####              | No                   |                         |        |
|   | 10                  | =Total Cover         |                     |  |                       |                      | _                       |        |

| Project/Site: Loeffel   | Trib T11A      |                     |        |                       | City/County: Nassau   | u, Rennse   | laer           |           | Sampling Date:   | 30 O   | ct. 17 |
|-------------------------|----------------|---------------------|--------|-----------------------|-----------------------|-------------|----------------|-----------|------------------|--------|--------|
| Applicant/Owner:        | GE/Arcadis     |                     |        |                       |                       |             | State:         | NY        | Sampling Poin    | t:     | 0      |
| Investigator(s): JK     |                |                     |        |                       | Section, To           | wnship, R   | ange: <u>N</u> | /A        |                  |        |        |
| Landform (hillside, ter | race, etc.):   | Stream Bank         |        | Local r               | elief (concave, conve | ex, none):  | None           |           | Slop             | e %:   | 0-5    |
| Subregion (LRR or MI    | RA): LRR       | R                   | Lat:   | TBD                   | Long:                 | TBD         |                |           | Datum:           | WGS    | 5 1984 |
| Soil Map Unit Name:     | HoC - Hoos     | ick Sandy, Gravel   | y Loa  | m,                    |                       | NW          | l classifie    | cation:   | N/A              |        |        |
| Are climatic / hydrolog | ic conditions  | on the site typical | for th | is time of year?      | Yes <u>X</u>          | No          |                | (If no, e | xplain in Remark | s.)    |        |
| Are Vegetation          | , Soil         | , or Hydrology      |        | significantly disturb | ed? Are "Norn         | nal Circun  | nstances       | s" preser | nt? Yes X        | No     |        |
| Are Vegetation          | , Soil         | , or Hydrology      |        | naturally problemat   | ic? (If needed        | d, explain  | any ans        | wers in l | Remarks.)        |        |        |
| SUMMARY OF F            | INDINGS -      | - Attach site r     | nap    | showing samp          | oling point locati    | ions, tra   | ansect         | s, imp    | ortant featu     | res, e | etc.   |
| Hydrophytic Vegetati    | on Present?    | Yes                 | х      | No                    | Is the Sampled A      | rea         |                |           |                  |        |        |
| Hydric Soil Present?    |                | Yes                 |        | No                    | within a Wetland?     | ?           | Yes            |           | No               |        |        |
| Wetland Hydrology F     | Present?       | Yes                 | Х      | No                    | If yes, optional We   | etland Site | ID:            |           |                  |        |        |
| Remarks: (Explain a     | Iternative pro | cedures here or ir  | n a se | parate report.)       |                       |             |                |           |                  |        |        |
|                         |                |                     |        |                       |                       |             |                |           |                  |        |        |
|                         |                |                     |        |                       |                       |             |                |           |                  |        |        |
|                         |                |                     |        |                       |                       |             |                |           |                  |        |        |
|                         |                |                     |        |                       |                       |             |                |           |                  |        |        |

| 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)  | X_Water-Stained Leaves (B9)                         | X Drainage Patterns (B10)                      |  |  |
| High Water Table (A2)   | Aquatic Fauna (B13)                                 | Moss Trim Lines (B16)                          |  |  |
| X Saturation (A3)   | Marl Deposits (B15)                                 | Dry-Season Water Table (C2)                    |  |  |
| Water Marks (B1)  | Crayfish Burrows (C8)                               |  |  |  |
| Sediment Deposits (B2)  | Saturation Visible on Aerial Imagery (C9)           |  |  |  |
| Drift Deposits (B3)   | Stunted or Stressed Plants (D1)                     |  |  |  |
| Algal Mat or Crust (B4)   | Geomorphic Position (D2)                            |  |  |  |
| Iron Deposits (B5)  | Thin Muck Surface (C7)                              | Shallow Aquitard (D3)                          |  |  |
| Inundation Visible on Aerial Imagery (B7)                                   | X_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):                                |  |  |  |
| Water Table Present? Yes X  | No Depth (inches): 14                               |  |  |  |
| Saturation Present? Yes X   | No Depth (inches): 0 Wet                            | and Hydrology Present? Yes X No                |  |  |
|   |   |  |  |  |
| (includes capillary fringe)   |   |  |  |  |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, monito | ring well, aerial photos, previous inspections), i  | f available:                                   |  |  |
|   | pring well, aerial photos, previous inspections), i | f available:                                   |  |  |
|   | ring well, aerial photos, previous inspections), i  | f available:                                   |  |  |
| Describe Recorded Data (stream gauge, monito                                |   | f available:                                   |  |  |
| Describe Recorded Data (stream gauge, monito                                |   | f available:                                   |  |  |
| Describe Recorded Data (stream gauge, monito                                |   | f available:                                   |  |  |
| Describe Recorded Data (stream gauge, monito                                |   | f available:                                   |  |  |
| Describe Recorded Data (stream gauge, monito                                |   | f available:                                   |  |  |
| Describe Recorded Data (stream gauge, monito                                |   | f available:                                   |  |  |
| Describe Recorded Data (stream gauge, monito                                |   | f available:                                   |  |  |
| Describe Recorded Data (stream gauge, monito                                |   | f available:                                   |  |  |
| Describe Recorded Data (stream gauge, monito                                |   | f available:                                   |  |  |

Sampling Point:

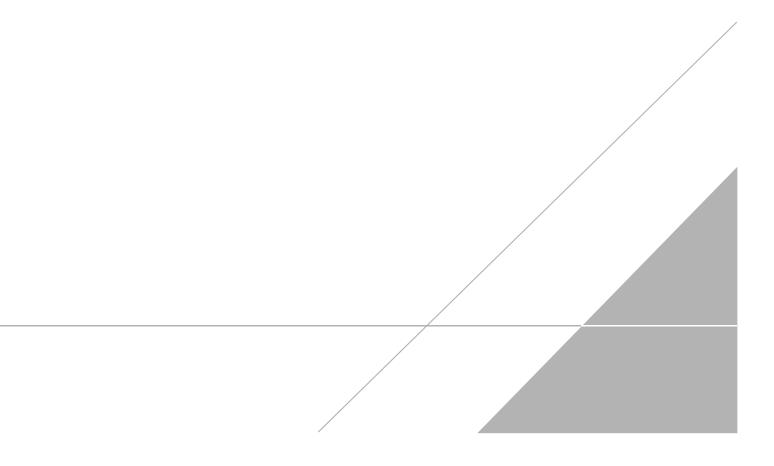
0

| <u>Tree Stratum</u> (Plot size: <u>10 Meters</u> ) | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test w   | orksheet:    |                     |                        |        |
|--|---------------------|----------------------|---------------------|--|--------------|---------------------|------------------------|--------|
| 1. Betula alleghaniensis (Yellow Birch)            | 35                  | Yes                  | FAC                 | Number of Dominon  | t Spaciaa    |                     |                        |        |
| 2. Fraxinus pennsylvanica (Green Ash)              | 5                   | No                   | FACW                | Number of Dominan<br>That Are OBL, FAC                     | •            |                     | 5                      | (A)    |
| 3. Betula lenta (Black Birch)                      | 10                  | Yes                  | FACU                | Total Number of Dor  | minont       |                     |                        |        |
| 4.   |                     |                      |                     | Species Across All S                                       |              |                     | 8                      | (B)    |
| 5.   |                     |                      |                     | Percent of Dominan   | t Spacias    |                     |                        |        |
| 6.   |                     |                      |                     | That Are OBL, FAC  | •            |                     | 62.5%                  | (A/I   |
| 7  |                     |                      |                     | Prevalence Index w   | vorksheet    | :                   |                        |        |
|  | 50                  | =Total Cover         |                     | Total % Cover  | of:          | М                   | ultiply by:            |        |
| Sapling/Shrub Stratum (Plot size:5 Meters          | )                   |                      |                     | OBL species  | 45           | x 1 =               | 45                     |        |
| 1. Quercus rubra (Red Oak)                         | 15                  | Yes                  | FACU                | FACW species   | 20           | x 2 =               | 40                     |        |
| 2. Rubus allegheniensis (Wild Raspberry)           | 10                  | No                   | FACU                | FAC species  | 65           | x 3 =               | 195                    |        |
| 3. Betula alleghaniensis (Yellow Birch)            | 25                  | Yes                  | FAC                 | FACU species   | 62           | x 4 =               | 248                    |        |
| 4. Betula lenta (Black Birch)                      | 10                  | No                   | FACU                | UPL species  | 0            | x 5 =               | 0                      |        |
| 5. Salix nigra (Black Willow)                      | 5                   | No                   | OBL                 | Column Totals:   | 192          | (A)                 | 528                    | (      |
| 6.   |                     |                      |                     | Prevalence Ir  | ndex = B/A   | 4 =                 | 2.75                   |        |
| 7.   |                     |                      |                     | Hydrophytic Veget  | ation Indie  | cators:             |                        |        |
|  | 65                  | =Total Cover         |                     | 1 - Rapid Test fo  | or Hydroph   | iytic Ve            | getation               |        |
| Herb Stratum (Plot size: 1 Meter )                 |                     |                      |                     | X 2 - Dominance  |              | -                   | •                      |        |
| 1. Carex stricta (Tussock Sedge)                   | 25                  | Yes                  | OBL                 | ## 3 - Prevalence I  | ndex is ≤3   | .0 <sup>1</sup>     |                        |        |
| 2. Solidago gigantea (Giant Goldenrod)             | 10                  | Yes                  | FACW                | 4 - Morphologic  | al Adaptati  | ons <sup>1</sup> (P | rovide sup             | oporti |
| 3. Rosa multiflora (Multiflora Rose)               | 10                  | Yes                  | FACU                | data in Rema   | irks or on a | a separa            | ate sheet)             |        |
| 4. Athyrium filix-femina (Northern Lady Fern)      | 5                   | No                   | FAC                 | Problematic Hyd  | drophytic √  | /egetati            | on <sup>1</sup> (Expla | ain)   |
| 5. Potentilla simplex (Cinquefoil)                 | 2                   | No                   | FACU                | <sup>1</sup> Indiactors of hydrig                          |              | otlond k            | drology                |        |
| 6. Dichanthelium clandestinum (Deertongue)         | 5                   | No                   | FACW                | <sup>1</sup> Indicators of hydric<br>present, unless distu |              |                     |                        | musi   |
| 7. Carex lurida (Lurid Sedge)                      | 10                  | Yes                  | OBL                 | Definitions of Vege  | tation Str   | ata:                |                        |        |
| 8. Salix nigra (Black Willow)                      | 5                   | No                   | OBL                 |  | - 2 in /7 6  | om) or              | moro in d              | iamo   |
| 9. Rubus allegheniensis (Wild Raspberry)           | 5                   | No                   | FACU                | <b>Tree</b> – Woody plants<br>at breast height (DB         |              |                     |                        | lame   |
| 10.  |                     |                      |                     | Conling/obruh  | a du plant   | -   tl              | -<br>Dan Din F         | ווסר   |
| 11.  |                     |                      |                     | Sapling/shrub – Wo<br>greater than or equa                 |              |                     |                        |        |
| 12.  |                     |                      |                     |  | ,            |                     |                        |        |
|  | 77                  | =Total Cover         |                     | Herb – All herbaceo<br>of size, and woody p                |              |                     |                        | ardle  |
| Woody Vine Stratum (Plot size: 5 Meters            | )                   |                      |                     |  |              |                     |                        | 00 6   |
| 1.   | _^                  |                      |                     | Woody vines – All v<br>height.                             | voody vine   | es great            | er than 3.             | 28 ft  |
| n  |                     |                      |                     |  |              |                     |                        |        |
| 3.   |                     |                      |                     | Hydrophytic  |              |                     |                        |        |
| 4.   |                     |                      |                     | Vegetation<br>Present? Ye                                  | es ####      | No                  |                        |        |
|  |                     | =Total Cover         |                     |  |              |                     |                        |        |
|  |                     |                      |                     |  |              |                     |                        |        |

|  | Matrix   | 0/         |   | x Features  | 1 . 2   | -     |  | <b>-</b> .  |   |
|--|--|------------|---|---|---|-------|--|---|---|
| inches)  | Color (moist)  | %          | Color (moist)   | <u>%</u> Ty   | pe <sup>1</sup> Loc <sup>2</sup>                    | le    | exture   | Remarks   |   |
| 0-4  | 10YR 5/4   | 100        |   |   |   | Sa    | andy   |   |   |
| 4-10   | 2.5Y 3/1   | 100        |   |   |   | Sa    | andy   | Organic   |   |
| 10-16  | 2.5Y 2.5/1   | 100        |   |   |   | Loam  | y/Clayey   |   |   |
|  |  |            |   |   |   |       |  |   |   |
|  |  |            |   | <u> </u>  |   |       |  |   |   |
|  |  |            |   |   |   |       |  |   |   |
|  |  |            |   |   |   |       |  |   |   |
|  |  |            |   |   |   |       |  |   |   |
|  |  |            |   |   |   |       |  |   |   |
|  |  |            |   | <u> </u>  |   |       |  |   |   |
|  |  |            |   |   |   |       |  |   |   |
|  |  |            |   |   |   |       |  |   |   |
|  |  |            |   |   |   |       |  |   |   |
|  |  |            |   |   |   |       |  |   |   |
|  |  |            |   |   |   |       |  |   |   |
|  |  | ·          |   |   |   |       |  |   |   |
|  | ncentration, D=Depl  | etion, RM= | Reduced Matrix, M   | S=Masked S  | and Grains.   |       |  | Pore Lining, M=Matrix.  | 3   |
| lydric Soil li   | ndicators:   | etion, RM= |   |   |   |       | Indicators for P   | Problematic Hydric Soi  |   |
| Hydric Soil II   | ndicators:<br>(A1)   | etion, RM= | Polyvalue Belo  | w Surface (S  |   |       | Indicators for P   | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA   | 149B)   |
| Hydric Soil II<br>Histosol (<br>Histic Epi   | n <b>dicators:</b><br>(A1)<br>ipedon (A2)  | etion, RM= | Polyvalue Belo<br>MLRA 149B   | w Surface (S<br>)   | 8) ( <b>LRR R,</b>                                  |       | 2 cm Muck  | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>ie Redox (A16) (LRR K,   | 149B)<br>L, R)  |
| Hydric Soil In<br>Histosol (<br>Histic Epi<br>Black His  | ndicators:<br>(A1)<br>ipedon (A2)<br>ttic (A3)   | etion, RM= | Polyvalue Belo<br>MLRA 149B<br>Thin Dark Surfa  | w Surface (S<br>)<br>ace (S9) ( <b>LR</b>   | 8) (LRR R,<br>R R, MLRA                             |       | Indicators for P<br>2 cm Muck (<br>Coast Prairi<br>5 cm Mucky  | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>ie Redox (A16) (LRR K,<br>/ Peat or Peat (S3) (LRF   | . 149B)<br>L, R)<br>R K, L, R)                                    |
| Hydric Soil II<br>Histosol (<br>Histic Epi<br>Black His<br>Hydroger  | n <b>dicators:</b><br>(A1)<br>ipedon (A2)  | etion, RM= | Polyvalue Belo<br>MLRA 149B<br>Thin Dark Surfa<br>High Chroma S   | w Surface (S<br>)<br>ace (S9) ( <b>LR</b><br>Sands (S11) (  | 8) (LRR R,<br>R R, MLRA<br>(LRR K, L)               |       | Indicators for F<br>2 cm Muck (<br>Coast Prairi<br>5 cm Mucky<br>Polyvalue B   | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>e Redox (A16) (LRR K,<br>Peat or Peat (S3) (LRR<br>elow Surface (S8) (LRR  | . 149B)<br>L, R)<br>R K, L, R)                                    |
| Hydric Soil In<br>Histosol (<br>Histic Epi<br>Black His<br>Hydroger<br>Stratified  | ndicators:<br>(A1)<br>ipedon (A2)<br>stic (A3)<br>n Sulfide (A4)   | -          | Polyvalue Belo<br>MLRA 149B<br>Thin Dark Surfa  | w Surface (S<br>)<br>ace (S9) ( <b>LR</b><br>Sands (S11) (<br>Mineral (F1)  | 8) (LRR R,<br>R R, MLRA<br>(LRR K, L)               |       | Indicators for F 2 cm Muck ( Coast Prairi 5 cm Mucky Polyvalue B Thin Dark S   | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>ie Redox (A16) (LRR K,<br>/ Peat or Peat (S3) (LRF   | 149B)<br>L, R)<br>K, L, R)<br>K, L)                               |
| Hydric Soil In<br>Histosol (<br>Histic Epi<br>Black His<br>Hydroger<br>Stratified<br>Depleted  | ndicators:<br>(A1)<br>ipedon (A2)<br>ttic (A3)<br>n Sulfide (A4)<br>Layers (A5)  | -          | Polyvalue Belo<br>MLRA 149B<br>Thin Dark Surfa<br>High Chroma S<br>Loamy Mucky I  | w Surface (S<br>)<br>ace (S9) ( <b>LR</b><br>Sands (S11)<br>Mineral (F1)<br>Matrix (F2)   | 8) (LRR R,<br>R R, MLRA<br>(LRR K, L)               |       | Indicators for P 2 cm Muck ( Coast Prairi 5 cm Mucky Polyvalue B Thin Dark S Iron-Mangat   | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>le Redox (A16) (LRR K,<br>7 Peat or Peat (S3) (LRF<br>selow Surface (S8) (LRR<br>Surface (S9) (LRR K, L)   | . 149B)<br>L, R)<br>R K, L, R)<br>K, L)<br>R K, L, R)             |
| Hydric Soil In<br>Histosol (<br>Histic Epi<br>Black His<br>Hydroger<br>Stratified<br>Depleted<br>Thick Da  | ndicators:<br>(A1)<br>ipedon (A2)<br>titic (A3)<br>n Sulfide (A4)<br>Layers (A5)<br>Below Dark Surface   | -          | Polyvalue Belo<br>MLRA 149B<br>Thin Dark Surfa<br>High Chroma S<br>Loamy Mucky I<br>Loamy Gleyed  | w Surface (S<br>)<br>ace (S9) ( <b>LR</b><br>Sands (S11) (<br>Mineral (F1)<br>Matrix (F2)<br>x (F3)   | 8) (LRR R,<br>R R, MLRA<br>(LRR K, L)               |       | Indicators for P 2 cm Muck ( Coast Prairi 5 cm Mucky Polyvalue B Thin Dark S Iron-Mangal Piedmont F  | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>e Redox (A16) (LRR K,<br>/ Peat or Peat (S3) (LRF<br>elow Surface (S8) (LRR<br>Surface (S9) (LRR K, L)<br>nese Masses (F12) (LR  | . 149B)<br>L, R)<br>R K, L, R)<br>K, L)<br>R K, L, R)<br>LRA 149E |
| Hydric Soil In<br>Histosol (<br>Histic Epi<br>Black His<br>Hydroger<br>Stratified<br>Depleted<br>Thick Dan<br>Sandy M  | ndicators:<br>(A1)<br>ipedon (A2)<br>ttic (A3)<br>n Sulfide (A4)<br>Layers (A5)<br>Below Dark Surface<br>rk Surface (A12)  | -          | Polyvalue Belo<br>MLRA 149B<br>Thin Dark Surfa<br>High Chroma S<br>Loamy Mucky I<br>Loamy Gleyed<br>Depleted Matri:   | w Surface (S<br>)<br>ace (S9) (LR<br>Sands (S11)<br>Mineral (F1)<br>Matrix (F2)<br>x (F3)<br>urface (F6)  | 8) (LRR R,<br>R R, MLRA<br>LRR K, L)<br>(LRR K, L)  |       | Indicators for P 2 cm Muck ( Coast Prairi 5 cm Mucky Polyvalue B Thin Dark S Iron-Mangat Piedmont Fl Mesic Spod                                      | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>ie Redox (A16) (LRR K,<br>/ Peat or Peat (S3) (LRF<br>eelow Surface (S8) (LRR<br>surface (S9) (LRR K, L)<br>nese Masses (F12) (LR<br>loodplain Soils (F19) (M  | . 149B)<br>L, R)<br>R K, L, R)<br>K, L)<br>R K, L, R)<br>LRA 149E |
| Hydric Soil In<br>Histosol (<br>Histic Epi<br>Black His<br>Hydroger<br>Stratified<br>Depleted<br>Thick Dan<br>Sandy Mi<br>Sandy Gl   | ndicators:<br>(A1)<br>ipedon (A2)<br>stic (A3)<br>n Sulfide (A4)<br>Layers (A5)<br>Below Dark Surface<br>rk Surface (A12)<br>ucky Mineral (S1)   | -          | Polyvalue Belo<br>MLRA 149B<br>Thin Dark Surfa<br>High Chroma S<br>Loamy Mucky I<br>Loamy Gleyed<br>Depleted Matri:<br>Redox Dark Su  | w Surface (S<br>)<br>ace (S9) ( <b>LR</b><br>Sands (S11) (<br>Mineral (F1)<br>Matrix (F2)<br>x (F3)<br>ırface (F6)<br>Surface (F7)  | 8) (LRR R,<br>R R, MLRA<br>LRR K, L)<br>(LRR K, L)  |       | Indicators for F 2 cm Muck Coast Prairi 5 cm Mucky Polyvalue B Thin Dark S Iron-Mangae Piedmont Fl Mesic Spod Red Parent                             | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>ie Redox (A16) (LRR K,<br>/ Peat or Peat (S3) (LRR<br>elow Surface (S8) (LRR<br>Surface (S9) (LRR K, L)<br>nese Masses (F12) (LR<br>loodplain Soils (F19) (M<br>lic (TA6) (MLRA 144A, 4  | . 149B)<br>L, R)<br>R K, L, R)<br>K, L)<br>R K, L, R)<br>LRA 149E |
| Hydric Soil In<br>Histosol (<br>Histic Epi<br>Black His<br>Hydroger<br>Stratified<br>Depleted<br>Thick Dan<br>Sandy Mi<br>Sandy Gl<br>Sandy Re                                       | ndicators:<br>(A1)<br>ipedon (A2)<br>ttic (A3)<br>n Sulfide (A4)<br>Layers (A5)<br>Below Dark Surface<br>rk Surface (A12)<br>ucky Mineral (S1)<br>leyed Matrix (S4)  | -          | Polyvalue Belo<br>MLRA 149B<br>Thin Dark Surfa<br>High Chroma S<br>Loamy Mucky I<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su<br>Depleted Dark                                    | w Surface (S<br>)<br>ace (S9) ( <b>LR</b><br>Sands (S11) (<br>Mineral (F1)<br>Matrix (F2)<br>x (F3)<br>urface (F6)<br>Surface (F7)<br>sions (F8)                                    | 8) (LRR R,<br>R R, MLRA<br>LRR K, L)<br>(LRR K, L)  |       | Indicators for F 2 cm Muck ( Coast Prairi 5 cm Mucky Polyvalue B Thin Dark S Iron-Mangar Piedmont FI Mesic Spod Red Parent Very Shallor              | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>ie Redox (A16) (LRR K,<br>7 Peat or Peat (S3) (LRF<br>ielow Surface (S8) (LRR<br>isurface (S9) (LRR K, L)<br>nese Masses (F12) (LR<br>loodplain Soils (F19) (M<br>lic (TA6) (MLRA 144A, 7<br>Material (F21)                        | . 149B)<br>L, R)<br>R K, L, R)<br>K, L)<br>R K, L, R)<br>LRA 149E |
| Hydric Soil In<br>Histosol (<br>Histic Epi<br>Black His<br>Hydroger<br>Stratified<br>Depleted<br>Thick Dan<br>Sandy Mi<br>Sandy Gl<br>Sandy Re                                       | ndicators:<br>(A1)<br>ipedon (A2)<br>titic (A3)<br>n Sulfide (A4)<br>Layers (A5)<br>Below Dark Surface<br>rk Surface (A12)<br>ucky Mineral (S1)<br>eyed Matrix (S4)<br>edox (S5)<br>Matrix (S6)                                      | -          | Polyvalue Belo<br>MLRA 149B<br>Thin Dark Surfa<br>High Chroma S<br>Loamy Mucky I<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su<br>Depleted Dark<br>Redox Depress                   | w Surface (S<br>)<br>ace (S9) ( <b>LR</b><br>Sands (S11) (<br>Mineral (F1)<br>Matrix (F2)<br>x (F3)<br>urface (F6)<br>Surface (F7)<br>sions (F8)                                    | 8) (LRR R,<br>R R, MLRA<br>LRR K, L)<br>(LRR K, L)  |       | Indicators for F 2 cm Muck ( Coast Prairi 5 cm Mucky Polyvalue B Thin Dark S Iron-Mangar Piedmont FI Mesic Spod Red Parent Very Shallor              | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>ie Redox (A16) (LRR K,<br>7 Peat or Peat (S3) (LRF<br>Below Surface (S8) (LRR<br>Surface (S9) (LRR K, L)<br>nese Masses (F12) (LR<br>loodplain Soils (F12) (M<br>lic (TA6) (MLRA 144A, 7<br>Material (F21)<br>w Dark Surface (F22) | . 149B)<br>L, R)<br>R K, L, R)<br>K, L)<br>R K, L, R)<br>LRA 149E |
| Hydric Soil Ii<br>Histosol (<br>Histic Epi<br>Black His<br>Hydroger<br>Stratified<br>Depleted<br>Thick Dai<br>Sandy Mi<br>Sandy Gi<br>Sandy Re<br>Stripped<br>X Dark Surf            | ndicators:<br>(A1)<br>ipedon (A2)<br>stic (A3)<br>n Sulfide (A4)<br>Layers (A5)<br>Below Dark Surface<br>rk Surface (A12)<br>ucky Mineral (S1)<br>leyed Matrix (S4)<br>edox (S5)<br>Matrix (S6)<br>face (S7)                         | • (A11)    | Polyvalue Belo<br>MLRA 149B<br>Thin Dark Surfa<br>High Chroma S<br>Loamy Mucky I<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su<br>Depleted Dark<br>Redox Depress<br>Marl (F10) (LR | w Surface (S<br>)<br>ace (S9) ( <b>LR</b><br>Sands (S11) (<br>Mineral (F1)<br>Matrix (F2)<br>x (F3)<br>urface (F6)<br>Surface (F6)<br>Surface (F7)<br>sions (F8)<br><b>R K, L</b> ) | 8) (LRR R,<br>R R, MLRA<br>(LRR K, L)<br>(LRR K, L) | 149B) | Indicators for P 2 cm Muck ( Coast Prairi 5 cm Mucky Polyvalue B Thin Dark S Iron-Mangar Piedmont Fl Mesic Spod Red Parent Very Shallor Other (Expla | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>ie Redox (A16) (LRR K,<br>7 Peat or Peat (S3) (LRF<br>Below Surface (S8) (LRR<br>Surface (S9) (LRR K, L)<br>nese Masses (F12) (LR<br>loodplain Soils (F12) (M<br>lic (TA6) (MLRA 144A, 7<br>Material (F21)<br>w Dark Surface (F22) | . 149B)<br>L, R)<br>K, L, R)<br>K, L)<br>R K, L, R)<br>LRA 149E   |
| Hydric Soil In<br>Histosol (<br>Histic Epi<br>Black His<br>Hydroger<br>Stratified<br>Depleted<br>Thick Dan<br>Sandy Mi<br>Sandy Gi<br>Sandy Gi<br>Sandy Re<br>Stripped<br>X Dark Sur | ndicators:<br>(A1)<br>ipedon (A2)<br>itic (A3)<br>n Sulfide (A4)<br>Layers (A5)<br>Below Dark Surface<br>rk Surface (A12)<br>ucky Mineral (S1)<br>leyed Matrix (S4)<br>edox (S5)<br>Matrix (S6)<br>face (S7)<br>hydrophytic vegetati | • (A11)    | Polyvalue Belo<br>MLRA 149B<br>Thin Dark Surfa<br>High Chroma S<br>Loamy Mucky I<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su<br>Depleted Dark<br>Redox Depress<br>Marl (F10) (LR | w Surface (S<br>)<br>ace (S9) ( <b>LR</b><br>Sands (S11) (<br>Mineral (F1)<br>Matrix (F2)<br>x (F3)<br>urface (F6)<br>Surface (F6)<br>Surface (F7)<br>sions (F8)<br><b>R K, L</b> ) | 8) (LRR R,<br>R R, MLRA<br>(LRR K, L)<br>(LRR K, L) | 149B) | Indicators for P 2 cm Muck ( Coast Prairi 5 cm Mucky Polyvalue B Thin Dark S Iron-Mangar Piedmont Fl Mesic Spod Red Parent Very Shallor Other (Expla | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>ie Redox (A16) (LRR K,<br>7 Peat or Peat (S3) (LRF<br>Below Surface (S8) (LRR<br>Surface (S9) (LRR K, L)<br>nese Masses (F12) (LR<br>loodplain Soils (F12) (M<br>lic (TA6) (MLRA 144A, 7<br>Material (F21)<br>w Dark Surface (F22) | . 149B)<br>L, R)<br>K, L, R)<br>K, L)<br>R K, L, R)<br>LRA 149E   |
| Hydric Soil In<br>Histosol (<br>Histic Epi<br>Black His<br>Hydroger<br>Stratified<br>Depleted<br>Thick Dan<br>Sandy Mi<br>Sandy Gi<br>Sandy Gi<br>Sandy Re<br>Stripped<br>X Dark Sur | ndicators:<br>(A1)<br>ipedon (A2)<br>stic (A3)<br>n Sulfide (A4)<br>Layers (A5)<br>Below Dark Surface<br>rk Surface (A12)<br>ucky Mineral (S1)<br>leyed Matrix (S4)<br>edox (S5)<br>Matrix (S6)<br>face (S7)                         | e (A11)    | Polyvalue Belo<br>MLRA 149B<br>Thin Dark Surfa<br>High Chroma S<br>Loamy Mucky I<br>Loamy Gleyed<br>Depleted Matri<br>Redox Dark Su<br>Depleted Dark<br>Redox Depress<br>Marl (F10) (LR | w Surface (S<br>)<br>ace (S9) ( <b>LR</b><br>Sands (S11) (<br>Mineral (F1)<br>Matrix (F2)<br>x (F3)<br>urface (F6)<br>Surface (F6)<br>Surface (F7)<br>sions (F8)<br><b>R K, L</b> ) | 8) (LRR R,<br>R R, MLRA<br>(LRR K, L)<br>(LRR K, L) | 149B) | Indicators for P 2 cm Muck ( Coast Prairi 5 cm Mucky Polyvalue B Thin Dark S Iron-Mangar Piedmont Fl Mesic Spod Red Parent Very Shallor Other (Expla | Problematic Hydric Soi<br>(A10) (LRR K, L, MLRA<br>ie Redox (A16) (LRR K,<br>7 Peat or Peat (S3) (LRF<br>Below Surface (S8) (LRR<br>Surface (S9) (LRR K, L)<br>nese Masses (F12) (LR<br>loodplain Soils (F12) (M<br>lic (TA6) (MLRA 144A, 7<br>Material (F21)<br>w Dark Surface (F22) | . 149B)<br>L, R)<br>K, L, R)<br>K, L)<br>R K, L, R)<br>LRA 149E   |

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs142p2\_051293.docx)

April 2018 Forms



| Project/Site: Dewey Loeffel Land     | fill Superfund Site     |                      | City/County: Nassau, Ren     | sselaer             | Sa              | ampling Date:  | 17 April 18        |
|--------------------------------------|-------------------------|----------------------|------------------------------|---------------------|-----------------|----------------|--------------------|
| Applicant/Owner: General Ele         | ectric Company          |                      |                              | State:              | NY              | Sampling Poin  | t: <u>A-Up</u>     |
| Investigator(s): JK                  |                         |                      | Section, Township            | o, Range: <u>N/</u> | ٩               |                |                    |
| Landform (hillside, terrace, etc.):  | Forested Hillside/Ray   | vine Local           | relief (concave, convex, non | e): <u>None</u>     |                 | Slop           | e %: <u>20-30%</u> |
| Subregion (LRR or MLRA): LRR         | R Lat:                  |                      | Long:                        |                     |                 | Datum:         | NAD 1983           |
| Soil Map Unit Name: Hoosic Gra       | velly Sandy Loam        |                      | 1                            | VWI classific       | ation: <u>N</u> | A              |                    |
| Are climatic / hydrologic conditions | on the site typical for | this time of year?   | Yes X                        | No (                | lf no, exp      | lain in Remark | s.)                |
| Are Vegetation, Soil                 | , or Hydrology          | significantly distur | bed? Are "Normal Cir         | cumstances          | " presenť       | ? Yes X        | No                 |
| Are Vegetation, Soil                 | , or Hydrology          | _naturally problema  | atic? (If needed, expl       | ain any ansv        | vers in Re      | emarks.)       |                    |
| SUMMARY OF FINDINGS                  | – Attach site ma        | p showing san        | pling point locations        | s, transec          | ts, imp         | ortant feat    | ures, etc.         |
| Hydrophytic Vegetation Present?      | Yes                     |                      | Is the Sampled Area          |                     |                 |                |                    |
| Hydric Soil Present?                 | Yes                     | No X                 | within a Wetland?            | Yes_                | N               | lo_X_          |                    |
| Wetland Hydrology Present?           | Yes                     | <u>No X</u>          | If yes, optional Wetland S   | Site ID:            |                 |                |                    |
| Remarks: (Explain alternative pro    | ocedures here or in a s | eparate report.)     |                              |                     |                 |                |                    |
|                                      |                         |                      |                              |                     |                 |                |                    |
|                                      |                         |                      |                              |                     |                 |                |                    |
|                                      |                         |                      |                              |                     |                 |                |                    |
|                                      |                         |                      |                              |                     |                 |                |                    |
|                                      |                         |                      |                              |                     |                 |                |                    |
| HYDROLOGY                            |                         |                      |                              |                     |                 |                |                    |
| Wetland Hydrology Indicators:        |                         |                      |                              |                     |                 | imum of two re | <u>quired)</u>     |
| Drimony Indicators (minimum of o     | no ie roduirod, choek a | u that apply/        |                              | Surface Soil        | I TOOKO (L      | 101            |                    |

| Primary Indicators (minimum   | of one is requir | red; check all        | that apply)                 |                       | Surface Soil Cracks (E                    | 36)             |  |  |  |
|---|------------------|-----------------------|-----------------------------|-----------------------|---|-----------------|--|--|--|
| Surface Water (A1)  |                  | Water-                | _                           | Drainage Patterns (B1 | 10)                                       |                 |  |  |  |
| High Water Table (A2)   |                  | Aquatio               | c Fauna (B13)               | _                     | Moss Trim Lines (B16                      | i)              |  |  |  |
| Saturation (A3)   |                  | Marl De               | eposits (B15)               | _                     | Dry-Season Water Ta                       | ble (C2)        |  |  |  |
| Water Marks (B1)  |                  | Hydrog                | gen Sulfide Odor (C1)       | _                     | Crayfish Burrows (C8)                     | )               |  |  |  |
| Sediment Deposits (B2)  |                  | Oxidize               | ed Rhizospheres on Living I | Roots (C3)            | Saturation Visible on Aerial Imagery (C9) |                 |  |  |  |
| Drift Deposits (B3)   |                  | _                     | Stunted or Stressed P       | Plants (D1)           |   |                 |  |  |  |
| Algal Mat or Crust (B4)   |                  | Geomorphic Position ( | (D2)                        |                       |   |                 |  |  |  |
| Iron Deposits (B5)  |                  | Shallow Aquitard (D3) | )                           |                       |   |                 |  |  |  |
| Inundation Visible on Ae  | rial Imagery (B7 | 7)Other (             | (Explain in Remarks)        | _                     | Microtopographic Reli                     | ef (D4)         |  |  |  |
| Sparsely Vegetated Con  | cave Surface (E  | 38)                   |                             | _                     | FAC-Neutral Test (D5                      | )               |  |  |  |
| Field Observations:   |                  |                       |                             |                       |   |                 |  |  |  |
| Surface Water Present?  | Yes              | No X                  | Depth (inches):             |                       |   |                 |  |  |  |
| Water Table Present?  | Yes              | No X                  | Depth (inches):             | -                     |   |                 |  |  |  |
|   | 165              |                       | Deput (inches).             |                       |   |                 |  |  |  |
| Saturation Present?   | Yes              | No X                  | Depth (inches):             | Wetland               | Hydrology Present?                        | Yes No X        |  |  |  |
|   |                  |                       |                             | Wetland               | Hydrology Present?                        | Yes No _X       |  |  |  |
| Saturation Present?   | Yes              | No X                  | Depth (inches):             | -                     |   | Yes <u>No X</u> |  |  |  |
| Saturation Present?<br>(includes capillary fringe)                                | Yes              | No X                  | Depth (inches):             | -                     |   | Yes No _X       |  |  |  |
| Saturation Present?<br>(includes capillary fringe)                                | Yes              | No X                  | Depth (inches):             | -                     |   | Yes <u>No X</u> |  |  |  |
| Saturation Present?<br>(includes capillary fringe)                                | Yes              | No X                  | Depth (inches):             | -                     |   | Yes <u>No X</u> |  |  |  |
| Saturation Present?<br>(includes capillary fringe)<br>Describe Recorded Data (str | Yes              | No X                  | Depth (inches):             | -                     |   | Yes <u>No X</u> |  |  |  |
| Saturation Present?<br>(includes capillary fringe)<br>Describe Recorded Data (str | Yes              | No X                  | Depth (inches):             | -                     |   | Yes <u>No X</u> |  |  |  |
| Saturation Present?<br>(includes capillary fringe)<br>Describe Recorded Data (str | Yes              | No X                  | Depth (inches):             | -                     |   | Yes <u>No X</u> |  |  |  |
| Saturation Present?<br>(includes capillary fringe)<br>Describe Recorded Data (str | Yes              | No X                  | Depth (inches):             | -                     |   | Yes <u>No X</u> |  |  |  |
| Saturation Present?<br>(includes capillary fringe)<br>Describe Recorded Data (str | Yes              | No X                  | Depth (inches):             | -                     |   | Yes <u>No X</u> |  |  |  |
| Saturation Present?<br>(includes capillary fringe)<br>Describe Recorded Data (str | Yes              | No X                  | Depth (inches):             | -                     |   | Yes <u>No X</u> |  |  |  |
| Saturation Present?<br>(includes capillary fringe)<br>Describe Recorded Data (str | Yes              | No X                  | Depth (inches):             | -                     |   | Yes <u>No X</u> |  |  |  |
| Saturation Present?<br>(includes capillary fringe)<br>Describe Recorded Data (str | Yes              | No X                  | Depth (inches):             | -                     |   | Yes <u>No X</u> |  |  |  |

Sampling Point: A-Up

| Tree Stratum (Plot size:10 m)                      | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:  |
|--|---------------------|----------------------|---------------------|--|
| 1. <u>Tsuga canadensis</u><br>2.                   | 80                  | Yes                  | FACU                | Number of Dominant Species<br>That Are OBL, FACW, or FAC: 1 (A)  |
| 3.   |                     | ·                    |                     | That Are OBL, FACW, or FAC:(A) Total Number of Dominant  |
| 4  |                     | ·                    |                     | Species Across All Strata: 5 (B)   |
| 5  |                     | ·                    |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC: 20.0% (A/B)   |
| 7.   |                     |                      |                     | Prevalence Index worksheet:  |
|  | 80                  | =Total Cover         |                     | Total % Cover of: Multiply by:   |
| Sapling/Shrub Stratum (Plot size: 5 m )            |                     |                      |                     | OBL species x 1 =  |
| 1. Fagus grandifolia                               | 10                  | Yes                  | FACU                | FACW species 0 x 2 = 0   |
| 2  |                     |                      |                     | FAC species5 x 3 =15   |
| 3  |                     |                      |                     | FACU species 105 x 4 = 420   |
| 4  |                     |                      |                     | UPL species x 5 =  |
| 5  |                     |                      |                     | Column Totals: 110 (A) 435 (B)   |
| 6  |                     |                      |                     | Prevalence Index = B/A =3.95   |
| 7  |                     |                      |                     | Hydrophytic Vegetation Indicators:   |
|  | 10                  | =Total Cover         |                     | 1 - Rapid Test for Hydrophytic Vegetation  |
| Herb Stratum (Plot size: 1 m )                     |                     |                      |                     | 2 - Dominance Test is >50%   |
| 1. Polystichum acrostichoides                      | 10                  | Yes                  | FACU                | 3 - Prevalence Index is ≤3.0 <sup>1</sup>  |
| 2. Thelypteris noveboracensis                      | 5                   | Yes                  | FAC                 | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| 3. Dryopteris marginalis                           | 5                   | Yes                  | FACU                | data in Remarks or on a separate sheet)  |
| 4.   |                     |                      |                     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 5.   |                     |                      |                     |  |
| 6.   |                     |                      |                     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 7.   |                     |                      |                     | Definitions of Vegetation Strata:  |
| 8.   |                     |                      |                     |  |
| 9.   |                     |                      |                     | <b>Tree</b> – 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   |
| 11   |                     |                      |                     | and greater than or equal to 3.28 ft (1 m) tall.   |
| 12   | 20                  | =Total Cover         |                     | <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
| Woody Vine Stratum (Plot size: 5 m )               | 20                  |                      |                     |  |
|  |                     |                      |                     | Woody vines – All woody vines greater than 3.28 ft in  |
| 1  |                     | ·                    |                     | height.  |
| 2  |                     | ·                    |                     | Hydrophytic  |
| 3.   |                     | ·                    |                     | Vegetation   |
| 4  |                     | ·                    |                     | Present? Yes <u>No X</u>   |
|  |                     | =Total Cover         |                     |  |
| Remarks: (Include photo numbers here or on a separ | ate sheet.)         |                      |                     |  |
| Data from Veg Plot C (collected October 12, 2017). |                     |                      |                     |  |
|  |                     |                      |                     |  |
|  |                     |                      |                     |  |
|  |                     |                      |                     |  |
|  |                     |                      |                     |  |

| Depth       Matrix       Redox Features         (inches)       Color (moist)       %       Type       Loc <sup>2</sup> Texture       Remarks         0-18       10YR 4/3       100  |                            |                       | to the dep |                     |            |             | or or co        | nfirm the absence of | f indicator | 's.)        |                  |
|---|----------------------------|-----------------------|------------|---------------------|------------|-------------|-----------------|----------------------|-------------|-------------|------------------|
| 0-18       10YR 4/3       100   | Depth                      | Matrix                |            |                     |            |             | . 2             |                      |             | -           |                  |
| Image: concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.          Hydric Soil Indicators:  | (inches)                   | Color (moist)         | <u>%</u>   | Color (moist)       | %          | Туре        | Loc             | l exture             |             | Rema        | rks              |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  | 0-18                       | 10YR 4/3              | 100        |                     |            |             |                 | Sandy                | w/ Silt a   | nd Loam, Oi | rganics, Pebbles |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            | ·           |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       | ·          |                     |            | ·           |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            | ·           |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            | ·           |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            | ·           |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Piedmont floodplain in Remarks)       Polytalue Below Surface (F22) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Mestrictive Layer (if observed):       Type:       No _X         Type:       Depth (inches):       Yes       No _  |                            |                       |            |                     |            | ·           |                 |                      |             |             |                  |
| Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, Link |                            |                       | etion, RM  | =Reduced Matrix, N  | IS=Mas     | ked Sand    | Grains.         |                      |             |             |                  |
| 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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       ************************************   | -                          |                       |            |                     | ~ ~ ~      | (00) (1     |                 |                      |             | •           |                  |
| 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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Marl (F10) (LRR K, L)       Other (Explain in Remarks) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Yes  |                            |                       |            |                     |            | ice (S8) (I | RR R,           |                      |             |             |                  |
| Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Type:       Depth (inches):         Type:   |                            |                       |            |                     | ,          |             |                 |                      |             |             |                  |
| Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Restrictive Layer (if observed):         Type:   |                            | ( )                   |            |                     |            |             |                 |                      | -           |             |                  |
| Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       If observed):       Type:         Type:   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
| Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:       Depth (inches):         Depth (inches):       Hydric Soil Present?       Yes       No       X  |                            |                       | (A11)      |                     |            |             | ( <b>r</b> , L) |                      |             |             |                  |
| Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:  |                            |                       | e (ATT)    |                     |            | ΓΖ)         |                 |                      |             |             |                  |
| Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       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  |                            |                       |            |                     |            | -6)         |                 |                      |             |             |                  |
| Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:         Depth (inches):       Hydric Soil Present?  |                            |                       |            |                     |            |             |                 |                      |             |             | ···, ···, ···)   |
| Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:         Depth (inches):       Hydric Soil Present?   |                            | • • • •               |            |                     |            |             |                 |                      |             | ( )         | 22)              |
| Dark Surface (S7) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   |                            |                       |            |                     | •          | 0)          |                 |                      |             |             |                  |
| <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. <b>Restrictive Layer (if observed):</b> Type:         Depth (inches):             Hydric Soil Present?       Yes  |                            |                       |            |                     | , _,       |             |                 |                      |             | ,           |                  |
| Restrictive Layer (if observed):  |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
| Restrictive Layer (if observed):  | <sup>3</sup> Indicators of | f hvdrophvtic vegetat | ion and we | etland hvdrologv mu | ist be pro | esent. un   | ess distu       | rbed or problematic. |             |             |                  |
| Type:   |                            |                       |            |                     |            | ,           |                 |                      |             |             |                  |
| Depth (inches):         Hydric Soil Present?         Yes         No         X   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 | Hydric Soil Prese    | ent?        | Yes         | No X             |
| Remarks:  |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   | Remarks:                   |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |
|   |                            |                       |            |                     |            |             |                 |                      |             |             |                  |

| Project/Site: Dewey Loeffel Landfill Superfund Site   | City/County: Nassau, Rensselaer Sampling Date: 17 April 18 |
|---|--|
| Applicant/Owner: General Electric Company   | State: NY Sampling Point: A-Wet                            |
| Investigator(s): JK   | Section, Township, Range: NA                               |
|   | relief (concave, convex, none): None Slope %: 0-5%         |
| Subregion (LRR or MLRA): LRR R Lat:   | Long: Datum: NAD 1983                                      |
| • · · · · · · · · · · · · · · · · · · ·   | *  |
| Soil Map Unit Name: Hoosic Gravelly Sandy Loam  | NWI classification: PEM                                    |
| Are climatic / hydrologic conditions on the site typical for this time of year?   | Yes X No (If no, explain in Remarks.)                      |
| Are Vegetation, Soil, or Hydrologysignificantly disturb   | bed? Are "Normal Circumstances" present? Yes X No          |
| Are Vegetation X , Soil , or Hydrology naturally problema   | atic? (If needed, explain any answers in Remarks.)         |
| SUMMARY OF FINDINGS – Attach site map showing sam   | pling 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:                          |
| Remarks: (Explain alternative procedures here or in a separate report.)   |  |
| Survey performed outside of growing season; therefore, presence of identif  | iable species recorded without cover.                      |
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| 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)X Water-Stained Leaves (B   | B9) X Drainage Patterns (B10)                              |
| X High Water Table (A2) Aquatic Fauna (B13)   | Moss Trim Lines (B16)                                      |
| X Saturation (A3) Marl Deposits (B15)   | Dry-Season Water Table (C2)                                |
| X Water Marks (B1) Hydrogen Sulfide Odor (  |  |
| Sediment Deposits (B2) Oxidized Rhizospheres of   |  |
| Drift Deposits (B3) Presence of Reduced Irc   |  |
| Algal Mat or Crust (B4) Recent Iron Reduction in  |  |
| Iron Deposits (B5) Thin Muck Surface (C7)   | Shallow Aquitard (D3)                                      |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in Remark<br>Sparsely Vegetated Concave Surface (B8)   | ks)Microtopographic Relief (D4)<br>X FAC-Neutral Test (D5) |
|   |  |
| Field Observations:<br>Surface Water Present? Yes No X Depth (inches):  |  |
| Surface Water Present?         Yes         No         X         Depth (inches):           Water Table Present?         Yes         X         No         Depth (inches): |  |
| Saturation Present? Yes X No Depth (inches):  |  |
| (includes capillary fringe)   |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre   | vious inspections), if available:                          |
|   |  |
|   |  |
| Remarks:  |  |
|   |  |
|   |  |
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|   |  |

Sampling Point: A-Wet

| Tree Stratum (Plot size: 10 m )  | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:   |                                    |
|--|---------------------|----------------------|---------------------|---|------------------------------------|
| 1.       2.  |                     |                      |                     | Number of Dominant Species<br>That Are OBL, FACW, or FAC:                               | (A)                                |
| 3<br>4   |                     |                      |                     | Total Number of Dominant<br>Species Across All Strata:                                  | (B)                                |
| 5<br>6   |                     |                      |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC:                              | (A/B)                              |
| 7  |                     |                      |                     | Prevalence Index worksheet:   |                                    |
|  |                     | =Total Cover         |                     | Total % Cover of:   | Multiply by:                       |
| Sapling/Shrub Stratum (Plot size: 5 m )  |                     |                      |                     | OBL species x   | 1 =                                |
| 1. Betula alleghaniensis   |                     |                      | FAC                 | FACW species x2   | 2 =                                |
| 2  |                     |                      |                     | FAC species x 3   | 3 =                                |
| 3.   |                     |                      |                     | FACU species x 4  | 4 =                                |
| 4.   |                     |                      |                     |   | 5 =                                |
| 5.   |                     |                      |                     | Column Totals: (A   | .) (B)                             |
| 6.   |                     |                      |                     | Prevalence Index = B/A =  |                                    |
| 7.   |                     |                      |                     | Hydrophytic Vegetation Indicato   | ors:                               |
|  |                     | =Total Cover         |                     | 1 - Rapid Test for Hydrophytic  | Vegetation                         |
| Herb Stratum (Plot size: 1 m )   |                     |                      |                     | 2 - Dominance Test is >50%  | -                                  |
| 1. Sphagnum sp.  |                     |                      |                     | 3 - Prevalence Index is ≤3.0 <sup>1</sup>   |                                    |
| 2. Lysimachia nummularia   |                     |                      | FACW                | 4 - Morphological Adaptations   | s <sup>1</sup> (Provide supporting |
| 2 Athenium filing forming  |                     |                      | FAC                 | data in Remarks or on a se  |                                    |
| 3.         Autynum linx-iemina           4.  |                     |                      |                     | X Problematic Hydrophytic Vege  | etation <sup>1</sup> (Explain)     |
| 5<br>6   |                     |                      |                     | <sup>1</sup> Indicators of hydric soil and wetla<br>present, unless disturbed or proble |                                    |
| 7.   |                     |                      |                     | Definitions of Vegetation Strata  | :                                  |
| 8.   |                     |                      |                     | <b>Tree</b> – Woody plants 3 in. (7.6 cm  | ) or more in diameter              |
| 9.   |                     |                      |                     | at breast height (DBH), regardless  |                                    |
| 10   |                     |                      |                     | Sapling/shrub – Woody plants le   | cc than 2 in DRU                   |
| 11.  |                     |                      |                     | and greater than or equal to 3.28   |                                    |
| 12   |                     |                      |                     | Herb – All herbaceous (non-wood   | w plants regardless                |
|  |                     | =Total Cover         |                     | of size, and woody plants less tha  |                                    |
| <u>Woody Vine Stratum</u> (Plot size: <u>5 m</u> )   |                     |                      |                     | Woody vines – All woody vines g   | reater than 3.28 ft in             |
| 1  |                     |                      |                     | height.   |                                    |
| 2  |                     |                      |                     | Hudrophutia   |                                    |
| 3  |                     |                      |                     | Hydrophytic<br>Vegetation   |                                    |
| 4  |                     |                      |                     | Present? Yes X  | No                                 |
|  |                     | =Total Cover         |                     |   |                                    |
| Remarks: (Include photo numbers here or on a separa<br>Survey performed outside of growing season; therefore |                     | of identifiable s    | species record      | ded without cover.  |                                    |

| Profile Desc              | cription: (Describe                      | to the dep  | th needed to docu               | ment th   | ne indicat          | or or co         | nfirm the absence of indi   | cators.)  |
|---------------------------|--|-------------|---------------------------------|-----------|---------------------|------------------|-----------------------------|---|
| Depth                     | Matrix                                   |             |                                 | x Featu   |                     |                  |                             |   |
| (inches)                  | Color (moist)                            | %           | Color (moist)                   | %         | Type <sup>1</sup>   | Loc <sup>2</sup> | Texture                     | Remarks   |
| 0-5                       | 5YR 2.5/1                                | 100         |                                 |           |                     |                  | Sandy                       | Silty w/ Significant Organic  |
| 5-7                       | 10YR 3/2                                 | 100         |                                 |           |                     |                  | Sandy                       | w/ Pebbles  |
| 7-13                      | 10YR 4/2                                 | 100         |                                 |           |                     |                  | Sandy                       | w/ Pebbles  |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
| ·                         |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
| <sup>1</sup> Type: C=C    | oncentration, D=Dep                      | letion, RM  | =Reduced Matrix, M              | 1S=Mas    | ked Sand            | Grains.          | <sup>2</sup> Location: PL=F | Pore Lining, M=Matrix.  |
| Hydric Soil               | Indicators:                              |             |                                 |           |                     |                  | Indicators for P            | roblematic Hydric Soils <sup>3</sup> :  |
| Histosol                  |  |             | Polyvalue Belo                  |           | ace (S8) ( <b>I</b> | .RR R,           |                             | (A10) ( <b>LRR K, L, MLRA 149B</b> )  |
|                           | pipedon (A2)                             |             | MLRA 149B                       | ,         |                     |                  |                             | e Redox (A16) ( <b>LRR K, L, R</b> )  |
|                           | istic (A3)                               |             | Thin Dark Surf                  |           |                     |                  |                             | Peat or Peat (S3) (LRR K, L, R)   |
|                           | en Sulfide (A4)                          |             | High Chroma S                   |           |                     |                  |                             | elow Surface (S8) (LRR K, L)  |
|                           | d Layers (A5)                            | - ( 1 1 1 ) | Loamy Mucky                     |           |                     | κκ, L)           |                             | urface (S9) ( <b>LRR K, L</b> )   |
|                           | d Below Dark Surface                     | e (A11)     | Loamy Gleyed                    |           | (FZ)                |                  |                             | nese Masses (F12) ( <b>LRR K, L, R</b> )<br>oodplain Soils (F19) ( <b>MLRA 149B</b> |
|                           | ark Surface (A12)<br>/lucky Mineral (S1) |             | Depleted Matri<br>Redox Dark Su |           | F6)                 |                  |                             | ic (TA6) ( <b>MLRA 144A, 145, 149B</b> )  |
|                           | Gleyed Matrix (S4)                       |             | Depleted Dark                   |           |                     |                  |                             | Material (F21)  |
|                           | Redox (S5)                               |             | Redox Depres                    |           | . ,                 |                  |                             | w Dark Surface (F22)  |
|                           | d Matrix (S6)                            |             | Marl (F10) (LR                  |           |                     |                  |                             | ain in Remarks)   |
| X Dark Su                 |  |             | () (=                           | , _,      |                     |                  |                             | ····· ···· · · · · · · · · · · · · · ·  |
|                           | ( )                                      |             |                                 |           |                     |                  |                             |   |
| <sup>3</sup> Indicators o | of hydrophytic vegetat                   | tion and we | etland hydrology mu             | ist be pr | esent, un           | ess distu        | rbed or problematic.        |   |
| Restrictive               | Layer (if observed):                     |             |                                 |           |                     |                  |                             |   |
| Type:                     | Ro                                       | ck          |                                 |           |                     |                  |                             |   |
| Depth (i                  | nches):                                  | 13          |                                 |           |                     |                  | Hydric Soil Present?        | Yes X No  |
| Remarks:                  |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |
| 1                         |  |             |                                 |           |                     |                  |                             |   |
| 1                         |  |             |                                 |           |                     |                  |                             |   |
| 1                         |  |             |                                 |           |                     |                  |                             |   |
|                           |  |             |                                 |           |                     |                  |                             |   |

| Project/Site: Dewey Loeffel Landfill Superfund Site  | City/County: Nassau, Rensselaer Sampling Date: 17 April 18  |  |  |  |  |
|--|---|--|--|--|--|
| Applicant/Owner: General Electric Company  | State: NY Sampling Point: B-Up                              |  |  |  |  |
| Investigator(s): JK  | Section, Township, Range: NA                                |  |  |  |  |
|  | relief (concave, convex, none): None Slope %: 20-30%        |  |  |  |  |
|  |   |  |  |  |  |
| Subregion (LRR or MLRA): LRR R Lat:  | Long: Datum: NAD 1983                                       |  |  |  |  |
| Soil Map Unit Name: Hoosic Gravelly Sandy Loam   | NWI classification: NA                                      |  |  |  |  |
| Are climatic / hydrologic conditions on the site typical for this time of year?  | Yes X No (If no, explain in Remarks.)                       |  |  |  |  |
| Are Vegetation, Soil, or Hydrologysignificantly disturb  | bed? Are "Normal Circumstances" present? Yes X No           |  |  |  |  |
| Are Vegetation X, Soil , or Hydrology naturally problema   | atic? (If needed, explain any answers in Remarks.)          |  |  |  |  |
| SUMMARY OF FINDINGS – Attach site map showing sam  | npling point locations, transects, important 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:                           |  |  |  |  |
| Survey performed outside of growing season; therefore, presence of identif   | ïable species recorded without cover.                       |  |  |  |  |
| 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 Leaves (B  |   |  |  |  |  |
| High Water Table (A2) Aquatic Fauna (B13)  | Moss Trim Lines (B16)                                       |  |  |  |  |
| Saturation (A3)Marl Deposits (B15)   | Dry-Season Water Table (C2)                                 |  |  |  |  |
| Water Marks (B1) Hydrogen Sulfide Odor (*  |   |  |  |  |  |
| Sediment Deposits (B2)Oxidized Rhizospheres of   |   |  |  |  |  |
| Drift Deposits (B3)Presence of Reduced Irc   |   |  |  |  |  |
| Algal Mat or Crust (B4)Recent Iron Reduction in  |   |  |  |  |  |
| Iron Deposits (B5) Thin Muck Surface (C7)  |   |  |  |  |  |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in Remark   |   |  |  |  |  |
| Sparsely Vegetated Concave Surface (B8)  | FAC-Neutral Test (D5)                                       |  |  |  |  |
| Field Observations:  |   |  |  |  |  |
| Surface Water Present? Yes No X Depth (inches):  |   |  |  |  |  |
| Water Table Present?       Yes       No       X       Depth (inches):         Saturation Present?       Yes       No       X       Depth (inches): |   |  |  |  |  |
| Saturation Present? Yes No X Depth (inches):<br>(includes capillary fringe)  | Wetland Hydrology Present? Yes <u>No X</u>                  |  |  |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre  | avious inspections) if available:                           |  |  |  |  |
| beschbe recorded Data (stream gauge, monitoring well, achai photos, pre  |   |  |  |  |  |
|  |   |  |  |  |  |
| Remarks:   |   |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |

Sampling Point: B-Up

| <u>Tree Stratum</u> (Plot size: 10 m )   | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet   |                                   |
|--|---------------------|----------------------|---------------------|--|-----------------------------------|
| 1. Tsuga canadensis  |                     | <u> </u>             | FACU                |  |                                   |
| 2. Acer saccharum  |                     | ·                    | FACU                | Number of Dominant Species<br>That Are OBL, FACW, or FAC                       |                                   |
| 3. Fagus grandifolia   |                     |                      | FACU                |  | 、,                                |
| 4.   |                     |                      |                     | Total Number of Dominant<br>Species Across All Strata:                         | (B)                               |
| 5  |                     |                      |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC                      | ::(A/B)                           |
| 7  |                     |                      |                     | Prevalence Index workshee  | t:                                |
|  |                     | =Total Cover         |                     | Total % Cover of:  | Multiply by:                      |
| Sapling/Shrub Stratum (Plot size: 5 m )  |                     |                      |                     | OBL species  | x 1 =                             |
| 1. Carpinus caroliniana  |                     |                      | FAC                 | FACW species   | x 2 =                             |
| 2  |                     |                      |                     | FAC species  | x 3 =                             |
| 3  |                     |                      |                     | FACU species   | x 4 =                             |
| 4.   |                     |                      |                     | UPL species  | x 5 =                             |
| 5.   |                     |                      |                     | Column Totals:   | (A) (B)                           |
| 6.   |                     |                      |                     | Prevalence Index = B/  | A =                               |
| 7.   |                     |                      |                     | Hydrophytic Vegetation Indi  | cators:                           |
|  |                     | =Total Cover         |                     | 1 - Rapid Test for Hydrop  | hytic Vegetation                  |
| Herb Stratum (Plot size: 1 m )   |                     | •                    |                     | 2 - Dominance Test is >5   |                                   |
| 1. Thelypteris noveboracensis  |                     |                      | FAC                 | 3 - Prevalence Index is ≤3   | 3.0 <sup>1</sup>                  |
|  |                     |                      |                     | 4 - Morphological Adapta   |                                   |
| 3.   |                     | . <u> </u>           |                     | data in Remarks or on  |                                   |
| 4.   |                     | ·                    |                     | X Problematic Hydrophytic  | √egetation <sup>1</sup> (Explain) |
| 5.   |                     |                      |                     | <sup>1</sup> Indiantors of hydric soil and y                                   | atland by dralagy must be         |
| 6.   |                     |                      |                     | <sup>1</sup> Indicators of hydric soil and w<br>present, unless disturbed or p |                                   |
| 7  |                     |                      |                     | Definitions of Vegetation St   | rata:                             |
| 8  |                     |                      |                     | Tree – Woody plants 3 in. (7.6   | 6 cm) or more in diameter         |
| 9  |                     | ·                    |                     | at breast height (DBH), regard   |                                   |
| 10   |                     |                      |                     | Sapling/shrub – Woody plan   |                                   |
| 11   |                     |                      |                     | and greater than or equal to 3   | .28 ft (1 m) tall.                |
| 12   |                     |                      |                     | Herb – All herbaceous (non-w   |                                   |
|  |                     | =Total Cover         |                     | of size, and woody plants less   | than 3.28 ft tall.                |
| <u>Woody Vine Stratum</u> (Plot size: <u>5 m</u> )   |                     |                      |                     | Woody vines – All woody vine   | es greater than 3.28 ft in        |
| 1  |                     |                      |                     | height.  |                                   |
| 2  |                     |                      |                     | Hydrophytic  |                                   |
| 3  |                     |                      |                     | Vegetation   |                                   |
| 4  |                     | ·                    |                     | Present? Yes   | No <u>X</u>                       |
|  |                     | =Total Cover         |                     |  |                                   |
| Remarks: (Include photo numbers here or on a separ<br>Survey performed outside of growing season; therefor | ,                   | of identifiable s    | species record      | ded without cover.   |                                   |
|  |                     |                      |                     |  |                                   |
|  |                     |                      |                     |  |                                   |
|  |                     |                      |                     |  |                                   |

| Depth                   | Matrix              | to the de                               | epth needed to docu<br>Redo     | x Featu   |                   |                  |                                       |                | 013.)                            |            |          |
|-------------------------|---------------------|---|---------------------------------|-----------|-------------------|------------------|---------------------------------------|----------------|----------------------------------|------------|----------|
| (inches)                | Color (moist)       | %                                       | Color (moist)                   | %         | Type <sup>1</sup> | Loc <sup>2</sup> | Texture                               |                | Rema                             | rks        |          |
| 0-5                     | 5YR 3/3             |   |                                 |           |                   |                  | Sandy                                 |                | Silty w/ Or                      | rganics    |          |
| 5-18                    | 10YR 5/4            |   |                                 |           |                   |                  | Sandy                                 |                | Trace Silt a                     | and Clay   |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           | ·                 |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           | ·                 |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           | ·                 |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           | ·                 |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           | ·                 |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           | ·                 |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           | . <u> </u>        |                  |                                       |                |                                  |            |          |
| <sup>1</sup> Type: C=Co | ncentration, D=Depl | etion, RI                               | M=Reduced Matrix, M             | IS=Mas    | ked Sand          | Grains.          |                                       |                | Lining, M=Ma                     |            |          |
| Hydric Soil I           |                     |   |                                 |           |                   |                  |                                       |                | lematic Hydr                     |            |          |
| Histosol                |                     |   | Polyvalue Belo                  |           | ice (S8) (I       | _RR R,           |                                       |                | D) (LRR K, L, I                  |            | )        |
|                         | ipedon (A2)         |   | MLRA 149B                       | ,         |                   |                  |                                       |                | edox (A16) (L                    |            | D)       |
| Black His               | n Sulfide (A4)      |   | Thin Dark Surf<br>High Chroma S |           |                   |                  | · · · · · · · · · · · · · · · · · · · | -              | at or Peat (S3<br>v Surface (S8) |            |          |
|                         | Layers (A5)         |   | Loamy Mucky                     |           |                   |                  |                                       | -              | ice (S9) (LRR                    |            |          |
|                         | Below Dark Surface  | Δ11)                                    | Loamy Gleyed                    |           |                   | <b>( ((, L</b> ) |                                       |                | e Masses (F12                    |            | R)       |
|                         | rk Surface (A12)    | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Depleted Matri                  |           | 12)               |                  |                                       | -              | plain Soils (F                   |            |          |
|                         | ucky Mineral (S1)   |   | Redox Dark Si                   |           | -6)               |                  |                                       |                | TA6) ( <b>MLRA 1</b>             |            |          |
|                         | leyed Matrix (S4)   |   | Depleted Dark                   |           |                   |                  |                                       | ed Parent Mat  |                                  | ,,         | ,        |
|                         | edox (S5)           |   | Redox Depres                    |           |                   |                  |                                       |                | ark Surface (F                   | 22)        |          |
|                         | Matrix (S6)         |   | <br>Marl (F10) ( <b>LR</b>      |           | ,                 |                  |                                       | her (Explain i |                                  | ,          |          |
| Dark Sur                | face (S7)           |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
| _                       |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     | ion and v                               | vetland hydrology mu            | ist be pr | esent, un         | less distu       | Irbed or problem                      | atic.          |                                  |            |          |
|                         | ayer (if observed): |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
| Type:                   |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
| Depth (ir               | iches):             |   |                                 |           |                   |                  | Hydric Soil F                         | Present?       | Yes                              | <u>NoX</u> | <u> </u> |
| Remarks:                |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |
|                         |                     |   |                                 |           |                   |                  |                                       |                |                                  |            |          |

| Project/Site: Dewey Loeffel Landfill Superfund Site  | City/County: Nassau, Rensselaer Sampling Date: 17 April 18          |
|--|---|
| Applicant/Owner: General Electric Company  | State: NY Sampling Point: B-Wet                                     |
| Investigator(s): JK  | Section, Township, Range: NA  |
| • ()   | Local relief (concave, convex, none): Convex Slope %: 0-5%          |
| Subregion (LRR or MLRA): LRR R Lat:  |   |
| Soil Map Unit Name: Hoosic Gravelly Sandy Loam   | NWI classification: PEM   |
| Are climatic / hydrologic conditions on the site typical for this time of ye   |   |
|  |   |
| Are Vegetation, Soil, or Hydrologysignificantly  |   |
| Are Vegetation, Soil, or Hydrologynaturally pro  |   |
| 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:                                   |
| Remarks: (Explain alternative procedures here or in a separate repo  | rt.)  |
|  |   |
|  |   |
|  |   |
|  |   |
|  |   |
| L<br>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)  |
| X Surface Water (A1) X Water-Stained Lea   |   |
| X High Water Table (A2) Aquatic Fauna (B1  |   |
| X Saturation (A3) Marl Deposits (B1  | 5) Dry-Season Water Table (C2)                                      |
| X Water Marks (B1) Hydrogen Sulfide  | Odor (C1) Crayfish Burrows (C8)                                     |
| Sediment Deposits (B2)Oxidized Rhizosph  | neres on Living Roots (C3)Saturation Visible on Aerial Imagery (C9) |
| Drift Deposits (B3)  |   |
| —  | ction in Tilled Soils (C6) X Geomorphic Position (D2)               |
| Iron Deposits (B5) Thin Muck Surface   |   |
| Inundation Visible on Aerial Imagery (B7)Other (Explain in F   | ,   |
| Sparsely Vegetated Concave Surface (B8)  | X FAC-Neutral Test (D5)   |
| Field Observations:  |   |
| Surface Water Present? Yes X No Depth (in  |   |
| Water Table Present?         Yes         X         No         Depth (in           Saturation Present?         Yes         X         No         Depth (in |   |
| (includes capillary fringe)  | ches): 0 Wetland Hydrology Present? Yes X No                        |
| Describe Recorded Data (stream gauge, monitoring well, aerial photo  |   |
|  |   |
|  |   |
| Remarks:   |   |
|  |   |
|  |   |
|  |   |
|  |   |
|  |   |
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|  |   |

Sampling Point: B-Wet

| Tree Stratum (Plot size:10 m)   | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:  |
|---|---------------------|----------------------|---------------------|--|
| 1.       2.   |                     |                      |                     | Number of Dominant Species<br>That Are OBL, FACW, or FAC:0 (A)   |
| 3.       4.   |                     |                      |                     | Total Number of Dominant<br>Species Across All Strata:2(B)   |
| 5   |                     |                      |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC:(A/B)  |
| 7   |                     |                      |                     | Prevalence Index worksheet:  |
|   |                     | =Total Cover         |                     | Total % Cover of:Multiply by:  |
| Sapling/Shrub Stratum (Plot size: 5 m )   |                     |                      |                     | OBL species10 x 1 =10  |
| 1   |                     |                      |                     | FACW species 15 x 2 = 30   |
| 2.  |                     |                      |                     | FAC species 0 x 3 = 0  |
| 3.  |                     |                      |                     | FACU species 0 x 4 = 0   |
| 4.  |                     |                      |                     | UPL species 0 x 5 = 0  |
| 5.  |                     |                      |                     | Column Totals: 25 (A) 40 (B)   |
| 6.  |                     |                      |                     | Prevalence Index = B/A = 1.60  |
| 7.  |                     |                      |                     | Hydrophytic Vegetation Indicators:   |
|   |                     | =Total Cover         |                     | 1 - Rapid Test for Hydrophytic Vegetation  |
| Herb Stratum (Plot size: 1 m )  |                     |                      |                     | 2 - Dominance Test is >50%   |
| 1. Sphagnum   | 20                  | Yes                  |                     | X 3 - Prevalence Index is ≤3.0 <sup>1</sup>  |
| 2. Pilea pumila   | 10                  | No                   | FACW                | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| 3. Polygonum sagittum   | 10                  | No                   | OBL                 | data in Remarks or on a separate sheet)  |
| 4. Carex  | 20                  | Yes                  |                     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 5. Malva neglecta   | 5                   | No                   | FACW                |  |
| 6. Solidago   | 2                   | No                   |                     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 7.  |                     |                      |                     | Definitions of Vegetation Strata:  |
| 8.  |                     |                      |                     |  |
| 9.  |                     |                      |                     | <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.    |
| 10<br>11  |                     |                      |                     | <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.       |
| 12  |                     |                      |                     | Herb – All herbaceous (non-woody) plants, regardless   |
|   | 67                  | =Total Cover         |                     | of size, and woody plants less than 3.28 ft tall.  |
| Woody Vine Stratum         (Plot size: 5 m)           1.  |                     |                      |                     | Woody vines – All woody vines greater than 3.28 ft in height.  |
| 2   |                     |                      |                     |  |
| 3   |                     |                      |                     | Hydrophytic<br>Vegetation  |
| 4.  |                     |                      |                     | Present? Yes X No  |
|   |                     | =Total Cover         |                     |  |
| Remarks: (Include photo numbers here or on a separa<br>Data from Veg Plot E (collected October 12, 2017). | ate sheet.)         |                      |                     |  |
|   |                     |                      |                     |  |

| Profile Desc            | ription: (Describe t | to the de | pth needed to docu     |                 |                    | or or co         | nfirm the absence o   | of indicators.         | .)                     |                       |
|-------------------------|----------------------|-----------|------------------------|-----------------|--------------------|------------------|-----------------------|------------------------|------------------------|-----------------------|
| Depth                   | Matrix               |           |                        | x Featur        |                    |                  |                       |                        |                        |                       |
| (inches)                | Color (moist)        | %         | Color (moist)          | %               | Type <sup>1</sup>  | Loc <sup>2</sup> | Texture               |                        | Remarks                | ;                     |
| 0-6                     | 5Y 3/1               | 95        | 10YR 5/4               | 5               | RM                 | Μ                | Sandy                 |                        | Organic                |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
| <sup>1</sup> Type: C=Co | oncentration, D=Depl | etion, RM | /I=Reduced Matrix, M   | IS=Masł         | ked Sand           | Grains.          |                       |                        | ing, M=Matrix          |                       |
| Hydric Soil I           | Indicators:          |           |                        |                 |                    |                  | Indicators            | for Problem            | natic Hydric           | Soils <sup>3</sup> :  |
| Histosol                | (A1)                 |           | Polyvalue Belo         |                 | ce (S8) ( <b>I</b> | _RR R,           | 2 cm N                | /luck (A10) ( <b>L</b> | .RR K, L, ML           | <b>RA 149B</b> )      |
|                         | oipedon (A2)         |           | MLRA 149B              | ,               |                    |                  |                       |                        | x (A16) ( <b>LRR</b>   |                       |
| Black Hi                | ( )                  |           | Thin Dark Surf         |                 |                    |                  |                       | -                      | r Peat (S3) ( <b>L</b> |                       |
|                         | n Sulfide (A4)       |           | High Chroma S          |                 |                    |                  |                       |                        | urface (S8) (L         |                       |
|                         | l Layers (A5)        |           | Loamy Mucky I          |                 |                    | R K, L)          |                       |                        | (S9) ( <b>LRR K,</b>   |                       |
|                         | d Below Dark Surface | e (A11)   | Loamy Gleyed           |                 | F2)                |                  |                       | -                      |                        | LRR K, L, R)          |
|                         | ark Surface (A12)    |           | Depleted Matri         |                 |                    |                  |                       |                        |                        | (MLRA 149B            |
|                         | lucky Mineral (S1)   |           | Redox Dark Su          |                 |                    |                  |                       |                        |                        | <b>A, 145, 149B</b> ) |
|                         | leyed Matrix (S4)    |           | Depleted Dark          |                 |                    |                  |                       | arent Materia          |                        |                       |
|                         | edox (S5)            |           | Redox Depress          | •               | B)                 |                  |                       |                        | Surface (F22           | )                     |
| X Stripped              |                      |           | Marl (F10) ( <b>LR</b> | <b>R K, L</b> ) |                    |                  | Other (               | (Explain in R          | emarks)                |                       |
| X Dark Su               | rface (S7)           |           |                        |                 |                    |                  |                       |                        |                        |                       |
| 3                       |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      | ion and v | vetland hydrology mu   | st be pre       | esent, un          | ess distu        | irbed or problematic. |                        |                        |                       |
|                         | Layer (if observed): |           |                        |                 |                    |                  |                       |                        |                        |                       |
| Type:                   | Roc                  |           |                        |                 |                    |                  |                       |                        |                        |                       |
| Depth (ir               | nches):              | 6         |                        |                 |                    |                  | Hydric Soil Pres      | ent?                   | Yes X                  | No                    |
| Remarks:                |                      |           |                        |                 |                    |                  | •                     |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |
|                         |                      |           |                        |                 |                    |                  |                       |                        |                        |                       |

| Project/Site: Dewey Loeffel Landfill Superfu  | ind Site                         | City/County: Nassau, Renssela           | aer Sampling Date: <u>17 April 18</u>   |  |  |  |  |
|---|----------------------------------|---|---|--|--|--|--|
| Applicant/Owner: General Electric Com   | bany                             |   | State: NY Sampling Point: <u>C-Up</u>   |  |  |  |  |
| Investigator(s): <u>JK</u>  |                                  | Section, Township, Ra                   | nge: NA                                 |  |  |  |  |
| Landform (hillside, terrace, etc.): Small Hill  | Itop Near Stream Local r         | elief (concave, convex, none): <u>(</u> | Concave Slope %: <u>5-10%</u>           |  |  |  |  |
| Subregion (LRR or MLRA): LRR R  | Lat:                             | Long:                                   | Datum: WGS 1984                         |  |  |  |  |
| Soil Map Unit Name: Fredon Silt Loam  |                                  | NWI                                     | classification: NA                      |  |  |  |  |
| Are climatic / hydrologic conditions on the site  | e typical for this time of year? | Yes X No                                | (If no, explain in Remarks.)            |  |  |  |  |
| Are Vegetation, Soil, or Hydr   | ologysignificantly disturb       | bed? Are "Normal Circum                 | stances" present? Yes X No              |  |  |  |  |
| Are Vegetation X, Soil , or Hydr  | ology naturally problemat        | tic? (If needed, explain a              | 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 <u>No X</u>                  | within a Wetland?                       | Yes No _X                               |  |  |  |  |
| Wetland Hydrology Present?  | Yes <u>No X</u>                  | If yes, optional Wetland Site           | D:                                      |  |  |  |  |
| Remarks: (Explain alternative procedures h<br>Survey performed outside of growing seaso                     | ,                                | able species recorded without c         | over.                                   |  |  |  |  |
| HYDROLOGY   |                                  |   |   |  |  |  |  |
| Wetland Hydrology Indicators:   |                                  | Seconda                                 | ry Indicators (minimum of two required) |  |  |  |  |
| Primary Indicators (minimum of one is requi   | red; check all that apply)       |   | ace Soil Cracks (B6)                    |  |  |  |  |
| Surface Water (A1)  | Water-Stained Leaves (B          | ,                                       | age Patterns (B10)                      |  |  |  |  |
| High Water Table (A2)   | Aquatic Fauna (B13)              | Moss                                    | Frim Lines (B16)                        |  |  |  |  |

| High Water Table (A2)        | -               | Aquatic         | Fauna (B13)                    | -              | Moss Trim Lines (B16)       |                |      |   |  |
|------------------------------|-----------------|-----------------|--------------------------------|----------------|-----------------------------|----------------|------|---|--|
| Saturation (A3)              | -               | Marl De         | eposits (B15)                  | -              | Dry-Season Water Table (C2) |                |      |   |  |
| Water Marks (B1)             | -               | Hydrog          | en Sulfide Odor (C1)           | -              | Crayfish Burrows (C8        | 3)             |      |   |  |
| Sediment Deposits (B2)       |                 | Oxidize         | d Rhizospheres on Living Ro    | oots (C3)      | Saturation Visible on       | Aerial Imagery | (C9) |   |  |
| Drift Deposits (B3)          | _               | Presen          | ce of Reduced Iron (C4)        |                | Stunted or Stressed I       | Plants (D1)    |      |   |  |
| Algal Mat or Crust (B4)      |                 | Recent          | Iron Reduction in Tilled Soils | s (C6)         | Geomorphic Position         | (D2)           |      |   |  |
| Iron Deposits (B5)           |                 | Thin Mu         | uck Surface (C7)               | _              | Shallow Aquitard (D3        | 5)             |      |   |  |
| Inundation Visible on Aer    | al Imagery (B7) | Other (B        | Explain in Remarks)            |                | Microtopographic Re         | lief (D4)      |      |   |  |
| Sparsely Vegetated Conc      | ave Surface (B8 | )               |                                | -              | FAC-Neutral Test (D         | 5)             |      |   |  |
| Field Observations:          |                 |                 |                                |                |                             |                |      |   |  |
| Surface Water Present?       | Yes             | No X            | Depth (inches):                |                |                             |                |      |   |  |
| Water Table Present?         | Yes             | No X            | Depth (inches):                |                |                             |                |      |   |  |
| Saturation Present?          | Yes             | No X            | Depth (inches):                | Wetland        | Hydrology Present?          | Yes            | No   | Х |  |
| (includes capillary fringe)  |                 |                 |                                |                |                             |                | _    |   |  |
| Describe Recorded Data (stre | am gauge, moni  | itoring well, a | aerial photos, previous inspe  | ctions), if av | vailable:                   |                |      |   |  |
|                              |                 |                 |                                |                |                             |                |      |   |  |
|                              |                 |                 |                                |                |                             |                |      |   |  |
| Remarks:                     |                 |                 |                                |                |                             |                |      |   |  |
|                              |                 |                 |                                |                |                             |                |      |   |  |
|                              |                 |                 |                                |                |                             |                |      |   |  |
|                              |                 |                 |                                |                |                             |                |      |   |  |
|                              |                 |                 |                                |                |                             |                |      |   |  |
|                              |                 |                 |                                |                |                             |                |      |   |  |
|                              |                 |                 |                                |                |                             |                |      |   |  |
|                              |                 |                 |                                |                |                             |                |      |   |  |
|                              |                 |                 |                                |                |                             |                |      |   |  |

Sampling Point: C-Up

| <u>Tree Stratum</u> (Plot size:10 m)                | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:  |                            |
|---|---------------------|----------------------|---------------------|--|----------------------------|
| 1. Acer rubrum                                      |                     |                      | FAC                 | Number of Dominant Species   |                            |
| 2   |                     |                      |                     | That Are OBL, FACW, or FAC   | :(A)                       |
| 3<br>4  |                     |                      |                     | Total Number of Dominant<br>Species Across All Strata:   | (B)                        |
| 5   |                     |                      |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC  | :(A/B)                     |
| 7   |                     |                      |                     | Prevalence Index worksheet   | :                          |
|   |                     | =Total Cover         |                     | Total % Cover of:  | Multiply by:               |
| Sapling/Shrub Stratum (Plot size: 5 m )             |                     |                      |                     | OBL species  | x 1 =                      |
| 1. Pinus strobus                                    |                     |                      | FACU                | FACW species   | x 2 =                      |
| 2. Carpinus caroliniana                             |                     |                      | FAC                 | FAC species  | x 3 =                      |
| 3. Fagus grandifolia                                |                     |                      | FACU                | FACU species   | x 4 =                      |
| 4. Rosa multiflora                                  |                     |                      | FACU                | UPL species  | x 5 =                      |
| 5   |                     |                      |                     | Column Totals:   | (A)(B)                     |
| 6   |                     |                      |                     | Prevalence Index = B/A   | A =                        |
| 7.  |                     |                      |                     | Hydrophytic Vegetation Indic   | cators:                    |
|   |                     | =Total Cover         |                     | 1 - Rapid Test for Hydrophytic Vegetation  |                            |
| Herb Stratum (Plot size: 1 m )                      |                     |                      |                     | 2 - Dominance Test is >50%   |                            |
| 1. Mitchella repens                                 |                     |                      | FACU                | <ul> <li>3 - Prevalence Index is ≤3.0<sup>1</sup></li> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)</li> <li>Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)</li> <li><sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</li> <li>Definitions of Vegetation Strata:</li> <li>Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</li> <li>Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.</li> </ul> |                            |
| 2.  |                     |                      |                     |  |                            |
| 3.  |                     |                      |                     |  |                            |
| 4.  |                     |                      |                     |  |                            |
| 5.  |                     |                      |                     |  |                            |
| 6   |                     |                      |                     |  |                            |
| 7   |                     |                      |                     |  |                            |
| 8<br>9.   |                     | ·                    |                     |  |                            |
| 9<br>10.  |                     |                      |                     |  |                            |
| 11  |                     |                      |                     |  |                            |
| 12.   |                     |                      |                     |  |                            |
|   |                     | =Total Cover         |                     | Herb – All herbaceous (non-w of size, and woody plants less  |                            |
| <u>Woody Vine Stratum</u> (Plot size: 5 m )         |                     | _                    |                     |  |                            |
| 1,  |                     |                      |                     | Woody vines – All woody vine<br>height.  | es greater than 3.28 ft in |
| 2.  |                     |                      |                     |  |                            |
| 3.  |                     |                      |                     | Hydrophytic<br>Vegetation  |                            |
| 4.  |                     |                      |                     | Present? Yes   | No X                       |
|   |                     | =Total Cover         |                     |  |                            |
| Remarks: (Include photo numbers here or on a sepa   | rate sheet.)        |                      |                     | 1  |                            |
| Survey performed outside of growing season; therefo | ,                   | of identifiable      | species record      | ded without cover.   |                            |
|   |                     |                      |                     |  |                            |
|   |                     |                      |                     |  |                            |
|   |                     |                      |                     |  |                            |
|   |                     |                      |                     |  |                            |

| Depth       Matrix       Redox F         (inches)       Color (moist)       %       Color (moist)         0-18       10YR 5/2       100   | %         Type1         |                 |                     | Remarks   |
|---|-------------------------|-----------------|---------------------|---|
|   | Surface (S8) ( <b>L</b> |                 |                     |   |
|   | Surface (S8) ( <b>L</b> |                 |                     |   |
| Hydric Soil Indicators:       Polyvalue Below S         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San | Surface (S8) ( <b>L</b> |                 |                     | Lining, M=Matrix.   |
| Hydric Soil Indicators:       Polyvalue Below S         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San | Surface (S8) ( <b>L</b> |                 |                     | Lining, M=Matrix.   |
| Hydric Soil Indicators:       Polyvalue Below S         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Hydric Soil Indicators:         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San                         | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Hydric Soil Indicators:         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San                         | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Hydric Soil Indicators:         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San                         | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Hydric Soil Indicators:         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San                         | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Hydric Soil Indicators:         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San                         | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Hydric Soil Indicators:       Polyvalue Below S         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Hydric Soil Indicators:       Polyvalue Below S         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Hydric Soil Indicators:         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San                         | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Hydric Soil Indicators:       Polyvalue Below S         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Hydric Soil Indicators:       Polyvalue Below S         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Hydric Soil Indicators:         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San                         | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Hydric Soil Indicators:         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San                         | Surface (S8) ( <b>L</b> |                 |                     | ELining, M=Matrix.  |
| Hydric Soil Indicators:         Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San                         | Surface (S8) ( <b>L</b> |                 |                     | e Lining, M=Matrix.   |
| Histosol (A1)       Polyvalue Below S         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San   |                         | RR R.           | Indiantana fan Duah | 2   |
| Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface         Hydrogen Sulfide (A4)       High Chroma San   |                         | RR R,           |                     | plematic Hydric Soils <sup>3</sup> :                                |
| Black Histic (A3) Thin Dark Surface<br>Hydrogen Sulfide (A4) High Chroma San  |                         |                 |                     | 0) (LRR K, L, MLRA 149  |
| Hydrogen Sulfide (A4) High Chroma San   |                         |                 |                     | edox (A16) ( <b>LRR K, L</b> , <b>F</b>                             |
|   |                         |                 |                     | at or Peat (S3) ( <b>LRR K</b> ,                                    |
| Stratified Layers (A5)LOarry Mucky Mir  |                         |                 |                     | w Surface (S8) (LRR K,  |
| Depleted Polew Dark Surface (A11)   |                         | <b>r</b> , L)   |                     | ace (S9) (LRR K, L)   |
| Depleted Below Dark Surface (A11)Loamy Gleyed Ma<br>Thick Dark Surface (A12) Depleted Matrix (F   |                         |                 |                     | e Masses (F12) ( <b>LRR K</b> ,<br>Iplain Soils (F19) ( <b>MLRA</b> |
| Sandy Mucky Mineral (S1) Redox Dark Surface   |                         |                 |                     | ΓΑ6) ( <b>MLRA 144A, 145,</b>                                       |
| Sandy Gleyed Matrix (S4) Depleted Dark Su   |                         |                 | Red Parent Mat      |   |
| Sandy Redox (S5) Redox Depression   |                         |                 |                     | ark Surface (F22)   |
| Stripped Matrix (S6) Marl (F10) (LRR I  | . ,                     |                 | Other (Explain i    | , ,   |
| Dark Surface (S7)   | -, _,                   |                 |                     | ,                             |
|   |                         |                 |                     |   |
| <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must b  | be present, unle        | ess disturbed o | or problematic.     |   |
| Restrictive Layer (if observed):  | •                       |                 |                     |   |
| Туре:   |                         |                 |                     |   |
| Depth (inches):   |                         |                 |                     |   |
|   |                         | Hy              | dric Soil Present?  | Yes No  |
| Remarks:  |                         | Ну              | dric Soil Present?  | Yes <u>No</u>   |

| Project/Site: Dewey Loeffel Landfill Superfund Site                             | City/County: Nassau, Rensselaer Sampling Date: 17 April 18    |
|---|---|
| Applicant/Owner: General Electric Company                                       | State: NY Sampling Point: C-Wet                               |
| Investigator(s): JK   | Section, Township, Range: NA                                  |
| Landform (hillside, terrace, etc.): Basin, Drainageway Local re                 | elief (concave, convex, none); Concave Slope %: 0-5%          |
|   | Long: Datum: NAD 1983   |
| Soil Map Unit Name: Fredon Silt Loam  | NWI classification: NA  |
|   |   |
| Are climatic / hydrologic conditions on the site typical for this time of year? | Yes X No (If no, explain in Remarks.)                         |
| Are Vegetation, Soil, or Hydrologysignificantly disturbed                       |   |
| Are Vegetation, Soil, or Hydrologynaturally problemat                           |   |
| SUMMARY OF FINDINGS – Attach site map showing sam                               | pling 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:                             |
| 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)                                      |
| X Surface Water (A1) Water-Stained Leaves (B                                    |   |
| X High Water Table (A2) Aquatic Fauna (B13)                                     | Moss Trim Lines (B16)   |
| X Saturation (A3) Marl Deposits (B15)   | Dry-Season Water Table (C2)                                   |
| Water Marks (B1) Hydrogen Sulfide Odor (C                                       | C1) Crayfish Burrows (C8)                                     |
| Sediment Deposits (B2) Oxidized Rhizospheres or                                 | n Living Roots (C3) Saturation Visible on Aerial Imagery (C9) |
| Drift Deposits (B3) X Presence of Reduced Iror                                  | n (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)                                       | X Shallow Aquitard (D3)                                       |
| Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks              | s)Microtopographic Relief (D4)                                |
| Sparsely Vegetated Concave Surface (B8)   | X FAC-Neutral Test (D5)                                       |
| Field Observations:   |   |
| Surface Water Present? Yes X No Depth (inches):                                 | 2   |
| Water Table 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, prev      | ious inspections), if available:                              |
|   |   |
| <br>Remarks:  |   |
|   |   |
|   |   |
|   |   |
|   |   |
|   |   |
|   |   |
|   |   |

Sampling Point: C-Wet

| <u>Tree Stratum</u> (Plot size:10 m)            | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:  |  |  |
|---|---------------------|----------------------|---------------------|--|--|--|
| 1<br>2  |                     |                      |                     | Number of Dominant Species<br>That Are OBL, FACW, or FAC: <u>3</u> (A)   |  |  |
| 3   |                     |                      |                     | Total Number of Dominant<br>Species Across All Strata: 5 (B)   |  |  |
| 5<br>5  |                     |                      |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC:60.0% (A/I   |  |  |
| 7   |                     |                      |                     | Prevalence Index worksheet:  |  |  |
|   |                     | =Total Cover         |                     | Total % Cover of: Multiply by:   |  |  |
| Sapling/Shrub Stratum (Plot size: 5 m           | )                   |                      |                     | OBL species X 1 =40  |  |  |
| . Ulmus americana                               | 20                  | Yes                  | FACW                | FACW species 115 x 2 = 230   |  |  |
| 2. Betula lenta                                 | 30                  | Yes                  | FACU                | FAC species5 x 3 =15   |  |  |
| 3. Betula papyrifera                            | 15                  | Yes                  | FACU                | FACU species 47 x 4 =188   |  |  |
| I. Salix nigra                                  | 5                   | No                   | OBL                 | UPL species 5 x 5 = 25   |  |  |
| 5.  |                     |                      |                     | Column Totals: 212 (A) 498 (   |  |  |
| ).  |                     |                      |                     | Prevalence Index = B/A = 2.35  |  |  |
|   |                     |                      |                     | Hydrophytic Vegetation Indicators:   |  |  |
|   | 70                  | =Total Cover         |                     | 1 - Rapid Test for Hydrophytic Vegetation  |  |  |
| <u>lerb Stratum</u> (Plot size: 1 m )           |                     | -                    |                     | X 2 - Dominance Test is >50%   |  |  |
| Solidago gigantea                               | 45                  | Yes                  | FACW                | X 3 - Prevalence Index is $\leq 3.0^{1}$   |  |  |
| 2. Carex lurida                                 | 20                  | <br>No               | OBL                 | 4 - Morphological Adaptations <sup>1</sup> (Provide support  |  |  |
| 3. Galium palustre                              | 10                  | <br>No               | OBL                 | data in Remarks or on a separate sheet)  |  |  |
| . Phragmites australis                          | 20                  | No                   | FACW                | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |  |  |
| 5. Fragaria fresca                              | 5                   | No                   | UPL                 |  |  |  |
| ). Poa palustris                                | 30                  | Yes                  | FACW                | <ul> <li><sup>1</sup>Indicators of hydric soil and wetland hydrology must<br/>present, unless disturbed or problematic.</li> </ul> |  |  |
| . Symphyotrichum ericoides                      | 2                   | No                   | FACU                | Definitions of Vegetation Strata:  |  |  |
| 3. Lythrum salicaria                            | 5                   | No                   | OBL                 | -  |  |  |
| ). Euthamia graminifolia                        | 5                   | No                   | FAC                 | Tree – Woody plants 3 in. (7.6 cm) or more in diame<br>at breast height (DBH), regardless of height.                               |  |  |
| IO<br>11  |                     |                      |                     | <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.                           |  |  |
| 2.  |                     |                      |                     | Herb – All herbaceous (non-woody) plants, regardle   |  |  |
|   | 142                 | =Total Cover         |                     | of size, and woody plants less than 3.28 ft tall.  |  |  |
| Noody Vine Stratum (Plot size: <u>5 m</u><br>1. |                     |                      |                     | <b>Woody vines</b> – All woody vines greater than 3.28 ft height.  |  |  |
| <u>.</u>  |                     |                      |                     |  |  |  |
| 3.  |                     |                      |                     | Hydrophytic<br>Vegetation  |  |  |
| 1   |                     |                      |                     | Present? Yes X No  |  |  |
|   |                     | =Total Cover         |                     |  |  |  |

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)   |   |           |  |           |                   |  | f indicators.)                                |   |  |  |
|---|---|-----------|--|-----------|-------------------|--|---|---|--|--|
| Depth   | Matrix  |           | Redo   | x Featu   | res               |  |   |   |  |  |
| (inches)  | Color (moist)   | %         | Color (moist)  | %         | Type <sup>1</sup> | Loc <sup>2</sup>                                     | Texture                                       | Remarks   |  |  |
| 0-2   | 5Y 2.5/2  | 100       |  |           |                   |  | Mucky Sand                                    | w/ Silt and Heavy Organics, Peaty                 |  |  |
| 2-8   | 5Y 5/1  | 95        | 10YR 4/6   | 5         | RM                | M  | Mucky Loam/Clay                               | Organics, Silt, Clay                              |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   | ·         |  |           |                   |  |   |   |  |  |
|   |   | ·         |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   | ·         |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
| $\frac{1}{1}$ Type: C=C   | ncentration D=Den   | letion RM | Reduced Matrix M   | IS=Masl   | ed Sand           | Grains   | <sup>2</sup> l ocation:                       | PL=Pore Lining, M=Matrix.                         |  |  |
| <sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.<br>Hydric Soil Indicators: Indicators |   |           |  |           |                   |  |   |   |  |  |
| Histosol  | Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLF |           |  |           |                   | 1uck (A10) ( <b>LRR K, L, MLRA 149B</b> )            |   |   |  |  |
| Histic Ep   | oipedon (A2)  |           | MLRA 149B  | )         |                   |  | Coast Prairie Redox (A16) (LRR K, L, R)       |   |  |  |
| Black Hi  | stic (A3)   |           | Thin Dark Surfa  | ace (S9   | ) (LRR R,         | R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L |   |   |  |  |
| Hydroge   | n Sulfide (A4)  |           | High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S8) (L |           |                   |  |   | lue Below Surface (S8) ( <b>LRR K, L</b> )        |  |  |
|   | d Layers (A5)   |           |  |           |                   |  |   |   |  |  |
|   | d Below Dark Surface  | e (A11)   | Loamy Gleyed   |           | F2)               |  | Iron-Manganese Masses (F12) (LRR K,           |   |  |  |
|   | ark Surface (A12)   |           | X Depleted Matri   |           |                   |  | Piedmont Floodplain Soils (F19) ( <b>MLRA</b> |   |  |  |
|   | lucky Mineral (S1)  |           | Redox Dark Su  |           |                   |  | Mesic Spodic (TA6) ( <b>MLRA 144A, 145,</b> 1 |   |  |  |
|   | Bleyed Matrix (S4)  |           | Depleted Dark  |           |                   |  |   | arent Material (F21)                              |  |  |
|   | edox (S5)<br>Matrix (S6)  |           | Redox Depress<br>Marl (F10) (LR                                    |           | 0)                |  |   | hallow Dark Surface (F22)<br>(Explain in Remarks) |  |  |
|   | rface (S7)  |           |  | in in, E) |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
| <sup>3</sup> Indicators of  | f hydrophytic vegetat   | ion and w | etland hydrology mu  | st be pr  | esent, un         | ess distu  | urbed or problematic.                         |   |  |  |
| Restrictive I   | Layer (if observed):  |           |  |           |                   |  |   |   |  |  |
| Type:   | Ro  | ck        |  |           |                   |  |   |   |  |  |
| Depth (ir   | nches):   | 8         |  |           |                   |  | Hydric Soil Pres                              | ent? Yes <u>X</u> No                              |  |  |
| Remarks:  |   |           |  |           |                   |  | •   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |
|   |   |           |  |           |                   |  |   |   |  |  |

| Project/Site: Dewey Loeffel Land     | fill Superfund Site                         | City/County: Nassau, Rensselaer Sampling Date: 29 March 18    |
|--------------------------------------|---|---|
| Applicant/Owner: General Ele         | ectric Company                              | State: NY Sampling Point: _H1 - Up                            |
| Investigator(s): JK                  |   | Section, Township, Range: NA                                  |
| Landform (hillside, terrace, etc.):  | Upslope of Pond Local r                     | elief (concave, convex, none): None Slope %: 0-5%             |
| Subregion (LRR or MLRA): LRR         |   | Long: 73.5633721° W Datum: NAD 1983                           |
| Soil Map Unit Name: Fredon Silt      | Loam  | NWI classification: NA  |
| Are climatic / hydrologic conditions | on the site typical for this time of year?  | Yes X No (If no, explain in Remarks.)                         |
| Are Vegetation , Soil                | , or Hydrology significantly disturb        | ed? Are "Normal Circumstances" present? Yes X No              |
|                                      | <br>_, or Hydrology naturally problemat     |   |
|                                      |   | pling point locations, transects, important features, etc.    |
|                                      |   | phily point locations, transects, important leatures, etc.    |
| Hydrophytic Vegetation Present?      | Yes <u>No X</u>                             | Is the Sampled Area   |
| Hydric Soil Present?                 | Yes <u>No X</u>                             | within a Wetland? Yes <u>No X</u>                             |
| Wetland Hydrology Present?           | Yes <u>No X</u>                             | If yes, optional Wetland Site ID:                             |
| HYDROLOGY                            |   |   |
| Wetland Hydrology Indicators:        |   | Secondary Indicators (minimum of two required)                |
|                                      | ne is required; check all that apply)       | Surface Soil Cracks (B6)                                      |
| Surface Water (A1)                   | Water-Stained Leaves (B                     |   |
| High Water Table (A2)                | Aquatic Fauna (B13)                         | Moss Trim Lines (B16)   |
| Saturation (A3)                      | Marl Deposits (B15)                         | Dry-Season Water Table (C2)                                   |
| Water Marks (B1)                     | Hydrogen Sulfide Odor (0                    |   |
| Sediment Deposits (B2)               | Oxidized Rhizospheres of                    | n Living Roots (C3) Saturation Visible on Aerial Imagery (C9) |
| Drift Deposits (B3)                  | Presence of Reduced Iro                     | n (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)                      | <u>?</u> Shallow Aquitard (D3)                                |
| Inundation Visible on Aerial Ir      | magery (B7)Other (Explain in Remark         | s)Microtopographic Relief (D4)                                |
| Sparsely Vegetated Concave           | Surface (B8)                                | FAC-Neutral Test (D5)   |
| Field Observations:                  |   |   |
|                                      | No X Depth (inches):                        |   |
|                                      | No X Depth (inches):                        |   |
|                                      | Mo X Depth (inches):                        | Wetland Hydrology Present? Yes No _X                          |
| (includes capillary fringe)          |   |   |
| Describe Recorded Data (stream       | gauge, monitoring well, aerial photos, prev | nous inspections), if available:                              |

Remarks:

Sampling Point: H1 - Up

|  | Absolute | Dominant          | Indicator      |   |  |
|--|----------|-------------------|----------------|---|--|
| Tree Stratum (Plot size: 10 m )                          | % Cover  | Species?          | Status         | Dominance Test worksheet  | :                                      |
| 1. Quercus rubra   |          |                   | FACU           | Number of Dominant Species  |  |
| 2. Prunus serotina                                       |          |                   | FACU           | That Are OBL, FACW, or FAC  | C:(A)                                  |
| 3. Pinus strobus   |          |                   | FACU           | Total Number of Dominant  |  |
| 4. <u>Betula papyrifera</u>                              | <u> </u> |                   | FACU           | Species Across All Strata:  | (B)                                    |
| 5<br>6   |          |                   |                | Percent of Dominant Species<br>That Are OBL, FACW, or FAC               |  |
| 7.   |          |                   |                | Prevalence Index workshee   |  |
|  |          | =Total Cover      |                | Total % Cover of:   | Multiply by:                           |
| Sapling/Shrub Stratum (Plot size: 5 m )                  |          |                   |                | OBL species   | x 1 =                                  |
| 1. Rosa multiflora                                       |          |                   | FACU           | FACW species  |  |
| 2.   |          |                   |                | FAC species   |  |
| 3.   |          |                   |                | FACU species  |  |
| 4.   |          |                   |                | UPL species   | x 5 =                                  |
| F  |          |                   |                | Column Totals:  |  |
|  |          |                   |                | Prevalence Index = B/   |  |
| 7  |          |                   |                | Hydrophytic Vegetation Indi   |  |
| ···  |          | =Total Cover      |                | 1 - Rapid Test for Hydrop   |  |
| Herb Stratum (Plot size: 1 m )                           |          |                   |                | 2 - Dominance Test is >5  | , ,                                    |
|  |          |                   | FACU           | 3 - Prevalence Index is ≤   |  |
|  |          |                   |                | I —   | tions <sup>1</sup> (Provide supporting |
| 2  |          |                   |                | data in Remarks or on   |  |
| 3<br>4   |          |                   |                | Problematic Hydrophytic   | Vegetation <sup>1</sup> (Explain)      |
| 5  |          |                   |                | <sup>1</sup> Indicators of hydric soil and v                            | wetland hydrology must be              |
| 6  |          |                   |                | present, unless disturbed or p  | , .,                                   |
| 7  |          |                   |                | Definitions of Vegetation St  | rata:                                  |
| 8<br>9.  |          |                   |                | <b>Tree</b> – Woody plants 3 in. (7.)<br>at breast height (DBH), regard |  |
| 10.  |          |                   |                | Sapling/shrub – Woody plan  | -                                      |
| 11   |          |                   |                | and greater than or equal to 3  |  |
| 12   |          | =Total Cover      |                | <b>Herb</b> – All herbaceous (non-v<br>of size, and woody plants less   |  |
| Woody Vine Stratum         (Plot size: 5 m)           1. |          |                   |                | Woody vines – All woody vin height.                                     | es greater than 3.28 ft in             |
| 2.   |          |                   |                |   |  |
| 3.   |          |                   |                | Hydrophytic   |  |
|  |          |                   |                | Vegetation<br>Present? Yes  | No X                                   |
| 4  |          | =Total Cover      |                |   |  |
| Remarks: (Include photo numbers here or on a sepa        |          |                   |                |   |  |
| Survey performed outside of growing season; therefo      |          | of identifiable s | species record | ded without cover.  |  |
|  |          |                   |                |   |  |

| Depth       Matrix       Redox Features         (inches)       Color (moist)       %       Type       Loc <sup>2</sup> Texture       Remarks         0-6       SYR 4/3       100       Sandy       Sandy       Sandy Silt-Loam   | Profile Desc               | cription: (Describe t  | o the de  | pth needed to docu  | iment th  | ne indicat        | or or co         | nfirm the absen   | ce of indica | tors.)        |               |
|--|----------------------------|------------------------|-----------|---------------------|-----------|-------------------|------------------|-------------------|--------------|---------------|---------------|
| 0-6       5YR 4/3       100  | Depth                      |                        |           |                     |           |                   |                  |                   |              |               |               |
| Image: Specific Constraintion, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.          Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histosoi (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histosoi (A1)       Polyvalue Below Surface (S8) (LRR R, L)         Black Histic CA3       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Startified Layers (A5)       Loamy Mucky Mineral (S1)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)         Sandy Macky Mineral (S1)       Redox Dark Surface (F7)         Sandy Redox (S5)       Redox Dark Surface (F7)         Sandy Redox (S5)       Med Dark Surface (F7)         Stripped Matrix (S6)       Matri (F1) (LRR K, L)         Dark Surface (S7)       Mart (F10) (LRR K, L) <sup>3</sup> Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed);       Type:         Type:       Rock         Depleted mineres:       6   | (inches)                   | Color (moist)          | %         | Color (moist)       | %         | Type <sup>1</sup> | Loc <sup>2</sup> | Texture           |              | Rema          | rks           |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       Hydric Soil Present?       Yes       No       X   | 0-6                        | 5YR 4/3                | 100       |                     |           |                   |                  | Sandy             |              | Sandy Sil     | t-Loam        |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       Hydric Soil Present?       Yes       No       X   |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Marl (F10) (LRR K, L)       Other (Explain in Remarks) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Restrictive Layer (if observed):       Type:       Keck       No _X         Deptht (inches):       6       Hydric Soi |                            |                        |           |                     |           | ·                 |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       Hydric Soil Present?       Yes       No       X   |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Marl (F10) (LRR K, L)       Other (Explain in Remarks) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Restrictive Layer (if observed):       Type:       Keck       No _X         Deptht (inches):       6       Hydric Soi |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Marl (F10) (LRR K, L)       Other (Explain in Remarks) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Restrictive Layer (if observed):       Type:       Keck       No _X         Deptht (inches):       6       Hydric Soi | ———                        |                        |           |                     |           | ·                 |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Marl (F10) (LRR K, L)       Other (Explain in Remarks) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Restrictive Layer (if observed):       Type:       Keck       No _X         Deptht (inches):       6       Hydric Soi |                            |                        |           |                     |           | ·                 |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Marl (F10) (LRR K, L)       Other (Explain in Remarks) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Restrictive Layer (if observed):       Type:       Keck       No _X         Deptht (inches):       6       Hydric Soi |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Marl (F10) (LRR K, L)       Other (Explain in Remarks) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No _X         Restrictive Layer (if observed):       Type:       Keck       No _X         Deptht (inches):       6       Hydric Soi |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       Hydric Soil Present?       Yes       No       X   |                            |                        |           |                     |           | ·                 |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       Hydric Soil Present?       Yes       No       X   |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       3       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No       X         Restrictive Layer (if observed):       Type:       Rock       No       X         Depth (inches):       6       Hydric Soil Present?       Yes       No                      |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       3       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No       X         Restrictive Layer (if observed):       Type:       Rock       No       X         Depth (inches):       6       Hydric Soil Present?       Yes       No                      |                            |                        |           |                     |           | ·                 |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       3       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No       X         Restrictive Layer (if observed):       Type:       Rock       No       X         Depth (inches):       6       Hydric Soil Present?       Yes       No                      |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       3       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No       X         Restrictive Layer (if observed):       Type:       Rock       No       X         Depth (inches):       6       Hydric Soil Present?       Yes       No                      |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       3       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No       X         Restrictive Layer (if observed):       Type:       Rock       No       X         Depth (inches):       6       Hydric Soil Present?       Yes       No                      |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R,<br>Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149E)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       3       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No       X         Restrictive Layer (if observed):       Type:       Rock       No       X         Depth (inches):       6       Hydric Soil Present?       Yes       No                      |                            |                        |           |                     |           | ·                 |                  |                   |              |               |               |
| Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, Linker 149B)         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)         Thick Dark Surface (A12)       Depleted Matrix (F3)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)         Dark Surface (S7)       Marl (F10) (LRR K, L) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:         Type:       6  |                            |                        | etion, RN | I=Reduced Matrix, N | IS=Mas    | ked Sand          | Grains.          |                   |              |               |               |
| 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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:       Rock         Type:       6       Hydric Soil Present?       Yes       No       X  | -                          |                        |           | Daharaha Dah        | 0 (       | (00) (            |                  |                   |              | -             |               |
| 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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       Hydric Soil Present?       Yes       No       X  |                            |                        |           |                     |           | ice (S8) (I       | .RR R,           |                   |              |               |               |
| Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149E         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       Rock       No         Depth (inches):       6       Hydric Soil Present?       Yes       No       X   |                            |                        |           |                     | ,         |                   |                  |                   |              |               |               |
| Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149E         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Yes No         Restrictive Layer (if observed):       Type:       Rock   |                            |                        |           |                     |           |                   |                  |                   | -            |               |               |
| Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149E         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       If observed):       Type:         Type:       Rock       Rock         Depth (inches):       6       Hydric Soil Present?       Yes No _X  |                            |                        |           |                     |           |                   |                  |                   | -            |               |               |
| Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1498         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 1498)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       If observed):       Type:         Type:       Rock       No         Depth (inches):       6       Hydric Soil Present?       Yes   |                            |                        | (11)      |                     |           |                   | ( <b>K</b> , L)  |                   |              |               |               |
| Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Marl (F10) (LRR K, L)       Other (Explain in Remarks) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       No         Xrype:       Rock         Depth (inches):       6   |                            |                        | e (ATT)   |                     |           | FZ)               |                  |                   |              |               |               |
| Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:       Rock         Depth (inches):       6       Hydric Soil Present?       Yes       No       X   |                            |                        |           |                     |           | 5                 |                  |                   |              |               |               |
| Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Restrictive Layer (if observed):         Type:       Rock       No         Depth (inches):       6       Hydric Soil Present?       Yes       No       X   |                            |                        |           |                     |           |                   |                  |                   |              |               | 44A, 145, 143 |
| Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:       Rock         Depth (inches):       6       Hydric Soil Present?       Yes       No       X  |                            |                        |           |                     |           |                   |                  |                   |              |               | :00)          |
| Dark Surface (S7) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.    Restrictive Layer (if observed):   Type:   Rock   Depth (inches):   6     Hydric Soil Present?   Yes  |                            |                        |           |                     |           | 0)                |                  |                   | •            | •             | 22)           |
| <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.          Restrictive Layer (if observed):       Type:       Rock         Depth (inches):       6       Hydric Soil Present?       Yes NoX  |                            |                        |           | (110)(110)          | , =/      |                   |                  |                   |              | in recinance) |               |
| Restrictive Layer (if observed):         Type:         Rock           Depth (inches):         6         Hydric Soil Present?         Yes NoX   | Dark ou                    |                        |           |                     |           |                   |                  |                   |              |               |               |
| Restrictive Layer (if observed):         Type:         Rock           Depth (inches):         6         Hydric Soil Present?         Yes NoX   | <sup>3</sup> Indicators of | f hvdrophvtic vegetati | on and w  | etland hvdrologv mu | ist be pr | esent. un         | ess distu        | urbed or problema | atic.        |               |               |
| Type:         Rock           Depth (inches):         6           Hydric Soil Present?         Yes  |                            |                        |           | , , , ,             |           | ,                 |                  |                   |              |               |               |
|  |                            |                        | ĸ         |                     |           |                   |                  |                   |              |               |               |
|  | Depth (ir                  | nches):                | 6         |                     |           |                   |                  | Hvdric Soil P     | resent?      | Yes           | No X          |
| Remarks:   |                            |                        | -         |                     |           |                   |                  | ,                 |              |               |               |
|  | Remarks:                   |                        |           |                     |           |                   |                  |                   |              |               |               |
|  |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
|  |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
|  |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
|  |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
|  |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
|  |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
|  |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
|  |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
|  |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
|  |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
|  |                            |                        |           |                     |           |                   |                  |                   |              |               |               |
|  |                            |                        |           |                     |           |                   |                  |                   |              |               |               |

| Project/Site: Dewey Loeffel Landfill Superfund Site   | City/County: Nassau, Rensselaer Sampling Date: 29 March 18   |
|---|--|
| Applicant/Owner: General Electric Company   | State: NY Sampling Point: H1 - Wet                           |
| Investigator(s): JK   | Section, Township, Range: NA                                 |
| Landform (hillside, terrace, etc.): Adjacent to Shore of Pond Local re                                      | elief (concave, convex, none): None Slope %: 0-5%            |
| Subregion (LRR or MLRA): LRR R Lat:   | Long: Datum: NAD 1983  |
| Soil Map Unit Name: Fredon Silt Loam  | NWI classification: NA                                       |
|   |  |
| Are climatic / hydrologic conditions on the site typical for this time of year?                             | Yes X No (If no, explain in Remarks.)                        |
| Are Vegetation, Soil, or Hydrologysignificantly disturbed   |  |
| Are Vegetation X, Soil , or Hydrology naturally problemation  | ic? (If needed, explain any answers in Remarks.)             |
| SUMMARY OF FINDINGS – Attach site map showing sam   | pling 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:                            |
| Remarks: (Explain alternative procedures here or in a separate report.)                                     |  |
| Survey performed outside of growing season; therefore, presence of identifia                                | able species recorded without cover.                         |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
| 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)X Water-Stained Leaves (B   | 9) X Drainage Patterns (B10)                                 |
| X High Water Table (A2) Aquatic Fauna (B13)   | Moss Trim Lines (B16)  |
| X Saturation (A3) Marl Deposits (B15)   | Dry-Season Water Table (C2)                                  |
| Water Marks (B1) Hydrogen Sulfide Odor (C   | C1) Crayfish Burrows (C8)                                    |
| Sediment Deposits (B2) Oxidized Rhizospheres or   | n Living Roots (C3)Saturation Visible on Aerial Imagery (C9) |
| Drift Deposits (B3) X Presence of Reduced Iror  | n (C4)Stunted or Stressed Plants (D1)                        |
| Algal Mat or Crust (B4)Recent Iron Reduction in   |  |
| Iron Deposits (B5) Thin Muck Surface (C7)   | Shallow Aquitard (D3)  |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks   |  |
| Sparsely Vegetated Concave Surface (B8)   | X FAC-Neutral Test (D5)                                      |
| Field Observations:   |  |
| Surface Water Present? Yes No X Depth (inches):   |  |
| Water Table Present?     Yes X     No     Depth (inches):       Output     Yes X     No     Depth (inches): |  |
| Saturation Present? Yes X No Depth (inches):  | 1 Wetland Hydrology Present? Yes X No                        |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev   | views inspections), if evailable:                            |
| Describe Recorded Data (stream gauge, monitoring weil, aerial photos, prev                                  | ious inspections), il available.                             |
|   |  |
| Remarks:  |  |
|   |  |
|   |  |
|   |  |
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|   |  |
|   |  |
|   |  |

Sampling Point: H1 - Wet

| <u>ree Stratum</u> (Plot size: <u>10 m</u> )<br>. <u>Fraxinus pennsylvanica</u> | % Cover      |              |        | Description of the second second second second   |                                  |
|---|--------------|--------------|--------|--|----------------------------------|
| . Fraxinus pennsylvanica  |              | Species?     | Status | Dominance Test worksheet:  |                                  |
|   |              |              | FACW   | Number of Dominant Species   |                                  |
| 2. Ulmus americana  | ·            |              | FACW   | That Are OBL, FACW, or FAC:  | (A)                              |
| 3   |              |              |        | Total Number of Dominant   |                                  |
| l   |              |              |        | Species Across All Strata:   | (B)                              |
| j   |              |              |        | Percent of Dominant Species  |                                  |
| )   |              |              |        | That Are OBL, FACW, or FAC:  | (A/B)                            |
|   |              |              |        | Prevalence Index worksheet:  |                                  |
|   | ;            | =Total Cover |        | Total % Cover of:  | Multiply by:                     |
| Sapling/Shrub Stratum (Plot size: 5 m )   |              |              |        | OBL species  | x 1 =                            |
| Carpinus caroliniana  |              |              | FAC    | FACW species   | x 2 =                            |
| 2.  |              |              |        |  | x 3 =                            |
| 3.  |              |              |        |  | x 4 =                            |
|   |              |              |        |  | x 5 =                            |
|   |              |              |        |  | (A)(B)                           |
|   |              |              |        | Prevalence Index = B/A   |                                  |
|   |              |              |        | -  |                                  |
| ·   |              |              |        | Hydrophytic Vegetation Indica  |                                  |
|   |              | =Total Cover |        | 1 - Rapid Test for Hydrophy  | -                                |
| <u>lerb Stratum</u> (Plot size: <u>1 m</u> )                                    |              |              |        | 2 - Dominance Test is >50%   |                                  |
| . Onoclea sensibilis  |              |              | FACW   | 3 - Prevalence Index is ≤3.0   | ) <sup>1</sup>                   |
| 2. Carex vulpinoidea  |              |              | OBL    | 4 - Morphological Adaptatio  |                                  |
| 3. Sphagnum   |              |              |        | data in Remarks or on a  | separate sneet)                  |
| l   |              |              |        | X Problematic Hydrophytic Ve   | egetation <sup>1</sup> (Explain) |
|   |              |              |        | <sup>1</sup> Indicators of hydric soil and we  | tland hydrology must be          |
| )   |              |              |        | present, unless disturbed or pro   |                                  |
| ,   |              |              |        | Definitions of Vegetation Stra   | ta:                              |
| 3.  |              |              |        | Tree Woody plants 2 in (7.6.   | am) ar mara in diamatar          |
| ).  |              |              |        | <b>Tree</b> – Woody plants 3 in. (7.6 c<br>at breast height (DBH), regardle  |                                  |
| 0.  |              |              |        |  |                                  |
| 1.  |              |              |        | <b>Sapling/shrub</b> – Woody plants and greater than or equal to 3.2   |                                  |
| 2.  |              |              |        |  | (                                |
| <i>L</i>  |              | =Total Cover |        | Herb – All herbaceous (non-wood of size, and woody plants less the second secon |                                  |
| Maadu//ina Stratum (Diataiza) Em )  |              |              |        | or size, and woody plants less ti  | ian 5.20 it tail.                |
| Voody Vine Stratum (Plot size: 5 m )  |              |              |        | Woody vines – All woody vines  | greater than 3.28 ft in          |
|   |              |              |        | height.  |                                  |
| <u> </u>  |              |              |        | Hydrophytic  |                                  |
| 3   |              |              |        | Vegetation   |                                  |
| l   |              |              |        | Present? Yes X   | No                               |
|   |              | =Total Cover |        |  |                                  |
| 3.  | rate sheet.) | =Total Cover |        | -  | es X                             |

| Profile Desc            | ription: (Describe f | to the de | oth needed to docu                         | ment th          | e indicat          | or or co         | nfirm the absence of inc                         | dicators.)                              |  |
|-------------------------|----------------------|-----------|--|------------------|--------------------|------------------|--|---|--|
| Depth                   | Matrix               |           | Redo                                       | x Featur         | es                 |                  |  |   |  |
| (inches)                | Color (moist)        | %         | Color (moist)                              | %                | Type <sup>1</sup>  | Loc <sup>2</sup> | Texture  | Remarks                                 |  |
| 0-5                     | 2.5Y 2.5/1           | 80        | 7.5YR 6/6                                  | 20               |                    |                  | Mucky Loam/Clay                                  | Trace Silt and Sand                     |  |
| 5-16                    | 5YR 4/1              | 50        | 7.5YR 6/6                                  | 35               | RM                 | М                | Mucky Loam/Clay                                  | Trace Silt and Sand                     |  |
|                         |                      |           | N 2.5/                                     | 15               | RM                 | М                |  |   |  |
|                         |                      |           |  |                  |                    |                  |  |   |  |
|                         |                      |           |  |                  |                    |                  |  |   |  |
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|                         |                      |           |  |                  |                    |                  |  |   |  |
|                         |                      |           |  |                  |                    |                  |  |   |  |
| <sup>1</sup> Type: C=Co | oncentration, D=Depl | etion, RN | I=Reduced Matrix, M                        | 1S=Masł          | ked Sand           | Grains.          | <sup>2</sup> Location: PL=                       | Pore Lining, M=Matrix.                  |  |
| Hydric Soil I           | Indicators:          |           |  |                  |                    |                  | Indicators for                                   | Problematic Hydric Soils <sup>3</sup> : |  |
| Histosol                | (A1)                 |           | Polyvalue Belo                             | w Surfa          | ce (S8) (I         | LRR R,           | 2 cm Muck  | (A10) ( <b>LRR K, L, MLRA 149B</b> )    |  |
| Histic Ep               | oipedon (A2)         |           | MLRA 149B) Coast Prairie Redox (A16)       |                  |                    |                  |  | rie Redox (A16) ( <b>LRR K, L, R</b> )  |  |
| Black Hi                | stic (A3)            |           | Thin Dark Surf                             | ace (S9)         | ) (LRR R           | 149B) 5 cm Muck  | xy Peat or Peat (S3) ( <b>LRR K, L, R</b> )      |   |  |
| Hydroge                 | n Sulfide (A4)       |           | High Chroma Sands (S11) ( <b>LRR K, L)</b> |                  |                    |                  | Polyvalue I                                      | Below Surface (S8) (LRR K, L)           |  |
| Stratified              | l Layers (A5)        |           | Loamy Mucky I                              | Mineral          | (F1) ( <b>LR</b> F | R K, L)          | Thin Dark Surface (S9) (LRR K, L)                |   |  |
|                         | d Below Dark Surface | e (A11)   | Loamy Gleyed                               |                  |                    | . ,              | Iron-Manganese Masses (F12) (LRR K, L, R         |   |  |
|                         | ark Surface (A12)    | ( )       | X Depleted Matri                           |                  | /                  |                  | Piedmont Floodplain Soils (F19) ( <b>MLRA 14</b> |   |  |
|                         | lucky Mineral (S1)   |           | Redox Dark Su                              |                  | 6)                 |                  | Mesic Spodic (TA6) ( <b>MLRA 144A, 145, 149</b>  |   |  |
|                         | ileyed Matrix (S4)   |           | Depleted Dark                              |                  |                    |                  | Red Parent Material (F21)                        |   |  |
|                         | edox (S5)            |           | Redox Depress                              |                  | • •                |                  | Very Shallow Dark Surface (F22)                  |   |  |
| X Stripped              |                      |           | Marl (F10) (LR                             |                  | 5)                 |                  | Other (Explain in Remarks)                       |   |  |
|                         | rface (S7)           |           |  | ις <b>Γ</b> , Ε) |                    |                  |  |   |  |
|                         |                      |           |  |                  |                    |                  |  |   |  |
|                         | , , , ,              | ion and w | etland hydrology mu                        | ist be pre       | esent, un          | less distu       | urbed or problematic.                            |   |  |
|                         | Layer (if observed): |           |  |                  |                    |                  |  |   |  |
| Туре:                   |                      |           |  |                  |                    |                  |  |   |  |
| Depth (ir               | 1ches):              |           |  |                  |                    |                  | Hydric Soil Present?                             | ? Yes <u>X</u> No                       |  |
| Remarks:                |                      |           |  |                  |                    |                  |  |   |  |
|                         |                      |           |  |                  |                    |                  |  |   |  |
|                         |                      |           |  |                  |                    |                  |  |   |  |
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|                         |                      |           |  |                  |                    |                  |  |   |  |

| Project/Site: Dewey Loeffel Land  | fill Superfund Site             |                       | City/County: Nassau, Rei   | nsselaer         | Sampli        | ing Date:   | 29 March 18        |
|---|---------------------------------|-----------------------|----------------------------|------------------|---------------|-------------|--------------------|
| Applicant/Owner: General Ele  | ctric Company                   |                       |                            | State:           | NY Sam        | pling Poin  | nt: <u>H2 - Up</u> |
| Investigator(s): JK Section, Township, Range: NA  |                                 |                       |                            |                  |               |             |                    |
| Landform (hillside, terrace, etc.):   | Upslope of Pond                 | Local re              | elief (concave, convex, no | ne): <u>None</u> |               | Slop        | e %: <u>0-5%</u>   |
| Subregion (LRR or MLRA): LRR  | R Lat:                          |                       | Long:                      |                  |               | Datum:      | WGS 1984           |
| Soil Map Unit Name: Fredon Silt Loam NWI classification: NA   |                                 |                       |                            |                  |               |             |                    |
| Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)   |                                 |                       |                            |                  |               |             |                    |
| Are Vegetation, Soil  | , or Hydrology                  | significantly disturb | ed? Are "Normal C          | ircumstances"    | present?      | Yes X       | No                 |
| Are Vegetation X, Soil  | , or Hydrology                  | naturally problemat   | ic? (If needed, exp        | plain any answ   | ers in Remar  | ːks.)       |                    |
| 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       within a Wetland?       Yes       No       X         Wetland Hydrology Present?       Yes       No       X       If yes, optional Wetland Site ID: |                                 |                       |                            |                  |               |             |                    |
| HYDROLOGY   |                                 |                       |                            |                  |               |             |                    |
| Wetland Hydrology Indicators:   |                                 |                       | Sec                        | condary Indicat  | tors (minimur | n of two re | equired)           |
| Primary Indicators (minimum of or   | <u>ne is required; check al</u> | l that apply)         |                            | Surface Soil C   | Cracks (B6)   |             |                    |
| Surface Water (A1)  | Wate                            | r-Stained Leaves (B   | 9)                         | Drainage Patt    | terns (B10)   |             |                    |
| High Water Table (A2)   | Aquat                           | tic Fauna (B13)       |                            | Moss Trim Lin    | 1es (B16)     |             |                    |
| Saturation (A3)   | <br>Marl [                      | Deposits (B15)        |                            | Dry-Season W     | Vater Table ( | C2)         |                    |

|   | <u> </u>   |   |
|---|--|---|
| Saturation (A3)                           | Marl Deposits (B15)                              | Dry-Season Water Table (C2)                   |
| Water Marks (B1)                          | Hydrogen Sulfide Odor (C1)                       | Crayfish Burrows (C8)                         |
| Sediment Deposits (B2)                    | Oxidized Rhizospheres on Living Roots (          | (C3)Saturation Visible on Aerial Imagery (C9) |
| Drift Deposits (B3)                       | Presence of Reduced Iron (C4)                    | Stunted or Stressed Plants (D1)               |
| Algal Mat or Crust (B4)                   | Recent Iron Reduction in Tilled Soils (C6        | Geomorphic Position (D2)                      |
| Iron Deposits (B5)                        | Thin Muck Surface (C7)                           | Shallow Aquitard (D3)                         |
| Inundation Visible on Aerial Imagery (B7) | Other (Explain in Remarks)                       | Microtopographic Relief (D4)                  |
| Sparsely Vegetated Concave Surface (B8    | 3)   | FAC-Neutral Test (D5)                         |
| Field Observations:                       |  |   |
| Surface Water Present? Yes                | No X Depth (inches):                             |   |
| Water Table Present? Yes                  | No X Depth (inches):                             |   |
| Saturation Present? Yes                   | No X Depth (inches): W                           | /etland Hydrology Present? Yes No _X          |
| (includes capillary fringe)               |  |   |
| Describe Recorded Data (stream gauge, mon | itoring well, aerial photos, previous inspection | s), if available:                             |
|   |  |   |
|   |  |   |
| Remarks:                                  |  |   |
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Sampling Point: H2 - Up

|   | Absolute      | Dominant          | Indicator      |  |                                   |            |
|---|---------------|-------------------|----------------|--|-----------------------------------|------------|
| <u>Tree Stratum</u> (Plot size: <u>10 m</u> )         | % Cover       | Species?          | Status         | Dominance Test worksheet                   |                                   |            |
| 1. <u>Prunus serotina</u>                             |               |                   | FACU           | Number of Dominant Species                 |                                   |            |
| 2. Quercus rubra                                      |               |                   | FACU           | That Are OBL, FACW, or FA                  | C:(A                              | <b>v</b> ) |
| 3   |               |                   |                | Total Number of Dominant                   |                                   |            |
| 4   |               |                   |                | Species Across All Strata:                 | (B                                | 3)         |
| 5   | ·             |                   |                | Percent of Dominant Species                |                                   |            |
| 6   |               |                   |                | That Are OBL, FACW, or FAC                 | ):(A                              | \/B)       |
| 7   |               |                   |                | Prevalence Index workshee                  | it:                               |            |
|   |               | =Total Cover      |                | Total % Cover of:                          | Multiply by:                      |            |
| Sapling/Shrub Stratum (Plot size: 5 m                 | )             |                   |                | OBL species                                | x 1 =                             |            |
| 1. Betula papyrifera                                  |               |                   | FACU           | FACW species                               | x 2 =                             |            |
| 2. Rosa multiflora                                    |               |                   | FACU           | FAC species                                | x 3 =                             |            |
| 3   |               |                   |                | FACU species                               | x 4 =                             |            |
| 4   |               |                   |                | UPL species                                | x 5 =                             |            |
| 5   |               |                   |                | Column Totals:                             | (A)                               | (B)        |
| 6.  |               |                   |                | Prevalence Index = B                       | /A =                              |            |
| 7.  |               |                   |                | Hydrophytic Vegetation Ind                 | icators:                          |            |
|   |               | =Total Cover      |                | 1 - Rapid Test for Hydror                  | ohytic Vegetation                 |            |
| Herb Stratum (Plot size: 1 m )                        |               |                   |                | 2 - Dominance Test is >5                   | i0%                               |            |
| 1   |               |                   |                | 3 - Prevalence Index is ≤                  | 3.0 <sup>1</sup>                  |            |
| 2.  |               |                   |                | 4 - Morphological Adapta                   |                                   | rtina      |
|   |               |                   |                | data in Remarks or on                      |                                   |            |
| 4.  |               |                   |                | Problematic Hydrophytic                    | Vegetation <sup>1</sup> (Explain) |            |
| 5   |               |                   |                | <sup>1</sup> Indicators of hydric soil and | wetland hydrology mus             | et ha      |
| 6.  |               |                   |                | present, unless disturbed or p             | , ,,                              | 50 00      |
| 7   |               |                   |                | Definitions of Vegetation St               | rata:                             |            |
| 8   |               |                   |                | Tree – Woody plants 3 in. (7.              | 6 cm) or more in diam             | ieter      |
| 9   |               |                   |                | at breast height (DBH), regar              | dless of height.                  |            |
| 10  |               |                   |                | Sapling/shrub – Woody plar                 | its less than 3 in. DBH           | ł          |
| 11  |               |                   |                | and greater than or equal to 3             |                                   |            |
| 12  |               |                   |                | Herb – All herbaceous (non-v               | woody) plants regardly            | 000        |
|   |               | =Total Cover      |                | of size, and woody plants les              |                                   | 000        |
| Woody Vine Stratum (Plot size: 5 m                    | )             |                   |                | Woody vines – All woody vin                | ues greater than 3.28 ft          | tin        |
| 1   |               |                   |                | height.                                    |                                   |            |
| 2.  |               |                   |                |  |                                   |            |
| 3.  |               |                   |                | Hydrophytic                                |                                   |            |
| 4.  |               |                   |                | Vegetation<br>Present? Yes                 | No X                              |            |
|   |               | =Total Cover      |                |  |                                   |            |
| Remarks: (Include photo numbers here or on a sepa     | arate sheet ) |                   |                | I  |                                   |            |
| Survey performed outside of growing season; therefore |               | of identifiable s | species record | ded without cover.                         |                                   |            |
|   |               |                   |                |  |                                   |            |
|   |               |                   |                |  |                                   |            |
|   |               |                   |                |  |                                   |            |

|                         | ription: (Describe                     | to the dep |                                 |            |                    | or or co         | nfirm the absence of                   | indicators.)   |                   |
|-------------------------|--|------------|---------------------------------|------------|--------------------|------------------|--|--|-------------------|
| Depth                   | Matrix                                 |            |                                 | x Featu    |                    |                  | _                                      |  |                   |
| (inches)                | Color (moist)                          | %          | Color (moist)                   | %          | Type <sup>1</sup>  | Loc <sup>2</sup> | Texture                                | Remarks  | 3                 |
| 0-4                     | 10YR 4/3                               | 100        |                                 |            |                    |                  | Sandy                                  | Trace Silt and   | d Clay            |
| 4-18                    | 2.5Y 5/4                               | 100        |                                 |            |                    |                  | Sandy                                  | Trace Silt and   | d Clay            |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  | ·          |                                 |            |                    |                  |  |  |                   |
|                         |  | ·          |                                 |            |                    |                  |  |  |                   |
|                         |  | . <u> </u> |                                 |            |                    |                  |  |  |                   |
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|                         |  | ·          |                                 |            | ·                  |                  |  |  |                   |
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|                         |  |            |                                 |            |                    |                  |  |  |                   |
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|                         |  | ·          |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
| <sup>1</sup> Type: C=Co | oncentration, D=Dep                    | letion, RM | =Reduced Matrix, M              | 1S=Masl    | ked Sand           | Grains.          | <sup>2</sup> Location: F               | PL=Pore Lining, M=Matri                                    | х.                |
| Hydric Soil I           |  |            |                                 |            |                    |                  |  | or Problematic Hydric                                      |                   |
| Histosol                | (A1)                                   |            | Polyvalue Belo                  | w Surfa    | ce (S8) ( <b>I</b> | .RR R,           | 2 cm Mu                                | uck (A10) ( <b>LRR K, L, MI</b>                            | <b>.RA 149B</b> ) |
| Histic Ep               | ipedon (A2)                            |            | MLRA 149B                       | ,          |                    |                  | Coast Prairie Redox (A16) (LRR K, L, F |  |                   |
| Black His               |  |            | Thin Dark Surf                  |            |                    |                  |  |  |                   |
|                         | n Sulfide (A4)                         |            | High Chroma S                   |            |                    |                  |  | ue Below Surface (S8) (I                                   |                   |
|                         | I Layers (A5)                          | - ( ) ( )  | Loamy Mucky                     |            |                    | R K, L)          |  | rk Surface (S9) ( <b>LRR K</b> ,                           |                   |
|                         | Below Dark Surface                     | e (A11)    | Loamy Gleyed                    |            | F2)                |                  |  | nganese Masses (F12) (<br>nt Elecateloin Soile (F10)       |                   |
|                         | rk Surface (A12)<br>lucky Mineral (S1) |            | Depleted Matri<br>Redox Dark Su |            | -6)                |                  |  | nt Floodplain Soils (F19)<br>podic (TA6) ( <b>MLRA 144</b> |                   |
|                         | leyed Matrix (S4)                      |            | Depleted Dark                   |            |                    |                  |  | rent Material (F21)  | A, 140, 140D)     |
|                         | edox (S5)                              |            | Redox Depres                    |            |                    |                  |  | allow Dark Surface (F22                                    | 2)                |
|                         | Matrix (S6)                            |            | <br>Marl (F10) ( <b>LR</b>      |            | ,                  |                  |  | Explain in Remarks)  |                   |
| Dark Sur                | face (S7)                              |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            | etland hydrology mu             | ist be pro | esent, unl         | ess distu        | irbed or problematic.                  |  |                   |
|                         | ayer (if observed):                    |            |                                 |            |                    |                  |  |  |                   |
| Type:                   |  |            |                                 |            |                    |                  |  |  |                   |
| Depth (ir               | nches):                                |            |                                 |            |                    |                  | Hydric Soil Prese                      | nt? Yes  | No <u>X</u>       |
| Remarks:                |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
|                         |  |            |                                 |            |                    |                  |  |  |                   |
| 1                       |  |            |                                 |            |                    |                  |  |  |                   |

| Project/Site: Dewey Loeffel Landfill Superfund Site                             | _ City/County: Nassau, Rensselaer Sampling Date: 29 March 18 |
|---|--|
| Applicant/Owner: General Electric Company                                       | State: NY Sampling Point: H2 - Wet                           |
| Investigator(s): JK   | Section, Township, Range: NA                                 |
| Landform (hillside, terrace, etc.): Wet Meadow/Emergent Local                   | I relief (concave, convex, none): Convex Slope %: 0-2        |
| Subregion (LRR or MLRA): LRR R Lat:   | Long: Datum: WGS 1984  |
| <u> </u>  |  |
| Soil Map Unit Name: Fredon Silt Loam  | NWI classification: Palustrine Emergent                      |
| Are climatic / hydrologic conditions on the site typical for this time of year? | Yes X No (If no, explain in Remarks.)                        |
| Are Vegetation, Soil, or Hydrologysignificantly distur                          | rbed? Are "Normal Circumstances" present? Yes X No           |
| Are Vegetation X , Soil , or Hydrology naturally problem                        | atic? (If needed, explain any answers in Remarks.)           |
| SUMMARY OF FINDINGS – Attach site map showing sar                               | mpling 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:                            |
| Remarks: (Explain alternative procedures here or in a separate report.)         |  |
| Survey performed outside of growing season; therefore, presence of identi       | ifiable species recorded without cover.                      |
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| 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)                                     |
| X Surface Water (A1) Water-Stained Leaves (                                     |  |
| X High Water Table (A2) Aquatic Fauna (B13)                                     | Moss Trim Lines (B16)  |
| X Saturation (A3) Marl Deposits (B15)   | Dry-Season Water Table (C2)                                  |
| Water Marks (B1) Hydrogen Sulfide Odor  |  |
| Sediment Deposits (B2) Oxidized Rhizospheres                                    |  |
| Drift Deposits (B3) Presence of Reduced Ir                                      | ron (C4) Stunted or Stressed Plants (D1)                     |
| Algal Mat or Crust (B4) Recent Iron Reduction i                                 | in Tilled Soils (C6) Geomorphic Position (D2)                |
| Iron Deposits (B5) Thin Muck Surface (C7)                                       | ) X Shallow Aquitard (D3)                                    |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in Remain              | rks) Microtopographic Relief (D4)                            |
| Sparsely Vegetated Concave Surface (B8)   | X FAC-Neutral Test (D5)                                      |
| Field Observations:   |  |
| Surface Water Present? Yes X No Depth (inches)                                  | ): 1   |
| Water Table Present? Yes X No Depth (inches)                                    |  |
| 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, pre       | evious inspections), if available:                           |
|   |  |
|   |  |
| Remarks:  |  |
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Sampling Point: H2 - Wet

| T 01 / 10 / 10 / 10                                 | Absolute     | Dominant          | Indicator      |  |                                 |
|---|--------------|-------------------|----------------|--|---------------------------------|
| Tree Stratum (Plot size: 10 m )                     | % Cover      | Species?          | Status         | Dominance Test worksheet:  |                                 |
| Fraxinus pennsylvanica  2.                          |              |                   | FACW           | Number of Dominant Species<br>That Are OBL, FACW, or FAC:                  | (A)                             |
| 3<br>4  |              |                   |                | Total Number of Dominant<br>Species Across All Strata:                     | (B)                             |
| 5   |              |                   |                | Percent of Dominant Species<br>That Are OBL, FACW, or FAC:                 | (A/B)                           |
| 7   |              |                   |                | Prevalence Index worksheet:  | (X/D)                           |
| ···   |              | =Total Cover      |                | Total % Cover of:  | Multiply by:                    |
| Sapling/Shrub Stratum (Plot size: 5 m )             |              |                   |                |  | x 1 =                           |
| 1 Solix dissolar                                    |              |                   | FACW           |  | x 2 =                           |
|   |              |                   | FACV           |  |                                 |
|   |              |                   |                | · ·  |                                 |
| 3.  |              |                   |                | · · ·  | x 4 =                           |
| 4.  |              |                   |                | · · · · · · · · · · · · · · · · · · ·                                      | x 5 =(D)                        |
| 5.  |              |                   |                |  | (A)(B)                          |
| 6   |              |                   |                | Prevalence Index = B/A =   |                                 |
| 7   |              |                   |                | Hydrophytic Vegetation Indica  | tors:                           |
|   |              | =Total Cover      |                | 1 - Rapid Test for Hydrophy  | tic Vegetation                  |
| Herb Stratum (Plot size: 1 m )                      |              |                   |                | 2 - Dominance Test is >50%   | 2                               |
| 1. Phalaris arundinacea                             |              |                   | FACW           | 3 - Prevalence Index is ≤3.0   | ,1                              |
| 2. Typha latifolia                                  |              |                   | OBL            | 4 - Morphological Adaptation   |                                 |
| 3. Juncus effusus                                   |              |                   | OBL            | data in Remarks or on a s  | separate sheet)                 |
| 4. Onoclea sensibilis                               |              |                   | FACW           | Problematic Hydrophytic Ve   | getation <sup>1</sup> (Explain) |
| 5. <u>Sphagnum</u>                                  |              |                   |                | <sup>1</sup> Indicators of hydric soil and wet                             |                                 |
| 6.  |              |                   |                | present, unless disturbed or prol  |                                 |
| 7   |              |                   |                | Definitions of Vegetation Strat  | .a:                             |
| 8.  |              |                   |                | Tree – Woody plants 3 in. (7.6 c   |                                 |
| 9   |              |                   |                | at breast height (DBH), regardle   | ss of height.                   |
| 10<br>11.   |              |                   |                | <b>Sapling/shrub</b> – Woody plants<br>and greater than or equal to 3.28   |                                 |
|   |              |                   |                | and greater than of equal to 5.20  |                                 |
| 12  |              | =Total Cover      |                | <b>Herb</b> – All herbaceous (non-woo<br>of size, and woody plants less th |                                 |
| Woody Vine Stratum (Plot size: 5 m )                |              |                   |                | Woody vines – All woody vines  | greater than 3 28 ft in         |
| 1   |              |                   |                | height.  | -                               |
| 2   |              |                   |                |  |                                 |
| 3.  |              |                   |                | Hydrophytic<br>Vegetation  |                                 |
| 4.  |              |                   |                | Present? Yes X   | Νο                              |
|   |              | =Total Cover      |                |  |                                 |
| Remarks: (Include photo numbers here or on a sepa   | rate sheet.) |                   |                | <u> </u>   |                                 |
| Survey performed outside of growing season; therefo |              | of identifiable s | species record | ded without cover.   |                                 |
|   |              |                   |                |  |                                 |
|   |              |                   |                |  |                                 |
|   |              |                   |                |  |                                 |

| Depth       Matrix       Redox Features         (inches)       Color (moist)       %       Type       Loc <sup>2</sup> Texture       Remarks         0-12       2.5YR 4/2       80       5YR 4/4       20       RM       M       Mucky Loam/Clay       Silty   | (inches) Color (moist) % Color (moist) % Type <sup>1</sup> Loc <sup>2</sup> Texture Rema   |                                     |
|--|--|-------------------------------------|
| 0-12         2.5YR 4/2         80         5YR 4/4         20         RM         M         Mucky Learn/Clay         Sility  |  |                                     |
| Image: Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>1</sup> Location: PL=Pore Lining, M=Matrix.          Hydric Soil Indicators in Public Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>1</sup> Location: PL=Pore Lining, M=Matrix.          Hydric Soil Indicators in Public Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>1</sup> Location: PL=Pore Lining, M=Matrix.          Hydric Soil Indicators in Public Concentration, D=Depletion, RM=Reduced Matrix, R2          Indicators for Problematic Hydric Soils?:          Histic Epipedon (A2)       MLRA 149B)          Coast Prainfe Redox (A16) (LRR K, L, R)          Black Histic (A3)       Thin Dark Surface (S9) (LRR K, L, R)           Polyvalue Below Surface (S8) (LRR K, L, R)          Startified Layers (A5)          Learny Mucky Mineral (F1)           Loarny Surface (F2)           Tron-Manganese Masses (F12) (LRR K, L, L)          Sandy Medyed Matrix (S4)          Depleted Matrix (F3)           Piedmont Floodplain Soils (F19) (MLRA 1444, 145, 1498         Sandy Medva (S5)         Red oz Dark Surface (F7)         Red Parent Material (F21)          Sandy Medva (S5)          Medro Dark Surface (F7)         Red Parent Material (F21)         Sandy Medva (S6)         Mari (F10) (LRR K, L)         Dother (Explain in Remarks)         Dark Surface (S7)         Sandy Greyed Matrix (S4)         Depleted Matrix (S6)         Mari (F10) (LRR K, L)         Dother (Explain in Remarks)         Dark Surfac | 0-12         2.5YR 4/2         80         5YR 4/4         20         RM         M ucky Loam/Clay         Silt                    | ty                                  |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Z Thick Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         X Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       No       No         Depth (inches):       12       Hydric Soil Present?       Yes _X_ No   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Z Thick Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         X Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       No       No         Depth (inches):       12       Hydric Soil Present?       Yes _X_ No   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Z Thick Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         X Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       No       No         Depth (inches):       12       Hydric Soil Present?       Yes _X_ No   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Z Thick Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         X Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       No       No         Depth (inches):       12       Hydric Soil Present?       Yes _X_ No   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Z Thick Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         X Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       No       No         Depth (inches):       12       Hydric Soil Present?       Yes _X_ No   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Z Thick Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         X Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       No       No         Depth (inches):       12       Hydric Soil Present?       Yes _X_ No   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Z Thick Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         X Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       No       No         Depth (inches):       12       Hydric Soil Present?       Yes _X_ No   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L, R)         Z Thick Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         X Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1449E)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       No       No         Depth (inches):       12       Hydric Soil Present?       Yes _X_ No   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :   |  |                                     |
| Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :   | <sup>1</sup> Type: C=Concentration D=Depletion RM=Reduced Matrix MS=Masked Sand Grains <sup>2</sup> Location: PL=Pore Lining M=M | latrix                              |
| Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, L, MLRA 149B)         Histic Epipedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)         X       Thick Dark Surface (A12)       Depleted Matrix (F3)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X       Stripped Matrix (S6)       Mari (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       12       Hydric Soil Present?       Yes       X       No   |  |                                     |
| 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)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         X Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 1448, 145, 149B         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:         Type:       Rock       Hydric Soil Present?       Yes       X       No  |  |                                     |
| Hydrogen Sulfide (A4)       High Chroma Sands (S11) (LRR K, L)       Polyvalue Below Surface (S8) (LRR K, L)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         X       Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149E         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X       Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:       Rock         Type:       Rock       Rock       No       No  |  |                                     |
| Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Thin Dark Surface (S9) (LRR K, L)         Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         X       Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149E         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X       Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:       Reock         Type:       Rock       Rock       No       No  |  |                                     |
| Depleted Below Dark Surface (A11)       Loamy Gleyed Matrix (F2)       Iron-Manganese Masses (F12) (LRR K, L, R)         X       Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149E         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X       Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Restrictive Layer (if observed):       Type:       Rock         Depth (inches):       12       Hydric Soil Present?       Yes X       No   |  |                                     |
| X       Thick Dark Surface (A12)       Depleted Matrix (F3)       Piedmont Floodplain Soils (F19) (MLRA 149E         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X       Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       If observed):       Type:       Reok         Type:       Rock       No       No   | Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR   | ₹K, L)                              |
| Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 144A, 145, 149B         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Kestrictive Layer (if observed):         Type:       Rock       Rock         Depth (inches):       12       Hydric Soil Present?       Yes X       No   | Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Iron-Manganese Masses (F1   | 2) (LRR K, L, R)                    |
| Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)       Red Parent Material (F21)         Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Bark Surface (S7)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):         Type:       Rock         Depth (inches):       12  | X Thick Dark Surface (A12) Depleted Matrix (F3) Piedmont Floodplain Soils (F   | <sup>:</sup> 19) ( <b>MLRA 149B</b> |
| Sandy Redox (S5)       Redox Depressions (F8)       Very Shallow Dark Surface (F22)         X Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Bark Surface (S7)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:       Rock         Depth (inches):       12       Hydric Soil Present?       Yes X       No  | Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Mesic Spodic (TA6) (MLRA 1  | 144A, 145, 149B)                    |
| X       Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)         Dark Surface (S7)       3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:       Rock         Depth (inches):       12       Hydric Soil Present?       Yes X       No   | Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21)  |                                     |
| Dark Surface (S7) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.           Restrictive Layer (if observed):       Type:       Rock         Depth (inches):       12       Hydric Soil Present?       Yes X No   | Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F   | F22)                                |
| <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.          Restrictive Layer (if observed):       Type:       Rock         Depth (inches):       12       Hydric Soil Present?       Yes X       No  | X       Stripped Matrix (S6)       Marl (F10) (LRR K, L)       Other (Explain in Remarks)  |                                     |
| Restrictive Layer (if observed):         Type:         Rock           Depth (inches):         12         Hydric Soil Present?         Yes X         No   | Dark Surface (S7)  |                                     |
| Restrictive Layer (if observed):         Type:         Rock           Depth (inches):         12         Hydric Soil Present?         Yes X         No   |  |                                     |
| Type:         Rock           Depth (inches):         12           Hydric Soil Present?         Yes X   |  |                                     |
| Depth (inches):         12         Hydric Soil Present?         Yes X         No   |  |                                     |
|  |  |                                     |
| Remarks:   | Depth (inches):         12         Hydric Soil Present?         Yes_X  | <u> </u>                            |
|  | Remarks:   |                                     |
|  |  |                                     |
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|  |  |                                     |

| Project/Site: Dewey Loeffel Landfill Super                             | rfund Site                           | City/County: Nassau, Rensselaer Sampling Date: 17 April 18   |  |  |
|--|--------------------------------------|--|--|--|
| Applicant/Owner: General Electric Cor                                  | mpany                                | State: NY Sampling Point: H3 - Up                            |  |  |
| Investigator(s): JK  |                                      | Section, Township, Range: NA                                 |  |  |
| Landform (hillside, terrace, etc.): Upslop                             | e of Drainage Channel Local r        | elief (concave, convex, none): None Slope %: 0-2             |  |  |
| Subregion (LRR or MLRA): LRR R   |                                      | Long: Datum: WGS 1984  |  |  |
| Soil Map Unit Name: Fredon Silt Loam                                   |                                      | NWI classification: NA                                       |  |  |
| Are climatic / hydrologic conditions on the s                          | ite typical for this time of year?   | Yes X No (If no, explain in Remarks.)                        |  |  |
| Are Vegetation, Soil, or Hyd   | drology significantly disturb        | ed? Are "Normal Circumstances" present? Yes X No             |  |  |
| Are Vegetation X , Soil, or Hyd  |                                      |  |  |  |
|  |                                      | pling point locations, transects, important features, etc.   |  |  |
|  | ch site map showing sam              | phily point locations, transects, important reatures, etc.   |  |  |
| Hydrophytic Vegetation Present?  | Yes No                               | Is the Sampled Area  |  |  |
| Hydric Soil Present?   | Yes No _X                            | within a Wetland? Yes <u>No X</u>                            |  |  |
| Wetland Hydrology Present?   | Yes <u>No X</u>                      | If yes, optional Wetland Site ID:                            |  |  |
|  |                                      |  |  |  |
| HYDROLOGY<br>Wetland Hydrology Indicators:                             |                                      | Secondary Indicators (minimum of two required)               |  |  |
| Primary Indicators (minimum of one is requ                             | uired: check all that apply)         | Surface Soil Cracks (B6)                                     |  |  |
| Surface Water (A1)   | Water-Stained Leaves (B              |  |  |  |
| High Water Table (A2)  | Aquatic Fauna (B13)                  | Moss Trim Lines (B16)  |  |  |
| Saturation (A3)  |                                      |  |  |  |
| Water Marks (B1)   | C1) Crayfish Burrows (C8)            |  |  |  |
| Sediment Deposits (B2)   | Oxidized Rhizospheres o              | n Living Roots (C3)Saturation Visible on Aerial Imagery (C9) |  |  |
| Drift Deposits (B3)  | Presence of Reduced Iro              |  |  |  |
| Algal Mat or Crust (B4)  | Recent Iron Reduction in             |  |  |  |
| Iron Deposits (B5)   | Thin Muck Surface (C7)               | Shallow Aquitard (D3)  |  |  |
| Inundation Visible on Aerial Imagery (                                 |                                      |  |  |  |
| Sparsely Vegetated Concave Surface                                     | (B8)                                 | FAC-Neutral Test (D5)  |  |  |
| Field Observations:  |                                      |  |  |  |
| Surface Water Present? Yes   | No X Depth (inches):                 |  |  |  |
| Water Table Present? Yes   | No X Depth (inches):                 |  |  |  |
| Saturation Present? Yes  | No X Depth (inches):                 | Wetland Hydrology Present? Yes No _X                         |  |  |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, r | nonitoring well, aerial photos, prev | vious inspections), if available:                            |  |  |
| jauge, i   | 5 ,, p.o.                            | · //   |  |  |

Remarks:

Sampling Point: H3 - Up

|  | Absolute    | Dominant     | Indicator | Denvironen Textonetation   |
|--|-------------|--------------|-----------|--|
| Tree Stratum (Plot size: 10 m )                    | % Cover     | Species?     | Status    | Dominance Test worksheet:  |
| 1  |             |              |           | Number of Dominant Species   |
| 2.<br>3.   |             |              |           | That Are OBL, FACW, or FAC:(A)   |
|  |             |              |           | Total Number of Dominant<br>Species Across All Strata: (B)   |
| 5  |             |              |           | Species Across All Strata:(B)  |
|  |             |              |           | Percent of Dominant Species<br>That Are OBL, FACW, or FAC: (A/B)   |
| 7  |             |              |           | Prevalence Index worksheet:  |
| ··   |             | =Total Cover |           | Total % Cover of: Multiply by:   |
| <u>Sapling/Shrub Stratum</u> (Plot size: 5 m )     |             |              |           | OBL species         x 1 =  |
| 1. Rosa multiflora                                 |             |              | FACU      | FACW species x 2 =   |
| 2. Betula papyrifera                               |             |              | FACU      | FAC species x 3 =  |
| 3.   |             |              |           | FACU species x 4 =   |
| 4.   |             |              |           | UPL species x 5 =  |
| 5.   |             |              |           | Column Totals: (A) (B)   |
| 6.   |             |              |           | Prevalence Index = B/A =   |
| 7  |             |              |           | Hydrophytic Vegetation Indicators:   |
|  |             | =Total Cover |           | 1 - Rapid Test for Hydrophytic Vegetation  |
| <u>Herb Stratum</u> (Plot size: 1 m )              |             |              |           | 2 - Dominance Test is >50%   |
| 1. Solidago canadensis                             |             |              | FACU      | $3 - Prevalence Index is \leq 3.0^{1}$   |
| 2  |             |              |           | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| 3.   |             |              |           | data in Remarks or on a separate sheet)  |
| 4.   |             |              |           | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 5  |             |              |           |  |
| 6  |             |              |           | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 7.   |             |              |           | Definitions of Vegetation Strata:  |
| 8.   |             |              |           |  |
| 9.   |             |              |           | <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.    |
| 10.  |             |              |           |  |
| 11.  |             |              |           | <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.       |
| 12.  |             |              |           |  |
|  |             | =Total Cover |           | <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
| Woody Vine Stratum (Plot size: 5 m )               |             |              |           |  |
| 1  |             |              |           | <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.   |
| 2.   |             |              |           |  |
| 3.   |             |              |           | Hydrophytic  |
| 4.   |             |              |           | Vegetation<br>Present? Yes No  |
|  |             | =Total Cover |           |  |
| Remarks: (Include photo numbers here or on a separ | ate sheet.) |              |           |  |
|  |             |              |           |  |
|  |             |              |           |  |
|  |             |              |           |  |
|  |             |              |           |  |
|  |             |              |           |  |
|  |             |              |           |  |

| Profile Desc  | ription: (Describe t | o the dep   | th needed to docu      | ment th   | e indicat          | or or coi        | nfirm the absence of | f indicato  | rs.)                           |                         |
|---------------|----------------------|-------------|------------------------|-----------|--------------------|------------------|----------------------|-------------|--------------------------------|-------------------------|
| Depth         | Matrix               |             | Redo                   | x Featu   | res                |                  |                      |             |                                |                         |
| (inches)      | Color (moist)        | %           | Color (moist)          | %         | Type <sup>1</sup>  | Loc <sup>2</sup> | Texture              |             | Remar                          | ks                      |
| 0-18          | 5YR 4/3              | 100         |                        |           |                    |                  | Sandy                |             | Sandy Silt-                    | Loam                    |
|               |                      |             |                        |           | ·                  |                  |                      |             |                                |                         |
|               |                      |             |                        |           | ·                  |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           | ·                  |                  |                      |             |                                |                         |
|               |                      |             |                        |           | ·                  |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           | ·                  |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           | ·                  |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    | Craina           | 21 a cation 1        | DI - Dara I | ining M-Mat                    | heir c                  |
| Hydric Soil I | ncentration, D=Depl  | etion, Rivi | Reduced Matrix, N      | 15=Mas    | ked Sand           | Grains.          |                      |             | _ining, M=Mat<br>ematic Hydrio |                         |
| Histosol      |                      |             | Polyvalue Belo         | w Surfa   | ce (S8) (I         | RRR              |                      |             | (LRR K, L, N                   |                         |
|               | ipedon (A2)          |             | MLRA 149B              |           |                    | ,                |                      |             | dox (A16) (LR                  |                         |
| Black His     |                      |             | Thin Dark Surf         | ,         | ) ( <b>LRR R</b> . | MLRA 1           |                      |             |                                | (LRR K, L, R)           |
|               | n Sulfide (A4)       |             | High Chroma S          |           |                    |                  |                      | -           | Surface (S8)                   |                         |
|               | Layers (A5)          |             | Loamy Mucky            |           |                    |                  |                      |             | e (S9) ( <b>LRR 1</b>          |                         |
|               | Below Dark Surface   | e (A11)     | Loamy Gleyed           |           |                    | . ,              |                      |             |                                | ) (LRR K, L, R)         |
| Thick Da      | rk Surface (A12)     |             | Depleted Matri         |           |                    |                  |                      |             |                                | 9) ( <b>MLRA 149B</b> ) |
| Sandy M       | ucky Mineral (S1)    |             | Redox Dark Su          | urface (F | -6)                |                  | Mesic S              | Spodic (TA  | A6) ( <b>MLRA 14</b>           | 4A, 145, 149B)          |
| Sandy G       | leyed Matrix (S4)    |             | Depleted Dark          | Surface   | e (F7)             |                  | Red Pa               | rent Mate   | rial (F21)                     |                         |
| Sandy Re      | edox (S5)            |             | Redox Depres           | sions (F  | 8)                 |                  | Very Sł              | nallow Dar  | rk Surface (F2                 | 22)                     |
| Stripped      | Matrix (S6)          |             | Marl (F10) ( <b>LR</b> | R K, L)   |                    |                  | Other(               | Explain in  | Remarks)                       |                         |
| Dark Sur      | face (S7)            |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      | on and we   | etland hydrology mu    | ist be pr | esent, unl         | ess distu        | rbed or problematic. |             |                                |                         |
|               | ayer (if observed):  |             |                        |           |                    |                  |                      |             |                                |                         |
| Type:         |                      |             |                        |           |                    |                  |                      |             |                                |                         |
| Depth (in     | ches):               |             |                        |           |                    |                  | Hydric Soil Prese    | ent?        | Yes                            | <u>No X</u>             |
| Remarks:      |                      |             |                        |           |                    |                  | •                    |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
|               |                      |             |                        |           |                    |                  |                      |             |                                |                         |
| 1             |                      |             |                        |           |                    |                  |                      |             |                                |                         |

| Applicant/Owner:       General Electric Company         Investigator(s):       JK         Section       Landform (hillside, terrace, etc.):         Drainage Channel       Local relief (concave, etc.):         Subregion (LRR or MLRA):       LRR R         Soil Map Unit Name:       Fredon Silt Loam         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes         Are Vegetation       , Soil       , or Hydrology       significantly disturbed?  | Long:       Datum:       WGS 1984        NWI classification:       NA         aNo(If no, explain in Remarks.)         a"Normal Circumstances" present?       Yes X No         needed, explain any answers in Remarks.) |
|---|--|
| Hydrophytic Vegetation Present?     Yes     X     No     Is the Samp       Hydric Soil Present?     Yes     X     No     within a Wef   | tland? Yes X No<br>nal Wetland Site ID:  |
| 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 Leaves (B9)         X       High Water Table (A2)       Aquatic Fauna (B13)         X       Saturation (A3)       Marl Deposits (B15)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (B15)         Drift Deposits (B3)       X         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)         Iron Deposits (B5)       Thin Muck Surface (C7)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Eicld Observational | Stunted or Stressed Plants (D1)  |
| Field Observations:         Surface Water Present?       Yes       X       No       Depth (inches):       2         Water Table Present?       Yes       X       No       Depth (inches):       0         Saturation Present?       Yes       X       No       Depth (inches):       0       W         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspection       No       No       No   | Vetland Hydrology Present? Yes X No<br>ns), if available:  |
| Remarks:  |  |

Sampling Point: H3 - Wet

| Tara Chataire (Distaire 40 m   | Absolute | Dominant        | Indicator      | Deminence Test werkelset                              |                           |
|--|----------|-----------------|----------------|---|---------------------------|
| Tree Stratum (Plot size: 10 m )  | % Cover  | Species?        | Status         | Dominance Test worksheet:                             |                           |
| 1  |          |                 |                | Number of Dominant Species                            |                           |
| 2  |          |                 |                | That Are OBL, FACW, or FAC:                           | (A)                       |
| 3  |          |                 |                | Total Number of Dominant                              |                           |
| 4  |          |                 |                | Species Across All Strata:                            | (B)                       |
| 5  |          |                 |                | Percent of Dominant Species                           |                           |
| 6  |          |                 |                | That Are OBL, FACW, or FAC:                           | (A/B)                     |
| 7  |          |                 |                | Prevalence Index worksheet:                           |                           |
|  |          | =Total Cover    |                | Total % Cover of:                                     | Multiply by:              |
| Sapling/Shrub Stratum (Plot size: 5 m )  |          |                 |                | OBL species   | x 1 =                     |
| 1. Alnus incana  |          |                 | FACW           | FACW species  | x 2 =                     |
| 2  |          |                 |                | FAC species   | x 3 =                     |
| 3  |          |                 |                | FACU species  | x 4 =                     |
| 4.   |          |                 |                | UPL species   | x 5 =                     |
| 5.   |          |                 |                | Column Totals:  | (A) (B)                   |
| 6.   |          |                 |                | Prevalence Index = B/A                                |                           |
| 7  |          |                 |                | Hydrophytic Vegetation Indic                          |                           |
| ··   |          | =Total Cover    |                | 1 - Rapid Test for Hydroph                            |                           |
| Herb Stratum (Plot size: 1 m )   |          |                 |                | 2 - Dominance Test is >50                             |                           |
|  |          |                 |                | —   |                           |
| 1. Onoclea sensibilis  |          |                 | FACW           | 3 - Prevalence Index is ≤3.                           |                           |
| 2. Phragmites australis  |          |                 | FACW           | 4 - Morphological Adaptati<br>data in Remarks or on a |                           |
| 3. <u>Carex vulpinoidea</u>  |          |                 | OBL            |   |                           |
| 4  |          |                 |                | Problematic Hydrophytic V                             | egetation ' (Explain)     |
| 5  |          |                 |                | <sup>1</sup> Indicators of hydric soil and we         |                           |
| 6  |          |                 |                | present, unless disturbed or pre                      | oblematic.                |
| 7  |          |                 |                | Definitions of Vegetation Stra                        | ata:                      |
| 8  |          |                 |                | Tree – Woody plants 3 in. (7.6                        | cm) or more in diameter   |
| 9  |          |                 |                | at breast height (DBH), regardl                       | ess of height.            |
| 10   |          |                 |                | Sapling/shrub – Woody plants                          | s less than 3 in. DBH     |
| 11   |          |                 |                | and greater than or equal to 3.2                      |                           |
| 12   |          |                 |                | Herb – All herbaceous (non-wo                         | odv) plants regardless    |
|  |          | =Total Cover    |                | of size, and woody plants less                        |                           |
| Woody Vine Stratum (Plot size: 5 m )   |          |                 |                | Woody vince All woody vince                           | a graatar than 2.29 ft in |
| 1  |          |                 |                | Woody vines – All woody vines height.                 | s greater than 5.26 it in |
| 2.   |          |                 |                |   |                           |
| 3.   |          |                 |                | Hydrophytic   |                           |
|  |          |                 |                | Vegetation<br>Present? Yes X                          | No                        |
| 4  |          | =Total Cover    |                |   |                           |
|  |          |                 |                |   |                           |
| Remarks: (Include photo numbers here or on a separ<br>Survey performed outside of growing season; therefor | ,        | of identifiable | species record | ded without cover.                                    |                           |
|  |          |                 |                |   |                           |
|  |          |                 |                |   |                           |
|  |          |                 |                |   |                           |

| Profile Desc  | ription: (Describe                         | to the dep | oth needed to docu     | ment th   | e indicat         | or or co         | nfirm the absence o                       | of indicators.)                                  |  |  |
|---------------|--|------------|------------------------|-----------|-------------------|------------------|---|--|--|--|
| Depth         | Matrix                                     |            | Redo                   | x Featur  | es                |                  |   |  |  |  |
| (inches)      | Color (moist)                              | %          | Color (moist)          | %         | Type <sup>1</sup> | Loc <sup>2</sup> | Texture                                   | Remarks  |  |  |
| 0-5           | 5Y 3/2                                     | 100        |                        |           |                   |                  | Sandy                                     | w/ Silt and Clay, Organics and Pebbles           |  |  |
| 5-6           | 5Y 4/2                                     | 100        |                        |           |                   |                  | Sandy                                     | w/ Organics                                      |  |  |
| 6-18          | 5Y 4/1                                     | 90         | 7.5YR 4/4              | 10        | RM                | M                | Loamy/Clayey                              | Silt and Clay                                    |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  | ·          |                        |           |                   |                  |   |  |  |  |
|               |  | ·          |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  | ·          |                        |           |                   |                  |   |  |  |  |
|               | ncentration, D=Depl                        | lation DM  |                        |           |                   | Craina           | <sup>2</sup> l eastion:                   | PL=Pore Lining, M=Matrix.                        |  |  |
| Hydric Soil I |  |            |                        | 13-11/251 | veu Sanu          | Grains.          |   | for Problematic Hydric Soils <sup>3</sup> :      |  |  |
| Histosol      |  |            | Polyvalue Belc         | w Surfa   | ce (S8) (I        | .RR R,           |   | Muck (A10) ( <b>LRR K, L, MLRA 149B</b> )        |  |  |
| Histic Ep     | ipedon (A2)                                |            | <br>MLRA 149B          | )         |                   |                  |   | Prairie Redox (A16) ( <b>LRR K, L, R</b> )       |  |  |
| Black His     | stic (A3)                                  |            | Thin Dark Surf         | ace (S9)  | ) (LRR R,         | MLRA 1           | 1 <b>49B</b> )5 cm N                      | Mucky Peat or Peat (S3) (LRR K, L, R)            |  |  |
| Hydroge       | n Sulfide (A4)                             |            | High Chroma S          | Sands (S  | 611) ( <b>LRF</b> | R K, L)          | Polyva                                    | alue Below Surface (S8) (LRR K, L)               |  |  |
| Stratified    | Layers (A5)                                |            | Loamy Mucky            | Mineral   | (F1) ( <b>LRF</b> | R K, L)          | Thin D                                    | oark Surface (S9) ( <b>LRR K, L</b> )            |  |  |
| X Depleted    | Below Dark Surface                         | e (A11)    | Loamy Gleyed           | Matrix (  | F2)               |                  | Iron-Manganese Masses (F12) (LRR K, L, R) |  |  |  |
| X Thick Da    | rk Surface (A12)                           |            | Depleted Matri         | x (F3)    |                   |                  | Piedm                                     | nont Floodplain Soils (F19) ( <b>MLRA 149B</b> ) |  |  |
| X Sandy M     | ucky Mineral (S1)                          |            | Redox Dark Su          | urface (F | 6)                |                  | Mesic                                     | Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b> )     |  |  |
|               | leyed Matrix (S4)                          |            | Depleted Dark          |           |                   |                  |   | arent Material (F21)                             |  |  |
|               | edox (S5)                                  |            | Redox Depres           |           |                   |                  |   | Shallow Dark Surface (F22)                       |  |  |
|               | Matrix (S6)                                |            | Marl (F10) ( <b>LR</b> |           | - /               |                  |   | (Explain in Remarks)                             |  |  |
|               | face (S7)                                  |            |                        | . ,       |                   |                  |   | ,  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               | hydrophytic vegetat<br>ayer (if observed): |            | etland hydrology mu    | st be pre | esent, un         | ess distu        | urbed or problematic.                     |  |  |  |
| Type:         | ayer (il observeu).                        |            |                        |           |                   |                  |   |  |  |  |
| Depth (ir     |  |            |                        |           |                   |                  | Hydric Soil Pres                          | ent? Yes X No                                    |  |  |
| Remarks:      |  |            |                        |           |                   |                  |   |  |  |  |
| Remarks.      |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |
|               |  |            |                        |           |                   |                  |   |  |  |  |

| Project/Site: Dewey Loeffel Landfill Superfund Site   | e City                    | y/County: <u>Nassau, Rensselae</u>   |               | Sampling Date: 17 April 18 |  |  |  |  |
|---|---------------------------|--------------------------------------|---------------|----------------------------|--|--|--|--|
| Applicant/Owner: General Electric Company   |                           | Sta                                  | te: <u>NY</u> | Sampling Point: J-Up       |  |  |  |  |
| Investigator(s): JK   |                           | Section, Township, Rang              | je: <u>NA</u> |                            |  |  |  |  |
| Landform (hillside, terrace, etc.): Elevated Bench  | of Stream Local relief    | f (concave, convex, none): <u>No</u> | ne            | Slope %: <u>5-10%</u>      |  |  |  |  |
| Subregion (LRR or MLRA): LRR R  | Lat:                      | Long:                                |               | Datum: WGS 1984            |  |  |  |  |
| Soil Map Unit Name: Hoosic Gravely Sandy Loam   |                           | NWI cla                              | assification: | NA                         |  |  |  |  |
| Are climatic / hydrologic conditions on the site typical  | I for this time of year?  | Yes X No                             | (If no, e     | explain in Remarks.)       |  |  |  |  |
| Are Vegetation, Soil, or Hydrology _  | significantly disturbed?  | ? Are "Normal Circumsta              | ances" pres   | ent? Yes X No              |  |  |  |  |
| Are Vegetation, Soil, or Hydrology _  | naturally problematic?    | (If needed, explain any              | answers ir    | n Remarks.)                |  |  |  |  |
| SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. |                           |                                      |               |                            |  |  |  |  |
| Hydrophytic Vegetation Present? Yes   | No Is                     | s the Sampled Area                   |               |                            |  |  |  |  |
| Hydric Soil Present? Yes  | No X w                    | vithin a Wetland?                    | Yes           | No <u>X</u>                |  |  |  |  |
| Wetland Hydrology Present? Yes  | No <u>X</u> If            | f yes, optional Wetland Site ID:     |               |                            |  |  |  |  |
| Remarks: (Explain alternative procedures here or i  | n a separate report.)     |                                      |               |                            |  |  |  |  |
| HYDROLOGY   |                           |                                      |               |                            |  |  |  |  |
| Wetland Hydrology Indicators:   |                           | <u>Secondary</u>                     | ndicators (I  | minimum of two required)   |  |  |  |  |
| Primary Indicators (minimum of one is required; che   | eck all that apply)       | Surface                              | Soil Crack    | s (B6)                     |  |  |  |  |
| · · ·   | Nater-Stained Leaves (B9) | `                                    | je Patterns   | · ,                        |  |  |  |  |
| High Water Table (A2)   | Aquatic Fauna (B13)       | Moss T                               | rim Lines (E  | 316)                       |  |  |  |  |

|   | Aqualic Faulia (B13)                          |                                 | 0)                          |  |  |  |
|---|---|---------------------------------|-----------------------------|--|--|--|
| Saturation (A3)                         | Marl Deposits (B15)                           | Dry-Season Water T              | Dry-Season Water Table (C2) |  |  |  |
| Water Marks (B1)                        | Hydrogen Sulfide Odor (C1)                    | Crayfish Burrows (C8            | 3)                          |  |  |  |
| Sediment Deposits (B2)                  | Oxidized Rhizospheres on Living Ro            | oots (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         | Geomorphic Position             | ı (D2)                      |  |  |  |
| Iron Deposits (B5)                      | Thin Muck Surface (C7)                        | Shallow Aquitard (D3            | 3)                          |  |  |  |
| Inundation Visible on Aerial Imagery (B | 7)Other (Explain in Remarks)                  | Microtopographic Re             | lief (D4)                   |  |  |  |
| Sparsely Vegetated Concave Surface (    | (B8)  | FAC-Neutral Test (D             | 5)                          |  |  |  |
| Field Observations:                     |   |                                 |                             |  |  |  |
| Surface Water Present? Yes              | No X Depth (inches):                          |                                 |                             |  |  |  |
| Water Table Present? Yes                | No X Depth (inches):                          |                                 |                             |  |  |  |
| Saturation Present? Yes                 | No X Depth (inches):                          | Wetland Hydrology Present?      | Yes No X                    |  |  |  |
| (includes capillary fringe)             |   |                                 |                             |  |  |  |
| Describe Recorded Data (stream gauge, m | onitoring well, aerial photos, previous inspe | ctions), if available:          |                             |  |  |  |
|   |   |                                 |                             |  |  |  |
|   |   |                                 |                             |  |  |  |
| Remarks:                                |   |                                 |                             |  |  |  |
|   |   |                                 |                             |  |  |  |
|   |   |                                 |                             |  |  |  |
|   |   |                                 |                             |  |  |  |
|   |   |                                 |                             |  |  |  |
|   |   |                                 |                             |  |  |  |
|   |   |                                 |                             |  |  |  |
|   |   |                                 |                             |  |  |  |

Sampling Point: J-Up

| Tree Stratum (Plot size: 10 m )           | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:  |  |  |
|---|---------------------|----------------------|---------------------|--|--|--|
| 1. Tsuga canadensis                       | 50                  | Yes                  | FACU                | Number of Dominant Species   |  |  |
| 2. Betula alleghaniensis                  | 30                  | Yes                  | FAC                 | That Are OBL, FACW, or FAC:4 (   |  |  |
| 3<br>t                                    |                     |                      |                     | Total Number of Dominant<br>Species Across All Strata: 7(  |  |  |
| 5<br>5                                    |                     | ·                    |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC: <u>57.1%</u> (A                                   |  |  |
| 7   |                     |                      |                     | Prevalence Index worksheet:  |  |  |
|   | 80                  | =Total Cover         |                     | Total % Cover of: Multiply by:   |  |  |
| Sapling/Shrub Stratum (Plot size: 5 m     | )                   |                      |                     | OBL species x 1 =  |  |  |
| 1. Betula alleghaniensis                  | 10                  | Yes                  | FAC                 | FACW species5 x 2 =10  |  |  |
| 2. Fraxinus pennsylvanica                 | 5                   | Yes                  | FACW                | FAC species 75 x 3 = 225   |  |  |
| 3. Acer saccharum                         | 5                   | Yes                  | FACU                | FACU species 95 x 4 = 380  |  |  |
| t. Rubus                                  | 2                   | No                   |                     | UPL species 0 x 5 = 0  |  |  |
| 5.  |                     |                      |                     | Column Totals: 175 (A) 615   |  |  |
| Э.  |                     |                      |                     | Prevalence Index = B/A = 3.51  |  |  |
| 7.  | _                   |                      |                     | Hydrophytic Vegetation Indicators:   |  |  |
|   | 22                  | =Total Cover         |                     | 1 - Rapid Test for Hydrophytic Vegetation  |  |  |
| <u>Herb Stratum</u> (Plot size: 1 m )     |                     |                      |                     | X 2 - Dominance Test is >50%   |  |  |
| · · · · · · · · · · · · · · · · · · ·     | 40                  | Voo                  | FACU                | —  |  |  |
| Polystichum acrostichoides                |                     | Yes                  |                     | 3 - Prevalence Index is ≤3.0 <sup>1</sup>  |  |  |
| 2. Amphicarpaea bracteata                 | _                   | Yes                  | FAC                 | 4 - Morphological Adaptations <sup>1</sup> (Provide support data in Remarks or on a separate sheet)          |  |  |
| 3. <u>Acer</u>                            | 2                   | <u>No</u>            |                     |  |  |  |
| 4. Thelypteris noveboracensis             | 15                  | No                   | FAC                 | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |  |  |
| 5. <u>Sphagnum</u><br>5                   | 10                  | <u>No</u>            |                     | <sup>1</sup> Indicators of hydric soil and wetland hydrology mu<br>present, unless disturbed or problematic. |  |  |
| 7   | _                   |                      |                     | Definitions of Vegetation Strata:  |  |  |
| 3<br>9.                                   |                     | ·                    |                     | <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diar at breast height (DBH), regardless of height.      |  |  |
|   |                     | ·                    |                     | at breast height (DDF), regardless of height.  |  |  |
| 10<br>11                                  | _                   |                      |                     | <b>Sapling/shrub</b> – Woody plants less than 3 in. DBł and greater than or equal to 3.28 ft (1 m) tall.     |  |  |
| 12  |                     |                      |                     | Herb – All herbaceous (non-woody) plants, regard   |  |  |
|   | 87                  | =Total Cover         |                     | of size, and woody plants less than 3.28 ft tall.  |  |  |
| <u>Woody Vine Stratum</u> (Plot size: 5 m | )                   |                      |                     | Weedwainee Allweedwainee greater then 2.20   |  |  |
| 1   |                     |                      |                     | <b>Woody vines</b> – All woody vines greater than 3.28 height.   |  |  |
| 2   |                     |                      |                     |  |  |  |
|   |                     |                      |                     | Hydrophytic  |  |  |
| 1   |                     | ·                    |                     | Vegetation<br>Present? Yes X No  |  |  |
| 3   |                     |                      |                     |  |  |  |
| 4   |                     | =Total Cover         |                     |  |  |  |

| Profile Desc            | ription: (Describe    | to the dep | oth needed to docu  | ment th   | ne indicat          | or or co         | nfirm the absence               | of indicato | ors.)                  |                         |
|-------------------------|-----------------------|------------|---------------------|-----------|---------------------|------------------|---------------------------------|-------------|------------------------|-------------------------|
| Depth                   | Matrix                |            |                     | x Featu   |                     |                  |                                 |             |                        |                         |
| (inches)                | Color (moist)         | %          | Color (moist)       | %         | Type <sup>1</sup>   | Loc <sup>2</sup> | Texture                         |             | Rema                   | rks                     |
| 0-6                     | 10YR 3/3              | 100        |                     |           |                     |                  | Sandy                           | w/ Silt,    | Organics, an           | d Small Cobbles         |
| 6-12                    | 7.5YR 4/4             | 100        |                     |           |                     |                  | Sandy                           | w/ S        | ilt, Clay, Org,        | Med. Cobbles            |
| 12-18                   | 5Y 5/1                | 100        |                     |           |                     |                  | Loamy/Clayey                    |             | Silty Clay w/ T        | race Sand               |
|                         |                       | ·          |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       | ·          |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       |            |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       | ·          |                     |           | ·                   |                  |                                 | ·           |                        |                         |
|                         |                       | ·          |                     |           |                     |                  |                                 | ·           |                        |                         |
| <sup>1</sup> Type: C=Co | oncentration, D=Dep   | letion, RM |                     | IS=Mas    | ked Sand            | Grains.          | ²Location:                      | PL=Pore     | Lining, M=Ma           |                         |
| Hydric Soil I           |                       |            |                     |           |                     |                  |                                 |             | ematic Hydri           |                         |
| Histosol                | (A1)                  |            | Polyvalue Belo      | w Surfa   | ice (S8) ( <b>I</b> | RR R,            | 2 cm                            | Muck (A10   | ) (LRR K, L, I         | VILRA 149B)             |
| Histic Ep               | oipedon (A2)          |            | MLRA 149B           | )         |                     |                  | Coast                           | Prairie Re  | edox (A16) ( <b>LF</b> | RR K, L, R)             |
| Black Hi                | stic (A3)             |            | Thin Dark Surf      |           |                     |                  | 49B) 5 cm                       | Mucky Pea   | t or Peat (S3)         | ) (LRR K, L, R)         |
| Hydroge                 | n Sulfide (A4)        |            | High Chroma S       | Sands (S  | 611) ( <b>LRF</b>   | R K, L)          | Polyv                           | alue Below  | Surface (S8)           | (LRR K, L)              |
| Stratified              | l Layers (A5)         |            | Loamy Mucky         | Mineral   | (F1) ( <b>LRF</b>   | R K, L)          | Thin [                          | Dark Surfac | ce (S9) ( <b>LRR</b>   | K, L)                   |
| Depleted                | d Below Dark Surface  | e (A11)    | Loamy Gleyed        | Matrix (  | (F2)                |                  | Iron-N                          | langanese   | Masses (F12            | 2) (LRR K, L, R)        |
| Thick Da                | ark Surface (A12)     |            | Depleted Matri      | x (F3)    |                     |                  | Piedn                           | nont Floodp | olain Soils (F1        | 9) ( <b>MLRA 149B</b> ) |
| Sandy M                 | lucky Mineral (S1)    |            | Redox Dark Su       | urface (F | =6)                 |                  | Mesic                           | Spodic (T   | A6) (MLRA 14           | 44A, 145, 149B)         |
| Sandy G                 | ileyed Matrix (S4)    |            | Depleted Dark       | Surface   | e (F7)              |                  | Red F                           | arent Mate  | erial (F21)            |                         |
| Sandy R                 | edox (S5)             |            | Redox Depres        | sions (F  | 8)                  |                  | Very Shallow Dark Surface (F22) |             |                        |                         |
| Stripped                | Matrix (S6)           |            | Marl (F10) (LR      | R K, L)   |                     |                  | Other (Explain in Remarks)      |             |                        |                         |
| Dark Su                 | rface (S7)            |            |                     |           |                     |                  |                                 |             |                        |                         |
|                         | f hydrophytic vegetat |            | etland hydrology mu | st be pr  | esent, unl          | ess distu        | urbed or problematic            |             |                        |                         |
|                         | Layer (if observed):  |            |                     |           |                     |                  |                                 |             |                        |                         |
| Type:                   | <b>L )</b>            |            |                     |           |                     |                  |                                 |             | N                      |                         |
|                         | nches):               |            |                     |           |                     |                  | Hydric Soil Pres                | sent?       | Yes                    | <u>No X</u>             |
| Remarks:                |                       |            |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       |            |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       |            |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       |            |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       |            |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       |            |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       |            |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       |            |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       |            |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       |            |                     |           |                     |                  |                                 |             |                        |                         |
|                         |                       |            |                     |           |                     |                  |                                 |             |                        |                         |

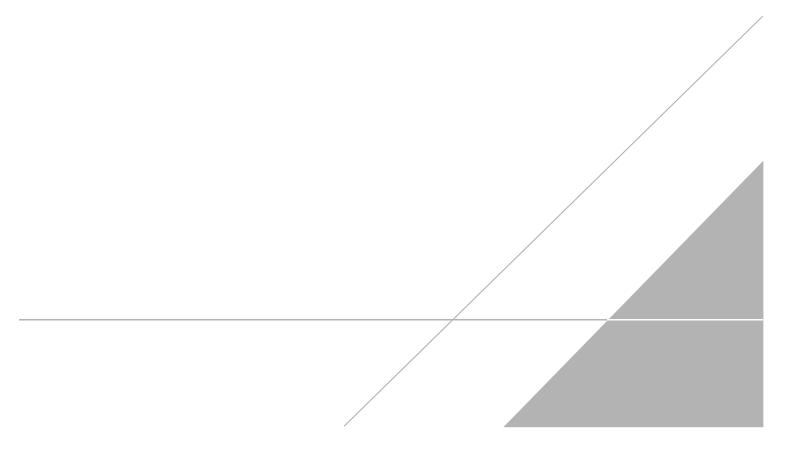
| Project/Site: Dewey Loeffel Landfill Superfund Site   | City/County: Nassau, Rensselaer Sampling Date: <u>17 April 18</u> |  |  |  |  |
|---|---|--|--|--|--|
| Applicant/Owner: General Electric Company   | State: NY Sampling Point: J-Wet                                   |  |  |  |  |
| Investigator(s): JK   | Section, Township, Range: NA                                      |  |  |  |  |
|   | elief (concave, convex, none): Concave Slope %: 0-5%              |  |  |  |  |
| Subregion (LRR or MLRA): LRR R Lat:   |   |  |  |  |  |
| <b>.</b>  | Long: Datum: WGS 1984   |  |  |  |  |
| Soil Map Unit Name: Fredon Silt Loam  | NWI classification: PEMA  |  |  |  |  |
| Are climatic / hydrologic conditions on the site typical for this time of year?   | Yes X No (If no, explain in Remarks.)                             |  |  |  |  |
| Are Vegetation, Soil, or Hydrologysignificantly disturbed   | ed? Are "Normal Circumstances" present? Yes X No                  |  |  |  |  |
| Are Vegetation X , Soil , or Hydrology naturally problemation   | ic? (If needed, explain any answers in Remarks.)                  |  |  |  |  |
| SUMMARY OF FINDINGS – Attach site map showing same  | pling point locations, transects, important features, etc.        |  |  |  |  |
| Hydrophytic Vegetation Present?     Yes     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:                                 |  |  |  |  |
| Remarks: (Explain alternative procedures here or in a separate report.)<br>Survey performed outside of growing season; therefore, presence of identifia | ble species recorded without cover.                               |  |  |  |  |
| 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)  |  |  |  |  |
| X Surface Water (A1) X Water-Stained Leaves (BS   | 9) X Drainage Patterns (B10)                                      |  |  |  |  |
| X High Water Table (A2) Aquatic Fauna (B13)   | Moss Trim Lines (B16)   |  |  |  |  |
| X Saturation (A3) Marl Deposits (B15)   | Dry-Season Water Table (C2)                                       |  |  |  |  |
| Water Marks (B1) Hydrogen Sulfide Odor (C   | 1) Crayfish Burrows (C8)  |  |  |  |  |
| Sediment Deposits (B2) Oxidized Rhizospheres on   |   |  |  |  |  |
| Drift Deposits (B3) X Presence of Reduced Iron  | n (C4) Stunted or Stressed Plants (D1)                            |  |  |  |  |
| Algal Mat or Crust (B4)Recent Iron Reduction in 1   | 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  |   |  |  |  |  |
| Sparsely Vegetated Concave Surface (B8)   | X FAC-Neutral Test (D5)   |  |  |  |  |
| Field Observations:   |   |  |  |  |  |
| Surface Water Present? Yes X No Depth (inches):   |   |  |  |  |  |
| Water Table Present?   Yes X   No   Depth (inches): _   |   |  |  |  |  |
| 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, previ   | ous inspections), if available:                                   |  |  |  |  |
| Remarks:  |   |  |  |  |  |
|   |   |  |  |  |  |
|   |   |  |  |  |  |
|   |   |  |  |  |  |
|   |   |  |  |  |  |
|   |   |  |  |  |  |

Sampling Point: J-Wet

| <u>Tree Stratum</u> (Plot size: 10 m )               | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet                                  | •                                      |
|--|---------------------|----------------------|---------------------|---|--|
| 1  |                     |                      |                     |   |  |
| 2.   |                     |                      |                     | Number of Dominant Species<br>That Are OBL, FACW, or FAC  |  |
| 3.       4.  |                     |                      |                     | Total Number of Dominant<br>Species Across All Strata:    | (B)                                    |
| 5.           6.                                      |                     |                      |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC |  |
| 7  |                     |                      |                     | Prevalence Index workshee                                 | •t:                                    |
|  |                     | =Total Cover         |                     | Total % Cover of:   | Multiply by:                           |
| Sapling/Shrub Stratum (Plot size: 5 m )              |                     |                      |                     | OBL species   | x 1 =                                  |
| 1  |                     |                      |                     | FACW species  | x 2 =                                  |
| 2  |                     |                      |                     | FAC species   | x 3 =                                  |
| 3.   |                     |                      |                     | FACU species  | x 4 =                                  |
| 4.   |                     |                      |                     | UPL species   | x 5 =                                  |
| 5.   |                     |                      |                     | Column Totals:  | (A) (B)                                |
| 6.   |                     |                      |                     | Prevalence Index = B                                      |  |
| 7.   |                     |                      |                     | Hydrophytic Vegetation Ind                                |  |
|  |                     | =Total Cover         |                     | 1 - Rapid Test for Hydrop                                 | hvtic Vegetation                       |
| <u>Herb Stratum</u> (Plot size: 1 m )                |                     |                      |                     | 2 - Dominance Test is >5                                  |  |
| A lucino chie numerularie                            |                     |                      | FACW                | 3 - Prevalence Index is ≤                                 |  |
| 2 Carex lurida                                       |                     |                      | OBL                 | I —   | tions <sup>1</sup> (Provide supporting |
|  |                     |                      |                     | data in Remarks or on                                     |  |
| 3.        4.   |                     |                      |                     | Problematic Hydrophytic                                   | Vegetation <sup>1</sup> (Explain)      |
| 5  |                     |                      |                     | <sup>1</sup> Indicators of hydric soil and v              | vetland hydrology must be              |
| 6  |                     |                      |                     | present, unless disturbed or p                            |  |
| 7  |                     |                      |                     | Definitions of Vegetation St                              | rata:                                  |
| 8  |                     |                      |                     | Tree – Woody plants 3 in. (7.                             | 6 cm) or more in diameter              |
| 9  |                     |                      |                     | at breast height (DBH), regar                             | dless of height.                       |
| 10   |                     |                      |                     | Sapling/shrub – Woody plan                                | its less than 3 in. DBH                |
| 11   |                     |                      |                     | and greater than or equal to 3                            |  |
| 12   |                     |                      |                     | Herb – All herbaceous (non-v                              | woody) plants, regardless              |
|  |                     | =Total Cover         |                     | of size, and woody plants less                            |  |
| <u>Woody Vine Stratum</u> (Plot size: <u>5 m</u> )   |                     |                      |                     | Woody vines – All woody vin                               | es greater than 3 28 ft in             |
| 1  |                     |                      |                     | height.   |  |
| 2  |                     |                      |                     |   |  |
| 3  |                     |                      |                     | Hydrophytic<br>Vegetation                                 |  |
| 4.   |                     |                      |                     | Present? Yes  | No                                     |
|  |                     | =Total Cover         |                     |   |  |
| Remarks: (Include photo numbers here or on a separ   | ate sheet.)         |                      |                     | 1   |  |
| Survey performed outside of growing season; therefor |                     | of identifiable s    | species record      | led without cover.  |  |
|  |                     |                      |                     |   |  |
|  |                     |                      |                     |   |  |
|  |                     |                      |                     |   |  |
|  |                     |                      |                     |   |  |

| Depth                  | Matrix               |           | Redo                | x Featur        | res               |                  |                      |  |
|------------------------|----------------------|-----------|---------------------|-----------------|-------------------|------------------|----------------------|--|
| (inches)               | Color (moist)        | %         | Color (moist)       | %               | Type <sup>1</sup> | Loc <sup>2</sup> | Texture              | Remarks  |
| 0-18                   | 5Y 5/1               | 75        | 10YR 3/6            | 25              | RM                | M                | Loamy/Clayey         | Clay and Silt                                  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        | ncentration, D=Depl  | etion, RM | =Reduced Matrix, M  | IS=Masl         | ked Sand          | Grains.          |                      | PL=Pore Lining, M=Matrix.                      |
| Hydric Soil I          |                      |           |                     |                 |                   |                  |                      | s for Problematic Hydric Soils <sup>3</sup> :  |
| Histosol               |                      |           | Polyvalue Belo      |                 | ce (S8) (I        | _RR R,           |                      | Muck (A10) ( <b>LRR K, L, MLRA 149B</b> )      |
|                        | ipedon (A2)          |           | MLRA 149B           |                 |                   |                  |                      | Prairie Redox (A16) ( <b>LRR K, L, R</b> )     |
| Black His              |                      |           | Thin Dark Surfa     |                 |                   |                  |                      | Mucky Peat or Peat (S3) ( <b>LRR K, L, R</b> ) |
|                        | n Sulfide (A4)       |           | High Chroma S       |                 |                   |                  |                      | alue Below Surface (S8) ( <b>LRR K, L</b> )    |
| Stratified             | Layers (A5)          |           | Loamy Mucky I       | Mineral         | (F1) ( <b>LRI</b> | R K, L)          | Thin D               | Dark Surface (S9) ( <b>LRR K, L</b> )          |
| Depleted               | Below Dark Surface   | e (A11)   | Loamy Gleyed        | Matrix (        | F2)               |                  | Iron-M               | langanese Masses (F12) ( <b>LRR K, L, R</b>    |
| Thick Da               | rk Surface (A12)     |           | Depleted Matri      | x (F3)          |                   |                  | Piedm                | nont Floodplain Soils (F19) ( <b>MLRA 149</b>  |
| Sandy M                | ucky Mineral (S1)    |           | Redox Dark Su       | urface (F       | 6)                |                  | Mesic                | Spodic (TA6) (MLRA 144A, 145, 149E             |
| Sandy G                | leyed Matrix (S4)    |           | Depleted Dark       | Surface         | e (F7)            |                  | Red P                | Parent Material (F21)                          |
| Sandy Re               | edox (S5)            |           | Redox Depress       | sions (F        | 8)                |                  | Very S               | Shallow Dark Surface (F22)                     |
| X Stripped             | Matrix (S6)          |           | Marl (F10) (LR      | <b>R K, L</b> ) |                   |                  | Other                | (Explain in Remarks)                           |
|                        | face (S7)            |           |                     |                 |                   |                  |                      |  |
|                        | hydrophytic vegetati | on and we | etland hydrology mu | st be pre       | esent, un         | less distu       | rbed or problematic. |  |
| Restrictive L<br>Type: | .ayer (if observed): |           |                     |                 |                   |                  |                      |  |
| _<br>Depth (in         | iches):              |           |                     |                 |                   |                  | Hydric Soil Pres     | sent? Yes <u>X</u> No                          |
| Remarks:               |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |
|                        |                      |           |                     |                 |                   |                  |                      |  |

**D2 - SVAP Forms** 



| 2. Field As    | ssessment                      | Owner's name: GE/Arcad<br><b>Reach #1</b> | dis                            | Evaluator's name:JK/JV     |
|----------------|--------------------------------|---|--------------------------------|----------------------------|
| A. Prelimin    | ary Field Data                 | Stream name: Tributary 1                  | T11A                           | Tributary to: Valatie Kill |
| Date of asse   | essment_11/1/17                | Weather conditions to                     | oday_Cloudy/Overcast           | - 40-50°F                  |
|                |                                |   | (ambient                       | temp.\ % cloud cover)      |
| Weather cor    | nditions over past 2 to 5      | days: Partly Cloudy                       | - Three Days Since R           | ain 38 °F                  |
|                |                                | *0  | (No. of days precip            | /average daytime temp.)    |
| Reach locat    | ion (UTM or Lat./Long.)        | *See<br>Fig. 3/                           |                                |                            |
| Channel typ    | e/classification scheme        | Type II/ B3 / Rosgen                      | -                              |                            |
| Riparian Co    | ver Type(s): Tree <u>40</u>    | % Shrub_20_% Herbaceo                     | ous <u>10</u> % Bare <u>10</u> | %                          |
| Bank Profile   | : Stratified Homog             | eneous_X_ Cohesive S                      | oil <u>X</u> Noncohesive S     | Soil                       |
| Gradient ( $$  | one): Low (0-2%)               | Moderate (>2<4%) X<br>*See                |                                | See                        |
| Bankfull cha   | innel width <u>~10</u> ft I    | Reach length <u>Fig. 3</u> ft             |                                |                            |
| Average ripa   | arian zone width 8.3           | ft; Method used (e.g.,                    | Range finder):                 | <i>l</i> easure            |
| Average hei    | ght of woody shrubs            | N/A ft; Method used (                     | e.g., Range finder):           | /A                         |
| Flood plain    | wetlands, if present <u>0.</u> | .005 acres/reach                          |                                |                            |
| Dominant su    |                                | 20cobble29grave<br>m) (60-250mm)          |                                |                            |
| Photo Point    | Locations and Descript         |   |                                |                            |
| Photo<br>Pt. # | GPS Coordin                    | ates/Waypoints                            | De                             | scription                  |
|                |                                |   |                                |                            |

| 1 | 2548 | Artificial green weir                            |
|---|------|--|
| 2 | 2549 | Bend looking upstream; steps and braided chanrel |
| 3 | 2550 | Flat/riffle area; upstream of bend               |
| 4 | 2551 | Wooden structure; pool                           |

SVAP Start Time/Water Temp: <u>N/A</u>\_\_\_\_SVAP End Time/Water Temp: <u>N/A</u>\_\_\_\_

Notes: N/A

#### **B. Element Scores**

| Element                          | Score | Element                            | Score |
|----------------------------------|-------|------------------------------------|-------|
| 1. Channel Condition             | 6     | 14. Aquatic Invertebrate Community | 8     |
| 2. Hydrologic Alteration         | 8     | 15. Riffle Embeddedness            | 6     |
| 3. Bank Condition                | 8     | 16. Salinity                       | N/A   |
| 4. Riparian Area Quantity        | 10    | A. Sum of all elements scored      | 124   |
| 5. Riparian Area Quality         | 9     | B. Number of elements scored       | 15    |
| 6. Canopy Cover                  | 9     |                                    |       |
| 7. Water Appearance              | 9     | Overall score: A/B8.3              |       |
| 8. Nutrient Enrichment           | 10    |                                    |       |
| 9. Manure or Human Waste         | 10    | 1 to 2.9 Severely Degraded         |       |
| 10. Pools                        | 9     | 3 to 4.9 Poor                      |       |
| 11. Barriers to Movement         | 6     | 5 to 6.9 Fair                      |       |
| 12. Fish Habitat Complexity      | 8     | 7 to 8.9 Good                      |       |
| 13. Aquatic Invertebrate Habitat | 8     | 9 to 10 Excellent                  |       |

Suspected causes of SVAP scores less than 5 (does not meet quality criteria for stream species)  $\ensuremath{\mathsf{N/A}}$ 

Recommendations for further assessment or actions: N/A

Riparian wildlife habitat recommendations:  $\ensuremath{\text{N/A}}$ 

| 2. Field As    | Field Assessment Owner's name: GE/Arcadis |   | dis                              | Evaluator's name:JK/JV     |
|----------------|---|---|----------------------------------|----------------------------|
| A. Prelimir    | ary Field Data                            | <b>Reach #2</b><br>Stream name: Tributary | T11A                             | Tributary to: Valatie Kill |
| Date of asse   | essment <u>11/1/17</u>                    | Weather conditions to                     | oday_Cloudy/Overcast             | - 40-50°F                  |
|                |   |   | (ambient                         | temp.\ % cloud cover)      |
| Weather co     | nditions over past 2 to 5                 | days: Partly Cloudy                       | - Three Days Since Ra            | ain38 °F                   |
|                |   |   | (No. of days precip/             | average daytime temp.)     |
| Reach locat    | ion (UTM or Lat./Long.)                   | *See<br>Fig. 3 /                          |                                  |                            |
| Channel typ    | e/classification scheme                   | Type II/ B3 / Rosgen                      | -                                |                            |
| Riparian Co    | ver Type(s): Tree <u>40</u>               | % Shrub_20_% Herbaced                     | ous <u>10</u> % Bare <u>10</u> % | 6                          |
| Bank Profile   | e: Stratified Homog                       | eneous <u>X</u> Cohesive S                | oil <u>X</u> Noncohesive S       | oil                        |
| Gradient ( $$  | one): Low (0-2%)                          | Moderate (>2<4%) X                        |                                  |                            |
| Bankfull cha   | annel width <u>~10</u> ft I               | *See<br>Reach length <u>Fig. 3</u> ft     | *Se<br>Flood plain width_Fig     |                            |
| Average rip    | arian zone width 8.2                      | _ft; Method used (e.g.,                   | Range finder):                   | leasure                    |
| Average he     | ight of woody shrubs $\_^{N}$             | J/A ft; Method used (                     | e.g., Range finder):             | Ά                          |
| Flood plain    | wetlands, if present <u>0.</u>            | 012 acres/reach                           |                                  |                            |
| Dominant si    |   | 5 cobble <u>41</u> grav<br>n) (60-250mm)  |                                  |                            |
| Photo Point    | Locations and Descript                    | ions:                                     |                                  |                            |
| Photo<br>Pt. # |   | ates/Waypoints                            | Des                              | scription                  |
|                |   |   |                                  |                            |
| 1              | 2552                                      |   | Sharp bends and eros             | ion on left bank.          |
| 2              | 2553                                      |   | Cut weir; sinuous arou           | Ind bend                   |

SVAP Start Time/Water Temp: N/A\_\_\_\_\_SVAP End Time/Water Temp: N/A\_\_\_\_

Notes: N/A

3

4

2554

2555

Braided channel; "side stream" near bend

Downstream; small step-pools and riffles. End of reach.

#### **B. Element Scores**

| Element                          | Score | Element                            | Score |
|----------------------------------|-------|------------------------------------|-------|
| 1. Channel Condition             | 7     | 14. Aquatic Invertebrate Community | 4     |
| 2. Hydrologic Alteration         | 7     | 15. Riffle Embeddedness            | 4     |
| 3. Bank Condition                | 8     | 16. Salinity                       | N/A   |
| 4. Riparian Area Quantity        | 8     | A. Sum of all elements scored      | 107   |
| 5. Riparian Area Quality         | 7     | B. Number of elements scored       | 15    |
| 6. Canopy Cover                  | 9     |                                    |       |
| 7. Water Appearance              | 9     | Overall score: A/B                 |       |
| 8. Nutrient Enrichment           | 10    |                                    |       |
| 9. Manure or Human Waste         | 10    | 1 to 2.9 Severely Degraded         |       |
| 10. Pools                        | 6     | 3 to 4.9 Poor                      |       |
| 11. Barriers to Movement         | 5     | 5 to 6.9 Fair                      |       |
| 12. Fish Habitat Complexity      | 7     | 7 to 8.9 Good                      |       |
| 13. Aquatic Invertebrate Habitat | 6     | 9 to 10 Excellent                  |       |

Suspected causes of SVAP scores less than 5 (does not meet quality criteria for stream species)  $N\!/\!A$ 

Recommendations for further assessment or actions:  $\ensuremath{\mathsf{N/A}}$ 

Riparian wildlife habitat recommendations:  $\ensuremath{\text{N/A}}$ 

| 2. Field As   | sessment                    | Owner's name: GE/Arcad        | lis                             | Evaluator's name:JK/JV              |  |  |
|---|-----------------------------|-------------------------------|---------------------------------|-------------------------------------|--|--|
|   |                             | Reach #3                      |                                 |                                     |  |  |
| A. Prelimin   | ary Field Data              | Stream name: Tributary        | 11A                             | Tributary to: Valatie Kill          |  |  |
|   | . 11/1/17                   |                               | . Cloudy/Overcast - A           | 0-50°F                              |  |  |
| Date of asse  | essment <u>11/1/17</u>      | Weather conditions to         |                                 |                                     |  |  |
|   |                             |                               | ,                               | mp.\ % cloud cover)                 |  |  |
| Weather cor   | nditions over past 2 to 5   | davs: Partly Cloudy           | - Three Days Since Rain         | 2 38 °F                             |  |  |
|   |                             | ,                             | (No. of days precip/av          | /erage daytime temp.)               |  |  |
| Reach locat   | ion (UTM or Lat./Long.)     | *See<br>Fig. 3/               |                                 |                                     |  |  |
| Channel typ   | e/classification scheme     | <u>Type II/ B3 / Rosgen</u>   |                                 |                                     |  |  |
| Riparian Co   | ver Type(s): Tree <u>40</u> | % Shrub_20_% Herbacec         | us <u>10</u> % Bare <u>10</u> % |                                     |  |  |
| Bank Profile  | : Stratified Homog          | eneous <u>X</u> Cohesive S    | oil X Noncohesive Soil          | l                                   |  |  |
| Gradient ( $$   | one): Low (0-2%)            | Moderate (>2<4%) X<br>*See    | High (>4%) *See                 |                                     |  |  |
| Bankfull cha  | nnel width <u>~10</u> ft    | Reach length <u>Fig. 3</u> ft |                                 |                                     |  |  |
| Average ripa  | arian zone width 6.1        | ft; Method used (e.g.,        | Range finder): <u>Field Mea</u> | isure                               |  |  |
| Average hei   | ght of woody shrubs         | N/A ft; Method used (         | e.g., Range finder): <u> </u>   |                                     |  |  |
| Flood plain   | wetlands, if present        | 0acres/reach                  |                                 |                                     |  |  |
| Dominant substrate (%): boulder       8       cobble       41       gravel       18       sand       20       fine sediments       13         (> 250 mm)       (60-250mm)       (2-60 mm)       (206 mm)       (< .06 mm) |                             |                               |                                 |                                     |  |  |
| Photo Point   | Locations and Descript      | ions:                         |                                 |                                     |  |  |
| Photo<br>Pt. #  | GPS Coordin                 | ates/Waypoints                | Desc                            | ription                             |  |  |
|   |                             |                               |                                 |                                     |  |  |
| 1   | 2556                        |                               | Upstream. Low sinuosity         | ν, straight.                        |  |  |
| 2   | 2557                        |                               | Upstream. Coarse wood           | ly debris dam blocking flow at bend |  |  |
| 3   | 2558                        |                               | Upstream. End of reach          |                                     |  |  |
| 4   | 2559                        |                               | Downstream. Log weir, I         | pend.                               |  |  |

SVAP Start Time/Water Temp: N/A \_\_\_\_\_SVAP End Time/Water Temp: N/A

Notes:N/A

#### **B. Element Scores**

| Element                          | Score | Element                            | Score |
|----------------------------------|-------|------------------------------------|-------|
| 1. Channel Condition             | 6     | 14. Aquatic Invertebrate Community | 6     |
| 2. Hydrologic Alteration         | 6     | 15. Riffle Embeddedness            | 4     |
| 3. Bank Condition                | 6     | 16. Salinity                       | N/A   |
| 4. Riparian Area Quantity        | 8     | A. Sum of all elements scored      | 97    |
| 5. Riparian Area Quality         | 8     | B. Number of elements scored       | 15    |
| 6. Canopy Cover                  | 9     |                                    |       |
| 7. Water Appearance              | 10    | Overall score: A/B 6.5             | _     |
| 8. Nutrient Enrichment           | 8     |                                    |       |
| 9. Manure or Human Waste         | 10    | 1 to 2.9 Severely Degraded         |       |
| 10. Pools                        | 4     | 3 to 4.9 Poor                      |       |
| 11. Barriers to Movement         | 3     | 5 to 6.9 Fair                      |       |
| 12. Fish Habitat Complexity      | 4     | 7 to 8.9 Good                      |       |
| 13. Aquatic Invertebrate Habitat | 5     | 9 to 10 Excellent                  |       |

Suspected causes of SVAP scores less than 5 (does not meet quality criteria for stream species) N/A

Recommendations for further assessment or actions: N/A

Riparian wildlife habitat recommendations: N/A

| 2. Field Assessment   | Owner's name: GE/Arca<br><b>Reach #4</b>     | dis                                   | Evaluator's name: JK/JV    |  |  |
|---|--|---------------------------------------|----------------------------|--|--|
| A. Preliminary Field Data   | Stream name: Tributary                       | T11A                                  | Tributary to: Valatie Kill |  |  |
| Date of assessment 11/1/17  | Weather conditions to                        |                                       | 40-50°F                    |  |  |
|   |  | , , , , , , , , , , , , , , , , , , , | , ,                        |  |  |
| Weather conditions over past 2 to 5   | days:  | - Three Days Since Raii               | n38 °F                     |  |  |
| Reach location (UTM or Lat./Long.)  |  |                                       | verage daytime temp.)      |  |  |
| Channel type/classification scheme  | Type II/ B3 / Rosgen                         |                                       |                            |  |  |
| Riparian Cover Type(s): Tree 40 % Shrub 20 % Herbaceous 10 % Bare 10 %                                |  |                                       |                            |  |  |
| Bank Profile: Stratified Homoge   | eneous <u>X</u> Cohesive Se                  | oil <u>X</u> Noncohesive Soi          | I                          |  |  |
| Gradient (√ one): Low (0-2%) Moderate (>2<4%) X High (>4%)<br>*See *See *See                          |  |                                       |                            |  |  |
| Bankfull channel width <u>~10</u> ft Reach length <u>Fig. 3</u> ft Flood plain width <u>Fig. 3</u> ft |  |                                       |                            |  |  |
| Average riparian zone width 7.5 ft; Method used (e.g., Range finder): Field Measure                   |  |                                       |                            |  |  |
| Average height of woody shrubs <u>N/A</u> ft; Method used (e.g., Range finder): <u>N/A</u>            |  |                                       |                            |  |  |
| Flood plain wetlands, if present0 acres/reach   |  |                                       |                            |  |  |
| Dominant substrate (%): boulder<br>(> 250 mr  | 10 cobble <u>36</u> _ grave<br>n) (60-250mm) |                                       |                            |  |  |
| Photo Point Locations and Descriptions:   |  |                                       |                            |  |  |
| Photo GPS Coordina<br>Pt. #   | ates/Waypoints                               | Desc                                  | ription                    |  |  |

|   | Pt. # |      |  |
|---|-------|------|--|
|   |       |      |  |
|   | 1     | 2560 | Upstream. Beginning of reach, near bend. |
|   | 2     | 2561 | Upstream. Around first bend.             |
|   | 3     | 2562 | Upstream. Around second bend.            |
| Γ | 4     | 2563 | Downstream. Around second bend.          |

SVAP Start Time/Water Temp: N/A /\_\_\_\_\_SVAP End Time/Water Temp: N/A /\_\_\_\_\_

Notes: N/A

#### **Stream Visual Assessment Protocol 2 Summary Sheet**

#### **B. Element Scores**

| Element                          | Score | Element                            | Score    |
|----------------------------------|-------|------------------------------------|----------|
| 1. Channel Condition             | 6     | 14. Aquatic Invertebrate Community | 4        |
| 2. Hydrologic Alteration         | 8     | 15. Riffle Embeddedness            | 7        |
| 3. Bank Condition                | 6     | 16. Salinity                       | N/A      |
| 4. Riparian Area Quantity        | 6     | A. Sum of all elements scored      | 104      |
| 5. Riparian Area Quality         | 8     | B. Number of elements scored       | 15       |
| 6. Canopy Cover                  | 7     |                                    |          |
| 7. Water Appearance              | 8     | Overall score: A/B 6.9             | <u> </u> |
| 8. Nutrient Enrichment           | 9     |                                    |          |
| 9. Manure or Human Waste         | 10    | 1 to 2.9 Severely Degraded         |          |
| 10. Pools                        | 6     | 3 to 4.9 Poor                      |          |
| 11. Barriers to Movement         | 5     | 5 to 6.9 Fair                      |          |
| 12. Fish Habitat Complexity      | 6     | 7 to 8.9 Good                      |          |
| 13. Aquatic Invertebrate Habitat | 8     | 9 to 10 Excellent                  |          |

Suspected causes of SVAP scores less than 5 (does not meet quality criteria for stream species) N/A

Recommendations for further assessment or actions: N/A

Riparian wildlife habitat recommendations: N/A

#### Stream Visual Assessment Protocol 2 Summary Sheet

| 2. Field Assessment                  | Owner's name: GE/Arcadis<br>Reach #5 Transition Zone             | Evaluator's name: JK/JV                       |
|--------------------------------------|--|---|
| A. Preliminary Field Data            | Stream name: Tributary T11A                                      | Tributary to: Valatie Kill                    |
| Date of assessment <u>11/2/17</u>    | Weather conditions today <u>Cloudy/Overce</u>                    | cast - 40-50°F<br>bient temp.\ % cloud cover) |
| Weather conditions over past 2 to 5  | days: Partly Cloudy - Three Days Sinc<br>(No. of days pr<br>*See | , , ,   |
| Reach location (UTM or Lat./Long.)   | Fig. 3/  |   |
| Channel type/classification scheme   | Type II/ B3 / Rosgen   |   |
| Riparian Cover Type(s): Tree 40      | % Shrub_20_% Herbaceous _10_% Bare _                             | <u>10_%</u>                                   |
| Bank Profile: Stratified Homog       | eneous <u>X</u> Cohesive Soil <u>X</u> Noncohesi                 | ve Soil                                       |
| Gradient ( $$ one): Low (0-2%) X     | Moderate (>2<4%) X High (>4%)                                    |   |
| Bankfull channel width <u>~10</u> ft | *See<br>Reach length <u>Fig. 3</u> ft Flood plain width          | *See<br>n_Fig. 3_ <sub>ft</sub>               |
| Average riparian zone width 5.1      | _ ft; Method used (e.g., Range finder):                          | eld Measure                                   |
| Average height of woody shrubs       | N/A ft; Method used (e.g., Range finder                          | ): <mark>///A</mark>                          |
| Flood plain wetlands, if present     | 0acres/reach   |   |
|                                      | 20 cobble 29 gravel 24 sand 17<br>m) (60-250mm) (2-60 mm) (20    |   |
| Photo Point Locations and Descript   | ions:  |   |

| T Hete T eine  | Thoto Tolin Educations and Descriptions. |                           |  |
|----------------|--|---------------------------|--|
| Photo<br>Pt. # | GPS Coordinates/Waypoints                | Description               |  |
|                |  |                           |  |
| 1              | 2624                                     | Upstream. Start of reach. |  |
| 2              | 2625                                     | Upstream. Middle.         |  |
| 3              | 2626                                     | Downstream. Middle.       |  |
| 4              | 25627                                    | Downstream. End of reach. |  |

SVAP Start Time/Water Temp: N/A SVAP End Time/Water Temp: N/A

Notes: N/A

#### **Stream Visual Assessment Protocol 2 Summary Sheet**

#### **B. Element Scores**

| Element                          | Score | Element                            | Score |
|----------------------------------|-------|------------------------------------|-------|
| 1. Channel Condition             | 7     | 14. Aquatic Invertebrate Community | 2     |
| 2. Hydrologic Alteration         | 8     | 15. Riffle Embeddedness            | 6     |
| 3. Bank Condition                | 7     | 16. Salinity                       | N/A   |
| 4. Riparian Area Quantity        | 7     | A. Sum of all elements scored      | 87    |
| 5. Riparian Area Quality         | 6     | B. Number of elements scored       | 15    |
| 6. Canopy Cover                  | 5     |                                    |       |
| 7. Water Appearance              | 8     | Overall score: A/B 5.8             |       |
| 8. Nutrient Enrichment           | 9     |                                    |       |
| 9. Manure or Human Waste         | 10    | 1 to 2.9 Severely Degraded         |       |
| 10. Pools                        | 4     | 3 to 4.9 Poor                      |       |
| 11. Barriers to Movement         | 4     | 5 to 6.9 Fair                      |       |
| 12. Fish Habitat Complexity      | 2     | 7 to 8.9 Good                      |       |
| 13. Aquatic Invertebrate Habitat | 2     | 9 to 10 Excellent                  |       |

Suspected causes of SVAP scores less than 5 (does not meet quality criteria for stream species) N/A

Recommendations for further assessment or actions: N/A

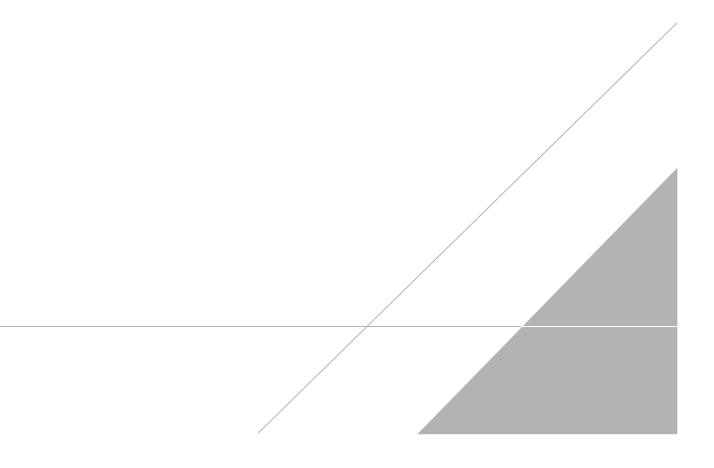
Riparian wildlife habitat recommendations:  $\ensuremath{\text{N/A}}$ 

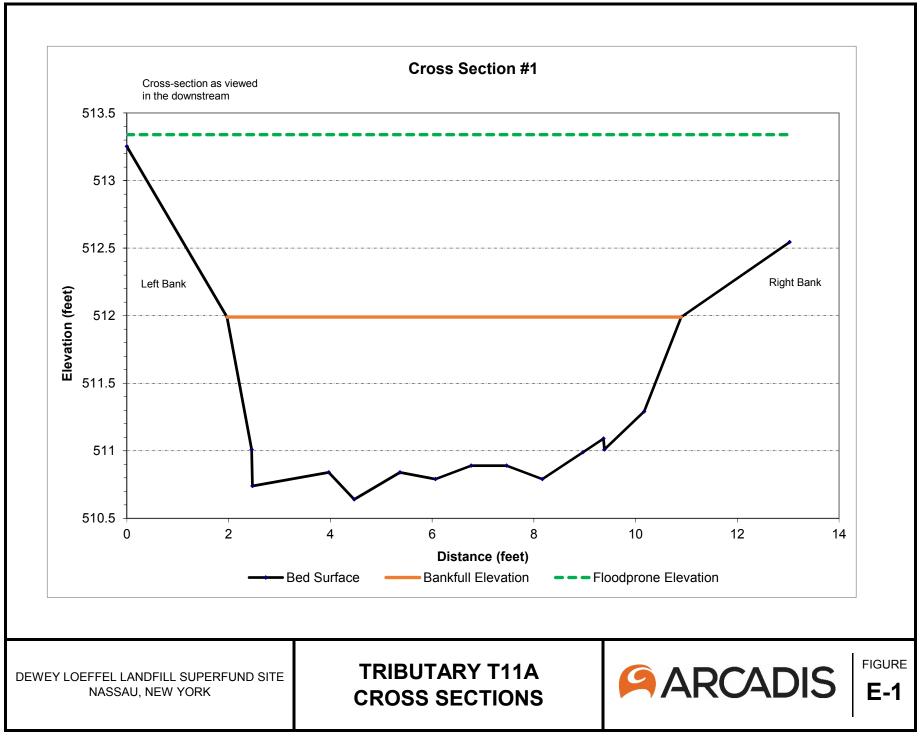
## **APPENDIX E**

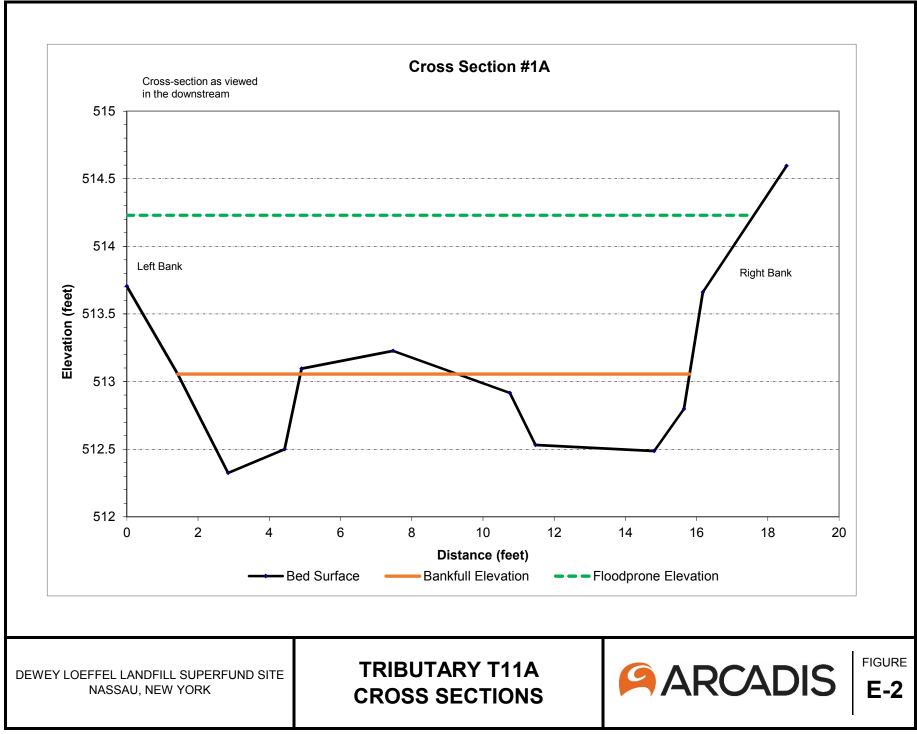
Stream Cross Sections Appendix E1 – Habitat Assessment Stream Cross Sections

Appendix E2 – 2010 and 2017 Cross Section Comparison

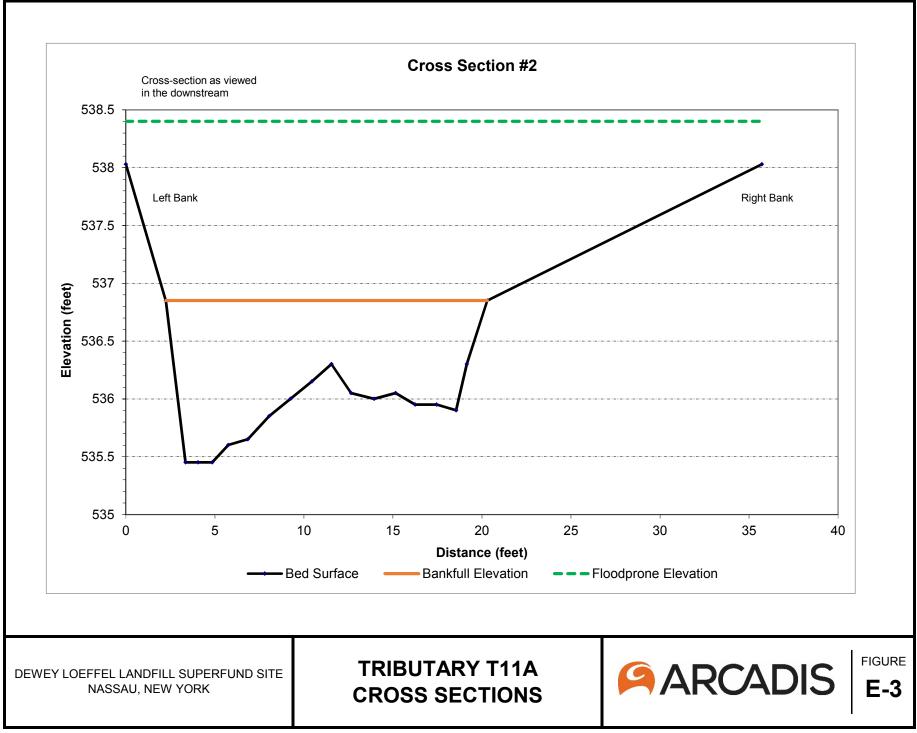
E1 – Habitat Assessment Stream Cross Sections

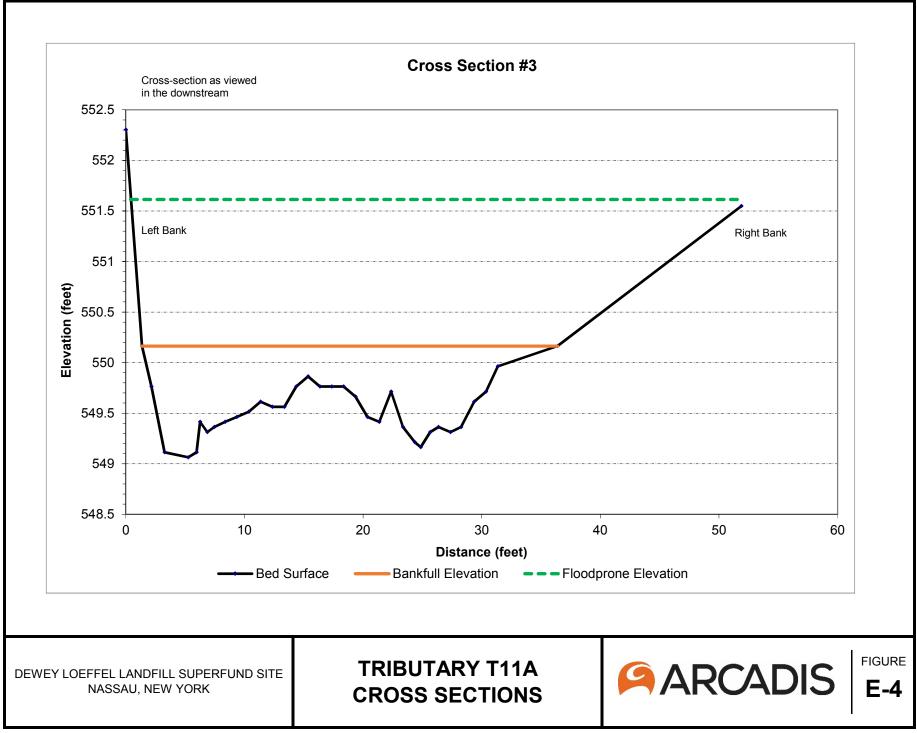


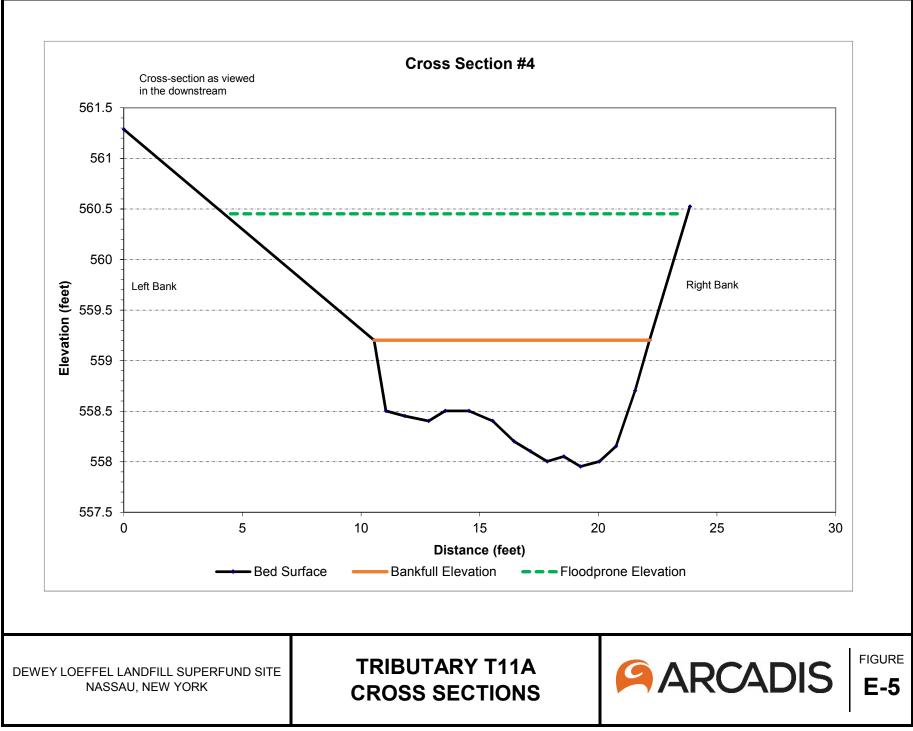




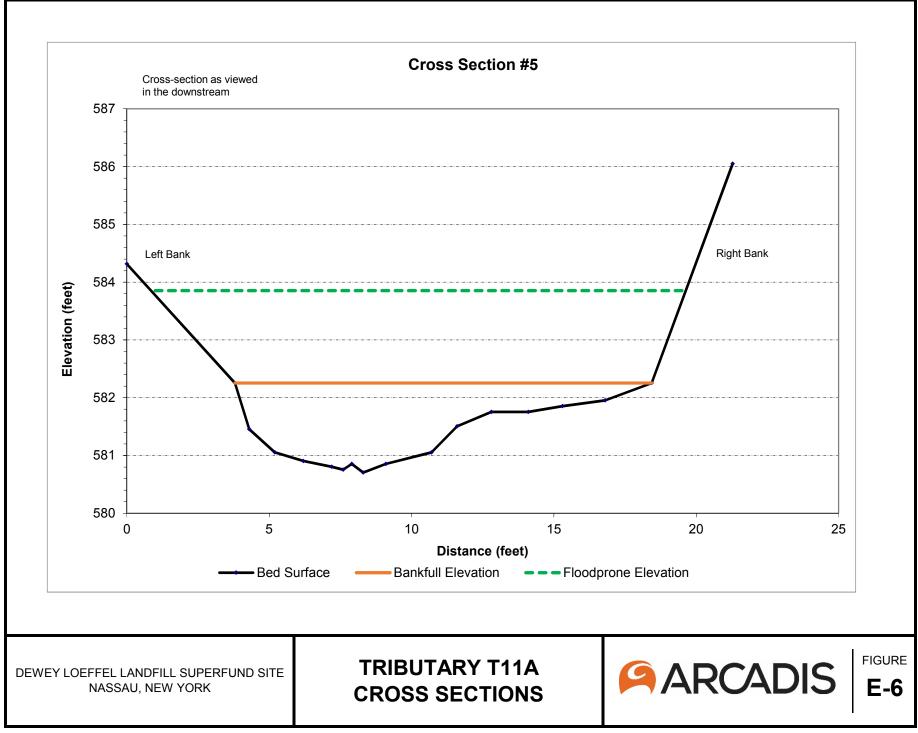
Cross Section Figures\_04112018.xlsm - 4/11/2018



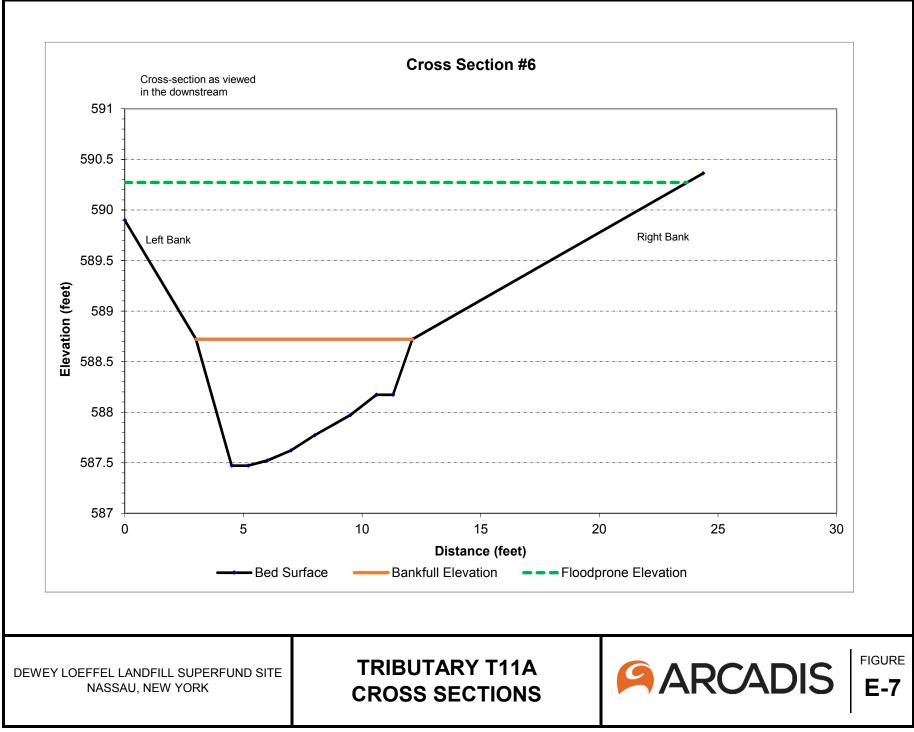




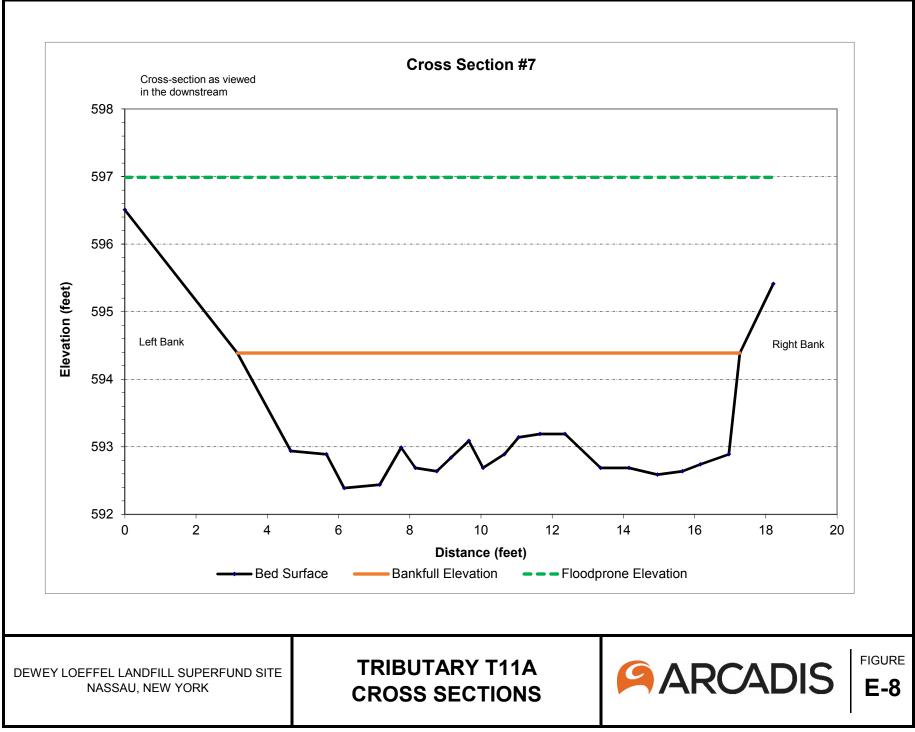
Cross Section Figures\_04112018.xlsm - 4/11/2018

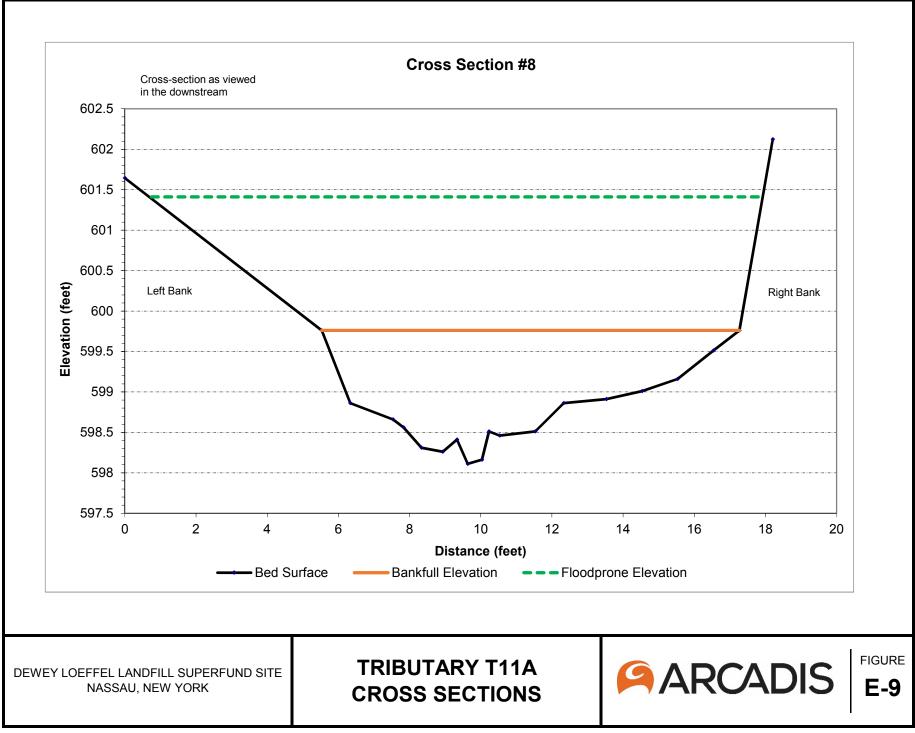


Cross Section Figures\_04112018.xlsm - 4/11/2018



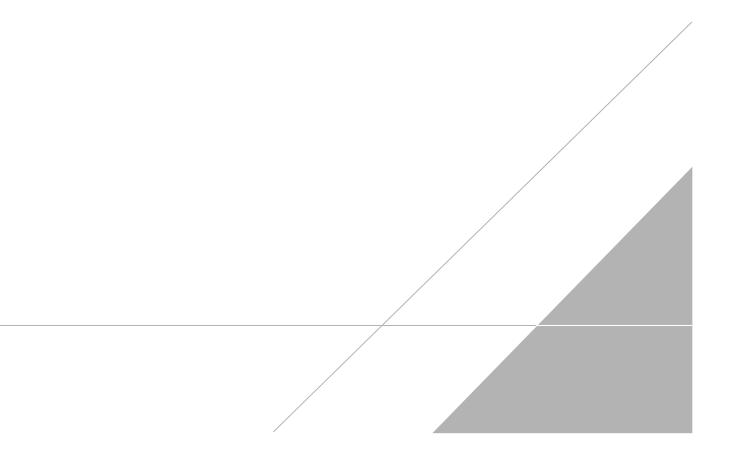
Cross Section Figures\_04112018.xlsm - 4/11/2018

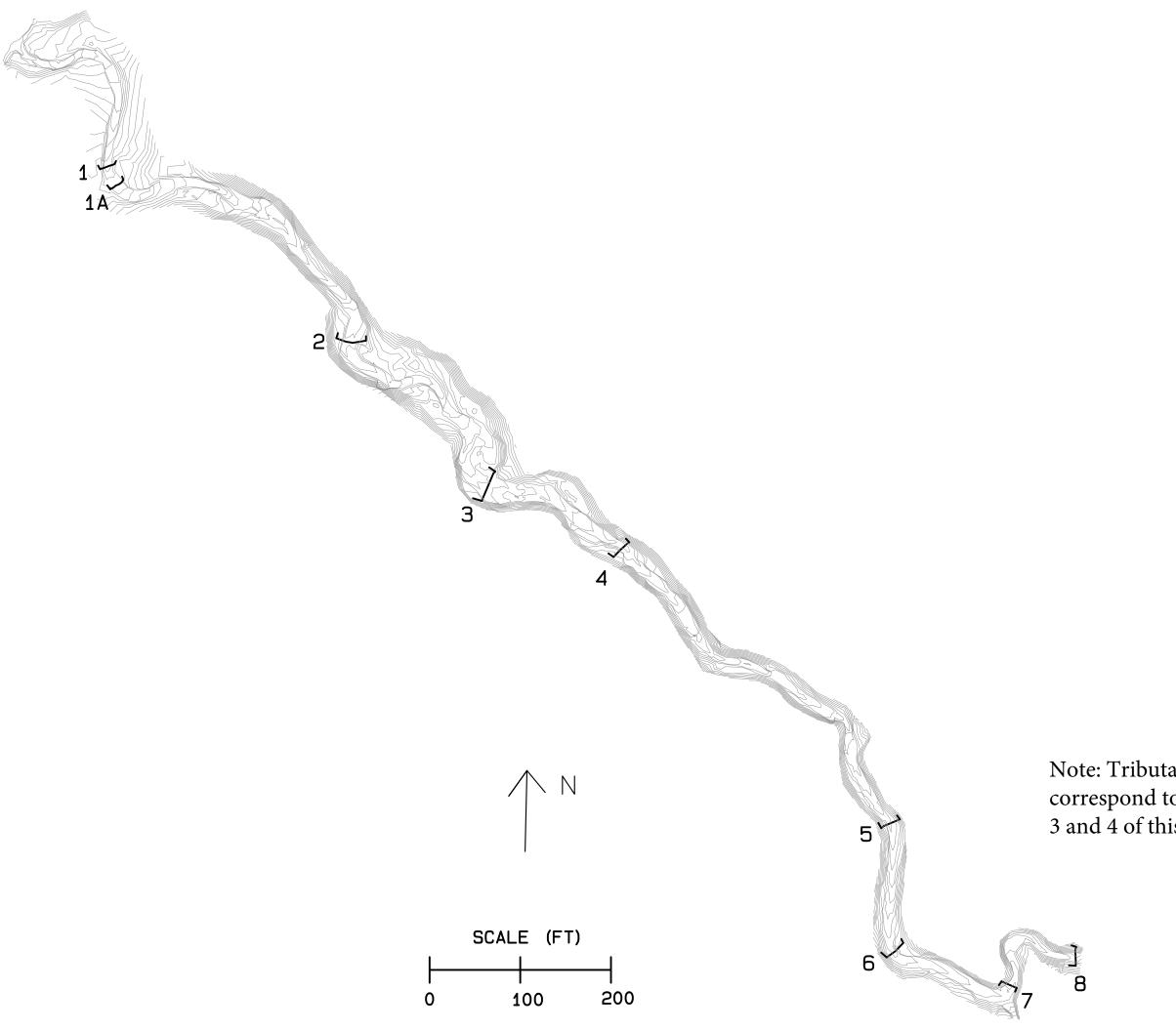




Cross Section Figures\_04112018.xlsm - 4/11/2018

E2 – 2010 and 2017 Cross Section Comparison



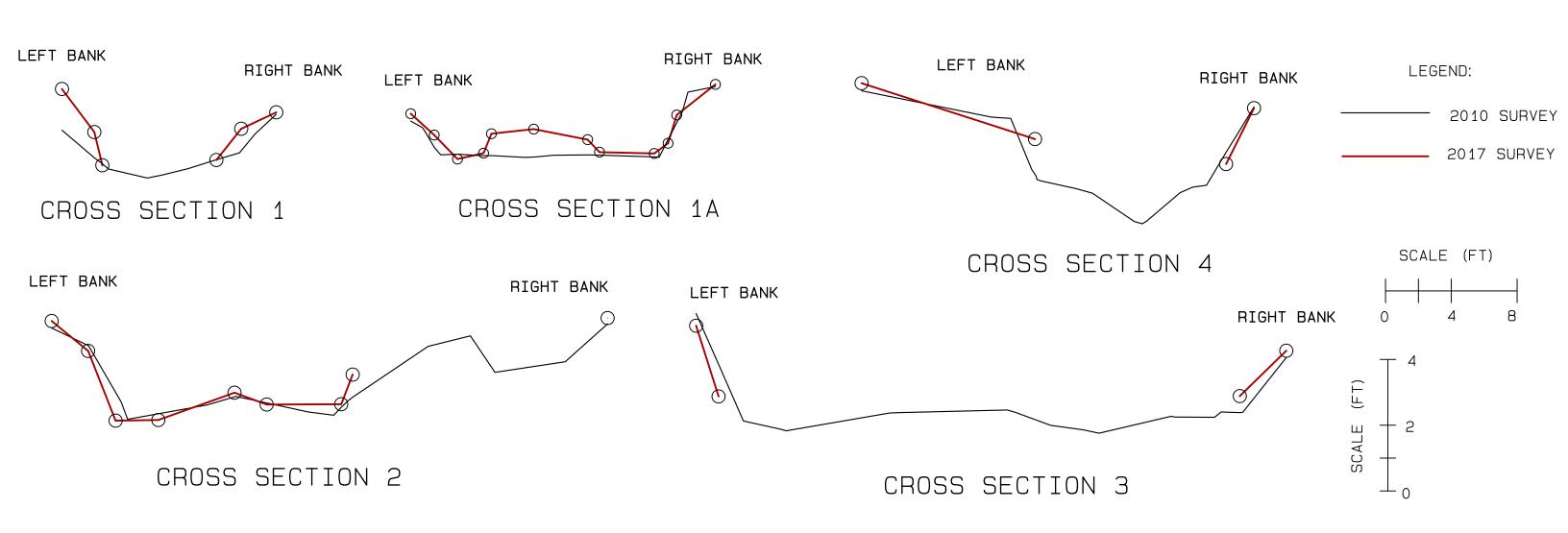


## PLAN VIEW

Note: Tributary T11A cross section locations correspond to cross sections illustrated on Figures 3 and 4 of this Data Summary Report.

# CROSS SECTIONS 1 THROUGH 4

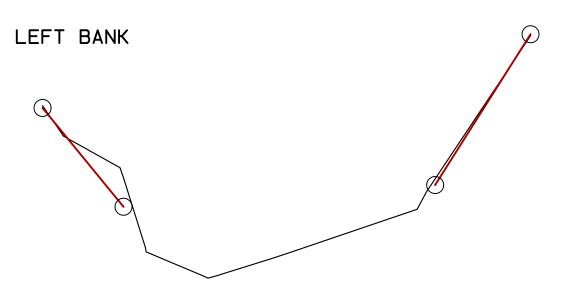
Notes for Cross Sections:
1. LEFT BANK and RIGHT BANK are oriented looking in the direction of flow.
2. 2010 SURVEY cross sections are based on smoothed contours illustrated in the Plan View.
3. 2017 SURVEY is based on straight-line connection of survey points collected in 2017.

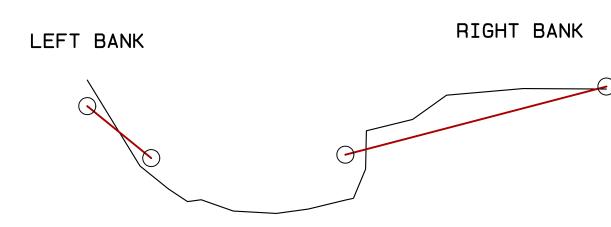


2X VERTICAL EXAGGERATION

## CROSS SECTIONS 5 THROUGH 8

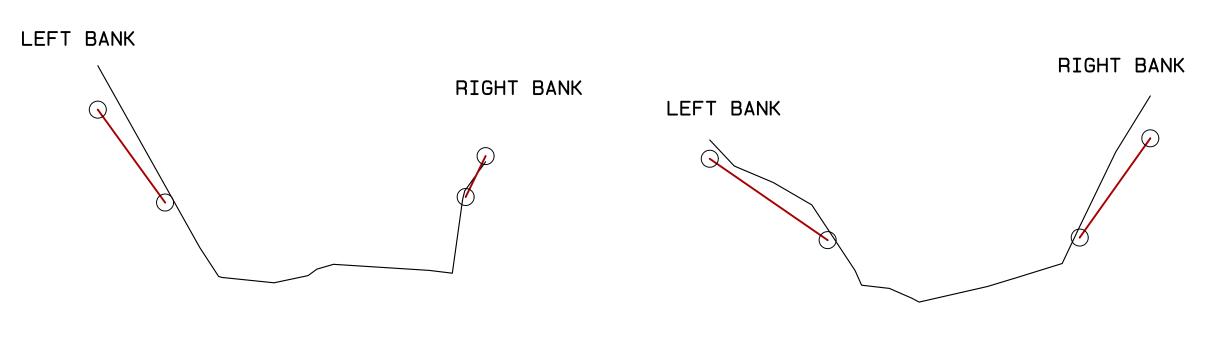
RIGHT BANK





CROSS SECTION 5

CROSS SECTION 6

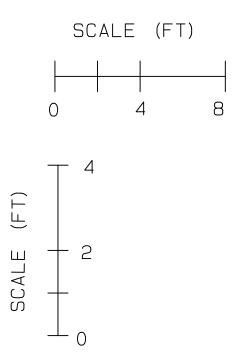


CROSS SECTION 7

CROSS SECTION 8

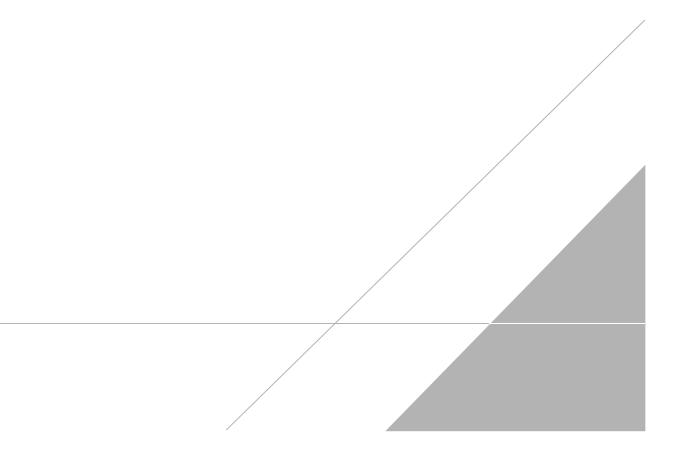
LEGEND:





### **APPENDIX F**

Tree Survey Results





| ID             | Species                   | DBH (inches) |
|----------------|---------------------------|--------------|
| A1             | Ash                       | 10           |
| A2             | Ash                       | 13           |
| A3             | Ash                       | 8            |
| A4             | American Elm              | 9            |
| A5             | American Elm              | 4            |
| A6             | American Elm              | 5            |
| A7             | American Elm              | 4            |
| A8             | Sugar Maple               | 4            |
| A9             | Basswood                  | 25           |
| A10            | American Beech            | 10           |
| A11            | American Beech            | 4            |
| A12            | American Beech            | 4            |
| A13            | White Pine                | 24           |
| A14            | American Beech            | 12           |
| A15            | American Beech            | 4            |
| A16            | Red Maple                 | 12           |
| A17            | White Pine                | 8            |
| A18            | American Elm              | 10           |
| A19            | Aspen                     | 15           |
| A20            | Aspen                     | 10           |
| A21            | Shagbark Hickory          | 6            |
| A22-1          | Black Birch               | 4            |
| A22-2          | Black Birch               | 4            |
| A22-3          | Black Birch               | 4            |
| A23            | White Pine                | 5            |
| A24            | Chestnut Oak              | 14           |
| A25            | Yellow Birch              | 9            |
| A26            | White Pine                | <u>_</u>     |
| A27-1          | White Pine White Pine     | 6            |
| A27-2          | White Pine White Pine     | 6            |
| A27-3          | White Pine White Pine     | 6            |
| A28            | White Pine White Pine     | 8            |
| A29            | White Pine White Pine     | 4            |
| A30            | Black Birch               | 13           |
| A31            | American Beech            | 6            |
| A32-1          | Black Birch               | 7            |
| A32-2          | Black Birch               | 5            |
| A33            | White Pine                | 4            |
| A34            | White Pine                | 5            |
| A35            | White Pine                | 4            |
| A36            | Hemlock                   | 7            |
| A37            | White Pine                | 7            |
| A38-1          | Black Birch               | 8            |
| A38-2          |                           |              |
| A38-2<br>A38-3 | Black Birch               | 8 7          |
| A38-4          | Black Birch               |              |
|                | Black Birch<br>White Pine | 8            |
| A39<br>A40-1   |                           | 8            |
| A40-1<br>A40-2 | Black Birch               | 8            |
|                | Black Birch               | 11           |
| A41            | Black Birch               | 9            |



| ID         | Species      | DBH (inches) |
|------------|--------------|--------------|
| A42        | Hemlock      | 9            |
| A43        | Hemlock      | 9            |
| A44        | Hemlock      | 5            |
| A45-1      | Black Birch  | 11           |
| A45-2      | Black Birch  | 5            |
| A46        | White Pine   | 18           |
| A47        | White Oak    | 16           |
| A48        | White Pine   | 5            |
| A49        | Black Birch  | 7            |
| A50        | Hemlock      | 6            |
| A51-1      | Black Birch  | 7            |
| A51-2      | Black Birch  | 7            |
| A52        | Sugar Maple  | 4            |
| A53-1      | Black Birch  | 8            |
| A53-2      | Black Birch  | 7            |
| A54        | Hemlock      | 7            |
| A55        | Black Birch  | 7            |
| A56        | Hemlock      | 8            |
| A57        | Hemlock      | 4            |
| A58        | Hemlock      | 7            |
| A59        | Black Birch  | 8            |
| A60        | Hemlock      | 4            |
| A61        | Hemlock      | 7            |
| A62        | Black Birch  | 4            |
| A63        | Hemlock      | 4            |
| A64        | Hemlock      | 4            |
| A65        | Black Birch  | 7            |
| A66        | Yellow Birch | 9            |
| A67        | Yellow Birch | 8            |
| A68        | Sugar Maple  | 3            |
| A69        | Hemlock      | 10           |
| A70        | Hemlock      | 8            |
| A71        | Hemlock      | 14           |
| A72-1      | Black Birch  | 8            |
| A72-2      | Black Birch  | 11           |
| A73        | Black Walnut | 14           |
| A74        | White Pine   | 10           |
| A75        | Black Birch  | 11           |
| A76        | Red Maple    | 14           |
| A77        | White Pine   | 12           |
| A78        | White Pine   | 17           |
| A79        | Black Birch  | 17           |
| A80        | Black Birch  | 10           |
| A81        | Black Birch  | 10           |
| A82        | Hemlock      | 9            |
| A83        | Henliock     | 9            |
| A84        | Red Maple    | 22           |
| A85        | Black Birch  | 4            |
| A85<br>A86 | Black Birch  | 6            |
| A87        | Black Birch  | 6            |
|            |              | U            |



| ID           | Species                   | DBH (inches) |
|--------------|---------------------------|--------------|
| A88          | Hemlock                   | 6            |
| A89          | Black Birch               | 6            |
| A90          | American Beech            | 6            |
| A91          | American Beech            | 3            |
| A92          | Black Birch               | 13           |
| A93          | Sugar Maple               | 10           |
| A94          | American Beech            | 18           |
| A95          | Hemlock                   | 19           |
| A96          | Hemlock                   | 7            |
| A97          | Hemlock                   | 3            |
| A98          | Yellow Birch              | 4            |
| A99          | Yellow Birch              | 3            |
| A100         | Black Birch               | 5            |
| A101         | Yellow Birch              | 4            |
| A102-1       | Hemlock                   | 5            |
| A102-2       | Hemlock                   | 6            |
| A102-2       | Hemlock                   | 25           |
| A104-1       | Yellow Birch              | 9            |
| A104-2       | Yellow Birch              | 7            |
| A105         | Yellow Birch              | 5            |
| A106         | Black Birch               | 5            |
| A107         | Yellow Birch              | 3            |
| A108         | Hemlock                   | 25           |
| A109         | Hemlock                   | 23           |
| A110         | Oak Sp.                   | 18           |
| A111         | American Beech            | 9            |
| A112         | American Beech            | 7            |
| A112<br>A113 | American Beech            | 11           |
| A113<br>A114 | Red Maple                 | 17           |
| A114<br>A115 | Hemlock                   | 8            |
| A115<br>A116 | Hemlock                   | 11           |
| A110<br>A117 | Red Maple                 | 13           |
| A117<br>A118 |                           | 16           |
| A119         | Red Maple<br>Yellow Birch | 4            |
| A119<br>A120 |                           | 16           |
| A120<br>A121 | Red Maple                 | 17           |
|              | Red Maple                 |              |
| A122         | American Beech<br>Hemlock | 4            |
| A123         |                           | 6            |
| A124         | American Beech            | 4            |
| A125         | Black Birch               | 4            |
| A126         | Red Maple                 | 27           |
| A127         | Hemlock                   | 15           |
| A128         | Red Maple                 | 9            |
| A129         | American Beech            | 4            |
| A130         | American Beech            | 4            |
| A131         | American Beech            | 6            |
| A132         | American Beech            | 5            |
| A133-1       | Yellow Birch              | 4            |
| A133-2       | Yellow Birch              | 5            |
| A134         | Yellow Birch              | 7            |



| ID             | Species             | DBH (inches) |
|----------------|---------------------|--------------|
| A135           | Yellow Birch        | 8            |
| A136           | Red Maple           | 25           |
| A137-1         | Yellow Birch        | 5            |
| A137-2         | Yellow Birch        | 12           |
| A138           | Black Birch         | 6            |
| A139           | Black Birch         | 6            |
| A140           | Hemlock             | 11           |
| A141           | Black Birch         | 4            |
| A142           | Yellow Birch        | 3            |
| A143           | Black Birch         | 3            |
| A144           | Hemlock             | 3            |
| A145           | Hemlock             | 4            |
| A146-1         | Red Maple           | 5            |
| A146-2         | Red Maple           | 17           |
| A140-2<br>A147 | Hemlock             | 5            |
|                |                     |              |
| A148           | Hemlock             | 8            |
| A149           | Sugar Maple         | 16           |
| A150           | Hemlock             | 17           |
| A151           | American Beech      | 5            |
| A152           | Hemlock             | 10           |
| A153           | Hemlock             | 9            |
| A154           | Sugar Maple         | 6            |
| A155           | Sugar Maple         | 4            |
| A156           | American Elm        | 4            |
| A157           | Sugar Maple         | 3            |
| A158           | Ash                 | 5            |
| A159           | Hemlock             | 8            |
| A160           | Sugar Maple         | 12           |
| A161           | American Beech      | 9            |
| A162           | American Beech      | 4            |
| A163           | American Beech      | 3            |
| A164           | Sugar Maple         | 18           |
| A165           | Hemlock             | 13           |
| A166           | American Beech      | 19           |
| A167           | American Beech      | 5            |
| A168           | American Beech      | 8            |
| A169           | Black Cherry        | 12           |
| A170           | Black Birch         | 12           |
| A171           | Black Birch         | 13           |
| A172           | Hemlock             | 4            |
| A173           | Hemlock             | 8            |
| A174           | Hemlock             | 8            |
| A175           | Black Birch         | 12           |
| A176           | Yellow Birch        | 9            |
| A177           | American Beech      | 5            |
| A178           | Black Birch         | 16           |
| A179           | American Beech      | 4            |
| A180           | Anencan beech       | 4            |
| A181           | Asir American Beech | 6            |
| A181<br>A182   |                     | 0<br>17      |
| A 102          | American Beech      | 17           |



| Species      | DBH (inches)   |
|--------------|--|
|              | 5  |
|              | 4  |
|              | 5  |
|              | 4  |
|              | 4  |
|              | 4  |
|              | 6  |
|              | 3  |
|              | 13   |
|              | 7  |
|              | 4  |
|              | 7  |
|              | 4  |
|              | 6  |
|              | 4  |
|              |  |
|              | 8  |
|              | 4  |
|              | 7  |
|              | 6  |
|              | 7  |
|              | 5  |
|              | 4  |
|              | 4  |
|              | 6  |
|              | 6  |
|              | 7  |
|              | 15   |
|              | 5  |
|              | 13   |
|              | 13   |
|              | 19   |
|              | 9  |
|              | 4  |
|              | 7  |
|              | 4  |
| Sugar Maple  | 11   |
| Sugar Maple  | 9  |
| Sugar Maple  | 10   |
| Black Walnut | 25   |
| Sugar Maple  | 6  |
| Sugar Maple  | 17   |
| Sugar Maple  | 15   |
| Sugar Maple  | 13   |
| Sugar Maple  | 6  |
|              | 14   |
|              | 10   |
|              | 8  |
|              | 4  |
|              |  |
| Yellow Birch | 4  |
|              | Sugar Maple         Sugar Maple         Black Walnut         Sugar Maple         Yellow Birch         Yellow Birch         Yellow Birch         Musclewood |



| ID    | Species        | DBH (inches) |
|-------|----------------|--------------|
| B19   | Sugar Maple    | 8            |
| B20   | Black Birch    | 24           |
| B21   | Black Birch    | 11           |
| B22   | Black Birch    | 20           |
| B23   | Sugar Maple    | 4            |
| B24   | Hemlock        | 11           |
| B25   | Black Birch    | 32           |
| B26   | Yellow Birch   | 18           |
| B27   | Yellow Birch   | 8            |
| B28   |                | 4            |
|       | Sugar Maple    |              |
| B29   | Hemlock        | 8            |
| B30   | Hemlock        | 10           |
| B31   | Yellow Birch   | 12           |
| B32   | Yellow Birch   | 11           |
| B33   | Black Birch    | 12           |
| B34   | American Beech | 7            |
| B35   | White Oak      | 14           |
| B36   | Yellow Birch   | 4            |
| B37   | Black Birch    | 10           |
| B38   | Yellow Birch   | 5            |
| B39-1 | Sugar Maple    | 18           |
| B39-2 | Sugar Maple    | 15           |
| B40   | Hemlock        | 5            |
| B41   | Hemlock        | 7            |
| B42   | Hemlock        | 11           |
| B43   | Hemlock        | 8            |
| B44   | Black Birch    | 4            |
| B45   | Black Birch    | 14           |
| B46   | Yellow Birch   | 3            |
| B47   | American Beech | 4            |
| B48-1 | American Beech | 8            |
| B48-2 | American Beech | 3            |
| B49   | Sugar Maple    | 20           |
| B50   | American Beech | 9            |
| B51   | American Beech | 5            |
| B52   | Hemlock        | 6            |
| B53   | American Beech | 7            |
| B54   | Black Birch    | 18           |
| B55   | Hemlock        | 8            |
| B56   | Hemlock        | 4            |
| B57   | Hemlock        | 6            |
| B58   | Hemlock        | 8            |
| B59   | Hemlock        | <u> </u>     |
| B60   | Yellow Birch   | 4            |
|       |                |              |
| B61   | Hemlock        | 12           |
| B62   | Hemlock        | 6            |
| B63   | Yellow Birch   | 4            |
| B64   | Hemlock        | 4            |
| 865   | Hemlock        | 4            |
| B66   | Hemlock        | 9            |



| ID         | Species        | DBH (inches) |
|------------|----------------|--------------|
| B67        | Hemlock        | 8            |
| B68        | Hemlock        | 8            |
| B69        | Hemlock        | 8            |
| B70        | Hemlock        | 8            |
| B71        | Hemlock        | 9            |
| B72        | Hemlock        | 7            |
| B73        | Black Birch    | 12           |
| B74        | Hemlock        | 5            |
| B75        | Hemlock        | 11           |
| B76        | Hemlock        | 5            |
| B77        | Sugar Maple    | 6            |
| B78        | Hemlock        | 4            |
| B79        | Black Birch    | 14           |
| B80        | Sugar Maple    | 13           |
| B81        | Hemlock        | 11           |
| B82-1      | Hemlock        | 4            |
| B82-2      | Hemlock        | 10           |
| B83        | Sugar Maple    | 9            |
| B84        | Hemlock        | 9            |
| B85        | Hemlock        | 4            |
| B86        | Hemlock        | 5            |
| B87        | Hemlock        |              |
| B88        | Hemlock        | 4            |
|            |                | 4 10         |
| 889        | Hemlock        |              |
| B90        | Hemlock        | 4            |
| B91        | Hemlock        | 4            |
| B92        | Yellow Birch   | 3            |
| B93        | Hemlock        | 6            |
| B94        | Hemlock        | 17<br>22     |
| B95        | Hemlock        |              |
| B96        | Sugar Maple    | 19           |
| B97        | Sugar Maple    | 17           |
| <u>B98</u> | Yellow Birch   | 4            |
| 899        | Ash            | 6            |
| B100       | Ash            | 3            |
| B101       | Hemlock        | 14           |
| B102       | Hemlock        | 4            |
| B103       | American Beech | 4            |
| B104       | Sugar Maple    | 18           |
| B105       | Hemlock        | 4            |
| B106       | Black Birch    | 17           |
| B107       | Hemlock        | 22           |
| B108       | Hemlock        | 4            |
| B109       | Sugar Maple    | 21           |
| B110       | Hemlock        | 4            |
| B111       | Black Birch    | 4            |
| B112       | Black Birch    | 4            |
| B113       | Yellow Birch   | 5            |
| B114       | Yellow Birch   | 4            |
| B115       | Hemlock        | 4            |



| ID           | Species        | DBH (inches) |
|--------------|----------------|--------------|
| B116         | Sugar Maple    | 17           |
| B117         | Hemlock        | 10           |
| B118         | Hemlock        | 9            |
| B119         | Hemlock        | 11           |
| B120         | Sugar Maple    | 18           |
| B120<br>B121 | Red Maple      | 4            |
| B121<br>B122 | Ash            | 4            |
| B122<br>B123 |                |              |
|              | Hemlock        | 7            |
| B124         | Sugar Maple    | 23           |
| B125         | Hemlock        | 32           |
| B126         | Black Birch    | 4            |
| B127         | Yellow Birch   | 4            |
| B128-1       | Red Maple      | 4            |
| B128-2       | Red Maple      | 4            |
| B129         | Sugar Maple    | 33           |
| B130         | Hemlock        | 27           |
| B131         | Sugar Maple    | 4            |
| B132         | Red Maple      | 5            |
| B133         | Red Maple      | 6            |
| B134         | Red Maple      | 4            |
| B135         | Red Maple      | 4            |
| B136         | Black Birch    | 5            |
| B137         | Black Birch    | 18           |
| B138         | Hemlock        | 8            |
| B139         | Hemlock        | 3            |
| B140         | Hemlock        | 4            |
| B141         | American Beech | 8            |
| B142         | American Beech | 8            |
| B143         | Hemlock        | 9            |
| B144         | Red Maple      | 4            |
| B145         | Hemlock        | 8            |
| B146         | Black Birch    | 18           |
| B147-1       | Hemlock        | 10           |
| B147-2       | Hemlock        | 4            |
| B148         | Yellow Birch   | 4            |
| B149         | Hemlock        | 6            |
| B150         | Hemlock        | 3            |
| B151         | Hemlock        | 8            |
| B152         | Yellow Birch   | 11           |
| B153         | Hemlock        | 11           |
| B154         | Yellow Birch   | 4            |
| B155         | Black Birch    | 3            |
| B156         | Hemlock        | 7            |
| B150         | Hemlock        | 3            |
|              |                |              |
| B158         | Hemlock        | 4            |
| B159         | Hemlock        | 3            |
| B160         | Hemlock        | 6            |
| B161         | Black Birch    | 14           |
| B162         | Hemlock        | 4            |
| B163         | Hemlock        | 3            |



| ID           | Species      | DBH (inches) |
|--------------|--------------|--------------|
| B164         | Hemlock      | 4            |
| B165         | Hemlock      | 6            |
| B166         | Hemlock      | 4            |
| B167         | Hemlock      | 5            |
| B168         | Black Birch  | 7            |
| B169         | Hemlock      | 4            |
| B170         | Hemlock      | 4            |
| B170<br>B171 | Ash          | 4            |
| B172         | Hemlock      | 5            |
| B172<br>B173 | Yellow Birch | 6            |
| B173<br>B174 | Hemlock      | 16           |
| B174<br>B175 |              | 21           |
|              | Black Cherry |              |
| B176         | Hemlock      | 4            |
| B177         | Hemlock      | 5            |
| B178         | Hemlock      | 5            |
| B179         | Hemlock      | 4            |
| B180         | Hemlock      | 5            |
| B181         | Hemlock      | 18           |
| B182         | Hemlock      | 5            |
| B183         | Yellow Birch | 5            |
| B184         | Yellow Birch | 4            |
| B185         | Hemlock      | 5            |
| B186         | Black Birch  | 13           |
| B187         | Hemlock      | 4            |
| B188         | Black Birch  | 6            |
| B189         | Black Birch  | 7            |
| B190         | Hemlock      | 5            |
| B191         | Yellow Birch | 3            |
| B192         | Yellow Birch | 3            |
| B193         | Yellow Birch | 13           |
| B194         | Hemlock      | 7            |
| B195         | Hemlock      | 4            |
| B196         | Hemlock      | 13           |
| B197         | Hemlock      | 15           |
| B198         | Hemlock      | 4            |
| B199         | Yellow Birch | 4            |
| B200         | Hemlock      | 6            |
| B201         | Black Birch  | 6            |
| B202         | Yellow Birch | 4            |
| B203         | Black Birch  | 3            |
| B204         | Hemlock      | 3            |
| B205         | Hemlock      | 4            |
| B206         | Yellow Birch | 6            |
| B207         | Hemlock      | 5            |
| B208         | Hemlock      | 4            |
| B209         | Hemlock      | 4            |
| B210         | Black Birch  | 3            |
| B210         | Yellow Birch | 6            |
| B212         | Hemlock      | 6            |
| B212<br>B213 | Hemlock      | 5            |
|              | THETHIOCK    | 5            |



| ID               | Species      | DBH (inches) |
|------------------|--------------|--------------|
| B214             | Hemlock      | 13           |
| B215             | Hemlock      | 17           |
| B216             | Hemlock      | 5            |
| B217             | Hemlock      | 6            |
| B218             | Yellow Birch | 9            |
| B219             | Sugar Maple  | 11           |
| B220             | Hemlock      | 6            |
| B221             | Sugar Maple  | 7            |
| B222             | Sugar Maple  | 21           |
| B223             | Yellow Birch | 13           |
| B224             | Hemlock      | 5            |
| B225             | Black Birch  | 11           |
| B225<br>B226     |              | 6            |
|                  | Hemlock      |              |
| B227             | Hemlock      | 5            |
| B228             | Black Birch  | 13           |
| B229             | Ash          | 4            |
| B230             | Black Birch  | 9            |
| B231             | Hemlock      | 23           |
| B232             | Hemlock      | 12           |
| B233             | Black Birch  | 9            |
| B234             | Hemlock      | 5            |
| B235             | Hemlock      | 5            |
| B236             | Black Birch  | 13           |
| B237             | Hemlock      | 10           |
| B238             | Black Birch  | 6            |
| B239             | Hemlock      | 22           |
| B240             | Black Birch  | 8            |
| B241-1           | Black Birch  | 6            |
| B241-2           | Black Birch  | 11           |
| B241-3           | Black Birch  | 9            |
| B241-4           | Black Birch  | 9            |
| B242             | Hemlock      | 12           |
| B243             | Hemlock      | 4            |
| B244             | Sugar Maple  | 13           |
| B245             | Hemlock      | 4            |
| B246             | Paper Birch  | 9            |
| B247             | Red Maple    | 8            |
| B248             | Black Birch  | 3            |
| B249             | Serviceberry | 4            |
| B250             | Red Maple    | 6            |
| B251             | Red Oak      | 19           |
| B252             | American Elm | 7            |
| B253             | Sugar Maple  | 13           |
| B254             | Red Maple    | 15           |
| B255             | White Pine   | 4            |
| B256             | Black Birch  | 3            |
| B257             | Black Birch  | 9            |
| B258             | Hemlock      | 7            |
| B259-1           | White Pine   | 6            |
| B259-1<br>B259-2 | White Pine   | 13           |
|                  |              | 13           |



| ID     | Species      | DBH (inches) |
|--------|--------------|--------------|
| B259-3 | White Pine   | 9            |
| B259-4 | White Pine   | 6            |
| B260-1 | Black Birch  | 11           |
| B260-2 | Black Birch  | 10           |
| B260-3 | Black Birch  | 9            |
| B261   | Black Birch  | 6            |
| B262   | Serviceberry | 6            |
| B263   | White Pine   | 20           |
| B264   | Unknown Sp.  | 8            |
| B265-1 | White Pine   | 8            |
| B265-2 | White Pine   | 9            |
| B265-3 | White Pine   | 25           |
| B265-4 | White Pine   | 9            |
| B266   | White Pine   | 17           |
| B267-1 | White Pine   | 11           |
| B267-2 | White Pine   | 12           |
| B267-3 | White Pine   | 14           |
| B268   | Unknown Sp.  | 9            |
| B269   | White Pine   | 25           |
| B270   | American Elm | 6            |
| B271-1 | White Pine   | 14           |
| B271-2 | White Pine   | 19           |
| B271-3 | White Pine   | 10           |
| B272   | American Elm | 3            |
| B273   | Black Birch  | 10           |
| B274   | Musclewood   | 4            |
| B275-1 | White Pine   | 11           |
| B275-2 | White Pine   | 16           |
| B276-1 | White Pine   | 14           |
| B276-2 | White Pine   | 4            |
| B277-1 | Black Birch  | 12           |
| B277-2 | Black Birch  | 8            |
| B278   | White Pine   | 15           |
| B279   | Black Birch  | 13           |
| B280   | Sugar Maple  | 13           |
| B281   | Hemlock      | 5            |
| B282   | Red Maple    | 14           |
| B283   | Black Birch  | 10           |
| B284   | Ash          | 4            |
| B285   | White Pine   | 3            |

#### Abbreviations, Notes, and Definitions:

1. DBH = diameter at breast height. DBH >18 inches is shaded grey.

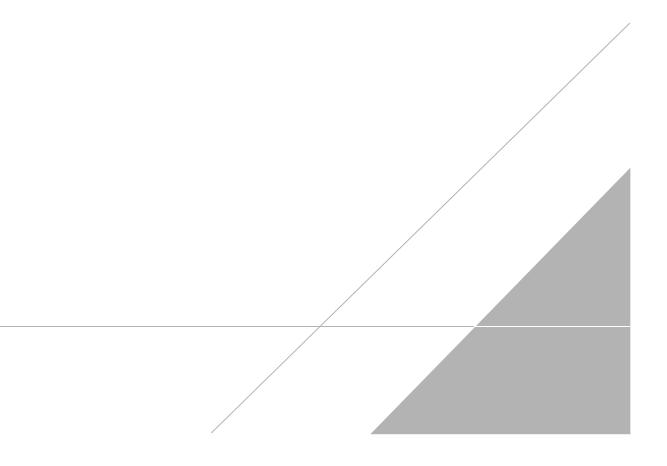
2. ID = identification. Trees and trunks identified by a letter designation indicating stream orientation (A for right bank and B for left bank, looking in the direction of flow) and numbered consecutively with the highest A and lowest B at the upstream end of Tributary T11A.

3. Trees speciated for all trunks greater than 3-inch DBH; only trees greater than 18-inch DBH were surveyed.

4. Unknown Sp. indicates species not identified.

### **APPENDIX G**

Vegetative Assessment Species List





#### Table G-1 Vegetative Assessment Species List Dewey Loeffel Landfill Superfund Site - Nassau, New York

| Scientific Name (Common)                       | Wetland Indicator Status <sup>1</sup> |
|--|---------------------------------------|
| Acer sp. (Maple Species)                       | NI                                    |
| Acer rubrum (Red Maple)                        | FAC                                   |
| Acer saccharinum (Silver Maple)                | FACW                                  |
| Acer saccharum (Sugar Maple)                   | FACU                                  |
| Alliaria petiolata (Garlic Mustard)            | FACU                                  |
| Amelanchier canadensis (Serviceberry)          | FAC                                   |
| Amphicarpaea bracteata (Hog peanut)            | FAC                                   |
| Athyrium filix-femina (Northern Lady Fern)     | FAC                                   |
| Betula alleghaniensis (Yellow Birch)           | FAC                                   |
| Betula lenta (Black Birch)                     | FACU                                  |
| Betula papyrifera (Paper Birch)                | FACU                                  |
| Carex lurida (Lurid Sedge)                     | OBL                                   |
| Carex plantaginea (Plantain Sedge)             | FACW                                  |
| Carex sp. (Carex Species)                      | NI                                    |
| Carex stricta (Tussock Sedge)                  | OBL                                   |
| Carpinus caroliniana (Blue Beech)              | FAC                                   |
| Carya ovata (Shagbark Hickory)                 | FACU                                  |
| Crataegus monogyna (Hawthorn)                  | FACU                                  |
| Dichanthelium clandestinum (Deertongue)        | FACW                                  |
| Dryopteris marginalis (Marginal Woodfern)      | FACU                                  |
| Echinochloa crus-galli (Barnyardgrass)         | FAC                                   |
| Elymus repens (Quack Grass)                    | FACU                                  |
| Equisetum arvense (Field Horsetail)            | FAC                                   |
| Equisetum hyemale (Scouring Rush)              | FAC                                   |
| Euthamnia gramnifolia (Grass-Leaved Goldenrod) | FAC                                   |
| Fagus grandifolia (American Beech)             | FACU                                  |
| Fallopia japonica (Japanese Knotweed)          | FACU                                  |
| Fragaria vesca (Wild Strawberry)               | UPL                                   |
| Fraxinus pennsylvanica (Green Ash)             | FACW                                  |
| Galium palustris (Marsh Bedstraw)              | OBL                                   |
| Hamamelis virginiana (Witch Hazel)             | FACU                                  |
| Juglans nigra (Black Walnut)                   | FACU                                  |
| Juncus effusus (Soft Rush)                     | OBL                                   |
| Lonicera japonica (Honeysuckle)                | FACU                                  |
| Lycopus americana (Water Horehound)            | OBL                                   |
| Lythrum salicaria (Purple Loosestrife)         | OBL                                   |
| Malva neglecta (Common Mallow)                 | UPL                                   |
| Mitchella repens (Partridgeberry)              | FACU                                  |
| Quercus sp. (Oak Species)                      | NI                                    |
| Onoclea sensiblis (Sensitive Fern)             | FACW                                  |
| Osmunda claytoniana (Interrupted Fern)         | FAC                                   |
| Panicum capillare (Witch Grass)                | FAC                                   |
| Phragmites australis (Common Reed)             | FACW                                  |
| Pilea pumila (Clearweed)                       | FACW                                  |
| Pinus strobus (White Pine)                     | FACU                                  |
| Plantago major (Common Plantain)               | FACU                                  |
| Poa palustris (Fowl Bluegrass)                 | FACW                                  |
| Polygonum sagittatum (Arrowleaf Tearthumb)     | OBL                                   |
|  |                                       |



#### Table G-1 Vegetative Assessment Species List Dewey Loeffel Landfill Superfund Site - Nassau, New York

| Scientific Name (Common)                    | Wetland Indicator Status <sup>1</sup> |
|---|---------------------------------------|
| Polystichum acrostichoides (Christmas Fern) | FACU                                  |
| Potentilla simplex (Cinquefoil)             | FACU                                  |
| Quercus rubra (Red Oak)                     | FACU                                  |
| Rosa multiflora (Multiflora Rose)           | FACU                                  |
| Rubus allegheniensis (Wild Raspberry)       | FACU                                  |
| Rubus sp. (Raspberry/Blackberry Species)    | NI                                    |
| Salix nigra (Black Willow)                  | OBL                                   |
| Solanum dulcamara (Nightshade)              | FAC                                   |
| Solidago gigantea (Giant Goldenrod)         | FACW                                  |
| Solidago sp. (Goldenrod species)            | NI                                    |
| Spahgnum sp. (Moss)                         | NI                                    |
| Sparganium americanum (American Bur-Reed)   | OBL                                   |
| Symphyotrichum ericoides (White Aster)      | FACU                                  |
| Thelypteris noveboracensis (New York Fern)  | FAC                                   |
| Tsuga canadensis (Eastern Hemlock)          | FACU                                  |
| Typha latifolia (Broad Leaf Cattail)        | OBL                                   |
| Ulmus americana (American Elm)              | FACW                                  |
| Vaccinium sp. (Blueberry Species)           | NI                                    |

#### Abbreviations, Notes, and Definitions:

1. Wetland indicator status is based on northeast regional listings found within the New York State Freshwater Wetlands Delineation Manual and supplemented by United States Department of Agricultural Plants database listings.

2. Status definitions:

OBL - Obligate Wetland Plants; plants that occur almost always in wetlands under natural conditions, but may also occur rarely in non-wetlands.

FACW - Facultative Wetland Plants; plants that occur usually in wetlands, but also occur in nonwetlands.

FAC - Facultative Plants; plants with a similar likelihood of occurring in both wetlands and nonwetlands.

FACU - Facultative Upland Plants; plants that occur sometimes in wetlands, but occur more often in non-wetlands.

UPL - Obligate Upland Plants; plants that occur rarely in wetlands, but occur almost always in nonwetlands under natural conditions.

NI - No Indicator available.