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ENVIRONMENTAL CONSULTANTS

January 15, 2020

Mr. Michael T. Easley  
Vice President, Finance  
Tennsco, LLC  
PO Box 1888  
Dickson, TN 37056

**Re: Jurisdictional Waters Evaluation Report  
20 Sanker Road; Dickson, Tennessee  
TriAD Project No.: 19-TEN01-01**

Dear Mr. Easley:

TriAD Environmental Consultants, Inc., (TriAD) is pleased to present the findings of the jurisdictional waters evaluation performed at the 33.04-acre property located at 20 Sanker Road (Site) in Dickson, Tennessee (Parcel Number: 120 007.18). The purpose of the evaluation was to identify the presence and extent of any potential State and Federal jurisdictional waters (i.e., wetlands, streams) at the Site. The methodology and results of the evaluation performed are described in the sections below.

### **Methodology**

Prior to the Site visit, TriAD performed a preliminary review of available data including the 2019 U.S. Geological Survey (USGS) Burns, Tennessee 7.5-minute Quadrangle topographic map; U.S. Fish and Wildlife Service, National Wetlands Inventory (NWI) Wetland Map; U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey for Dickson County, Tennessee; Tennessee Department of Environment and Conservation (TDEC), Division of Water Resources, Water Quality Assessment MapViewer; TDEC Division of Water Resources Hydrologic Determinations MapViewer; Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM); and aerial photographs of the Site obtained via Google Earth.

On January 6, 2020, a field survey was conducted to identify potential State and Federal jurisdictional waters within the Site boundary. Site characteristics used in the identification of potential jurisdictional waters included, but were not limited to, the presence of distinct watercourse channels, surface water, hydrophytic vegetation, and hydric soils. Areas possessing one or more of these characteristics were subjected to more thorough visual and physical inspection. The following definitions were used for classification purposes:

## State Waters

- *Wet Weather Conveyance* – a man-made or natural watercourse, including natural watercourses that have been modified by channelization: that flow only in direct response to precipitation runoff in their immediate locality; whose channels are at all times above the groundwater table; that are not suitable for drinking water supplies; and in which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow there is not sufficient water to support fish, or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months. [TN Rule 1200-04-03-.04 (25)]
- *Waters of the State* – any and all water, public or private, on or beneath the surface of the ground, that are contained within, flow through, or border upon Tennessee or any portion thereof, except those bodies of water confined to and retained within the limits of private property in single ownership that do not combine or effect a junction with natural surface or underground waters. [T. C. A. § 69-3-103]

## Federal Waters

Waters of the United States are defined in 40 CFR Section 230.3 and are regulated by Section 404 of the Clean Water Act that is administered and enforced by the U.S. Army Corps of Engineers (USACE).

## **Results**

### Preliminary Assessment

The following is a summary of background sources reviewed for the subject Site:

- 2019 USGS Burns, Tennessee Topographic Map (Figure 1) – No hydrologic features are identified on or immediately adjacent to the Site.
- U.S. Fish and Wildlife Service, NWI Map (Figure 3) – A freshwater pond is identified in the central portion of the Site. No other hydrologic features are identified on or immediately adjacent to the Site.
- NRCS Websoil Survey for Dickson County, Tennessee (Attachment 1) – Site soils are identified as Dickson silt loam, 2 to 5 percent slopes; Melvin silt loam, frequently flooded; Sengtown gravelly silt loam, 5 to 12 percent slopes; and Sengtown gravelly silt loam, 30 to 60 percent slopes. Melvin silt loam, frequently flooded, is listed on the NRCS Hydric Soils List for Dickson County, Tennessee.
- TDEC Water Quality Assessment and Permits MapViewer – No hydrologic features are identified on or immediately adjacent to the Site.

- TDEC Hydrologic Determinations MapViewer – No previous hydrologic determinations are identified within or immediately adjacent to the Site.
- FEMA Flood Insurance Rate Map – The Site is not located within the floodplain or floodway of a stream or river.
- Aerial Photographs – No hydrologic features on or immediately adjacent to the Site were identified on the aerial images reviewed.

#### Jurisdictional Waters Determination

During the field survey, low-lying areas of standing water and saturated soils were noted immediately south of the developed portions of the facility and within the wooded areas of the Site located in the southwest portion of the property. The previous 7-day rainfall at the time of the survey was approximately 1.86 inches (NOAA – Dickson, TN) with approximately 0.2 inches occurring within the previous 48 hours. Stormwater runoff from the property is restricted to the southwest by Porclein Drive and the railroad along the southern property boundary. A culvert running under Porclein Drive was identified actively conveying flow from the low-lying southwest portions of the Site to a roadside ditch on the west side of Porclein Drive. A second culvert was identified under the railroad along the southern property boundary and appeared to be a stormwater conveyance originating from the adjacent property to the south.

Vegetation within the low-lying areas of the Site was generally comprised of a mixture of obligate wetland, herbaceous species immediately downgradient of the developed portions of the facility and hardwood tree species commonly found in bottomland and depressional areas within the low-lying wooded areas. Wetland determinations performed within these low-lying areas yielded sufficient wetland indicators (i.e., wetland hydrology, hydrophytic vegetation, hydric soils) to classify these areas as potential State and Federal jurisdictional wetlands. Subsequent to the determinations, areas identified as potential jurisdictional wetlands were delineated with highly visible, pink wetland flagging. A Site Map depicting the approximate extent of the delineated wetlands at the Site is provided as Figure 2. Photographs taken during the determinations/delineations are provided as Attachment 3.

#### **Summary**

It is TriAD's finding that approximately 7.9 acres of potential State and Federal jurisdictional wetlands are located within the Site boundary. As portions of the delineated wetland area may extend beyond the western and southern property boundaries, the actual extent of potential jurisdictional wetlands at the Site will need to be confirmed subsequent to a field/boundary survey. Please note that it is important that the findings presented herein be verified by TDEC and the USACE before they can be considered official. Specific permitting requirements with respect to any proposed development of the Site can be determined following confirmation of the jurisdictional status of the identified features.

TriAD greatly appreciates the opportunity to assist you with this project. If you have any questions or would like to discuss our findings in more detail, please contact me at (615) 889-6888 or by email at [jdrewnowski@triadenv.com](mailto:jdrewnowski@triadenv.com).

Sincerely,

**TriAD Environmental Consultants, Inc.**

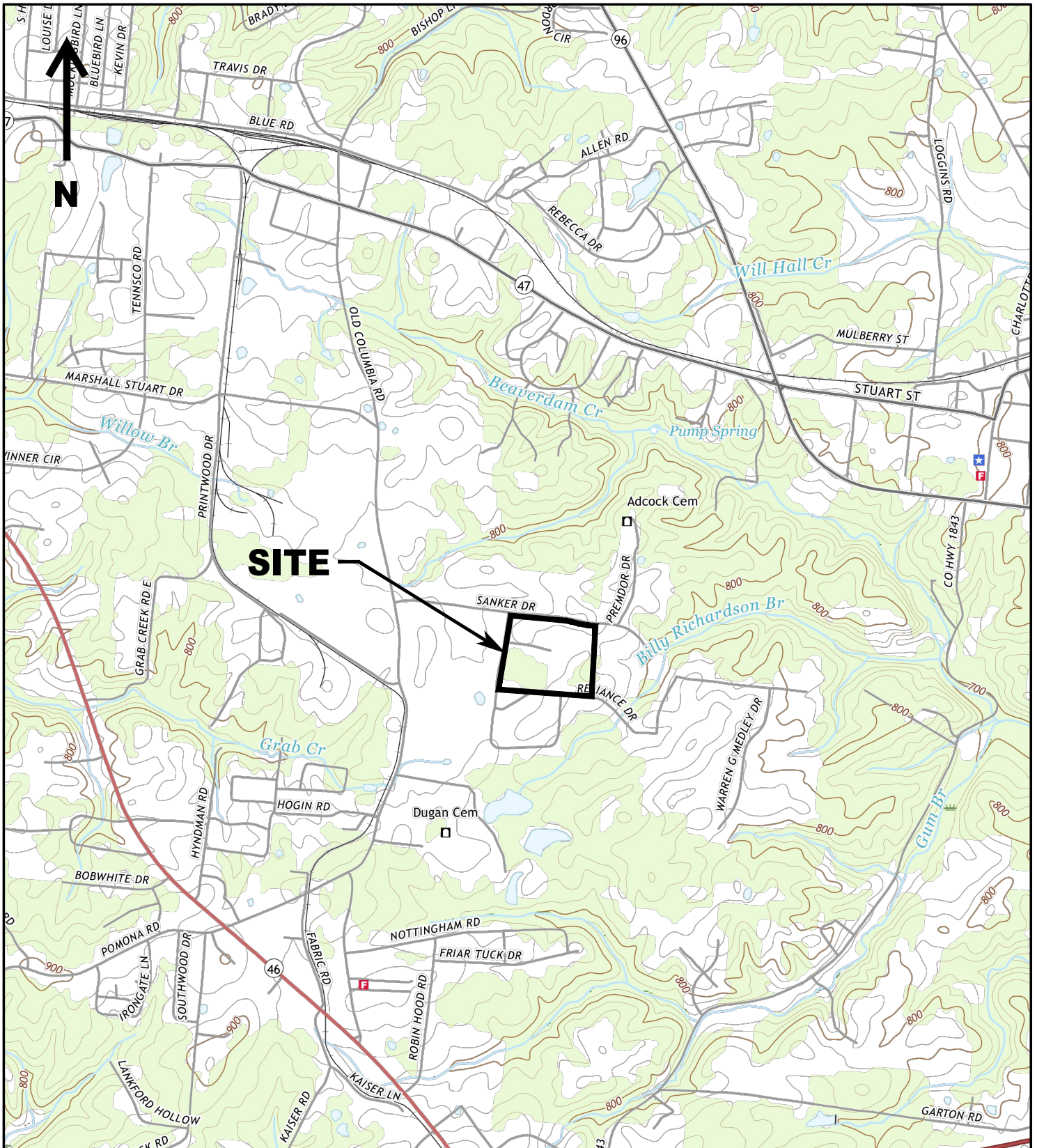


John E. Drewnowski, P.E., QHP (1136-TN15)  
Project Engineer/Scientist

Attachments:      Figure 1 – Vicinity Map  
                         Figure 2 – Site Map  
                         Figure 3 – NWI Map  
                         Attachment 1 – Web Soil Survey Soil Map  
                         Attachment 2 – Wetland Determination Data Forms  
                         Attachment 3 – Photographs



**Figure 1**  
**Vicinity Map**



SOURCE: USGS 7.5-MINUTE BURNS, TENNESSEE QUADRANGLE 2019.

PREPARED BY:



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## FIGURE 1: VICINITY MAP

20 SANKER ROAD  
DICKSON, TENNESSEE

DWG. DATE: 01/14/20

PROJECT NO.: 19-TEN01-01

SCALE: 1:24,000

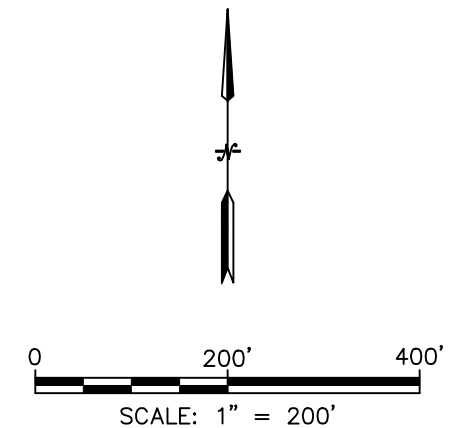
SHEET 1 OF 1

**Figure 2**




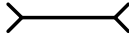

**Site Map**



N:\Jobs\TEN\DRAWINGS\001-3 WETLAND DETERMINATION.dwg SAVED: 1/15/2020 11:13 AM BY: LCOTON



#### LEGEND

-  PROPERTY BOUNDARY
-  APPROXIMATE WETLAND BOUNDARY
-  WETLAND SAMPLING POINT
-  EXISTING CULVERT (LOCATION APPROXIMATE)
-  PHOTOGRAPH LOCATION (APPROXIMATE)

#### NOTES

1. AERIAL IMAGED OBTAINED VIA GOOGLE EARTH, DATED APRIL 15, 2019.
2. PROPERTY BOUNDARY OBTAINED FROM TENNESSEE DEPARTMENT OF FINANCE AND ADMINISTRATION PROPERTY MAP VIEWER. PROPERTY BOUNDARY LOCATION IS APPROXIMATE.

#### FIGURE 2: SITE MAP

20 SANKER ROAD  
DICKSON, TENNESSEE

SCALE: 1" = 200' DR LMC CHK JED REV JED

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**Figure 3**  
**NWI Map**



U.S. Fish and Wildlife Service

# National Wetlands Inventory



20 Sanker Road; Dickson, TN



U.S. Fish and Wildlife Service, National Standards and Support Team,  
wetlands\_team@fws.gov

January 2, 2020

## Wetlands

|   |                                |   |                                   |   |          |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland       |  | Lake     |
|  | Estuarine and Marine Wetland   |  | Freshwater Forested/Shrub Wetland |  | Other    |
|   |                                |  | Freshwater Pond                   |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

## **Attachment 1**

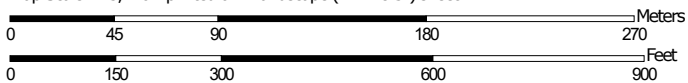
### **Web Soil Survey Soil Map**



Soil Map—Dickson County, Tennessee  
(20 Sanker Road; Dickson, TN)



Map Scale: 1:3,270 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

1/2/2020  
Page 1 of 3



## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dickson County, Tennessee

Survey Area Data: Version 14, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 27, 2015—Aug 8, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

| Map Unit Symbol                    | Map Unit Name  | Acres in AOI | Percent of AOI |
|------------------------------------|--|--------------|----------------|
| DkB                                | Dickson silt loam, 2 to 5 percent slopes             | 16.9         | 47.5%          |
| Me                                 | Melvin silt loam, frequently flooded                 | 5.9          | 16.5%          |
| SeC                                | Sengtown gravelly silt loam, 5 to 12 percent slopes  | 12.3         | 34.4%          |
| SeF                                | Sengtown gravelly silt loam, 30 to 60 percent slopes | 0.5          | 1.5%           |
| <b>Totals for Area of Interest</b> |  | <b>35.6</b>  | <b>100.0%</b>  |

## **Attachment 2**

### **Wetland Determination Data Forms**

# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: 20 Sanker Road City/County: Dickson Sampling Date: 1/6/20  
Applicant/Owner: Tennsco State: TN Sampling Point: 1  
Investigator(s): John Drewnowski, TriAD Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): <1%  
Subregion (LRR or MLRA): LRR N Lat: 36° 2'34.50"N Long: 87°20'12.30"W Datum: WGS84  
Soil Map Unit Name: Melvin silt loam, frequently flooded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

|   |   |
|---|---|
| Hydrophytic Vegetation Present? Yes <u>X</u> No _____ | Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ |
| Hydric Soil Present? Yes <u>X</u> No _____            |   |
| Wetland Hydrology Present? Yes <u>X</u> No _____      |   |

Remarks:

## HYDROLOGY

| Wetland Hydrology Indicators:   |   | Secondary Indicators (minimum of two required)                     |
|---|---|--|
| Primary Indicators (minimum of one is required; check all that apply) |   |  |
| <input type="checkbox"/> Surface Water (A1)                           | <input type="checkbox"/> True Aquatic Plants (B14)                  | <input type="checkbox"/> Surface Soil Cracks (B6)                  |
| <input checked="" type="checkbox"/> High Water Table (A2)             | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                 | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |
| <input checked="" type="checkbox"/> Saturation (A3)                   | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Drainage Patterns (B10)                   |
| <input type="checkbox"/> Water Marks (B1)                             | <input type="checkbox"/> Presence of Reduced Iron (C4)              | <input type="checkbox"/> Moss Trim Lines (B16)                     |
| <input type="checkbox"/> Sediment Deposits (B2)                       | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Dry-Season Water Table (C2)               |
| <input type="checkbox"/> Drift Deposits (B3)                          | <input type="checkbox"/> Thin Muck Surface (C7)                     | <input type="checkbox"/> Crayfish Burrows (C8)                     |
| <input type="checkbox"/> Algal Mat or Crust (B4)                      | <input type="checkbox"/> Other (Explain in Remarks)                 | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Iron Deposits (B5)                           |   | <input type="checkbox"/> Stunted or Stressed Plants (D1)           |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)    |   | <input checked="" type="checkbox"/> Geomorphic Position (D2)       |
| <input checked="" type="checkbox"/> Water-Stained Leaves (B9)         |   | <input type="checkbox"/> Shallow Aquitard (D3)                     |
| <input type="checkbox"/> Aquatic Fauna (B13)                          |   | <input type="checkbox"/> Microtopographic Relief (D4)              |
|   |   | <input type="checkbox"/> FAC-Neutral Test (D5)                     |

### Field Observations:

Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches): \_\_\_\_\_  
Water Table Present? Yes X No \_\_\_\_\_ Depth (inches): 6"  
Saturation Present? Yes X No \_\_\_\_\_ Depth (inches): 3"  
(includes capillary fringe)

Wetland Hydrology Present? Yes X No \_\_\_\_\_

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

Remarks:

Standing water approximately 50 feet south of sampling point.

**VEGETATION (Four Strata) – Use scientific names of plants.**

 Sampling Point: 1

| Tree Stratum (Plot size: <u>30</u> )  | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
|---|---------------------|----------------------|---------------------|---|-------------------|--------------|-----------------------|-----------------|--------------------|-------------|-----------------------|------------------|--------------------|-------------|-------------------|-------------|------------------------------|----------------|
| 1. <u>Liquidambar styraciflua</u>   | <u>15</u>           | <u>Y</u>             | <u>FAC</u>          | <b>Dominance Test worksheet:</b><br>Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)<br><br>Total Number of Dominant Species Across All Strata: <u>4</u> (B)<br><br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>1.0</u> (A/B)   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. <u>Acer rubrum</u>   | <u>15</u>           | <u>Y</u>             | <u>FAC</u>          |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. <u>Quercus lyrata</u>  | <u>10</u>           |                      | <u>OBL</u>          |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. <u>Quercus phellos</u>   | <u>10</u>           |                      | <u>FAC</u>          |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               | <b>Prevalence Index worksheet:</b><br><table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species <u>65</u></td> <td>x 3 = <u>195</u></td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: <u>75</u> (A)</td> <td><u>205</u> (B)</td> </tr> </table><br>Prevalence Index = B/A = <u>2.7</u> | Total % Cover of: | Multiply by: | OBL species <u>10</u> | x 1 = <u>10</u> | FACW species _____ | x 2 = _____ | FAC species <u>65</u> | x 3 = <u>195</u> | FACU species _____ | x 4 = _____ | UPL species _____ | x 5 = _____ | Column Totals: <u>75</u> (A) | <u>205</u> (B) |
| Total % Cover of:   | Multiply by:        |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| OBL species <u>10</u>   | x 1 = <u>10</u>     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| FACW species _____  | x 2 = _____         |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| FAC species <u>65</u>   | x 3 = <u>195</u>    |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| FACU species _____  | x 4 = _____         |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| UPL species _____   | x 5 = _____         |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| Column Totals: <u>75</u> (A)  | <u>205</u> (B)      |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 7. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____   | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <u>50</u> = Total Cover<br>50% of total cover: <u>25</u> 20% of total cover: <u>10</u>  |                     |                      |                     | <b>Hydrophytic Vegetation Indicators:</b><br>___ 1 - Rapid Test for Hydrophytic Vegetation<br>___ 2 - Dominance Test is >50%<br>___ 3 - Prevalence Index is ≤3.0 <sup>1</sup><br>___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br>___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Sapling/Shrub Stratum</b> (Plot size: <u>15</u> )                                    |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. <u>Acer rubrum</u>   | <u>15</u>           | <u>Y</u>             | <u>FAC</u>          |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. <u>Liquidambar styraciflua</u>   | <u>10</u>           | <u>Y</u>             | <u>FAC</u>          |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Definitions of Four Vegetation Strata:</b><br><br><b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.<br><br><b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.<br><br><b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.<br><br><b>Woody vine</b> – All woody vines greater than 3.28 ft in height.  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 7. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 8. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 9. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 10. _____   | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <u>25</u> = Total Cover<br>50% of total cover: <u>12.5</u> 20% of total cover: <u>5</u> |                     |                      |                     | <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Herb Stratum</b> (Plot size: <u>5</u> )  |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. <u>Smilax spp.</u>   | <u>5</u>            |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 7. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 8. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 9. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 10. _____   | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| _____ = Total Cover<br>50% of total cover: _____      20% of total cover: _____         |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                                       |                     |                      |                     |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 1. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 2. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 3. _____  | _____               | _____                | _____               | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____  |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 4. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 5. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |
| 6. _____  | _____               | _____                | _____               |   |                   |              |                       |                 |                    |             |                       |                  |                    |             |                   |             |                              |                |

## SOIL

Sampling Point: 1

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

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

### Hydric Soil Indicators:

- Impure Soil Indicators:**
- ☐ Histosol (A1)
  - ☐ Histic Epipedon (A2)
  - ☐ Black Histic (A3)
  - ☐ Hydrogen Sulfide (A4)
  - ☐ Stratified Layers (A5)
  - ☐ 2 cm Muck (A10) **(LRR N)**
  - ☐ Depleted Below Dark Surface (A11)
  - ☐ Thick Dark Surface (A12)
  - ☐ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
  - ☐ Sandy Gleyed Matrix (S4)
  - ☐ Sandy Redox (S5)
  - ☐ Stripped Matrix (S6)

- |                                     |  |
|-------------------------------------|--|
| <input type="checkbox"/>            | Dark Surface (S7)                                      |
| <input type="checkbox"/>            | Polyvalue Below Surface (S8) ( <b>MLRA 147, 148</b> )  |
| <input type="checkbox"/>            | Thin Dark Surface (S9) ( <b>MLRA 147, 148</b> )        |
| <input type="checkbox"/>            | Loamy Gleyed Matrix (F2)                               |
| <input checked="" type="checkbox"/> | Depleted Matrix (F3)                                   |
| <input type="checkbox"/>            | Redox Dark Surface (F6)                                |
| <input type="checkbox"/>            | Depleted Dark Surface (F7)                             |
| <input type="checkbox"/>            | Redox Depressions (F8)                                 |
| <input type="checkbox"/>            | Iron-Manganese Masses (F12) ( <b>LRR N, MLRA 136</b> ) |
| <input type="checkbox"/>            | Umbria Surface (F13) ( <b>MLRA 136, 122</b> )          |
| <input type="checkbox"/>            | Piedmont Floodplain Soils (F19) ( <b>MLRA 148</b> )    |
| <input type="checkbox"/>            | Red Parent Material (F21) ( <b>MLRA 127, 147</b> )     |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- |  |                                   |
|--|-----------------------------------|
|  | 2 cm Muck (A10) <b>(MLRA 147)</b> |
|  | Coast Prairie Redox (A16)         |
|  | <b>(MLRA 147, 148)</b>            |
|  | Piedmont Floodplain Soils (F19)   |
|  | <b>(MLRA 136, 147)</b>            |
|  | Very Shallow Dark Surface (TF12)  |
|  | 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: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes X No       

Remarks:

Depleted soil matrix.

# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: 20 Sanker Road City/County: Dickson Sampling Date: 1/6/20  
Applicant/Owner: Tennsco State: TN Sampling Point: 2  
Investigator(s): John Drewnowski, TriAD Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): <1%  
Subregion (LRR or MLRA): LRR N Lat: 36° 2'37.13"N Long: 87°20'5.78"W Datum: WGS84  
Soil Map Unit Name: Dickson silt loam, 2 to 5 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

|   |   |  |   |
|---|---|--|---|
| Hydrophytic Vegetation Present? Yes <u>X</u> No _____ | Hydic Soil Present? Yes <u>X</u> No _____ | Wetland Hydrology Present? Yes <u>X</u> No _____ | Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ |
| Remarks:  |   |  |   |

## HYDROLOGY

|  |   |  |  |
|--|---|--|--|
| <b>Wetland Hydrology Indicators:</b>   |   | <b>Secondary Indicators (minimum of two required)</b>              |  |
| <b>Primary Indicators (minimum of one is required; check all that apply)</b>                               |   |  |  |
| <input checked="" type="checkbox"/> Surface Water (A1)   | <input type="checkbox"/> True Aquatic Plants (B14)                  | <input type="checkbox"/> Surface Soil Cracks (B6)                  |  |
| <input type="checkbox"/> High Water Table (A2)   | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                 | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |  |
| <input checked="" type="checkbox"/> Saturation (A3)  | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Drainage Patterns (B10)                   |  |
| <input type="checkbox"/> Water Marks (B1)  | <input type="checkbox"/> Presence of Reduced Iron (C4)              | <input type="checkbox"/> Moss Trim Lines (B16)                     |  |
| <input type="checkbox"/> Sediment Deposits (B2)  | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Dry-Season Water Table (C2)               |  |
| <input type="checkbox"/> Drift Deposits (B3)   | <input type="checkbox"/> Thin Muck Surface (C7)                     | <input type="checkbox"/> Crayfish Burrows (C8)                     |  |
| <input type="checkbox"/> Algal Mat or Crust (B4)   | <input type="checkbox"/> Other (Explain in Remarks)                 | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |  |
| <input type="checkbox"/> Iron Deposits (B5)  |   | <input type="checkbox"/> Stunted or Stressed Plants (D1)           |  |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)   |   | <input checked="" type="checkbox"/> Geomorphic Position (D2)       |  |
| <input type="checkbox"/> Water-Stained Leaves (B9)   |   | <input type="checkbox"/> Shallow Aquitard (D3)                     |  |
| <input type="checkbox"/> Aquatic Fauna (B13)   |   | <input type="checkbox"/> Microtopographic Relief (D4)              |  |
|  |   | <input type="checkbox"/> FAC-Neutral Test (D5)                     |  |
| <b>Field Observations:</b>   |   |  |  |
| Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>5"</u>                                     |   | <b>Wetland Hydrology Present? Yes <u>X</u> No _____</b>            |  |
| Water Table Present? Yes _____ No _____ Depth (inches): _____  |   |  |  |
| Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0"</u><br>(includes capillary fringe)         |   |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: |   |  |  |
| Remarks:<br><b>Restrictive layer (potentially bedrock) at approximately 15" below ground surface.</b>      |   |  |  |

**VEGETATION (Four Strata) – Use scientific names of plants.**

 Sampling Point: 2

| Tree Stratum (Plot size: <u>30 ft.</u> )  | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status |  |
|---|---------------------|----------------------|---------------------|--|
| 1. _____  | _____               | _____                | _____               | <b>Dominance Test worksheet:</b><br>Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)<br><br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br><br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>1.0</u> (A/B)  |
| 2. _____  | _____               | _____                | _____               |  |
| 3. _____  | _____               | _____                | _____               |  |
| 4. _____  | _____               | _____                | _____               |  |
| 5. _____  | _____               | _____                | _____               |  |
| 6. _____  | _____               | _____                | _____               |  |
| 7. _____  | _____               | _____                | _____               |  |
| _____ = Total Cover   |                     |                      |                     | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL species <u>90</u> x 1 = <u>90</u><br>FACW species _____ x 2 = _____<br>FAC species <u>5</u> x 3 = <u>15</u><br>FACU species _____ x 4 = _____<br>UPL species _____ x 5 = _____<br>Column Totals: <u>95</u> (A) <u>105</u> (B)<br><br>Prevalence Index = B/A = <u>1.1</u>   |
| 50% of total cover: _____ 20% of total cover: _____                             |                     |                      |                     |  |
| <b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft.</u> )                        |                     |                      |                     |  |
| 1. <u>Liquidambar styraciflua</u>   | <u>5</u>            | _____                | <u>FAC</u>          |  |
| 2. _____  | _____               | _____                | _____               |  |
| 3. _____  | _____               | _____                | _____               |  |
| 4. _____  | _____               | _____                | _____               |  |
| 5. _____  | _____               | _____                | _____               |  |
| 6. _____  | _____               | _____                | _____               |  |
| 7. _____  | _____               | _____                | _____               |  |
| 8. _____  | _____               | _____                | _____               |  |
| 9. _____  | _____               | _____                | _____               |  |
| _____ = Total Cover   |                     |                      |                     | <b>Hydrophytic Vegetation Indicators:</b><br>___ 1 - Rapid Test for Hydrophytic Vegetation<br>___ 2 - Dominance Test is >50%<br>___ 3 - Prevalence Index is ≤3.0 <sup>1</sup><br>___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br>___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 50% of total cover: _____ 20% of total cover: _____                             |                     |                      |                     |  |
| <b>Herb Stratum</b> (Plot size: <u>5</u> )                                      |                     |                      |                     |  |
| 1. <u>Scirpus cyperinus</u>   | <u>70</u>           | <u>Y</u>             | <u>OBL</u>          |  |
| 2. <u>Juncus effusus</u>  | <u>20</u>           | <u>Y</u>             | <u>OBL</u>          |  |
| 3. _____  | _____               | _____                | _____               |  |
| 4. _____  | _____               | _____                | _____               |  |
| 5. _____  | _____               | _____                | _____               |  |
| 6. _____  | _____               | _____                | _____               |  |
| 7. _____  | _____               | _____                | _____               |  |
| 8. _____  | _____               | _____                | _____               |  |
| 9. _____  | _____               | _____                | _____               |  |
| 10. _____   | _____               | _____                | _____               |  |
| 11. _____   | _____               | _____                | _____               |  |
| _____ = Total Cover   |                     |                      |                     | <b>Definitions of Four Vegetation Strata:</b><br><br><b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.<br><br><b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.<br><br><b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.<br><br><b>Woody vine</b> – All woody vines greater than 3.28 ft in height. |
| 50% of total cover: <sup>45</sup> _____ 20% of total cover: <sup>18</sup> _____ |                     |                      |                     |  |
| <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )                               |                     |                      |                     |  |
| 1. _____  | _____               | _____                | _____               |  |
| 2. _____  | _____               | _____                | _____               |  |
| 3. _____  | _____               | _____                | _____               |  |
| 4. _____  | _____               | _____                | _____               |  |
| 5. _____  | _____               | _____                | _____               |  |
| _____ = Total Cover   |                     |                      |                     |  |
| 50% of total cover: _____ 20% of total cover: _____                             |                     |                      |                     |  |
| <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____                    |                     |                      |                     |  |
| Remarks: (Include photo numbers here or on a separate sheet.)                   |                     |                      |                     |  |



## SOIL

Sampling Point: 2[illegible]

# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: 20 Sanker Road City/County: Dickson Sampling Date: 1/6/20  
Applicant/Owner: Tennsco State: TN Sampling Point: 3  
Investigator(s): John Drewnowski, TriAD Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): <1%  
Subregion (LRR or MLRA): LRR N Lat: 36° 2'37.10"N Long: 87°20'11.40"W Datum: WGS84  
Soil Map Unit Name: Melvin silt loam, frequently flooded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

|   |   |  |   |
|---|---|--|---|
| Hydrophytic Vegetation Present? Yes <u>X</u> No _____ | Hydic Soil Present? Yes <u>X</u> No _____ | Wetland Hydrology Present? Yes <u>X</u> No _____ | Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ |
| Remarks:  |   |  |   |

## HYDROLOGY

|  |   |  |  |
|--|---|--|--|
| <b>Wetland Hydrology Indicators:</b>   |   | <b>Secondary Indicators (minimum of two required)</b>              |  |
| <b>Primary Indicators (minimum of one is required; check all that apply)</b>                               |   |  |  |
| <input type="checkbox"/> Surface Water (A1)  | <input type="checkbox"/> True Aquatic Plants (B14)                  | <input type="checkbox"/> Surface Soil Cracks (B6)                  |  |
| <input checked="" type="checkbox"/> High Water Table (A2)  | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                 | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |  |
| <input checked="" type="checkbox"/> Saturation (A3)  | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Drainage Patterns (B10)                   |  |
| <input type="checkbox"/> Water Marks (B1)  | <input type="checkbox"/> Presence of Reduced Iron (C4)              | <input type="checkbox"/> Moss Trim Lines (B16)                     |  |
| <input type="checkbox"/> Sediment Deposits (B2)  | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Dry-Season Water Table (C2)               |  |
| <input type="checkbox"/> Drift Deposits (B3)   | <input type="checkbox"/> Thin Muck Surface (C7)                     | <input type="checkbox"/> Crayfish Burrows (C8)                     |  |
| <input type="checkbox"/> Algal Mat or Crust (B4)   | <input type="checkbox"/> Other (Explain in Remarks)                 | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |  |
| <input type="checkbox"/> Iron Deposits (B5)  |   | <input type="checkbox"/> Stunted or Stressed Plants (D1)           |  |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)   |   | <input checked="" type="checkbox"/> Geomorphic Position (D2)       |  |
| <input checked="" type="checkbox"/> Water-Stained Leaves (B9)  |   | <input type="checkbox"/> Shallow Aquitard (D3)                     |  |
| <input type="checkbox"/> Aquatic Fauna (B13)   |   | <input type="checkbox"/> Microtopographic Relief (D4)              |  |
|  |   | <input type="checkbox"/> FAC-Neutral Test (D5)                     |  |
| <b>Field Observations:</b>   |   |  |  |
| Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____   |   | <b>Wetland Hydrology Present? Yes <u>X</u> No _____</b>            |  |
| Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>9"</u>                                       |   |  |  |
| Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>6"</u><br>(includes capillary fringe)         |   |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: |   |  |  |
| Remarks:   |   |  |  |

**VEGETATION (Four Strata) – Use scientific names of plants.**

 Sampling Point: 3

| Tree Stratum (Plot size: <u>30 ft.</u> )   | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status |  |
|--|---------------------|----------------------|---------------------|--|
| 1. <u>Acer rubrum</u>  | <u>30</u>           | <u>Y</u>             | <u>FAC</u>          | <b>Dominance Test worksheet:</b><br>Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)<br><br>Total Number of Dominant Species Across All Strata: <u>3</u> (B)<br><br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.66</u> (A/B)   |
| 2. <u>Quercus stellata</u>   | <u>15</u>           | <u>Y</u>             | <u>UPL</u>          |  |
| 3. <u>Liquidambar styraciflua</u>  | <u>10</u>           |                      | <u>FAC</u>          |  |
| 4. <u>Carya ovalis</u>   | <u>5</u>            |                      | <u>FACU</u>         |  |
| 5. _____   |                     |                      |                     | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by:<br>OBL species _____ x 1 = _____<br>FACW species _____ x 2 = _____<br>FAC species <u>57</u> x 3 = <u>171</u><br>FACU species <u>5</u> x 4 = <u>20</u><br>UPL species <u>15</u> x 5 = <u>75</u><br>Column Totals: <u>77</u> (A) <u>266</u> (B)<br><br>Prevalence Index = B/A = <u>3.5</u>  |
| 6. _____   |                     |                      |                     |  |
| 7. _____   |                     |                      |                     |  |
|  |                     |                      |                     |  |
| <u>60</u> = Total Cover<br>50% of total cover: <u>30</u> 20% of total cover: <u>12</u> |                     |                      |                     |  |
| <b>Sapling/Shrub Stratum (Plot size: <u>15 ft.</u> )</b>                               |                     |                      |                     |  |
| 1. <u>Liquidambar styraciflua</u>  | <u>15</u>           | <u>Y</u>             | <u>FAC</u>          | <b>Hydrophytic Vegetation Indicators:</b><br>___ 1 - Rapid Test for Hydrophytic Vegetation<br>___ 2 - Dominance Test is >50%<br>___ 3 - Prevalence Index is ≤3.0 <sup>1</sup><br>___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br>___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.                                   |
| 2. _____   |                     |                      |                     |  |
| 3. _____   |                     |                      |                     |  |
| 4. _____   |                     |                      |                     |  |
| 5. _____   |                     |                      |                     | <b>Definitions of Four Vegetation Strata:</b><br><br><b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.<br><br><b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.<br><br><b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.<br><br><b>Woody vine</b> – All woody vines greater than 3.28 ft in height. |
| 6. _____   |                     |                      |                     |  |
| 7. _____   |                     |                      |                     |  |
| 8. _____   |                     |                      |                     |  |
| 9. _____   |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____   |
| 10. _____  |                     |                      |                     |  |
| 11. _____  |                     |                      |                     |  |
|  |                     |                      |                     |  |
| <u>15</u> = Total Cover<br>50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u> |                     |                      |                     |  |
| <b>Herb Stratum (Plot size: <u>5</u> )</b>   |                     |                      |                     |  |
| 1. _____   |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____   |
| 2. _____   |                     |                      |                     |  |
| 3. _____   |                     |                      |                     |  |
| 4. _____   |                     |                      |                     |  |
| 5. _____   |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____   |
| 6. _____   |                     |                      |                     |  |
| 7. _____   |                     |                      |                     |  |
| 8. _____   |                     |                      |                     |  |
| 9. _____   |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____   |
| 10. _____  |                     |                      |                     |  |
| 11. _____  |                     |                      |                     |  |
|  |                     |                      |                     |  |
| _____ = Total Cover<br>50% of total cover: _____ 20% of total cover: _____             |                     |                      |                     |  |
| <b>Woody Vine Stratum (Plot size: <u>30</u> )</b>                                      |                     |                      |                     |  |
| 1. <u>Vitis rotundifolia</u>   | <u>2</u>            |                      | <u>FAC</u>          | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____   |
| 2. _____   |                     |                      |                     |  |
| 3. _____   |                     |                      |                     |  |
| 4. _____   |                     |                      |                     |  |
| 5. _____   |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____   |
|  |                     |                      |                     |  |
|  |                     |                      |                     |  |
|  |                     |                      |                     |  |
| <u>2</u> = Total Cover<br>50% of total cover: _____ 20% of total cover: _____          |                     |                      |                     |  |
| Remarks: (Include photo numbers here or on a separate sheet.)                          |                     |                      |                     |  |

## SOIL

Sampling Point: 3

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

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

### Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) **(LRR N)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- |                                     |  |
|-------------------------------------|--|
| <input type="checkbox"/>            | Dark Surface (S7)                                      |
| <input type="checkbox"/>            | Polyvalue Below Surface (S8) ( <b>MLRA 147, 148</b> )  |
| <input type="checkbox"/>            | Thin Dark Surface (S9) ( <b>MLRA 147, 148</b> )        |
| <input type="checkbox"/>            | Loamy Gleyed Matrix (F2)                               |
| <input checked="" type="checkbox"/> | Depleted Matrix (F3)                                   |
| <input type="checkbox"/>            | Redox Dark Surface (F6)                                |
| <input type="checkbox"/>            | Depleted Dark Surface (F7)                             |
| <input type="checkbox"/>            | Redox Depressions (F8)                                 |
| <input type="checkbox"/>            | Iron-Manganese Masses (F12) ( <b>LRR N, MLRA 136</b> ) |
| <input type="checkbox"/>            | Umbria Surface (F13) ( <b>MLRA 136, 122</b> )          |
| <input type="checkbox"/>            | Piedmont Floodplain Soils (F19) ( <b>MLRA 148</b> )    |
| <input type="checkbox"/>            | Red Parent Material (F21) ( <b>MLRA 127, 147</b> )     |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- |  |                                   |
|--|-----------------------------------|
|  | 2 cm Muck (A10) <b>(MLRA 147)</b> |
|  | Coast Prairie Redox (A16)         |
|  | <b>(MLRA 147, 148)</b>            |
|  | Piedmont Floodplain Soils (F19)   |
|  | <b>(MLRA 136, 147)</b>            |
|  | Very Shallow Dark Surface (TF12)  |
|  | 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: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes X No       

Remarks:

Depleted soil matrix.

# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: 20 Sanker Road City/County: Dickson Sampling Date: 1/6/20  
Applicant/Owner: Tennsco State: TN Sampling Point: 4  
Investigator(s): John Drewnowski, TriAD Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): <5%  
Subregion (LRR or MLRA): LRR N Lat: 36° 2'38.50"N Long: 87°20'11.34"W Datum: WGS84  
Soil Map Unit Name: Dickson silt loam, 2 to 5 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

|   |   |
|---|---|
| Hydrophytic Vegetation Present? Yes _____ No <u>X</u> | Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> |
| Hydric Soil Present? Yes <u>X</u> No _____            |   |
| Wetland Hydrology Present? Yes _____ No <u>X</u>      |   |

Remarks:

## HYDROLOGY

| Wetland Hydrology Indicators:   |   | Secondary Indicators (minimum of two required)                     |
|---|---|--|
| Primary Indicators (minimum of one is required; check all that apply) |   |  |
| <input type="checkbox"/> Surface Water (A1)                           | <input type="checkbox"/> True Aquatic Plants (B14)                  | <input type="checkbox"/> Surface Soil Cracks (B6)                  |
| <input type="checkbox"/> High Water Table (A2)                        | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                 | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |
| <input type="checkbox"/> Saturation (A3)                              | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Drainage Patterns (B10)                   |
| <input type="checkbox"/> Water Marks (B1)                             | <input type="checkbox"/> Presence of Reduced Iron (C4)              | <input type="checkbox"/> Moss Trim Lines (B16)                     |
| <input type="checkbox"/> Sediment Deposits (B2)                       | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Dry-Season Water Table (C2)               |
| <input type="checkbox"/> Drift Deposits (B3)                          | <input type="checkbox"/> Thin Muck Surface (C7)                     | <input type="checkbox"/> Crayfish Burrows (C8)                     |
| <input type="checkbox"/> Algal Mat or Crust (B4)                      | <input type="checkbox"/> Other (Explain in Remarks)                 | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Iron Deposits (B5)                           |   | <input type="checkbox"/> Stunted or Stressed Plants (D1)           |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)    |   | <input type="checkbox"/> Geomorphic Position (D2)                  |
| <input type="checkbox"/> Water-Stained Leaves (B9)                    |   | <input type="checkbox"/> Shallow Aquitard (D3)                     |
| <input type="checkbox"/> Aquatic Fauna (B13)                          |   | <input type="checkbox"/> Microtopographic Relief (D4)              |
|   |   | <input type="checkbox"/> 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): \_\_\_\_\_  
(includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No X

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

Remarks:

# VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 4

| Tree Stratum (Plot size: <u>30 ft.</u> )                                   | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:  |
|--|---------------------|----------------------|---------------------|--|
| 1. _____   | _____               | _____                | _____               | Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)   |
| 2. _____   | _____               | _____                | _____               | Total Number of Dominant Species Across All Strata: _____ (B)  |
| 3. _____   | _____               | _____                | _____               | Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)  |
| 4. _____   | _____               | _____                | _____               | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by:<br>OBL species _____ x 1 = _____<br>FACW species _____ x 2 = _____<br>FAC species _____ x 3 = _____<br>FACU species _____ x 4 = _____<br>UPL species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br><br>Prevalence Index = B/A = _____  |
| 5. _____   | _____               | _____                | _____               |  |
| 6. _____   | _____               | _____                | _____               |  |
| 7. _____   | _____               | _____                | _____               |  |
| _____ = Total Cover<br>50% of total cover: _____ 20% of total cover: _____ |                     |                      |                     | <b>Hydrophytic Vegetation Indicators:</b><br>___ 1 - Rapid Test for Hydrophytic Vegetation<br>___ 2 - Dominance Test is >50%<br>___ 3 - Prevalence Index is ≤3.0 <sup>1</sup><br>___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br>___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| <b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft.</u> )                   |                     |                      |                     |  |
| 1. _____   | _____               | _____                | _____               |  |
| 2. _____   | _____               | _____                | _____               |  |
| 3. _____   | _____               | _____                | _____               | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
| 4. _____   | _____               | _____                | _____               |  |
| 5. _____   | _____               | _____                | _____               |  |
| 6. _____   | _____               | _____                | _____               |  |
| 7. _____   | _____               | _____                | _____               | <b>Definitions of Four Vegetation Strata:</b><br><br><b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.<br><br><b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.<br><br><b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.<br><br><b>Woody vine</b> – All woody vines greater than 3.28 ft in height. |
| 8. _____   | _____               | _____                | _____               |  |
| 9. _____   | _____               | _____                | _____               |  |
| 10. _____  | _____               | _____                | _____               |  |
| _____ = Total Cover<br>50% of total cover: _____ 20% of total cover: _____ |                     |                      |                     | <b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>   |
| <b>Herb Stratum</b> (Plot size: <u>5 ft.</u> )                             |                     |                      |                     |  |
| 1. <u>Festuca arundinacea</u>  | <u>80</u>           | _____                | <u>FACU</u>         |  |
| 2. <u>Andropogon virginicus</u>  | <u>15</u>           | _____                | <u>FACU</u>         |  |
| 3. _____   | _____               | _____                | _____               |  |
| 4. _____   | _____               | _____                | _____               |  |
| 5. _____   | _____               | _____                | _____               |  |
| 6. _____   | _____               | _____                | _____               |  |
| 7. _____   | _____               | _____                | _____               |  |
| 8. _____   | _____               | _____                | _____               |  |
| 9. _____   | _____               | _____                | _____               |  |
| 10. _____  | _____               | _____                | _____               |  |
| 11. _____  | _____               | _____                | _____               |  |
| _____ = Total Cover<br>50% of total cover: _____ 20% of total cover: _____ |                     |                      |                     |  |
| <b>Woody Vine Stratum</b> (Plot size: <u>30 ft.</u> )                      |                     |                      |                     |  |
| 1. _____   | _____               | _____                | _____               |  |
| 2. _____   | _____               | _____                | _____               |  |
| 3. _____   | _____               | _____                | _____               |  |
| 4. _____   | _____               | _____                | _____               |  |
| 5. _____   | _____               | _____                | _____               |  |
| _____ = Total Cover<br>50% of total cover: _____ 20% of total cover: _____ |                     |                      |                     |  |

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

## SOIL

Sampling Point: 4

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

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

### Hydric Soil Indicators:

- Impure Soil Indicators:**
- ☐ Histosol (A1)
  - ☐ Histic Epipedon (A2)
  - ☐ Black Histic (A3)
  - ☐ Hydrogen Sulfide (A4)
  - ☐ Stratified Layers (A5)
  - ☐ 2 cm Muck (A10) **(LRR N)**
  - ☐ Depleted Below Dark Surface (A11)
  - ☐ Thick Dark Surface (A12)
  - ☐ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
  - ☐ Sandy Gleyed Matrix (S4)
  - ☐ Sandy Redox (S5)
  - ☐ Stripped Matrix (S6)

- |                                     |  |
|-------------------------------------|--|
| <input type="checkbox"/>            | Dark Surface (S7)                                      |
| <input type="checkbox"/>            | Polyvalue Below Surface (S8) ( <b>MLRA 147, 148</b> )  |
| <input type="checkbox"/>            | Thin Dark Surface (S9) ( <b>MLRA 147, 148</b> )        |
| <input type="checkbox"/>            | Loamy Gleyed Matrix (F2)                               |
| <input type="checkbox"/>            | Depleted Matrix (F3)                                   |
| <input type="checkbox"/>            | Redox Dark Surface (F6)                                |
| <input type="checkbox"/>            | Depleted Dark Surface (F7)                             |
| <input checked="" type="checkbox"/> | Redox Depressions (F8)                                 |
| <input type="checkbox"/>            | Iron-Manganese Masses (F12) ( <b>LRR N, MLRA 136</b> ) |
| <input type="checkbox"/>            | Umbric Surface (F13) ( <b>MLRA 136, 122</b> )          |
| <input type="checkbox"/>            | Piedmont Floodplain Soils (F19) ( <b>MLRA 148</b> )    |
| <input type="checkbox"/>            | Red Parent Material (F21) ( <b>MLRA 127, 147</b> )     |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- |  |                                   |
|--|-----------------------------------|
|  | 2 cm Muck (A10) <b>(MLRA 147)</b> |
|  | Coast Prairie Redox (A16)         |
|  | <b>(MLRA 147, 148)</b>            |
|  | Piedmont Floodplain Soils (F19)   |
|  | <b>(MLRA 136, 147)</b>            |
|  | Very Shallow Dark Surface (TF12)  |
|  | 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: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes X No       

Remarks:

Redox depressions.

## **Attachment 3**

### **Photographs**





**Photo No. 1:** Low-lying wooded area; facing north

**Image Date:** 1/6/20

**Location:** 20 Sanker Road; Dickson, TN

**Photographer:** JED



**Photo No. 2:** Standing water in southwest property corner

**Image Date:** 1/6/20

**Location:** 20 Sanker Road; Dickson, TN

**Photographer:** JED





|  |                           |
|--|---------------------------|
| <b>Photo No. 3:</b> Low-lying wooded area; facing west | <b>Image Date:</b> 1/6/20 |
| <b>Location:</b> 20 Sanker Road; Dickson, TN           | <b>Photographer:</b> JED  |



|  |                           |
|--|---------------------------|
| <b>Photo No. 4:</b> Hydric soils in low-lying wooded area. | <b>Image Date:</b> 1/6/20 |
| <b>Location:</b> 20 Sanker Road; Dickson, TN               | <b>Photographer:</b> JED  |





|  |                           |
|--|---------------------------|
| <b>Photo No. 5:</b> Wetland Sample Point 3; facing south | <b>Image Date:</b> 1/6/20 |
| <b>Location:</b> 20 Sanker Road; Dickson, TN             | <b>Photographer:</b> JED  |



|   |                           |
|---|---------------------------|
| <b>Photo No. 6:</b> Low-lying herbaceous area south of building | <b>Image Date:</b> 1/6/20 |
| <b>Location:</b> 20 Sanker Road; Dickson, TN                    | <b>Photographer:</b> JED  |