

WETLAND DELINEATION REPORT G.W. VILLAGE COMMERCIAL STAFFORD COUNTY, VIRGINIA

TNT PROJECT NO.: 2156-A

FOR

NORTH POINT DEVELOPMENT

MARCH 23, 2022



March 23, 2022

Mr. Ryan Marshall North Point Development 12977 N. Outer 40 Road, Suite 203 St. Louis, MO 63141

TNT Project Number: 2156-A

Reference: Wetland Delineation Report, G.W. Village Commercial, Stafford County, Virginia

Latitude: 38° 25′ 2″ N, Longitude: 77° 26′ 3″ W

Dear Mr. Marshall:

TNT Environmental, Inc. (TNT) is pleased to present this wetland delineation report for the above-referenced project in general accordance with TNT Proposal Number 3342-R3 dated June 1, 2021 and revised November 17, 2021. The wetlands and Waters of the U.S. identified during this investigation for the above-referenced project site were delineated by TNT based on the *Corps of Engineers' Wetlands Delineation Manual* (1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic & Gulf Coast Region*. Specifically, this report was prepared to provide baseline data concerning the type and extent of resources that are most likely considered jurisdictional by the U.S. Army Corps of Engineers (USACE) and Virginia Department of Environmental Quality (VDEQ). The delineation entails the gathering of appropriate field data according to the applicable USACE Manuals, field flagging and mapping of approximate wetland and stream boundaries located onsite, preparation of this final report, and a request to the USACE for boundary confirmation and jurisdictional determination of U.S. Waters, including wetlands, identified onsite. Based on the field investigation conducted in June through July 2021 and October 2021 through March 2022, there are potentially jurisdictional Waters of the U.S., including wetlands, located within the study area.

PROJECT SITE DESCRIPTION

The project site consists of an assemblage of parcels of land totaling approximately 253-acres situated along Cedar Lane, south of Courthouse Road and west of Interstate 95 in Stafford County, Virginia (Appendix I: Figure 1- Project Location Map). The project site is further identified by Stafford County Tax Map #s: 29-78 (portion), 29-78A, 29-79 (portion), 38-68 (portion), 38-69 (portion), 38-70, 38-70A, 38-77A, and 38-78. The terrain of the project site consists of gently sloping floodplains as well as moderately steeply sloping hills and is within the Accokeek Creek drainage basin (Appendix I: Figure 2- USGS Topographic Map). The project site is primarily undeveloped forest land with a few rural residential properties, agricultural fields, and several utility easements located throughout the site.

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SECONDARY INFORMATION REVIEW

Secondary information entails the background research and review of recorded data and/or mapping associated with the project site. Resources reviewed include but are not limited to the following:

- U. S. Geological Survey (USGS) Stafford, VA Quadrangle, The National Map (2020)
- U. S. Fish and Wildlife Service (USFWS), National Wetlands Inventory (NWI) Online Mapper, https://www.fws.gov/wetlands/data/mapper.html
- Natural Resources Conservation Service (NRCS), Electronic Field Office Technical Guide, Stafford County Soils, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
- Available aerial photography and GIS data

The USGS Stafford quadrangle map shows elevations of approximately 200-225 feet above mean sea level (MSL) in the northern and portions of the site and approximately 150 feet above MSL in the central portions. As shown on the USGS Map, the project site drains to and contains a portion of Accokeek Creek, located within the Lower Potomac watershed and identified as Hydrologic Unit Code (HUC) 02070011. The NWI map depicts riverine, freshwater pond and freshwater forested/shrub wetland features within the project site boundaries.

The soil survey indicates that the site is underlain primarily by Aura gravelly fine sandy loam (AvB, AvC2, AvD2, AvE2), Aura-Galestown-Sassafras complex (AwD, AwE), Bibb fine sandy loam (Bb), Bladen loam (Bd), Bourne fine sandy loam (BmB), Bourne loam (BoB), Caroline fine sandy loam (CaB2, CaC2, CaD2), Caroline clay loam (CcC3, CcD3), Caroline-Sassafras complex (CdE), Craven loam (CrB), luka fine sandy loam (Iu), Kempsville fine sandy loa, (KfB, KfC2, KfD2), Mecklenburg loam (MkB2, MkC2), Sassafras fine sandy loam (SfA, SfB, SfC2, SfD2, SfE2), Tetotum fine sandy loam (TeA, TeB, TeC2), and Watt silt loam (WgE). Other land types mapped on site include Alluvial land (Ae), Cut and fill land (Cw), Fresh water swamp (Fs), Stony rolling land (StD), and Stony steep land (StE). Alluvial land (Ae), Bibb fine sandy loam (Bb) and Bladen loam (Bd) are classified by the NRCS as predominantly hydric.

FIELD INVESTIGATION & METHODOLOGY

The analysis contained in this report uses the results of a field survey conducted by TNT in June through July 2021 and October 2021 through March 2022. Florescent pink demarcation flags were placed in the field and sequentially numbered to provide an onsite record of the location of wetlands and other Waters subject to the jurisdiction of state and federal agencies. The data sheets used in this investigation are enclosed (see *Appendix III*), along with a photographic log documenting site conditions (*Appendix IV*), and the delineation map showing approximate data point locations and boundaries of potentially jurisdictional wetlands and other Waters (*Appendix V*).

The delineation of wetlands was conducted using the *Corps of Engineers' Wetlands Delineation Manual* (1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic & Gulf Coast Region*. The USACE Manual and associated Regional Supplement follow three parameters for the identification of wetlands: dominance of hydrophytic vegetation, presence of

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hydric soils, and hydrologic indicators. All three parameters must be present under normal conditions for an area to be considered a jurisdictional wetland in accordance with Section 404 of the Clean Water Act. Streams were delineated based on the limits of the ordinary high-water mark (OHWM), which can be determined by several factors. Physical characteristics include, but are not limited to, clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation/scouring; the presence of litter and debris, wrack lines; and other appropriate means such as gauge data, historical records, flood predictions, and statistical analysis.

For the purpose of this report and future permitting needs, wetlands and other Waters are then further classified according to the Cowardin System as described in *Classification of Wetlands and Deepwater Habitats of the United States* (1979).

FINDINGS

Based on our field reconnaissance, TNT has identified and located several wetland systems and other Waters onsite. Wetlands identified on the project site are classified as palustrine forested (PFO), palustrine scrub/shrub (PSS), palustrine emergent (PEM), and palustrine open waters (POW) wetlands. The main source of hydrology for these wetlands is a combination of high groundwater table and floodwaters from Accokeek Creek, which runs throughout the site. The wetlands are underlain primarily by Alluvial land (Ae), Aura-Galestown-Sassafras complex (AwE), Bibb fine sandy loam (Bb), Bladen loam (Bd), and luka fine sandy loam (Iu) soils. Other waters on site include Accokeek Creek and several unnamed perennial, intermittent and ephemeral tributaries. Beaver activity has heavily influenced hydrology and vegetation of the streams and floodplain wetlands onsite.

The summary table of the data sheets characterizing the wetlands is included in Appendix III. Dominant wetland and/or riparian vegetation consists largely of alluvial forest species, listed below in Table 1. The dominant upland vegetation, which consists of a combination of chestnut oak forest, pine-oak-heath, and basic mesic forest communities is listed below in Table 2. The remaining site contains agricultural land and a few rural residential properties, with several utility easements and dirt trail located throughout the site.

Table 1 – Dominant Riparian Buffer and Wetland Vegetation

Scientific Name	Common Name	Wetland Indicator*					
	Trees						
Acer negundo	Box Elder	FAC					
Acer rubrum	Red Maple	FAC					
Betula nigra	River Birch	FACW					
Carpinus caroliniana	Ironwood	FAC					
Celtis occidentalis	Hackberry	FACU					
Fraxinus pennsylvanica	Green Ash	FACW					
Ilex opaca	American Holly	FAC					

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Scientific Name	Common Name	Wetland Indicator*
Juglans nigra	Black Walnut	UPL
Liquidambar styraciflua	Sweetgum	FAC
Liriodendron tulipifera	Tulip Poplar	FACU
Platanus occidentalis	Sycamore	FACW
Salix nigra	Black Willow	OBL
Ulmus americana	American Elm	FAC
	Shrubs and Woody Vines	
Asimina triloba	Pawpaw	FAC
Cornus amomum	Silky Dogwood	FACW
Euonymus americanus	Strawberry Bush	FAC
Lindera benzoin	Spicebush	FACW
Sambucus canadensis	Common Elderberry	UPL**
Toxicodendron radicans	Poison Ivy	FAC
Viburnum acerifolium	Mapleleaf Viburnum	FACU
	Herbaceous	
Arisaema triphyllum	Jack-in-the-Pulpit	FACW
Chasmanthium latifolium	River Oats	FAC
Lonicera japonica	Japanese Honeysuckle	FACU
Microstegium vimineum	Japanese Stiltgrass	FAC
Onoclea sensibilis	Sensitive Fern	FACW
Osmundastrum cinnamomeum	Cinnamon Fern	FACW
Polystichum acrostichoides	Christmas Fern	FACU
Vernonia noveboracensis	New York Ironweed	FACW

^{*} The indicator status of a species indicates the probability that the species will occur in a wetland, as follows: Obligate Upland (UPL, <1%), Facultative Upland (FACU, 1-33%), Facultative (FAC, 34-66%), Facultative Wetland (FACW, 67-99%), and Obligate Wetland (OBL, >99%) in accordance with the National List of Plant Species that Occur in Wetlands: National Summary (2012). **Where the wetland indicator is NI (not indicated), UPL has been assumed for the purpose of calclations.

Table 2 – Dominant Upland Vegetation

Scientific Name	Common Name	Wetland Indicator*					
Trees							
Acer rubrum	Red Maple	FAC					
Carya glabra	Pignut Hickory	FACU					
Carya tomentosa	Mockernut Hickory	UPL**					
Castanea dentata	American Chestnut	UPL**					
Cercis canadensis	Eastern Redbud	UPL					
Cornus florida	Flowering Dogwood	FACU					
Fagus grandifolia	American Beech	FACU					
Liriodendron tulipifera	Tulip Poplar	FACU					
Magnolia acuminata	Cucumber Tree	FACU					

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Scientific Name	Common Name	Wetland Indicator*
Nyssa sylvatica	Black Gum	FAC
Pinus strobus	Eastern White Pine	FACU
Pinus virginiana	Virginia Pine	UPL**
Quercus alba	White Oak	FACU
Quercus montana	Chestnut Oak	UPL
Quercus rubra	Northern Red Oak	FACU
Sassafras albidum	Sassafras	FACU
Tsuga caroliniana	Carolina Hemlock	UPL**
	Shrubs And Woody Vines	
Kalmia latifolia	Mountain Laurel	FACU
Smilax rotundifolia	Common Greenbrier	FAC
Vaccinium pallidum	Lowbush Blueberry	UPL**
	Herbaceous	
Gaultheria procumbens	Wintergreen	FACU
Lonicera japonica	Japanese Honeysuckle	FACU
Medeola virginiana	Indian Cucumber Root	FACU
Polystichum acrostichoides	Christmas Fern	FACU

REGULATORY DISCUSSION

The USACE - Norfolk District and the Virginia Department of Environmental Quality (DEQ) have implemented the State Programmatic General Permit (SPGP) program to streamline the permit process and avoid duplication of agency review. For those projects impacting less than 0.1-acres of non-tidal wetlands and less than 300 linear feet of stream bed a Nationwide permit from the USACE can be obtained for most projects. For those projects impacting greater than 0.1-acres of wetlands and 300-1,500 linear feet of stream bed, a General Permit can be obtained from DEQ. All SPGP permit applications are reviewed by the USACE but the permit authorization comes solely from DEQ. Notification of potential impacts should be filed with DEQ by completing the Joint Permit Application (JPA) form which is submitted to the Virginia Marine Resources Agency (VMRC) and DEQ. Upon receipt the VMRC distributes the JPA to the other resource agencies (USACE, VDEQ, etc.) for review and comment. Compensatory mitigation for unavoidable impacts to non-tidal Waters and wetlands will generally be provided at a ratio of 2:1 for forested wetlands, 1.5:1 for scrub/shrub wetlands, 1:1 for emergent wetlands, and a site-specific ratio based on the Unified Stream Methodology assessment for streams. Mitigation can include: the purchase or use of mitigation bank credits; wetland preservation; preservation of upland buffers; and in-lieu-fee contribution to the Virginia Aquatic Resources Trust Fund.

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PROCEEDINGS

With your authorization, we will contact the USACE to schedule a field meeting to conduct a wetlands and Waters boundary confirmation and jurisdictional determination. This process takes an average of six to eight weeks depending on the availability of USACE personnel. Once we have determined potential impacts we can assist you with permitting options and support to complete the process. In the interim, we recommend further review of state and federal agency records pertaining to Section 7 (Federal Endangered Species Act) and Section 106 (National Historic Preservation Act). These reviews will generally be required to verify compliance for either the Nationwide Permit (NWP) or General Permit conditions.

TNT would like to thank you for the opportunity to provide you with this wetland delineation. We look forward to assisting you further with this project and other environmental concerns you may have. If you have any questions, please feel free to contact us at any time at (703) 466-5123.

Sincerely,

TNT ENVIRONMENTAL, INC.

Jillian S. Moore, PWD, PWS, ISA-CA

Senior Wetland Scientist

Jillian@TNTenv.com

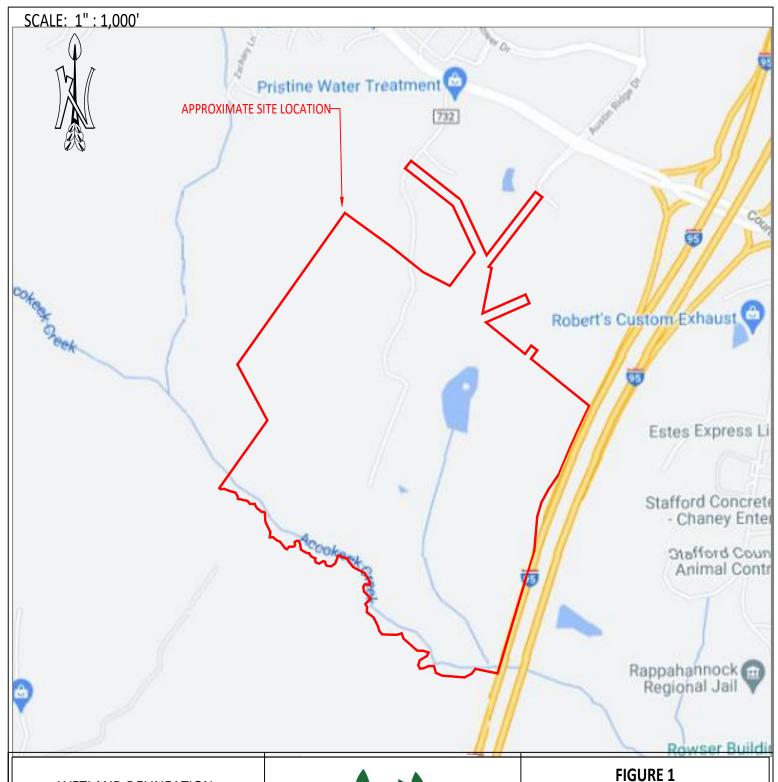
Avi M. Sareen, PWD, ISA-CA

Principal/President

Avi@TNTenv.com

APPENDIX I

VICINITY MAP & USGS TOPOGRAPHIC MAP



WETLAND DELINEATION **REPORT**

GW VILLAGE INDUSTRIAL PROPERTIES

STAFFORD COUNTY, VA

MARCH 2022

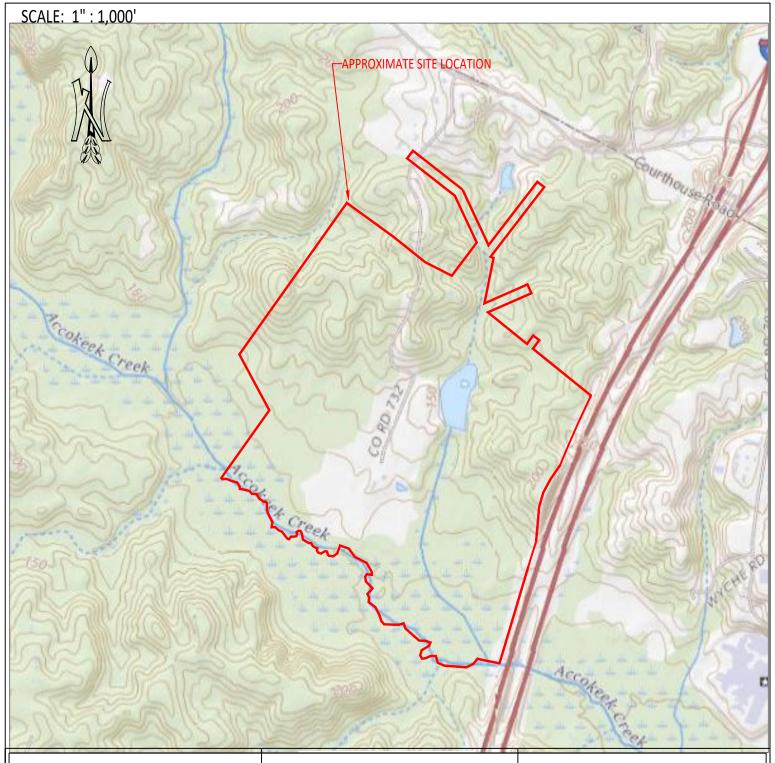


4455 BROOKFIELD CORPORATE DRIVE, **SUITE 100 CHANTILLY, VIRGINIA 20151**

SITE LOCATION MAP

SOURCE: GOOGLE MAPS

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WETLAND DELINEATION REPORT

GW VILLAGE INDUSTRIAL PROPERTIES

STAFFORD COUNTY, VA

MARCH 2022



4455 BROOKFIELD CORPORATE DRIVE, SUITE 100 CHANTILLY, VIRGINIA 20151

FIGURE 2

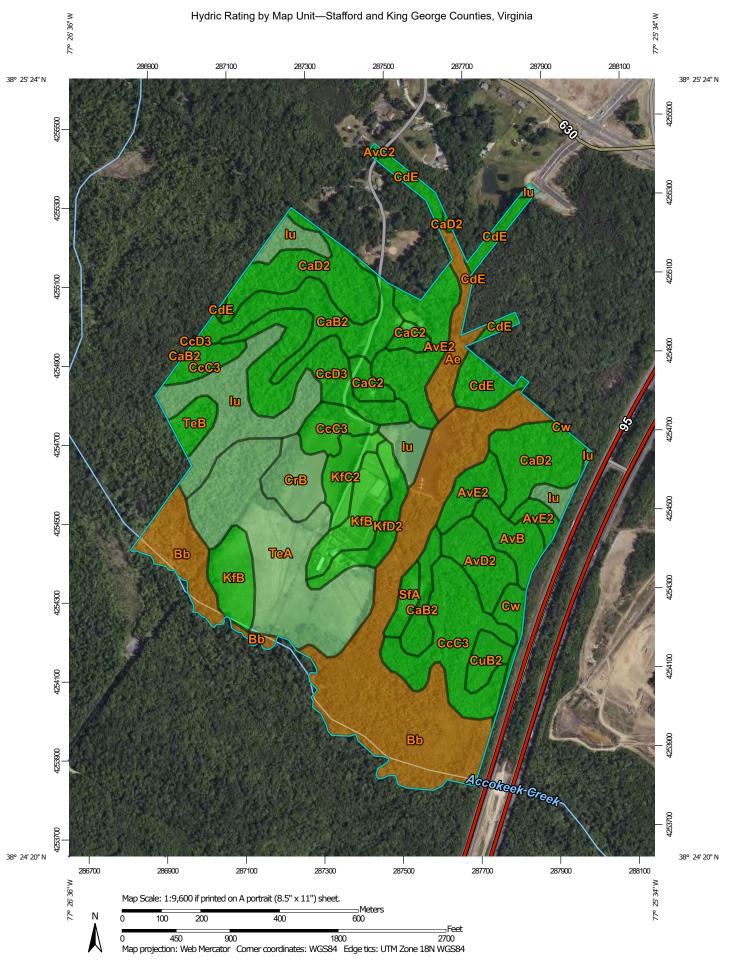
STAFFORD, VA USGS TOPOGRAPHIC MAP

SOURCE: USGS THE NATIONAL MAP (2020)

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APPENDIX II

NATIONAL WETLAND INVENTORY MAP & NRCS SOILS MAP



MAP LEGEND

Area of Interest (AOI) Transportation Area of Interest (AOI) Rails Soils Interstate Highways **Soil Rating Polygons** US Routes Hydric (100%) Major Roads Hydric (66 to 99%) Local Roads \sim Hydric (33 to 65%) Background Hydric (1 to 32%) Aerial Photography Not Hydric (0%) Not rated or not available Soil Rating Lines Hydric (100%) Hydric (66 to 99%) Hydric (33 to 65%) Hydric (1 to 32%) Not Hydric (0%) Not rated or not available **Soil Rating Points** Hydric (100%) Hydric (66 to 99%) Hydric (33 to 65%) Hydric (1 to 32%) Not Hydric (0%) Not rated or not available **Water Features** Streams and Canals

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15.800.

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: Stafford and King George Counties, Virginia

Survey Area Data: Version 17, Sep 16, 2021

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

Date(s) aerial images were photographed: May 9, 2021—Aug 15, 2021

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.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ae	Alluvial land, wet	85	5.5	2.2%
AvB	Aura gravelly fine sandy loam, 2 to 6 percent slopes	0	4.7	1.9%
AvC2	Aura gravelly fine sandy loam, 6 to 10 percent slopes, eroded	0	0.2	0.1%
AvD2	Aura gravelly fine sandy loam, 10 to 18 percent slopes, eroded	0	6.0	2.4%
AvE2	Aura gravelly fine sandy loam, 18 to 35 percent slopes, eroded	0	15.9	6.3%
Bb	Bibb fine sandy loam, 0 to 4 percent slopes	93	51.2	20.4%
CaB2	Caroline fine sandy loam, 2 to 6 percent slopes, eroded	0	14.8	5.9%
CaC2	Caroline fine sandy loam, 6 to 10 percent slopes, eroded	0	3.5	1.4%
CaD2	Caroline fine sandy loam, 10 to 18 percent slopes, eroded	0	19.9	7.9%
CcC3	Caroline clay loam, 6 to 10 percent slopes, severely eroded	0	21.5	8.5%
CcD3	Caroline clay loam, 10 to 18 percent slopes, severely eroded	0	12.7	5.1%
CdE	Caroline-Sassafras complex, 15 to 30 percent slopes	0	8.0	3.2%
CrB	Craven loam, 2 to 6 percent slopes	3	5.8	2.3%
CuB2	Cullen loam, 2 to 6 percent slopes, eroded	0	2.7	1.1%
Cw	Cut and fill land	0	2.2	0.9%
lu	luka fine sandy loam, local alluvium, 0 to 4 percent slopes	8	21.2	8.4%
KfB	Kempsville fine sandy loam, gravelly substratum, 2 to 6 percent slopes	0	12.2	4.9%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
KfC2	Kempsville fine sandy loam, gravelly substratum, 6 to 10 percent slopes, eroded	0	4.4	1.7%
KfD2	Kempsville fine sandy loam, gravelly substratum, 10 to 18 percent slopes, eroded	0	5.1	2.0%
SfA	Sassafras fine sandy loam, 0 to 2 percent slopes	0	2.1	0.8%
ТеА	Tetotum fine sandy loam, 0 to 2 percent slopes	9	29.1	11.6%
TeB	Tetotum fine sandy loam, 2 to 6 percent slopes	0	2.7	1.1%
Totals for Area of Inter	rest		251.4	100.0%

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.



Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

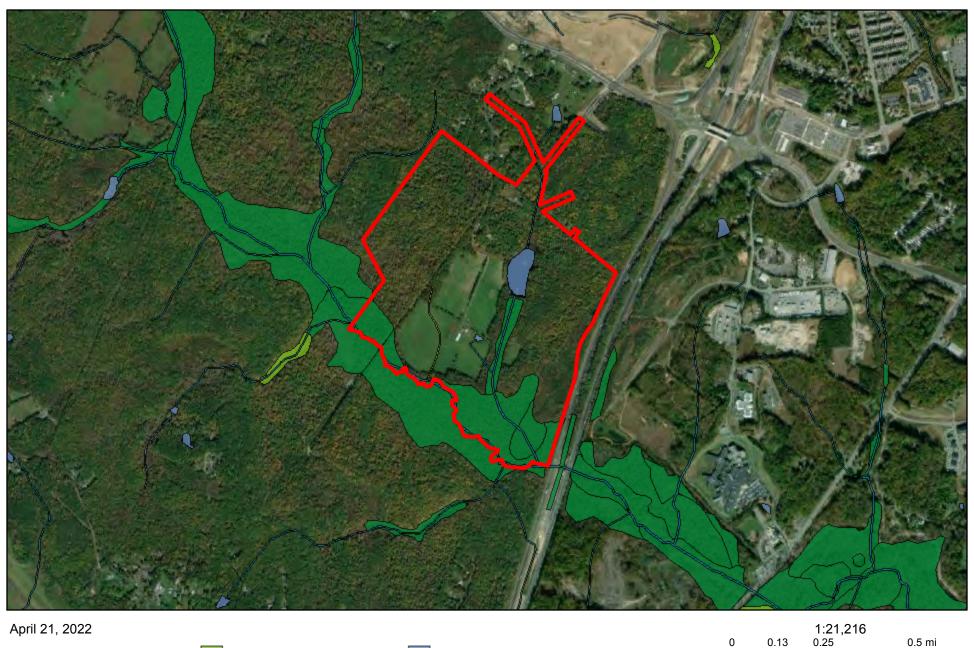
Rating Options

Aggregation Method: Percent Present

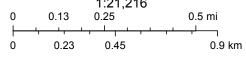
Component Percent Cutoff: None Specified

Tie-break Rule: Lower

National Wetlands Inventory







Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE,

APPENDIX III

WETLAND DATA SHEETS

Data Point	Hydrophytic Vegetation	Hydric Soils	Hydrology	Classification	Associated Photograph
DP-969	No	Yes	No	Non-Wetland	1
DP-970	Yes	Yes	Yes	PEM Wetland	2
DP-971	Yes	Yes	Yes	PFO Wetland	3
DP-972	No	No	No	Non-Wetland	4
DP-973	Yes	No	No	Non-Wetland	5
DP-974	Yes	Yes	Yes	PFO Wetland	6
DP-975	No	No	No	Non-Wetland	7
DP-976	No	No	No	Non-Wetland	8
DP-977	Yes	Yes	Yes	PFO Wetland	9
DP-978	No	No	No	Non-Wetland	10
DP-979	No	No	No	Non-Wetland	11
DP-980	Yes	Yes	Yes	PFO Wetland	12
DP-981	No	No	No	Non-Wetland	13
DP-982	Yes	Yes	Yes	PFO Wetland	14
DP-983	No	No	No	Non-Wetland	15
DP-984	No	No	No	Non-Wetland	16
DP-985	No	No	No	Non-Wetland	17
DP-ZZ25	No	No	No	Non-Wetland	18
DP-ZZ26	Yes	Yes	Yes	PFO Wetland	19
DP-ZZ27	No	No	No	Non-Wetland	20
DP-ZZ28	Yes	Yes	Yes	PFO Wetland	21
DP-ZZ29	No	Yes	No	Non-Wetland	22
DP-ZZ30	Yes	No	Yes	Non-Wetland	23
DP-ZZ31	Yes	Yes	Yes	PEM Wetland	24
DP-ZZ32	Yes	No	Yes	Non-Wetland	25
DP-ZZ33	Yes	Yes	Yes	PFO Wetland	26
DP-ZZ34	Yes	No	No	Non-Wetland	27
DP-ZZ35	Yes	Yes	Yes	PFO Wetland	28
DP-TP1	Yes Yes	Yes	No	Non-Wetland	29
DP-TP2		No Yes	No Yes	Non-Wetland PFO Wetland	30 31
DP-MM1	Yes No	No	No	Non-Wetland	32
DP-MM2	No				33
DP-MM3	Yes	No Yes	No Yes	Non-Wetland PFO Wetland	33 34
DP-MM4	Yes	No	No	Non-Wetland	35
DP-MM5	Yes	Yes	Yes	PFO Wetland	36
DP-MM6	Yes	No	No	Non-Wetland	37
DP-MM7	No	No	No	Non-Wetland	38
DP-MM8	Yes	Yes	Yes	PFO Wetland	39
DP-TP3	No	No	No	Non-Wetland	40
DP-TP4	Yes	Yes	Yes	PFO Wetland	40
DP-TP5	No	No	No	Non-Wetland	42
DP-TP6	Yes	No	No	Non-Wetland	42
DP-TP7	No	Yes	No	Non-Wetland	43 44
DP-TP8	INU	162	INO	NOH-WELIAND	44

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: G.W. Village Commercial	City/County: Staffo	ord County	Sampling Date: 2021-07-20	
•		State: Virginia	· -	
Investigator(s): TNT Environmental- S. Swartzendruber, T. Payne				
Landform (hillslope, terrace, etc.): Upland	•	-	Slone (%):	
Subregion (LRR or MLRA): P 133A Lat: 38.41	•	, -		
		NWI classific		
Are climatic / hydrologic conditions on the site typical for this time of ye				
Are Vegetation, Soil, or Hydrology significantly				
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If	needed, explain any answer	rs in Remarks.)	
SUMMARY OF FINDINGS - Attach site map showing	sampling poin	t locations, transects	, important features, etc.	
Hydrophytic Vegetation Present? Yes	Is the Sampl within a Wet	ed Area land? Yes	No <u> </u>	
Remarks:		. 0010		
This data point is not within a wetland. Take	en outside of	GO16.		
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil		
Surface Water (A1) Aquatic Fauna (B1)	3)	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2) Marl Deposits (B15		Drainage Pat		
Saturation (A3) Hydrogen Sulfide C		Moss Trim Li		
Water Marks (B1) Oxidized Rhizospho			Water Table (C2)	
Sediment Deposits (B2) Presence of Reduc	ed Iron (C4)	Crayfish Burr		
Drift Deposits (B3) Recent Iron Reduct			sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4) Thin Muck Surface		Geomorphic	Position (D2)	
Iron Deposits (B5) Other (Explain in R		Shallow Aqui		
Inundation Vis ble on Aerial Imagery (B7)	,	FAC-Neutral		
Water-Stained Leaves (B9)			noss (D8) (LRR T, U)	
Field Observations:				
Surface Water Present? Yes No Depth (inches)):			
Water Table Present? Yes No Depth (inches)):			
Saturation Present? Yes No Depth (inches)): \ \	Wetland Hydrology Presen	t? Yes No	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	ns previous inspection	ons) if available		
Describe recorded Data (stream gauge, monitoring well, actial prote	os, previous mapeene	maj, ii avaliabic.		
Remarks:				
Wetland hydrology was not observed at thi	s location.			

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: DP-969

= 20 to 20 ft r		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2.				Total Number of Dominant
3.				Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 33.3 (A/B)
6				Prevalence Index worksheet:
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:		OBL species $0 \times 1 = 0$
Sapling Stratum (Plot size: 30 ft r)				FACW species 0 x 2 = 0
1				FAC species 20
2				FACU species 45 x 4 = 180
3				17100 oposico X 1
4				
5				Column Totals: <u>65</u> (A) <u>240</u> (B)
6				Prevalence Index = B/A = 3.69
		= Total Cov		Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
		= Total Cov	er	Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).
1 Solanum carolinense	25	~	FACU	Sapling – Woody plants, excluding woody vines,
2. Andropogon virginicus	20		FAC	approximately 20 ft (6 m) or more in height and less
3. Sorghum halepense	20	~	FACU	than 3 in. (7.6 cm) DBH.
4.	·			Shrub – Woody plants, excluding woody vines,
5.				approximately 3 to 20 ft (1 to 6 m) in height.
6				Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, and woody
8.				plants, except woody vines, less than approximately 3 ft (1 m) in height.
9				3 it (1 iii) iii neight.
10				Woody vine – All woody vines, regardless of height.
11				
· · · · · · · · · · · · · · · · · · ·	0 = 0/	= Total Cov		
50% of total cover: 32.5				
	20% 01	total cover.		
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes No
50% of total cover:	20% of	total cover:		i i cociit: 1 co NO
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: DP-969

Depth	Matrix	0/		dox Feature			- .	5
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹		<u>Texture</u>	Remarks
0 - 12	10YR 5/2	80	7.5YR 5/8	20	<u> </u>	_ <u>M</u>		
-								
-			_					
				_	-			
			-				·	
-	·		-				·	
Type: C=Co	oncentration, D=De	epletion, RM	I=Reduced Matrix, I	ИS=Maske	d Sand G	rains.	² Location: PL=	=Pore Lining, M=Matrix.
lydric Soil	ndicators: (Appl	icable to al	I LRRs, unless oth	erwise no	ted.)		Indicators for	Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue E				J) 1 cm Muck	(A9) (LRR O)
	pipedon (A2)		Thin Dark S					(A10) (LRR S)
Black Hi			Loamy Mud	-		R O)		/ertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gle	-	(F2)		· · · · · · · · · · · · · · · · · · ·	Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)	D T 11\	<u>✓</u> Depleted M		E6)			s Bright Loamy Soils (F20)
	Bodies (A6) (LRR cky Mineral (A7) (Redox Dari	`	,		(MLRA 1	nt Material (TF2)
	esence (A8) (LRR		Redox Dep					ow Dark Surface (TF12)
	ick (A9) (LRR P, T		Marl (F10)		0)			plain in Remarks)
	Below Dark Surfa	-	Depleted C		(MLRA	151)		,
	ark Surface (A12)		Iron-Manga	nese Mas	ses (F12)	(LRR O, P,	T) ³ Indicator	rs of hydrophytic vegetation and
Coast Pi	rairie Redox (A16)	(MLRA 150	A) Umbric Sur	face (F13)	(LRR P,	T, U)	wetland	hydrology must be present,
-	lucky Mineral (S1)	(LRR O, S)						disturbed or problematic.
	Sleyed Matrix (S4)		Reduced V					
-	ledox (S5)		Piedmont F					op)
	Matrix (S6)	C T II)	Anomalous	Bright Loa	amy Soils	(F20) (MLF	RA 149A, 153C, 15	3D)
	rface (S7) (LRR P, _ayer (if observed							
	Layer (II observed	4).						
Type:	ahaa):						Hudria Cail Dra	esent? Yes V No No
Depth (inc	ines).						Hydric Soil Pre	sent? Yes V No No
Н	ydric soll w	as obse	erved at this	locatio	on.			

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: G.W. Village Commercial	City/County: Staffor	rd County	Sampling Date: 2021-07-20			
Applicant/Owner: North Point Development		State: Virginia	· · · ·			
Investigator(s): TNT Environmental- S. Swartzendruber, T. Payne Section, Township, Range:						
Landform (hillslope, terrace, etc.): Depression						
Subregion (LRR or MLRA): P 133A Lat: 38.						
		NWI classification				
Are climatic / hydrologic conditions on the site typical for this time of						
Are Vegetation, Soil, or Hydrology significan						
Are Vegetation, Soil, or Hydrology naturally	problematic? (If i	needed, explain any answer	rs in Remarks.)			
SUMMARY OF FINDINGS - Attach site map showing	ng sampling point	locations, transects	, important features, etc.			
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No No No No No No No N	is the campie	_				
Hydric Soil Present? Yes V No Wetland Hydrology Present? Yes No	within a Wetl	and? Yes	No			
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:		·	tors (minimum of two required)			
Primary Indicators (minimum of one is required; check all that appl	•	Surface Soil (, ,			
Surface Water (A1) Aquatic Fauna (I			etated Concave Surface (B8)			
High Water Table (A2) Marl Deposits (B		<u>✓</u> Drainage Pat				
Saturation (A3) Hydrogen Sulfid		Moss Trim Li				
	pheres along Living Roo	ots (C3) Dry-season (Crayfish Burr	Vater Table (C2)			
	luction in Tilled Soils (C6		sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Thin Muck Surfa		Geomorphic				
Iron Deposits (B5) Other (Explain in		Shallow Aqui				
Inundation Vis ble on Aerial Imagery (B7)	· · · · · · · · · · · · · · · · · · ·	FAC-Neutral				
Water-Stained Leaves (B9)			oss (D8) (LRR T, U)			
Field Observations:						
Surface Water Present? Yes No Depth (inch	es):					
Water Table Present? Yes No Depth (inch	es):					
Saturation Present? Yes No Depth (inch	es): v	Vetland Hydrology Presen	t? Yes <u>'</u> No			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos previous inspection	ns) if available:				
Describe Necorded Data (stream gauge, monitoring well, aerial pri	otos, previous inspection	ns), ii avallable.				
Remarks:						
Mottonal budgets and the control of the control	1					
Wetland hydrology was observed at this l	ocation.					

		Dominant		Dominance Test worksheet:		
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species		
1				That Are OBL, FACW, or FAC: 2 (A)		
2				Total Number of Dominant		
3				Species Across All Strata: 2 (B)		
4				Percent of Dominant Species		
5				That Are OBL, FACW, or FAC: 100 (A/B)		
6				Providence in Leasured about		
		= Total Cov	er	Prevalence Index worksheet:		
50% of total cover:	20% of	total cover:		Total % Cover of: Multiply by: OBL species 75 x 1 = 75		
Sapling Stratum (Plot size: 30 ft r)				X 1		
1				FACW species $\frac{0}{2}$ $\times 2 = \frac{0}{2}$		
2				FAC species $\frac{0}{45}$ x 3 = $\frac{0}{00}$		
3.				FACU species 15 x 4 = 60		
4.				UPL species <u>0</u> x 5 = <u>0</u>		
5.				Column Totals: 90 (A) 135 (B)		
6				5 1 1 50 15		
o		= Total Cov		Prevalence Index = B/A = 1.5		
EOO/ of total covery				Hydrophytic Vegetation Indicators:		
50% of total cover: Shrub Stratum (Plot size: 30 ft r)	20% 01	lotal cover.		✓ 1 - Rapid Test for Hydrophytic Vegetation		
				✓ 2 - Dominance Test is >50%		
1				3 - Prevalence Index is ≤3.0 ¹		
2				Problematic Hydrophytic Vegetation ¹ (Explain)		
3						
4				¹ Indicators of hydric soil and wetland hydrology must		
5				be present, unless disturbed or problematic.		
6				Definitions of Five Vegetation Strata:		
		= Total Cov	er	Tree – Woody plants, excluding woody vines,		
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in.		
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).		
1. Juncus effusus	50		OBL	Sapling – Woody plants, excluding woody vines,		
2. Carex lurida	25		OBL	approximately 20 ft (6 m) or more in height and less		
3. Solanum carolinense	15		FACU	than 3 in. (7.6 cm) DBH.		
4				Shrub – Woody plants, excluding woody vines,		
5				approximately 3 to 20 ft (1 to 6 m) in height.		
6				Herb – All herbaceous (non-woody) plants, including		
7.				herbaceous vines, regardless of size, and woody		
8.				plants, except woody vines, less than approximately 3 ft (1 m) in height.		
9.				o it (1 m) in neight.		
10.				Woody vine – All woody vines, regardless of height.		
11.						
	90%	= Total Cov				
50% of total cover: 45.0	$\overline{}$					
00.6	20% 01	lotal cover.				
1						
2						
3						
4						
5				Hydrophytic		
		= Total Cov	er	Vegetation Present? Yes No		
50% of total cover:	20% of	total cover:	Present? Yes No			
Remarks: (If observed, list morphological adaptations belo	w).					

Dominant hydrophytic vegetation was observed at this location.

SOIL Sampling Point: DP-970

Depth	Matrix			. 2	- .	5 .		
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type ¹		Texture	Remarks
0 - 12	10YR 5/2	60	7.5YR 5/8	40	<u> </u>	<u>M</u>		
-								
-								
-			_					
					-			
			-					
-								
Type: C=C	oncentration, D=De	epletion, RM	I=Reduced Matrix, I	MS=Maske	d Sand G	rains.	² Location: PL:	=Pore Lining, M=Matrix.
lydric Soil	ndicators: (Appl	icable to al	I LRRs, unless oth	erwise no	ted.)		Indicators for	Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue E				J) 1 cm Muck	(A9) (LRR O)
	pipedon (A2)		Thin Dark S					(A10) (LRR S)
	stic (A3)		Loamy Mud	-		R O)		/ertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gle	-	(F2)			Floodplain Soils (F19) (LRR P, S, T)
	l Layers (A5)	D T 11\	<u>✓</u> Depleted M		E6)			s Bright Loamy Soils (F20)
	Bodies (A6) (LRR cky Mineral (A7) (Redox Darl Depleted D	`	,		(MLRA 1	nt Material (TF2)
	esence (A8) (LRR		Redox Dep					ow Dark Surface (TF12)
	ick (A9) (LRR P, T		Marl (F10)		0)			plain in Remarks)
	Below Dark Surfa	-	Depleted C		(MLRA	151)		,
	ark Surface (A12)		Iron-Manga	anese Mas	ses (F12)	(LRR O, P,	T) ³ Indicator	rs of hydrophytic vegetation and
Coast P	rairie Redox (A16)	(MLRA 150	A) Umbric Sur	face (F13)	(LRR P,	T, U)	wetland	hydrology must be present,
-	lucky Mineral (S1)	(LRR O, S)						disturbed or problematic.
-	Sleyed Matrix (S4)		Reduced V					
-	ledox (S5)		Piedmont F					op)
	Matrix (S6)	C T II)	Anomalous	Bright Loa	amy Soils	(F20) (MLR	RA 149A, 153C, 15	3D)
	rface (S7) (LRR P _ayer (if observed						<u> </u>	
	Layer (II Observed	4).						
Type:	abaa):						Uvdria Cail Dra	esent? Yes V No No
Depth (in- Remarks:	ines).						Hydric Soil Pre	sent? Yes V No No
Н	yarıc soli w	as obse	erved at this	locatio	on.			

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

	County: Stafford County Sampling Date: 2021-07-20
Applicant/Owner: North Point Development	State: Virginia Sampling Point: DP-971
Investigator(s): TNT Environmental- S. Swartzendruber, T. Payne Sec	· -
Landform (hillslope, terrace, etc.): Depression	
, , ,	,
	266 Long: -77.4367882 Datum: WGS 84
Soil Map Unit Name: <u>CrB - Craven Ioam</u>	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distr	urbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally probler	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes V	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks: This data point is within a wetland. Taken insi	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (Li	
Saturation (A3) Hydrogen Sulfide Odor	
Water Marks (B1) Oxidized Rhizospheres Sediment Deposits (B2) Presence of Reduced II	
■ Utilit Denosits (B3) Recent Iron Reduction	
✓ Drift Deposits (B3) Recent Iron Reduction Algal Mat or Crust (B4) Thin Muck Surface (C7	
Algal Mat or Crust (B4) Thin Muck Surface (C7	Geomorphic Position (D2)
	Geomorphic Position (D2)
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema) Geomorphic Position (D2) rks) Shallow Aquitard (D3)
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations:	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches):	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):) Geomorphic Position (D2) rks) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present?) Geomorphic Position (D2) rks) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes No
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes No
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes No
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents): Remarks:	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes V No revious inspections), if available:
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents)	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes V No revious inspections), if available:
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents): Remarks:	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes V No revious inspections), if available:
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents): Remarks:	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes V No revious inspections), if available:
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents): Remarks:	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes V No revious inspections), if available:
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents:	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes V No revious inspections), if available:
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents:	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes V No revious inspections), if available:
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents:	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes V No revious inspections), if available:
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents:	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes V No revious inspections), if available:
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema Inundation Vis ble on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents:	Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes V No revious inspections), if available:

20.ft r		Dominant		Dominance Test worksheet:				
Tree Stratum (Plot size: 30 ft r)	% Cover 40	Species? ✓	Status FAC	Number of Dominant Species				
1. Liquidambar styraciflua				That Are OBL, FACW, or FAC: 3 (A)				
2. Ilex opaca	15		FAC	Total Number of Dominant				
3. Juniperus virginiana	10		FACU	Species Across All Strata: 4 (B)				
4				Percent of Dominant Species				
5				That Are OBL, FACW, or FAC: 75 (A/B)				
6				Prevalence Index worksheet:				
		= Total Cov						
50% of total cover: <u>32.5</u>	20% of	total cover:	13.0					
Sapling Stratum (Plot size: 30 ft r)				OBL species $\frac{0}{70}$ $x = \frac{0}{140}$				
1				17.011 species X2				
2				1 Ao species x o =				
3				FACU species $\frac{15}{9}$ $\times 4 = \frac{60}{9}$				
4				UPL species $0 \times 5 = 0$				
5.				Column Totals: <u>140</u> (A) <u>365</u> (B)				
6.				Prevalence Index = B/A = 2.61				
		= Total Cov	er	Hydrophytic Vegetation Indicators:				
50% of total cover:	20% of	total cover:		1 - Rapid Test for Hydrophytic Vegetation				
Shrub Stratum (Plot size: 30 ft r)				✓ 2 - Dominance Test is >50%				
1. Rosa multiflora	5		FACU	✓ 3 - Prevalence Index is ≤3.0 ¹				
2				Problematic Hydrophytic Vegetation¹ (Explain)				
3.				Problematic Hydrophytic Vegetation (Explain)				
4.				The disease of booking and conditioned booking or the				
5.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
6.				Definitions of Five Vegetation Strata:				
0	5%	Total Cov		Definitions of tive vegetation strata.				
50% of total cover: 2.5				Tree – Woody plants, excluding woody vines,				
·	20% 01	total cover:		approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).				
Herb Stratum (Plot size: 30 ft r) 1 Carex squarrosa	70	~	FACW					
··· 			TACV	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less				
2				than 3 in. (7.6 cm) DBH.				
3				, , , ,				
4				Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.				
5								
6				Herb – All herbaceous (non-woody) plants, including				
7				herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately				
8				3 ft (1 m) in height.				
9				Manufactura Allemande education a manufactura of lectural				
10				Woody vine – All woody vines, regardless of height.				
11								
	70%	= Total Cov	er					
50% of total cover: 35.0								
Woody Vine Stratum (Plot size: 30 ft r)								
1								
2								
3								
4								
5				Hydrophytic				
		= Total Cov		Vegetation Present? Yes No				
50% of total cover:		total cover:		100				
Remarks: (If observed, list morphological adaptations belo	w).							
Dominant wetland hydrology was ob	served.							

SOIL Sampling Point: DP-971

Profile Desc	ription: (Describe	to the dep	oth needed to docu	ment the	indicator	or confirn	n the absence of	indicators.)	
Depth	Matrix			ox Feature	1				
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	Texture	Remarks	
0 - 12	10YR 5/2	80	10YR 5/8	20	<u>C</u>	M	Silt Loam		
-									
									_
					_				_
	-		-			·			_
									_
					_				
¹ Type: C=Co	oncentration, D=Dep	oletion, RM	=Reduced Matrix, M	S=Maske	d Sand G	rains.	² Location: Pl	L=Pore Lining, M=Mat	rix.
Hydric Soil I	ndicators: (Applic	cable to all	LRRs, unless other	rwise no	ted.)		Indicators fo	r Problematic Hydric	Soils ³ :
Histosol	(A1)		Polyvalue B	elow Surfa	ace (S8) (I	LRR S, T, l	J) 1 cm Mud	ck (A9) (LRR O)	
	pipedon (A2)		Thin Dark S					ck (A10) (LRR S)	
Black Hi			Loamy Mucl			₹ 0)		Vertic (F18) (outside	
	n Sulfide (A4)		Loamy Gley		(F2)			t Floodplain Soils (F19	
	l Layers (A5) Bodies (A6) (LRR F	D T 11\	✓ Depleted Ma Redox Dark		F6)		Anomaio	us Bright Loamy Soils	(F20)
	cky Mineral (A7) (L			,	,			ent Material (TF2)	
	esence (A8) (LRR I		Redox Depr					llow Dark Surface (TF	12)
1 cm Mu	ck (A9) (LRR P, T)		Marl (F10) (LRR U)			Other (E)	kplain in Remarks)	
	Below Dark Surfac	ce (A11)	Depleted Oc				2		
	ark Surface (A12)		Iron-Mangar				•	ors of hydrophytic veg	
	airie Redox (A16) (lucky Mineral (S1) (A) Umbric SurfDelta Ochric					nd hydrology must be p s disturbed or problem	
	ileyed Matrix (S4)	LKK (), (3)	Reduced Ve					s disturbed or problem	alic.
	edox (S5)		Piedmont FI						
-	Matrix (S6)						, RA 149A, 153C, 1	53D)	
Dark Su	face (S7) (LRR P,	S, T, U)							
Restrictive I	_ayer (if observed)	:							
Type:									
Depth (inc	ches):						Hydric Soil Pr	resent? Yes	No
Remarks:									
Н	ydric soil wa	is obse	rved at this	location	on.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: G.W. Village Commercial	City/County: Staf	ford County	Sampling Date: 2021-07-20			
Applicant/Owner: North Point Development		State: Virginia				
Investigator(s): TNT Environmental- S. Swartzendruber,			. 0			
Landform (hillslope, terrace, etc.): Upland	·	-	Slope (%):			
Subregion (LRR or MLRA): P 133A L						
Soil Map Unit Name: CrB - Craven loam		NWI classific				
Are climatic / hydrologic conditions on the site typical for thi						
Are Vegetation, Soil, or Hydrologys	•					
Are Vegetation, Soil, or Hydrology r		(If needed, explain any answe				
SUMMARY OF FINDINGS – Attach site map	•		,			
SOMMANT OF THE HINGS - Attach site map		The locations, transects	, important reatures, etc.			
Hydrophytic Vegetation Present? Yes N	lo Is the Sam	pled Area				
Hydric Soil Present? Yes N	lo within a W		No <u> </u>			
Wetland Hydrology Present? Yes N Remarks:	0					
HYDROLOGY						
Wetland Hydrology Indicators:	the state of the A		ators (minimum of two required)			
Primary Indicators (minimum of one is required; check all			Surface Soil Cracks (B6)			
	Fauna (B13)		Sparsely Vegetated Concave Surface (B8)			
	eposits (B15) (LRR U) en Sulfide Odor (C1)		Drainage Patterns (B10) Moss Trim Lines (B16)			
1	d Rhizospheres along Living F		Moss Trim Lines (B16) (C3) Dry-Season Water Table (C2)			
	ce of Reduced Iron (C4)		Crayfish Burrows (C8)			
	Iron Reduction in Tilled Soils (
	uck Surface (C7)	Geomorphic Position (D2)				
Iron Deposits (B5) Other (B	Explain in Remarks)	Shallow Aqu	itard (D3)			
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral Test (D5)				
Water-Stained Leaves (B9)		Sphagnum n	noss (D8) (LRR T, U)			
Field Observations:	nath (in ale a a).					
	pth (inches): pth (inches):					
	pth (inches):	Wetland Hydrology Preser	nt? Yes No			
(includes capillary fringe)		, oj	it? res No			
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspec	tions), if available:				
Remarks:						
Remarks.						
Wetland hydrology was not observe	d at this location.					

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: DP-972

Remarks: (If observed, list morphological adaptations below	ow).			
50% of total cover: 5.0	20% of	total cover	<u>2.0</u>	Present? Yes No
		= Total Cov		Vegetation
5	400′			Hydrophytic
4				
3				
2.				
1. Smilax rotundifolia	10		FAC	
Woody Vine Stratum (Plot size: 30 ft r)				
50% of total cover:	20% of	total cover	·:	
	:	= Total Cov	ver	
11				
10	· .——			, 13, 13, 13, 13, 13, 13, 13, 13, 13, 13
9				Woody vine – All woody vines, regardless of height.
8				3 ft (1 m) in height.
7				plants, except woody vines, less than approximately
7				herbaceous vines, regardless of size, and woody
6				Herb – All herbaceous (non-woody) plants, including
5.				approximately 3 to 20 ft (1 to 6 m) in height.
4				Shrub – Woody plants, excluding woody vines,
3				than 3 in. (7.6 cm) DBH.
2				approximately 20 ft (6 m) or more in height and less
1				Sapling – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30 ft r)				(7.5 Girl) Or larger in diameter at breast neight (DDH).
50% of total cover:	20% 0f	lotal cover	•	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
E00/ of total cover				Tree – Woody plants, excluding woody vines,
		= Total Cov		
6.				Definitions of Five Vegetation Strata:
5				be present, unless disturbed or problematic.
4				¹ Indicators of hydric soil and wetland hydrology must
3				
2				Problematic Hydrophytic Vegetation ¹ (Explain)
1				3 - Prevalence Index is ≤3.0 ¹
				2 - Dominance Test is >50%
20.64	20 % 01	iolai COVEI		1 - Rapid Test for Hydrophytic Vegetation
50% of total cover:				Hydrophytic Vegetation Indicators:
		= Total Cov	ver	
6.				Prevalence Index = B/A = 3.75
5				Column Totals: <u>80</u> (A) <u>300</u> (B
4				UPL species 0 $x = 0$
3				
2				I ===
1				FAC species 20 x 3 = 60
Sapling Stratum (Plot size: 30 ft r)				FACW species $0 \times 2 = 0$
50% of total cover: <u>35.0</u>	20% of	total cover	14.0	OBL species 0 x 1 = 0
F00/ - £4-4-1				Total % Cover of: Multiply by:
v	70%	= Total Cov	·····	Prevalence Index worksheet:
5 6				That Are OBL, FACW, or FAC: 50 (A/E
				Percent of Dominant Species That Are OBL_FACW_or FAC: 50 (A/F
4.				
3.				Total Number of Dominant Species Across All Strata: 2 (B)
2. Ilex opaca	10		FAC	
1. Fagus grandifolia	60		FACU	That Are OBL, FACW, or FAC: 1 (A)
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
	Absolute	Dominant	Indicator	Dominance Test worksheet:

Dominant hydrophytic vegetation was not observed at this location.

SOIL Sampling Point: DP-972

Profile Desc	ription: (Describe	e to the depth	n needed to docu	ment the ir	ndicator	or confirm	the absence	of indicato	rs.)	
Depth	Matrix			ox Features						
(inches)	Color (moist)	<u></u> %	Color (moist)	%	Type'	Loc ²	<u>Texture</u>		Remarks	
0 - 12	7.5YR 4/4	100					Silt Loam			
-										
_										
l ——										
_										
										<u> </u>
l — -	-									
¹ Type: C=C	oncentration, D=De	pletion, RM=F	Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location:	PL=Pore Li	ning, M=Matr	ix.
Hydric Soil	Indicators: (Appli	cable to all L	RRs, unless othe	rwise note	d.)		Indicators	for Probler	natic Hydric	Soils ³ :
Histosol	(A1)		Polyvalue B	elow Surfac	e (S8) (L	RR S, T, U	J) 1 cm M	uck (A9) (L	RR O)	
	oipedon (A2)		Thin Dark S					uck (A10) (•	
	stic (A3)		Loamy Mucl							MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley			,				(LRR P, S, T)
	d Layers (A5)		Depleted Ma		,				Loamy Soils (
	Bodies (A6) (LRR	P. T. U)	Redox Dark		3)			A 153B)	,	/
	icky Mineral (A7) (L		Depleted Da	•	,			rent Materi	al (TF2)	
	esence (A8) (LRR		Redox Depr						Surface (TF1	(2)
	ick (A9) (LRR P, T)		Marl (F10) (I		•			Explain in F	•	*
	d Below Dark Surfa		Depleted Oc		MLRA 1	51)			,	
-	ark Surface (A12)	,	iron-Mangar				T) ³ Indica	ators of hyd	rophytic vege	tation and
	rairie Redox (A16)	(MLRA 150A)							gy must be p	
	lucky Mineral (S1)		Delta Ochric			,		-	d or problema	
-	Gleyed Matrix (S4)	, ,	Reduced Ve			0A, 150B)			·	
	Redox (S5)		Piedmont FI							
-	Matrix (S6)						A 149A, 153C,	153D)		
	rface (S7) (LRR P,	S, T, U)		J	,	- / (,,	,		
	Layer (if observed									
Type:										
, , <u> </u>	ches):						Hydric Soil	Present?	Yes	No 🗸
							Tiyane con	1 1030111:		
Remarks:	vdria aail w		soomrod at t	bio loo	-ti-n					
	ydric soil wa	as not or	served at t	nis ioca	ation.					

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: G.W. Village Commercial	City/County: Staffe	ord County	Sampling Date: 2021-07-20		
Applicant/Owner: North Point Development		State: Virginia	· -		
Investigator(s): TNT Environmental- S. Swartzendruber, T. Payne					
Landform (hillslope, terrace, etc.): Upland, Depression	•		Slone (%):		
Subregion (LRR or MLRA): P 133A Lat: 38.41					
		NWI classific			
Are climatic / hydrologic conditions on the site typical for this time of year	<u></u>	· · · · · · · · · · · · · · · · · · ·	,		
Are Vegetation, Soil, or Hydrology significantly					
Are Vegetation, Soil, or Hydrology naturally pre-	oblematic? (I	f needed, explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS - Attach site map showing	sampling poin	t locations, transects	, important features, etc.		
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Wetland Hydrology Present?	Is the Samp		No <u> </u>		
Wetland Hydrology Present? Yes No Remarks:					
LIVEROLOGY					
HYDROLOGY		Casandaniladiaa	tore (reinierum of ture required)		
Wetland Hydrology Indicators:			tors (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)	2)	Surface Soil			
Surface Water (A1) Aquatic Fauna (B1) High Water Table (A2) Mad Deposits (B1)		Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2) Marl Deposits (B15) Saturation (A3) Hydrogen Sulfide 0			Drainage Patterns (B10)		
Saturation (A3) Hydrogen Sulfide (Water Marks (B1) Oxidized Rhizosph			Moss Trim Lines (B16) ots (C3) Dry-Season Water Table (C2)		
Sediment Deposits (B2) — Presence of Reduce		Crayfish Burr			
Drift Deposits (B3) Recent Iron Reduct			sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Thin Muck Surface		Geomorphic			
Iron Deposits (B5) Other (Explain in F		Shallow Aqui			
Inundation Vis ble on Aerial Imagery (B7)	,	FAC-Neutral			
Water-Stained Leaves (B9)			noss (D8) (LRR T, U)		
Field Observations:					
Surface Water Present? Yes No Depth (inches):				
Water Table Present? Yes No Depth (inches):				
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Presen	t? Yes No		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	os previous inspecti	ons) if available			
Describe recorded bata (stream gauge, monitoring wen, acriai priori	os, previous mapeen	ons), ii avallable.			
Remarks:					
Wetland hydrology was not observed at th	is location.				
,					

- 20 ft r		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Fagus grandifolia	20		FACU	That Are OBL, FACW, or FAC: 4 (A)
2. Liquidambar styraciflua	15		FAC	Total Number of Dominant
3. Carpinus caroliniana	10		FAC	Species Across All Strata: 5 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 80 (A/B)
6				
	45%	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: 22.5	20% of	total cover:	9.0	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)				OBL species $\frac{0}{2}$ $x = \frac{0}{2}$
1. Asimina triloba	15	'	FAC	FACW species $0 \times 2 = 0$
2.				FAC species 45 x 3 = 135
3.				FACU species 20 x 4 = 80
4.				UPL species <u>0</u> x 5 = <u>0</u>
5				Column Totals: 65 (A) 215 (B)
				2 21
6	15%	- Total Cav		Prevalence Index = B/A = 3.31
75				Hydrophytic Vegetation Indicators:
50% of total cover: <u>7.5</u>	20% of	total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)				✓ 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	=	= Total Cov	er	Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r				(7.6 cm) or larger in diameter at breast height (DBH).
1				Sapling – Woody plants, excluding woody vines,
2.				approximately 20 ft (6 m) or more in height and less
3.				than 3 in. (7.6 cm) DBH.
4				Shrub – Woody plants, excluding woody vines,
5.				approximately 3 to 20 ft (1 to 6 m) in height.
				Herb – All herbaceous (non-woody) plants, including
6				herbaceous vines, regardless of size, and woody
7				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				
11				
	=	= Total Cov	er	
50% of total cover:	20% of	total cover:		
Woody Vine Stratum (Plot size: 30 ft r)				
1. Smilax rotundifolia	5	/	FAC	
2				
3.				
4.				
5.				Hodge about
···	5% =	Total Cov	or.	Hydrophytic Vegetation
50% of total cover: 2.5		total cover:		Present? Yes No
		iolai cover:		
Remarks: (If observed, list morphological adaptations belo	w).			

Dominant hydrophytic vegetation was observed at this location.

SOIL Sampling Point: DP-973

Depth	ription: (Describe		Red	ox Feature	es		Toytura Domorka				
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type ¹	Loc ²	Texture	Remarks			
0 - 12	7.5YR 5/4	40	7.5YR 5/8	60	<u>C</u>	<u>M</u>	Silt Loam				
-											
					-						
					-		· 				
	-						·				
							· -				
	oncentration, D=De					rains.		=Pore Lining, M=Matrix.	. 3		
-	Indicators: (Appli	cable to all						Problematic Hydric Soi	IS*:		
Histosol			Polyvalue B					k (A9) (LRR O)			
Histic Ep	oipedon (A2)		Thin Dark S Loamy Muc					k (A10) (LRR S) Vertic (F18) (outside MLF	DA 150A B)		
	n Sulfide (A4)		Loamy Gley	-		K 0)		Floodplain Soils (F19) (Li			
	Layers (A5)		Depleted Ma		(1 2)			is Bright Loamy Soils (F20			
	Bodies (A6) (LRR I	P, T, U)	Redox Dark		F6)		(MLRA		,		
-	icky Mineral (A7) (L		Depleted Da	ark Surface	e (F7)			nt Material (TF2)			
Muck Pr	esence (A8) (LRR	J)	Redox Depr		8)		Very Shal	low Dark Surface (TF12)			
	ick (A9) (LRR P, T)		Marl (F10) (Other (Ex	plain in Remarks)			
	d Below Dark Surfa	ce (A11)	Depleted O				3				
	ark Surface (A12)	MI DA 450A	Iron-Manga		. ,	•		rs of hydrophytic vegetation			
	rairie Redox (A16) (lucky Mineral (S1) (Umbric SurfDelta Ochric					d hydrology must be prese disturbed or problematic.	ent,		
	Gleyed Matrix (S4)	LKK 0, 3)	Reduced Ve					disturbed of problematic.			
	ledox (S5)		Piedmont F								
	Matrix (S6)						, RA 149A, 153C, 15	53D)			
Dark Su	rface (S7) (LRR P,	S, T, U)			-						
Restrictive I	_ayer (if observed)):									
Type:											
Depth (in	ches):						Hydric Soil Pre	esent? Yes N	lo		
Remarks:							•				
W	etland hydr/	ology w	as not obse	erved a	t this	locatio	n.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: G.W. Village Commercial	City/County: Staff	ord County	Sampling Date: 2021-07-20
Applicant/Owner: North Point Development		State: Virginia	·
	Section, Township,		
	Local relief (concave		Slope (%). 5
Subregion (LRR or MLRA): P 133A L			
Soil Map Unit Name: CrB - Craven loam			
		NWI classific	
Are climatic / hydrologic conditions on the site typical for this	•		
Are Vegetation, Soil, or Hydrologys			
Are Vegetation, Soil, or Hydrologyn	aturally problematic? (I	f needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling poin	t locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes ✓ No.	0		
Wetland Hydrology Present? Yes V	o within a We	tland? Yes	No
Remarks:			
·			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all t	hat apply)	Surface Soil	Cracks (B6)
Surface Water (A1) Aquatic	Fauna (B13)	Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2) Marl De	posits (B15) (LRR U)	✓ Drainage Par	tterns (B10)
Saturation (A3) Hydroge	en Sulfide Odor (C1)	Moss Trim Li	nes (B16)
Water Marks (B1) Oxidized	d Rhizospheres along Living Ro	oots (C3) Dry-Season	Water Table (C2)
	e of Reduced Iron (C4)	Crayfish Buri	
	Iron Reduction in Tilled Soils (C		sible on Aerial Imagery (C9)
	ck Surface (C7)		Position (D2)
	Explain in Remarks)	Shallow Aqui	
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral	, ,
Water-Stained Leaves (B9) Field Observations:	Т	Spriagrium ii	noss (D8) (LRR T, U)
_	oth (inches):		
	oth (inches):		
		Wetland Hydrology Presen	t? Yes No
(includes capillary fringe)	, ,		10
Describe Recorded Data (stream gauge, monitoring well, a	aerial photos, previous inspection	ons), if available:	
Remarks:			
Wetland hydrology was observed at	this location.		
, , , , , , , , , , , , , , , , , , , ,			

Sampling	Point:	DP-974

20.65 %		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r		Species?		Number of Dominant Species
1. Liquidambar styraciflua	40		FAC	That Are OBL, FACW, or FAC: 2 (A)
2. Ilex opaca	15		FAC	Total Number of Dominant
3. Fagus grandifolia	10		FACU	Species Across All Strata: 2 (B)
4				Description of Description of Opening
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6.				
		Total Cov	er	Prevalence Index worksheet:
50% of total cover: 32.5				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)	20 /6 01	lotal cover.		OBL species 0 x 1 = 0
				FACW species $0 x 2 = 0$
1				FAC species 55 x 3 = 165
2				FACU species 10
3				
4				01 L 3pcolc3
5				Column Totals: 65 (A) 205 (B)
6.				Prevalence Index = B/A = 3.15
		Total Cov	er	
50% of total cover:				Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 30 ft r)	20% 01	iolai cover.		1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
		= Total Cov	er	
50% of total cover:				Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)	20 /0 01	total cover.		(7.6 cm) or larger in diameter at breast height (DBH).
				(, , , , , , , , , , , , , , , , , , ,
1				Sapling – Woody plants, excluding woody vines,
2				approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3				than 6 m. (7.5 cm) BBT.
4				Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6				Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
8.				plants, except woody vines, less than approximately
				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				
11				
	=	= Total Cov	er	
50% of total cover:	20% of	total cover:		
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2				
3.				
4				
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes No
50% of total cover:	·	total cover:		100
Remarks: (If observed, list morphological adaptations belo	w).			
Dominant wetland hydrology was ob	served.			

Depth	Matrix	0/		lox Feature		. 2	- .	
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type ¹		<u>Texture</u>	Remarks
0 - 12	10YR 5/2	80	10YR 5/8	_ 20	<u>C</u>	<u> M</u>	Silt Loam	
-							. <u></u> -	
-			· -				<u></u>	
-								
_							· -	
_							· -	
			-		-	-	·	
							2	
			I=Reduced Matrix, I I LRRs, unless oth			rains.		PL=Pore Lining, M=Matrix. or Problematic Hydric Soils ³ :
-		icable to al				IDDCT		•
Histosol ((AT) ipedon (A2)		Polyvalue E Thin Dark S					uck (A9) (LRR O) uck (A10) (LRR S)
Black His			Loamy Mud					d Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gle	-		,		nt Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)		<u>✓</u> Depleted M		` ,		<u> </u>	ous Bright Loamy Soils (F20)
Organic !	Bodies (A6) (LRR	P, T, U)	Redox Dari	Surface (F6)		(MLRA	A 153B)
5 cm Mu	cky Mineral (A7) (I	LRR P, T, L) Depleted D	ark Surfac	e (F7)			rent Material (TF2)
	esence (A8) (LRR		Redox Dep		8)		-	allow Dark Surface (TF12)
	ck (A9) (LRR P, T		Marl (F10)				Other (E	xplain in Remarks)
	Below Dark Surfa	ace (A11)	Depleted C				31 maliana	
	rk Surface (A12)	/MI D A 150	Iron-Manga DA) Umbric Sur					tors of hydrophytic vegetation and and hydrology must be present,
	lucky Mineral (S1)							es disturbed or problematic.
-	leyed Matrix (S4)	(LIXIX O, O)	Reduced V					is disturbed of problematic.
-	edox (S5)		Piedmont F					
-				•	`	, •		
Stripped	Matrix (S6)		Anomalous	Bright Loa	my Soils	(F20) (MLI	RA 149A, 153C, ′	153D)
Dark Sur	face (S7) (LRR P,		Anomalous	Bright Loa	my Soils	(F20) (MLI	RA 149A, 153C, <i>1</i>	153D)
Dark Sur	` ,		Anomalous	Bright Loa	imy Soils	(F20) (MLI	RA 149A, 153C, <i>1</i>	153D)
Dark Sur	face (S7) (LRR P,		Anomalous	Bright Loa	imy Soils	(F20) (MLI	RA 149A, 153C, [,]	
Dark Sur Restrictive L	face (S7) (LRR P, ayer (if observed		Anomalous	Bright Loa	imy Soils	(F20) (MLI	RA 149A, 153C, ²	
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (ML I		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):	Anomalous			(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (ML I		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (ML I		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (ML I		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur Restrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		
Dark Sur estrictive L Type: Depth (inc	face (S7) (LRR P, Layer (if observed thes):	i):				(F20) (MLI		

Project/Site: G.W. Village Commercial	City/County: Staf	ford County	Sampling Date: 2021-07-20
Applicant/Owner: North Point Development		State: Virginia	· · · · ·
Investigator(s): TNT Environmental- S. Swartzendruber, T. F			
Landform (hillslope, terrace, etc.): Upland	•		Slope (%)
Subregion (LRR or MLRA): P 133A Lat:			
Soil Map Unit Name: Iu - Iuka fine sandy loam		Long NWI classific	
Are climatic / hydrologic conditions on the site typical for this time.	-		
Are Vegetation, Soil, or Hydrology signi			
Are Vegetation, Soil, or Hydrology natur	ally problematic?	(If needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map sho	wing sampling poi	nt locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No	<u></u>		
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No	/		.,
Wetland Hydrology Present? Yes No	within a W	etland? Yes	No
Remarks:	<u> </u>		
This data point is not within a wetland.	Taken outside f	lag GV-8.	
•		J	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	apply)	Surface Soil	
Surface Water (A1) Aquatic Fau			getated Concave Surface (B8)
	ts (B15) (LRR U)	Drainage Pa	
Saturation (A3) Hydrogen S		Moss Trim Li	
	izospheres along Living R		Water Table (C2)
	Reduced Iron (C4)	Crayfish Bur	
Drift Deposits (B3) Recent Iron	Reduction in Tilled Soils (C6) Saturation V	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck S	Surface (C7)	Geomorphic	Position (D2)
Iron Deposits (B5) Other (Expla	ain in Remarks)	Shallow Aqu	itard (D3)
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral	
Water-Stained Leaves (B9)		Sphagnum n	noss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No Depth (
Water Table Present? Yes No Depth (
Saturation Present? Yes No Depth (includes capillary fringe)	inches):	Wetland Hydrology Preser	nt? Yes No
Describe Recorded Data (stream gauge, monitoring well, aeria	al photos, previous inspec	tions), if available:	
Remarks:			
Matlend by drolony was not about and	at this leastion		
Wetland hydrology was not observed a	it this location.		

		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Fagus grandifolia	50		FACU	That Are OBL, FACW, or FAC: 3 (A)
2. Ilex opaca	15		FAC	Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50 (A/B)
6				
	65%	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: <u>32.5</u>				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)				OBL species 0 x 1 = 0
1. Quercus alba	15	~	FACU	FACW species <u>0</u>
2				FAC species 35 x 3 = 105
2				FACU species 80 x 4 = 320
3				UPL species 0 x 5 = 0
4				Column Totals: 115 (A) 425 (B)
5				(-)
6	450/			Prevalence Index = B/A = 3.7
		= Total Cov		Hydrophytic Vegetation Indicators:
50% of total cover: 7.5	20% of	total cover:	3.0	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2.				Problematic Hydrophytic Vegetation¹ (Explain)
3.				Problematic Hydrophytic vegetation (Explain)
				1
4				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				Definitions of Five Vegetation Strata:
6				Definitions of Five Vegetation Strata.
		= Total Cov		Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)	45	á		(7.6 cm) or larger in diameter at breast height (DBH).
1. Parathelypteris noveboracensis	15		FAC	Sapling – Woody plants, excluding woody vines,
2. Polystichum acrostichoides	15		FACU	approximately 20 ft (6 m) or more in height and less
3				than 3 in. (7.6 cm) DBH.
4				Shrub – Woody plants, excluding woody vines,
5.				approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
8				plants, except woody vines, less than approximately 3 ft (1 m) in height.
9				3 it (1 iii) iii neignt.
				Woody vine – All woody vines, regardless of height.
10				
11	30%			
45.0		= Total Cov		
50% of total cover: 15.0	20% of	total cover:	6.0	
Woody Vine Stratum (Plot size: 30 ft r	_			
1. Smilax rotundifolia	5		FAC	
2				
3				
4				
5.				Hydrophytic
	5%	= Total Cov	er	Vegetation
50% of total cover: 2.5		total cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations belo		.5.0. 00 101.		
Tromains. (ii observed, list morphological adaptations belo	· v v).			

Depth	Matrix	-	needed to document the indicator or confirm Redox Features		·
(inches)	Color (moist)	%	Color (moist) % Type ¹ Loc ²	Texture	Remarks
0 - 12	7.5YR 6/6	_ 100 _		Silt Loam	
-					
-					
					_
					•
-					
-					
-					
1Type: C=C	ncentration D=De	nletion PM=P	educed Matrix, MS=Masked Sand Grains.	² Location: Pl	L=Pore Lining, M=Matrix.
			Rs, unless otherwise noted.)		r Problematic Hydric Soils ³ :
Histosol		ouble to all El	Polyvalue Below Surface (S8) (LRR S, T, I		ck (A9) (LRR O)
	oipedon (A2)		Thin Dark Surface (S9) (LRR S, T, U)		ck (A40) (LRR S)
Black Hi			Loamy Mucky Mineral (F1) (LRR O)		Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleyed Matrix (F2)		t Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)		Depleted Matrix (F3)		us Bright Loamy Soils (F20)
	Bodies (A6) (LRR	P, T, U)	Redox Dark Surface (F6)	(MLRA	
	cky Mineral (A7) (L	•	Depleted Dark Surface (F7)		ent Material (TF2)
Muck Pr	esence (A8) (LRR	U)	Redox Depressions (F8)	Very Sha	illow Dark Surface (TF12)
1 cm Mu	ck (A9) (LRR P, T))	Marl (F10) (LRR U)	Other (E)	xplain in Remarks)
Depleted	d Below Dark Surfa	ce (A11)	Depleted Ochric (F11) (MLRA 151)		
	ark Surface (A12)		Iron-Manganese Masses (F12) (LRR O, P.		ors of hydrophytic vegetation and
			Umbric Surface (F13) (LRR P, T, U)		nd hydrology must be present,
-	lucky Mineral (S1)	(LRR O, S)	Delta Ochric (F17) (MLRA 151)		s disturbed or problematic.
	Sleyed Matrix (S4)		Reduced Vertic (F18) (MLRA 150A, 150B)		
-	ledox (S5)		Piedmont Floodplain Soils (F19) (MLRA 14		505)
	Matrix (S6)		Anomalous Bright Loamy Soils (F20) (MLF	RA 149A, 153C, 1	53D)
	rface (S7) (LRR P, _ayer (if observed				
	Layer (II Observed)-			
Type:	- I \		-	Hardela Oali Da	
Depth (in	cnes):		_	Hydric Soil Pr	resent? Yes No
Remarks:			and an abita to a salt an		
Н	yarıc son wa	as observ	ed at this location.		

Project/Site: G.W. Village Commercial	City/County: Sta	fford County	Sampling Date: 2021-07-20
Applicant/Owner: North Point Development		State: Virginia	· -
Investigator(s): TNT Environmental- S. Swartzendruber			
Landform (hillslope, terrace, etc.): Upland	<u> </u>		Slope (%)
Subregion (LRR or MLRA): P 133A	•		
Soil Map Unit Name: lu - luka fine sandy loam			
		NWI classific	
Are climatic / hydrologic conditions on the site typical for the			
Are Vegetation, Soil, or Hydrology			
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling po	int locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes I	No. V		
Hydrophytic Vegetation Present? Yes I Hydric Soil Present? Yes I	No V	npled Area	.,
Wetland Hydrology Present? Yes	No within a W	Vetland? Yes	No
Remarks:			
This data point is not within a wetla	nd. Taken outside	GU-6A.	
·			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all	that apply)	Surface Soil	
Surface Water (A1) Aquatio	c Fauna (B13)	Sparsely Ve	getated Concave Surface (B8)
	eposits (B15) (LRR U)	Drainage Pa	
	gen Sulfide Odor (C1)	Moss Trim L	
Water Marks (B1) Oxidize	ed Rhizospheres along Living I	Roots (C3) Dry-Season	Water Table (C2)
Sediment Deposits (B2) Preser	nce of Reduced Iron (C4)	Crayfish Bur	rows (C8)
Drift Deposits (B3) Recent	t Iron Reduction in Tilled Soils	(C6) Saturation V	isible on Aerial Imagery (C9)
	luck Surface (C7)		Position (D2)
	(Explain in Remarks)	Shallow Aqu	
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral	
Water-Stained Leaves (B9)		Sphagnum n	noss (D8) (LRR T, U)
Field Observations:	andle Carelana)		
	epth (inches):		
	epth (inches):		
Saturation Present? Yes No De (includes capillary fringe)	epth (inches):	Wetland Hydrology Preser	nt? Yes No
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspec	ctions), if available:	
Remarks:			
Wetland hydrology was not observe	ad at this location		
wettand flydrology was not observe	su at tills location.		
I .			

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: DP-976

Tors Otrature (Plataines 30 ft r		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft r</u>) 1 Fagus grandifolia	% Cover 30	Species?	FACU	Number of Dominant Species
··				That Are OBL, FACW, or FAC: 0 (A)
2. Liriodendron tulipifera	25		FACU	Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Bassalan as Indianas dalah ad
	55%	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: 27.5	20% of	total cover	11.0	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)				OBL species $\frac{0}{2}$ $x = \frac{0}{2}$
1				FACW species $\frac{0}{2}$ $\times 2 = \frac{0}{2}$
2.				FAC species $0 \times 3 = 0$
3.				FACU species <u>75</u> x 4 = <u>300</u>
4.			-	UPL species <u>0</u> x 5 = <u>0</u>
5.				Column Totals: <u>75</u> (A) <u>300</u> (B)
6				5
0		= Total Cov	or	Prevalence Index = B/A = 4.0
50% of total cover:				Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 30 ft r)	20% 01	total cover		1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	:	= Total Cov	er	Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover	:	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).
1. Polystichum acrostichoides	20		FACU	Sapling – Woody plants, excluding woody vines,
2				approximately 20 ft (6 m) or more in height and less
3				than 3 in. (7.6 cm) DBH.
4.				Shrub – Woody plants, excluding woody vines,
5.				approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
8.			-	plants, except woody vines, less than approximately
				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10			-	
11.	20%			
10.0		= Total Cov		
50% of total cover: 10.0	20% of	total cover	4.0	
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov	er	Vegetation
50% of total cover:				Present? Yes No
Remarks: (If observed, list morphological adaptations belo				1
, , , , , , , , , , , , , , , , , , , ,	,			

Depth	Matrix	to the depth		nt the indicator or confirm eatures	ii tile absence or	maicators.)
(inches)	Color (moist)	%	Color (moist)	% Type ¹ Loc ²	Texture	Remarks
0 - 12	7.5YR 4/2	100			Silt Loam	
-						
	-					
1Type: C=C	ncentration D=De	nletion PM=P	Peduced Matrix MS=	Masked Sand Grains.	² Location: PI	_=Pore Lining, M=Matrix.
			RRs, unless otherw			r Problematic Hydric Soils ³ :
Histosol				w Surface (S8) (LRR S, T, I		ck (A9) (LRR O)
	oipedon (A2)			ice (S9) (LRR S, T, U)		ck (A10) (LRR S)
Black Hi				/lineral (F1) (LRR O)		Vertic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleyed	Matrix (F2)	Piedmont	t Floodplain Soils (F19) (LRR P, S, T)
Stratified	d Layers (A5)		Depleted Matrix	(F3)	Anomalou	us Bright Loamy Soils (F20)
_	Bodies (A6) (LRR I		Redox Dark Su	` '	(MLRA	-
	icky Mineral (A7) (L		Depleted Dark			ent Material (TF2)
	esence (A8) (LRR		Redox Depress	, ,		llow Dark Surface (TF12)
	ick (A9) (LRR P, T) d Below Dark Surfa		Marl (F10) (LRI Depleted Ochri	c (F11) (MLRA 151)	Other (Ex	plain in Remarks)
	ark Surface (A12)	00 (/ (/ / /		e Masses (F12) (LRR O, P,	. T) 3Indicato	ors of hydrophytic vegetation and
	rairie Redox (A16) (MLRA 150A)		(F13) (LRR P, T, U)	•	nd hydrology must be present,
	lucky Mineral (S1)			17) (MLRA 151)	unless	disturbed or problematic.
	Bleyed Matrix (S4)			(F18) (MLRA 150A, 150B)		
	ledox (S5)			Iplain Soils (F19) (MLRA 1 4		
	Matrix (S6)		Anomalous Brig	ht Loamy Soils (F20) (MLF	RA 149A, 153C, 1	53D)
	rface (S7) (LRR P, _ayer (if observed)				1	
	Layer (II Observed).				
Type:	-LV-		<u> </u>		United Call Da	
	ches):				Hydric Soil Pr	esent? Yes No
Remarks:	vdrie eeil w		aanvad at thi	o lo oction		
П	yarıc son wa	as not ob	served at thi	s location.		

Project/Site: G.W. Village Commercial	City/County: Stafford C	County	Sampling Date: 2021-07-20
•			Sampling Point: DP-977
Investigator(s): TNT Environmental- S. Swartzendruber, T. Payne			· -
Landform (hillslope, terrace, etc.): Depression			
Subregion (LRR or MLRA): P 133A Lat: 38.4	•	, -	
	- · · · · · · · · · · · · · · · · · · ·		
Are climatic / hydrologic conditions on the site typical for this time of y			
Are Vegetation, Soil, or Hydrology significantl	y disturbed? Are "No	ormal Circumstances" p	oresent? Yes No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If need	led, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin	g sampling point loc	ations, transects	, important features, etc.
Lhydrophytic Vegetation Present? Veg. V			
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No	is the campica A		
Wetland Hydrology Present? Yes V No	within a Wetland	? Yes	No
Remarks:	•		
This data point is within a wetland. Taken			
HYDROLOGY			
Wetland Hydrology Indicators:			tors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply		Surface Soil	Cracks (B6)
Surface Water (A1) Aquatic Fauna (B			getated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B1		✓ Drainage Pat	
Saturation (A3) Hydrogen Sulfide		Moss Trim Li	
	heres along Living Roots (C	· ·	Water Table (C2)
Sediment Deposits (B2) Presence of Redu		Crayfish Burr	
	ction in Tilled Soils (C6)		sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surfac Iron Deposits (B5) Other (Explain in		Geomorphic	
Inundation Vis ble on Aerial Imagery (B7)	Nemarks)	Shallow Aqui FAC-Neutral	
✓ Water-Stained Leaves (B9)			noss (D8) (LRR T, U)
Field Observations:		<u> </u>	
Surface Water Present? Yes No Depth (inche	s):		
Water Table Present? Yes No Depth (inche			
Saturation Present? Yes No Depth (inche		and Hydrology Presen	it? Yes 🔽 No
(includes capillary fringe)	, . <u></u>		
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), i	if available:	
Remarks:			
Wetland hydrology was observed at this lo	cation.		

= 0		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)	% Cover 25	Species? ✓	Status FAC	Number of Dominant Species
1. Liquidambar styraciflua				That Are OBL, FACW, or FAC: 4 (A)
2. Liriodendron tulipifera	15		FACU	Total Number of Dominant
3. Fraxinus americana	10		FACU	Species Across All Strata: 6 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 66.7 (A/B)
6				
	50% :	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: 25.0	20% of	total cover:	10.0	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)				OBL species $\frac{20}{15}$ $\times 1 = \frac{20}{30}$
1				FACW species $\frac{15}{40}$ $\times 2 = \frac{30}{120}$
2				FAC species $\frac{40}{25}$ x 3 = $\frac{120}{100}$
3.				FACU species 25 x 4 = 100
4.				UPL species $0 \times 5 = 0$
5.				Column Totals: 100 (A) 270 (B)
6				27
o		Total Cov		Prevalence Index = B/A = 2.7
50% of total cover:				Hydrophytic Vegetation Indicators:
50% of total cover: Shrub Stratum (Plot size: 30 ft r)	20% 01	lotal cover.		1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test is >50%
1				✓ 3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	:	= Total Cov	er	Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).
1. Carex lurida	20		OBL	Sapling – Woody plants, excluding woody vines,
2. Boehmeria cylindrica	15	~	FACW	approximately 20 ft (6 m) or more in height and less
3. Microstegium vimineum	15	~	FAC	than 3 in. (7.6 cm) DBH.
4.				Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, <u>and</u> woody
·				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				
11	F00/			
		= Total Cov		
50% of total cover: 25.0	20% of	total cover:	10.0	
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2				
3.				
4.				
5				Understadie
···		Total Cov		Hydrophytic Vegetation
EOO/ of total covers				Present? Yes No
50% of total cover:		iolai cover:		
Remarks: (If observed, list morphological adaptations belo	W).			

(inches)	Matrix	2/		lox Feature		. 2	- .	
0 12	Color (moist)	<u>%</u>	Color (moist)		Type ¹	Loc ²	Texture	Remarks
0 - 12	7.5YR 4/1	60	7.5YR 5/8	40	<u>C</u>	M	Silt Loam	
			-					
-							. <u></u>	
-								
_					-			
	-		_			· ——		
			. 				2	
			I=Reduced Matrix, No I LRRs, unless oth			rains.		=Pore Lining, M=Matrix. • Problematic Hydric Soils ³ :
-		Cable to al				DDCT		•
Histosol (ipedon (A2)		Polyvalue E Thin Dark S					k (A9) (LRR O) k (A10) (LRR S)
Black His			Loamy Muc					Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley	-		/		Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)		<u>✓</u> Depleted M		` ,		·	us Bright Loamy Soils (F20)
Organic f	Bodies (A6) (LRR	P, T, U)	Redox Dark	k Surface (F6)		(MLRA	153B)
5 cm Mu	cky Mineral (A7) (L	RR P, T, L) Depleted D	ark Surfac	e (F7)			nt Material (TF2)
	esence (A8) (LRR		Redox Dep		8)			low Dark Surface (TF12)
	ck (A9) (LRR P, T)		Marl (F10)				Other (Ex	plain in Remarks)
	Below Dark Surfa	ce (A11)	Depleted O				31	
	rk Surface (A12)	(MI DA 150	Iron-Manga OA) Umbric Sur					ors of hydrophytic vegetation and dhydrology must be present,
	ucky Mineral (S1)							disturbed or problematic.
-	leyed Matrix (S4)	(LIXIX O, O,	Reduced V					distarbed of problematic.
	edox (S5)		Piedmont F					
-	Matrix (S6)						RA 149A, 153C, 15	53D)
Dark Sur	face (S7) (LRR P,	S, T, U)						
Restrictive L	ayer (if observed):						
Type:								
	:hes)·						Hydric Soil Pro	esent? Yes No
Depth (inc								
Remarks:	,							
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	location	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	locatio	n.			
Remarks:	,	as obse	erved at this	location	n.			
Remarks:	,	as obse	erved at this	location	n.			
Remarks:	,	as obse	erved at this	location	n.			
Remarks:	,	as obse	erved at this	location	n.			
Remarks:	,	as obse	erved at this	location	n.			
Remarks:	,	as obse	erved at this	location	n.			

Project/Site: G.W. Village Commercial	City/County: Stafford	County	Sampling Date: 2021-07-20	
•			Sampling Point: DP-978	
Investigator(s): TNT Environmental- S. Swartzendruber, T. Payne				
Landform (hillslope, terrace, etc.): Basin	•		Slope (%):	
Subregion (LRR or MLRA): P 133A Lat: 38.4				
Soil Map Unit Name: TeA - Tetotum fine sandy loam				
Are climatic / hydrologic conditions on the site typical for this time of ye				
Are Vegetation, Soil, or Hydrology significantly				
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If nee	eded, explain any answer	rs in Remarks.)	
SUMMARY OF FINDINGS - Attach site map showing	sampling point lo	cations, transects	, important features, etc.	
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No	Is the Sampled A		,	
Wetland Hydrology Present? Yes No	within a Wetland	d? Yes	No	
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:			tors (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil	` '	
Surface Water (A1) Aquatic Fauna (B1		Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)		
High Water Table (A2) Marl Deposits (B1: Saturation (A3) Hydrogen Sulfide		Moss Trim Li		
	neres along Living Roots (Water Table (C2)	
Sediment Deposits (B2) Presence of Redu		Crayfish Burr		
	ction in Tilled Soils (C6)	•	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4) Thin Muck Surface		Geomorphic	Position (D2)	
Iron Deposits (B5) Other (Explain in F	Remarks)	Shallow Aqui	tard (D3)	
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral		
Water-Stained Leaves (B9)		Sphagnum m	oss (D8) (LRR T, U)	
Field Observations:				
Surface Water Present? Yes No Depth (inches				
Water Table Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches Depth (inches Saturation Present)		land Hydrology Presen	t? Yes No	
Saturation Present? Yes No Depth (inches (includes capillary fringe)) vveti	iand nydrology Presen	tr resNo	
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections),	, if available:		
Remarks:				
Wetland hydrology was not observed at th	is location.			
, 3,				

20 ft v		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Fagus grandifolia	50		FACU	That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3 (A/B)
6				That Are OBL, FACW, or FAC (A/B)
0.	50%	= Total Cov		Prevalence Index worksheet:
50% of total cover: 25.0				Total % Cover of: Multiply by:
	20% 01	total cover:	10.0	OBL species 0 x 1 = 0
Sapling Stratum (Plot size: 30 ft r)				FACW species $0 x 2 = 0$
1				FAC species 15 x 3 = 45
2				
3				
4				UPL species $0 \times 5 = 0$
5				Column Totals: <u>85</u> (A) <u>325</u> (B)
6				Decorder to day D/A 3.82
<u> </u>		= Total Cov		Prevalence Index = B/A = 3.82
FOOV of total account				Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
<u> </u>		= Total Cov		
50% of total cover:				Tree – Woody plants, excluding woody vines,
·	20% 01	total cover:		approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 30 ft r 1 Polystichum acrostichoides	20	~	FACIL	(7.5 off) of larger in diameter at breast height (BBH).
··· ·			FACU	Sapling – Woody plants, excluding woody vines,
2				approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3				than 3 iii. (7.0 cm) bbii.
4				Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
8				plants, except woody vines, less than approximately
				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				
11				
	20%	= Total Cov	er	
50% of total cover: 10.0	20% of	total cover:	4.0	
Woody Vine Stratum (Plot size: 30 ft r)				
1 Smilax rotundifolia	15	✓	FAC	
2				
3				
4				
5	450/			Hydrophytic
		= Total Cov		Vegetation No.
50% of total cover: 7.5	20% of	total cover:	3.0	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).			

Depth	Matrix	·		ent the indicator or confir Features		or mulcators.
(inches)	Color (moist)	%	Color (moist)	% Type ¹ Loc ²	Texture	Remarks
0 - 14	7.5YR 4/4	100			Silt Loam	Hydric soil was not observed at this location.
					<u> </u>	
-						
	-		-		-	
1- 0.0					2, ,,	<u> </u>
	ndicators: (Applic			=Masked Sand Grains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
-		able to all Lr				•
Histosol	(AT) ipedon (A2)			ow Surface (S8) (LRR S, T, face (S9) (LRR S, T, U)		Лиск (A9) (LRR O) Лиск (A10) (LRR S)
Black His				Mineral (F1) (LRR O)		ed Vertic (F18) (outside MLRA 150A,B)
· ——	n Sulfide (A4)		Loamy Gleyed			ont Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)		Depleted Matr			alous Bright Loamy Soils (F20)
· ——	Bodies (A6) (LRR F	P, T, U)	Redox Dark S	1 /		RA 153B)
5 cm Mu	cky Mineral (A7) (L	RR P, T, U)	Depleted Dark	Surface (F7)	Red P	arent Material (TF2)
Muck Pr	esence (A8) (LRR l	J)	Redox Depres	ssions (F8)		shallow Dark Surface (TF12)
	ck (A9) (LRR P, T)		Marl (F10) (LF		Other	(Explain in Remarks)
-	Below Dark Surfac	e (A11)		ric (F11) (MLRA 151)	3	
	rk Surface (A12)	MI DA 450A)		se Masses (F12) (LRR O, F		cators of hydrophytic vegetation and
	airie Redox (A16) (lucky Mineral (S1) (ce (F13) (LRR P, T, U) F17) (MLRA 151)		land hydrology must be present, ess disturbed or problematic.
-	leyed Matrix (S4)	LIKIK O, O)		ic (F18) (MLRA 150A, 150E		cas disturbed of problematic.
-	edox (S5)			odplain Soils (F19) (MLRA 1		
	Matrix (S6)					.=-=:
Stripped	Matrix (OO)		Anomalous Br	right Loamy Soils (F20) (ML	RA 149A, 153C	, 153D)
	face (S7) (LRR P, 5	S, T, U)	Anomalous Bi	right Loamy Soils (F20) (ML	RA 149A, 153C	, 153D)
Dark Sui			Anomalous Bi	ight Loamy Soils (F20) (ML	RA 149A, 153C	, 153D)
Dark Sui	face (S7) (LRR P,		Anomalous Bi	ight Loamy Soils (F20) (ML	RA 149A, 153C	, 153D)
Dark Sur Restrictive L Type:	face (S7) (LRR P,	:	Anomalous Bi	ight Loamy Soils (F20) (ML	Hydric Soil	
Dark Sur Restrictive L Type:	face (S7) (LRR P, s ayer (if observed)	:	Anomalous Bi	ight Loamy Soils (F20) (ML		
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, s ayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sur Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sur Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sur Restrictive L Type: Depth (ind Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sur Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sur Restrictive L Type: Depth (ind Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sur Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			
Dark Sun Restrictive L Type: Depth (incompleted) Remarks:	face (S7) (LRR P, Sayer (if observed)	:	_			

Project/Site: G.W. Village Commercial	City/County: Stafford County Sampling Date: 2021-07-20
Applicant/Owner: North Point Development	State: Virginia Sampling Point: DP-979
Investigator(s): TNT Environmental- S. Swartzendruber, T. Payne	
	Local relief (concave, convex, none): Concave Slope (%):
	233798 Long: -77.4391406 Datum: WGS 84
•	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area
Hydric Soil Present? Wetland Hydrology Present? Remarks:	within a Wetland? Yes No
Remarks:	
HADDOLOGA	
HYDROLOGY Western Hydrology Indicators:	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	
1	
Surface Water (A1) Aquatic Fauna (B1: High Water Table (A2) Marl Deposits (B15	
Night Water Table (A2) Mail Deposits (B13) Saturation (A3) Hydrogen Sulfide C	
	eres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduction	
	tion in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in R	Remarks) Shallow Aquitard (D3)
Inundation Vis ble on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches)	
Water Table Present? Yes No Depth (inches)	
Saturation Present? Yes No Depth (inches)): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
Wetland by dralagy was not absented at this	is leastion
Wetland hydrology was not observed at thi	is location

70 ft r		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Carpinus caroliniana	10		FAC	That Are OBL, FACW, or FAC: 4 (A)
2. Fraxinus americana	10		FACU	Total Number of Dominant
3. Liquidambar styraciflua	10		FAC	Species Across All Strata: 8 (B)
4. Quercus rubra	10		FACU	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50 (A/B)
6				Prevalence Index worksheet:
	40%	= Total Cov	er	
50% of total cover: 20.0	20% of	total cover:	8.0	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)				OBL species $0 \times 1 = 0$
1				FAC species $\frac{0}{55}$ $\times 2 = \frac{0}{165}$
2				1710 species x 0
3				FACU species 45 x 4 = 180
4.				UPL species $\frac{15}{445}$ $\times 5 = \frac{75}{400}$
5.				Column Totals: <u>115</u> (A) <u>420</u> (B)
6.				Prevalence Index = B/A = 3.65
		= Total Cov		
50% of total cover:				Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 30 ft r	2070 01	total cover.		1 - Rapid Test for Hydrophytic Vegetation
1				2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0 ¹
2.				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
		= Total Cov		Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)	00	,	540	(7.6 cm) or larger in diameter at breast height (DBH).
1. Parathelypteris noveboracensis	20		FAC	Sapling – Woody plants, excluding woody vines,
2. Polystichum acrostichoides	15		FACU	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3. Rubus flagellaris	15		UPL	than 5 m. (7.5 cm) DDM.
4. Parthenocissus quinquefolia	10		FACU	Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6				Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				
10.				Woody vine – All woody vines, regardless of height.
11.				
	60%	= Total Cov	er	
50% of total cover: 30.0	20% of	total cover:	12.0	
Woody Vine Stratum (Plot size: 30 ft r)				
1 Smilax rotundifolia	15	~	FAC	
···				
2				
3				
4				
5	15%			Hydrophytic
7.5		= Total Cov		Vegetation Present? Yes No
50% of total cover: 7.5		total cover:	3.0	100
Remarks: (If observed, list morphological adaptations belo	w).			

Depth	Matrix	to the depth		nt the indicator or confirn eatures	n the absence of	indicators.)
(inches)	Color (moist)	%	Color (moist)	% Type ¹ Loc ²	Texture	Remarks
0 - 12	7.5YR 4/4	100			Silt Loam	
-						
-						
1- 0.0					21 11 12	
			RRs, unless otherwi	Masked Sand Grains.		L=Pore Lining, M=Matrix. r Problematic Hydric Soils ³ :
-		cable to all Li				•
Histosol	(AT) pipedon (A2)		•	w Surface (S8) (LRR S, T, t ace (S9) (LRR S, T, U)		ck (A9) (LRR O) ck (A10) (LRR S)
Black Hi				Mineral (F1) (LRR O)		Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleyed			t Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)		Depleted Matrix			us Bright Loamy Soils (F20)
·	Bodies (A6) (LRR I	P, T, U)	Redox Dark Su		(MLRA	
5 cm Mu	icky Mineral (A7) (L	.RR P, T, U)	Depleted Dark	Surface (F7)	Red Pare	ent Material (TF2)
Muck Pr	esence (A8) (LRR	U)	Redox Depress	ions (F8)		llow Dark Surface (TF12)
	ick (A9) (LRR P, T)		Marl (F10) (LRI		Other (Ex	plain in Remarks)
	d Below Dark Surfa	ce (A11)		c (F11) (MLRA 151)		
	ark Surface (A12)	(141 D.A. 450.A.)		e Masses (F12) (LRR O, P,	•	ors of hydrophytic vegetation and
	rairie Redox (A16) (lucky Mineral (S1) ((F13) (LRR P, T, U) 17) (MLRA 151)		nd hydrology must be present, s disturbed or problematic.
	Gleyed Matrix (S4)	(LKK 0, 3)		: (F18) (MLRA 151) : (F18) (MLRA 150A, 150B)		s disturbed or problematic.
	tedox (S5)			Iplain Soils (F19) (MLRA 14		
	Matrix (S6)			ght Loamy Soils (F20) (MLR		53D)
	rface (S7) (LRR P,	S, T, U)		, , , , , ,	, ,	•
Restrictive	_ayer (if observed)):				
Type:			<u></u>			
Depth (in	ches):		<u></u>		Hydric Soil Pr	esent? Yes No
Remarks:						
Н	vdric soil wa	as not ob	served at thi	s location.		
	•					

Project/Site: G.W. Village Commercial City	//County: Stafford County Sampling Date: 2021-07-20
	State: Virginia Sampling Point: DP-980
Investigator(s): TNT Environmental- S. Swartzendruber, T. Payne Sec	
Landform (hillslope, terrace, etc.): Depression Loc	
	615 Long: <u>-77.4389146</u> Datum: <u>WGS 84</u>
•	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly dist	turbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally proble	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes _ ✓ No	
Hydric Soil Present? Yes V No	Is the Sampled Area
Wetland Hydrology Present? Yes V No No	within a Wetland? Yes No
Remarks: This data point is within a wetland. Taken insi	de GX-5.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (L	
Saturation (A3) Hydrogen Sulfide Odor	(C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres	s along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced	Iron (C4) Crayfish Burrows (C8)
✓ Drift Deposits (B3) Recent Iron Reduction	in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7	
Iron Deposits (B5) Other (Explain in Rema	
Inundation Vis ble on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:
Wetland hydrology was observed at this location	n.
Remarks:	

- 20 ft r		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Carpinus caroliniana	20		FAC	That Are OBL, FACW, or FAC: 3 (A)
2. Liquidambar styraciflua	15		FAC	Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6.				
	35%	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: 17.5				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)				OBL species $0 \times 1 = 0$
1				FACW species $0 \times 2 = 0$
				FAC species 40 x 3 = 120
2.				FACU species $0 \times 4 = 0$
3				UPL species <u>0</u> x 5 = <u>0</u>
4				Column Totals: 40 (A) 120 (B)
5				(2)
6				Prevalence Index = $B/A = 3.0$
		= Total Cov	er	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)				✓ 2 - Dominance Test is >50%
1.				✓ 3 - Prevalence Index is ≤3.0 ¹
2.				
3.				Problematic Hydrophytic Vegetation ¹ (Explain)
				1
4				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				
6				Definitions of Five Vegetation Strata:
		= Total Cov		Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r	_			(7.6 cm) or larger in diameter at breast height (DBH).
1. Euonymus americanus	5		FAC	Sapling – Woody plants, excluding woody vines,
2				approximately 20 ft (6 m) or more in height and less
3				than 3 in. (7.6 cm) DBH.
4.				Shrub – Woody plants, excluding woody vines,
5.				approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, and woody
				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				
11				
		= Total Cov		
50% of total cover: 2.5	20% of	total cover:	1.0	
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2				
3.				
4.				
5				
·				Hydrophytic Vegetation
F00/ 51 1 1		= Total Cov		Present? Yes No
50% of total cover:		total cover:		
Remarks: (If observed, list morphological adaptations below	ow).			

Depth	Matrix			dox Featur		. 2		
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 6	10YR 5/2	100					Silt Loam	
6 - 12	10YR 5/2	85	10YR 5/8	15	<u>C</u>	<u>M</u>	Silt Loam	
-			<u> </u>		_			
-								
-								
_			-					
							21 11 11	
			M=Reduced Matrix, Matr			Frains.		=Pore Lining, M=Matrix. Problematic Hydric Soils ³ :
Histosol		ilouble to ul	Polyvalue E			(IRRST)		k (A9) (LRR O)
	oipedon (A2)		Thin Dark S					k (A10) (LRR S)
	istic (A3)		Loamy Muc					Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gle	-				Floodplain Soils (F19) (LRR P, S, T)
Stratified	d Layers (A5)		✓ Depleted M	latrix (F3)			Anomalou	s Bright Loamy Soils (F20)
	Bodies (A6) (LRR		Redox Darl		` ,		(MLRA	
	ıcky Mineral (A7) (nt Material (TF2)
	esence (A8) (LRR		Redox Dep		F8)		-	ow Dark Surface (TF12)
	ick (A9) (LRR P, T		Marl (F10)		\ /MLDA	454)	Other (Exp	olain in Remarks)
	d Below Dark Surfa ark Surface (A12)	ace (ATT)	Depleted O Iron-Manga	•		•	T) ³ Indicator	rs of hydrophytic vegetation and
	, ,	(MI RA 150	DA) Umbric Sur					d hydrology must be present,
	lucky Mineral (S1)							disturbed or problematic.
-	Gleyed Matrix (S4)	(=:::: = , = ,	Reduced V					
	Redox (S5)		Piedmont F					
-	Matrix (S6)						RA 149A, 153C, 15	3D)
	rface (S7) (LRR P							
Restrictive	Layer (if observed	d):						
Type:								
Depth (in	ches):						Hydric Soil Pre	esent? Yes <u>'</u> No
Remarks:							•	
Н	ydric soil w	as obse	erved at this	data p	oint.			

Project/Site: G.W. Village Commercial City	//County: Stafford County Sampling Date: 2021-07-20
	State: Virginia Sampling Point: DP-981
Investigator(s): TNT Environmental- S. Swartzendruber, T. Payne Sec	
	cal relief (concave, convex, none): Concave Slope (%):
	243 Long: -77.4391873 Datum: WGS 84
•	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly dist	turbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally proble	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No V Wetland Hydrology Present? Yes No V Remarks:	within a Wetland? Yes No
Remarks:	
LIVEROLOGY	
HYDROLOGY Westernd Mudralers Indicators	Cocondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (L Saturation (A3) Hydrogen Sulfide Odor	
Vater Marks (B1) Oxidized Rhizospheres	
Sediment Deposits (B2) Presence of Reduced	
Drift Deposits (B3) Recent Iron Reduction	
Algal Mat or Crust (B4) Thin Muck Surface (C7	
Iron Deposits (B5) Other (Explain in Rema	arks) Shallow Aquitard (D3)
Inundation Vis ble on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	orevious inspections), if available:
Remarks:	
Wetland budgeless was not about ad at this	acation
Wetland hydrology was not observed at this I	ocation.

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: DP-981

Tors Otrature (Plataines 30 ft r		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft r</u>) 1 Fagus grandifolia	% Cover 25	Species? ✓	FACU	Number of Dominant Species
	20	<u> </u>		That Are OBL, FACW, or FAC: 1 (A)
2. Liquidambar styraciflua	20		FAC	Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 33.3 (A/B)
6				Prevalence Index worksheet:
	45%	= Total Cov	er	
50% of total cover: 22.5	20% of	total cover	9.0	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)				OBL species $\frac{0}{0}$ $x = \frac{0}{0}$
1				FACW species $0 \times 2 = 0$
2.				FAC species $\frac{20}{45}$ $\times 3 = \frac{60}{100}$
3				FACU species 45 x 4 = 180
4.				UPL species <u>0</u>
5				Column Totals: 65 (A) 240 (B)
6.				2.60
U		= Total Cov	er	Prevalence Index = B/A = 3.69
50% of total cover:				Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 30 ft r)	20 /0 01	total cover		1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
		= Total Cov	er	Tree Woody plants, avaluding woody vines
50% of total cover:	20% of	total cover		Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).
1. Polystichum acrostichoides	20	~	FACU	Sapling – Woody plants, excluding woody vines,
2.				approximately 20 ft (6 m) or more in height and less
3				than 3 in. (7.6 cm) DBH.
۸.				Shrub – Woody plants, excluding woody vines,
4				approximately 3 to 20 ft (1 to 6 m) in height.
5				
b				Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
7				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				Woody Vine - All Woody Vines, regardless of fieight.
11				
	20%	= Total Cov	er	
50% of total cover: 10.0	20% of	total cover	4.0	
Woody Vine Stratum (Plot size: 30 ft r)				
1				
··				l l
2				
2. 3.				
2				
2. 3.				Hydrophytic
2		= Total Cov	er	Vegetation
2		= Total Cov	er	

Depth	Matrix		Redox Features	_	
(inches)	Color (moist)	%	Color (moist) % Type ¹ Loc ²		Remarks
0 - 12	10YR 5/6	100		Silt Loam	
-					
-				-	
		<u> </u>			_
				 	
-					
-					
-					
Type: C=C	oncentration D=De	enletion RM=Re	educed Matrix, MS=Masked Sand Grains.	² l ocation: Pl	_=Pore Lining, M=Matrix.
			Rs, unless otherwise noted.)		r Problematic Hydric Soils ³ :
Histosol			Polyvalue Below Surface (S8) (LRR S, T,		ck (A9) (LRR O)
	oipedon (A2)		Thin Dark Surface (S9) (LRR S, T, U)		ck (A10) (LRR S)
	stic (A3)		Loamy Mucky Mineral (F1) (LRR O)		Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)		Floodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Matrix (F3)	Anomalou	us Bright Loamy Soils (F20)
	Bodies (A6) (LRR		Redox Dark Surface (F6)	(MLRA	
	ıcky Mineral (A7) (Depleted Dark Surface (F7)		nt Material (TF2)
	resence (A8) (LRR		Redox Depressions (F8)	-	llow Dark Surface (TF12)
	ick (A9) (LRR P, T	•	Marl (F10) (LRR U)	Other (Ex	plain in Remarks)
	d Below Dark Surfa ark Surface (A12)	ace (ATT)	Depleted Ochric (F11) (MLRA 151)Iron-Manganese Masses (F12) (LRR 0, F	T) ³ Indicate	ors of hydrophytic vegetation and
		(MI RA 150A)	Umbric Surface (F13) (LRR P, T, U)		d hydrology must be present,
	lucky Mineral (S1)		Delta Ochric (F17) (MLRA 151)		disturbed or problematic.
-	Gleyed Matrix (S4)	(======================================	Reduced Vertic (F18) (MLRA 150A, 150E		
-	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA 1		
-	Matrix (S6)		Anomalous Bright Loamy Soils (F20) (ML		53D)
Dark Su	rface (S7) (LRR P,	, S, T, U)			
Restrictive	Layer (if observed	d):			
Type:			_		
Depth (in	ches):		_	Hydric Soil Pr	esent? Yes No
Remarks:					
Н	ydric soil w	as not obs	served at this location.		

Project/Site: G.W. Village Commercial	City/County: Stafford Cou	nty	Sampling Date: 2021-07-20
•	, ,		· · · · ·
Investigator(s): TNT Environmental- S. Swartzendruber, T. Payne			
Landform (hillslope, terrace, etc.): Ditch			Slope (%)
Subregion (LRR or MLRA): P 133A Lat: 38.41			
Are climatic / hydrologic conditions on the site typical for this time of ye			
Are Vegetation, Soil, or Hydrology significantly			
Are Vegetation, Soil, or Hydrology naturally pro	blematic? (If needed,	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	sampling point locati	ons, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes <u>✓</u> No			
Hydric Soil Present? Yes No Yes No No No No No No No N	Is the Sampled Area		
Wetland Hydrology Present? Yes No	within a Wetland?	Yes	No
Remarks:			
This datapoint is within a wetland. Taken in	side GZ-7.		
•			
HYDROLOGY			
Wetland Hydrology Indicators:	_	Secondary Indica	itors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil	
Surface Water (A1) Aquatic Fauna (B13			getated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15		✓ Drainage Pa	tterns (B10)
Saturation (A3) Hydrogen Sulfide C		Moss Trim Li	
	eres along Living Roots (C3)		Water Table (C2)
Sediment Deposits (B2) Presence of Reduc		Crayfish Burn	
Drift Deposits (B3) Recent Iron Reduct		-	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface			Position (D2)
Iron Deposits (B5) Other (Explain in R	· ,	Shallow Aqui	
Inundation Vis ble on Aerial Imagery (B7)	···· ·	FAC-Neutral	
Water-Stained Leaves (B9)			noss (D8) (LRR T, U)
Field Observations:			. , , , , , , , , , , , , , , , , , , ,
Surface Water Present? Yes No Depth (inches)	:		
Water Table Present? Yes No Depth (inches)			
Saturation Present? Yes No Depth (inches)		Hydrology Preser	nt? Yes ✔ No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if av	ailable:	
Remarks:			
remarks.			
Wetland hydrology was observed at this loo	cation.		

6	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Carpinus caroliniana	15		FAC	That Are OBL, FACW, or FAC: 9 (A)
2. Liquidambar styraciflua	15	~	FAC	T
3. Platanus occidentalis	15	~	FACW	Total Number of Dominant Species Across All Strata: 9 (B)
4				Openies Across Air Girata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6	45%			Prevalence Index worksheet:
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover: <u>22.5</u>	20% of	total cover:	9.0	
Sapling Stratum (Plot size: 30 ft r)				
1				FACW species $\frac{45}{45}$ $\times 2 = \frac{90}{125}$
2				FAC species $\frac{45}{2}$ $\times 3 = \frac{135}{2}$
3.				FACU species <u>0</u>
				UPL species 0 x 5 = 0
4				Column Totals: 140 (A) 275 (B)
5				
6				Prevalence Index = B/A = 1.96
	:	= Total Cov	er	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover:	:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)				✓ 2 - Dominance Test is >50%
1				✓ 3 - Prevalence Index is ≤3.0 ¹
2.				
				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	;	= Total Cov	er	Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:	!	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).
1 Glyceria striata	20	~	OBL	Sapling – Woody plants, excluding woody vines,
2 Carex frankii	15		OBL	approximately 20 ft (6 m) or more in height and less
3. Fraxinus pennsylvanica	15		FACW	than 3 in. (7.6 cm) DBH.
. Onoclea cancibilic		•/		Objects 10/2 and a selection of the sele
4. Onoclea sensibilis	15		FACW	Shrub – Woody plants, excluding woody vines,
4. Onoclea sensibilis 5. Thelypteris palustris	15	<u></u>	FACW OBL	Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
··-				approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including
5. Thelypteris palustris	15			approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody
5. Thelypteris palustris 6. 7.	15			approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately
Thelypteris palustris 6	15			approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody
Thelypteris palustris 6. 7. 8. 9.	15			approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately
5. Thelypteris palustris 6.	15			approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Thelypteris palustris 6. 7. 8. 9.	15		OBL	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
5. Thelypteris palustris 6	80%	= Total Cov	OBL	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
5. Thelypteris palustris 6	80%		OBL	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
5. Thelypteris palustris 6	80%	= Total Cov	OBL	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
5. Thelypteris palustris 6	80%	= Total Cov	OBL	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
5. Thelypteris palustris 6	80% 20% of	= Total Cov	OBL	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Thelypteris palustris Thelypteris palustris	80% 20% of	= Total Cov	OBL	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
5. Thelypteris palustris 6	80% : 20% of 15	= Total Cov	OBL	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
5. Thelypteris palustris 6	80% : 20% of 15	= Total Cov	OBL	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
5. Thelypteris palustris 6	80% s	= Total Cov	OBL	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic
5. Thelypteris palustris 6	80% :	= Total Covers	OBL	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic Vegetation
5. Thelypteris palustris 6	80% :	= Total Cov	OBL	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic

Depth	Matrix	0/		dox Featur		. 2	- .	5
(inches) 0 - 7	Color (moist) 7.5YR 5/1	<u>%</u> 90	Color (moist) 7.5YR 4/6	<u>%</u> 10	Type ¹	Loc ²	Texture Silty Clay Loam	Remarks
			-				· 	-
7 - 14	10YR 6/1	80	5YR 5/8	20	<u>C</u>	_ <u>M</u>	Silt Loam	
-								
-					_		. <u> </u>	
-								
_							· · <u></u>	
		 -	-		_		·	
T.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				4C-Masks	- C		21	-Dava Lining M-Matrix
			I=Reduced Matrix, I I LRRs, unless oth			rains.		_=Pore Lining, M=Matrix. r Problematic Hydric Soils ³ :
Histosol (Polyvalue E			(IRRS T		ck (A9) (LRR O)
	ipedon (A2)		Thin Dark S					ck (A10) (LRR S)
Black His	. , ,		Loamy Mud					Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gle	-				Floodplain Soils (F19) (LRR P, S, T)
Stratified	Layers (A5)		✓ Depleted M	latrix (F3)			Anomalo	us Bright Loamy Soils (F20)
	Bodies (A6) (LRR		Redox Dar		,		(MLRA	
	cky Mineral (A7) (nt Material (TF2)
	esence (A8) (LRR		Redox Dep		F8)		-	llow Dark Surface (TF12)
	ck (A9) (LRR P, T		Marl (F10)		\ /MI D A	454)	Other (Ex	plain in Remarks)
	Below Dark Surfark Surfark Surface (A12)	ace (ATT)	Depleted C Iron-Manga				T) ³ Indicate	ors of hydrophytic vegetation and
	, ,	(MI RA 150	(Indi-Manga (NA) Umbric Sur					d hydrology must be present,
	ucky Mineral (S1)							disturbed or problematic.
-	leyed Matrix (S4)	-,-,	Reduced V					,
	edox (S5)		Piedmont F					
Stripped	Matrix (S6)		Anomalous	Bright Lo	amy Soils	(F20) (MLF	RA 149A, 153C, 1	53D)
		o =						
	face (S7) (LRR P,							
Restrictive L	ayer (if observed							
								.,
Restrictive L	ayer (if observed						Hydric Soil Pr	esent? Yes No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):					Hydric Soil Pr	esent? Yes <u> </u>
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	locatio	on.		Hydric Soil Pr	esent? Yes <u> </u>
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	locatio	on.		Hydric Soil Pr	esent? Yes <u> </u>
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	locatio	on.		Hydric Soil Pr	esent? Yes <u>V</u> No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	locatio	on.		Hydric Soil Pr	esent? Yes <u>V</u> No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	locatio	on.		Hydric Soil Pr	esent? Yes <u> </u>
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	locatio	on.		Hydric Soil Pr	esent? Yes V No No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	locatio	on.		Hydric Soil Pr	esent? Yes <u>V</u> No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	locatio	on.		Hydric Soil Pr	esent? Yes <u>V</u> No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	locatio	on.		Hydric Soil Pr	esent? Yes <u>v</u> No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	locatio	on.		Hydric Soil Pr	esent? Yes V No No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	locatio	on.		Hydric Soil Pr	esent? Yes V No No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	location	on.		Hydric Soil Pr	esent? Yes V No No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	location	on.		Hydric Soil Pr	esent? Yes V No No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	location	on.		Hydric Soil Pr	esent? Yes <u>V</u> No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	location	on.		Hydric Soil Pr	esent? Yes V No No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	locatio	on.		Hydric Soil Pr	esent? Yes V No No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	location	on.		Hydric Soil Pr	esent? Yes V No No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	location	on.		Hydric Soil Pr	esent? Yes V No No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	location	on.		Hydric Soil Pr	esent? Yes V No No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	location	on.		Hydric Soil Pr	esent? Yes V No No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	location	on.		Hydric Soil Pr	esent? Yes V No No
Restrictive L Type: Depth (inc Remarks:	ayer (if observed	d):	erved at this	location	on.		Hydric Soil Pr	esent? Yes V No No

Project/Site: G.W. Village Commercial	City/County: S	Stafford County	Sampling Date: 2021-07-20
Applicant/Owner: North Point Development		State: Virginia	-
Investigator(s): TNT Environmental- S. Swartzendruber,			
Landform (hillslope, terrace, etc.): Upland		•	e Slope (%)·
Subregion (LRR or MLRA): P 133A L	•	•	
Soil Map Unit Name: Bb - Bibb fine sandy loam			
Are climatic / hydrologic conditions on the site typical for this		NWI classific	
	· · · · · · · · · · · · · · · · · · ·		,
Are Vegetation, Soil, or Hydrologys			
Are Vegetation, Soil, or Hydrology r	naturally problematic?	(If needed, explain any answe	ers in Remarks.)
${\bf SUMMARY\ OF\ FINDINGS-Attach\ site\ map}$	showing sampling	point locations, transects	s, important features, etc.
Hydrophytic Vegetation Present?			
Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N	lo	Sampled Area	.,
Wetland Hydrology Present? Yes N		a Wetland? Yes	No
Remarks:			
This data point is not within a wetlar	nd. Taken outsid	e of GY-1.	
·			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicate	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all f	that apply)	Surface Soil	
Surface Water (A1) Aquatic	Fauna (B13)	Sparsely Ve	getated Concave Surface (B8)
	posits (B15) (LRR U)	Drainage Pa	
	en Sulfide Odor (C1)	Moss Trim L	
Water Marks (B1) Oxidized	d Rhizospheres along Livi	ng Roots (C3) Dry-Season	Water Table (C2)
Sediment Deposits (B2) Presence	ce of Reduced Iron (C4)	Crayfish Bui	rows (C8)
Drift Deposits (B3) Recent	Iron Reduction in Tilled So	oils (C6) Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Mu	ıck Surface (C7)	Geomorphic	Position (D2)
Iron Deposits (B5) Other (E	Explain in Remarks)	Shallow Aqu	itard (D3)
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutra	
Water-Stained Leaves (B9)		Sphagnum r	moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No De			
Water Table Present? Yes No De			
Saturation Present? Yes No Del (includes capillary fringe)	oth (inches):	Wetland Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gauge, monitoring well, a	aerial photos, previous ins	spections), if available:	
Remarks:			
Wetland hydrology was not observe	d at this location	2	
wetiand hydrology was not observe	u at tills location	1.	

20.ft r		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Fagus grandifolia	25		FACU	That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 5 (B)
4				
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)
6.				That Are OBL, I ACW, OF I AC.
o		Total Cov		Prevalence Index worksheet:
50% of total cover: 12.5				Total % Cover of: Multiply by:
<u> </u>	20% 01	total cover:	0.0	OBL species 0 x 1 = 0
Sapling Stratum (Plot size: 30 ft r)	10		E40	FACW species $0 x 2 = 0$
1. Ilex opaca	10		FAC	FAC species 25 x 3 = 75
2				
3				FACU species 55 x 4 = 220
4				UPL species $0 \times 5 = 0$
5.				Column Totals: <u>80</u> (A) <u>295</u> (B)
6.		_		2.60
o	10%	- Total Cav		Prevalence Index = B/A = 3.69
5.0				Hydrophytic Vegetation Indicators:
50% of total cover: <u>5.0</u>	20% of	total cover:	2.0	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5.				be present, unless disturbed or problematic.
6.				Definitions of Five Vegetation Strata:
0		- Total Cav		Definitions of Five Vegetation Strata.
		Total Cov		Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 30 ft r	45			(7.6 cm) of larger in diameter at breast height (DBH).
1. Lonicera japonica	15		FACU	Sapling – Woody plants, excluding woody vines,
2. Parthenocissus quinquefolia	15	✓	FACU	approximately 20 ft (6 m) or more in height and less
3				than 3 in. (7.6 cm) DBH.
4				Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6				Herb – All herbaceous (non-woody) plants, including
6				herbaceous vines, regardless of size, and woody
7				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				woody vine - All woody vines, regardless of fleight.
11				
	30% =	= Total Cov	er	
50% of total cover: 15.0	20% of	total cover:	6.0	
Woody Vine Stratum (Plot size: 30 ft r)	2070 01	total cover.		
1 Smilax rotundifolia	15	~	FAC	
··-			FAC	
2				
3				
4				
5				Hydrophytic
	15%	= Total Cov	er	Vegetation
50% of total cover: 7.5		total cover:		Present? Yes No
		total COVEI.		
Remarks: (If observed, list morphological adaptations below	w).			

Profile Desc	ription: (Describe	to the dep	oth needed to docu	ment the	indicator	or confirn	n the absence	of indicators	s.)		
Depth	Matrix			Redox Features							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>				
0 - 12	10YR 5/4	80	10YR 5/8	15	<u>C</u>	M	Silt Loam	10yr 6/1 5	% (depleti	on)	
-											
					_,						
				_	-	·				_	
	-		-	_							
-											
¹Type: C=Co	ncentration D=Der	oletion RM	=Reduced Matrix, M	S=Maske	d Sand Gi	ains	² l ocation:	PL=Pore Lin	ing M=Matrix		
			LRRs, unless othe			unio.		for Problem			
Histosol			Polyvalue Be			RR S. T. U		/luck (A9) (LR	-		
	pipedon (A2)		Thin Dark Su					/luck (A10) (L	•		
Black Hi			Loamy Muck							ILRA 150A,B)	
Hydroge	n Sulfide (A4)		Loamy Gley	ed Matrix	(F2)					(LRR P, S, T)	
	l Layers (A5)		Depleted Ma					alous Bright L	oamy Soils (F	⁻ 20)	
_	Bodies (A6) (LRR F		Redox Dark	,	,			RA 153B)	· (TEO)		
	cky Mineral (A7) (L							arent Material hallow Dark S		2)	
	esence (A8) (LRR l ck (A9) (LRR P, T)	<i>)</i>)	Redox Depre		-0)			(Explain in Re	•	2)	
	Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)	Other	(LAPIAIII III IXC	iliaiks)		
	ark Surface (A12)	(* * * * *)	Iron-Mangar				, T) ³ Indic	ators of hydro	ophytic vegeta	ation and	
		MLRA 150	A) Umbric Surfa					land hydrolog	y must be pro	esent,	
Sandy M	lucky Mineral (S1) (LRR O, S)	Delta Ochric	(F17) (M	LRA 151)		unle	ess disturbed	or problemat	ic.	
	leyed Matrix (S4)		Reduced Ve								
-	edox (S5)		Piedmont Flo								
	Matrix (S6)	. T IIV	Anomalous I	Bright Loa	imy Soils (F20) (MLR	RA 149A, 153C	, 153D)			
	face (S7) (LRR P, s -ayer (if observed)						1				
	ayer (ii observed)	•									
Type:	shoo):						Hydric Soil	Dracent?	Vaa	No V	
Remarks:	ches):						nyaric Soil	Present?	Yes	No	
H	ydric soil wa	is not d	observed at t	his loc	cation.						

Project/Site: G.W. Village Commercial	City/County: Staff	ord County	Sampling Date: 2021-07-20
Applicant/Owner: North Point Development		State: Virginia	· · · ·
Investigator(s): TNT Environmental- S. Swartzendruber, T. Pa			
Landform (hillslope, terrace, etc.): Upland			Slope (%)
Subregion (LRR or MLRA): P 133A Lat: 3			
Soil Map Unit Name: Bb - Bibb fine sandy loam			
		NWI classific	
Are climatic / hydrologic conditions on the site typical for this time			
Are Vegetation, Soil, or Hydrology signific			
Are Vegetation, Soil, or Hydrology natura	ly problematic? (I	f needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map show	ving sampling poir	nt locations, transects	, important features, etc.
Hydrophytic Vogotation Procent2 Vog No.			
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No	/ 10 1110 04111.		.,
Wetland Hydrology Present? Yes No	within a We	tland? Yes	No
Remarks:			
This data point is not within a wetland.	Γaken outside G	SZ-13.	
•			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	oply)	Surface Soil	
Surface Water (A1) Aquatic Fauna			getated Concave Surface (B8)
High Water Table (A2) Marl Deposits		Drainage Pa	
Saturation (A3) Hydrogen Sul		Moss Trim Li	
	cospheres along Living Ro		Water Table (C2)
Sediment Deposits (B2) Presence of F	Reduced Iron (C4)	Crayfish Buri	rows (C8)
Drift Deposits (B3) Recent Iron R	eduction in Tilled Soils (C	C6) Saturation Vi	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Su	rface (C7)	Geomorphic	Position (D2)
Iron Deposits (B5) Other (Explain	າ in Remarks)	Shallow Aqui	tard (D3)
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral	
Water-Stained Leaves (B9)		Sphagnum m	noss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No Depth (in			
Water Table Present? Yes No Depth (in			
Saturation Present? Yes No Depth (in (includes capillary fringe)	ches):	Wetland Hydrology Presen	t? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspecti	ons), if available:	
Remarks:			
Wetland hydrology was not observed at	thic location		
wettand flydrology was not observed at	. tilis location.		
1			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)	% Cover	Species?	Status	Number of Dominant Species
_{1.} Fagus grandifolia	25	~	FACU	That Are OBL, FACW, or FAC: 1 (A)
2.				
				Total Number of Dominant Species Across All Strata: 4 (B)
3				Species Across All Strata: 4 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 25 (A/B)
6				
	25%	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: 12.5				Total % Cover of: Multiply by:
	20 /0 01	total cover	·	OBL species $0 \times 1 = 0$
Sapling Stratum (Plot size: 30 ft r)				FACW species $0 x 2 = 0$
1				
2				1 AO 3pecies X 3 =
3				FACU species <u>55</u> x 4 = <u>220</u>
4.				UPL species <u>0</u> x 5 = <u>0</u>
				Column Totals: <u>70</u> (A) <u>265</u> (B)
5				
6				Prevalence Index = $B/A = 3.79$
	:	= Total Cov	er	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r				
				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
o				Definitions of Five Vegetation Strata.
		= Total Cov		Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover		approximately 20 ft (6 m) or more in height and 3 in.
				(7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 30 ft r)				(1.10 0.11) 01 tanger 111 diameter at 51 daet 110 grit (2.211).
Herb Stratum (Plot size: 30 ft r) 1. Lonicera japonica	15		FACU	
1. Lonicera japonica	15 15		FACU FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
Lonicera japonica Parthenocissus quinquefolia	15	~	FACU	Sapling – Woody plants, excluding woody vines,
1. Lonicera japonica	15	~	FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
Lonicera japonica Parthenocissus quinquefolia	15		FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines,
1. Lonicera japonica 2. Parthenocissus quinquefolia 3.	15		FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3	15		FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6.	15		FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7.	15		FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8.	15		FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8. 9.	15		FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8.	15		FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8. 9.			FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8. 9. 10.	15 		FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8. 9. 10. 11.	30%	= Total Cov	FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 15.0	30%		FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 15.0 Woody Vine Stratum (Plot size: 30 ft r)	30% s	= Total Cov	FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 15.0 Woody Vine Stratum (Plot size: 30 ft r) 1. Smilax rotundifolia	30%	= Total Cov	FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 15.0 Woody Vine Stratum (Plot size: 30 ft r)	30% s	= Total Cov	FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 15.0 Woody Vine Stratum (Plot size: 30 ft r) 1. Smilax rotundifolia	30% s	= Total Cov	FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 15.0 Woody Vine Stratum (Plot size: 30 ft r) 1. Smilax rotundifolia 2. 11. 12. 15.0 15.0 15.0 15.0 15.0 15.0 15.0 15.	30% of 15	= Total Cov	FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 15.0 Woody Vine Stratum (Plot size: 30 ft r) 1. Smilax rotundifolia 2. 3. 4. 14. 15. 15. 15. 15. 15. 15. 15. 15. 15. 15	30% of 15	= Total Cov	FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3.	30% of 15	= Total Cover	FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3.	30% 30% of 15 15%	= Total Cover	FACU FAC FAC FAC	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
1. Lonicera japonica 2. Parthenocissus quinquefolia 3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 15.0 Woody Vine Stratum (Plot size: 30 ft r) 1. Smilax rotundifolia 2. 3. 4. 14. 15. 15. 15. 15. 15. 15. 15. 15. 15. 15	30% = 20% of 15 = 15% = 20% of	= Total Cover	FACU FAC FAC FAC	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic Vegetation

Depth	Matrix	2/		lox Feature		. 2	- .	
(inches) 0 - 12	Color (moist) 10YR 5/4	<u>%</u> 80	Color (moist)	<u>%</u> 15	Type ¹		<u>Texture</u>	Remarks 10vr 6/1 5% (depletion)
0 - 12	10 YR 5/4	_ 80	10YR 5/8	15		<u>M</u>	Silt Loam	10yr 6/1 5% (depletion)
-	-						· -	
-			-				· 	
-								
							2	
			I=Reduced Matrix, I I LRRs, unless oth			rains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
-		icable to al				IDDCT		•
Histosol	oipedon (A2)		Polyvalue E Thin Dark S					Muck (A9) (LRR O) Muck (A10) (LRR S)
Black Hi	. , ,		Loamy Muc					ed Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gle	-		к О,		ont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted M		(1 2)		·	alous Bright Loamy Soils (F20)
	Bodies (A6) (LRR	P. T. U)	Redox Dari		F6)			RA 153B)
-	icky Mineral (A7)							arent Material (TF2)
	esence (A8) (LRR		Redox Dep					Shallow Dark Surface (TF12)
	ıck (A9) (LRR P, T		Marl (F10)		,		-	(Explain in Remarks)
Depleted	d Below Dark Surfa	ace (A11)	Depleted C		(MLRA	151)		
Thick Da	ark Surface (A12)		Iron-Manga	nese Mas	ses (F12)	(LRR O, P	, T) ³ Indio	cators of hydrophytic vegetation and
Coast Pi	rairie Redox (A16)	(MLRA 150	OA) Umbric Sur	face (F13)	(LRR P,	T, U)	wet	tland hydrology must be present,
-	lucky Mineral (S1)	(LRR O, S)						ess disturbed or problematic.
	Bleyed Matrix (S4)		Reduced V					
-	tedox (S5)		Piedmont F					
	Matrix (S6)		Anomalous	Bright Loa	amy Soils	(F20) (MLI	RA 149A, 153C	i, 153D)
Dark Cu	rface (S7) (LRR P ,	S, T, U)						
Restrictive I	_ayer (if observed							
Restrictive I	_ayer (if observed							
Restrictive I Type: Depth (ind	_ayer (if observed						Hydric Soil	Present? Yes No
Restrictive I Type: Depth (index Remarks:	Layer (if observed	i):					Hydric Soil	Present? Yes No
Restrictive I Type: Depth (index Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (index Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (index Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (index Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (index Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (index Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (income Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (index Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (index Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation		Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation	•	Hydric Soil	Present? Yes No
Restrictive I Type: Depth (ind Remarks:	Layer (if observed	i):	observed at	this lo	cation	•	Hydric Soil	Present? Yes No

Project/Site: G.W. Village Commercial Cit	y/County: Stafford County	Sampling Date: 2021-07-20
•	State: Virg	
Investigator(s): TNT Environmental- S. Swartzendruber, T. Payne Se		
Landform (hillslope, terrace, etc.): Upland Lo	· • • • • • • • • • • • • • • • • • • •	
Subregion (LRR or MLRA): P 133A Lat: 38.4136		
	NWI cl	
Are climatic / hydrologic conditions on the site typical for this time of year?		
Are Vegetation, Soil, or Hydrology significantly dis		
Are Vegetation, Soil, or Hydrology naturally proble	ematic? (If needed, explain any a	answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sa	ampling point locations, trans	sects, important features, etc.
Hydrophytic Vocatation Present?		
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No	Is the Sampled Area	
Wetland Hydrology Present? Yes No	within a Wetland? Yes	S No
Remarks:		
This data point is not within a wetland. Taker	outside of flag G-10.	
·	_	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary	Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surfac	e Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparse	ely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (I		ge Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odo	r (C1) Moss ⁻	Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosphere	s along Living Roots (C3) Dry-Se	eason Water Table (C2)
Sediment Deposits (B2) Presence of Reduced		sh Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction	in Tilled Soils (C6) Satura	tion Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C		orphic Position (D2)
Iron Deposits (B5) Other (Explain in Rem		w Aquitard (D3)
Inundation Vis ble on Aerial Imagery (B7)		leutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Spnag	num moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches): _ Water Table Present? Yes No Depth (inches): _		
		Present? Yes No
Saturation Present? Yes No Depth (inches): _ (includes capillary fringe)	Wetland Hydrology F	resent? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:	
Remarks:		
Wetland hydrology was not observed at this	location	
Trottana ny arology wao not obcorroa at ano		

= 0		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Fagus grandifolia	20		FACU	That Are OBL, FACW, or FAC: 3 (A)
2. Liquidambar styraciflua	15		FAC	Total Number of Dominant
3. Liriodendron tulipifera	15		FACU	Species Across All Strata: 7 (B)
4. Nyssa sylvatica	15		FAC	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 42.9 (A/B)
6				
	65% :	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: <u>32.5</u>	20% of	total cover:	13.0	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)				OBL species $0 \times 1 = 0$
1				FACW species $0 \times 2 = 0$
2.				FAC species <u>45</u> x 3 = <u>135</u>
3.				FACU species <u>65</u> x 4 = <u>260</u>
4.				UPL species <u>0</u> x 5 = <u>0</u>
				Column Totals: 110 (A) 395 (B)
5				0.50
6				Prevalence Index = B/A = 3.59
		= Total Cov		Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4.				¹ Indicators of hydric soil and wetland hydrology must
5.				be present, unless disturbed or problematic.
6.				Definitions of Five Vegetation Strata:
o		Total Cov		John Marie St. 1100 Vogotation Guata.
				Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 30 ft r) 1 Lonicera japonica	15		FACIL	(7.0 cm) of larger in diameter at breast neight (DBH).
··	15		FACU	Sapling – Woody plants, excluding woody vines,
2. Parthenocissus quinquefolia	15		FACU	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3				than 3 iii. (7.0 cm) DDH.
4				Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
8.				plants, except woody vines, less than approximately 3 ft (1 m) in height.
9.				3 it (1 iii) iii neight.
				Woody vine – All woody vines, regardless of height.
10				
11	30%			
45.0		= Total Cov		
50% of total cover: 15.0	20% of	total cover:	6.0	
Woody Vine Stratum (Plot size: 30 ft r)				
1. Smilax rotundifolia	15		FAC	
2				
3.				
4.				
5.				
·	15%	Total Cov		Hydrophytic Vegetation
500/ 7.5				Present? Yes No
50% of total cover: 7.5		total cover:	<u> </u>	
Remarks: (If observed, list morphological adaptations belo	w).			

Depth Matrix Redox Features (inches) Color (moist) % Type¹ Loc² Texture Remarks	
(inches) Color (moist) % Color (moist) % Type Loc Texture Remarks	
0.40 40/0.5/4 00 40/0.5/0 45 0 14 0/11 40 0/4.50//	
<u>0 - 12</u> 10YR 5/4 <u>80</u> 10YR 5/8 <u>15</u> <u>C</u> <u>M</u> <u>Silt Loam</u> 10yr 6/1 5% (depletion)	
<u> </u>	
-	
	—
_ -	
_ -	
-	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ :	
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O)	
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S)	
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 15	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P,	3, T)
Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20)	
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B)	
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12)	
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks)	
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)	
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Iron-Manganese Masses (F12) (LRR O, P, T)	
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present,	
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic.	
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)	
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):	
Type:	,
Depth (inches): No	
Remarks:	
Hydric soil was not observed at this location.	

Applicant/Owner: North Point Development Investigator(s): TNT Environmental, Inc J. Moore, M. Mednikova Section, Township, Landform (hillslope, terrace, etc.): Upland Local relief (concave Subregion (LRR or MLRA): P 133A Lat: 38.4140836	ve, convex, none): None Slope (%): 2 Long: -77.4317934 Datum: WGS 84 NWI classification: None
Investigator(s): TNT Environmental, Inc J. Moore, M. Mednikova Section, Township, Landform (hillslope, terrace, etc.): Upland Local relief (concave Subregion (LRR or MLRA): P 133A Lat: 38.4140836 Soil Map Unit Name: AvE2 - Aura gravelly fine sandy loam Are climatic / hydrologic conditions on the site typical for this time of year? Yes N	, Range:
Landform (hillslope, terrace, etc.): Upland Local relief (concave) Subregion (LRR or MLRA): P 133A Lat: 38.4140836 Soil Map Unit Name: AvE2 - Aura gravelly fine sandy loam Are climatic / hydrologic conditions on the site typical for this time of year? Yes N	ve, convex, none): None Slope (%): 2 Long: -77.4317934 Datum: WGS 84 NWI classification: None
Subregion (LRR or MLRA): P 133A Lat: 38.4140836 Soil Map Unit Name: AvE2 - Aura gravelly fine sandy loam Are climatic / hydrologic conditions on the site typical for this time of year? Yes V	Long: -77.4317934 Datum: WGS 84 NWI classification: None
Soil Map Unit Name: AvE2 - Aura gravelly fine sandy loam Are climatic / hydrologic conditions on the site typical for this time of year? Yes N	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes N	
	NO (IT NO EXPLAIN IN REMARKS)
Are Vegetation, Soil, or Hydrology significantly disturbed?	
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? Hydric Soil Present? Yes No Yes No within a We	pled Area etland? Yes No
Wetland Hydrology Present? Yes No Remarks:	
LIVED OLON	
HYDROLOGY Westernel Mudrelegy Indicators	Cocondan Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1) Aquatic Fauna (B13)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Faulta (B15) High Water Table (A2) Marl Deposits (B15) (LRR U)	Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living R	
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Vis ble on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	· · · · — —
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	tions), if available:
Remarks:	
Only one secondary indicator of wetland hydrology wa	s observed.

	Daint	DP-ZZ25	
Sampling	Point.	DF-ZZZ3	

Tora Otratura (Diet sine 30 ft r		Dominant		Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: 30 ft r) 1. Fagus grandifolia	% Cover 30	Species? ✓	FACU	Number of Dominant Species	• >
2. Liquidambar styraciflua	30	<u> </u>	FAC	That Are OBL, FACW, or FAC: 2 (A	4)
2. Quercus alba	30	<u> </u>	FACU	Total Number of Dominant	
	10		FAC	Species Across All Strata: 4 (E	B)
4. Ilex opaca	- —		FAC	Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 50 (A	A/B)
6	100%			Prevalence Index worksheet:	
500		= Total Cov		Total % Cover of: Multiply by:	
50% of total cover: <u>50.0</u>	20% of	total cover	20.0	OBL species 0 x 1 = 0	
Sapling Stratum (Plot size: 30 ft r)	40		- 40	FACW species 0 $x = 0$	
1. Ilex opaca			FAC	FAC species 50 x 3 = 150	
2				FACU species 62 x 4 = 248	
3					
4					(D)
5				Column Totals: <u>112</u> (A) <u>398</u>	(B)
6				Prevalence Index = $B/A = 3.55$	
500 500 50		= Total Cov		Hydrophytic Vegetation Indicators:	
50% of total cover: <u>5.0</u>	20% of	total cover	2.0	1 - Rapid Test for Hydrophytic Vegetation	
Shrub Stratum (Plot size: 30 ft r				2 - Dominance Test is >50%	
1				3 - Prevalence Index is ≤3.0 ¹	
2				Problematic Hydrophytic Vegetation ¹ (Explain)	
3					
4				¹ Indicators of hydric soil and wetland hydrology mus	st
5				be present, unless disturbed or problematic.	
6				Definitions of Five Vegetation Strata:	
		= Total Cov	er	Tree Woody plants evaluding woody vines	
50% of total cover:	20% of	total cover		Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.	١.
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH	
1. Lonicera japonica	2		FACU	Sapling – Woody plants, excluding woody vines,	
2.				approximately 20 ft (6 m) or more in height and less	3
3.				than 3 in. (7.6 cm) DBH.	
J				Shrub – Woody plants, excluding woody vines,	
T				approximately 3 to 20 ft (1 to 6 m) in height.	
5					
0	- ——			Herb – All herbaceous (non-woody) plants, includin herbaceous vines, regardless of size, and woody	ıg
7				plants, except woody vines, less than approximately	y
8				3 ft (1 m) in height.	
9				Woody vine – All woody vines, regardless of height	ıt.
10				311, 13, 13	
11					
		= Total Cov			
50% of total cover: 1.0	20% of	total cover	0.4		
Woody Vine Stratum (Plot size: 30 ft r)					
1					
2					
3					
4.					
5.				Hydrophytic	
		= Total Cov	er	Vegetation	
50% of total cover:				Present? Yes No	
Remarks: (If observed, list morphological adaptations belo		Jacan Gover			
Tremains. (ii observed, list morphological adaptations belo	JVV J.				
Hydrophytic vegetation was not dom	ninant.				

Profile Desc	ription: (Describe	to the dept	h needed to docui	ment the ii	ndicator	or confirn	n the absence	of indicato	rs.)	
Depth	Matrix		Redo	x Features	<u> </u>					
(inches)	Color (moist)	<u> </u>	Color (moist)	%	Type'	Loc ²	Texture		Remarks	
0 - 3	10YR 3/3	100					Silt Loam			_
3 - 12	10YR 5/6	100					Silt			
-										
										_
	-									
¹ Type: C=Ce	oncentration, D=De	pletion, RM=	Reduced Matrix, Ma	S=Masked	Sand Gra	ains.	² Location:	PL=Pore Li	ning, M=Matr	ix.
Hydric Soil	Indicators: (Appli	cable to all L	RRs, unless othe	rwise note	ed.)		Indicators	for Probler	matic Hydric	Soils ³ :
Histosol	(A1)		Polyvalue Be	elow Surfac	e (S8) (L	RR S, T, U	J) 1 cm M	uck (A9) (L	.RR O)	
Histic Ep	oipedon (A2)		Thin Dark Su	ırface (S9)	(LRR S,	T, U)		uck (A10) (
Black Hi			Loamy Muck	-		O)			, .	MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		=2)					(LRR P, S, T)
	d Layers (A5) Bodies (A6) (LRR I	D T IIV	Depleted Ma		6)			ious Bright A 153B)	Loamy Soils	(F2U)
_	icky Mineral (A7) (L		Redox Dark Depleted Da				•	rent Materi	al (TF2)	
	esence (A8) (LRR I		Redox Depre						Surface (TF1	(2)
	ick (A9) (LRR P, T)	- ,	Marl (F10) (L		,		-	Explain in F		,
Depleted	d Below Dark Surfac	ce (A11)	Depleted Oc	hric (F11) (MLRA 1	51)				
	ark Surface (A12)		Iron-Mangan						Irophytic vege	
	rairie Redox (A16) (, U)			ogy must be p	
	flucky Mineral (S1) (LRR O, S)	Delta Ochric			0A 1E0D\		ss disturbe	d or problema	itic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve Piedmont Flo							
-	Matrix (S6)						A 149A, 153C,	153D)		
	rface (S7) (LRR P,	S, T, U)	/	g =	., (.	_0, (,,	,		
	_ayer (if observed)									
Type:										
Depth (in	ches):						Hydric Soil	Present?	Yes	No
Remarks:							<u> </u>			
H	ydric soil wa	as not pr	esent.							
	-	•								

Project/Site: G.W. Village Commercial City/	County: Stafford County Sampling Date: 2021-07-20
	State: Virginia Sampling Point: DP-ZZ26
Investigator(s): TNT Environmental, Inc J. Moore, M. Mednikova Sect	
Landform (hillslope, terrace, etc.): Depression Loca	
	57 Long: -77.4323085 Datum: WGS 84
•	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distu	rbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sar	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes _ ✓ No	
Hydric Soil Present? Yes V No	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
DP-ZZ26 taken within PFO wetland inside flag	PK40.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LR	
✓ Saturation (A3) Hydrogen Sulfide Odor ((C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres	along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced In	
Drift Deposits (B3) Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	
Iron Deposits (B5) Other (Explain in Remar	
Inundation Vis ble on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes V No Depth (inches): 10	
Saturation Present? Yes V No Depth (inches): 0	Wetland Hydrology Present? Yes No No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	
Remarks.	
Wetland hydrology was present.	

Complina	Daint	DP-ZZ26
Samnlina	Point.	DI 2220

Toro Otroboro (Dietoino 30 ft r		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft r</u>) 1. Liquidambar styraciflua	% Cover 40	Species? ✓	FAC	Number of Dominant Species That Are OBL FACW or FAC: 5 (A)
2. Acer rubrum	30		FAC	That Are OBL, FACW, or FAC: 5 (A)
2. Fagus grandifolia	10		FACU	Total Number of Dominant
	· ——			Species Across All Strata: 5 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6	0.00/			Prevalence Index worksheet:
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover: <u>40.0</u>	20% of	total cover	16.0	OBL species 0 $x 1 = 0$
Sapling Stratum (Plot size: 30 ft r)	_			FACW species 0 $x = 0$
1. Liquidambar styraciflua	5		FAC	FAC species 90
2				FACU species 10
3				
4				VI E SPECIES X S =
5				Column Totals: <u>100</u> (A) <u>310</u> (B)
6				Prevalence Index = B/A = 3.10
0.5		= Total Cov		Hydrophytic Vegetation Indicators:
50% of total cover: 2.5	20% of	total cover	1.0	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)				✓ 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
		= Total Cov	er	Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover	:	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).
1. Microstegium vimineum	10	~	FAC	Sapling – Woody plants, excluding woody vines,
2. Acer rubrum	5	~	FAC	approximately 20 ft (6 m) or more in height and less
3.				than 3 in. (7.6 cm) DBH.
4				Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
5				Herb – All herbaceous (non-woody) plants, including
o				herbaceous vines, regardless of size, and woody
7				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				
11	450/			
7.E		= Total Cov		
50% of total cover: <u>7.5</u>		total cover	3.0	
Woody Vine Stratum (Plot size: 30 ft r)	20% of	10101 00101		
1				
2	 ·			
	 ·			
2				
2				Hydrophytic
2				Vegetation
2. 3. 4.		Total Cov	er	
2		Total Cov	er	Vegetation
2	20% of ow).	Total Cov	er	Vegetation

Profile Desc	ription: (Describe	to the dep	oth needed to docur	ment the	indicator	or confirm	n the absence	of indicato	rs.)	
Depth	Matrix	0/		x Feature		12	Tantona		Danasadas	
(inches)	Color (moist)		Color (moist)	%	Type'	Loc ²	Texture		Remarks	
0 - 2	10YR 3/2	100					Silt Loam			
2 - 14	10YR 5/1	80	10YR 4/6	20	<u>C</u>	М	Silt Loam			
				_						
-										
_						· -				
				. .						
										
1						<u> </u>				
			=Reduced Matrix, Matri			rains.			ining, M=Matri: natic Hydric \$	
		able to all				DDCT			•	ouis .
Histosol	oipedon (A2)		Polyvalue Be Thin Dark Su					uck (A9) (L luck (A10) (•	
	istic (A3)		Loamy Muck							/ILRA 150A,B)
	en Sulfide (A4)		Loamy Gleye			,				(LRR P, S, T)
Stratified	d Layers (A5)		Depleted Ma	atrix (F3)			Anoma	lous Bright	Loamy Soils (I	F20)
_	Bodies (A6) (LRR F		Redox Dark	•	,			A 153B)	. (750)	
	ıcky Mineral (A7) (L esence (A8) (LRR l							rent Materi	al (TF2) : Surface (TF1:	2)
	uck (A9) (LRR P, T)))	Redox Depre Marl (F10) (L		-0)		-	Explain in F		۷)
	d Below Dark Surfac	ce (A11)	Depleted Oc		(MLRA 1	51)	0		tomarito,	
Thick Da	ark Surface (A12)		Iron-Mangan	ese Mass	ses (F12)	(LRR O, P		-	Irophytic veget	
	rairie Redox (A16) (-	ogy must be pr	
-	Mucky Mineral (S1) (LRR O, S)						ss disturbe	d or problema	tic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve Piedmont Flo							
-	Matrix (S6)		Anomalous E					153D)		
	rface (S7) (LRR P,	S, T, U)		9	,	/ (,,	,		
Restrictive	Layer (if observed)	:								
Type:										
Depth (in	ches):						Hydric Soil	Present?	Yes	No
Remarks:										
H	ydric soil wa	is obse	rved.							
1										

Project/Site: G.W. Village Commercial	City/County: Staffo	ord County	Sampling Date: 2021-07-20			
Applicant/Owner: North Point Development			Sampling Point: DP-ZZ27			
Investigator(s): TNT Environmental, Inc J. Moore, M. Mednikova						
Landform (hillslope, terrace, etc.): Upland			Slone (%): 2			
Subregion (LRR or MLRA): P 133A Lat: 38.4						
Soil Map Unit Name: CaD2 - Caroline fine sandy loam						
		NWI classific				
Are climatic / hydrologic conditions on the site typical for this time of y						
Are Vegetation, Soil, or Hydrology significantl						
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If	needed, explain any answer	rs in Remarks.)			
SUMMARY OF FINDINGS - Attach site map showin	g sampling poin	t locations, transects	, important features, etc.			
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No	- Is the Sampl		No V			
Wetland Hydrology Present? Yes No	- Within a Wet					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply	1	Surface Soil				
Surface Water (A1) Aquatic Fauna (B			petated Concave Surface (B8)			
Surface Water (A1) Aquatic Faulta (B1) High Water Table (A2) Marl Deposits (B1)		<u>✓</u> Drainage Pat				
Saturation (A3) Hydrogen Sulfide		Moss Trim Li				
	heres along Living Ro		Water Table (C2)			
Sediment Deposits (B2) Presence of Redu	uced Iron (C4)	Crayfish Burr				
Drift Deposits (B3) Recent Iron Redu	iction in Tilled Soils (C	6) Saturation Vi	sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Thin Muck Surfac		Geomorphic				
Iron Deposits (B5) Other (Explain in	Remarks)	Shallow Aqui				
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral				
Water-Stained Leaves (B9)		Sphagnum m	noss (D8) (LRR T, U)			
Field Observations: Surface Water Present? Yes No Depth (inche	ve).					
Water Table Present? Yes No Depth (inche						
Saturation Present? Yes No Depth (inche						
(includes capillary fringe)	,		11. 163 110			
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspection	ons), if available:				
Remarks:						
Remarks.						
Only one secondary indicator of wetland h	ydrology was	observed.				

Complina	Daint	DP-ZZ27
∹amnlına	Point.	DF-ZZZ/

20.4		Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species	
1. Fagus grandifolia	50		FACU	That Are OBL, FACW, or FAC: 1	A)
2. Quercus alba	30		FACU	Total Number of Dominant	
3. Liquidambar styraciflua	20		FAC		B)
4					
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A	A/B)
6				That Are OBE, I AGW, OF I AG (A	~0)
·	100%	= Total Cov		Prevalence Index worksheet:	
50% of total cover: 50.0				Total % Cover of: Multiply by:	
	20% 01	total cover.		OBL species <u>0</u> x 1 = <u>0</u>	
Sapling Stratum (Plot size: 30 ft r)	10		FAOLI	FACW species $0 x 2 = 0$	
			FACU	FAC species 22 x 3 = 66	
2				FACU species 92 x 4 = 368	
3					
4.				UPL species $0 \times 5 = 0$	
5				Column Totals: 114 (A) 434	(B)
6				5	
o	10%	= Total Cov		Prevalence Index = B/A = 3.81	
50%				Hydrophytic Vegetation Indicators:	
50% of total cover: <u>5.0</u>	20% of	total cover:	2.0	1 - Rapid Test for Hydrophytic Vegetation	
Shrub Stratum (Plot size: 30 ft r				2 - Dominance Test is >50%	
1				3 - Prevalence Index is ≤3.0 ¹	
2				Problematic Hydrophytic Vegetation ¹ (Explain)	
3				<u> </u>	
4.				1 and a section of the edge of	-4
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	St
5				,	
6				Definitions of Five Vegetation Strata:	
		= Total Cov		Tree – Woody plants, excluding woody vines,	
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in	
Herb Stratum (Plot size: 30 ft r				(7.6 cm) or larger in diameter at breast height (DBH	Ⅎ).
1 Liquidambar styraciflua	2		FAC	Sapling – Woody plants, excluding woody vines,	
2. Quercus alba	2		FACU	approximately 20 ft (6 m) or more in height and less	s
3.				than 3 in. (7.6 cm) DBH.	
				Shrub – Woody plants, excluding woody vines,	
4.				approximately 3 to 20 ft (1 to 6 m) in height.	
5					
6				Herb – All herbaceous (non-woody) plants, including	ng
7				herbaceous vines, regardless of size, and woody	
				I plants except woody vines less than approximately	lv.
8				plants, except woody vines, less than approximately 3 ft (1 m) in height.	ly
				3 ft (1 m) in height.	
9				' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	
9				3 ft (1 m) in height.	
9				3 ft (1 m) in height.	
9	4%	Total Cov	er	3 ft (1 m) in height.	
9	4%	Total Cov	er	3 ft (1 m) in height.	
9	4%	Total Cov	er	3 ft (1 m) in height.	
9	4% 20% of	= Total Cover:	er 0.8	3 ft (1 m) in height.	
9	4% 20% of	= Total Cov	er 0.8	3 ft (1 m) in height.	
9	4% 20% of	= Total Cov	er 0.8	3 ft (1 m) in height.	
9	4% 20% of	= Total Cov	er 0.8	3 ft (1 m) in height.	
9	4% 20% of	= Total Cov	er 0.8	3 ft (1 m) in height. Woody vine – All woody vines, regardless of heigh	
9	4% 20% of	= Total Cov	er 0.8	3 ft (1 m) in height. Woody vine – All woody vines, regardless of heigh Hydrophytic	
9	4% 20% of	= Total Cover:	er 0.8	3 ft (1 m) in height. Woody vine – All woody vines, regardless of heigh Hydrophytic Vegetation	
9	4% 20% of	= Total Cover:	er 0.8	3 ft (1 m) in height. Woody vine – All woody vines, regardless of heigh Hydrophytic	
9	4% 20% of	= Total Cover:	er 0.8	3 ft (1 m) in height. Woody vine – All woody vines, regardless of heigh Hydrophytic Vegetation	

Profile Desc	ription: (Describe	to the de	oth needed to docu	ment the	indicator	or confirn	n the absence of inc	licators.)	
Depth	Matrix		Redox Features						
(inches)	Color (moist)		Color (moist)	%	Type'	Loc ²	Texture	Remark	<u>s</u>
0 - 2	10YR 5/4	90	10YR 4/6	10	<u>C</u>	<u>M</u>	Silt Loam		
3 - 14	10YR 6/6	100					Silt Loam		
-									
									_
			-	_	-				_
	-					· ——			_
							2		
			=Reduced Matrix, M LRRs, unless othe			rains.	Location: PL=F		
•		Sable to all			•	DDCTI		•	ic soils .
Histosol	ipedon (A2)		Polyvalue Be					49) (LRR 0) 410) (LRR S)	
Black His			Loamy Muck						le MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley			,			19) (LRR P, S, T)
Stratified	Layers (A5)		Depleted Ma	atrix (F3)			Anomalous I	Bright Loamy Soi	ls (F20)
-	Bodies (A6) (LRR I		Redox Dark				(MLRA 15		
	cky Mineral (A7) (L							Material (TF2) / Dark Surface (1	
· 	esence (A8) (LRR I ck (A9) (LRR P, T)	J)	Redox Depr Marl (F10) (I		-0)			in in Remarks)	F12)
	Below Dark Surface	ce (A11)	Depleted Oc) (MLRA 1	51)	Out (Explo	iii iii r tomanto,	
Thick Da	rk Surface (A12)		Iron-Mangar	nese Mas	ses (F12)	(LRR O, P,	T) ³ Indicators	of hydrophytic ve	getation and
			A) Umbric Surfa					ydrology must be	•
-	lucky Mineral (S1) (LRR O, S)						sturbed or proble	matic.
	leyed Matrix (S4) edox (S5)		Reduced Ve Piedmont FI						
-	Matrix (S6)						RA 149A, 153C, 153D))	
	face (S7) (LRR P,	S, T, U)		J	,	/ (,,	,	
Restrictive L	ayer (if observed)):							
Type:									_
Depth (inc	ches):						Hydric Soil Prese	ent? Yes	No
Remarks:							-1		
H	ydric soil wa	as not c	bserved.						

Project/Site: G.W. Village Commercial Ci	ity/County: Stafford County Sampling Date: 2021-07-20
•	State: Virginia Sampling Point: DP-ZZ28
Investigator(s): TNT Environmental, Inc J. Moore, M. Mednikova Si	
• , , —	ocal relief (concave, convex, none): Concave Slope (%): 2
, ,	0438 Long: -77.4311519 Datum: WGS 84
	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year	
	isturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally probl	ematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing s	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No No No No No No No N	Is the Sampled Area within a Wetland? Yes No
Remarks:	
DP-ZZ28 taken PFO wetland, inside flag PL2	J.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	
High Water Table (A2) Marl Deposits (B15) (
Saturation (A3) Hydrogen Sulfide Od	
	es along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Drift Deposits (B3) Recent Iron Reduction	
Drift Deposits (B3) Recent Iron Reductio Algal Mat or Crust (B4) Thin Muck Surface (C	•
Iron Deposits (B5) Other (Explain in Rer	
Indit Deposite (20) Inundation Vis ble on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections) if available:
Decombe Necorded Data (officially gauge, monitoring won, dental priotes,	previous inspections), if available.
Remarks:	
Wetland hydrology was observed.	

Camplina	Doint:	DP-ZZ28
Samniina	Point.	DI 2220

7. O. J. (D. J. 20 ft r		Dominant		Dominance Test worksheet:		
Tree Stratum (Plot size: 30 ft r) 1 Carpinus caroliniana	% Cover 30	Species? ✓	Status FAC	Number of Dominant Species		
1. Carpinus caroliniana 2. Acer rubrum	25	<u> </u>	FAC	That Are OBL, FACW, or FAC: 5 (A)		
2. Liriodendron tulipifera	15		FACU	Total Number of Dominant		
3. Ciriodendron tuliphera 4. Quercus alba	10		FACU	Species Across All Strata: 5 (B)		
··-				Percent of Dominant Species		
5				That Are OBL, FACW, or FAC: 100 (A/B)		
6	80%	T-t-l Cov		Prevalence Index worksheet:		
50% of total cover: 40.0		= Total Cov		Total % Cover of: Multiply by:		
Sapling Stratum (Plot size: 30 ft r)	20% OI	totai covei.	10.0	OBL species <u>5</u> <u>x 1 = 5</u>		
	10	V	FAC	FACW species $0 x 2 = 0$		
				FAC species 75 x 3 = 225		
2				FACU species 25		
3				UPL species 0 x 5 = 0		
4				Column Totals: 105 (A) 330 (B)		
5						
6				Prevalence Index = B/A = 3.14		
F 0		= Total Cov		Hydrophytic Vegetation Indicators:		
50% of total cover: <u>5.0</u>	20% of	total cover:	2.0	1 - Rapid Test for Hydrophytic Vegetation		
Shrub Stratum (Plot size: 30 ft r)				✓ 2 - Dominance Test is >50%		
1				3 - Prevalence Index is ≤3.0 ¹		
2				Problematic Hydrophytic Vegetation ¹ (Explain)		
3						
4				¹ Indicators of hydric soil and wetland hydrology must		
5				be present, unless disturbed or problematic.		
6				Definitions of Five Vegetation Strata:		
		= Total Cov	er	Tree – Woody plants, excluding woody vines,		
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in.		
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).		
1. Athyrium angustum	10		FAC	Sapling – Woody plants, excluding woody vines,		
2. Carex stipata	5		OBL	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.		
3				than 3 m. (7.6 cm) DBH.		
4				Shrub – Woody plants, excluding woody vines,		
5				approximately 3 to 20 ft (1 to 6 m) in height.		
6				Herb – All herbaceous (non-woody) plants, including		
7				herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately		
8				3 ft (1 m) in height.		
9						
10				Woody vine – All woody vines, regardless of height.		
11						
	15% :	Total Cov	er			
50% of total cover: 7.5	20% of	total cover:	3.0			
Woody Vine Stratum (Plot size: 30 ft r)						
2.						
3						
4						
5				Hydrophytic Vegetation		
500/ of total covers		= Total Cov		Present? Yes No		
50% of total cover:		total cover.				
Remarks: (If observed, list morphological adaptations belo	w).					
Hydrophytic vegetation was dominar	nt.					

Profile Desc	ription: (Describe	to the dept	h needed to docur	nent the	indicator	or confirm	n the absence of	f indicators.)
Depth	Matrix			x Feature		. 2	- .	
(inches)	Color (moist)		Color (moist)	%	Type'	Loc²	<u>Texture</u>	Remarks
0 - 14	10YR 5/2	60	5YR 5/8	40	<u>C</u>	М	Silt Loam	
-								
_								
					-			
				· 	· 			
-								
¹Type: C=Ce	oncentration, D=De	oletion. RM=	Reduced Matrix. MS	S=Masked	d Sand G	rains.	² Location: P	PL=Pore Lining, M=Matrix.
	Indicators: (Applic							or Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	low Surfa	ice (S8) (I	LRR S, T,	U) 1 cm Mu	ick (A9) (LRR O)
Histic Ep	pipedon (A2)		Thin Dark Su					ick (A10) (LRR S)
Black Hi	stic (A3)		Loamy Muck			R O)	Reduced	d Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		(F2)			nt Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma					ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR F		Redox Dark	,	,			A 153B)
	icky Mineral (A7) (L		Depleted Date					ent Material (TF2)
	esence (A8) (LRR I	٦)	Redox Depre Marl (F10) (L		8)		-	allow Dark Surface (TF12) xplain in Remarks)
	ick (A9) (LRR P, T) d Below Dark Surfac	re (A11)	Nan (F10) (L		(MIRA 1	51)	Other (E	xpiaiii iii Reiliaiks)
-	ark Surface (A12)	30 (7111)	Iron-Mangan				, T) ³ Indicat	tors of hydrophytic vegetation and
	rairie Redox (A16) (MLRA 150A	-					nd hydrology must be present,
	lucky Mineral (S1)		Delta Ochric					s disturbed or problematic.
Sandy G	Gleyed Matrix (S4)		Reduced Ver	tic (F18)	(MLRA 1	50A, 150B)	
-	ledox (S5)		Piedmont Flo					
	Matrix (S6)		Anomalous E	Bright Loa	my Soils	(F20) (MLF	RA 149A, 153C, 1	153D)
	rface (S7) (LRR P,							
	_ayer (if observed)):						
Type:								
	ches):						Hydric Soil P	resent? Yes V No No
Remarks:								
Н	ydric soil wa	as prese	nt.					

Project/Site: G.W. Village Commercial	City/County: Staffe	ord County	Sampling Date: 2021-07-20			
•			Sampling Point: DP-ZZ29			
Investigator(s): TNT Environmental, Inc J. Moore, M. Mednikova						
Landform (hillslope, terrace, etc.): Upland, Depression	•	-	Slone (%): 5			
Subregion (LRR or MLRA): P 133A Lat: 38.41						
		NWI classific				
•						
Are climatic / hydrologic conditions on the site typical for this time of ye						
Are Vegetation, Soil, or Hydrology significantly						
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (I	f needed, explain any answe	rs in Remarks.)			
SUMMARY OF FINDINGS - Attach site map showing	sampling poin	t locations, transects	, important features, etc.			
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Samp	led Area tland? Yes	No			
Wetland Hydrology Present? Yes No Remarks:						
HYDROLOGY Wetland Hydrology Indicators:		Socondary Indica	tors (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)				
Surface Water (A1) Aquatic Fauna (B1:		petated Concave Surface (B8)				
Surface Water (A1) Aquatic Faulta (B15) High Water Table (A2) Marl Deposits (B15)		<u>✓</u> Drainage Pat				
Saturation (A3) — Hydrogen Sulfide C		Moss Trim Li				
Water Marks (B1) Oxidized Rhizosph			Water Table (C2)			
Sediment Deposits (B2) Presence of Reduc	ed Iron (C4)	Crayfish Burr				
Drift Deposits (B3) Recent Iron Reduc	tion in Tilled Soils (C	C6) Saturation Vi	sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Thin Muck Surface	(C7)	Geomorphic Position (D2)				
Iron Deposits (B5) Other (Explain in R	emarks)	Shallow Aqui	tard (D3)			
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral				
Water-Stained Leaves (B9)	-	Sphagnum m	noss (D8) (LRR T, U)			
Field Observations:	\ -					
Surface Water Present? Yes No Depth (inches)						
Water Table Present? Yes No Depth (inches) Saturation Present? Yes No Depth (inches)		Wetland Hydrology Presen	t? Yes No			
Saturation Present? Yes No Depth (inches) (includes capillary fringe)):	wetiand Hydrology Presen	t? res No			
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspection	ons), if available:				
Remarks:						
Only one secondary indicator of wetland hy	drology was	s observed.				

00.6	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft r		Species?		Number of Dominant Species	
1. Quercus alba	35		FACU FACU	That Are OBL, FACW, or FAC: 1 (A)	
2. Fagus grandifolia	20	<u></u>		Total Number of Dominant	
3. Acer rubrum			FAC	Species Across All Strata: 4 (B)	
4. Carpinus caroliniana	15		FAC	Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 25 (A/E	3)
6	100%			Prevalence Index worksheet:	
T00/ 6/ / 50 O		= Total Cov		Total % Cover of: Multiply by:	
50% of total cover: <u>50.0</u>	20% of	total cover	20.0	OBL species 0 x 1 = 0	
Sapling Stratum (Plot size: 30 ft r)				FACW species $0 \times 2 = 0$	
1				FAC species 35 x 3 = 105	
2				FACU species 70 x 4 = 280	
3				UPL species 0 x 5 = 0	
4				Column Totals: 105 (A) 385 (B))
5				0.07	
6		Total Cov		Prevalence Index = B/A = 3.67	
50% of total cover:				Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size: 30 ft r)	20 /6 01	total cover.	·	1 - Rapid Test for Hydrophytic Vegetation	
				2 - Dominance Test is >50%	
1				3 - Prevalence Index is ≤3.0 ¹	
				Problematic Hydrophytic Vegetation ¹ (Explain)	
3. 4.				1	
5				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
6				Definitions of Five Vegetation Strata:	
		= Total Cov	er	_	
50% of total cover:				Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.	
Herb Stratum (Plot size: 30 ft r				(7.6 cm) or larger in diameter at breast height (DBH).	
1. Polystichum acrostichoides	5	~	FACU	Sapling – Woody plants, excluding woody vines,	
2.				approximately 20 ft (6 m) or more in height and less	
3.				than 3 in. (7.6 cm) DBH.	
4				Shrub – Woody plants, excluding woody vines,	
5				approximately 3 to 20 ft (1 to 6 m) in height.	
6				Herb – All herbaceous (non-woody) plants, including	
7				herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately	
8				3 ft (1 m) in height.	
9				Manda di cina All con de coince de condita e estable	
10				Woody vine – All woody vines, regardless of height.	
11					
	5%	= Total Cov	er		
50% of total cover: 2.5	20% of	total cover:	1.0		
Woody Vine Stratum (Plot size: 30 ft r)					
1					
2					
3					
4					
5				Hydrophytic	
		= Total Cov		Vegetation Present? Yes No	
50% of total cover:		total cover	:	1103CHL: 103NO	
Remarks: (If observed, list morphological adaptations belo	w).				
Hydrophytic vegetation was not dom	inant				
Try at opiny tie vegetation was not don	miant.				

Profile Desc	ription: (Describe	to the dept	h needed to docun	nent the	indicator	or confirn	n the absence of	of indicators.)
Depth	Matrix			x Feature	1			
(inches)	Color (moist)	<u> %</u>	Color (moist)	<u>%</u>	Type'	Loc ²	<u>Texture</u>	Remarks
0 - 14	10YR 6/1	60	5YR 5/6	40	<u>C</u>	<u>M</u>	Silt	
-								
				-				
							 .	
					· <u></u>			
-								
¹Type: C=C	oncentration, D=Dep	oletion RM=	Reduced Matrix MS	S=Masked	d Sand Gr	ains	² Location:	PL=Pore Lining, M=Matrix.
	Indicators: (Applic					unio.		for Problematic Hydric Soils ³ :
Histosol			Polyvalue Be			RR S. T. I		uck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					uck (A10) (LRR S)
Black Hi			Loamy Mucky					ed Vertic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix ((F2)		Piedmo	ont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Mat	trix (F3)			Anomal	lous Bright Loamy Soils (F20)
_	Bodies (A6) (LRR P		Redox Dark S					A 153B)
	icky Mineral (A7) (LI		Depleted Dar					rent Material (TF2)
	esence (A8) (LRR L	J)	Redox Depre		8)			nallow Dark Surface (TF12)
	ick (A9) (LRR P, T) d Below Dark Surfac	·ο (Λ11)	Marl (F10) (L Depleted Och		/MI DA 1	51)	Other (E	Explain in Remarks)
-	ark Surface (A12)	E (ATT)	Iron-Mangane				T) ³ Indica	ators of hydrophytic vegetation and
	rairie Redox (A16) (I	MLRA 150A	-				•	and hydrology must be present,
	lucky Mineral (S1)		Delta Ochric			, -,		ss disturbed or problematic.
	Bleyed Matrix (S4)		Reduced Ver			50A, 150B))	·
	tedox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	19A)	
Stripped	Matrix (S6)		Anomalous B	right Loa	my Soils (F20) (MLR	RA 149A, 153C,	153D)
	rface (S7) (LRR P, \$							
Restrictive I	_ayer (if observed)	:						
Type:								,
Depth (in	ches):						Hydric Soil F	Present? Yes No
Remarks:							•	
H	ydric soil wa	s prese	nt.					

Project/Site: G.W. Village Commercial	City/County: Stafford	County	Sampling Date: 2021-07-20
•			Sampling Point: DP-ZZ30
Investigator(s): TNT Environmental, Inc J. Moore, M. Mednikova			
Landform (hillslope, terrace, etc.): Upland, Depression	·	•	Slone (%): 2
Subregion (LRR or MLRA): P 133A Lat: 38.411	7387	ang: -77.4346204	Datum: WGS 84
		NWI classific	
Are climatic / hydrologic conditions on the site typical for this time of year			
Are Vegetation, Soil, or Hydrology significantly of			
Are Vegetation, Soil, or Hydrology naturally prol	blematic? (If nee	eded, explain any answer	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	sampling point lo	ocations, transects	, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes No Yes No	Is the Sampled within a Wetlan		No
DP-ZZ30 taken in upland field, outside flag HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil (
Surface Water (A1) Aquatic Fauna (B13	3)		etated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15)		Drainage Pat	
Saturation (A3) Hydrogen Sulfide O		Moss Trim Lii	
Water Marks (B1) Oxidized Rhizosphe			Vater Table (C2)
Sediment Deposits (B2) Presence of Reduce	ed Iron (C4)	Crayfish Burr	
Drift Deposits (B3) Recent Iron Reducti	ion in Tilled Soils (C6)	Saturation Visit	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface		Geomorphic	
Iron Deposits (B5)	emarks)	Shallow Aqui	
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral	
Water-Stained Leaves (B9)		Sphagnum m	oss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No Depth (inches):			
Water Table Present? Yes No Depth (inches):			
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wet	tland Hydrology Presen	t? Yes V No
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections)), if available:	
Remarks:			
Stunted growth of vegetation was observed	d. Wetland hvd	drology was pres	sent.

7 0 (D)		Dominant		Dominance Test worksheet:		
Tree Stratum (Plot size: 30 ft r) 1		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
2. 3.				Total Number of Dominant Species Across All Strata:	1	(B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)
6		= Total Cov		Prevalence Index worksheet:		
EOO/ of total covers				Total % Cover of:	Multiply by:	_
50% of total cover:	20% 01	total cover		OBL species 80 x	c 1 = <u>80</u>	_
Sapling Stratum (Plot size: 30 ft r)				FACW species 10 x	(2 = 20	
1					3 = 15	_
2				FACU species 0 x		_
3				UPL species 0 x		_
4					445	– (B)
5				Column Totals.		_ (D)
6				Prevalence Index = B/A =		_
		= Total Cov		Hydrophytic Vegetation Indica		
50% of total cover: Shrub Stratum (Plot size: 30 ft r)	20% 01	total cover		1 - Rapid Test for Hydrophy		
				✓ 2 - Dominance Test is >50%	%	
1				3 - Prevalence Index is ≤3.0		
2.				Problematic Hydrophytic Ve	egetation¹ (Explai	n)
3						
4				¹ Indicators of hydric soil and we		nust
5				be present, unless disturbed or	<u> </u>	
6				Definitions of Five Vegetation	Strata:	
		= Total Cov		Tree – Woody plants, excluding	woody vines,	
50% of total cover:	20% of	total cover	:	approximately 20 ft (6 m) or more		
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at	breast height (DI	BH).
1 Leersia oryzoides	80		OBL	Sapling – Woody plants, exclud		
2. Boehmeria cylindrica	10		FACW	approximately 20 ft (6 m) or mo	re in height and le	ess
3. Microstegium vimineum	5		FAC	than 3 in. (7.6 cm) DBH.		
4				Shrub – Woody plants, excluding approximately 3 to 20 ft (1 to 6 re		
5					, ,	
0				Herb – All herbaceous (non-woodherbaceous vines, regardless of		
7				plants, except woody vines, less		
8				3 ft (1 m) in height.		
9				Woody vine – All woody vines,	regardless of hei	ght.
10						
11	95%					
47 F	$\overline{}$	= Total Cov				
50% of total cover: 47.5	20% of	total cover	19.0			
Woody Vine Stratum (Plot size: 30 ft r)						
1						
2						
3						
4						
5				Hydrophytic		
	:	= Total Cov	ver .	Vegetation Present? Yes	No	
50% of total cover:	20% of	total cover	:	Present? Yes	No	
Remarks: (If observed, list morphological adaptations belo	w).			ı		

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	n the absence	of indicate	ors.)	
Depth	Matrix			x Feature						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	-	Remarks	
0 - 10	10YR 5/4	100					Silt Loam			_
10 - 16	10YR 5/4	90	10YR 3/6	10	С	М	Silt Loam	-		
-										
_										
		-		_	-					
			-	_	-					
	-									
			=Reduced Matrix, M			ains.			ining, M=Matr	
-		able to all	LRRs, unless othe						matic Hydric	Soils":
Histosol	` '		Polyvalue Be					. , .	•	
Histic Ep	oipedon (A2)		Thin Dark Si Loamy Muck					luck (A10) ed Vertic (F		MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley			(0)		•	, .	(LRR P, S, T)
	Layers (A5)		Depleted Ma		(- –)				Loamy Soils	
Organic	Bodies (A6) (LRR F	P, T, U)	Redox Dark	Surface (F6)		(MLF	RA 153B)	-	
	cky Mineral (A7) (L							arent Mater		
· 	esence (A8) (LRR L	J)	Redox Depr		- 8)				k Surface (TF1	12)
	ick (A9) (LRR P, T) d Below Dark Surfac	·Δ (Δ11)	Marl (F10) (I Depleted Oc	,	/MIRA1	51)	Other (Explain in	Remarks)	
	ark Surface (A12)	C (A11)	Iron-Mangar				T) ³ Indic	ators of hvo	drophytic vege	tation and
· 	, ,	MLRA 150	A) Umbric Surfa					-	ogy must be p	
Sandy M	lucky Mineral (S1) (LRR O, S)	Delta Ochric	(F17) (M	LRA 151)		unle	ess disturbe	ed or problema	itic.
-	sleyed Matrix (S4)		Reduced Ve							
-	edox (S5)		Piedmont Fl					4E2D)		
	Matrix (S6) rface (S7) (LRR P, S	S T II)	Anomalous I	Bright Loa	imy Solis (F20) (WILK	A 149A, 153C	, 1530)		
	_ayer (if observed)									
Type:	, (,									
Depth (inc	ches):						Hydric Soil	Present?	Yes	No 🗸
Remarks:							,			
	ydric soil wa	s not n	resent.							
	,									

Project/Site: G.W. Village Commercial	City/County: Staff	ford County	Sampling Date: 2021-07-20
Applicant/Owner: North Point Development		State: Virginia	· · · · ·
Investigator(s): TNT Environmental, Inc J. Moore, M. Me			
Landform (hillslope, terrace, etc.): Depression	 .	· • ————	Slone (%). 2
Subregion (LRR or MLRA): P 133A La			
Soil Map Unit Name: TeA - Tetotum fine sandy loam		NWI classific	
Are climatic / hydrologic conditions on the site typical for this			
Are Vegetation, Soil, or Hydrology sig			
Are Vegetation, Soil, or Hydrology na	turally problematic? (If needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map s	howing sampling poi	nt locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Yes No No	within a We		No
Wetland Hydrology Present? Yes No Remarks:			
DP-ZZ31 taken in PEM wetland, inside			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all the		Surface Soil	, ,
Surface Water (A1) Aquatic F		Sparsely Ve	getated Concave Surface (B8)
	osits (B15) (LRR U)	<u>✓</u> Drainage Pa	
	Sulfide Odor (C1)	Moss Trim L	
	Rhizospheres along Living R of Reduced Iron (C4)	Crayfish Bur	Water Table (C2)
	on Reduction in Tilled Soils (isible on Aerial Imagery (C9)
	k Surface (C7)		Position (D2)
	plain in Remarks)	Shallow Aqu	
Inundation Vis ble on Aerial Imagery (B7)	, , , , , , , , , , , , , , , , , , , ,	FAC-Neutral	
Water-Stained Leaves (B9)			noss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No Dept	h (inches):		
Water Table Present? Yes No Dept	h (inches):		
Saturation Present? Yes No Dept	h (inches):	Wetland Hydrology Preser	nt? Yes <u>'</u> No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, as	erial photos, previous inspect	ions), if available:	
	man priotos, promodo mopos.		
Remarks:			
Wetland hydrology was observed.			

Sampling	Point:	DP-ZZ31
samonno	POIIII	D

1	20 ft #		Dominant		Dominance Test worksheet:
2 3	<u>Tree Stratum</u> (Plot size: 30 ft r)			Status	
\$ Species Across All Strata: 2 (B) \$ Species Across All St					That Are OBL, FACW, or FAC: 2 (A)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)					
5 6.	3				Species Across All Strata: 2 (B)
Tatal Are OBL, FACW, or FACE 100 (A/B)	4				Percent of Dominant Species
Total Cover	5				
Total % Cover of:	6				Decorded as Index weeks best
Saping Stratum (Plot size: 30 ft r) Saping Stratum (=	= Total Cov	er	
FACW species 10		20% of	total cover:		
FACW species V X 2 = 20	Sapling Stratum (Plot size: 30 ft r)				
2					17.617 species x2
Activation Act					
4.					
5. 6 = Total Cover					
Prevalence Index = B/A = 1.12					Column Totals: <u>85</u> (A) <u>95</u> (B)
Total Cover					5 1 1 2 1 1 2 1 1 2
Shrub Stratum (Plot size: 30 ft r 1. Scirpus longii	o				
Shrub Stratum (Plot size: 30 ftr 1. Scirus longili 25	500/ of total cover				
1. Scirpus longii		20% 01	ioiai cover		
2		40	~	OBL	
Sersia oryzoides 10					
4. Persicaria pensylvanica 5.					Problematic Hydrophytic Vegetation ¹ (Explain)
5					
B5%	···			FACW	
Solid Cover 42.5 20% of total cover 17.0 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, approximately 3 ft (1 m) in height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height.	5				1
Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines	6				Definitions of Five Vegetation Strata:
Solid Cover 42.5 20% of total cover: 17.0 approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).					Tree – Woody plants, excluding woody vines.
Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Total Cover	50% of total cover: <u>42.5</u>	20% of	total cover:	17.0	approximately 20 ft (6 m) or more in height and 3 in.
2	Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).
2	1				Sapling – Woody plants, excluding woody vines,
3					approximately 20 ft (6 m) or more in height and less
Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.					than 3 in. (7.6 cm) DBH.
5					Shrub – Woody plants, excluding woody vines,
6.					approximately 3 to 20 ft (1 to 6 m) in height.
7					Herb – All herbaceous (non-woody) plants, including
8					herbaceous vines, regardless of size, and woody
9					
10					3 it (1 m) in neight.
11 = Total Cover = Total Cover					Woody vine – All woody vines, regardless of height.
= Total Cover 50% of total cover: 20% of total cover: Woody Vine Stratum (Plot size: 30 ft r) 1 = 2 = 3 = 4 = 5 = Total Cover 50% of total cover: 20% of total cover: 50% of total cover: 20% of total cover: 50% of total cover: 20% of total cover:					
Solid total cover: 20% of total cover: Solid total cover:	11				
Woody Vine Stratum (Plot size: 30 ft r) 1					
1		20% of	total cover:		
2					
3					
4	2				
5 = Total Cover = Total Cover: 20% of total cover: Present? Yes No	3				
= Total Cover	4				
= Total Cover Vegetation Present? Yes No	5				Hydrophytic
50% of total cover: 20% of total cover:		:	= Total Cov	er	Vegetation
Remarks: (If observed, list morphological adaptations below).	50% of total cover:	20% of	total cover:		Present? Yes No
	Remarks: (If observed, list morphological adaptations belo	w).			1
	, , , , , , , , , , , , , , , , , , , ,	,			

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the	indicator	or confirm	n the absence of in	dicators.)
Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Type 1 Loc²								
(inches)	Color (moist)	<u> </u>	Color (moist)	%	Type'	_Loc ²	<u>Texture</u>	Remarks
0 - 14	10YR 5/2	80	10YR 5/6	20	<u>C</u>	<u>M</u>	Silt Loam	
-								
-								
								_
				-	-			
_								
-								
¹Type: C=Co	oncentration, D=Dep	oletion, RM=F	Reduced Matrix, MS	=Masked	d Sand Gr	ains.	² Location: PL=F	Pore Lining, M=Matrix.
	ndicators: (Applic							Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Bel	low Surfa	ace (S8) (I	RR S, T, L	J) 1 cm Muck ((A9) (LRR O)
Histic Ep	pipedon (A2)		Thin Dark Su	rface (S9) (LRR S,	T, U)	2 cm Muck ((A10) (LRR S)
Black Hi	, ,		Loamy Mucky			R O)		ertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		(F2)			loodplain Soils (F19) (LRR P, S, T)
	Layers (A5)		<u>✓</u> Depleted Mat		-0)			Bright Loamy Soils (F20)
_	Bodies (A6) (LRR P		Redox Dark S				(MLRA 15	Material (TF2)
	icky Mineral (A7) (L l esence (A8) (LRR U		Depleted Dar Redox Depre					w Dark Surface (TF12)
	ick (A9) (LRR P, T)	,,	Marl (F10) (L	•	0)			ain in Remarks)
	Below Dark Surfac	e (A11)	Depleted Och		(MLRA 1	51)		,
Thick Da	ark Surface (A12)		Iron-Mangane	ese Mass	es (F12)	LRR O, P,	T) ³ Indicators	of hydrophytic vegetation and
	rairie Redox (A16) (I					⁻ , U)		hydrology must be present,
	lucky Mineral (S1) (LRR O, S)	Delta Ochric					isturbed or problematic.
	Sleyed Matrix (S4)		Reduced Ver					
-	edox (S5) Matrix (S6)		Piedmont Flo				19A) RA 149A, 153C, 153I	D)
	rface (S7) (LRR P, \$	S. T. U)	Anomalous B	ngni Loa	illy Solis (1 20) (WILK	A 149A, 133C, 133	<i>b</i>)
	_ayer (if observed)							
Type:	,							
Depth (inc	ches):						Hydric Soil Pres	ent? Yes V No No
Remarks:	,						1 -	
Н	ydric soil wa	s presei	nt.					
	,							

Project/Site: G.W. Village Commercial	City/County: Staffo	ord County	Sampling Date: 2021-07-20		
•			Sampling Point: DP-ZZ32		
Investigator(s): TNT Environmental, Inc J. Moore, M. Mednikova					
Landform (hillslope, terrace, etc.): Upland, Depression	• •		Slone (%): 2		
Subregion (LRR or MLRA): P 133A Lat: 38.41	17387	Jana: -77.4346204	Olope (70)		
		NWI classific			
Are climatic / hydrologic conditions on the site typical for this time of ye					
Are Vegetation, Soil, or Hydrology significantly					
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If	needed, explain any answer	rs in Remarks.)		
SUMMARY OF FINDINGS - Attach site map showing	sampling poin	t locations, transects	, important features, etc.		
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes No Yes No	Is the Sampl within a Wet		No		
DP-ZZ32 taken in upland field, outside flag	РМ17.				
HYDROLOGY Wetland Hydrology Indicators:		Socondary Indica	tors (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)					
Surface Water (A1) Aquatic Fauna (B1:	3)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)		
Surface Water (AT) Aquatic Faulta (BT) High Water Table (A2) Marl Deposits (B15		Sparsery veg			
Saturation (A3) Hydrogen Sulfide C		Moss Trim Li			
Water Marks (B1) Oxidized Rhizosph			Water Table (C2)		
Sediment Deposits (B2) Presence of Reduc	ed Iron (C4)	Crayfish Burr			
Drift Deposits (B3) Recent Iron Reduc	tion in Tilled Soils (C	6) <u><a><a><a> Saturation Vi</u>	sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Thin Muck Surface		Geomorphic	Position (D2)		
Iron Deposits (B5)	emarks)	Shallow Aqui	tard (D3)		
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral			
Water-Stained Leaves (B9)		Sphagnum m	ioss (D8) (LRR T, U)		
Field Observations:					
Surface Water Present? Yes No Depth (inches)					
Water Table Present? Yes No Depth (inches)			. /		
Saturation Present? Yes No Depth (inches) (includes capillary fringe)): '	Wetland Hydrology Presen	t? Yes No		
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspection	ons), if available:			
Remarks:					
Stunted growth of vegetation was observe	d Wetland h	vdrology was pre	sent		
Stanted growth of vegetation was observe	a. Wedana n	yarology was pre-	Sont.		

Sampling Poin	t: DP-ZZ32
	•

7 0: 1 (D) 1 : 30 ft r		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft r</u>) 1	% Cover			Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2				
3				Total Number of Dominant Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover	·	OBL species 60 x 1 = 60
Sapling Stratum (Plot size: 30 ft r)				FACW species 10
1				FAC species 20 x 3 = 60
2				FACU species 10
3				UPL species $0 \times 5 = 0$
4				Column Totals: 100 (A) 180 (B)
5				Column Totals: <u>100</u> (A) <u>180</u> (B)
6				Prevalence Index = B/A = 1.80
	=			Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover	:	✓ 1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)				✓ 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
		= Total Cov	er er	Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover	:	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).
1. Leersia oryzoides	60		OBL	Sapling – Woody plants, excluding woody vines,
2. Andropogon virginicus	10		FAC	approximately 20 ft (6 m) or more in height and less
3. Boehmeria cylindrica	10		FACW	than 3 in. (7.6 cm) DBH.
4. Microstegium vimineum	10		FAC	Shrub – Woody plants, excluding woody vines,
5. Solanum carolinense	10		FACU	approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
8.				plants, except woody vines, less than approximately
				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				
11	100%	= Total Cov		
50% of total cover: 50.0				
	20% of	total cover	20.0	
Woody Vine Stratum (Plot size: 30 ft r				
1				
2				
3				
4				
5				Hydrophytic
	=	= Total Cov	er er	Vegetation Present? Yes No
50% of total cover:	20% of	total cover	:	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).			•
Hydrophytia vagatatian waa damina	. +			
Hydrophytic vegetation was dominar	IL.			

Profile Desc	ription: (Describe	to the depti	n needed to docun	nent the i	indicator	or confirn	n the absence of	indicators.)
Depth	Matrix			x Feature	1			
(inches)	Color (moist)	<u> %</u>	Color (moist)	<u>%</u>	Type'	_Loc ²	Texture	Remarks
0 - 16	10YR 5/4	80	10YR 3/6	20	<u>C</u>	M	Silt Loam	
-								
				-				
-								
¹Type: C=Ce	oncentration, D=Dep	oletion. RM=I	Reduced Matrix. MS	S=Masked	d Sand Gi	ains.	² Location: Pl	L=Pore Lining, M=Matrix.
	Indicators: (Applic							or Problematic Hydric Soils ³ :
Histosol			Polyvalue Be			.RR S. T. U	J) 1 cm Mud	ck (A9) (LRR O)
	oipedon (A2)		Thin Dark Su					ck (A10) (LRR S)
Black Hi			Loamy Mucky					Vertic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix ((F2)			t Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Mat					us Bright Loamy Soils (F20)
_	Bodies (A6) (LRR F		Redox Dark S	•	,		(MLRA	•
	icky Mineral (A7) (L		Depleted Dar		. ,			ent Material (TF2)
	esence (A8) (LRR U	J)	Redox Depre		8)			allow Dark Surface (TF12)
	ick (A9) (LRR P, T) d Below Dark Surfac	e (Δ11)	Marl (F10) (L Depleted Och		(MIRA 1	51)	Other (E)	xplain in Remarks)
-	ark Surface (A12)	(/(///	Iron-Mangane				T) ³ Indicate	ors of hydrophytic vegetation and
	rairie Redox (A16) (MLRA 150A)	-					nd hydrology must be present,
	lucky Mineral (S1) (Delta Ochric			. ,		s disturbed or problematic.
Sandy G	Gleyed Matrix (S4)		Reduced Ver	tic (F18) ((MLRA 1	60A, 150B))	
-	ledox (S5)		Piedmont Flo					
	Matrix (S6)		Anomalous B	right Loai	my Soils (F20) (MLR	RA 149A, 153C, 1	53D)
	rface (S7) (LRR P,							
	_ayer (if observed)	:						
Type:							1	
Depth (in	ches):						Hydric Soil Pr	resent? Yes No
Remarks:			_					
Н	ydric soil wa	is not pr	esent.					

Project/Site: G.W. Village Commercial	City/County: Stafford C	County	Sampling Date: 2021-07-20
•			Sampling Point: DP-ZZ33
Investigator(s): TNT Environmental, Inc J. Moore, M. Mednikova			
Landform (hillslope, terrace, etc.): Depression			Slope (%). 2
Subregion (LRR or MLRA): P 133A Lat: 38.41			
Are climatic / hydrologic conditions on the site typical for this time of ye			
Are Vegetation, Soil, or Hydrology significantly			
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If need	ded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	sampling point loc	cations, transects	, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No No No No No No No N		_	No
Remarks:			
DP-ZZ33 taken in PFO wetland inside flag	JF26.		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1) Aquatic Fauna (B1			getated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B1)		Drainage Pa	
Saturation (A3) Hydrogen Sulfide (Moss Trim Li	
	eres along Living Roots (0		Water Table (C2)
Sediment Deposits (B2) Presence of Reduc		Crayfish Burn	
	etion in Tilled Soils (C6)		isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface Iron Deposits (B5) Other (Explain in F		✓ GeomorphicShallow Aqui	
Inundation Vis ble on Aerial Imagery (B7)	.emarks)	Shallow Aqu	, ,
Water-Stained Leaves (B9)			noss (D8) (LRR T, U)
Field Observations:		<u> </u>	
Surface Water Present? Yes No Depth (inches):		
Water Table Present? Yes No Depth (inches			
Saturation Present? Yes V No Depth (inches		and Hydrology Preser	nt? Yes 🗸 No
(includes capillary fringe)		, .,	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), i	if available:	
Remarks:			
ixemans.			
Wetland hydrology was observed.			

	.	DP-ZZ33	2
Samnlina	Point.	DP-ZZ33	5

- 20 ft r		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft r</u>) 1 Liquidambar styraciflua	% Cover 50	Species? ✓	Status FAC	Number of Dominant Species
Elquidambar styracinua Fagus grandifolia	40	<u> </u>	FACU	That Are OBL, FACW, or FAC: 2 (A)
2. Acer rubrum	5		FAC	Total Number of Dominant
••				Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 66.7 (A/B)
6	95%	= Total Cov		Prevalence Index worksheet:
50% of total cover: 47.5				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)	ZU 70 Ui	lolai covei.	10.0	OBL species <u>5</u> x 1 = <u>5</u>
				FACW species $0 x 2 = 0$
1				FAC species 90 x 3 = 270
2				FACU species <u>42</u> x 4 = <u>168</u>
3				UPL species <u>0</u> x 5 = <u>0</u>
4				Column Totals: <u>137</u> (A) <u>443</u> (B)
5				2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
U		= Total Cov	er	Prevalence Index = B/A = 3.23
50% of total cover:				Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 30 ft r)	2070 01	total cover.		1 - Rapid Test for Hydrophytic Vegetation
1				✓ 2 - Dominance Test is >50%
2.				3 - Prevalence Index is ≤3.0¹
3.				Problematic Hydrophytic Vegetation ¹ (Explain)
4				1
5				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
v		= Total Cov	er	_
50% of total cover:				Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)	_			(7.6 cm) or larger in diameter at breast height (DBH).
1. Microstegium vimineum	30	•	FAC	Sapling – Woody plants, excluding woody vines,
2. Athyrium angustum	5		FAC	approximately 20 ft (6 m) or more in height and less
3. Rosa palustris	5		OBL	than 3 in. (7.6 cm) DBH.
4. Lonicera japonica	2		FACU	Shrub – Woody plants, excluding woody vines,
5.				approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
8.				plants, except woody vines, less than approximately 3 ft (1 m) in height.
9.				
10				Woody vine – All woody vines, regardless of height.
11.				
	42% :	= Total Cov	er	
50% of total cover: 21.0	20% of	total cover:	8.4	
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2.				
3.				
4.				
5.				Hydronhytic
		= Total Cov	er	Hydrophytic Vegetation
50% of total cover:				Present? Yes No
Remarks: (If observed, list morphological adaptations belo				
Tromania. (Il abbortou, ilot morphological adaptatione bold				
Hydrophytic vegetation was dominar	nt at thi	s point		

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	the absence	of indicate	ors.)	
Depth	Matrix			x Feature						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0 - 2	10YR 3/2	100					Sandy Loam			_
2 - 14	2.5Y 5/1	95	10YR 4/6	5	С	М	Sand			
-										_
	-									
										_
-										
¹Type: C=Co	oncentration, D=Dep	oletion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location:	PL=Pore I	ining, M=Matrix	<u> </u>
			LRRs, unless othe						matic Hydric S	
Histosol	(A1)		Polyvalue Be	elow Surfa	ace (S8) (L	LRR S, T, U	J) 1 cm N	luck (A9) (LRR O)	
Histic Ep	pipedon (A2)		Thin Dark Su					luck (A10)	(LRR S)	
Black Hi	stic (A3)		Loamy Muck			R O)			18) (outside N	
	n Sulfide (A4)		Loamy Gleye		(F2)				ain Soils (F19)	
	l Layers (A5)		Depleted Ma		- 0)			_	Loamy Soils (F	-20)
	Bodies (A6) (LRR F		Redox Dark					RA 153B)	ial (TE2)	
	icky Mineral (A7) (L esence (A8) (LRR l		Depleted Da Redox Depre					arent Mate	iai (1F2) k Surface (TF1:	2)
· 	ick (A9) (LRR P, T)	,,	Marl (F10) (L		0)			Explain in		-)
	Below Dark Surface	e (A11)	Depleted Oc	,	(MLRA 1	51)		(
	ark Surface (A12)		Iron-Mangan	ese Mass	ses (F12) ((LRR O, P,	T) ³ Indic	ators of hy	drophytic veget	ation and
Coast Pr	rairie Redox (A16) (MLRA 150	A) Umbric Surfa	ace (F13)	(LRR P, T	「, U)	wet	land hydro	ogy must be pr	esent,
	lucky Mineral (S1) (LRR O, S)	Delta Ochric					ess disturb	ed or problemat	ic.
	Sleyed Matrix (S4)		Reduced Ve							
-	ledox (S5)		Piedmont Flo					450D)		
	Matrix (S6) rface (S7) (LRR P, \$	S T 11)	Anomalous E	Bright Loa	imy Soils ((F20) (WILK	A 149A, 153C	, 153D)		
	_ayer (if observed)									
Type:	-uyer (ii observeu)	•								
Depth (inc	phoe):						Hydric Soil	Drocont?	Yes	No
							Hydric 30ii	rieseiit:	165	140
Remarks:	vdria sail wa	o proc	ont							
П	ydric soil wa	is pres	JIIL.							

Project/Site: G.W. Village Commercial	City/County: Stafford C	County	Sampling Date: 2021-07-20		
•			Sampling Point: DP-ZZ34		
Investigator(s): TNT Environmental, Inc J. Moore, M. Mednikova Section, Township, Range:					
Landform (hillslope, terrace, etc.): Upland			Slone (%): 5		
Subregion (LRR or MLRA): P 133A Lat: 38.41					
Are climatic / hydrologic conditions on the site typical for this time of ye					
Are Vegetation, Soil, or Hydrology significantly					
Are Vegetation, Soil, or Hydrology naturally pro	blematic? (If need	ded, explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS - Attach site map showing	sampling point lo	cations, transects	, important features, etc.		
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Wes No No Wes No No Wes	Is the Sampled A		No		
Remarks:					
HADBOLOGA					
HYDROLOGY Wetland Hydrology Indicators:		Cocondan/Indica	toro (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)			
Surface Water (A1) Aquatic Fauna (B13	8)	Sparsely Vegetated Concave Surface (B8)			
Surface Water (A1) Aquatic Fauria (B15 High Water Table (A2) Marl Deposits (B15		Oparsely veg			
Saturation (A3) Hydrogen Sulfide C		Moss Trim Li			
<u> </u>	eres along Living Roots (Water Table (C2)		
Sediment Deposits (B2) Presence of Reduc		Crayfish Burr			
Drift Deposits (B3) Recent Iron Reduct	ion in Tilled Soils (C6)		sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Thin Muck Surface		Geomorphic	Position (D2)		
Iron Deposits (B5) Other (Explain in R	emarks)	Shallow Aqui			
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral			
Water-Stained Leaves (B9)		Sphagnum m	noss (D8) (LRR T, U)		
Field Observations:					
Surface Water Present? Yes No Depth (inches)					
Water Table Present? Yes No Depth (inches) Saturation Present? Yes No Depth (inches)		I II I I B	t? Yes No_		
Saturation Present? Yes No Depth (inches) (includes capillary fringe)	: wetia	and Hydrology Presen	t? Yes No		
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections),	if available:			
Remarks:					
Only one secondary indicator of wetland hy	drology was ob	served.			

Sampling F	Point:	DP-ZZ34

20.65 %		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Liquidambar styraciflua	80		FAC	That Are OBL, FACW, or FAC: 4 (A)
2. Acer rubrum	10		FAC	Total Number of Dominant
3. Salix nigra	5		OBL	Species Across All Strata: 5 (B)
4				Description of Description of Occasion
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)
6				(VB)
	95%	= Total Cov	/er	Prevalence Index worksheet:
50% of total cover: 47.5				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)	20 /0 01	total cover.		OBL species <u>45</u> x 1 = <u>45</u>
1 Liquidambar styraciflua	30	~	FAC	FACW species $0 x 2 = 0$
Fagus grandifolia	20		FACU	FAC species 150 x 3 = 450
				FACU species 20 x 4 = 80
3				UPL species $0 \times 5 = 0$
4				
5				Column Totals: <u>215</u> (A) <u>575</u> (B)
6				Prevalence Index = B/A = 2.67
	50%	= Total Cov	er er	Hydrophytic Vegetation Indicators:
50% of total cover: 25.0				1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)	_			✓ 2 - Dominance Test is >50%
1				
				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	:	= Total Cov	er er	Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:	:	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).
1. Microstegium vimineum	30	✓	FAC	Sapling – Woody plants, excluding woody vines,
2 Scirpus atrovirens	30	~	OBL	approximately 20 ft (6 m) or more in height and less
3 Leersia oryzoides	10		OBL	than 3 in. (7.6 cm) DBH.
				Shrub – Woody plants, excluding woody vines,
4				approximately 3 to 20 ft (1 to 6 m) in height.
5				
6				Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
7				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Weedy vine All woody vines regardless of height
10				Woody vine – All woody vines, regardless of height.
11				
	70% :	= Total Cov	er	
50% of total cover: 35.0				
Woody Vine Stratum (Plot size: 30 ft r)	20 /0 01	total cover.		
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov	er	Vegetation
50% of total cover:				Present? Yes No No
Remarks: (If observed, list morphological adaptations belo			•	
remarks. (II observed, list morphological adaptations belo	vv).			
Hydrophytic vegetation was dominar	nt.			

Profile Desc	ription: (Describe	to the dept	h needed to docur	nent the	indicator	or confirm	m the absence of	of indicators.)	
Depth	Matrix			x Feature		. 2			
(inches)	Color (moist)		Color (moist)	%	Type'	Loc²	<u>Texture</u>	Remark	<u> </u>
0 - 12	10YR 5/4	60	5YR 5/6	40	С	М	Sandy Loam		
-									
						-			
					. ——		· ·		
				. —			· ·		
-									
1 _{Type:} C=C	oncentration, D=De	olotion DM-	Doduced Matrix MS	C=Maaka	d Cond C		² l continu	DI -Doro Lining M-Me	atris.
	Indicators: (Appli					iairis.		PL=Pore Lining, M=Ma for Problematic Hydri	
-		Jubic to un i				DDCT		•	
Histosol	oipedon (A2)		Polyvalue Be Thin Dark Su					uck (A9) (LRR O) uck (A10) (LRR S)	
-	stic (A3)		Loamy Muck					ed Vertic (F18) (outsid	e MI RΔ 150Δ R)
	en Sulfide (A4)		Loamy Gleye			()		nt Floodplain Soils (F1	
	d Layers (A5)		Depleted Ma		(1 -)			lous Bright Loamy Soil	
	Bodies (A6) (LRR F	P. T. U)	Redox Dark		- 6)			A 153B)	o (o)
	ıcky Mineral (A7) (L		Depleted Dai					rent Material (TF2)	
	esence (A8) (LRR I		Redox Depre					nallow Dark Surface (T	F12)
	ick (A9) (LRR P, T)	,	Marl (F10) (L		,			Explain in Remarks)	•
Depleted	d Below Dark Surfac	ce (A11)	Depleted Ocl	nric (F11)	(MLRA 1	51)			
Thick Da	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12)	(LRR O, P		ators of hydrophytic ve	-
	rairie Redox (A16) (and hydrology must be	
-	Mucky Mineral (S1)	LRR O, S)	Delta Ochric					ss disturbed or probler	natic.
	Gleyed Matrix (S4)		Reduced Ver						
-	Redox (S5)		Piedmont Flo					450D\	
	Matrix (S6)	C T II)	Anomalous E	right Loa	my Soils	(F20) (ML F	RA 149A, 153C,	153D)	
	rface (S7) (LRR P, Layer (if observed)								
	Layer (II observed))-							
Type:								- 10 V	🗸
	ches):						Hydric Soil F	Present? Yes	No
Remarks:		_	_						
Н	ydric soil wa	as not pi	esent.						

Project/Site: G.W. Village Commercial	City/County: Staffe	ord County	Sampling Date: 2021-07-20					
Applicant/Owner: North Point Development			Sampling Point: DP-ZZ35					
Investigator(s): TNT Environmental, Inc J. Moore, M. Mednikov								
Landform (hillslope, terrace, etc.): Depression		<u> </u>	Slope (%): 2					
· · · · · · · · · · · · · · · · · · ·	Subregion (LRR or MLRA): P 133A Lat: 38.4145298 Long: -77.4336301 Datum: WGS 84							
		NWI classific						
Are climatic / hydrologic conditions on the site typical for this time of								
Are Vegetation, Soil, or Hydrology significan								
Are Vegetation, Soil, or Hydrology naturally	problematic? (I	f needed, explain any answe	rs in Remarks.)					
SUMMARY OF FINDINGS - Attach site map showing	ng sampling poin	t locations, transects	, important features, etc.					
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No No	is the camp		.,					
Wetland Hydrology Present? Yes V No	within a We	tland? Yes	No					
DP-ZZ35 taken in PFO wetland inside flag	PNI.							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply	•	Surface Soil	Cracks (B6)					
Surface Water (A1) Aquatic Fauna (B		getated Concave Surface (B8)						
High Water Table (A2) Marl Deposits (B		Drainage Pat						
Saturation (A3) Hydrogen Sulfide		Moss Trim Li						
	pheres along Living Ro		Water Table (C2)					
Sediment Deposits (B2) Presence of Red	luction in Tilled Soils (C	Crayfish Burr	sible on Aerial Imagery (C9)					
Drift Deposits (B3) Recent Iron Red Algal Mat or Crust (B4) Thin Muck Surfa		Geomorphic						
Iron Deposits (B5) Other (Explain in		Shallow Aqui						
Inundation Vis ble on Aerial Imagery (B7)	Tromano,	FAC-Neutral Test (D5)						
Water-Stained Leaves (B9)			noss (D8) (LRR T, U)					
Field Observations:								
Surface Water Present? Yes No Depth (inches	es):							
Water Table Present? Yes No Depth (inches								
Saturation Present? Yes No Depth (inches	es): 0	Wetland Hydrology Presen	t? Yes <u>/</u> No					
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phonone in the control of the contr	otos, previous inspecti	ons), if available:						
2000/100 Flood 2014 (01/04/11 gauge, memoring won, definit pri	stee, provided inopositi	ono), ii avaliabio.						
Remarks:								
Wetland hydrology was observed.								

S 11	D - ! - 4:	DP-ZZ35
Samnling	Point.	DP-ZZ33

Tora Otratura (Dietaine 30 ft r		Dominant		Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: 30 ft r) 1. Salix nigra	% Cover 35	Species? ✓	OBL	Number of Dominant Species	
2. Acer rubrum	25	<u> </u>	FAC	That Are OBL, FACW, or FAC: 7 (A))
3. Liquidambar styraciflua	20		FAC	Total Number of Dominant	
Platanus occidentalis	20	<u> </u>	FACW	Species Across All Strata: 7 (B))
···			FACW	Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 100 (A/	/B)
6	100%			Prevalence Index worksheet:	
		= Total Cov		Total % Cover of: Multiply by:	
50% of total cover: <u>50.0</u>	20% of	total cover:	20.0	OBL species 60 x 1 = 60	
Sapling Stratum (Plot size: 30 ft r)				FACW species 25 x 2 = 50	
1. Acer rubrum	10		FAC		
2				·	
3				FACU species 0 $x = 0$	
4				01 L species - x 3	
5				Column Totals: <u>142</u> (A) <u>281</u> (E	B)
6				Prevalence Index = B/A = 1.98	
	10%	= Total Cov	er	Hydrophytic Vegetation Indicators:	
50% of total cover: 5.0					
Shrub Stratum (Plot size: 30 ft r)				1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50%	
1					
2.				✓ 3 - Prevalence Index is ≤3.0 ¹	
				Problematic Hydrophytic Vegetation ¹ (Explain)	
3					
4				¹ Indicators of hydric soil and wetland hydrology must	1
5				be present, unless disturbed or problematic.	
6				Definitions of Five Vegetation Strata:	
		= Total Cov		Tree – Woody plants, excluding woody vines,	
50% of total cover:	20% of	total cover:	·	approximately 20 ft (6 m) or more in height and 3 in.	
Herb Stratum (Plot size: 30 ft r				(7.6 cm) or larger in diameter at breast height (DBH)	•
1. Juncus effusus	15		OBL	Sapling – Woody plants, excluding woody vines,	
2. Carex stipata	10		OBL	approximately 20 ft (6 m) or more in height and less	
3. Boehmeria cylindrica	5		FACW	than 3 in. (7.6 cm) DBH.	
4. Microstegium vimineum	2		FAC	Shrub – Woody plants, excluding woody vines,	
5				approximately 3 to 20 ft (1 to 6 m) in height.	
6.				Herb – All herbaceous (non-woody) plants, including	1
7.				herbaceous vines, regardless of size, and woody	
8.				plants, except woody vines, less than approximately 3 ft (1 m) in height.	
9.				on (1 m) in noight.	
10.				Woody vine – All woody vines, regardless of height.	
11.					
· · ·	000/	= Total Cov			
50% of total cover: 16.0					
<u> </u>	20% 01	total cover.			
Woody Vine Stratum (Plot size: 30 ft r)					
1					
2					
3					
4					
5				Hydrophytic	
	:	= Total Cov	er	Vegetation No.	
50% of total cover:	20% of	total cover:	:	Present? Yes No	
Remarks: (If observed, list morphological adaptations belo	w).			_1	
	,				
Hydrophytic vegetation was dominaı	nt.				

Profile Desc	ription: (Describe	to the dept	h needed to docun	nent the	indicator	or confirn	n the absence of	findicators.)
Depth	Matrix			x Feature	1			
(inches)	Color (moist)	<u> </u>	Color (moist)	<u>%</u>	Type'	_Loc ²	Texture	Remarks
0 - 16	2.5Y 5/1	60	5YR 4/6	40	<u>C</u>	<u>M</u>	Silty Clay Loam	
-		- '						
				-				
					· <u> </u>			
-								
¹Tyne: C=C	oncentration, D=Dep	letion RM=	Reduced Matrix MS	S=Masker	d Sand Gr	ains	² Location: Pl	L=Pore Lining, M=Matrix.
	Indicators: (Applic					unio.		or Problematic Hydric Soils ³ :
Histosol			Polyvalue Be			RR S. T. U		ck (A9) (LRR O)
	oipedon (A2)		Thin Dark Su					ck (A10) (LRR S)
	stic (A3)		Loamy Mucky					Vertic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix ((F2)		Piedmon	t Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Mat	trix (F3)			Anomalo	ous Bright Loamy Soils (F20)
_	Bodies (A6) (LRR P		Redox Dark S					(153B)
	icky Mineral (A7) (LI		Depleted Dar					ent Material (TF2)
	esence (A8) (LRR L	J)	Redox Depre		8)			allow Dark Surface (TF12)
	ıck (A9) (LRR P, T) d Below Dark Surfac	·ο (Λ11)	Marl (F10) (L Depleted Och		/MI DA 1	5 4\	Other (E)	xplain in Remarks)
	ark Surface (A12)	C (ATT)	Iron-Mangane				T) ³ Indicate	ors of hydrophytic vegetation and
	rairie Redox (A16) (I	MLRA 150A	-					nd hydrology must be present,
	lucky Mineral (S1)		Delta Ochric			, -,		s disturbed or problematic.
	Gleyed Matrix (S4)	. ,	Reduced Ver			0A, 150B))	·
	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	19A)	
Stripped	Matrix (S6)		Anomalous B	right Loa	my Soils (F20) (MLR	RA 149A, 153C, 1	53D)
	rface (S7) (LRR P, \$							
Restrictive	Layer (if observed)	:						
Type:								
Depth (in	ches):						Hydric Soil Pr	resent? Yes V No No
Remarks:							1	
H	ydric soil wa	s prese	nt.					

Project/Site: G.W. Village Commercial	City/County: Staf	ford County	Sampling Date: 2021-12-02		
Applicant/Owner: North Point Development		State: Virginia			
Investigator(s): TNT Environmental- T. Payne, D. Dellapo					
Landform (hillslope, terrace, etc.): Toeslope			Slope (%): 2		
Subregion (LRR or MLRA): P 133A Lat:	,	,			
		Long NWI classific			
Are climatic / hydrologic conditions on the site typical for this tim					
Are Vegetation, Soil, or Hydrology signif					
Are Vegetation, Soil, or Hydrology natur		(If needed, explain any answe	•		
SUMMARY OF FINDINGS – Attach site map sho	owing sampling poi	nt locations, transects	, important features, etc.		
Hydrophytic Vegetation Present? Yes <u>✓</u> No	Is the Sam	inled Area			
Hydric Soil Present? Yes No			No		
Wetland Hydrology Present? Yes No Remarks:	<u>/</u>				
HYDROLOGY					
Wetland Hydrology Indicators:		<u> </u>	tors (minimum of two required)		
Primary Indicators (minimum of one is required; check all that		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)			
Surface Water (A1) Aquatic Fau High Water Table (A2) Marl Deposi	na (B13) ts (B15) (LRR U)	Sparsely vegetated Concave Surface (B8) Drainage Patterns (B10)			
	ulfide Odor (C1)	Moss Trim Li			
	nizospheres along Living F		Water Table (C2)		
	Reduced Iron (C4)	Crayfish Burrows (C8)			
Drift Deposits (B3) Recent Iron	Reduction in Tilled Soils	(C6) Saturation Vi	sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Thin Muck S		Geomorphic	Position (D2)		
Iron Deposits (B5) Other (Expla	ain in Remarks)	Shallow Aqui			
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)			
Water-Stained Leaves (B9) Field Observations:		Spnagnum m	noss (D8) (LRR I, U)		
Surface Water Present? Yes No Depth (inches):				
Water Table Present? Yes No Depth (
Saturation Present? Yes No Depth (Wetland Hydrology Present? Yes No			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aeria	al photos, previous inspec	tions), if available:			
Remarks:					
Wetland hydrology not observed					

Sampling Poir	_{it:} DP-TP1
. •	•

20.4		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Fagus grandifolia	45		FACU	That Are OBL, FACW, or FAC: 5 (A)
2. Acer rubrum	25		FAC	Total Number of Dominant
3. Nyssa sylvatica	10		FAC	Species Across All Strata: 8 (B)
4				Description of Description of Control
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 63 (A/B)
6.				That the OBE, Thow, of the
·	80%	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: 40.0				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)	20 /0 01	total cover.		OBL species 0 x 1 = 0
1. Fagus grandifolia	20	~	FACU	FACW species $0 x 2 = 0$
	15		FAC	FAC species 70 $\times 3 = 210$
2. <u>llex opaca</u>			FAC	FACU species 80 x 4 = 320
3				UPL species 0 $x = 0$
4				· — — — — — — — — — — — — — — — — — — —
5				Column Totals: <u>150</u> (A) <u>530</u> (B)
6				Prevalence Index = B/A = 3.5
	35% :	= Total Cov	er	Hydrophytic Vegetation Indicators:
50% of total cover: 17.5				1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)			,	✓ 2 - Dominance Test is >50%
1 Fagus grandifolia	15	~	FACU	
o lley onaca	10		FAC	3 - Prevalence Index is ≤3.0 ¹
				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	25% :	= Total Cov	er	Tree – Woody plants, excluding woody vines,
50% of total cover: 12.5	20% of	total cover:	5.0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r				(7.6 cm) or larger in diameter at breast height (DBH).
1 llex opaca	5	✓	FAC	Conline Woody plants evaluding woody vines
2 Smilax glauca	5		FAC	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
				than 3 in. (7.6 cm) DBH.
				Object. We adversaries and other second of the second of t
4				Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
5				
6				Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				
10.				Woody vine – All woody vines, regardless of height.
11.				
	100/	- Total Cav		
5.0		= Total Cov		
50% of total cover: <u>5.0</u>	20% of	total cover:	2.0	
Woody Vine Stratum (Plot size: 30 ft r				
1				
2				
3				
4				
5.				Hydronhytic
		Total Cov	er	Hydrophytic Vegetation
50% of total cover:				Present? Yes No
		ioiai cover		
Remarks: (If observed, list morphological adaptations belo	W).			
Hydrophytic vegetation observed				

Profile Desc	ription: (Describe	to the de	oth needed to docu	ment the	indicator	or confirr	n the absence of	indicators.)
Depth	Matrix			ox Feature	1	-		
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0 - 4	10YR 6/3	90	10YR 6/8	10	<u>C</u>	M	Sandy Loam	
4 - 14	10YR 5/1	90	10YR 5/8	10	<u>C</u>	M	Silty Clay Loam	
-								
	-							
						· ——		
-				_	_			
			=Reduced Matrix, M			ains.		_=Pore Lining, M=Matrix.
-		cable to all	LRRs, unless othe					r Problematic Hydric Soils ³ :
Histosol	(A1) pipedon (A2)		Polyvalue Boundary Solution					ck (A9) (LRR O) ck (A10) (LRR S)
Black Hi			Loamy Muck					Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley			-,		Floodplain Soils (F19) (LRR P, S, T)
Stratified	d Layers (A5)		✓ Depleted Ma	atrix (F3)			Anomalou	us Bright Loamy Soils (F20)
-	Bodies (A6) (LRR F		Redox Dark	,	,		(MLRA	
	icky Mineral (A7) (L							nt Material (TF2)
	esence (A8) (LRR l ick (A9) (LRR P, T)	J)	Redox Depr Marl (F10) (I		-8)			llow Dark Surface (TF12) plain in Remarks)
	d Below Dark Surfac	ce (A11)	Depleted Oc	,) (MLRA 1	51)	Other (EX	plain in remarks)
	ark Surface (A12)	, ,	Iron-Mangar				, T) ³ Indicate	ors of hydrophytic vegetation and
			A) Umbric Surfa					d hydrology must be present,
-	fucky Mineral (S1) (LRR O, S)						disturbed or problematic.
-	Bleyed Matrix (S4) Redox (S5)		Reduced Ve Piedmont FI					
-	Matrix (S6)						49A) RA 149A, 153C, 15	53D)
	rface (S7) (LRR P,	S, T, U)	<u> </u>	g	,	, (,,	,
Restrictive I	_ayer (if observed)	:						
Type:								
Depth (inc	ches):						Hydric Soil Pr	esent? Yes V No No
Remarks:							1	
Н	ydric soils o	bserve	d					

Project/Site: G.W. Village Commercial Ci	ity/County: Stafford County Sampling Date: 2021-12-02					
	State: Virginia Sampling Point: DP-TP2					
Investigator(s): TNT Environmental- T. Payne, D. Dellapenna Section, Township, Range:						
•	pocal relief (concave, convex, none): Concave Slope (%): 5					
	5526 Long: -77.4367782 Datum: WGS 84					
	NWI classification: None					
Are climatic / hydrologic conditions on the site typical for this time of year						
Are Vegetation, Soil, or Hydrology significantly dis	sturbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally probl	ematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map showing s	campling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes _ ✔ No						
Hydric Soil Present? Yes No	Is the Sampled Area					
Hydric Soil Present? Wetland Hydrology Present? Yes No V Pemarks:	within a Wetland? Yes No					
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)					
High Water Table (A2) Marl Deposits (B15) (
Saturation (A3) Hydrogen Sulfide Odd						
Water Marks (B1) Oxidized Rhizosphere Sediment Deposits (B2) Presence of Reduced	es along Living Roots (C3) Dry-Season Water Table (C2) I Iron (C4) Crayfish Burrows (C8)					
Drift Deposits (B3) Recent Iron Reductio						
Algal Mat or Crust (B4) Thin Muck Surface (C						
Iron Deposits (B5) Other (Explain in Ren						
Inundation Vis ble on Aerial Imagery (B7)	FAC-Neutral Test (D5)					
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)					
Field Observations:						
Surface Water Present? Yes No Depth (inches): _						
Water Table Present? Yes No Depth (inches): _						
Saturation Present? Yes No Depth (inches): _	Wetland Hydrology Present? Yes No					
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:					
Remarks:						
Watland hydrology not about ad						
Wetland hydrology not observed						

20.4	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r		Species?		Number of Dominant Species _
1. Fagus grandifolia	20		FACU	That Are OBL, FACW, or FAC: 5 (A)
2. Ilex opaca	15		FAC	Total Number of Dominant
3. Juniperus virginiana	15		FACU	Species Across All Strata: 9 (B)
4. Acer rubrum	10		FAC	Descent of Descinant Consis
5. Carpinus caroliniana	10		FAC	Percent of Dominant Species That Are OBL, FACW, or FAC: 56 (A/B)
6. Quercus alba	10		FACU	
	80%	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: 40.0				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)	2070 01	total oover.		OBL species 0 x 1 = 0
1. Fagus grandifolia	20	~	FACU	FACW species $0 x 2 = 0$
o lley onaca	20	<u> </u>	FAC	FAC species 70 x 3 = 210
=·			170	FACU species 76 x 4 = 304
3				UPL species $0 \times 5 = 0$
4				Column Totals: 146 (A) 514 (B)
5				Column Totals. (A) (B)
6				Prevalence Index = $B/A = 3.5$
	40% :	= Total Cov	er	Hydrophytic Vegetation Indicators:
50% of total cover: 20.0	20% of	total cover:	8.0	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)				✓ 2 - Dominance Test is >50%
1 Kalmia latifolia	10	✓	FACU	3 - Prevalence Index is ≤3.0 ¹
2. Ilex opaca			FAC	
3.				Problematic Hydrophytic Vegetation ¹ (Explain)
				4
4				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				
6	15%			Definitions of Five Vegetation Strata:
7.5		= Total Cov		Tree – Woody plants, excluding woody vines,
50% of total cover: 7.5	20% of	total cover:	3.0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).
1. Ilex opaca	5		FAC	Sapling – Woody plants, excluding woody vines,
2. Smilax glauca	5	✓	FAC	approximately 20 ft (6 m) or more in height and less
3. Tipularia discolor	1		FACU	than 3 in. (7.6 cm) DBH.
4				Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
5				Haub All banks as a configuration of the desired
0				Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
7				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				The state of the s
11				
	11% :	= Total Cov	er	
50% of total cover: 5.5	20% of	total cover:	2.2	
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov	er	Vegetation Present? Yes No
50% of total cover:	20% of	total cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).			1
Hydrophytic vegetation observed				

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	the absence of indicator	s.)	
Depth	Matrix			x Feature	1	. 2	_		
(inches)	Color (moist)		Color (moist)	%	Type'	Loc ²	<u>Texture</u>	Remarks	
0 - 9	10YR 3/4	100					Silt Loam		
9 - 12	10YR 4/2	100					Silt Loam		
12 - 14	10YR 5/2	90	10YR 5/6	10	<u>C</u>	M	Sandy Loam		
-									
-					_				
				_					
1- 0.0			- IM (: M				21 (1) 51 5		
			=Reduced Matrix, M LRRs, unless othe			ains.	Location: PL=Pore Lir		
Histosol		able to all	Polyvalue Be		•	RRSTI		-	
	ipedon (A2)		Tolyvalde Bo				2 cm Muck (A10) (L	•	
Black His			Loamy Muck					8) (outside MLRA 150	0A,B)
Hydroge	n Sulfide (A4)		Loamy Gley	ed Matrix	(F2)		Piedmont Floodplai	in Soils (F19) (LRR P,	S, T)
	Layers (A5)		Depleted Ma				Anomalous Bright L	oamy Soils (F20)	
-	Bodies (A6) (LRR F		Redox Dark				(MLRA 153B)	N (TE2)	
	cky Mineral (A7) (L esence (A8) (LRR l		Depleted DaRedox Depression				Red Parent Materia Very Shallow Dark		
	ck (A9) (LRR P, T)	-,	Marl (F10) (I		0)		Other (Explain in R	, ,	
	Below Dark Surfac	ce (A11)	Depleted Oc) (MLRA 1	51)		,	
	rk Surface (A12)		Iron-Mangar					ophytic vegetation and	i
			A) Umbric Surfa			, U)		gy must be present,	
-	ucky Mineral (S1) (leyed Matrix (S4)	LRR 0, 5)	Delta Ochric Reduced Ve			ΩΛ 150R)	unless disturbed	or problematic.	
	edox (S5)		Piedmont Fl						
-	Matrix (S6)						A 149A, 153C, 153D)		
Dark Sur	face (S7) (LRR P,	S, T, U)							
Restrictive L	.ayer (if observed)	:							
Type:									,
Depth (inc	ches):						Hydric Soil Present?	Yes No	
Remarks:									
H	ydric soils n	ot obse	erved						

Project/Site: G.W. Village Commercial	City/County: Prince William County Sampling Date: 2021-12-02
Applicant/Owner: North Point Development	State: Virginia Sampling Point: DP-MM1
Investigator(s): TNT Environmental, Inc. (J. Moore, M. Sellers)	
	Local relief (concave, convex, none): None Slope (%): 2
	11817 Long: -77.4341881 Datum: WGS 84
Soil Map Unit Name: Bb- Bibb Fine Sandy Loam	NWI classification: Freshwater Forested Wetland
Are climatic / hydrologic conditions on the site typical for this time of ye	
	disturbed? Are "Normal Circumstances" present? YesNo
Are Vegetation, Soil, or Hydrology naturally pro	blematic? (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	
Hydric Soil Present? Yes V No	Is the Sampled Area within a Wetland? Yes V No
Wetland Hydrology Present? Yes No	within a wetland? Tes No
Remarks:	·
Wetland data point taken inside wetland fla	g OD1.
'	3
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	
High Water Table (A2) Marl Deposits (B15	
Saturation (A3) Hydrogen Sulfide C	
1 	eres along Living Roots (C3)
Sediment Deposits (B2)	ed Iron (C4)
Drift Deposits (B3)	tion in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	(C7) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain in R	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	☐ Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No ✓ Depth (inches)	
Water Table Present? Yes No Depth (inches) Saturation Present? Yes No Depth (inches)	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:
Remarks:	
Wetland hydrology is observed in the vicini	tv
Wettand hydrology is observed in the vicini	ty.

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: DP-MM1 Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: 30 ft r) % Cover Species? Status **Number of Dominant Species** 1. Acer rubrum **FAC** That Are OBL, FACW, or FAC: 4 _ (A) 20 2. Ilex opaca FAC **Total Number of Dominant** 3. Liquidambar styraciflua 20 FAC 5 ____ (B) Species Across All Strata: Percent of Dominant Species 80 _ (A/B) That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: 10 x 1 = 10 **OBL** species 70% = Total Cover 0 <u>x 2 = 0</u> **FACW** species 50% of total cover: 35.0 20% of total cover: 14.0 70 ____ x 3 = 210 FAC species Sapling/Shrub Stratum (Plot size: 30 ft r) FACU species 20 x 4 = 80 **UPL** species x 5 = 0Column Totals: 100 ___ (A) Prevalence Index = B/A = 3.00**Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% ✓ 3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain) 50% of total cover: _____ 20% of total cover: ____ Herb Stratum (Plot size: 30 ft r) ¹Indicators of hydric soil and wetland hydrology must 1. Dichanthelium latifolium 20 ✓ FACU be present, unless disturbed or problematic. 2. Leersia oryzoides 10 **~** OBL **Definitions of Four Vegetation Strata:** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 4. ______ ___ ___ ___ ____ _____ more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. **Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in height. 30% = Total Cover 50% of total cover: 15.0 20% of total cover: 6.0

____= Total Cover

50% of total cover: _____ 20% of total cover: _____ Remarks: (If observed, list morphological adaptations below).

Woody Vine Stratum (Plot size: 30 ft r

Hydrophytic vegetation is dominant in the vicinity.

Yes ____ No ____

Hydrophytic

Vegetation

Present?

Profile Desc	ription: (Describe	e to the dep	th needed to docur	ment the	indicator	or confir	rm the absence of	indicators.)	
Depth	Matrix	0/		x Feature		1 2		Demonde	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type'	Loc ²	Texture	Remarks	
0 - 12	10YR 4/2	80	10YR 5/8	20	<u>C</u>	M	Clay Loam		
-									
					-	_			
	-				-	-			
	-								
			Reduced Matrix, M			rains.		=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Appli	icable to all	LRRs, unless othe					Problematic Hydric Soils ³ :	
Histosol			Polyvalue Be					k (A9) (LRR O)	
_	pipedon (A2)		Thin Dark Su					k (A10) (LRR S)	
Black Hi	stic (A3) n Sulfide (A4)		Loamy Muck			R O)		Vertic (F18) (outside MLRA 150 / Floodplain Soils (F19) (LRR P, S	
	I Layers (A5)		Depleted Ma		(FZ)			riodopiain Soils (F19) (ERR P, S is Bright Loamy Soils (F20)	, 1)
	Bodies (A6) (LRR	P. T. U)	Redox Dark		F6)		(MLRA		
	cky Mineral (A7) (L			,			,	nt Material (TF2)	
_	esence (A8) (LRR		Redox Depre					low Dark Surface (TF12)	
☐ 1 cm Mι	ck (A9) (LRR P, T))					Other (Ex	plain in Remarks)	
_	d Below Dark Surfa	ice (A11)	Depleted Oc				2		
	ark Surface (A12)		Iron-Mangan					rs of hydrophytic vegetation and	
	rairie Redox (A16) lucky Mineral (S1)		· —					d hydrology must be present, disturbed or problematic.	
	Bleyed Matrix (S4)	(LKK U, 3)	Delta Ochric Reduced Ve					disturbed of problematic.	
	ledox (S5)		Piedmont Flo						
	Matrix (S6)						RA 149A, 153C, 15	53D)	
	rface (S7) (LRR P,	S, T, U)		-		. , ,		•	
Restrictive I	ayer (if observed) :							
Type:									
Depth (in	ches):						Hydric Soil Pro	esent? Yes 🖍 No	
Remarks:							- 1		
Hvdric s	oil is observ	ved in th	e vicinitv.						
,			,						

Project/Site: G.W. Village Commercial	City/County: Prince William County Sampling Date: 2021-12-02
Applicant/Owner: North Point Development	State: Virginia Sampling Point: DP-MM2
Investigator(s): TNT Environmental, Inc. (J. Moore, M. Sellers)	
	Local relief (concave, convex, none): None Slope (%): 2
	111818 Long: -77.4342141 Datum: WGS 84
Soil Map Unit Name: Bb- Bibb Fine Sandy Loam	NWI classification: Freshwater Forested Wetland
Are climatic / hydrologic conditions on the site typical for this time of y	
	y disturbed? Are "Normal Circumstances" present? YesNo
Are Vegetation, Soil, or Hydrology naturally pr	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	.
Remarks:	
Upland data point taken outside wetland fl	ag OD1.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B	13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B1	5) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide	Odor (C1) Moss Trim Lines (B16)
☐ Water Marks (B1) ☐ Oxidized Rhizospl	heres along Living Roots (C3)
Sediment Deposits (B2)	
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
☐ Iron Deposits (B5) ☐ Other (Explain in I	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
☐ Water-Stained Leaves (B9) Field Observations:	☐ Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches	s).
Water Table Present? Yes No _ Depth (inches	
Saturation Present? Yes No Depth (inches	·
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial phol	tos, previous inspections), if available:
Remarks:	
Wetland hydrology is not observed in the	vicinity
Wetland flydrology is not observed in the v	nomicy.

EGETATION (Four Strata) – Use scientific nar	nes or pr	ants.		Sampling Point: DP-MM2
Free Stratum (Plot size: 30 ft r		Dominant Species?		Dominance Test worksheet:
Fagus grandifolia	60	Species:	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Acer rubrum	20	<u> </u>	FAC	That Ale OBL, FACW, OF FAC. (A)
Quercus velutina	20	<u> </u>	UPL	Total Number of Dominant
*· 				Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 33.3 (A/B)
5				Prevalence Index worksheet:
7				
3				Total % Cover of: Multiply by: OBL species 0 x 1 = 0
	100% =	Total Cov	er	x 1
50% of total cover: <u>50.0</u>	20% of	total cover:	20.0	FACW species $0 \times 2 = 0$
Sapling/Shrub Stratum (Plot size: 30 ft r)				FAC species $\underline{20}$ $\times 3 = \underline{60}$
I				FACU species 60 x 4 = 240
2.				UPL species <u>20</u> x 5 = <u>100</u>
3.				Column Totals: 100 (A) 400 (B)
				Dravialance Index — D/A — 4.00
5				Prevalence Index = B/A = 4.00
				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
3				3 - Prevalence Index is ≤3.0 ¹
		Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size: 30 ft r) 1				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2.				Definitions of Four Vegetation Strata:
3.				
1.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				
5				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 3 in. DBH and greater than 3.20 it (1 in) tail.
3				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				
	=	Total Cov	er	
50% of total cover:	20% of	total cover:		
Noody Vine Stratum (Plot size: 30 ft r)				
1				
2.				
3.				
4				
5				Hydrophytic Vegetation
		Total Cov		Present? Yes No
50% of total cover:	20% of	total cover:		

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the	indicator	or confirm	n the absence of ind	icators.)	
Depth	Matrix			x Feature					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type'	Loc ²	<u>Texture</u>	Remarks	
0-3	10YR 3/2	100					Sandy Loam		
3 - 7	10YR 4/2	100					Sandy Loam		
7 - 12	10YR 5/2	100					Sandy Loam		
-					-				
				-					
-				-					
-									
	oncentration, D=De Indicators: (Applicators)					ains.		ore Lining, M=Matrix. oblematic Hydric Soils ³ :	
l		cable to all L	_		•	DD C T 1	_	•	
Histosol	oipedon (A2)		Polyvalue Be		· , •		U)		
	stic (A3)		Loamy Muck					tic (F18) (outside MLRA 15 0	0A,B)
_	en Sulfide (A4)		Loamy Gleye	-	. , .	,		odplain Soils (F19) (LRR P,	-
_	d Layers (A5)		Depleted Ma					right Loamy Soils (F20)	
_	Bodies (A6) (LRR I		Redox Dark		•		(MLRA 153	,	
	icky Mineral (A7) (L esence (A8) (LRR (Depleted Da		. ,		Red Parent N	/laterial (TF2) Dark Surface (TF12)	
	uck (A9) (LRR P, T)		Marl (F10) (L		-0)			n in Remarks)	
_	d Below Dark Surfa		Depleted Oct		(MLRA 1	51)	<u> </u>		
_	ark Surface (A12)		Iron-Mangan	ese Mass	ses (F12) (LRR O, P,	•	of hydrophytic vegetation and	t
	rairie Redox (A16) (_			', U)		ydrology must be present,	
	Mucky Mineral (S1) (Gleyed Matrix (S4)	LRR O, S)	Delta Ochric			OA 150D)		turbed or problematic.	
	Redox (S5)		Reduced Ver						
	Matrix (S6)		_				RA 149A, 153C, 153D)	
	rface (S7) (LRR P,	S, T, U)							
Restrictive	Layer (if observed)):							
Type:			<u> </u>						
Depth (in	ches):						Hydric Soil Prese	nt? Yes No	_
Remarks:									
Hydric s	soil is not ob	served ir	the vicinity	y .					

Project/Site: G.W. Village Commercial	City/County: Prince William County Sampling Date: 2021-12-02
Applicant/Owner: North Point Development	State: Virginia Sampling Point: DP-MM3
Investigator(s): TNT Environmental, Inc. (J. Moore, M. Sellers)	
	Local relief (concave, convex, none): None Slope (%): 2
• • •	107943 Long: -77.4335787 Datum: WGS 84
Soil Map Unit Name: Bb- Bibb Fine Sandy Loam	NWI classification: Freshwater Forested Wetland
Are climatic / hydrologic conditions on the site typical for this time of ye	
	/ disturbed?
Are Vegetation, Soil, or Hydrology naturally pr	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No Remarks:	
Upland data point taken outside wetland fl	ag JM10.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Aquatic Fauna (B1	
High Water Table (A2) Marl Deposits (B1:	
Saturation (A3) Hydrogen Sulfide	Odor (C1) Moss Trim Lines (B16)
☐ Water Marks (B1) ☐ Oxidized Rhizosph	neres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	· / · · · · · · · · · /
☐ Iron Deposits (B5) ☐ Other (Explain in F☐ Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	<u> </u>
Surface Water Present? Yes No Depth (inches	s):
Water Table Present? Yes No _ ✓ Depth (inches	s):
Saturation Present? Yes No Depth (inches	s): Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	os previous inspections) if available:
Docordo Para (orodin gaage, memoring won, acriai prioc	ss, provided inspectation, in available.
Remarks:	
Wetland hydrology is not observed in the v	ricinity.

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

00.5		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r		Species?		Number of Dominant Species
1. Acer rubrum	20		FAC	That Are OBL, FACW, or FAC: 3 (A)
2. Carpinus caroliniana	20		FAC	Total Number of Dominant
3. Fagus grandifolia	20	'	FACU	Species Across All Strata: 6 (B)
4. Ilex opaca	20		FAC	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)
6.				That Ale OBE, I AOW, OF I AO.
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
<u> </u>	000/	Total Cov	er er	OBL species $0 x 1 = 0$
50% of total cover: 40.0				FACW species $0 x 2 = 0$
Sapling/Shrub Stratum (Plot size: 30 ft r	20 /6 01	lotal cover.		FAC species 60 x 3 = 180
				FACU species <u>35</u> x 4 = <u>140</u>
1				UPL species 0 $x = 0$
2				Column Totals: 95 (A) 320 (B)
3				(1)
4				Prevalence Index = $B/A = 3.37$
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is $\leq 3.0^1$
		Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover:		- Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 30 ft r				¹ Indicators of hydric soil and wetland hydrology must
1 Polystichum acrostichoides	10	~	FACU	be present, unless disturbed or problematic.
2 Lonicera japonica	5		FACU	Definitions of Four Vegetation Strata:
="				Bellintions of Four Vegetation offata.
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				noight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				
	15% =	Total Cov	er	
50% of total cover: 7.5	20% of	total cover:	3.0	
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2.				
3				
4				
5				Hydrophytic
		Total Cov		Vegetation Present? Yes No
50% of total cover:		total cover:		
Remarks: (If observed, list morphological adaptations belo	w).			
Hydrophytic vegetation is not domin	ant in tl	he vicir	nity.	

Sampling Point: DP-MM3

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confir	m the absence of indic	cators.)
Depth	Matrix			x Featur		. 2	<u> </u>	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type'	Loc ²	Texture	Remarks
0-8	10YR 4/4	100			- 		Silt Loam	
8 - 10	10YR 5/4	90	10YR 4/3	10	_ <u>D</u>	<u> M</u>	Silt Loam	
10 - 14	10YR 4/6	100					Silt Loam	
-								
_								
	-					-	- -	
						-		
1							2	
			Reduced Matrix, Matrix			rains.		re Lining, M=Matrix. blematic Hydric Soils ³ :
Histosol		cable to all	Polyvalue Be		•	IDDCT		•
	oipedon (A2)		Thin Dark Su		· , •		2 cm Muck (A	
l =	stic (A3)		Loamy Muck					c (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye	-	. , .	,		odplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma					ight Loamy Soils (F20)
	Bodies (A6) (LRR I		Redox Dark		. ,		(MLRA 153E	,
_	icky Mineral (A7) (L esence (A8) (LRR		Depleted Da Redox Depre				Red Parent Ma	aterial (1F2) Dark Surface (TF12)
	ick (A9) (LRR P, T)		Marl (F10) (L		го)		Other (Explain	, ,
_	d Below Dark Surfa		Depleted Oc) (MLRA 1	151)	Other (Explain	r.c.mance)
_	ark Surface (A12)		Iron-Mangan	ese Mas	ses (F12)	(LRR O, P	P, T) ³ Indicators of	hydrophytic vegetation and
	rairie Redox (A16) (· —				•	drology must be present,
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric					urbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve Piedmont Flo					
	Matrix (S6)						RA 149A, 153C, 153D)	
	rface (S7) (LRR P,	S, T, U)		g = 0	u, coc	(0) (,,,	
Restrictive	Layer (if observed):						
Type:								
Depth (in	ches):						Hydric Soil Presen	t? Yes No
Remarks:							1	
Hydric s	oil is not ob	served	in the vicinity	٧.				
			•	•				

Project/Site: G.W. Village Commercial	City/County: Prince William County Sampling Date: 2021-12-02
Applicant/Owner: North Point Development	State: Virginia Sampling Point: DP-MM4
Investigator(s): TNT Environmental, Inc. (J. Moore, M. Sellers)	
	Local relief (concave, convex, none): None Slope (%): 2
	106406 Long: -77.4340029 Datum: WGS 84
Soil Map Unit Name: Bb-Bibb Fine Sandy Loam	NWI classification: Freshwater forested wetland
Are climatic / hydrologic conditions on the site typical for this time of y	
	ly disturbed?
Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	In the Committed Area
Hydric Soil Present? Yes V No	Is the Sampled Area within a Wetland? Yes V No
Wetland Hydrology Present? Yes No	
Remarks:	
Wetland data point taken inside wetland fl	ag JM9.
·	•
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1) Aquatic Fauna (B	
High Water Table (A2) Marl Deposits (B1)	
Saturation (A3) Hydrogen Sulfide	
1 	heres along Living Roots (C3)
Sediment Deposits (B2)	uced Iron (C4)
Drift Deposits (B3)	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain in	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No ✓ Depth (inche	
Water Table Present? Yes No Depth (inche Saturation Present? Yes No Depth (inche	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:
Remarks:	
Wetland hydrology is observed in the vicir	nity
Wetland hydrology is observed in the vicil	nty.

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

				Sampling Point: DP-MM4
20.4		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r		Species?		Number of Dominant Species
1. Acer rubrum	60		FAC	That Are OBL, FACW, or FAC: 2 (A)
_{2.} Fagus grandifolia	10		FACU	Total Number of Dominant
3	· ——			Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 66.7 (A/B)
6				Brooken as Indonesia Indonesia
7	. <u> </u>			Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	70% :	= Total Cov	er	OBL species $0 \times 1 = 0$
50% of total cover: <u>35.0</u>	20% of	total cover:	14.0	FACW species $0 \times 2 = 0$
Sapling/Shrub Stratum (Plot size: 30 ft r)				FAC species $\frac{80}{30}$ $\times 3 = \frac{240}{30}$
1. Ilex opaca	20	~	FAC	FACU species 20 x 4 = 80
_{2.} Fagus grandifolia	10		FACU	UPL species $0 \times 5 = 0$
3				Column Totals: 100 (A) 320 (B)
4.				Prevalence Index = B/A = 3.20
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.				
· ·	30% :	Total Cov	er	3 - Prevalence Index is ≤3.0¹
50% of total cover: 15.0				Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 30 ft r)	2070 01	total cover.		1
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1				Definitions of Four Vegetation Strata:
2				Definitions of Four Vegetation Strata.
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4	· ——			more in diameter at breast height (DBH), regardless of height.
5				Holght.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11	- ——			height.
12				
		Total Cov	er	
50% of total cover:	20% of	total cover:		
Woody Vine Stratum (Plot size: 30 ft r)				
1	<u> </u>			
2	. <u> </u>			
3				
4				
5				Hydrophytic
		= Total Cov	er	Vegetation
50% of total cover:	20% of	total cover:		Present? Yes No
50% of total cover:Remarks: (If observed, list morphological adaptations beloemant) Hydrophytic vegetation is dominant	ow).			rieseitt! Tes NO

Profile Desc	cription: (Describe	to the de	oth needed to docur	ment the	indicator	or confir	m the absence of inc	licators.)
Depth	Matrix			x Featur		. 2		
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc 2	Texture	Remarks
0-6	10YR 4/2	95	10YR 5/6	5	<u> C </u>	<u>M</u>	Silt Loam	
6 - 16	10YR 6/1	60	10YR 5/8	40	<u> </u>	М	Silt Loam	
				_				
-								
-						-		_
					_	-		
¹Type: C=C	oncentration D=De	nletion RM	=Reduced Matrix, M	S=Maske	d Sand G	raine	² Location: PL=P	ore Lining, M=Matrix.
			LRRs, unless othe			iaiiis.		roblematic Hydric Soils ³ :
Histosol	, , , ,		Polyvalue Be		•	LRR S, T,		•
Histic E	pipedon (A2)		Thin Dark Su		. , .		. –	A10) (LRR S)
	istic (A3)		Loamy Muck			R O)		rtic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		(F2)			oodplain Soils (F19) (LRR P, S, T)
	d Layers (A5) Bodies (A6) (LRR l	P T II)	Depleted Ma		(F6)		(MLRA 15	Bright Loamy Soils (F20)
	ucky Mineral (A7) (L		=		` '		,	Material (TF2)
_	resence (A8) (LRR		Redox Depre					Dark Surface (TF12)
_	uck (A9) (LRR P, T)		Marl (F10) (L				U Other (Expla	in in Remarks)
	d Below Dark Surfa	ce (A11)	☐ Depleted Oc☐ Iron-Mangan	•	, .	•	9 T) ³ Indicators	of hydrophytic vegetation and
	ark Surface (A12) rairie Redox (A16)	MLRA 150				•	· •	ydrology must be present,
	Mucky Mineral (S1)		Delta Ochric					sturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ve					
	Redox (S5)		Piedmont Flo					
	Matrix (S6) Inface (S7) (LRR P,	C T II)	Anomalous E	Bright Lo	amy Soils	(F20) (ML	.RA 149A, 153C, 153D))
	Layer (if observed							
Type:		,.						
, , <u> </u>	ches):						Hydric Soil Prese	ent? Yes 🗸 No
Remarks:	,							
Hydric s	soil is observ	ed in t	ne vicinity.					
1194110			io violinty.					

Project/Site: G.W. Village Commercial	County: Prince William County Samp	oling Date: 2021-12-02
Applicant/Owner: North Point Development	State: Virginia Samp	
Investigator(s): TNT Environmental, Inc. (J. Moore, M. Sellers) Section		
Landform (hillslope, terrace, etc.): Upland Local		Slope (%): 2
Subregion (LRR or MLRA): P 133A Lat: 38.410436	,	
Soil Map Unit Name: Bb-Bibb Fine Sandy Loam	NWI classification:	Freshwater forested wetland
Are climatic / hydrologic conditions on the site typical for this time of year?		
Are Vegetation, Soil, or Hydrology significantly distur		
Are Vegetation, Soil, or Hydrology naturally problem.		
SUMMARY OF FINDINGS – Attach site map showing san		
Hydrophytic Vegetation Present? Yes _ ✓ No		
Hydric Soil Present? Yes No	Is the Sampled Area	🗸
Hydric Soil Present? Yes No V Wetland Hydrology Present? Yes No V	within a Wetland? Yes	No
Remarks:		
Upland data point taken outside wetland flag J	IVIS I.	
HYDROLOGY		
Wetland Hydrology Indicators:	_	minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks	
Umage: Surface Water (A1) Umage: Aquatic Fauna (B13) Umage: High Water Table (A2) Umage: Marl Deposits (B15) (LR)		d Concave Surface (B8)
Saturation (A3) Hydrogen Sulfide Odor (_	
Water Marks (B1) Oxidized Rhizospheres a	_	·
Sediment Deposits (B2)		
☐ Drift Deposits (B3) ☐ Recent Iron Reduction in	_	on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7) Other (Top lair in Report	☐ Geomorphic Position	
☐ Iron Deposits (B5) ☐ Other (Explain in Remark		,
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	☐ FAC-Neutral Test (☐ Sphagnum moss (I	•
Field Observations:	<u> </u>	70) (ERRY 1, 0)
Surface Water Present? Yes No Depth (inches):		
Water Table Present? Yes No V Depth (inches):		
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Y	′es No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available;	
Describe recorded bata (et.eat.) gaage, mentering men, acres, pro-	vious mopositono), ir aranazio.	
Remarks:		
Wetland hydrology is not observed in the vicin	itv.	
, 3,	•	

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

'EGETATION (Four Strata) – Use scientific na	mes or br	ants.		Sampling Point: DP-MM5
20.64 "		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Acer rubrum	30		FAC	That Are OBL, FACW, or FAC: 4 (A)
2. Ilex opaca	15		FAC	Total Number of Dominant
3				Species Across All Strata: 5 (B)
4				Dercent of Deminant Charles
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B
6				(VE
7				Prevalence Index worksheet:
B				Total % Cover of: Multiply by:
J		= Total Cov	or	OBL species 0 x 1 = 0
70% (1.1.)				FACW species 0 x 2 = 0
50% of total cover: 22.5	20% of	total cover	3.0	FAC species 105 x 3 = 315
Sapling/Shrub Stratum (Plot size: 30 ft r)			540	FACU species 10 x 4 = 40
1. Acer rubrum	30		FAC	UPL species 0 x 5 = 0
Liquidambar styraciflua	30		FAC	
3				Column Totals: <u>115</u> (A) <u>355</u> (B
4. <u> </u>				Prevalence Index = B/A = 3.09
5.				
5				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>30.0</u>	20% of	total cover	12.0	
Herb Stratum (Plot size: 30 ft r)				¹ Indicators of hydric soil and wetland hydrology must
1. Lonicera japonica	10		FACU	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3.				
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of
				height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 3 iii. DBH and greater than 3.26 it (1 iii) tali.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				
		= Total Cov	er	
50% of total cover: 5.0				
Woody Vine Stratum (Plot size: 30 ft r)	20% 01	lotal cover		
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov	er	Vegetation
				Present? Yes No
50% of total cover:		total cover		

SOIL Sampling Point: <u>DP-MM5</u>

Profile Desc	cription: (Describe	to the de	oth needed to docu	ment the	e indicator	or confi	rm the absence of in	ndicators.)
Depth	Matrix			x Featu		loc ²		-
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type¹	LOC	Texture	Remarks
0-5	10YR 5/3	95	10YR 5/8	_ <u>5</u>	_ <u>C</u>	<u>M</u>	Silt Loam	
8 - 14	7.5YR 6/8	95	10YR 6/2	<u>5</u>	_ <u>D</u>	M	Silty Clay Loam	_
-								
-								
	-							
	-							
1							2	
			=Reduced Matrix, M LRRs, unless othe			rains.		Pore Lining, M=Matrix. Problematic Hydric Soils ³ :
Histosol	, , , ,	cable to all	Polyvalue Be		•	IDDET		· · · · · · · · · · · · · · · · · · ·
	pipedon (A2)		Thin Dark Su		· , •		. —	(A10) (LRR S)
	istic (A3)		Loamy Muck					ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye	-	. , .	,		loodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma					Bright Loamy Soils (F20)
	Bodies (A6) (LRR		Redox Dark		. ,		(MLRA 1	•
_	ucky Mineral (A7) (L resence (A8) (LRR		Depleted Da Redox Depre					: Material (TF2) ow Dark Surface (TF12)
	uck (A9) (LRR P, T)		Marl (F10) (I		(ГО)			ain in Remarks)
_	d Below Dark Surfa		Depleted Oc		1) (MLRA 1	151)	<u> </u>	an in remaine,
	ark Surface (A12)		Iron-Mangan	ese Ma	sses (F12)	(LRR O,	P, T) ³ Indicators	s of hydrophytic vegetation and
	rairie Redox (A16)		· —					hydrology must be present,
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric					listurbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve Piedmont Flo					
	Matrix (S6)						LRA 149A, 153C, 153	SD)
	rface (S7) (LRR P,	S, T, U)	<u></u>			(– -) (-,
Restrictive	Layer (if observed):						
Type:								
Depth (in	ches):						Hydric Soil Pres	sent? Yes No
Remarks:							•	
Hydric s	soil is not ob	served	in the vicinit	у.				
			•	•				

Project/Site: G.W. Village Commercial	City/County: Pr	rince William (County	Sampling Date:	2021-12-02
Applicant/Owner: North Point Development	, ,	St	ate: Virginia	Sampling Point:	DP-MM6
Investigator(s): TNT Environmental, Inc. (J. Moore, M. Sellers)				. 3	
Landform (hillslope, terrace, etc.): Depression				Slor	oe (%): 10
Subregion (LRR or MLRA): P 133A Lat: 38.4					
Soil Map Unit Name: Bb-Bibb Fine Sandy Loam		Long	NIMI classifica	ation: Freshwater	Forested Wetland
Are climatic / hydrologic conditions on the site typical for this time of y	voor2 Voo	No. /If			
					✓ Na
Are Vegetation, Soil, or Hydrology significantly					NO
Are Vegetation, Soil, or Hydrology naturally pr	oblematic?	(If needed, ex	plain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	g sampling p	oint location	s, transects	, important fe	eatures, etc.
Hydrophytic Vegetation Present? Yes No					
Hydric Soil Present? Yes V No	15 1110 00	ampled Area			
Wetland Hydrology Present? Yes V No	within a	Wetland?	Yes	No	_
Remarks:					
Wetland data point taken inside wetland fl	ad IM60				
Wettaria data point taken inside wettaria n	ag olvioo.				
HYDROLOGY					
Wetland Hydrology Indicators:		<u>S</u>	Secondary Indica	ators (minimum of	two required)
Primary Indicators (minimum of one is required; check all that apply))	إ	Surface Soil		
Surface Water (A1) Aquatic Fauna (B		Ļ	-	getated Concave	Surface (B8)
High Water Table (A2) Marl Deposits (B1 Saturation (A3) Hydrogen Sulfide		<u>[</u>	Drainage Pa		
= 1) diagon camac	• •	- Daata (C2)	Moss Trim Li	, ,	
☐ Water Marks (B1) ☐ Oxidized Rhizospl ☐ Sediment Deposits (B2) ☐ Presence of Redu	=	g Roois (C3) <u>L</u>	Crayfish Bur	Water Table (C2)	
Drift Deposits (B3) Recent Iron Redu	, ,	ils (C6)	-	isible on Aerial Im	nagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface		(00) [-	Position (D2)	
Iron Deposits (B5) Other (Explain in I	, ,	Ī	Shallow Aqui	` ,	
Inundation Visible on Aerial Imagery (B7)]	FAC-Neutral	Test (D5)	
☐ Water-Stained Leaves (B9)		1	Sphagnum n	noss (D8) (LRR T	ʻ, U)
Field Observations:					
Surface Water Present? Yes No Depth (inches		_			
Water Table Present? Yes No Depth (inches		_			
Saturation Present? Yes No Depth (inchest (includes capillary fringe)	s): <u>0</u>	_ Wetland Hy	drology Preser	nt? Yes 🔽	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	tos, previous insp	pections), if availa	able:		
Remarks:					
Wetland hydrology is observed in the vicin	ity.				

VEGETA

20.64		Dominant		Dominance Test worksheet:
ee Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
Liquidambar styraciflua	30		FAC	That Are OBL, FACW, or FAC: 6 (A)
llex opaca	20		FAC	Total Number of Dominant
				Species Across All Strata: 7 (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 85.7 (A/B
				Providence Indexessed about
				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
	50% =	= Total Cov	/er	OBL species $\frac{5}{10}$ $\times 1 = \frac{5}{20}$
50% of total cover: 25.0	20% of	total cover	10.0	FACW species $\frac{10}{200}$ $\times 2 = \frac{20}{200}$
apling/Shrub Stratum (Plot size: 30 ft r)				FAC species $80 \times 3 = 240$
llex opaca	20	~	FAC	FACU species <u>20</u> x 4 = <u>80</u>
Lonicera tatarica	20	~	FACU	UPL species <u>0</u> x 5 = <u>0</u>
				Column Totals: <u>115</u> (A) <u>345</u> (B)
				Prevalence Index = B/A = 3.00
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				
	40%			☑ 3 - Prevalence Index is ≤3.0 ¹
20.0		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 20.0	20% of	total cover	8.0	
erb Stratum (Plot size: 30 ft r)	40			¹ Indicators of hydric soil and wetland hydrology must
Dichanthelium clandestinum	10		FACW	be present, unless disturbed or problematic.
Smilax rotundifolia	10		FAC	Definitions of Four Vegetation Strata:
Carex frankii	5		OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o
				more in diameter at breast height (DBH), regardless of
				height.
				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				Harb All barbassaus (non woody) plants, regardless
	- '			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
)	-			
				Woody vine – All woody vines greater than 3.28 ft in height.
l				neight.
2	25%	Total Cov	·or	
50% of total cover: 12.5				
	20% 0f	ioial cover		
/oody Vine Stratum (Plot size: 30 ft r)				
				Hydrophytic
	=	= Total Cov	/er	Vegetation No.
50% of total cover:	20% of	total cover	:	Present? Yes No
emarks: (If observed, list morphological adaptations below	OW).			

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confir	m the absence of it	ndicators.)
Depth	Matrix			x Featur		. 2	·	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type'	Loc ²	Texture	Remarks
0-6	10YR 3/2	100					Clay Loam	
6 - 14	5YR 5/2	90	10YR 4/6	10	<u>C</u>	M	Clay Loam	_
				_	_			
-								
_								
	-			-		-		
			-			-		
1								
			=Reduced Matrix, Matri			rains.		=Pore Lining, M=Matrix. Problematic Hydric Soils ³ :
l <u> </u>		cable to all				I DD C T		(A9) (LRR O)
Histosol	oipedon (A2)		Polyvalue Be		. , .		. –	(A9) (LRR O) (A10) (LRR S)
	stic (A3)		Loamy Muck					/ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye			,		Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma					s Bright Loamy Soils (F20)
	Bodies (A6) (LRR I		Redox Dark		. ,		(MLRA 1	,
_	icky Mineral (A7) (L esence (A8) (LRR (Depleted Da Redox Depre					nt Material (TF2) ow Dark Surface (TF12)
	ick (A9) (LRR P, T)		Marl (F10) (L		го)			olain in Remarks)
_	d Below Dark Surfa		Depleted Oc) (MLRA 1	151)	<u> </u>	Jan III remaine,
_	ark Surface (A12)		Iron-Mangan	ese Mas	ses (F12)	(LRR O, P	P, T) ³ Indicator	rs of hydrophytic vegetation and
	rairie Redox (A16) (· —					hydrology must be present,
_	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric					disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve Piedmont Flo					
	Matrix (S6)						RA 149A, 153C, 15	3D)
	rface (S7) (LRR P,	S, T, U)		g	,	(·) (,
Restrictive	Layer (if observed)):						
Type:								
Depth (in	ches):						Hydric Soil Pre	sent? Yes V No No
Remarks:							-	
Hydric s	oil is observ	ed in th	ne vicinity.					
			•					

Project/Site: G.W. Village Commercial	City/County: Prince William County Sampling Date: 2021-	12-02
Applicant/Owner: North Point Development	State: Virginia Sampling Point: DP-M	M7
Investigator(s): TNT Environmental, Inc. (J. Moore, M. Sellers)		
• , ,	ocal relief (concave, convex, none): None Slope (%):	2
	21166 Long: -77.4318574 Datum: W	
Soil Map Unit Name: Bb-Bibb Fine Sandy Loam	NWI classification: Freshwater Foreste	
Are climatic / hydrologic conditions on the site typical for this time of year		
	disturbed? Are "Normal Circumstances" present? YesNo	
Are Vegetation, Soil, or Hydrology naturally pro		
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important feature	s, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area	
Hydric Soil Present? Yes No	within a Wetland? Yes No	
Wetland Hydrology Present? Yes No	Willing Westand.	
Remarks:		
Upland data point taken outside wetland fla	g JM60.	
HADBOLOCA		
HYDROLOGY Wetland Hydrology Indicators:	Secondary Indicators (minimum of two req	uired)
Primary Indicators (minimum of one is required; check all that apply)	Secondary midicators (minimum or two red	<u>uireu)</u>
Surface Water (A1) Aquatic Fauna (B13)	——————————————————————————————————————	(B8)
High Water Table (A2) Marl Deposits (B15		(00)
Saturation (A3) Hydrogen Sulfide O		
1 	res along Living Roots (C3) Dry-Season Water Table (C2)	
Sediment Deposits (B2)	ed Iron (C4)	
Drift Deposits (B3)	on in Tilled Soils (C6)	C9)
Algal Mat or Crust (B4)	C7) Geomorphic Position (D2)	
☐ Iron Deposits (B5) ☐ Other (Explain in Re		
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)	
Water-Stained Leaves (B9)	☐ Sphagnum moss (D8) (LRR T, U)	
Field Observations: Surface Water Present? Yes No ▶ Depth (inches)		
Water Table Present? Yes No Depth (inches) Saturation Present? Yes No Depth (inches)		~
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:	
Domoska		
Remarks:	oinity	
Wetland hydrology is not observed in the vi	omity.	

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

Tree Stratum (Plot size: 30 ft r		Dominant Species?		Dominance Test worksheet:	
1 Acer rubrum	20	Species:	FAC	Number of Dominant Species That Are OBL_FACW_or_FAC: 4	(\ \
2. Ilex opaca	20		FAC	That Are OBL, FACW, or FAC: 4	(A)
3. Pinus strobus	20		FACU	Total Number of Dominant Species Across All Strata: 6	(B)
4. 5.				Percent of Dominant Species That Are OBL FACW or FAC: 66.7	(A /D)
6				That Are OBL, FACW, or FAC: 66.7	(A/B)
7				Prevalence Index worksheet:	
8.				Total % Cover of: Multiply by:	_
o	60% =	Total Cov		OBL species 0 x 1 = 0	=
50% of total cover: 30.0				FACW species <u>0</u> x 2 = <u>0</u>	_
Sapling/Shrub Stratum (Plot size: 30 ft r)	20 /6 01	total cover.		FAC species 70 x 3 = 210	_
1. Fagus grandifolia	20	~	FACU	FACU species 40 x 4 = 160	_
2. Ilex opaca	20		FAC	UPL species 0 x 5 = 0	_
			FAC	Column Totals: <u>110</u> (A) <u>370</u>	(B)
·· ·					
4				Prevalence Index = B/A = 3.36	_
5				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8	F0%			3 - Prevalence Index is ≤3.0 ¹	
50% of total cover: 25.0		Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain	1)
Herb Stratum (Plot size: 30 ft r) 1.				¹ Indicators of hydric soil and wetland hydrology me be present, unless disturbed or problematic. Definitions of Four Vegetation Strata:	ust
3				Tree – Woody plants, excluding vines, 3 in. (7.6 ci	m) or
4. 5.				more in diameter at breast height (DBH), regardle height.	
6				Sapling/Shrub – Woody plants, excluding vines, I than 3 in. DBH and greater than 3.28 ft (1 m) tall.	less
7 8					41
9.				Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.	aless
10				Woody vine – All woody vines greater than 3.28 f	ft in
11				height.	
12					
	=	Total Cov	er		
50% of total cover:	20% of	total cover:			
Woody Vine Stratum (Plot size: 30 ft r)					
1					
2					
3					
4					
5				Hydrophytic	
	=	Total Cov	er	Vegetation	
50% of total cover:	20% of	total cover:		Present? Yes No	
Remarks: (If observed, list morphological adaptations belo				<u>. I</u>	
Hydrophytic vegetation is dominant i	in the v	icinity.			

Sampling Point: DP-MM7

Profile Desc	ription: (Describe	to the depth	needed to docun	nent the	indicator	or confirn	n the absence of in	dicators.)
Depth	Matrix			x Feature		. 2		
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-3	10YR 3/4	100			· 		Silt Loam	
3 - 14	10YR 5/4	100					Silt Loam	
-								
-								
						-		
1- 0.0							2, ,,	
	oncentration, D=Deplicators: (Applicators)					ains.		Pore Lining, M=Matrix. Problematic Hydric Soils ³ :
Histosol		Jabie to all Li	Polyvalue Be			DDCTI		•
	oipedon (A2)		Thin Dark Su				. —	(A10) (LRR S)
Black Hi			Loamy Mucky					ertic (F18) (outside MLRA 150A,B)
_	n Sulfide (A4)		Loamy Gleye			,		loodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Mat					Bright Loamy Soils (F20)
_	Bodies (A6) (LRR F		Redox Dark	•	,		(MLRA 15	
	icky Mineral (A7) (L esence (A8) (LRR (Depleted Dar		. ,			Material (TF2) w Dark Surface (TF12)
_	ick (A9) (LRR P, T)	J)	Marl (F10) (L	•	0)			ain in Remarks)
	d Below Dark Surfac	ce (A11)	Depleted Och		(MLRA 1	51)	<u> </u>	,
Thick Da	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12) (LRR O, P,	, T) ³ Indicators	of hydrophytic vegetation and
	rairie Redox (A16) (_			', U)		hydrology must be present,
	lucky Mineral (S1) (Bleyed Matrix (S4)	LRR O, S)	Delta Ochric			OA 150D)		isturbed or problematic.
	ledox (S5)		Reduced Ver					
_	Matrix (S6)						RA 149A, 153C, 153	D)
	rface (S7) (LRR P,	S, T, U)	_	J	,	, (•
Restrictive I	_ayer (if observed)):						
Type:								
Depth (in	ches):						Hydric Soil Pres	sent? Yes No
Remarks:								
Hydric s	oil is not ob	served ir	the vicinity	/ .				

Project/Site: G.W. Village Commercial	City/County: Prince William County	Sampling Date: 2021-12-02
Applicant/Owner: North Point Development	State: Virg	inia Sampling Point: DP-MM8
Investigator(s): TNT Environmental, Inc. (J. Moore, M. Sellers		
Landform (hillslope, terrace, etc.): Upland	, , ,	
Subregion (LRR or MLRA): P 133A Lat: 38.4		
Soil Map Unit Name: Bb-Bibb Fine sandy loam		ssification: Freshwater forested wetland
Are climatic / hydrologic conditions on the site typical for this time of		
Are Vegetation, Soil, or Hydrology significan		
Are Vegetation, Soil, or Hydrology naturally		
SUMMARY OF FINDINGS – Attach site map showin	sampling point locations, trans	sects, important leatures, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area	
Hydric Soil Present? Yes No	within a Wetland? Yes	No
Wetland Hydrology Present? Yes No		
Upland data point taken outside wetland	- 3	
HYDROLOGY	Casandan	Indicates (minimum of two monutes d)
Wetland Hydrology Indicators:		Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply Surface Water (A1) Aquatic Fauna (B		e Soil Cracks (B6) ely Vegetated Concave Surface (B8)
Surface Water (A1) High Water Table (A2) Aquatic Fauna (B		ge Patterns (B10)
Saturation (A3) Hydrogen Sulfide		Frim Lines (B16)
	• •	eason Water Table (C2)
Sediment Deposits (B2)	ced Iron (C4)	sh Burrows (C8)
		tion Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	` '	orphic Position (D2)
Iron Deposits (B5) Unundation Visible on Aerial Imagery (B7)		w Aquitard (D3) leutral Test (D5)
Water-Stained Leaves (B9)	=	num moss (D8) (LRR T, U)
Field Observations:	<u></u>	
Surface Water Present? Yes No Depth (inche):	
Water Table Present? Yes No Depth (inche):	
Saturation Present? Yes No Depth (inches): Wetland Hydrology F	Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	os, previous inspections), if available:	
	, , , , , , , , , , , , , , , , , , , ,	
Remarks:		
One wetland hydrology indicator is observed	ed in the vicinity.	

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: DP-MM8 Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: 30 ft r % Cover Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: **Total Number of Dominant** 2 (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B) 6. ______ ____ ____ Prevalence Index worksheet: Total % Cover of: Multiply by: 0 x 1 = 0 **OBL** species = Total Cover FACW species 0 x 2 = 050% of total cover: _____ 20% of total cover: ____ 25 ____ x 3 = _75 FAC species Sapling/Shrub Stratum (Plot size: 30 ft r) FACU species 90 x 4 = 360 1. Liquidambar styraciflua 5 FAC **UPL** species x 5 = 0Column Totals: 115 ___ (A) <u>435</u> (B) Prevalence Index = B/A = 3.78**Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 5% = Total Cover Problematic Hydrophytic Vegetation¹ (Explain) 50% of total cover: 2.5 20% of total cover: 1.0 Herb Stratum (Plot size: 30 ft r) ¹Indicators of hydric soil and wetland hydrology must 1 Dactylis glomerata be present, unless disturbed or problematic. 2. Elymus virginicus 20 FAC **Definitions of Four Vegetation Strata:** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. **Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in height. 110% = Total Cover 50% of total cover: 55.0 20% of total cover: 22.0 Woody Vine Stratum (Plot size: 30 ft r Hydrophytic _____ = Total Cover Vegetation Yes _____ No ___ Present? 50% of total cover: _____ 20% of total cover: ____ Remarks: (If observed, list morphological adaptations below). Hydrophytic vegetation is not dominant in the vicinity.

Profile Desc	ription: (Describe	to the dept	h needed to docun	nent the	indicator	or confirm	n the absence of in	dicators.)
Depth	Matrix			x Feature		. 3		_
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-4	7.5YR 4/4	100		· 	_		Silt Loam	
4 - 14	7.5YR 4/6	100			_		Clay Loam	
14 - 18	7.5YR 4/6	80	10YR 4/3	20	<u>D</u>	M	Silty Clay Loam	
					-			
-								
_								
¹Type: C=Co	oncentration D=Der	letion RM=	Reduced Matrix, MS	S=Maske	d Sand Gr	ains	² l ocation: Pl =	Pore Lining, M=Matrix.
			RRs, unless other					Problematic Hydric Soils ³ :
Histosol ((A1)		Polyvalue Be	low Surf	ace (S8) (L	RR S, T, L	J) 🔲 1 cm Muck	(A9) (LRR O)
_	pipedon (A2)		Thin Dark Su					(A10) (LRR S)
Black His			Loamy Mucky			R O)		ertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4) I Layers (A5)		Loamy Gleye Depleted Mat		(F2)			loodplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20)
	Bodies (A6) (LRR F	P. T. U)	Redox Dark		F6)		(MLRA 15	
I = 1	cky Mineral (A7) (L		Depleted Dar	,	,			Material (TF2)
Muck Pr	esence (A8) (LRR l	J)	Redox Depre	,	- 8)		— <i>'</i>	w Dark Surface (TF12)
_	ck (A9) (LRR P, T)	(8.4.4)	Marl (F10) (L			=4\	U Other (Expla	ain in Remarks)
	d Below Dark Surfac ark Surface (A12)	e (A11)	Depleted Och				T) ³ Indicators	of hydrophytic vegetation and
_	rairie Redox (A16) (MLRA 150A	_					hydrology must be present,
	lucky Mineral (S1) (Delta Ochric			. ,		isturbed or problematic.
_	sleyed Matrix (S4)		Reduced Ver					
	ledox (S5)		Piedmont Flo					D)
_	Matrix (S6) rface (S7) (LRR P, \$	S T II)	Anomaious B	sright Loa	amy Solis (F20) (MLR	A 149A, 153C, 153	D)
	_ayer (if observed)							
Type:	,							
Depth (inc	ches):						Hydric Soil Pres	sent? Yes No
Remarks:								
Hydric s	oil is not ob	served i	n the vicinity	<i>/</i> .				
,				, .				

Project/Site: G.W. Village Commercial City/C	County: Stafford County Sampling Date: 2021-12-02
	State: Virginia Sampling Point: DP-TP3
Investigator(s): TNT Environmental- T. Payne, D. Dellapenna Secti	
Landform (hillslope, terrace, etc.): Floodplain Local	
	34 Long: -77.4411712 Datum: WGS 84
Soil Map Unit Name: Bibb fine sandy loam (Bb)	NWI classification: Freshwater forested
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly disturbed.	
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing san	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes _ ✓ No	In the Commission Associated
Hydric Soil Present? Yes V No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	Within a wetiand? TesNo
PFO data point taken inside flag TPC9	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LR	
✓ Saturation (A3) Hydrogen Sulfide Odor (Water Marks (B1) Oxidized Rhizospheres a	
Water Marks (B1) Oxidized Rhizospheres a Sediment Deposits (B2) Presence of Reduced Iro	
Drift Deposits (B3) Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	
Iron Deposits (B5) Other (Explain in Remark	ks) Shallow Aquitard (D3)
Inundation Vis ble on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Dept	
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): 10	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
Wetland hydrology observed	

7 0 (D) (D) (1 30 ft r		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)	% Cover 35	Species? ✓		Number of Dominant Species
1. Carpinus caroliniana	25		FAC	That Are OBL, FACW, or FAC: 6 (A)
2. Acer rubrum			FAC	Total Number of Dominant
3. Prunus serotina	25		FACU	Species Across All Strata: 9 (B)
4. Liquidambar styraciflua	5		FAC	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 67 (A/B)
6				
	90%	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: 45.0	20% of	f total cover:	18.0	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r				OBL species $0 \times 1 = 0$
1. Carpinus caroliniana	15	~	FAC	FACW species $\frac{5}{x^2} = \frac{10}{x^2}$
2. Betula nigra	5		FACW	FAC species 120 x 3 = 360
-				FACU species 45 x 4 = 180
3				UPL species $0 x 5 = 0$
4				Column Totals: <u>170</u> (A) <u>550</u> (B)
5				
6	20%			Prevalence Index = B/A = 3.2
		= Total Cov		Hydrophytic Vegetation Indicators:
50% of total cover: 10.0	20% of	f total cover:	4.0	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r		_		✓ 2 - Dominance Test is >50%
1. Carpinus caroliniana	20		FAC	3 - Prevalence Index is ≤3.0 ¹
2. Ilex opaca	10		FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5.				be present, unless disturbed or problematic.
6.				Definitions of Five Vegetation Strata:
	30%	= Total Cov	er	
50% of total cover: 15.0				Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)	20 /0 01	total cover.		(7.6 cm) or larger in diameter at breast height (DBH).
1. Lonicera japonica	10	~	FACU	
2 Polystichum acrostichoides	10		FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
3. Carex sp.	5		FAC	than 3 in. (7.6 cm) DBH.
	5			
4. Smilax glauca	<u> </u>		FAC	Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
5				approximately 5 to 20 ft (1 to 6 ff) in height.
6				Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				
10				Woody vine – All woody vines, regardless of height.
11.				
	30%	= Total Cov	er	
50% of total cover: 15.0				
Woody Vine Stratum (Plot size: 30 ft r)	20 /0 01	total cover		
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes No
50% of total cover:	20% of	f total cover:		LIESCHILL IES NO
Remarks: (If observed, list morphological adaptations belo	w).			
Hydrophytic vegetation observed				

Profile Desc	ription: (Describe	to the de	oth needed to docu	ment the	indicator	or confirm	n the absence o	f indicators.)
Depth	Matrix			x Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0 - 5	10YR 3/4	100					Silt Loam	
5 - 14	10YR 5/2	85	7.5YR 4/6	15	С	М	Silt Loam	
-								
-				_				
		-		-	_			_
			-	_	_	·		
	-		-			·	-	
				_	_			
			=Reduced Matrix, M			ains.		PL=Pore Lining, M=Matrix.
-		able to all	LRRs, unless othe					or Problematic Hydric Soils ³ :
Histosol	` '		Polyvalue Be					uck (A9) (LRR O)
Histic Ep	nipedon (A2)		Thin Dark Su Loamy Muck					uck (A10) (LRR S) d Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley			(0)		nt Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)		✓ Depleted Ma		()			ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR F	P, T, U)	Redox Dark		F6)			A 153B)
5 cm Mu	cky Mineral (A7) (L	RR P, T, U) Depleted Da	rk Surfac	e (F7)			rent Material (TF2)
	esence (A8) (LRR l	J)	Redox Depre		- 8)			allow Dark Surface (TF12)
	ck (A9) (LRR P, T)	- (0.4.4)	Marl (F10) (I	•	\	F4\	Other (E	Explain in Remarks)
	l Below Dark Surfac ark Surface (A12)	e (A11)	Depleted Oc Iron-Mangar				T) ³ Indica	tors of hydrophytic vegetation and
		MLRA 150	A) Umbric Surfa					and hydrology must be present,
	lucky Mineral (S1) (ss disturbed or problematic.
-	leyed Matrix (S4)	. ,	Reduced Ve					·
Sandy R	edox (S5)		Piedmont Flo	oodplain (Soils (F19)	(MLRA 14	49A)	
	Matrix (S6)		Anomalous I	Bright Loa	amy Soils (F20) (MLF	RA 149A, 153C, 1	153D)
	face (S7) (LRR P,							
	_ayer (if observed)	:						
Type:								
Depth (inc	ches):						Hydric Soil P	Present? Yes No
Remarks:	مام انمم منسلمين		•					
Н	ydric soil ob	served						

Project/Site: G.W. Village Commercial	City/County: Staff	ord County	Sampling Date: 2021-12-17				
Applicant/Owner: North Point Development		State: Virginia	· · · ·				
Investigator(s): TNT Environmental-T.Payne, A.Sareen							
Landform (hillslope, terrace, etc.): Upland			Slope (%):				
Subregion (LRR or MLRA): P 133A Lat:							
Soil Map Unit Name: Caroline fine sandy loam (CaD2)		NWI classific					
Are climatic / hydrologic conditions on the site typical for this tim							
Are Vegetation, Soil, or Hydrology signi	-						
Are Vegetation, Soil, or Hydrology natur		If needed, explain any answe					
SUMMARY OF FINDINGS – Attach site map sho	wing sampling poir	nt locations, transects	, important features, etc.				
Hydrophytic Vegetation Present? Yes No	V la the Same	alad Araa					
Hydric Soil Present? Yes No	/		No				
Wetland Hydrology Present? Yes No	<u>v</u>	etianu res	NO				
Upland data point taken in the eastern	most linear porti	ion of the property	.				
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)				
Primary Indicators (minimum of one is required; check all that	apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Aquatic Fau			Sparsely Vegetated Concave Surface (B8)				
	ts (B15) (LRR U)		Drainage Patterns (B10)				
Saturation (A3) Hydrogen S			Moss Trim Lines (B16)				
	izospheres along Living R						
Sediment Deposits (B2) Presence of	Reduced Iron (C4)	Crayfish Buri	Crayfish Burrows (C8)				
Drift Deposits (B3) Recent Iron	Reduction in Tilled Soils (
Algal Mat or Crust (B4) Thin Muck S	urface (C7)	Geomorphic Position (D2)					
Iron Deposits (B5) Other (Expla	iin in Remarks)	Shallow Aquitard (D3)					
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral					
Water-Stained Leaves (B9)		Sphagnum m	noss (D8) (LRR T, U)				
Field Observations:							
Surface Water Present? Yes No Depth (
Water Table Present? Yes No Depth (
Saturation Present? Yes No Depth ((includes capillary fringe)	inches):	Wetland Hydrology Presen	t? Yes No				
Describe Recorded Data (stream gauge, monitoring well, aeria	ıl photos, previous inspect	ions), if available:					
Remarks:							
Wetland hydrology was not observed a	at this location						
Wedana nyarology was not observed t	it tillo loodtion.						

Sampling	Daint	DP-	TP4
samnlina	Point.	וט	

20.4		Dominant		Dominance Test worksheet:			
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species			
1. Fagus grandifolia	40		FACU	That Are OBL, FACW, or FAC: 0 (A)			
2. Quercus alba	40		FACU	Total Number of Dominant			
3. Carpinus caroliniana	10		FAC	Species Across All Strata: 3 (B)			
4				Descent of Deminent Species			
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)			
6							
	90%	= Total Cov	er	Prevalence Index worksheet:			
50% of total cover: 45.0				Total % Cover of: Multiply by:			
Sapling Stratum (Plot size: 30 ft r)	2070 01	total oover		OBL species $0 x 1 = 0$			
				FACW species $0 x 2 = 0$			
1				FAC species 10 x 3 = 30			
2				FACU species 90 x 4 = 360			
3				UPL species 0 $x = 0$			
4				Column Totals: 100 (A) 390 (B)			
5				Column Totals. (A)			
6				Prevalence Index = $B/A = 3.90$			
	:	= Total Cov	er	Hydrophytic Vegetation Indicators:			
50% of total cover:	20% of	total cover:		1 - Rapid Test for Hydrophytic Vegetation			
Shrub Stratum (Plot size: 30 ft r)				2 - Dominance Test is >50%			
1				3 - Prevalence Index is ≤3.0 ¹			
2.							
•				Problematic Hydrophytic Vegetation ¹ (Explain)			
3							
4				¹ Indicators of hydric soil and wetland hydrology must			
5				be present, unless disturbed or problematic.			
6				Definitions of Five Vegetation Strata:			
		= Total Cov		Tree – Woody plants, excluding woody vines,			
50% of total cover:	20% of	total cover		approximately 20 ft (6 m) or more in height and 3 in.			
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).			
1. Polystichum acrostichoides	10		FACU	Sapling – Woody plants, excluding woody vines,			
2				approximately 20 ft (6 m) or more in height and less			
3				than 3 in. (7.6 cm) DBH.			
4.				Shrub – Woody plants, excluding woody vines,			
5.				approximately 3 to 20 ft (1 to 6 m) in height.			
0				Herb – All herbaceous (non-woody) plants, including			
•				herbaceous vines, regardless of size, and woody			
7				plants, except woody vines, less than approximately			
8				3 ft (1 m) in height.			
9				Woody vine – All woody vines, regardless of height.			
10							
11							
		= Total Cov					
50% of total cover: 5.0	20% of	total cover:	2.0				
Woody Vine Stratum (Plot size: 30 ft r)							
1							
2.							
3.							
4							
5		T-4-1 0		Hydrophytic Vegetation			
		= Total Cov	Present? Yes No				
50% of total cover:	20% of	total cover					

Dominant hydrophytic vegetation was not observed at this location.

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the i	ndicator o	or confirm	the absence	of indicato	ors.)		
Depth	Matrix			x Features	1						
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	<u>Texture</u>		Remark	S	
0 - 16	5YR 5/8	100					Silt Loam				
-											
_											
-											
¹Type: C=Co	ncentration, D=Dep	letion RM=R	educed Matrix MS	S=Masked	Sand Gra	ins	² Location:	PI =Pore I	ining M=M	atrix	
	ndicators: (Applic						Indicators				
Histosol			Polyvalue Be			RR S. T. U			-		
	ipedon (A2)		Thin Dark Su					uck (A10)	•		
Black His			Loamy Muck						18) (outsi d	e MLRA 1	50A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix (F2)		Piedmo	nt Floodpla	ain Soils (F	19) (LRR P	P, S, T)
	Layers (A5)		Depleted Ma				Anomal	ous Bright	Loamy Soi	s (F20)	
	Bodies (A6) (LRR P		Redox Dark	,	,			A 153B)			
	cky Mineral (A7) (LI		Depleted Dai					rent Mater			
· 	esence (A8) (LRR L	J)	Redox Depre		3)				k Surface (T	F12)	
· 	ck (A9) (LRR P, T) Below Dark Surfac	- Δ (Δ11)	Marl (F10) (L Depleted Ocl	•	/MI DA 15	:1\	Other (i	Explain in F	Remarks)		
	rk Surface (A12)	C (A11)	Iron-Mangan				T) ³ Indica	ators of hyd	drophytic ve	getation ar	nd
	airie Redox (A16) (I	MLRA 150A)			. , .				ogy must be	-	
	ucky Mineral (S1)		Delta Ochric			•		-	ed or proble		
Sandy G	leyed Matrix (S4)		Reduced Ver	tic (F18) (MLRA 15	0A, 150B)					
Sandy R	edox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	9A)				
	Matrix (S6)		Anomalous E	Bright Loar	ny Soils (F	20) (MLR	A 149A, 153C,	153D)			
	face (S7) (LRR P, S						1				
	ayer (if observed)	:									
Type:			<u> </u>								,
Depth (inc	:hes):						Hydric Soil I	Present?	Yes	No_	
Remarks:	ydric soil wa	s not ob	served at tl	nis loc	ation.						

Project/Site: G.W. Village Commercial	City/County: Staff	ord County	Sampling Date: 2021-12-17			
Applicant/Owner: North Point Development		State: Virginia	· · ·			
Investigator(s): TNT Environmental-T.Payne, A.Sareen						
Landform (hillslope, terrace, etc.): Depression			Slone (%). 5			
Subregion (LRR or MLRA): P 133A Lat: 38						
		Long NWI classific				
Are climatic / hydrologic conditions on the site typical for this time						
Are Vegetation, Soil, or Hydrology signification						
Are Vegetation, Soil, or Hydrology naturall	y problematic? (If needed, explain any answe	rs in Remarks.)			
SUMMARY OF FINDINGS - Attach site map show	ing sampling poir	nt locations, transects	, important features, etc.			
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No	within a We		No			
Remarks:	l					
Wetland datapoint taken within PFO insi	de flag TPFA2.					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)			
Primary Indicators (minimum of one is required; check all that ap	inly)	Surface Soil				
Surface Water (A1) Aquatic Fauna		Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2) Marl Deposits			Sparsely vegetated Concave Surface (B6) Drainage Patterns (B10)			
Saturation (A3) Hydrogen Sulf		Moss Trim Li				
	ospheres along Living R		Water Table (C2)			
Sediment Deposits (B2) Presence of R						
	eduction in Tilled Soils (-	Crayfish Burrows (C8)) Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Thin Muck Sur		Geomorphic				
Iron Deposits (B5) Other (Explain	• •	Shallow Aqui				
Inundation Vis ble on Aerial Imagery (B7)	m remaine)	FAC-Neutral	, ,			
Water-Stained Leaves (B9)			noss (D8) (LRR T, U)			
Field Observations:			,,,,,			
Surface Water Present? Yes No Depth (inc	ches):					
Water Table Present? Yes No Depth (inc						
Saturation Present? Yes No Depth (inc		Wetland Hydrology Presen	it? Yes <u>'</u> No			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial particular)		iana) if available.				
Describe Recorded Data (stream gauge, monitoring well, aerial p	onotos, previous inspect	ions), if available:				
Remarks:						
Wetland hydrology was observed at this	location.					

- 20 ft r		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Acer rubrum	20		FAC	That Are OBL, FACW, or FAC: 3 (A)
2. Nyssa sylvatica	20		FAC	Total Number of Dominant
3. Fagus grandifolia	15		FACU	Species Across All Strata: 5 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 60 (A/B)
6				
	55% :	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: 27.5	20% of	total cover:	11.0	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)				OBL species $0 \times 1 = 0$
1				FACW species $\frac{0}{50}$ x 2 = $\frac{0}{150}$
2				FAC species $\frac{50}{25}$ $\times 3 = \frac{150}{100}$
3.				FACU species 25 x 4 = 100
4.				UPL species 0 x 5 = 0
5.				Column Totals: <u>75</u> (A) <u>250</u> (B)
6				5
0		= Total Cov		Prevalence Index = B/A = 3.33
E00/ of total cover:				Hydrophytic Vegetation Indicators:
50% of total cover: Shrub Stratum (Plot size: 30 ft r)	20% 01	iolai covei.		1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
		= Total Cov		Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).
1. Carex spp.	10		FAC	Sapling – Woody plants, excluding woody vines,
2. Polystichum acrostichoides	10		FACU	approximately 20 ft (6 m) or more in height and less
3				than 3 in. (7.6 cm) DBH.
4				Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6				Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, and woody
8				plants, except woody vines, less than approximately 3 ft (1 m) in height.
9.				o k (i m) iii noight.
10.				Woody vine – All woody vines, regardless of height.
11.				
	000/	Total Cov		
50% of total cover: 10.0				
	20% 01	total cover.		
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2				
3				
4				
5				Hydrophytic
	:	= Total Cov	er	Vegetation
50% of total cover:	20% of	total cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).			

Dominant hydrophytic vegetation was observed at this location.

Profile Desc	cription: (Describe	to the dep	th needed to docu	ment the	indicator	or confir	m the absence o	f indicators.)
Depth	Matrix		Redox Features					
(inches)	Color (moist)		Color (moist)	%	Type'	Loc ²	Texture	Remarks
0 - 14	10YR 5/2	70	5YR 4/6	30	<u>C</u>	<u>M</u>	Silt Loam	
						_	<u> </u>	
-								
_				_			·	
	_				-	-		
							 -	
					<u> </u>			
-								
¹Type: C=C	oncentration, D=De	pletion, RM=	Reduced Matrix, M	S=Masked	d Sand G	rains.	² Location: F	PL=Pore Lining, M=Matrix.
	Indicators: (Appli							or Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	elow Surfa	ice (S8) (LRR S, T,	U) 1 cm Mu	ıck (A9) (LRR O)
Histic E	pipedon (A2)		Thin Dark S	urface (S9) (LRR S	, T, U)	2 cm Mu	ick (A10) (LRR S)
	istic (A3)		Loamy Muck			R 0)		d Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley		(F2)			nt Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		<u>✓</u> Depleted Ma	. ,				ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR I		Redox Dark	,	,			A 153B)
	ucky Mineral (A7) (L resence (A8) (LRR I		Depleted Da Redox Depre					ent Material (TF2) allow Dark Surface (TF12)
	uck (A9) (LRR P, T)	J)	Marl (F10) (I		0)		-	explain in Remarks)
	d Below Dark Surface	ce (A11)	Depleted Oc		(MLRA 1	I 51)	0.1101 (2	splain in Homanio)
-	ark Surface (A12)	` ,	Iron-Mangar				, T) ³ Indica	tors of hydrophytic vegetation and
Coast P	rairie Redox (A16) (MLRA 150	A) Umbric Surfa	ace (F13)	(LRR P,	T, U)	wetla	nd hydrology must be present,
-	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric					s disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ve					
-	Redox (S5)		Piedmont Fl					1505)
	Matrix (S6)	C T II)	Anomalous I	Bright Loa	my Soils	(F20) (ML I	RA 149A, 153C, ²	153D)
	rface (S7) (LRR P, Layer (if observed)							
	Layer (II Observed)	,.						
Type:	shoo):						Usalvia Cail D	resent? Yes V No No
	ches):						Hydric Soil P	resent? Yes No No
Remarks:	المحادث ممثا المدا							
	lydric soil wa	as obse	rved at this i	ocatio	n.			

Project/Site: G. W. Village Commercial	City/County: Staffor	rd County	Sampling Date: 2021-12-17				
Applicant/Owner: North Point Development		State: Virginia	·				
Investigator(s): TNT Environmental-T.Payne, A.Sareen Section, Township, Range:							
Landform (hillslope, terrace, etc.): Upland			Slope (%):				
Subregion (LRR or MLRA): P 133A Lat: 38.4							
Soil Map Unit Name: Caroline-Sassafras complex (CdE)		NWI classific					
Are climatic / hydrologic conditions on the site typical for this time of y							
Are Vegetation, Soil, or Hydrology significantly							
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If r	needed, explain any answer	rs in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showin	g sampling point	locations, transects	, important features, etc.				
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Yes No	Is the Sample within a Wetla	ed Area and? Yes	No <u> </u>				
Wetland Hydrology Present? Yes No Remarks:	-						
HYDROLOGY		-					
Wetland Hydrology Indicators:		-	tors (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)			Surface Soil Cracks (B6)				
Surface Water (A1) Aquatic Fauna (B			Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)				
High Water Table (A2) Marl Deposits (B1 Saturation (A3) Hydrogen Sulfide		Moss Trim Li					
	heres along Living Roo						
Sediment Deposits (B2) — Presence of Redu			C3) Dry-Season Water Table (C2) Crayfish Burrows (C8)				
	ction in Tilled Soils (C6						
Algal Mat or Crust (B4) Thin Muck Surface		Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)					
Iron Deposits (B5) Other (Explain in l	, ,	Shallow Aquitard (D3)					
Inundation Vis ble on Aerial Imagery (B7)	,	FAC-Neutral					
Water-Stained Leaves (B9)			oss (D8) (LRR T, U)				
Field Observations:							
Surface Water Present? Yes No Depth (inches	s):						
Water Table Present? Yes No Depth (inches	s):						
Saturation Present? Yes No Depth (inches	s): W	etland Hydrology Presen	t? Yes No				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspection	ns), if available:					
Jacob Hoose Data (or oam gaage, memoring nen, as har pro-	, p	,,					
Remarks:							
One secondary indicator of wetland hydro	logy was obse	erved.					

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: DP-TP6

Torra Otractions (Distraction 30 ft r		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft r</u>) 1. Fagus grandifolia	% Cover 20	Species?	FACU	Number of Dominant Species
	· -			That Are OBL, FACW, or FAC: 1 (A)
2. Quercus alba	15		FACU	Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 33.3 (A/B)
6				
	35% =	= Total Cov	er er	Prevalence Index worksheet:
50% of total cover: <u>17.5</u>	20% of	total cover	7.0	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r				OBL species $0 \times 1 = 0$
1. Ilex opaca	10	~	FAC	FACW species 0 x 2 = 0
2.				FAC species 10 x 3 = 30
3.				FACU species <u>35</u>
				UPL species 0 x 5 = 0
4				Column Totals: <u>45</u> (A) <u>170</u> (B)
5				
6				Prevalence Index = B/A = 3.78
5.0	10% =			Hydrophytic Vegetation Indicators:
50% of total cover: <u>5.0</u>	20% of	total cover	2.0	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6.				Definitions of Five Vegetation Strata:
·		Total Cov		
50% of total cover				Tree – Woody plants, excluding woody vines,
50% of total cover:	20% 01	lotal cover	·	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 30 ft r)				(**************************************
1				Sapling – Woody plants, excluding woody vines,
2				approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3	· —— ·			
4				Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6				Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, and woody
8				plants, except woody vines, less than approximately 3 ft (1 m) in height.
9.				
10.				Woody vine – All woody vines, regardless of height.
11.				
		Total Cov	er	
E00/ of total cover				
50% of total cover:	20% 01	lotal cover	·	
Woody Vine Stratum (Plot size: 30 ft r)				
1	· ——			
2				
3				
4				
5				Hydrophytic
		= Total Cov	er er	Vegetation
50% of total cover:	20% of	total cover	<u></u>	Present? Yes No
Remarks: (If observed, list morphological adaptations belo				

Dominant hydrophytic vegetation was not observed at this location.

SOIL Sampling Point: DP-TP6

Profile Desc	ription: (Describe	to the depth	n needed to docu	ment the in	dicator	or confirm	the absence	of indicato	rs.)	
Depth	Matrix			ox Features						
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	<u>Texture</u>		Remarks	
0 - 14	10YR 5/4	100					Silt Loam			
-										
-										
	-									
	oncentration, D=De					ains.			ning, M=Matr	
-	Indicators: (Appli	cable to all L							natic Hydric	Solis":
Histosol	` '		Polyvalue Be					. , .	•	
	oipedon (A2)		Thin Dark S					uck (A10) (
	stic (A3)		Loamy Muck			(O)				MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley		-2)					(LRR P, S, T)
	d Layers (A5) Bodies (A6) (LRR I	D T 11)	Depleted Ma Redox Dark		2)			-	Loamy Soils (F20)
	icky Mineral (A7) (L		Depleted Da	•	,			A 153B) rent Materia	al /TE2)	
	esence (A8) (LRR		Redox Depr						Surface (TF1	2)
	ick (A9) (LRR P, T)		Marl (F10) (I		,			Explain in F	•	2)
	d Below Dark Surfa		Depleted Oc		MLRA 1	51)	0.1101 (1	=xpiaiii iii i	iomanio)	
-	ark Surface (A12)	, ,	iron-Mangar				T) ³ Indica	ators of hyd	rophytic vege	tation and
	rairie Redox (A16) ((MLRA 150A)						-	gy must be p	
Sandy N	lucky Mineral (S1)	(LRR O, S)	Delta Ochric	(F17) (MLF	RA 151)		unle	ss disturbe	d or problema	tic.
Sandy C	Gleyed Matrix (S4)		Reduced Ve	rtic (F18) (N	ILRA 15	0A, 150B)	1			
Sandy F	Redox (S5)		Piedmont Fl	oodplain So	ils (F19)	(MLRA 14	I9A)			
Stripped	Matrix (S6)		Anomalous I	Bright Loam	ny Soils (F20) (MLR	A 149A, 153C,	153D)		
	rface (S7) (LRR P,									
Restrictive	Layer (if observed):								
Type:										
Depth (in	ches):		<u></u>				Hydric Soil	Present?	Yes	No
Remarks:							•			
H	ydric soil wa	as not ob	served at t	his loca	ation.					

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: G. W. Village Commercial	City/County: Staff	ord County	Sampling Date: 2021-12-17	
Applicant/Owner: North Point Development		State: Virginia	· -	
Investigator(s): TNT Environmental-T.Payne, A.Sareen				
Landform (hillslope, terrace, etc.): Upland			Slope (%)	
Subregion (LRR or MLRA): P 133A Lat:				
Soil Map Unit Name: Aura gravelly fine sandy loam (AvE2)		Long NWI classific		
•				
Are climatic / hydrologic conditions on the site typical for this tim	-			
Are Vegetation, Soil, or Hydrology signif				
Are Vegetation, Soil, or Hydrology natur	ally problematic? (If needed, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS - Attach site map sho	wing sampling poi	nt locations, transects	, important features, etc.	
Hydrophytic Vegetation Present? Yes No	Is the Sam		No 🗸	
Wetland Hydrology Present? Yes No Remarks:	<u>/</u>			
LIVEROLOGY				
HYDROLOGY Western Hydrology Indicators		Soondary Indias	store (minimum of two required)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that a	annly)	Surface Soil	otors (minimum of two required) Cracks (R6)	
•				
Surface Water (A1) Aquatic Faul High Water Table (A2) Marl Deposition		Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)		
Saturation (A3) Hydrogen Si		Moss Trim Li		
<u> </u>	zospheres along Living R		Water Table (C2)	
	Reduced Iron (C4)	Crayfish Bur		
Drift Deposits (B3) Recent Iron	Reduction in Tilled Soils (C6) Saturation Vi	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4) Thin Muck S	urface (C7)	Geomorphic	Position (D2)	
Iron Deposits (B5) Other (Expla	in in Remarks)	Shallow Aqu		
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral		
Water-Stained Leaves (B9)		Sphagnum n	noss (D8) (LRR T, U)	
Field Observations: Surface Water Present? Yes No Depth (nahaa):			
Water Table Present? Yes No Depth (
Saturation Present? Yes No Depth (Wetland Hydrology Preser	nt? Yes No	
(includes capillary fringe)	•		it: 165 NO	
Describe Recorded Data (stream gauge, monitoring well, aeria	I photos, previous inspect	ions), if available:		
Demodes				
Remarks:				
Wetland hydrology was not observed a	t this location.			
,				

20.ft r		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1. Carya glabra	50		FACU	That Are OBL, FACW, or FAC: 2 (A)
2. Ilex opaca	40		FAC	Total Number of Dominant
3. Acer rubrum	20		FAC	Species Across All Strata: 3 (B)
4. Carpinus caroliniana	15		FAC	Percent of Dominant Species
5. Liriodendron tulipifera	15		FACU	That Are OBL, FACW, or FAC: 66.7 (A/B)
6. Liquidambar styraciflua	10		FAC	Bassalan as Indonesia la de
	150%	Total Cov	er	Prevalence Index worksheet:
50% of total cover: <u>75.0</u>	20% of	total cover:	30.0	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)				OBL species $0 \times 1 = 0$
1. Ilex opaca	20	'	FAC	FACW species $\frac{0}{105}$ x 2 = $\frac{0}{215}$
2				FAC species $\frac{105}{25}$ $\times 3 = \frac{315}{25}$
3.		_		FACU species 65 x 4 = 260
4.				UPL species $0 \times 5 = 0$
5.				Column Totals: <u>170</u> (A) <u>575</u> (B)
6.				5
o	20%	= Total Cov		Prevalence Index = B/A = 3.38
50% of total cover: 10.0				Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 30 ft r)	20% 01	lotal cover.		1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	=	Total Cov	er	Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r)				(7.6 cm) or larger in diameter at breast height (DBH).
1				Sapling – Woody plants, excluding woody vines,
2				approximately 20 ft (6 m) or more in height and less
3.				than 3 in. (7.6 cm) DBH.
4.				Shrub – Woody plants, excluding woody vines,
5.				approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
				herbaceous vines, regardless of size, <u>and</u> woody
7				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				
11				
	=	Total Cov	er	
50% of total cover:	20% of	total cover:		
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2				
3.				
4.				
5.				Hydronhytio
		Total Cov	er	Hydrophytic Vegetation
50% of total cover:				Present? Yes No
	·	iolai cover.		
Remarks: (If observed, list morphological adaptations belo	w).			

Dominant hydrophytic vegetation was observed at this location.

SOIL Sampling Point: DP-TP7

Profile Desc	ription: (Describe	to the depth	needed to docu	ment the ir	ndicator	or confirm	the absence	of indicato	rs.)	
Depth	Matrix			x Features						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type'	Loc ²	<u>Texture</u>		Remarks	
0 - 14	10YR 4/3	100					Silt Loam			
-										
								-		
								-		
	-									
-										
	oncentration, D=De					ains.			ning, M=Matr	
-	Indicators: (Appli	cable to all Li							natic Hydric	Solis":
Histosol	` '		Polyvalue Be					luck (A9) (L	•	
	oipedon (A2)		Thin Dark Su					luck (A10) (
	stic (A3)		Loamy Muck			(O)				MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley		-2)					(LRR P, S, T)
	d Layers (A5) Bodies (A6) (LRR I	. T II)	Depleted Ma Redox Dark		6)			•	Loamy Soils (F20)
	icky Mineral (A7) (L	•	Depleted Da	•	,			RA 153B) arent Materi	al (TE2)	
	esence (A8) (LRR l		Redox Depre						Surface (TF1	2)
	ick (A9) (LRR P, T)	3,	Marl (F10) (I		,,			Explain in F	•	2)
	d Below Dark Surfa	ce (A11)	Depleted Oc		MLRA 1	51)	001 (_xpiaiii iii i	tomarkoj	
-	ark Surface (A12)	,	iron-Mangar				T) ³ Indic	ators of hyd	rophytic vege	tation and
	rairie Redox (A16) (MLRA 150A)			. , .			-	gy must be p	
Sandy N	lucky Mineral (S1)	(LRR O, S)	Delta Ochric	(F17) (ML I	RA 151)		unle	ess disturbe	d or problema	tic.
Sandy G	Gleyed Matrix (S4)		Reduced Ve	rtic (F18) (I	MLRA 15	0A, 150B)				
Sandy F	Redox (S5)		Piedmont Flo	oodplain So	oils (F19)	(MLRA 14	I9A)			
Stripped	Matrix (S6)		Anomalous I	Bright Loam	ny Soils (F20) (MLR	A 149A, 153C	, 153D)		
	rface (S7) (LRR P,									
Restrictive	Layer (if observed)):								
Type:										
Depth (in	ches):		<u>—</u>				Hydric Soil	Present?	Yes	No
Remarks:										
Н	ydric soil wa	as not ob	served at t	his loca	ation.					

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: G. W. Village Commercial	City/County: Sta	fford County	Sampling Date: 2021-12-17	
Applicant/Owner: North Point Development		State: Virginia	· · · · ·	
Investigator(s): TNT Environmental-T.Payne, A.Sare				
Landform (hillslope, terrace, etc.): Upland			Slope (%):	
Subregion (LRR or MLRA): P 133A La				
Soil Map Unit Name: Aura gravelly fine sandy loam (Av		NWI classific		
Are climatic / hydrologic conditions on the site typical for this				
Are Vegetation, Soil, or Hydrology sign				
Are Vegetation, Soil, or Hydrology na	turally problematic?	(If needed, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS - Attach site map s	howing sampling po	int locations, transects	, important features, etc.	
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No No	Is the San within a W	npled Area /etland? Yes	No 🗸	
Wetland Hydrology Present? Yes No Remarks:			<u> </u>	
LIVER OLON				
HYDROLOGY		O a see de me la dise		
Wetland Hydrology Indicators:	and a mark of		ators (minimum of two required)	
Primary Indicators (minimum of one is required; check all the		Surface Soil		
Surface Water (A1) Aquatic F High Water Table (A2) Marl Dep	osits (B15) (LRR U)	Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)		
	n Sulfide Odor (C1)	Moss Trim Lines (B16)		
	Rhizospheres along Living I		Water Table (C2)	
	e of Reduced Iron (C4)	Crayfish Bur		
	on Reduction in Tilled Soils		isible on Aerial Imagery (C9)	
	k Surface (C7)		Position (D2)	
Iron Deposits (B5) Other (Ex	plain in Remarks)	Shallow Aqu	itard (D3)	
Inundation Vis ble on Aerial Imagery (B7)		FAC-Neutral	Test (D5)	
Water-Stained Leaves (B9)		Sphagnum n	noss (D8) (LRR T, U)	
Field Observations:				
Surface Water Present? Yes No Dept				
Water Table Present? Yes No Dept				
Saturation Present? Yes No Dept	:h (inches):	Wetland Hydrology Preser	nt? Yes No	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ac	erial photos, previous insper	tions), if available:		
Remarks:				
Wetland hydrology was not observed	d at this location.			

		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)
6.				That Ald OBE, I AOW, OF I AO.
		= Total Cov	er	Prevalence Index worksheet:
50% of total cover:				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 ft r)	20 /0 01	total cover		OBL species 0 x 1 = 0
				FACW species $0 x 2 = 0$
1				FAC species 60 x 3 = 180
2				FACU species 20 x 4 = 80
3				UPL species 0 x 5 = 0
4				Column Totals: 80 (A) 260 (B)
5				Column rotals (A) (B)
6				Prevalence Index = $B/A = 3.25$
		= Total Cov	er er	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover	:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 ft r)				✓ 2 - Dominance Test is >50%
1				
2.				3 - Prevalence Index is ≤3.0 ¹
				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
		= Total Cov	er er	Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover	<u> </u>	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30 ft r				(7.6 cm) or larger in diameter at breast height (DBH).
1. Andropogon virginicus	40		FAC	Sapling – Woody plants, excluding woody vines,
2. Liatris spicata	20	~	FAC	approximately 20 ft (6 m) or more in height and less
3. Perilla frutescens	20	~	FACU	than 3 in. (7.6 cm) DBH.
4.				Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
6				herbaceous vines, regardless of size, and woody
7				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				
11				
	80%	= Total Cov	er er	
50% of total cover: 40.0	20% of	total cover	16.0	
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2.				
3.				
4. 5.				
o.				
				Hydrophytic
		= Total Cov		Vegetation
50% of total cover:	20% of	= Total Cov		1

Dominant hydrophytic vegetation was not observed at this location.

SOIL Sampling Point: DP-TP8

(inches)	Matrix			ox Feature		. 2		
0 - 4	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
	7.5YR 3/4	100					Silt Loam	
4 - 14	7.5YR 4/1	90	7.5YR 4/6	10	<u> </u>	PL	Sandy Loam	
-	-							
-								
	_							
	-				_			
			=Reduced Matrix, N			rains.		=Pore Lining, M=Matrix.
-		icable to all	LRRs, unless other					Problematic Hydric Soils ³ :
Histosol	pipedon (A2)		Polyvalue B Thin Dark S					
	istic (A3)		Loamy Muc					((A10) (LRR S) /ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley			K 0)		Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		✓ Depleted M		(1 2)			s Bright Loamy Soils (F20)
	Bodies (A6) (LRR	P. T. U)	Redox Dark	. ,	F6)		(MLRA 1	
	ucky Mineral (A7) (I				,			t Material (TF2)
	resence (A8) (LRR		Redox Dep					ow Dark Surface (TF12)
	uck (A9) (LRR P, T		Marl (F10) (• • •			olain in Remarks)
	d Below Dark Surfa		Depleted O) (MLRA 1	151)		,
	ark Surface (A12)	,	Iron-Manga	•		-	, T) ³ Indicator	s of hydrophytic vegetation and
	, ,	(MLRA 150	A) Umbric Surf					I hydrology must be present,
	Mucky Mineral (S1)							disturbed or problematic.
-	Gleyed Matrix (S4)		Reduced Ve)	·
-	Redox (S5)		Piedmont F					
-	Matrix (S6)						RA 149A, 153C, 15	3D)
Dark Su	ırface (S7) (LRR P,	, S, T, U)						
Restrictive	Layer (if observed	i):						
Type:								
Depth (in	ches):						Hydric Soil Pre	sent? Yes 🔽 No
Remarks:								
	lydric soil w	as obse	erved at this	locatio	n			
• •	iyano oon w	40 0000	, voa at tillo	iooatic	711.			

APPENDIX IV

PHOTOGRAPHS



Photograph 1: View of DP-969 showing the upland fields, taken outside of flag GO-16 in the northeastern portion of the site.



Photograph 2: View of DP-970 showing the PEM wetlands, taken inside of flag GO-16 in the northeastern portion of the site.



Photograph 3: View of DP-971 showing PFO wetlands in the northeastern portion of the site.



Photograph 4: View of DP-972 showing the forested uplands in the northeastern portion of the site.



Photograph 5: View of DP-973 showing the forested uplands, taken outside of flag GS-14 in the northeastern portion of the site.



Photograph 6: View of DP-974 showing the PFO wetlands, taken inside of flag GT-8 in the northeastern portion of the site.



Photograph 7: View of DP-975 showing the forested uplands in the northeastern portion of the site.



Photograph 8: View of DP-976 showing the forested uplands, taken outside of flag GU-6 in the northeastern portion of the site.



Photograph 9: View of DP-977 showing the PFO wetlands, taken inside of flag GV-9 in the northeastern portion of the site.



Photograph 10: View of DP-978 showing the forested uplands in the northeastern portion of the site.



Photograph 11: View of DP-979 showing the forested uplands, taken outside of flag GW-22 in the northeastern portion of the site.



Photograph 12: View of DP-980 showing the PFO wetlands, taken inside of flag GX-5 in the northeastern portion of the site.



Photograph 13: View of DP-981 showing the forested uplands, taken outside of flag GW-1 in the northeastern portion of the site.



Photograph 14: View of DP-982 showing the PFO wetlands, taken inside of flag GZ-7 in the northeastern portion of the site.



Photograph 15: View of DP-983 showing the forested uplands, taken outside of flag GY-1 in the northeastern portion of the site.



Photograph 16: View of DP-984 showing the forested uplands in the northeastern portion of the site.



Photograph 17: View of DP-985 showing the forested uplands, taken outside of flag G-10 in the northeastern portion of the site.



Photograph 18: View of DP-ZZ25 showing the forested uplands, taken outside of flag PK-30 in the northeastern portion of the site.



Photograph 19: View of DP-ZZ26 showing the PFO wetlands, taken inside of flag PK-40 in the northeastern portion of the site.



Photograph 20: View of DP-ZZ27 showing the forested uplands, taken outside of flag PL-19 in the northeastern portion of the site.



Photograph 21: View of DP-ZZ28 showing the PFO wetlands, taken inside of flag PL-25 in the northeastern portion of the site.



Photograph 22: View of DP-ZZ29 showing the forested uplands, taken upgradient of flag HA-17 in the northeastern portion of the site.



Photograph 23: View of DP-ZZ30 showing the upland fields, taken outside of flag PMA-7 in the southeastern portion of the site.



Photograph 24: View of DP-ZZ31 showing the PEM wetlands, taken inside of flag PMA-7 in the southeastern portion of the site.



Photograph 25: View of DP-ZZ32 showing the upland fields, taken outside of flag PM-17 in the southeastern portion of the site.



Photograph 26: View of DP-ZZ33 showing the PFO wetlands, taken inside of flag OF-28 in the northeastern portion of the site.



Photograph 27: View of DP-ZZ34 showing the forested uplands, taken outside of flag PN-1 in the northeastern portion of the site.



Photograph 28: View of DP-ZZ35 showing the PFO wetlands, taken inside of flag PN-1 in the northeastern portion of the site.



Photograph 29: View of DP-TP1 showing the forested uplands, taken outside flag BN24 in the northern portion of the site.



Photograph 30: View of DP-TP2 showing the forested uplands, taken outside flag TPB14 in the northern portion of the site.



Photograph 31: View of DP-MM1 showing the PFO wetlands, taken inside flag OD1 in the south-central portion of the site.



Photograph 32: View of DP-MM2 showing the forested uplands, taken outside flag OD1 in the south-central portion of the site.



Photograph 33: View of DP-MM3 showing the forested uplands, taken outside flag JM10 in the south-central portion of the site.



Photograph 34: View of DP-MM4 showing the PFO wetlands, taken inside flag JM9 in the south-central portion of the site.



Photograph 35: View of DP-MM5 showing the forested uplands, taken outside JM31 in the eastern portion of the site.



Photograph 36: View of DP-MM6 showing the PFO wetlands, taken inside flag JM60 in the southeastern portion of the site.



Photograph 37: View of DP-MM7 showing the forested uplands, taken outside flag JM60 in the southeastern portion of the site.



Photograph 38: View of DP-MM8 showing the forested uplands, taken outside flag JM4 in the south-central portion of the site.



Photograph 39: View of DP-TP3 showing the PFO wetlands, taken inside flag TPC9 in the western portion of the site.



Photograph 40: View of DP-TP4 showing the forested uplands, taken inside the eastern most linear portion of the property



Photograph 41: View of DP-TP5 showing the PFO wetlands, taken inside flag TPFA2 in the northwest portion of the site.



Photograph 42: View of DP-TP6 showing the forested uplands, taken outside of flag TP-FA6 in the north-central portion of the stie.



Photograph 43: View of DP-TP7 forested uplands, taken outside of flag TP-F73 north of the northwestern most boundary.



Photograph 44: View of DP-TP8 forested uplands, taken in the north-central portion of the site along Courthouse Road and Austin Ridge Drive.



Photograph 45: View of POW Wetlands in the northeastern portion of the site.



Photograph 46: View of POW wetlands in the southeastern portion of the site.



Photograph 47: View of a transmission easement along the western property boundary.



Photograph 48: View of the agricultural pastures in the southern portion of the site.



Photograph 49: View of wood line along the eastern property boundary.

APPENDIX V

WETLANDS AND WATERS OF THE U.S. DELINEATION MAP

