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June 28, 2022

Lin Xu
Project Review Coordinator
Division of Mitigation Services
Department of Environmental Quality
1652 Mail Service Center
Raleigh, NC 27699-1652

Re: Response to NC DWR Comments on Draft Final Mitigation Plan Submittal
Wicomico Buffer Mitigation Site, Edgecombe County, NC
Tar Pamlico River Basin
DMS Project No. 100188

Dear Mr. Xu:

Freese and Nichols received comments from NC DWR dated June 16, 2022, on the Wicomico draft final mitigation plan submitted on February 2, 2022. The comments were constructive and will improve the mitigation plan. This letter provides our responses to those comments. Edits have been made to the final mitigation plan.

Wicomico Buffer Mitigation Plan Comments:

1. **DWR project number is 2021-0750 version 2**
   - ❖ DWR project number updated
2. **Correct 0240 rule reference to .0703 rule and title Nutrient Offset Trading Rule**
   - ❖ Updated
3. **Easement deed is outdated**
   - ❖ State Property Office has reviewed and approved the Conservation Easement Deed in Appendix E
4. **Include a credit service area map and title it to be "Riparian Buffer & Nutrient Offset credit services map"**
   - ❖ Figure 3 has been updated to include a credit service map, and retitled.
5. **Update Figure 8 title to "Buffer Mitigation Concept Map & Plot Locations**
   - ❖ Figure 8 has been updated with requested title.
6. **Page 4 and 5: It is preferred that staff names are not used in mitigation plans and instead "DWR Staff" or "DWR" depending on preference.**
   - ❖ Noted and updated accordingly.
7. **Page 5: Add space between 15 and NCAC and add 15A NCAC 02B .0703**

- Updated

8. **Page 5: Add nutrient offset after riparian buffer mitigation**
   - Updated
9. **Page 6: Add that the HUC-8 is also the service area for credits**
   - Updated
10. **Page 6: Add "with flexibility to convert into nutrient offsets" to Type of Credits description**
    - Updated
11. **Page 11: Remove text referencing enhancement and preservation areas**
    - Updated
12. **Page 11: No live stakes are shown in Table 7, remove text**
    - Updated
13. **Page 11: For planting plan, add text committing to mixing stems prior to planting to ensure diverse distribution of planted trees across the site.**
    - Text added on page 11 and in Table 7.
14. **Page 12 (Table 7): The planting plan appears to show a mix of trees and shrubs. If provider is planting a mix of trees and shrubs, this needs to be accounted for in the performance standards later in the Plan text. Add column to this table title "Tree/Shrub" and indicate which is appropriate for each species**.
    - Noted, and column added
15. **Page 13: Add "with flagging or posts" to sentence on how planted stems will be marked.**
    - Updated
16. **Page 13: Monitoring expectations: data collected no earlier than LATE August, add Heights to the data to be collected, change survival rate to be 260 stems/acre at year 5.**
    - Updated
17. **Page 13: Replace MY with monitoring year.**
    - Updated
18. **Page 14: Add "and bare areas will be seeded" to bullet "No invasive species in areas where invasive species have been treated"**
    - Updated
19. **Page 14: Pick which performance standard will apply to this site: 1) hardwood trees only, or 2) hardwood trees and shrubs. The rule provides for either to apply, DWR needs the provider to pick which performance standard to be held to each monitoring year.**
    - Performance standards of 260 stems/acre and 4 native hardwood tree and native shrub species were updated.
20. **Figure 8: Change title to "Riparian Restoration for Buffer Credits with Plot Locations"**
    - This comment appears to be in conflict with Comment 5 as to the name of the Figure title. We have titled Figure 8 in accordance with Comment 5.

21. **Figure 8: Plots are too uniform, move at least 1 plot closer to the top of bank and 1 plot closer to the outer boundary.**
    - ❖ Moved 1 plot closer to top of bank and 1 closer to outer boundary.
22. **Figure 8: Change feature label from "Buffer Restoration" to "Riparian Restoration for Buffer Credits"**
    - ❖ Updated

We hope that these responses adequately address the NC DWR comments, and we look forward to working with NC DMS during the next phases of this important project.

Sincerely,

Ian Jewell
Project Manager
Ian.Jewell@freese.com

MITIGATION PLAN

WICOMICO BUFFER MITIGATION SITE
EDGECOMBE COUNTY, NORTH CAROLINA

DMS PROJECT NO.100188
NCDEQ CONTRACT NO. 200209-01
DWR PROJECT NO. 2021-0750 VERSION 2

Tar Pamlico River Basin
Cataloging Unit 03020103
RFP#:16-20200209

Prepared for:

NC Department of Environmental Quality
Division of Mitigation Services
1652 Mail Service Center
Raleigh, NC 27699-1652

June 2022

MITIGATION PLAN

Wicomico Riparian Buffer Mitigation Site
Edgecombe County, NC

DMS Project No. 100188
DMS Contract No. 200209-01
DWR Project No. 2021-0750

Tar Pamlico Watershed
HUC 03020103

Prepared for:

NC Department of Environmental Quality
Division of Mitigation Services
1652 Mail Service Center
Raleigh, NC 27699-1652

Prepared by:

Freese and Nichols, Inc.
531 N Liberty St
Winston-Salem, NC 27101

This mitigation plan has been written in conformance with the requirements of the following:

- 15A NCAC 02B .0295 Mitigation Program Requirements for Protection and Maintenance of Riparian Buffers.
- 15A NCAC 02B .0703, Nutrient Offset Trading Rule, amended effective September 1, 2010
- NCDEQ Division of Mitigation Services In-Lieu Fee Instrument signed and dated July 28, 2010.

These documents govern NCDMS operations and procedures for the delivery of compensatory mitigation.

Contributing Staff:

Bryan Dick, PhD, PE, PH	*Lead Technical Professional/ Lead Quality Assurance*
Ian Jewell, JD	*Project Manager/Mitigation Plan Development*
Emily Brown, PE, ENVSP, CFM	*Buffer Site Design/Mitigation Plan Development*
Lydia Ward, PE, ENV SP	*Mitigation Plan Development/Construction Documents*
Jason Steele, PhD, PWS	*Buffer Site Design/Mitigation Plan Development*

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1.0 MITIGATION PROJECT SUMMARY

1.1 PROJECT NARRATIVE

The Wicomico Riparian Buffer Restoration Project (the "site") will provide high quality compensatory mitigation for authorized riparian buffer impacts credited through the NC DMS in-lieu fee program and occurring within the Tar Pamlico River Hydrologic Unit Code (HUC) 03020103 and to address the watershed goals identified win the Tar-Pamlico River Basin Restoration Plan (RBRP).

The Site is located within the United States Geological Survey (USGS) hydrologic unit code (HUC) 03020103010010 and the Lower Tar North Carolina Department of Water Resources (NCDWR) River Sub-basin. The UT Tar River flows adjacent to the site and eventually flows into the Tar River approximately 4.1 river miles downstream. The Tar River is classified as a Class C stream and a Nutrient Sensitive Water (C, NSW). While not discussed in any NCDMS Local Watershed Plans (LWPs), this reach of the Tar River is designated as a Targeted Local Watershed (TLW) and is discussed in the Tar-Pamlico River Basin RBRP. Fifty-eight percent of the watershed is agricultural. The RBRP notes that this watershed has the highest buffer impairment in the Tar-Pamlico River Basin and therefore has the highest priority need for buffer enhancement as well as addressing impacts from ditching and agriculture. Additionally, the project area is encompassed by catchments associated with targeted resource areas (TRAs). The catchments (IDs 3348463, 3348487, 3348547, 3348593, 3348597, 3348595, and 3348605) are associated with water quality, habitat, and hydrology TRAs.

This riparian restoration project will improve water quality by creating a functioning native vegetation buffer that intercepts and filters agricultural runoff. The area surrounding the stream proposed for buffer mitigation is currently in use as row crop agriculture. By reducing and filtering the runoff from the site, and restoring a forested riparian area, the project will reduce nutrient and sediment inputs to UT Tar River and ultimately the Tar River. The restored floodplain area will filter sediment during rainfall events, create shading to minimize thermal pollution, and provide a wildlife corridor to connect nearby forested areas. Invasive vegetation will be treated within the project area as needed and the proposed native vegetation will provide cover and food for wildlife. The major goals of the proposed riparian restoration are to provide ecological and water quality enhancements to the Tar River watershed of the Tar Pamlico Basin by creating a functional riparian corridor and restoring the riparian areas. Specific enhancements to water quality and ecological processes are outlined in **Table 1**.

Table 1. Ecological and Water Quality Goals – Wicomico Buffer Mitigation Site

On-Site Stressor/Impairment	Goals to Address/Remove Stressor	RBRP Objectives Supported
Non-functioning riparian vegetation	• Restore native riparian vegetation communities	• Reduce nutrient inputs to waters in Tar River basin

On-Site Stressor/Impairment	Goals to Address/Remove Stressor	RBRP Objectives Supported
Water quality impairments (Nutrients)	• Decrease nutrient inputs from on and off-site by filtering runoff from agricultural fields through restored native buffer zones	• Remove row crop vegetation and plant native woody and herbaceous vegetation to reduce bare soil surface, remove application of liquid fertilizers and herbicides
Sediment Inputs	• Sediment from on and off-site sources will be deposited on restored floodplain areas where native vegetation will slow overland flow velocities	• Reduce sediment inputs to waters in Tar River basin
Non-diffuse flow	• Remove areas of flow concentration and allow overland flow velocities to further slow by enter native vegetation buffer.	• Reduce sediment inputs to waters in Tar River basin
Terrestrial Habitat Fragmentation –	• Restore native woody and herbaceous vegetation and remove invasive vegetation	• Improve wildlife habitat • Restore degraded riparian buffers

1.2 PROJECT LOCATION AND SITE DESCRIPTION

The Wicomico Riparian Buffer Mitigation Site is located 4.5 miles south of Speed and 5 miles east of Tarboro, North Carolina. The site is accessed from NC-111 and the Site centroid coordinates are 35.90712,-77.44034 (**Figure 1**). The site is comprised of approximately 3.7 acres along an unnamed tributary of the Tar River (UT Tar River). The Site is characterized by active row crop agriculture. The project will restore or enhance riparian areas within the project area, which will provide 160,000 buffer credits, or 3.67 acres worth of buffer mitigation.

Driving Directions to the project (from Raleigh): Get on I-440E from Capital Blvd. Continue onto US-64E to Exit 488, South Shiloh Farm Road. Head North on South Shiloh Farm Road for approximately 1 miles and then take a right onto NC-111 north. Continue onto NC-111 north, proceed approximately 5.4 miles to a dirt farm road entrance on the left. Follow the dirt road for approximately 1/3 of a mile and turn right

onto an unimproved farm road that parallels a large ditch/stream. The conservation easement begins approximately 800 feet up this road.

1.2.1 Watershed Characterization

The Wicomico Riparian Buffer Mitigation Site is located 4.5 miles south of Speed and 5 miles east of Tarboro, North Carolina. The Site is located within the United States Geological Survey (USGS) 14-digit hydrologic unit code (HUC) 03020103010010 and the Lower Tar North Carolina Department of Water Resources (NCDWR) River Sub-basin. Site topography, as shown on the Speed, NC 7.5 minute topographic quadrangle, has very little topographic relief with a gentle slope from the terrace located east of the project area (**Figure 2**).

1.2.2 Physiography, Geology, and Soils

The Wicomico Riparian Buffer Mitigation Site is located in the North Carolina Coastal Plain physiographic province and is underlain by the Yorktown and Duplin Formations. The Yorktown Formation consists of fossiliferous clay and bluish gray fine-grained sand; the Duplin Formation is composed of medium- to coarse- grained sand, sandy marl, and limestone. Site soils are largely poorly drained, which facilitates the formation of wetlands in small depressions on floodplains across the western Coastal Plain.

The project site is in the geomorphic floodplain of an unnamed tributary to the Tar River and is situated approximately 4.1 river miles away from the Tar River and is adjacent to the Wicomico Terrace. Throughout the late Pleistocene and early Holocene, the Tar River drainage basin experienced changes in hydrology, sediment load, baseflow, isostatic adjustment, and climate (Moore and Daniel, Jr., 2011). These changes produced a complex geomorphologic sequence that includes numerous terraces, a modern floodplain, and an incised river channel that has cut down into underlying Cretaceous and Tertiary geologic units. The terraces consist of a thin layer of Quaternary sediments underlain by fluvial, estuarine, and marine sequences that include various Cretaceous and Tertiary formations (such as the Yorktown Formation). The overlying layer of Quaternary sands has been influenced by changes in fluvial and aeolian processes, climate (i.e., drought), and vegetation. The Tar River has been migrating south-southwest through time, preserving Pleistocene and Holocene sediments northeast of the river and creating an asymmetric river valley.

Soil mapping units are based on the US Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) soil survey for Edgecombe County. Site soils are mapped as the Ballahack series, which are a fine sandy loam typically found in flats and depressions in the Coastal Plain. These soils are show in **Figure 4**, and mapped soil series occurring on the site and their associated properties are summarized in **Table 2**.

Table 2. Summary of Mapped Soil Series

Map Unit Symbol	Series Name	Drainage Class	Taxonimic Class	Landscape Position and Landform	Hydric Soil (Y/N)
Ba	Ballahack	Very Poorly Drained	Fine-loamy, mixed, semiactive, acid, thermic Cumulic Humaquepts	Low stream terraces, high bottomlands, and marine terraces	Y

1.2.3 Streams and Existing Conditions

The property is currently managed for agricultural production (corn and soybeans) and lacks existing forested buffer along the streams and drainage ways bisecting and surrounding the site. Site drainage and hydrology have been historically altered with channelized streams and cleared agricultural lands prevalent on historic aerial photographs dating back to the 1905s. Historic aerial photography from 1951 are included as **Figure 5** and show the site in agricultural production. In general, the site has maintained an agricultural production character over the past 70 years within very little changes in land cover. This consistency within the project watershed indicates that watershed processes affecting hydrology, sediment supply, and nutrient and other pollutant delivery have not varied widely over this period. The lack of development pressure makes it likely that watershed processes and stressors from outside of the project limits will remain consistent throughout the implementation, monitoring, and closeout of this project. The drainage area of UT Tar River (Stream A) at the site boundary encompasses 3.56 square miles and flows through multiple row crop agriculture areas before reaching the project area. Historical aerial photographs show the Stream A was ditched prior to 1951, and the riparian area has been in agricultural use for the same timeframe. The riparian area is dominated by row crop agriculture with a single row of trees along Stream A. Overall, ecological degradation of the site is directly attributed to row crop agriculture.

On April 21, 2021, staff with the NC Division of Water Resources (DWR) conducted an on-site determination of site channels for the applicability of the Tar Pamlico Riparian Buffer Rules (15A NCAC 02B .0259). It was determined that the reach of Stream A bordering the site is subject to Tar Pamlico Buffer Rules. A copy of the DWR Stream Determination letter (dated April 28, 2021) is provide in **Appendix B**. Note that for the purpose of this Mitigation Plan, the nomenclature of site reaches will be consistent with those referenced in the "Site Viability for Buffer Mitigation and Nutrient Offset Letter" prepared by DWR on June 10, 2021.

The dominant vegetation community within the project area is primarily composed of row crop agriculture dominated by soybeans (*Glycine max*). An area of managed pine forest of loblolly pine (*Pinus taeda*) is located 375 feet east of the proposed buffer area. The site has been maintained by mechanical and chemical controls up to the edge of Stream A and lacks canopy, understory, and shrub vegetation layers. A single layer of mixed hardwood forest is located approximately 5 feet from the edge of the ditched stream. Typical vegetation within this area includes common persimmon (*Diospyros virginiana*), sweetgum (*Liquidambar styraciflua*), red maple (*Acer rubrum*), water oak (*Quercus nigra*), willow oak (*Q. phellos*), winged elm (*Ulmus alata*) and loblolly pine (*Pinus taeda*). Typical herbaceous species along the fringe of the managed row crop area include tall goldenrod (*Solidago altissima*), perennial sowthistle (*Sonchus arvensis*), blackberry (*Rubus argutus*), and various grasses (*Festuca* and *Poa* spp.). Interspersed vine species, including cat greenbrier (*Smilax glauca*), trumpet creeper (*Campsis radicans*), poison ivy (*Toxicodendron radicans*), and Japanese honeysuckle (*Lonicera japonica*) were observed within the thinly wooded buffer area.

Drainage area for the riparian areas were determined by delineating watersheds using the USGS StreamStats program. **Figure 3** shows the watershed boundary for the area, which is approximately 3.52 square miles in size. The watershed is predominantly comprised of row crop agriculture, with dispersed areas of woodlands. Photographs of existing site conditions are included in **Appendix D**.

2.0 REGULATORY CONSIDERATIONS

2.1 DETERMINATION OF CREDITS

Approximately 1,950 linear feet of Stream A have been targeted for riparian area restoration. Approximately 3.67 acres of existing agricultural fields are targeted for restoration to provide 160,000 riparian buffer mitigation units.

On June 10, 2021, DWR staff performed an evaluation of surface water features and adjacent riparian areas within the proposed Site for the determination of riparian buffer mitigation and nutrient offset pursuant to 15 NCAC 02B .0295 and 15 NCAC 02B .0703. Based upon this evaluation, DWR determined that areas within 200 feet of UT Tar River are eligible for buffer and nutrient credits. There are no known site constraints that would impede or adversely affect the restoration of the riparian buffer within the recorded easement area. Diffuse flow of runoff will be maintained in the riparian buffer. Any direct conveyances (such as drainage swales) will be eliminated, and the flow converted to diffuse flow. The Site Viability Letter is included in **Appendix B**.

The proposed mitigation attributes, quantities and credits are outlined in **Table 3** and **Table 4** below.

Table 3. Buffer Project Attributes and Timeline – Wicomico Buffer Mitigation Site.

Project Name	Wicomico Buffer Mitigation Site
River Basin	Tar Pamlico
USGS Hydrologic Unit 8-digit/Credit Service Area	03020103
USGS Hydrologic Unit 14-digit	03020103010010
NCDWR River Sub-basin	Lower Tar
Geographic Location (Lat/ Long DD)	35.90712,-77.44034
Site Protection Instrument (DB, PG)	To be recorded
Total Credits (BMU)	160,000
Type of Credits	Riparian Buffer with flexibility to convert into nutrient offsets
Mitigation Plan Date	February 2022
Initial Planting Date	November 2022
Baseline Report Date	December 2022
MY1 Report Date	November 2023
MY2 Report Date	November 2024
MY 3 Report Date	November 2025
MY 4 Report Date	November 2026
MY 5 Report Date	November 2027

Table 4. Buffer Project Areas and Assets: Riparian Buffer Credits – Wicomico Buffer Mitigation Site

Tar-Pamlico 03020103	**Project Area**
19.16394	**N Credit Conversion Ratio (ft^2/pound)**
297.54099	**P Credit Conversion Ratio (ft^2/pound)**

Credit Type	Location	Subject? (enter NO if ephemeral or ditch [1])	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (ft^2)	Total (Creditable) Area of Buffer Mitigation (ft^2)	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Convertible to Riparian Buffer?	Riparian Buffer Credits	Convertible to Nutrient Offset?	Delivered Nutrient Offset: N (lbs)	Delivered Nutrient Offset: P (lbs)
Buffer	Rural	Yes	I / P	Restoration	0-100	Stream A	160,000	160,000	1	100%	1.00000	Yes	160,000.000	Yes	8,349.014	537.741
						Totals (ft2):	**160,000**	**160,000**					**160,000.000**		**8,349.014**	**537.741**
						Total Buffer (ft2):	**160,000**	**160,000**								
						Total Nutrient Offset (ft2):	**0**	**N/A**								

Total Ephemeral Area (ft^2) for Credit:	**0**	**0**	
Total Eligible Ephemeral Area (ft^2):	**40,000**	**0.0%**	**Ephemeral Reaches as % TABM**
Total Eligible for Preservation (ft^2):	**53,333**	**0.0%**	**Preservation as % TABM**

Enter Preservation Credits Below

Credit Type	Location	Subject?	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (sf)	Total (Creditable) Area for Buffer Mitigation (ft^2)	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Riparian Buffer Credits
												–
						Preservation Area Subtotals (ft^2):	**0**	**0**				

TOTAL AREA OF BUFFER MITIGATION (TABM)			
Mitigation Totals		**Square Feet**	**Credits**
Restoration:		160,000	160,000.000
Enhancement:		0	0.000
Preservation:		0	0.000
Total Riparian Buffer:		160,000	160,000.000
TOTAL NUTRIENT OFFSET MITIGATION			
Mitigation Totals		**Square Feet**	**Credits**
Nutrient Offset:	**Nitrogen:**	0	0.000
	Phosphorus:		0.000

To ensure that a project meets "Categorical Exclusion" criteria, the Federal Highways Administration (FHWA) and NCDMS have developed a Categorical Exclusion (CE) checklist that is included as part of the environmental screening process. A Government Environmental Records Report was ordered for the site through Envirosite Corporation on March 23, 2021. Neither the target property, nor adjacent properties, were listed in any of the Federal, State, or Tribal environmental databases searched by Envirosite. The assessment revealed no evidence of any recognized environmental conditions (RECs) connected to or within 1 mile of the Site. The CE documentation and CE approval Form for the Site are included in **Appendix C** and was approved by FHWA and DMS on July 6, 2021.

A summary of regulatory considerations for the Site is presented in **Table 5**. These considerations are expanded upon in **Sections 2.1.1 to 2.1.4.** A copy of the signed Categorical Exclusion Form for the project can be found in **Appendix C**.

Table 5. Regulatory Considerations

Parameters	Applicable ?	Resolved ?	Supporting Docs?
Water of the United States - Section 404	No	N/A	N/A
Water of the United States - Section 401	No	N/A	N/A
Endangered Species Act	Yes	Yes	Categorical Exclusion (Appendix C)
Historic Preservation Act	Yes	Yes	Categorical Exclusion (Appendix C)
Coastal Zone Management Act (CZMA or CAMA)	No	N/A	N/A
FEMA Floodplain Compliance	No	N/A	N/A
Essential Fisheries Habitat	No	N/A	N/A

2.1.1 FEMA Floodplain

According to the North Carolina Floodplain Mapping Information System, the Site does not lie within a 100-year floodplain (one percent annual chance of flooding) and is not within a regulatory floodway (**Figure 6**). The project is within FEMA FIRM Panel 3720476800J, effective November 3, 2004. The stream adjacent to the project area is outside of a Special Flood Hazard Area. No hydrologic trespass will result from the riparian buffer restoration project.

2.1.2 Threatened and Endangered Species

Plants and animals with a federal classification of endangered or threatened are protected under provisions of Sections 7 and 9 of the Endangered Species Act of 1973, as amended. As of March 29, 2021, the United States Fish and Wildlife Service (USFWS) lists five federally protected species for Edgecombe County, which include the bald eagle (*Haliaeetus leucocephalus*), red-cockaded woodpecker (*Picoides*

borealis), dwarf wedgemussel (*Alasmidonta heterodon*), Tar River spinymussel (*Parvaspina steinstansana*) and yellow lance (*Elliptio lanceolata*) (**Table 6**). A pedestrian survey conducted in March 2021 did not identify any potential habitat for listed species within the project area.

Table 6. Federally Protected Species in Edgecombe County, NC

Scientific Name	Common Name	Federal Status	Habitat
Haliaeetus leucocephalus	Bald eagle	Bald and Golden Eagle Protection Act	Mature forest in proximity to large bodies of open water for foraging. Large dominant trees are utilized for nesting sites, typically within 1.0 mile of open water.
Picoides borealis	Red-cockaded woodpecker	Endangered	Open, mature stands of southern pines, particularly longleaf pine (*Pinus palustris*) aged 60 years or older, which are contiguous with pine stands at least 30 years of age to provide foraging habitat.
Alasmidonta heterodon	Dwarf wedgemussel	Endangered	Creek and river areas with a slow to moderate current and sand, gravel, or firm silt bottoms. Waters must be well oxygenated. Stream banks in these areas are generally stable with extensive root systems holding soils in place.
Parvaspina steinstansana	Tar River spinymussel	Endangered	Fast flowing streams with well oxygenated, circumneutral pH water. The bottom should be composed of unconsolidated gravel and coarse sand. Water needs to be silt free, and stream banks should be stable, typically with many roots from adjacent trees and shrubs.
Elliptio lanceolata	Yellow lance	Threatened	Sand loving species found in clean, coarse to medium sand, with moderate flowing water with high dissolved oxygen.

A review of the North Carolina Natural Heritage Program (NCNHP) records on March 29, 2021 indicated no known threatened or endangered species occurrence within a one-mile radius of the Site. A letter was sent to the North Carolina Wildlife Resources Commission (NCWRC) on April 14, 2021 requesting review and comment of possible issues with respect to fish and wildlife resources on the site. No response was received by June 15, 2021. All correspondence with NCWRC is included in **Appendix C**.

Based upon agency responses and the results of the pedestrian survey, the project would have a "no effect" on any of the five federally listed species.

2.1.3 Cultural Resources

A review of the North Carolina State Historic Preservation Office GIS Web Service database on March 30, 2020 revealed no National Register listings within a one-mile radius of the Site. A letter was submitted to the North Carolina State Historic Preservation Office (SHPO) on April 14, 2021. SHPO responded on May 11, 2021 and stated that they were aware "of no historic resources which would be affected by the project". Cultural resources met the Categorical Exclusion criteria for FHWA and NCDMS projects, and documentation is included in **Appendix C**.

2.1.4 401/404

There will not be permanent impacts to Waters of the United States at the Site. All riparian restoration will take place in uplands and will not occur within the jurisdictional boundary of UT Tar River that flows east of the Site.

3.0 IMPLEMENTATION PLAN

3.1 SITE PREPARATION

Based upon pre-project assessment of compaction within the proposed planting areas, the buffer area will be chisel plowed to reduce the negative impact of the compacted plow pan on tree root growth. The drainage swales present on the eastern boundary of the Site will be graded to promote diffuse flow at the riparian buffer boundary. A temporary stabilization seed mix will be used to stabilize plowed soils and reduce sediment loss during rain events in disturbed areas. This will be followed by a permanent seed mixture. No other physical drainages (i.e., drainage tiles, ditches) were observed within the project area. However, such features will be removed during project implementation in the event any are observed prior to, or during, construction and planting.

The proposed mitigation site will provide for the establishment of natural plant assemblages occurring within riparian habitats of the Coastal Plain. Target species to be planted have been carefully selected based upon site-specific information (including soil profiles and evaluation of landscape position). The proposed planting regime will result in a mature community characteristic of riparian areas in the region. The project will include the restoration and enhancement of riparian areas adjacent to streams on the property as outlined in **Figure 8**. Nutrient offsets provided by the project are shown in **Figure 9**. This will be achieved via the planting of characteristic hardwood species and ensuring diffuse flow through the riparian area. Low levels of existing exotic or invasive species cover have been observed within the proposed buffer area. Dense areas of invasive species will be treated during construction.

Prior to planting, the conservation easement boundary will be marked using 6-inch diameter treated post buried 2 feet, standing 6 feet above the ground surface, within the agricultural fields. T-posts will be

installed to provide supplemental marking within areas between the treated posts. The easement boundary will also be marked with standard yellow Conservation Area signs, per the January 2014 NCDMS Boundary Marking Standards.

3.2 MATERIALS AND METHODS

The revegetation plan for the riparian restoration area will include permanent seeding and planting bare root trees. These revegetation efforts will be coupled with treating invasive species. The planting plan consists of the planting of native species on a density of approximately 538 stems per acre. Species will be mixed prior to planting to ensure a diverse distribution of planted trees across the site. Species selection and distribution were matched closely to micro-site hydrologic and edaphic conditions and include species characteristic of riparian buffer assemblages in the watershed. Site index provides a species specific indirect measure of site productivity expressed as the average height of the tree species at a specific age. The site was evaluated using the Baker and Broadfoot site index model (Baker and Broadfoot, 1979), which evaluates soil and site factors as indicators of soil aeration, moisture, compaction, and nutrients to determine the productivity of the site for select hardwood tree species. Site index at age 50 for cherrybark oak (*Quercus pagoda*), willow oak (*Q. phellos*), and American sycamore (*Platanus occidentalis*) were 76 feet, 72 feet, and 71 feet respectively, which indicates that these species are suitable for the observed site conditions. The water oak (*Q. nigra*) site index of 75 to 84 feet was calculated based upon Broadfoot (1963), indicating that the species is also very well suited for the observed site conditions. This was further supported by the observed water oak saplings adjacent to the site. Mature American persimmon (*Diospyros virginiana*) was also observed within the single layer of trees present within the site and downstream of the site, indicating that the species is also well suited for the site conditions. Additional species, including silky dogwood, spicebush, American beautyberry, and Allegheny chinkapin will provide a native understory vegetative layer that will enhance nutrient uptake and provide additional wildlife value. **Table 7** summarizes the planting plan for the site.

Table 7. Wicomico Buffer Mitigation Site Planting Plan

WOODY PLANTING						
Buffer Area (160000.0 square feet, 3.67 acres)						
	Scientific Name	**Common Name**	**Tree/ Shrub**	**Quantity**	**% Composition**	
BARE ROOT	*Platanus occidentalis*	American sycamore	Tree	325	16%	Bare root seedlings planted on 9-ft centers, with species mixed prior to planting to ensure diverse distribution of plants across the site.
	Callicarpa americana	American beautyberry	Shrub	152	7%	
	Cornus amomum	Silky Dogwood	Shrub	110	5%	
	Lindera benzoin	Spicebush	Shrub	175	9%	
	Quercus pagoda	Cherrybark Oak	Tree	194	9%	
	Quercus michauxii	Swamp chestnut oak	Tree	330	16%	
	Quercus nigra	Water oak	Tree	220	11%	
	Sambucus canadensis	Elderberry	Shrub	109	5%	
	Castanea pumila	Allegheny Chinkapin	Shrub	110	6%	
	Diospyros virginiana	American persimmon	Tree	330	16%	

HERBACEOUS PLANTING				
All Disturbed Area (160000.0 square feet, 3.67 acres)				
TEMPORARY SEEDING	Warm Season (May 15 - Aug 15) - German Millet			Apply at 40 lbs/acre to all disturbed areas
	Cool Season (Aug 15 - May 15) - Virginia Rye			
PERMANENT SEEDING	**Scientific Name**	**Common Name**	**% by Weight**	Apply at 25 lb/acre to disturbed areas
	Andropogon gerardii	Big bluestem	12%	
	Carex vulpinoidea	Fox sedge	10%	
	Coreposis lanceloata	Lance leaf tickseed	5%	
	Elymus virginicus	Virginia rye	15%	
	Festuca ovina	Hard fescue	5%	
	Panicum virgatum	Switchgrass	10%	
	Rudbeckia hirta	Blackeyed susan	1%	
	Schizachyrium scoparium	Little bluestem	8%	
	Sorghastrum nutans	Indian grass	9%	
	Tridens flavus	Purple top	12%	
	Tripsacum dactyloides	Eastern gammagrass	13%	

The planting and re-establishment of characteristic riparian vegetation will be coupled with controlling invasive species population. Herbicide applications and vegetative management may be needed during tree establishment in the restoration areas to prevent recruitment and establishment of invasive species that could compete with the planted native species. The restoration area will be closely monitored, and invasive vegetation management will be implemented as needed, and in consultation with DMS staff.

4.0 MONITORING PLAN

The site monitoring plan has been developed to ensure that the required performance standards are met, and project goals and objectives are achieved. Project monitoring components are listed in more detail in **Figure 8**. **Table 8** includes a summary of the project monitoring components.

4.1 VEGETATION MONITORING

Vegetation monitoring quadrants will be installed across the site to measure the survival of the planted trees (**Figure 8**). Planted stems in the monitoring plot will all be marked with flagging or posts. The first annual monitoring activities will commence at the end of the first growing season, at least 180 days after planting has been completed, and will be re-assessed annually no earlier than late August of each year. Species composition, density, height, and survival rates will be evaluated on an annual basis for each plot and for the entire site. The number of monitoring quadrants required, and frequency of monitoring, will follow the CVS-EEP Protocol Level 2 (version 4.2) or other approved DMS protocol. Reference photographs of the vegetation plots and site will be taken during the annual vegetation assessment. Planted vegetation must average 7 feet in height at the end of monitoring year 5. Survival rate will be 260 stems/acre at monitoring year 5.

4.2 PHOTOGRAPH REFERENCE STATIONS

Photographs will be taken within the project area once a year to visually document stability for five years following construction. Permanent markers will be established and located with GPS equipment so the same location and view directions on the site are photographed each year.

4.3 VISUAL ASSESSMENT

A visual assessment of the conservation easement will also be performed each year to confirm the following:

- Fencing/signage are in good condition throughout the site
- No livestock access within the conservation easement area

- No encroachment has occurred
- No invasive species in areas where invasive species have been treated and bare areas will be seeded
- Diffuse flow has been maintained in the conservation easement area
- No cutting, clearing, grubbing, or similar activities have occurred that would negatively affection the functioning of the buffer

Table 8. Monitoring components – Wicomico Riparian Buffer Site

Parameter	Monitoring Feature	Quantity	Frequency
Vegetation	CVS Level 2 Quadrant	5	Annual
Visual Assessment		Yes	Annual
Exotic and Nuisance Vegetation			Annual
Project Boundary			Annual

5.0 PROJECT SUCCESS CRITERIA

The site will be evaluated based upon performance criteria related to vegetative density. Specifically, the performance criteria for this project will be:

1. Demonstrated density of planted species to meet or exceed 260 trees per acre (including native hardwood and native shrub volunteer species) during the fifth year post-planting; and
2. Species assemblage must include a minimum of four native hardwood tree and native shrub species, where no one species is greater than 50% of stems.

6.0 STEWARDSHIP

6.1 OWNERSHIP

The land required for riparian area planting, management, and stewardship of the mitigation project includes a portion of the parcel listed in **Table 9**. An option agreement for the project area has been signed by the property owner and a Memorandum of Option has been recorded at the Edgecombe County Register of Deeds. The proposed conservation easement on this property has not yet been recorded.

Table 9. Site Protection Instrument – Wicomico Buffer Mitigation Site

Landowner	PIN	County	Site Protection Instrument	Deed Book/ Page Number	Acreage to be Protected
Mayo Farms of Tarboro, Inc.	4768-27-7131	Edgecombe	CE	1189/0762	3.67

All site protection instruments require 60-day advance notification to the State prior to any action to void, amend, or modify the document. No such action shall take place unless approved by the State.

6.2 LONG-TERM STEWARDSHIP PLAN

The site will be transferred to the North Carolina Department of Environmental Quality (NCDEQ) Stewardship Program. This party shall serve as conservation easement holder and long-term steward for the property and will conduct periodic inspection of the site to ensure that restrictions required in the conservation easement are upheld. Funding will be supplied by the responsible party on a yearly basis until such time an endowment is established. The NCDEQ Stewardship Program is developing an endowment system within the non-reverting, interest-bearing Conservation Lands Conservation Fund Account. The use of funds from the Endowment Account will be governed by North Carolina General Statue GS 113A-232(d)(3). Interest gained by the endowment fund may be used for the purpose of stewardship, monitoring, stewardship administration, and land transaction costs, if applicable. The Stewardship Program will periodically install signage as needed to identify boundary markings as needed.

The landowner shall contact the long-term steward if clarification is needed regarding the restrictions associated with the recorded conservation easement. The landowner shall also report damaged or missing signs to the long-term steward, as well as contact the long-term steward if a boundary needs to be marked, or clarification is needed regarding a boundary location. If land use changes in future and fencing is required to protect the easement, the landowner is responsible for installing appropriate approved fencing.

Long-term stewardship activities may include (but are not limited to):

- Signage installation and maintenance along the Site boundary to denote the area protected by the recorded conservation easement;
- Evaluation and repair/remediation of diffuse flow; and
- Evaluation and remediation of nuisance vegetation.

7.0 REFERENCES

Broadfoot, W.M., 1963. Guide for evaluating water oak sites (Vol. 1). Southern Forest Experiment Station, Forest Service, US Department of Agriculture.

Baker, J.B. and Broadfoot, W.M., 1979. Site evaluation for commercially important southern hardwoods. US Department of Agriculture Forest Service, Southern Forest Experiment Station, General Technical Report SO-26. New Orleans, Louisiana.

Lockhart, B.R., 2013. Site index determination techniques for southern bottomland hardwoods. Southern Journal of Applied Forestry, 37(1), pp.5-12.

Natural Resources Conservation Service (NRCS). Web Soil Survey of Edgecombe County. http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

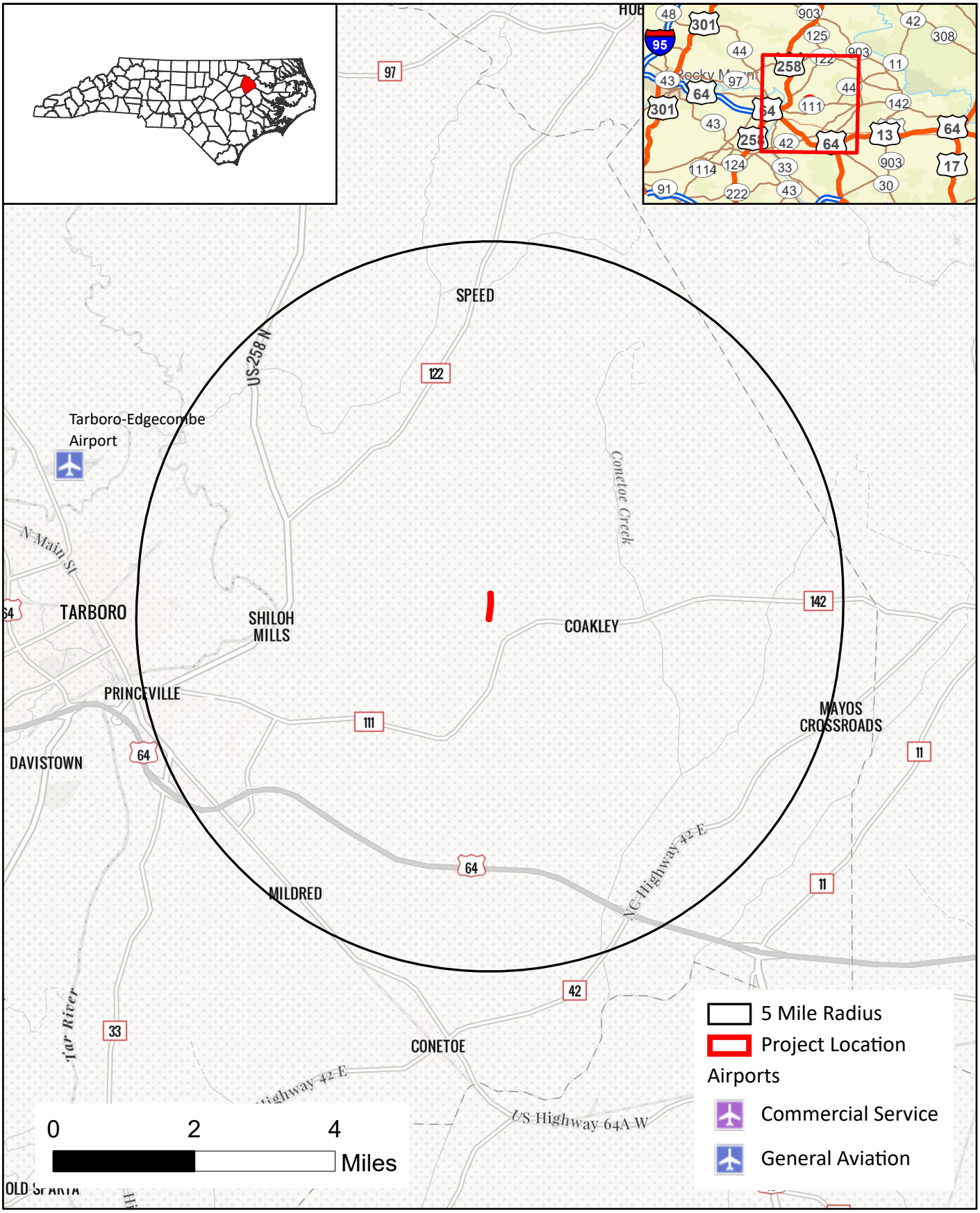
North Carolina Division of Water Quality (NCDWQ), 2011. Surface Water Classifications. http://deq.nc.gov/about/divisions/water-resources/planning/classification-standards/classifications

North Carolina Natural Heritage Program (NHP), 2021. Natural Heritage Element Occurrence Database, Edgecombe County, NC.

United States Fish and Wildlife Service (USFWS), 2021. Endangered Species, Threatened Species, Federal Species of Concern and Candidate Species, Pitt County, NC. https://www.fws.gov/raleigh/species/cntylist/edgecombe.html

Appendix A

Figures

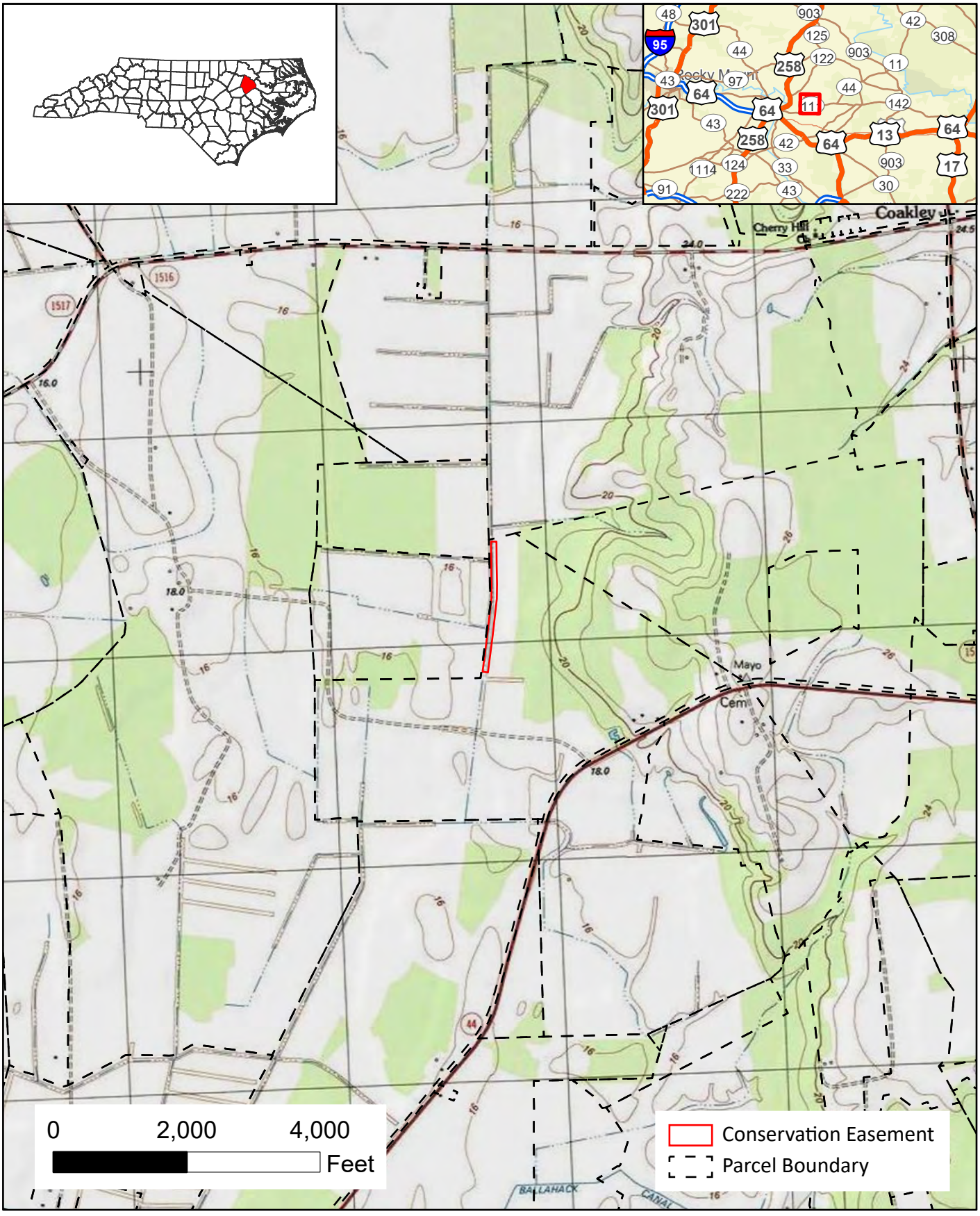


VICINITY MAP

Wicomico Buffer Mitigation Site
Edgecombe County, NC

EXHIBIT 1

FREESE AND NICHOLS
531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744



N

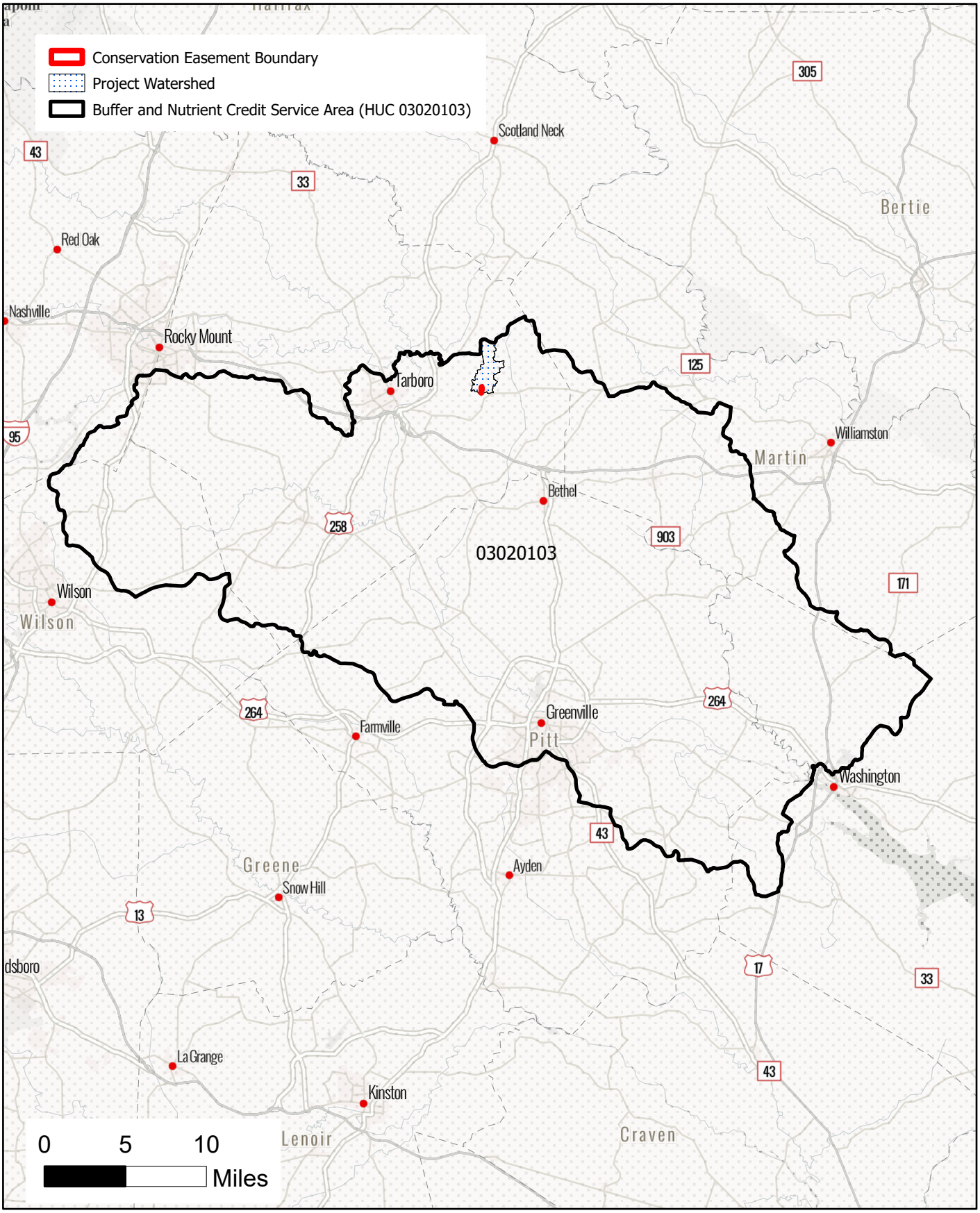
TOPOGRAPHIC MAP

Wicomico Buffer Mitigation Site
Edgecombe County, NC

EXHIBIT 2

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744



N

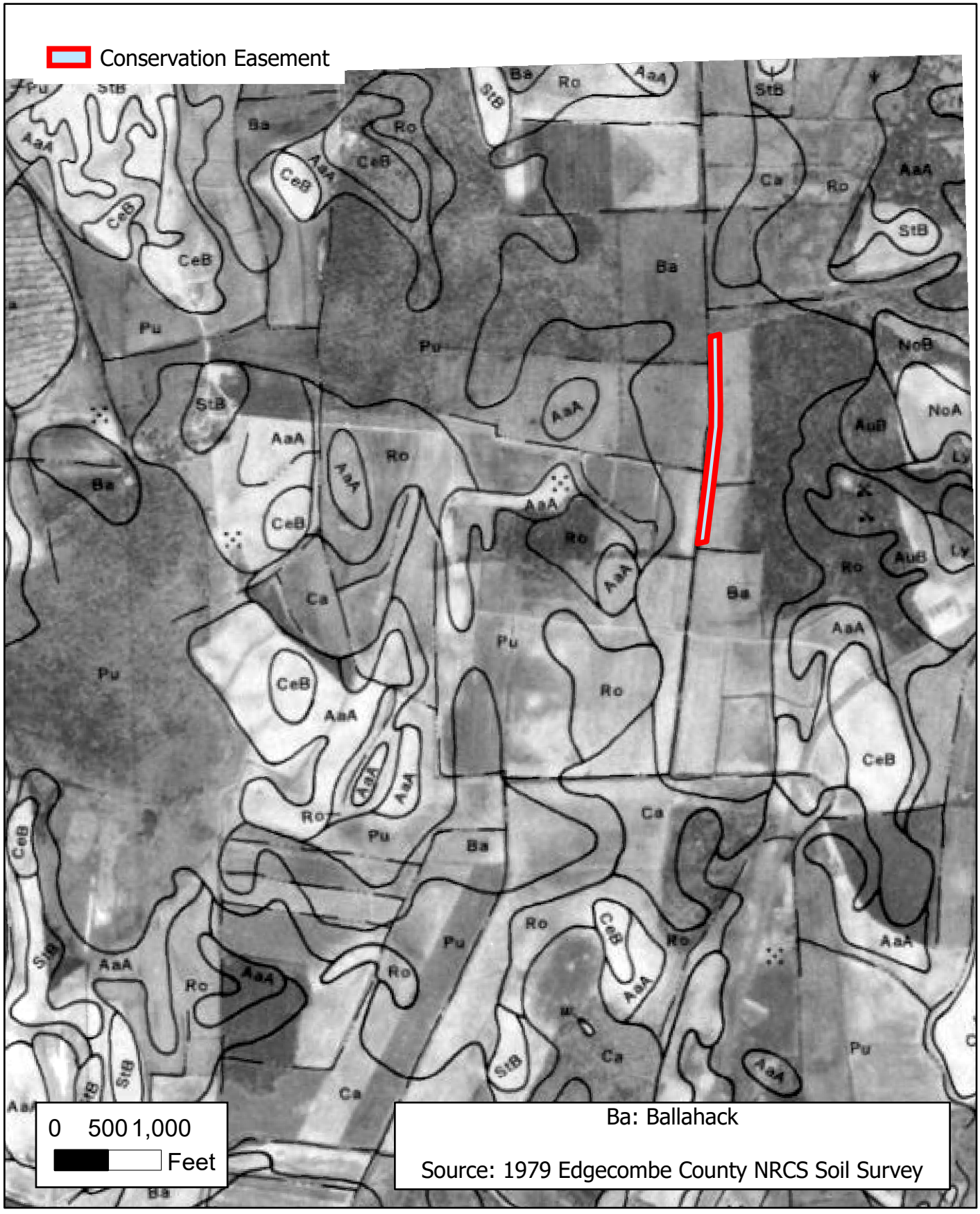
RIPARIAN BUFFER & NUTRIENT OFFSET CREDIT SERVICE AREA MAP

Wicomico Buffer Mitigation Site
Edgecombe County, NC

EXHIBIT 3

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744



N

1979 Soils Map

Wicomico Buffer Mitigation Site
Edgecombe County, NC

EXHIBIT 4

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744

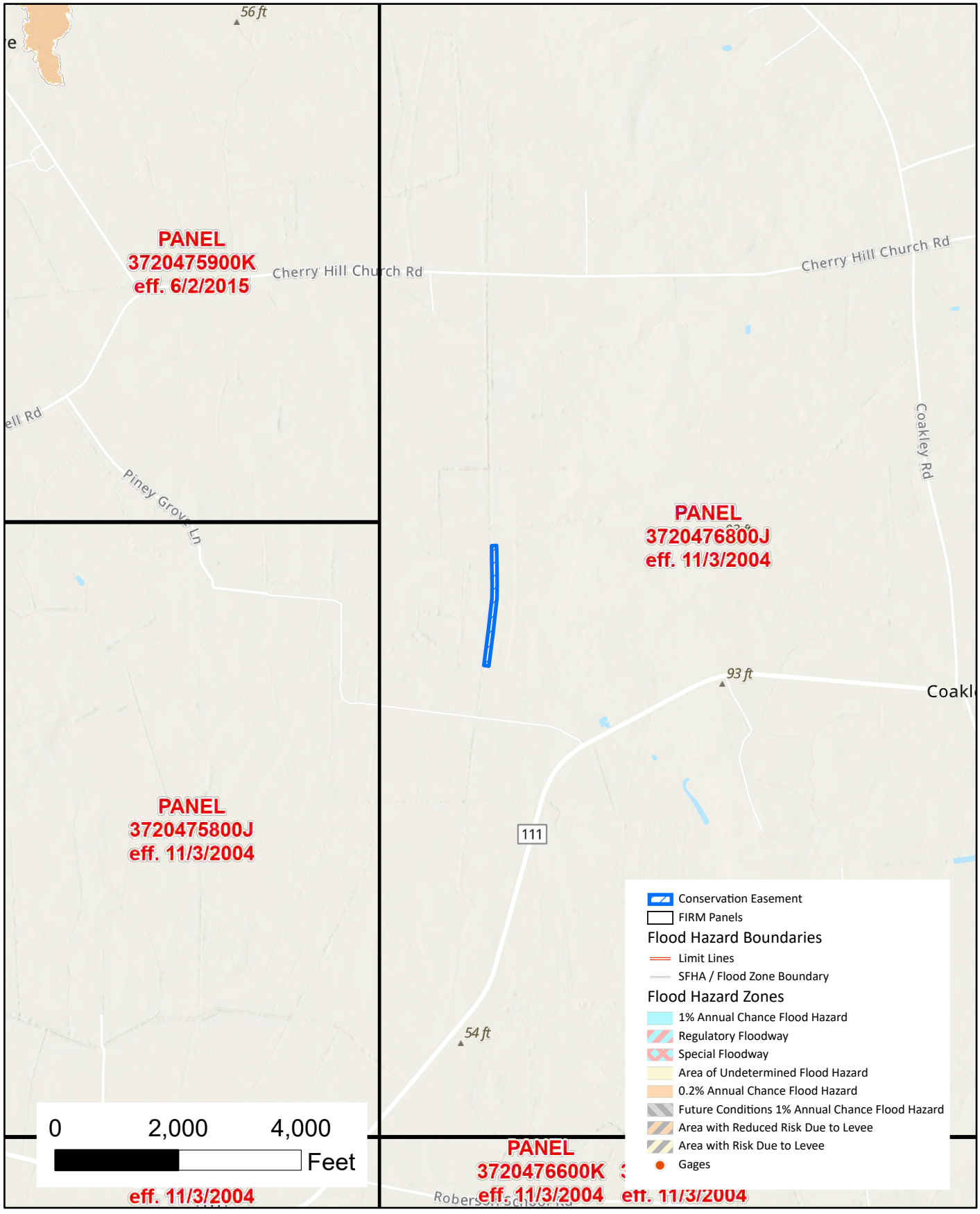
N

1951 HISTORIC AERIAL

Wicomico Buffer Mitigation Site
Edgecombe County, NC

EXHIBIT 5

FREESE AND NICHOLS
531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744



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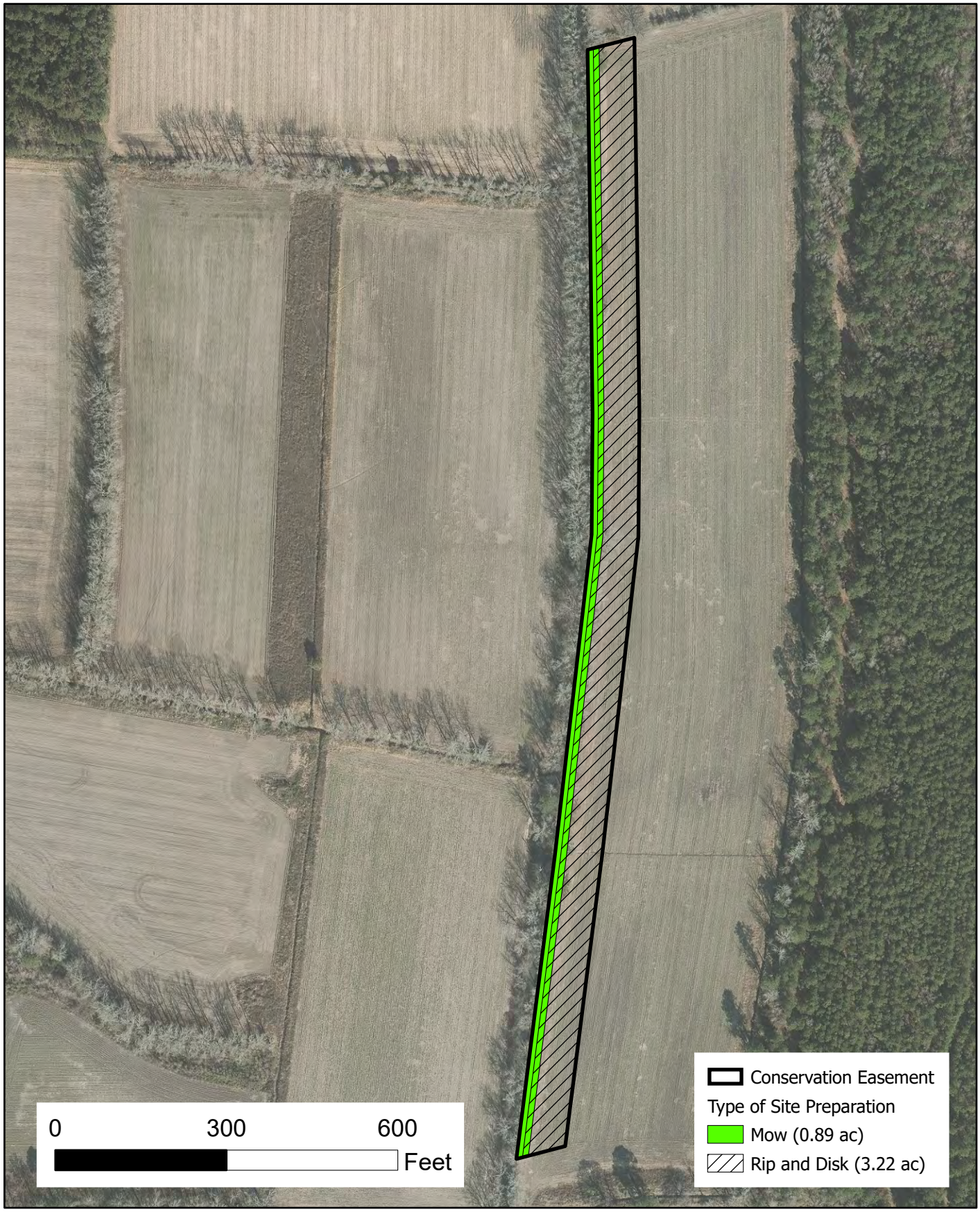
FEMA MAPPING

Wicomico Buffer Mitigation Site
Edgecombe County, NC

EXHIBIT 6

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744



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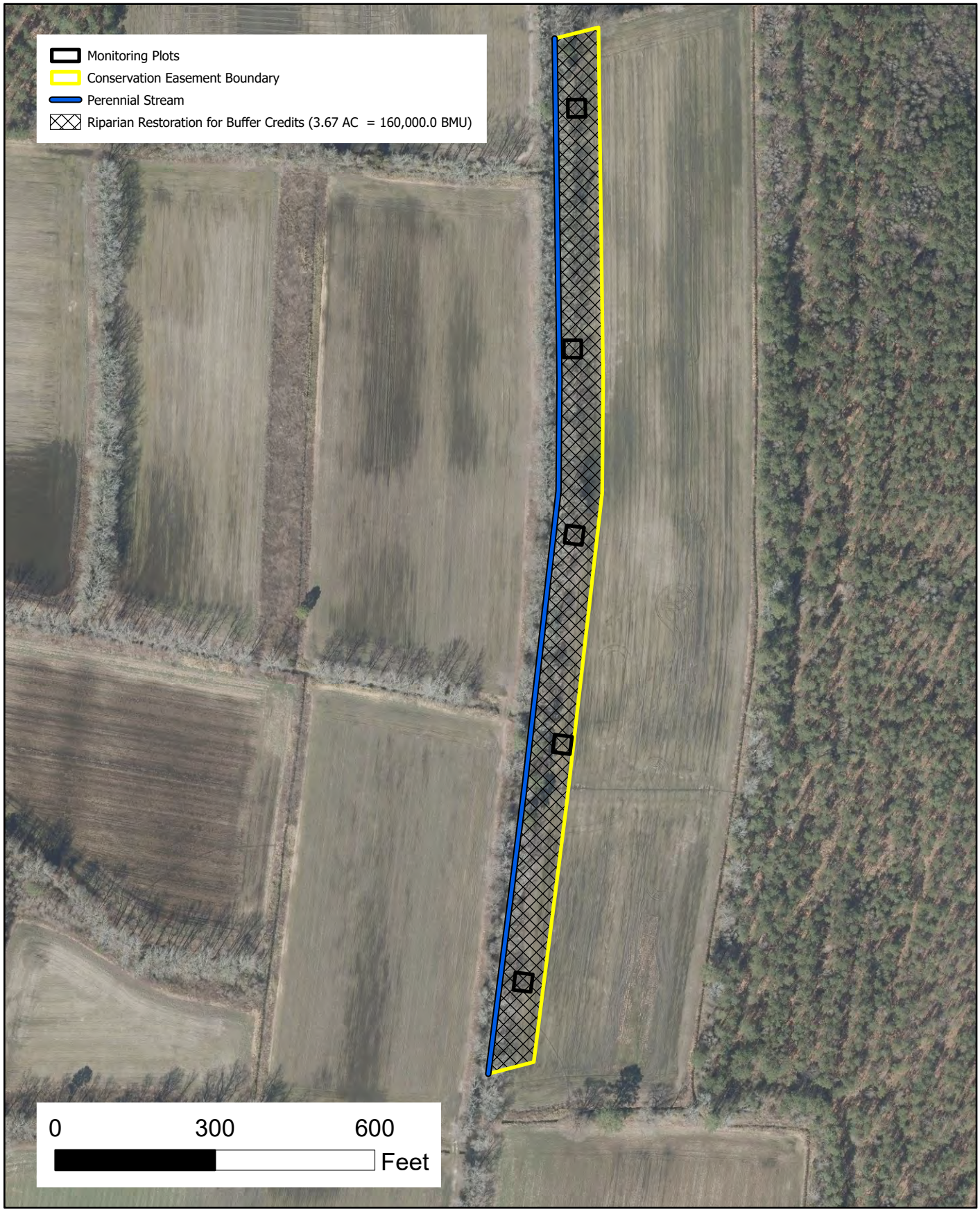
SITE PREPARATION

Wicomico Buffer Mitigation Site
Edgecombe County, NC

EXHIBIT 7

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744



N

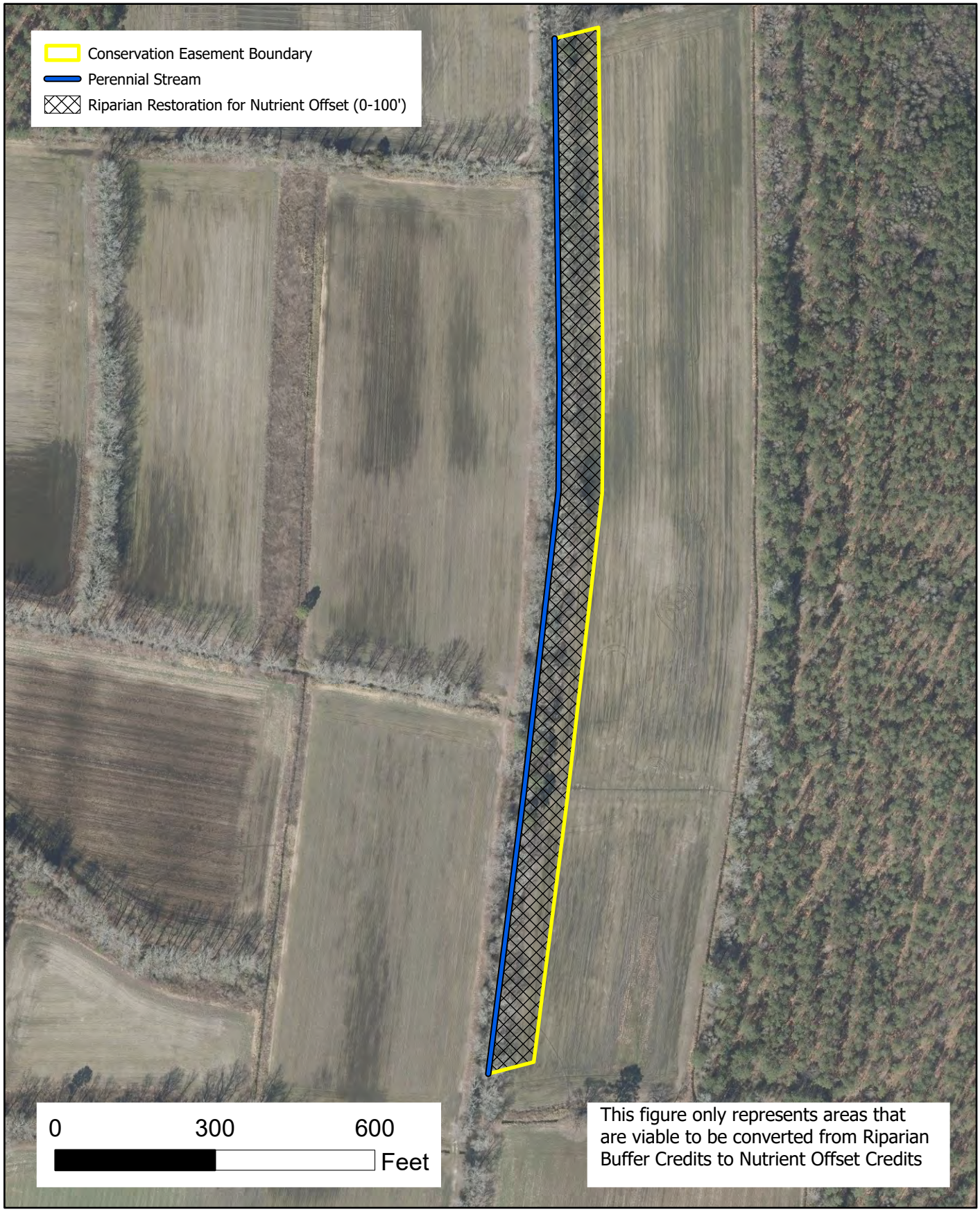
BUFFER MITIGATION CONCEPT MAP AND PLOT LOCATIONS

Wicomico Buffer Mitigation Site
Edgecombe County, NC

EXHIBIT 8

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744



N

NUTRIENT OFFSET CONCEPTUAL

Wicomico Buffer Mitigation Site
Edgecombe County, NC

EXHIBIT 9

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744

Appendix B

NC DWR Correspondence

ROY COOPER
Governor
DIONNE DELLI-GATTI
Secretary
S. DANIEL SMITH
Director

NORTH CAROLINA
Environmental Quality

April 28, 2021

Project 20210750
Edgecombe County

Jason Steele
Freese and Nichols, Inc.
531 North Liberty St
Winston-Salem, NC 27101
Jason.Steele@freese.com

Subject:	**On-Site Determination for Applicability to the Tar-Pamlico Buffer Rules 15A NCAC 02B .0734**
Project Name:	Wicomico Buffer Mitigation Site
Address:	NC-111N, Tarboro, Edgecombe County, NC
Location:	Lat., Long: 35.9065954, -77.4406771

Dear Mr. Steele:

On April 21, 2021, Bethany Harvey and Shelton Sullivan of the Division of Water Resources (DWR) conducted an on-site review of features located on the subject property at the request of Jason Steele with Freese and Nichols, Inc. to determine the applicability of features on the site to the Tar-Pamlico Riparian Area Protection Rules, Title 15A North Carolina Administrative Code 02B .0734.

The enclosed map(s) depict the feature(s) evaluated and this information is also summarized in the table below. Streams were evaluated for being ephemeral, at least intermittent, and subjectivity to the Tar-Pamlico Riparian Area Protection Rules. Streams that are considered "Subject" have been located on the most recently published NRCS Soil Survey of Edgecombe County and/or the most recent copy of the USGS Topographic (at 1:24,000 scale) map(s), have been located on the ground at the site, and possess characteristics that qualify them to be at least intermittent streams. Features that are considered "Not Subject" have been determined to not be at least intermittent, not present on the property, or not depicted on the required maps.

This determination only addresses the applicability to the buffer rules within the proposed easement and does not approve any activity within buffers or within waters of the state. There may be other streams or features located on the property that appear or do not appear on the maps referenced above. Any of the features on the site may be considered jurisdictional according to the US Army Corps of Engineers and subject to the Clean Water Act.

The following table addresses the features observed and rated during the DWR site visit:

Feature ID	Feature Type: stream (ephemeral, intermittent, perennial), ditch, swale, wetland, other	Subject to Buffer Rules	Start @	Stop @	Depicted on Soil Survey	Depicted on USGS Topo
Stream	Stream-at least I	Yes	Easement boundary	Easement boundary	Yes	Yes
Ditch 1	Ditch	No	Easement boundary	Stream	Yes	No
Ditch 2	Ditch	No	Easement boundary	Stream	Yes	No

* E: Ephemeral, I: Intermittent, P: Perennial

This on-site determination shall expire five (5) years from the date of this letter. Landowners or affected parties that dispute this determination made by the DWR may request an appeal determination by the Director of Water Resources. An appeal request must be made within sixty (60) calendar days of the date of this letter to the Director in writing, as per 15A NCAC 02B .0734 (4).

If sending via U.S. Postal Service:	*If sending via delivery service (UPS, FedEx, etc.)*
Paul Wojoski - DWR 401 & Buffer Permitting Branch Supervisor 1617 Mail Service Center Raleigh, NC 27699-1617	Paul Wojoski - DWR 401 & Buffer Permitting Branch Supervisor 512 N Salisbury St. Raleigh, NC 27604

This determination is final and binding as detailed above, unless an appeal is requested **within sixty (60) calendar days**.

If you have any additional questions or require additional information, please contact Shelton Sullivan at shelton.sullivan@ncdenr.gov or 919-707-3636. This determination is subject to review as provided in Articles 3 & 4 of G.S. 150B.

Sincerely,

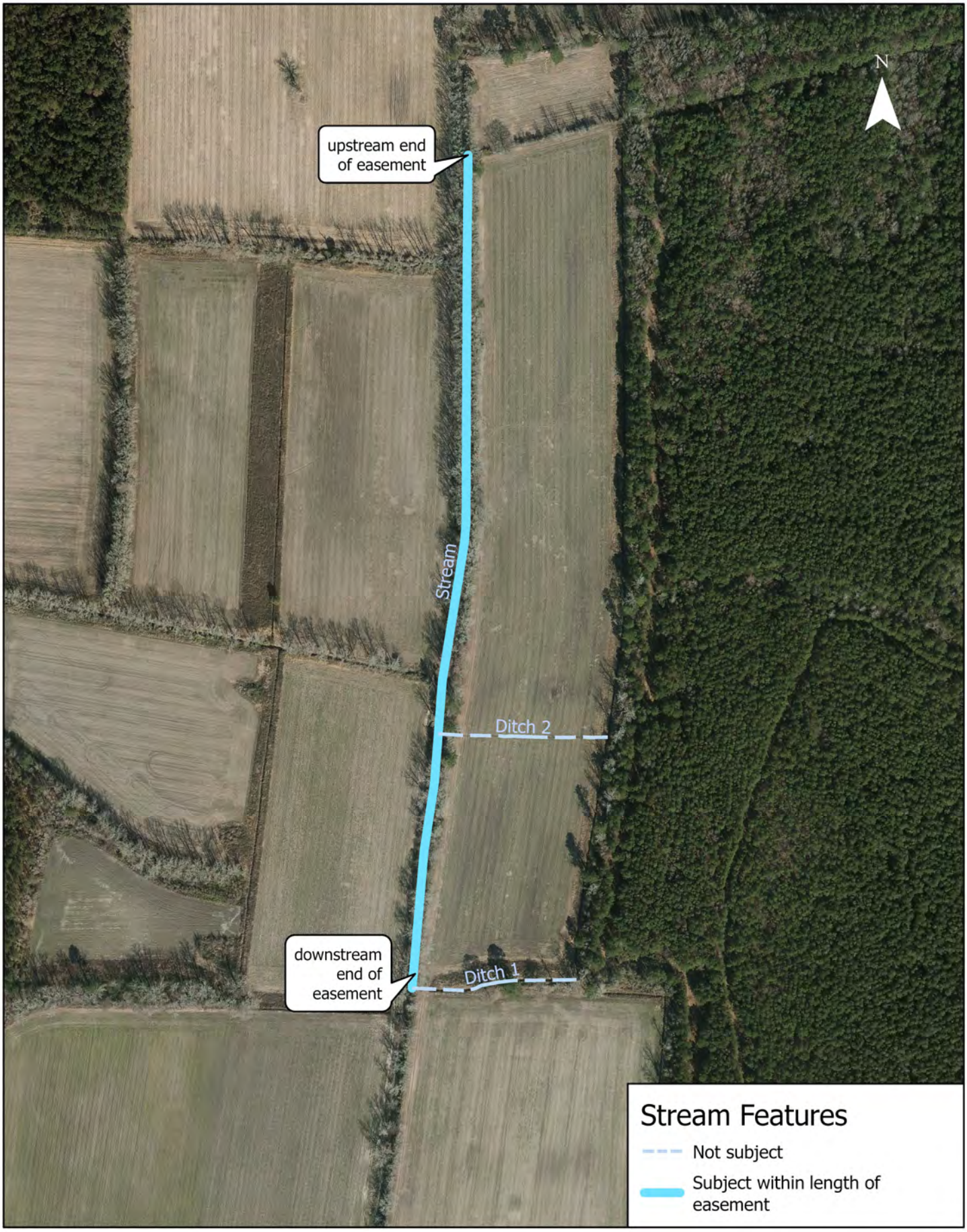
DocuSigned by:
Paul Wojoski
949D91BA53EF4E0...

Paul Wojoski
Supervisor, DWR 401 & Buffer Permitting

Attachments: Site Map with labels, Photos, NRCS Soil Survey, USGS Topographical Map

cc: Jason Steele via email Jason.Steele@freese.com
Shelton Sullivan via email shelton.sullivan@ncdenr.gov
Katie Merritt via email katie.merritt@ncdenr.gov
401 & Buffer Permitting Branch files
OWNER CC copies

Filename: 20210750_Wicomico_StreamCalls_4-21-21.docx



Wicomico Buffer Mitigation Site

4-21-21 Wicomico Pics

1. Downstream from crossing, below mitigation site.

2. Looking upstream from crossing, toward mitigation site

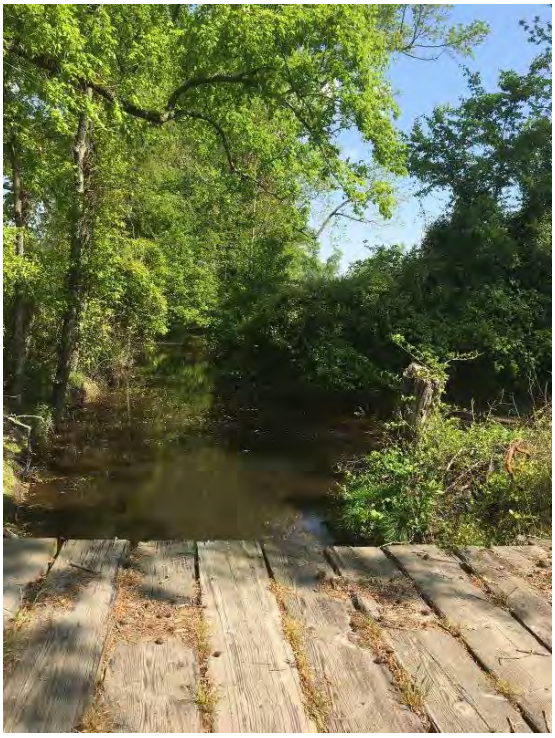
3. Beaver dam on main stream.

4. Stream below beaver dam

5. Agricultural field adjacent to stream.

7. Ditch 2, looking upstream (east).

6. Ditch 1, looking upstream (east) from stream



8. Crossing above site, showing inundation from beaver dam.

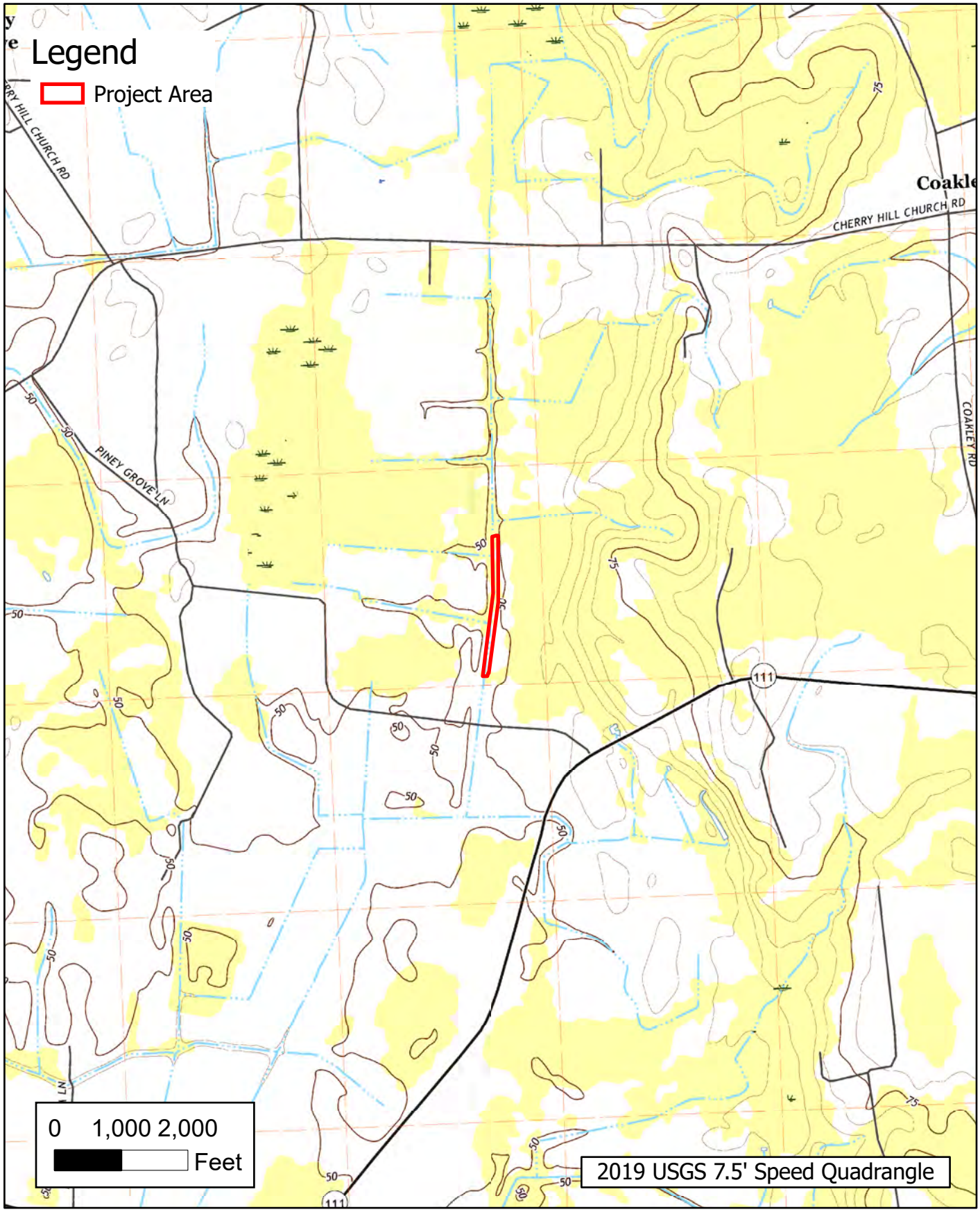
N

PROJECT AREA WITH SOIL SURVEY MAP

Wicomico Buffer Mitigation Site
Edgecombe County, NC

FIGURE 3

FREESE AND NICHOLS
531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744



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PROJECT AREA AND TOPOGRAPHY

Wicomico Buffer Mitigation Site
Edgecombe County, NC

FIGURE 2

FREESE AND NICHOLS
531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744

ROY COOPER
Governor
JOHN NICHOLSON
Interim Secretary
S. DANIEL SMITH
Director

NORTH CAROLINA
Environmental Quality

June 10, 2021

Jason Steele
Freese and Nichols, Inc.
(via electronic mail: jason.steele@freese.com)

Re: Site Viability for Buffer Mitigation & Nutrient Offset – Wicomico Site
6199 NC 111, Tarboro, NC (near 35.90712, -77.44034)
Tar-Pamlico 03020103
Edgecombe County

Dear Mr. Steele,

On February 22, 2021, Katie Merritt, with the Division of Water Resources (DWR), received a request from you on behalf of Freese and Nichols, Inc. (F&N) for a site visit near the above-referenced site in the Tar-Pamlico River Basin within the 8-digit Hydrologic Unit Code 03020103. The site visit was to determine the potential for riparian buffer mitigation and nutrient offset within a proposed conservation easement boundary, which is more accurately depicted in the attached map labeled “Figure 1” prepared by F&N. The proposed easement boundary in Figure 1, includes all riparian areas intended to be proposed as part of a mitigation site. On April 15, 2021, Ms. Merritt performed a site assessment of the subject site. Staff with F&N were also present.

Ms. Merritt’s evaluation of the features onsite and their associated mitigation determination for the riparian areas are provided in the table below. This evaluation was made from Top of Bank (TOB) and landward 200’ from each feature for buffer mitigation pursuant to 15A NCAC 02B .0295 (effective November 1, 2015) and for nutrient offset credits pursuant to 15A NCAC 02B .0703.

Feature	Classification onsite	[1]Subject to Buffer Rule	[7]Riparian Land uses adjacent to Feature (0-200')	Buffer Credit Viable	[3]Nutrient Offset Viable	[4,5]Mitigation Type Determination w/in riparian areas
A	Stream	Yes	Non-forested agricultural fields with a single line of trees along the top of bank. Invasive understory is present.	Yes	Yes (non-forested areas only)	Non-forested fields - **Restoration Site** per 15A NCAC 02B .0295 (n)
B	Ditch >3' depth	No	Right Bank - Non-forested agricultural fields Left Bank – mature forest along the main upper segment with non-forested agricultural fields along the downstream segment.	No	Yes (non-forested areas only)	Non-forested fields - **Restoration Site** per 15A NCAC 02B .0295 (n)

[1]Subjectivity calls for the features were determined by DWR in correspondence dated April 28, 2021 (DWR# 2021-0750) using the 1:24,000 scale quadrangle topographic map prepared by USGS and the most recent printed version of the soil survey map prepared by the NRCS .

[2]The area of preservation credit within a buffer mitigation site shall comprise of no more than 25 percent (25%) of the total area of buffer mitigation per 15A NCAC 0295 (o)(5) and 15A NCAC 0295 (o)(4). Site cannot be a Preservation Only site to comply with this rule.

[3]*NC Division of Water Resources - Methodology and Calculations for determining Nutrient Reductions associated with Riparian Buffer Establishment*

[4]Determinations made for this Site are determined based on the proposal provided in maps and figures submitted with the request.

[5] All features proposed for buffer mitigation or nutrient offset, must have a planted conservation easement established that includes the tops of channel banks when being measured perpendicular and landward from the banks, even if no credit is viable within that riparian area.

[6]The area of the mitigation site on ephemeral channels shall comprise no more than 25 percent (25%) of the total area of buffer mitigation per 15A NCAC 02B .0295 (o)(7).

Determinations provided in the table above were made using a proposed easement boundary showing proposed mitigation areas shown in Figure 1. The map representing the proposal for the site is attached to this letter and initialed by Ms. Merritt on June 10, 2021. Substantial changes to the proposed easement boundary could affect the Site's potential to generate buffer mitigation and nutrient offset credits.

This letter does not constitute an approval of this Site to generate buffer and nutrient offset credits. Pursuant to 15A NCAC 02B .0295, a mitigation proposal and a mitigation plan shall be submitted to DWR for written approval **prior** to conducting any mitigation activities in riparian areas and/or surface waters for buffer mitigation credit. Pursuant to 15A NCAC 02B .0703, a proposal regarding a proposed nutrient load-reducing measure for nutrient offset credit shall be submitted to DWR for approval prior to any mitigation activities in riparian areas and/or surface waters.

All vegetative plantings, performance criteria and other mitigation requirements for riparian restoration, enhancement and preservation must follow the requirements in 15A NCAC 02B .0295 to be eligible for buffer and/or nutrient offset mitigation credits. For any areas depicted as not being viable for nutrient offset credit above, one could propose a different measure, along with supporting calculations and sufficient detail to support estimates of load reduction, for review by the DWR to determine viability for nutrient offset in accordance with 15A NCAC 02B .0703.

This viability assessment will expire on June 8, 2023 or upon approval of a mitigation plan by the DWR, whichever comes first. This letter should be provided in any nutrient offset, buffer, stream or wetland mitigation plan for this Site.

Please contact Katie Merritt at (919) 707-3637 if you have any questions regarding this correspondence.

Sincerely,

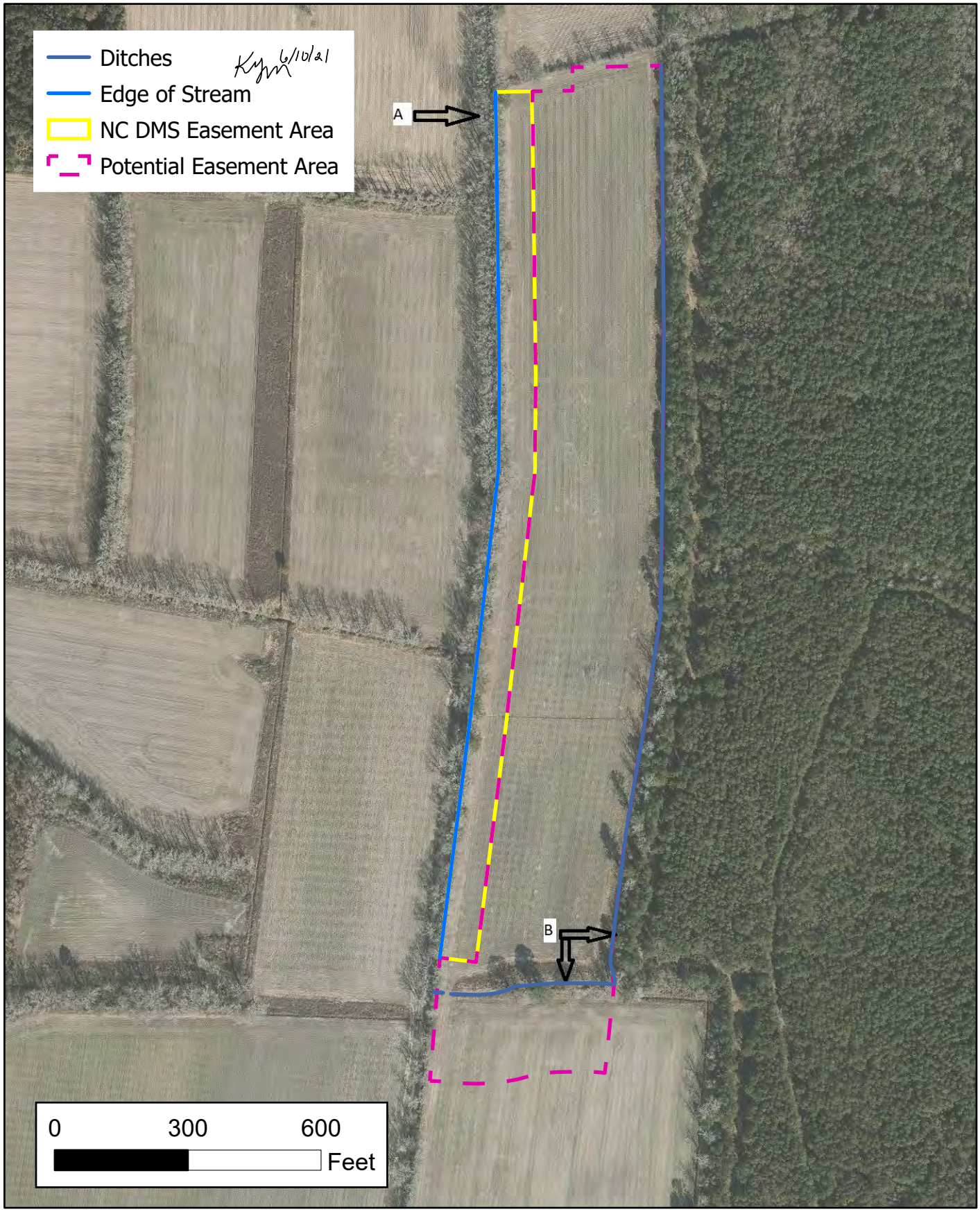
DocuSigned by:
Paul Wojoski
949D91BA53EF4E0...

Paul Wojoski, Supervisor
401 and Buffer Permitting Branch

PW/kym

Attachments: Figure 1.

cc: File Copy (Katie Merritt)



N

PROJECT AREA AND BUFFER FEATURES

Wicomico Buffer Mitigation Site
Edgecombe County, NC

FIGURE 1

FREESE AND NICHOLS
531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744

Appendix C

Categorical Exclusion Documentation

Appendix A

Categorical Exclusion Form for Division of Mitigation Services Projects
Version 2

Note: Only Appendix A should to be submitted (along with any supporting documentation) as the environmental document.

Part 1: General Project Information	
Project Name:	Wicomico Buffer Mitigation Site
County Name:	Edgecombe
DMS Number:	100188
Project Sponsor:	Freese and Nichols, Inc.
Project Contact Name:	Ian Jewell
Project Contact Address:	531 N. Liberty St, Winston-Salem, NC 27101
Project Contact E-mail:	Ian.Jewell@freese.com
DMS Project Manager:	Lin Xu

Project Description

The Wicomico Buffer Mitigation Site is located 4.5 miles south of Speed and 5 miles east of Tarboro, North Carolina. The site is comprised of approximately 3.7 acres along an unnamed tributary of the Tar River (UT Tar River). The Site is characterized by active row crop agriculture. The project will restore or enhance riparian areas within the project area, which will provide 160,000 buffer credits, or 3.67 acres worth of buffer mitigation in the Tar Pamlico River Basin (03020103).

For Official Use Only

Reviewed By:

7/1/2021	Lin Xu
Date	**DMS Project Manager**

Conditional Approved By:

Date	**For Division Administrator FHWA**

☐ **Check this box if there are outstanding issues**

Final Approval By:

7-6-21	Donald W Brew
Date	**For Division Administrator FHWA**

Part 2: All Projects Regulation/Question	Response
Coastal Zone Management Act (CZMA)	
1. Is the project located in a CAMA county?	☐ Yes ☑ No
2. Does the project involve ground-disturbing activities within a CAMA Area of Environmental Concern (AEC)?	☐ Yes ☐ No ☑ N/A
3. Has a CAMA permit been secured?	☐ Yes ☐ No ☑ N/A
4. Has NCDCM agreed that the project is consistent with the NC Coastal Management Program?	☐ Yes ☐ No ☑ N/A
Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)	
1. Is this a "full-delivery" project?	☑ Yes ☐ No
2. Has the zoning/land use of the subject property and adjacent properties ever been designated as commercial or industrial?	☐ Yes ☑ No ☐ N/A
3. As a result of a limited Phase I Site Assessment, are there known or potential hazardous waste sites within or adjacent to the project area?	☐ Yes ☑ No ☐ N/A
4. As a result of a Phase I Site Assessment, are there known or potential hazardous waste sites within or adjacent to the project area?	☐ Yes ☐ No ☑ N/A
5. As a result of a Phase II Site Assessment, are there known or potential hazardous waste sites within the project area?	☐ Yes ☐ No ☑ N/A
6. Is there an approved hazardous mitigation plan?	☐ Yes ☐ No ☑ N/A
National Historic Preservation Act (Section 106)	
1. Are there properties listed on, or eligible for listing on, the National Register of Historic Places in the project area?	☐ Yes ☑ No
2. Does the project affect such properties and does the SHPO/THPO concur?	☐ Yes ☐ No ☑ N/A
3. If the effects are adverse, have they been resolved?	☐ Yes ☐ No ☑ N/A
Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act)	
1. Is this a "full-delivery" project?	☑ Yes ☐ No
2. Does the project require the acquisition of real estate?	☑ Yes ☐ No ☐ N/A
3. Was the property acquisition completed prior to the intent to use federal funds?	☐ Yes ☑ No ☐ N/A
4. Has the owner of the property been informed: * prior to making an offer that the agency does not have condemnation authority; and * what the fair market value is believed to be?	☑ Yes ☐ No ☐ N/A

Part 3: Ground-Disturbing Activities Regulation/Question	Response
American Indian Religious Freedom Act (AIRFA)	
1. Is the project located in a county claimed as "territory" by the Eastern Band of Cherokee Indians?	☐ Yes ☑ No
2. Is the site of religious importance to American Indians?	☐ Yes ☐ No ☑ N/A
3. Is the project listed on, or eligible for listing on, the National Register of Historic Places?	☐ Yes ☐ No ☑ N/A
4. Have the effects of the project on this site been considered?	☐ Yes ☐ No ☑ N/A
Antiquities Act (AA)	
1. Is the project located on Federal lands?	☐ Yes ☑ No
2. Will there be loss or destruction of historic or prehistoric ruins, monuments or objects of antiquity?	☐ Yes ☐ No ☑ N/A
3. Will a permit from the appropriate Federal agency be required?	☐ Yes ☐ No ☑ N/A
4. Has a permit been obtained?	☐ Yes ☐ No ☑ N/A
Archaeological Resources Protection Act (ARPA)	
1. Is the project located on federal or Indian lands (reservation)?	☐ Yes ☑ No
2. Will there be a loss or destruction of archaeological resources?	☐ Yes ☐ No ☑ N/A
3. Will a permit from the appropriate Federal agency be required?	☐ Yes ☐ No ☑ N/A
4. Has a permit been obtained?	☐ Yes ☐ No ☑ N/A
Endangered Species Act (ESA)	
1. Are federal Threatened and Endangered species and/or Designated Critical Habitat listed for the county?	☑ Yes ☐ No
2. Is Designated Critical Habitat or suitable habitat present for listed species?	☐ Yes ☑ No ☐ N/A
3. Are T&E species present or is the project being conducted in Designated Critical Habitat?	☐ Yes ☐ No ☑ N/A
4. Is the project "likely to adversely affect" the specie and/or "likely to adversely modify" Designated Critical Habitat?	☐ Yes ☐ No ☑ N/A
5. Does the USFWS/NOAA-Fisheries concur in the effects determination?	☐ Yes ☐ No ☑ N/A
6. Has the USFWS/NOAA-Fisheries rendered a "jeopardy" determination?	☐ Yes ☐ No ☑ N/A

Executive Order 13007 (Indian Sacred Sites)	
1. Is the project located on Federal lands that are within a county claimed as "territory" by the EBCI?	☐ Yes ☑ No
2. Has the EBCI indicated that Indian sacred sites may be impacted by the proposed project?	☐ Yes ☐ No ☑ N/A
3. Have accommodations been made for access to and ceremonial use of Indian sacred sites?	☐ Yes ☐ No ☑ N/A
Farmland Protection Policy Act (FPPA)	
1. Will real estate be acquired?	☑ Yes ☐ No
2. Has NRCS determined that the project contains prime, unique, statewide or locally important farmland?	☑ Yes ☐ No ☐ N/A
3. Has the completed Form AD-1006 been submitted to NRCS?	☑ Yes ☐ No ☐ N/A
Fish and Wildlife Coordination Act (FWCA)	
1. Will the project impound, divert, channel deepen, or otherwise control/modify any water body?	☐ Yes ☑ No
2. Have the USFWS and the NCWRC been consulted?	☐ Yes ☐ No ☑ N/A
Land and Water Conservation Fund Act (Section 6(f))	
1. Will the project require the conversion of such property to a use other than public, outdoor recreation?	☐ Yes ☑ No
2. Has the NPS approved of the conversion?	☐ Yes ☐ No ☑ N/A
Magnuson-Stevens Fishery Conservation and Management Act (Essential Fish Habitat)	
1. Is the project located in an estuarine system?	☐ Yes ☑ No
2. Is suitable habitat present for EFH-protected species?	☐ Yes ☐ No ☑ N/A
3. Is sufficient design information available to make a determination of the effect of the project on EFH?	☐ Yes ☐ No ☑ N/A
4. Will the project adversely affect EFH?	☐ Yes ☐ No ☑ N/A
5. Has consultation with NOAA-Fisheries occurred?	☐ Yes ☐ No ☑ N/A
Migratory Bird Treaty Act (MBTA)	
1. Does the USFWS have any recommendations with the project relative to the MBTA?	☐ Yes ☑ No
2. Have the USFWS recommendations been incorporated?	☐ Yes ☐ No ☑ N/A
Wilderness Act	
1. Is the project in a Wilderness area?	☐ Yes ☑ No
2. Has a special use permit and/or easement been obtained from the maintaining federal agency?	☐ Yes ☐ No ☑ N/A

Wicomico Buffer Mitigation Site

Categorical Exclusion

SUMMARY

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, or other emergency releases of pollutants and contaminants into the environment.

Since the Wicomico Buffer Mitigation Site is a full-delivery project, a Government Environmental Records Report was ordered for the site through Envirosite Corporation on March 23, 2021. Neither the target property, nor adjacent properties, were listed in any of the Federal, State, or Tribal environmental databases searched by Envirosite. The assessment revealed no evidence of any recognized environmental conditions (RECs) connected to the target property. The Report is included in the Appendix.

National Historic Preservation Action (Section 106)

National Historic Preservation Action (Section 106) declares a national policy of historic preservation to protect, rehabilitate, restore, and reuse districts, sites, buildings, structures, and objects significant in American architecture, history, archaeology and culture, and Section 106 mandates that federal agencies take into account the effect of an undertaking on a property that is included in, or is eligible for inclusion in, the National Register of Historic Places.

Freese and Nichols, Inc. (FNI) requested a review and comment from the State Historic Preservation Office (SHPO) with respect to architectural and archaeological resources related to Wicomico Buffer Mitigation Site on April 14, 2021. SHPO responded on May 11, 2021 and stated they were aware of "no historic resources which would be affected by the project" and would have no further comment. Section 106 correspondence is included in the Appendix.

Uniform Relocation Assistance and Real Property Acquisition Act (Uniform Act)

These acts, known collectively as the Uniform Act, provide for uniform and equitable treatment of persons displaced from their homes, businesses, non-profit associations, or farms by Federal and Federally-assisted programs, and establish uniform and equitable land acquisition policies.

Wicomico Buffer Mitigation Site is a full-delivery project that includes land acquisition. Notification of the fair market value of the project property and the lack of condemnation authority by FNI was provided to the landowner by written correspondence. A copy of the letter is included in the Appendix.

Endangered Species Act (ESA)

Section 7 requires federal agencies, in consultation with and with the assistance of the Secretary of the Interior or of Commerce, as appropriate, to ensure that actions they authorize, fund or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species.

The Edgecombe County listed endangered species includes Red-cockaded woodpecker, dwarf wedgemussel, Tar River spinymussel, and yellow lance. The project area does not include any in-stream work, and no habitat for red-cockaded woodpecker is present within the project area. Therefore, due to lack of habitat for the listed species at the site, the project has been determined by FNI to have "no effect" on listed species.

FNI requested review and comment from the US Fish and Wildlife Service (USFWS) on April 14, 2021 for the Wicomico Buffer Mitigation Site and its potential impacts on threatened and endangered species. As of June 15, 2021, no USFWS response to effects determination has been received. All documents submitted to USFWS are included in the Appendix.

Farmland Protection Policy Act (FPPA)

The FPPA requires that, before taking or approving any Federal action that would result in the conversion of farmland, the agency must examine the effects of the action using the criteria set forth in the FPPA, and, if there are adverse effects, must consider alternatives to lessen them.

The Wicomico Buffer Mitigation Stie includes the conversion of prime farmland. As such, Form AD-1006 has been completed and submitted to the National Resources Conservation Service (NRCS). The completed form and correspondence documenting its submittal are included in the Appendix.

Fish and Wildlife Coordination Act (FWCA)

The FWCA requires consultation with the USFWS and appropriate state wildlife agencies on projects that impounded, diverted, deepened or otherwise modify waterbodies. The Wicomico Buffer Mitigation project is situated directly adjacent to an unnamed tributary of the Tar River, and while modification of the waterbody is unlikely, coordination with UFSWS and the North Carolina Wildlife Resources Commission (WRC) was requested on April 14, 2021. No NCWRC response was received by June 15, 2021. All correspondence with USFWS and WRC are included in the Appendix.

Migratory Bird Treaty Act (MBTA)

The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird. The indirect killing of birds by destroying their nests and eggs is covered by the MBTA, so construction in nesting areas during nesting seasons can constitute a taking.

FNI requested comment on the Wicomico Buffer Mitigation Site from the USFWS regarding migratory birds on April 14, 2021. As of June 15, 2021, no USFWS response to effects on migratory birds has been received. All correspondence with USFWS is included in the Appendix.

Wicomico Buffer Mitigation Site

Categorical Exclusion

APPENDIX

Wicomico Buffer Mitigation Site
Categorical Exclusion

CERCLA DOCUMENTATION

Government Records Report | 2021

Order Number: 52640

Report Generated: 03/23/2021

Project Name: Wicomico

Project Number: Wicomico

Wicomico
Piney Grove Lane
Tarboro, NC 27886

2 Corporate Drive
Suite 450
Shelton, CT 06484
Toll Free: 866-211-2028
www.envirositecorp.com

Table of Contents 2021

Envirosite Corporation has conducted a search of all reasonably ascertainable records in accordance with EPA's AAI (40 CFR Part 312) requirements and the ASTM E-1527-13 Environmental Site Assessments standard.

SUBJECT PROPERTY INFORMATION:

ADDRESS:

Wicomico
Piney Grove Lane
Tarboro, NC 27886

COORDINATES:

Latitude (North):	35.906977 - 35°54'25.1"
Longitude (West):	-77.440534 - -77°26'25.9"
Universal Transverse Mercator:	Zone 18N
UTM X (Meters):	279761.45
UTM Y (Meters):	3976382.82

ELEVATION:

Elevation:	49.160 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH SUBJECT PROPERTY:

Subject Property Map: 35077-H4 Speed, NC
Most Recent Revision: 2016

No Mapped Sites

SUBJECT PROPERTY SEARCH RESULTS:

The subject property was not listed in any of the databases searched by Envirosite Corporation.

SEARCH RESULTS:

No unmappable sites reported.

DATABASE(S) WITH NO MAPPED SITES:

FEDERAL RCRA NON-CORRACTS TSD FACILITIES LIST

ARCHIVED RCRA TSDF	Archived Resource Conservation and Recovery Act: Treatment Storage and Disposal Facilities
RCRA_TSDF	Resource Conservation and Recovery Act: Treatment Storage and Disposal Facilities

FEDERAL CERCLIS LIST

CERCLIS NFRAP	Comprehensive Environmental Response Compensation and Liability Act No Further Remedial Action Planned
CERCLIS-HIST	Comprehensive Environmental Response Compensation and Liability Act
FEDERAL FACILITY	Federal Facility sites
SEMS_8R_ACTIVE SITES	Sites on SEMS Active Site Inventory
SEMS_8R_ARCHIVED SITES	Sites on SEMS Archived Site Inventory

FEDERAL RCRA CORRACTS FACILITIES LIST

CORRACTS	Hazardous Waste Corrective Action
HIST CORRACTS 2	Historical Hazardous Waste Corrective Action

FEDERAL DELISTED NPL SITE LIST

DELISTED NPL	Delisted National Priority List
DELISTED PROPOSED NPL	Delisted proposed National Priority List
SEMS_DELETED NPL	Sites Deleted from National Priorities List

FEDERAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

EPA LF MOP	EPA Landfill Methane Outreach Project Database

FEDERAL ERNS LIST

ERNS	Emergency Response Notification System

FEDERAL INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES

FED E C	Engineering Controls
FED I C	Institutional Controls
RCRA IC_EC	RCRA sites with Institutional and Engineering Controls

FEDERAL RCRA GENERATORS LIST

HIST RCRA_CESQG	Historical Resource Conservation and Recovery Act_Conditionally Exempt Small Quantity Generators
HIST RCRA_LQG	Historical Resource Conservation and Recovery Act_ Large Quantity Generators
HIST RCRA_NONGEN	Historical Resource Conservation and Recovery Act_Non Generators
HIST RCRA_SQG	Historical Resource Conservation and Recovery Act_Small Quantity Generators
RCRA_LQG	Resource Conservation and Recovery Act_ Large Quantity Generators
RCRA_NONGEN	Resource Conservation and Recovery Act_Non Generators
RCRA_SQG	Resource Conservation and Recovery Act_Small Quantity Generators
RCRA_VSQG	Resource Conservation and Recovery Act_Very Small Quantity Generator

FEDERAL NPL SITE LIST

NPL	National Priority List
NPL EPA R1 GIS	GIS for EPA Region 1 NPL
NPL EPA R3 GIS	GIS for EPA Region 3 NPL

FEDERAL NPL SITE LIST *(cont.)*

NPL EPA R6 GIS	GIS for EPA Region 6 NPL
NPL EPA R8 GIS	GIS for EPA Region 8 NPL
NPL EPA R9 GIS	GIS for EPA Region 9 NPL
PART NPL	Part National Priority List
PROPOSED NPL	Proposed National Priority List
SEMS_FINAL NPL	Sites included on the Final National Priorities List
SEMS_PROPOSED NPL	Sites Proposed to be Added to the National Priorities List

STATE- AND TRIBAL - EQUIVALENT CERCLIS

ARCHIVED HSDS - NC	Archived Hazardous Substance Disposal Sites
ARCHIVED HSDS AREAS - NC	Areas of Archived Hazardous Substance Disposal Sites
FRB SUPERFUND - NC	FRB Superfund - NC
SHWS - NC	State Hazardous Waste Sites

STATE AND TRIBAL REGISTERED STORAGE TANK LISTS

FEMA UST	FEMA Underground Storage Tanks
INDIAN UST R1	Underground Storage Tanks on Indian Land in EPA Region 1
INDIAN UST R10	Underground Storage Tanks on Indian Land in EPA Region 10
INDIAN UST R2	Underground Storage Tanks on Indian Land in EPA Region 2
INDIAN UST R4	Underground Storage Tanks on Indian Land in EPA Region 4
INDIAN UST R5	Underground Storage Tanks on Indian Land in EPA Region 5
INDIAN UST R6	Underground Storage Tanks on Indian Land in EPA Region 6
INDIAN UST R7	Underground Storage Tanks on Indian Land in EPA Region 7
INDIAN UST R8	Underground Storage Tanks on Indian Land in EPA Region 8
INDIAN UST R9	Underground Storage Tanks on Indian Land in EPA Region 9
AST - NC	Aboveground Storage Tanks
UST - NC	Underground Storage Tanks
UST 2 - NC	UST Facilities

STATE AND TRIBAL BROWNFIELD SITES

TRIBAL BROWNFIELDS	Tribal Brownfields
BROWNFIELDS - NC	Brownfield

STATE RCRA GENERATORS LIST

HWG - NC	State Hazardous Waste Generators

STATE INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES

I C - NC	Institutional Controls

STATE AND TRIBAL LEAKING STORAGE TANK LISTS

INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land in EPA Region 1
INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land in EPA Region 10
INDIAN LUST R2	Leaking Underground Storage Tanks on Indian Land in EPA Region 2
INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land in EPA Region 4
INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land in EPA Region 5
INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land in EPA Region 6
INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land in EPA Region 7
INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land in EPA Region 8
INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land in EPA Region 9
LAST - NC	Leaking Aboveground Storage Tanks
LUST - NC	Leaking Underground Storage Tanks
LUST TRUST - NC	Leaking Underground Storage Tanks: Trust

STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

PRLF - NC	Pre-Regulatory Landfill Sites
SWF/LF - NC	Solid Waste Facilities Landfills

LOCAL BROWNFIELD LISTS

BROWNFIELDS-ACRES	EPA ACRES Brownfields
FED BROWNFIELDS	Federal Brownfields

LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES

FED CDL	DOJ Clandestine Drug Labs
US HIST CDL	Historical Clandestine Drug Labs
INACTIVE HWS - NC	Inacitve Hazardous Waste Sites

LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES

HIST INDIAN ODI R8	Historical Open Dump Inventory
INDIAN ODI R8	Open Dump Inventory
ODI	Open Dump Inventory
TRIBAL ODI	Indian Open Dump Inventory Sites
SWRCY - NC	Recycling Facilities
SWRCY 2 - NC	Material Recovery Facilities
SWTIRE - NC	Solid Waste Tire

RECORDS OF EMERGENCY RELEASE REPORTS

HMIRS (DOT)	Hazardous Materials Information Reporting Systems

LOCAL LAND RECORDS

LIENS 2	CERCLA Lien Information

OTHER ASCERTAINABLE RECORDS

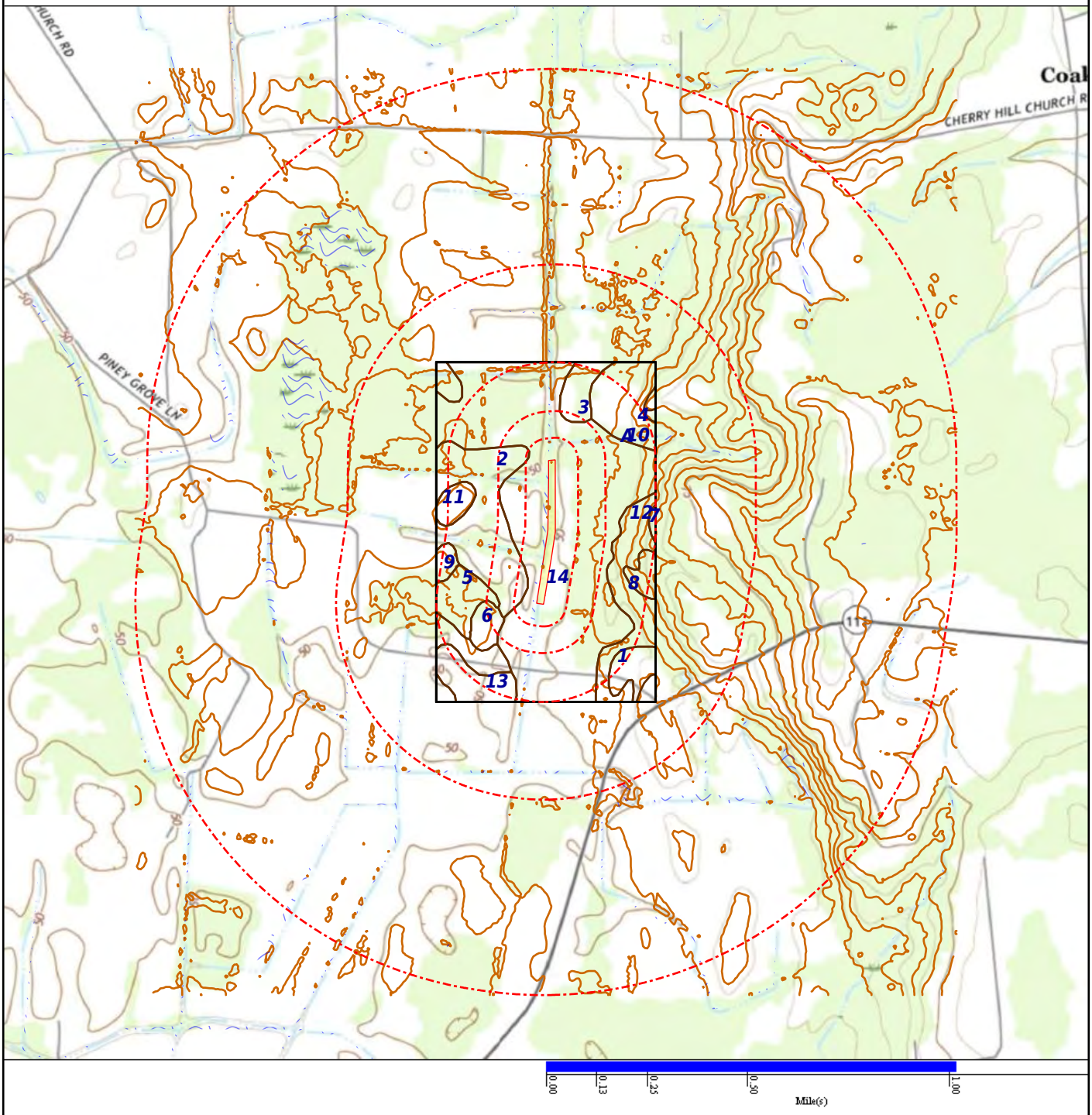
AFS	Air Facility Systems
ALT FUELING	Alternative Fueling Stations
AST PBS	ASTs at Bulk Petroleum Terminals
BRS	Biennial Reporting Systems
CDC HAZDAT	Hazardous Substance Release and Health Effects Information
COAL ASH DOE	Coal Ash: Department of Energy
COAL ASH EPA	Coal Ash: Environmental Protection Agency
COAL GAS	Coal Gas Plants
CONSENT (DECREES)	Superfund Consent Decree
CORRECTIVE ACTIONS_2020	Wastes - Hazardous Waste - Corrective Action
DEBRIS EPA LF	EPA Disaster Debris Landfill Sites
DEBRIS EPA SWRCY	EPA Disaster Debris Recovery Sites
DOD	Department of Defense
DOT OPS	Department of Transportation Office of Pipeline Safety
ECHO	EPA Enforcement and Compliance History Online
ENOI	Electronic Notice of Intent
EPA FUELS	EPA Fuels Registration, Reporting, and Compliance List
EPA OSC	EPA On-Site Coordinator
EPA WATCH	EPA Watch List
FA HWF	Financial Assurance for Hazardous Waste Facilities
FEDLAND	Federal Lands
FRS	Facility Index Systems
FTTS	FIFRA/TSCA Tracking System
FTTS INSP	FIFRA/TSCA Tracking System: Inspections
FUDS	Formerly Used Defense Sites
HIST AFS	Historical Air Facility Systems
HIST AFS 2	Historical Air Facility Systems
HIST DOD	Department of Defense historical sites
HIST LEAD_SMELTER	Historical Lead Smelter Sites
HIST MLTS	Historical Material Licensing Tracking Systems
HIST PCB TRANS	Historical Polychlorinated Biphenyl (PCB) Facilities
HIST PCS ENF	Historical Enforced Permit Compliance Facilities
HIST PCS FACILITY	Historical Permit Compliance Facilities
HIST SSTS	Historical Section 7 Tracking Systems
HWC DOCKET	Hazardous Waste Compliance Docket
ICIS	Integrated Compliance Information System
INACTIVE PCS	Inactive Permit Compliance Facilities
INDIAN RESERVATION	Indian Reservations
LUCIS	Land Use Control Information Systems

OTHER ASCERTAINABLE RECORDS *(cont.)*

LUCIS 2	Land Use Control Information Systems 2
MINES	Mines
MINES USGS	Mines list from USGS
MLTS	Material Licensing Tracking Systems
NPL AOC	Areas related to NPL remediation sites
NPL LIENS	National Priority List Liens
OSHA	Occupational Safety & Health Administration
PADS	PCB Activity Database Systems
PCB TRANSFORMER	Polychlorinated Biphenyl (PCB) Waste
PCS ENF	Enforced Permit Compliance Facilities
PCS FACILITY	Permit Compliance Facilities
RAATS	RCRA Administrative Action Tracking Systems
RADINFO	Radiation Information Systems
RMP	Risk Management Plans
ROD	Record of Decision
SCRD DRYCLEANERS	SCRD Drycleaners
SEMS_SMELTER	Sites on SEMS Potential Smelter Activity
SSTS	Section 7 Tracking Systems
STORMWATER	Storm Water Permits
TOSCA-PLANT	Toxic Substance Control Act: Plants
TRIS	Toxic Release Inventory Systems
UMTRA	Uranium Mill Tailing Sites
VAPOR	EPA Vapor Intrusion
BROWNFIELDS AEC - NC	Brownfields with Areas of Environmental Concern
COAL ASH - NC	Coal Ash sites
DAYCARE - NC	Daycare Facility
DRYCLEANERS - NC	Drycleaners
DRYCLEANERS 2 - NC	Drycleaners
DRYCLEANERS CLEANUP - NC	Drycleaners Cleanup
HIST COAL ASH - NC	Historical Coal Ash sites
IMD - NC	Incident Management Database
MGP - NC	Manufactured Gas Plant Sites
NFA - NC	No Further Action Sites
NPDES - NC	State Wastewater and NPDES Permits
OLI - NC	Old Landfill Inventory
UIC - NC	Underground Injection Controls

SUBJECT NAME: Wicomico
ADDRESS: Piney Grove Lane, Tarboro, NC, 27886
LAT/LONG: 35.906977 / -77.440534

PREPARED FOR: Freese and Nichols, Inc.
ORDER #: 52640
REPORT DATE: March 23, 2021



- Subject Property
- CDC HAZDAT (No Data)
- Federal Lands (No Data)
- Historical DOD (No Data)
- Equal/Higher Elevation
- Department of Defense (No Data)
- FEMA FloodZone 100 (No Data)
- Indian Reservation (No Data)
- Lower Elevation
- DFIRM Floodzone 100 (No Data)
- FEMA FloodZone 500 (No Data)
- National Priority List (No Data)
- Brownfields Areas (No Data)
- DFIRM Floodzone 500 (No Data)
- Hazardous Substance Disposal Sites (No Data)
- NWI

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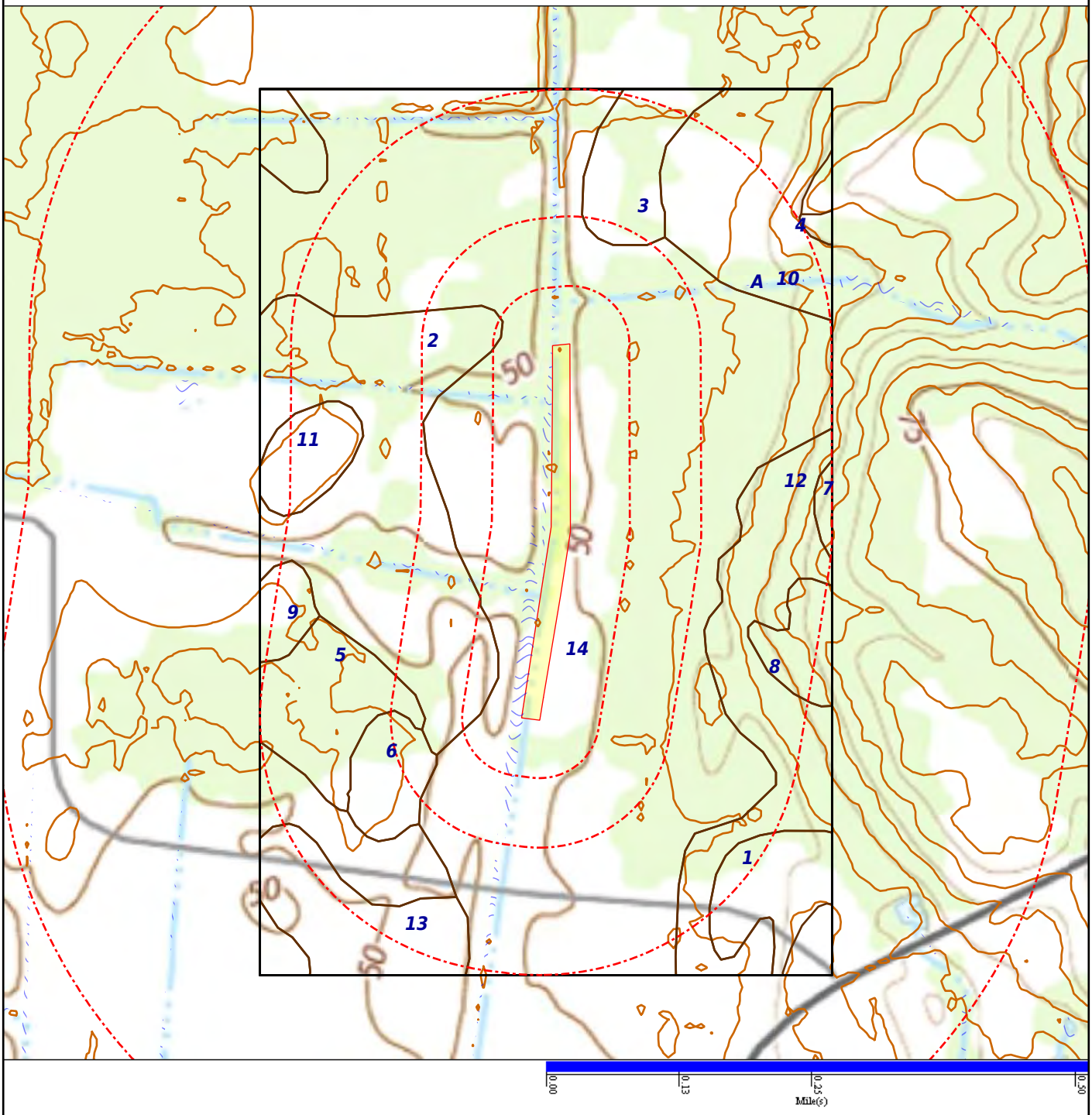

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- CDC HAZDAT (No Data)
- Federal Lands (No Data)
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- National Priority List (No Data)
- Brownfields Areas (No Data)
- DFIRM Floodzone 500 (No Data)
- Hazardous Substance Disposal Sites (No Data)
- NWI

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
FEDERAL RCRA NON-CORRACTS TSD FACILITIES LIST								
ARCHIVED RCRA TSDF		0.500	0	0	0	--	--	0
RCRA_TSDF		0.500	0	0	0	--	--	0
FEDERAL CERCLIS LIST								
CERCLIS NFRAP		0.500	0	0	0	--	--	0
CERCLIS-HIST		0.500	0	0	0	--	--	0
FEDERAL FACILITY		1.000	0	0	0	0	--	0
SEMS_8R_ACTIVE SITES		0.500	0	0	0	--	--	0
SEMS_8R_ARCHIVED SITES		0.500	0	0	0	--	--	0
FEDERAL RCRA CORRACTS FACILITIES LIST								
CORRACTS		1.000	0	0	0	0	--	0
HIST CORRACTS 2		1.000	0	0	0	0	--	0
FEDERAL DELISTED NPL SITE LIST								
DELISTED NPL		1.000	0	0	0	0	--	0
DELISTED PROPOSED NPL		1.000	0	0	0	0	--	0
SEMS_DELETED NPL		1.000	0	0	0	0	--	0
FEDERAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS								
EPA LF MOP		0.500	0	0	0	--	--	0
FEDERAL ERNS LIST								
ERNS		SP	0	--	--	--	--	0
FEDERAL INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES								
FED E C		0.500	0	0	0	--	--	0
FED I C		0.500	0	0	0	--	--	0
RCRA IC_EC		0.250	0	0	--	--	--	0
FEDERAL RCRA GENERATORS LIST								
HIST RCRA_CESQG		0.250	0	0	--	--	--	0
HIST RCRA_LQG		0.250	0	0	--	--	--	0
HIST RCRA_NONGEN		0.250	0	0	--	--	--	0
HIST RCRA_SQG		0.250	0	0	--	--	--	0
RCRA_LQG		0.250	0	0	--	--	--	0
RCRA_NONGEN		0.250	0	0	--	--	--	0
RCRA_SQG		0.250	0	0	--	--	--	0
RCRA_VSQG		0.250	0	0	--	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
FEDERAL NPL SITE LIST								
NPL		1.000	0	0	0	0	--	0
NPL EPA R1 GIS		1.000	0	0	0	0	--	0
NPL EPA R3 GIS		1.000	0	0	0	0	--	0
NPL EPA R6 GIS		1.000	0	0	0	0	--	0
NPL EPA R8 GIS		1.000	0	0	0	0	--	0
NPL EPA R9 GIS		1.000	0	0	0	0	--	0
PART NPL		1.000	0	0	0	0	--	0
PROPOSED NPL		1.000	0	0	0	0	--	0
SEMS_FINAL NPL		1.000	0	0	0	0	--	0
SEMS_PROPOSED NPL		1.000	0	0	0	0	--	0
STATE- AND TRIBAL - EQUIVALENT CERCLIS								
ARCHIVED HSDS - NC		1.000	0	0	0	0	--	0
ARCHIVED HSDS AREAS - NC		1.000	0	0	0	0	--	0
FRB SUPERFUND - NC		1.000	0	0	0	0	--	0
SHWS - NC		1.000	0	0	0	0	--	0
STATE AND TRIBAL REGISTERED STORAGE TANK LISTS								
FEMA UST		0.250	0	0	--	--	--	0
INDIAN UST R1		0.250	0	0	--	--	--	0
INDIAN UST R10		0.250	0	0	--	--	--	0
INDIAN UST R2		0.250	0	0	--	--	--	0
INDIAN UST R4		0.250	0	0	--	--	--	0
INDIAN UST R5		0.250	0	0	--	--	--	0
INDIAN UST R6		0.250	0	0	--	--	--	0
INDIAN UST R7		0.250	0	0	--	--	--	0
INDIAN UST R8		0.250	0	0	--	--	--	0
INDIAN UST R9		0.250	0	0	--	--	--	0
AST - NC		0.250	0	0	--	--	--	0
UST - NC		0.250	0	0	--	--	--	0
UST 2 - NC		0.250	0	0	--	--	--	0
STATE AND TRIBAL BROWNFIELD SITES								
TRIBAL BROWNFIELDS		0.500	0	0	0	--	--	0
BROWNFIELDS - NC		0.500	0	0	0	--	--	0
STATE RCRA GENERATORS LIST								
HWG - NC		0.250	0	0	--	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
STATE INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES								
I C - NC		0.500	0	0	0	--	--	0
STATE AND TRIBAL LEAKING STORAGE TANK LISTS								
INDIAN LUST R1		0.500	0	0	0	--	--	0
INDIAN LUST R10		0.500	0	0	0	--	--	0
INDIAN LUST R2		0.500	0	0	0	--	--	0
INDIAN LUST R4		0.500	0	0	0	--	--	0
INDIAN LUST R5		0.500	0	0	0	--	--	0
INDIAN LUST R6		0.500	0	0	0	--	--	0
INDIAN LUST R7		0.500	0	0	0	--	--	0
INDIAN LUST R8		0.500	0	0	0	--	--	0
INDIAN LUST R9		0.500	0	0	0	--	--	0
LAST - NC		0.500	0	0	0	--	--	0
LUST - NC		0.500	0	0	0	--	--	0
LUST TRUST - NC		0.500	0	0	0	--	--	0
STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS								
PRLF - NC		1.000	0	0	0	0	--	0
SWF/LF - NC		0.500	0	0	0	--	--	0
LOCAL BROWNFIELD LISTS								
BROWNFIELDS-ACRES		0.500	0	0	0	--	--	0
FED BROWNFIELDS		0.500	0	0	0	--	--	0
LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES								
FED CDL		SP	0	--	--	--	--	0
US HIST CDL		SP	0	--	--	--	--	0
INACTIVE HWS - NC		1.000	0	0	0	0	--	0
LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES								
HIST INDIAN ODI R8		0.500	0	0	0	--	--	0
INDIAN ODI R8		0.500	0	0	0	--	--	0
ODI		0.500	0	0	0	--	--	0
TRIBAL ODI		0.500	0	0	0	--	--	0
SWRCY - NC		0.500	0	0	0	--	--	0
SWRCY 2 - NC		0.500	0	0	0	--	--	0
SWTIRE - NC		0.500	0	0	0	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
RECORDS OF EMERGENCY RELEASE REPORTS								
HMIRS (DOT)		SP	0	--	--	--	--	0
LOCAL LAND RECORDS								
LIENS 2		SP	0	--	--	--	--	0
OTHER ASCERTAINABLE RECORDS								
AFS		SP	0	--	--	--	--	0
ALT FUELING		0.250	0	0	--	--	--	0
AST PBS		0.250	0	0	--	--	--	0
BRS		SP	0	--	--	--	--	0
CDC HAZDAT		1.000	0	0	0	0	--	0
COAL ASH DOE		0.500	0	0	0	--	--	0
COAL ASH EPA		0.500	0	0	0	--	--	0
COAL GAS		1.000	0	0	0	0	--	0
CONSENT (DECREES)		1.000	0	0	0	0	--	0
CORRECTIVE ACTIONS_2020		0.500	0	0	0	--	--	0
DEBRIS EPA LF		0.500	0	0	0	--	--	0
DEBRIS EPA SWRCY		0.500	0	0	0	--	--	0
DOD		1.000	0	0	0	0	--	0
DOT OPS		SP	0	--	--	--	--	0
ECHO		SP	0	--	--	--	--	0
ENOI		SP	0	--	--	--	--	0
EPA FUELS		SP	0	--	--	--	--	0
EPA OSC		0.125	0	--	--	--	--	0
EPA WATCH		SP	0	--	--	--	--	0
FA HWF		SP	0	--	--	--	--	0
FEDLAND		1.000	0	0	0	0	--	0
FRS		SP	0	--	--	--	--	0
FTTS		SP	0	--	--	--	--	0
FTTS INSP		SP	0	--	--	--	--	0
FUDS		1.000	0	0	0	0	--	0
HIST AFS		SP	0	--	--	--	--	0
HIST AFS 2		SP	0	--	--	--	--	0
HIST DOD		1.000	0	0	0	0	--	0
HIST LEAD_SMELTER		SP	0	--	--	--	--	0
HIST MLTS		SP	0	--	--	--	--	0
HIST PCB TRANS		SP	0	--	--	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
OTHER ASCERTAINABLE RECORDS *(cont.)*								
HIST PCS ENF		SP	0	--	--	--	--	0
HIST PCS FACILITY		SP	0	--	--	--	--	0
HIST SSTS		SP	0	--	--	--	--	0
HWC DOCKET		SP	0	--	--	--	--	0
ICIS		SP	0	--	--	--	--	0
INACTIVE PCS		SP	0	--	--	--	--	0
INDIAN RESERVATION		1.000	0	0	0	0	--	0
LUCIS		0.500	0	0	0	--	--	0
LUCIS 2		0.500	0	0	0	--	--	0
MINES		0.250	0	0	--	--	--	0
MINES USGS		0.250	0	0	--	--	--	0
MLTS		SP	0	--	--	--	--	0
NPL AOC		1.000	0	0	0	0	--	0
NPL LIENS		SP	0	--	--	--	--	0
OSHA		SP	0	--	--	--	--	0
PADS		SP	0	--	--	--	--	0
PCB TRANSFORMER		SP	0	--	--	--	--	0
PCS ENF		SP	0	--	--	--	--	0
PCS FACILITY		SP	0	--	--	--	--	0
RAATS		SP	0	--	--	--	--	0
RADINFO		SP	0	--	--	--	--	0
RMP		0.500	0	0	0	--	--	0
ROD		1.000	0	0	0	0	--	0
SCRD DRYCLEANERS		0.250	0	0	--	--	--	0
SEMS_SMELTER		SP	0	--	--	--	--	0
SSTS		SP	0	--	--	--	--	0
STORMWATER		SP	0	--	--	--	--	0
TOSCA-PLANT		SP	0	--	--	--	--	0
TRIS		SP	0	--	--	--	--	0
UMTRA		0.500	0	0	0	--	--	0
VAPOR		0.500	0	0	0	--	--	0
BROWNFIELDS AEC - NC		0.500	0	0	0	--	--	0
COAL ASH - NC		0.500	0	0	0	--	--	0
DAYCARE - NC		SP	0	--	--	--	--	0
DRYCLEANERS - NC		0.250	0	0	--	--	--	0
DRYCLEANERS 2 - NC		0.250	0	0	--	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
OTHER ASCERTAINABLE RECORDS *(cont.)*								
DRYCLEANERS CLEANUP - NC		0.500	0	0	0	--	--	0
HIST COAL ASH - NC		0.500	0	0	0	--	--	0
IMD - NC		0.500	0	0	0	--	--	0
MGP - NC		1.000	0	0	0	0	--	0
NFA - NC		0.500	0	0	0	--	--	0
NPDES - NC		SP	0	--	--	--	--	0
OLI - NC		0.500	0	0	0	--	--	0
UIC - NC		SP	0	--	--	--	--	0

No unmappable sites reported.

FEDERAL RCRA NON-CORRACTS TSD FACILITIES LIST

ARCHIVED RCRA TSDF: Resource Conservation and Recovery Act hazardous waste transportation storage disposal and treatment facilities

Agency Version Date: 10/12/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 04/13/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 01/15/2021

RCRA_TSDF: Resource Conservation and Recovery Act hazardous waste transportation storage disposal and treatment facilities

Agency Version Date: 10/12/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 04/13/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 01/15/2021

FEDERAL CERCLIS LIST

CERCLIS NFRAP: The CERCLIS sites with No Further Remedial Action Planned from the CERCLIS program database. The Environmental Protection Agency decommissioned the CERCLIS data in 2014. The last update was November 12, 2013.

Agency Version Date: 10/25/2013
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 02/12/2021

CERCLIS-HIST: The CERCLIS program database contains information on the assessment and remediation of federal hazardous waste sites. The Environmental Protection Agency decommissioned the CERCLIS data in 2014. The last update was November 12, 2013.

Agency Version Date: 10/29/2013
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 02/12/2021

FEDERAL FACILITY: Sites where Federal Facilities Restoration and Reuse Office (FFRRO) arranged cleanup for Base Closure and Property Transfer at Federal Facilities

Agency Version Date: 11/17/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8712
Most Recent Contact: 02/12/2021

SEMS_8R_ACTIVE SITES: The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted. NPL sites include latitude and longitude information. For non-NPL sites, a brief site status is provided.

Agency Version Date: 11/17/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/12/2021

SEMS_8R_ARCHIVED SITES: The Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

Agency Version Date: 10/28/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/12/2021

FEDERAL RCRA CORRACTS FACILITIES LIST

CORRACTS: List of facilities where Resource Conservation and Recovery Act Corrective Action Program used to investigate and remediate hazardous releases

Agency Version Date: 10/12/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 04/13/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-1667
Most Recent Contact: 01/15/2021

HIST CORRACTS 2: List of facilities where Resource Conservation and Recovery Act Corrective Action Program used to investigate and remediate hazardous releases that are no longer in current agency list.

Agency Version Date: 10/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 06/08/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-1667
Most Recent Contact: 03/12/2021

FEDERAL DELISTED NPL SITE LIST

DELISTED NPL: National Priority List of sites that were delisted and no longer require action

Agency Version Date: 11/17/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/12/2021

DELISTED PROPOSED NPL: Sites that have been delisted from the proposed National Priority List

Agency Version Date: 11/17/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/12/2021

SEMS_DELETED NPL: All Deleted National Priority List Sties

Agency Version Date: 10/28/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/12/2021

FEDERAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

EPA LF MOP: Sites in the EPA Landfill Methane Outreach Program

Agency Version Date: 01/11/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/09/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/11/2021

FEDERAL ERNS LIST

ERNS: Emergency Response Notification System records of reported spills

Agency Version Date: 02/04/2021
Agency Update Frequency: Annually
Planned Next Contact: 05/03/2021
Agency: National Response Center United States Coast Guard
Agency Contact: N/R
Most Recent Contact: 02/04/2021

FEDERAL INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES

FED E C: Federal listing of remediation sites with engineering controls

Agency Version Date: 03/11/2021
Agency Update Frequency: Varies
Planned Next Contact: 06/07/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 03/11/2021

FEDERAL INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES (cont.)

FED I C: Federal listing of remediation sites with institutional controls

Agency Version Date: 03/11/2021
Agency Update Frequency: Varies
Planned Next Contact: 06/07/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 03/11/2021

RCRA IC_EC: Sites with institutional or engineering controls related to Resource Conservation and Recovery Act

Agency Version Date: 02/19/2021
Agency Update Frequency: Varies
Planned Next Contact: 05/18/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 02/19/2021

FEDERAL RCRA GENERATORS LIST

HIST RCRA_CESQG: List of Resource Conservation and Recovery Act licensed conditionally exempt small quantity generators that are no longer in current agency list.

Agency Version Date: 10/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 06/08/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 03/12/2021

HIST RCRA_LQG: List of Resource Conservation and Recovery Act licensed large quantity generators that are no longer in current agency list.

Agency Version Date: 10/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 06/08/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 03/12/2021

HIST RCRA_NONGEN: List of Resource Conservation and Recovery Act licensed non-generators that are no longer in current agency list.

Agency Version Date: 10/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 06/08/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 03/12/2021

HIST RCRA_SQG: List of Resource Conservation and Recovery Act licensed small quantity generators that are no longer in current agency list.

Agency Version Date: 10/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 06/08/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 03/12/2021

RCRA_LQG: Resource Conservation and Recovery Act listing of licensed large quantity generators

Agency Version Date: 10/12/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 04/13/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 01/15/2021

RCRA_NONGEN: Resource Conservation and Recovery Act listing of licensed non-generators

Agency Version Date: 10/12/2020
Agency Update Frequency: Varies
Planned Next Contact: 04/13/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 01/15/2021

RCRA_SQG: Resource Conservation and Recovery Act listing of licensed small quantity generators

Agency Version Date: 10/12/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 04/13/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 01/15/2021

FEDERAL RCRA GENERATORS LIST (cont.)

RCRA_VSQG: Resource Conservation and Recovery Act listing of licensed very small quantity generators.

Agency Version Date: 10/12/2020
Agency Update Frequency: Varies
Planned Next Contact: 04/13/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 01/15/2021

FEDERAL NPL SITE LIST

NPL: List of priority contaminated sites among identified releases or threatened releases of hazardous substances pollutants or contaminants nationally

Agency Version Date: 11/17/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/12/2021

NPL EPA R1 GIS: Geospatial data for the Environmental Protection Agency Region 1 National Priority List subject to environmental regulation

Agency Version Date: 11/17/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 02/12/2021

NPL EPA R3 GIS: Geospatial data for the Environmental Protection Agency Region 3 National Priority List subject to environmental regulation

Agency Version Date: 11/17/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 02/12/2021

NPL EPA R6 GIS: Geospatial data for the Environmental Protection Agency Region 6 National Priority List subject to environmental regulation

Agency Version Date: 11/17/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 02/12/2021

NPL EPA R8 GIS: Geospatial data for the Environmental Protection Agency Region 8 National Priority List subject to environmental regulation

Agency Version Date: 11/17/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 02/12/2021

NPL EPA R9 GIS: Geospatial data for the Environmental Protection Agency Region 9 National Priority List subject to environmental regulation

Agency Version Date: 11/17/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 02/12/2021

PART NPL: Sites that are a part of an National Priority List site referred to as the parent site

Agency Version Date: 11/17/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/12/2021

FEDERAL NPL SITE LIST (cont.)

PROPOSED NPL: Sites that have been proposed for the National Priority List

Agency Version Date: 11/17/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/12/2021

SEMS_FINAL NPL: All Included National Priority List Sites

Agency Version Date: 10/28/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/12/2021

SEMS_PROPOSED NPL: All Proposed National Priority List Sites

Agency Version Date: 10/28/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/12/2021

STATE- AND TRIBAL - EQUIVALENT CERCLIS

ARCHIVED HSDS - NC: The Hazardous Substance Disposal Sites that were listed on both the National Priority List and the State Priority List as of June 21, 1995. Updated 1998 and 2004.

Agency Version Date: 12/13/2018
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 05/24/2021
Agency: North Carolina Center for Geographic Information and analysis
Agency Contact: (919) 754-6585
Most Recent Contact: 02/25/2021

ARCHIVED HSDS AREAS - NC: Areas of Archived Hazardous Substance Disposal Sites

Agency Version Date: 12/13/2018
Agency Update Frequency: Quarterly
Planned Next Contact: 05/24/2021
Agency: North Carolina Center for Geographic Information and analysis
Agency Contact: (919) 754-6585
Most Recent Contact: 02/25/2021

FRB SUPERFUND - NC: The NC DENR Federal Remediation Branch list of Superfund and CERCLA sites.

Agency Version Date: 12/21/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 06/15/2021
Agency: Department of Environmental Quality
Agency Contact: (919) 707-8200
Most Recent Contact: 03/19/2021

SHWS - NC: Hazardous Substances Cleanup Fund list of sites

Agency Version Date: 02/11/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 05/10/2021
Agency: Department of Environmental Quality
Agency Contact: (919) 707-8200
Most Recent Contact: 02/11/2021

STATE AND TRIBAL REGISTERED STORAGE TANK LISTS

FEMA UST: FEMA underground storage tank listing

Agency Version Date: 06/21/2019
Agency Update Frequency: Varies
Planned Next Contact: 04/16/2021
Agency: FEMA
Agency Contact: 202-212-5283
Most Recent Contact: 01/19/2021

INDIAN UST R1: Underground Storage Tanks on Indian Land in EPA Region 1

Agency Version Date: 02/03/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 05/03/2021
Agency: U.S. Environmental Protection Agency Region 1
Agency Contact: 855-246-3642
Most Recent Contact: 02/03/2021

STATE AND TRIBAL REGISTERED STORAGE TANK LISTS (cont.)

INDIAN UST R10: Underground Storage Tanks on Indian Land in EPA Region 10

Agency Version Date: 12/02/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/27/2021
Agency: U.S. Environmental Protection Agency Region 10
Agency Contact: 855-246-3642
Most Recent Contact: 03/01/2021

INDIAN UST R2: Underground Storage Tanks on Indian Land in EPA Region 2

Agency Version Date: 12/07/2016
Agency Update Frequency: Quarterly
Planned Next Contact: 05/05/2021
Agency: U.S. Environmental Protection Agency Region 2
Agency Contact: 855-246-3642
Most Recent Contact: 02/05/2021

INDIAN UST R4: Underground Storage Tanks on Indian Land in EPA Region 4

Agency Version Date: 04/14/2020
Agency Update Frequency: Semi Annually
Planned Next Contact: 05/27/2021
Agency: U.S. Environmental Protection Agency Region 4
Agency Contact: 855-246-3642
Most Recent Contact: 03/01/2021

INDIAN UST R5: Underground Storage Tanks on Indian Land in EPA Region 5

Agency Version Date: 11/19/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/14/2021
Agency: U.S. Environmental Protection Agency Region 5
Agency Contact: 855-246-3642
Most Recent Contact: 02/15/2021

INDIAN UST R6: Underground Storage Tanks on Indian Land in EPA Region 6

Agency Version Date: 12/18/2020
Agency Update Frequency: Semi Annually
Planned Next Contact: 06/11/2021
Agency: U.S. Environmental Protection Agency Region 6
Agency Contact: 855-246-3642
Most Recent Contact: 03/17/2021

INDIAN UST R7: Underground Storage Tanks on Indian Land in EPA Region 7

Agency Version Date: 11/19/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/14/2021
Agency: U.S. Environmental Protection Agency Region 7
Agency Contact: 855-246-3642
Most Recent Contact: 02/15/2021

INDIAN UST R8: Underground Storage Tanks on Indian Land in EPA Region 8

Agency Version Date: 02/01/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/29/2021
Agency: U.S. Environmental Protection Agency Region 8
Agency Contact: 855-246-3642
Most Recent Contact: 02/01/2021

INDIAN UST R9: Underground Storage Tanks on Indian Land in EPA Region 9

Agency Version Date: 02/01/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/29/2021
Agency: U.S. Environmental Protection Agency Region 9
Agency Contact: 855-246-3642
Most Recent Contact: 02/01/2021

AST - NC: Oil terminal facility Locations

Agency Version Date: 02/05/2021
Agency Update Frequency: Varies
Planned Next Contact: 05/04/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 715-1117
Most Recent Contact: 02/05/2021

UST - NC: Registered Underground Storage Tanks

Agency Version Date: 01/08/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/06/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8234
Most Recent Contact: 01/08/2021

STATE AND TRIBAL REGISTERED STORAGE TANK LISTS (cont.)

UST 2 - NC: UST Facility Operating Permits

Agency Version Date: 01/26/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/23/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8234
Most Recent Contact: 01/26/2021

STATE AND TRIBAL BROWNFIELD SITES

TRIBAL BROWNFIELDS: Tribal brownfield remediation site listing

Agency Version Date: 02/10/2017
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 04/02/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 01/05/2021

BROWNFIELDS - NC: Brownfield Projects Inventory

Agency Version Date: 02/11/2021
Agency Update Frequency: Varies
Planned Next Contact: 05/10/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8234
Most Recent Contact: 02/11/2021

STATE RCRA GENERATORS LIST

HWG - NC: Hazardous Waste sites that are regulated by the hazardous waste portions of the Resource Conservation and Recovery Act (RCRA)

Agency Version Date: 01/05/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/01/2021
Agency: North Carolina Center for Geographic Information and analysis
Agency Contact: (919) 754-6585
Most Recent Contact: 01/05/2021

STATE INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES

I C - NC: Sites with land Use Restrictions Monitoring

Agency Version Date: 02/11/2021
Agency Update Frequency: Varies
Planned Next Contact: 05/10/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8234
Most Recent Contact: 02/11/2021

STATE AND TRIBAL LEAKING STORAGE TANK LISTS

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land in EPA Region 1

Agency Version Date: 02/02/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/30/2021
Agency: U.S. Environmental Protection Agency Region 1
Agency Contact: 855-246-3642
Most Recent Contact: 02/02/2021

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land in EPA Region 10

Agency Version Date: 04/14/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/27/2021
Agency: U.S. Environmental Protection Agency Region 10
Agency Contact: 855-246-3642
Most Recent Contact: 03/01/2021

INDIAN LUST R2: Leaking Underground Storage Tanks on Indian Land in EPA Region 2

Agency Version Date: 12/07/2016
Agency Update Frequency: Quarterly
Planned Next Contact: 05/05/2021
Agency: U.S. Environmental Protection Agency Region 2
Agency Contact: 855-246-3642
Most Recent Contact: 02/05/2021

STATE AND TRIBAL LEAKING STORAGE TANK LISTS (cont.)

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land in EPA Region 4

Agency Version Date: 12/02/2020
Agency Update Frequency: Semi Annually
Planned Next Contact: 05/27/2021
Agency: U.S. Environmental Protection Agency Region 4
Agency Contact: 855-246-3642
Most Recent Contact: 03/01/2021

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land in EPA Region 5

Agency Version Date: 11/19/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/14/2021
Agency: U.S. Environmental Protection Agency Region 5
Agency Contact: 855-246-3642
Most Recent Contact: 02/15/2021

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land in EPA Region 6

Agency Version Date: 11/23/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/18/2021
Agency: U.S. Environmental Protection Agency Region 6
Agency Contact: 855-246-3642
Most Recent Contact: 02/19/2021

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land in EPA Region 7

Agency Version Date: 04/15/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/14/2021
Agency: U.S. Environmental Protection Agency Region 7
Agency Contact: 855-246-3642
Most Recent Contact: 02/15/2021

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land in EPA Region 8

Agency Version Date: 11/23/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/18/2021
Agency: U.S. Environmental Protection Agency Region 8
Agency Contact: 855-246-3642
Most Recent Contact: 02/19/2021

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land in EPA Region 9

Agency Version Date: 02/01/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/29/2021
Agency: U.S. Environmental Protection Agency Region 9
Agency Contact: 855-246-3642
Most Recent Contact: 02/01/2021

LAST - NC: Aboveground Storage Tanks with reported leaks

Agency Version Date: 12/15/2020
Agency Update Frequency: Varies
Planned Next Contact: 06/09/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8234
Most Recent Contact: 03/12/2021

LUST - NC: Underground Storage Tanks with reported leaks

Agency Version Date: 12/15/2020
Agency Update Frequency: Varies
Planned Next Contact: 06/09/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8150
Most Recent Contact: 03/12/2021

LUST TRUST - NC: State Trust Fund Database

Agency Version Date: 01/07/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/05/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8234
Most Recent Contact: 01/07/2021

STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

PRLF - NC: List of non-permitted landfills that have been closed since 1/1/1983.

Agency Version Date: 01/29/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/27/2021
Agency: North Carolina Center for Geographic Information and analysis
Agency Contact: (919) 754-6585
Most Recent Contact: 01/29/2021

SWF/LF - NC: Landfill sites

Agency Version Date: 02/10/2021
Agency Update Frequency: Varies
Planned Next Contact: 05/10/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8200
Most Recent Contact: 02/10/2021

LOCAL BROWNFIELD LISTS

BROWNFIELDS-ACRES: EPA Brownfields Assessment, Cleanup and Redevelopment Exchange System.

Agency Version Date: 12/28/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 03/26/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 12/28/2020

FED BROWNFIELDS: Federal brownfield remediation sites

Agency Version Date: 02/05/2021
Agency Update Frequency: Semi Annually
Planned Next Contact: 05/05/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 02/05/2021

LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES

FED CDL: The U.S. Department of Justice listing of clandestine drug lab locations

Agency Version Date: 01/28/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/26/2021
Agency: U.S. Department of Justice
Agency Contact: 202-307-7610
Most Recent Contact: 01/28/2021

US HIST CDL: The U.S. Department of Justice historical listing of clandestine drug lab locations

Agency Version Date: 08/05/2019
Agency Update Frequency: Quarterly
Planned Next Contact: 05/31/2021
Agency: U.S. Department of Justice
Agency Contact: 202-307-7610
Most Recent Contact: 03/03/2021

INACTIVE HWS - NC: Listing of inactive hazardous sites where a hazardous substance release has been identified

Agency Version Date: 01/07/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/05/2021
Agency: North Carolina Center for Geographic Information and analysis
Agency Contact: (919) 754-6585
Most Recent Contact: 01/07/2021

LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES

HIST INDIAN ODI R8: List of Region 8 Indian land open dump inventory sites maintained within the STARS program that is no longer in current agency list.

Agency Version Date: 11/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 04/29/2021
Agency: Indian Health Service
Agency Contact: 855-246-3642
Most Recent Contact: 02/01/2021

INDIAN ODI R8: Region 8 Indian land open dump inventory sites maintained within the STARS program

Agency Version Date: 02/12/2021
Agency Update Frequency: Varies
Planned Next Contact: 05/11/2021
Agency: Indian Health Service
Agency Contact: 855-246-3642
Most Recent Contact: 02/12/2021

LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES (cont.)

ODI: Open dump inventory sites

Agency Version Date: 10/03/2017
Agency Update Frequency: No Update
Planned Next Contact: 05/24/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 02/25/2021

TRIBAL ODI: Indian land open dump inventory for all regions

Agency Version Date: 12/18/2020
Agency Update Frequency: Varies
Planned Next Contact: 06/04/2021
Agency: Indian Health Service
Agency Contact: 301-443-3593
Most Recent Contact: 03/10/2021

SWRCY - NC: Listing of recycling facilities

Agency Version Date: 11/13/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/10/2021
Agency: Department of Environment and Natural Resources
Agency Contact: 919.707.8236
Most Recent Contact: 02/10/2021

SWRCY 2 - NC: Material Recovery Facilities (MRFs)

Agency Version Date: 02/04/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 05/03/2021
Agency: Department of Environment and Natural Resources
Agency Contact: 919.707.8236
Most Recent Contact: 02/04/2021

SWTIRE - NC: Solid Waste Permitted Facility List

Agency Version Date: 02/11/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 05/10/2021
Agency: Department of Environmental Quality
Agency Contact: (919) 707-8200
Most Recent Contact: 02/11/2021

RECORDS OF EMERGENCY RELEASE REPORTS

HMIRS (DOT): Hazardous Material spills reported by the Department of Transportation

Agency Version Date: 01/05/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/02/2021
Agency: U.S. Department of Transportation
Agency Contact: (202) 366-4996
Most Recent Contact: 01/05/2021

LOCAL LAND RECORDS

LIENS 2: Comprehensive Environmental Response Compensation and Liability Act sites with liens

Agency Version Date: 05/11/2017
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 04/02/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 01/05/2021

OTHER ASCERTAINABLE RECORDS

AFS: Air Facility Systems Quarterly Extract

Agency Version Date: 02/16/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 05/14/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 02/16/2021

ALT FUELING: Alternative Fueling Stations by fuel type.

Agency Version Date: 01/14/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/12/2021
Agency: U.S. Department of Energy
Agency Contact: N/R
Most Recent Contact: 01/14/2021

OTHER ASCERTAINABLE RECORDS (cont.)

AST PBS: Bulk petroleum terminals with a total bulk storage capacity of 50,000 barrels or more.

Agency Version Date: 12/11/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 06/04/2021
Agency: Department of Homeland Security
Agency Contact: 202-853-5361
Most Recent Contact: 03/09/2021

BRS: Reporting of hazardous waste generation and management from large quantity generators

Agency Version Date: 10/12/2020
Agency Update Frequency: Biennial
Planned Next Contact: 04/13/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/15/2021

CDC HAZDAT: The Agency for Toxic Substances and Disease Registry's Hazardous Substance Release/Health Effects Database.

Agency Version Date: 08/21/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/11/2021
Agency: Agency for Toxic Substances and Disease Registry
Agency Contact: 770-488-6399
Most Recent Contact: 02/12/2021

COAL ASH DOE: List of existing and planned generators with 1 megawatt or greater of combined capacity that are utilizing coal ash impoundments.

Agency Version Date: 01/08/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/07/2021
Agency: Department of Energy
Agency Contact: (202) 586-8800
Most Recent Contact: 01/08/2021

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

Agency Version Date: 02/18/2021
Agency Update Frequency: Varies
Planned Next Contact: 05/17/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 02/18/2021

COAL GAS: Manufactured Gas Plant locations

Agency Version Date: 01/22/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/20/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 01/22/2021

CONSENT (DECREES): Legal decisions regarding responsibility for Superfund locations

Agency Version Date: 11/13/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/10/2021
Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 02/10/2021

CORRECTIVE ACTIONS_2020: In 2009 the EPA created the 2020 Corrective Action Baseline list of contaminated or potentially contaminated sites with a cleanup goal to complete 95% by the year 2020. The names on the list indicate the facility owners who may or may not have caused the contamination.

Agency Version Date: 12/21/2018
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 05/04/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: N/R
Most Recent Contact: 02/05/2021

DEBRIS EPA LF: EPA list of designated landfill facilities for the safe disposal of disaster debris.

Agency Version Date: 01/26/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/27/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 01/26/2021

OTHER ASCERTAINABLE RECORDS (cont.)

DEBRIS EPA SWRCY: EPA list of facilities for the safe recovery, recycling, and disposal of disaster debris.

Agency Version Date: 01/26/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/27/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 01/26/2021

DOD: Department of Defense sites

Agency Version Date: 11/17/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/11/2021
Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 02/12/2021

DOT OPS: Incident Data Report

Agency Version Date: 11/30/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/26/2021
Agency: U.S. Department of Transportation
Agency Contact: (202) 366-4996
Most Recent Contact: 02/26/2021

ECHO: ECHO is EPA Enforcement and Compliance History Online website to search for facilities in your community to assess their compliance with environmental regulations related to CAA, CWA, RCRA, & SDWA.

Agency Version Date: 01/07/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/05/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-1667
Most Recent Contact: 01/07/2021

ENOI: The Electronic Notice of Intent (eNOI) database contains construction sites and industrial facilities that submit permit requests to EPA for Construction General Permits (CGP) and Multi-Sector General Permits (MSGP).

Agency Version Date: 09/25/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 06/15/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 03/19/2021

EPA FUELS: List of companies and facilities registered to participate in EPA Fuel Programs under Title 40 CFR Part 80.

Agency Version Date: 11/23/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/18/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: (202) 564-2307
Most Recent Contact: 02/19/2021

EPA OSC: Listing of oil spills and hazardous substance release sites requiring EPA On-Site Coordinators.

Agency Version Date: 10/09/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 04/02/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: (202) 564-2307
Most Recent Contact: 01/05/2021

EPA WATCH: The EPA Watch List was used to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. EPA maintained the lists from 2011 - 2013.

Agency Version Date: 02/09/2018
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 04/02/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: (202) 564-2307
Most Recent Contact: 01/05/2021

FA HWF: Hazardous Waste Facilities with Financial Assurance

Agency Version Date: 01/20/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/19/2021
Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 01/20/2021

OTHER ASCERTAINABLE RECORDS (cont.)

FEDLAND: Federal land locations

Agency Version Date: 01/06/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/07/2021
Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 02/09/2021

FRS: Facility Registry Systems

Agency Version Date: 11/27/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/24/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 02/23/2021

FTTS: Tracking of administrative and enforcement activities related to FIFRA/TSCA

Agency Version Date: 04/16/2013
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 04/20/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 564-2280
Most Recent Contact: 01/22/2021

FTTS INSP: Tracking of inspections related to FIFRA/TSCA

Agency Version Date: 05/08/2017
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 04/13/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 564-2280
Most Recent Contact: 01/15/2021

FUDS: Defense sites that require cleanup

Agency Version Date: 11/23/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/19/2021
Agency: US Army Corps of Engineering
Agency Contact: (202) 761-0011
Most Recent Contact: 02/19/2021

HIST AFS: List of Air Facility Systems Quarterly Extract that are no longer in current agency list.

Agency Version Date: 06/14/2019
Agency Update Frequency: Quarterly
Planned Next Contact: 04/01/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/05/2021

HIST AFS 2: List of Air Facility Systems Quarterly Extract that are no longer in current agency list.

Agency Version Date: 11/26/2018
Agency Update Frequency: Quarterly
Planned Next Contact: 05/04/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 02/05/2021

HIST DOD: Department of Defense historical sites

Agency Version Date: 08/17/2018
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 05/11/2021
Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 02/12/2021

HIST LEAD_SMELTER: List of former lead smelter sites that is no longer in current agency list.

Agency Version Date: 12/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 04/19/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/21/2021

HIST MLTS: List of sites in possession/use of radioactive materials regulated by NRC that is no longer in current agency list.

Agency Version Date: 07/13/2016
Agency Update Frequency: Annually
Planned Next Contact: 04/29/2021
Agency: Nuclear Regulatory Commission
Agency Contact: (800) 397-4209
Most Recent Contact: 02/01/2021

OTHER ASCERTAINABLE RECORDS (cont.)

HIST PCB TRANS: List of PCB Disposal Facilities that are no longer in current agency list.

Agency Version Date: 01/18/2018
Agency Update Frequency: No Update
Planned Next Contact: 05/17/2021
Agency: Environmental Protection Agency
Agency Contact: (703) 308-8404
Most Recent Contact: 02/18/2021

HIST PCS ENF: List of permitted facilities to discharge wastewater (Federal equivalent to NPDES) that are no longer in current agency list.

Agency Version Date: 12/08/2018
Agency Update Frequency: Annually
Planned Next Contact: 06/04/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 564-6582
Most Recent Contact: 03/09/2021

HIST PCS FACILITY: List of Permitted facilities to discharge wastewater (Federal equivalent to NPDES) that are no longer in current agency list.

Agency Version Date: 12/18/2018
Agency Update Frequency: Annually
Planned Next Contact: 06/03/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 564-6582
Most Recent Contact: 03/09/2021

HIST SSTS: List of tracking of facilities who produce pesticides and their quantity that are no longer in current agency list.

Agency Version Date: 02/13/2019
Agency Update Frequency: Annually
Planned Next Contact: 05/21/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 02/23/2021

HWC DOCKET: Listing of Federal facilities which are managing or have managed hazardous waste; or have had a release of hazardous waste.

Agency Version Date: 02/16/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 05/17/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: (202) 564-2307
Most Recent Contact: 02/16/2021

ICIS: Comprised of all Federal Administrative and Judicial enforcement information [intended to replace PCS] by tracking enforcement and compliance information (also contains what used to be known as FFTS)

Agency Version Date: 01/12/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/09/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/12/2021

INACTIVE PCS: Inactive Permitted facilities to discharge wastewater

Agency Version Date: 01/12/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/09/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 564-6582
Most Recent Contact: 01/12/2021

INDIAN RESERVATION: Indian Reservation sites

Agency Version Date: 10/26/2020
Agency Update Frequency: Varies
Planned Next Contact: 04/19/2021
Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 01/21/2021

LUCIS: Land Use Control Information Systems

Agency Version Date: 07/24/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 04/06/2021
Agency: Department of the Navy: BRAC PMO
Agency Contact: (619) 532-0900
Most Recent Contact: 01/08/2021

OTHER ASCERTAINABLE RECORDS (cont.)

LUCIS 2: Land Use Control Information Systems

Agency Version Date: 01/17/2018
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 05/18/2021
Agency: Department of the Navy: BRAC PMO
Agency Contact: (619) 532-0900
Most Recent Contact: 02/19/2021

MINES: Mines Master Index Files

Agency Version Date: 01/11/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/09/2021
Agency: Department of Labor
Agency Contact: (202) 693-9400
Most Recent Contact: 01/11/2021

MINES USGS: Listing of all active mines and mineral plants in 2003

Agency Version Date: 02/02/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/13/2021
Agency: USGS Mineral Resources Program
Agency Contact: (703) 648-5953
Most Recent Contact: 01/15/2021

MLTS: Sites in possession/use of radioactive materials regulated by NRC

Agency Version Date: 05/19/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/04/2021
Agency: Nuclear Regulatory Commission
Agency Contact: (800) 397-4209
Most Recent Contact: 02/05/2021

NPL AOC: Areas of Concern related to NPL remediation sites

Agency Version Date: 11/17/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: Environmental Protection Agency
Agency Contact: N/R
Most Recent Contact: 02/12/2021

NPL LIENS: National Priority List of sites with Liens

Agency Version Date: 10/28/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/12/2021

OSHA: OSHA's listing of inspections violations and fatality information

Agency Version Date: 10/16/2020
Agency Update Frequency: Varies
Planned Next Contact: 04/08/2021
Agency: Occupational Safety & Health Administration
Agency Contact: 800-321-6742
Most Recent Contact: 01/11/2021

PADS: Listing of generators transporters commercial store/ brokers and disposers of PCB

Agency Version Date: 02/12/2021
Agency Update Frequency: Varies
Planned Next Contact: 05/11/2021
Agency: Environmental Protection Agency
Agency Contact: (703) 308-8404
Most Recent Contact: 02/12/2021

PCB TRANSFORMER: Disposal and Storage of Polychlorinated Biphenyl (PCB) Waste

Agency Version Date: 11/27/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/24/2021
Agency: Environmental Protection Agency
Agency Contact: (703) 308-8404
Most Recent Contact: 02/24/2021

PCS ENF: Permitted facilities to discharge wastewater (Federal equivalent to NPDES)

Agency Version Date: 01/12/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/09/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 564-6582
Most Recent Contact: 01/12/2021

OTHER ASCERTAINABLE RECORDS (cont.)

PCS FACILITY: Permitted facilities to discharge wastewater (Federal equivalent to NPDES)

Agency Version Date: 01/12/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/09/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 564-6582
Most Recent Contact: 01/12/2021

RAATS: Listing of major violators with enforcement actions issued under RCRA. Includes administrative and civil actions filed by the EPA. This dataset is no longer maintained.

Agency Version Date: 09/23/2019
Agency Update Frequency: Varies
Planned Next Contact: 05/04/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 02/05/2021

RADINFO: EPA regulated facilities with radiation and radioactive materials

Agency Version Date: 08/01/2019
Agency Update Frequency: Varies
Planned Next Contact: 04/23/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/26/2021

RMP: Facilities producing/handling/ process/ distribute/ store specific chemicals report plans required by the Clean Air Act

Agency Version Date: 03/17/2020
Agency Update Frequency: Monthly
Planned Next Contact: 04/16/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 564-2534
Most Recent Contact: 01/19/2021

ROD: Permanent remedy at an NPL site

Agency Version Date: 11/17/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/11/2021
Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 02/12/2021

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners

Agency Version Date: 12/18/2020
Agency Update Frequency: No Update
Planned Next Contact: 06/14/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 03/16/2021

SEMS_SMELTER: This report includes sites that have smelting-related, or potentially smelting-related, indicators in the SEMS database. The report includes information on the site location as well as contaminants of concern.

Agency Version Date: 10/28/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/11/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/12/2021

SSTS: Tracking of facilities who produce pesticides and their quantity

Agency Version Date: 12/25/2020
Agency Update Frequency: Annually
Planned Next Contact: 06/18/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 03/23/2021

STORMWATER: Permitted storm water sites

Agency Version Date: 01/12/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/09/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/12/2021

OTHER ASCERTAINABLE RECORDS (cont.)

TOSCA-PLANT: Plants controlled by the Toxic Substance Control Act

Agency Version Date: 12/28/2020
Agency Update Frequency: Varies
Planned Next Contact: 03/26/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 12/28/2020

TRIS: Information regarding toxic chemicals that are being used/manufactured/ treated/ transported/released into the environment

Agency Version Date: 10/14/2020
Agency Update Frequency: Varies
Planned Next Contact: 04/09/2021
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/11/2021

UMTRA: Uranium Recovery Sites

Agency Version Date: 01/14/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/12/2021
Agency: United States Nuclear Regulatory Commission
Agency Contact: (301) 415-8200
Most Recent Contact: 01/14/2021

VAPOR: EPA Vapor Intrusion Database

Agency Version Date: 12/21/2020
Agency Update Frequency: Varies
Planned Next Contact: 06/15/2021
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 03/19/2021

BROWNFIELDS AEC - NC: Brownfield projects with Areas of Environmental Concern (AEC) boundaries.

Agency Version Date: 11/16/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/10/2021
Agency: North Carolina Center for Geographic Information and analysis
Agency Contact: (919) 754-6585
Most Recent Contact: 02/11/2021

COAL ASH - NC: Coal Ash Disposal Sites

Agency Version Date: 01/15/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/13/2021
Agency: North Carolina Center for Geographic Information and analysis
Agency Contact: (919) 754-6585
Most Recent Contact: 01/15/2021

DAYCARE - NC: Daycare facility sites

Agency Version Date: 11/10/2020
Agency Update Frequency: Varies
Planned Next Contact: 05/05/2021
Agency: Division of Child Development and Early Education
Agency Contact: (919) 662-4499
Most Recent Contact: 02/05/2021

DRYCLEANERS - NC: Drycleaner Sites

Agency Version Date: 12/18/2020
Agency Update Frequency: Varies
Planned Next Contact: 06/14/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8234
Most Recent Contact: 03/16/2021

DRYCLEANERS 2 - NC: Listing of dry cleaning facilities.

Agency Version Date: 02/22/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 05/19/2021
Agency: North Carolina Department of Environmental Quality
Agency Contact: N/R
Most Recent Contact: 02/22/2021

DRYCLEANERS CLEANUP - NC: Listing dry cleaning facilities under remediation.

Agency Version Date: 11/25/2020
Agency Update Frequency: Quarterly
Planned Next Contact: 05/19/2021
Agency: North Carolina Department of Environmental Quality
Agency Contact: N/R
Most Recent Contact: 02/22/2021

OTHER ASCERTAINABLE RECORDS (cont.)

HIST COAL ASH - NC: List of Coal Ash Disposal Sites that is no longer in current agency list.

Agency Version Date: 06/05/2017
Agency Update Frequency: Annually
Planned Next Contact: 06/04/2021
Agency: North Carolina Center for Geographic Information and analysis
Agency Contact: (919) 754-6585
Most Recent Contact: 03/08/2021

IMD - NC: List of sites from the Incident Management Database for Regional Underground Storage Tanks (RUST) and the Aboveground Incident Management Database

Agency Version Date: 12/15/2020
Agency Update Frequency: Varies
Planned Next Contact: 06/09/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8234
Most Recent Contact: 03/12/2021

MGP - NC: Locations of all Manufactured Gas Plants involved in the MGP Assessment and Remediation Program

Agency Version Date: 01/15/2021
Agency Update Frequency: No Update
Planned Next Contact: 04/13/2021
Agency: North Carolina Center for Geographic Information and analysis
Agency Contact: (919) 754-6585
Most Recent Contact: 01/15/2021

NFA - NC: No further action cleanup sites listing

Agency Version Date: 02/11/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 05/10/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8234
Most Recent Contact: 02/11/2021

NPDES - NC: Active General permits: NPDES and wastewater facility Location listing

Agency Version Date: 02/04/2021
Agency Update Frequency: Varies
Planned Next Contact: 05/03/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8234
Most Recent Contact: 02/04/2021

OLI - NC: Old Landfill inventory location information

Agency Version Date: 02/10/2021
Agency Update Frequency: Varies
Planned Next Contact: 05/10/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8200
Most Recent Contact: 02/10/2021

UIC - NC: Underground Injection Wells Database List

Agency Version Date: 01/19/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/16/2021
Agency: Department of Environment and Natural Resources
Agency Contact: (919) 707-8234
Most Recent Contact: 01/19/2021

SUBJECT PROPERTY ADDRESS:

Wicomico
Piney Grove Lane
Tarboro, NC 27886

SUBJECT PROPERTY COORDINATES:

Latitude(North):	35.906977 - 35°54'25.1"
Longitude(West):	-77.440534 - -77°26'25.9"
Universal Transverse Mercator:	Zone 18N
UTM X (Meters):	279761.45
UTM Y (Meters):	3976382.82

ELEVATION:

Elevation:	49.160 ft. above sea level

USGS TOPOGRAPHIC MAP:

Subject Property Map:	35077-H4 Speed, NC
Most Recent Revision:	2016

GEOHYDROLOGY DATA:

SUBJECT PROPERTY TOPOGRAPHY:

Topographic Gradient: South

DFIRM FLOOD ZONE:

	DFIRM Flood
Subject Property County:	Electronic Data:
EDGECOMBE	No available data.
Flood Plain Panel at Subject Property:	37065C
Additional Panels in search area:	No available data

FEMA FLOOD ZONE:

	FEMA Flood
Subject Property County:	Electronic Data:
EDGECOMBE	No available data.
Flood Plain Panel at Subject Property:	3700870095B
Additional Panels in search area:	3700870125B

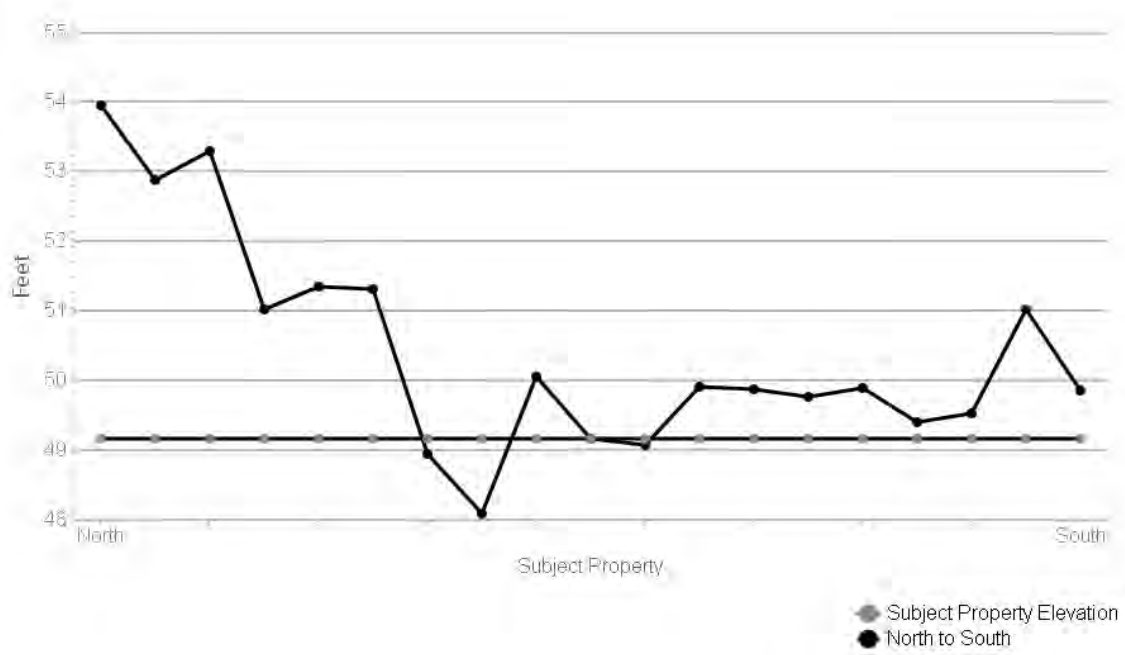
NATIONAL WETLAND INVENTORY:

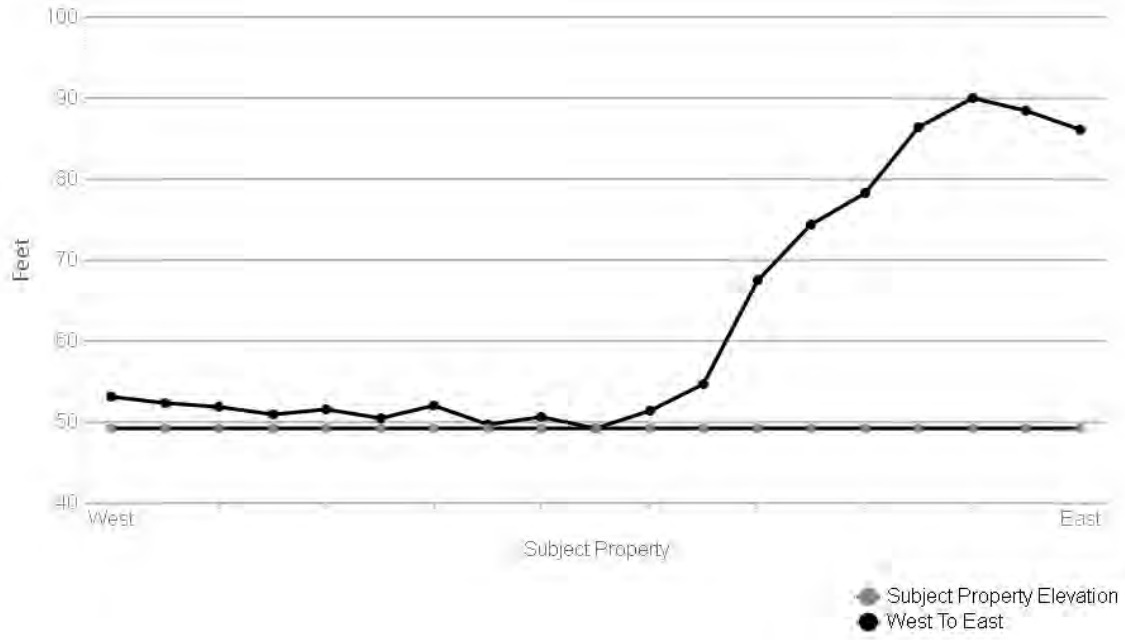
	NWI Electronic
NWI Quad at Subject Property:	Data Coverage:
Speed	Yes - refer to the Geological Findings Map

LITHOSTRATIGRAPHIC INFORMATION:

ROCK STRATIGRAPHIC UNIT:		**GEOLOGIC AGE IDENTIFICATION**
Era:	N/R	Category: 11 Tm Miocene
System:	N/R	
Series:	Miocene	
Code:	Tm	

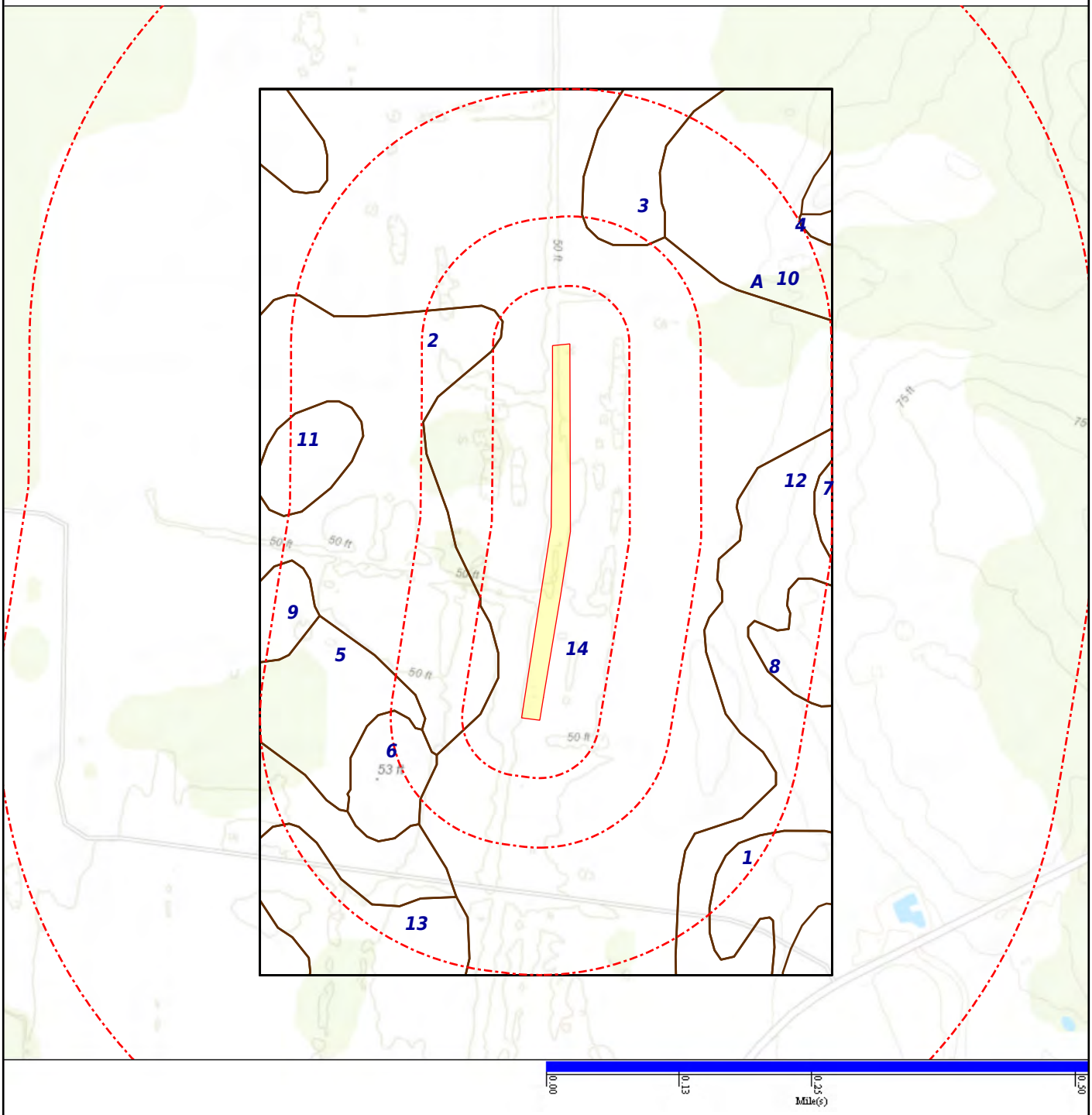
SURROUNDING ELEVATION PROFILES:





SUBJECT NAME: Wicomico
ADDRESS: Piney Grove Lane, Tarboro, NC, 27886
LAT/LONG: 35.906977 / -77.440534

PREPARED FOR: Freese and Nichols, Inc.
ORDER #: 52640
REPORT DATE: March 23, 2021



SOIL COMPOSITION IN GENERAL AREA OF SUBJECT PROPERTY:

Agency source: Soil Conservation Service, US Department of Agriculture

SOIL MAP ID 1

USDA Soil Name	Altavista,Series
USDA Soil Texture	Fine sandy loam
Hydrologic Soil Group	C
Soil Drainage Class	Moderately well drained
Hydric Classification	9
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-8	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5
2	8-15	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5
3	15-42	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil	4-14	3.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	15-42	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-6
4	42-80	Sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5

SOIL MAP ID 2

USDA Soil Name	Portsmouth,Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B/D
Soil Drainage Class	Very poorly drained
Hydric Classification	90
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-12	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and	4-42	3.5-5.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-12	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	3.5-5.5
2	12-19	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	3.5-5.5
3	19-23	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	3.5-5.5
4	23-35	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	4-14	3.5-5.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
4	23-35	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	test D 2487, in ASTM, 1984).	4-14	3.5-5.5
5	35-38	Sandy loam	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-5.5
6	38-48	Sand	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-141	5.6-7.8
7	48-80	Sand	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	14-141	5.6-7.8

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
7	48-80	Sand	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	test D 2487, in ASTM, 1984).	14-141	5.6-7.8

SOIL MAP ID 3

USDA Soil Name	Cape Fear,Series
USDA Soil Texture	Loam
Hydrologic Soil Group	C/D
Soil Drainage Class	Very poorly drained
Hydric Classification	95
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-16	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	4.5-6.5
2	16-45	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75	0.42-1.4	3.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	16-45	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.4	3.5-6
3	45-52	Sandy clay loam	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	3.5-6
4	52-80	Sand	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-141	3.5-6

SOIL MAP ID 4

USDA Soil Name	Altavista,Series
USDA Soil Texture	Fine sandy loam
Hydrologic Soil Group	C
Soil Drainage Class	Moderately well drained
Hydric Classification	9
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-8	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5
2	8-15	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5
3	15-42	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-6
4	42-80	Sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil	14-42	3.5-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
4	42-80	Sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5

SOIL MAP ID 5

USDA Soil Name	Roanoke,Series
USDA Soil Texture	Loam
Hydrologic Soil Group	C/D
Soil Drainage Class	Poorly drained
Hydric Classification	100
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-7	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-5.5
2	7-10	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and	4-14	3.5-5.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	7-10	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-5.5
3	10-43	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-4	3.5-5.5
4	43-52	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.4	3.5-5.5
5	52-80	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	0.42-14	3.5-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
5	52-80	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	test D 2487, in ASTM, 1984).	0.42-14	3.5-6.5

SOIL MAP ID 6

USDA Soil Name	Altavista,Series
USDA Soil Texture	Fine sandy loam
Hydrologic Soil Group	C
Soil Drainage Class	Moderately well drained
Hydric Classification	9
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-8	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5
2	8-15	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and	14-42	3.5-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	8-15	Fine sandy loam	Transportation Officials, 1984.	the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5
3	15-42	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-6
4	42-80	Sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5

SOIL MAP ID 7

USDA Soil Name	Autryville,Series
USDA Soil Texture	Loamy sand
Hydrologic Soil Group	A
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Moderate

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-9	Loamy sand	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	42-141	4.5-6.5
2	9-26	Loamy sand	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	42-141	4.5-6.5
3	26-46	Sandy loam	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-5.5
4	46-58	Loamy sand	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in	42-141	4.5-5.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
4	46-58	Loamy sand	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	organic matter (ASTM test D 2487, in ASTM, 1984).	42-141	4.5-5.5
5	58-85	Sandy clay loam	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-5.5

SOIL MAP ID 8

USDA Soil Name	Autryville,Series
USDA Soil Texture	Loamy sand
Hydrologic Soil Group	A
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Moderate

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-9	Loamy sand	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil	42-141	4.5-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-9	Loamy sand	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	42-141	4.5-6.5
2	9-26	Loamy sand	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	42-141	4.5-6.5
3	26-46	Sandy loam	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-5.5
4	46-58	Loamy sand	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	42-141	4.5-5.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
5	58-85	Sandy clay loam	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-5.5

SOIL MAP ID 9

USDA Soil Name	Altavista,Series
USDA Soil Texture	Fine sandy loam
Hydrologic Soil Group	C
Soil Drainage Class	Moderately well drained
Hydric Classification	9
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-8	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5
2	8-15	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75	14-42	3.5-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	8-15	Fine sandy loam	of State Highway and Transportation Officials, 1984.	mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5
3	15-42	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-6
4	42-80	Sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5

SOIL MAP ID 10

USDA Soil Name	Roanoke,Series
USDA Soil Texture	Loam
Hydrologic Soil Group	C/D
Soil Drainage Class	Poorly drained
Hydric Classification	100
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-7	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-5.5
2	7-10	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-5.5
3	10-43	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-4	3.5-5.5
4	43-52	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75	0.42-1.4	3.5-5.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
4	43-52	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.4	3.5-5.5
5	52-80	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-14	3.5-6.5

SOIL MAP ID 11

USDA Soil Name	Altavista,Series
USDA Soil Texture	Fine sandy loam
Hydrologic Soil Group	C
Soil Drainage Class	Moderately well drained
Hydric Classification	9
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-8	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	14-42	3.5-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-8	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	test D 2487, in ASTM, 1984).	14-42	3.5-6.5
2	8-15	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-6.5
3	15-42	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-6
4	42-80	Sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	14-42	3.5-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
4	42-80	Sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	test D 2487, in ASTM, 1984).	14-42	3.5-6.5

SOIL MAP ID 12

USDA Soil Name	Roanoke,Series
USDA Soil Texture	Loam
Hydrologic Soil Group	C/D
Soil Drainage Class	Poorly drained
Hydric Classification	100
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-7	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-5.5
2	7-10	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75	4-14	3.5-5.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	7-10	Loam	Transportation Officials, 1984.	mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-5.5
3	10-43	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-4	3.5-5.5
4	43-52	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.4	3.5-5.5
5	52-80	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM,	0.42-14	3.5-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
5	52-80	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	1984).	0.42-14	3.5-6.5

SOIL MAP ID 13

USDA Soil Name	Roanoke,Series
USDA Soil Texture	Loam
Hydrologic Soil Group	C/D
Soil Drainage Class	Poorly drained
Hydric Classification	100
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-7	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-5.5
2	7-10	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent	4-14	3.5-5.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	7-10	Loam	M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-5.5
3	10-43	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-4	3.5-5.5
4	43-52	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.4	3.5-5.5
5	52-80	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-14	3.5-6.5

SOIL MAP ID 14

USDA Soil Name	Ballahack,Series
USDA Soil Texture	Fine sandy loam
Hydrologic Soil Group	B/D
Soil Drainage Class	Very poorly drained
Hydric Classification	90
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-37	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	3.5-5.5
2	37-49	Sandy clay loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, sands with fines, Clayey Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-5.5
3	49-80	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-141	4.5-5.5

SOIL MAP ID A

USDA Soil Name	Roanoke,Series
USDA Soil Texture	Fine sandy loam
Hydrologic Soil Group	D
Soil Drainage Class	Poorly drained
Hydric Classification	93
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-7	Fine sandy loam	No data	No data	14.1143-42.343	3.6-5.5
2	7-12	No data	No data	No data	0-141.1433	3.6-5.5
3	12-50	No data	No data	No data	0-1.4114	3.6-5.5
4	50-72	Sand	No data	No data	0.4234-141.1433	3.6-6.5

WATER AGENCY DATA:

WATER AGENCY SEARCH DISTANCES:

DATABASE:	SEARCH DISTANCE (MILES):
NWIS	1.000
PWS	1.000
WELLS - NC	1.000
WELLS DWR - NC	1.000
WELLS MON - NC	1.000

DISTANCE TO NEAREST:	DISTANCE:
NWIS	N/A
PWS	N/A
WELLS - NC	N/A
WELLS DWR - NC	N/A
WELLS MON - NC	N/A

FEDERAL WATER AGENCY DATA SUMMARY:

MAP ID:	WELL ID:	LOCATION FROM SP:
No Wells Found	N/R	N/R

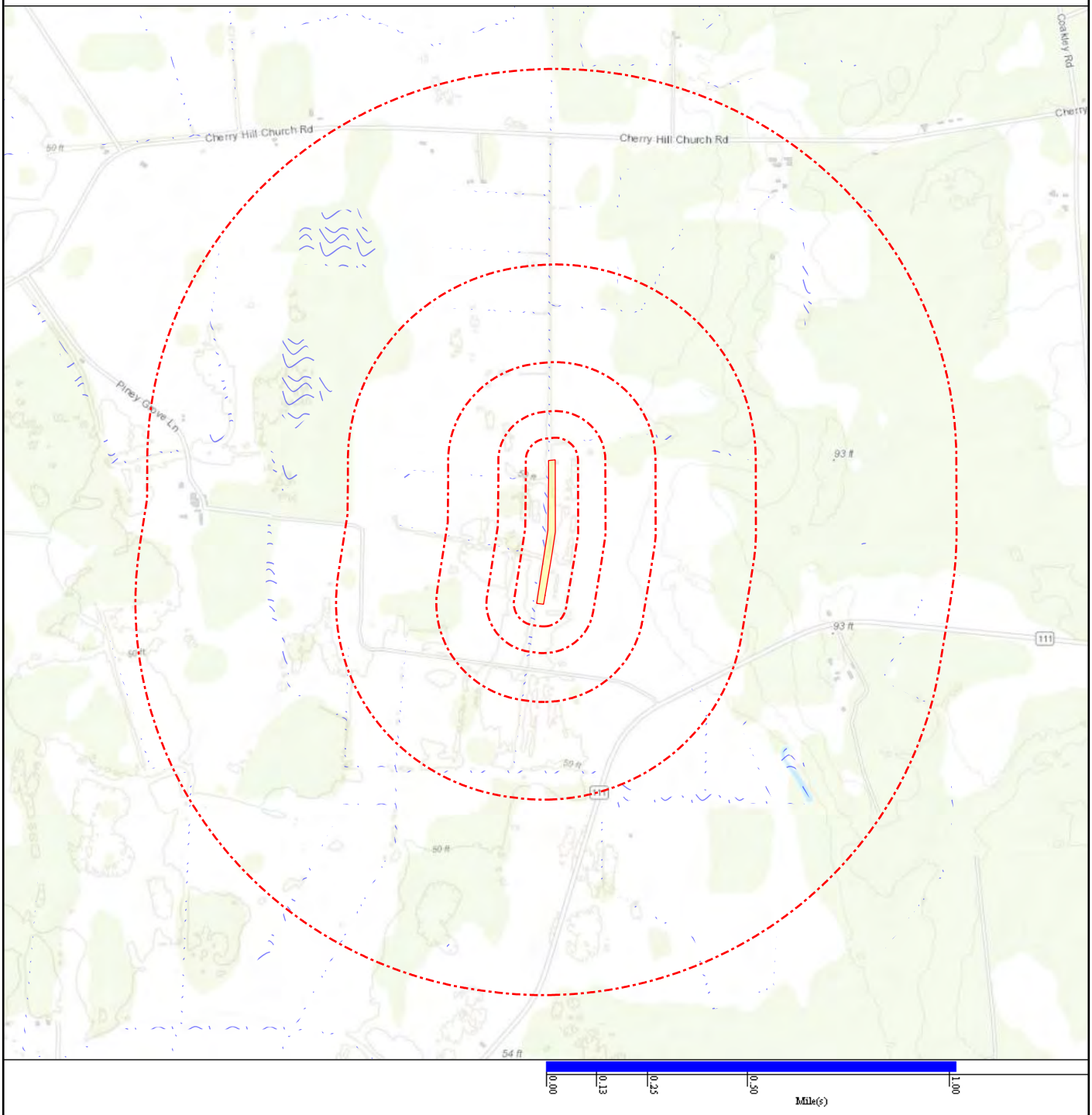
Note: PWS System location is not always the same as well location.

STATE/LOCAL WATER AGENCY DATA SUMMARY:

MAP ID:	WELL ID:	LOCATION FROM SP:
No Wells Found	N/R	N/R

SUBJECT NAME: Wicomico
ADDRESS: Piney Grove Lane, Tarboro, NC, 27886
LAT/LONG: 35.906977 / -77.440534

PREPARED FOR: Freese and Nichols, Inc.
ORDER #: 52640
REPORT DATE: March 23, 2021



RADON DATA:

STATE SOURCE: No Available Data

FEDERAL AREA RADON INFORMATION FOR: 27886

NUMBER OF SAMPLE SITES: 2

Area:	Average Activity:	% <4 pCi/L:	% 4-20 pCi/L:	% >20 pCi/L:
first floor	0.3 pCi/L	100%	0%	0%
unknown	0.3 pCi/L	100%	0%	0%

HIST PWS ENF
Historical Public Water Supply locations with Enforcement Violations
Environmental Protection Agency
(800) 426-4791
List of Safe Drinking Water Information Systems (SDWIS) with enforcement violations that are no longer in current agency list.

NWIS
National Water Information Systems
United States Geological Society
(703) 648-5953
Information on all water resources for the United States. This database contains all current and historical data for the nation.

PWS
Public Water Supply
Environmental Protection Agency
(800) 426-4791
Safe drinking water information Systems

PWS ENF
Public Water Supply locations with Enforcement Violations
Environmental Protection Agency
(800) 426-4791
Safe drinking water information Systems with enforcememnt violations

WELLS - NC
PWS Wells & surface water intakes
Department of Environmental Quality (NCDEQ)
(877) 623-6748
PWS Wells & surface water intakes

WELLS DWR - NC
Active and inactive DWR wells
Department of Environmental Quality (NCDEQ)
(877) 623-6748
Active and inactive DWR wells

WELLS MON - NC
GW Monitoring Wells
Department of Environmental Quality (NCDEQ)
(877) 623-6748
Groundwater Monitoring Well Permits

FLOOD Q3
Flood data
Environmental Protection Agency
(202) 566-1667
Q3 Flood Data

HYDROLOGIC UNIT
Hydrologic Unit Maps
USGS
The United States Geological Survey created a hierarchical system of hydrologic units originally called regions, sub-regions, accounting units, and cataloging units. Each unit was assigned a unique Hydrologic Unit Code (HUC). As first implemented the system had 21 regions, 221 subregions, 378 accounting units, and 2,264 cataloging units. Over time the system was changed and expanded. As of 2010 there are six levels in the hierarchy, represented by hydrologic unit codes from 2 to 12 digits long, called regions, subregions, basins, subbasins, watersheds, and subwatersheds. The table below describes the system's hydrologic unit levels and their characteristics, along with example names and codes.

WETLANDS NWI
National Wetland Inventory
U.S. Fish and Wildlife Service
(703) 358-2171
Wetland Inventory for the United States

SSURGO
Detailed Soil Data Map
Natural Resources Conservation Service: U.S. Department of Agriculture
(202) 690-4985
Detailed Soil Data Map

STATSGO & MUI
General Soil Data Map
Natural Resources Conservation Service: U.S. Department of Agriculture
(202) 690-4985
General Soil Data Map

USGS GEOLOGIC AGE
USGS Digital Data Series DDS
Natural Resources Conservation Service: U.S. Department of Agriculture
(202) 690-4985
USGS Digital Data Series DDS: Geologic Age and Rock Stratigraphic Unit

RADON
National Radon Database
USGS
703-605-6008
A study of the EPA/State Residential Radon Survey and the National Residential Radon Survey.

AIRPORT FACILITIES
Airport landing facilities
Federal Aviation Administration
(866) 835-5322
Airport landing facilities

BASINS
Better Assessment Science Integrating point & Non-point Sources
U.S. Environmental Protection Agency
855-246-3642
Integrated geographical information system national watershed data and environmental assessment known as Better Assessment Science Integrating point & Non-point Sources

DIGITAL OBSTACLE
Obstacles of interest to aviation users
Federal Aviation Administration
855-379-6518
The Digital Obstacle File describes all known obstacles of interest to aviation users in the U.S. with limited coverage of the Pacific the Caribbean Canada and Mexico. The obstacles are assigned unique numerical identifiers; accuracy codes and listed in order of ascending latitude within each state or area by FAA Region.

EPICENTERS
National Geographical Data Center
National Geographical Data Center
303-497-6826
List of recent and historic earthquakes and information.

FLOOD DFIRM
National Flood Hazard Layer Database
Federal Emergency Management Agency
The National Flood Hazard Layer Database (NFHL) is a computer database that contains the flood hazard map information from FEMAs Flood Map Modernization program. These map data are from Digital Flood Insurance Rate Map (DFIRM) databases and Letters of Map Revision.

Wicomico Buffer Mitigation Site
Categorical Exclusion

SECTION 106 CORRESPONDENCE

FREESE AND NICHOLS
Innovative approaches
Practical results
Outstanding service
531 North Liberty Street • Winston-Salem, North Carolina 27101 • 336-790-6744
www.freese.com

April 24, 2020

Renee Gledhill-Earley
State Historic Preservation Office
4617 Mail Service Center
Raleigh, NC 27699-4617

Subject: Middendorf Springs Mitigation Site
Anson County, North Carolina

Dear Ms. Gledhill-Earley,

Freese and Nichols, Inc. requests review and comment on any possible issues that may emerge with respect to archaeological or cultural resources associated with the Middendorf Springs Mitigation Site. A project review narrative, Site Map, Topographic Map, Aerial Photograph and results from the NC Historic Preservation Office database are attached.

The Middendorf Springs Mitigation Site is being developed to provide in-kind mitigation for unavoidable stream channel impacts. This project will include stream restoration to unnamed tributaries of South Fork Jones Creek and restoration and rehabilitation of degraded riparian wetlands located adjacent to the unnamed tributaries. The site has been disturbed due to agricultural row crop use. Historically the site has been in agricultural production (crops and timber) for the last 70 years. Furthermore, no archaeological artifacts have been observed or noted during preliminary surveys for restoration purposes.

We ask that you review this site based on the attached information to determine the presence of any historic properties.

We thank you in advance for your timely response and cooperation. Please feel free to contact us with any questions that you may have concernting the project.

Sincerely,
Freese and Nichols, Inc.

Jason Steele, PWS
Environmental Scientist

Enclosures:
1) Project Review Package

North Carolina Department of Natural and Cultural Resources

State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper | Secretary D. Reid Wilson

May 11, 2021

Jason Steele, PhD, PWS
Freese and Nichols, Inc.
531 North Liberty Street
Winston-Salem, NC 27101

jason.steele@freese.com

Re: Wicomico Buffer mitigation site, 6199 NC 111, Tarboro, Edgecombe County, ER 21-1000

Dear Dr. Steele:

Thank you for your email of April 14, 2021, regarding the above-referenced undertaking. We have reviewed the submittal and offer the following comments.

We have conducted a review of the project and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the project as proposed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-814-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

Renee Gledhill-Earley

for Ramona Bartos, Deputy
State Historic Preservation Officer

Wicomico Buffer Mitigation Site
Categorical Exclusion

UNIFORM ACT DOCUMENTATION

FREESE AND NICHOLS
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531 N. Liberty St. + Winston-Salem, North Carolina 27101 + 336-790-6744 + FAX 817-735-7491 www.freese.com

June 10, 2021

Ben Mayo
Owner
Mayo Farms of Tarboro, Inc.
P O Box 160
Tarboro, NC 27886

Dear Mr. Mayo:

The purpose of this letter is to notify you that Freese and Nichols, Inc., in offering to purchase an easement on your property in Edgecombe County, North Carolina, does not have the power to acquire it by eminent domain. Also, Freese and Nichol's offer to purchase an easement on your property is based on what we believe to be its fair market value.

If you have any questions, please feel free to call me at 919-418-8430.

Sincerely,

Ian Jewell
Project Manager

Wicomico Buffer Mitigation Site
Categorical Exclusion

USFWS CORRESPONDENCE

Jason Steele

From: Raleigh, FW4 <raleigh@fws.gov>
Sent: Wednesday, April 14, 2021 10:16
To: Jason Steele
Subject: Automatic reply: [EXTERNAL] Emailing: Wicomico Buffer Mitigation Site Coordination Package

Thank you for submitting your online project package. We will review your package within 30 days of receipt. If you have submitted an online **project review request letter**, expect our response within 30 days. If you have submitted an online **project review certification letter**, you will typically not receive a response from us since the certification letter is our official response. However, if we have additional questions or we do not concur with your determinations, we will contact you during the review period.

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Practical results
Outstanding service

531 North Liberty Street + Winston-Salem, North Carolina 27101 www.freese.com

April 14, 2021

Gary Jordan
US Fish and Wildlife Service
Raleigh Field Office
PO Box 33726
Raleigh, NC 27636
Via email: raleigh@fws.gov

Re: Wicomico Buffer Mitigation Site, Edgecombe County, North Carolina
Ref: USFWS Consultation Code 04EN2000-2021-SLI-0913

Dear Mr. Jordan,

Freese and Nichols, Inc. requests review and comment on any possible issues that might emerge with respect to threatened, endangered and candidate species, migratory birds, or other trust resources with a riparian buffer restoration project on the Wicomico Buffer Mitigation Site located in Edgecombe County, NC. A USGS Topographic Map and Overview Map showing the approximate project are enclosed. The site is depicted on the attached project location map (**Figure 1**), quadrangle map (**Figure 2**) and aerial photograph (**Figure 3**).

The Wicomico Buffer Mitigation Site is being developed to provide riparian buffer mitigation in the Tar Pamlico River Basin. The project includes the restoration and enhancement of riparian buffer along an unnamed tributary of the Tar River. Currently, the buffer area is extensively impacted by row crop agriculture, lack of native woody vegetation, nutrient loading from fertilization practices, and upland erosion and sedimentation. This riparian restoration project will improve water quality by creating a functioning native vegetation buffer that intercepts and filters agricultural runoff. The area surrounding the stream proposed for buffer mitigation are row crop agriculture. By reducing and filtering the runoff from the site, restoring a forest to maintained riparian areas, the project will reduce nutrient and sediment inputs to UT Tar River and ultimately the Tar River. The restored floodplain area will filter sediment during rainfall events, create shading to minimize thermal pollution, and provide a wildlife corridor to connect nearby forested areas. Invasive vegetation will be treated within the project area as needed and the proposed native vegetation will provide cover and food for wildlife.

The enclosed project review package provides the information about the species, critical habitat, and bald eagles considered in our review, and the species conclusions table included in the package identifies our determinations for the resources that may be affected by the project. All applicable erosion and sediment control and stormwater regulations will be adhered to for the entirety of the project.

If we have not heard from you in 30 days, we will assume that you concur with the Species Conclusion Table, do not have any comments regarding any associated laws, and that you do not have any information relevant to this project at the current time.

We thank you in advance for your timely response and cooperation. Please feel free to contact us with any questions that you may have concerning the extent of site disturbance associated with this project.

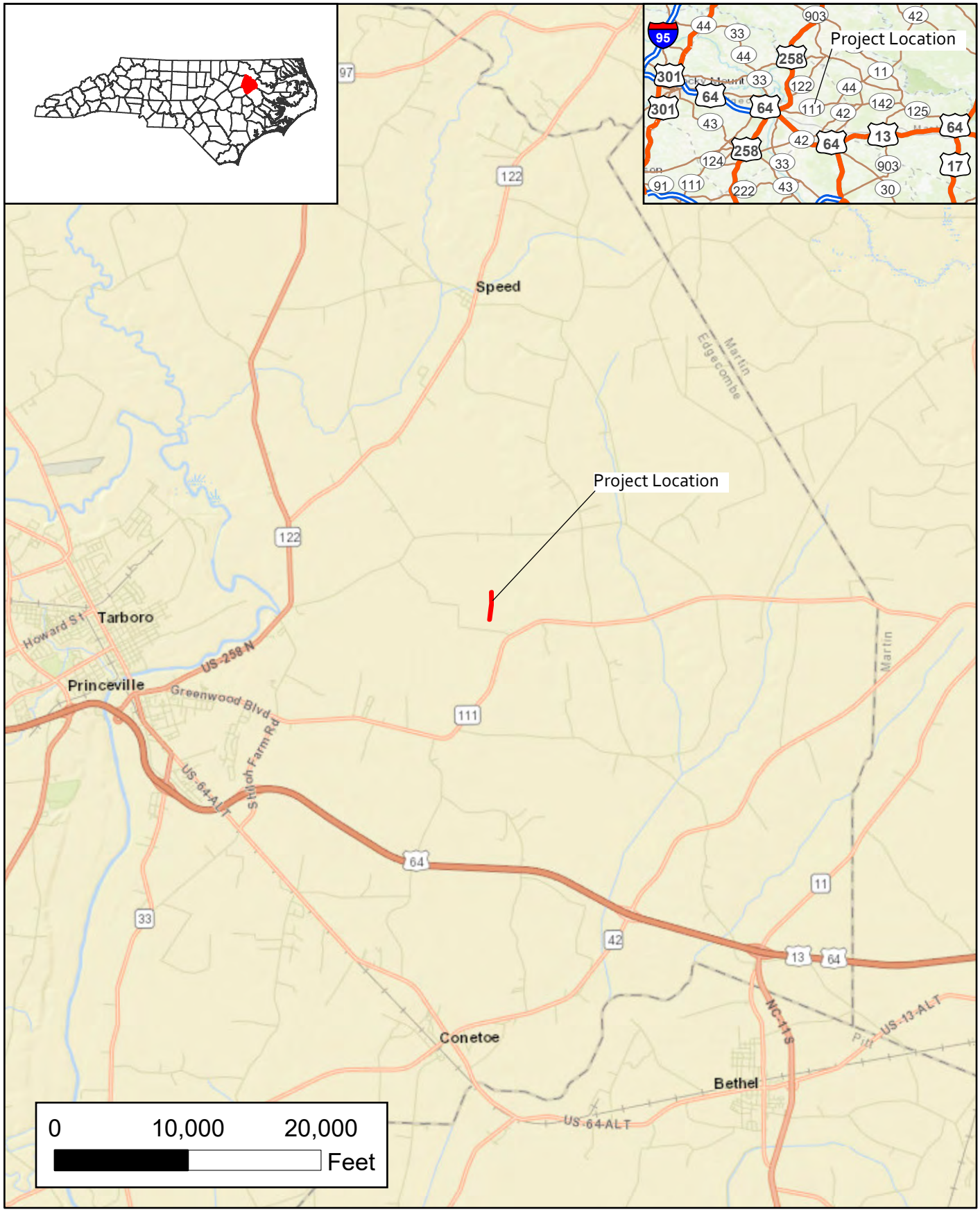
Sincerely,

Freese and Nichols, Inc.

Jason Steele, PhD, PWS
Senior Environmental Scientist

Enclosures:

1) Figures
    a. Figure 1 – Project Location
    b. Figure 2 – Topographic Map
    c. Figure 3 – Aerial Photograph
2) USFWS IPaC Official Species List
3) NC Natural Heritage Program Project Review Species List
4) USFWS IPaC Species Conclusion Table
5) Site Photographs



N

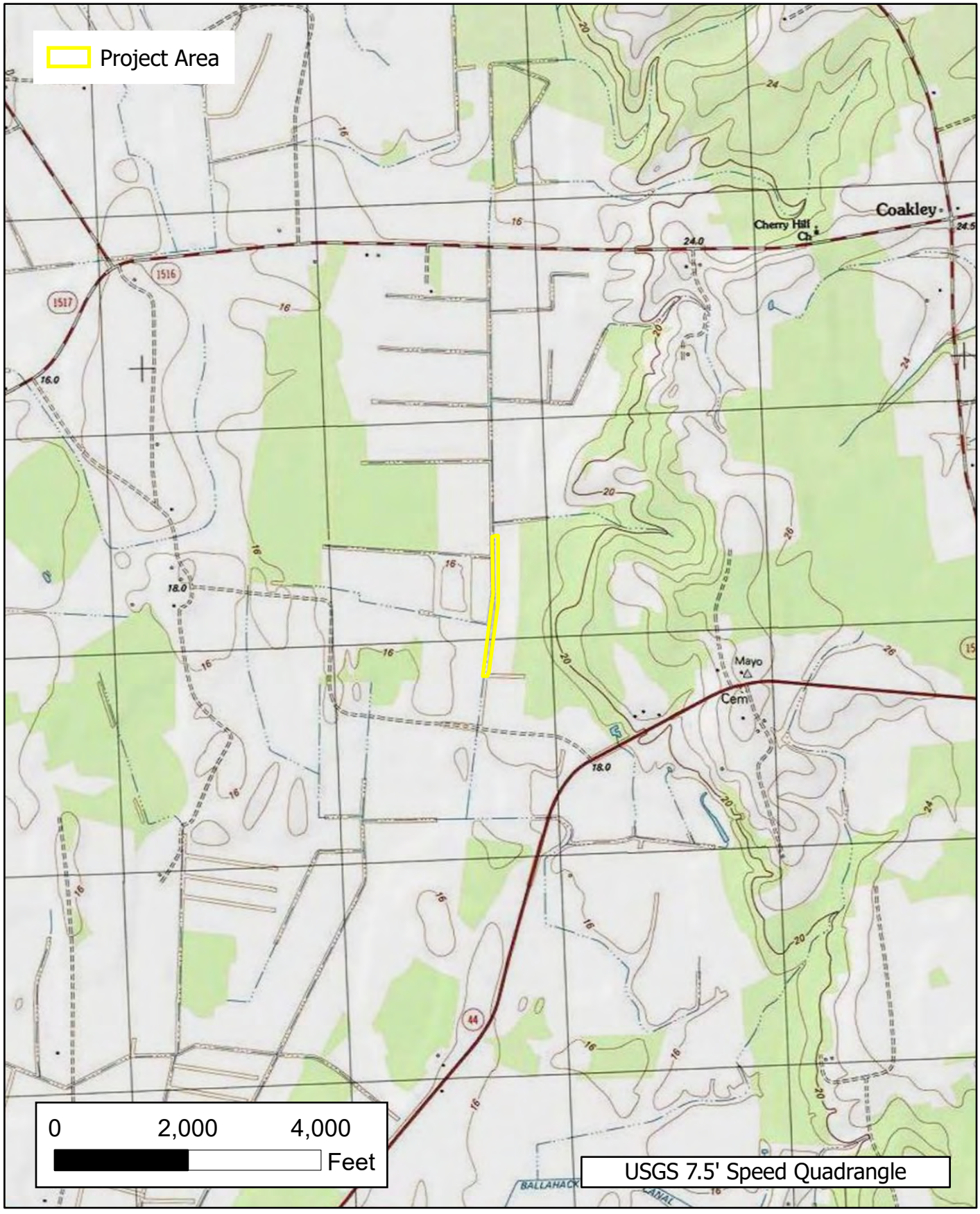
PROJECT LOCATION

Wicomico Buffer Mitigation Site
Edgecombe County, NC

FIGURE 1

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744



N

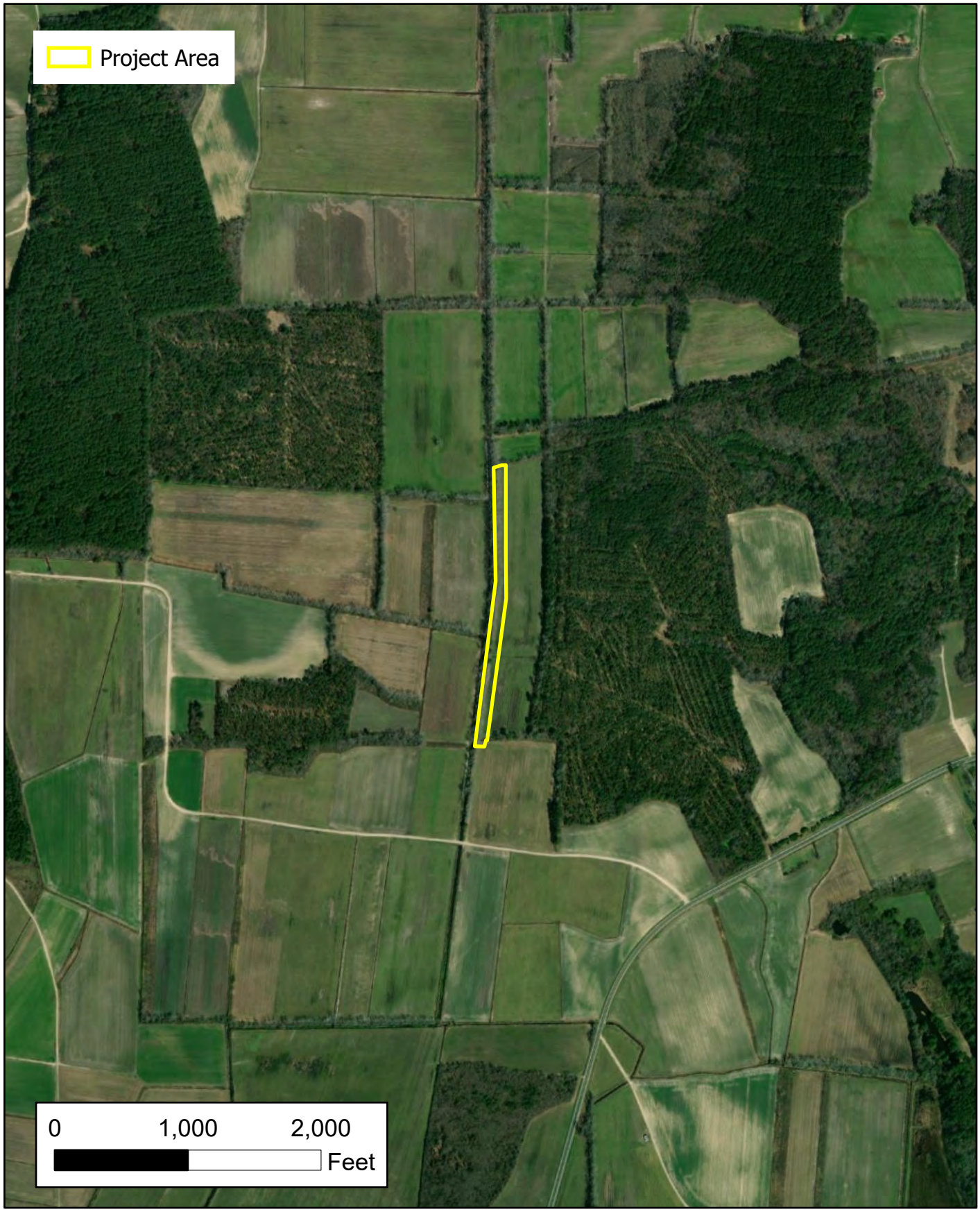
PROJECT AREA AND TOPOGRAPHY

Wicomico Buffer Mitigation Site
Edgecombe County, NC

FIGURE 2

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744



N

PROJECT AREA AND AERIAL PHOTOGRAPH

Wicomico Buffer Mitigation Site
Edgecombe County, NC

FIGURE 3

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744

Photograph 1. Wicomico buffer area, looking north. Approximate buffer area eastern boundary indicated by red arrow.

Photograph 2. Wicomico buffer area, looking south. Approximate buffer area boundaries indicated by red arrows.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Raleigh Field Office
P.O. Box 33726
Raleigh, NC 27636-3726

Date: June 30, 2021

Self-Certification Letter

Project Name Wicomico Buffer Mitigation Site

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Raleigh Ecological Services online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the project named above in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA), and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c, 54 Stat. 250), as amended (Eagle Act). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

The species conclusions table in the enclosed project review package summarizes your ESA and Eagle Act conclusions. Based on your analysis, mark all the determinations that apply:

- [x] "no effect" determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
- [ ] "may affect, not likely to adversely affect" determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
- [ ] "may affect, likely to adversely affect" determination for the Northern long-eared bat (Myotis septentrionalis) and relying on the findings of the January 5, 2016, Programmatic Biological Opinion for the Final 4(d) Rule on the Northern long-eared bat;
- [x] "no Eagle Act permit required" determinations for eagles.

We certify that use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with the “no effect” or “not likely to adversely affect” determinations for proposed and listed species and proposed and designated critical habitat; the “may affect” determination for Northern long-eared bat; and/or the “no Eagle Act permit required” determinations for eagles. Additional coordination with this office is not needed. Candidate species are not legally protected pursuant to the ESA. However, the Service encourages consideration of these species by avoiding adverse impacts to them. Please contact this office for additional coordination if your project action area contains candidate species. Should project plans change or if additional information on the distribution of proposed or listed species, proposed or designated critical habitat, or bald eagles becomes available, this determination may be reconsidered. This certification letter is valid for 1 year. Information about the online project review process including instructions, species information, and other information regarding project reviews within North Carolina is available at our website http://www.fws.gov/raleigh/pp.html. If you have any questions, you can write to us at Raleigh@fws.gov or please contact Leigh Mann of this office at 919-856-4520, ext. 10.

Sincerely,

/s/Pete Benjamin

Pete Benjamin
Field Supervisor
Raleigh Ecological Services

Enclosures - project review package

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Raleigh Ecological Services Field Office
Post Office Box 33726
Raleigh, NC 27636-3726
Phone: (919) 856-4520 Fax: (919) 856-4556

In Reply Refer To: March 29, 2021
Consultation Code: 04EN2000-2021-SLI-0913
Event Code: 04EN2000-2021-E-02007
Project Name: Wicomico Buffer Mitigation Site

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The species list generated pursuant to the information you provided identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

Section 7 of the Act requires that all federal agencies (or their designated non-federal representative), in consultation with the Service, insure that any action federally authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any federally-listed endangered or threatened species. A biological assessment or evaluation may be prepared to fulfill that requirement and in determining whether additional consultation with the Service is necessary. In addition to the federally-protected species list, information on the species' life histories and habitats and information on completing a biological assessment or

evaluation and can be found on our web page at http://www.fws.gov/raleigh. Please check the web site often for updated information or changes

If your project contains suitable habitat for any of the federally-listed species known to be present within the county where your project occurs, the proposed action has the potential to adversely affect those species. As such, we recommend that surveys be conducted to determine the species' presence or absence within the project area. The use of North Carolina Natural Heritage program data should not be substituted for actual field surveys.

If you determine that the proposed action may affect (i.e., likely to adversely affect or not likely to adversely affect) a federally-protected species, you should notify this office with your determination, the results of your surveys, survey methodologies, and an analysis of the effects of the action on listed species, including consideration of direct, indirect, and cumulative effects, before conducting any activities that might affect the species. If you determine that the proposed action will have no effect (i.e., no beneficial or adverse, direct or indirect effect) on federally listed species, then you are not required to contact our office for concurrence (unless an Environmental Impact Statement is prepared). However, you should maintain a complete record of the assessment, including steps leading to your determination of effect, the qualified personnel conducting the assessment, habitat conditions, site photographs, and any other related articles.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

Not all Threatened and Endangered Species that occur in North Carolina are subject to section 7 consultation with the U.S Fish and Wildlife Service. Atlantic and shortnose sturgeon, sea turtles,when in the water, and certain marine mammals are under purview of the National Marine Fisheries Service. If your project occurs in marine, estuarine, or coastal river systems you should also contact the National Marine Fisheries Service, http://www.nmfs.noaa.gov/

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. If you have any questions or comments, please contact John Ellis of this office at john_ellis@fws.gov.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Raleigh Ecological Services Field Office
Post Office Box 33726
Raleigh, NC 27636-3726
(919) 856-4520

Project Summary

Consultation Code: 04EN2000-2021-SLI-0913
Event Code: 04EN2000-2021-E-02007
Project Name: Wicomico Buffer Mitigation Site
Project Type: FORESTRY
Project Description: Compensatory stream buffer mitigation site, approximately 4 acres in size. Work will include targeted grading to create diffuse flow, and planting of native woody species. No stream work will occur.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@35.9067887,-77.4403503367167,14z

Counties: Edgecombe County, North Carolina

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Amphibians

NAME	STATUS
Neuse River Waterdog *Necturus lewisi* There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6772	Proposed Threatened

Fishes

NAME	STATUS
Carolina Madtom *Noturus furiosus* There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/528	Proposed Endangered

Clams

NAME	STATUS
Atlantic Pigtoe *Fusconaia masoni* There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5164	Proposed Threatened
Tar River Spinymussel *Elliptio steinstansana* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1392	Endangered
Yellow Lance *Elliptio lanceolata* There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4511	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

NC DEPARTMENT OF
NATURAL AND CULTURAL RESOURCES

Roy Cooper, **Governor**
D. Reid Wilson, **Secretary**
Walter Clark
Director, Division of Land and Water Stewardship

NCNHDE-14323

March 29, 2021

Jason Steele
Freese and Nichols, Inc.
531 North Liberty St
Winston-Salem, NC 27101
RE: Wicomico Buffer Mitigation Project

Dear Jason Steele:

The North Carolina Natural Heritage Program (NCNHP) appreciates the opportunity to provide information about natural heritage resources for the project referenced above.

A query of the NCNHP database, based on the project area mapped with your request, indicates that there are no records for rare species, important natural communities, natural areas, and/or conservation/managed areas within the proposed project boundary, or within a one-mile radius of the project boundary.

Please note that although there may be no documentation of natural heritage elements within or near the project boundary, it does not imply or confirm their absence; the area may not have been surveyed. The results of this query should not be substituted for field surveys where suitable habitat exists. In the event that rare species are found within the project area, please contact the NCNHP so that we may update our records.

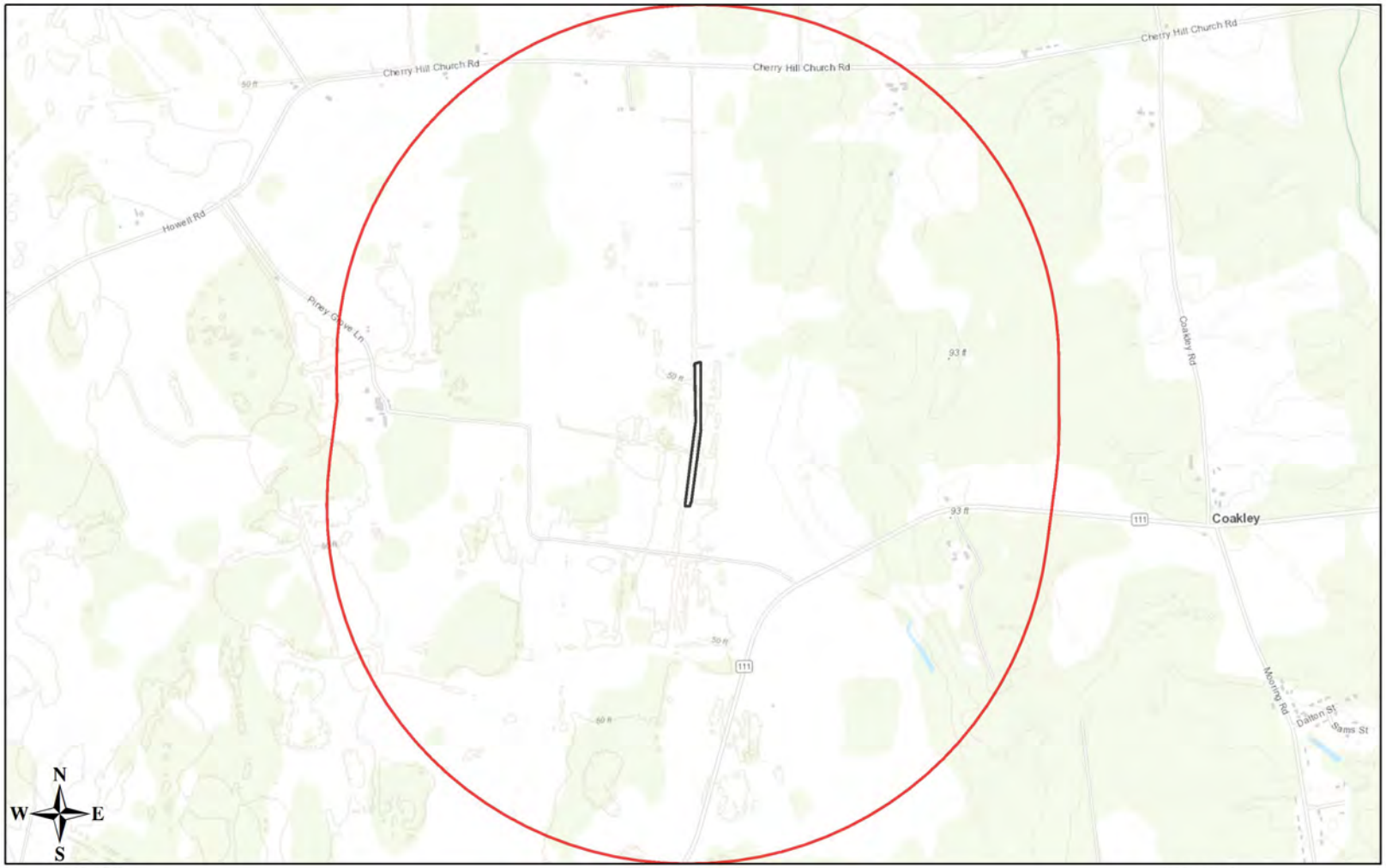
Please also note that natural heritage element data are maintained for the purposes of conservation planning, project review, and scientific research, and are not intended for use as the primary criteria for regulatory decisions. Information provided by the NCNHP database may not be published without prior written notification to the NCNHP, and the NCNHP must be credited as an information source in these publications. Maps of NCNHP data may also not be redistributed without permission.

If you have questions regarding the information provided in this letter or need additional assistance, please contact Rodney A. Butler at rodney.butler@ncdcr.gov or 919.707.8603.

Sincerely,

NC Natural Heritage Program

NCNHDE-14323: Wicomico Buffer Mitigation Project



March 29, 2021

Project Boundary

Buffered Project Boundary

1:24,333

0 0.2 0.4 0.8 mi

0 0.325 0.65 1.3 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Species Conclusions Table

Project Name: Wicomico Buffer Mitigation Site (Consultation Code 04EN2000-2021-SLI-0913)

Date: June 30, 2021

Species / Resource Name	Conclusion	ESA Section 7 / Eagle Act Determination	Notes / Documentation
Neuse River Waterdog *Necturus lewisii*	No suitable habitat present	No effect	The Neuse River waterdog specific habitat characteristics include low to moderate gradient streams and low current velocity. It is a fully aquatic salamander, never leaving the water. It lacks lungs, getting oxygen from the water via external gills and needs clean, flowing water with high dissolved oxygen concentrations. The species dwells in streams wider than 15 meters but has been found in smaller creeks. Project area is located in the riparian area of an unnamed tributary Tar River and will not occur within the adjacent stream channel. The project will only involve planting in the riparian area of the stream with minor grading of two small locations to create diffuse flow patterns through the easement. There will be no disturbance of the stream channel, and appropriate erosion and sediment control measures will be used in all locations where land disturbance occurs. No suitable habitat is present within the project area, the project is entirely within upland areas (i.e., no in-stream component). The UT Tar River that flows west of the project area is a ditched stream with high sediment load due to upstream agricultural activities and does not provide the habitat required for the target species.

Species / Resource Name	Conclusion	ESA Section 7 / Eagle Act Determination	Notes / Documentation
Carolina madtom *Noturus furiosus*	No suitable habitat present	No effect	The species occurs in riffles, runs, and pools in medium to large streams and rivers. Ideally, it inhabits fresh waters with continuous, year-round flow and moderate gradient in both the Piedmont and Coastal Plain physiographic regions. Optimal substrate for the Carolina madtom is predominantly silt-free, stable, gravel and cobble bottom habitat, and it must have cover for nest sites, including under rocks, bark, relic mussel shells, and even cans and bottles. Project area is located in the riparian area of an unnamed tributary Tar River and will not occur within the adjacent stream channel. The project will only involve planting in the riparian area of the stream with minor grading of two small locations to create diffuse flow patterns through the easement. There will be no disturbance of the stream channel, and appropriate erosion and sediment control measures will be used in all locations where land disturbance occurs. No suitable habitat is present within the project area, the project is entirely within upland areas (i.e., no in-stream component). The UT Tar River that flows west of the project area is a ditched stream with high sediment load due to upstream agricultural activities and does not provide the habitat required for the target species.

Atlantic pigtoe *Fusconaia masoni*	No suitable habitat present	No effect	The preferred habitat of the Atlantic pigtoe is coarse sand and gravel, and rarely in silt and detritus. Historically, the best populations existed in small creeks to larger rivers with excellent water quality, where flows were sufficient to maintain clean, silt-free substrates. Project area is located in the riparian area of an unnamed tributary Tar River and will not occur within the adjacent stream channel. The project will only involve planting in the riparian area of the stream with minor grading of two small locations to create diffuse flow patterns through the easement. There will be no disturbance of the stream channel, and appropriate erosion and sediment control measures will be used in all locations where land disturbance occurs. No suitable habitat is present within the project area, the project is entirely within upland areas (i.e., no in-stream component). The UT Tar River that flows west of the project area is a ditched stream with high sediment load due to upstream agricultural activities and does not provide the habitat required for the target species.
Tar River spinymussel *Elliptio steinstansana*	No suitable habitat present	No effect	The Tar spinymussel is endemic to the Tar and Neuse River drainage basins in North Carolina. This mussel requires a stream with fast flowing, well-oxygenated, circumneutral pH water. The bottom should be composed of unconsolidated gravel and coarse sand. The water needs to be relatively silt-free, and stream banks should be stable, typically with many roots from adjacent riparian trees and shrubs.

			Project area is located in the riparian area of an unnamed tributary Tar River and will not occur within the adjacent stream channel. The project will only involve planting in the riparian area of the stream with minor grading of two small locations to create diffuse flow patterns through the easement. There will be no disturbance of the stream channel, and appropriate erosion and sediment control measures will be used in all locations where land disturbance occurs. No suitable habitat is present within the project area, the project is entirely within upland areas (i.e., no in-stream component). The UT Tar River that flows west of the project area is a ditched stream with high sediment load due to upstream agricultural activities and does not provide the habitat required for the target species.
Yellow lance *Elliptio lanceolata*	No suitable habitat present	No effect	The yellow lance is a sand-loving species often found buried deep in clean, coarse to medium sand, although it can sometimes be found in gravel substrates. Yellow lances often are moved with shifting sand and eventually settle in sand at the downstream end of stable sand and gravel bars. This species depends on clean, moderate flowing water with high dissolved oxygen. This species is found in medium-sized rivers to smaller streams. Project area is located in the riparian area of an unnamed tributary Tar River and will not occur within the adjacent stream channel. The project will only involve planting in the riparian area of the stream with minor grading of two small locations to create diffuse flow patterns through the easement. There will be no disturbance of the stream channel, and appropriate erosion and

			sediment control measures will be used in all locations where land disturbance occurs. No suitable habitat is present within the project area, the project is entirely within upland areas (i.e., no in-stream component). The UT Tar River that flows west of the project area is a ditched stream with high sediment load due to upstream agricultural activities and does not provide the habitat required for the target species.
Critical habitat	No critical habitat present		
Northern long-eared bat	No suitable habitat present (no trees)	No effect	No trees are present in project area and no tree cutting will occur.
Bald Eagle (*Haliaeetus leucocephalus*)	Unlikely to disturb nesting bald eagles	No Eagle Act Permit Required	

Acknowledgement: I agree that the above information about my proposed project is true. I used all of the provided resources to make an informed decision about impacts in the immediate and surrounding areas.

Jason Steele, PhD, PWS
Senior Environmental Scientist

Signature /Title

June 30, 2021

Date

Wicomico Buffer Mitigation Site Categorical Exclusion

FARMLAND PROTECTION POLICY ACT DOCUMENTATION

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www.freese.com

April 14, 2021

Kristin May
Acting State Soil Scientist
Natural Resources Conservation Service
4407 Bland Rd, Suite 117
Raleigh, NC 27609
Via email: kristin.may@usda.gov

Subject: Wicomico Buffer Mitigation Site
Edgecombe County, North Carolina

Dear Ms. May,

Freese and Nichols, Inc. requests review and a completed AD-1006 form for a NC Department of Mitigation Services riparian buffer mitigation project (Wicomico Buffer Mitigation Site) located in Edgecombe County, NC. A zipped shapefile of the project boundary is attached for your review.

The Wicomico Buffer Mitigation Site is being developed to provide riparian buffer mitigation in the Tar Pamlico River Basin. The project includes the restoration and enhancement of riparian buffer along an unnamed tributary of the Tar River. Currently, the buffer area is extensively impacted by row crop agriculture, lack of native woody vegetation, nutrient loading from fertilization practices, and upland erosion and sedimentation. This riparian restoration project will improve water quality by creating a functioning native vegetation buffer that intercepts and filters agricultural runoff. The restored floodplain area will filter sediment during rainfall events, create shading to minimize thermal pollution, and provide a wildlife corridor to connect nearby forested areas. Invasive vegetation will be treated within the project area as needed and the proposed native vegetation will provide cover and food for wildlife. Historically the site has been in agricultural production (crops and timber) for the last 70 years.

We thank you in advance for your timely response and cooperation. Please feel free to contact us with any questions that you may have concernting the project.

Sincerely,
Freese and Nichols, Inc.

Jason Steele, PhD, PWS
Environmental Scientist

United States Department of Agriculture

Natural Resources
Conservation Service

North Carolina
State Office

4407 Bland Rd.
Suite 117
Raleigh
North Carolina 27609
Voice (704) 680-3541
Fax (844) 325-2156

May 11, 2021

Jason Steele
Environmental Scientist
Freese and Nichols
531 North Liberty Street
Winston-Salem, NC 27101

Dear Jason Steele;

The following information is in response to your request soliciting comments regarding the Wicomico Buffer Mitigation Site in Edgecombe County, NC.

Projects are subject to Farmland Protection Policy Act (FPPA) requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a Federal agency or with assistance from a Federal agency.

For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land. Farmland means prime or unique farmlands as defined in section 1540(c)(1) of the Act or farmland that is determined by the appropriate state or unit of local government agency or agencies with concurrence of the Secretary to be farmland of statewide of local importance.

“Farmland" does not include land already in or committed to urban development or water storage. Farmland ``already in'' urban development or water storage includes all such land with a density of 30 structures per 40-acre area. Farmland already in urban development also includes lands identified as ``urbanized area'' (UA) on the Census Bureau Map, or as urban area mapped with a ``tint overprint'' on the USGS topographical maps, or as ``urban-built-up'' on the USDA Important Farmland Maps. See over for more information.

The area in question includes land already in or committed to urban development or is not considered Prime Farmland due to lack of drainage. There are no needs to initiate an AD-1006 form according to the Code of Federal Regulation 7CFR 658, Farmland Protection Policy Act. The area in question is exempt of the FPPA regulations.

If you have any questions, please feel free to call me at (704) 680-3541 office or (704) 754-6734 cell.

Sincerely,

Kristin L May

Kristin L May
Acting State Soil Scientist

cc:
Carl Kirby, acting supervisory soil conservationist, NRCS, Snow Hill, NC

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 03/29/2021
Name of Project Wicomico Buffer Mitigation Site	Federal Agency Involved FHWA
Proposed Land Use Land conversion for buffer mitigation	County and State Edgecombe County, NC
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 4/14/2021 / Person Completing Form: Kristin Mav

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☐ NO ☑	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %	
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS 5/11/2021	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	4.23			
B. Total Acres To Be Converted Indirectly	0.0			
C. Total Acres In Site	4.23			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide Important or Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)				

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	15			
2. Perimeter In Non-urban Use	(10)	10			
3. Percent Of Site Being Farmed	(20)	20			
4. Protection Provided By State and Local Government	(20)	0			
5. Distance From Urban Built-up Area	(15)	15			
6. Distance To Urban Support Services	(15)	10			
7. Size Of Present Farm Unit Compared To Average	(10)	10			
8. Creation Of Non-farmable Farmland	(10)	0			
9. Availability Of Farm Support Services	(5)	5			
10. On-Farm Investments	(20)	5			
11. Effects Of Conversion On Farm Support Services	(10)	0			
12. Compatibility With Existing Agricultural Use	(10)	0			
TOTAL SITE ASSESSMENT POINTS	160	90	0	0	0
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100	0	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	90	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	90	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☐

Reason For Selection:

Name of Federal agency representative completing this form:	Date:

(See Instructions on reverse side) **Form AD-1006 (03-02)**

Wicomico Buffer Mitigation Site Categorical Exclusion

FISH & WILDLIFE COORDINATION ACT
NC WILDLIFE RESOURCES COMMISSION
CORRESPONDENCE

Jason Steele

From: Jason Steele
Sent: Wednesday, May 19, 2021 11:44
To: maria.dunn@ncwildlife.org
Subject: RE: Emailing: Wicomico Buffer Mitigation Site Coordination Package

Hi Maria,

I'm following up on this correspondence for the Wicomico Buffer Mitigation Site coordination.

Best Regards,

Jason Steele, PhD, PWS
Environmental Scientist

Freese and Nichols, Inc.
531 N. Liberty St.
Winston-Salem, NC 27101
(540) 449-2837 (mobile)
www.freese.com

From: Jason Steele
Sent: Wednesday, April 14, 2021 10:22 AM
To: maria.dunn@ncwildlife.org
Subject: Emailing: Wicomico Buffer Mitigation Site Coordination Package

Hi Ms. Dunn,

Please find the project review coordination package for the Wicomico Buffer Mitigation Site, a NC DMS supported riparian buffer mitigation site located in Edgecombe County. Thank you in advance for your timely response and cooperation. Feel free to contact me with any questions that you may have during your review.

Best Regards,

Jason Steele, PhD, PWS
Environmental Scientist

Freese and Nichols, Inc.
531 N. Liberty St.
Winston-Salem, NC 27101
(540) 449-2837 (mobile)

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April 14, 2021

Maria Dunn
Coastal Coordinator
North Carolina Wildlife Resource Commission
DENR Rgl
943 Washington Square Mall
Washington, NC 27889
Via email: maria.dunn@ncwildlife.org

Subject: Wicomico Buffer Mitigation Site
Edgecombe County, North Carolina

Dear Ms. Dunn,

Freese and Nichols, Inc. requests review and comment on any possible issues that may emerge with respect to fish and wildlife issues associated with the Wicomico Buffer Mitigation Site. A Site Location Map, Topographic Map and Aerial Photograph showing the approximate project area are enclosed.

The Wicomico Buffer Mitigation Site is being developed to provide riparian buffer mitigation in the Tar Pamlico River Basin. The project includes the restoration and enhancement of riparian buffer along an unnamed tributary of the Tar River. Currently, the buffer area is extensively impacted by row crop agriculture, lack of native woody vegetation, nutrient loading from fertilization practices, and upland erosion and sedimentation. This riparian restoration project will improve water quality by creating a functioning native vegetation buffer that intercepts and filters agricultural runoff. By reducing and filtering the runoff from the site, restoring a forest to maintained riparian areas, the project will reduce nutrient and sediment inputs to UT Tar River and ultimately the Tar River. Invasive vegetation will be treated within the project area as needed and the proposed native vegetation will provide cover and food for wildlife.

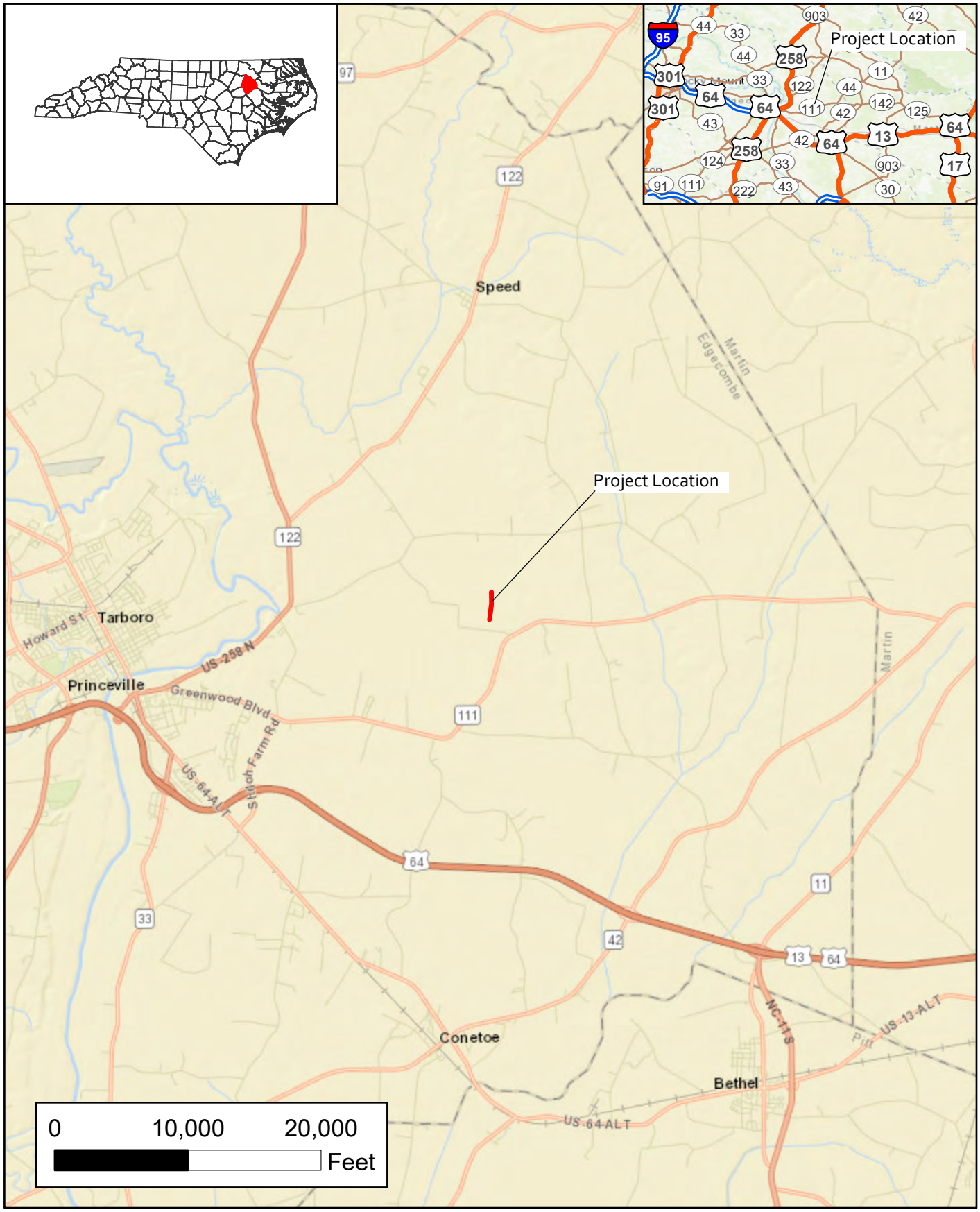
We thank you in advance for your timely response and cooperation. Please feel free to contact us with any questions that you may have concernting the project.

Sincerely,
Freese and Nichols, Inc.

Jason Steele, PhD, PWS
Environmental Scientist

Wicomico Buffer Mitigation Site
Categorical Exclusion

FIGURES



N

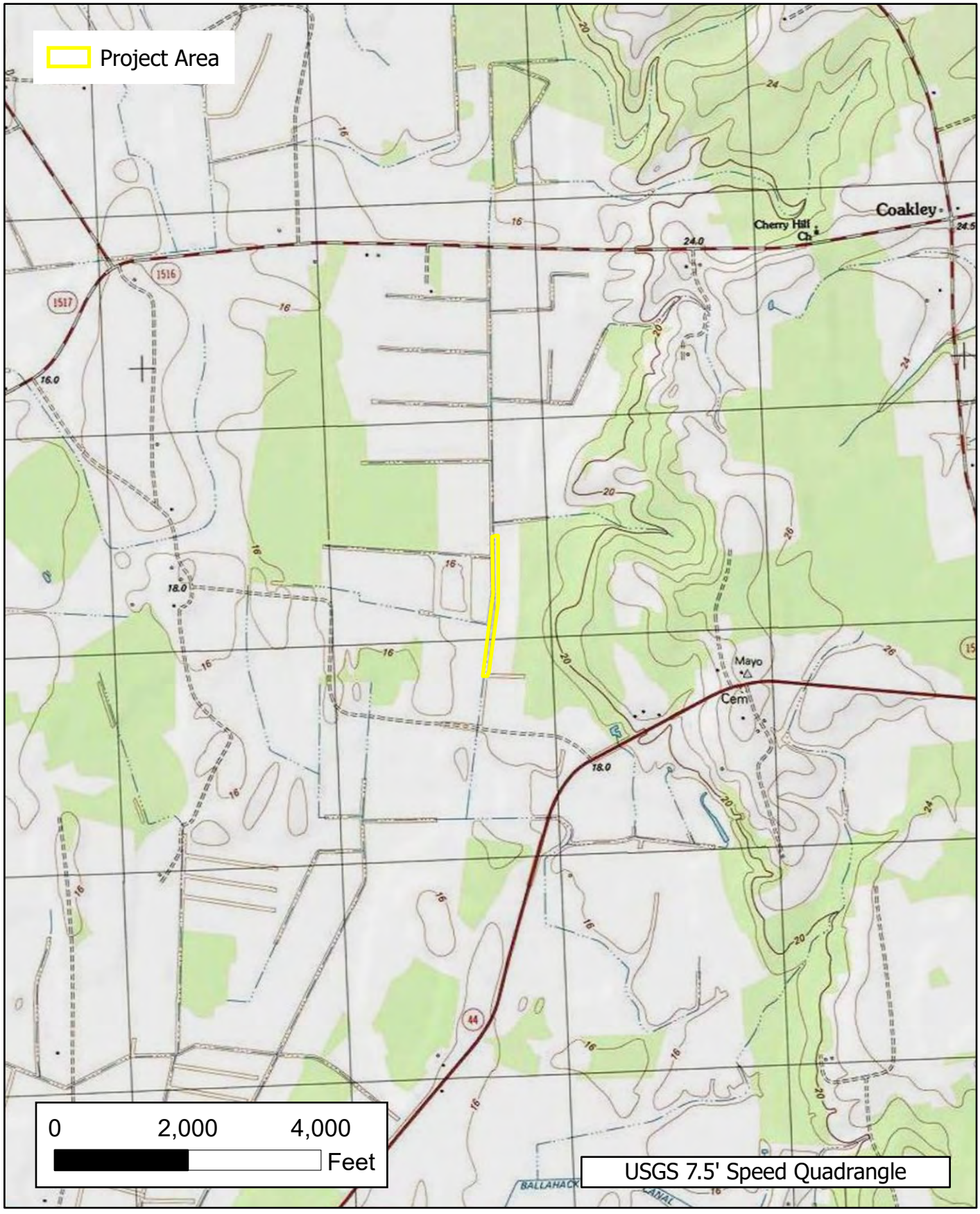
PROJECT LOCATION

Wicomico Buffer Mitigation Site
Edgecombe County, NC

FIGURE 1

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744



N

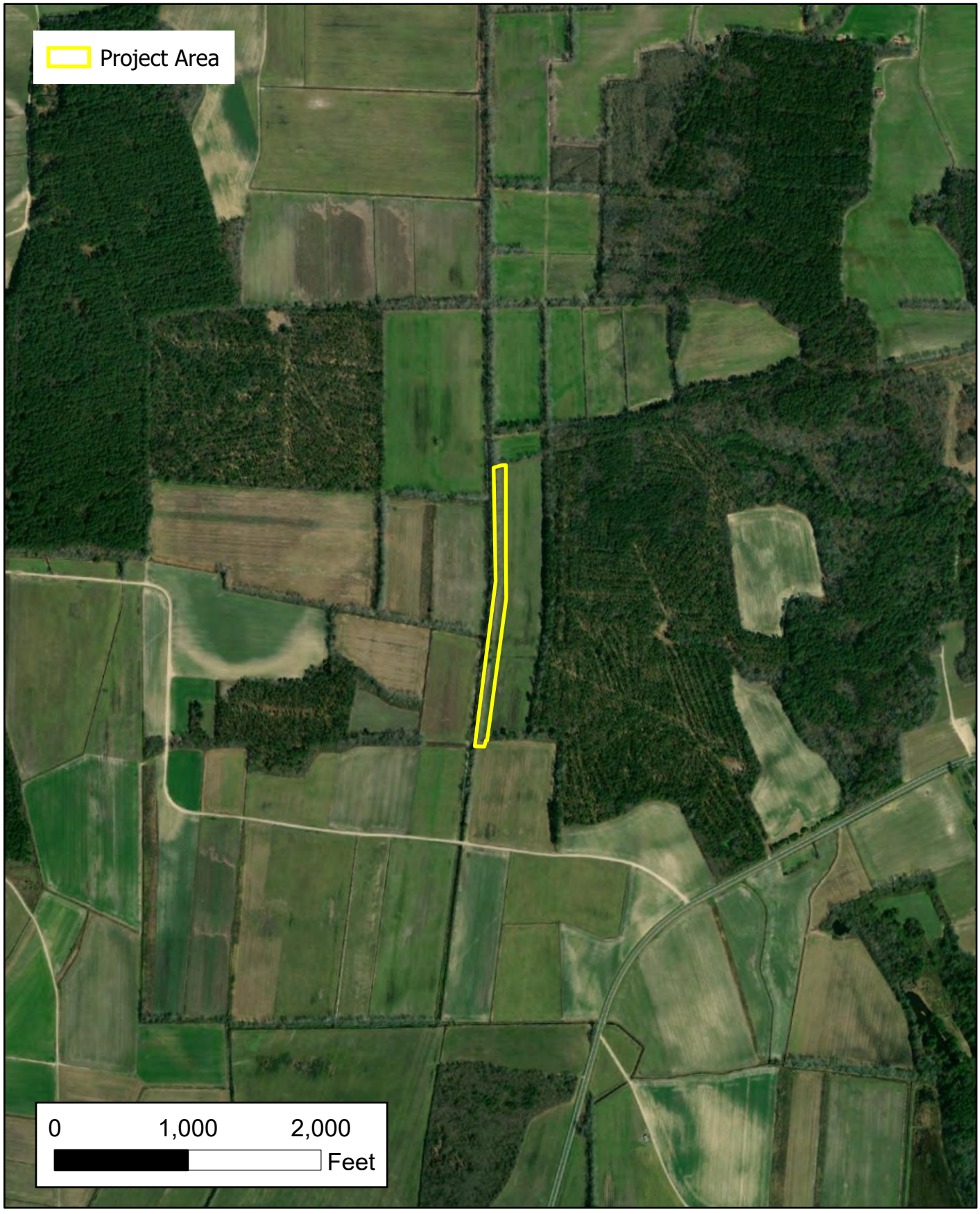
PROJECT AREA AND TOPOGRAPHY

Wicomico Buffer Mitigation Site
Edgecombe County, NC

FIGURE 2

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744



N

PROJECT AREA AND AERIAL PHOTOGRAPH

Wicomico Buffer Mitigation Site
Edgecombe County, NC

FIGURE 3

FREESE AND NICHOLS

531 N. Liberty St.
Winston-Salem, NC 27101
336-790-6744

Appendix D

Site Photographs

4-21-21 Wicomico Pics

1. Downstream from crossing, below mitigation site.

2. Looking upstream from crossing, toward mitigation site

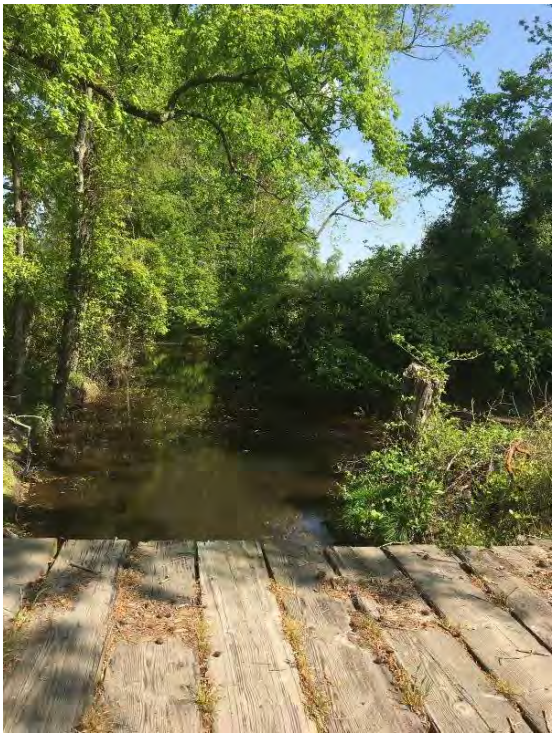
3. Beaver dam on main stream.

4. Stream below beaver dam

5. Agricultural field adjacent to stream.

7. Ditch 2, looking upstream (east).

6. Ditch 1, looking upstream (east) from stream



8. Crossing above site, showing inundation from beaver dam.

Appendix E

Conservation Easement Deed

STATE OF NORTH CAROLINA

DEED OF CONSERVATION EASEMENT AND RIGHT OF ACCESS PROVIDED PURSUANT TO FULL DELIVERY MITIGATION CONTRACT

EDGECOMBE COUNTY

SPO File Number: 33-LA-149
Project Number: 100188

Prepared by: Office of the Attorney General
Property Control Section
Return to: NC Department of Administration
State Property Office
1321 Mail Service Center
Raleigh, NC 27699-1321

THIS DEED OF CONSERVATION EASEMENT AND RIGHT OF ACCESS, made this_____day of_____, 2022, by *Mayo Farms of Tarboro, Inc.*, ("**Grantor**"), whose mailing address is PO Box 160, Tarboro NC 27886, to the State of North Carolina, ("**Grantee**"), whose mailing address is State of North Carolina, Department of Administration, State Property Office, 1321 Mail Service Center, Raleigh, NC 27699-1321. The designations of Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine, or neuter as required by context.

WITNESSETH:

WHEREAS, pursuant to the provisions of N.C. Gen. Stat. § 143-214.8 et seq., the State of North Carolina has established the Division of Mitigation Services (formerly known as the Ecosystem Enhancement Program and Wetlands Restoration Program) within the Department of Environmental Quality for the purposes of acquiring, maintaining, restoring, enhancing, creating and preserving wetland and riparian resources that contribute to the protection and improvement of water quality, flood prevention, fisheries, aquatic habitat, wildlife habitat, and recreational opportunities; and

WHEREAS, this Conservation Easement from Grantor to Grantee has been negotiated, arranged and provided for as a condition of a full delivery contract between Freese and Nichols, Inc. and the North Carolina Department of Environmental Quality, to provide stream, wetland and/or buffer mitigation pursuant to the North Carolina Department of Environmental Quality Purchase and Services Contract Number 200209-01.

WHEREAS, The State of North Carolina is qualified to be the Grantee of a Conservation Easement pursuant to N.C. Gen. Stat. § 121-35; and

WHEREAS, the Department of Environment and Natural Resources and the United States Army Corps of Engineers, Wilmington District entered into a Memorandum of Understanding, (MOU) duly executed by all parties on November 4, 1998. This MOU recognized that the Wetlands Restoration Program was to provide effective compensatory mitigation for authorized impacts to wetlands, streams and other aquatic resources by restoring, enhancing and preserving the wetland and riparian areas of the State; and

WHEREAS, the Department of Environment and Natural Resources, the North Carolina Department of Transportation and the United States Army Corps of Engineers, Wilmington District entered into a Memorandum of Agreement, (MOA) duly executed by all parties in Greensboro, NC on July 22, 2003, which recognizes that the Division of Mitigation Services (formerly Ecosystem Enhancement Program) is to provide for compensatory mitigation by effective protection of the land, water and natural resources of the State by restoring, enhancing and preserving ecosystem functions; and

WHEREAS, the Department of Environment and Natural Resources, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the North Carolina Wildlife Resources Commission, the North Carolina Division of Water Quality, the North Carolina Division of Coastal Management, and the National Marine Fisheries Service entered into an agreement to continue the In-Lieu Fee operations of the North Carolina Department of Natural Resources' Division of Mitigation Services (formerly Ecosystem Enhancement Program) with an effective date of 28 July, 2010, which supersedes and replaces the previously effective MOA and MOU referenced above; and

WHEREAS, the acceptance of this instrument for and on behalf of the State of North Carolina was granted to the Department of Administration by resolution as approved by the Governor and Council of State adopted at a meeting held in the City of Raleigh, North Carolina, on the 8th day of February 2000; and

WHEREAS, the Division of Mitigation Services in the Department of Environmental Quality, which has been delegated the authority authorized by the Governor and Council of State to the Department of Administration, has approved acceptance of this instrument; and

WHEREAS, Grantor owns in fee simple certain real property situated, lying, and being in Number 3 Township, Edgecombe County, North Carolina (the "**Property**"), and being more particularly described as that certain parcel of land containing approximately 478.1 acres and being conveyed to the Grantor by deed as recorded in Deed Book 1189 at Page 762 of the Edgecombe County Registry, North Carolina; and

WHEREAS, Grantor is willing to grant a Conservation Easement and Right of Access over the herein described areas of the Property, thereby restricting and limiting the use of the areas of the Property subject to the Conservation Easement to the terms and conditions and purposes hereinafter set forth, and Grantee is willing to accept said Easement and Access Rights. The Conservation Easement shall be for the protection and benefit of the waters of an unnamed tributary of the Tar River.

NOW, THEREFORE, in consideration of the mutual covenants, terms, conditions, and restrictions hereinafter set forth, Grantor unconditionally and irrevocably hereby grants and conveys unto Grantee, its successors and assigns, forever and in perpetuity, a Conservation Easement and Right of Access together with an access easement to and from the Conservation Easement Area described below.

The Conservation Easement Area consists of the following:

Tracts Number 1 containing a total of 3.63 acres as shown on the plats of survey entitled "Conservation Easement Survey for the State of North Carolina" February 15, 2022 by Linda F. Humphrey, PLS Number L-4879 and recorded in the Edgecombe County, North Carolina Register of Deeds at **Plat Book_____Pages_____.**

See attached "**Exhibit A**", Legal Description of area of the Property hereinafter referred to as the "Conservation Easement Area"

The purposes of this Conservation Easement are to maintain, restore, enhance, construct, create and preserve wetland and/or riparian resources in the Conservation Easement Area that contribute to the protection and improvement of water quality, flood prevention, fisheries, aquatic habitat, wildlife habitat, and recreational opportunities; to maintain permanently the Conservation Easement Area in its natural condition, consistent with these purposes; and to prevent any use of the Easement Area that will significantly impair or interfere with these purposes. To achieve these purposes, the following conditions and restrictions are set forth:

I. DURATION OF EASEMENT

Pursuant to law, including the above referenced statutes, this Conservation Easement and Right of Access shall be perpetual and it shall run with, and be a continuing restriction upon the use of, the Property, and it shall be enforceable by the Grantee against the Grantor and against Grantor's heirs, successors and assigns, personal representatives, agents, lessees, and licensees.

II. ACCESS EASEMENT

Grantor hereby grants and conveys unto Grantee, its employees, agents, successors and assigns, a perpetual, non-exclusive easement for ingress and egress over and upon the Property at all reasonable times and at such location as practically necessary to access the Conservation Easement Area for the purposes set forth herein ("Access Easement"). This grant of easement shall not vest any rights in the public and shall not be construed as a public dedication of the Access Easement. Grantor covenants, represents and warrants that it is the sole owner of and is seized of the Property in fee simple and has the right to grant and convey this Access Easement.

III. GRANTOR RESERVED USES AND RESTRICTED ACTIVITIES

The Conservation Easement Area shall be restricted from any development or usage that would impair or interfere with the purposes of this Conservation Easement. Unless expressly reserved as a compatible use herein, any activity in, or use of, the Conservation Easement Area by the Grantor is prohibited as inconsistent with the purposes of this Conservation Easement. Any rights not expressly reserved hereunder by the Grantor have been acquired by the Grantee. Any rights not expressly reserved hereunder by the Grantor, including the rights to all mitigation credits, including, but not limited to, stream, wetland, and riparian buffer mitigation units, derived from each site within the area of the Conservation Easement, are conveyed to and belong to the Grantee. Without limiting the generality of the foregoing, the following specific uses are prohibited, restricted, or reserved as indicated:

A. Recreational Uses. Grantor expressly reserves the right to undeveloped recreational uses, including hiking, bird watching, hunting and fishing, and access to the Conservation Easement Area for the purposes thereof.

B. Motorized Vehicle Use. Motorized vehicle use in the Conservation Easement Area is prohibited except within a Crossing Area(s) or Road or Trail as shown on the recorded survey plat**.**

C. Educational Uses. The Grantor reserves the right to engage in and permit others to engage in educational uses in the Conservation Easement Area not inconsistent with this Conservation Easement, and the right of access to the Conservation Easement Area for such purposes including organized educational activities such as site visits and observations. Educational uses of the property shall not alter vegetation, hydrology or topography of the site.

D. Damage to Vegetation. Except within Crossing Area(s) as shown on the recorded survey plat and as related to the removal of non-native plants, diseased or damaged trees, or vegetation that destabilizes or renders unsafe the Conservation Easement Area to persons or natural habitat, all cutting, removal, mowing, harming, or destruction of any trees and vegetation in the Conservation Easement Area is prohibited.

E. Industrial, Residential and Commercial Uses. All industrial, residential and commercial uses are prohibited in the Conservation Easement Area.

F. Agricultural Use. All agricultural uses are prohibited within the Conservation Easement Area including any use for cropland, waste lagoons, or pastureland.

G. New Construction. There shall be no building, facility, mobile home, antenna, utility pole, tower, or other structure constructed or placed in the Conservation Easement Area.

H. Roads and Trails. There shall be no construction or maintenance of new roads, trails, walkways, or paving in the Conservation Easement.

All existing roads, trails and crossings within the Conservation Easement Area shall be shown on the recorded survey plat.

I. Signs. No signs shall be permitted in the Conservation Easement Area except interpretive signs describing restoration activities and the conservation values of the Conservation Easement Area, signs identifying the owner of the Property and the holder of the Conservation Easement, signs giving directions, or signs prescribing rules and regulations for the use of the Conservation Easement Area.

J. Dumping or Storing. Dumping or storage of soil, trash, ashes, garbage, waste, abandoned vehicles, appliances, machinery, or any other material in the Conservation Easement Area is prohibited.

K. Grading, Mineral Use, Excavation, Dredging. There shall be no grading, filling, excavation, dredging, mining, drilling, hydraulic fracturing; removal of topsoil, sand, gravel, rock, peat, minerals, or other materials.

L. Water Quality and Drainage Patterns. There shall be no diking, draining, dredging, channeling, filling, leveling, pumping, impounding or diverting, causing, allowing or permitting the diversion of surface or underground water in the Conservation Easement Area. No altering or tampering with water control structures or devices, or disruption or alteration of the restored, enhanced, or created drainage patterns is allowed. All removal of wetlands, polluting or discharging into waters, springs, seeps, or wetlands, or use of pesticide or biocides in the Conservation Easement Area is prohibited. In the event of an emergency interruption or shortage of all other water sources, water from within the Conservation Easement Area may temporarily be withdrawn for good cause shown as needed for the survival of livestock on the Property.

M. Subdivision and Conveyance. Grantor voluntarily agrees that no further subdivision, partitioning, or dividing of the Conservation Easement Area portion of the Property owned by the Grantor in fee simple ("fee") that is subject to this Conservation Easement is allowed. Any future transfer of the Property shall be subject to this Conservation Easement and Right of Access and to the Grantee's right of unlimited and repeated ingress and egress over and across the Property to the Conservation Easement Area for the purposes set forth herein.

N. Development Rights. All development rights are permanently removed from the Conservation Easement Area and are non-transferrable.

O. Disturbance of Natural Features. Any change, disturbance, alteration or impairment of the natural features of the Conservation Easement Area or any intentional introduction of non-native plants, trees and/or animal species by Grantor is prohibited.

The Grantor may request permission to vary from the above restrictions for good cause shown, provided that any such request is not inconsistent with the purposes of this Conservation Easement, and the Grantor obtains advance written approval from the Division of Mitigation Services, 1652 Mail Services Center, Raleigh, NC 27699-1652.

IV. GRANTEE RESERVED USES

A. Right of Access, Construction, and Inspection. The Grantee, its employees, agents, successors and assigns, shall have a perpetual Right of Access over and upon the Conservation Easement Area to undertake or engage in any activities necessary to construct, maintain, manage, enhance, repair, restore, protect, monitor and inspect the stream, wetland and any other riparian resources in the Conservation Easement Area for the purposes set forth herein or any long-term management plan for the Conservation Easement Area developed pursuant to this Conservation Easement.

B. Restoration Activities. These activities include planting of trees, shrubs and herbaceous vegetation, installation of monitoring wells, utilization of heavy equipment to grade, fill, and prepare the soil, modification of the hydrology of the site, and installation of natural and manmade materials as needed to direct in-stream, above ground, and subterraneous water flow.

C. Signs. The Grantee, its employees and agents, successors or assigns, shall be permitted to place signs and witness posts on the Property to include any or all of the following: describe the project, prohibited activities within the Conservation Easement, or identify the project boundaries and the holder of the Conservation Easement.

D. Fences. Conservation Easements are purchased to protect the investments by the State (Grantee) in natural resources. Livestock within conservations easements damages the investment and can result in reductions in natural resource value and mitigation credits which would cause financial harm to the State. Therefore, Landowners (Grantor) with livestock are required to restrict livestock access to the Conservation Easement area. Repeated failure to do so may result in the State (Grantee) repairing or installing livestock exclusion devices (fences) within the conservation area for the purpose of restricting livestock access. In such cases, the landowner (Grantor) must provide access to the State (Grantee) to make repairs.

E. Crossing Area(s). The Grantee is not responsible for maintenance of crossing area(s), however, the Grantee, its employees and agents, successors or assigns, reserve the right to repair crossing area(s), at its sole discretion and to recover the cost of such repairs from the Grantor if such repairs are needed as a result of activities of the Grantor, his successors or assigns.

V. ENFORCEMENT AND REMEDIES

A. Enforcement. To accomplish the purposes of this Conservation Easement, Grantee is allowed to prevent any activity within the Conservation Easement Area that is inconsistent with the purposes of this Conservation Easement and to require the restoration of such areas or features in the Conservation Easement Area that may have been damaged by such unauthorized activity or use. Upon any breach of the terms of this Conservation Easement by Grantor, the Grantee shall, except as provided below, notify the Grantor in writing of such breach and the Grantor shall have ninety (90) days after receipt of such notice to correct the damage caused by such breach. If the breach and damage remains uncured after ninety (90) days, the Grantee may enforce this Conservation Easement by bringing appropriate legal proceedings including an action to recover damages, as well as injunctive and other relief. The Grantee shall also have the power and authority, consistent with its statutory authority: (a) to prevent any impairment of the Conservation Easement Area by acts which may be unlawful or in violation of this Conservation Easement; (b) to otherwise preserve or protect its interest in the Property; or (c) to seek damages from any appropriate person or entity. Notwithstanding the foregoing, the Grantee reserves the immediate right, without notice, to obtain a temporary restraining order, injunctive or other appropriate relief, if the breach is or would irreversibly or otherwise materially impair the benefits to be derived from this Conservation Easement, and the Grantor and Grantee acknowledge that the damage would be irreparable and remedies at law inadequate. The rights and remedies of the Grantee provided hereunder shall be in addition to, and not in lieu of, all other rights and remedies available to Grantee in connection with this Conservation Easement.

B. Inspection. The Grantee, its employees and agents, successors and assigns, have the right, with reasonable notice, to enter the Conservation Easement Area over the Property at reasonable times for the purpose of inspection to determine whether the Grantor is complying with the terms, conditions and restrictions of this Conservation Easement.

C. Acts Beyond Grantor's Control. Nothing contained in this Conservation Easement shall be construed to entitle Grantee to bring any action against Grantor for any injury or change in the Conservation Easement Area caused by third parties, resulting from causes beyond the Grantor's control, including, without limitation, fire, flood, storm, and earth movement, or from any prudent action taken in good faith by the Grantor under emergency conditions to prevent, abate, or mitigate significant injury to life or damage to the Property resulting from such causes.

D. Costs of Enforcement. Beyond regular and typical monitoring expenses, any costs incurred by Grantee in enforcing the terms of this Conservation Easement against Grantor, including, without limitation, any costs of restoration necessitated by Grantor's acts or omissions in violation of the terms of this Conservation Easement, shall be borne by Grantor.

E. **No Waiver.** Enforcement of this Easement shall be at the discretion of the Grantee and any forbearance, delay or omission by Grantee to exercise its rights hereunder in the event of any breach of any term set forth herein shall not be construed to be a waiver by Grantee.

VI. MISCELLANEOUS

A. This instrument sets forth the entire agreement of the parties with respect to the Conservation Easement and supersedes all prior discussions, negotiations, understandings or agreements relating to the Conservation Easement. If any provision is found to be invalid, the remainder of the provisions of the Conservation Easement, and the application of such provision to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

B. Grantor is responsible for any real estate taxes, assessments, fees, or charges levied upon the Property. Grantee shall not be responsible for any costs or liability of any kind related to the ownership, operation, insurance, upkeep, or maintenance of the Property, except as expressly provided herein. Upkeep of any constructed bridges, fences, or other amenities on the Property are the sole responsibility of the Grantor. Nothing herein shall relieve the Grantor of the obligation to comply with federal, state or local laws, regulations and permits that may apply to the exercise of the Reserved Rights.

C. Any notices shall be sent by registered or certified mail, return receipt requested to the parties at their addresses shown herein or to other addresses as either party establishes in writing upon notification to the other.

D. Grantor shall notify Grantee in writing of the name and address and any party to whom the Property or any part thereof is to be transferred at or prior to the time said transfer is made. Grantor further agrees that any subsequent lease, deed, or other legal instrument by which any interest in the Property is conveyed is subject to the Conservation Easement herein created.

E. The Grantor and Grantee agree that the terms of this Conservation Easement shall survive any merger of the fee and easement interests in the Property or any portion thereof.

F. This Conservation Easement and Right of Access may be amended, but only in writing signed by all parties hereto, or their successors or assigns, if such amendment does not affect the qualification of this Conservation Easement or the status of the Grantee under any applicable laws, and is consistent with the purposes of the Conservation Easement. The owner of the Property shall notify the State Property Office and the U.S. Army Corps of Engineers in writing sixty (60) days prior to the initiation of any transfer of all or any part of the Property or of any request to void or modify this Conservation Easement. Such notifications and modification requests shall be addressed to:

Division of Mitigation Services Program Manager
NC State Property Office
1321 Mail Service Center
Raleigh, NC 27699-1321

and

General Counsel
US Army Corps of Engineers
69 Darlington Avenue
Wilmington, NC 28403

G. The parties recognize and agree that the benefits of this Conservation Easement are in gross and assignable provided, however, that the Grantee hereby covenants and agrees, that in the event it transfers or assigns this Conservation Easement, the organization receiving the interest will be a qualified holder under N.C. Gen. Stat. § 121-34 et seq. and § 170(h) of the Internal Revenue Code, and the Grantee further covenants and agrees that the terms of the transfer or assignment will be such that the transferee or assignee will be required to continue in perpetuity the conservation purposes described in this document.

VII. QUIET ENJOYMENT

Grantor reserves all remaining rights accruing from ownership of the Property, including the right to engage in or permit or invite others to engage in only those uses of the Conservation Easement Area that are expressly reserved herein, not prohibited or restricted herein, and are not inconsistent with the purposes of this Conservation Easement. Without limiting the generality of the foregoing, the Grantor expressly reserves to the Grantor, and the Grantor's invitees and licensees, the right of access to the Conservation Easement Area, and the right of quiet enjoyment of the Conservation Easement Area,

TO HAVE AND TO HOLD, the said rights and easements perpetually unto the State of North Carolina for the aforesaid purposes,

AND Grantor covenants that Grantor is seized of the Property in fee and has the right to convey the permanent Conservation Easement herein granted; that the same is free from encumbrances and that Grantor will warrant and defend title to the same against the claims of all persons whomsoever.

IN TESTIMONY, WHEREOF, the Grantor has hereunto set his hand and seal, the day and year first above written.

_____(SEAL)

NORTH CAROLINA
COUNTY OF _____

I,_____, a Notary Public in and for the County and State aforesaid, do hereby certify that_____, Grantor, personally appeared before me this day and acknowledged the execution of the foregoing instrument.

IN WITNESS, WHEREOF, I have hereunto set my hand and Notary Seal this the _____ day of_____, 20_.

_____
Notary Public

My commission expires:

_____

Exhibit A

Commencing at a point with coordinates of Northing 790860.26; Easting 2468253.66, NAD 1983/2011 Datum, a common corner with F.M. Dunn, Jr. and Judith W. Dunn, Deed Book 1462, Page 810 and Mayo Farms of Tarboro, Inc., Deed Book 1189, Page 762; thence S 83°52'41" W 983.17'; thence N 07°21'32" W 193.09'; thence S 76°18'48" W 5587.12' to a point with coordinates of Northing 789624.93; Easting 2461822.89, NAD 1983/2011 Datum being the TRUE POINT OF BEGINNING and being the northwest corner of the new conservation easement; thence N 76°18'48" E 82.62'; thence S 00°39'18" E 947.49' to a point; thence S 07°19'33" W 511.13' to a point; thence S 07°36'53" W 502.74' to a point; thence S 75°21'25" W 86.98' to a point; thence N 07°36'53" E 535.48' to a point; thence N 07°19'33" E 505.31' to a point; thence N 00°39'18" W 923.32' to the point and place of beginning and containing 3.63 Acres according to a map prepared by Mack Gay Associates, P.A., titled, "Conservation Easement Survey for the State of North Carolina" dated February 15, 2022.