MITIGATION PLAN – COOR ISLAND
PHASE B NUTRIENT OFFSET SITE

Wayne County, North Carolina

DMS Project ID No. 100650
Full Delivery Contract No. 519674731-02
DWR Project No. 2021-0021v2
RFP No. 16-519674731

Neuse River Basin
Cataloging Unit 03020201

Prepared for:

NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF MITIGATION SERVICES
1652 MAIL SERVICE CENTER
RALEIGH, NORTH CAROLINA 27699-1652

June 2023

Restoration Systems, LLC
1101 Haynes St. Suite 211
Raleigh, North Carolina
Ph: (919) 755-9490
Fx: (919) 755-9492

Response to DMS Comments
DMS Project ID No. 100650
Full Delivery Contract No. 519674731-02
NC DWR Stream Determination, Project No. 2021-0021 v2
RFP 16-519674731

Comments Received (Black Text) & Responses (Blue Text)

1. Table 12: Edit to say 12 vegetation plots.
   Completed.

2. Table 15: Square footage and credits for each asset do not match the credit determination table. Please review and update.
   Square footage and credits for assets have been checked and updated throughout the report.

3. Figure 1: It's unclear what lines represent counties (not in legend) and NC River Subbasin 8-digit HUCs. Please review and revise them to make them more distinct.
   Figure 1 has been updated to differentiate county lines from 8-digit HUCs, and county symbology has been added to the table of contents.

4. As required by the contract and in Section 4.6 of RFP 16-519674731, Restoration System must submit the required Performance Bond as part of the final mitigation plan. This must be approved before invoice submission.
   Understood.

5. This is a reminder that Task 2 has not been completed and will not be complete until the Conservation Easement is recorded for this project and all required deliverables have been submitted to the DMS Project Manager and State Property Office.
   Understood.

6. Digital Deliverables: The credit determination layer does not match the TOB/offset/easement layers in multiple instances. Please update the shapefiles and revise the square footage as necessary. See the screen capture of the misalignment below.
   Shapefiles were checked and updated along with the report and credit determination table.

Restoration Systems, LLC
1101 Haynes St. Suite 211
Raleigh, North Carolina
Ph: (919) 755-9490
Fx: (919) 755-9492

Response to DWR Comments
DMS Project ID No. 100650
Full Delivery Contract No. 519674731-02
NC DWR Stream Determination, Project No. 2021-0021 v2
RFP 16-519674731

Comments Received (Black Text) & Responses (Blue Text)

Initial Comments:

1. Page 5 of PDF: Please provide updated site photos.
   Updated site photos are included in Appendix A.

2. Page 6 of PDF Section 1.1: This introduction is conflicting. Are we reviewing this for just NOC or RBC as well?
   The contract is for NOC, but DMS wants to have the option to convert to RBC in the if needed. Text has been added to clarify that the project includes the option to convert NOC eligible credits to RBC. Also, the name of the site has been revised to remove “Mitigation”.

3. Page 7 of PDF Section 1.2: This sentence sounds like it has repeating information about Appendix A.
   This sentence has been revised to reference the location of the project credit table is in Section 6.

4. Page 7 of PDF Table 2: Do not include this table since this is also in the Project Credit Table.
   Table 2 has been removed from the document, and remaining tables have been renumbered.

5. Page 7 of PDF Section 1.3: Please expand on information regarding Coor Island Phase 1 and what is the existing land use within phase 1 easement at the time of this plan submittal.
   This section has been updated to provide additional info regarding the initial phase of Coor Island.

6. Page 7 of PDF Section 1.3: When describing the restoration areas, make sure to include "and adjacent riparian areas". In some sections, it only says the riparian restoration or preservation of "riparian buffers". However, "Riparian Buffer" is defined in rules as having a "Zone 1" and a "Zone 2" and only being the area adjacent to streams depicted on certain maps. You also have ditches on the site, therefore using the term "Riparian Buffer" is not accurate for describing those areas. Errors can simply be avoided by just saying "riparian buffers and adjacent riparian areas".
   Understood text throughout has been revised from “riparian buffers” to “riparian buffers and adjacent riparian areas”.

7. Page 9 of PDF Section 1.3: Check buffer rule reference. Letter was also provided viability for buffer credits. correct statement here and add applicable rule reference (0295).
   The statement has been corrected with the applicable rule reference.

8. Page 14 of PDF Section 3.1 Table 10: If 10 species of trees are shown in the table, DWR expects 10 species to be planted. If anticipating to plant only minimum of 4 from the list, DWR cannot confirm the density percentages column would comply with the performance standard of "no one tree species will be greater than 50%" as noted on Rule .0295 (n)(2). At this time the density according to Table 10 is not accurate unless all 10 species are planted.

   It is understood that changes to planting plans can happen. If any changes are needed to the planting list before planting, the Provider will need to submit a request to DWR for approval of the modified planting list if not listed as an approved tree in Table 10. DWR will accept a few substitutions if RS wants to include a table as potential substitutions in a Table 10b but you must include the % those subs are intended to be utilized in the case you need those substitutions.
   Understood. Table 10 reflects what has been ordered for planting. The potential substitute species has been removed.

9. Page 16 of PDF Section 6.0: Seems like a sentence is repeated here. What about RBC?
   The repeat sentence has been deleted. A sentence has been added to include RBC has an option for conversion for NOC associated with the stream feature.

10. Page 16 of PDF Section 6.2: First sentence add “within riparian areas” and delete “buffer”.
    Edits have been incorporated.

11. Page 20 of PDF Figure 1: Clarify that this is the service area for "Riparian Buffer Credits" and "Nutrient Offset Credits".
    Service Area map legend information has been clarified.

12. Page 25 of PDF Figure 6: Please show stream origins on relevant figures. Please show a differentiation for credits between the widths and feature types so it is comparable to how it is listed in the Project Credit Table so we can determine where the credits are coming from.
    Stream origins have been added to Figure 5-7. Also, symbology for ditch and stream features has been added to Figures 5-7. On Figure 6 credits have been differentiated on the figure by width.

13. Page 26 of PDF Figure 7: Create a figure 7a showing buffer credit assets similar to Coors Island first phase Mit Plan. Unable to see the >50ft no credit area, possibly make an inset map.
    Per discussion the inset on Figure 6 provides the detail for the <50ft no credit area.

14. Page 27 of PDF: Please add more recent photos that is around the time frame of submission of this report.
    More recent photos have been included.

15. Page 29 of PDF: Delete Table 15 in Section 6 and replace with this credit table. Project Credit Table should not be in Appendixes. (If required for DMS, Table 15 can be left but still add the project credit table in Section 6).
    Understood. Project credit table has been moved from the appendix to Section 6.

    As previously discussed, DMS plans on DWR reviewing this project for RBC and NOC. Please fill out this table with RBC information. i.e. add creditable area of mitigation.
    Project credit table has been updated to include RBC.

Follow-up Comments:

1. Page 12 of PDF Section 1.3: Just need to reference 15A NCAC 02b .0295 here. do not include (n).
   Rule reference has been updated to remove”(n)”.

2. Page 16 of PDF Section 3.1: "A minimum of 4 species of trees will be planted as evident in Table 9 which shows the planting of 10 species."
   This sentence has been updated to reflect there will be a minimum of 10 species of trees planted as shown in the planting plan table.

3. Page 16 of PDF Section 3.1: Does this need to be referencing Table 9 instead? There are a few wrong references since a table was removed. Please fix throughout the report.
   All tables mentioned in the narrative have been updated to identify the appropriate table.

4. Page 20 of PDF Table 14: Should the total creditable area of buffer be 293,514 in this column instead of 196,018?
   Yes the table has been updated.

5. Page 28 of PDF Figure 6: Add the appropriate range of widths in the legend.
   The legend has been updated to include the range of widths.

MITIGATION PLAN – COOR ISLAND
PHASE B NUTRIENT OFFSET SITE

Wayne County, North Carolina

DMS Project ID No. 100650
Full Delivery Contract No. 519674731-02
DWR Project No. 2021-0021v2
RFP No. 16-519674731

Neuse River Basin
Cataloging Unit 03020201

Prepared for:

NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF MITIGATION SERVICES
1652 MAIL SERVICE CENTER
RALEIGH, NORTH CAROLINA 27699-1652

Prepared by:

Restoration Systems, LLC
1101 Haynes Street, Suite 211
Raleigh, North Carolina 27604
Contact: Raymond Holz
919-755-9490 (phone)
919-755-9492 (fax)

June 2023

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

- State Rule 15A NCAC 02B .0295 (Consolidated Buffer Mitigation Rule – CMB Rule)
- State Rule 15A NCAC 02B .0703 (Nutrient Offset Credit Trading Rule)

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

This document was assembled using the DMS Buffer Mitigation Plan Template and Guidance and State Rule 15A NCAC 02B .0295 (Consolidated Buffer Mitigation Rule – CMB Rule)

TABLE OF CONTENTS

TABLES

APPENDICES

1. Mitigation Project Summary

1.1. Introduction

The Coor Island Phase B Nutrient Offset Site (hereafter referred to as the "Project" or "Site") is designed in accordance with State Rule 15A NCAC 02B .0295 (Consolidated Buffer Mitigation Rule – CMB Rule) to Neuse River Riparian Buffer Credits (RBC) and 15A NCAC 02B .0703 (Nutrient Offset Credit Trading Rule) to Neuse River Nutrient Offset Credits (NOC) for impacts within the Neuse River Basin USGS 8-digit HUC 03020201, excluding the Falls Lake Watershed. The proposed permanent conservation easement will encompass 17.795 acres and will provide **32,505.163 lbs. Nitrogen Nutrient Offset Credits (NOC or Available NOC)** with the option to convert NOC eligible credits to RBC credits. The Project will provide the State with the Available NOC while permanently protecting the restored riparian area and preserving the forested floodplain, a mapped FEMA Floodway (Map 3720256800K, Panel 2568, effective June 20, 2018).

Located in Wayne County, North Carolina, the Project encompasses 17.795 acres, of which 17.019 acres of crop land will be restored to forested riparian buffer and adjacent riparian areas and 0.409 acres of existing riparian forest will be preserved. The Project will restore riparian buffers and adjacent riparian areas along an unnamed tributary to Half Mile Creek and preserve the established riparian buffer and adjacent riparian areas where they exists. Detailed project mapping is provided in Appendix A, along with site-specific data in Appendix B.

Restoration Systems (RS) is the current fee-simple owner of the subject tract. As the fee-simple owner, RS will assign a conservation easement over the subject parcel; such easement will be conveyed to the State of North Carolina Property Office. A Certification of Ownership and Notice of Intent to Grant Conservation Easement to the State of North Carolina is provided in Appendix C.

A DWR representative conducted an on-site stream determination on January 21, 2021. A Stream Determination letter was provided on March 4, 2021. Further, A DWR representative conducted a Site Viability visit on March 24, 2021, and provided an approval letter on April 16, 2021. Both the Stream Determination and Site Viability letters are attached in Appendix C.

1.2. Project Goals

The primary goals of the proposed nutrient offset project are to provide ecological and water quality enhancements to the Neuse River Basin by restoring the riparian area to create a functional riparian corridor. The Site is not located within a watershed planning unit but addresses watershed goals outlined by the Neuse River Basin Restoration Priorities (RBRP) report (NCEEP 2010 amended 2018). Table 1 summarizes the RBRP goals and provides site-specific objectives to address the RBRP goals and enhancements to water quality and ecological processes.

Table 1. Ecological and Water Quality Goals

Goal	Objective
Decrease nutrient levels	Nutrient input will be decreased by filtering runoff from the agricultural fields through restored riparian buffer zones and adjacent riparian areas. The off-site nutrient input will also be absorbed on-site by filtering flood flows through restored floodplain areas, where flood flows can disperse through native vegetation.
Decrease sediment input	Sediment from off-site sources will be captured by deposition on restored floodplain areas where native vegetation will slow overland flow velocities.

Table 1. Ecological and Water Quality Goals (Continued)

Goal	Objective
Decrease water temperature and increase dissolved oxygen concentrations	Planted riparian trees will shade the streams as they mature, reducing thermal pollution.
Create appropriate terrestrial habitat	Buffer areas will be restored by planting native vegetation.
Permanently protect the project Parcel from harmful uses	A permanent conservation easement will be recorded, protecting the Parcel's assets in perpetuity.

Ecological and water quality goals will be achieved by restoring 17.019 acres of forested riparian buffer and adjacent riparian areas and preserving 0.409 acres of existing riparian forest and adjacent riparian areas.

Proposed activities include:

- The cessation of agricultural production on the Site
- The cessation of vegetation maintenance along Site tributaries
- Planting a diverse woody riparian buffer and adjacent riparian areas comprised of native hardwoods and a permanent herbaceous seed mix that supports native diversity, including pollinators and wildlife.
- Protect Site tributaries, riparian buffers, adjacent riparian areas, and the FEMA flood zone with a perpetual conservation easement

Mitigation activities outlined in this proposal are designed to provide the Division with **32,505.163 lbs. NOC.** Mitigation totals are calculated per the requirements in RFP #16-519674731, State Rule 15A NCAC 02B .0295 (Consolidated Mitigation Buffer Rule), and State Rule 15A NCAC 02B .0709 (Nutrient Offset Credit Trading Rule). Site tributaries drain to Half Mile Creek in a FEMA regulated floodplain. A completed DWR credit determination table is provided in Table 14 of Section 6.2.

1.3. Existing and Historic Parcel Conditions

The Site totals 17.795 acres primarily used for row crop production. Of the 17.795 acres that will be placed under conservation easement, 17.019 acres are to be converted from active row crop land to a forested riparian buffer and adjacent riparian areas within FEMA Regulated Floodway, and the remainder 0.409 acres of forested riparian buffer and adjacent riparian areas will be preserved. The remaining area includes existing bottomland hardwood forest and water features. The Project will preserve and restore riparian buffer and adjacent riparian areas along an unnamed tributary to Half Mile Creek and four (4) ditches with hydrologic connection to the unnamed tributary. The Project's sole tributary originates on Site. The Site surrounds an existing DMS Project ID No. 100183 – Coor Island – DWR Project No. 2021 0021 v3 that provides riparian buffer restoration and preservation, this existing 11.52-acre project was planted in February 2023 with Coastal Plain Bottomland Hardwood bare-root seedlings. The downstream Site boundary is an existing mitigation site, Half Mile Branch Bank Site. Detailed project mapping is provided in Appendix A, along with site-specific data in Appendix B.

Intensive agriculture practices exist across all proposed restoration areas. Agricultural fields within and adjacent to the Site are subject to routine fertilizer and herbicide applications. Site streams and ditches exhibit bank erosion due to long-term plowing and removal of native vegetation throughout the proposed restoration areas. Historic imagery dating back to 1959 indicates that land management practices are consistent with the Site's current conditions (EDR Report, Appendix D)

Table 2. Project Activity and Reporting History

Task	Anticipated Completion Date	Actual Completion Date
Mitigation Plan	June 2023	
Initial Planting Date	February 2024	
Baseline Report Date	May 2024	
MY1 Report Date	December 2025	
MY2 Report Date	December 2026	
MY3 Report Date	December 2027	
MY4 Report Date	December 2028	
MY5 Report Date	December 2029	

Table 3. Project Attribute Table

Project Information			
Project Name		Coor Island Phase B Nutrient Offset site	
County		Wayne	
Project Area (acres)		17.795	
Project Coordinates (latitude and longitude)		35.385356, -78.118679	
Project Watershed Summary Information			
Physiographic Province		Southeastern Plain	
River Basin		Neuse	
USGS Hydrologic Unit 8-digit	030202010	USGS Hydrologic Unit14-digit	03020201-200030
DWR Sub-basin		03-04-12	
Project Drainage Area, Total Outfall		UT1: 257 Acres	
Project Drainage Area Percentage of Impervious Area		< 2%	

Regulatory Considerations			
Regulation	**Applicable?**	**Resolved?**	**Supporting Documentation**
Waters of the United States – Section 404	No	NA	NA
Waters of the United States – Section 401	No	NA	NA
Endangered Species Act	Yes	Yes	Appendix D
Historic Preservation Act	Yes	Yes	Appendix D
Coastal Zone Management Act [CZMA/Coastal Area Management Act (CAMA)]	No	NA	NA
FEMA Floodplain Compliance	Yes	Yes	Section 2.3 Appendix C
Essential Fisheries Habitat	No	NA	Appendix D

Table 4. Project Contacts Table

Full Delivery Provider / Designer Restoration Systems 1101 Haynes Street, Suite 211 Raleigh, North Carolina 27604 Raymond Holz 919-755-9490	**Planting Contractor** Restoration Systems 1101 Haynes Street, Suite 211 Raleigh, North Carolina 27604 Josh Merritt (919) 639-6132	**Surveyor** k2 Design Group 5688 U.S. Hwy. 70 East Goldsboro, NC 27534 John Rudolph (L-4194) 919-394-2547
Monitoring Axiom Environmental, Inc. 218 Snow Avenue Raleigh, NC 27603 Grant Lewis 919-215-1693		

DWR performed an on-site visit to determine applicability to the Neuse River Buffer Rules (15A NCAC 02B .0295), and Site viability to provide buffer credits based on the Neuse Buffer Rule (15A NCAC 02b .0295) and nutrient offset credits based on the Nutrient Offset Credit Trading Rule (15A NCAC 02B .0703) on January 21, 2021, and March 24, 2021 respectively. A copy of both the "On-Site Origin Determination for Applicability to the Neuse River Buffer Rules" and "Site Viability for Buffer Mitigation and Nutrient Offset" are provided in Appendix C. A Summary of their determinations, specific to Parcel Features, is summarized in Table 5 and correlated with stream segments as labeled in Appendix A figures. There have been no changes to land use in the project area since DWR's site visit.

Table 5. Project Features

Feature Name	Feature Type	Subject to Buffer Rules	Nutrient Offset Viability	Buffer Credit Viable	Contingencies
UT to Half Mile Branch (UT 1)	Intermittent/Perennial	Yes	Yes*	Yes	No Credits allowed in Timbered & Cleared Neuse Buffer (Zone 1 & Zone 2)
A	Ditch >3’ depth	No	Yes	No	Must meet 15A NCAC 02B .0295 (o)(8) (A, B, C, & D) No Credits allowed in DOT R.O.W.
B	Ditch <3’ depth	No	Yes	Yes**	No Credits allowed in DOT R.O.W.
C	Ditch >3’ depth	No	Yes	No	No Credits allowed in DOT R.O.W. or for fields forested during baseline
D	Ditch >3’ depth	No	Yes	No	No Credits allowed in DOT R.O.W. or for fields forested during baseline

* Timbered and cleared areas beyond the Neuse Buffer for buffer credit only – per 15A NCAC 02B .0295

** DWR Assessment concluded the ditch meets 15A NCAC 02B .0295 (o)(8) (See Appendix C “Site Viability for Buffer Mitigation and Nutrient Offset” letter)

1.4. Watershed Characteristics

The Site is located within USGS HUC 03020201-200030 and DWR Subbasin 03-04-12. Features drain to Half Mile Branch, which is classified as WS-IV and NSW by DWR. WS indicates that the watershed is for drinking supply in addition to providing recreation and protected areas. The NSW designation applies to surface water that is experiencing excessive growth of microscopic or macroscopic vegetation. The Parcel topography, as indicated on the Northwest Goldsboro, NC USGS 7.5-minute topographic quadrangle, shows gently sloped areas throughout the Parcel (Figure 2, Appendix A). Land uses draining to the project reaches are primarily agriculture with some existing forest.

1.5. Soils

The Parcel is mapped by the Wayne County Soil Survey. Project soils are described below in Table 6. An image of the paper copy of the 1972 Soil Survey of Wayne County is provided in Figure 8. A custom soil report is provided in Appendix B.

Table 6. Project Soil Types and Descriptions

Map Unit Symbol	Unit Name and Description	Percent of Bank Parcel	Hydric Status
Bb	Bibb sandy loam	27.2	Yes
Jo	Johns sandy loam	0.9	Yes
KaA	Kalmia sandy loam, 0 to 2 percent slopes	4.7	No
Le	Leaf loam	3.0	Yes
Lv	Lumbee sandy loam	57.1	Yes
NrB2	Norfolk sandy loam, 2 to 6 percent slopes, eroded	2.4	No
WaB	Wagram loamy sand, 0 to 6 percent slopes	4.8	No

Appendix B – Soils Report (Source: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm)

1.6. Geology

The Parcel is located in the Southeastern Floodplains and Low Terraces ecoregion on the border of the Rolling Coastal Plain ecoregion within the Southeastern Plains of North Carolina; USGS HUC 03020201 (NCDWQ Subbasin Number 03-04-12) of the Neuse River Basin. Regional physiography is characterized by broad interstream divides with gentle to steep side slopes dissected by numerous small, low to moderate gradient sandy bottomed streams and major river floodplains, associated terraces, and low gradient streams with sandy and silty substrates (Griffith et al. 2002a). On-site elevations range from a high of 83 feet National Geodetic Vertical Datum (NGVD) on slopes to a low of approximately 73 feet NGVD at the lowest point of the Parcel.

1.7. Directions to Site

The Site is located in southern Wayne County, approximately three miles west of Goldsboro (Figure 1, Appendix A). Directions to the Site from Raleigh, North Carolina, are below.

- Head east on US-70 for 30 miles
- Turn Right onto Creechs Mill Rd; travel 3.4 miles
- Turn Left onto Brogden Rd; travel 8 miles
- Brogden Road becomes Old Smithfield Road
- Site entrance is located on the right side of the road just after Antioch Presbyterian Church
    - Site Latitude, Longitude 35.3864, -78.1168

1.8. Site Maps

Appendix A

2. Regulatory Considerations

The presence of conditions or characteristics that could hinder restoration activities at the Site were evaluated. The evaluation focused primarily on the existence of hazardous materials, utilities, restrictive easements, rare/threatened/endangered species or critical habitats, the potential for hydrologic trespass, and existing utility easements. Existing information regarding Parcel constraints was acquired and reviewed, including an Environmental Records Report developed by Environmental Data Resources Inc., which located no evidence of environmental risk associated with the Parcel (Appendix D). In addition, any Parcel conditions that could restrict the restoration and implementation were documented during the field investigation. As a result of our review and field surveys, **no known Parcel constraints exist** that may hinder proposed restoration activities. Potential constraints reviewed include the following;

2.1. Threatened and Endangered Species

The NC Natural Heritage Program (NHP) database and the US Fish and Wildlife Service (USFWS) database were searched for federally listed threatened and endangered plant and animal species in Wayne County, NC (Appendix D). Five species are listed or proposed for listing as federally endangered or threatened species: the Neuse River Waterdog, Carolina Madtom, Red-cockaded woodpecker, Atlantic Pigtoe, Tar River Spinymussel. Restoration Systems performed pedestrian surveys of the Parcel in February 2020 and determined no suitable habitat for the species existed within restoration areas. The USFWS Self-Certification Letter Appendix D.

2.2. Cultural Resources and Significant Natural Heritage Areas

There are no existing structures in the project area or on the larger tract of land. The State Historic Preservation Office (SHPO) was contacted with a request for review and comment. SHPO provided a response letter on March 31, 2021, stating, "We [SHPO] 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." All communication with SHPO is included in Appendix D.

2.3. FEMA Floodplain Compliance

FEMA coordination/review is conducted at the county level. Regulated activities within mapped FEMA areas are discussed under Wayne County Ordinance Chapter 38 – Flood Prevention (https://library.municode.com/nc/wayne_county/codes/code_of_ordinances?nodeId=COOR_CH38FLDAPR). Specifically, Section 38-62, which discusses provisions required within FEMA mapped zones where base flood elevation data has been provided. Under this Section, there is no restriction of reforestation in Zone X. Coordination with the Wayne County FEMA Administrator was completed in August of 2021. The attached NC DMS Floodplain Checklist is provided in Appendix C.

2.4. Waters of The United States (404 Considerations)

Jurisdictional Waters of the US within the Site were not delineated as the project will not involve any land-disturbing activities or impacts to Water of the US.

2.5. Land Quality

Wayne County does not administer its own Erosion and Sediment Control program. Thus, the Site's proposed land-disturbing activities are subject to the State's authority under the Sedimentation Pollution Control Act of 1973 (1973 Act) and 15A NCAC 04. Under the 1973 Act, an erosion and sediment control

plan is required if more than one acre of land on a tract is disturbed (§ 113A-57. Mandatory standards for land-disturbing activity). Site restoration activities will not include soil disturbance thus, an Erosion and Sediment Control Plan is not required.

2.6. Parcel Location, Parcel Constraints, and Access

The Parcel is in rural Wayne County, near the town of Goldsboro (Figure 1). The Parcel is accessible for construction, monitoring, and long-term stewardship from Old Smithfield Road. DOT right of ways, powerlines, and associated easements will be excluded from the conservation easement (Appendix F).

2.7. Other Environmental Conditions

An Environmental Data Resources, Inc (EDR) Radius Map Report with Geocheck was ordered for the Parcel on February 19, 2021. Neither the target property nor the adjacent properties were listed in any Federal, State, or Tribal environmental databases searched by EDR. The executive summary of the EDR report is included in Appendix D.

3. Restoration Plan

The Project will restore agriculturally impacted land in the Parcel footprint to a forested riparian corridor, protected in perpetuity, improving the ecological function of the area. Areas slated for restoration may require soil testing and will be ripped to break up compact soil. Site preparation will include select herbicide treatments and/or limited mechanical clearing to remove undesirable vegetation and may include soil amendments. Where needed, invasive species will be selectively removed and/or spot treated by a licensed pesticide applicator. The design will ensure that no adverse impacts to wetlands or existing riparian buffers and adjacent riparian areas occur. Figure 5, Appendix A illustrates the conceptual design for the Parcel.

Table 7. Restoration Plan Activities

Restoration Plan Activity	Actions (Figure 5, Appendix A)
Riparian Restoration	1.) Parcel-wide soil preparation herbaceous vegetation treatment ahead of planting 2.) Establishment of a native herbaceous community via site-specific seed mix (Table 8) 3.) Establishment of 17.019 acres of native hardwood forest via the planting of bare-root hardwood saplings (Table 9)

3.1. Materials and Methods

Restoration of Riparian Coastal Plain Bottomland Hardwood Forest allows for the development and expansion of characteristic species across the landscape. Ecotonal changes between community types contribute to habitat diversity and provide secondary benefits, such as enhanced feeding and nesting opportunities for mammals, birds, amphibians, and other wildlife.

Revegetating floodplains will provide overall system stability, shade, and wildlife habitat. In addition, viable riparian communities will improve the system's biogeochemical function by filtering pollutants from overland and shallow subsurface flows and providing organic materials to adjacent stream channels.

A diverse and native herbaceous seed mix will be planted across the Site. This mix will provide soil stability, ecological diversity, and favorable growing conditions for the planted woody species. Seeding will consist of a seasonally appropriate temporary nurse crop (eg. millet or cereal rye), a mix of wildflowers known to benefit wildlife, including pollinators (eg. *Rudbeckia spp., Echinacea spp., Coreopsis spp., Eupatorium*

coelestinum, Chamaecrista fasciculata), and a blend of low growing grasses, which will provide long term soil stability and wildlife benefit without unduly competing with the desired forbs or woody plantings (eg. *Agrostis spp.*).

Table 8. Seed Mix

Long-Term Seed Mix: Native diversity, Pollinator Benefits & Stabilization					
Rate: 2 lbs /acre. Species subject to availability.					
Species	**%**		**Species**	**%**	
Agrostis hyemalis	5	FAC	*Helianthus angustifolius*	4	FACW
Agrostis perennans	5	FACU	*Heliopsis helianthoides*	4	UPL
Andropogon gerardi	4	FAC	*Hibiscus moscheutos*	0.5	OBL
Bidens aristosa	3	FACW	*Juncus effusus*	2	FACW
Carex albolutescens	2	FACW	*Juncus tenuis*	2	FAC
Carex lupulina	1	OBL	*Lespedeza capitata*	2	FACU
Carex vulpinoidea	2	OBL	*Liatris spicata*	0.5	FAC
Chamaecrista fasciculata	5	FACU	*Monarda fistulosa*	0.5	FACU
Chamaecrista nictitans	2	FACU	*Panicum anceps*	6	FAC
Coreopsis lanceolata	3	NI	*Panicum clandestinum*	2	FAC
Coreopsis tinctoria	3	FAC	*Panicum virgatum*	4	FAC
Desmodium canadense	2	FAC	*Rudbeckia hirta*	7	FACU
Echinacea purpurea	7	NI	*Schizachyrium scoparium*	4	FACU
Elymus virginicus	5	FACW	*Senna hebecarpa*	5	FAC
Eupatorium coelestinum	0.5	FAC	*Sorghastrum nutans*	4	FACU
Eupatorium perfoliatum	1	FACW	*Verbena hastata*	2	FACW

Variations in vegetative planting will occur based on the topography and hydrologic condition of soils. Vegetative species composition will be based on site-specific features and community descriptions from the *Classification of the Natural Communities of North Carolina* (Schafale and Weakley 2012). Community associations to be utilized include Riparian and Wetland Buffer.

Bare-root seedlings within the Riparian Coastal Plain Bottomland Hardwood Forest will be planted at a density between 680 and 720 stems per acre on 8-foot centers. Planting will be performed between November 15 and March 15 to allow plants to stabilize during the dormant period and set roots during the spring season. Species will be well mixed within the planting scheme to ensure diversity of bare roots across planted areas and monitoring plots. Species availability may result in the substitution of regionally appropriate native species. A minimum of 10 species of trees will be planted. Final species composition and density will be detailed in the As-built Report. Potential species planted within the Site detailed in Table 9 depicts the total number of stems and species distribution within each vegetation association (Figure 6, Appendix A).

(Space left intentionally blank - Table on following page)

Table 9. Planting Plan

Vegetation Association		Coastal Plain Bottomland Hardwood*	
Area (acres)		**17.019 Acres**	
Species	**Indicator Status**	**# planted ***	**% of total**
River birch (*Betula nigra*)	FACW	1200	10%
Black gum (*Nyssa Sylvatica*)	FAC	1200	10%
Swamp chestnut oak (*Quercus michauxii*)	FAC	1200	10%
American elm (*Ulmus americana*)	FAC	1200	10%
Red mulberry (*Morus rubra*)	FACU	1200	10%
Persimmon (*Dispyros virginiana*)	FAC	1000	8%
Sycamore (*Platanus occidentalis*)	FAC	1200	10%
Tulip poplar (*Liriodendron tulipifera*)	FACU	1400	12%
Water oak (*Quercus nigra*)	FACW	1200	10%
Willow oak (*Quercus phellos*)	FACW	1200	10%
	TOTAL	**12,000**	**100**

* Planted at a density between 680 and 720 stems per acre.

3.2. Easement Marking

The entire easement area will be appropriately marked to identify the easement boundaries per DMS and DWR 401 & Buffer Permitting Branch requirements. Fencing is not proposed or required.

3.3. Other Activities

Beaver, Privet, and other potential nuisance species will be monitored throughout the 5-year monitoring period. Appropriate actions to alleviate any negative impacts regarding vernation development and/or water management will occur on an as-needed basis.

4. Monitoring Plan

Restoration monitoring procedures for vegetation will monitor plant survival and species diversity. Quantitative sampling will include twelve (12) permanent 10 x 10-meter vegetation plots as outlined in the CVS Level 1-2 Protocol for Recording Vegetation, Version 4.2 (Lee et al. 2008) and will occur no earlier than the first calendar day of Fall each year (Figure 8, Appendix A). A reference photo will be taken from the origin point of each plot. All planted stems in the plots will be marked with flagging tape and recorded. Data collected will include species, height, planting type (planted stem and/or volunteer), and vigor. Monitoring will be conducted by Axiom Environment, Inc based on the schedule in Table 10. A summary of monitoring is outlined in Table 11. Annual monitoring reports will be submitted to the NCDMS by Restoration Systems no later than December 1 of each monitoring year data.

Table 10. Monitoring Schedule

Resource	Year 1	Year 2	Year 3	Year 4	Year 5
Vegetation (2% of planted area)	x	x	x	x	x
Visual Assessment (100% of Site)	x	x	x	x	x
Report Submittal	x	x	x	x	x

Table 11. Monitoring Summary

Vegetation Parameters				
Parameter	**Method**	**Schedule/ Frequency**	**Number/ Extent**	**Data Collected/Reported**
Vegetation	12 Permanent vegetation plots 0.0247 acre (100 square meters) in size; *CVS-EEP Protocol for Recording Vegetation*, *Version 4.2* (Lee et al. 2008).	As-built (MY 0), MY 1, 2, 3, 4, and 5	12 plots across the restoration portion of the Site	Species, height, vigor, planted vs. volunteer, stems/acre. Reference photo at each monitoring plot.

5. Project Performance Criteria

Performance criteria will be based on the survival of planted species at a density of 260 stems per acre after five years of monitoring. The first annual monitoring activities will commence at the end of the first growing season, at least five months after planting has been completed.

Table 12. Performance Criteria

Vegetation
• Within planted portions of the Site, in accordance with Rule 15A NCAC 02B .0295: a) a minimum of 260 stems per acre must be present at year 5, and b) a minimum of four native hardwood and native shrub species in each vegetation monitoring plot, where no one species is greater than 50 % of stems. • Planted and volunteer stems are counted, provided they are included in the approved planting list for the Site; natural recruits not on the planting list may be considered by the DWR on a case-by-case basis.

5.1. Vegetation Contingency / Adaptive Management Plan

An adaptive management plan will be developed and implemented with the approval of DMS and DWR in the event the Site, or a specific component of the Site, fails to achieve performance criteria as outlined above. Other vegetation maintenance and repair activities may include pruning, mulching, and fertilizing. If exotic invasive plant species require treatment, such species will be controlled by mechanical (physical removal with the use of a chainsaw) and/or herbicide application in accordance with North Carolina Department of Agriculture (NCDA) rules and regulations.

5.2. Compatibility with Project Goals

The following table outlines the compatibility of Site performance criteria described above to Site goals and objectives that will be utilized to evaluate if Site goals and objectives are achieved.

Table 13. Compatibility of Performance Criteria to Project Goals and Objectives

Goals	Objectives	Compatibility of Performance Criteria with Goals and Objectives
• Removing nonpoint sources of pollution associated with agricultural production, including a) ceasing the broadcast application of fertilizer, pesticides, and other agricultural materials into and adjacent to Site features, and b) providing a restored buffer to filter runoff from adjacent land use • Reducing sedimentation within on-site and downstream receiving waters • Promoting floodwater attenuation by increasing frictional resistance of floodwaters crossing Site floodplains • Improving aquatic habitat by enhancing stream bed shading and natural detritus input • Providing a terrestrial wildlife corridor and refuge in an area extensively developed for agricultural production. • Restoring and re-establishing natural community structure, habitat diversity, and functional continuity • Protecting the Parcel's riparian buffer and adjacent riparian areas functions and values in perpetuity	• Cessation of agricultural row crops from the Site • Cessation of vegetation maintenance along Site features • Mechanical disking of Site soils to reduce compaction and increase soil surface roughness • Plant a diverse woody riparian buffer and adjacent riparian areas comprised of native hardwoods • Protect riparian buffers, adjacent riparian area, and FEMA flood zones with a perpetual conservation easement	• Disking of Site soils to provide diffused flow per Rule 15A NCAC 02B .0295 • Planting at a density between 680 and 720 stems per acre, to achieve a minimum of 260 stems per acre by year five of monitoring, as required by Rule 15A NCAC 02B .0295 • Planting of diverse woody riparian buffer and adjacent riparian areas to meet the minimum species and percentage requirements detailed in Rule 15A NCAC 02B .0295 – "A minimum of four native hardwood and native shrub species, where no one species is greater than 50 percent of stems"

6. Mitigation Potential

The Site will generate Neuse River NOC on restored riparian areas measured from the top of bank out perpendicularly a maximum of 200 feet on subject Features. Per the Consolidated Mitigation Buffer Rule, the Parcel will generate NOC via allowed activities under Sections (n) Riparian Buffer Restoration Site. In addition, riparian buffer and adjacent riparian areas associated with the stream feature are eligible for conversion to RBC.

6.1. Diffuse Flow

All features will retain diffuse flow except for Feature D, which will have a diffused flow reduction as per DWR comments (See Figure 6).

6.2. Determination of Credits

Within the 17.795-acre Site, 17.019 acres of crop land within riparian areas will be restored to forested riparian areas and 0.409 acres of existing riparian forest will be preserved. The primary goals associated with restoring riparian areas within the Site are improvement to water quality, enhanced flood attenuation, and restored wildlife habitat. These goals will be achieved by restoring 17.019 acres of forested riparian buffer and adjacent riparian areas and preserving 0.409 acres of existing forest and State waters.

Table 14. Mitigation Activities and Credit Summary

Coor Island Phase B Nutrient Offset Site, 2021-0021v2, Project Credits

Neuse 03020201 - Outside Falls Lake	Project Area
19.16394	N Credit Conversion Ratio (ft^2/pound)
N/A	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)
Nutrient Offset	Rural	Yes	I / P	Restoration	0-100	UT1	46,945	46,945	1	100%	1.00000	Yes	46,945.000	Yes	2,449.653	—
Nutrient Offset	Rural	Yes	I / P	Restoration	101-200	UT1	293,514	293,514	1	33%	3.03030	Yes	96,859.717	Yes	15,315.953	—
													—		—	—
Nutrient Offset	Rural	No	Ditch	Restoration	0-100	A, B, C, D	155,565	0	1	100%		No	—	Yes	8,117.590	—
Nutrient Offset	Rural	No	Ditch	Restoration	101-200	A, B, C, D	126,903	0	1	33%		No	—	Yes	6,621.968	—
													—		—	—
Nutrient Offset	Rural	No	Ditch	Restoration		Diffuse Flow Feature D	2,175	0	1				—		—	—
													—		—	—
Nutrient Offset	Rural	No	Ditch	Restoration		Less Than 50-Feet Feature C	1,794	0	1				—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
						Totals (ft2):	626,896	340,459					143,804.717		32,505.164	0.000
						Total Buffer (ft2):	0	0								
						Total Nutrient Offset (ft2):	626,896	N/A								

Total Ephemeral Area (ft^2) for Credit:	0	0	
Total Eligible Ephemeral Area (ft^2):	0	0.0%	Ephemeral Reaches as % TABM
Total Eligible for Preservation (ft^2):	0	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:		0	0.000
Enhancement:		0	0.000
Preservation:		0	0.000
Total Riparian Buffer:		0	0.000
TOTAL NUTRIENT OFFSET MITIGATION			
Mitigation Totals		Square Feet	Credits
Nutrient Offset:	Nitrogen:	626,896	32,505.164
	Phosphorus:		0.000

7. Long-Term Management Plan

The Site will be transferred to the NCDEQ Stewardship Program. This party shall serve as the conservation easement holder and long-term steward for the property and will conduct periodic inspections 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 Statute 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.

8. References

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. United States Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

North Carolina Division of Mitigation Services (NCDMS). 2010 amended 2018. Neuse River Basin Restoration Priorities (online). Available: https://files.nc.gov/ncdeq/Mitigation%20Services/Watershed_Planning/Neuse_River_Basin/RBRP-Neuse-201807-.pdf (September 11, 2020).

Schafale, M.P. 2012. Guide to the Natural Communities of North Carolina: Fourth Approximation. North Carolina Natural Heritage Program, North Carolina Department of Environment and Natural Resources. Raleigh, North Carolina.

State of North Carolina. (1973). Chapter 113A - Article 4. https://www.ncleg.net/enactedlegislation/statutes/html/byarticle/chapter_113a/article_4.html.

State of North Carolina. NCAC Title 15A - Environmental Quality; Chapter 04 - Sedimentation Control. North Carolina Office of Administrative Hearings. http://reports.oah.state.nc.us/ncac.asp?folderName=%5CTitle+15A+-+Environmental+Quality%5CChapter+04+-+Sedimentation+Control.

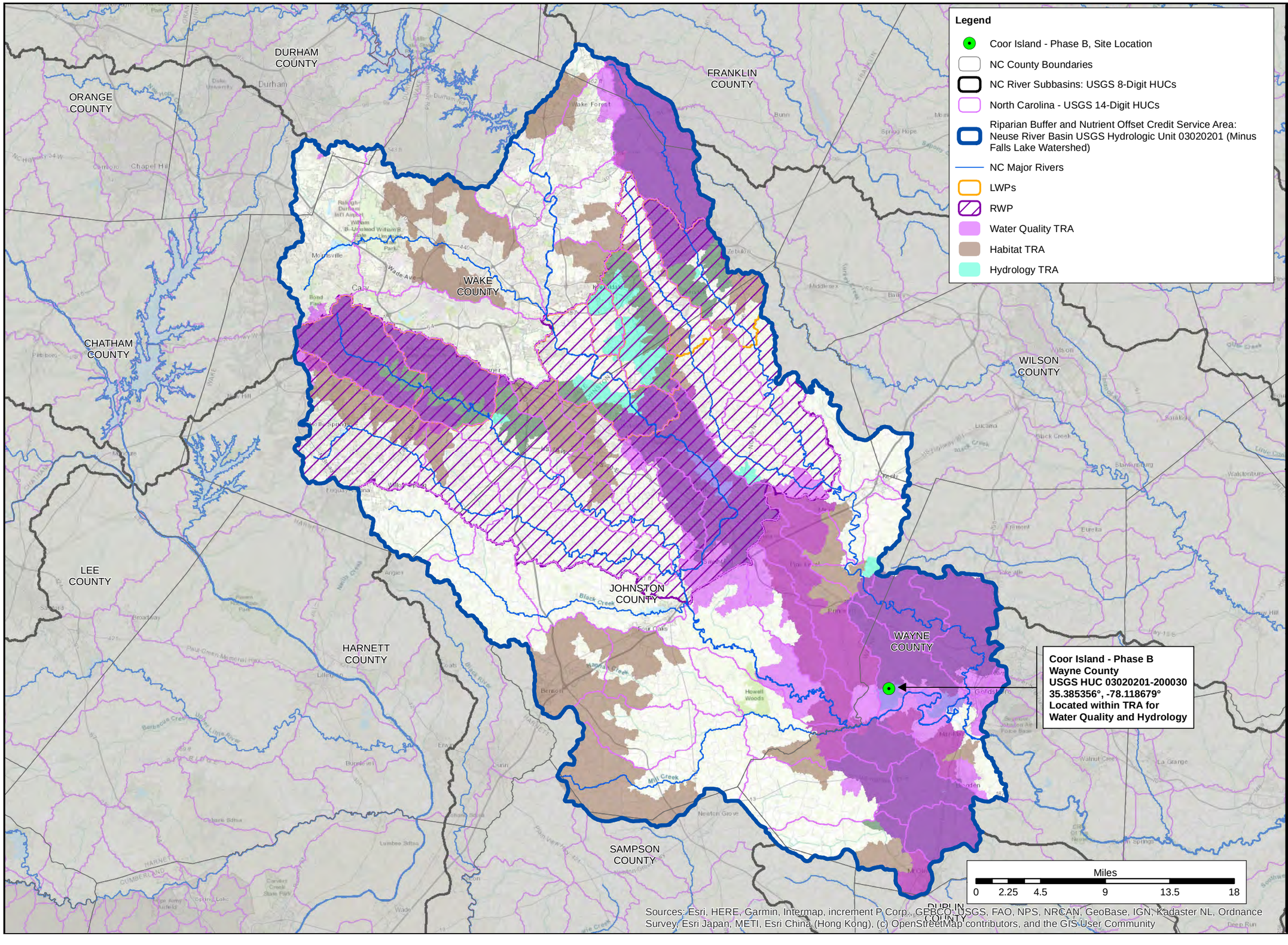
United States Department of Agriculture (USDA). 2019. Web Soil Survey (online). Available: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx [September 2, 2020].

United States Fish and Wildlife Service (USFWS). 2020. Endangered Species, Threatened Species, Federal Species of Concern, and Candidate Species, Wayne County, North Carolina (online, updated July 17, 2020). Available: https://www.fws.gov/raleigh/species/cntylist/wayne.html [September 2, 2020].

Appendix A. Figures, Site Photo Log, and DWR Credit Determination Table

Figure 1. Site Location & Hydrologic Unit Map
Figure 2. US Geological Survey Topo Quad
Figure 3. Soil Survey of Wayne County
Figure 4. Existing Conditions
Figure 5. Planting Plan
Figure 6. Mitigation Credit
Figure 7. Monitoring Plan

Site Photos



RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of Enviromental Quality

Division of Mitigation Services

Project:

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

Wayne County, NC

Title:

SITE LOCATION, HYDROLOGIC UNIT, & SERVICE AREA MAP

Drawn by: RJH

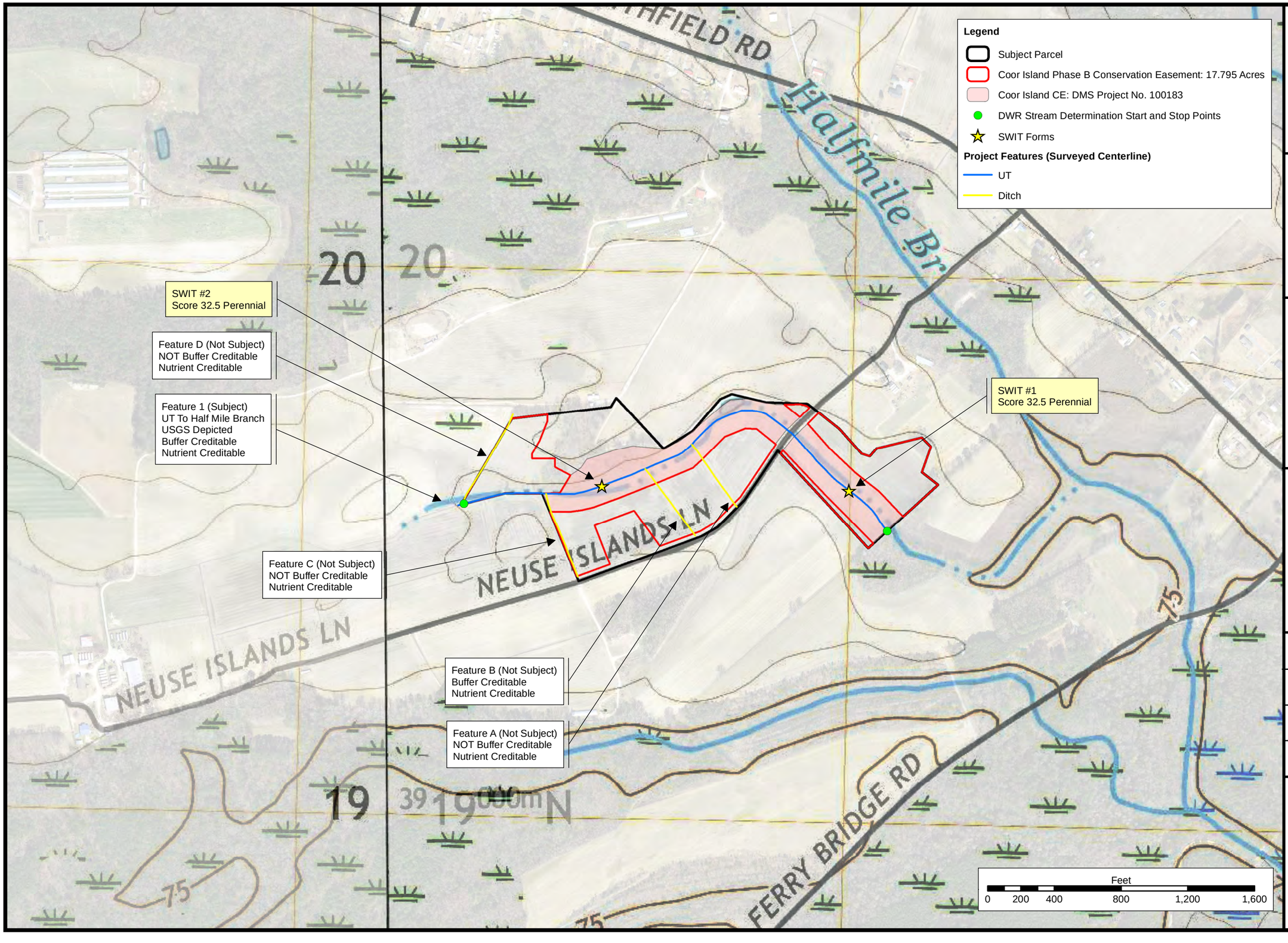
Date: JUNE 2023

Scale: 1:450,000

Project No.: 100650

FIGURE

1



RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of Enviromental Quality

Division of Mitigation Services

Project:

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

Title:

USGS TOPO QUAD

Goldsboro, NC (2019) 7.5 minute topographic quadrangle provided by the U.S. Geological Survey (USGS)

Drawn by: RJH

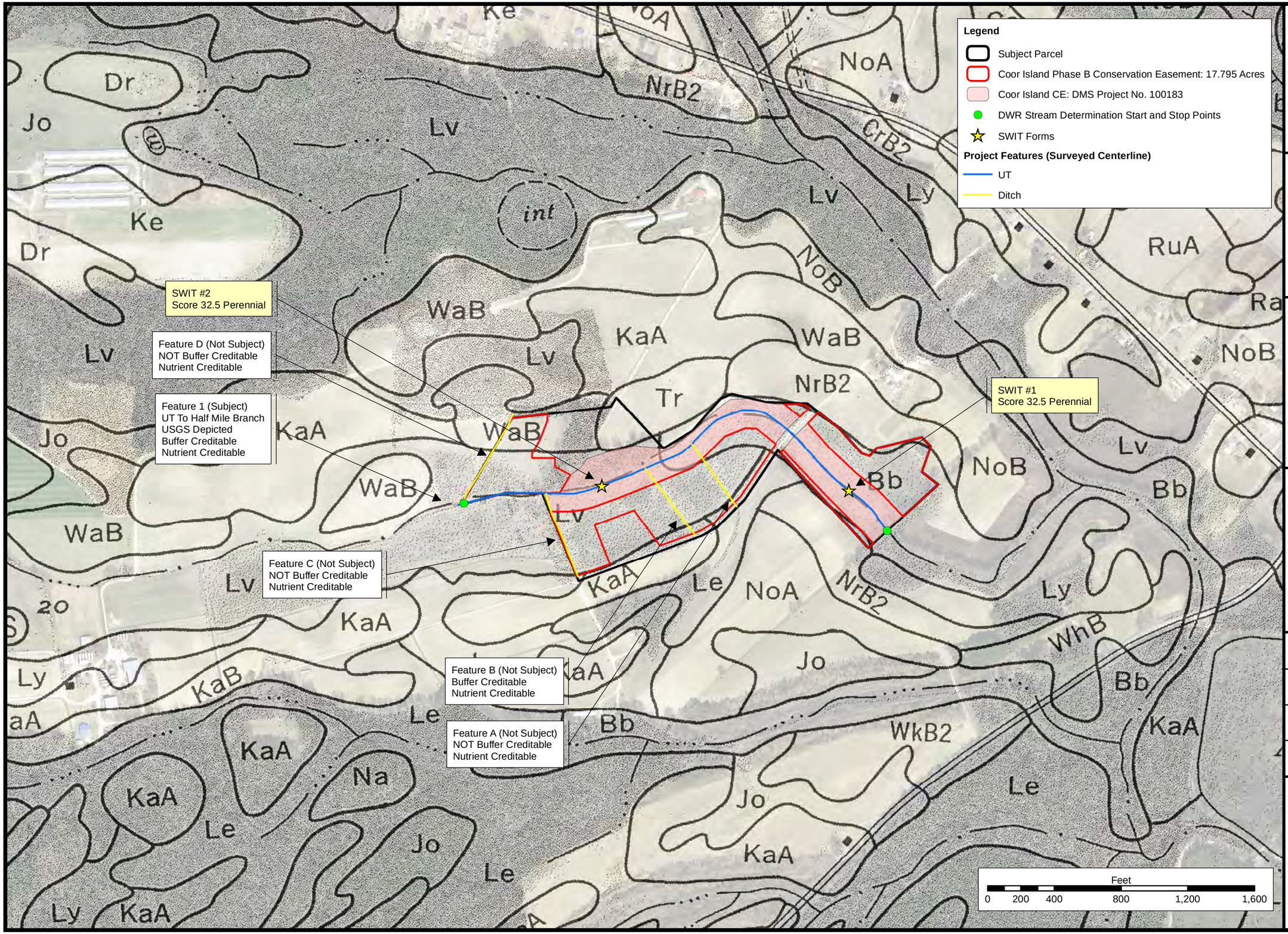
Date: JUNE 2023

Scale: 1:6,500

Project No.: 100650

FIGURE

2



RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of Enviromental Quality

Division of Mitigation Services

Project:

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

Title:

NRCS SOIL SURVEY

Soil Survey of Wayne County, NC (1972) provided by NRCS Sheet 18

Drawn by: RJH

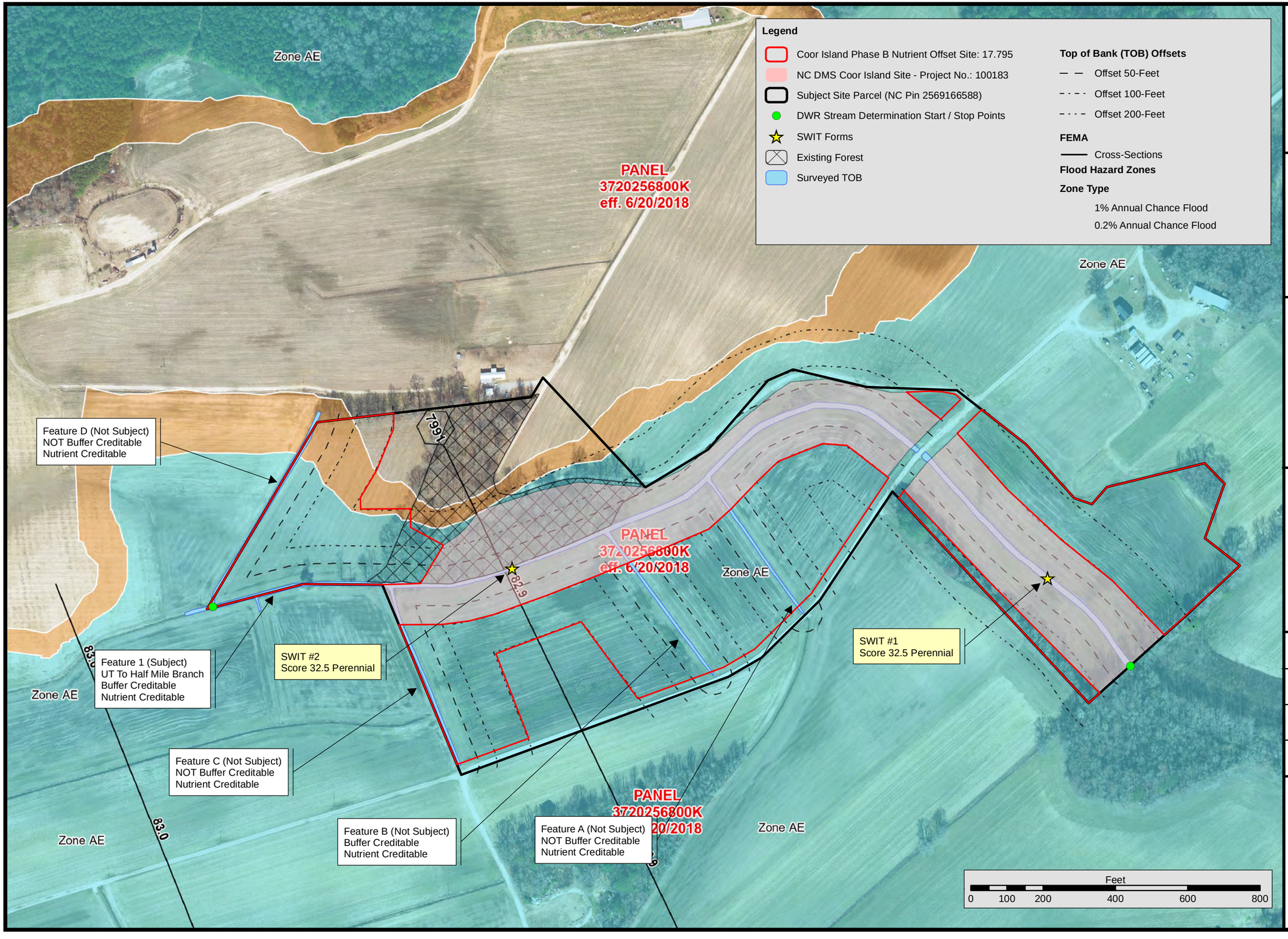
Date: JUNE 2023

Scale: 1:6,500

Project No.: 100650

FIGURE

3



RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of Enviromental Quality

Division of Mitigation Services

Project:

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

Wayne County, NC

Title:

EXISTING CONDITIONS

Source: FEMA Flood Insurance Rate Map 3720256300K, Panel 2563, effective June 20, 2018

2021 NC OneMap

Drawn by: RJH

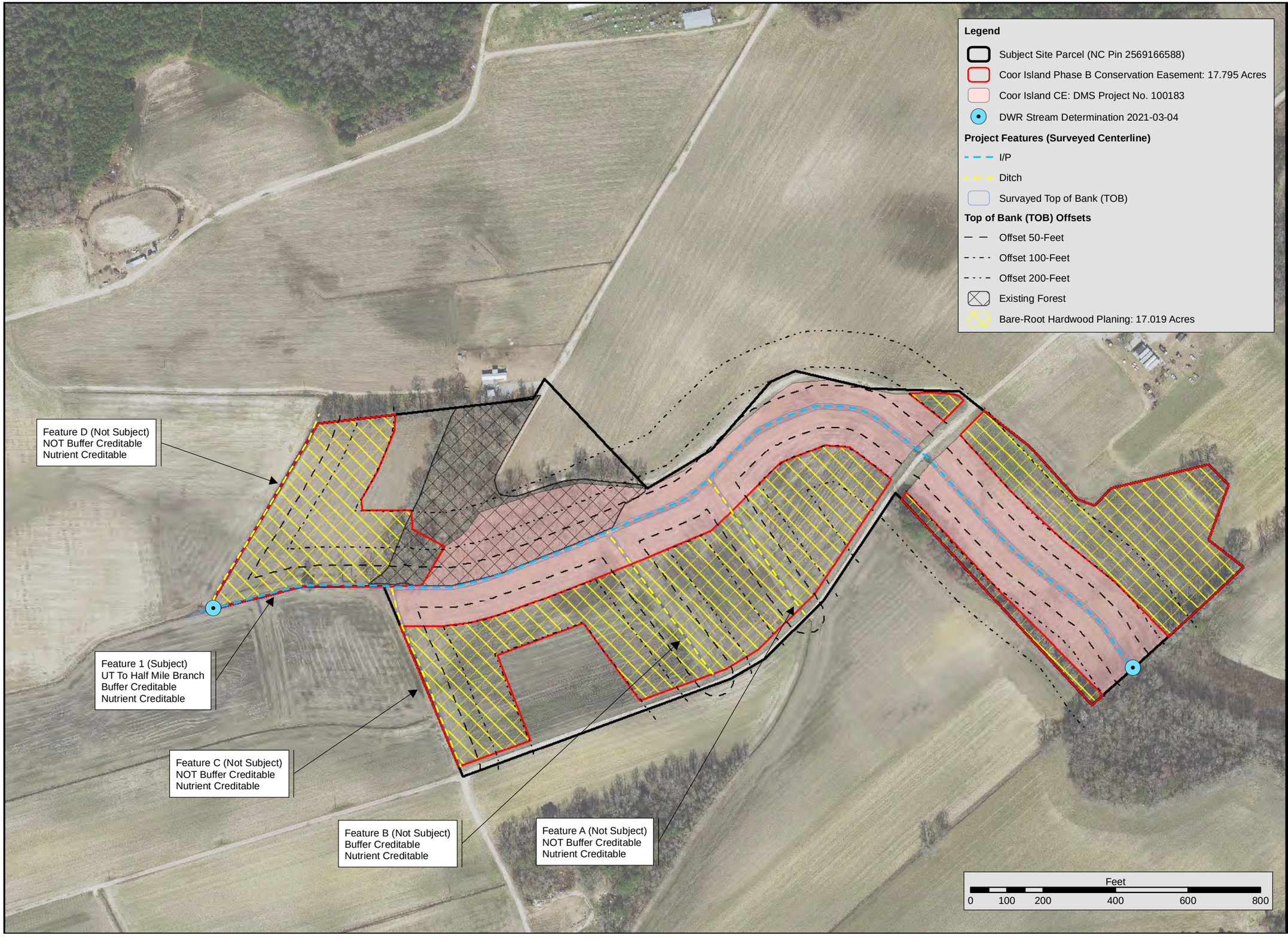
Date: JUNE 2023

Scale: 1:3,000

Project No.: 100650

FIGURE

4



RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of Enviromental Quality

Division of Mitigation Services

Project:

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

Wayne County, NC

Title:

RESTORATION PLAN

2021 NC OneMap

Drawn by: RJH

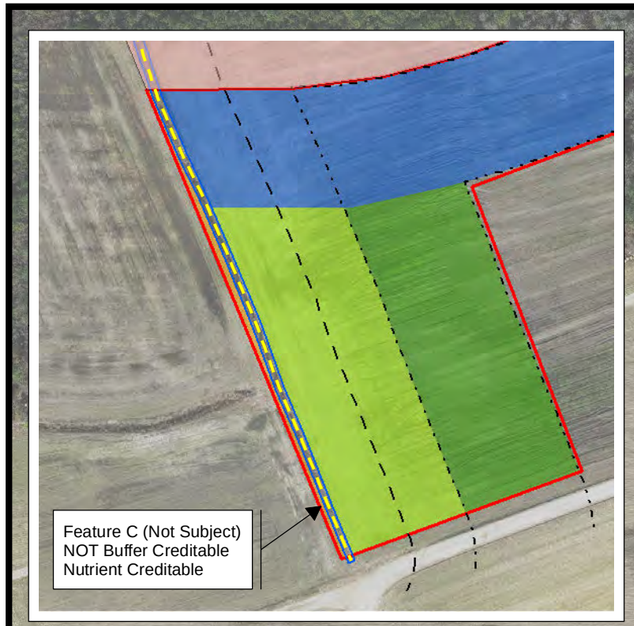
Date: JUNE 2023

Scale: 1:3,000

Project No.: 100650

FIGURE

5



Legend

- Subject Site Parcel (NC Pin 2569166588)
- Coor Island Phase B Conservation Easement: 17.795 Acres
- Coor Island CE: DMS Project No. 100183
- Existing Forest
- DWR Stream Determination 2021-03-04

Project Features (Surveyed Centerline)

- I/P
- Ditch
- Surveyed TOB

Top of Bank (TOB) Offsets

- Offset 50-Feet
- Offset 100-Feet
- Offset 200-Feet

Coor Island PhaseB - Proposed Credits

- I/P Restoration 0-100-feet (NOC - RBC Conversion Eligible)
- I/P Restoration 101-200-feet (NOC - RBC Conversion Eligible)
- Ditch Restoration 0-100-feet (NOC Only)
- Ditch Restoration 101-200-feet (NOC Only)
- Diffuse Flow Reduction (No Credit)
- Preservation (No Credit)
- Restoration (No Credit - Less Than 50-Feet)

Diffuse Flow Reduction

Feature D (Not Subject)
NOT Buffer Creditable
Nutrient Creditable

Credit Taken From Feature 1
Out 200-feet from TOB

Feature 1 (Subject)
UT To Half Mile Branch
Buffer Creditable
Nutrient Creditable

Credit Taken From Feature 1
Out 200-feet from TOB

Feature C (Not Subject)
NOT Buffer Creditable
Nutrient Creditable

Feature B (Not Subject)
Buffer Creditable
Nutrient Creditable

Feature A (Not Subject)
NOT Buffer Creditable
Nutrient Creditable

Feet
0 100 200 400 600 800

NOTE ABOUT WIDTHS & CREDITING:

Nutrient Offset Credit (NOC)
Nutrient Offset Credit is contiguous from TOB, is a minimum of 50 ft. from the TOB and a maximum of 200 ft. from the TOB.

Features A, B, and C - No Diffused Flow Reduction Required
Per DWR Comments

RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of Enviromental Quality

Division of Mitigation Services

Project:

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

Wayne County, NC

Title:

CREDIT DETERMINATION

2021 NC OneMap

Drawn by: RJH

Date: JUNE 2023

Scale: 1:3,000

Project No.: 100650

FIGURE

6

N

MONITORING NOTES:

Quantitative sampling will include twelve (12) permanent 10 x10-meter vegetation plots, 2.06% of the Total Restoration Area (TRA). TRA includes all planted areas within 200-feet from the TOB, including non-credit and diffuse flow areas.

1, 10 x10-meter vegetation plot = 1,076.39 sq. ft.
TRA = 626,907.000 sq. ft.
2% of TRA = 12,538.14 sq. ft. / 1,076.39 sq. ft. = 11.65

11.65 round-up to 12 vegetation plots accounting for 2.06% of the TRA.

Legend

- Subject Site Parcel (NC Pin 2569166588)
- Coor Island Phase B Conservation Easement: 17.795 Acres
- Coor Island CE: DMS Project No. 100183
- Coor Island Phase B Monitoring Plots (12 Total)
- DWR Stream Determination 2021-03-04

Project Features (Surveyed Centerline)

- I/P
- Ditch
- Survayed TOB

Top of Bank (TOB) Offsets

- Offset 50-Feet
- Offset 100-Feet
- Offset 200-Feet

Coor Island PhaseB - Proposed Credits

- I/P Restoration 0-100-feet (NOC - RBC Conversion Eligible)
- I/P Restoration 101-200-feet (NOC - RBC Conversion Eligible)
- Ditch Restoration 0-100-feet (NOC Only)
- Ditch Restoration 101-200-feet (NOC Only)
- Diffuse Flow Reduction (No Credit)
- Preservation (No Credit)
- Restoration (No Credit - Less Than 50-feet)

Diffuse Flow Reduction

Feature D (Not Subject)
NOT Buffer Creditable
Nutrient Creditable

Feature 1 (Subject)
UT To Half Mile Branch
Buffer Creditable
Nutrient Creditable

Feature C (Not Subject)
NOT Buffer Creditable
Nutrient Creditable

Feature B (Not Subject)
Buffer Creditable
Nutrient Creditable

Feature A (Not Subject)
NOT Buffer Creditable
Nutrient Creditable

Feet
0 100 200 400 600 800

RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of Enviromental Quality

Division of Mitigation Services

Project:

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

Wayne County, NC

Title:

MONITORING MAP

2021 NC OneMap

Drawn by: RJH

Date: JUNE 2023

Scale: 1:3,000

Project No.: 100650

FIGURE

7

N

Photo 1 – Looking west, Photo Date, November 20, 2023

Photo 2 – Looking east, Photo Date, November 20, 2023

Photo 3 – Looking northeast, Photo Date, November 20, 2023

Photo 4 – Looking east, Photo Date, November 20, 2023

NC DWQ Stream Identification Form Version 4.11

Date: 9/11/2020	**Project/Site:** Coors Island/UT to Half Mile	**Latitude:** 35.385562
Evaluator: A. Baldwin	**County:** Wayne	**Longitude:** -78.115851
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30* 32.50	**Stream Determination (circle one)** Ephemeral Intermittent Perennial	**Other** e.g. Quad Name: NW Goldsboro

A. Geomorphology (Subtotal = 14.0)	Absent	Weak	Moderate	Strong
1[a]. Continuity of bed and bank	0	1	2	3 ●
2. Sinuosity of channel along thalweg	0	1 ●	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1 ●	2	3
4. Particle size of stream substrate	0	1	2 ●	3
5. Active/relict floodplain	0	1	2	3 ●
6. Depositional bars or benches	0	1 ●	2	3
7. Recent alluvial deposits	0	1 ●	2	3
8. Headcuts	0 ●	1	2	3
9. Grade controls	0	0.5 ●	1	1.5
10. Natural valley	0	0.5	1	1.5 ●
11. Second or greater order channel	No = 0 ●		Yes = 3	

[a] Man-made ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 9.5)				
12. Presence of Baseflow	0	1	2	3 ●
13. Iron oxidizing bacteria	0	1 ●	2	3
14. Leaf litter	1.5	1 ●	0.5	0
15. Sediment on plants or debris	0	0.5 ●	1	1.5
16. Organic debris lines or piles	0	0.5	1 ●	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3 ●	

C. Biology (Subtotal = 9.00)				
18. Fibrous roots in streambed	3 ●	2	1	0
19. Rooted upland plants in streambed	3 ●	2	1	0
20. Macrobenthos (note diversity and abundance)	0 ●	1	2	3
21. Aquatic Mollusks	0 ●	1	2	3
22. Fish	0 ●	0.5	1	1.5
23. Crayfish	0 ●	0.5	1	1.5
24. Amphibians	0	0.5 ●	1	1.5
25. Algae	0	0.5	1 ●	1.5
26. Wetland plants in streambed	FACW = 0.75;		OBL = 1.5 ●	Other = 0

* perennial streams may also be identified using other methods. See p. 35 of manual

Notes:

Data point was on the downstream reach surrounded by existing ag fields.

Sketch:

NC DWQ Stream Identification Form Version 4.11

Date: 9/11/2020	**Project/Site:** Coors Island/UT to Half Mile	**Latitude:** 35.385684
Evaluator: A. Baldwin	**County:** Wayne	**Longitude:** -78.120566
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30* 32.50	**Stream Determination (circle one)** Ephemeral Intermittent Perennial ✓	**Other** e.g. Quad Name: NW Goldsboro

A. Geomorphology (Subtotal = 15.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of bed and bank	0 ○	1 ○	2 ○	3 ◉
2. Sinuosity of channel along thalweg	0 ○	1 ○	2 ◉	3 ○
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0 ○	1 ○	2 ◉	3 ○
4. Particle size of stream substrate	0 ○	1 ○	2 ◉	3 ○
5. Active/relict floodplain	0 ○	1 ○	2 ◉	3 ○
6. Depositional bars or benches	0 ○	1 ◉	2 ○	3 ○
7. Recent alluvial deposits	0 ○	1 ◉	2 ○	3 ○
8. Headcuts	0 ◉	1 ○	2 ○	3 ○
9. Grade controls	0 ○	0.5 ○	1 ◉	1.5 ○
10. Natural valley	0 ○	0.5 ○	1 ○	1.5 ◉
11. Second or greater order channel	No = 0 ◉		Yes = 3 ○	

[a] Man-made ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 8.0)				
12. Presence of Baseflow	0 ○	1 ○	2 ○	3 ◉
13. Iron oxidizing bacteria	0 ◉	1 ○	2 ○	3 ○
14. Leaf litter	1.5 ○	1 ◉	0.5 ○	0 ○
15. Sediment on plants or debris	0 ◉	0.5 ○	1 ○	1.5 ○
16. Organic debris lines or piles	0 ○	0.5 ○	1 ◉	1.5 ○
17. Soil-based evidence of high water table?	No = 0 ○		Yes = 3 ◉	

C. Biology (Subtotal = 9.00)				
18. Fibrous roots in streambed	3 ◉	2 ○	1 ○	0 ○
19. Rooted upland plants in streambed	3 ◉	2 ○	1 ○	0 ○
20. Macrobenthos (note diversity and abundance)	0 ◉	1 ○	2 ○	3 ○
21. Aquatic Mollusks	0 ◉	1 ○	2 ○	3 ○
22. Fish	0 ◉	0.5 ○	1 ○	1.5 ○
23. Crayfish	0 ◉	0.5 ○	1 ○	1.5 ○
24. Amphibians	0 ○	0.5 ◉	1 ○	1.5 ○
25. Algae	0 ○	0.5 ○	1 ◉	1.5 ○
26. Wetland plants in streambed	FACW = 0.75; ○	OBL = 1.5 ◉	Other = 0 ○	

* perennial streams may also be identified using other methods. See p. 35 of manual

Notes:

Data point was on the upstream reach with an existing ag field on the right bank riparian zone and forest on the left bank riparian zone.

Sketch:

United States Department of Agriculture

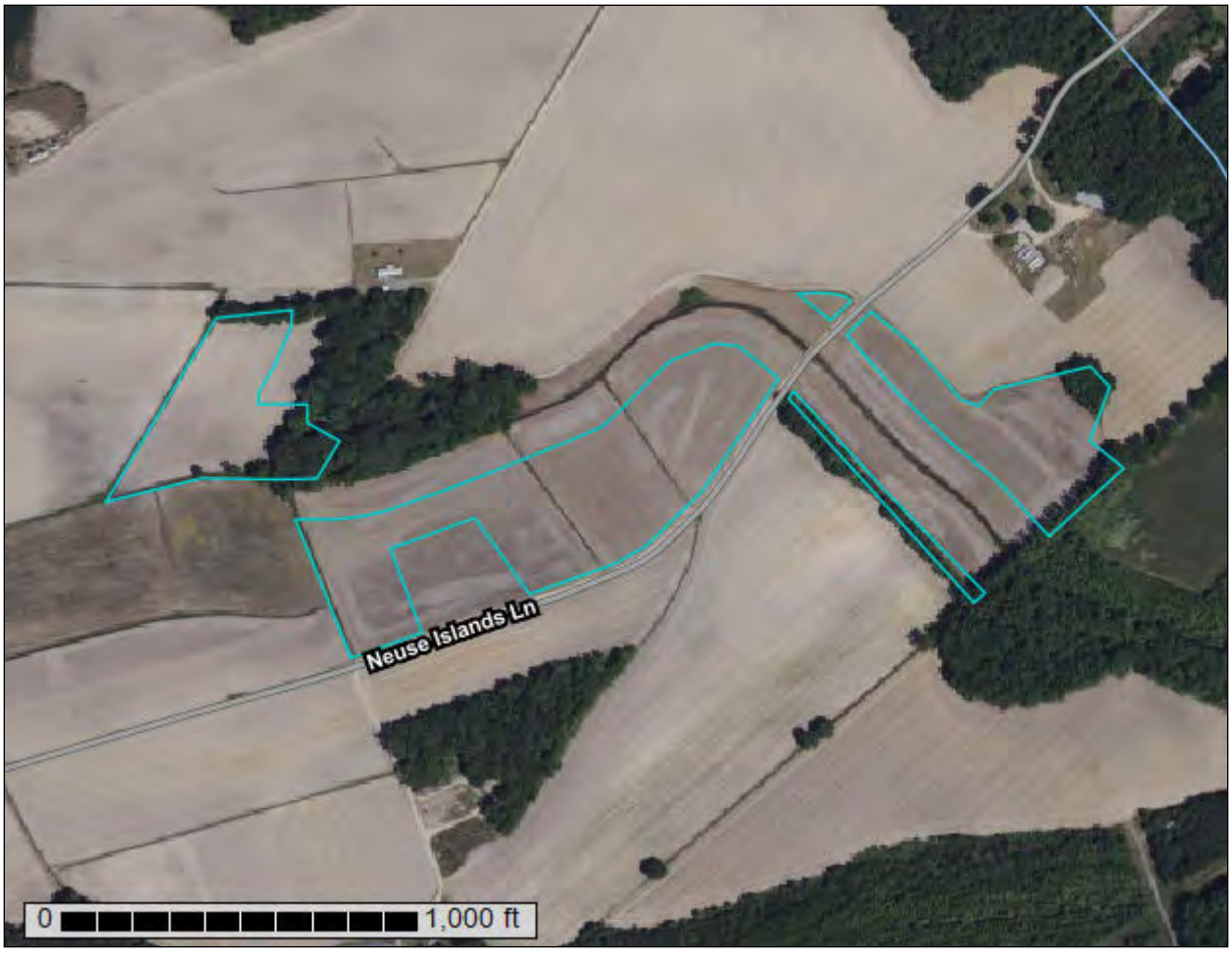
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Wayne County, North Carolina

Coor Island Phase B



June 19, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:4,780 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Wayne County, North Carolina
Survey Area Data: Version 21, Sep 12, 2022

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

Date(s) aerial images were photographed: Apr 24, 2022—May 9, 2022

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Bb	Bibb sandy loam	4.8	27.2%
Jo	Johns sandy loam	0.2	0.9%
KaA	Kalmia loamy sand, 0 to 2 percent slopes	0.8	4.7%
Le	Leaf loam	0.5	3.0%
Lv	Lumbee sandy loam	10.2	57.1%
NrB2	Norfolk sandy loam, 2 to 6 percent slopes, eroded	0.4	2.4%
WaB	Wagram loamy sand, 0 to 6 percent slopes	0.9	4.8%
Totals for Area of Interest		**17.8**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Wayne County, North Carolina

Bb—Bibb sandy loam

Map Unit Setting

National map unit symbol: 3wyb
Elevation: 80 to 330 feet
Mean annual precipitation: 38 to 55 inches
Mean annual air temperature: 59 to 70 degrees F
Frost-free period: 210 to 265 days
Farmland classification: Not prime farmland

Map Unit Composition

Bibb, undrained, and similar soils: 80 percent
Johnston, undrained, and similar soils: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bibb, Undrained

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy and loamy alluvium

Typical profile

A - 0 to 6 inches: sandy loam
Cg1 - 6 to 60 inches: sandy loam
Cg2 - 60 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Description of Johnston, Undrained

Setting

Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy and loamy alluvium

Typical profile

A - 0 to 30 inches: mucky loam
Cg1 - 30 to 34 inches: loamy fine sand
Cg2 - 34 to 80 inches: fine sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Ponded
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: NoneFrequent
Frequency of ponding: Frequent
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Jo—Johns sandy loam

Map Unit Setting

National map unit symbol: 3wyl
Elevation: 80 to 330 feet
Mean annual precipitation: 38 to 55 inches
Mean annual air temperature: 59 to 70 degrees F
Frost-free period: 210 to 265 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Johns and similar soils: 85 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Johns

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy alluvium over sandy alluvium

Typical profile

Ap - 0 to 8 inches: fine sandy loam
E - 8 to 15 inches: fine sandy loam

Bt - 15 to 32 inches: sandy clay loam
2Cg - 32 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Lumbee, undrained

Percent of map unit: 5 percent
Landform: Backswamps on stream terraces
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: Yes

KaA—Kalmia loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 3wyn
Elevation: 80 to 330 feet
Mean annual precipitation: 38 to 55 inches
Mean annual air temperature: 59 to 70 degrees F
Frost-free period: 210 to 265 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Kalmia and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kalmia

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex

Across-slope shape: Convex
Parent material: Loamy alluvium over sandy alluvium

Typical profile

Ap - 0 to 8 inches: loamy sand
E - 8 to 12 inches: loamy sand
B - 12 to 32 inches: sandy clay loam
2C - 32 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to strongly contrasting textural stratification
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 40 to 72 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Hydric soil rating: No

Le—Leaf loam

Map Unit Setting

National map unit symbol: 3wyw
Elevation: 80 to 330 feet
Mean annual precipitation: 38 to 55 inches
Mean annual air temperature: 59 to 70 degrees F
Frost-free period: 210 to 265 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Leaf, drained, and similar soils: 80 percent
Leaf, undrained, and similar soils: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Leaf, Drained

Setting

Landform: Flats on broad interstream divides, terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey marine deposits

Typical profile

A - 0 to 7 inches: loam

Btg - 7 to 67 inches: clay
Cg - 67 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 11.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: D
Hydric soil rating: Yes

Description of Leaf, Undrained

Setting

Landform: Terraces, flats on broad interstream divides
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey marine deposits

Typical profile

A - 0 to 7 inches: loam
Btg - 7 to 67 inches: clay
Cg - 67 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 11.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: D
Hydric soil rating: Yes

Lv—Lumbee sandy loam

Map Unit Setting

National map unit symbol: 3wz0
Elevation: 80 to 330 feet
Mean annual precipitation: 38 to 55 inches
Mean annual air temperature: 59 to 70 degrees F
Frost-free period: 210 to 265 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Lumbee, drained, and similar soils: 85 percent
Lumbee, undrained, and similar soils: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lumbee, Drained

Setting

Landform: Backswamps on stream terraces
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loamy alluvium over sandy alluvium

Typical profile

Ap - 0 to 6 inches: sandy loam
E - 6 to 14 inches: sandy loam
Btg - 14 to 36 inches: sandy clay loam
2Cg - 36 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to strongly contrasting textural stratification
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Hydric soil rating: Yes

Description of Lumbee, Undrained

Setting

Landform: Backswamps on stream terraces
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loamy alluvium over sandy alluvium

Typical profile

Ap - 0 to 6 inches: sandy loam
E - 6 to 14 inches: sandy loam
Btg - 14 to 36 inches: sandy clay loam
2Cg - 36 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to strongly contrasting textural stratification
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: Rare
Frequency of ponding: Occasional
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: B/D
Hydric soil rating: Yes

NrB2—Norfolk sandy loam, 2 to 6 percent slopes, eroded

Map Unit Setting

National map unit symbol: 3wz8
Elevation: 80 to 330 feet
Mean annual precipitation: 38 to 55 inches
Mean annual air temperature: 59 to 70 degrees F
Frost-free period: 210 to 265 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Norfolk, moderately eroded, and similar soils: 90 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Norfolk, Moderately Eroded

Setting

Landform: Ridges on marine terraces, broad interstream divides on marine terraces
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy marine deposits

Typical profile

Ap - 0 to 6 inches: sandy loam
Bt1 - 6 to 38 inches: sandy clay loam
Bt2 - 38 to 100 inches: sandy clay loam

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 40 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Hydric soil rating: No

WaB—Wagram loamy sand, 0 to 6 percent slopes

Map Unit Setting

National map unit symbol: 3wzl
Elevation: 80 to 330 feet
Mean annual precipitation: 38 to 55 inches
Mean annual air temperature: 59 to 70 degrees F
Frost-free period: 210 to 265 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Wagram and similar soils: 90 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wagram

Setting

Landform: Ridges on marine terraces, broad interstream divides on marine terraces
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy marine deposits

Typical profile

Ap - 0 to 8 inches: loamy sand
E - 8 to 24 inches: loamy sand
Bt - 24 to 75 inches: sandy clay loam
BC - 75 to 83 inches: sandy loam

Properties and qualities

Slope: 0 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 60 to 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Bibb, undrained

Percent of map unit: 3 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: Yes

Johnston, undrained

Percent of map unit: 2 percent
Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: Yes

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

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

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

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

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix C. Agency Letters/Correspondence

DWR Email, March 14, 023
DWR Stream Determination Letter, March 4, 2021
DWR Site Viability Letter, April 16, 2021
FEMA Floodplain Checklist

Holz, Raymond

From: Merritt, Katie <katie.merritt@ncdenr.gov>
Sent: Tuesday, March 14, 2023 4:50 PM
To: Ray Holz
Cc: Dunnigan, Emily
Subject: RE: [External] Coor Island Phase B (DWR 2021-0021v2) & Thunder Phase B (DWR 2021-0018v2)

Hey Raymond,
Thank you for you letting me know. The Coor Island Phase B & Thunder Phase B BPDP documents along with the corresponding draft UMBI are formally withdrawn from the DWR Bank review. Please make sure to still use the same DWR project ID numbers that were assigned to these two sites when submitting documents to DMS.

The site viability letters for these two sites are still valid, as long as there have been no landuse changes since the initial DWR review of the two draft BPDP documents.

Thank you,
Katie

From: Ray Holz <rholz@restorationsystems.com>
Sent: Tuesday, March 14, 2023 3:26 PM
To: Merritt, Katie <katie.merritt@ncdenr.gov>
Cc: Dunnigan, Emily <emily.dunnigan@ncdenr.gov>
Subject: [External] Coor Island Phase B (DWR 2021-0021v2) & Thunder Phase B (DWR 2021-0018v2)

Katie – Following up on our conversation earlier today, I wanted to provide you with formal notice that Restoration Systems (RS) would like to terminate the banking process for Coor Island Phase B (DWR 2021-0021v2) & Thunder Phase B (DWR 2021-0018v2). RS received contracts from DEQ to provide these sites via full-delivery contracts through DMS. We have started that process and will submit mitigation plans to DMS soon. RS will apply comments received from DWR during the Draft BPDP submittal/review process.

Given that RS has already started the permitting process on these two sites and DWR has reviewed/made comments to the drafts, I wanted to confirm that our viability letters are still valid. Each Site's viability letter states, "This viability assessment will expire on April 13, 2023, or upon approval of a mitigation plan by the DWR, whichever comes first" – attached for quick reference.

Please let me know if we need to address the expiration of the viability letters.

Thanks,
RH

----- ------ ------
Raymond J. Holz | Restoration Systems, LLC
1101 Haynes St. Suite 211 | Raleigh, NC 27604
tel: 919.334.9122 | cell: 919.604.9314 | fax: 919.755.9492
email: rholz@restorationsystems.com

ROY COOPER
Governor
MICHAEL S. REGAN
Secretary
S. DANIEL SMITH
Director

NORTH CAROLINA
Environmental Quality

March 4, 2021

E and S Wayne Farms, LLC
4216 White Kestrel Drive
Raleigh, NC 27616

2021 0021 v1
Wayne County

Subject: **On-Site Determination** for Applicability to Neuse Riparian Buffer Rules (15A NCAC 02B .0714)

Subject Property/ Project Name: Coor Island Mitigation Site

Address/Location: (No Number) Neuse Island Lane, Goldsboro Wayne County

Stream(s) Evaluated: (1) – UT to Half Mile Branch

Determination Date: January 21, 2021 Staff: Allen Stewart

Determination Type:	
Buffer:	Stream:
X - Neuse (15A NCAC 02B .0714) - Tar-Pamlico (15A NCAC 02B .0734 - Catawba (15A NCAC 02B .0614) - Jordan (15A NCAC 02B .0267) (governmental and/or interjurisdictional projects) - Randleman (15A NCAC 02B .0724) - Goose Creek (15A NCAC 02B .0605-.0608)	X - Intermittent/Perennial Determination

Stream	E/I/P*	Not Subject	Subject	Start@	Stop@	Soil Survey	USGS Topo
UT to Half Mile Branch	P		X	35.385270, -78.123396	35.384778, -78.114888	X	X

*Ephemeral / Intermittent / Perennial

To: E and S Wayne Farms LLC,

The Division of Water Resources has determined that the stream listed above and included on the attached map has been located on the most recent published (1974) NRCS Soil Survey of Wayne County, North Carolina and/or the most recent copy of the 2019 Princeton USGS Topographic map at a 1:24,000 scale and evaluated for applicability to the Neuse Riparian Buffer Rule. For Each stream that is checked "Not Subject" it has been determined to not be at least intermittent or not present on the property. Streams that are checked "Subject" have been mapped on (1974) NRCS Soil Survey and/or USGS Topographic map 1:24,000, located on the property and possess characteristics that qualify them to be at least intermittent streams. There may be other streams or features located on the property that do not appear on the maps referenced above but may be considered jurisdictional according to the US Army Corps of Engineers and subject to the Clean Water Act.

This on-site determination shall expire five (5) years from the date of this letter. Landowners or affected parties that dispute a determination made by the DWR may request a determination by the Director. An appeal request must be made within sixty (60) calendar days of date of this letter to the Director in writing.

If sending via US Postal Service:
c/o *Paul Wojoski*
DWR – 401 & Buffer Permitting Unit
1617 Mail Service Center
Raleigh, NC 27699-1617

If sending via delivery service (UPS, FedEx, etc.):
c/o Paul Wojoski
DWR – 401 & Buffer Permitting Unit
512 N. Salisbury Street
Raleigh, NC 27604

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

This determination only addresses the applicability to the buffer rules and does not approve any activity within the buffers or waters. The project may require a Section 404/401 Permit for the proposed activity. Any inquiries regarding applicability to the Clean Water Act should be directed to the US Army Corps of Engineers Raleigh Regulatory Field Office at (919)-554-4884 Ext. 22.

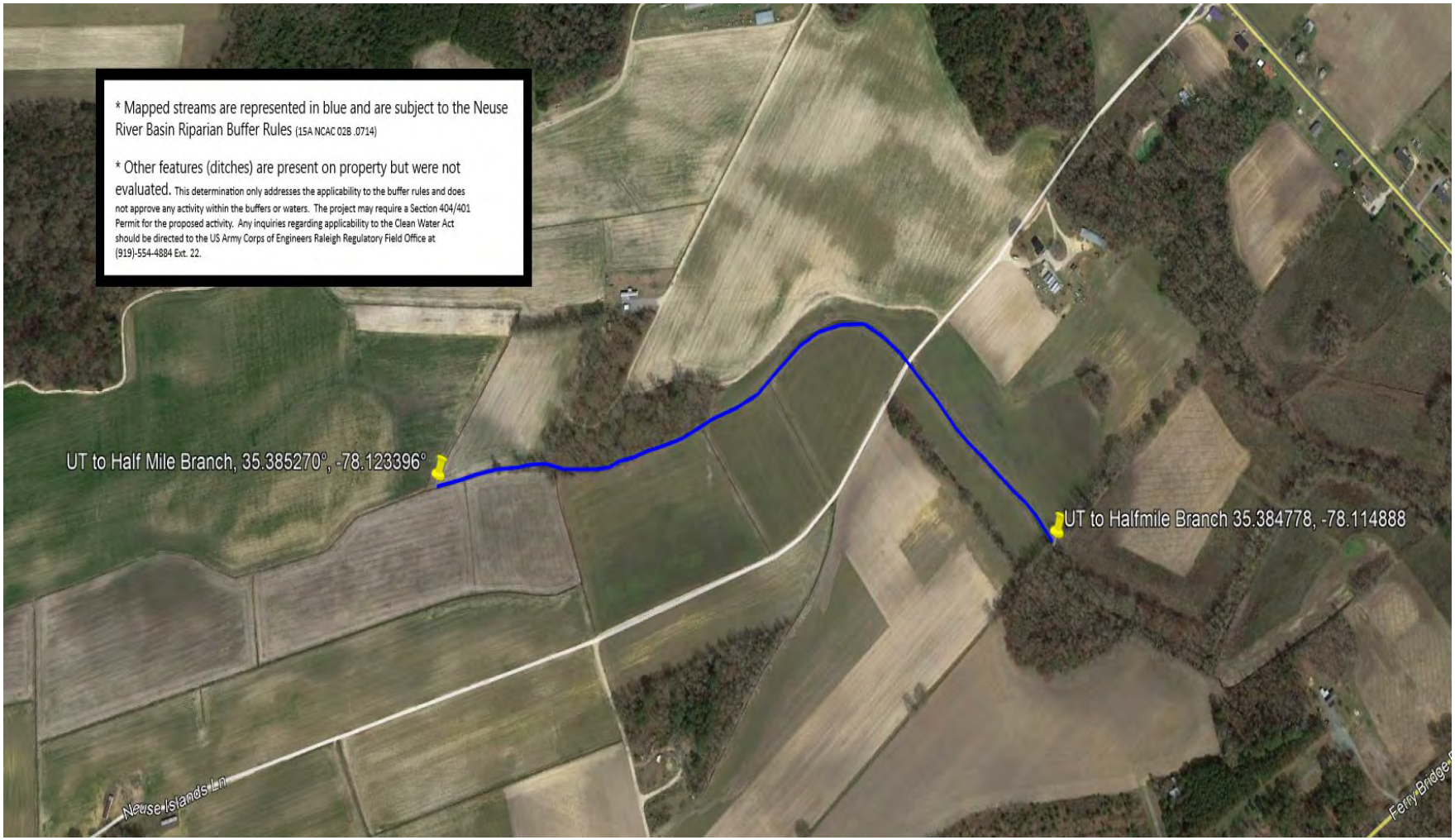
If you have questions regarding this determination, please feel free to contact Allen Stewart at (252) 946-6481.

Sincerely,

Robert Tankard

Robert Tankard, Assistant Regional Supervisor
Water Quality Regional Operations Section
Division of Water Resources, NCDEQ

cc: WaRO DWR File Copy/LASERFICHE
Raymond Holz, Restoration Systems LLC, rholz@restorationsystems.com
Katie Merritt, NCDWR 401 & Buffer Permitting Branch, Katie.Merritt@ncdenr.gov
Samantha Dailey, US Army Corps of Engineers Raleigh Regulatory Field Office, samantha.j.dailey@usace.army.mil


* Mapped streams are represented in blue and are subject to the Neuse River Basin Riparian Buffer Rules (15A NCAC 02B .0714)
* Other features (ditches) are present on property but were not evaluated. This determination only addresses the applicability to the buffer rules and does not approve any activity within the buffers or waters. The project may require a Section 404/401 Permit for the proposed activity. Any inquiries regarding applicability to the Clean Water Act should be directed to the US Army Corps of Engineers Raleigh Regulatory Field Office at (919)-554-4884 Ext. 22.
UT to Half Mile Branch, 35.385270°, -78.123396°
UT to Halfmile Branch 35.384778, -78.114888
Neuse Islands Ln
Ferry Bridge

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

NORTH CAROLINA
Environmental Quality

April 16, 2021

Raymond Holz
Restoration Systems, LLC
(via electronic mail: rholz@restorationsystems.com)

Re: Site Viability for Buffer Mitigation & Nutrient Offset – Coor Island Site
Off Neuse Island Lane, Goldsboro (near 35.386634, -78.116390)
Neuse 03020201
Wayne County

Dear Mr. Holz,

On December 11, 2020, Katie Merritt, with the Division of Water Resources (DWR), received a request from you on behalf of Restoration Systems, LLC (RS) for a site visit near the above-referenced site in the Neuse River Basin within the 8-digit Hydrologic Unit Code 03020201. 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-Existing Conditions" (Figure 1) prepared by RS. The proposed easement boundary in Figure 1, includes all riparian areas intended to be proposed as part of a full-delivery project for the Division of Mitigation Services (RFP #16-20200402) as well as a private mitigation bank project by RS. On March 24, 2021, Ms. Merritt performed a site assessment of the subject site. Staff with RS 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	Riparian Land uses adjacent to Feature (0-200')	Buffer Credit Viable	[3]Nutrient Offset Viable	[4,5]Mitigation Type Determination w/in riparian areas
UT to Half Mile Branch	Stream	Yes	Combination of non-forested agricultural fields with mature forest Agricultural land uses not present along entire reach during baseline period 1991-1995 (see map) Neuse buffers (Zone 1 & Zone 2) timbered & cleared between 1999-2004 (see map) post buffer-protection rules cannot be used for crediting *(area not shown within the proposed project boundary but was assessed)*	[2]Yes (except within certain areas)	Yes (non-forested ag fields also not forested during baseline)	Non-forested fields - **Restoration Site** per 15A NCAC 02B .0295 (n) Timbered & Cleared Neuse Buffer (Zone 1 & Zone 2)- no credit Timbered & Cleared areas (beyond the Neuse Buffer) – **Restoration Site** per 15A NCAC 02B .0295 (n) for buffer credit only Forested Areas – **Preservation Site** per 15A NCAC 02B .0295 (o)(5)
A	Ditch >3'	No	Non-forested agricultural fields & partially located within a DOT Right Of Way (ROW)	No	Yes	**Restoration Site** per 15A NCAC 02B .0295 (n) Note: No credits are allowed within the DOT R.O.W
B	Ditch <3' depth	No	Non-forested agricultural fields and partially located within a DOT Right Of Way (ROW)	*see note	Yes	**Restoration Site** per 15A NCAC 02B .0295 (o)(8) ***Buffer Mitigation Note –** Assessment concludes the ditch meets 15A NCAC 02B.0295 (o)(8) (A, B, C, D & E). More information is required to be provided in a mitigation plan for complete assessment. See rule. Note: No credits are allowed within the DOT R.O.W
C	Ditch >3' depth	No	Right Bank – non-forested agricultural fields and partially located within a DOT Right Of Way (ROW) Left bank - Agricultural land uses not present adjacent to entire reach during baseline period 1991-1995 (see map)	No	Yes (on right side only)	**Restoration Site** per 15A NCAC 02B .0295 (n) Fields forested during baseline – no credit Note: No credits are allowed within the DOT R.O.W

Feature	Classification onsite	[1]Subject to Buffer Rule	Riparian Land uses adjacent to Feature (0-200')	Buffer Credit Viable	[3]Nutrient Offset Viable	[4,5]Mitigation Type Determination w/in riparian areas
D	Ditch >3' depth	No	Left Bank - non-forested agricultural fields and partially located within a DOT Right Of Way (ROW) Right Bank - Agricultural land uses not present adjacent to entire reach during baseline period 1991-1995 (see map)	No	Yes (on left side only)	**Restoration Site** per 15A NCAC 02B .0295 (n) Fields forested during baseline – no credit Note: No credits are allowed within the DOT R.O.W
E	Ditch	No	Not assessed	N/A	N/A	Not assessed

[1]Subjectivity calls for the features were determined by DWR in correspondence dated March 4, 2021 (ID# 2021-0021) 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 based on the proposed conservation easement boundaries depicted in Figure 1 for the full-delivery mitigation site and the private mitigation bank site. The two easement boundaries are contiguous, and thus, the approval of the private mitigation bank site will be dependent on the approval and implementation of the full-delivery mitigation site. The map representing the proposal for the site is attached to this letter and is initialed by Ms. Merritt on April 13, 2021. Substantial changes to the proposed easement boundaries 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 April 16, 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,

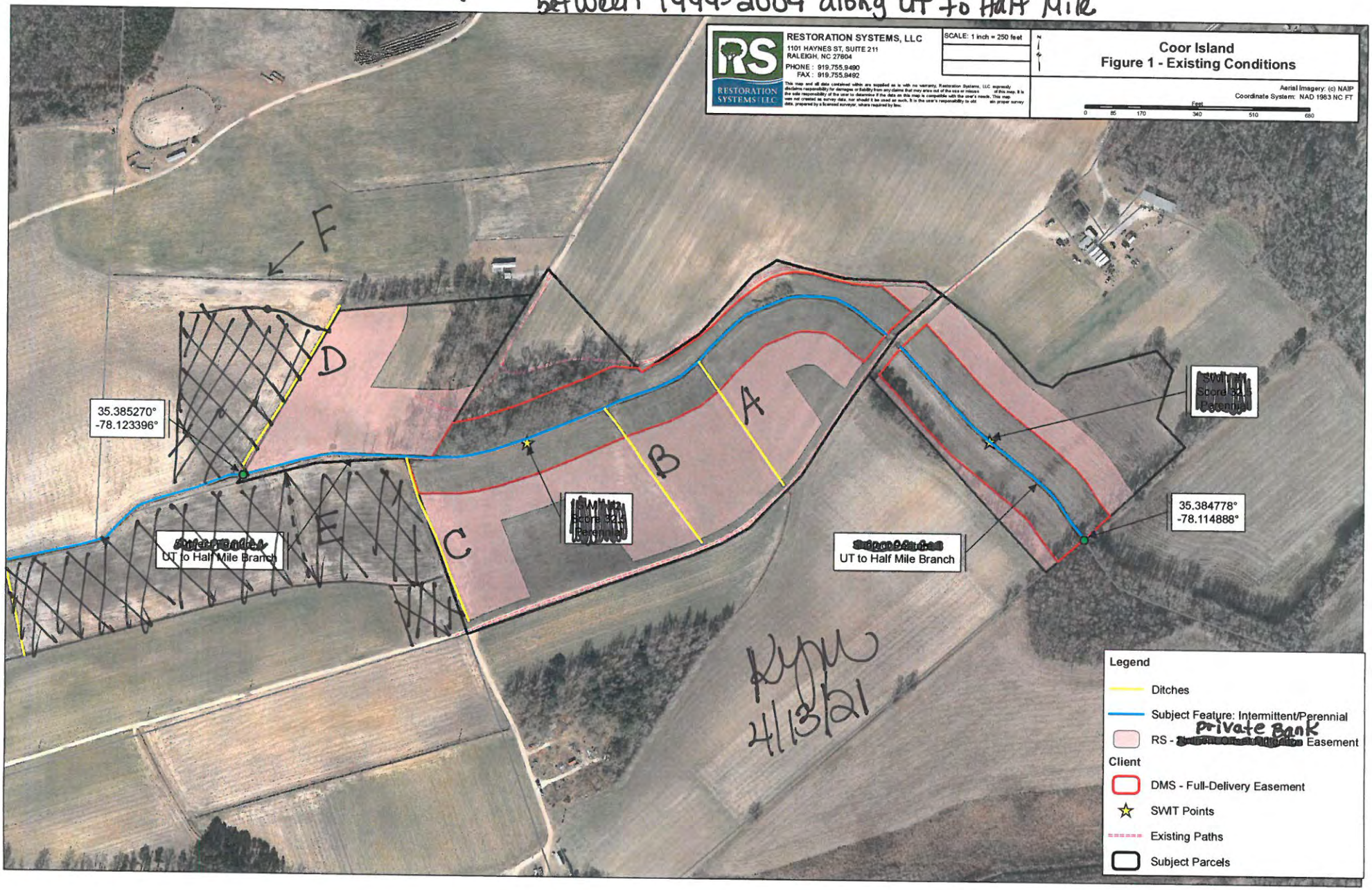
DocuSigned by:
Paul Wojoski
949D91BA53EF4E0...

Paul Wojoski, Supervisor
401 and Buffer Permitting Branch

PW/kym
Attachments: "Figure 1 – Existing Conditions"

cc: File Copy (Katie Merritt)

= Not agriculture during baseline, forested until between 1999-2004 along UT to Half Mile



KYW 4/13/21

DMS Floodplain Requirements Checklist

This form was developed by the National Flood Insurance program, NC Floodplain Mapping program and the Division of Mitigation Services (DMS) to be filled for all DMS projects. The form is intended to summarize the floodplain requirements during the design phase of the projects. The form should be submitted to the Local Floodplain Administrator with three copies submitted to NFIP (attn. State NFIP Engineer), NC Floodplain Mapping Unit (attn. State NFIP Coordinator) and NC Ecosystem Enhancement Program.

Project Location

Name of project:	Coor Island Site
Name if stream or feature:	UT To Half Mile Branch
County:	Wayne
Name of river basin:	Neuse
Is project urban or rural?	Rural
Name of Jurisdictional municipality/county:	Wayne County
DFIRM panel number for entire site:	Panel 3720256800K (eff. 06/20/2018)
Consultant name:	Matthew Harrell Restoration Systems, LLC
Phone number:	252-299-1655
Address:	1101 Haynes St. Suite 211 Raleigh, NC 27607

Design Information

Provide a general description of project (one paragraph). Include project limits on a reference orthophotograph at a scale of 1" = 500". – Project Figures Attached

No work is proposed within the FEMA regulated floodplain. A project description is included in the cover letter.

Floodplain Information

Is project located in a Special Flood Hazard Area (SFHA)?

○ Yes ◉ No The lower reaches

If project is located in a SFHA, check how it was determined:

☐ Redelineation

☐ Detailed Study

☐ Limited Detail Study

☐ Approximate Study

☐ Don't know

List flood zone designation:

Check if applies:

☑ AE Zone

- ◉ Floodway
- ○ Non-Encroachment
- ○ None

☐ A Zone

- ○ Local Setbacks Required
- ○ No Local Setbacks Required

If local setbacks are required, list how many feet:

Does proposed channel boundary encroach outside floodway/non-encroachment/setbacks?

○ Yes ◉ No

Land Acquisition (Check)

☐ State owned (fee simple)

☐ Conservation easment (Design Bid Build)

☑ Conservation Easement (Full Delivery Project)

Note: if the project property is state-owned, then all requirements should be addressed to the Department of Administration, State Construction Office (attn: Herbert Neily, (919) 807-4101)

Is community/county participating in the NFIP program?

◉ Yes ○ No

Note: if community is not participating, then all requirements should be addressed to NFIP (attn: State NFIP Engineer, (919) 715-8000

Name of Local Floodplain Administrator: Berry Gray
Phone Number: 919-731-1650

Floodplain Requirements

This section to be filled by designer/applicant following verification with the LFPA

☑ No Action

☐ No Rise

☐ Letter of Map Revision

☐ Conditional Letter of Map Revision

☐ Other Requirements

List other requirements:

Comments:

Name: Berry Gray Signature: BG

Title: Planning Director Date: 8/9/21

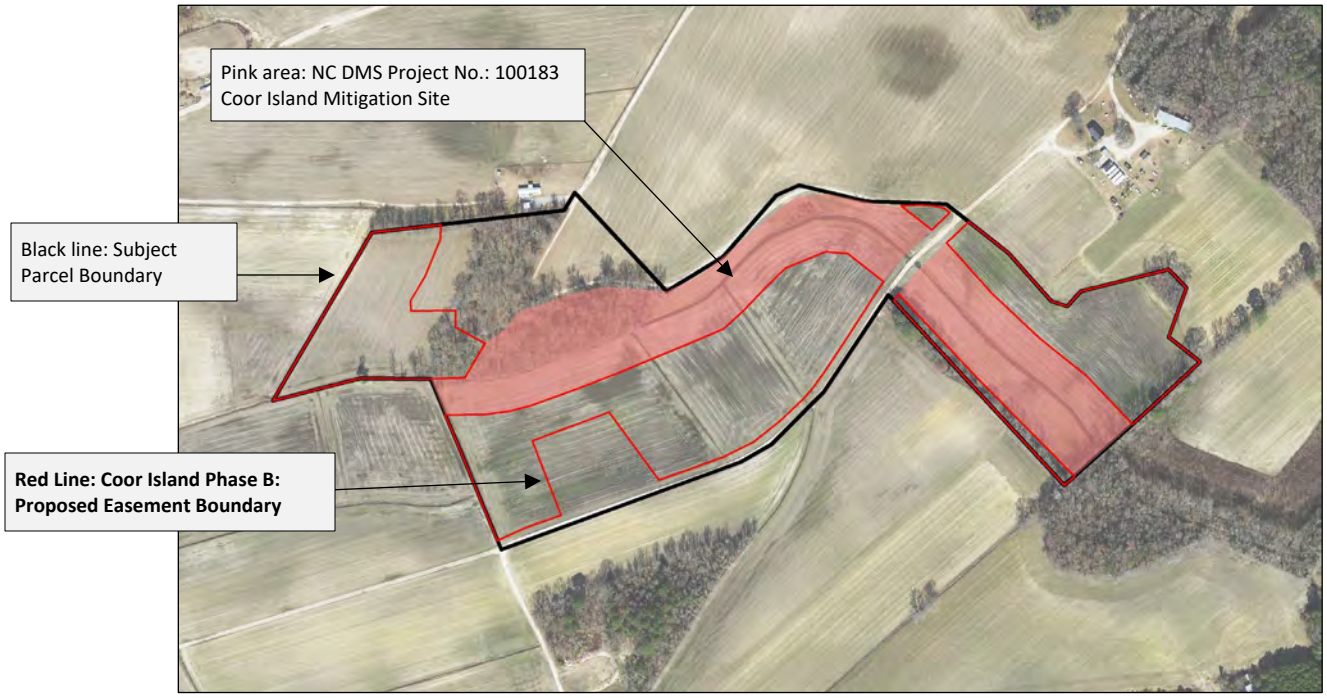
Appendix D. Categorical Exclusion Document (Including NHP)

COOR ISLAND PHASE B MITIGATION SITE
Wayne County, North Carolina

DMS Project No. 100650 / Contract# 519674731-02 / RFP: 16-519674731

Task 1b: Categorical Exclusion/ERTR

Contents:



Prepared for:
North Carolina Department of Environmental Quality
Division of Mitigation Services
1652 Mail Service Center
Raleigh, NC 27699-1652

March 13, 2023

TASK 1 b.) Categorical Exclusion Summary:
Part 1: General Project Information (Attached)

Part 2: All Projects Regulation/Questions

Coastal Zone Management Act
No issue – project is not located within a CAMA county.

CERCLA
No issue within project boundaries – please see the attached Executive Summary from a Limited Phase 1 Site Assessment performed by Environmental Data Resources, Inc. on February 19th, 2021.

National Historic Preservation Act (Section 106)
No Issue – please see attached letter from Ramona M. Bartos, State of the Historic Preservation Office.

Uniform Act
N/A – Property acquisition was completed prior to the intent of use federal funds.

Part 3: Ground-Disturbing Activates Regulation/Questions

American Indian Religious Freedom Act (AIRFA)
Not applicable – the Project is not located in a county claimed as "territory" by the Eastern Band of Cherokee Indians.

Antiquities Act (AA)
Not applicable – Project is not located on Federal land.

Archaeological Resources Protection Act (ARPA)
Not applicable – Project is not located on Federal or Indian lands.

Endangered Species Act (ESA)
Project activities will have no effect on any Endangered or Threatened Species. The Project will occur in existing agricultural fields, which are intensively managed for row crops. A biological survey included in the 9-step online compliance process found "no effect" based on no suitable habitat present as the land is currently in agriculture production and does not propose removing trees. The self-certification letter is attached.

Executive Order 13007 (Indian Sacred Sites)
Not applicable – Project is not located in a county claimed as "territory" by the Eastern Band of Cherokee Indians.

Farmland Protection Policy Act (FPPA)
Please find the attached Form AD-1006 and correspondence from Ryan Janway, Natural Resource Specialist USDA-NRCS.

Fish and Wildlife Coordination Act (FWCA)
Not applicable – Project will not impound, divert, channel deepen, or otherwise control/modify any water body.

Land & Water Conservation Fund Act (Section 6(f))
Not applicable

Magnuson-Stevens Fishery Conservation and Management Act (Essential Fish Habitat)
Not applicable – Project is not located within an estuarine system.

Migratory Bird Treaty Act (MBTA)
USFWS provided no recommendations for the Project relative to the MBTA. Please see the attached email from Kathy Matthews, Fish and Wildlife Biologist, US Fish and Wildlife Service.

Wilderness Act
Not applicable – the Project is not located within a Wilderness area.

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:	Coor Island Phase B Mitigation Site
County Name:	Wayne
DMS Number:	100650
Project Sponsor:	Restoration Systems, LLC
Project Contact Name:	Raymond Holz
Project Contact Address:	1101 Haynes Street, Suite 211, Raleigh NC, 27604
Project Contact E-mail:	rholz@restorationsystems.com
DMS Project Manager:	Emily Dunnigan

Project Description

The Coor Island Phase B Mitigation Site (Site) is designed to provide Nutrient Offset Credits (NOC) for impacts within the Neuse River Basin USGS 8-digit HUC 03020201, excluding the Falls Lake Watershed. The conservation easement will encompass 17.684 acres. The primary goal of the project is to convert 16.909 acres of active row crop land to a forested riparian buffer within FEMA Regulated Flood-way (BFE). There will be no ground disturbance.

For Official Use Only

Reviewed By:

3/15/2023 — Emily Dunnigan

Date — **DMS Project Manager**

Conditional Approved By:

Date — **For Division Administrator FHWA**

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

Final Approval By:

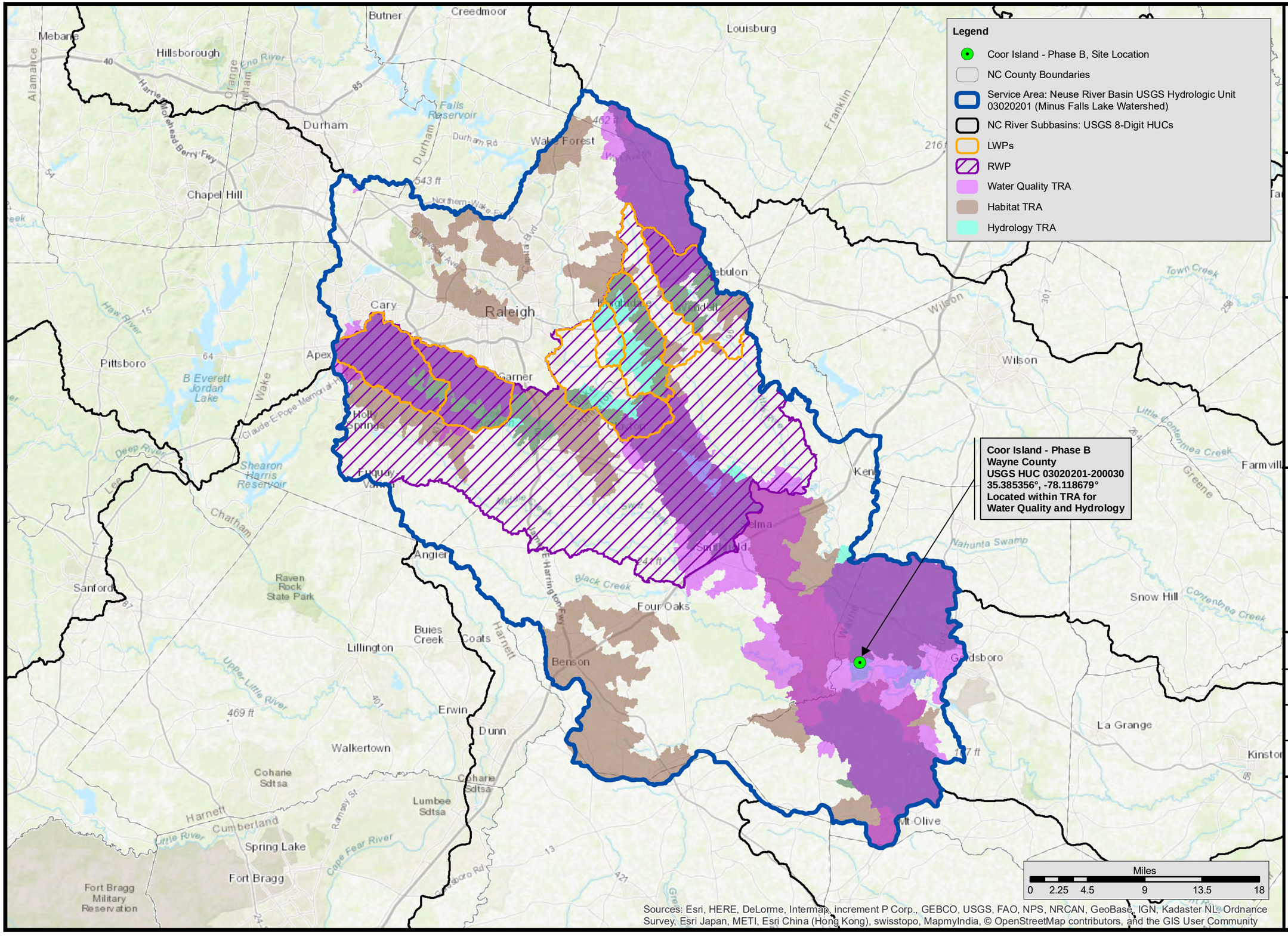
3-15-23 — Donald W Brew

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



RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of Enviromental Quality

Division of Mitigation Services

Project:

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

Wayne County, NC

Title:

SITE LOCATION, HYDROLOGIC UNIT, & SERVICE AREA MAP

Drawn by: RJH

Date: AUG 2022

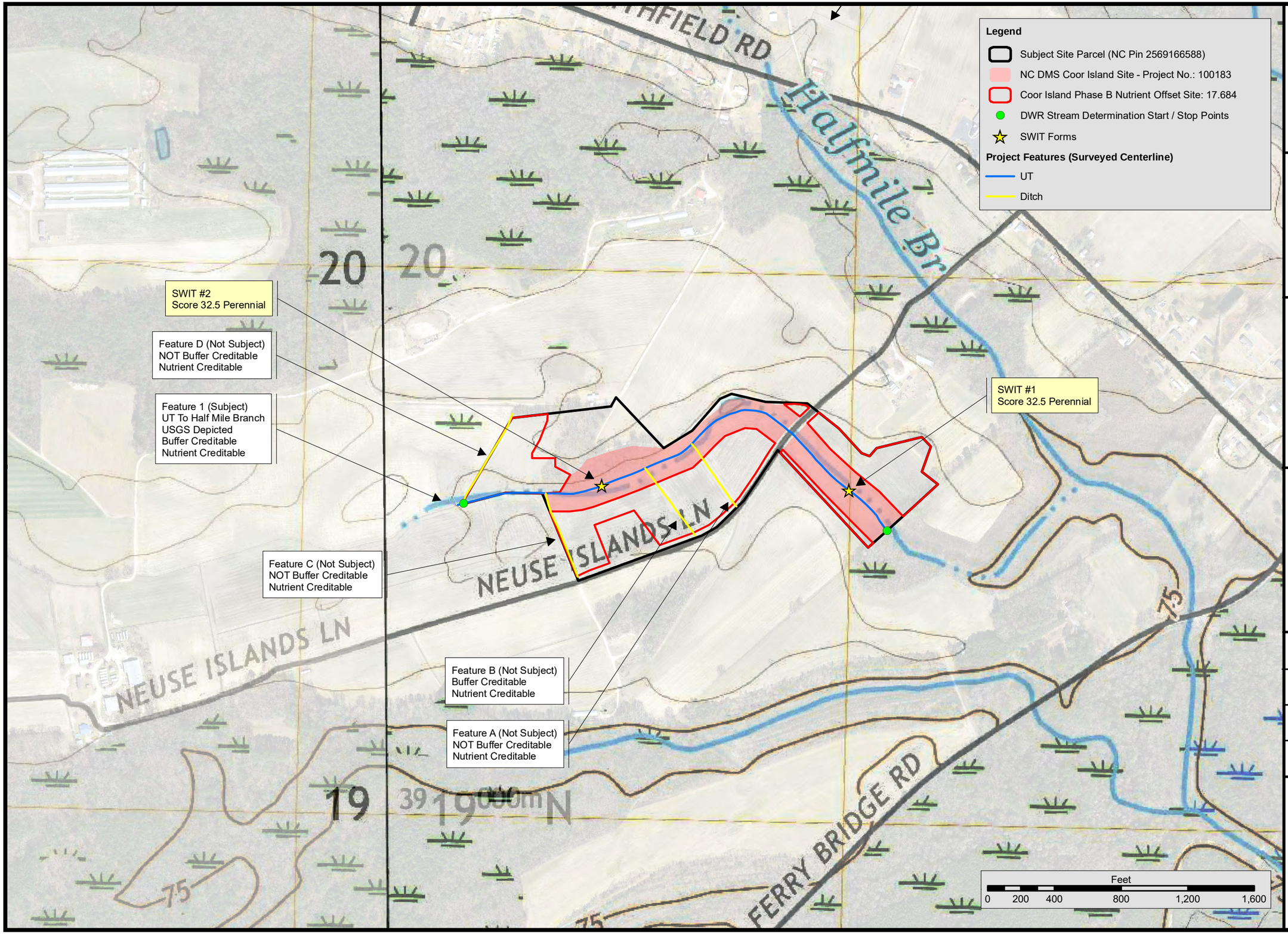
Scale: 1:450,000

Project No.: 2022-08-0002

FIGURE

1

N



RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of Enviromental Quality

Division of Mitigation Services

Project:

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

Wayne County, NC

Title:

USGS TOPO QUAD

Goldsboro, NC (2019) 7.5 minute topographic quadrangle provided by the U.S. Geological Survey (USGS)

Drawn by: RJH

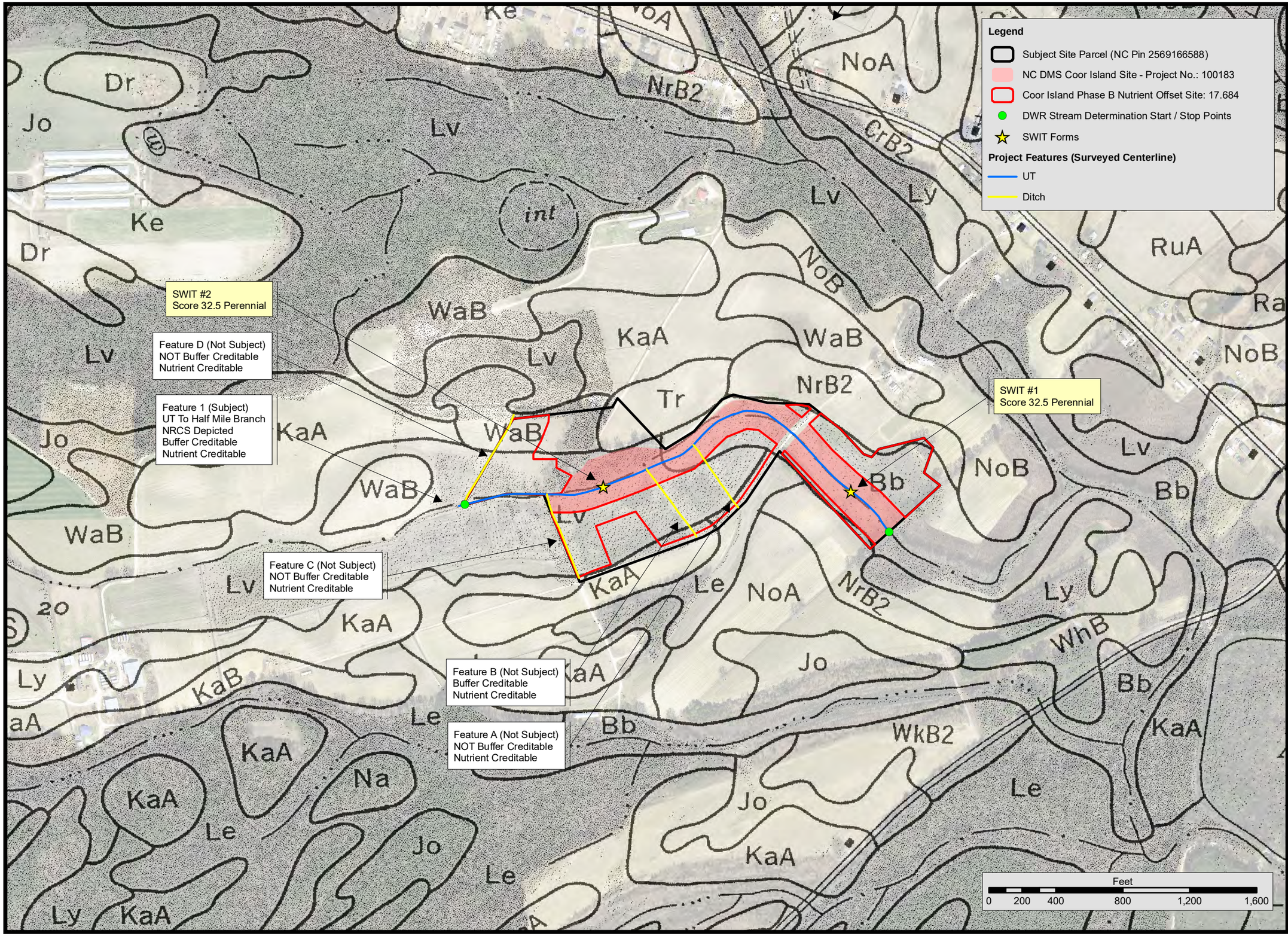
Date: AUG 2022

Scale: 1:6,500

Project No.: 2022-08-0002

FIGURE

2



RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of Enviromental Quality

Division of Mitigation Services

Project:

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

Wayne County, NC

Title:

NRCS SOIL SURVEY

Soil Survey of Wayne County, NC (1972) provided by NRCS Sheet 18

Drawn by: RJH

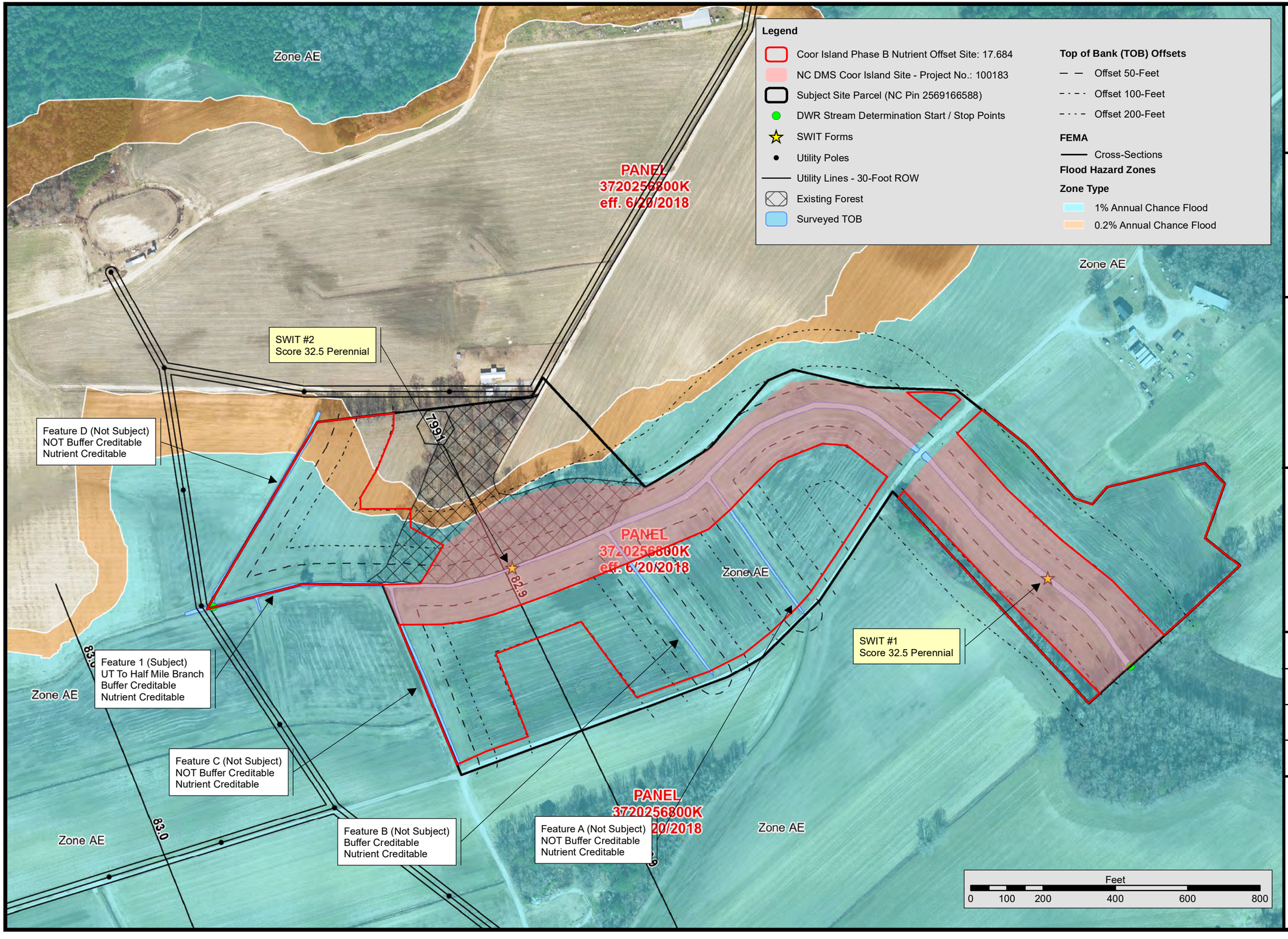
Date: AUG 2022

Scale: 1:6,500

Project No.: 2022-08-0002

FIGURE

3



RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of Enviromental Quality

Division of Mitigation Services

Project:

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

Wayne County, NC

Title:

EXISTING CONDITIONS

Source: FEMA Flood Insurance Rate Map 3720256300K, Panel 2563, effective June 20, 2018

2021 NC OneMap

Drawn by: RJH

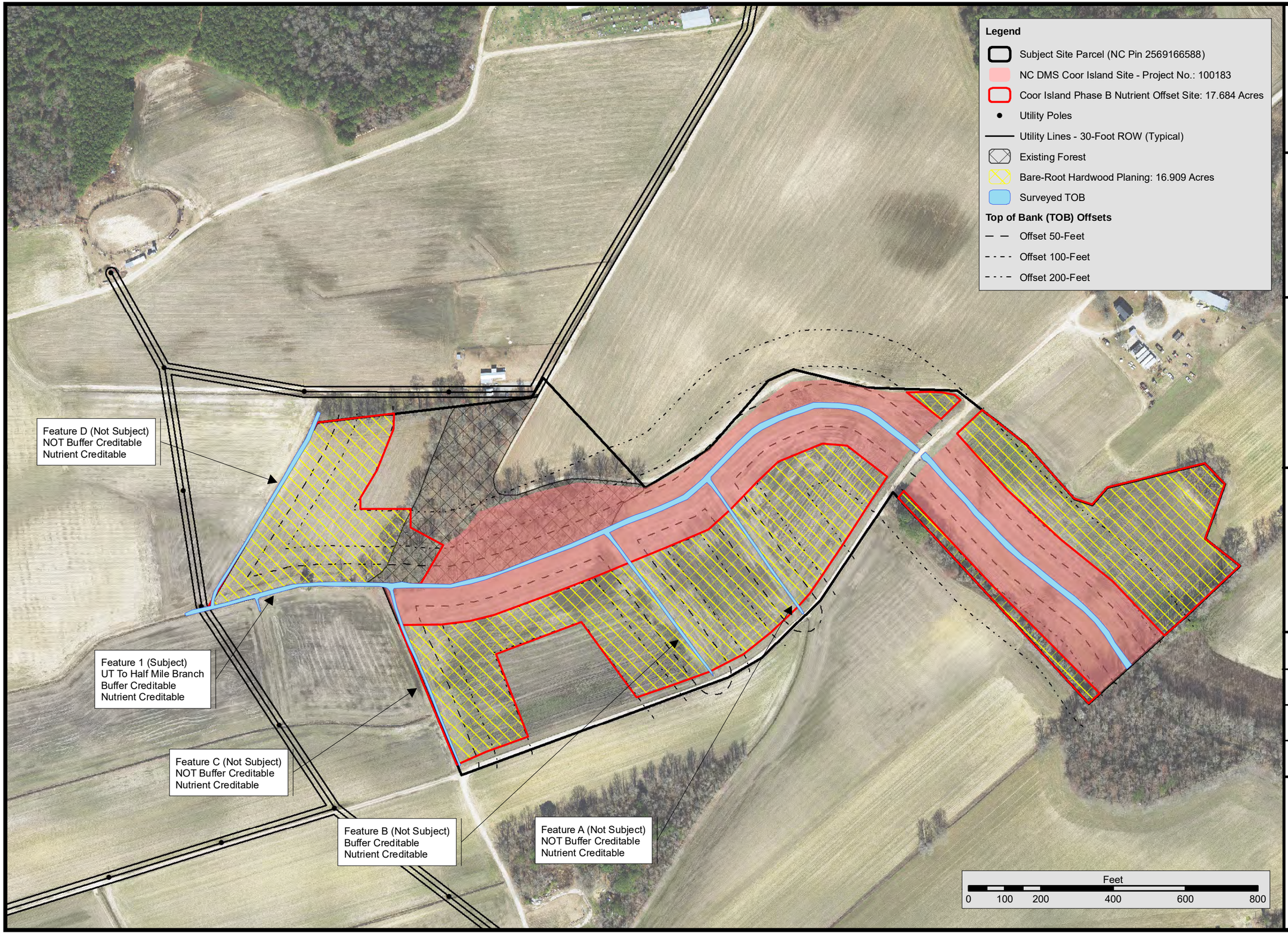
Date: AUG 2022

Scale: 1:3,000

Project No.: 2022-08-0002

FIGURE

4



RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of Enviromental Quality

Division of Mitigation Services

Project:

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

Wayne County, NC

Title:

RESTORATION PLAN

2021 NC OneMap

Drawn by: RJH

Date: AUG 2022

Scale: 1:3,000

Project No.: 2022-08-0002

FIGURE

5

Coor Island
2271 Old Smithfield Road
Goldsboro, NC 27530

Inquiry Number: 6373747.2s
February 19, 2021

EDR Summary Radius Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

2271 OLD SMITHFIELD ROAD
GOLDSBORO, NC 27530

COORDINATES

Latitude (North):	35.3856870 - 35˚ 23' 8.47''
Longitude (West):	78.1154420 - 78˚ 6' 55.59''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	762022.5
UTM Y (Meters):	3919438.2
Elevation:	77 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	U.S. Geological Survey
Target Property:	SE
Source:	U.S. Geological Survey
Target Property:	SW
Source:	U.S. Geological Survey
Target Property:	NW
Source:	U.S. Geological Survey

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20141018
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
2271 OLD SMITHFIELD ROAD
GOLDSBORO, NC 27530

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	H.F. LEE POWER STATI		COAL ASH	Lower	1872, 0.355, SE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.
COAL ASH: A review of the COAL ASH list, as provided by EDR, and dated 09/10/2020 has revealed that there is 1 COAL ASH site within approximately 0.5 miles of the target property.

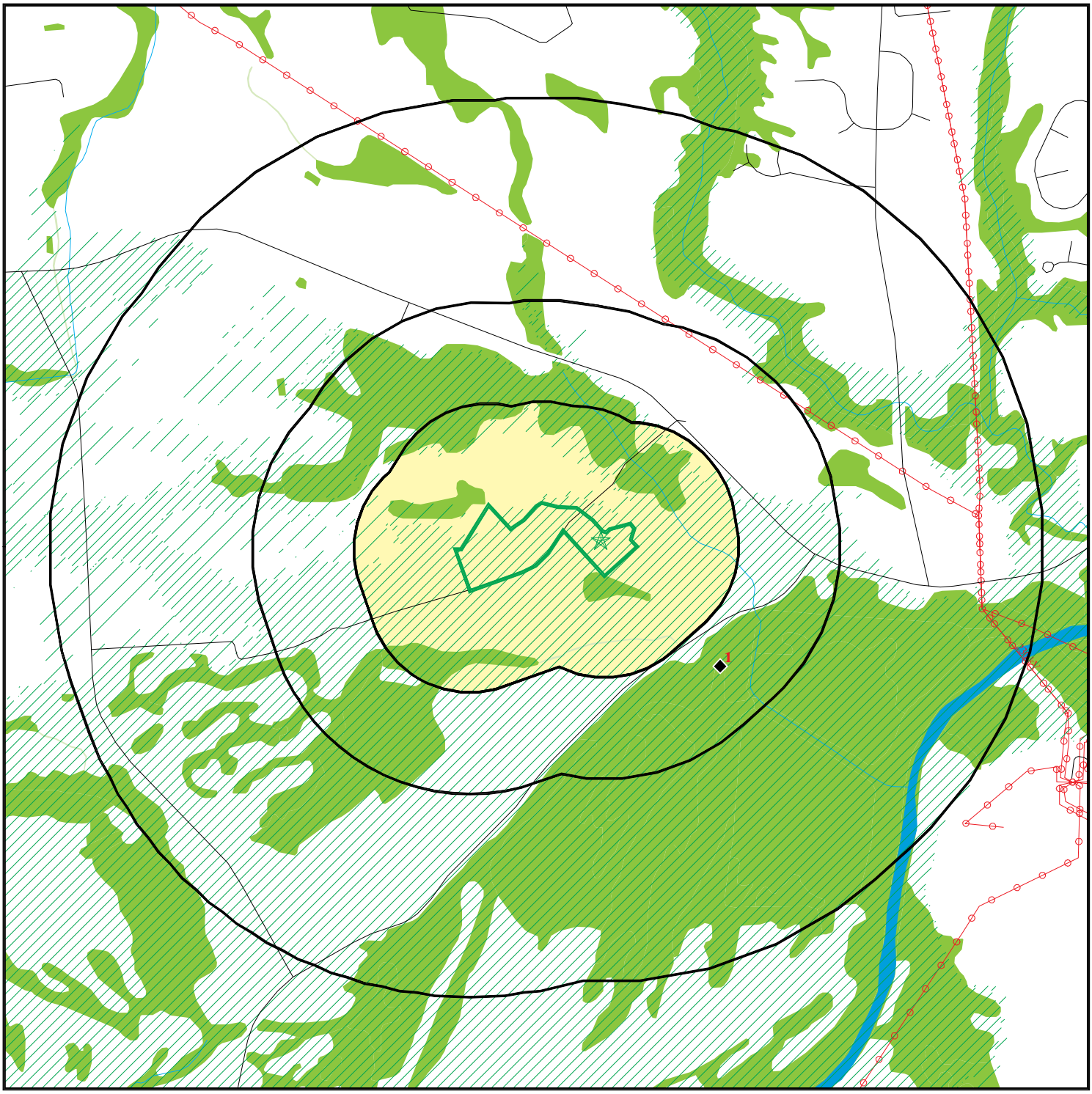
Lower Elevation	Address	Direction / Distance	Map ID	Page
H.F. LEE POWER STATI Wastewater Permit Num: WAYNE-031		SE 1/4 - 1/2 (0.355 mi.)	1	8

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

OVERVIEW MAP - 6373747.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

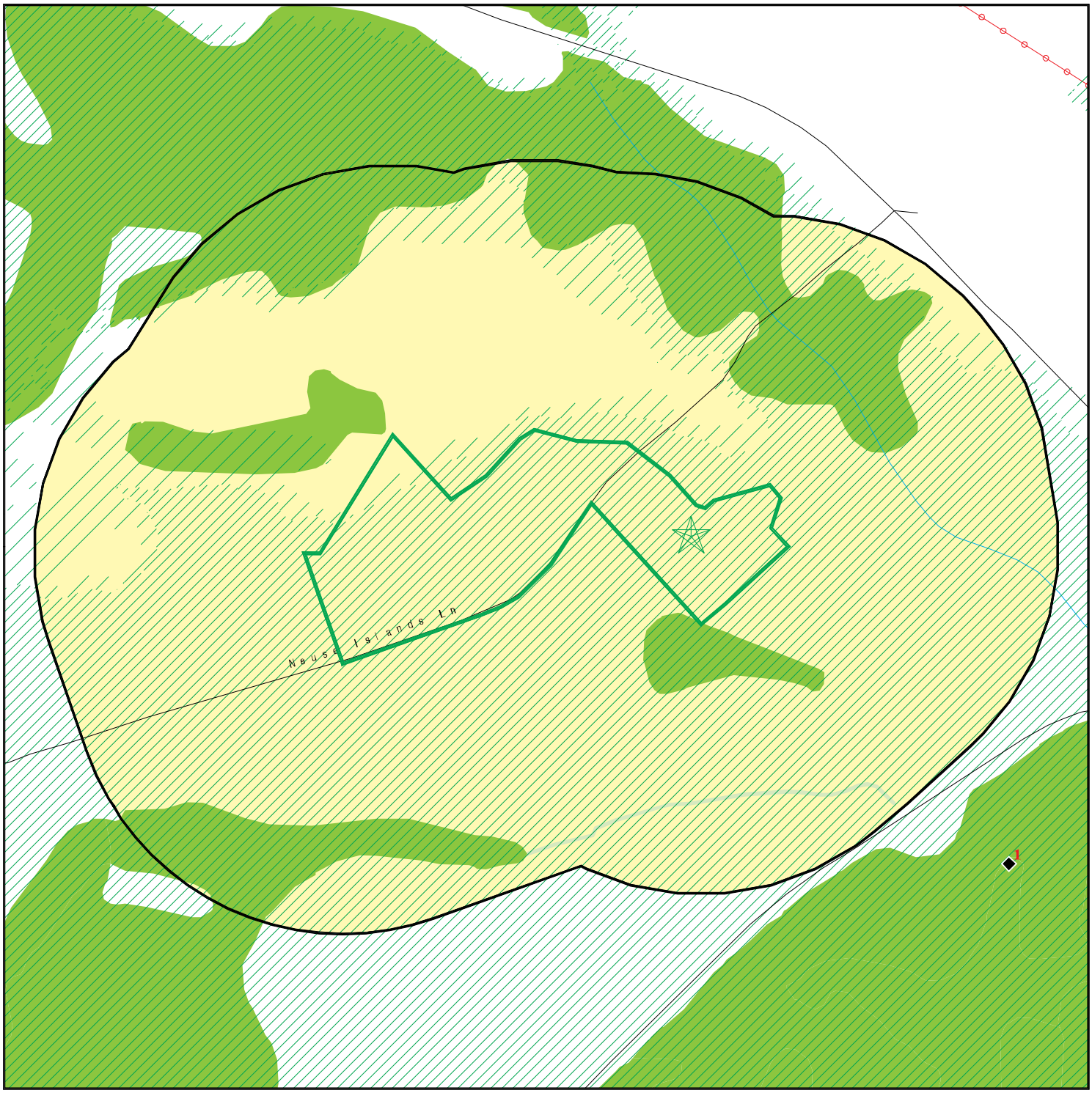
Hazardous Substance Disposal Sites

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Coor Island	CLIENT: Restoration Systems, LLC
ADDRESS: 2271 Old Smithfield Road Goldsboro NC 27530	CONTACT: JD Hamby
LAT/LONG: 35.385687 / 78.115442	INQUIRY #: 6373747.2s DATE: February 19, 2021 9:44 am

DETAIL MAP - 6373747.2S



0 1/8 1/4 1/2 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Hazardous Substance Disposal Sites

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Coor Island	CLIENT:	Restoration Systems, LLC
ADDRESS:	2271 Old Smithfield Road Goldsboro NC 27530	CONTACT:	JD Hamby
LAT/LONG:	35.385687 / 78.115442	INQUIRY #:	6373747.2s
		DATE:	February 19, 2021 9:45 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
NC HSDS	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
DEBRIS	0.500		0	0	0	NR	NR	0
OLI	0.500		0	0	0	NR	NR	0
LCID	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal leaking storage tank lists								
LAST	0.500		0	0	0	NR	NR	0
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
LUST TRUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
HIST LF	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
SPILLS	0.001		0	NR	NR	NR	NR	0
IMD	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SPILLS 90	0.001		0	NR	NR	NR	NR	0
SPILLS 80	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
ASBESTOS	0.001		0	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	1	NR	NR	1
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
AOP	0.001		0	NR	NR	NR	NR	0
SEPT HAULERS	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CCB	0.500		0	0	0	NR	NR	0
PCSRP	0.500		0	0	0	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	0.001		0	NR	NR	NR	NR	0
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	0	0	1	0	0	1

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
1 **SE** **1/4-1/2** **0.355 mi.** **1872 ft.** **Relative:** **Lower**	**H.F. LEE POWER STATION** **WAYNE (County), NC** **Click here for full text details** **COAL ASH** Wastewater Permit Num WAYNE-031	**COAL ASH**	**S117904168** **N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
NC	AIRS	Air Quality Permit Listing	Department of Environmental Quality	09/08/2020	09/09/2020	12/03/2020
NC	AOP	Animal Operation Permits Listing	Department of Environmental Quality	04/01/2020	05/26/2020	05/27/2020
NC	ASBESTOS	ASBESTOS	Department of Health & Human Services	10/30/2020	11/23/2020	02/08/2021
NC	AST	AST Database	Department of Environment and Natural Resourc	08/12/2020	09/15/2020	12/07/2020
NC	BROWNFIELDS	Brownfields Projects Inventory	Department of Environment and Natural Resourc	12/01/2020	12/08/2020	12/09/2020
NC	CCB	Coal Ash Structural Fills (CCB) Listing	Department of Environmental Quality	02/27/2020	07/07/2020	09/23/2020
NC	COAL ASH	Coal Ash Disposal Sites	Department of Environment & Natural Resources	09/10/2020	09/23/2020	12/14/2020
NC	DEBRIS	Solid Waste Active Disaster Debris Sites Listing	Department of Environmental Quality	09/02/2020	09/16/2020	12/08/2020
NC	DRYCLEANERS	Drycleaning Sites	Department of Environment & Natural Resources	09/08/2020	09/16/2020	12/08/2020
NC	Financial Assurance 1	Financial Assurance Information Listing	Department of Environment & Natural Resources	10/30/2020	11/04/2020	12/31/2020
NC	Financial Assurance 2	Financial Assurance Information Listing	Department of Environmental & Natural Resourc	10/02/2012	10/03/2012	10/26/2012
NC	Financial Assurance 3	Financial Assurance Information	Department of Environment & Natural Resources	12/02/2020	12/03/2020	02/18/2021
NC	HIST LF	Solid Waste Facility Listing	Department of Environment & Natural Resource	11/06/2006	02/13/2007	03/02/2007
NC	HSDS	Hazardous Substance Disposal Site	North Carolina Center for Geographic Informat	08/09/2011	11/08/2011	12/05/2011
NC	IMD	Incident Management Database	Department of Environment and Natural Resourc	10/30/2020	11/03/2020	01/21/2021
NC	INST CONTROL	No Further Action Sites With Land Use Restrictions Monitorin	Department of Environmental Quality	09/04/2020	09/09/2020	12/03/2020
NC	LAST	Leaking Aboveground Storage Tanks	Department of Environment & Natural Resources	10/30/2020	11/03/2020	01/22/2021
NC	LCID	Land-Clearing and Inert Debris (LCID) Landfill Notifications	Department of Environmental Quality	04/30/2020	07/09/2020	09/23/2020
NC	LUST	Regional UST Database	Department of Environment and Natural Resourc	10/30/2020	11/03/2020	11/18/2020
NC	LUST TRUST	State Trust Fund Database	Department of Environment and Natural Resourc	10/02/2020	10/07/2020	12/31/2020
NC	NPDES	NPDES Facility Location Listing	Department of Environment & Natural Resources	10/01/2020	10/27/2020	01/15/2021
NC	OLI	Old Landfill Inventory	Department of Environment & Natural Resources	09/11/2020	10/09/2020	12/30/2020
NC	PCSRP	Petroleum-Contaminated Soil Remediation Permits	Department of Environmental Quality	07/06/2020	07/07/2020	09/23/2020
NC	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Environment, Health and Natural		07/01/2013	12/24/2013
NC	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Environment, Health and Natural		07/01/2013	01/13/2014
NC	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Environment, Health and Natural		07/01/2013	12/20/2013
NC	SEPT HAULERS	Permitted Septage Haulers Listing	Department of Environmental Quality	05/13/2020	07/07/2020	09/23/2020
NC	SHWS	Inactive Hazardous Sites Inventory	Department of Environment, Health and Natural	09/04/2020	09/09/2020	12/03/2020
NC	SPILLS	Spills Incident Listing	Department of Environment & Natural Resources	10/09/2020	10/22/2020	01/14/2021
NC	SPILLS 80	SPILLS80 data from FirstSearch	FirstSearch	06/14/2001	01/03/2013	03/06/2013
NC	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	09/27/2012	01/03/2013	03/06/2013
NC	SWF/LF	List of Solid Waste Facilities	Department of Environment and Natural Resourc	09/10/2020	09/23/2020	12/14/2020
NC	SWRCY	Recycling Center Listing	Department of Environment & Natural Resources	09/16/2020	09/17/2020	12/09/2020
NC	UIC	Underground Injection Wells Listing	Department of Environment & Natural Resources	10/26/2020	11/30/2020	12/07/2020
NC	UST	Petroleum Underground Storage Tank Database	Department of Environment and Natural Resourc	10/30/2020	11/04/2020	12/31/2020
NC	VCP	Responsible Party Voluntary Action Sites	Department of Environment and Natural Resourc	09/04/2020	09/09/2020	12/03/2020
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	ABANDONED MINES	Abandoned Mines	Department of Interior	09/16/2020	09/17/2020	12/10/2020
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2017	06/22/2020	11/20/2020
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2019	12/01/2020	02/09/2021
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	09/30/2020	10/08/2020	01/04/2021
US	CORRACTS	Corrective Action Report	EPA	12/14/2020	12/17/2020	12/22/2020
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	11/03/2020	11/17/2020	02/09/2021
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	01/02/2020	01/28/2020	04/17/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	Delisted NPL	National Priority List Deletions	EPA	12/30/2020	01/14/2021	02/09/2021
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	10/03/2020	10/06/2020	01/04/2021
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	12/14/2020	12/15/2020	12/22/2020
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	04/03/2019	04/05/2019	05/14/2019
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FEMA UST	Underground Storage Tank Listing	FEMA	07/21/2020	09/03/2020	11/25/2020
US	FINDS	Facility Index System/Facility Registry System	EPA	11/04/2020	12/01/2020	01/25/2021
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	09/29/2020	11/17/2020	01/25/2021
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	11/13/2020	11/13/2020	01/25/2021
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	08/08/2017	09/11/2018	09/14/2018
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	09/20/2020	09/22/2020	12/14/2020
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/29/2020	05/20/2020	08/12/2020
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/14/2020	05/20/2020	08/12/2020
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	04/14/2020	05/26/2020	08/12/2020
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	04/14/2020	05/20/2020	08/12/2020
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	04/08/2020	05/20/2020	08/12/2020
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	04/15/2020	05/20/2020	08/12/2020
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	04/14/2020	05/20/2020	08/12/2020
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	04/08/2020	05/20/2020	08/12/2020
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	04/29/2020	05/20/2020	08/12/2020
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	04/14/2020	05/20/2020	08/12/2020
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	04/14/2020	05/26/2020	08/12/2020
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/14/2020	05/20/2020	08/12/2020
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/08/2020	05/20/2020	08/12/2020
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	04/03/2020	05/20/2020	08/12/2020
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	04/14/2020	05/20/2020	08/13/2020
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	04/08/2020	05/20/2020	08/12/2020
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	12/30/2020	01/14/2021	02/09/2021
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	12/30/2020	01/14/2021	02/18/2021
US	LUCIS	Land Use Control Information System	Department of the Navy	11/11/2020	11/17/2020	02/09/2021
US	MINES MRDS	Mineral Resources Data System	USGS	04/06/2018	10/21/2019	10/24/2019
US	MINES VIOLATIONS	MSHA Violation Assessment Data	DOL, Mine Safety & Health Admi	11/24/2020	11/30/2020	01/25/2021

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	08/05/2020	08/10/2020	10/08/2020
US	NPL	National Priority List	EPA	12/30/2020	01/14/2021	02/09/2021
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	10/09/2019	10/11/2019	12/20/2019
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	09/13/2019	11/06/2019	02/10/2020
US	PCS	Permit Compliance System	EPA, Office of Water	07/14/2011	08/05/2011	09/29/2011
US	PCS ENF	Enforcement data	EPA	12/31/2014	02/05/2015	03/06/2015
US	PCS INACTIVE	Listing of Inactive PCS Permits	EPA	11/05/2014	01/06/2015	05/06/2015
US	PRP	Potentially Responsible Parties	EPA	04/27/2020	05/06/2020	06/09/2020
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/30/2020	01/14/2021	02/09/2021
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/01/2019	07/01/2019	09/23/2019
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	12/14/2020	12/17/2020	12/22/2020
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/14/2020	12/17/2020	12/22/2020
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/14/2020	12/17/2020	12/22/2020
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/14/2020	12/17/2020	12/22/2020
US	RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionall	Environmental Protection Agency	12/14/2020	12/17/2020	12/22/2020
US	RMP	Risk Management Plans	Environmental Protection Agency	11/02/2020	11/12/2020	01/25/2021
US	ROD	Records Of Decision	EPA	12/30/2020	01/14/2021	02/18/2021
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	SEMS	Superfund Enterprise Management System	EPA	12/30/2020	01/14/2021	02/18/2021
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	12/30/2020	01/14/2021	02/18/2021
US	SSTS	Section 7 Tracking Systems	EPA	10/19/2020	10/19/2020	01/04/2021
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2018	08/14/2020	11/04/2020
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/17/2020	09/10/2020
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	08/30/2019	11/15/2019	01/28/2020
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	09/14/2020	09/15/2020	12/10/2020
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	03/18/2020	03/19/2020	06/09/2020
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	10/28/2020	11/05/2020	11/18/2020
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	09/21/2020	09/22/2020	12/14/2020
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	03/18/2020	03/19/2020	06/09/2020
US	US INST CONTROLS	Institutional Controls Sites List	Environmental Protection Agency	10/28/2020	11/05/2020	11/18/2020
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	11/03/2020	11/23/2020	01/25/2021
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	05/06/2020	05/27/2020	08/13/2020
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	UXO	Unexploded Ordnance Sites	Department of Defense	12/31/2018	07/02/2020	09/17/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	08/10/2020	10/20/2020	11/02/2020
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2018	04/10/2019	05/16/2019
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	01/01/2019	04/29/2020	07/10/2020
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	06/30/2018	07/19/2019	09/10/2019
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2018	10/02/2019	12/10/2019
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	05/31/2018	06/19/2019	09/03/2019
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
NC	Daycare Centers	Sensitive Receptor: Child Care Facility List	Department of Health & Human Services			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
NC	State Wetlands	Wetland Inventory	US Fish & Wildlife Service			
US	Topographic Map		U.S. Geological Survey			
US	Oil/Gas Pipelines		Endeavor Business Media			
US	Electric Power Transmission Line Data		Endeavor Business Media			

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

COOR ISLAND
2271 OLD SMITHFIELD ROAD
GOLDSBORO, NC 27530

TARGET PROPERTY COORDINATES

Latitude (North):	35.385687 - 35° 23' 8.47''
Longitude (West):	78.115442 - 78° 6' 55.59''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	762022.5
UTM Y (Meters):	3919438.2
Elevation:	77 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5947420 NORTHWEST GOLDSBORO, NC
Version Date:	2013
Southeast Map:	5948626 SOUTHWEST GOLDSBORO, NC
Version Date:	2013
Southwest Map:	5947410 GRANTHAM, NC
Version Date:	2013
Northwest Map:	5948616 PRINCETON, NC
Version Date:	2013

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

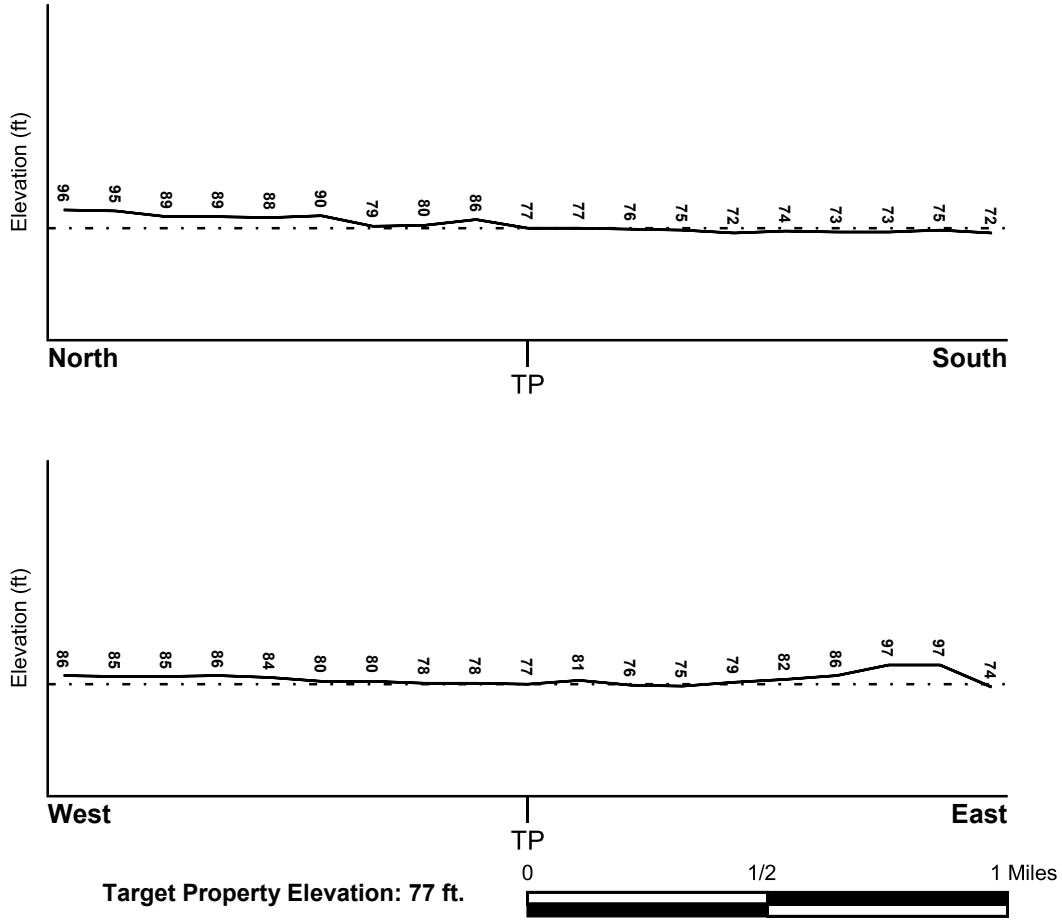
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
3720256800J	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
3720266000J	FEMA FIRM Flood data
3720265000J	FEMA FIRM Flood data
3720254800J	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NORTHWEST GOLDSBORO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Cambrian
Series:	Cambrian
Code:	Ce *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	ROANOKE
Soil Surface Texture:	loam
Hydrologic Group:	Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.
Soil Drainage Class:	Poorly. Soils may have a saturated zone, a layer of low hydraulic conductivity, or seepage. Depth to water table is less than 1 foot.

Hydric Status: Soil meets the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	HIGH
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	7 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 3.60
2	7 inches	12 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 20.00 Min: 0.00	Max: 5.50 Min: 3.60
3	12 inches	50 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.20 Min: 0.00	Max: 5.50 Min: 3.60
4	50 inches	72 inches	stratified	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 20.00 Min: 0.06	Max: 6.50 Min: 3.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: muck
loamy sand
fine sandy loam
silt loam
loamy fine sand
sandy loam

Surficial Soil Types: muck
loamy sand
fine sandy loam
silt loam
loamy fine sand
sandy loam

Shallow Soil Types: silt loam
sandy clay loam

Deeper Soil Types: sand

loamy sand

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

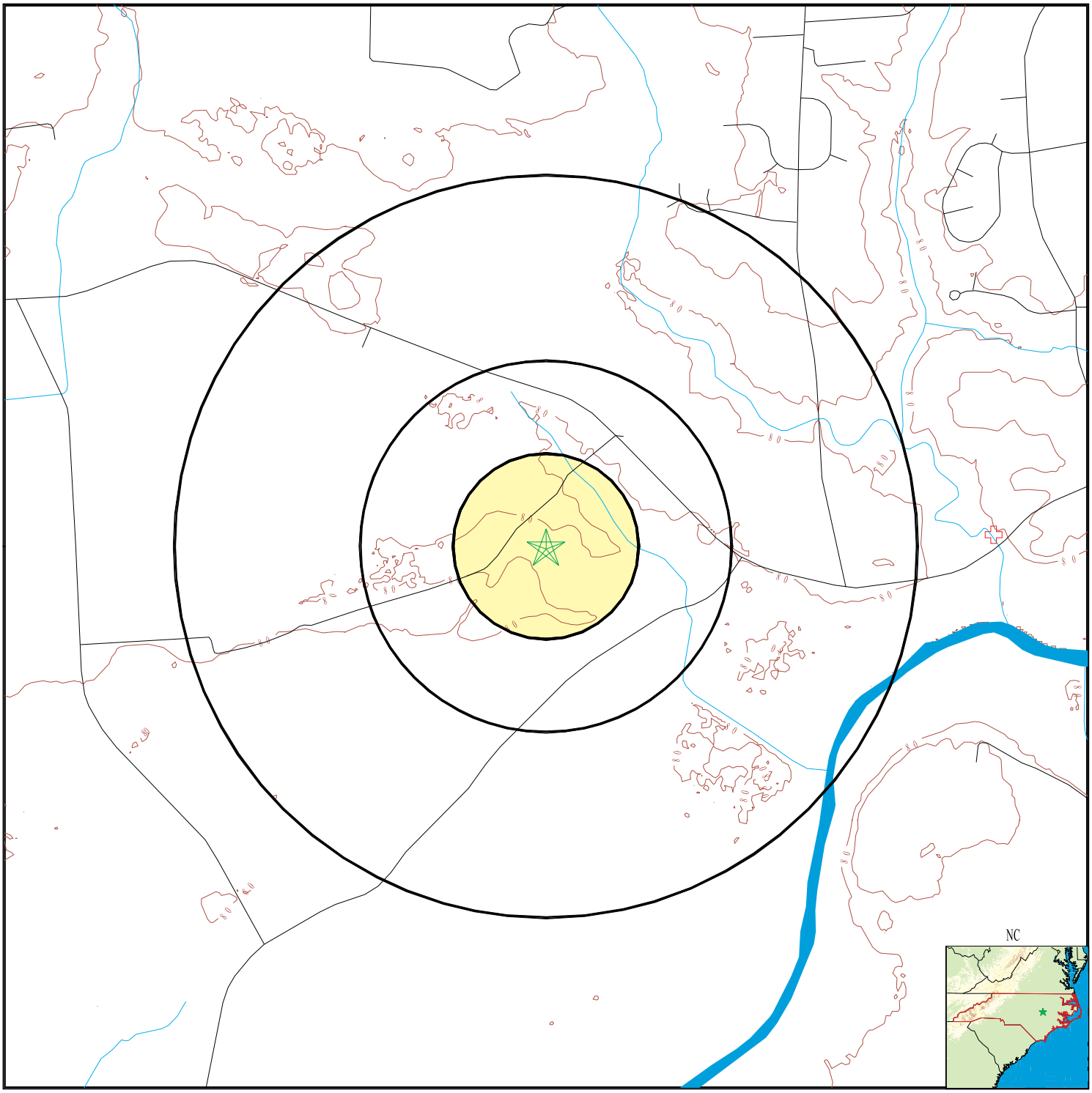
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

OTHER STATE DATABASE INFORMATION

PHYSICAL SETTING SOURCE MAP - 6373747.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- Wildlife Areas
- Natural Areas
- Rare & Endangered Species

SITE NAME: Coor Island	CLIENT: Restoration Systems, LLC
ADDRESS: 2271 Old Smithfield Road Goldsboro NC 27530	CONTACT: JD Hamby
LAT/LONG: 35.385687 / 78.115442	INQUIRY #: 6373747.2s DATE: February 19, 2021 9:45 am

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
	Click here for full text details	NC_NHEO	NC50004874

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for WAYNE County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 27530

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.600 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: US Fish & Wildlife Service
Telephone: 703-358-2171

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

North Carolina Public Water Supply Wells
Source: Department of Environmental Health
Telephone: 919-715-3243

OTHER STATE DATABASE INFORMATION

North Carolina Wildlife Resources/Game Lands
Source: Center for Geographic Information and Analysis
Telephone: 919-733-2090
All publicly owned game lands managed by the North Carolina Wildlife Resources Commission and as listed in Hunting and Fishing Maps.

NC Natural Heritage Sites: Natural Heritage Element Occurrence Sites
Source: Natural Heritage Occurrence Sites Center for Geographic Information and Analysis
Telephone: 919-733-2090
A point coverage identifying locations of rare and endangered species, occurrences of exemplary or unique natural ecosystems (terrestrial or aquatic), and special animal habitats (e.g., colonial waterbird nesting sites).

NC Natural Areas: Significant Natural Heritage Areas
Source: Center for Geographic Information and Analysis
Telephone: 919-733-2090
A polygon converage identifying sites (terrestrial or aquatic) that have particular biodiversity significance. A site's significance may be due to the presenceof rare species, rare or high quality natural communities, or other important ecological features.

RADON

State Database: NC Radon
Source: Department of Environment & Natural Resources
Telephone: 919-733-4984
Radon Statistical and Non Statiscal Data

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

North Carolina Department of Natural and Cultural Resources

State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper | Secretary D. Reid Wilson

March 31, 2021

Matthew Harrell
Restoration Systems, LLC
1101 Haynes Street, Suite 211
Raleigh, NC 27604

mharrell@restorationsystems.com

Re: Coor Island Mitigation Site, 2271 Old Smithfield Road, Goldsboro, Wayne County, ER 21-0618

Dear Mr. Harrell:

Thank you for your letter of February 18, 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

NC DEPARTMENT OF
NATURAL AND CULTURAL RESOURCES

Roy Cooper, **Governor**
Susi Hamilton, **Secretary**
Walter Clark, **Director, Land and Water Stewardship**

NCNHDE-12855

September 11, 2020

Allison Keith
Axiom Environmental
218 Snow Ave
Raleigh, NC 27603
RE: Coor

Dear Allison Keith:

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

Based on the project area mapped with your request, a query of the NCNHP database indicates that there are no records for rare species, important natural communities, natural areas, and/or conservation/managed areas within the proposed project boundary. Please note that although there may be no documentation of natural heritage elements within 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.

The attached 'Potential Occurrences' table summarizes rare species and natural communities that have been documented within a one-mile radius of the property boundary. The proximity of these records suggests that these natural heritage elements may potentially be present in the project area if suitable habitat exists. Tables of natural areas and conservation/managed areas within a one-mile radius of the project area, if any, are also included in this report.

If a Federally-listed species is found within the project area or is indicated within a one-mile radius of the project area, the NCNHP recommends contacting the US Fish and Wildlife Service (USFWS) for guidance. Contact information for USFWS offices in North Carolina is found here: https://www.fws.gov/offices/Directory/ListOffices.cfm?statecode=37.

Please 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 not be redistributed without permission.

The NC Natural Heritage Program may follow this letter with additional correspondence if a Dedicated Nature Preserve, Registered Heritage Area, Clean Water Management Trust Fund easement, or Federally-listed species are documented near the project area.

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

Natural Heritage Element Occurrences, Natural Areas, and Managed Areas Within a One-mile Radius of the Project Area
Coor
September 11, 2020
NCNHDE-12855

Element Occurrences Documented Within a One-mile Radius of the Project Area

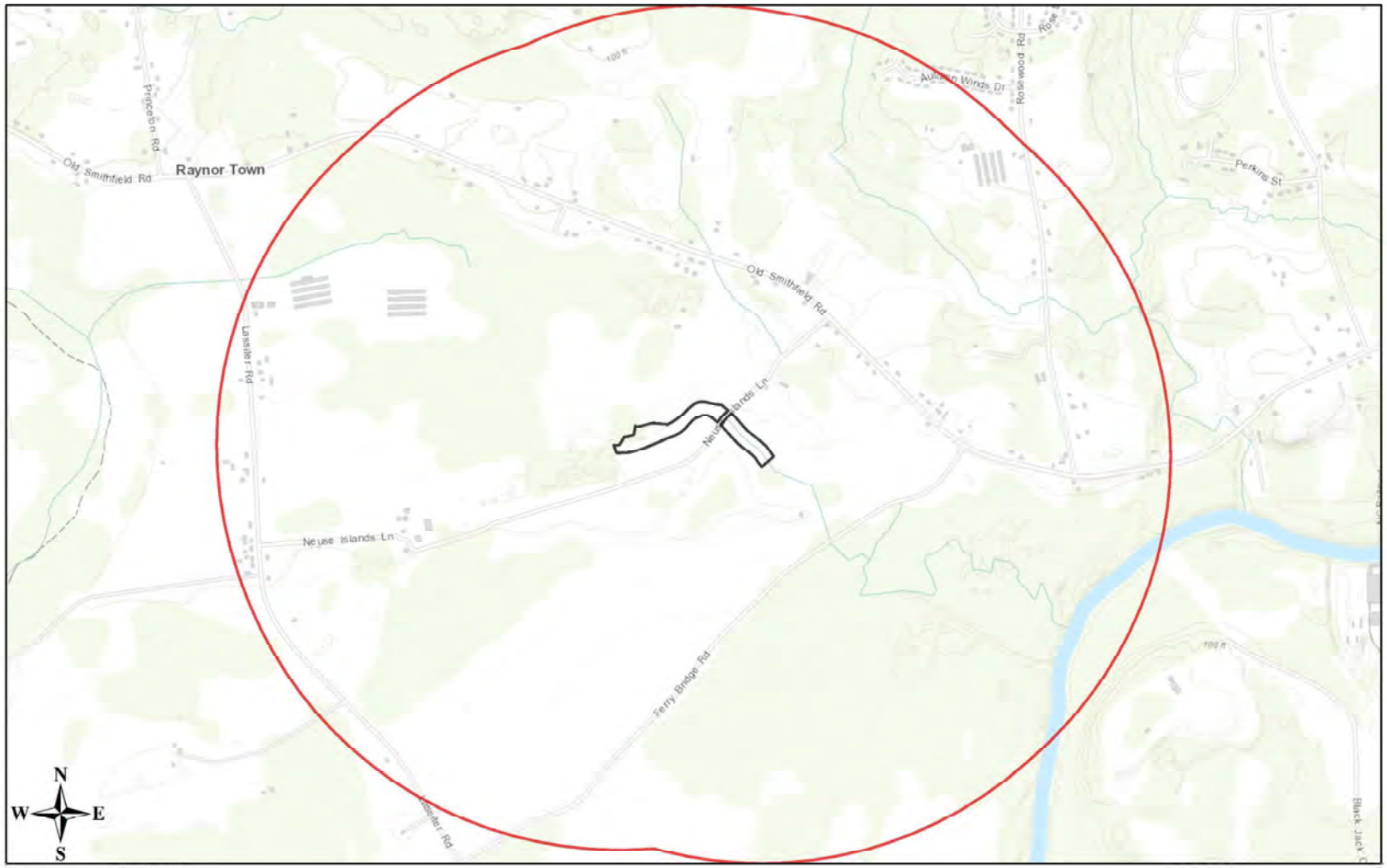
Taxonomic Group	EO ID	Scientific Name	Common Name	Last Observation Date	Element Occurrence Rank	Accuracy	Federal Status	State Status	Global Rank	State Rank
Amphibian	4929	Necturus lewisi	Neuse River Waterdog	2019-10-03	B	3-Medium	Proposed Threatened	Special Concern	G2	S2
Freshwater Fish	36877	Notropis chalybaeus	Ironcolor Shiner	1961-06-06	H	3-Medium	---	Significantly Rare	G4	S2S3
Freshwater Fish	17447	Noturus furiosus	Carolina Madtom	1979-08-13	H	3-Medium	Proposed Endangered	Threatened	G2	S2

No Natural Areas are Documented Within a One-mile Radius of the Project Area

No Managed Areas are Documented Within a One-mile Radius of the Project Area

Definitions and an explanation of status designations and codes can be found at https://ncnhde.natureserve.org/help. Data query generated on September 11, 2020; source: NCNHP, Q3 July 2020. Please resubmit your information request if more than one year elapses before project initiation as new information is continually added to the NCNHP database.

NCNHDE-12855: Coor



September 11, 2020

Project Boundary

Buffered Project Boundary

1:21,941

0 0.175 0.35 0.7 mi

0 0.3 0.6 1.2 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

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: May 05, 2021
Consultation Code: 04EN2000-2021-SLI-1109
Event Code: 04EN2000-2021-E-02489
Project Name: Coor Island Buffer/Nutrient 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-1109
Event Code: 04EN2000-2021-E-02489
Project Name: Coor Island Buffer/Nutrient Mitigation Site
Project Type: ** OTHER **
Project Description: Plant native hardwood trees November 2021-March 2022. Permanent conservation easement.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@35.38548565,-78.12048123201903,14z

Counties: Wayne 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.

Birds

NAME	STATUS
Red-cockaded Woodpecker *Picoides borealis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7614	Endangered

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

Critical habitats

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

4 Summary Discussion, Conclusion, And Effect Determinations

4.1 Effect Determination Summary

SPECIES (COMMON NAME)	SCIENTIFIC NAME	LISTING STATUS	PRESENT IN ACTION AREA	EFFECT DETERMINATION
Atlantic Pigtoe	Fusconaia masoni	Proposed Threatened	Excluded from analysis	Excluded from analysis
Carolina Madtom	Noturus furiosus	Proposed Endangered	Excluded from analysis	Excluded from analysis
Neuse River Waterdog	Necturus lewisi	Proposed Threatened	Excluded from analysis	Excluded from analysis
Red-cockaded Woodpecker	Picoides borealis	Endangered	Yes	NE
Tar River Spinymussel	Elliptio steinstansana	Endangered	Yes	NLAA

4.2 Summary Discussion

This project consists entirely of planting native vegetation. No ground disturbing activities will occur. The re-establishment of native vegetation on an area that is currently in intensive traditional row crops will provide benefits for all native species and is unlikely to have any negative impacts.

4.3 Conclusion

Species	Conclusion	Determination	Note
Bald Eagle	Unlikely to disturb nesting bald eagles	NE	Not within 660' of nest
NLEB	Suitable habitat (Trees) present	NE	No tree cutting, Outside Red HUC
Red-cockaded Woodpecker	Lack of suitable habitat	NE	Lack of pine forest habitat
Tar River Spinymussel	Lack of suitable habitat	NLAA	Potential downstream benefits

United States Department of the Interior

FISH AND WILDLIFE SERVICE

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

Date: 6-9-2021

Self-Certification Letter

Project Name Coor Island 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
- [x] "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

From: Matthews, Kathryn H
To: Matthew Harrell
Cc: Ellis, John
Subject: Re: [EXTERNAL] RE: MBTA Review Request: Coor Island Mitigation Site, Wayne County, NC
Date: Thursday, June 10, 2021 9:13:58 AM

Hi Matthew,

The USFWS does not have a formal review process for MBTA, and we hardly ever receive requests for review or comment. I am not sure why FHWA appears to require coordination with us. In general, mitigation or other restoration projects are beneficial for birds, especially in the long-term. I will coordinate with FHWA to see if we can get them to reword the requirement for mitigation projects, so that formal reviews are not expected. In the meantime, if we don't respond within 30 days to a request for review, you can consider that as "no comment" and check the box indicating you have coordinated with us. I will let DMS and FHWA know.

Thanks,
Kathy

Please note that I am teleworking almost exclusively. Email is the best way to reach me. Thanks,

Kathy Matthews
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
551-F Pylon Drive
Raleigh, NC 27606
919-856-4520, x. 27

From: Matthew Harrell <mharrell@restorationsystems.com>
Sent: Wednesday, June 9, 2021 12:57 PM
To: Matthews, Kathryn H <kathryn_matthews@fws.gov>
Cc: Ellis, John <john_ellis@fws.gov>
Subject: [EXTERNAL] RE: MBTA Review Request: Coor Island Mitigation Site, Wayne County, NC

Hi Kathy,

NORTH CAROLINA WILDLIFE RESOURCES COMMISSION
Cameron Ingram, Executive Director

June 7, 2021

Mr. Matthew Harrell
Restoration Systems, LLC
1101 Haynes Street, Suite 211
Raleigh, NC 27604

Subject: Request for Environmental Information for the Coor Island Mitigation Site, Wayne County, North Carolina.

Mr. Harrell,

Biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the proposed project description. Comments are provided in accordance with certain provisions of the Clean Water Act of 1977 (as amended), Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667e) and North Carolina General Statutes (G.S. 113-131 et seq.).

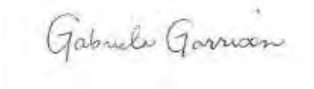
In conjunction with the NC Division of Mitigation Services, Restoration Systems, LLC has identified and developed the Coor Island Mitigation Site. The 30.5-acre site will restore and preserve riparian buffers. This site is located along Neuse Islands Lane, southwest of its intersection with Old Smithfield Road, west of Goldsboro.

The project area drains to Halfmile Branch in the Neuse River basin. Stream restoration projects often improve water quality and aquatic habitat. Establishing native, forested buffers in riparian areas will improve both aquatic and terrestrial habitats and provide a travel corridor for wildlife species.

In addition to stringent best management practices for erosion and sediment control during construction, the NCWRC recommends the use of biodegradable and wildlife-friendly sediment and erosion control devices. Silt fencing, fiber rolls and/or other products should have loose-weave netting that is made of natural fiber materials with movable joints between the vertical and horizontal twines. Silt fencing and similar products that have been reinforced with plastic or metal mesh should be avoided as they impede the movement of terrestrial wildlife species. Excessive silt and sediment loads can have detrimental effects on aquatic resources including destruction of spawning habitat, suffocation of eggs and clogging of gills. Only native vegetation should be installed onsite and any invasive plant species found in or near the project area should be removed and destroyed.

Thank you for the opportunity to review and comment on this project. If I can be of further assistance, please contact me at (910) 409-7350 or gabriela.garrison@ncwildlife.org.

Sincerely,



Gabriela Garrison
Eastern Piedmont Habitat Conservation Coordinator
Habitat Conservation Program

United States Department of Agriculture

Natural Resources
Conservation Service

North Carolina
State Office

4407 Bland Rd.
Suite 117
Raleigh
North Carolina 27609
Voice (919) 873-2100
Fax (844) 325-2156

March 8, 2023

Raymond J. Holz
Restoration Systems, LLC
1101 Haynes St., Suite 211
Raleigh, NC 27604
Office: 919-334-9122

Dear Raymond Holz:

The following information is in response to your request soliciting comments regarding the Coor Island Phase B Mitigation site in Wayne 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 **does include** land classified as Prime Farmland. In accordance with the Code of Federal Regulations 7CFR 658, Farmland Protection Policy Act, the AD-1006 was initiated. NRCS has completed Parts II, IV, V of the form, and returned for completion by the requesting agency.

If you have any questions, please feel free to email me at Ryan.Janway@usda.gov.

Sincerely,

Ryan Janway

Ryan Janway
Natural Resource Specialist

cc:
Andrew Faison, supervisory soil conservationist, NRCS, NC
Michael Jones, state soil scientist, Raleigh, NC

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 03/03/2023
Name of Project Coor Island Phase B Mitigation Site	Federal Agency Involved FHWA
Proposed Land Use Nutrient Offset Credits	County and State Wayne County, North Carolina
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 3/3/2023 / Person Completing Form: Rvan Janwav

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: 0	Average Farm Size: 300
Major Crop(s): Corn	Farmable Land In Govt. Jurisdiction Acres: 86.96 % 310,477	Amount of Farmland As Defined in FPPA Acres: 86.96 % 310,477	
Name of Land Evaluation System Used: Wayne County LESA	Name of State or Local Site Assessment System: NA	Date Land Evaluation Returned by NRCS: 3/8/2023	

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	17.7			
B. Total Acres To Be Converted Indirectly	0			
C. Total Acres In Site	17.7			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	11.5			
B. Total Acres Statewide Important or Local Important Farmland	1.4			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	.0051%			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	70.89%			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)	49.95			

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)				
2. Perimeter In Non-urban Use	(10)				
3. Percent Of Site Being Farmed	(20)				
4. Protection Provided By State and Local Government	(20)				
5. Distance From Urban Built-up Area	(15)				
6. Distance To Urban Support Services	(15)				
7. Size Of Present Farm Unit Compared To Average	(10)				
8. Creation Of Non-farmable Farmland	(10)				
9. Availability Of Farm Support Services	(5)				
10. On-Farm Investments	(20)				
11. Effects Of Conversion On Farm Support Services	(10)				
12. Compatibility With Existing Agricultural Use	(10)				
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100	49.95	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	0	0	0	0
TOTAL POINTS ***(Total of above 2 lines)***	260	49.95	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)**

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, http://fppa.nrcs.usda.gov/lesa/.

Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s)of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map**,** or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)

Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.

Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.

Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.

Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.

2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.
Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \text{ X } 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

United States Department of Agriculture

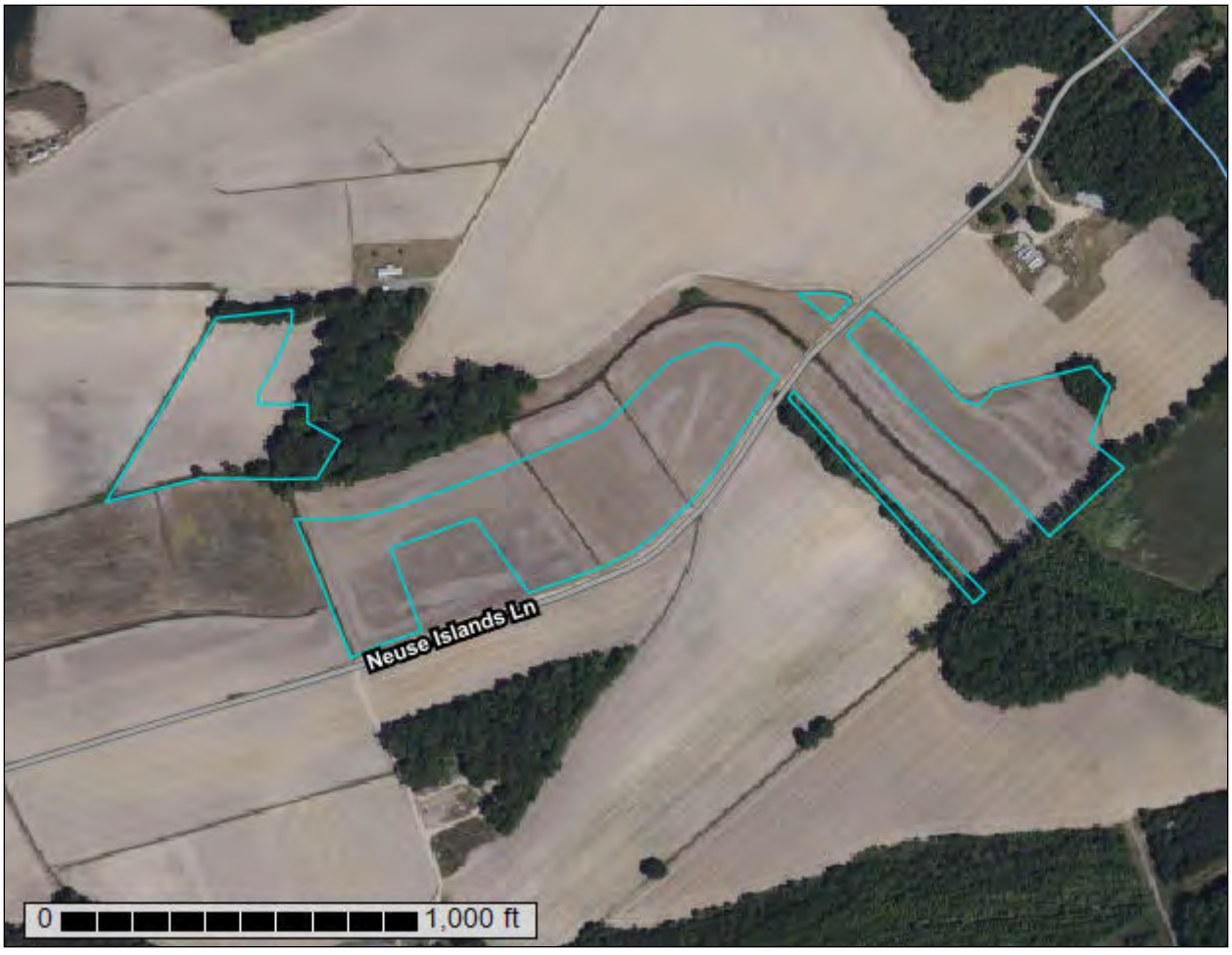
NRCS

Natural Resources Conservation Service

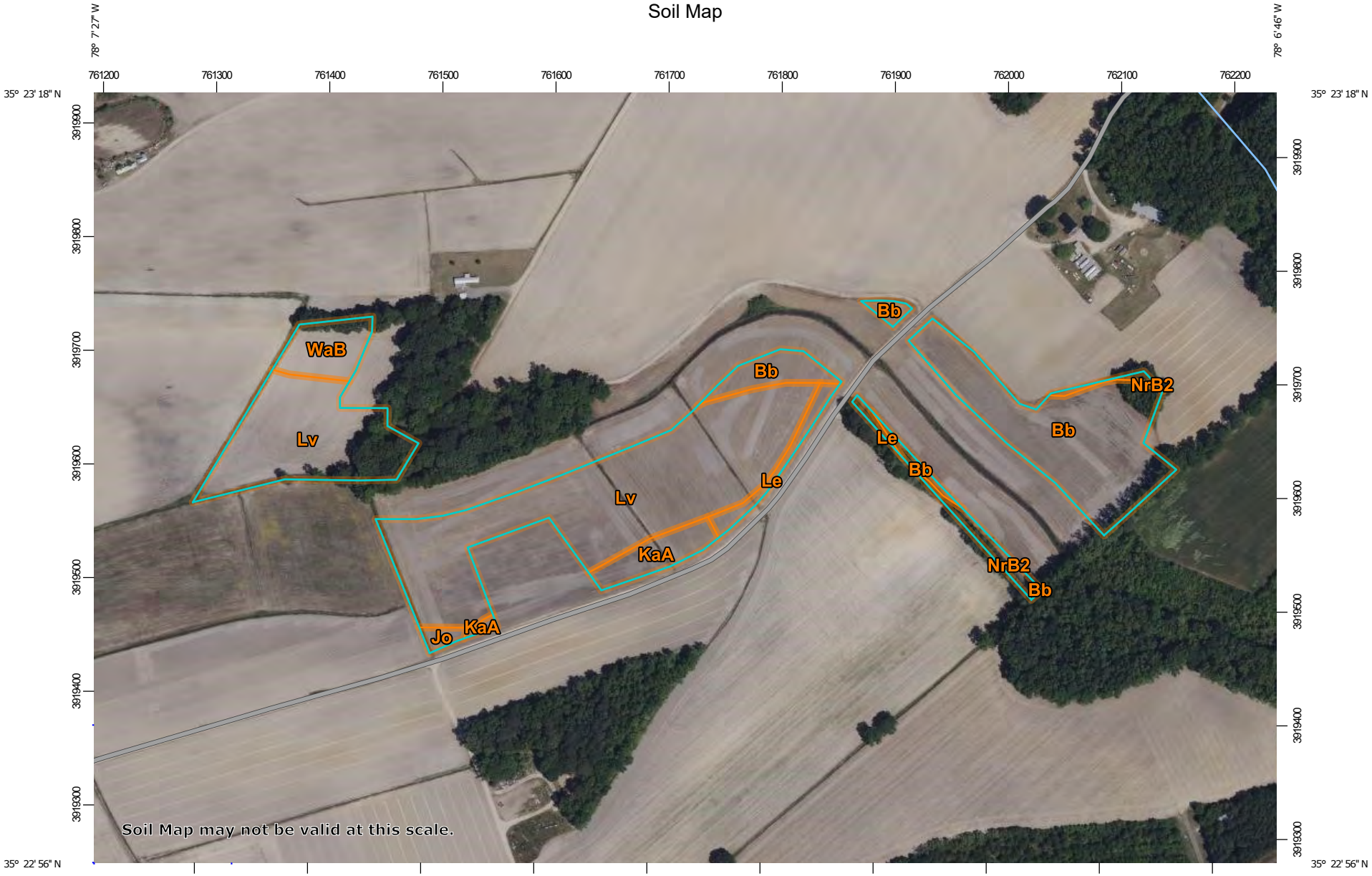
A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Wayne County, North Carolina

Coor Island Phase B



March 8, 2023



Map Scale: 1:4,780 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Wayne County, North Carolina
Survey Area Data: Version 21, Sep 12, 2022

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

Date(s) aerial images were photographed: Apr 24, 2022—May 9, 2022

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Bb	Bibb sandy loam	4.8	27.4%
Jo	Johns sandy loam	0.1	0.8%
KaA	Kalmia loamy sand, 0 to 2 percent slopes	0.8	4.4%
Le	Leaf loam	0.5	2.7%
Lv	Lumbee sandy loam	10.2	57.4%
NrB2	Norfolk sandy loam, 2 to 6 percent slopes, eroded	0.4	2.4%
WaB	Wagram loamy sand, 0 to 6 percent slopes	0.9	4.9%
Totals for Area of Interest		**17.7**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

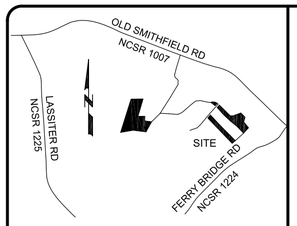
An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Appendix E. Financial Assurance

Pursuant to Section IV H and Appendix III of the NCDEQ DMS (formerly Ecosystem Enhancement Program) In-Lieu Fee Instrument dated July 28, 2010, the North Carolina Department of Environmental Quality (NCDEQ) has provided the USACE-Wilmington District with a formal commitment to fund projects to satisfy mitigation requirements assumed by NCDEQ DMS. This commitment provides financial assurance for all mitigation projects implemented by the program.

Appendix F. Site Protection Instrument



VICINITY MAP (NTS)

DEED REFERENCE(S):

BEING A PORTION OF PROPERTY RECORDED IN D.B. 3757, PG. 327 OF THE WAYNE COUNTY REGISTER OF DEEDS.

MAP REFERENCE(S):

P.C P, SL. 67-C
P.C. F, SL. 295
P.C. O, SL. 33F
P.C. F, SL. 273
P.C. O, SL. 241

ACCESS EASEMENT AGREEMENT REFERENCE(S):

D.B. 3742, PG. 520
D.B. 3749, PG. 744

THE AREA REPRESENTED BY THIS PLAT IS LOCATED IN A FLOOD HAZARD BOUNDARY ACCORDING TO FEMA MAP NUMBER(S) 3720256800K, ZONE(S) AE, DATED: JUNE 20, 2018.

OWNER'S CERTIFICATE (PIN 2569264339):

I (We) hereby certify that I (we) am (are) the owner(s) of the property shown and described herein which property was conveyed to me (us) by deed recorded at D.B. 3757, pg. 327, Wayne County Registry, and that (I) we hereby adopt the plan of the conservation easement with our free consent. Further, (I) we hereby certify that the land shown herein is within the subdivision regulation jurisdiction of Wayne County, North Carolina.

_____ _____
Date Restoration Systems, LLC Representative

STATE OF NORTH CAROLINA
COUNTY OF WAYNE

Filed for registration at _____ M. _____ , 2023 in the Register of Deeds

Office. Recorded in P.C. _____ , SL. _____.

_____ _____
Register of Deeds By

STATE OF NORTH CAROLINA
COUNTY OF WAYNE

I, _____ , Review Officer of Wayne County, certify that the map or plat to which this certification is affixed meets all statutory requirements for recording.

_____ _____
Date Review Officer

SURVEYORS CERTIFICATION(S)

Surveyor's disclaimer: No attempt was made to locate any cemeteries, wetlands, hazardous material sites, underground utilities or any other features above, or below ground other than those shown. However, no visible evidence of cemeteries or utilities, aboveground or otherwise, was observed by the undersigned (other than those shown).

I certify that the survey is of another category such as the recombination of existing parcels, a court-ordered survey, or other exception to the definition of subdivision (conservation easement).

I, JOHN A. RUDOLPH, certify that this plat was drawn under my supervision from an actual survey made under my supervision (deed description recorded in Book SEE, Page REFS, etc.) (other); that the boundaries not surveyed are clearly indicated as drawn from information found in Book____, page____; that the ratio of precision or positional accuracy as calculated is 1/10,000+; that this plat was prepared in accordance with G.S. 47-30 as amended. Witness my original signature, license number and seal this 8th day of May, A.D., 2023.

SEAL OR STAMP

L-4194
Professional Land Surveyor License Number

"PRELIMINARY PLAT"
NOT FOR RECORDATION, CONVEYANCES OR SALES

FIRM LICENSE No.: C-2111

DRAWN BY:	FGR
DATE:	5/8/23
DWG. NO.:	RSS524MR23CE-PH2
SURVEYED BY:	J.A.R.

k2 design group
774 S. Beston Road
La Grange, NC 28551
252.582.3097
www.k2designgroup.com

CORNER DESCRIPTIONS

CORNER #	DESCRIPTION
1	2.0" O.D. IRON PIPE 0.75' BELOW GRADE
2	1.0" O.D. IRON PIPE 1.0' BELOW GRADE, BENT
3	1.0" O.D. PINCHED-TOP IRON FLUSH WITH GRADE, DISTURBED
4	1.0" O.D. IRON PIPE 0.4' BELOW GRADE, BENT
5	1.0" O.D. IRON PIPE 0.5' BELOW GRADE
6	No. 5 REBAR FLUSH WITH GRADE
7	1.0" O.D. IRON PIPE FLUSH WITH GRADE
8	No. 5 REBAR FLUSH WITH GRADE
9	2.0" O.D. IRON PIPE FLUSH WITHGRADE
10	No. 5 REBAR WITH YELLOW CAP FLUSH WITH GRADE
11	1.0" O.D. IRON PIPE 0.3' ABOVE GRADE
12	No. 5 REBAR FLUSH WITH GRADE
13	1.0" O.D. IRON PIPE 0.1' BELOW GRADE
14	1.0" O.D. IRON PIPE 1.2' BELOW GRADE
15	1.0" O.D. IRON PIPE 0.2' BELOW GRADE
16	No. 4 REBAR 0.4' BELOW GRADE
17 THRU 18	No. 5 REBAR FLUSH WITH GRADE
19	0.75" O.D. IRON PIPE 0.4' ABOVE GRADE
20	No. 5 REBAR FLUSH WITH GRADE
21	1.5" O.D. IRON PIPE FLUSH WITH GRADE
89	No. 5 REBAR 0.3' BELOW GRADE LOCATED AT CENTERLINE INTERSECTION OF EXISTING ACCESS EASEMENTS 1 & 2
101 THRU 128, 142 THRU 144	No. 5 REBAR FLUSH WITH GRADE WITH AN ALUMINUM 3 1/4" CAP INSCRIBED: "STATE OF NORTH CAROLINA CONSERVATION EASEMENT"
150 AND 166 AND 167	No. 5 REBAR FLUSH WITH GRADE WITH A YELLOW PLASTIC CAP INSCRIBED: "CONSERVATION EASEMENT"
171 THRU 193	No. 5 REBAR FLUSH WITH GRADE WITH AN ALUMINUM 3 1/4" CAP INSCRIBED: "STATE OF NORTH CAROLINA CONSERVATION EASEMENT"

NOTE
EXISTING 20' WIDE NON-EXCLUSIVE ACCESS EASEMENT FOR INGRESS, EGRESS & REGRESS, D.B. 3742, PG. 520, AND D.B. 3749, PG. 744 DOES NOT ENCROACH INTO THE CONSERVATION EASEMENT AT ANY POINT

RESTORATION SYSTEMS, LLC
1101 HAYNES STREET
SUITE 211
RALEIGH, NC 27604

CONSERVATION EASEMENT ACREAGE DATA:

CONSERVATION EASEMENT AREA 1	RESTORATION SYSTEMS, LLC D.B. 3757, PG. 327 PIN 2569264339	4.05 ACRES±
CONSERVATION EASEMENT AREA 2	RESTORATION SYSTEMS, LLC D.B. 3757, PG. 327 PIN 2569264339	0.54 ACRES±
CONSERVATION EASEMENT AREA 3	RESTORATION SYSTEMS, LLC D.B. 3757, PG. 327 PIN 2569264339	0.14 ACRES±
CONSERVATION EASEMENT AREA 4	RESTORATION SYSTEMS, LLC D.B. 3757, PG. 327 PIN 2569264339	9.13 ACRES±
CONSERVATION EASEMENT AREA 5	RESTORATION SYSTEMS, LLC D.B. 3757, PG. 327 PIN 2569264339	3.95 ACRES±
TOTAL CONSERVATION EASEMENT EXCLUDING ACCESS EASEMENTS BY COORDINATE COMPUTATION		17.81 ACRES±

LINE DATA ALONG CONSERVATION EASEMENT AREA 1

LINE	BEARING	DISTANCE
L100	N45°52'50"E	94.08'

LINE DATA ALONG CONSERVATION EASEMENT AREA 2

LINE	BEARING	DISTANCE
L101	N33°47'48"E	24.83'
L102	S43°10'19"E	169.26'
L103	S43°17'55"E	186.07'
L104	S44°48'42"E	236.75'
L105	S44°48'26"E	186.78'
L106	S48°06'07"W	41.42'

LINE DATA ALONG CONSERVATION EASEMENT AREA 3

LINE	BEARING	DISTANCE
L36	N51°38'55"W	118.95'
L121	N88°20'32"E	61.59'
L122	S88°18'33"E	35.57'
L123	S78°54'38"E	32.43'
L124	S69°10'30"E	5.10'
L125	S50°01'54"E	20.44'
L126	S45°52'50"W	78.11'
L127	N01°39'28"W	1.03'

LINE DATA ALONG CONSERVATION EASEMENT AREA 4

LINE	BEARING	DISTANCE
L3	N52°00'05"W	141.01'
L4	N85°36'05"W	67.91'
L5	S67°59'19"W	132.02'
L6	S46°16'23"W	82.88'
L7	S43°37'58"W	102.50'
L8	S47°56'34"W	83.40'
L9	S66°51'19"W	121.53'
L10	S67°34'48"W	84.23'
L11	S67°31'37"W	138.83'
L12	S68°41'39"W	137.63'
L13	S70°10'04"W	157.25'
L14	S75°43'31"W	69.19'
L15	S82°20'10"W	77.38'
L16	S89°33'03"W	118.59'
L107	N73°02'53"E	2.13'
L108	N69°53'56"E	209.32'
L109	N69°53'56"E	252.93'
L110	N60°02'28"E	100.29'
L111	N45°24'20"E	218.92'
L112	N33°47'48"E	384.03'
L113	S49°50'14"E	5.15'

LINE DATA ALONG CONSERVATION EASEMENT AREA 5

LINE	BEARING	DISTANCE
L18	N88°16'01"E	106.06'
L19	N30°42'39"E	123.22'
L114	N61°33'06"W	103.17'
L115	N00°02'12"W	51.58'
L116	S89°43'48"W	138.20'
L117	N00°48'46"W	30.60'
L118	N30°19'00"E	89.83'
L119	N22°10'37"E	122.49'
L120	N01°20'20"E	43.34'

ACCESS EASEMENT & TIE DOWN LINES

LINE	BEARING	DISTANCE
L1	N39°07'59"E	96.78'
L2	N45°52'50"E	120.58'
L36	S51°38'55"E	118.95'
L37	S45°52'50"W	118.84'
L128	N42°49'20"W	25.21'
L129	N33°47'48"E	21.73'
L130	S49°50'14"E	24.67'
L131	N49°50'14"W	30.19'

LOCALIZED PROJECT COORDINATES ALONG CONSERVATION EASEMENT 1

POINT	NORTHING	EASTING
91	596846.2499	2263395.0264
2	596749.8506	2263518.0682
3	596601.1918	2263651.2004
4	596584.7741	2263700.0566
5	596631.7427	2263742.0890
6	596698.0907	2264011.8496
7	596641.3730	2264066.9994
8	596490.5381	2264012.4375
9	596414.4589	2264108.8315
10	596276.5903	2263960.4652
101	596222.6843	2263900.3818
102	596062.4078	2263721.7383
103	596194.9225	2263590.1126
104	596362.8817	2263423.2547
105	596498.2984	2263295.6505
106	596621.7411	2263179.8435
107	596696.8128	2263240.9246
108	596780.7549	2263327.4870

LOCALIZED PROJECT COORDINATES ALONG CONSERVATION EASEMENT 2

POINT	NORTHING	EASTING
11	596034.7446	2263690.9050
102	596062.4078	2263721.7383
103	596194.9225	2263590.1126
104	596362.8817	2263423.2547
105	596498.2984	2263295.6505
106	596621.7411	2263179.8435
171	596601.1107	2263166.0343

LOCALIZED PROJECT COORDINATES ALONG CONSERVATION EASEMENT 3

POINT	NORTHING	EASTING
4142	596893.9588	2263188.6499
4143	596820.1550	2263281.9296
4188	596894.9837	2263188.6202
4189	596896.7654	2263250.1851
4190	596895.7158	2263285.7424
4191	596889.4774	2263317.5707
4192	596887.6640	2263322.3383
4193	596874.5329	2263338.0049

LOCALIZED PROJECT COORDINATES ALONG CONSERVATION EASEMENT 4

POINT	NORTHING	EASTING
4112	596660.4450	2263133.9831
4113	596747.2567	2263022.8641
4114	596752.4651	2262955.1558
4115	596702.9859	2262832.7599
4116	596645.6942	2262772.8641
4117	596571.5098	2262702.1381
4118	596515.6429	2262640.2161
4119	596467.8755	2262528.4684
4120	596435.7506	2262450.6048
4121	596382.6821	2262322.3156
4122	596332.6734	2262194.0880
4123	596279.3237	2262046.1643
4124	596262.2642	2261979.1141
4125	596251.9442	2261902.4215
4126	596251.0147	2261783.8302
4172	595865.1927	2261946.4690
4173	595937.1314	2262143.0380
4174	596171.0442	2262052.2102
4175	596259.4122	2262287.6268
4176	596047.2733	2262443.9955
4177	596134.1989	2262681.5155
4178	596184.2826	2262768.4065
4179	596337.9863	2262924.3009
4180	596657.1243	2263137.9178

LOCALIZED PROJECT COORDINATES ALONG CONSERVATION EASEMENT 5

POINT	NORTHING	EASTING
17	596362.1567	2261737.6394
18	596363.5831	2261520.1185
19	596294.8954	2261252.5058
20	596811.5645	2261557.5518
127	596365.3642	2261843.6490
128	596471.2997	2261906.5760
181	596520.4471	2261815.8625
182	596572.0229	2261815.8295
183	596571.3719	2261677.6351
184	596601.9708	2261677.2010
185	596679.5183	2261722.5465
186	596792.9430	2261768.7809
187	596836.2687	2261769.7935

GENERAL NOTES:

NO HORIZONTAL CONTROL EXISTS WITHIN 2000 FEET.

NOTE: NO ABSTRACT OF TITLE, NOR TITLE COMMITMENT, OR RESULTS OF TITLE SEARCH WERE FURNISHED TO THE SURVEYOR. ALL DOCUMENTS OF RECORD REVIEWED ARE NOTED HEREON (SEE REFERENCES). THERE MAY EXIST OTHER DOCUMENTS OF RECORD THAT MAY AFFECT THIS SURVEYED PARCEL.

ALL DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES.

COORDINATES SHOWN ARE BASED ON LOCALIZED GROUND DISTANCES OTHER THAN ISS 150
SEE DATUM DESCRIPTION.

LEGEND:

ISS - IRON STAKE SET
ECM - EXISTING CONCRETE MARKER
EIP - EXISTING IRON PIPE
PTI - PINCHED-TOP IRON
MNS - MAG NAIL SET
EIS - EXISTING IRON STAKE
EPP - EXISTING PUMP PIPE
EIB - EXISTING IRON BAR
PPS - PUMP PIPE SET
NMC - NON-MONUMENTED CORNER
R/W - RIGHT OF WAY
EOP - EDGE OF PAVEMENT
GW - GROUNDWATER GAUGE
CL - CENTERLINE
UP - UTILITY POLE
P.B. - PLAT BOOK
D.B. - DEED BOOK
PG. - PAGE
P.C.B. - PLAT CABINET BOOK
CMP - CORRUGATED METAL PIPE
CPP - CORRUGATED PLASTIC PIPE
RCP - REINFORCED CORRUGATED PIPE
MW - MONITORING WELL
SG - STREAM GAUGE
● No. 5 REBAR FLUSH WITH GRADE WITH AN ALUMINUM 3 1/4" CAP INSCRIBED: "STATE OF NORTH CAROLINA CONSERVATION EASEMENT"
CONSERVATION EASEMENT LINE
TIE DOWN LINE
RIGHT OF WAY LINE OR ADJOINER LINE
EASEMENT LINE
FENCE LINE
PROPOSED ACCESS EASEMENT
EXISTING ACCESS EASEMENTS

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PLAT IS BASED ON NORTH CAROLINA STATE PLANE COORDINATES ESTABLISHED BY USING THE ONLINE POSITIONING USER SERVICE (OPUS) PROVIDED BY THE NATIONAL GEODETIC SURVEY.

ISS 150 NC GRID COORDINATES NAD 83 (2011)
N=595,864.5731'
E=2,261,944.4361'

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PLAT IS 0.99987702 (GROUND TO GRID). THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM ISS 126 TO ISS 150 IS S 22°34'04" E 418.49' FEET.

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES.

GEOID-2012B CONUS

GNSS RECEIVER - TOPCON HIPER V WITH MINIMUM TIME OF 2+ HOURS COMPLETED ON 06/21/21

THE FOLLOWING BASE STATIONS WERE USED:

PID	DESIGNATION	LATITUDE (m)	LONGITUDE (m)
DK6525	NCSF SMITHFIELD CORS ARP	N353349.609	W0782010.805
DK5550	NCGO GOLDBORO CORS ARP	N352516.868	W0780330.575
DM3989	NCKI KINSTON ARP	N352440.946	W0780915.825

SHEET 1 OF 2

CONSERVATION EASEMENT FOR THE STATE OF NORTH CAROLINA DIVISION OF MITIGATION SERVICES OVER A PORTION OF THE LANDS OF RESTORATION SYSTEMS, LLC CURRENT OWNER PER D.B. 3757, PG. 327 (PIN No. 2569264339)

DMS PROJECT ID# 100650
SPO NUMBER XX-XX-XXX
COOR ISLAND - PHASE 2

FORK TOWNSHIP WAYNE COUNTY NORTH CAROLINA

(THE FIELD SURVEY TOOK PLACE DURING AUGUST 2021 & JULY 2022 & APRIL 2023)

200 100 0 200 400

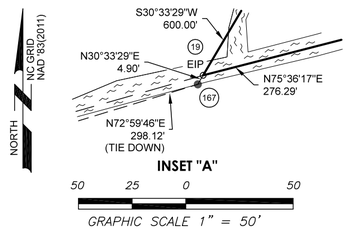
GRAPHIC SCALE 1" = 200'

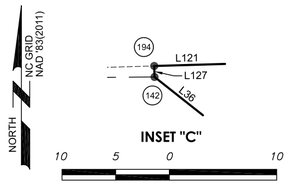
LEGEND:

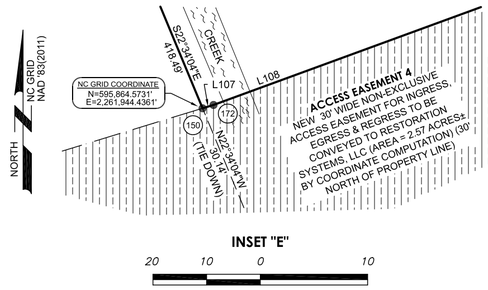
ISS - IRON STAKE SET
ECM - EXISTING CONCRETE MARKER
EIP - EXISTING IRON PIPE
PTI - PINCHED-TOP IRON
MNS - MAG NAIL SET
EIS - EXISTING IRON STAKE
EPP - EXISTING PUMP PIPE
EIB - EXISTING IRON BAR
PPS - PUMP PIPE SET
NMC - NON-MONUMENTED CORNER
R/W - RIGHT OF WAY
EOP - EDGE OF PAVEMENT
GW - GROUNDWATER GAUGE
CL - CENTERLINE
UP - UTILITY POLE
P.B. - PLAT BOOK
D.B. - DEED BOOK
PG. - PAGE
P.C.B. - PLAT CABINET BOOK
CMP - CORRUGATED METAL PIPE
CPP - CORRUGATED PLASTIC PIPE
RCP - REINFORCED CORRUGATED PIPE
MW - MONITORING WELL
SG - STREAM GAUGE

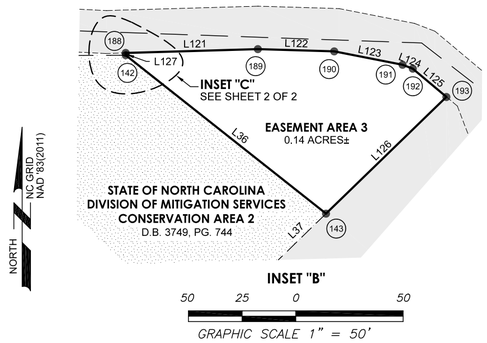
● No. 5 REBAR FLUSH WITH GRADE WITH AN ALUMINUM 3 1/4" CAP INSCRIBED: "STATE OF NORTH CAROLINA CONSERVATION EASEMENT"

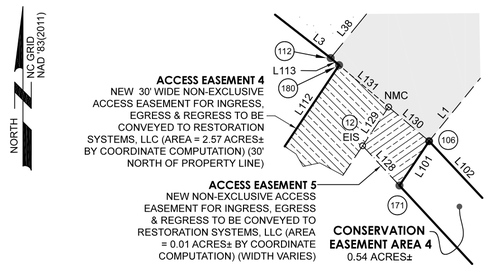
CONSERVATION EASEMENT LINE
TIE DOWN LINE
RIGHT OF WAY LINE OR ADJOINER LINE
EASEMENT LINE
FENCE LINE
PROPOSED ACCESS EASEMENT
EXISTING ACCESS EASEMENTS







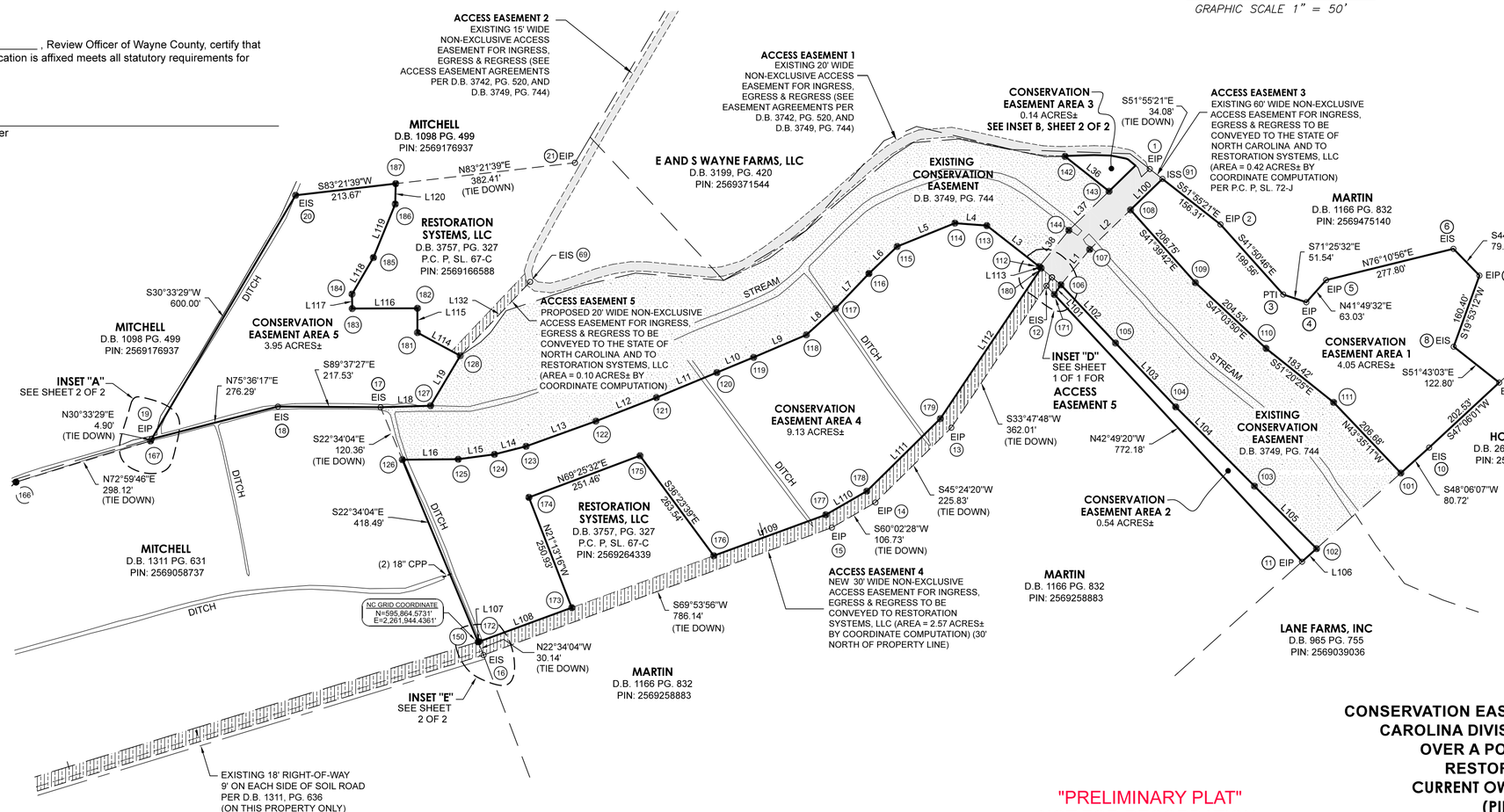




STATE OF NORTH CAROLINA
COUNTY OF WAYNE

I, _____ , Review Officer of Wayne County, certify that the map or plat to which this certification is affixed meets all statutory requirements for recording.

_____ _____
Date Review Officer



"PRELIMINARY PLAT"
NOT FOR RECORDATION,
CONVEYANCES OR SALES

SHEET 2 OF 2

CONSERVATION EASEMENT FOR THE STATE OF NORTH CAROLINA DIVISION OF MITIGATION SERVICES OVER A PORTION OF THE LANDS OF RESTORATION SYSTEMS, LLC

CURRENT OWNER PER D.B. 3757, PG. 327
(PIN No. 2569264339)
DMS PROJECT ID# 100650
SPO NUMBER XX-XX-XXX
COOR ISLAND - PHASE 2

FORK TOWNSHIP WAYNE COUNTY NORTH CAROLINA
(THE FIELD SURVEY TOOK PLACE DURING AUGUST 2021 & JULY 2022 & APRIL 2023)

200 100 0 200 400
GRAPHIC SCALE 1" = 200'

Excise Tax $[_____]

STATE OF NORTH CAROLINA

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

WAYNE COUNTY

SPO File Number: [xx-xx-xxx]
DMS Project Number: 100650

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 _____, 2023, by **Restoration Systems, LLC,** a North Carolina limited liability company ("**Grantor**"), whose mailing address is 1101 Haynes Street, Suite 211, Raleigh, NC 27604, 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 (formerly Department of Environment and Natural Resources), 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 Restoration Systems, LLC**,** a North Carolina limited liability company, 1101 Haynes Street, Suite 211, Raleigh, NC 27604 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 519674731-02.

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 (formerly Department of Environment and Natural Resources), 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 Fork Township, Wayne County, North Carolina (the "**Property**"), and being more particularly described as that certain parcel of land containing approximately 36.85 acres and being conveyed to the Grantor by deed as recorded in **Deed Book 3757 at Page 327** of the Wayne 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 Half Mile Branch.

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:

BEING ALL OF "Conservation Easement Area 1", containing approximately **4.05 acres**, "Conservation Easement Area 2", containing approximately **0.54 acres**, "Conservation Easement Area 3", containing approximately **0.14 acres**, "Conservation Easement Area 4", containing approximately **9.13 acres**, and "Conservation Easement Area 5", containing approximately **3.95 acres**, for a total of **17.81 acres** as shown on the plat of survey titled Conservation Easement for the State of North Carolina Division of Mitigation Services, over a Portion of the Lands of Restoration Systems, LLC, Current Owners per D.B. 3757, Pg. 327 (PIN No. 2569264339), DMS Project ID 100650, SPO Number [XX-XX-XXX], Coor Island – Phase 2, Fork Township, Wayne County, North Carolina", dated [_____ ____, 2023], and executed [_____ ____, 2023], by John A. Rudolph, PLS Number L-4194, K2 Design Group, and recorded in the Wayne County, North Carolina Register of Deeds at **Plat Cabinet [___]**, **Slide [___]**.

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 the locations more particularly described as "Access Easement 1", "Access Easement 2", "Access Easement 3", "Access Easement 4", and "Access Easement 5" as shown on that map of survey titled "*Conservation Easement for The State of North Carolina Division of Mitigation Services over a Portion of the Lands of Restoration Systems, LLC, Current Owners per D.B. 3757, Pg. 327 (PIN No. 2569264339), DMS Project ID# 100650, SPO Number [xx-xx-xxx], Coor Island – Phase II*", to access the Conservation Easement Areas for the purposes set forth herein ("Access Easements"). The foregoing "Access Easement 2" also includes the entirety of "Access Easement 2" as shown on that map of survey titled "*Conservation Easement for The State of North Carolina Division of Mitigation Services over a Portion of the Lands of Restoration Systems, LLC, Current Owners per D.B. 3757, Pg. 327 (PIN No. 2569264339), DMS Project ID# 100183, SPO Number 96-LA-181, Coor Island*", recorded in Plat Cabinet P, Slide 72-J, Wayne County Register of Deeds. This grant of easement shall not vest any rights in the public and shall not be construed as a public dedication of the Access Easements. 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 these Access Easements.

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.

RESTORATION SYSTEMS, LLC,
a North Carolina limited liability company

By: _____ [SEAL]
Name: _____
Title: _____

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 _____, 2023.

_____
Notary Public

My commission expires:

_____

EXHIBIT A
Legal Description

Conservation Easement Area 1

BEING ALL OF Conservation Easement Area 1 of the Coor Island Site, Phase 2, over a portion of the lands of Restoration Systems, LLC (D.B. 3757, PG. 327) lying and being situated in Fork Township, Wayne County, North Carolina and particularly described as follows (all distances are ground distances unless otherwise noted):

Beginning at an iron stake (Point of Beginning) labeled as Point No. 91 and being the Northern most corner of the Conservation Easement Area 1 and being located North 55°54'44" East 1751.54 feet from an iron stake (Point No. 150) with N.C. Grid Coordinates N= 595,864.5731', E= 2,261,944.4361' (NAD '83, 2011).

Thence from the Point of Beginning (Point No. 91),
South 51°55'21" East 156.31' to an iron pipe;
thence South 41°50'46" East 199.56' to a pinched-top iron;
thence South 71°25'32" East 51.54' to an iron pipe;
thence North 41°49'32" East 63.03' to an iron pipe;
thence North 76°10'56" East 277.80' to an iron stake;
thence South 44°11'49" East 79.11' to an iron pipe;
thence South 19°53'12" West 160.40' to an iron stake;
thence South 51°43'03" East 122.80' to an iron pipe;
thence South 47°06'01" West 202.53' to an iron stake;
thence South 48°06'07" West 80.72' to an iron stake;
thence North 43°35'11" West 206.68' to an iron stake;
thence North 51°20'25" West 183.42' to an iron stake;
thence North 47°03'50" West 204.53' to an iron stake;
thence North 41°39'42" West 206.75' to an iron stake;
thence North 45°52'50" East 94.08' to an iron stake;
which is the point of beginning, having an area of approximately 4.05 acres.

Conservation Easement Area 2

BEING ALL OF Conservation Easement Area 2 of the Coor Island Site, Phase 2, over a portion of the lands of Restoration Systems, LLC (D.B. 3757, PG. 327) lying and being situated in Fork Township, Wayne County, North Carolina and particularly described as follows (all distances are ground distances unless otherwise noted):

Beginning at an iron stake (Point of Beginning) labeled as Point No. 106 and being the Northern most corner of the Conservation Easement Area 1 and being located North 58°29'47" East 1448.98 feet from an iron stake (Point No. 150) with N.C. Grid Coordinates N= 595,864.5731', E= 2,261,944.4361' (NAD '83, 2011).

Thence from the Point of Beginning (Point No. 106),

South 43°10'19" East 169.26' to an iron stake;
thence South 43°17'55" East 186.07' to an iron stake;
thence South 44°48'42" East 236.75' to an iron stake;
thence South 44°48'26" East 186.78' to an iron stake;
thence South 48°06'07" West 41.42' to an iron pipe;
thence North 42°49'20" West 772.18' to an iron stake;
thence North 33°47'48" East 24.83' to an iron stake;
which is the point of beginning, having an area of approximately 0.54 acres.

Conservation Easement Area 3

BEING ALL OF Conservation Easement Area 3 of the Coor Island Site, Phase 2, over a portion of the lands of Restoration Systems, LLC (D.B. 3757, PG. 327) lying and being situated in Fork Township, Wayne County, North Carolina and particularly described as follows (all distances are ground distances unless otherwise noted):

Beginning at an iron stake (Point of Beginning) labeled as Point No. 188 and being a Northern corner of the Conservation Easement Area 3 and being located North 50°22'09" East 1615.47 feet from an iron stake (Point No. 150) with N.C. Grid Coordinates
N= 595,864.5731', E= 2,261,944.4361' (NAD '83, 2011).

Thence from the Point of Beginning (Point No. 188),
North 88°20'32" East 61.59' to an iron stake;
thence South 88°18'33" East 35.57' to an iron stake;
thence South 78°54'38" East 32.43' to an iron stake;
thence South 69°10'30" East 5.10' to an iron stake;
thence South 50°01'54" East 20.44' to an iron stake;
thence South 45°52'50" West 78.11' to an iron stake;
thence North 51°38'55" West 118.95' to an iron stake;
thence North 01°39'28" West 1.03' to an iron stake;
which is the point of beginning, having an area of approximately 0.14 acres.

Conservation Easement Area 4

BEING ALL OF Conservation Easement Area 4 of the Coor Island Site, Phase 2, over a portion of the lands of Restoration Systems, LLC (D.B. 3757, PG. 327) lying and being situated in Fork Township, Wayne County, North Carolina and particularly described as follows (all distances are ground distances unless otherwise noted):

Beginning at an iron stake (Point of Beginning) labeled as Point No. 150 being the Southwestern most corner of the Conservation Easement Area 4 with N.C. Grid Coordinates
N= 595,864.5731', E= 2,261,944.4361' (NAD '83, 2011).

Thence from the Point of Beginning (Point No. 150), North 22°34'04" West 418.49' to an iron stake;

Thence North 89°33'03" East 118.59' to an iron stake;
thence North 82°20'10" East 77.38' to an iron stake;
thence North 75°43'31" East 69.19' to an iron stake;
thence North 70°10'04" East 157.25' to an iron stake;
thence North 68°41'39" East 137.63' to an iron stake;
thence North 67°31'37" East 138.83' to an iron stake;
thence North 67°34'48" East 84.23' to an iron stake;
thence North 66°51'19" East 121.53' to an iron stake;
thence North 47°56'34" East 83.40' to an iron stake;
thence North 43°37'58" East 102.50' to an iron stake;
thence North 46°16'23" East 82.88' to an iron stake;
thence North 67°59'19" East 132.02' to an iron stake;
thence South 85°36'05" East 67.91' to an iron stake;
thence South 52°00'05" East 141.01' to an iron stake;
thence South 49°50'14" East 5.15' to an iron stake;
thence South 33°47'48" West 384.03' to an iron stake;
thence South 45°24'20" West 218.92' to an iron stake;
thence South 60°02'28" West 100.29' to an iron stake;
thence South 69°53'56" West 252.93' to an iron stake;
thence North 36°23'39" West 263.54' to an iron stake;
thence South 69°25'32" West 251.46' to an iron stake;
thence South 21°13'16" East 250.93' to an iron stake;
thence South 69°53'56" West 209.32' to an iron stake;
thence South 73°02'53" West 2.13' to an iron stake;
which is the point of beginning, having an area of approximately 9.13 acres.

Conservation Easement Area 5

BEING ALL OF Conservation Easement Area 5 of the Coor Island Site, Phase 2, over a portion of the lands of Restoration Systems, LLC (D.B. 3757, PG. 327) lying and being situated in Fork Township, Wayne County, North Carolina and particularly described as follows (all distances are ground distances unless otherwise noted):

Beginning at an iron pipe (Point of Beginning) labeled as Point No. 19 and being the Southwestern most corner of the Conservation Easement Area 5 and being located North 58°07'19" West 814.83 feet from an iron stake (Point No. 150) with N.C. Grid Coordinates N= 595,864.5731', E= 2,261,944.4361' (NAD ’83, 2011).

Thence from the Point of Beginning (Point No. 19),
North 30°33'29" East 600.00' to an iron stake;
thence North 83°21'39" East 213.67' to an iron stake;
thence South 01°20'20" West 43.34' to an iron stake;
thence South 22°10'37" West 122.49' to an iron stake;
thence South 30°19'00" West 89.83' to an iron stake;
thence South 00°48'46" East 30.60' to an iron stake;
thence North 89°43'48" East 138.20' to an iron stake;

thence South 00°02'12" East 51.58' to an iron stake;
thence South 61°33'06" East 103.17' to an iron stake;
thence South 30°42'39" West 123.22' to an iron stake;
thence South 88°16'01" West 106.06' to an iron stake;
thence North 89°37'27" West 217.53' to an iron stake;
thence South 75°36'17" West 276.29' to an iron pipe;
which is the point of beginning, having an area of approximately 3.95 acres.

ALL OF THE FOREGOING CONSERVATION EASEMENT AREAS as shown on plat of survey titled "Conservation Easement for the State of North Carolina Division of Mitigation Services, over a Portion of the Lands of Restoration Systems, LLC, Current Owners per D.B. 3757, Pg. 327 (PIN No. 2569264339), DMS Project ID 100650, SPO Number [XX-XX-XXX], Coor Island, Phase 2, Fork Township, Wayne County, North Carolina", dated [_____ ____, 2023], and executed [_____ ____, 2023], by John A. Rudolph, PLS Number L-4194, K2 Design Group, and recorded in Plat Cabinet [___], Slide [___], Wayne County Register of Deeds.

AND SUCH CONSERVATION EASEMENT AREAS TOGETHER WITH the locations more particularly described as "Access Easement 1", "Access Easement 2", "Access Easement 3", "Access Easement 4", and "Access Easement 5" as shown on that map of survey titled "Conservation Easement for the State of North Carolina Division of Mitigation Services, over a Portion of the Lands of Restoration Systems, LLC, Current Owners per D.B. 3757, Pg. 327 (PIN No. 2569264339), DMS Project ID 100650, SPO Number [XX-XX-XXX], Coor Island – Phase 2, Fork Township, Wayne County, North Carolina", dated [_____ ____, 2023], and executed [_____ ____, 2023], by John A. Rudolph, PLS Number L-4194, K2 Design Group, and recorded in Plat Cabinet [___], Slide [___], Wayne County Register of Deeds, to access the Conservation Easement Areas for the purposes set forth in the insured Deed of Conservation Easement. The foregoing "Access Easement 2" also includes the entirety of "Access Easement 2" as shown on that map of survey titled "*Conservation Easement for The State of North Carolina Division of Mitigation Services over a Portion of the Lands of Restoration Systems, LLC, Current Owners per D.B. 3757, Pg. 327 (PIN No. 2569264339), DMS Project ID# 100183, SPO Number 96-LA-181, Coor Island*", recorded in Plat Cabinet P, Slide 72-J, Wayne County Register of Deeds.

Appendix G. Maintenance Plan

The Site shall be monitored on a regular basis and a physical inspection of the site shall be conducted a minimum of once per year throughout the post-construction monitoring period until performance standards are met. These site inspections may identify site components and features that require routine maintenance. Routine maintenance should be expected most often in the first two years following site construction and may include the following:

Component/Feature	Maintenance through project close-out
Vegetation	Vegetation shall be maintained to ensure the health and vigor of the targeted plant community. Routine vegetation maintenance and repair activities may include supplemental planting, pruning, mulching, and fertilizing. Exotic invasive plant species shall be controlled by mechanical and/or chemical methods. Any vegetation control requiring herbicide application will be performed in accordance with NC Department of Agriculture (NCDA) rules and regulations.
Beaver	Beaver and associated dams are to be removed as they colonize and until the project is closed.
Site Boundary	Site boundaries shall be identified in the field to ensure clear distinction between the mitigation site and adjacent properties. Boundaries may be identified by fence, marker, bollard, post, tree- blazing, or other means as allowed by site conditions and/or conservation easement. Boundary markers disturbed, damaged, or destroyed will be repaired and/or replaced on an as needed basis.