



Pre-Construction Notification (PCN) Form

For Nationwide Permits and Regional General Permits
(along with corresponding Water Quality Certifications)

April 13, 2022 Ver 4.3

Please note: fields marked with a red asterisk * below are required. You will not be able to submit the form until all mandatory questions are answered.

Also, if at any point you wish to print a copy of the E-PCN, all you need to do is right-click on the document and you can print a copy of the form.

Below is a link to the online help file.

<https://edocs.deq.nc.gov/WaterResources/0/edoc/624704/PCN%20Help%20File%202018-1-30.pdf>

A. Processing Information

Pre-Filing Meeting Date Request was submitted on: *

8/1/2022

If this is a courtesy copy, please fill in this with the submission date.

County (or Counties) where the project is located: *

Columbus

Is this a NCDMS Project? *

☐ Yes ☒ No

Click Yes, only if NCDMS is the applicant or co-applicant.

Is this project a public transportation project? *

☒ Yes ☐ No

This is any publicly funded by municipal, state or federal funds road, rail, airport transportation project.

Is this a NCDOT Project? *

☒ Yes ☐ No

(NCDOT only) T.I.P. or state project number:

HB-0012

WBS # *

49871.1.1

(for NCDOT use only)

1a. Type(s) of approval sought from the Corps: *

- ☒ Section 404 Permit (wetlands, streams and waters, Clean Water Act)
☐ Section 10 Permit (navigable waters, tidal waters, Rivers and Harbors Act)

Has this PCN previously been submitted? *

☐ Yes
☒ No

1b. What type(s) of permit(s) do you wish to seek authorization? *

- ☐ Nationwide Permit (NWP)
☒ Regional General Permit (RGP)
☐ Standard (IP)

1c. Has the NWP or GP number been verified by the Corps? *

☐ Yes ☒ No

Regional General Permit (RGP) Number:

201902350 - Work associated with bridge construction, widening, replacement, and interchanges

RGP Numbers (for multiple RGPs):

List all RGP numbers you are applying for not on the drop down list.

1d. Type(s) of approval sought from the DWR: *

check all that apply

- ☒ 401 Water Quality Certification - Regular
☐ Non-401 Jurisdictional General Permit
☐ Individual 401 Water Quality Certification
☐ 401 Water Quality Certification - Express
☐ Riparian Buffer Authorization

1e. Is this notification solely for the record because written approval is not required?

*

For the record only for DWR 401 Certification:

☐ Yes ☒ No

For the record only for Corps Permit:

☐ Yes ☒ No

1f. Is this an after-the-fact permit application? *

☐ Yes ☒ No

1g. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts?

If so, attach the acceptance letter from mitigation bank or in-lieu fee program.

☒ Yes ☐ No

Acceptance Letter Attachment

Click the upload button or drag and drop files here to attach document

Accept_HB-0012.pdf

277.53KB

FILE TYPE MUST BE PDF

1h. Is the project located in any of NC's twenty coastal counties? *

☐ Yes ☒ No

1j. Is the project located in a designated trout watershed? *

☐ Yes ☒ No

Link to trout information: <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout.aspx>

B. Applicant Information



1a. Who is the Primary Contact? *

Jason Dilday

1c. Primary Contact Phone: *

(xxx)xxx-xxxx

(919)707-6111

1b. Primary Contact Email: *

jldilday@ncdot.gov

1d. Who is applying for the permit? *

☒ Owner
(Check all that apply)

☒ Applicant (other than owner)

1e. Is there an Agent/Consultant for this project? *

☐ Yes ☒ No

2. Owner Information

2a. Name(s) on recorded deed: *

n/a

2b. Deed book and page no.:

2c. Contact Person:

(for Corporations)

2d. Address *

Street Address

n/a

Address Line 2

City

n/a

Postal / Zip Code

n/a

State / Province / Region

n/a

Country

n/a

2e. Telephone Number: *

(xxx)xxx-xxxx

(919)707-6000

2f. Fax Number:

(xxx)xxx-xxxx

2g. Email Address: *

maturchy@ncdot.gov

3. Applicant Information (if different from owner)

3a. Name: *

NC DOT

3b. Business Name:

(if applicable)

3c. Address *

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

Postal / Zip Code

26799-1598

State / Province / Region

NC

Country

US

3d. Telephone Number: *

(919)707-6000

(xxx)xxx-xxxx

3e. Fax Number:

(xxx)xxx-xxxx

3f. Email Address: *

maturchy@ncdot.gov

C. Project Information and Prior Project History

1. Project Information

1a. Name of project: *

Bridge 32 over Waccamaw River Overflow on SR 1928 (HB-0012-Central)

1b. Subdivision name:

(if appropriate)

1c. Nearest municipality / town: *

Old Dock

2. Project Identification

2a. Property Identification Number:

(tax PIN or parcel ID)

2b. Property size:

(in acres)

2c. Project Address

Street Address

Address Line 2

City

Postal / Zip Code

State / Province / Region

Country

2d. Site coordinates in decimal degrees

Please collect site coordinates in decimal degrees. Use between 4-6 digits (unless you are using a survey-grade GPS device) after the decimal place as appropriate, based on how the location was determined. (For example, most mobile phones with GPS provide locational precision in decimal degrees to map coordinates to 5 or 6 digits after the decimal place.)

Latitude: *

34.159016

ex: 34.208504

Longitude: *

-78.570884

-77.796371

3. Surface Waters

3a. Name of the nearest body of water to proposed project: *

Waccamaw River Overflow

3b. Water Resources Classification of nearest receiving water: *

C;Sw

[Surface Water Lookup](#)

3c. What river basin(s) is your project located in? *

Lumber

3d. Please provide the 12-digit HUC in which the project is located. *

030402060601

[River Basin Lookup](#)

4. Project Description and History

4a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: *

Land use in the project vicinity consists primarily of swamplands and minor residential development.

4b. Have Corps permits or DWR certifications been obtained for this project (including all prior phases) in the past? *

☐ Yes ☒ No ☐ Unknown

4f. List the total estimated acreage of all existing wetlands on the property:

2.0

4g. List the total estimated linear feet of all existing streams on the property:

(intermittent and perennial)

250

4h. Explain the purpose of the proposed project: *

Bridge inspections have been performed and it has been determined that due to hydraulic issues the bridge needs to be replaced.

4i. Describe the overall project in detail, including indirect impacts and the type of equipment to be used: *

This project involves replacing the 36.5-foot, 2 span bridge with a 55-foot, single span on the existing alignment using an on-site detour. Standard road building equipment, such as trucks, bulldozers and cranes will be used.

5. Jurisdictional Determinations

5a. Have the wetlands or streams been delineated on the property or proposed impact areas? *

☒ Yes ☐ No ☐ Unknown

Comments:

PJD package included with application

5b. If the Corps made a jurisdictional determination, what type of determination was made? *

☐ Preliminary ☐ Approved ☒ Not Verified ☐ Unknown ☐ N/A

Corps AID Number:

Example: SAW-2017-99999

5c. If 5a is yes, who delineated the jurisdictional areas?

Name (if known): Greg Price and Chris Underwood

Agency/Consultant Company: NCDOT

Other:

6. Future Project Plans

6a. Is this a phased project? *

☐ Yes ☒ No

Are any other NWP(s), regional general permit(s), or individual permits(s) used, or intended to be used, to authorize any part of the proposed project or related activity? This includes other separate and distant crossing for linear projects that require Department of the Army authorization but don't require pre-construction notification.

D. Proposed Impacts Inventory

1. Impacts Summary

1a. Where are the impacts associated with your project? (check all that apply):

☒ Wetlands ☒ Streams-tributaries ☐ Buffers
☒ Open Waters ☐ Pond Construction

2. Wetland Impacts

If there are wetland impacts proposed on the site, then complete this question for each wetland area impacted.

"W." will be used in the table below to represent the word "wetland".

2a. Site # * (?)	2a1 Reason * (?)	2b. Impact type * (?)	2c. Type of W. *	2d. W. name *	2e. Forested *	2f. Type of Jurisdiction * (?)	2g. Impact area *
1-Detour	Temp. Fill	T	Riverine Swamp Forest	WA	Yes	Both	0.015 (acres)
1-Detour	Excavation	P	Riverine Swamp Forest	WA	Yes	Both	0.007 (acres)
3	Fill	P	Riverine Swamp Forest	WB/WC	Yes	Both	0.020 (acres)
3	Mech. Clearing	P	Riverine Swamp Forest	WB/WC	Yes	Both	0.035 (acres)

2g. Total Temporary Wetland Impact
0.015

2g. Total Permanent Wetland Impact
0.062

2g. Total Wetland Impact
0.077

2i. Comments:

0.03 acre of handclearing will occur in the area of the on-site detour. There will be <0.01 acre of temporary fill in the handclearing area for erosion control measures. An additional 0.1 acre of handclearing will occur due to the installation of a utility pole.

3. Stream Impacts

If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.
"S." will be used in the table below to represent the word "stream".

	3a. Reason for impact * (?)	3b. Impact type *	3c. Type of impact *	3d. S. name *	3e. Stream Type * (?)	3f. Type of Jurisdiction *	3g. S. width * Average (feet)	3h. Impact length * (linear feet)
S1	2-Bridge and Detour Bridge	Temporary	Dewatering	Waccamaw River Overflow	Perennial	Both	18	103

** All Perennial or Intermittent streams must be verified by DWR or delegated local government.

3i. Total jurisdictional ditch impact in square feet:
0

3i. Total permanent stream impacts:
0

3i. Total temporary stream impacts:
103

3i. Total stream and ditch impacts:
103

3j. Comments:

4. Open Water Impacts

If there are proposed impacts to lakes, ponds, estuaries, tributaries, sounds, the Atlantic Ocean, or any other open water of the U.S. then individually list all open water impacts below.

4a. Site # * (?)	4a1. Impact Reason	4b. Impact type * (?)	4c. Name of waterbody (?)	4d. Activity type *	4e. Waterbody type *	4f. Impact area * (acres)
1-Detour	Temp Fill	T	Waccamaw River Overflow	Fill	Other	0.04
Utility 2	Temp Fill	T	Waccamaw River Overflow	Fill	Other	0.01

4g. Total temporary open water Impacts:
0.05

4g. Total permanent open water impacts:
0.00

4g. Total open water impacts:
0.05

4h. Comments:

Temporary fill (0.04 ac or 184 ft) will be placed in the open water section of the Waccamaw River Overflow to accommodate the temporary on-site detour for the project. After completion, fill will be removed and the site returned to its previous state. Utility temporary impact is to allow placement of overhead utility pole outside of location of temporary on-site detour.

E. Impact Justification and Mitigation

1. Avoidance and Minimization

1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing the project: *

The bridge will be replaced on the existing alignment. The new bridge will have no bents in the water. See stormwater management plan for additional minimization measures.

1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques: *

NCDOT's Best Management Practices for Construction and Maintenance Activities will be employed in all facets of construction and demolition.

2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State

2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?

☒ Yes ☐ No

2c. If yes, mitigation is required by (check all that apply):

☐ DWR ☒ Corps

2d. If yes, which mitigation option(s) will be used for this project?

☐ Mitigation bank ☒ Payment to in-lieu fee program ☐ Permittee Responsible Mitigation

4. Complete if Making a Payment to In-lieu Fee Program

4a. Approval letter from in-lieu fee program is attached.

☒ Yes ☐ No

4b. Stream mitigation requested:

(linear feet)

0

4c. If using stream mitigation, what is the stream temperature:

NC Stream Temperature Classification Maps can be found under the Mitigation Concepts tab on the Wilmington District's [RIBITS](#) website.

4d. Buffer mitigation requested (DWR only):

(square feet)

0

4e. Riparian wetland mitigation requested:

(acres)

0.06

4f. Non-riparian wetland mitigation requested:

(acres)

0

4g. Coastal (tidal) wetland mitigation requested:

(acres)

0

4h. Comments

F. Stormwater Management and Diffuse Flow Plan (required by DWR)

*** Recent changes to the stormwater rules have required updates to this section .***

1. Diffuse Flow Plan

1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?

☐ Yes ☒ No

For a list of options to meet the diffuse flow requirements, click [here](#).

If no, explain why:

There are no riparian buffers in the project area.

2. Stormwater Management Plan

2a. Is this a NCDOT project subject to compliance with NCDOT's Individual NPDES permit NCS000250? *

☒ Yes ☐ No

Comments:

G. Supplementary Information

1. Environmental Documentation

1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land? *

☒ Yes ☐ No

1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)? *

☒ Yes ☐ No

1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) *

☐ Yes ☒ No

Comments: *

Type I Categorical Exclusions do not require submittal to the State Clearing House.

2. Violations (DWR Requirement)

2a. Is the site in violation of DWR Water Quality Certification Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), or DWR Surface Water or Wetland Standards or Riparian Buffer Rules (15A NCAC 2B .0200)? *

☐ Yes ☒ No

3. Cumulative Impacts (DWR Requirement)

3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? *

☐ Yes ☒ No

3b. If you answered "no," provide a short narrative description.

Due to minimal transportation impact resulting from this bridge replacement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary.

4. Sewage Disposal (DWR Requirement)

4a. Is sewage disposal required by DWR for this project? *

☐ Yes ☐ No ☒ N/A

5. Endangered Species and Designated Critical Habitat (Corps Requirement)

5a. Will this project occur in or near an area with federally protected species or habitat? *

☒ Yes ☐ No

5b. Have you checked with the USFWS concerning Endangered Species Act impacts? *

☒ Yes ☐ No

5c. If yes, indicate the USFWS Field Office you have contacted.

Raleigh

5d. Is another Federal agency involved? *

☐ Yes ☒ No ☐ Unknown

5e. Is this a DOT project located within Division's 1-8? *

☒ Yes ☐ No

5j. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? *

N.C. Natural Heritage Program database; USFWS-IPaC query; biological surveys for protected species identified for the project area, which include American alligator, Waccamaw silverside, wood stork, Northern long-eared bat, red-cockaded woodpecker and Cooley's meadowrue. The American alligator does not require surveys. The Northern long-eared bat is covered under the programmatic biological opinion for the species and received a biological conclusion of "May Affect, Likely to Adversely Affect". Habitat for Cooley's meadowrue exists, but no specimens were observed in a survey conducted on June 2, 2022. Habitat for red-cockaded woodpecker does not exist in the study area. Informal concurrence for Waccamaw silverside and wood stork from the USFWS is included with this permit application.

6. Essential Fish Habitat (Corps Requirement)

6a. Will this project occur in or near an area designated as an Essential Fish Habitat? *

☐ Yes ☒ No

6b. What data sources did you use to determine whether your site would impact an Essential Fish Habitat? *

NMFS county index

7. Historic or Prehistoric Cultural Resources (Corps Requirement)

Link to the State Historic Preservation Office Historic Properties Map (does not include archaeological data: <http://gis.ncdcr.gov/hpweb/>)

7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)? *

☐ Yes ☒ No

7b. What data sources did you use to determine whether your site would impact historic or archeological resources? *

NEPA documentation

8. Flood Zone Designation (Corps Requirement)

Link to the FEMA Floodplain Maps: <https://msc.fema.gov/portal/search>

8a. Will this project occur in a FEMA-designated 100-year floodplain? *

☒ Yes ☐ No

8b. If yes, explain how project meets FEMA requirements:

NCDOT Hydraulics Unit coordination with FEMA.

8c. What source(s) did you use to make the floodplain determination? *

FEMA floodplain mapping

Miscellaneous

Comments

Please use the space below to attach all required documentation or any additional information you feel is helpful for application review. Documents should be combined into one file when possible, with a Cover Letter, Table of Contents, and a Cover Sheet for each Section preferred.

Click the upload button or drag and drop files here to attach document

HB-0012 General Columbus September 1 2022.pdf

9.16MB

File must be PDF or KMZ

Signature

*

☒ By checking the box and signing below, I certify that:

- The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief; and
- The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.
- I have given true, accurate, and complete information on this form;
- I agree that submission of this PCN form is a "transaction" subject to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I agree to conduct this transaction by electronic means pursuant to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I understand that an electronic signature has the same legal effect and can be enforced in the same way as a written signature; AND
- I intend to electronically sign and submit the PCN form.

Full Name: *

Mack Christopher Rivenbark, III

Signature *

Chris Rivenbark

Date

9/1/2022

ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

MARC RECKTENWALD

Director



NORTH CAROLINA
Environmental Quality

August 22, 2022

Mr. Philip S. Harris, III, P.E.
Environmental Analysis Unit
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

Subject: Mitigation Acceptance Letter:

HB-0012, Replace Bridge 32 over the Waccamaw River Overflow on SR 1928 (Dock Road), Columbus County

The purpose of this letter is to notify you that the North Carolina Department of Environmental Quality – Division of Mitigation Services (NCDEQ-DMS) will provide the mitigation for the subject project. Based on the information received from you on August 22, 2022, the impacts are located in CU 03040206 of the Lumber River basin in the Southern Inner Coastal Plain (SICP) Eco-Region, and are as follows:

Lumber 03040206	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres/square feet)	0	0	0	0.060	0	0	0	0

The impacts and associated mitigation needs were not projected by the NCDOT in the 2022 impact data. NCDEQ – DMS commits to implementing sufficient compensatory mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies using the delivery timeline listed in Section F.3.c.iii of the In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from NCDEQ-DMS.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-707-8420.

Sincerely,

A handwritten signature in cursive script that reads "Elizabeth Harmon".

for James B. Stanfill
DMS Deputy Director

cc: Mr. Monte Matthews, USACE – Raleigh
Ms. Amy Chapman, NCDWR
Mr. Brad Chilton, NCDOT – EAU
File: HB-0012



North Carolina Department of Environmental Quality | Division of Mitigation Services
217 West Jones Street | 1652 Mail Service Center | Raleigh, North Carolina 27699-1652
919.707.8976



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Raleigh ES Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726
August 25, 2022



Gregory W. Price
NC Department of Transportation
431 Transportation Drive
Fayetteville, NC 28302

Dear Mr. Price:

This letter is in response to your letters of August 18, 2022 which provided the U.S. Fish and Wildlife Service (Service) with the biological conclusions of the North Carolina Department of Transportation (NCDOT) that the following three bridge/culvert replacements may affect, but are not likely to adversely affect the federally threatened Waccamaw Silverside (*Menidia extensa*) and wood stork (*Mycteria americana*). In addition, NCDOT has determined that the action will have no effect on the federally endangered red-cockaded woodpecker (*Picoides borealis*) and Cooley's meadowrue (*Thalictrum cooleyii*). The federally threatened northern long-eared bat (*Myotis septentrionalis*) has been previously addressed through a programmatic biological opinion. The following response is provided in accordance with Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

- HB-0011 - replace Bridge No. 230026 over Gum Swamp Run on SR 1928 in Columbus County
- HB-0012 - replace Bridge No. 230032 over Waccamaw River Overflow on SR 1928 in Columbus County
- HB-0013 - replace Culvert No. 24-2270 over Waccamaw River Overflow on SR 1928 in Columbus County

According to information provided, wood stork surveys were conducted on June 2, 2022. No storks or stork nests were observed. Although there is a known occurrence of Waccamaw Silverside near the action areas, no surveys for Waccamaw Silverside were warranted due to likelihood of the anomalous specimens being washed over Lake Waccamaw's dam and not representing a reproducing population. Based on available information, the Service concurs with your conclusion that the actions may affect, but are not likely to adversely affect the wood stork and Waccamaw Silverside. The Service also concurs with your conclusion that the actions will have no effect on the red-cockaded woodpecker and Cooley's meadowrue.

We believe that the requirements of Section 7(a)(2) of the ESA have been satisfied. We remind you that obligations under Section 7 consultation must be reconsidered if: (1) new information reveals impacts of these identified actions that may affect listed species or critical habitat in a manner not previously considered in this review; (2) these actions are subsequently modified in a manner that was not considered in this review; or (3) a new species is listed or critical habitat

determined that may be affected by these identified actions. If you have any questions regarding our response, please contact Mr. Gary Jordan at gary_jordan@fws.gov.

Sincerely,

**GARY
JORDAN**



Digitally signed by
GARY JORDAN
Date: 2022.08.25
08:23:05 -04'00'



for Pete Benjamin
Field Supervisor

Electronic copy:

Liz Hair, USACE, Wilmington, NC

Travis Wilson, NCWRC, Creedmoor, NC

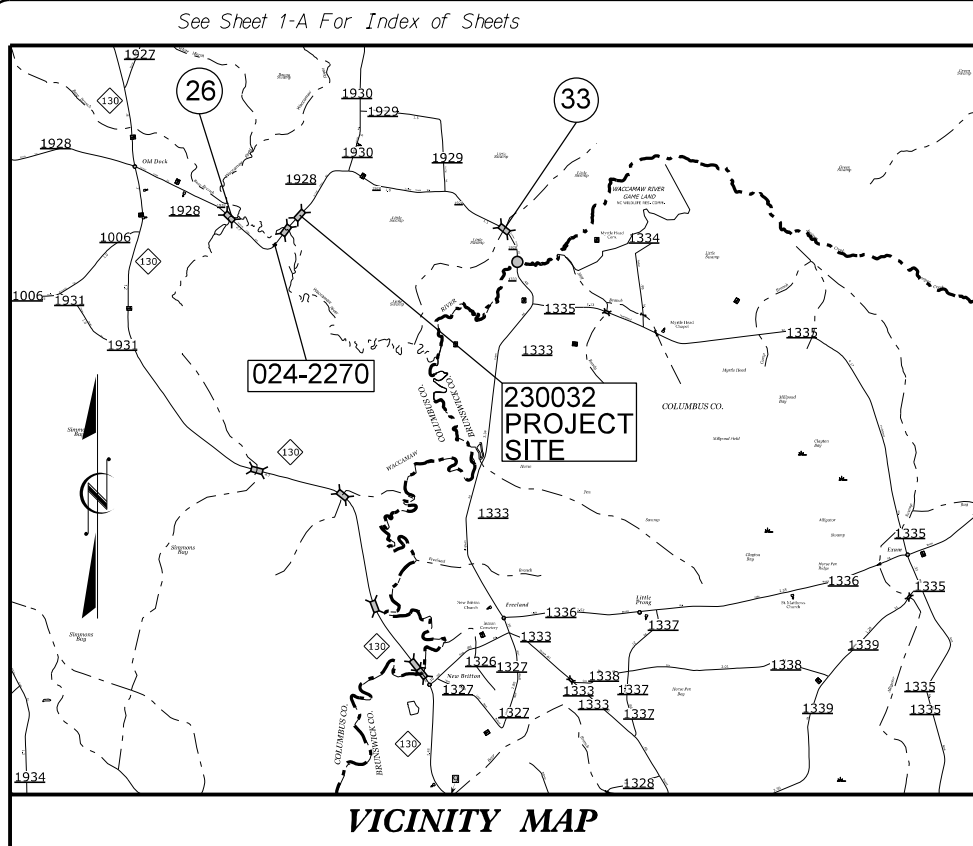
		North Carolina Department of Transportation Highway Stormwater Program STORMWATER MANAGEMENT PLAN FOR NCDOT PROJECTS					
(Version 3.00; Released August 2021)							
WBS Element: 49871.3.1		TIP/Proj No: HB-0012 / 230032		County(ies): Columbus		Page 1 of 2	
General Project Information							
WBS Element: 49871		TIP Number: HB-0012 / 230032		Project Type: Bridge Replacement		Date: 6/14/2022	
NCDOT Contact: Eileen Fuchs		Contractor / Designer: Sungate Design Group P.A.					
Address: 1582 MSC, Raleigh, NC 27699-1582 (Mail) 1000 Birch Ridge Drive, Raleigh, NC 27610		Address: 905 Jones Franklin Road Raleigh					
Phone: (919) 707-6613		Phone: (919) 859-2243					
Email: eafuchs@ncdot.gov		Email: jdalton@sungatedesign.com					
City/Town: Whiteville		County(ies): Columbus					
River Basin(s): Lumber		CAMA County?: No					
Wetlands within Project Limits? Yes							
Project Description							
Project Length (lin. miles or feet): 471'		Surrounding Land Use: Wooded and Agricultural					
		Proposed Project		Existing Site			
Project Built-Up Area (ac.) 0.3 ac.				0.2 ac.			
Typical Cross Section Description: Two 10' wide travel lanes with 3' grass shoulders and 3:1 fill slopes.		Two 10' wide travel lanes.					
Annual Avg Daily Traffic (veh/hr/day):		Design/Future: 880		Year: 2022		Existing: 880	
						Year: 2022	
General Project Narrative: (Description of Minimization of Water Quality Impacts)		HB-0012 is a bridge replacement project that involves removing existing Columbus County bridge # 230032 on Dock Road over the Waccamaw River Floodplain and replacing it with a 1 @ 55' - 21" cored slab bridge. No deck drains will be installed, reducing any impacts associated with direct bridge roadway runoff. Existing drainage patterns are maintained, with the exception of ditches being further away from the center alignment to accommodate for a wider road. Rock-plated fill slopes will be put in place near the bridge to reduce impacts to wetlands. Detour will only temporarily alter the direction of a ditch.					

		North Carolina Department of Transportation Highway Stormwater Program STORMWATER MANAGEMENT PLAN FOR NCDOT PROJECTS					
(Version 3.00; Released August 2021)							
WBS Element: 49871.3.1		TIP/Proj No.: HB-0012 / 230032		County(ies): Columbus		Page 2 of 2	
General Project Information							
Waterbody Information							
Surface Water Body (1):		Waccamaw River		NCDWR Stream Index No.:		15-(1)	
NCDWR Surface Water Classification for Water Body		Primary Classification:		Class C			
		Supplemental Classification:		Swamp Waters (Sw)			
Other Stream Classification:		None					
Impairments:		None					
Aquatic T&E Species?		No		Comments:			
NRTR Stream ID:						Buffer Rules in Effect: N/A	
Project Includes Bridge Spanning Water Body?		Yes		Deck Drains Discharge Over Buffer? N/A		Dissipator Pads Provided in Buffer?	
Deck Drains Discharge Over Water Body?		No		(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
		(If yes, provide justification in the General Project Narrative)					

Submitted 9/1/2022

PROJECT: HB-0012

CONTRACT: C204713



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PERMIT DRAWING
SHEET 1 OF 10

DATE: 08-08-2022

COLUMBUS COUNTY

LOCATION: BRIDGE# 230032 OVER OVERFLOW FOR WACCAMAW RIVER
ON SR 1928 (DOCK ROAD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING & STRUCTURE

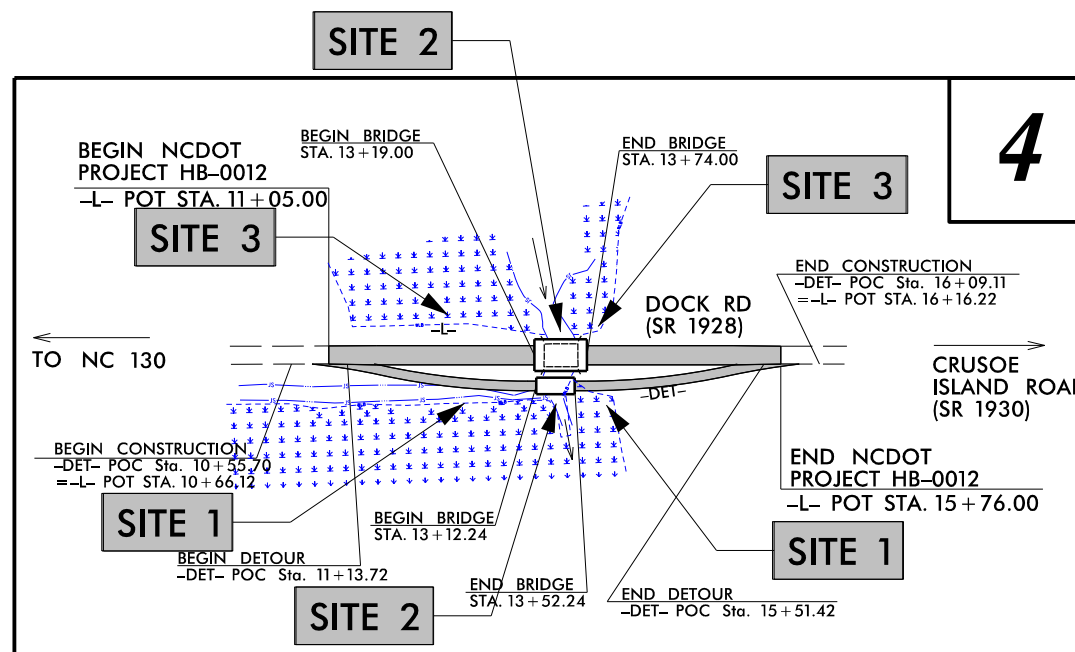
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HB-0012	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
49872.3.1		PE	
49872.3.1		UTIL., RW	
49872.3.1		CONST.	

3600 S. COLLEGE RD. STE. E-375
WILMINGTON, NC 28412

WETHERILL ENGINEERING

1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION



BRIDGE# 230032

EXPRESS DESIGN BRIDGE
REPLACEMENT: DIVISION 6

PRELIMINARY PLANS

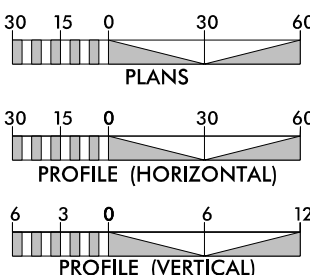
BRIDGE #: 230032
SUBMITTAL #: S-0XX
SUBMITTAL DATE: X /XX /22

WETLAND AND SURFACE WATER IMPACTS PERMIT

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II MODIFIED.

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2022 = 880
ADT FY = N/A
DHV = N/A
D = N/A
T = 6 % *
V = 55 MPH
* (TTST = 3% + DUAL = 3%)
FUNC CLASS =
LOCAL
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY PROJECT HB-0012 = 0.079 MILES
LENGTH STRUCTURE PROJECT HB-0012 = 0.010 MILES
TOTAL LENGTH PROJECT HB-0012 = 0.089 MILES

NCDOT CONTACT: EILEEN FUCHS
PRIORITY PROJECTS UNIT

Prepared for:
DIVISION OF HIGHWAYS

1000 BIRCH RIDGE DRIVE, RALEIGH, NC 27610

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MARCH 15, 2022

LETTING DATE:
MARCH 15, 2022

EDWARD G. WETHERILL, PE
PROJECT ENGINEER

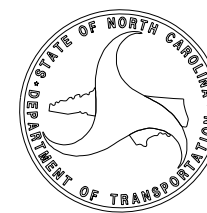
GREG S. PURVIS, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

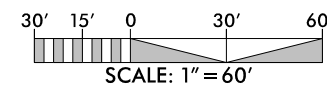
ROADWAY DESIGN
ENGINEER

SIGNATURE: P.E.



Submitted 9/1/2022

PHILLIP TIMOTHY MARLOWE



BRIDGE# 230032

RFC PLANS

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 2 OF 10

DATE: 08-08-2022

PROJECT REFERENCE NO.

HB-0012

SHEET NO.

4

R/W SHEET NO.

ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER



TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

1223 Jones Franklin Rd.
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Fax: 919 851 8107

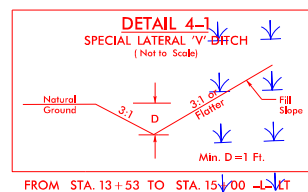
3600 S. COLLEGE RD., STE. E-375
WILMINGTON, NC 28412

-L- POT
Sta. 10+00.00

-L- POT Sta. 16+75.00

TO NC 130

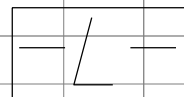
CRUSOE ISLAND ROAD
(SR 1930)



IMPACTS ARE ACCOUNTED FOR
IN PROPOSED DETOUR IMPACTS

ROCKPLATING
PER RSD 275.01

PHILLIP TIMOTHY MARLOWE



F F FILL IN WETLAND

* * * MECHANIZED CLEARING

TS TS TEMPORARY SURFACE WATER IMPACTS

PI = 11+30.00
EL = 36.66'
VC = 50'
K = 57
EXIST.K = 45
DS = 35MPH*

PI = 12+26.83
EL = 37.37'
VC = 140'
K = 135
DS = 55MPH

PI = 14+28.66
EL = 36.75'
VC = 90'
K = 117
DS = 55MPH

PI = 15+00.00
EL = 37.08'
VC = 50'
K = 56
EXIST.K = 40
DS = 40MPH*

EX.GRADE (-)0.1500% (+)0.7321%

EXC. TO EL. 31.3
EST. 33 CY

EXC. TO EL. 31.4
EST. 32 CY

EX.GRADE (-)0.98%

* - MEETS SUBREGIONAL
TIER GUIDELINES

BEG DITCH
PI STA 13+53 -L- LT
ELEV=30.42

CL 'II' RIPRAP
1.5:1 NORMAL

CL 'II' RIPRAP
1.5:1 NORMAL

END DITCH
PI STA 15+00 -L- LT
ELEV=31.60

WSEL ON 3-30-2022=NWS=30.9

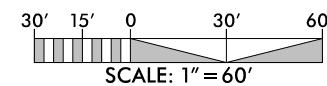
BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE = 10507 CFS
DESIGN FREQUENCY = 25 YRS
DESIGN HW ELEVATION = 35.2 FT
BASE DISCHARGE = 15290 CFS
BASE FREQUENCY = 100 YRS
BASE HW ELEVATION = 35.9 FT
OVERTOPPING DISCHARGE = 11500 CFS
OVERTOPPING FREQUENCY = +25 YRS
OVERTOPPING ELEVATION = 35.2 FT

OVERTOPS ROADWAY APPROX. 314' NORTHEAST OF WACCAMAW RIVER

DATE OF SURVEY = 3-30-2022

W.S.ELEVATION AT DATE OF SURVEY = 30.9 FT



BRIDGE# 230032

RFC PLANS

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETEDPERMIT DRAWING
SHEET 3 OF 10

DATE: 08-08-2022

PROJECT REFERENCE NO.

HB-0012

SHEET NO.

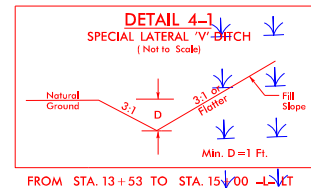
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RW SHEET NO.

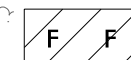
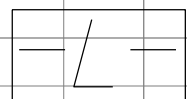
ROADWAY DESIGN
ENGINEERHYDRAULICS
ENGINEERTRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 81073600 S. COLLEGE RD., STE. E-375
WILMINGTON, NC 28412-L- POT
Sta. 10+00.00

-L- POT Sta. 16+75.00

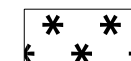
TO NC 130

CRUSOE ISLAND ROAD
(SR 1930)IMPACTS ARE ACCOUNTED FOR
IN PROPOSED DETOUR IMPACTSROCKPLATING
PER RSD 275.01

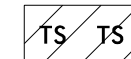
PHILLIP TIMOTHY MARLOWE



FILL IN WETLAND



MECHANIZED CLEARING



TEMPORARY SURFACE WATER IMPACTS

PI = 11+30.00
EL = 36.66'
VC = 50'
K = 57
EXIST.K = 45
DS = 35MPH*PI = 12+26.83
EL = 37.37'
VC = 140'
K = 135
DS = 55MPHPI = 14+28.66
EL = 36.75'
VC = 90'
K = 117
DS = 55MPHPI = 15+00.00
EL = 37.08'
VC = 50'
K = 56
EXIST.K = 40
DS = 40MPH*

EX.GRADE (-)0.1500% (+)0.7321%

(-)0.3072%

EXC. TO EL. 31.3
EST. 33 CYEXC. TO EL. 31.4
EST. 32 CY

(-)0.4383%

EX.GRADE (-)0.98%

* - MEETS SUBREGIONAL
TIER GUIDELINESBEG DITCH
PI STA 13+53 -L- LT
ELEV=30.42CL 'II' RIPRAP
1.5:1 NORMALCL 'II' RIPRAP
1.5:1 NORMALEND DITCH
PI STA 15+00 -L- LT
ELEV=31.60

WSEL ON 3-30-2022=NWS=30.9

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE = 10507 CFS
DESIGN FREQUENCY = 25 YRS
DESIGN HW ELEVATION = 35.2 FT
BASE DISCHARGE = 15290 CFS
BASE FREQUENCY = 100 YRS
BASE HW ELEVATION = 35.9 FT
OVERTOPPING DISCHARGE = 11500 CFS
OVERTOPPING FREQUENCY = +25 YRS
OVERTOPPING ELEVATION = 35.2 FT

OVERTOPS ROADWAY APPROX. 314' NORTHEAST OF WACCAMAW RIVER

DATE OF SURVEY = 3-30-2022

W.S.ELEVATION
AT DATE OF SURVEY = 30.9 FT

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	HB-0012	X-2

PERMIT DRAWING
SHEET 4 OF 10
DATE: 08-08-2022

SITE 3

SITE 3

SITE 3

SITE 3

SITE 3

SITE 3

BEGIN BRIDGE
STA. 13 + 19.00

13 + 19.00

13 + 18.98

13 + 00.00

12 + 75.00

12 + 50.00

12 + 25.00

0.025

0.025

0.025

0.025

0.025

0.025

0.025

0.025

0.025

0.025

0.025

0.025

3:1

3:1

3:1

3:1

3:1

4:1

4:1

3:1

1.5:1

3:1

WETLAND

WETLAND

WETLAND

WETLAND

WETLAND

WETLAND

WETLAND

WETLAND

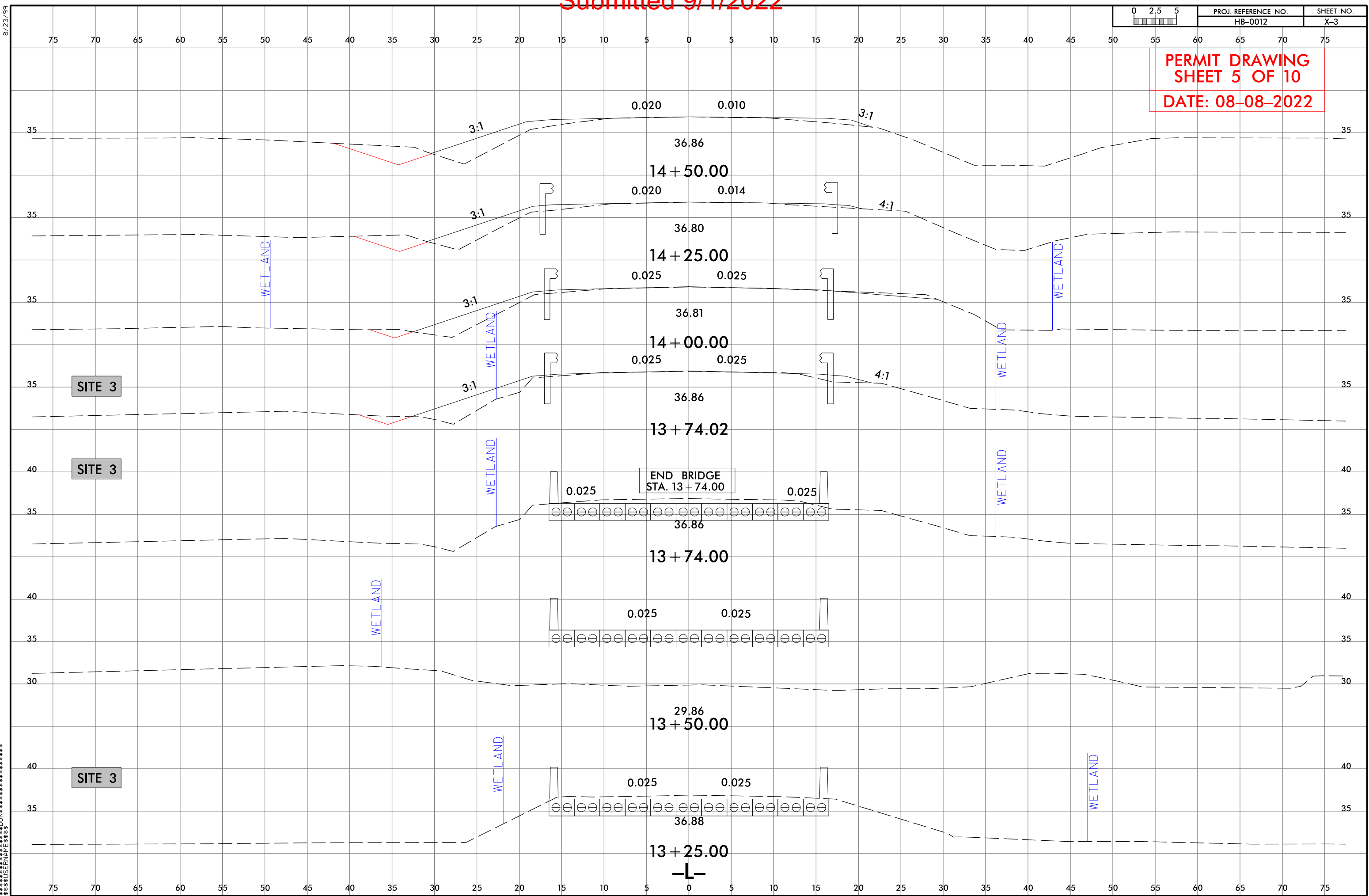
WETLAND

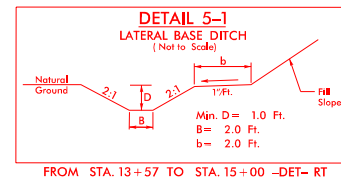
WETLAND



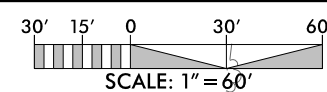
8/23/99

PERMIT DRAWING
SHEET 5 OF 10
DATE: 08-08-2022





IMPACTS ARE ACCOUNTED FOR
IN PROPOSED ROADWAY IMPACTS



BRIDGE# 230032 ONSITE DETOUR

PRELIM. PLANS

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 6 OF 10

DATE: 08-08-2022

PROJECT REFERENCE NO.

HB-0012

SHEET NO.

5

R/W SHEET NO.

ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER



1223 Jones Franklin Rd.
Raleigh, N.C. 27606
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Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

TO NC 130

DOCK ROAD (SR 1928)
18.5' BST

DOCK ROAD (SR 1928)
18.5' BST

CRUSOE ISLAND ROAD
(SR 1930)

Century Link, D.A.T.U.R.

Century Link, D.A.T.U.R.



SITE 1

SITE 2

SITE 1

PHILLIP TIMOTHY MARLOWE

TEMPORARY FILL IN WETLAND

HAND CLEARING

TEMPORARY SURFACE WATER IMPACTS

48 -DET-

BEGIN GRADE
STA. 11+13.72
EL. 36.67

PI = 12+21.85
EL = 36.47'
VC = 105'
K = 219
DS = 60MPH+

LOW SIDE
LOW CHORD

BEGIN BRIDGE
STA. 13+12.24

END BRIDGE
STA. 13+52.24

PI = 14+11.85
EL = 37.04'
VC = 90'
K = 148
DS = 55MPH

END GRADE
STA. 15+51.42
EL. 36.61

EX. GRADE
0.2115%

(-10.1800%)

(+10.3000%)

(+10.3000%)

(-10.3097%)

EX. GRADE
0.1340%

3.5'
MIN.

3.5'
MIN.

CL 'II' RIPRAP
1.5:1 NORMAL

CL 'II' RIPRAP
1.5:1 NORMAL

WSEL ON 3-30-2022 = NWS = 30.9

BEG DITCH
PI STA 13+57 -DET- RT
ELEV=30.55

END DITCH
PI STA 15+00 -DET- RT
ELEV=31.00

BRIDGE HYDRAULIC DATA

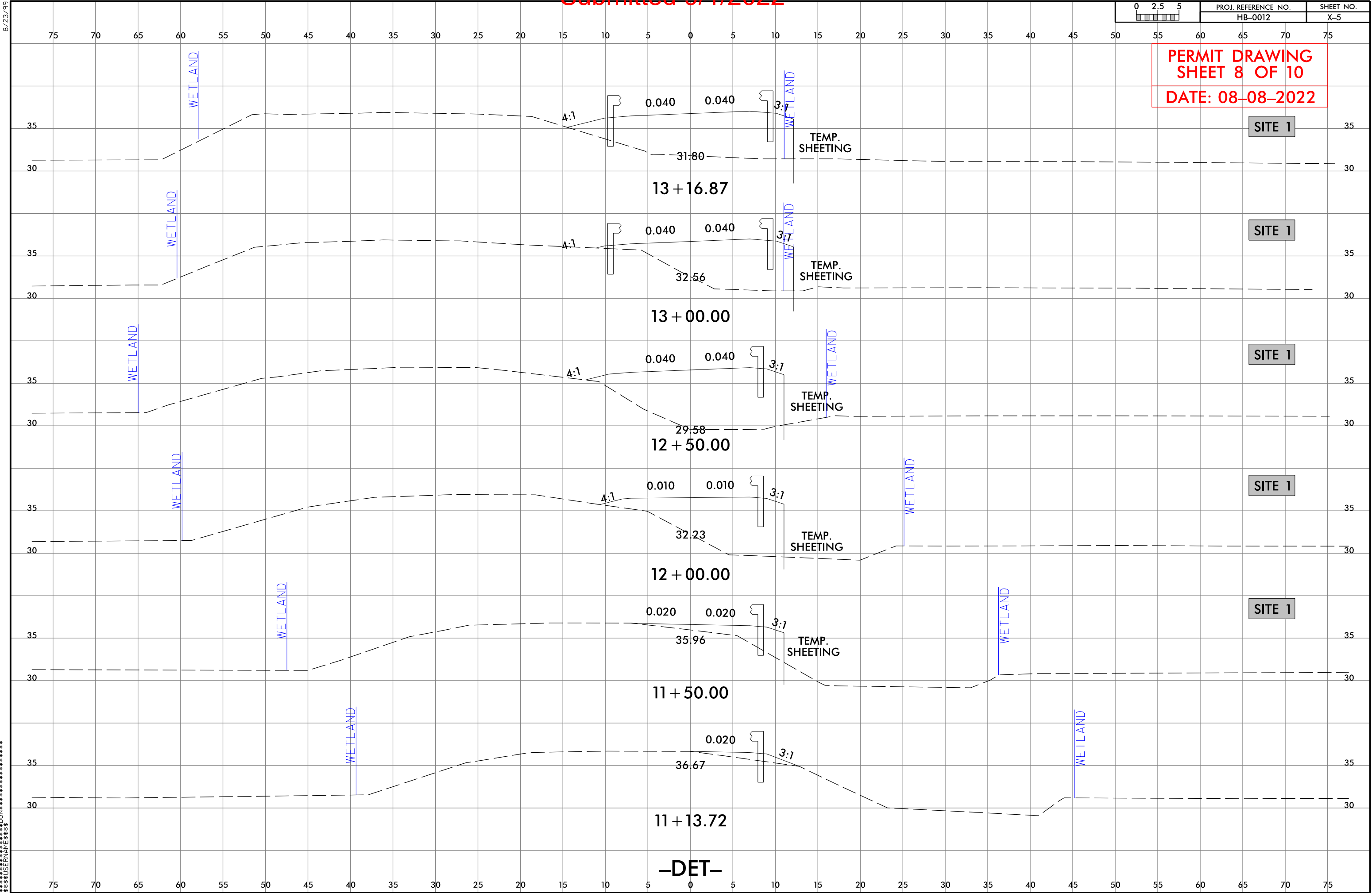
DESIGN DISCHARGE	= 7832	CFS
DESIGN FREQUENCY	= 10	YRS
DESIGN HW ELEVATION	= 34.6	FT
BASE DISCHARGE	= 15290	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 36.2	FT
OVERTOPPING DISCHARGE	= N/A	CFS
OVERTOPPING FREQUENCY	= N/A	YRS
OVERTOPPING ELEVATION	= N/A	FT

DATE OF SURVEY = 3-30-2022
W.S. ELEVATION AT DATE OF SURVEY = 30.9 FT

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	HB-0012	X-5

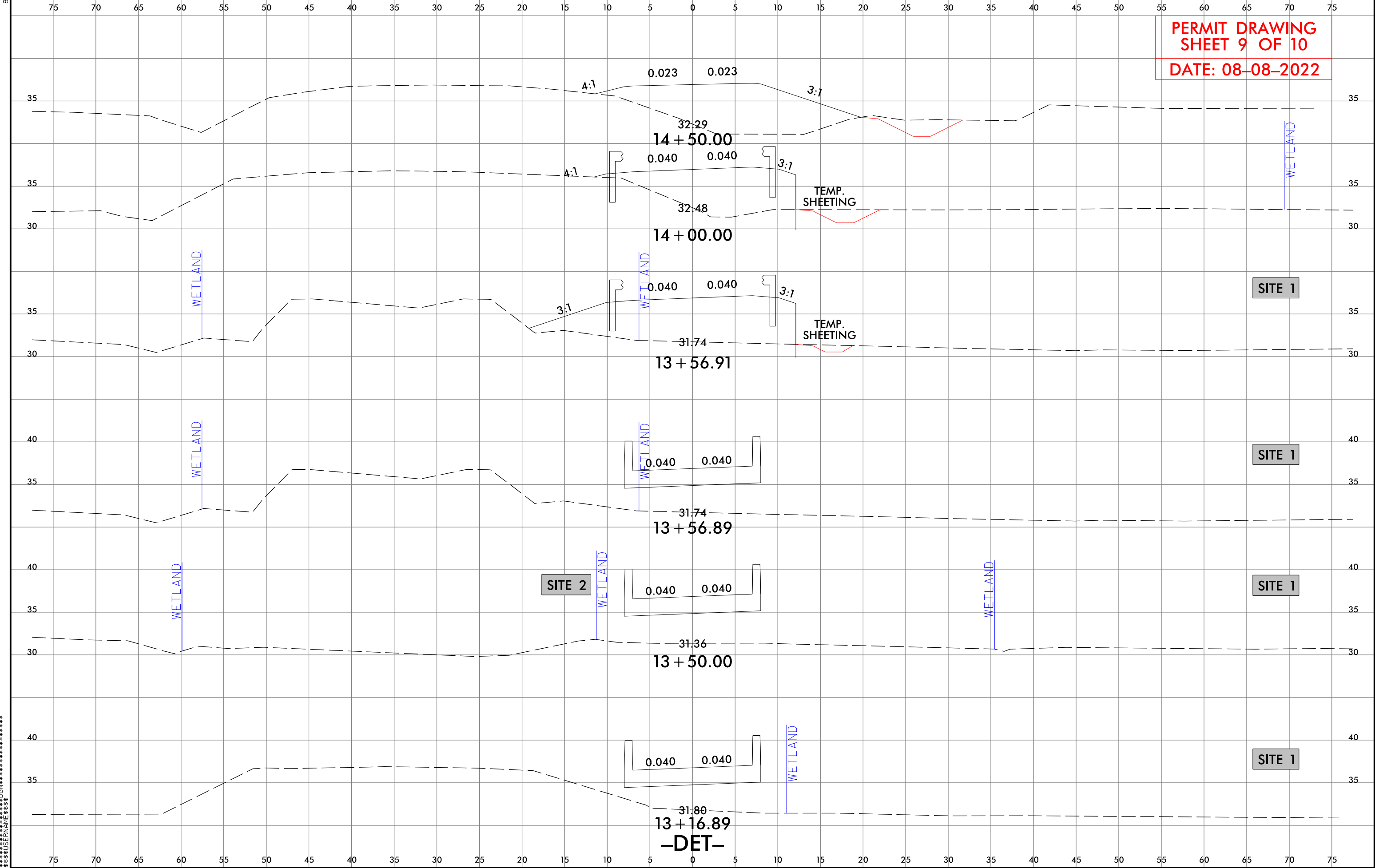
PERMIT DRAWING
SHEET 8 OF 10
DATE: 08-08-2022



8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	HB-0012	X-6

PERMIT DRAWING
SHEET 9 OF 10
DATE: 08-08-2022



WETLAND AND SURACE WATER IMPACTS SUMMARY												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	11+41 to 13+27-DET-	ROADWAY FILL		< 0.01			0.02		0.04		184	
	13+45 to 13+95-DET	ROADWAY FILL		0.01	< 0.01		0.01					
2	13+17 to 13+53-DET-	DETOUR BRIDGE						< 0.01			48	
	13+28 to 13+63-L-	BRIDGE						0.02			55	
3	11+90 to 13+31-L-LT	ROADWAY FILL	0.01			0.02						
	13+57 to 13+98-L-LT	ROADWAY FILL	< 0.01			0.02						
TOTALS*:			0.02	0.02	< 0.01	0.04	0.03	0.03	0.04	0	287	0

*Rounded totals are sum of actual impacts

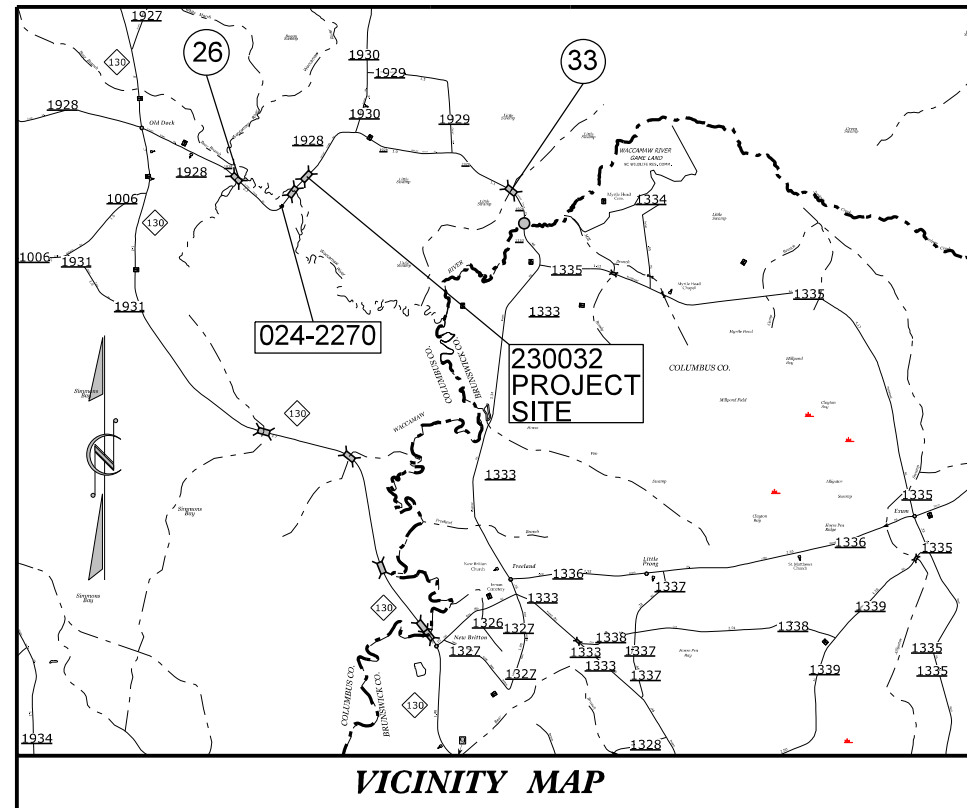
NOTES:

There will be <0.01 acre of temporary fill in the hand clearing area for erosion control measures

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
08-08-2022
COLUMBUS COUNTY
HB-0012
BRG 230032

09/08/99

TIP PROJECT: HB-0012



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITIES BY OTHERS PLANS
COLUMBUS COUNTY

LOCATION: BRIDGE# 230032 OVER OVERFLOW FOR
WACCAMAW RIVER ON SR 1928 (DOCK ROAD)

TYPE OF WORK: UTILITY RELOCATION BY OTHERS

T.I.P. NO.	SHEET NO.
HB-0012	UE-1

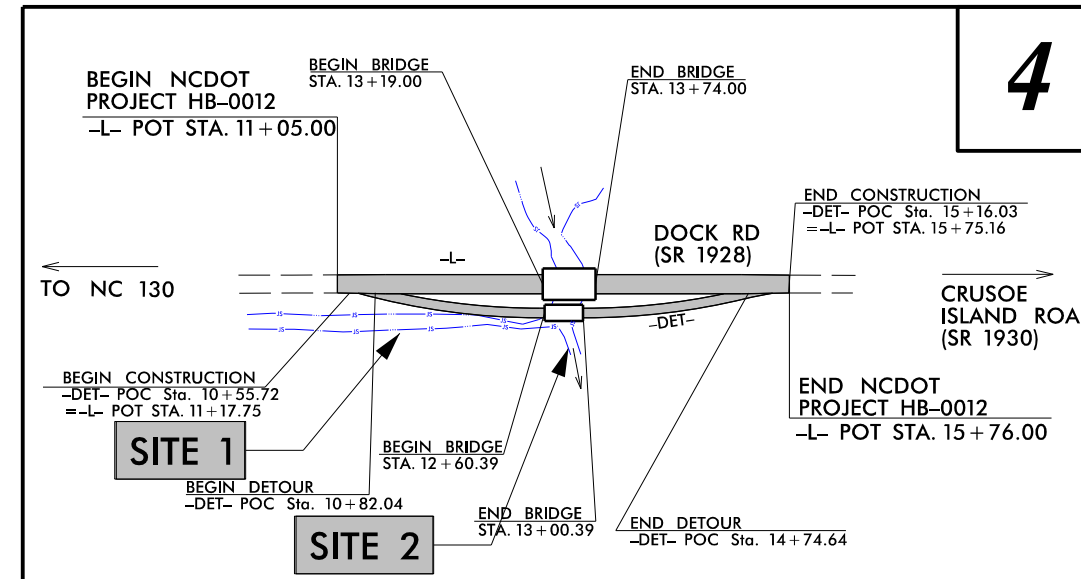
NOTE:
ALL UTILITY WORK SHOWN ON THIS
SHEET WILL BE DONE BY OTHERS.
NO PAYMENT WILL BE MADE TO
THE CONTRACTOR FOR UTILITY WORK
SHOWN ON THIS SHEET.

PERMIT DRAWING
SHEET 1 OF 3

DATE: 08-05-2022

FINAL DRAWING
FOR REVIEW PURPOSES ONLY

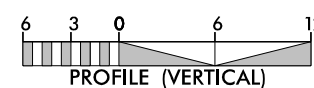
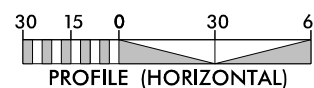
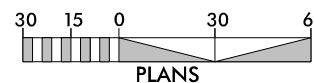
UE-2



WETLAND AND SURFACE WATER IMPACTS PERMIT – UTILITIES

BRIDGE# 230032

GRAPHIC SCALES



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UE-1	TITLE SHEET
UE-2	UBO PLAN SHEET

UTILITY OWNERS WITH CONFLICTS

- (A) POWER – BRUNSWICK ELECTRIC MEMBERSHIP CORP
- (B) COMMUNICATIONS – ATLANTIC TELEPHONE MEMBERSHIP CORP
- (C) COMMUNICATIONS – CENTURYLINK

PREPARED IN THE OFFICE OF:



1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN - GIS/GPS
CIVIL/SITE DESIGN - CONSTRUCTION OBSERVATION - SURVEY/SUE - UTILITIES

PANKIL K. PATEL UTILITY PROJECT MANAGER
TREVER REEVES PROJECT UTILITY COORDINATOR



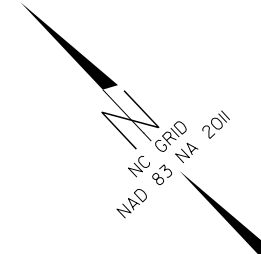
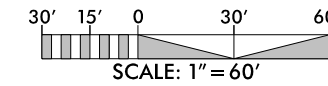
DIVISION OF HIGHWAYS

1000 BIRCH RIDGE DRIVE
RALEIGH, NC 27610

RICK HANDLIN DIVISION UTILITY ENGINEER
RANDY D. ROGERS DIVISION UTILITY COORDINATOR

NOTES:

- SCHEDULE FOR CONSTRUCTION OF TEMPORARY AND PROPOSED BRIDGE
 - TEMPORARY BRIDGE – DECEMBER 2022
 - PROPOSED BRIDGE – SEPTEMBER 2023
- ALL UTILITIES WILL NEED TO RELOCATE BY NOVEMBER 2022.
- BEMC WILL HAVE TEMPORARY OVERHEAD RELOCATION OF ELECTRIC FACILITIES ON THE SOUTH SIDE OF THE BRIDGE.
- BEMC WILL RELOCATE BACK TO EXISTING LOCATION AFTER ALL CONSTRUCTION WORK IS COMPLETED FOR THE PROJECT.
- EXISTING U/G CENTURYLINK FACILITIES ARE IN CONFLICT WITH PROPOSED WORK. CENTURYLINK TO REVIEW LOCATION OF EXISTING U/G FACILITIES AND SUBMIT PERMIT APPLICATION FOR RELOCATION OF THEIR FACILITIES.



PLAN VIEW – ALL UTILITY RELOCATIONS



TEMPORARY SURFACE WATER IMPACTS



HAND CLEARING

UTILITIES BY OTHERS

ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR PROPOSED UTILITY WORK SHOWN ON THIS SHEET.



TRANSPORTATION PLANNING/DESIGN • BRIDGE/STRUCTURE DESIGN • GIS/GPS
CIVIL/SITE DESIGN • CONSTRUCTION OBSERVATION • SURVEY/SUE • UTILITIES

3800 S. COLLEGE RD., STE. F-375
WILKINSON, NC 28412

**PERMIT DRAWING
SHEET 2 OF 3**

DATE: 08-05-2022

**BEGIN NCDOT PROJECT HB-0012
-L- POT STA. 11+05.00**

PHILLIP TIMOTHY MARLOWE

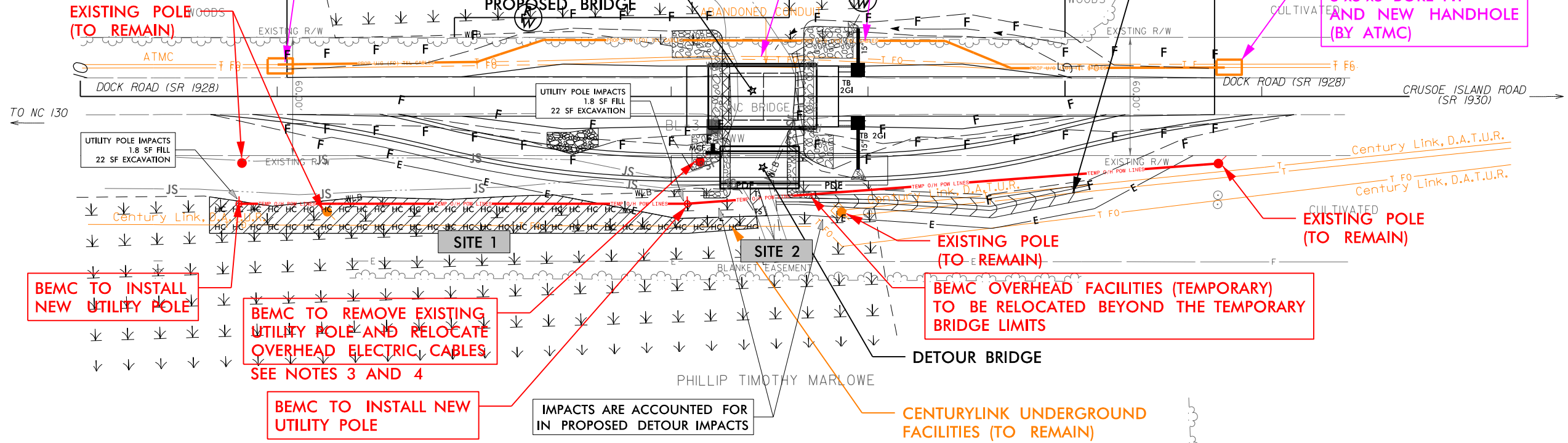
**ABANDON EXISTING ATMC
FACILITIES**

**ATMC FACILITIES TO BE
RELOCATED ON THE
NORTH SIDE CLOSE TO
EXISTING ROW**

**SEE NOTE 5
END NCDOT
PROJECT HB-0012
-L- POT STA. 15+76.00**

**3'x3'x3' BORE PIT
AND NEW HANDHOLE
(BY ATMC)**

**EXISTING POLE
(TO REMAIN)**



**BEMC TO INSTALL
NEW
UTILITY POLE**

**BEMC TO REMOVE EXISTING
UTILITY POLE AND RELOCATE
OVERHEAD ELECTRIC CABLES
SEE NOTES 3 AND 4**

**BEMC TO INSTALL NEW
UTILITY POLE**

**IMPACTS ARE ACCOUNTED FOR
IN PROPOSED DETOUR IMPACTS**

**EXISTING POLE
(TO REMAIN)**

**BEMC OVERHEAD FACILITIES (TEMPORARY)
TO BE RELOCATED BEYOND THE TEMPORARY
BRIDGE LIMITS**

DETOUR BRIDGE

**CENTURYLINK UNDERGROUND
FACILITIES (TO REMAIN)**

WETLAND AND SURFACE WATER IMPACTS SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	10+66 to 13+44 -L-RT	BEMC O/H					0.10					
2	13+40 to 13+49 -L-RT	BEMC O/H							< 0.01			
	13+38 to 13+53-L-LT	ATMC										
TOTALS*:							0.10		< 0.01	0	0	0

*Rounded totals are sum of actual impacts

NOTES:

Site 1: Wetland WA

Utility Pole Impacts (Fill: 2 - 18" Diameter Poles)=3.6 sf

Utility Pole Impacts (Excavation: 2 - 18" Diameter Poles)=44 sf

Site 2: Stream Waccamaw River Floodplain

ATMC Roadway Impacts Only

NC DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

08-05-2022

COLUMBUS COUNTY

HB-0012

BRG 230032

SHEET

3

OF

3

Jurisdictional Determination Request



**US Army Corps
of Engineers**
Wilmington District

This form is intended for use by anyone requesting a jurisdictional determination (JD) from the U.S. Army Corps of Engineers, Wilmington District (Corps). Please include all supporting information, as described within each category, with your request. You may submit your request via mail, electronic mail, or facsimile. Requests should be sent to the appropriate project manager of the county in which the property is located. A current list of project managers by assigned counties can be found on-line at:

<http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram/Contact/CountyLocator.aspx>, by calling 910-251-4633, or by contacting any of the field offices listed below. Once your request is received you will be contacted by a Corps project manager.

ASHEVILLE & CHARLOTTE REGULATORY FIELD OFFICES

US Army Corps of Engineers
151 Patton Avenue, Room 208
Asheville, North Carolina 28801-5006
General Number: (828) 271-7980
Fax Number: (828) 281-8120

WASHINGTON REGULATORY FIELD OFFICE

US Army Corps of Engineers
2407 West Fifth Street
Washington, North Carolina 27889
General Number: (910) 251-4610
Fax Number: (252) 975-1399

RALEIGH REGULATORY FIELD OFFICE

US Army Corps of Engineers
3331 Heritage Trade Drive, Suite 105
Wake Forest, North Carolina 27587
General Number: (919) 554-4884
Fax Number: (919) 562-0421

WILMINGTON REGULATORY FIELD OFFICE

US Army Corps of Engineers
69 Darlington Avenue
Wilmington, North Carolina 28403
General Number: 910-251-4633
Fax Number: (910) 251-4025

INSTRUCTIONS:

All requestors must complete Parts A, B, C, D, E, F and G.

NOTE TO CONSULTANTS AND AGENCIES: If you are requesting a JD on behalf of a paying client or your agency, please note the specific submittal requirements in **Part H**.

NOTE ON PART D – PROPERTY OWNER AUTHORIZATION: Please be aware that all JD requests must include the current property owner authorization for the Corps to proceed with the determination, which may include inspection of the property when necessary. This form must be signed by the current property owner(s) or the owner(s) authorized agent to be considered a complete request.

NOTE ON PART D - NCDOT REQUESTS: Property owner authorization/notification for JD requests associated with North Carolina Department of Transportation (NCDOT) projects will be conducted according to the current NCDOT/USACE protocols.

NOTE TO USDA PROGRAM PARTICIPANTS: A Corps approved or preliminary JD may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA Program participants, or anticipate participation in USDA programs, you should also request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

Jurisdictional Determination Request

A. PARCEL INFORMATION

Street Address: _____

City, State: _____

County: _____

Parcel Index Number(s) (PIN): _____

B. REQUESTOR INFORMATION

Name: _____

Mailing Address: _____

Telephone Number: _____

Electronic Mail Address: _____

Select one:

☐

I am the current property owner.

☐

I am an Authorized Agent or Environmental Consultant¹

☐

Interested Buyer or Under Contract to Purchase

☐

Other, please explain. _____

C. PROPERTY OWNER INFORMATION²

Name: _____

Mailing Address: _____

Telephone Number: _____

Electronic Mail Address: _____

¹ Must provide completed Agent Authorization Form/Letter.

² Documentation of ownership also needs to be provided with request (copy of Deed, County GIS/Parcel/Tax Record).

Jurisdictional Determination Request

D. PROPERTY ACCESS CERTIFICATION^{3,4}

By signing below, I authorize representatives of the Wilmington District, U.S. Army Corps of Engineers (Corps) to enter upon the property herein described for the purpose of conducting on-site investigations, if necessary, and issuing a jurisdictional determination pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899. I, the undersigned, am either a duly authorized owner of record of the property identified herein, or acting as the duly authorized agent of the owner of record of the property.

Print Name

Capacity: ☐ Owner ☐ Authorized Agent⁵

Date

Signature

E. REASON FOR JD REQUEST: (Check as many as applicable)

- ☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
- ☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
- ☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
- ☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
- ☐ I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
- ☐ A Corps JD is required in order obtain my local/state authorization.
- ☐ I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
- ☐ I believe that the site may be comprised entirely of dry land.
- ☐ Other: _____

³ For NCDOT requests following the current NCDOT/USACE protocols, skip to Part E.

⁴ If there are multiple parcels owned by different parties, please provide the following for each additional parcel on a continuation sheet.

⁵ Must provide agent authorization form/letter signed by owner(s).

Jurisdictional Determination Request

F. JURISDICTIONAL DETERMINATION (JD) TYPE (Select One)

☐ I am requesting that the Corps provide a preliminary JD for the property identified herein.

A Preliminary Jurisdictional Determination (PJD) provides an indication that there may be “waters of the United States” or “navigable waters of the United States” on a property. PJDs are sufficient as the basis for permit decisions. For the purposes of permitting, all waters and wetlands on the property will be treated as if they are jurisdictional “waters of the United States”. PJDs cannot be appealed (33 C.F.R. 331.2); however, a PJD is “preliminary” in the sense that an approved JD can be requested at any time. PJDs do not expire.

☐ I am requesting that the Corps provide an approved JD for the property identified herein.

An Approved Jurisdictional Determination (AJD) is a determination that jurisdictional “waters of the United States” or “navigable waters of the United States” are either present or absent on a site. An approved JD identifies the limits of waters on a site determined to be jurisdictional under the Clean Water Act and/or Rivers and Harbors Act. Approved JDs are sufficient as the basis for permit decisions. AJDs are appealable (33 C.F.R. 331.2). The results of the AJD will be posted on the Corps website. A landowner, permit applicant, or other “affected party” (33 C.F.R. 331.2) who receives an AJD may rely upon the AJD for five years (subject to certain limited exceptions explained in Regulatory Guidance Letter 05-02).

☐ I am unclear as to which JD I would like to request and require additional information to inform my decision.

G. ALL REQUESTS

☐ Map of Property or Project Area. This Map must clearly depict the boundaries of the review area.

☐ Size of Property or Review Area _____ acres.

☐ The property boundary (or review area boundary) is clearly physically marked on the site.

Jurisdictional Determination Request

H. REQUESTS FROM CONSULTANTS

☐

Project Coordinates (Decimal Degrees): Latitude: _____
Longitude: _____

☐

A legible delineation map depicting the aquatic resources and the property/review area. Delineation maps must be no larger than 11x17 and should contain the following: (Corps signature of submitted survey plats will occur after the submitted delineation map has been reviewed and approved).⁶

- North Arrow
- Graphical Scale
- Boundary of Review Area
- Date
- Location of data points for each Wetland Determination Data Form or tributary assessment reach.

For Approved Jurisdictional Determinations:

- Jurisdictional wetland features should be labeled as Wetland Waters of the US, 404 wetlands, etc. Please include the acreage of these features.
- Jurisdictional non-wetland features (i.e. tidal/navigable waters, tributaries, impoundments) should be labeled as Non-Wetland Waters of the US, stream, tributary, open water, relatively permanent water, pond, etc. Please include the acreage or linear length of each of these features as appropriate.
- Isolated waters, waters that lack a significant nexus to navigable waters, or non-jurisdictional upland features should be identified as Non-Jurisdictional. Please include a justification in the label regarding why the feature is non-jurisdictional (i.e. “Isolated”, “No Significant Nexus”, or “Upland Feature”). Please include the acreage or linear length of these features as appropriate.

For Preliminary Jurisdictional Determinations:

- Wetland and non-wetland features should not be identified as Jurisdictional, 404, Waters of the United States, or anything that implies jurisdiction. These features can be identified as Potential Waters of the United States, Potential Non-wetland Waters of the United States, wetland, stream, open water, etc. Please include the acreage and linear length of these features as appropriate.

☐

Completed Wetland Determination Data Forms for appropriate region
(at least one wetland and one upland form needs to be completed for each wetland type)

⁶ Please refer to the guidance document titled “Survey Standards for Jurisdictional Determinations” to ensure that the supplied map meets the necessary mapping standards. <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Jurisdiction/>

Jurisdictional Determination Request

- ☐ Completed appropriate Jurisdictional Determination form
 - **PJDs**, please complete a Preliminary Jurisdictional Determination Form⁷ and include the Aquatic Resource Table
 - **AJDs**, please complete an Approved Jurisdictional Determination Form⁸
- ☐ Vicinity Map
- ☐ Aerial Photograph
- ☐ USGS Topographic Map
- ☐ Soil Survey Map
- ☐ Other Maps, as appropriate (e.g. National Wetland Inventory Map, Proposed Site Plan, previous delineation maps, LIDAR maps, FEMA floodplain maps)
- ☐ Landscape Photos (if taken)
- ☐ NCSAM and/or NCWAM Assessment Forms and Rating Sheets
- ☐ NC Division of Water Resources Stream Identification Forms
- ☐ Other Assessment Forms

⁷ www.saw.usace.army.mil/Portals/59/docs/regulatory/regdocs/JD/RGL_08-02_App_A_Prelim_JD_Form_fillable.pdf

⁸ Please see <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Jurisdiction/>

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

BACKGROUND INFORMATION

B. NAME AND ADDRESS OF PERSON REQUESTING PJD:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

State: _____ County/parish/borough: _____ City: _____

Lat.: Long.:

Name of nearest waterbody:

☐ Office (Desk) Determination. Date:

☐ Field Determination. Date(s):

[illegible]

- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "*may be*" waters of the U.S. and/or that there "*may be*" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- ☐ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Map: _____.
- ☐ Data sheets prepared/submitted by or on behalf of the PJD requestor.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report. Rationale: _____.
- ☐ Data sheets prepared by the Corps: _____.
- ☐ Corps navigable waters' study: _____.
- ☐ U.S. Geological Survey Hydrologic Atlas: _____.
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
- ☐ U.S. Geological Survey map(s). Cite scale & quad name: _____.
- ☐ Natural Resources Conservation Service Soil Survey. Citation: _____.
- ☐ National wetlands inventory map(s). Cite name: _____.
- ☐ State/local wetland inventory map(s): _____.
- ☐ FEMA/FIRM maps: _____.
- ☐ 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)
- ☐ Photographs: ☐ Aerial (Name & Date): _____.
or ☐ Other (Name & Date): _____.
- ☐ Previous determination(s). File no. and date of response letter: _____.
- ☐ Other information (please specify): _____.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of
Regulatory staff member
completing PJD

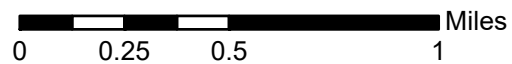
Gregory W. Price 8-24-2022

Signature and date of
person requesting PJD
(REQUIRED, unless obtaining
the signature is impracticable)¹

¹ Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.



Figure 1. Vicinity Map
 WBS No. 49871.1.1
 Replace Bridge 32 on SR 1928 over Waccamaw River Overflow
 Columbus County



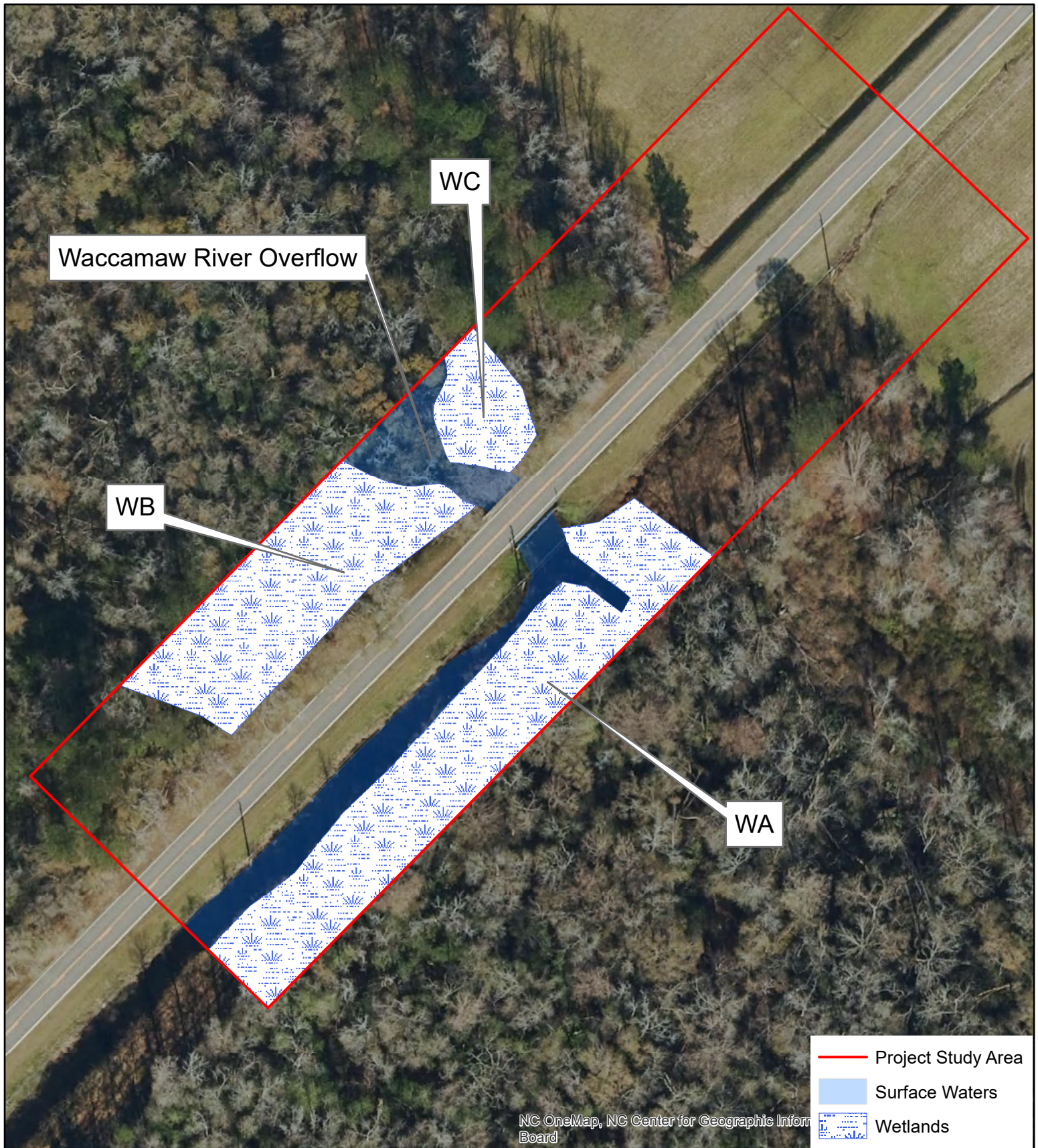
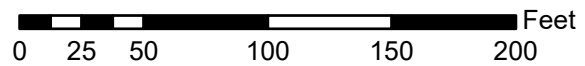


Figure 2. Jurisdictional Features Map
 WBS No. 49871.1.1
 Replace Bridge 32 on SR 1928 over Waccamaw River Overflow
 Columbus County



WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Dock Road - Bridge 32 City/County: Columbus Sampling Date: 1/12/22
 Applicant/Owner: NCDOT State: NC Sampling Point: Wetland
 Investigator(s): Greg Price Section, Township, Range: Bogue Township
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR or MLRA): LRR Lat: 34.160911 Long: -78.569055 Datum: _____
 Soil Map Unit Name: Muckalee Sandy Loam NWI classification: PFO1C

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

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: Point 25' inside boundary of WB 09 flag.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input checked="" type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

 Sampling Point: Wetland

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Quercus laurifolia</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. <u>Taxodium distichum</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>															
3. <u>Ilex opaca</u>	<u>10</u>		<u>FAC</u>															
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
<u>80</u> = Total Cover 50% of total cover: _____ 20% of total cover: _____				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>30</u></td> <td>x 1 = <u>30</u></td> </tr> <tr> <td>FACW species <u>60</u></td> <td>x 2 = <u>120</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>180</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.8</u>	Total % Cover of:	Multiply by:	OBL species <u>30</u>	x 1 = <u>30</u>	FACW species <u>60</u>	x 2 = <u>120</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: <u>100</u> (A)	<u>180</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>30</u>	x 1 = <u>30</u>																	
FACW species <u>60</u>	x 2 = <u>120</u>																	
FAC species <u>10</u>	x 3 = <u>30</u>																	
FACU species _____	x 4 = _____																	
UPL species _____	x 5 = _____																	
Column Totals: <u>100</u> (A)	<u>180</u> (B)																	
<u>10</u> = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																		
1. <u>Eubotrys racemosus</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
<u>10</u> = Total Cover 50% of total cover: _____ 20% of total cover: _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
Herb Stratum (Plot size: <u>5'</u>)																		
1. <u>Arundinaria tecta</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>															
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
<u>10</u> = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Woody Vine Stratum (Plot size: <u>30'</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____														
1. <u>N/A</u>																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Remarks: (If observed, list morphological adaptations below).																		

SOIL

Sampling Point: Wetland

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 3/1	100					Loam	
3-8+	10YR 4/1	100					Loam	
8-12+	10YR 5/2	70	10YR 5/4	30			Sandy loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Dock Road - Bridge 32 City/County: Columbus Sampling Date: 1/12/22
 Applicant/Owner: NCDOT State: NC Sampling Point: Upland
 Investigator(s): Greg Price Section, Township, Range: Bogue Township
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR or MLRA): LRR Lat: 34.160641 Long: -78.569436 Datum: _____
 Soil Map Unit Name: Muckalee Sandy Loam NWI classification: PFO1C

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

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: Point 10' outside boundary of WB 12 & 13 flags.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

 Sampling Point: Upland

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quercus virginiana</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80</u> (A/B)
2. <u>Pinus taeda</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Ilex opaca</u>	<u>10</u>		<u>FAC</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
<u>70</u> = Total Cover 50% of total cover: _____ 20% of total cover: _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>35</u> x 2 = <u>70</u> FAC species <u>35</u> x 3 = <u>115</u> FACU species <u>40</u> x 4 = <u>160</u> UPL species _____ x 5 = _____ Column Totals: <u>110</u> (A) <u>345</u> (B) Prevalence Index = B/A = <u>3.1</u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Cyrilla racemiflora</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
<u>10</u> = Total Cover 50% of total cover: _____ 20% of total cover: _____				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Arundinaria tecta</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>25</u> = Total Cover 50% of total cover: _____ 20% of total cover: _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>30'</u>)				
1. <u>Smilax rotundifolia</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
<u>5</u> = Total Cover 50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				Hydrophytic Vegetation Present? Yes <u>X</u> No _____

SOIL

Sampling Point: Upland

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/1	100					Loam	
4-12+	10YR 4/2	100					Sandy loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (**LRR O**)
- ☐ 2 cm Muck (A10) (**LRR S**)
- ☐ Reduced Vertic (F18) (**outside MLRA 150A,B**)
- ☐ Piedmont Floodplain Soils (F19) (**LRR P, S, T**)
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: