Pre-Construction Notification (PCN) Form

For Nationwide Permits and Regional General Permits

(along with corresponding Water Quality Certifications)

June 1, 2021 Ver 4.1

*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

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

Pitt

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:

B-4786

WBS # *

38222.1.FR2

(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-404 Jurisdictional General Permit

☐ Individual 401 Water Quality Certification

☐ 401 Water Quality Certification - Express

☑ Riparian Buffer Authorization

Pre-Filing Meeting Information

Before submitting this form please ensure you have submitted the Pre-Filing Meeting Request Form as we will not be able to accept your application without this important first step. The Pre-Filing Meeting Request Form is used in accordance with 40 C.F.R. Section 121.4(a) “At least 30 days prior to submitting a certification request, the project proponent shall request a pre-filing meeting with the certifying

agency" and in accordance with 40 C.F.R. Section 121.5(b)(7), and (c)(5) all certification requests shall include documentation that a pre-filing meeting request was submitted to the certifying authority at least 30 days prior to submitting the certification request. Click **here** to read more information on when this form is needed prior to application submission or **here** to view the form.

Is this a courtesy copy notification? *

Yes No

ID#

Version

Pre-fling Meeting or Request Date

5/13/2021

Attach documentation of Pre-Filing Meeting Request here:

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

File type must be PDF

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

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? *

Deanna Riffey

1b. Primary Contact Email: *

driffey@ncdot.gov

1c. Primary Contact Phone: *

(xxx)xxx-xxxx

(919)707-6151

1d. Who is applying for the permit? *

Owner

Applicant (other than owner)

(Check all that apply)

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

Yes No

2. Owner Information

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

Multiple properties

2b. Deed book and page no.:

2c. Contact Person:

(for Corporations)

2d. Address *

Street Address

1000 Birch Ridge Road

Address Line 2

City

Raleigh

State / Province / Region

NC

Postal / Zip Code

27610

Country

USA

2e. Telephone Number: *

(xxx)xxx-xxxx

(919)707-6123

2f. Fax Number:

(xxx)xxx-xxxx

2g. Email Address: *

pharris@ncdot.gov

C. Project Information and Prior Project History

1. Project Information

1a. Name of project: *

Pitt County Bridge No. 38 on US 13 (Memorial Drive) over Tar River

1b. Subdivision name:

(if appropriate)

1c. Nearest municipality / town: *

Greenville

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

State / Province / Region

Postal / Zip Code

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: *

35.618175

ex: 34.208504

Longitude: *

-77.390172

-77.796371

3. Surface Waters

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

Tar River

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

C; NSW

Surface Water Lookup

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

Tar-Pamlico

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

03020103

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: *

The project vicinity is developed primarily for residential purposes, while land use in the vicinity consists of residential and retail development and land cleared and maintained for air traffic at the Pitt-Greenville Airport (clearway).

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:

0.19

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 No. 38 (US 13 eastbound) is sixty-two-year-old bridge with a deteriorating concrete structure that can no longer be addressed by maintenance activities. The purpose of the project is to replace the structure on its existing alignment.

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

The existing 541 foot long, 33.5 foot wide, 12-span structure will be replaced on the existing alignment. The new bridge will be an 8-span, 550 foot long and and a 41 foot wide. A temporary work bridge will be needed for bridge construction. Standard roadbuilding equipment will be used. There are no impacts expected from utilities.

5. Jurisdictional Determinations

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

(●) Yes ( ) No ( ) Unknown

Comments:

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): Sandy Smith and Scott Davis

Agency/Consultant Company: Axiom

Other:

5d. List the dates of the Corp jurisdiction determination or State determination if a determination was made by the Corps or DWR.

Tom Steffens informed Axiom by phone in July 2015 that he and Garcy Ward had visited the project site and verified the wetland delineation. No written JD documentation was provided.

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 Jurisdicition * (?)	2g. Impact area *
1	Access road	T	Bottomland Hardwood Forest	WD	Yes	Both	0.100 (acres)
2	Access road	T	Riverine Swamp Forest	WB & WC	Yes	Both	0.010 (acres)

2g. Total Temporary Wetland Impact

0.110

2g. Total Permanent Wetland Impact

0.000

2g. Total Wetland Impact

0.110

2i. Comments:

A temporary work bridge (conceptual footprint shown on sheet 4) is proposed for removal of the existing bridge and construction of the proposed bridge. The impacts shown due to temporary fill in wetlands are for the anticipated temporary fill to build access roads on each side of the river from ends of temporary work bridge out along embankments and then up 20' high embankments.

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 *
1	Bridge bents	P	Tar River	Fill	Other	0.01 (acres)
1	Bridge bents	T	Tar River	Fill	Other	0.01 (acres)

4g. Total temporary open water Impacts:

0.01

4g. Total permanent open water impacts:

0.01

4g. Total open water impacts:

0.02

4h. Comments:

6. Buffer Impacts (for DWR)

If project will impact a protected riparian buffer, then complete the chart below. Individually list all buffer impacts below.

6a. Project is in which protect basin(s)? *

Check all that apply.

- [ ] Neuse
- [ ] Catawba
- [ ] Goose Creek
- [ ] Other
- [x] Tar-Pamlico
- [ ] Randleman
- [ ] Jordan Lake

6b. Impact Type * (?)	6c. Per or Temp * (?)	6d. Stream name *	6e. Buffer mitigation required? *	6f. Zone 1 impact *	6g. Zone 2 impact *
Roadway/bridge	P	Tar River	No	6,279 (square feet)	3,317 (square feet)

6h. Total buffer impacts:

	Zone 1	Zone 2
Total Temporary impacts:	0.00	0.00

	Zone 1	Zone 2
Total Permanent impacts:	6,279.00	3,317.00

	Zone 1	Zone 2
Total combined buffer impacts:	6,279.00	3,317.00

6i. Comments:

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 along its existing alignment, and traffic detoured onto the southbound bridge. 2.5:1 is the steepest allowable traditional grass lined fill slope for this project. Rock Plating is being used in this area to allow for a steeper than 2.5:1 slope as this is necessary to avoid filling in a portion of the greenway.

It was estimated that a 2.5:1 is achievable at 23+75 so that is where rock plating will begin, 1.5:1 is needed at 25+00.

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

Design Standards in Sensitive Watersheds will be adhered to.

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

2b. If this project DOES NOT require Compensatory Mitigation, explain why:

All wetland impacts are temporary, and buffer impacts are allowable.

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

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

1b. All buffer impacts and high ground impacts require diffuse flow or other form of stormwater treatment. If the project is subject to a state implemented riparian buffer protection program, include a plan that fully documents how diffuse flow will be maintained.

All Stormwater Control Measures (SCM)s must be designed in accordance with the NC Stormwater Design Manual. Associated supplement forms and other documentation shall be provided.

What type of SCM are you providing?

- ☐ Level Spreader
- ☐ Vegetated Conveyance (lower SHWT)
- ☐ Wetland Swale (higher SHWT)
- ☐ Other SCM that removes minimum 30% nitrogen
- ☑ Proposed project will not create concentrated stormwater flow through the buffer

(check all that apply)

For a list of options to meet the diffuse flow requirements, click here.

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 II Categorical Exclusions do not require submission to the 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 the existing bridge being replaced, this project will neither influence nearby land uses nor stimulate growth.

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

What Federal Agency is involved?

NMFS

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? *

USFWS IPaC, coordination with USFWS and NMFS. The NLEB PBO will be utilized as will the PCO/PBO for the Tar River spinymussel, yellow lance, Carolina madtom, Atlantic pigtoe, green floater, and Neuse River waterdog. Concurrence was received from the NMFS for the Atlantic sturgeon. Guidelines for Avoiding Impacts to the West Indian Manatee will be adhered to. Other species received biological conclusions of No Effect due to no habitat or no observation of species during surveys.

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? *

Coordination with NMFS during NRTR research, Essential Fish Mapper checked in 2021.

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/hpoweb/

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? *

Programmatic CE 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:

Hydraulics Unit coordination with FEMA

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

FEMA 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

B-4786 General Pitt December 21 2021.pdf 6.25MB

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 *

Date

12/21/2021

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
https://www.fisheries.noaa.gov/region/southeast

09/30/2019

F/SER31:KBD
SERO-2019-01281

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

Dear Mr. Harris:

This letter responds to your request for consultation with the National Marine Fisheries Service (NMFS), pursuant to Section 7 of the Endangered Species Act (ESA) for the following action.

SERO Number	Project Type
SERO-2019-01281	NCDOT Bridge replacement (TIP No. B-4786)

Consultation History
We received your letter requesting consultation on May 22, 2019, and initiated consultation that day. We had further correspondence on additional details of the project on August 20-21, 2019. The project has been assigned a tracking number in our new NMFS Environmental Consultation Organizer (ECO), SERO-2019-01281. Please refer to this number in any future inquiries regarding this project.

Project Location

Address	Latitude/Longitude	Water body
Greenville, Pitt County, North Carolina	35.618239ºN, 77.390028ºW (North American Datum 1983)	Tar River

Image of the project location and surrounding area (©2019 Google)

Existing Site Conditions
The project site is located on northbound US 13 over Tar River, in Greenville, Pitt County, North Carolina. The existing bridge, Number 38, was built in 1955 and is 540 feet (ft) long with 12 spans and 7 bents in the water. The river is 330 ft wide at the project site. The river is non-tidal, and benthic conditions are described as silty sands, and fine to coarse sands with small traces of gravel. The project site is located in freshwater (above the saltwater wedge) approximately 57 miles from its confluence with Pamlico Sound. Water depth in the project area ranges from 3 to 10 ft deep. The project location is located in Atlantic sturgeon critical habitat Carolina Unit 2.

Project Description
The applicant proposes to replace the existing 12-span bridge with a new 8-span bridge; a 550-ft superstructure, with 5 bents within the open waters of the river. The bridge bents will be constructed of drilled shafts, which are also known as cast-in-place piles. A temporary work bridge will be required during construction and will most likely be constructed of 30-inch diameter pipe piles. The actual number and size of the piles has not been determined by the contractor yet, but will most likely be installed by vibratory hammer. There will be 0.0058 acres of permanent streambed impact due to the drilled shafts. The clearance above normal water elevation is 30 ft. All bents and piles of the existing bridge and temporary work bridge will be removed, upon project completion. The bents and piles from the existing bridge and temporary work bridge will either be removed by extracting them or cutting them below grade.

Construction Conditions
An in-water moratorium is in effect between February 15 and September 30 to prevent the disruption of Atlantic sturgeon spawning runs/migration activities. No equipment or

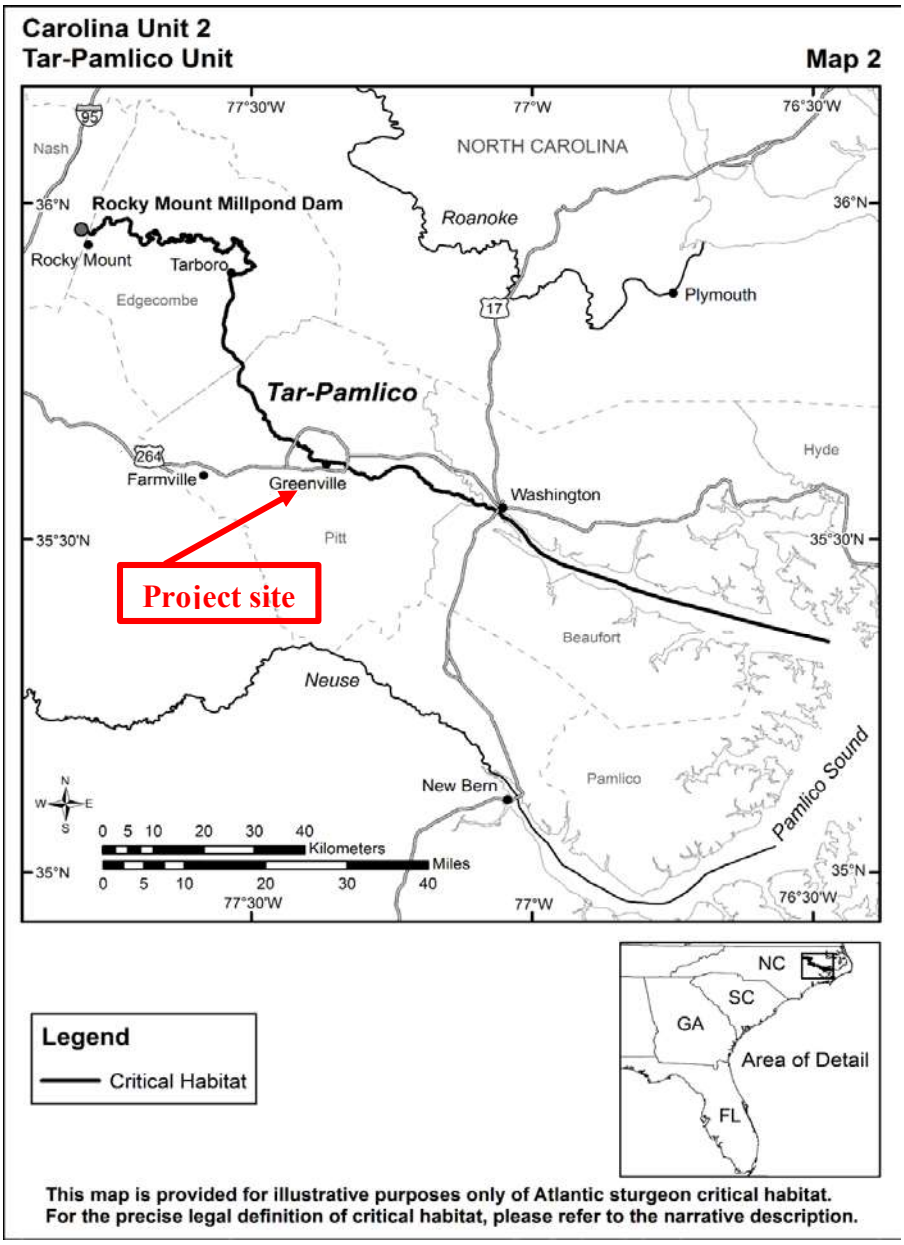
construction materials of any type shall be allowed to be placed or fall into the river during this time period. During the work period, construction may be done from temporary work bridges, as long as these features were installed outside of the restricted season.

The contractor will comply with North Carolina Department of Transportation's (NCDOT) Best Management Practices (BMPs) for Bridge Demolition and Removal. Additionally, NCDOT will follow all stream crossing guidelines for anadromous fish passage, as well as implement NCDOT Design Standards in Sensitive Watersheds. Debris will be disposed of in accordance with Section 802 of the 2012 Standard Specifications. Compliance includes:

- Existing bridge piles in the navigation channel will be removed completely, unless not practicable, and piles located in wetland areas will be cut off below the mudline to minimize overall disturbance.
- The use of turbidity curtains will be evaluated for areas with sufficient depth, but lower velocity. Turbidity will be monitored during in-water work to ensure compliance with state water quality standards.
- Non-shattering methods will be implemented (no explosives) for bridge removal. No bridge deck or substructure components will be dropped in the water.
- Loose debris and road surface materials will be removed prior to demolition to minimize the potential for turbidity and contaminant discharge.

Effects Determination for Species the Action Agency or NMFS Believes May Be Affected by the Proposed Action

Species	ESA Listing Status	Action Agency Effect Determination	NMFS Effect Determination
Fish			
Atlantic sturgeon (Carolina DPS)	E	NLAA	NLAA
E = endangered; NLAA = may affect, not likely to adversely affect			



The project is located in Atlantic sturgeon critical habitat Carolina Unit 2, Tar-Pamlico Unit. The physical and biological features (PBFs) of the critical habitat are described in the table below. We believe the proposed action may affect the PBFs: hard substrate, unobstructed water of appropriate depth, and water quality. Since the project is located in freshwater, PBF 2 will not occur in the action area.

Atlantic Sturgeon Critical Habitat PBFs and their Purpose/Function		
PBF		**Purpose/Function of PBF**
Hard Substrate (PBF 1)	Hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per trillion [ppt] range)	Necessary for settlement of fertilized eggs, refuge, growth, and development of early life stages
Salinity Gradient and Soft Substrate (PBF 2)	Aquatic habitat with a gradual downstream salinity gradient of 0.5 ppt up to as high as 30 ppt and soft substrate (e.g., sand, mud) between the river mouth and spawning sites	Necessary for juvenile foraging and physiological development
Unobstructed Water of Appropriate Depth (PBF 3)	Water of appropriate depth and absent physical barriers to passage (e.g., locks, dams, thermal plumes, turbidity, sound, reservoirs, gear, etc.) between the river mouth and spawning sites	Necessary to support: • Unimpeded movement of adults to and from spawning sites • Seasonal and physiologically dependent movement of juvenile Atlantic sturgeon to appropriate salinity zones within the river estuary • Staging, resting, or holding of subadults or spawning condition adults. Water depths in main river channels must also be deep enough (at least 1.2 meter) to ensure continuous flow in the main channel at all times when any sturgeon life stage would be in the river
Water Quality (PBF 4)	Water quality conditions, especially in the bottom meter of the water column, with the appropriate combination of temperature and oxygen values	Necessary to support: • Spawning • Annual and inter-annual adult, subadult, larval, and juvenile survival • Larval, juvenile, and subadult growth, development, and recruitment. Appropriate temperature and oxygen values will vary interdependently, and depending on salinity in a particular habitat. For example, 6.0 milligrams per liter (mg/L) DO or greater likely supports juvenile rearing habitat, whereas DO less than 5.0 mg/L for longer than 30 days is less likely to support rearing when water temperature is greater than 25 °C. In temperatures greater than 26 °C, DO greater than 4.3 mg/L is needed to protect

Atlantic Sturgeon Critical Habitat PBFs and their Purpose/Function		
PBF		Purpose/Function of PBF
		survival and growth. Temperatures of 13 to 26 °C likely support spawning habitat.

Analysis of Potential Routes of Effects to Species

During in-water construction, Atlantic sturgeon may be physically injured if struck by construction equipment or materials during installation of the temporary work bridges or the cast-in-place piles. However, by restricting in-water work outside of the in-water work moratorium of February 15-September 30, we believe the likelihood of sturgeon presence in this portion of the river coinciding with in-water construction is not expected and therefore we do not expect effects to sturgeon during in-water construction.

Atlantic sturgeon could be affected by the placement of temporary in-water structures (e.g., temporary work bridges) in areas that may serve as migration, foraging or refuge habitat. However, these structures will be installed outside of the work moratorium and after they are constructed they will not block upstream access, and will be removed after bridge construction is completed. Therefore, we believe the effect to Atlantic sturgeon from the placement of temporary in-water structures will be insignificant. Atlantic sturgeon are opportunistic feeders that forage over large areas and the area of temporary impact is relatively small (0.0058 acres) compared to the surrounding area available. Further, once the temporary structures are removed, sturgeon can use the area for foraging and refuge again.

Analysis of Potential Routes of Effect to Critical Habitat

Hard substrate (PBF 1) necessary for the settlement of fertilized eggs and refuge, growth, and development of early life stages may be affected by the installation of piles. The river contains pebble (gravel-size rock) that may serve as a critical function for egg, larvae, and adult sturgeon growth and spawning. However, we believe this effect to PBF 1 will be insignificant. The temporary work bridge piles and permanent new bridge piles will only affect small portions of the main channel. The new bridge will be of similar size and location as the existing bridge, and also have less bents therefore allowing for more available substrate. The available substrate surrounding the permanent and temporary work bridges will continue to support these early life stages, and once the temporary work bridges are removed, these areas of hard substrate will become accessible again.

Unobstructed water of appropriate depth (PBF 3) that supports staging, resting, holding, or movement of various life stages of Atlantic sturgeon may be affected by the installation of piles and temporary work structures. We believe the obstructions created by the installation of piles will have an insignificant effect on PBF 3 because the temporary work bridges and permanent bridge piles will only affect small portions of the main channel. The temporary work bridges will be removed at the end of the project's construction. While the placement of the work bridges will have a temporary effect on water depth (deeper upstream, shallower downstream), these effects will be localized, and will not affect the overall depth of the river in this area since sufficient passage will be maintained within a portion of the river at all times during construction. In addition, sedimentation effects are not anticipated to reach a level that would create a depth barrier, and the implementation of the construction moratorium will ensure there is no noise barrier to migrating individuals in the event they are present in the river.

Water quality (PBF 4) supporting important life functions, such as growth and reproduction, of various life stages of Atlantic sturgeon may be affected by temporary and highly localized turbidity and associated effects on suitable water temperature and oxygen values caused during installation of piles and temporary work bridges. Turbidity curtains will be used to contain turbidity; therefore, we believe the effects to PBF 4 from any small amount of turbidity that may escape will be insignificant. We also expect construction-induced turbidity to be temporary and settle out within a period of time. Additionally, no in-water work will occur between February 15 and September 30 to prevent sturgeon from being exposed to elevated turbidity levels during times of the year when they might be present in the project area.

Conclusion

Because all potential project effects to listed species and critical habitat were found to be discountable, insignificant, or beneficial, we conclude that the proposed action is not likely to adversely affect listed species and critical habitat under NMFS's purview. This concludes your consultation responsibilities under the ESA for species under NMFS's purview. Consultation must be reinitiated if a take occurs or new information reveals effects of the action not previously considered, or if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed or critical habitat designated that may be affected by the identified action. NMFS's findings on the project's potential effects are based on the project description in this response. Any changes to the proposed action may negate the findings of this consultation and may require reinitiation of consultation with NMFS.

We look forward to further cooperation with you on other projects to ensure the conservation of our threatened and endangered marine species and designated critical habitat. If you have any questions on this consultation please contact Kay Davy, Consultation Biologist, at (727) 415-9271, or by email at Kay.Davy@noaa.gov.

Sincerely,

REECE.KARLA.M.1365885962 Digitally signed by REECE.KARLA.M.1365885962 Date: 2019.09.30 14:26:22 -04'00'

for David Bernhart
Assistant Regional Administrator
for Protected Resources

File: 1514-22.L.1

U.S. Department of Homeland Security

United States Coast Guard

Commander
United States Coast Guard
Fifth Coast Guard District

431 Crawford Street
Portsmouth, VA. 23704-5004
Staff Symbol: dpb
Phone: (757) 398-6227
Fax: (757) 398-6334
Email: Kashanda.l.booker@uscg.mil
CGDFiveBridges@uscg.mil

16591
15 FEB 2019

Mr. Phillip Harris, P.E.
North Carolina Department of Transportation
Environmental Analysis Unit Head
1598 Mail Service Center
Raleigh, NC 27610

Dear Mr. Harris:

Coast Guard review of your proposed project as provided in an email dated Nov 29, 2018, from Mr. Greg Purvis with Wetherill Engineering, on behalf of the North Carolina Department of Transportation, is complete.

Based on the documentation provided and our research, it is determined that a Coast Guard bridge permit will not be required for the proposed highway fixed bridge, US 13/Memorial Drive over Tar River, in Pitt County, NC. (35.618239, -77.390028)

The project will be placed in our Coast Guard Authorization Act of 1982 exemption category for the location and structure described above and **is valid for five years from the date of this letter**. The Coast Guard Authorization Act of 1982 exempts bridge projects from Coast Guard Bridge permits when the bridge project crosses non-tidal waters which are not used, susceptible to use in their natural condition, or susceptible to use by reasonable improvement as a means to transport interstate commerce. The following conditions apply to this determination:

a. If the construction project on the above bridge does not commence within this time, you must contact this office for reaffirmation of this determination.

b. Future bridge projects along the above waterway will have to be independently evaluated before they may be considered for placement in the Advance Approval category. This includes modification, replacement and removal of the above bridge, following its initial construction.

In addition, the requirement to display navigational lighting at the aforementioned bridge is hereby waived, as per Title 33 Code of Federal Regulations, Part 118.40(b). This waiver may be rescinded at any time in the future should nighttime navigation through the proposed bridge be increased to a level determined by the District Commander to warrant lighting.

The fact that a Coast Guard bridge permit is not required does not relieve you of the responsibility for compliance with the requirements of any other Federal, State, or local agency who may have jurisdiction over any aspect of the project.

If you have any further questions, please contact Ms. Kashanda Booker at the above listed address or telephone number.

Sincerely,

HAL R. PITTS
Bridge Program Manager
By direction

Copy: CG Sector North Carolina, Waterways Management
U. S. Army Corps of Engineers, North Carolina District
Federal Highways Administration, North Carolina Division

Submitted 12/21/2021

North Carolina Department of Transportation

Highway Stormwater Program

STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS

(Version 2.07; Released October 2016)

WBS Element:	38222.1.FR2	TIP No.:	B-4786	County(ies):	Pitt	Page	1	of	1

General Project Information

WBS Element:	38222.1.FR2	**TIP Number:**	B-4786	**Project Type:**	Bridge Replacement	**Date:**	12/28/2018
NCDOT Contact:	Jacquelyn Bowles, PE			**Contractor / Designer:**	TGS Engineers (David B. Petty, PE)		
	Address: 1590 Mail Service Center Raleigh, NC 27699-1590			**Address:**	706 Hillsborough Street Suite 200 Raleigh NC, 27603		
	Phone: 919-707-6559			**Phone:**	919-773-8887 ext. 104		
	Email: jkbowles@ncdot.gov			**Email:**	dpetty@tgsengineers.com		
City/Town:	Greenville			**County(ies):**	Pitt		
River Basin(s):	Tar-Pamlico			**CAMA County?**	No		
Wetlands within Project Limits?	Yes						

Project Description

Project Length (lin. miles or feet):	1250 ft.	**Surrounding Land Use:**	Residential and Commercial Development, Forest

	Proposed Project	**Existing Site**
Project Built-Upon Area (ac.)	1.1 ac.	0.9 ac.
Typical Cross Section Description:	Two 12' paved travel lanes with 4' to 10' paved shoulders and 2' to 3' grass shoulders.	Two 12' paved travel lanes with 3' to 10' paved and 3' grassed shoulders.
Annual Avg Daily Traffic (veh/hr/day):	Design/Future: 17250 (northbound only) Year: 2039	Existing: 13800 (northbound only) Year: 2019

General Project Narrative: (Description of Minimization of Water Quality Impacts)

Replacement of Bridge No. 730038 (northbound bridge) on US 13 over the Tar River. Proposed 550' long by 41' wide 8-span bridge to replace existing 541' long by 33.5' wide 12-span bridge.

Runoff on the existing bridge discharges directly in the Tar River; however, the proposed bridge will have no direct discharge into the river. Stormwater runoff from the proposed bridge is to flow to grated inlets on each side of the bridge then flow down the systems and outlet well outside buffers where it will be diffused with riprap pads. All proposed stormwater runoff is discharged at the lowest practicable velocities.

The existing bridge has seven bents in the Tar River which will be removed. The proposed bridge will have five bents in the river.

A temporary work bridge (conceptual footprint shown on sheet 4) is proposed for removal of the existing bridge and construction of the proposed bridge. The impacts shown due to temporary fill in wetlands are for the anticipated temporary fill to build access roads on each side of the river from ends of temporary work bridge out along embankments and then up 20' high embankments.

Waterbody Information

Surface Water Body (1):	Tar River	**NCDWR Stream Index No.:**	28-(94)
NCDWR Surface Water Classification for Water Body	**Primary Classification:**	Class C	
	Supplemental Classification:	Nutrient Sensitive Waters (NSW)	
Other Stream Classification:			
Impairments:			
Aquatic T&E Species?	Yes	Comments: per Aquatic Species Survey Report dated 8/1/2018: may affect/not likely adversely the Tar River Spinymussel & the Yellow Lance	
NRTR Stream ID:		**Buffer Rules in Effect:**	Tar-Pamlico

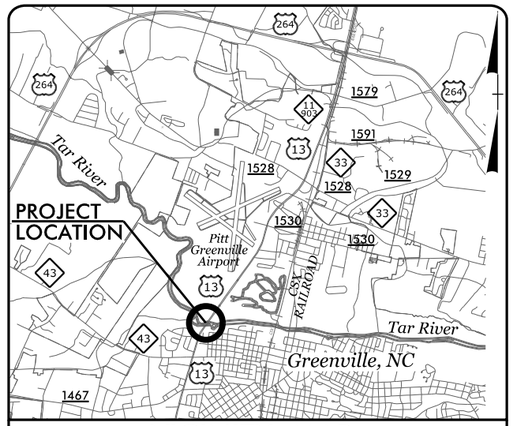
Project Includes Bridge Spanning Water Body?	Yes	**Deck Drains Discharge Over Buffer?**	No	**Dissipator Pads Provided in Buffer?**	No
Deck Drains Discharge Over Water Body?	No	(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
(If yes, provide justification in the General Project Narrative)					

09/08/99

TIP PROJECT: B-4786

CONTRACT:

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Plan Sheet Symbols
See Sheet 1C-1 Through 1C-? For Survey Control Sheets



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PITT COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4786	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
38222.1.FR2	BRSTP-0013(041)	PE
38222.2.2	BRSTP-0013(041)	R/W, UTIL

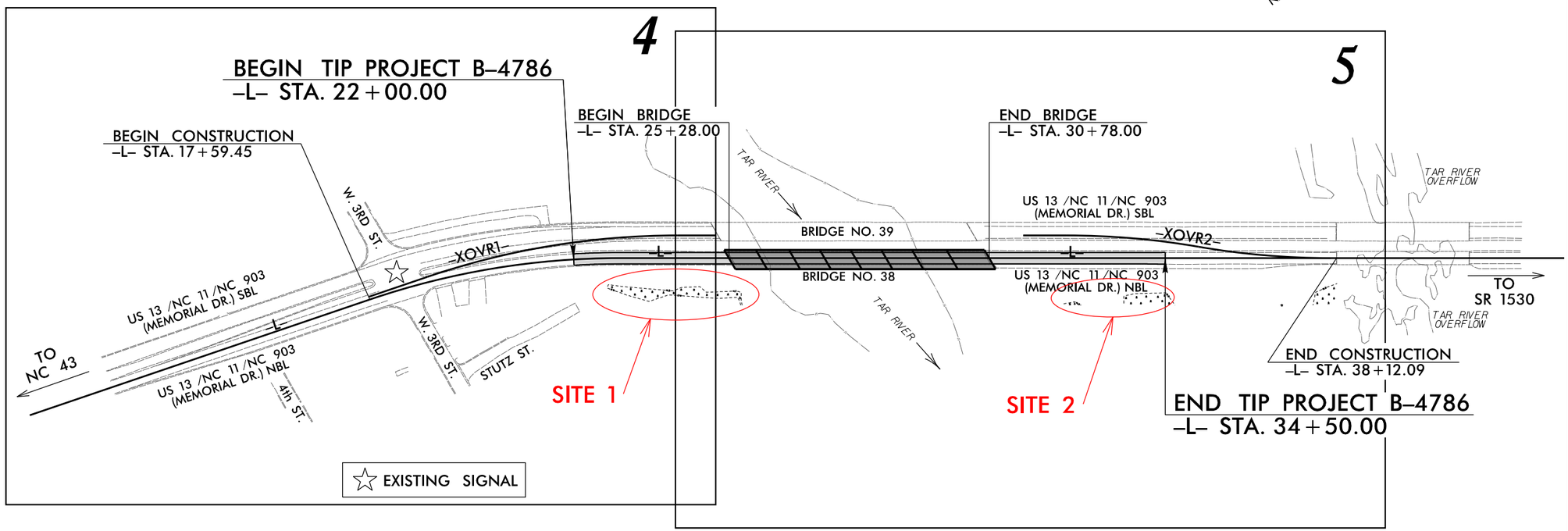
LOCATION: REPLACE BRIDGE NO. 38 OVER THE TAR RIVER ON US 13 IN GREENVILLE

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

PERMIT DRAWING
SHEET 1 OF 9

WETLAND AND SURFACE WATER IMPACTS PERMIT

NAD 83/
NA 2011



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF GREENVILLE.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

PLANS: 50 25 0 50 100
PROFILE (HORIZONTAL): 50 25 0 50 100
PROFILE (VERTICAL): 10 5 0 10 20

DESIGN DATA

ADT 2019 = 13800 NBL
14740 SBL
ADT 2039 = 17250 NBL
K = 8 %
D = 55 %
T = 6 % *
V = 50 MPH
* TTST = 3% DUAL 3%
FUNC CLASS =
PRINCIPAL ARTERIAL
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4786	=	*0.133 mile*
LENGTH STRUCTURES TIP PROJECT B-4786	=	*0.104 mile*
TOTAL LENGTH TIP PROJECT B-4786	=	*0.237 mile*

Prepared For:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610
By:

TGS ENGINEERS
706 HILLSBOROUGH ST
SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MAY 18, 2018

LETTING DATE:
DECEMBER 17, 2019

V. MARCUS LOWERY, PE
PROJECT ENGINEER

DAVID STUTTS, PE
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

3/22/2019
X:\NCDOT\B-4786\Hydraulics\PERMITS_Environmental\Drawings\B-4786_wet_tsh.dgn
User:dpetty

Submitted 12/21/2021

PROJECT REFERENCE NO.	SHEET NO.
B-4786	04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PITT COUNTY
BRIDGE #730038

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
706 HILLSBOROUGH ST. SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

REVISIONS 8/17/99

NAD 83 /NA 2011

BEGIN TIP PROJECT B-4786
-L- POC Sta. 22+00.00

T T DENOTES TEMPORARY FILL IN WETLAND

PERMIT DRAWING SHEET 2 OF 9

APPROX. LOCATION OF PROPOSED SOUTH TAR RIVER GREENWAY, PHASE 3 (EB-5539)

ATLANTIC-PACIFIC PROPERTIES, LLC
ISAAC A. ARTIS, JR.
ISAAC A. ARTIS, ET UX
DAISY MAE HIGHSMITH
DANNATA LAKIA LUNSFORD
JEFFREY HAGANS, ET UX
JOHN PAGE HEIRS
ULYSSES GRANT BELL, III, ET UX
JO ANN B. STATON
JACQUELINE SCOTT SMITH
LYMAN EARL SCOTT, ET UX
WALTER BOLDEN
WILLIAM D. DAVIS
RUEBELL HYMAN, ET UX
MARTY REARDON
PATRICIA GRIMES SHORT, ET UX
VIVIAN CRUMP
MICHAEL L. WILSON, ET UX
ROY CLAYTON EVERETT
ULYSSES G. BELL, JR.
NASSEEM AWARTANI
RUEBELL HYMAN HARDY, ET UX
BENJAMIN F. JOHNSON, ET UX
M. R. CHANDLER COMPANY, LLC
TIMANNA C. HENDERSON
CALVIN BECKETT HEIRS
THE STATE HIGHWAY AND PUBLIC WORKS COMMISSION
THE CITY OF GREENVILLE, NORTH CAROLINA

-GPS 3- -BL-5 BM#1 BM#2

N 16°33'49.0" E -L-

US 13/NC 11/NC 903 (MEMORIAL DRJ SBL VARIABLE WIDTH BST

US 13/NC 11/NC 903 (MEMORIAL DRJ NBL VARIABLE WIDTH BST

US 13/NC 11/NC 903 (MEMORIAL DRJ SBL 30' BST

US 13/NC 11/NC 903 (MEMORIAL DRJ NBL 30' BST

TO NC 43

RETAIN

RETAIN SYSTEM

CROSSING SIGNAL

TAR RIVER

GREENVILLE UTILITIES COMMISSION

30' UTILITY EASEMENT

DRAINAGE EASEMENT

20' SOUTH TAR RIVER GREENWAY EASEMENT

APPROX. LOCATION OF PROPOSED SOUTH TAR RIVER GREENWAY, PHASE 3 (EB-5539)(BY OTHERS)

USE ROCK PLATING FROM -L- STA 23+75 +/- TO 25+49 +/- RT
EXTEND ROCK PLATING LIMITS TO 2.5:1 SLOPES
CLASS II RIP RAP

CLASS B RIP RAP

CONCEPTUAL TEMPORARY ACCESS ROAD (CONTRACTOR DESIGNED)

SCALE 1" = 50'

SITE 1

50' 0' 50' 100'
25'

SEE SHEET 06 FOR -L- PROFILE

RADII DIMENSIONS ARE TO FACE OF CURB (F/C) UNLESS OTHERWISE NOTED

MATCHLINE -L- STA. 24+50.00
SEE SHEET 05

10/18/2021
X:\TGS\B-4786\Hydraulics\PERMITS_Environmental\Drawings\B-4786_wet_psh04.dgn
User:rgu

Submitted 12/21/2021

PROJECT REFERENCE NO.	SHEET NO.
B-4786	04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PITT COUNTY
BRIDGE #730038

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
706 HILLSBOROUGH ST. SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

REVISIONS 8/17/99

NAD 83 /NA 2011

BEGIN TIP PROJECT B-4786
-L- POC Sta. 22+00.00

T T DENOTES TEMPORARY FILL IN WETLAND

PERMIT DRAWING SHEET 3 OF 9

APPROX. LOCATION OF PROPOSED SOUTH TAR RIVER GREENWAY, PHASE 3 (EB-5539)

ATLANTIC-PACIFIC PROPERTIES, LLC
DANNATA LAKIA LUNSFORD
JEFFREY HAGANS, ET UX
DAISY MAE HIGHSMITH
ISAAC A. ARTIS, JR.
ISAAC A. ARTIS, ET UX
JOHN PAGE HEIRS
GREENVILLE UTILITIES COMMISSION
30' UTILITY EASEMENT
DRAINAGE EASEMENT
WOODS
TAR RIVER
ULYSSES GRANT BELL, III, ET UX
JO ANN B. STATON
JACQUELINE SCOTT SMITH
LYMAN EARL SCOTT, ET UX
WALTER BOLDEN
WILLIAM D. DAVIS
RUEBELL HYMAN, ET UX
MARTY REARDON
PATRICIA GRIMES SHORT, ET UX
VIVIAN CRUMP
MICHAEL L. WILSON, ET UX
ROY CLAYTON EVERETT
ULYSSES G. BELL, JR.
NASSEEM AWARTANI
RUEBELL HYMAN HARDY, ET UX
BENJAMIN F. JOHNSON, ET UX
M. R. CHANDLER COMPANY, LLC
TIMANNA C. HENDERSON
THE STATE HIGHWAY AND PUBLIC WORKS COMMISSION
CALVIN BECKETT HEIRS
THE CITY OF GREENVILLE, NORTH CAROLINA
US 13/NC 11/NC 903 (MEMORIAL DRJ SBL VARIABLE WIDTH BST
US 13/NC 11/NC 903 (MEMORIAL DRJ NBL VARIABLE WIDTH BST
US 13/NC 11/NC 903 (MEMORIAL DRJ NBL 30' BST
N 16°33'49.0" E
-L-
-GPS 3-
BL-5
BM#1
BM#2
RETAIN
RETAIN SYSTEM
CROSSING SIGNAL
2GI
15" RCP-IV
ELBOW
CSP
RETAIN
CLASS B RIP RAP
USE ROCK PLATING FROM -L- STA 23+75 +/- TO 25+49 +/- RT EXTEND ROCK PLATING LIMITS TO 2.5:1 SLOPES CLASS II RIP RAP
APPROX. LOCATION OF PROPOSED SOUTH TAR RIVER GREENWAY, PHASE 3 (EB-5539)(BY OTHERS)
DRAINAGE EASEMENT
20' SOUTH TAR RIVER GREENWAY EASEMENT
SCALE 1"=50'
CONCEPTUAL TEMPORARY ACCESS ROAD (CONTRACTOR DESIGNED)
SITE 1

MATCHLINE -L- STA. 24+50.00
SEE SHEET 05

50' 0' 50' 100'
25'

SEE SHEET 06 FOR -L- PROFILE

RADII DIMENSIONS ARE TO FACE OF CURB (F/C) UNLESS OTHERWISE NOTED

10/18/2021
X:\TGS\B-4786\Hydraulics\PERMITS_Environmental\Drawings\B-4786_wet_psh04.dgn
User:rgu

Submitted 12/21/2021

T T DENOTES TEMPORARY FILL IN WETLAND

PERMIT DRAWING
SHEET 4 OF 9

END TIP PROJECT B-4786
-L- POT Sta. 34+50.00

PITT COUNTY
BRIDGE #730038

NAD 83 /NA 2011

PROJECT REFERENCE NO.	SHEET NO.
B-4786	05
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
706 HILLSBOROUGH ST. SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

CONTRACTOR SHALL MAINTAIN MINIMUM
70 FT. GAP FOR DURATION OF CONSTRUCTION

CONTACTOR MAY ELECT TO INSTALL A CONTINUOUS TEMPORARY WORK BRIDGE WITH MINIMUM LOW CHORD ELEVATION OF 23 FT.

MATCHLINE -L- STA. 24+50.00
SEE SHEET 04

REVISIONS 8/17/99

PITT COUNTY-CITY OF GREENVILLE AIRPORT AUTHORITY

WOODS

TAR RIVER

EXISTING R/W

VIRGINIA ELECTRIC & POWER CO. 150' UTILITY EASEMENT

GREENVILLE UTILITIES COMMISSION 100' UTILITY EASEMENT

MTL

FALLOW

RETAIN

8" CMP

CONC

PLACE STEEL PLATE OVER 2GI DURING DETOUR

REMOVE 2GI

2GI

15" RCP-IV

TB 2GI 15"

BL-9

BL-7

REMOVE CB

APPROX. LOCATION OF PROPOSED SOUTH TAR RIVER GREENWAY, PHASE 3 (EB-5539)(BY OTHERS)

MINIMUM 70 FT. GAP

12" ACP

BM#4

ELBOW

15" CSP

CLASS B RIP RAP

USE ROCK PLATING FROM -L- STA. 30+87 +/- TO 31+75 +/- RT EXTEND ROCK PLATING LIMITS TO 2.5:1 SLOPES CLASS II RIP RAP

USE ROCK PLATING FROM -L- STA 23+75 +/- TO 25+49 +/- RT EXTEND ROCK PLATING LIMITS TO 2.5:1 SLOPES CLASS II RIP RAP

24" PVC

30' UTILITY EASEMENT

1 CALVIN BECKETT HEIRS

2 PITT COUNTY-CITY OF GREENVILLE AIRPORT AUTHORITY

CONCEPTUAL TEMPORARY ACCESS ROAD (CONTRACTOR DESIGNED)

CONCEPTUAL TEMPORARY WORK BRIDGE (CONTRACTOR DESIGNED)

THE HISTORIC HIGH WATER MARK COULD NOT BE DETERMINED BY PHYSICAL OR PAROLE EVIDENCE

CONCEPTUAL TEMPORARY ACCESS ROAD (CONTRACTOR DESIGNED)

TEMPORARY FILL IN WETLANDS

SCALE
1" = 50'

SITE 1

SITE 2

50' 0' 50' 100'
25'

10/18/2021
W:\B-4786\Hydraulics\PERMITS_Environmental\Drawings\B-4786_wet_psh05.dgn
User:kgray

Submitted 12/21/2021

T T DENOTES TEMPORARY FILL IN WETLAND

PERMIT DRAWING
SHEET 5 OF 9

CONTRACTOR SHALL MAINTAIN MINIMUM 70 FT. GAP FOR DURATION OF CONSTRUCTION

CONTACTOR MAY ELECT TO INSTALL A CONTINUOUS TEMPORARY WORK BRIDGE WITH MINIMUM LOW CHORD ELEVATION OF 23 FT.

END TIP PROJECT B-4786
-L- POT Sta. 34+50.00

PITT COUNTY
BRIDGE #730038

NAD 83 /NA 2011

PROJECT REFERENCE NO.	SHEET NO.
B-4786	05
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
706 HILLSBOROUGH ST. SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

REVISIONS 8/17/99

MATCHLINE -L- STA. 24+50.00
SEE SHEET 04

PITT COUNTY-CITY OF GREENVILLE AIRPORT AUTHORITY

WOODS

FALLOW

EXISTING R/W

TAR RIVER

JS

TB

BZ 1

BZ 2

RETAIN

REMOVE 2GI

PLACE STEEL PLATE OVER 2GI DURING DETOUR

2GI

15" RCP-IV

TB 2GI 15"

REMOVE CB

APPROX. LOCATION OF PROPOSED SOUTH TAR RIVER GREENWAY, PHASE 3 (EB-5539)(BY OTHERS)

MINIMUM 70 FT. GAP

ELBOW

15" CSP

CLASS B RIP RAP

USE ROCK PLATING FROM -L- STA. 30+87 +/- TO 31+75 +/- RT EXTEND ROCK PLATING LIMITS TO 2.5:1 SLOPES CLASS II RIP RAP

USE ROCK PLATING FROM -L- STA 23+75 +/- TO 25+49 +/- RT EXTEND ROCK PLATING LIMITS TO 2.5:1 SLOPES CLASS II RIP RAP

1 CALVIN BECKETT HEIRS

2 PITT COUNTY-CITY OF GREENVILLE AIRPORT AUTHORITY

CONCEPTUAL TEMPORARY ACCESS ROAD (CONTRACTOR DESIGNED)

CONCEPTUAL TEMPORARY WORK BRIDGE (CONTRACTOR DESIGNED)

THE HISTORIC HIGH WATER MARK COULD NOT BE DETERMINED BY PHYSICAL OR PAROLE EVIDENCE

CONCEPTUAL TEMPORARY ACCESS ROAD (CONTRACTOR DESIGNED)

TEMPORARY FILL IN WETLANDS

SCALE 1" = 50'

SITE 1

SITE 2

50' 0' 50' 100'
25'

10/18/2021
X:\NCDOT\B-4786\Hydraulics\PERMITS_Environmental\Drawings\B-4786_wet_psh05.dgn
User:kgray

5/28/99

PERMIT DRAWING
SHEET 6 OF 9

–L–
US 13

TGS ENGINEERS
706 HILLSBOROUGH ST. SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

PROJECT REFERENCE NO.	SHEET NO.
B-4786	06
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EXISTING GROUND
PROPOSED GRADE
LEFT DITCH GRADE
RIGHT DITCH GRADE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

BM#1 ELEVATION = 42.35'
N 682701' E 2477934'
-L- STA. 15+33 50' RT.
BM-A RR SPIKE SET IN BASE OF 36" TWIN WATER OAK (72" DIAMETER BASE)

BM#2 ELEVATION = 32.23'
N 683236' E 2478119'
-L- STA. 21+09 39' RT.
BM-B RR SPIKE SET IN BASE OF 14" ELM

BEGIN GRADE
-L- STA. 22+00.00
ELEV=27.86'

-L- STA 17+59.45 TO -L- STA 22+00.00
MAINTAIN EXISTING GRADE
(MILL & FILL 1.5")

PI = 23+50.00
EL = 27.36'
VC = 250'
K = 193

(-)0.3333%
(+)0.9644%

US 13 INTERSECTION W/ WEST 3RD STREET

CONCEPTUAL TEMPORARY ACCESS ROAD (CONTRACTOR DESIGNED)

CONTRACTOR SHALL MAINTAIN MINIMUM 70 FT. GAP FOR DURATION OF CONSTRUCTION

CONTACTOR MAY ELECT TO INSTALL A CONTINUOUS TEMPORARY WORK BRIDGE WITH MINIMUM LOW CHORD ELEVATION OF 23 FT.

PI = 28+00.00
EL = 31.70'
VC = 650'
K = 342

BEGIN BRIDGE
-L- STA. 25+28.00

LOW SIDE LOW CHORD

END BRIDGE
-L- STA. 30+78.00

(+)0.9644%
(-)0.9382%

REMOVE EXISTING BRIDGE

MINIMUM 70 FT. GAP

CLASS II RIP RAP KEY-IN 3.5' (TYP.)

1.5:1 NORMAL SLOPE (RIP RAP) (TYP.)

EX. CONCRETE SLOPING ABUTMENTS TO BE RETAINED (TYP.)

PROPOSED EXCAVATION TO ELEV. 19.0' (TYP.)

NORMAL WSEL=1'

CONCEPTUAL TEMPORARY ACCESS ROAD (CONTRACTOR DESIGNED)

CONCEPTUAL TEMPORARY WORK BRIDGE (CONTRACTOR DESIGNED)

BM#3 ELEVATION = 26.64'
N 684104' E 2478695'
-L- STA. 31+55.17' RT.
BM-C RR SPIKE SET IN ASPHALT SHOULDER

PI = 33+50.00
EL = 26.54'
VC = 200'
K = 649

(-)0.9382%
(-)0.6300%

END GRADE
-L- STA. 34+50.00
ELEV=25.91'

-L- STA 34+50 TO -L- STA 38+12.09
MAINTAIN EXISTING GRADE
(MILL & FILL 1.5")

BM#4 ELEVATION = 24.66'
N 684485' E 2478968'
-L- STA. 36+24 19' RT.
BM-D RR SPIKE SET IN ASPHALT SHOULDER

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 45200	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 22.9	FT
BASE DISCHARGE	= 53100	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 24.3	FT
OVERTOPPING DISCHARGE	= 47600	CFS
OVERTOPPING FREQUENCY	= 50+	YRS
OVERTOPPING ELEVATION	= 23.2	FT
		FT
DATE OF SITE VISIT	= 9/8/2017	
W.S.ELEVATION AT DATE OF SITE VISIT	= 1	FT

FOR –L– PLAN SEE SHEETS 04 & 05

$$$$$$$$SYSTEM$$$$$$$$
$$$$$$$$USERNAME$$$$$$$$
$$$$$$$$DGN$$$$$$$$
$$$$$$$$FILE$$$$$$$$

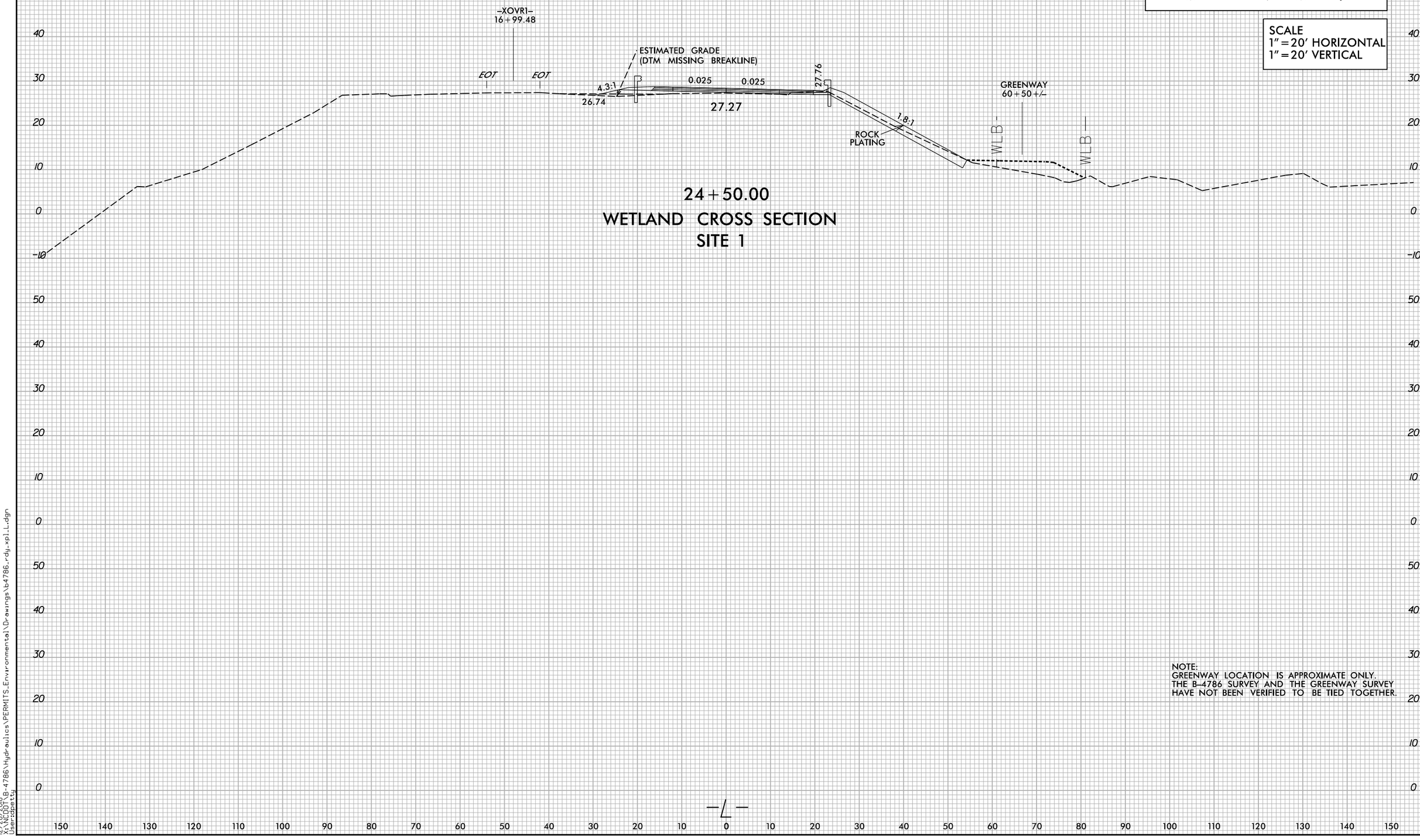
Submitted 12/21/2021

8/23/99

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	B-4786	X-4

PERMIT DRAWING
SHEET 7 OF 9

SCALE
1" = 20' HORIZONTAL
1" = 20' VERTICAL



24+50.00
WETLAND CROSS SECTION
SITE 1

NOTE:
GREENWAY LOCATION IS APPROXIMATE ONLY.
THE B-4786 SURVEY AND THE GREENWAY SURVEY HAVE NOT BEEN VERIFIED TO BE TIED TOGETHER.

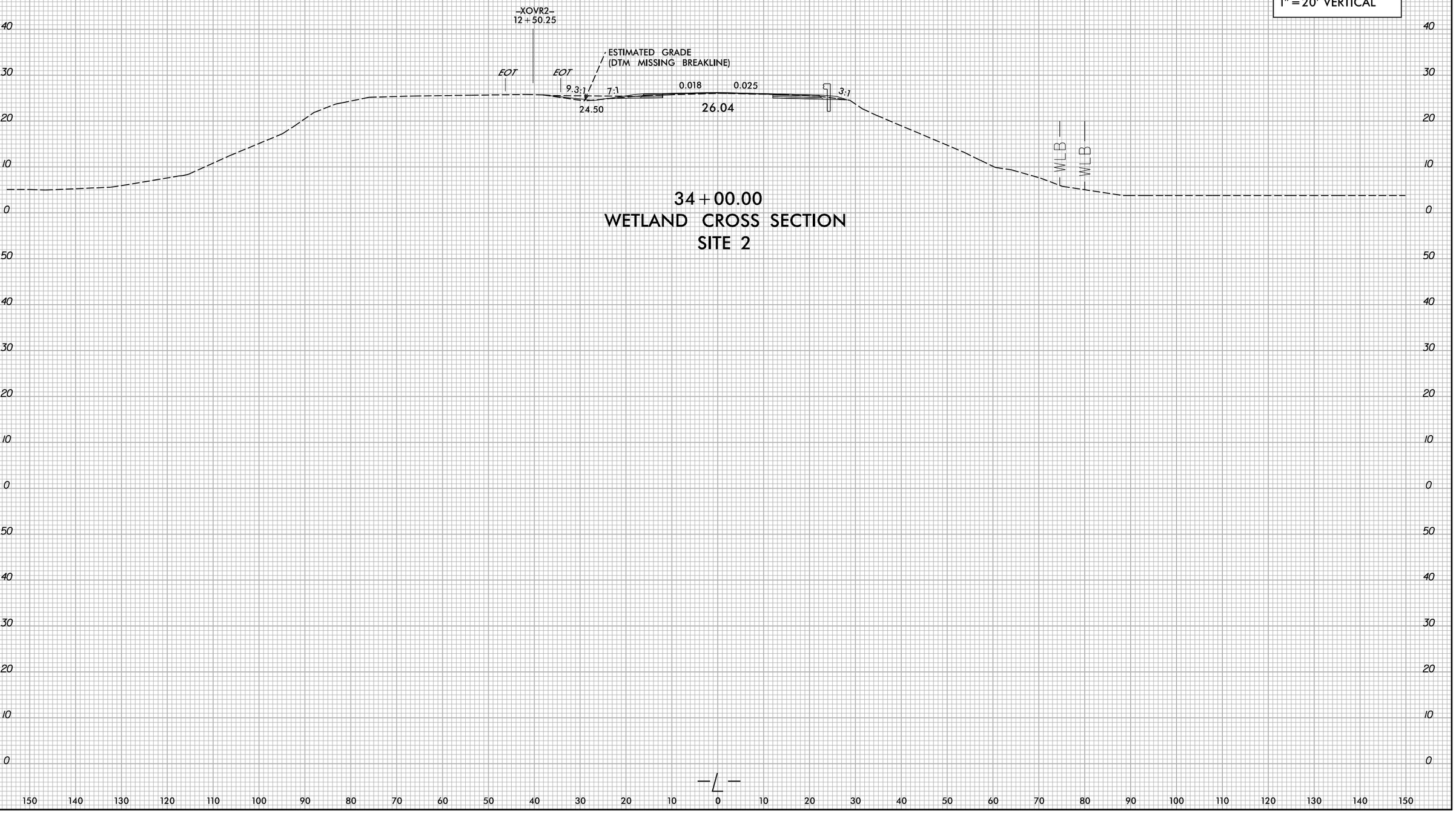
12/28/2018
K:\NCDOT\B-4786\Hydraulics\PERMITS_Environmental\Drawings\b4786_rdy_xpl_L.dgn
User:dpettu

8/23/99

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	B-4786	X-10

PERMIT DRAWING
SHEET 8 OF 9

SCALE
1″=20′ HORIZONTAL
1″=20′ VERTICAL



34+00.00
WETLAND CROSS SECTION
SITE 2

12/28/2018
K:\NCDOT\B-4786\Hydraulics\PERMITS.Environmental\Drawings\b4786_rdy_xsll.dgn
User:dpetty

Submitted 12/21/2021

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	-L- 22+70 RT / 25+54 RT	Temporary Access Road		0.10								
2	-L- 32+43 RT / 34+50 RT	Temporary Access Road		0.01								
TOTALS*:				0.11						0	0	0

*Rounded totals are sum of actual impacts

NOTES:

<0.01 acres of Permanent SW impacts for bridge interior bents (drilled shafts) at -L- 26+65, 27+30, 27+95, 28+60 & 29+25.

<0.01 acres of Temporary SW impacts for temporary workbridge interior bents (likely pipe piles) between -L- 26+15 & 29+70.

Revised 2016 09 09

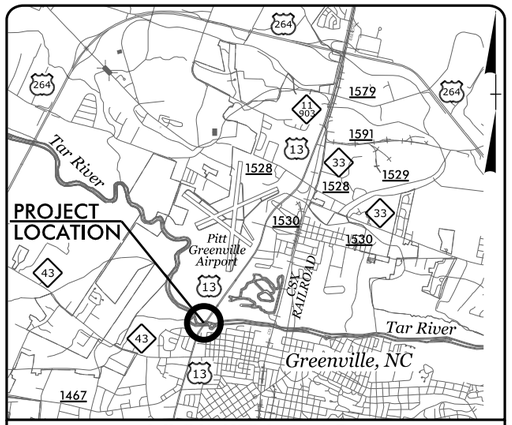
NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
3/22/2019
Pitt County
B-4786
PROJECT: 38222.1.FR2

09/08/99

TIP PROJECT: B–4786

CONTRACT:

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Plan Sheet Symbols
See Sheet 1C-1 Through 1C-? For Survey Control Sheets



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PITT COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B–4786	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
38222.1.FR2	BRSTP–0013(041)	PE
38222.2.2	BRSTP–0013(041)	R/W, UTIL

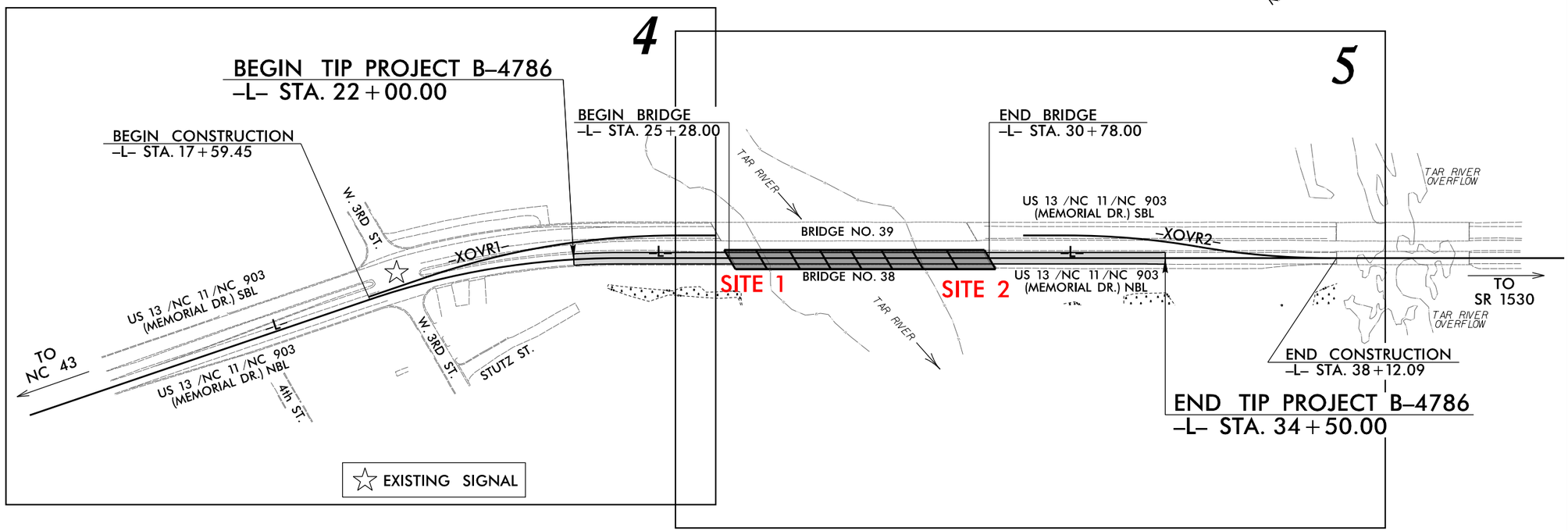
LOCATION: REPLACE BRIDGE NO. 38 OVER THE TAR RIVER ON US 13 IN GREENVILLE

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

BUFFER IMPACTS PERMIT

BUFFER DRAWING SHEET 1 OF 3

NAD 83/NA 2011



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF GREENVILLE.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

PLANS: 50 25 0 50 100
PROFILE (HORIZONTAL): 50 25 0 50 100
PROFILE (VERTICAL): 10 5 0 10 20

DESIGN DATA

ADT 2019 = 13800 NBL
14740 SBL
ADT 2039 = 17250 NBL
K = 8 %
D = 55 %
T = 6 % *
V = 50 MPH
* TTST = 3% DUAL 3%
FUNC CLASS = PRINCIPAL ARTERIAL REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B–4786	=	*0.133 mile*
LENGTH STRUCTURES TIP PROJECT B–4786	=	*0.104 mile*
TOTAL LENGTH TIP PROJECT B–4786	=	*0.237 mile*

Prepared For:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

By:
TGS ENGINEERS
706 HILLSBOROUGH ST
SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: MAY 18, 2018

LETTING DATE: DECEMBER 17, 2019

V. MARCUS LOWERY, PE
PROJECT ENGINEER

DAVID STUTTS, PE
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: *P.E.*

ROADWAY DESIGN ENGINEER

SIGNATURE: *P.E.*

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

12/28/2018
X:\NCDOT\B-4786\Hydraulics\PERMITS_Environmental\Drawings\B-4786_wet_tsh_buf.dgn
User:dpetty

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

BUFFER DRAWING SHEET 2 OF 3

END TIP PROJECT B-4786
-L- POT Sta. 34+50.00

PITT COUNTY
BRIDGE #730038

NAD 83 /NA 2011

PROJECT REFERENCE NO.	SHEET NO.
B-4786	05
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
706 HILLSBOROUGH ST., SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

CONTRACTOR SHALL MAINTAIN MINIMUM 70 FT. GAP FOR DURATION OF CONSTRUCTION

CONTACTOR MAY ELECT TO INSTALL A CONTINUOUS TEMPORARY WORK BRIDGE WITH MINIMUM LOW CHORD ELEVATION OF 23 FT.

MATCHLINE -L- STA. 24+50.00
SEE SHEET 04

SITE 1

SITE 2

MINIMUM 70 FT. GAP

APPROX. LOCATION OF PROPOSED SOUTH TAR RIVER GREENWAY, PHASE 3 (EB-5539)(BY OTHERS)

EXISTING TRANSPORTATION FACILITY (TYP.)

CONCEPTUAL TEMPORARY ACCESS ROAD (CONTRACTOR DESIGNED)

CONCEPTUAL TEMPORARY WORK BRIDGE (CONTRACTOR DESIGNED)

THE HISTORIC HIGH WATER MARK COULD NOT BE DETERMINED BY PHYSICAL OR PAROLE EVIDENCE

CONCEPTUAL TEMPORARY ACCESS ROAD (CONTRACTOR DESIGNED)

1 CALVIN BECKETT HEIRS

2 PITT COUNTY-CITY OF GREENVILLE AIRPORT AUTHORITY

TAR RIVER

WOODS

FALLOW

EXISTING R/W

USE ROCK PLATING FROM -L- STA 23+75+/- TO 25+49+/- RT EXTEND ROCK PLATING LIMITS TO 2.5:1 SLOPES CLASS II RIP RAP

USE ROCK PLATING FROM -L- STA 30+87+/- TO 31+75+/- RT EXTEND ROCK PLATING LIMITS TO 2.5:1 SLOPES CLASS II RIP RAP

CLASS B RIP RAP

PLACE STEEL PLATE OVER 2GI DURING DETOUR

REMOVE 2GI

RETAIN

REMOVE

ELBOW

15" CSP

15" RCP-IV

2GI

12" ACP

24" PVC

8" CMP

15" CMP

10' PDE

30' UTILITY EASEMENT

VIRGINIA ELECTRIC & POWER CO. 100' UTILITY EASEMENT

GREENVILLE UTILITIES COMMISSION 100' UTILITY EASEMENT

50' 0' 50' 100'
25'

REVISIONS 8/17/99

10/18/2021
X:\NCDOT\B-4786\Hydraulics\PERMITS_Environmental\Drawings\B-4786_buf_psh05.dgn
User:kgray

Submitted 12/21/2021

RIPARIAN BUFFER IMPACTS SUMMARY

			IMPACT									BUFFER REPLACEMENT	
			TYPE			ALLOWABLE			MITIGABLE				
SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft^2)	ZONE 2 (ft^2)	TOTAL (ft^2)	ZONE 1 (ft^2)	ZONE 2 (ft^2)	TOTAL (ft^2)	ZONE 1 (ft^2)	ZONE 2 (ft^2)
1	Roadway	-L- 25+45/26+21		X		2,872	996	3,868					
2	Roadway	-L- 29+25/30+46		X		3,407	2,321	5,728					
TOTAL:						6,279	3,317	9,596	0	0	0	0.0	0.0

Notes:

There are no wetland impacts within buffer impacts on this project.

N.C. DEPT. OF TRANSPORTATION

DIVISION OF HIGHWAYS

B-4786

PITT COUNTY

PROJECT: 38222.1.FR2

DATE 12/28/2018

SHEET 3 OF 3

Rev. SEP 2016