



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. ERIC BOYETTE  
SECRETARY

December 11, 2020

U.S. Army Corps of Engineers  
151 Patton Avenue, Room 208  
Asheville, NC 28801-5006

ATTN: Ms. Crystal Amschler  
NCDOT Coordinator

Subject: **Application for Section 404 Nationwide Permit 13 and 33** for the Proposed Replacement of Bridge 11 on NC 109 over Deadfall Creek in Anson County, Division 10, WBS 45771.1.1, TIP No. B-5818.

Dear Madam:

The North Carolina Department of Transportation (NCDOT) proposes to replace bridge number 11 on NC 109 with a new bridge downstream of the existing alignment. Traffic will utilize the existing bridge during construction.


As a result of replacing the existing bridge, there will be 66 linear feet of stream bank stabilization at the location of the existing bridge and at the outlet of new ditches, and <0.01 acre of temporary stream impacts from temporary impervious dikes causeways needed for removal of the existing bridge and installation of bank stabilization.

Please see enclosed copies of the Pre-Construction Notification (PCN), which includes the following attachments: pre-filing notification documentation, mussel survey memo, Catawba response letter, Stormwater Management Plan, and Permit Drawings. A Minimum Criteria Determination Checklist (MCDC) was completed in November 2018 and distributed shortly thereafter.

This project calls for a letting date of March 16, 2021 and a review date of January 26, 2021.

A copy of this permit application and its distribution list will be posted on the NCDOT Website at: <http://connect.ncdot.gov/resources/Environmental>. If you have any questions or need additional information, please contact Erin Cheely at [ekcheely@ncdot.gov](mailto:ekcheely@ncdot.gov) or (919) 707-6108.

Sincerely,

  
Philip S. Harris III, P.E., C.P.M.  
Environmental Analysis Unit Head

cc: NCDOT Permit Application Standard Distribution List

Mailing Address:  
NC DEPARTMENT OF TRANSPORTATION  
ENVIRONMENTAL ANALYSIS UNIT  
1598 MAIL SERVICE CENTER  
RALEIGH NC 27699-1598

Telephone: (919) 707-6000  
Customer Service: 1-877-368-4968  
Website: [www.ncdot.gov](http://www.ncdot.gov)

Location:  
1000 BIRCH RIDGE DRIVE  
RALEIGH NC 27610



## Pre-Construction Notification (PCN) Form

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

October 26, 2020 Ver 3.3

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

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

Anson

#### 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-5818

#### WBS # \*

45771.1.1

(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)

This form may be used to initiate the standard/individual permit process with the Corps. Please contact your Corps representative concerning submittals for standard permits. All required items that are not provided in the E-PCN can be added to the miscellaneous upload area located at the bottom of this form.

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

Yes  No

Nationwide Permit (NWP) Number:

13 - Bank Stabilization

Nationwide Permit (NWP) Number:

33 - Temporary Construction

#### NWP Numbers (for multiple NWPS):

List all NW 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 Permit
- 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.

ID#

Version

### Pre-filing Meeting or Request Date \*

9/28/2020

### Attach documentation of Pre-Filing Meeting Request here: \*

B-5818 401 Pre-Filing Notification (Mass 12 MLL Request) 2020-09-28.pdf

417.96KB

### 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? \*

NCDOT

### 1b. Primary Contact Email: \*

ekcheely@ncdot.gov

### 1c. Primary Contact Phone: \*

(xxx)xxx-xxxx  
(919)707-6108

### 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: \*

NC Department of Transportation

### 2b. Deed book and page no.:

### 2c. Responsible party:

(for Corporations)

### 2d. Address \*

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

Postal / Zip Code

27699

State / Province / Region

NC

Country

US

2e. Telephone Number: \*

(xxx)xxx-xxxx

(919)707-6108

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: \*

B-5818: Replace Bridge 11 over Deadfall Creek on NC 109

1b. Subdivision name:

(if appropriate)

1c. Nearest municipality / town: \*

Lowrys

### 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: \*

34.826772

ex: 34.208504

Longitude: \*

-80.194570

-77.796371

### 3. Surface Waters

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

Deadfall Creek

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

C

Surface Water Lookup

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

Yadkin-PeeDee

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

03040201

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: \*

Surrounding land use is primarily agricultural and forested interspersed with residential.

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

Yes  No  Unknown

4d. Attach an 8 1/2 X 11 excerpt from the most recent version of the USGS topographic map indicating the location of the project site. (for DWR)

[Click the upload button or drag and drop files here to attach document](#)

File type must be pdf

4e. Attach an 8 1/2 X 11 excerpt from the most recent version of the published County NRCS Soil Survey map depicting the project site. (for DWR)

[Click the upload button or drag and drop files here to attach document](#)

File type must be pdf

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

0.07

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

(intermittent and perennial)

1585

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

Replace a structurally deficient bridge (sufficiency rating 49.51 out of 100 and substructure condition appraisal 4 out of 9) that is approaching the end of its useful life to provide a safe crossing.

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

This project is the replacement of NCDOT Bridge #11. The existing 120', 3 span bridge will be replaced with a 130', single span girder bridge approximately 50' downstream of the existing alignment. Traffic will be maintained on the existing bridge during construction. Standard road building equipment such as trucks, dozers, and cranes will be used.

4j. Please upload project drawings for the proposed project.

[Click the upload button or drag and drop files here to attach document](#)

B-5818 Final Permit Drawings.pdf

3.26MB

File type must be pdf

## 5. Jurisdictional Determinations

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

Yes  No  Unknown

Comments:

The only resource identified in the study area being impacted is the perennial named stream, Deadfall Creek.

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): Hal Bain and Pete Stafford

Agency/Consultant Company: RK&K

Other:

5d1. Jurisdictional determination upload

[Click the upload button or drag and drop files here to attach document](#)

File type must be PDF

## 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.

No.

## 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

### 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 <sup>*</sup> (?)	3b. Impact type <sup>*</sup>	3c. Type of impact <sup>*</sup>	3d. S. name <sup>*</sup>	3e. Stream Type <sup>*</sup> (?)	3f. Type of Jurisdiction <sup>*</sup>	3g. S. width <sup>*</sup>	3h. Impact length <sup>*</sup>
S1	Impervious dike	Temporary	Dewatering	Deadfall Creek	Perennial	Both	28 Average (feet)	6 (linear feet)
S2	Bank stabilization under old bridge	Permanent	Bank Stabilization	Deadfall Creek	Perennial	Both	28 Average (feet)	46 (linear feet)
S3	Bank stabilization at ditch outlets	Permanent	Bank Stabilization	Deadfall Creek	Perennial	Both	28 Average (feet)	20 (linear feet)

\*\* 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:**

66

**3i. Total temporary stream impacts:**

6

**3i. Total stream and ditch impacts:**

72

**3j. Comments:**

Temporary impacts from impervious dikes total 52 linear feet (<0.01 acre), but 46 linear feet of these impacts overlap with the bank stabilization under the old bridge.

## 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 existing drainage patterns are being maintained. All proposed ditches will flow towards the creek. There will be 6" vertical PVC pipe slots at both ends of the bridge to convey runoff and meet the requirements of 4' allowable spread. The deck drains will not discharge directly above the stream. At the end of the bridge, two TB2GIs are placed in the shoulder berm gutters to convey the bridge runoff to the floodplain areas with Class B riprap outlet protection. The abutments of the bridge will be protected by Class II riprap to prevent future erosion and stream migration.

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

Temporary impervious dikes will be utilized during the installation of bank stabilization. Traffic will be maintained on the existing bridge during construction. NCDOT will adhere to Best Management Practices for Construction and Maintenance Activities.

### 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:**

The NCDOT does not propose mitigation for the temporary and bank stabilization impacts associated with this project. These impacts do not require permanent fill in the stream bed, therefore, under Section 404 of the Clean Water Act, do not constitute Loss of Waters of the U.S., and are not subject to compensatory mitigation.

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

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

**If no, explain why:**

No buffered resources within 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:**



## 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

### NEPA or SEPA Final Approval Letter

[Click the upload button or drag and drop files here to attach document](#)

B-5818 2018-11-26 MCDC.pdf

1.31MB

FILETYPE MUST BE PDF

## 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 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

5d. Is another Federal agency involved? \*

Yes  No  Unknown

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

Yes  No

5f. Will you cut any trees in order to conduct the work in waters of the U.S.? \*

Yes  No

5g. Does this project involve bridge maintenance or removal? \*

Yes  No

5g(1). If yes, have you inspected the bridge for signs of bat use such as staining, guano, bats, etc.? Representative photos of signs of bat use can be found in the NLEB SLOPES, Appendix F, pages 3-7.

Yes  No

Link to the NLEB SLOPES document: [http://saw-reg.usace.army.mil/NLEB/1-30-17-signed\\_NLEB-SLOPES&apps.pdf](http://saw-reg.usace.army.mil/NLEB/1-30-17-signed_NLEB-SLOPES&apps.pdf)

If you answered "Yes" to 5g(1), did you discover any signs of bat use? \*

Yes  No  Unknown

\*\*\* If yes, please show the location of the bridge on the permit drawings/project plans.

5h. Does this project involve the construction/installation of a wind turbine(s)? \*

Yes  No

5i. Does this project involve (1) blasting, and/or (2) other percussive activities that will be conducted by machines, such as jackhammers, mechanized pile drivers, etc.? \*

Yes  No

If yes, please provide details to include type of percussive activity, purpose, duration, and specific location of this activity on the property.

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

File must be PDF

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

As of 7/17/20, the USFWS lists three protected species for Anson County. Red-cockaded woodpecker is listed as historical for Anson County, therefore surveys are not required for this species. However, there is no habitat present for red-cockaded woodpecker within the project area. There is habitat present for Schweinitz's sunflower, and the most recent survey for this species was conducted in October 2019, and no individuals were found.

Surveys for Carolina heelsplitter were conducted in 2016 and 2018 (2018 survey report included with this ePCN). While habitat is present for this species, no individuals were found during either survey. As USACE is the lead agency for this project, NCDOT cannot render a biological conclusion, but per recent guidance from USFWS, when there is aquatic habitat present, a biological conclusion of May Affect, Not Likely to Adversely Affect is usually recommended.

NMFS lists Atlantic and shortnose sturgeon in this area, but per Fritz Rohde from NOAA Marine Fisheries, there is no habitat present for either of these species within the project vicinity.

**Consultation Documentation Upload**

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

B-5818 Mussel Survey Report 2019.pdf

2.06MB

File type must be PDF

## 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/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? \***

Tribal coordination

**7c. Historic or Prehistoric Information Upload**

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

B-5818 Catawba Indian Nation Response.pdf

378.32KB

File must be PDF

## 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:**

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

FEMA Maps

## Miscellaneous



**Comments**

**Miscellaneous attachments not previously requested.**

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

B-5818 Cover Letter.pdf

288.03KB

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:\***

Michael Anthony Turchy

**Signature \***



*Michael Turchy*

**Date**

12/11/2020

## RE: Pre-Filing Notification for Raleigh Let Projects in the 12 MLL

Carpenter, Kristi <kristilynn.carpenter@ncdenr.gov>

Wed 10/21/2020 5:36 PM

**To:** Dagnino, Carla S <cdagnino@ncdot.gov>; Chapman, Amy <amy.chapman@ncdenr.gov>; Wanucha, Dave <dave.wanucha@ncdenr.gov>; Hood, Donna <donna.hood@ncdenr.gov>; Ridings, Rob <rob.ridings@ncdenr.gov>; Steenhuis, Joanne <joanne.steenhuis@ncdenr.gov>; Ward, Garcy <garcy.ward@ncdenr.gov>

**Cc:** Barrett, William A <wabarrett@ncdot.gov>; Cheely, Erin K <ekcheely@ncdot.gov>; Cashin, Gordon E <gcashin@ncdot.gov>; Rivenbark, Chris <crivenbark@ncdot.gov>; Dilday, Jason L <jldilday@ncdot.gov>; Hemphill, Jeffrey L <jhemphill@ncdot.gov>; Riffey, Deanna <driffey@ncdot.gov>; Turchy, Michael A <maturchy@ncdot.gov>; Murray, Christopher A <camurray@ncdot.gov>; Price, Gregory W <gwprice2@ncdot.gov>; Hining, Kevin J <kjhining@ncdot.gov>; Harris, Philip S <pharris@ncdot.gov>

 1 attachments (18 KB)

Pre Filing Notification List of Projects from 12 MLL Through Sept 21 to NCDWR (002).xlsx;

All,

Please see the attached spreadsheet which has added columns with the DWR project and version number for each project listed along a link to each project in Laserfiche.

All notifications are in our system with the original notification date of 9/28/2020.

Please utilize the added DWR information when sending the applications for the listed projects.

Please contact me if there are any questions/concerns.

Thanks,

Kristi Lynn Carpenter

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**From:** Dagnino, Carla S <cdagnino@ncdot.gov>

**Sent:** Monday, September 28, 2020 12:09 PM

**To:** Chapman, Amy <amy.chapman@ncdenr.gov>; Carpenter, Kristi <kristilynn.carpenter@ncdenr.gov>; Wanucha, Dave <dave.wanucha@ncdenr.gov>; Hood, Donna <donna.hood@ncdenr.gov>; Ridings, Rob <rob.ridings@ncdenr.gov>; Steenhuis, Joanne <joanne.steenhuis@ncdenr.gov>; Ward, Garcy <garcy.ward@ncdenr.gov>

**Cc:** Barrett, William A <wabarrett@ncdot.gov>; Cheely, Erin K <ekcheely@ncdot.gov>; Cashin, Gordon E <gcashin@ncdot.gov>; Rivenbark, Chris <crivenbark@ncdot.gov>; Dilday, Jason L <jldilday@ncdot.gov>; Hemphill, Jeffrey L <jhemphill@ncdot.gov>; Riffey, Deanna <driffey@ncdot.gov>; Turchy, Michael A <maturchy@ncdot.gov>; Murray, Christopher A <camurray@ncdot.gov>; Price, Gregory W <gwprice2@ncdot.gov>; Hining, Kevin J <kjhining@ncdot.gov>; Harris, Philip S <pharris@ncdot.gov>

**Subject:** Pre-Filing Notification for Raleigh Let Projects in the 12 MLL

All,

Please see the attached letter and request for the Pre-Filing Notification. We are not requesting a meeting for the attached projects and would like this letter and attachment to represent the notification in Laser Fiche.

If you have any questions about this, please contact me.

Thank you!

Carla

**Carla Dagnino**

Environmental Coordination and Permitting Group Leader

Environmental Analysis Unit

NC Department of Transportation

919 707 6110 Office

919 602 9452 Cell

[cdagnino@ncdot.gov](mailto:cdagnino@ncdot.gov)

1598 Mail Service Center

Raleigh, NC 27699 -1598

1000 Birch Ridge Drive

Raleigh, NC 27610

**Projects Potentially Requiring Notification per New 401 EPA Rule  
12 Month Let List SEPT 2020 - SEPT 2021 (from 36 Month Let List)**

DWR Rep	NCDOT Contact	Let Date	TIP	Let Type	Div	County	Project Description	Type of Previous DWR Correspondence	DWR #	Version #	Received Laserfiche Link
Wanucha	Bill Barrett	09/21/2021	B-5728	Raleigh Letting	7	Alamance	REPLACE BRIDGE 112 OVER REEDY FORK CREEK IN OSSIPEE ON NC 87	No Files found in Laserfiche	20201505	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326036&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326036&amp;dbid=0&amp;repo=WaterResources</a>
Hood	Erin Cheely	05/18/2021	B-4407	Raleigh Letting	10	Anson, Stanly	BRIDGE 70 OVER ROCKY RIVER ON US 52	No Files found in Laserfiche	20201506	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326038&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326038&amp;dbid=0&amp;repo=WaterResources</a>
Hood	Erin Cheely	03/16/2021	B-5818	Raleigh Letting	10	Anson	REPLACE BRIDGE 11 OVER DEADFALL CREEK ON NC 109	No Files found in Laserfiche	20201507	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326055&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326055&amp;dbid=0&amp;repo=WaterResources</a>
Hood	Bill Barrett	07/20/2021	BR-0107	Raleigh Letting	12	Iredell	SR 1577 BRIDGE 131 REPLACE BRIDGE 131 OVER TO SNOW CREEK.	No Files found in Laserfiche	20201508	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326056&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326056&amp;dbid=0&amp;repo=WaterResources</a>
Hood	Rail Division	08/17/2021	P-5705A	Raleigh Letting	10	Mecklenburg	CHARLOTTE WYE CONNECTION - RAIL	No Files found in Laserfiche	20181692	2	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326025&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326025&amp;dbid=0&amp;repo=WaterResources</a>
Ridings	Chris Murray	02/16/2021	B-5318	DDRL	5	Wake	REPLACE BRIDGE 910126 OVER SMITHS CREEK SR 2044 (LIGON MILLROAD) IN WAKE FOREST	Laserfiche Files: Scoping Letter	20201509	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326057&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326057&amp;dbid=0&amp;repo=WaterResources</a>
Steenhuis	Gordon Cashin	07/20/2021	B-5624	Raleigh Letting	3	Brunswick	BRIDGE 57 OVER JUNIPER CREEK ON NC 211	Laserfiche Files: P/JD Package	20201510	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326058&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326058&amp;dbid=0&amp;repo=WaterResources</a>
Steenhuis	Gordon Cashin	07/20/2021	B-5642	Raleigh Letting	3	Brunswick	BRIDGE 65 OVER HOOD CREEK ON NC 87	No Files found in Laserfiche	20201511	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326059&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326059&amp;dbid=0&amp;repo=WaterResources</a>
Steenhuis	Chris Rivenbark	05/18/2021	BR-0017	Raleigh Letting	3	Duplin	BRIDGE 300012 ON NC 11 OVER LITTLE ROCKFISH CREEK	Laserfiche Files: P/JD Package	20201512	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326060&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326060&amp;dbid=0&amp;repo=WaterResources</a>
Steenhuis	Greg Price	07/20/2021	I-5878	DDRL	6	Harnett	I-95 AT US 421 (EXIT 73) AND SR 1793 (POPE ROAD) (EXIT 72). IMPROVE INTERCHANGES. WIDEN TO EIGHT LANES. (COMB W/I-5883 & I-5886B).	No Files found in Laserfiche	20201513	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326061&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326061&amp;dbid=0&amp;repo=WaterResources</a>
Steenhuis	Greg Price	07/20/2021	I-5883	DDRL	6	Harnett	I-95 AT SR 1808 (JONESBORO ROAD) (EXIT 75) TO NORTH OF SR 1709 (HODGES CHAPEL ROAD) (EXIT 77). IMPROVE INTERCHANGES. WIDEN TO EIGHT LANES. (COMB W/I-5878 & I-5886B).	Laserfiche Files: Scoping Letter and JD Request	20201514	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326062&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326062&amp;dbid=0&amp;repo=WaterResources</a>
Steenhuis	Greg Price	07/20/2021	I-5986B	DDRL	6	Harnett, Johnston	I-95 FROM SR 1709 (HODGES CHAPEL ROAD - EXIT 77) TO I-40 (EXIT 81). WIDEN TO EIGHT LANES HARNETT/JONSTON COUNTIES. (COMB W/I-5878 & I-5883).	No Files found in Laserfiche	20190214	3	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326029&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326029&amp;dbid=0&amp;repo=WaterResources</a>
Steenhuis	Jason Dilday	04/20/2021	R-2561CA	DDRL	6	Columbus	NC 87 AT NC 11. CONSTRUCT INTERCHANGE.	Laserfiche Files: P/JD Package	20201515	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326063&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326063&amp;dbid=0&amp;repo=WaterResources</a>
Steenhuis	Greg Price	04/20/2021	R-5797	DDRL	6	Columbus	US 74 AT SR 1506 (BOARDMAN ROAD)	Laserfiche Files: P/JD Package	20201516	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326064&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326064&amp;dbid=0&amp;repo=WaterResources</a>
Wanucha	Kevin Hining	07/20/2021	17BP.11.R.15	DDRL	11	Wilkes	BRIDGE 419 ON SR 1148 OVER NAKED CREEK.	No Files found in Laserfiche	20201517	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326065&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326065&amp;dbid=0&amp;repo=WaterResources</a>
Wanucha	Erin Cheely	06/15/2021	BR-0048	Raleigh Letting	11	Surry	BRIDGE 103 ON NC 268 OVER MITCHELL RIVER REPLACE BRIDGE.	Laserfiche Files: Start of Study Letter	20201518	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326066&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326066&amp;dbid=0&amp;repo=WaterResources</a>
Wanucha	Jeff Hemphill	07/20/2021	BR-0108	Raleigh Letting	11	Wilkes	SR 2418 BRIDGE 4 REPLACE BRIDGE 4 OVER LITTLE HUNTING CREEK.	No Files found in Laserfiche	20201519	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326067&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326067&amp;dbid=0&amp;repo=WaterResources</a>
Ward	Jason Dilday	09/21/2021	B-4926	DDRL	2	Lenoir	NEUSE RIVER - REPLACE BRIDGE NO. 20 AND 34 OVER NEUSE RIVER/OVERFLOW ON NC 55	Laserfiche Files: Previous NW 6	20181733	2	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326028&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326028&amp;dbid=0&amp;repo=WaterResources</a>
Ward	Deanna Riffey	09/21/2021	B-5614	Raleigh Letting	2	Beaufort	REPLACE BRIDGE 9 OVER BLOUNTS CREEK ON SR 1112	No Files found in Laserfiche	20201520	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326068&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326068&amp;dbid=0&amp;repo=WaterResources</a>
Ward	Deanna Riffey	05/18/2021	B-5619	Raleigh Letting	2	Lenoir	REPLACE BRIDGE 52 OVER NEUSE RIVER AND REPLACE BRIDGE 152 OVER NEUSE RIVER OVERFLOW ON SR 1389 (HARDY BRIDGE ROAD)	No Files found in Laserfiche	20201521	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326069&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326069&amp;dbid=0&amp;repo=WaterResources</a>
Ward	Deanna Riffey	09/21/2021	BR-0004	Raleigh Letting	2	Beaufort	BRIDGE 060066 ON US 264 OVER PUNGO RIVER	No Files found in Laserfiche	20201522	1	9/28/2020 <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326070&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=1326070&amp;dbid=0&amp;repo=WaterResources</a>



North Carolina Department of Transportation

Highway Stormwater Program  
**STORMWATER MANAGEMENT PLAN**  
 FOR NCDOT PROJECTS



(Version 2.08; Released April 2018)

WBS Element: 45771.2.1      TIP No.: B-5818      County(ies): Anson      Page 1 of 1

**General Project Information**

WBS Element:	45771.2.1	TIP Number:	B-5818	Project Type:	Bridge Replacement	Date:	12/2/2020
NCDOT Contact:	Keith Paschal		Contractor / Designer:	STV Engineers, Inc. / Edward Vance			
Address:	1020 Birch Ridge Drive Raleigh, NC 27610		Address:	900 West Trade Street, Ste. 715 Charlotte, NC 28202			
	Phone:	(919) 707-6481		Phone:	(704) 816-2556		
	Email:	<a href="mailto:kpaschal@ncdot.gov">kpaschal@ncdot.gov</a>		Email:	<a href="mailto:Edward.Vance@stvinc.com">Edward.Vance@stvinc.com</a>		
City/Town:	Wadesboro		County(ies):	Anson			
River Basin(s):	Yadkin-Pee Dee		CAMA County?	No			
Wetlands within Project Limits?	No						

**Project Description**

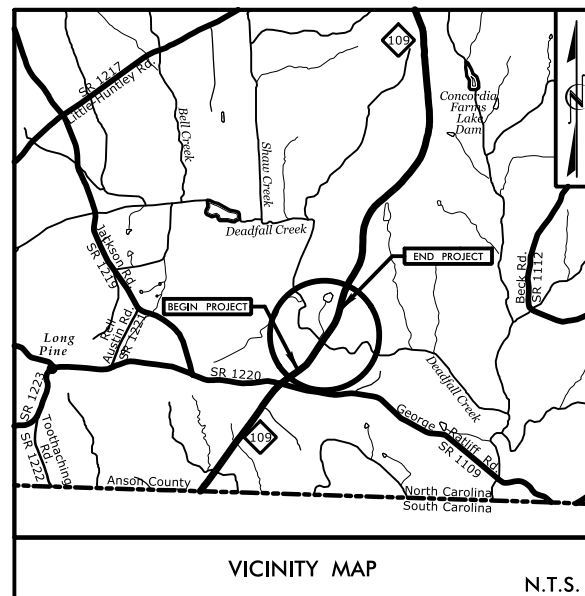
Project Length (lin. miles or feet):	0.492 Mi	Surrounding Land Use:	Partially Wooded					
	<b>Proposed Project</b>			<b>Existing Site</b>				
Project Built-Upon Area (ac.)	1.0	ac.	0.8	ac.				
Typical Cross Section Description:	Bridge : Two 12' lanes and 4' shoulders at both ends of the travel lanes. Approach: Two 12' lanes, 4' paved shoulders			Bridge: Two 12' lanes with 2' shoulders at both ends of the travel lanes. Approach: Two 12' lanes, variable shoulders				
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	2640	Year:	2043	Existing:	1320	Year:	2018
General Project Narrative: (Description of Minimization of Water Quality Impacts)	<p>The existing 120', 3 span bridge over Deadfall Creek on NC 109 is being replaced with a single span girder bridge with a span arrangement of 1@130' (72" MBT Girder). The bridge will have 4' end bent caps with 1.5:1 sloping abutments skewed at 90 degrees. The bridge will be normal crowned with 12' travel lanes, 4' shoulders and bridge railings on both the sides of the travel lanes. This gives the bridge a 32' clear roadway width and a 35'-3" out-to-out width. This existing bridge will be removed, and the proposed bridge will be placed about 50' downstream of the existing bridge alignment, keeping the existing bridge during construction as a detour bridge. The existing drainage patterns are being maintained in the proposed condition. A proposed ditch will convey water in place of the existing channel (per directions from NCDOT) due to the road re-alignment. All proposed ditches and the channel change will flow towards and into the creek. 6" vertical PVC pipe slots at 5' centers line the low end on both edges of the bridge to convey runoff and meet the requirement of 4' allowable spread. These deck drains will not discharge directly above the stream. At the end of the bridge two TB2GI's are placed in the shoulder berm gutters to convey the bridge runoff to the floodplain areas with CL-B Riprap outlet protection. The abutments of the bridge are protected by CL-II Riprap to prevent future erosion and stream migration. Impervious dikes and dewatering operation will be performed during the installation of streambank stabilization (Riprap).</p>							

**Waterbody Information**

Surface Water Body (1):	Deadfall Creek		NCDWR Stream Index No.:	13-47-2			
NCDWR Surface Water Classification for Water Body	Primary Classification:		Class C				
	Supplemental Classification:		None				
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?	N/A		
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)						

**TIP PROJECT: B-5818**

See Sheet 1A For Index of Sheets  
See Sheet 1B For Standard Symbology Sheet



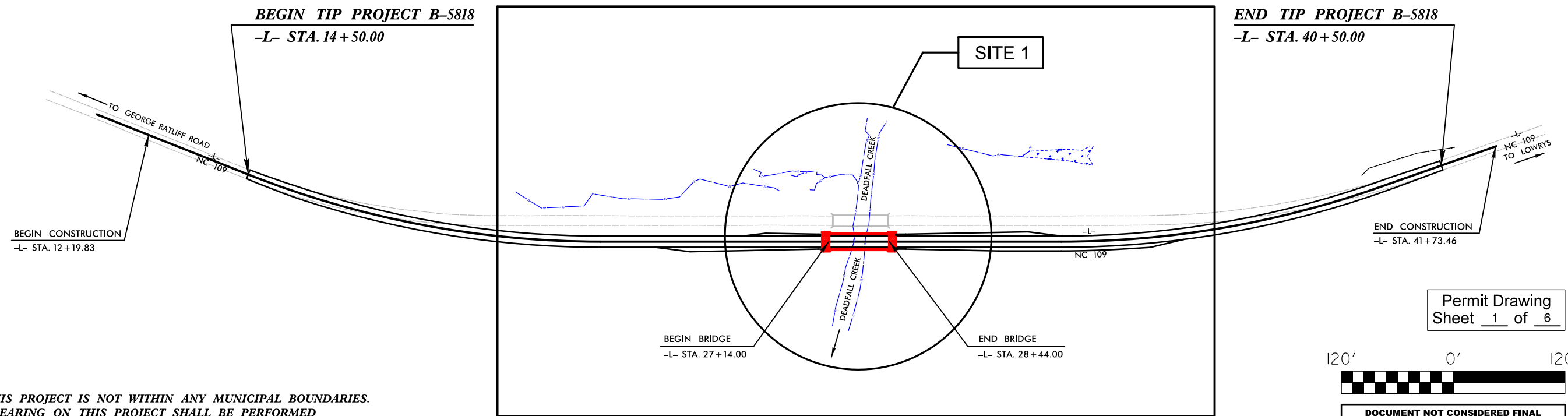
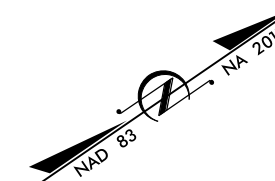
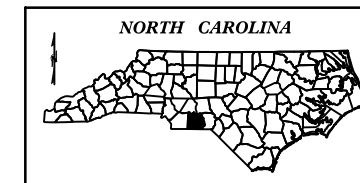
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**ANSON COUNTY**

**LOCATION: BRIDGE #011 OVER DEADFALL CREEK ON NC 109**  
**TYPE OF WORK: GRADING, DRAINAGE, PAVING & STRUCTURE**

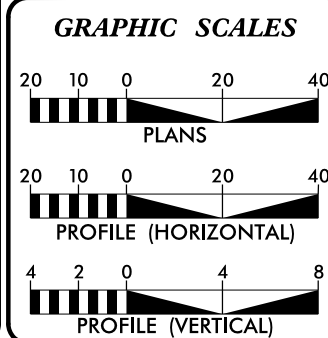
**SURFACE WATER IMPACTS PERMIT**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5818	1	6
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45771.1.1		P.E.	
45771.2.1		ROW & UTILITIES	



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

**CONTRACT:**



**DESIGN DATA**

ADT 2018	= 1,320
ADT 2043	= 2,640
K	= 9%
D	= 60%
T	= 22%*
V	= 55 MPH
FUNC. CLASSIFICATION:	MAJOR COLLECTOR
	* (TTST 15% + DUALS 7%)
REGIONAL TIER	

**PROJECT LENGTH**

LENGTH OF ROADWAY TIP PROJECT B-5818	= 0.467 MILES
LENGTH OF STRUCTURE TIP PROJECT B-5818	= 0.025 MILES
TOTAL LENGTH OF TIP PROJECT B-5818	= 0.492 MILES

NCDOT CONTACT: KEITH PASCHAL, PE  
Structure Management Unit

PLANS PREPARED FOR THE NCDOT BY:

**STV** 100 Years  
STV Engineers, Inc.  
900 West Trade St., Suite 715  
Charlotte, NC 28202  
NC License Number F-0991

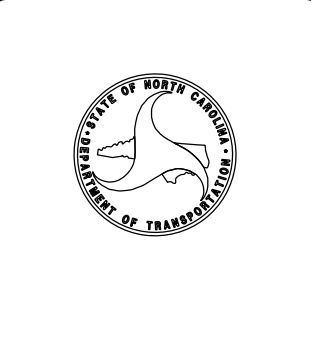
2018 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE:	DECEMBER 3, 2019
LETTING DATE:	NOVEMBER 17, 2020
	<u>NIKKI T. HONEYCUTT, PE</u> PROJECT ENGINEER
	<u>MAAMOON K. ABDELAZIZ</u> PROJECT DESIGNER

**HYDRAULICS ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.

**ROADWAY DESIGN ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.



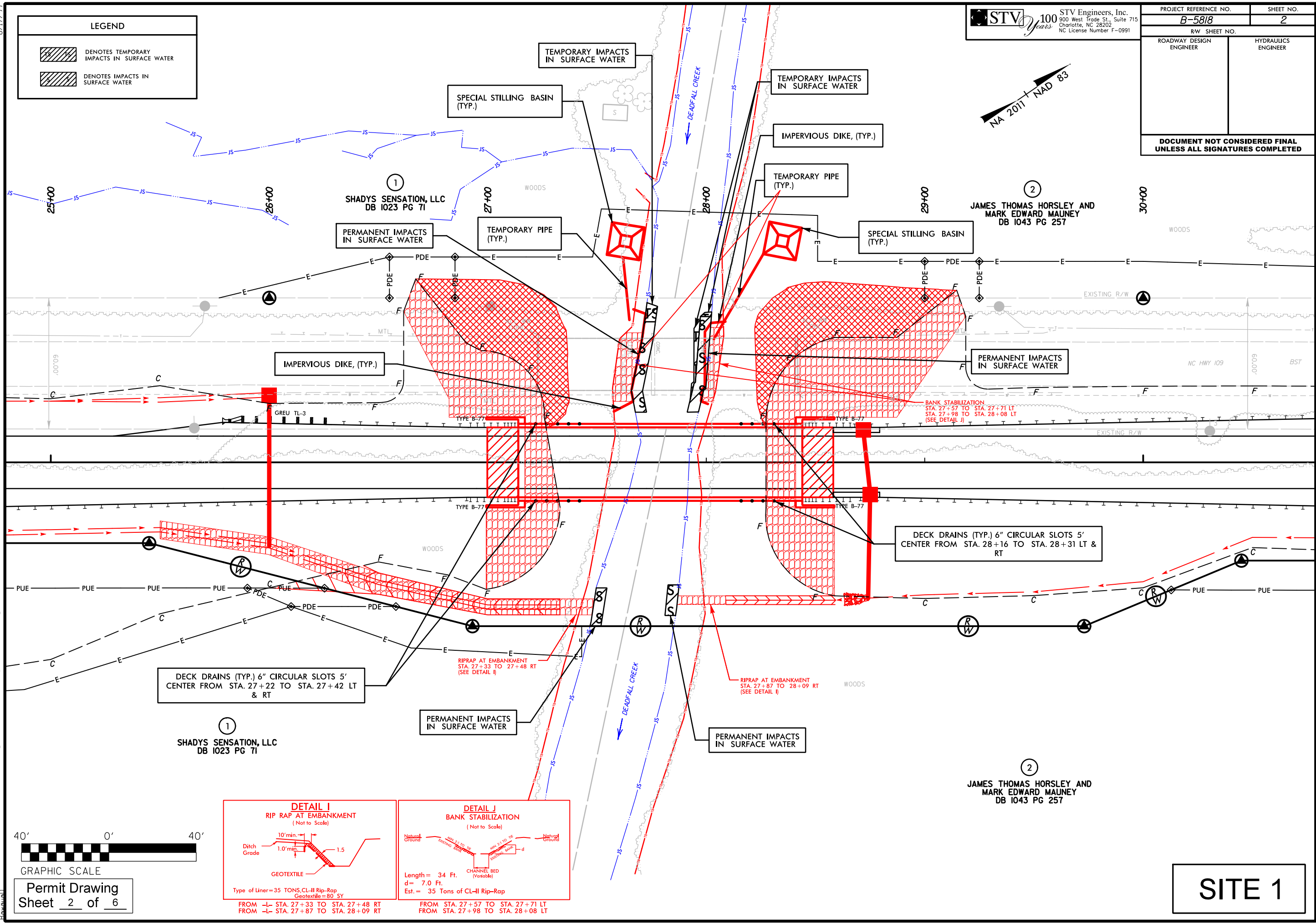
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**LEGEND**

- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES IMPACTS IN SURFACE WATER

**STV** 100 Years  
 STV Engineers, Inc.  
 900 West Trade St., Suite 715  
 Charlotte, NC 28202  
 NC License Number F-0991

PROJECT REFERENCE NO. <b>B-5818</b>	SHEET NO. <b>2</b>
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



Permit Drawing  
 Sheet 2 of 6

**DETAIL I**  
 RIP RAP AT EMBANKMENT  
 (Not to Scale)

Type of Liner = 35 TONS CL-II Rip-Rap  
 Geotextile = 80 SY

FROM - STA. 27+33 TO STA. 27+48 RT  
 FROM - STA. 27+87 TO STA. 28+09 RT

**DETAIL J**  
 BANK STABILIZATION  
 (Not to Scale)

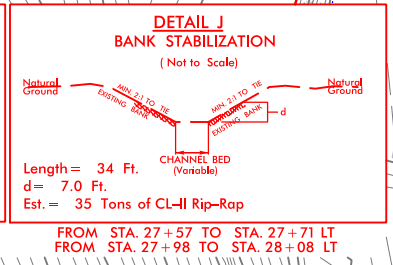
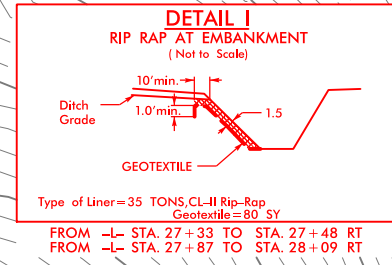
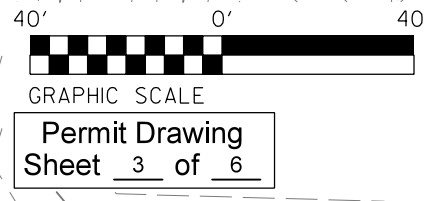
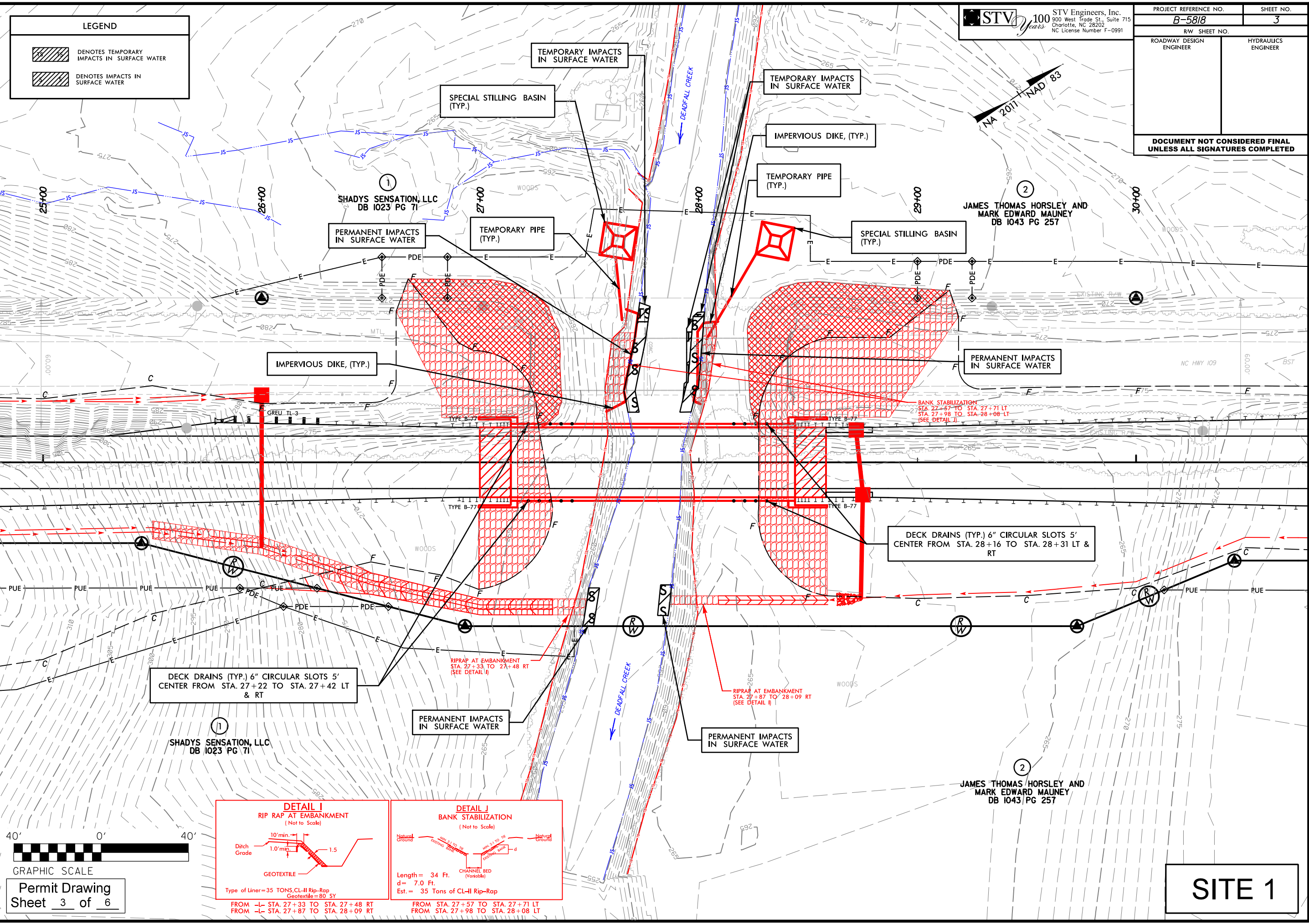
Length = 34 Ft.  
 d = 7.0 Ft.  
 Est. = 35 Tons of CL-II Rip-Rap

FROM STA. 27+57 TO STA. 27+71 LT  
 FROM STA. 27+98 TO STA. 28+08 LT

**SITE 1**

12/7/2020 C:\Hydraulics\permits\_environmental\drawings\prj\shadys\B5818\_hyd\_prm\_pah03.dgn  
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PROJECT REFERENCE NO. <b>B-5818</b>	SHEET NO. <b>3</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

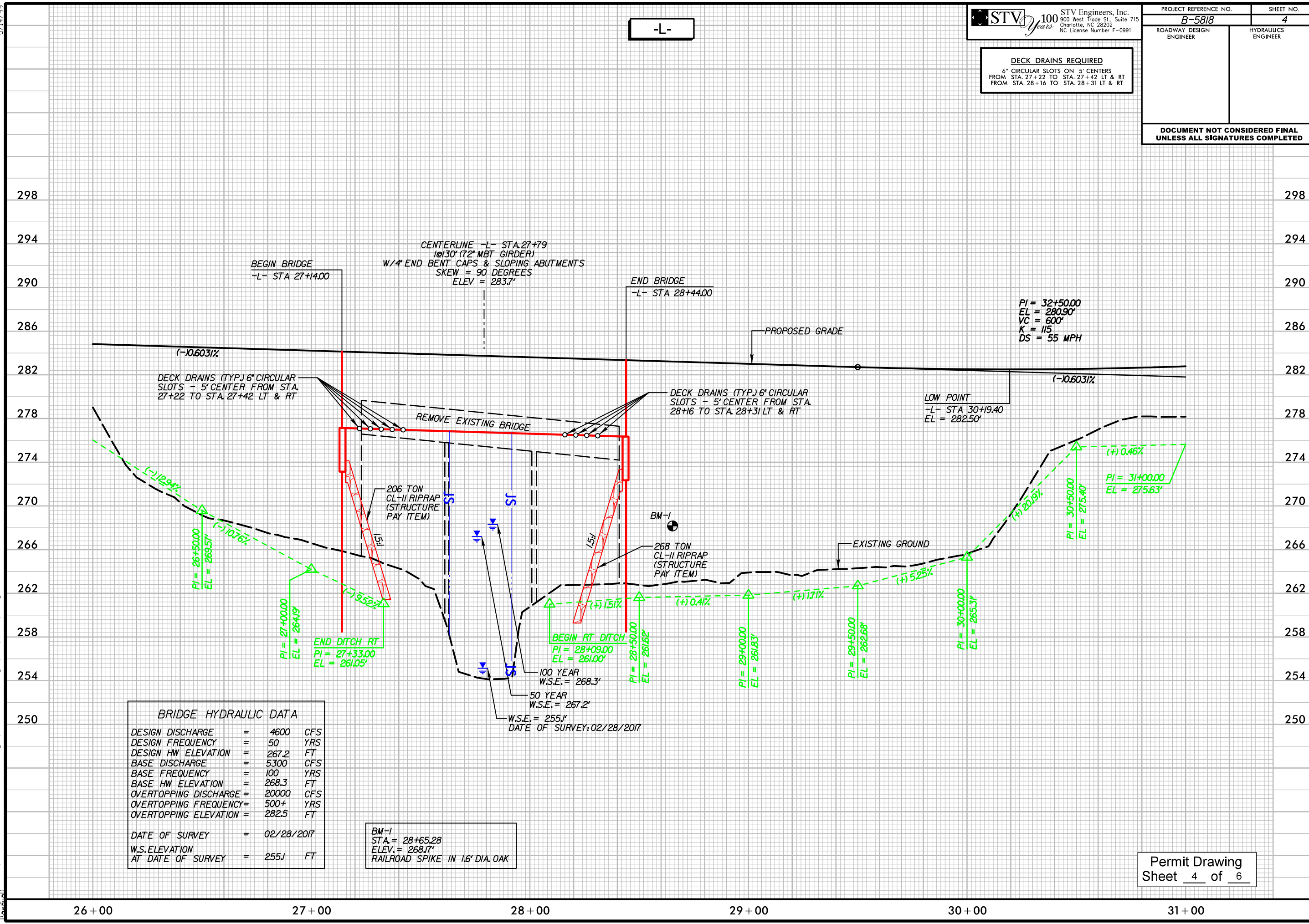


SITE 1

5/14/99  
12/7/2020  
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**DECK DRAINS REQUIRED**  
 6" CIRCULAR SLOTS ON 5' CENTERS  
 FROM STA. 27+22 TO STA. 27+42 LT & RT  
 FROM STA. 28+16 TO STA. 28+31 LT & RT

-L-



BRIDGE HYDRAULIC DATA	
DESIGN DISCHARGE	= 4600 CFS
DESIGN FREQUENCY	= 50 YRS
DESIGN HW ELEVATION	= 267.2 FT
BASE DISCHARGE	= 5300 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 268.3 FT
OVERTOPPING DISCHARGE	= 20000 CFS
OVERTOPPING FREQUENCY	= 500+ YRS
OVERTOPPING ELEVATION	= 282.5 FT
DATE OF SURVEY	= 02/28/2017
W.S.ELEVATION AT DATE OF SURVEY	= 255.1 FT

BM-1  
 STA. = 28+65.28  
 ELEV. = 268.17'  
 RAILROAD SPIKE IN 1.6" DIA. OAK

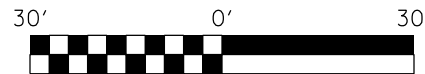
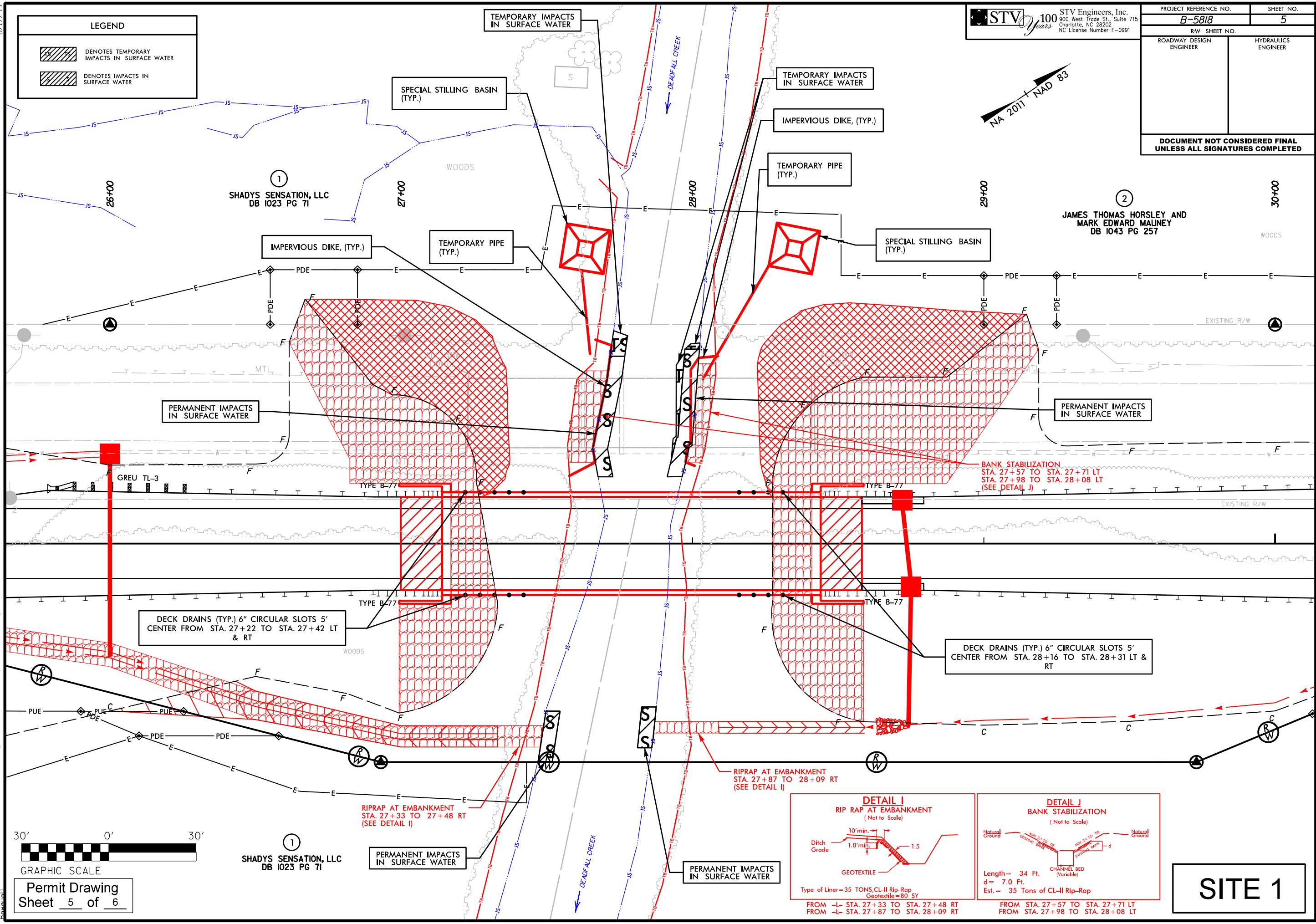


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LEGEND	
	DENOTES TEMPORARY IMPACTS IN SURFACE WATER
	DENOTES IMPACTS IN SURFACE WATER

**STV** 100 Years  
 STV Engineers, Inc.  
 900 West Trade St., Suite 715  
 Charlotte, NC 28202  
 NC License Number F-0991

PROJECT REFERENCE NO. <b>B-5818</b>	SHEET NO. <b>5</b>
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

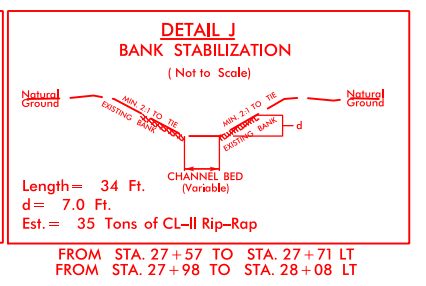
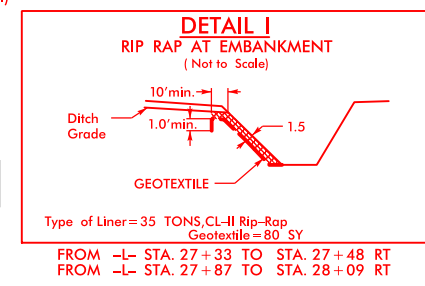


GRAPHIC SCALE  
 Permit Drawing  
 Sheet 5 of 6

SHADYS SENSATION, LLC  
 DB IO23 PG 71

PERMANENT IMPACTS IN SURFACE WATER

PERMANENT IMPACTS IN SURFACE WATER



**SITE 1**

**WETLAND PERMIT IMPACT 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)
SITE 1	27+65.73 / 27+72.22	BANK STABILIZATION (TEMPORARY IMPACTS DUE TO IMPERVIOUS DIKE)						0.01	<0.01	46	6	
	27+92.33 / 28+02.55											
SITE 1	27+46.85 / 27+54.54	BANK STABILIZATION						<0.01		20		
	27+81.12 / 27+87.55											
<b>TOTALS:</b>								0.01	<0.01	66	6	

\* TEMPORARY IMPACTS LENGTH TOTAL = 52' (46' TAKEN INTO ACCOUNT IN PERMANENT IMPACTS)

NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 BRIDGE #11 OVER DEADFALL CREEK  
 ON (NC 109)  
 ANSON COUNTY  
 B-5818  
 SHEET 6 of 6 12/7/2020

# **Freshwater Mussel Survey Report**

**Bridge No. 11 over Deadfall Creek**

**on NC 109**

**TIP # B-5818**

**WBS: 45771.1.1**

**Anson County, North Carolina**



**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
Project Development and Environmental Analysis Unit  
Natural Environment Section**

**NCDOT Contact: Matt Haney  
919-707-6122; mmhaney@ncdot.gov**

**June 2019**

## FRESHWATER MUSSEL SURVEY REPORT

**PROJECT:** Protected species survey report for Carolina Heelsplitter (*Lasmigona decorata*), Brook Floater (*Alasmidonta varicosa*), and Atlantic Pigtoe (*Fusconaia masoni*) for the proposed replacement of Bridge No. 11 on NC 109 over Deadfall Creek within the Pee Dee River Basin in Anson County. WBS: 45771.1.1, TIP No. B-5818.

**REPORT BIOLOGISTS:** Joseph D. Alderman and John M. Alderman

The North Carolina Department of Transportation proposes to replace Bridge No. 11 over Deadfall Creek (Stream Index No. 13-47-2) in Anson County (Figures 1 and 2).

The Carolina Heelsplitter is federally listed Endangered by the United States Fish & Wildlife Service (USFWS). The Carolina Heelsplitter exists from the Savannah River Basin in South Carolina to the Pee Dee River Basin in North Carolina. The USFWS documents Union County as part of the historical Carolina Heelsplitter range.

The Brook Floater is a federal At-Risk species (USFWS). The Brook Floater's range extends from Canada to the South Carolina/Georgia state line, including Brown's Creek in Anson County, North Carolina.

The Atlantic Pigtoe is a federal At-Risk Species (USFWS) and is a native Southeast Atlantic Slope freshwater mussel species. The USFWS may list this species as threatened during 2019. The Atlantic Pigtoe has records from the Altamaha River Basin in Georgia to the James River Basin in Virginia. The USFWS documents adjacent Union County as part of the current Atlantic Pigtoe range.

The Carolina Heelsplitter and Brook Floater's preferred habitats include low to higher gradient stable banked streams with relatively silt free substrates. Coarser substrates, including cobble, boulder, and bedrock, are usually present within an occupied stream reach. The best populations have been found in higher water quality, well-oxygenated streams. In general, woodland dominates the landscape. Carolina Heelsplitter records exist in first order streams up to main channels of large rivers. Brook Floater records mostly exist in third order and larger streams.

The Atlantic Pigtoe normally requires clean sand and pea gravel substrates and circumneutral pH water. The highest densities recorded for this species existed in silt free, unconsolidated coarse sand and pea gravel within "run" stream reaches. The best populations have been documented from North Carolina Division of Water Resources Outstanding Resource Waters (ORW) stream reaches or within streams potentially suitable for such designations.

Prior to and after conducting in-stream surveys, reviews of the January 2019 North Carolina Natural Heritage Program (NCNHP), November 2018 North Carolina Wildlife Resources Commission Aquatics Database (NCWRC), NC Museum of Natural Sciences,

Alderman Environmental Services, Inc. (AES), Philadelphia Academy of Natural Sciences (ANSP), and Ohio State University Museum of Biodiversity databases were conducted to determine if there were any records of rare mussels within the proposed project study area or receiving waters. This review indicated that the closest occurrence of the Carolina Heelsplitter (documented in 2017) is within Goose Creek, a tributary of the Rocky River in Union County (NCNHP, NCWRC). This occurrence is more than 100 stream miles downstream from the project site. The closest occurrence of the Brook Floater is Browns Creek in Anson County, which is more than 50 stream miles downstream from Deadfall Creek. The closest occurrence of the Atlantic Pigtoe occurred in the Little River in Montgomery County in 1987, which is more than 75 stream miles from the project site (NCNHP). No dams exist along the main channel of Deadfall Creek.

The North Carolina Department of Environmental Quality (NCDEQ) records no NPDES permits for Deadfall Creek. Deadfall Creek is a Class C stream (NCDEQ 2014). Rhoddy Creek is the next major confluence with Deadfall Creek, which is approximately 1.6 stream mile down from Bridge No. 11.

Alderman Environmental Services, Inc. biologists Joseph D. Alderman (USFWS Permit No. TE28597A-1), John M. Alderman (North Carolina Wildlife Resources Commission Permit No. 18-ES00009 and USFWS Permit No. TE065756-3), and Logan Williams (subpermittee under John Alderman's NCWRC permit) completed a mussel survey at the site on October 23, 2018 within 100+ meters upstream and 400+ meters downstream from the project stream crossing (Figures 1 and 2). Using visual and tactile searches, three person-hours were required to complete the survey within this relatively rural area of Anson County. Stream widths were approximately 15 meters, and banks were up to three meters tall. Depth averaged less than 0.3 meter. The surveyed reach canopy was mostly closed, and wooded buffers were wide. Water was slightly turbid and low. Substrates included silt, sand, gravel, pebble, cobble, boulder, and with bedrock dominate. Beaver activity (gnawed sticks) was observed in Deadfall Creek.

Documented freshwater mussels included eight live Eastern Elliptio (*Elliptio complanata*), two live Eastern Creekshell (*Villosa delumbis*), three live Notched Rainbow (*Villosa constricta*), two live Creeper (*Strophitus undulatus*), four live Atlantic Spike (*E. producta*). The Asian Clam (*Corbicula fluminea*) was observed.

### **Biological Conclusion**

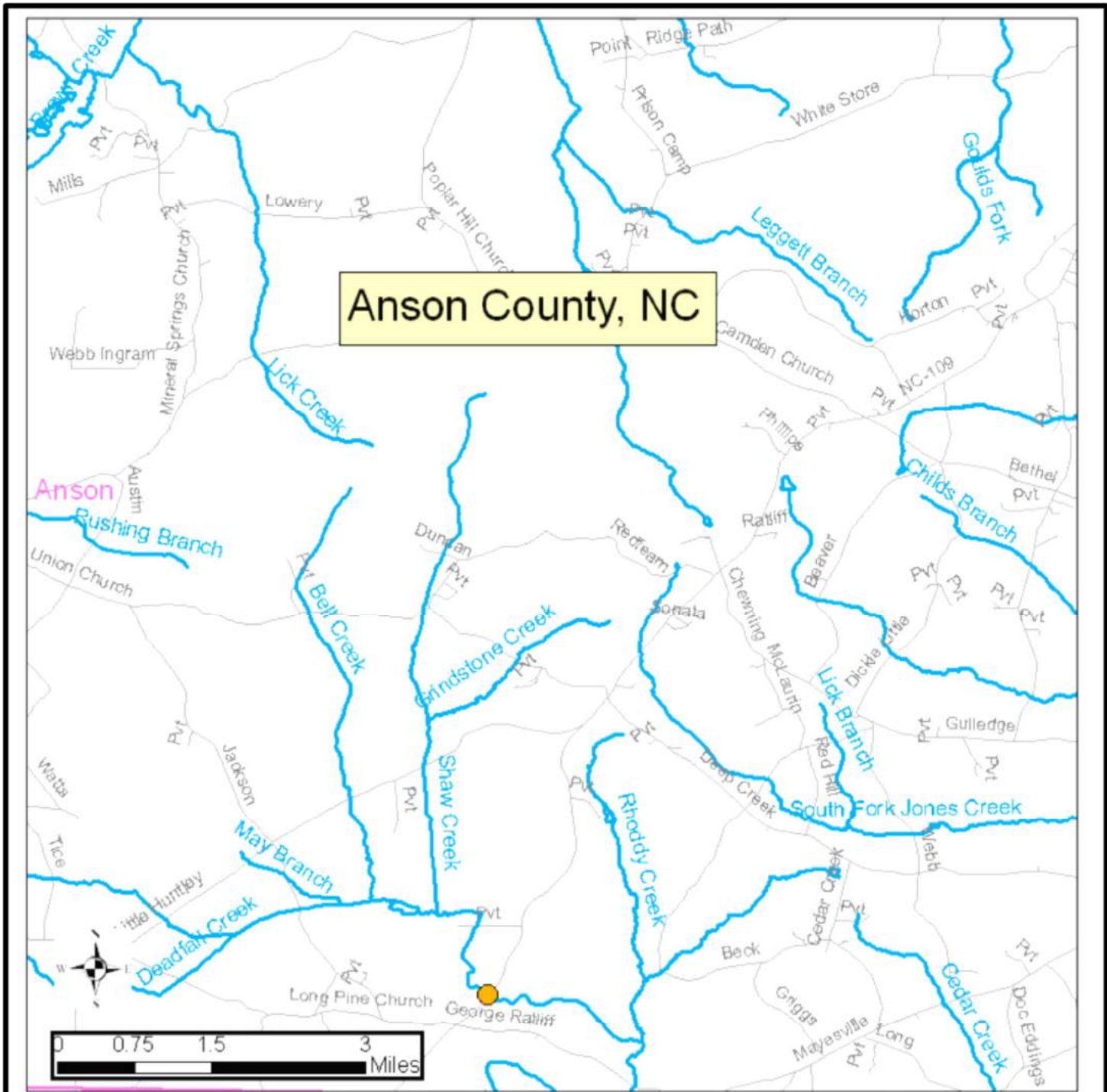
**Deadfall Creek near Bridge No. 11 provides good quality habitat for the Carolina Heelsplitter, Brook Floater, and Atlantic Pigtoe. These species are usually associated with streams with high diversities and abundances of other mussel taxa. Although diversity is relatively high within the surveyed reach of Deadfall Creek, observed abundances were low. Given low abundances of other freshwater mussel taxa within the surveyed reach, and the distance to any recent element occurrences (see above data), the project will not affect the Carolina Heelsplitter, Brook Floater, or Atlantic Pigtoe.**

## **References**

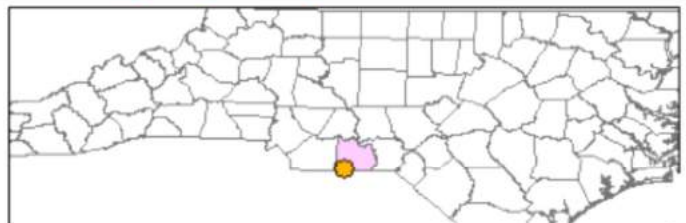
North Carolina Museum of Natural Sciences. 2016. 1 November 2016 online database search.

North Carolina Natural Heritage Program. 2019. January 2019 Database.

North Carolina Department of Environmental Quality. 2014. GIS shapefiles of 303(d) listed streams and NPDES permits.



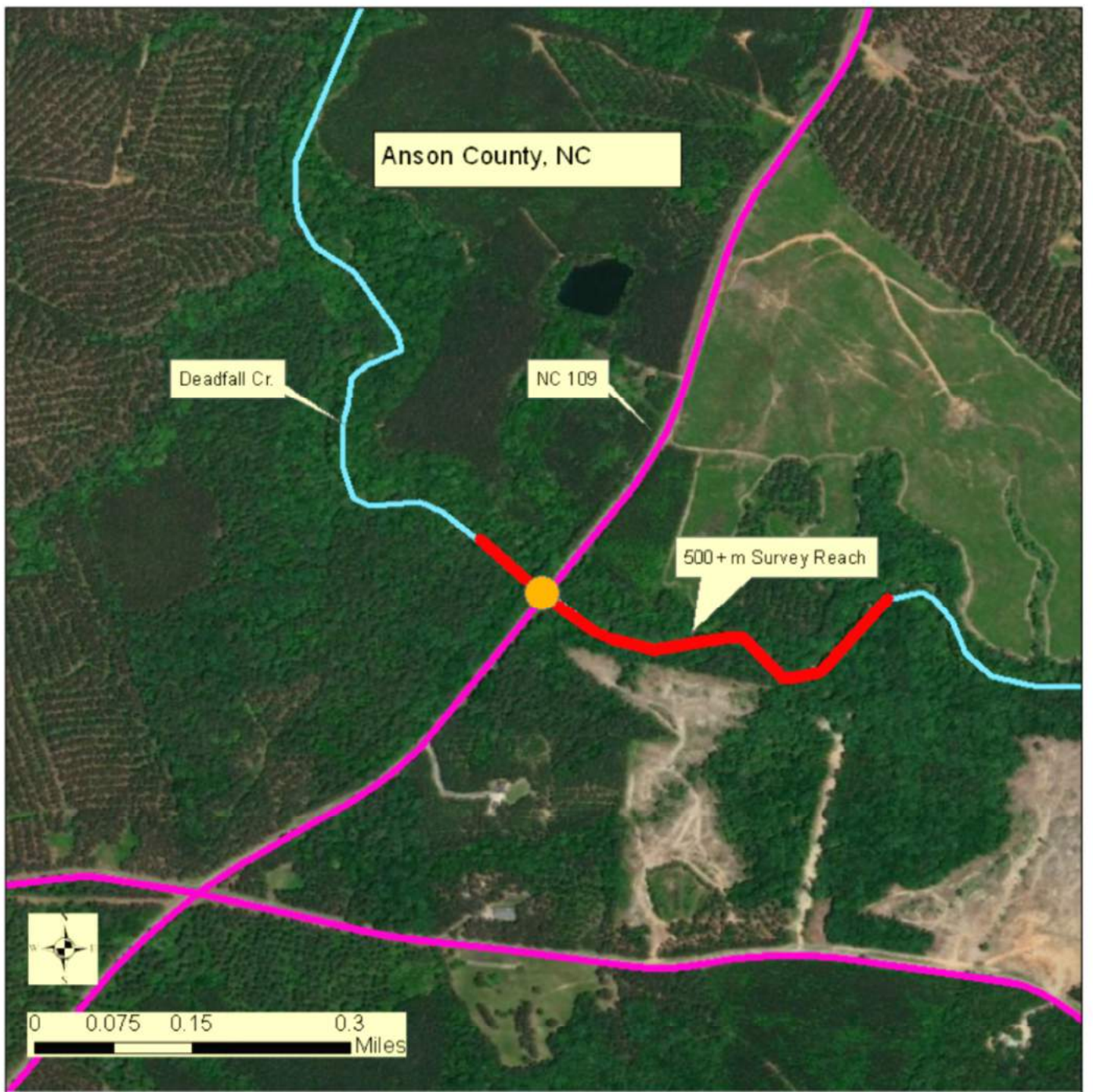
**Figure 1**  
**VICINITY MAP**  
**Anson County, NC**  
**Replace Bridge No. 11**  
**on NC 109 over Deadfall Cr.**  
**Project B-5818 (WBS 45771.1.1)**






- Bridge No. 11
- Streams
- Roads

Date: 2/28/2019  
 By: JMA





**Figure 2**  
**SURVEY AREA MAP**  
**Anson County, NC**  
**Replace Bridge No. 11**  
**on NC 109 over Deadfall Cr.**  
**Project B-5818 (WBS 45771.1.1)**

-  Bridge No. 11
-  Roads
-  Streams

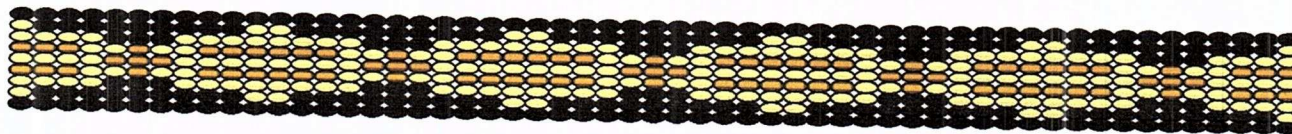
Date: 2/28/2019 By: JMA





Catawba Indian Nation  
Tribal Historic Preservation Office  
1536 Tom Steven Road  
Rock Hill, South Carolina 29730

Office 803-328-2427  
Fax 803-328-5791



January 24, 2020

Attention: David Stutts  
NC Department of Transportation  
1581 Mail Service Center  
Raleigh, NC 27699

Re. THPO #	Project #	Project Description
2020-193-97	B-5818	Replacement of Bridge No. 11 on NC 109 over Deadfall Creek in Anson County

Dear Mr. Stutts,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail [caitlinh@ccppcrafts.com](mailto:caitlinh@ccppcrafts.com).

Sincerely,

Wenonah G. Haire  
Tribal Historic Preservation Officer