



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

February 10, 2020

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

ATTN: Ms. Nicholle Braspenickx  
NCDOT Coordinator

Subject: **Application for Section 404 Nationwide Permit 13 and 33, and 401 Water Quality Certification** for the proposed replacement of Bridge No. 166 on SR 1601 (Coolbrook Road) over Rocky Creek in Iredell County, Division 12, TIP No. BR-0115.  
Debit \$240 from WBS 48824.1.1.

Dear Madam:

NCDOT proposes to replace structurally deficient Bridge No. 166 (superstructure condition appraisal of 4 out of 9 according to Federal Highway Administration [FHWA] standards) on S.R. 1595 (Coolbrook Road) over Rocky Creek in Iredell County. The existing bridge is approaching the end of its useful life. The existing bridge also has a posted weight limit, and the proposed project has been designed to meet the legal load rating.

The project proposes replacing the existing two-lane bridge with an approximately 30-foot wide structure with two 10-foot travel lanes with 3-foot 11-inch paved shoulders. The proposed bridge would be approximately 138 feet in length and the proposed right of way varies from 60 feet to 85 feet. The total length of the project is approximately 700 feet. The proposed bridge will not be posted and will be designed to meet the legal load rating. This bridge replacement will be constructed in-place using an off-site detour.

There will be a total of 104 linear feet (lf) of bank stabilization impacts. There will be a total of 115 lf (<0.01 acre) of temporary impacts from impervious dikes located on both the left and right banks of Rocky Creek; however, all but 11 lf are within the bank stabilization impacts. There will be 84 lf (0.03 ac) of temporary impacts and from temporary work pads/causeways, if needed, all of which are within the bank stabilization/impervious dike impacts.

There will be no utility impacts for this project.

Avoidance and Minimization

NCDOT has avoided permanent stream impacts to Rocky Creek (other than bank stabilization) by spanning the creek with the bridge. The only permanent stream impacts will be those for bank stabilization under the new bridge.

Mitigation

NCDOT does not propose mitigation for the 104 linear feet of bank stabilization impacts, as bank stabilization does not require fill in the streambed and therefore, under Section 404 of the Clean Water Act, does not constitute Loss of Waters of the U.S. and is not subject to compensatory mitigation.

Please see enclosed copies of the Pre-Construction Notification (PCN), stormwater management plan, permit drawings and design plans for the above-referenced project.

A Categorical Exclusion was completed in July 2019 and distributed shortly thereafter. Additional copies are available upon request.

This project calls for a letting date of July 21, 2020 and a review date of June 2, 2020.

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 Bill Barrett at [wabarrett@ncdot.gov](mailto:wabarrett@ncdot.gov) or (919) 707-6103.

Sincerely,

  
for Philip S. Harris III, P.E., C.P.M.

Environmental Analysis Unit Head

Cc: NCDOT Permit Application Standard Distribution List



## Pre-Construction Notification (PCN) Form

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

September 29, 2018 Ver 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:\*

Iredell

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:

BR-0115

WBS #\*

48824.1.1

(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)

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

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

FILETYPE 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: \***

wabarrett@ncdot.gov

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

(xxx)xxx-xxxx  
(919)707-6103

**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: \***

NCDOT

**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

USA

**2e. Telephone Number: \***

(xxx)xxx-xxxx  
(919)707-6103

**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: \***

Replacement of Bridge No. 480166 on SR 1595 (Coolbrook Road) over Rocky Creek

**1b. Subdivision name:**

(if appropriate)

**1c. Nearest municipality / town: \***

Union Grove

### 2. Project Identification

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**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:\***

36.014070

ex: 34.208504

**Longitude:\***

-81.003658

-77.796371

### 3. Surface Waters

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

Rocky 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.\***

030401020104

[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:\***

Undeveloped woods, agriculture land, and some residences.

**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

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

(intermittent and perennial)

787

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

The replacement of Bridge No. 480166 is part of the Growing Rural Economy and Agriculture through Transportation and Technology Enhancement or Replacement in North Carolina (GREATER-NC) Project under the United States Department of Transportation's 2018 Better Utilizing Investments to Leverage Development (BUILD) Grant program. The purpose of the grant and this bridge replacement project is to provide transportation infrastructure to support economic development and improve physical and digital connectivity in rural communities in North Carolina. The posted weight restriction on Bridge No. 480166 prohibits large or heavy vehicles, typically used in transporting agricultural and manufactured products, from using the bridge. Vehicles above the posted weight must detour 7 miles to avoid the bridge. Replacing the existing bridge will eliminate posted weight limits by providing a safe crossing for all legal loads and will make accommodations for broadband installation in order to support economic competitiveness. NCDOT Structures Management Unit records indicate Bridge No. 480166 has a sufficiency rating of 58.87 out of a possible 100. Bridge No. 480166 is considered structurally deficient due to a superstructure condition appraisal of 4 out of 9 according to Federal Highway Administration (FHWA) standards. The bridge is approaching the end of its useful life. The existing bridge also has a posted weight limit and the proposed project has been designed to meet the legal load rating.

\* This bridge will serve as a detour route for NCDOT project BR-0114, which proposes the replacement of Bridge No. 480165 on SR 1601 (Branton Road) over Rocky Creek. Since Bridge No. 480165 is currently a posted bridge, it will need to be constructed prior to the BR-0114 bridge replacement.

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

The existing 107', 3 span bridge over Rocky Creek on SR 1595 (Coolbrook Road) is being replaced with 3 span bridge with a span arrangement of 1@30' (21" Cored Slab), 1@70' (24" Cored Slab), and 1@35' (21" Cored Slab). The bridge will have 1.5:1 sloping abutments. The bridge will be superelevated with a 3% slope and with 10' travel lanes with 3'11" to the right and 3'11" to the left shoulders, 27'-10" clear width and 30' OTO width. The existing bridge structure will be removed.

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

BR-0115\_Permit Drawings.pdf

4.6MB

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:

No wetlands in project study area. Only one stream (Rocky 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): Jim Mason
Agency/Consultant Company: Three Oaks Engineering
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 Open Waters Streams-tributaries Pond Construction Buffers

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".

Table with 9 columns: ID, Reason for impact, Impact type, Type of impact, S. name, Stream Type, Type of Jurisdiction, S. width, Impact length. Rows include S1 (Bank stabilization), S2 (Impervious dikes), and S3 (work pad / causeway).

\*\* 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:

104

3i. Total temporary stream impacts:

11

3i. Total stream and ditch impacts:

115

### 3j. Comments:

S2 Comment: Of the 115 linear feet of temporary stream impacts from the Impervious dikes, 104 lf are within the streambank impact. As such, 11 lf of temporary stream impacts for the Impervious dike are listed.

S3 comment: All of the 84 linear feet of temporary stream impacts from the temporary causeway are within the length of the streambank impacts. As such, 0 lf of temporary stream impacts for the temporary causeway are listed.

The temporary work pad / causeway will not cross more than half of the stream (Rocky Creek)

## 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 proposed bridge is 31 feet longer than the existing bridge.  
The proposed bridge will span Rocky Creek, with no pilings in the stream.

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

Overall drainage patterns will be maintained. There are roadside ditches that flow towards the bridge on both sides of the project. On the end side of the bridge, a traffic bearing grated drop inlet with double frame and grates (2GI) was placed on the right side of the roadway in the shoulder berm gutter to pick up runoff from the bridge. Class-II rip rap abutment protection on both banks of the stream is also proposed to prevent future erosion and stream migration. Deck drains will be required to meet spread criteria but the drains will not discharge directly above water. Impervious dikes will be used around existing abutments to prevent sediment from entering the stream during the removal of existing bridge and will be dewatered as needed.

Best Management Practices for Surface Waters will be used during all phases of construction.

### 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:

NCDOT does not propose mitigation for the 104 linear feet of bank stabilization impacts, as bank stabilization does not require fill in the streambed and therefore, under Section 404 of the Clean Water Act, does not constitute Loss of Waters of the U.S. and is 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:

not located within a Buffer Basin.

### 2. Stormwater Management Plan

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

Yes  No

#### Comments:

see attached Permit Drawings

## 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

[NEPA or SEPA Final Approval Letter](#)

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

FILE TYPE 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.

NCDOT does not propose mitigation for the 104 linear feet of bank stabilization impacts, as bank stabilization does not require fill in the streambed and therefore, under Section 404 of the Clean Water Act, does not constitute Loss of Waters of the U.S. and is not subject to compensatory mitigation.

## 4. Sewage Disposal (DWR Requirement)

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

Yes  No  NA

## 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.

Asheville

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? \*

IPAC, USFWS website, NCNHP website, and on-site pedestrian surveys.

As of November 13, 2019, the USFWS lists three protected species for Iredell County: bog turtle, northern long-eared bat (NLEB), and dwarf-flowered heartleaf (DFHL).

Bog turtle: does not require a Biological Conclusion.

NLEB: NCDOT has determined that the proposed action does not require separate consultation on the grounds that the proposed action is consistent with the final Section 4(d) rule, codified at 50 C.F.R. § 17.40(o) and effective February 16, 2016.

DFHL: Biological Conclusion of No Effect. Habitat is present for dwarf-flowered heartleaf; however, no individuals of this species were identified during surveys conducted at the project site. Additionally, review of NCNHP database indicates no known DFHL occurrences within 1.0 mile of the study area.

### Consultation Documentation Upload

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

BR-0115 Iredell 4(d) NLEB.pdf

236.77KB

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? \*

NSEPA Documentation

### 7c. Historic or Prehistoric Information Upload

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

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:

NCDOT Hydraulics Unit coordination with FEMA

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

FEMA Maps (Panels 3710480200J and 3710480300K)

## Miscellaneous

### Comments

Miscellaneous attachments not previously requested.

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

BR-0115 Application Cover Letter.pdf

169.61KB

File must be PDF or KMZ

## Signature

\*

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

- 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



Date

2/10/2020



North Carolina Department of Transportation

Highway Stormwater Program  
STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS



(Version 2.08; Released April 2018)

WBS Element: 67115.1.1      TIP No.: BR-0115      County(ies): Iredell      Page 1 of 1

General Project Information

WBS Element:	67115.1.1	TIP Number:	BR-0115	Project Type:	Bridge Replacement	Date:	12/4/2019
NCDOT Contact:	David Stutts		Contractor / Designer:		STV Engineers, Inc. / Shirshant Sharma		
	Address:	1020 Birch Ridge Drive Raleigh, NC 27610			Address:	900 West Trade Street, Ste. 715 Charlotte, NC 28202	
	Phone:	(919) 707-6442			Phone:	(704) 816-2556	
	Email:	dstutts@ncdot.gov			Email:	Shirshant.Sharma@stvinc.com	
City/Town:	Love Valley, NC			County(ies):	Iredell		
River Basin(s):	Yadkin-Pee Dee			CAMA County?	No		
Wetlands within Project Limits?	No						

Project Description

Project Length (lin. miles or feet):	0.13	Surrounding Land Use:	Rural Residential					
	Proposed Project			Existing Site				
Project Built-Upon Area (ac.)	0.3	ac.	0.3	ac.				
Typical Cross Section Description:	Bridge : Two 10' lanes, 3'11" to the right and 3'11" to the left paved shoulders. Approach: Two 10' lanes, variable paved shoulders.			Bridge: Two 10' lanes, 1.5' to the right and 1.5' to the left shoulders. Approach: Two 10' lanes, variable shoulders.				
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	1120	Year:	2040	Existing:	560	Year:	2016
General Project Narrative: (Description of Minimization of Water Quality Impacts)	<p>The existing 107', 3 span bridge over Rocky Creek on SR 1595 (Coolbrook Road) is being replaced with 3 span bridge with a span arrangement of 1@30' (21" Cored Slab), 1@70' (24" Cored Slab), and 1@35' (21" Cored Slab). The bridge will have 1.5:1 sloping abutments. The bridge will be superelevated with a 3% slope and with 10' travel lanes with 3'11" to the right and 3'11" to the left shoulders, 27'-10" clear width and 30' OTO width. The existing bridge structure will be removed. Overall drainage patterns will be maintained. There are roadside ditches that flow towards the bridge on both sides of the project. On the end side of the bridge, a traffic bearing grated drop inlet with double frame and grates (2GI) was placed on the right side of the roadway in the shoulder berm gutter to pick up runoff from the bridge. Class-II rip rap abutment protection on both banks of the stream is also proposed to prevent future erosion and stream migration. Deck drains will be required to meet spread criteria but the drains will not discharge directly above water. Impervious dikes will be used around existing abutments to prevent the sediment from entering the stream during the removal of existing bridge and will be dewatered as needed.</p>							

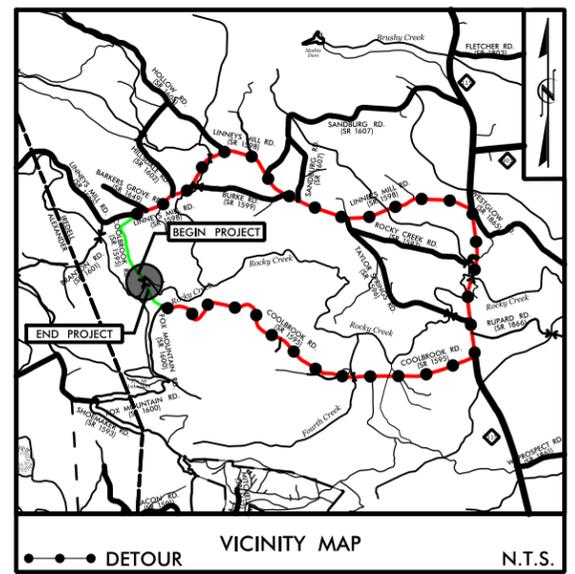
Waterbody Information

Surface Water Body (1):	Rocky Creek		NCDWR Stream Index No.:	12-108-11			
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)						

09.06/19

**TIP PROJECT: BR-0115**

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



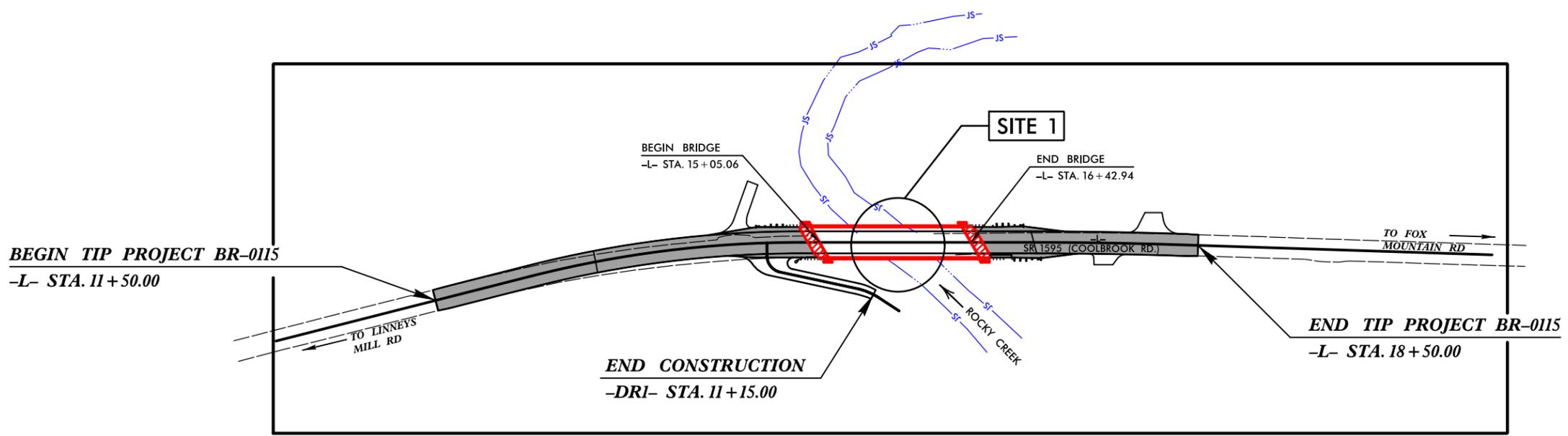
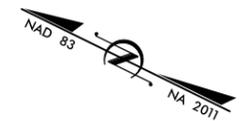
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**IREDELL COUNTY**

LOCATION: BRIDGE #166 OVER ROCKY CREEK  
ON SR 1595 (COOLBROOK RD)

**SURFACE WATER IMPACTS PERMIT**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0115	1	5
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
67115.1.1	2020001	P.E.	



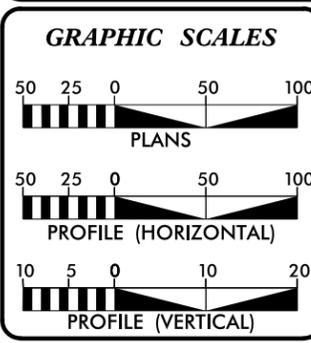
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.  
CLEARING ON THIS PROJECT SHALL BE PERFORMED  
TO THE LIMITS ESTABLISHED BY METHOD \_\_\_\_\_

Permit Drawing  
Sheet 1 of 5

**INCOMPLETE PLANS**  
DO NOT USE FOR R/W ACQUISITION

**DOCUMENT NOT CONSIDERED FINAL**  
UNLESS ALL SIGNATURES COMPLETED

**CONTRACT:**



**DESIGN DATA**

ADT 2016	=	560
ADT 2040	=	1120
DHV	=	N/A
D	=	N/A
T	=	N/A
V	=	35 MPH

FUNC. CLASSIFICATION:  
LOCAL  
SUB-REGIONAL TIER

**PROJECT LENGTH**

LENGTH OF ROADWAY TIP PROJECT BR-0115	=	0.107 MILES
LENGTH OF STRUCTURE TIP PROJECT BR-0115	=	0.026 MILES
TOTAL LENGTH OF TIP PROJECT BR-0115	=	0.133 MILES

NCDOT CONTACT: DAVID STUTTS, PE  
Structures 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: November 27, 2019	SHANE SHARPE, PE PROJECT ENGINEER
LETTING DATE: APRIL 21, 2020	BHUPESH R. JOSHI, EIT PROJECT DESIGNER

**HYDRAULICS ENGINEER**

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

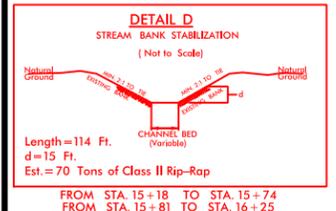
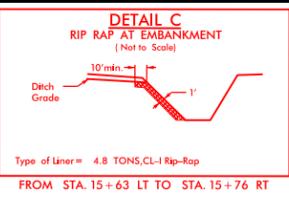
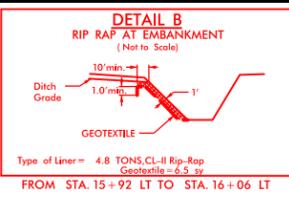
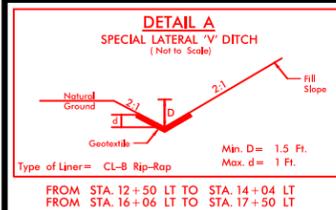
**ROADWAY DESIGN ENGINEER**

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



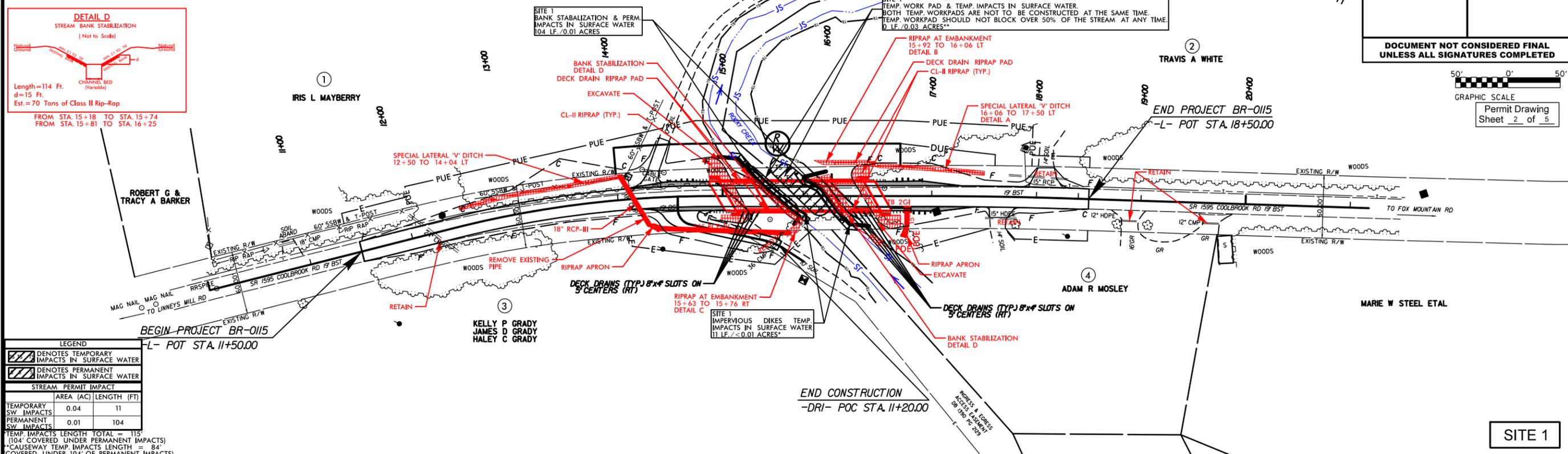
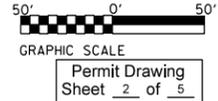
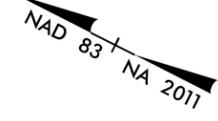
I/16/2020 R:\Hydraulics\PERMITS-Environmental\Drawings\PRM\_SHT\BR-0115-hyd-prm\_psh01.tsh.dgn misticemo

8/17/09



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 NC License Number F-0991

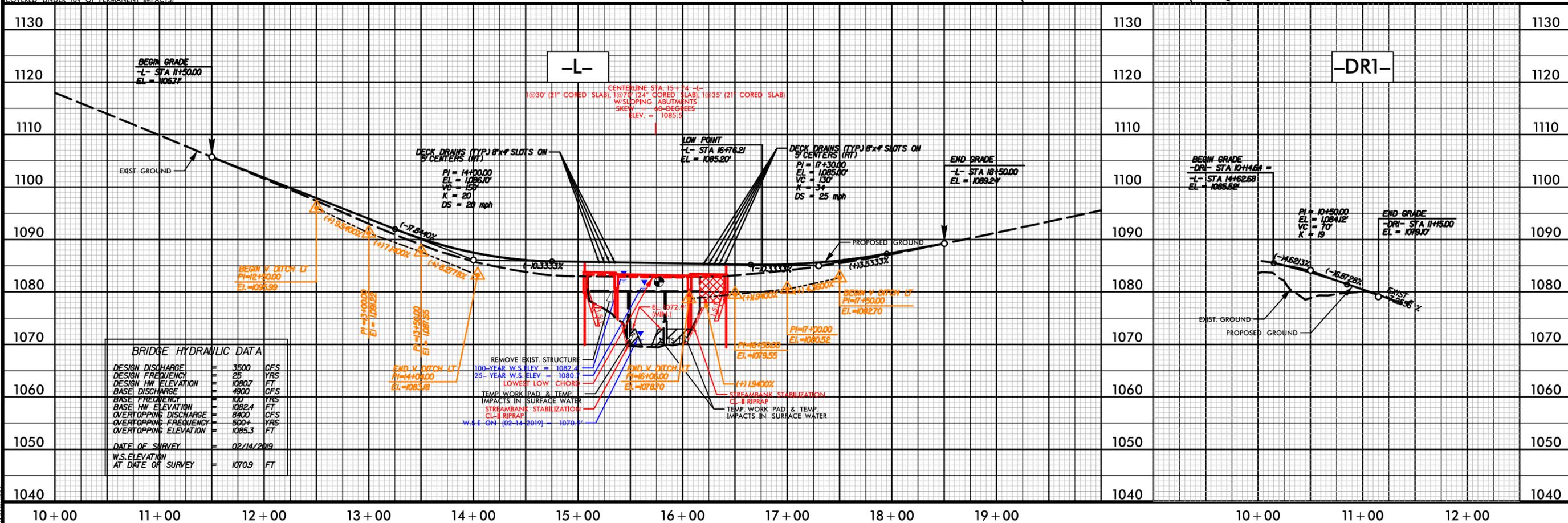
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R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	
<b>DOCUMENT NOT CONSIDERED FINAL</b> UNLESS ALL SIGNATURES COMPLETED	



**LEGEND**

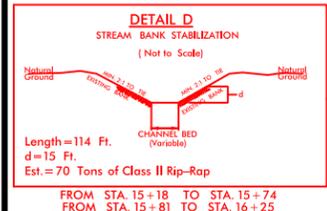
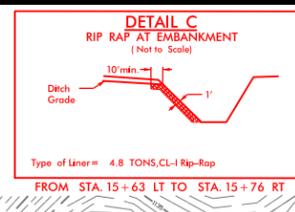
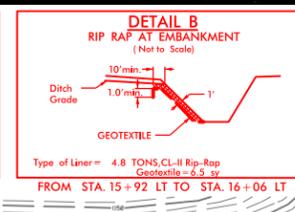
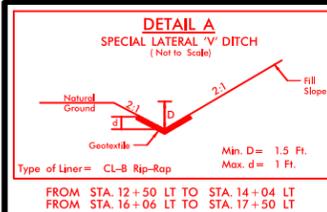
	DENOTES TEMPORARY IMPACTS IN SURFACE WATER
	DENOTES PERMANENT IMPACTS IN SURFACE WATER
<b>STREAM PERMIT IMPACT</b>	
AREA (AC)	LENGTH (FT)
TEMPORARY SW IMPACTS	0.04   11
PERMANENT SW IMPACTS	0.01   104

TEMP. IMPACTS LENGTH TOTAL = 115'  
 (104' COVERED UNDER PERMANENT IMPACTS)  
 \*CAUSEWAY TEMP. IMPACTS LENGTH = 84'  
 COVERED UNDER 104' OF PERMANENT IMPACTS



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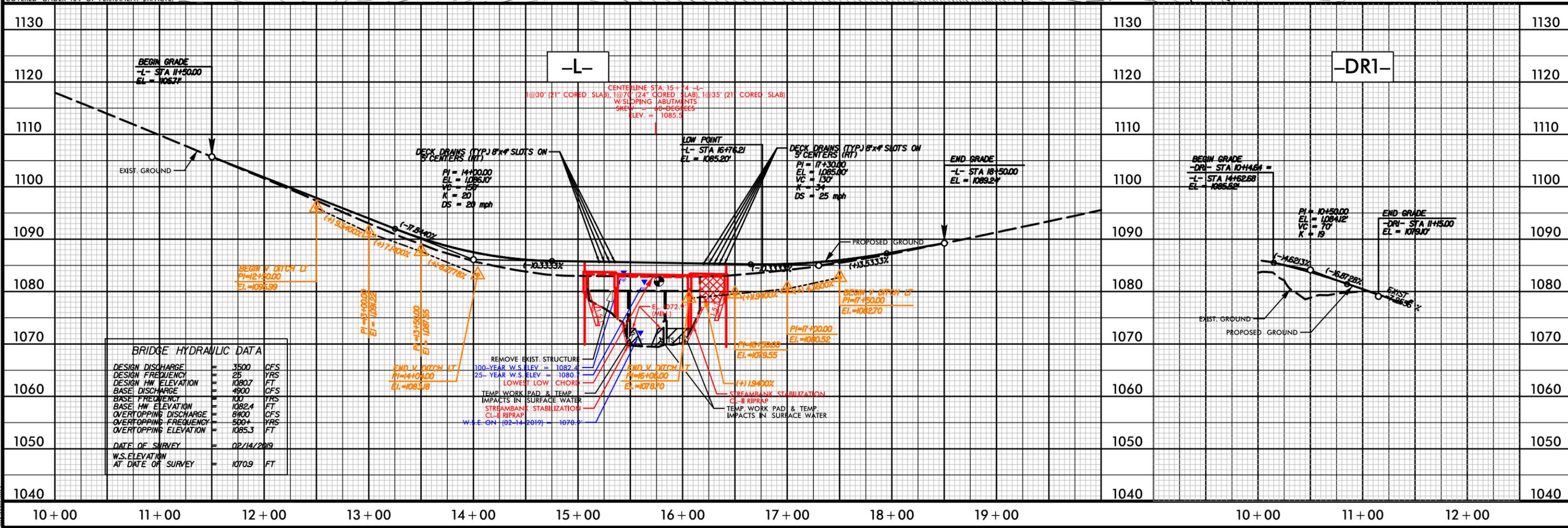
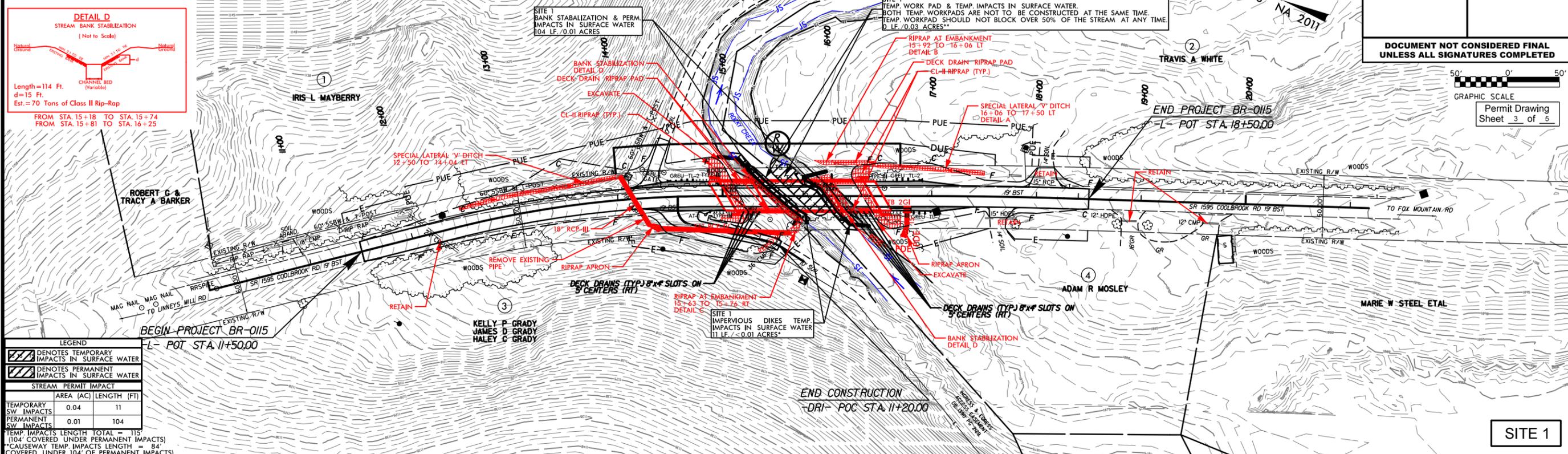
8/17/09



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Charlotte, NC 28202  
NC License Number F-0991

PROJECT REFERENCE NO. <b>BR-0115</b>	SHEET NO. <b>3</b>
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	
<b>DOCUMENT NOT CONSIDERED FINAL</b> UNLESS ALL SIGNATURES COMPLETED	

50' 0' 50'  
GRAPHIC SCALE  
Permit Drawing  
Sheet 3 of 5



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8/17/99

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

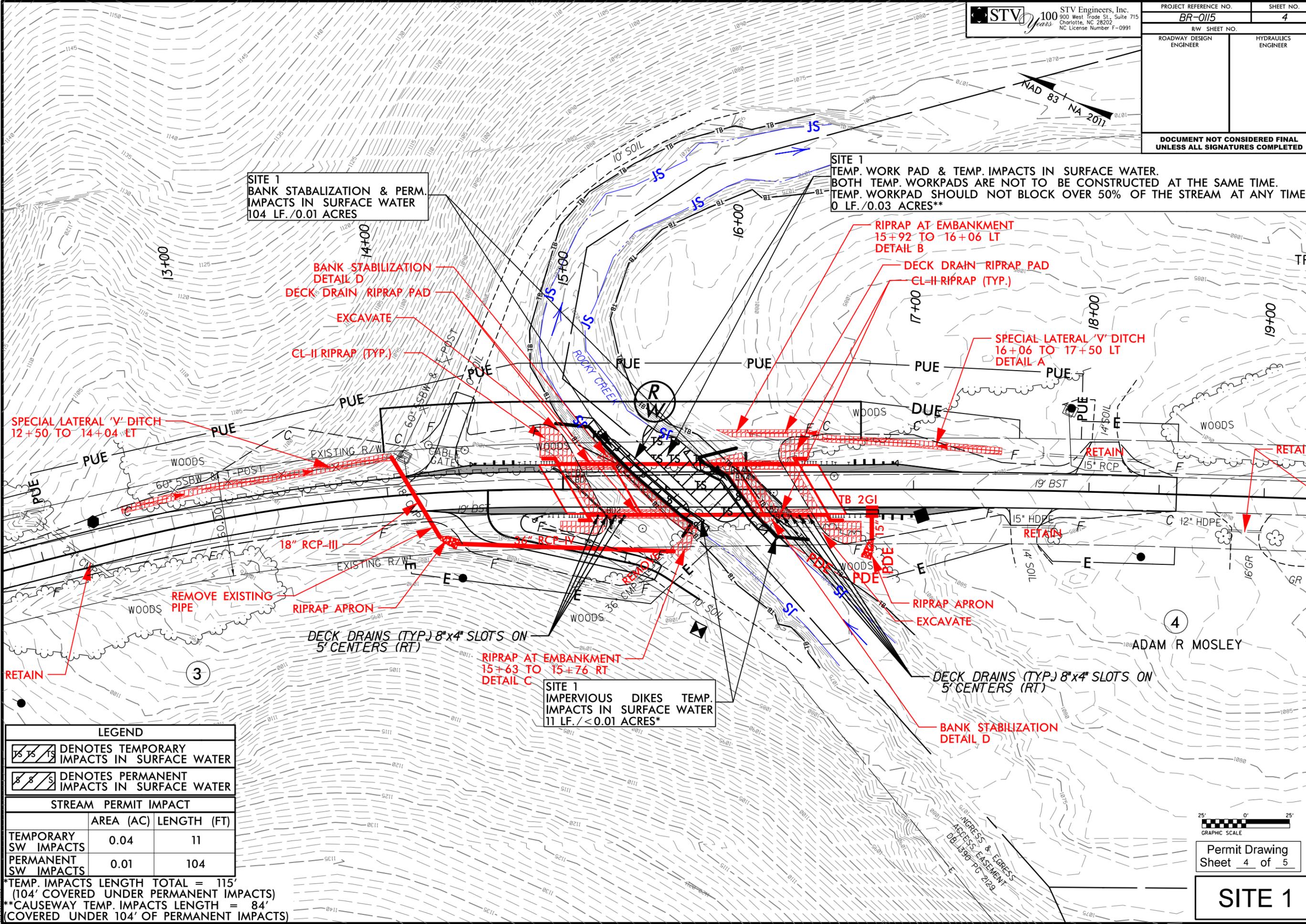
PROJECT REFERENCE NO. <b>BR-0115</b>	SHEET NO. <b>4</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

**SITE 1**  
 TEMP. WORK PAD & TEMP. IMPACTS IN SURFACE WATER.  
 BOTH TEMP. WORKPADS ARE NOT TO BE CONSTRUCTED AT THE SAME TIME.  
 TEMP. WORKPAD SHOULD NOT BLOCK OVER 50% OF THE STREAM AT ANY TIME.  
 0 LF./0.03 ACRES\*\*

**SITE 1**  
 BANK STABILIZATION & PERM. IMPACTS IN SURFACE WATER  
 104 LF./0.01 ACRES

**SITE 1**  
 IMPERVIOUS DIKES TEMP. IMPACTS IN SURFACE WATER  
 11 LF./<0.01 ACRES\*



**LEGEND**

	DENOTES TEMPORARY IMPACTS IN SURFACE WATER
	DENOTES PERMANENT IMPACTS IN SURFACE WATER

**STREAM PERMIT IMPACT**

	AREA (AC)	LENGTH (FT)
TEMPORARY SW IMPACTS	0.04	11
PERMANENT SW IMPACTS	0.01	104

\*TEMP. IMPACTS LENGTH TOTAL = 115'  
 (104' COVERED UNDER PERMANENT IMPACTS)  
 \*\*CAUSEWAY TEMP. IMPACTS LENGTH = 84'  
 (COVERED UNDER 104' OF PERMANENT IMPACTS)

25' 0' 25'  
 GRAPHIC SCALE

Permit Drawing  
 Sheet 4 of 5

**SITE 1**

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 1/6/2020

**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)
1	-L- 15+23 TO 16+16	STREAMBANK STABILIZATION & IMPACTS IN SURFACE WATER ON BOTH LT AND RT SIDE OF THE STREAM						0.01		104		
1	-L- 15+11 TO 15+83 -L- 15+69 TO 16+29	IMPERVIOUS DIKES & IMPACTS IN SURFACE WATER ON BOTH THE LT AND RT SIDE OF THE STREAM							<0.01		11*	
1	-L- 15+27 TO 16+08	TEMPORARY WORK PAD/CAUSEWAY ON BOTH LT AND RT SIDE OF THE STREAM & IMPACTS IN THE STREAM							0.03		0**	
<b>TOTALS:</b>								0.01	0.04	104	11	

\*TEMPORARY IMPACTS LENGTH TOTAL = 115' (104' COVERED UNDER PERMANENT STREAMBANK STABILIZATION IMPACTS)  
 \*\*CAUSEWAY TEMPORARY IMPACTS LENGTH = 84' (COVERED UNDER PERMANENT STREAMBANK STABILIZATION IMPACTS)

NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 BRIDGE #166 OVER ROCKY CREEK  
 ON SR 1595 (COOLBROOK RD)  
 IREDELL COUNTY  
 BR-0115



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

June 17, 2019

TO: Carla Dagnino, ECAP Group Leader  
Environmental Analysis Unit

FROM: Chris Manley, Environmental Program Consultant  
Biological Surveys Group, EAU

SUBJECT: Section 7 survey results for the northern long-eared bat (*Myotis septentrionalis*) associated with the replacement of Bridge No. 166 over Rocky Creek on SR 1595 in Iredell County, **TIP No. BR-0115**.

The North Carolina Department of Transportation (NCDOT, Division 12) proposes to replace Bridge No. 166 over Rocky Creek on SR 1595 in Iredell County, TIP No. BR-0115. The existing bridge is a three-span structure with steel beams, timber deck and guard rails, and concrete end walls. The overall length of the structure is 107 feet.

Northern long-eared bat

The project to replace Bridge No. 166 has been reviewed for effects on the northern long-eared bat (NLEB). As of May 4, 2015, NLEB is listed by the U.S. Fish and Wildlife Service (USFWS) as "Threatened" under the Endangered Species Act of 1973. As of June 17, 2019, NLEB is listed by USFWS ([http://www.fws.gov/raleigh/species/cntylist/nc\\_counties.html](http://www.fws.gov/raleigh/species/cntylist/nc_counties.html)) as "probable/potential" in Iredell County. USFWS also established a final rule under the authority of section 4(d) of the Endangered Species Act that provides measures for the conservation of NLEB. The USFWS has tailored the final 4(d) rule to prohibit the take of NLEB from certain activities within areas where they are in decline. This incidental take protection applies only to known NLEB occupied maternity roost trees and known NLEB hibernacula. Effective February 16, 2016, incidental take resulting from tree removal is prohibited if it 1) occurs within a ¼ mile radius of known NLEB hibernacula; or 2) cuts or destroys known occupied maternity roost trees or any other trees within a 150-foot radius from the known maternity tree during the pup season (June 1-July 31).

According to the North Carolina Natural Heritage Program (NHP) Biotics Database, most recently updated April 2019, **the nearest NLEB hibernacula record is 45 miles west of the project and no known NLEB roost trees occur within 150 feet of the project area.**

NCDOT has also reviewed the USFWS Asheville Field office website ([http://www.fws.gov/asheville/htmls/project\\_review/NLEB\\_in\\_WNC.html](http://www.fws.gov/asheville/htmls/project_review/NLEB_in_WNC.html)) for consistency with NHP records. This project is located entirely outside of the red highlighted areas (12-digit HUC) that the USFWS Asheville Field Office has determined to be representative of an area that may require consultation.

For the proposed action, NCDOT has committed to the conservation measures listed below:

- 1) No alterations of a known hibernacula entrance or interior environment if it impairs an essential behavioral pattern, including sheltering northern long-eared bats (January 1 through December 31);
- 2) No tree removal within a 0.25 mile radius of a known hibernacula (January 1 through December 31); and
- 3) No cutting or destroying a known, occupied maternity roost tree, or any other trees within a 150-foot radius from the known, occupied maternity tree during the period from June 1 through and including July 31.

**NCDOT has determined that the proposed action does not require separate consultation on the grounds that the proposed action is consistent with the final Section 4(d) rule, codified at 50 C.F.R. § 17.40(o) and effective February 16, 2016.** NCDOT may presume its determination is informed by best available information and consider Section 7 responsibilities fulfilled for NLEB.

If you need any additional information, please contact Chris Manley at 919-707-6135.