



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. ERIC BOYETTE  
SECRETARY

January 6, 2022

U.S. Army Corps of Engineers  
Raleigh Regulatory Field Office  
3331 Heritage Trade Drive, Suite 105  
Wake Forest, NC 27587

ATTN: Mr. David Bailey  
NCDOT Regulatory Coordinator

Subject: **Application for Section 404 Regional General Permit 50, and Section 401 Water Quality Certification** for the Proposed Replacement of Bridge 112 on NC 87 over Reedy Fork Creek in Alamance County, Division 7, TIP No. B-5728, Debit \$570 from WBS 45684.1.1.

Dear Sir:

The North Carolina Department of Transportation (NCDOT) proposes to replace bridge number 112 on NC 87 over Reedy Fork Creek with a new bridge in the same location. Traffic will utilize an on-site Detour bridge during construction.

As a result of replacing the existing bridge, there will be 66 linear feet of stream bank stabilization, and 0.26 acre (134 linear feet) of reported temporary stream impacts from causeways needed for removal of the existing bridge and construction of the new one. There are additional temporary impacts associated with the causeways not reported, as they overlap permanent bank stabilization impacts.


There will be 24,312 square feet of mitigable impacts to the Jordan River Buffer. Mitigation has been acquired from NCDMS for the mitigable buffer impacts from this project.

Please see enclosed copies of the Pre-Construction Notification (PCN), which includes the following attachments: pre-filing notification documentation, an NCDWR "Onsite Determination for Applicability to the Mitigation Rules (15A NCAC 2H .0506) and Onsite Determination for Applicability to the Jordan Buffer Rules (15A NCAC 02B .0267)" letter, dated September 19, 2018, Historic Architecture Form, Archaeological Form, Tribal Letters (Monacan Indian Nation and Catawba), Stormwater Management Plan, Permit Drawings and Buffer Drawings. A Minimum Criteria Determination Checklist (MCDC) was completed in November 2020 and distributed shortly thereafter.

This project calls for a letting date of April 19, 2022, and a review date of March 1, 2022.

A copy of this permit application and its distribution list will be posted on the NCDOT Website at: <https://xfer.services.ncdot.gov/pdea/PermApps/>. 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)

June 1, 2021 Ver 4.1

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

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

Below is a link to the online help file.

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

### A. Processing Information



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

Alamance

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-5728

WBS # \*

45684.1.1

(for NCDOT use only)

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

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

Has this PCN previously been submitted? \*

☐ Yes  
☒ No

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

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

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

☐ Yes ☒ No

Regional General Permit (RGP) Number:

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

RGP Numbers (for multiple RGPs):

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

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

check all that apply

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

### Pre-Filing Meeting Information

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

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

Is this a courtesy copy notification? \*

☐ Yes ☒ No

ID#

Version

Pre-filing Meeting or Request Date

9/28/2020

Attach documentation of Pre-Filing Meeting Request here:

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

B-5728 401 Pre-Filing Notification (Mass 12 MLL Request) 2020-09-28.pdf

417.96KB

File type must be PDF

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

\*

For the record only for DWR 401 Certification:

☐ Yes ☒ No

For the record only for Corps Permit:

☐ Yes ☒ No

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

☐ Yes ☒ No

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

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

☐ Yes ☒ No

Acceptance Letter Attachment

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

FILE TYPE MUST BE PDF

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

## B. Applicant Information



1a. Who is the Primary Contact? \*

NCDOT

1c. Primary Contact Phone: \*

(xxx)xxx-xxxx

(919)707-6103

1b. Primary Contact Email: \*

wabarrett@ncdot.gov

1d. Who is applying for the permit? \*

☒ Owner

(Check all that apply)

☐ Applicant (other than owner)

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

☐ Yes ☒ No

## 2. Owner Information

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

n/a

2b. Deed book and page no.:

2c. Contact Person:

(for Corporations)



## 2d. Address \*

Street Address

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)707-6103

## 2f. Fax Number:

(xxx)xxx-xxxx

## 2g. Email Address: \*

wabarrett@ncdot.gov

# C. Project Information and Prior Project History

## 1. Project Information

### 1a. Name of project: \*

B-5728: Replacement of Bridge #000112 on NC 87 over Reedy Fork Creek

### 1b. Subdivision name:

(if appropriate)

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

Ossippee

## 2. Project Identification

### 2a. Property Identification Number:

(tax PIN or parcel ID)

### 2b. Property size:

(in acres)

### 2c. Project Address

Street Address

Address Line 2

City

State / Province / Region

Postal / Zip Code

Country

### 2d. Site coordinates in decimal degrees

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

### Latitude: \*

36.173083

ex: 34.208504

### Longitude: \*

-79.510335

-77.796371

## 3. Surface Waters

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

Reedy Fork Creek

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

WS-V; NSW

[Surface Water Lookup](#)

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

Cape Fear

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

030300020705

[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: \*

Forestland with historically industrial, residential use areas and agricultural properties.

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

☐ Yes ☒ No ☐ Unknown

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

0

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

(intermittent and perennial)

633

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

The purpose of the proposed project is to remove a structurally deficient bridge and replace in-place with a bridge that meets current design standards and can accommodate future projected traffic volumes as well as accommodating all legal loads. The bridge is considered structurally deficient due to a substructure condition appraisal of 4 out of 9, according to Federal Highway Administration standards. NCDOT Bridge Management Unit records indicate Bridge No. 112 currently has a sufficiency rating of 29.32 out of a possible 100.

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

The bridge will include a two-lane roadway with twelve-foot lanes and a minimum of six-foot paved shoulders. The design speed limit is 55 MPH. The bridge will be replaced with a new bridge approximately 340 feet in length. The Burlington-Graham Metropolitan Planning Organization (MPO) Comprehensive Transportation Plan (CTP) for bicycle paths recommends improvements to the NC 87 route in Ossipee. Although, no special bicycle or pedestrian accommodations (i.e., 8 foot wide path and/or sidewalks) have been requested on the bridge. The current design has shoulders on the bridge six feet in width, which a bicycle or pedestrian could use to cross the bridge.

An offsite detour was considered but ultimately not chosen because no NC routes were available to detour traffic, especially truck traffic, onto. The preferred alternative is to replace Bridge No. 112 in place with an onsite detour via a temporary bridge west of its existing location.

Standard road building equipment such as trucks, dozers, and cranes will be used.

5. Jurisdictional Determinations

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

☒ Yes ☐ No ☐ Unknown

Comments:

only streams present, no wetlands.

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): Troy Shelton  
Agency/Consultant Company: Dewberry, Inc.  
Other:

6. Future Project Plans

6a. Is this a phased project? \*

☐ Yes ☒ No

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

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* (?)	3b.Impact type *	3c. Type of impact*	3d. S. name *	3e. Stream Type* (?)	3f. Type of Jurisdiction *	3g. S. width*	3h. Impact length*

S1	causeway	Temporary	Bank Stabilization	Reedy Fork Creek	Perennial	Both	170 Average (feet)	17 (linear feet)
S2	causeway	Temporary	Workpad/Causeway	Reedy Fork Creek	Perennial	Both	170 Average (feet)	134 (linear feet)
S3	bridge replacement	Permanent	Bank Stabilization	Reedy Fork Creek	Perennial	Both	170 Average (feet)	66 (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:

151

3i. Total stream and ditch impacts:

217

3j. Comments:

Note included on Permit Drawing Sheet 2 of 8: "Causeways not to extend more than 50% across Reedy Fork Creek".  
There are some temporary stream impacts from the causeway that aren't included in totals, as they overlap with permanent bank stabilization impacts.

6. Buffer Impacts (for DWR)

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

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

Check all that apply.

- ☐ Neuse
- ☐ Catawba
- ☐ Goose Creek
- ☐ Other
- ☐ Tar-Pamlico
- ☐ Randleman
- ☒ Jordan Lake

6b. Impact Type * (?)	6c. Per or Temp * (?)	6d. Stream name *	6e. Buffer mitigation required? *	6f. Zone 1 impact *	6g. Zone 2 impact *
Bridge	P	Reedy Fork Creek	Yes	14,938 (square feet)	9,374 (square feet)

6h. Total buffer impacts:

	Zone 1	Zone 2
Total Temporary impacts:	0.00	0.00
Total Permanent impacts:	14,938.00	9,374.00
Total combined buffer impacts:	14,938.00	9,374.00

6i. Comments:

E. Impact Justification and Mitigation

1. Avoidance and Minimization

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

Steps were taken to reduce stream impacts where possible. For any fill slopes located with ditch stub-outs, toe protection is being installed. Rip rap pads are being used near jurisdictional areas to minimize the potential for erosion. Any sediment and erosion control devices will follow the NCDOT procedure for Environmentally Sensitive Areas where required and will be installed as needed throughout the site to promote stability and minimize sedimentation. Grass swales and rip rap dissipator treatments have been designed and utilized where practical to minimize the impacts to jurisdictional and wetland areas.

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

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

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

☒ DWR ☐ Corps

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

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

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

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

☒ Yes ☐ No

4b. Stream mitigation requested:

(linear feet)

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

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

4d. Buffer mitigation requested (DWR only):

(square feet)

24,312

4e. Riparian wetland mitigation requested:

(acres)

4f. Non-riparian wetland mitigation requested:

(acres)

4g. Coastal (tidal) wetland mitigation requested:

(acres)

4h. Comments

6. Buffer mitigation (State Regulated Riparian Buffer Rules) - required by DWR

6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation? If yes, you must fill out this entire form - please contact DWR for more information.

☒ Yes ☐ No

6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation calculate the amount of mitigation required in the table below.

	6c. Reason for impact	6d. Total impact (square feet)	Multiplier	6e. Required mitigation (square feet)	
Zone 1	Bridge	14,938	3	44,814	

Zone 2 Bridge 9,374 1.5 14,061

6f. Total buffer mitigation required

58875

6g. If buffer mitigation is required, is payment to a mitigation bank or NC Division of Mitigation Services proposed?

☒ Yes ☐ No

6j. Comments:

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

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

1. Diffuse Flow Plan

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

☒ Yes ☐ No

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

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

What type of SCM are you providing?

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

(check all that apply)

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

## 2. Stormwater Management Plan

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

☒ Yes ☐ No

### Comments:

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

### 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

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

IPaC, NC Natural Heritage Program (NHP) Biotics Database, field surveys.

### 6. Essential Fish Habitat (Corps Requirement)

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

☐ Yes ☒ No

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

NMFS County Index

### 7. Historic or Prehistoric Cultural Resources (Corps Requirement)

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

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

☐ Yes ☒ No

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

Minimum Criteria Determination Checklist (MCDC), NCDOT Archaeology Group and Historic Structures Group documentation (attachments).

## 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 Map (Zone EA)

## Miscellaneous

### Comments

In response to Question C.5.B., the "unknown" box was clicked. However, David Bailey with the Corps (and April Norton, NCDWR Representative) conducted an on-site visit on August 17, 2018. A PJD was never issued by the Corps.

The NCDWR "Onsite Determination for Applicability to the Mitigation Rules (15A NCAC 2H .0506) and Onsite Determination for Applicability to the Jordan Buffer Rules (15A NCAC 02B .0267)" document, dated September 19, 2018, is attached to this ePCN.

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

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

B-5728 Cover Letter.pdf	406.26KB
B-5728 Historic Properties.pdf	5.2MB
B-5728 PA 16-01-0055 Alamance No Archaeological Survey Required Form.pdf	1.72MB
B-5728 Tribal Letters.pdf	1015.6KB
B-5728 Mitigation Accept.pdf	208.7KB
B-5728 NCDWR Stream Determination Letter_B-5728.pdf	2.21MB
B5728_Permit_Buffer_drawings.pdf	3.76MB
FINAL State MCD Checklist B-5728 11-23-20.pdf	4.11MB

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 Turchy

Signature \*

*Michael Turchy*

Date

1/6/2022

ROY COOPER  
Governor  
ELIZABETH S. BISER  
Secretary



December 20, 2021

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

Dear Mr. Harris:

Subject: Mitigation Acceptance Letter:

**B-5728**, Replace Bridge 112 over Reedy Fork on NC 87 Alamance County

The purpose of this letter is to notify you that the North Carolina Department of Environmental Quality – Division of Mitigation Services (NCDEQ-DMS) will provide the buffer mitigation for the subject project. Based on the information received from you on December 17, 2021, the impacts are located in CU 03030002 of the Cape Fear River basin Haw Arm in the Central Piedmont (CP) Eco-Region, and are as follows:

Cape Fear 03030002 Haw Arm	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	0	0	0	0	14,938.000	9,374.000

All buffer mitigation requests and approvals are administrated through the Riparian Restoration Buffer Fund. The NCDOT will be responsible to ensure that appropriate compensation for the buffer mitigation will be provided in the agreed upon method of fund transfer. Upon receipt of the NCDWR's Buffer Authorization Certification, DMS will transfer funds from the NCDOT 2984 Fund into the Riparian Restoration Buffer Fund. Upon completion of the transfer payment, NCDOT will have complete its riparian buffer mitigation responsibility for TIP Number B-5728 in Alamance County. Subsequently, DMS will conduct a review of current NCDOT ILF Program mitigation projects in the river basin to determine if available buffer mitigation credits exist prior to procuring new buffer assets. If there are buffer mitigation credits available, then the Riparian Restoration Buffer Fund will purchase the appropriate amount of buffer mitigation credits from the NCDOT ILF Program.

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

Sincerely,

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

James B. Stanfill  
DMS Asset Management Supervisor

cc: Ms. Amy Chapman, NCDWR – Raleigh  
File: B-5728



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



North Carolina Department of Transportation  
Highway Stormwater Program  
STORMWATER MANAGEMENT PLAN  
FOR NCDOT PROJECTS



(Version 2.08; Released April 2018)

WBS Element: 45684.1.1 TIP No.: B-5728 County(ies): ALAMANCE Page 1 of 1

General Project Information

WBS Element:	45684.1.1	TIP Number:	B-5728	Project Type:	Bridge Replacement	Date:	11/11/2021
NCDOT Contact:	Dan Duffield, P.E.			Contractor / Designer:	Cameron M. Long, P.E.		
Address:	NCDOT Design Build 1020 Birch Ridge Drive Raleigh, NC 27610			Address:	Moffatt & Nichol 4700 Falls of Neuse Rd., Suite 300 Raleigh, NC 27609		
	Phone: 919-707-6611				Phone: 919-781-4626		
	Email: <a href="mailto:dcduffield@ncdot.gov">dcduffield@ncdot.gov</a>				Email: <a href="mailto:clong@moffattnichol.com">clong@moffattnichol.com</a>		
City/Town:	Ossippee			County(ies):	Alamance		
River Basin(s):	Cape Fear			CAMA County?	No		
Wetlands within Project Limits?	No						

Project Description

Project Length (lin. miles or feet):	0.29	Surrounding Land Use:	Forestland with historically industrial, commercial, residential use areas and agricultural properties		
Project Built-Up Area (ac.)		Proposed Project		Existing Site	
3.5 ac.				2.8 ac.	
Typical Cross Section Description:	-L- (NC 87) will have two 12' paved lanes with an 8' grass shoulder (11' w/ Guard Rail), outside grass roadway ditches with 4:1 side slopes and fill and cut slopes between 6:1 and 2:1. An on-site detour -LDET- will have two 11' paved lanes with 8' grass shoulder (10' w/Guard Rail), outside grass roadway ditches with 2:1 side slopes.			Along existing -L- (NC 87), there is one lane (12') in each direction and grass shoulders.	
Annual Avg Daily Traffic (veh/hr/day):	Design/Future: 7040	Year: 2041	Existing: 6340	Year: 2021	
General Project Narrative: (Description of Minimization of Water Quality Impacts)	The North Carolina Department of Transportation (NCDOT) has proposed to replace bridge #000112 on NC 87 over Reedy Fork. Below are a list of minimization efforts associated with water quality impacts. Steps were taken to reduce stream impacts where possible. For any fill slopes located with ditch stub outs, toe protection is being installed. Rip rap pads are being used near jurisdictional areas to minimize the potential for erosion. Any sediment and erosion control devices will follow the NCDOT procedure for Environmentally Sensitive Areas where required and will be installed as needed throughout the site to promote stability and minimize sedimentation. Grass swales and rip rap dissipator treatments have been designed and utilized where practical to minimize the impacts to jurisdictional and wetland areas.				

Waterbody Information

Surface Water Body (1):	Reedy Fork		NCDWR Stream Index No.:	16-11-(9)	
NCDWR Surface Water Classification for Water Body	Primary Classification:	Water Supply V (WS-V)			
	Supplemental Classification:	Nutrient Sensitive Waters (NSW)			
Other Stream Classification:	None				
Impairments:	None				
Aquatic T&E Species?	No	Comments:			
NRTR Stream ID:	Reedy Fork		Buffer Rules in Effect:	Jordan Lake	
Project Includes Bridge Spanning Water Body?	Yes	Deck Drains Discharge Over Buffer?	No	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)					

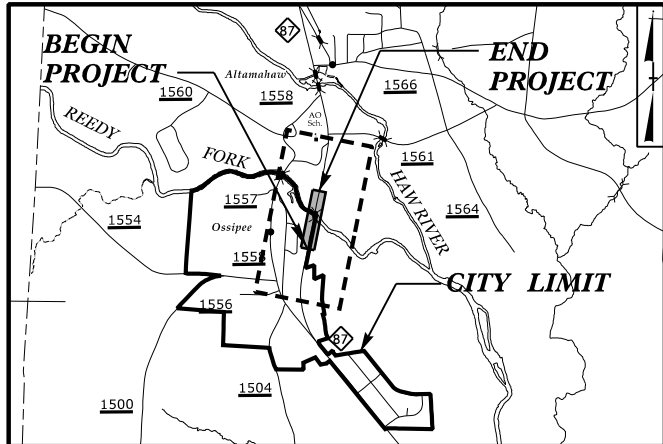


09/08/99

TIP PROJECT: B-5728

CONTRACT:

See Sheet 1A For Index of Sheets  
See Sheet 1B For Conventional Symbols



VICINITY MAP  
(NOT TO SCALE)

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

ALAMANCE COUNTY

LOCATION: REPLACEMENT OF BRIDGE NO. 000112 OVER REEDY FORK  
ON NC 87

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

WETLAND AND SURFACE WATER IMPACTS PERMIT

ROW PLANS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5728	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45684.1.1	N/A	PE	
45684.2.1	N/A	ROW/UT	

PERMIT DRAWING  
SHEET 1 OF 8

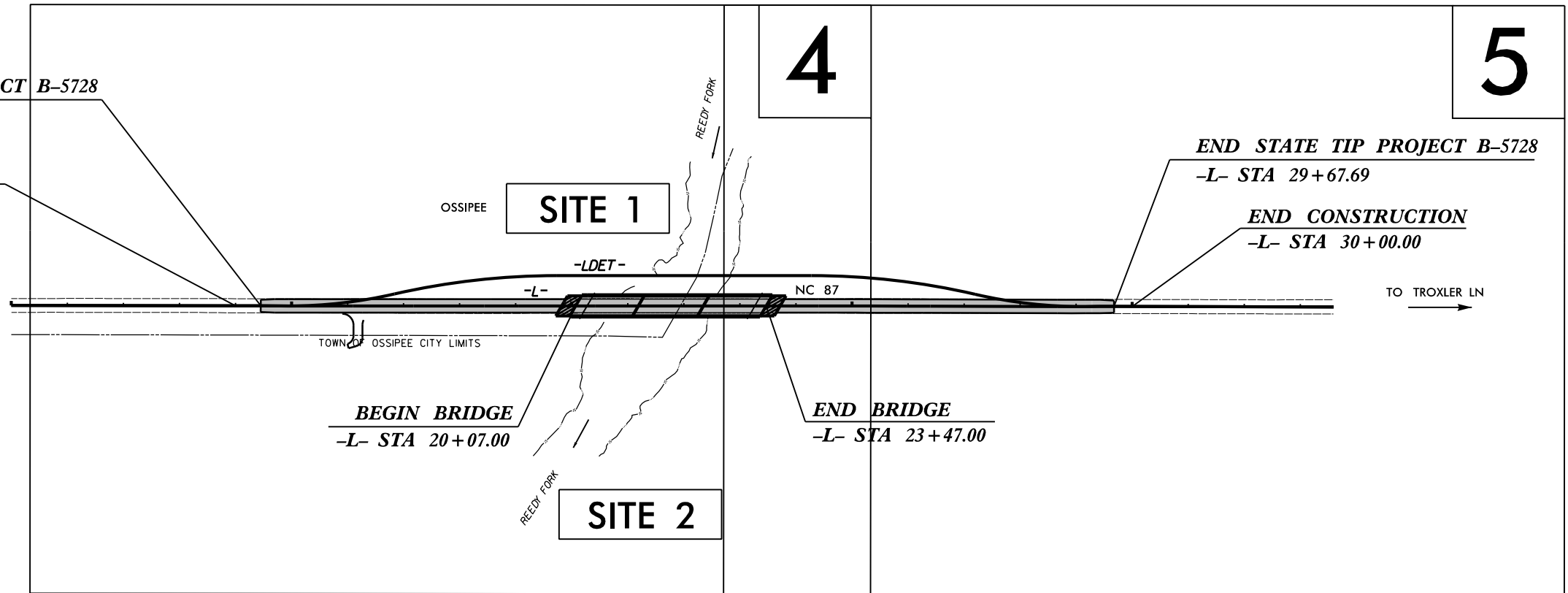
PM: CAMERON LONG, PE  
11/11/2021



BEGIN STATE TIP PROJECT B-5728  
-L- STA 14+45.11

BEGIN CONSTRUCTION  
-L- STA 14+00.00

TO OLD NC 87



BEGIN BRIDGE  
-L- STA 20+07.00

END BRIDGE  
-L- STA 23+47.00

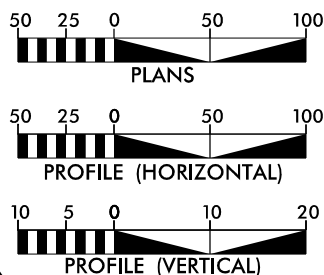
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-L- STA 29+67.69

END CONSTRUCTION  
-L- STA 30+00.00

A PORTION OF THIS PROJECT IS WITHIN THE  
MUNICIPAL BOUNDARIES OF OSSIPEE  
CLEARING ON THIS PROJECT SHALL BE ACCOMPLISHED  
BY METHOD II

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2021 = 6,340  
ADT 2041 = 7,040  
K = 10 %  
D = 65 %  
T = 10 % \*  
V = 55 MPH  
\* TTST = 3% DUAL 7%  
FUNC CLASS =  
MINOR ARTERIAL -  
REGIONAL

PROJECT LENGTH

LENGTH OF ROADWAY = 0.224 mi  
TIP PROJECT B-5728  
LENGTH OF STRUCTURES = 0.064 mi  
TIP PROJECT B-5728  
LENGTH OF TIP = 0.288 mi  
PROJECT B-5728

Prepared In the Office of:  
**moftatt & nichol**  
4700 FALLS OF NEUSE ROAD, SUITE 300  
RALEIGH, NORTH CAROLINA 27609  
(919) 781-4656 VOICE (919) 781-4669 FAX  
NC License NO.: F-0105

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
MARCH 25, 2021

LETTING DATE:  
NOVEMBER 16, 2021

TRENT HUFFMAN P.E.  
PROJECT ENGINEER

GRAY MODLIN P.E.  
PROJECT DESIGN ENGINEER

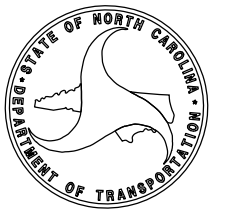
DAVID STUTTS, P.E.  
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: P.E.

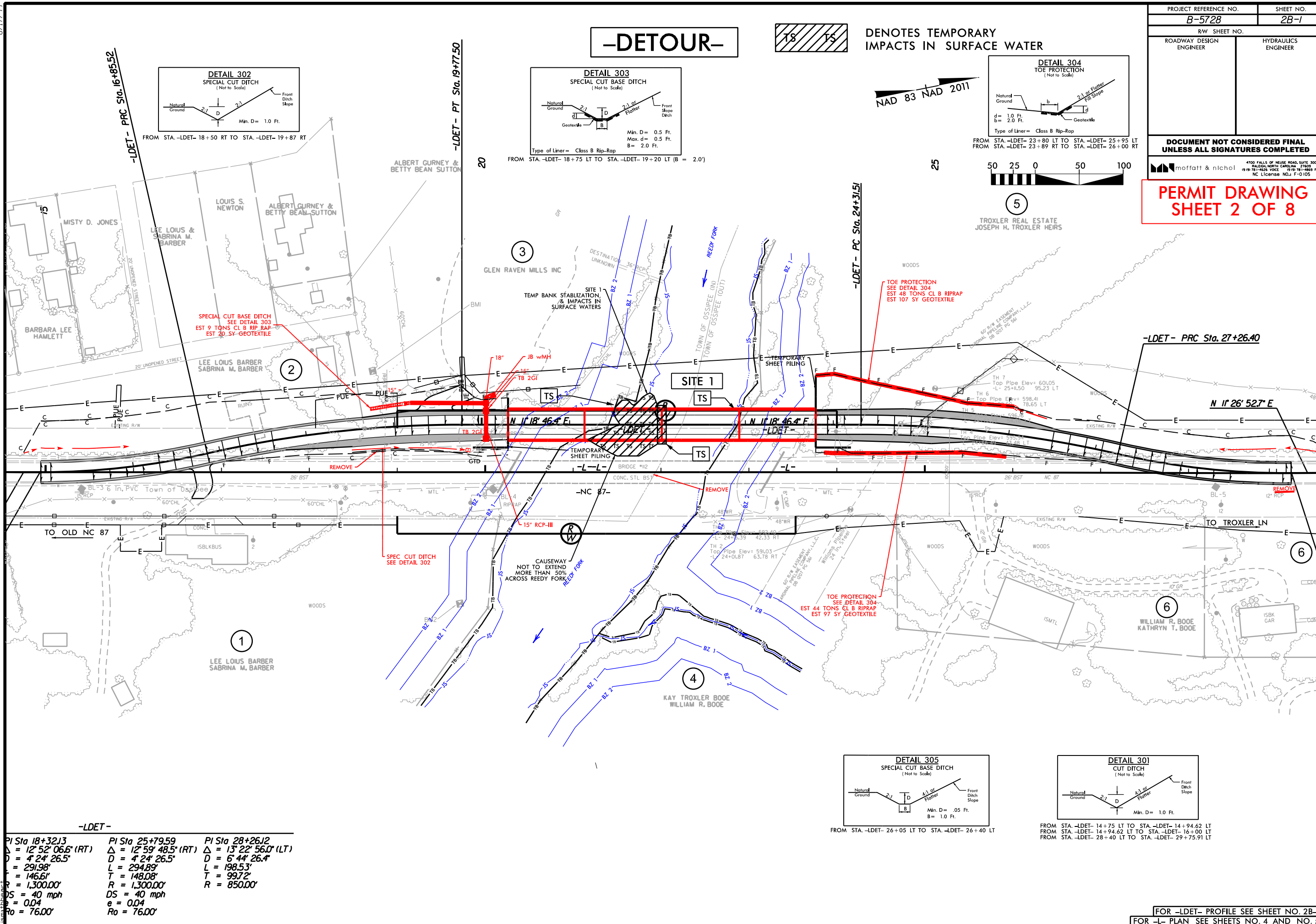
ROADWAY DESIGN  
ENGINEER

SIGNATURE: P.E.



8/17/99

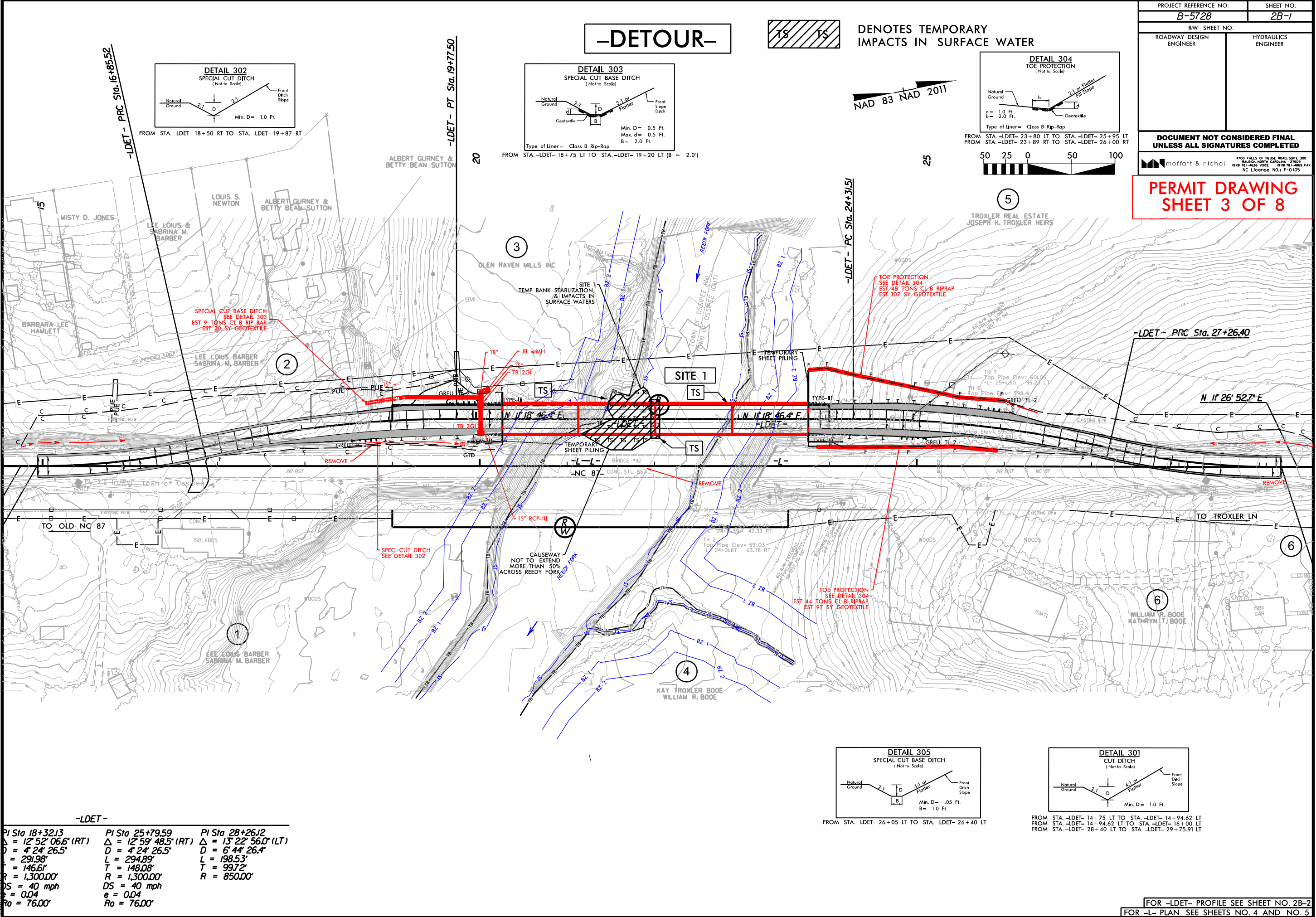
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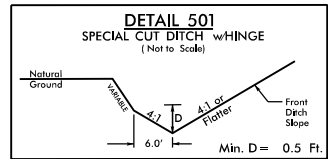
8/17/99

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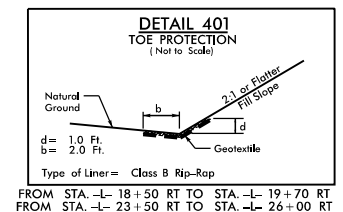


PERMIT DRAWING  
SHEET 3 OF 8

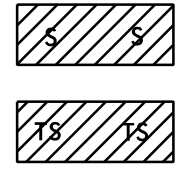
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FROM STA. -L- 14+00 LT TO STA. -L- 14+45.11 LT  
FROM STA. -L- 14+50 RT TO STA. -L- 15+00 RT  
FROM STA. -L- 25+75 RT TO STA. -L- 29+67.69 RT  
FROM STA. -L- 29+67.69 LT TO STA. -L- 30+00 LT



FROM STA. -L- 18+50 RT TO STA. -L- 19+70 RT  
FROM STA. -L- 23+50 RT TO STA. -L- 26+00 RT



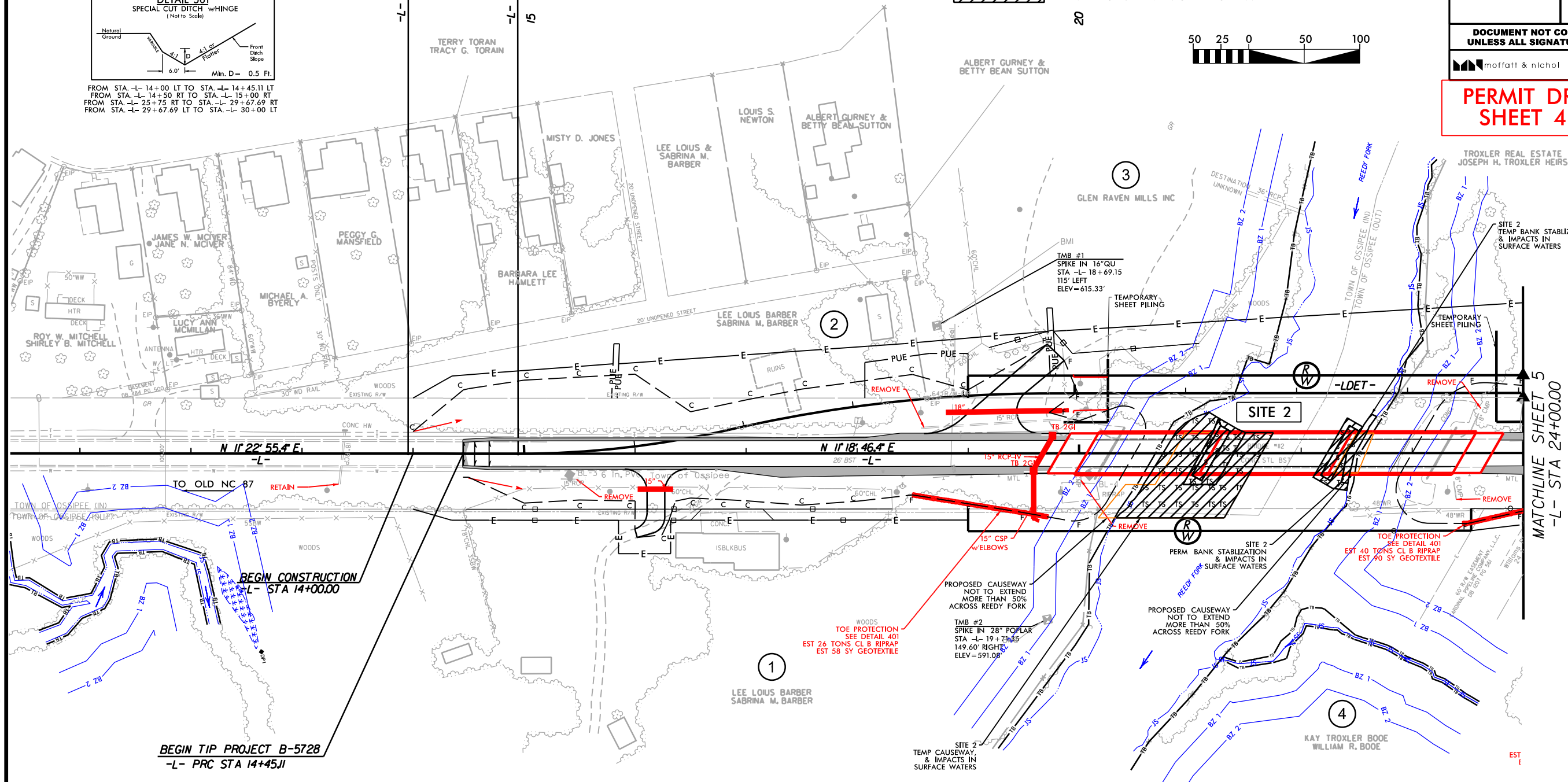
DENOTES IMPACTS IN  
SURFACE WATER

DENOTES TEMPORARY  
IMPACTS IN SURFACE WATER

NAD 83 NAD 2011



PROJECT REFERENCE NO. <b>B-5728</b>		SHEET NO. <b>4</b>
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>		
4700 FALLS OF NEUSE ROAD, SUITE 300 RALEIGH, NORTH CAROLINA 27609 (919) 781-4626 VOICE (919) 781-4669 FAX NC License NO.: F-0105		
<b>PERMIT DRAWING SHEET 4 OF 8</b>		



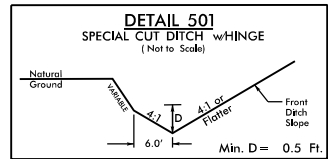
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$L = 49.51'$	$L = 49.51'$
$T = 24.75'$	$T = 24.75'$
$R = 15,927.2'$	$R = 11,085.86'$
	$DS = 55$ MPH
	$e = NC$

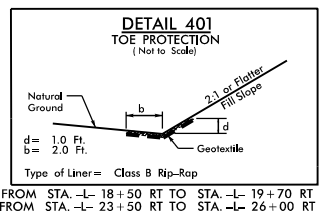
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FOR -L- PROFILE SEE SHEET NO. 6



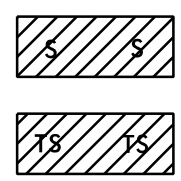
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FROM STA. -L- 14+00 LT TO STA. -L- 14+45.11 LT  
FROM STA. -L- 14+50 RT TO STA. -L- 15+00 RT  
FROM STA. -L- 25+75 RT TO STA. -L- 29+67.69 RT  
FROM STA. -L- 29+67.69 LT TO STA. -L- 30+00 LT



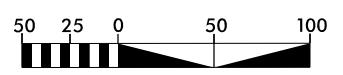
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FROM STA. -L- 23+50 RT TO STA. -L- 26+00 RT



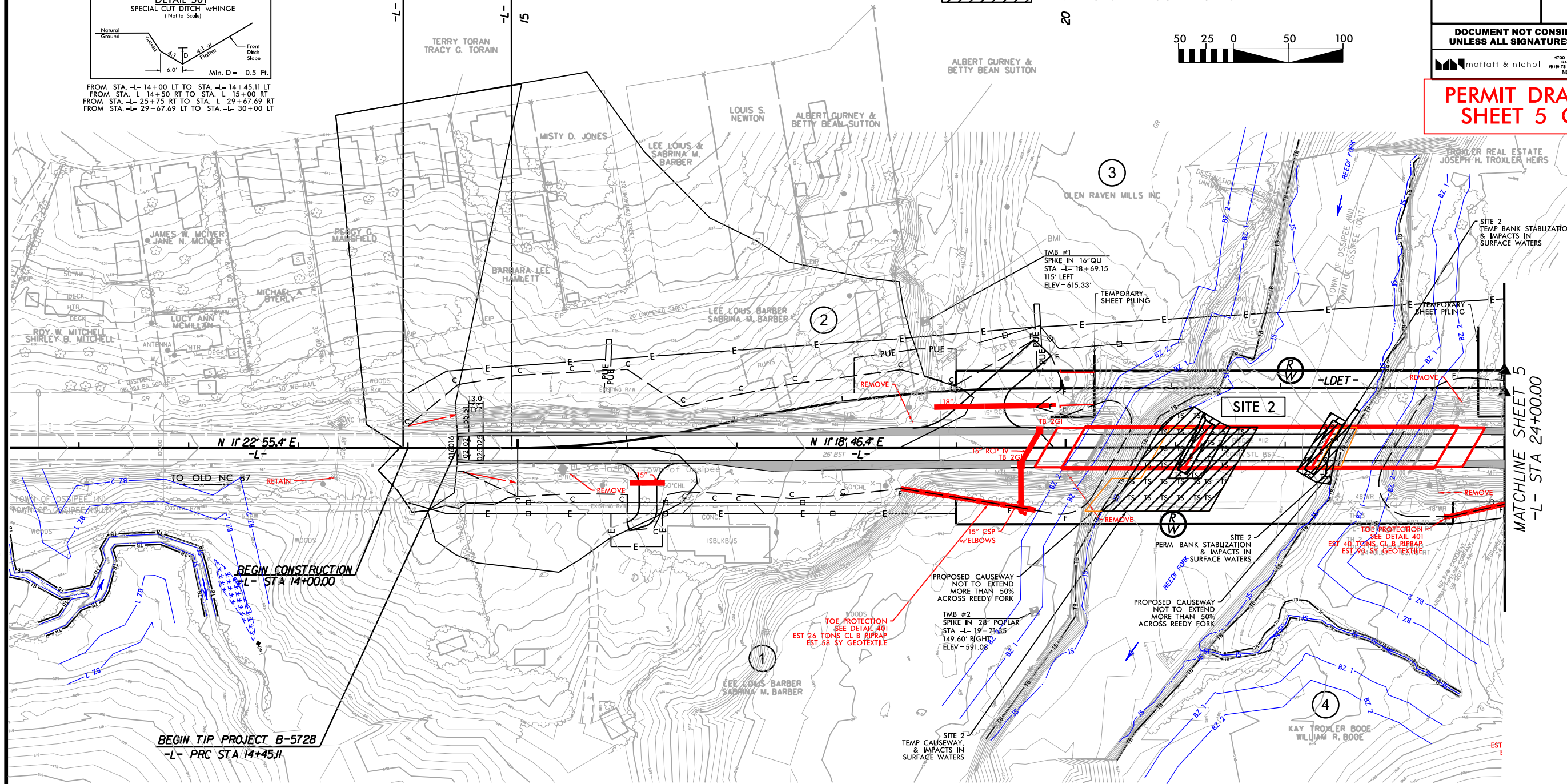
DENOTES IMPACTS IN  
SURFACE WATER

DENOTES TEMPORARY  
IMPACTS IN SURFACE WATER

NAD 83 NAD 2011



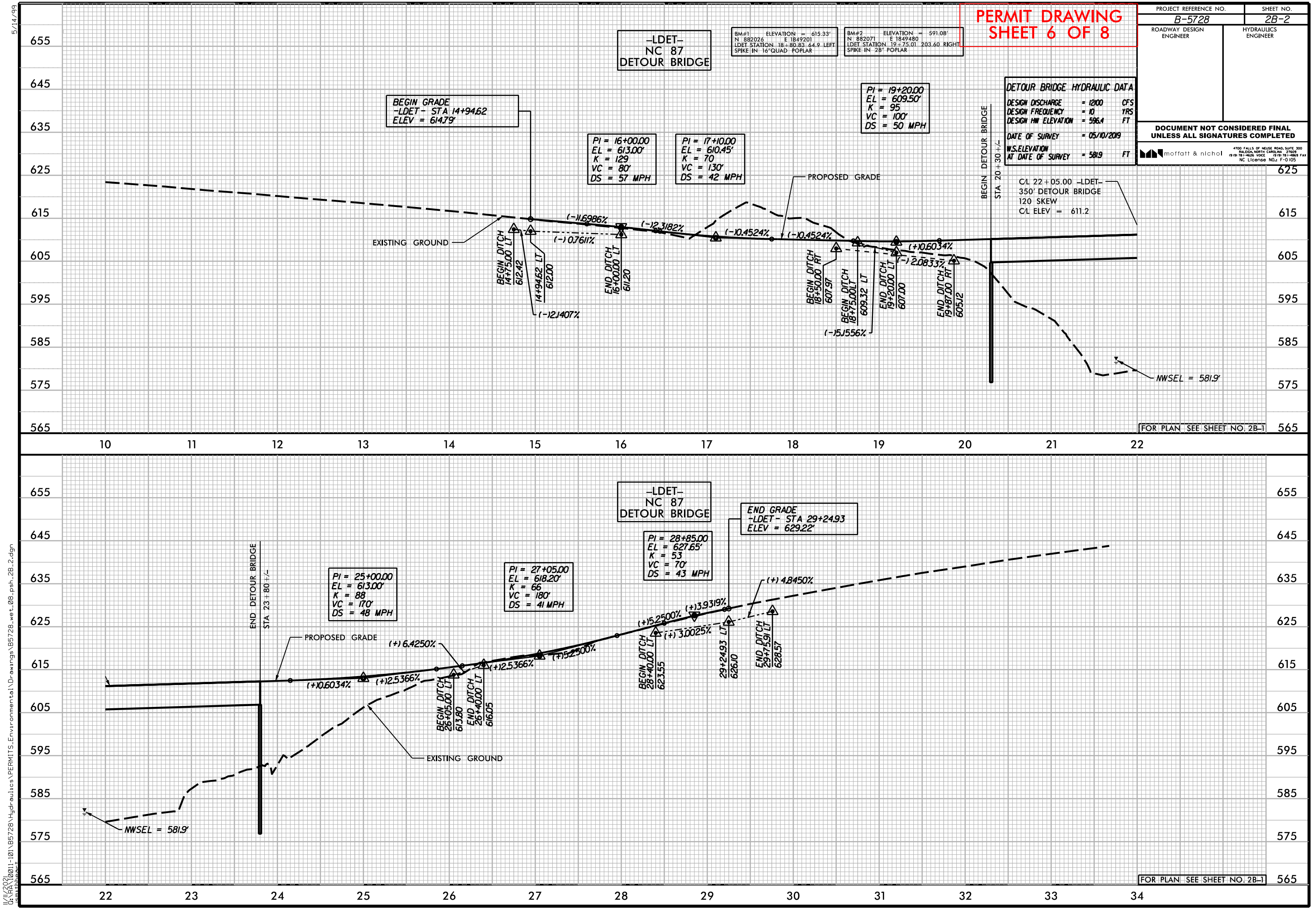
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RW SHEET NO.		HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER		
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>		
4700 FALLS OF NEUSE ROAD, SUITE 300 DALLAS, NORTH CAROLINA 27609 (919) 781-4626 VOICE (919) 781-4669 FAX NC License NO.: F-0105		
<b>PERMIT DRAWING SHEET 5 OF 8</b>		



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-L-	
PI Sta 14+20.36	PI Sta 14+69.86
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$D = 0^\circ 22' 37.7''$	$D = 0^\circ 31' 00.6''$
$L = 49.51'$	$L = 49.51'$
$T = 24.75'$	$T = 24.75'$
$R = 15,927.2'$	$R = 11,085.86'$
	$DS = 55$ MPH
	$e = NC$

FOR DETOUR SEE SHEET NO. 2B-1  
FOR -L- PROFILE SEE SHEET NO. 6





5/14/99

PROJECT REFERENCE NO.  
**B-5728**

ROADWAY DESIGN  
ENGINEER

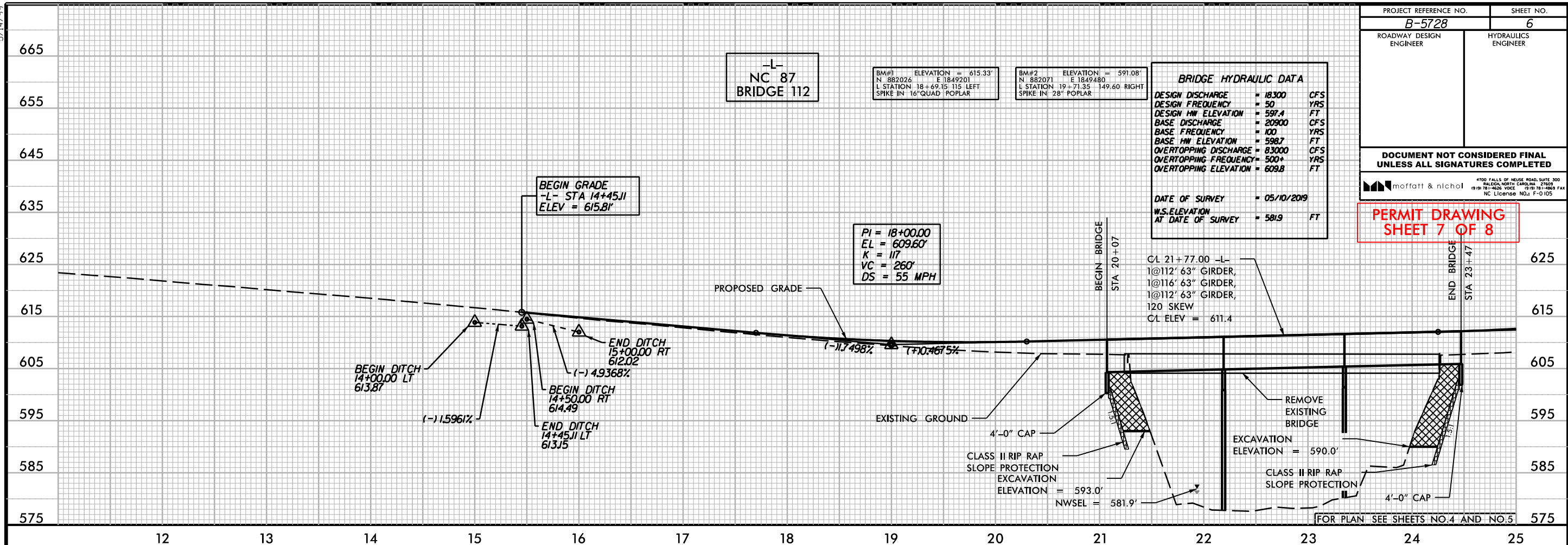
SHEET NO.  
**6**

HYDRAULICS  
ENGINEER

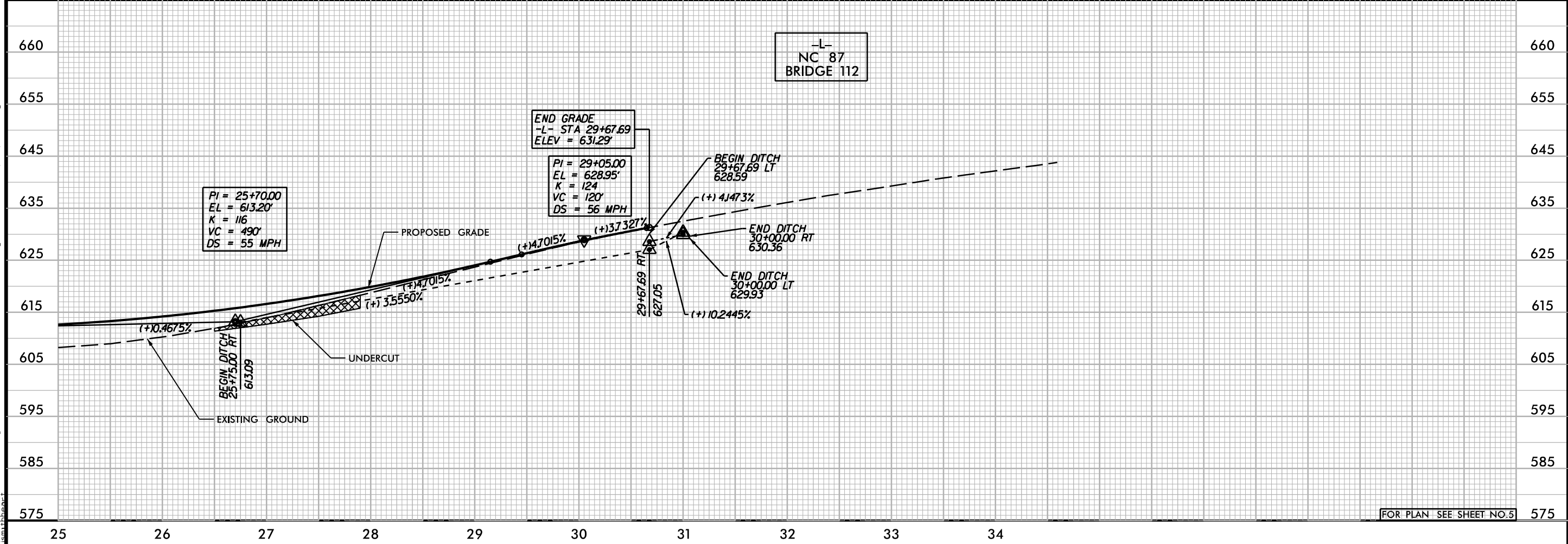
DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**PERMIT DRAWING  
SHEET 7 OF 8**

4700 FALLS OF NEUSE ROAD, SUITE 300  
RALEIGH, NORTH CAROLINA 27604  
(919) 883-1000 VOICEMAIL (919) 883-1001 FAX  
NC LICENSE NO. F-0105



I:\1\2021\1001-101\B5728\Hydraulics\PERMITS\Environmental\Drawings\B5728\_wet\_09\_pfl.psh\_06.dgn



WETLAND AND SURACE WATER IMPACTS SUMMARY												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-LDET- 21+30 to 22+80	Causeway							0.08		17	
		Bank Stabilization										
2	-L- 20+95 to 22+59	Causeway							0.18		134	
		Bank Stabilization						< 0.01		66		
TOTALS*:								< 0.01	0.26	66	151	0

NOTES:  
440 SQ. Ft. OF STREAM IMPACT FOR DETOUR INTERIOR BENT  
516 SQ. Ft. OF STREAM IMPACT FOR INTERIOR BENT  
SOME TEMPORARY STREAM IMPACTS FROM CAUSEWAY NOT RECORDED DUE TO PERMANENT BANK STABILIZATION

SHEET 8 OF 8

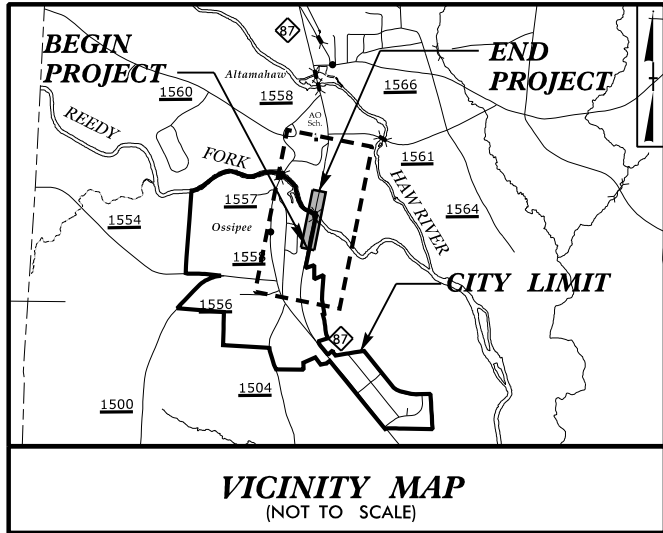


09/08/99

TIP PROJECT: B-5728

CONTRACT:

See Sheet 1A For Index of Sheets  
See Sheet 1B For Conventional Symbols



STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**ALAMANCE COUNTY**

LOCATION: REPLACEMENT OF BRIDGE NO. 000112 OVER REEDY FORK  
ON NC 87

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

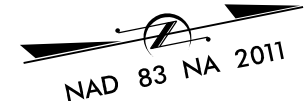
**BUFFER IMPACTS PERMIT**

ROW PLANS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5728	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45684.1.1	N/A	PE	
45684.2.1	N/A	ROW/UT	

**BUFFER DRAWING  
SHEET 1 OF 3**

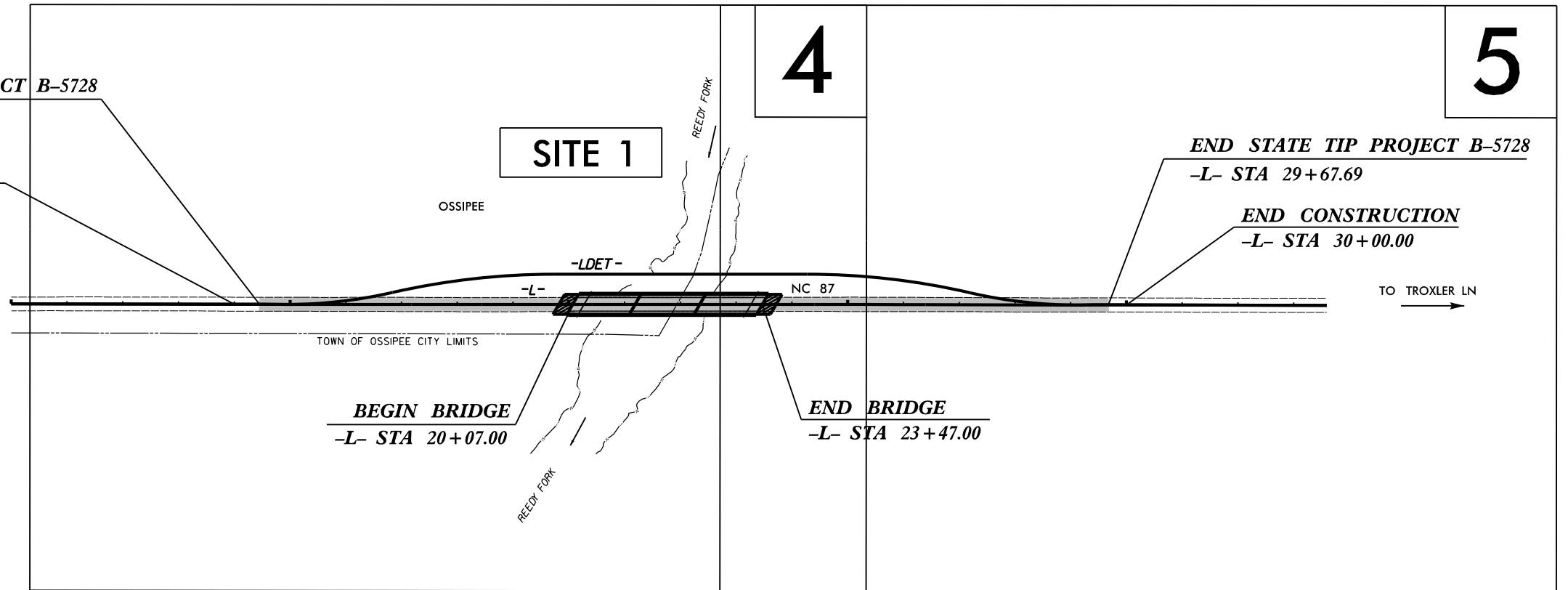
PM: CAMERON LONG, PE  
11/12/2021



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-L- STA 14+45.11

BEGIN CONSTRUCTION  
-L- STA 14+00.00

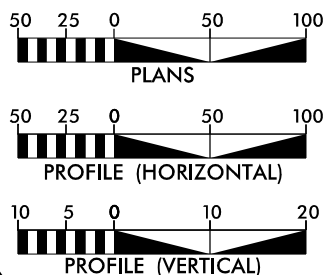
TO OLD NC 87



A PORTION OF THIS PROJECT IS WITHIN THE  
MUNICIPAL BOUNDARIES OF OSSIPEE  
CLEARING ON THIS PROJECT SHALL BE ACCOMPLISHED  
BY METHOD II

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2021 = 6,340  
ADT 2041 = 7,040  
K = 10 %  
D = 65 %  
T = 10 % \*  
V = 55 MPH  
\* TTST = 3% DUAL 7%  
FUNC CLASS =  
MINOR ARTERIAL -  
REGIONAL

PROJECT LENGTH

LENGTH OF ROADWAY = 0.224 mi  
TIP PROJECT B-5728  
LENGTH OF STRUCTURES = 0.064 mi  
TIP PROJECT B-5728  
LENGTH OF TIP = 0.288 mi  
PROJECT B-5728

Prepared In the Office of:  
**moftatt & nichol**  
4700 FALLS OF NEUSE ROAD, SUITE 300  
RALEIGH, NORTH CAROLINA 27609  
(919) 781-4656 VOICE (919) 781-4669 FAX  
NC License NO.: F-0105

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
MARCH 25, 2021

LETTING DATE:  
NOVEMBER 16, 2021

TRENT HUFFMAN P.E.  
PROJECT ENGINEER

GRAY MODLIN P.E.  
PROJECT DESIGN ENGINEER

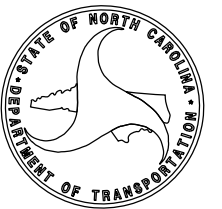
DAVID STUTTS, P.E.  
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: P.E.

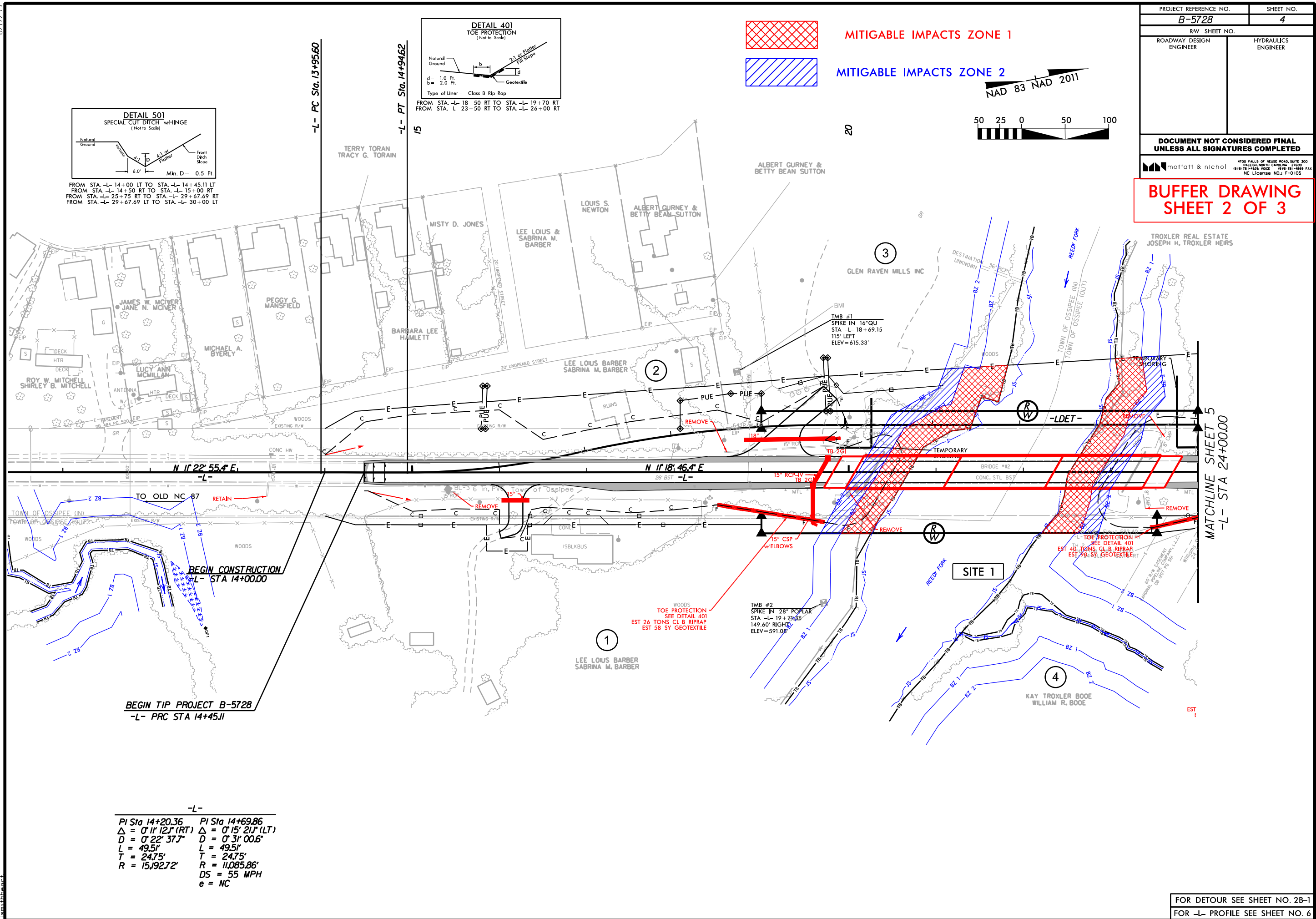
ROADWAY DESIGN  
ENGINEER

SIGNATURE: P.E.



11/2/2021  
Q:\RA\10011-10\B5728\Hydraulics\PERMITS\_Environmental\Drawings\B5728\_buff\_01.tsh.dgn  
ismithheer

**BUFFER DRAWING  
SHEET 2 OF 3**



FOR DETOUR SEE SHEET NO. 2B-1  
FOR -L- PROFILE SEE SHEET NO. 6

## RIPARIAN BUFFER IMPACTS SUMMARY

			IMPACTS									BUFFER REPLACEMENT	
Site No.	Station (From/To)	Structure Size / Type	TYPE			ALLOWABLE			MITIGABLE				
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )	TOTAL (ft <sup>2</sup> )	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )	TOTAL (ft <sup>2</sup> )	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )
1	-L- 19+75 to 23+50	Bridge		X					14938	9374	24312		
TOTALS*:						0	0	0	14938	9374	24312	0	0

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
11/11/2011  
ALAMANCE COUNTY  
B-5728

SHEET 3 OF 3



16-01-0055



## HISTORIC ARCHITECTURE AND LANDSCAPES NO HISTORIC PROPERTIES PRESENT OR AFFECTED FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

### PROJECT INFORMATION

<b>Project No:</b>	B-5728	<b>County:</b>	Alamance
<b>WBS No.:</b>	45684.1.1	<b>Document Type:</b>	CE
<b>Fed. Aid No:</b>		<b>Funding:</b>	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal
<b>Federal Permit(s):</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Permit Type(s):</b>	unknown
<b><u>Project Description:</u></b>			
Replace Bridge No. 112 on NC 87 over the Reedy Fork Creek.			

### SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

- ☒ There are no National Register-listed or Study Listed properties within the project's area of potential effects.
- ☒ There are no properties less than fifty years old which are considered to meet Criteria Consideration G within the project's area of potential effects.
- ☐ There are no properties within the project's area of potential effects.
- ☒ There are properties over fifty years old within the area of potential effects, but they do not meet the criteria for listing on the National Register.
- ☒ There are no historic properties present or affected by this project. (Attach any notes or documents as needed.)

**Date of field visit:** n/a

#### **Description of review activities, results, and conclusions:**

Review of HPOGIS web service was undertaken on January 26, 2016. Based on this review, there are no existing NR, DE, LL, SL, or SS properties in the project area. Ossipee Mill (AM0321) appears next to the bridge on the aerial photographs on HPOGIS web, but more recent aerial photographs and Google StreetView from July 2015 indicate that the mill has been destroyed. Ossipee Mill Houses (AM0322) are near the project area but none of the parcels for these houses intersect with the project area. One other house constructed in 1951 is indicated on Alamance County GIS Tax Data at the north end of the project area; however that house does not possess the architectural integrity or distinction to meet the criteria for National Register listing either individually or as a historic district. The bridge itself, Alamance County Bridge No. 112, was built in 1949. The structure does not exemplify any distinctive engineering or aesthetic type and is not eligible for the National Register of Historic Places. No historic properties will be affected by this project.

## SUPPORT DOCUMENTATION

☐ Map(s)    ☐ Previous Survey Info.    ☒ Photos    ☐ Correspondence    ☐ Design Plans

## FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes – NO HISTORIC PROPERTIES PRESENT OR AFFECTED

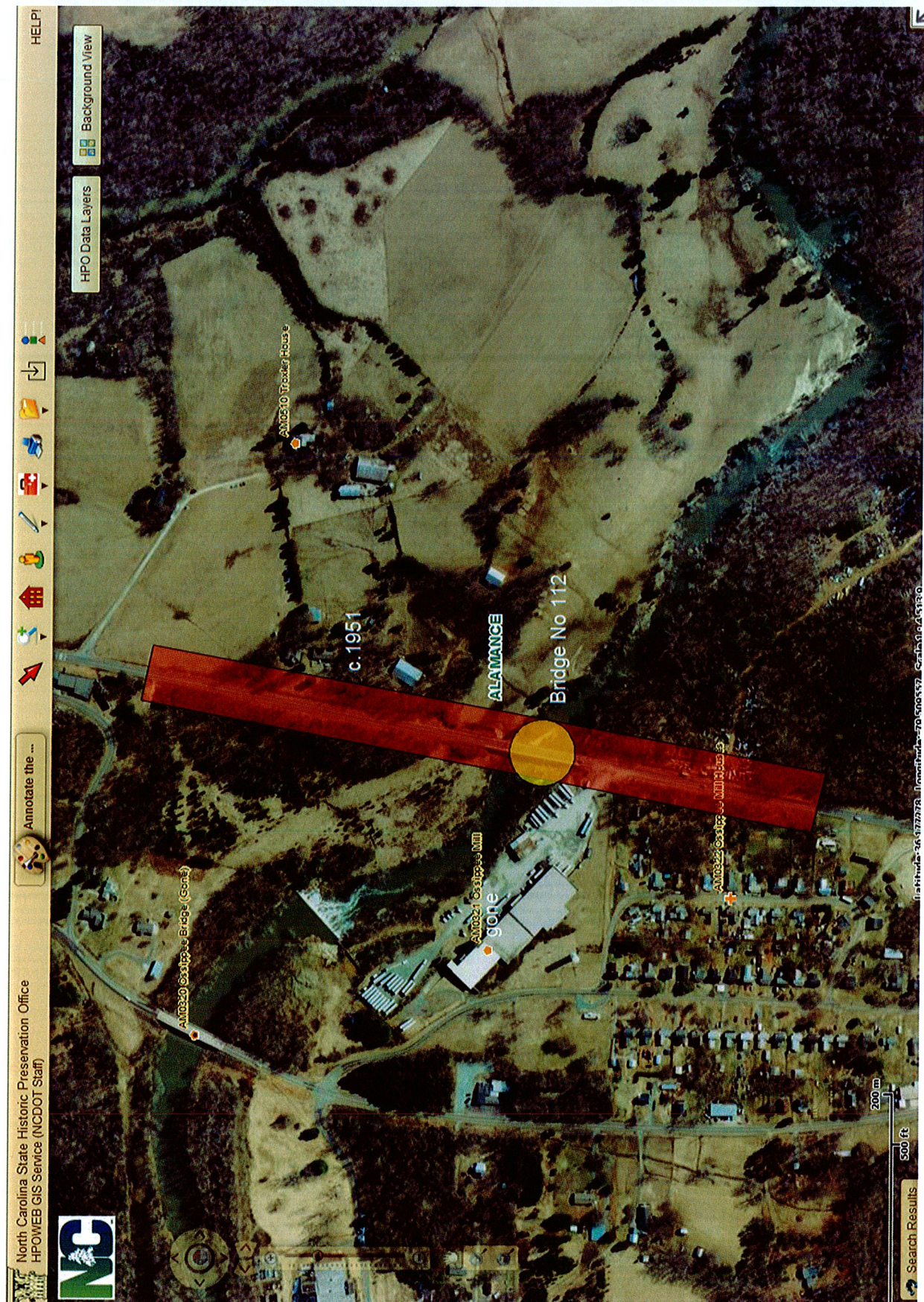
Shelby Reap

NCDOT Architectural Historian

Jan 26, 2016

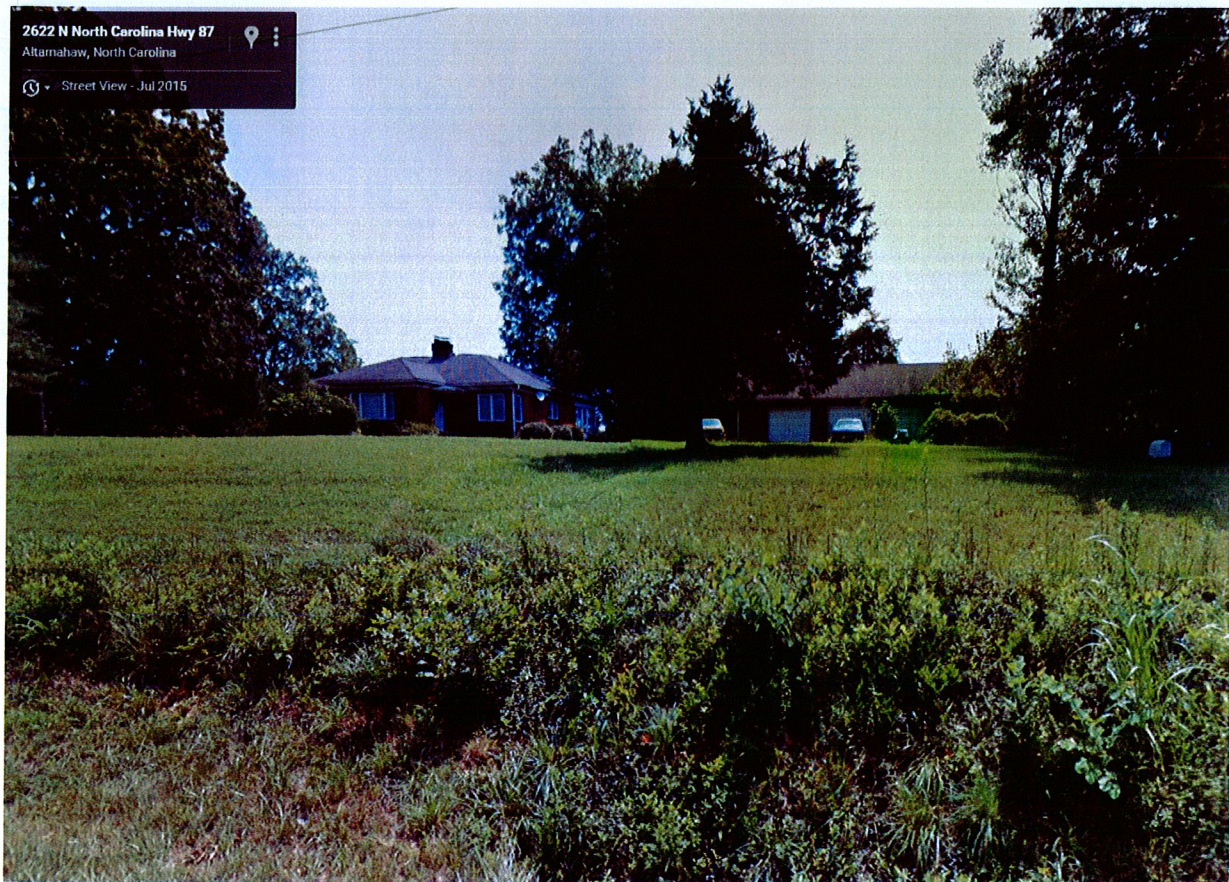
Date





Historic Architecture and Landscapes NO HISTORIC PROPERTIES PRESENT OR AFFECTED form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.





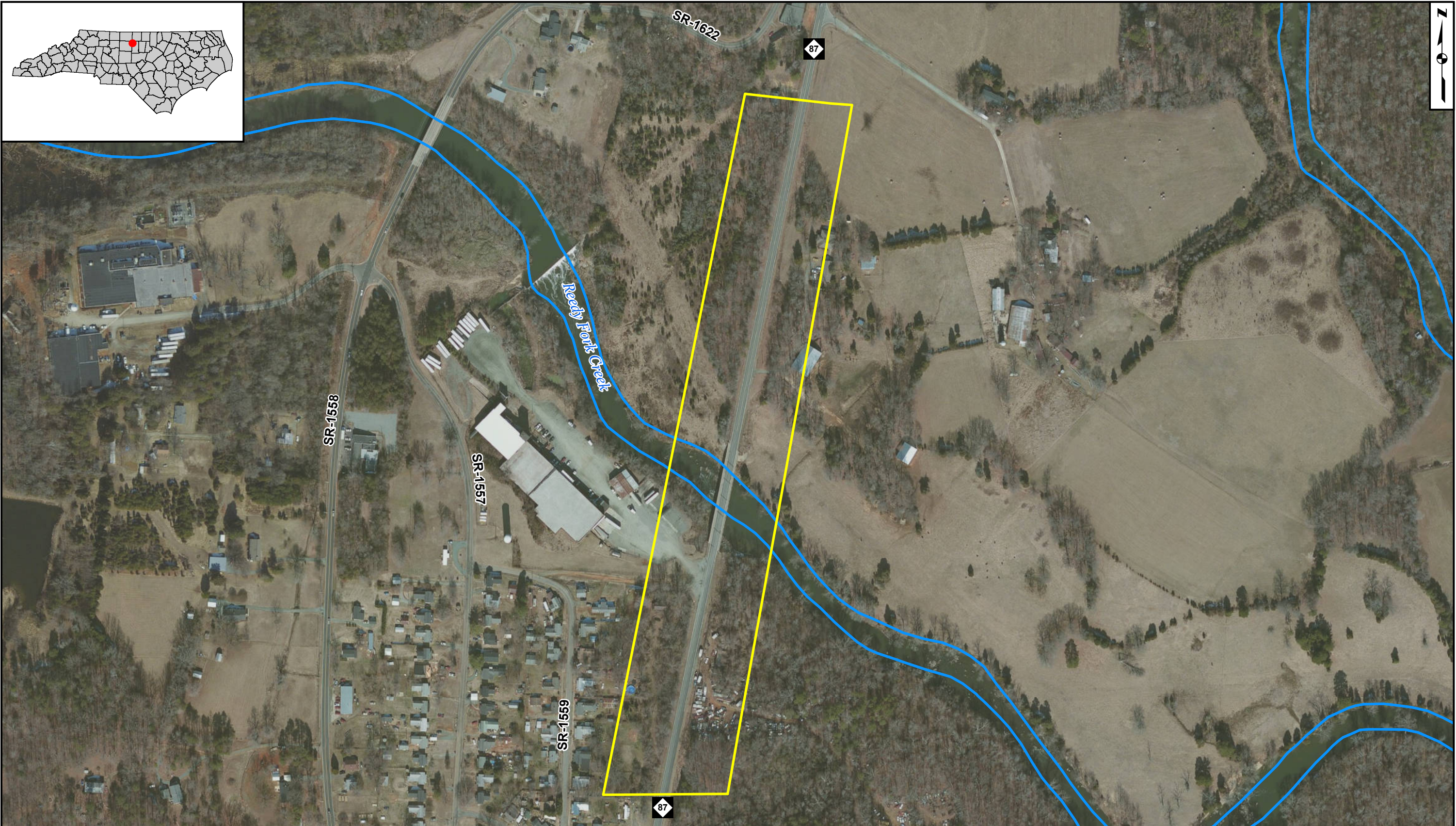
House c.1951

















16-01-0055

**NO ARCHAEOLOGICAL SURVEY REQUIRED FORM**

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.

**PROJECT INFORMATION**

Project No: **B-5728** County: **Alamance**  
 WBS No: **45684.1.1** Document: **CE**  
 F.A. No: **N/A** Funding: ☒ State ☐ Federal

Federal Permit Required? ☒ Yes ☐ No Permit Type: **NWP**

**Project Description:** The NCDOT proposes to replace Bridge No. 112 on NC 87 over Reedy Fork Creek in Alamance County. Bridge No. 112 was built in 1949, and is considered to be structurally deficient and functionally obsolete. The Proposed Study Area for the project will be centered on the bridge and measure about 300 feet wide by about 2,100 feet long. Overall, the Study Area will encompass about 605,920 square feet (13.9 acres), inclusive of the existing roadway and structure to be replaced.

**SUMMARY OF CULTURAL RESOURCES REVIEW*****Brief description of review activities, results of review, and conclusions:***

A map review and site file search was conducted at the Office of State Archaeology (OSA) on Friday, January 15, 2016. An archaeological study has been conducted along this particular stretch of NC 87 (see Glover 1994 [TIP# R-2560]), and three (3) archaeological sites have been recorded within one-half (1/2) mile of the proposed project. Digital copies of HPO's maps (Ossipee Quadrangle) as well as the HPOWEB GIS Service (<http://gis.ncdcr.gov/hpoweb/>) were last reviewed on Monday, January 25, 2016. There are three (3) known historic architectural resources (Ossipee Mill [AM0321], Ossipee Mill Houses [AM0322], and Troxler House [AM0510]) within the vicinity of the Study Area; however, intact archaeological deposits associated with these resources would not be anticipated within the footprint of the proposed project. In addition, topographic maps, historic maps (NCMaps website), USDA soil survey maps, and aerial photographs were utilized and inspected to gauge environmental factors that may have contributed to historic or prehistoric settlement within the project limits, and to assess the level of modern, slope, agricultural, hydrological, and other erosive-type disturbances within and surrounding the archaeological APE.

***Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:***

This is a State-funded project for which a Federal permit will be required. The need for temporary and/or permanent easements has not been determined; however, the overall dimensions of the Study Area will capture any necessary easements. At this time, we are in compliance with NC GS 121-12a, since there are no eligible (i.e. National Register-listed) archaeological resources located within the project's Study Area that would require our attention. From an environmental perspective, Alamance County lies within the upland portion of the Piedmont Plateau region. The Study Area is characterized by gently rolling topography, which gives way to more rugged terrain near Reedy Fork Creek. The Study Area consists of six (6) soil types: Lloyd loam, 10-15% slopes, eroded (LbD2), Buncombe loamy fine sand, 0-2% slopes, occasionally flooded (Ba), Wilkes soils, 10-15% slopes (WbD), Helena coarse sandy loam, 2-6% slopes,

16-01-0055

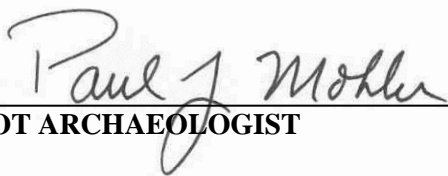
eroded (HbB2), Enon fine sandy loam, 6-10% slopes, eroded (EdC2), and Wilkes soils, 6-10% slopes (WbC). The eroded, occasionally flooded, and moderately sloped soil conditions within the Study Area are not favorable for containing intact archaeological sites/resources. Preservation of archaeological materials within such soil types is likely to be poor. In addition, the Study Area falls within the project limits that were surveyed in 1994 as a result of the proposed NC 87 road widening project (TIP# R-2560). Based on the field methodology for that survey, the B-5728 Study Area was not deemed appropriate for formal archaeological investigations. In 1949, NC 87 was rerouted to bypass the towns of Ossipee and Altamahaw in northwestern Alamance County. As noted above, Bridge No. 112 was built in 1949, thus as part of the bypass project. Much of the corridor would have been greatly disturbed by the construction of the new alignment for NC 87 at that time. For comparative purposes, the Office of State Archaeology (OSA) has reviewed several projects within the vicinity of Bridge No. 112 for environmental compliance, including two (2) borrow pits (ER 86-7162 and ER 86-7504) and a stream restoration site (ER 06-1831). Stating a low probability and "NR eligible sites unlikely," OSA did not recommend archaeological surveys to be conducted. Although three (3) archaeological sites are located nearby, one at the confluence of Reedy Fork Creek and the Haw River and two further upstream along the Haw River, none of the sites were deemed eligible for the National Register. The contextual integrity of these sites has been greatly compromised by erosion and flooding episodes, limiting their archaeological interpretive significance. Based on the nature of the proposed project, current soil conditions, and previous review/survey work, it is believed that the current Study Area, as depicted, is unlikely to contain intact and significant archaeological resources. No archaeological survey is required for this project. If design plans change or are made available prior to construction, then additional consultation regarding archaeology will be required. At this time, no further archaeological work is recommended. If archaeological materials are uncovered during project activities, then such resources will be dealt with according to the procedures set forth for "unanticipated discoveries," to include notification of NCDOT's Archaeology Group.

#### SUPPORT DOCUMENTATION

See attached: ☒ Map(s) ☐ Previous Survey Info ☐ Photos ☐ Correspondence  
☐ Photocopy of County Survey Notes Other:

#### FINDING BY NCDOT ARCHAEOLOGIST

##### NO ARCHAEOLOGY SURVEY REQUIRED

  
 NCDOT ARCHAEOLOGIST

January 25, 2016

Date

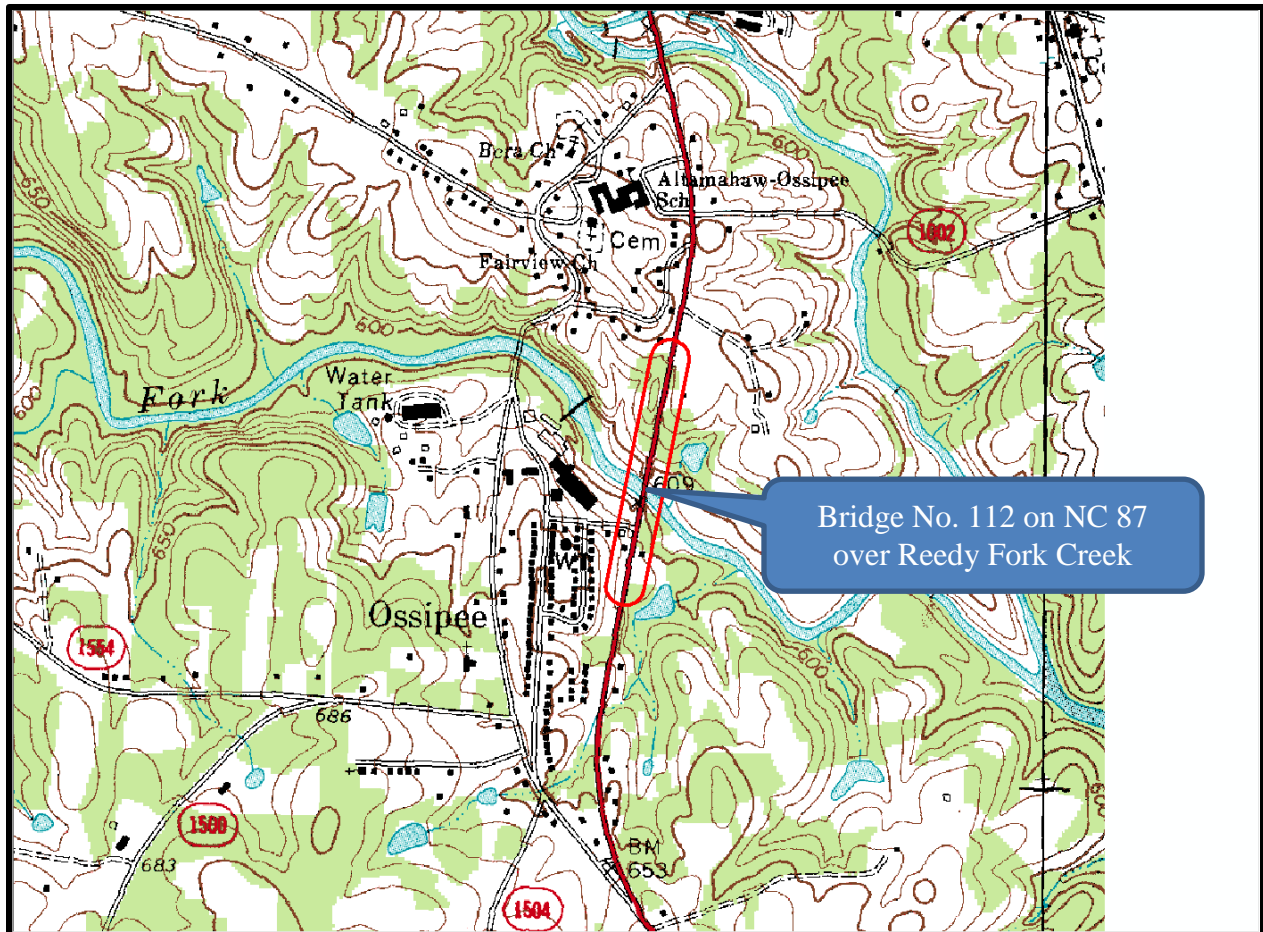
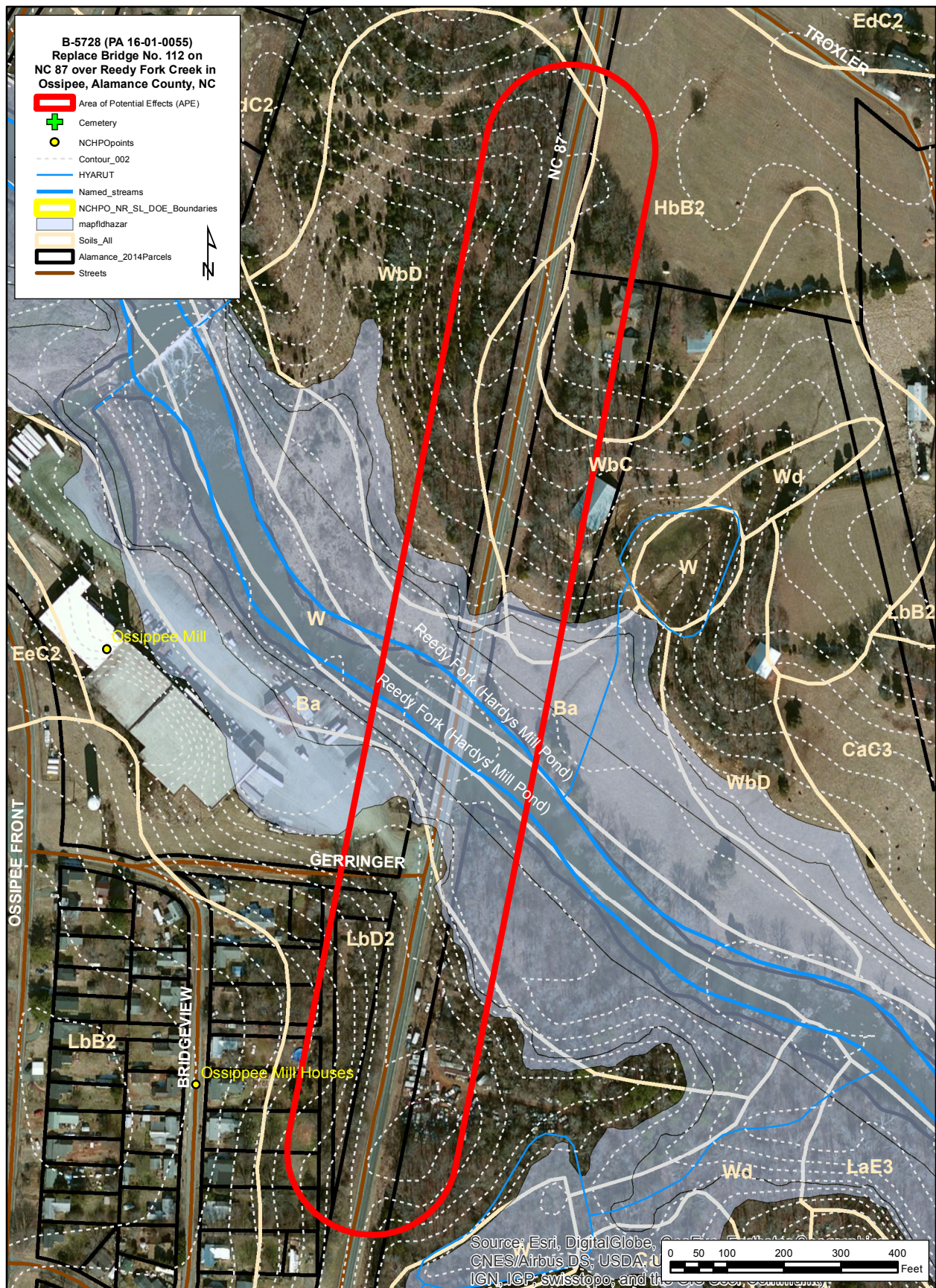


Figure 1: Ossipee, NC (USGS 1970).









## MONACAN INDIAN NATION

1/24/2020

NCDOT  
Tierre Peterson  
1000 Birch Ridge Drive  
Raleigh, NC 27610

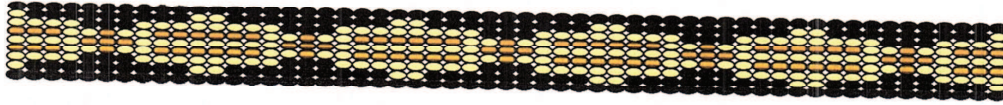
RE: Replacement of Bridge No. 112; Alamance County, NC; Project B-5728

Dear Mr. Peterson,

Thank you for contacting us regarding the proposed bridge construction in Alamance County, NC. As this area is located within Monacan ancestral territory please allow us time to properly review and understand the project details. Even though we may not have any comments currently we do maintain the right to remain informed on the discovery of any Native American artifacts or human remains uncovered during the construction process. Should any findings appear, please contact the Monacan Indian Nation immediately.

Respectfully,

Chief Kenneth Branham  
Monacan Indian Nation



January 24, 2020

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

Re. THPO #	Project #	Project Description
2020-193-98	B-5728	Replacement of Bridge No. 112 on NC 87 over Reedy Fork Creek in Alamance 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





NORTH CAROLINA  
Environmental Quality

ROY COOPER

Governor

MICHAEL S. REGAN

Secretary

LINDA CULPEPPER

Interim Director

September 19, 2018

William Barrett, NCDOT  
Environmental Analysis Unit  
1598 Mail Service Center  
Raleigh, NC 27699

**Subject:** Onsite Determination for Applicability to the Mitigation Rules (15A NCAC 2H .0506) and Onsite Determination for Applicability to the Jordan Buffer Rules (15A NCAC 02B .0267)

**Proposed Project:** Replace Bridge 112 on NC 87 (North Carolina Highway 87) over Reedy Fork in the Town of Ossippee; Alamance County; STIP B-5728.

Dear Mr. Barrett:

On August 17, 2018, the North Carolina Department of Transportation, North Carolina Division of Water Resources (NCDWR), Army Corps of Engineers (Corps) and Dewberry consultants conducted an onsite determination to review drainage features described in Table 1 regarding applicability to mitigation and buffer requirements.

NCDWR acknowledges the areas and boundaries identified as jurisdictional wetlands by the USACE. The attached map(s) accurately depicts stream determinations conducted during the site visit.

Table 1. Description of drainage features.

Stream Name	Feature Code	Basin	Sub-basin	Stream Classification	Stream Index No.	Applicable Buffer Rule	Mitigation Rule
Reedy Fork Creek	SA	Cape Fear	CPF02	WS-V; NSW	16-11-(9)	Subject	Subject
UT to Reedy Fork Creek	SB	Cape Fear	CPF02	WS-V; NSW	16-11-(9)	N/A*	N/A*
UT to Reedy Fork Creek	SC	Cape Fear	CPF02	WS-V; NSW	16-11-(9)	Subject	Not Subject
UT to Reedy Fork Creek	SD	Cape Fear	CPF02	WS-V; NSW	16-11-(9)	Not Subject	Not Subject

\*Feature SB is not within the project study area.

NCDWR has determined that the above feature identified as SA (Reedy Fork Creek) is perennial and is subject to mitigation. Additionally, feature codes identified as SA and SC are subject to the Jordan Buffer Rules.



This letter only addresses the applicability to the mitigation rules and does not approve any activity within Waters of the United States, or Waters of the State. Any impacts to wetlands and streams must comply with 404/401 regulations, water supply regulations (15A NCAC 2B .0216), and any other required federal, state and local regulations.

The owner (or future owners) or permittee should notify NCDWR (and other relevant agencies) of this determination in any future correspondences concerning this property and/or project. This on-site determination shall expire five (5) years from the date of this letter.

Landowners or affected parties that dispute a determination made by NCDWR or Delegated Local Authority that a surface water exists and that it is subject to the mitigation rules may request a determination by the Director. A request for a determination by the Director shall be referred to the Director in writing c/o Amy Chapman, NCDWR Wetlands/401 Unit, 1617 Mail Service Center, Raleigh, NC 27699-1617.

Individuals that dispute a determination by NCDWR or Delegated Local Authority that “exempts” a surface water from the mitigation rules may ask for an adjudicatory hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice and the date the affected party (including downstream and adjacent landowners) is notified of this decision. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-providing the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission. The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings  
6714 Mail Service Center  
Raleigh, NC 27699-6714  
Telephone: (919) 431-3000, Facsimile: (919) 431-3100

A copy of the petition must also be served on DEQ as follows:

Mr. Bill F. Lane, General Counsel  
Department of Environmental Quality  
1601 Mail Service Center

This determination is final and binding unless you ask for a hearing within 60 days.

If you have any additional questions or require additional information, please call April Norton at 919-707-9111 or [April.Norton@ncdenr.gov](mailto:April.Norton@ncdenr.gov).

Sincerely,

DocuSigned by:

*April Norton*

03BAC6376A6340D...

Attachments: Jurisdictional Features Map

Electronic copy only distribution:  
David Bailey, US Army Corps of Engineers, Raleigh Field Office  
Troy Shelton, Dewberry  
File Copy





NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

LINDA CULPEPPER  
Interim Director

NCDWR Project No.: \_\_\_\_\_

County: \_\_\_\_\_

Applicant: \_\_\_\_\_

Project Name: \_\_\_\_\_

Date of Issuance of 401 Water Quality Certification: \_\_\_\_\_

#### **Certificate of Completion**

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Resources, 1617 Mail Service Center, Raleigh, NC, 27699-1617. This form may be returned to NCDWR by the applicant, the applicant's authorized agent, **or** the project engineer. It is not necessary to send certificates from all of these.

#### ***Applicant's Certification***

I, \_\_\_\_\_, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### ***Agent's Certification***

I, \_\_\_\_\_, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### ***Engineer's Certification***

\_\_\_\_\_ Partial \_\_\_\_\_ Final

I, \_\_\_\_\_, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

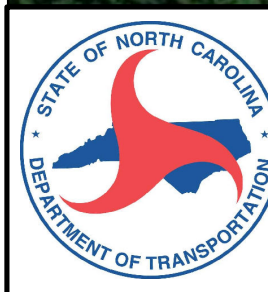
Signature \_\_\_\_\_ Registration No. \_\_\_\_\_

Date \_\_\_\_\_







 <p>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS ENVIRONMENTAL ANALYSIS UNIT</p>	<p><b>JURISDICTIONAL FEATURES MAP</b> <b>Replace Bridge No.112 on NC 87</b> <b>over Reedy Fork Creek</b> <b>in Alamance County</b> <b>TIP Project B-5728</b></p>	<p>0 500 Feet</p>	<table border="1"><tr><td>Div: 7</td><td>TIP # B-5728</td></tr><tr><td colspan="2">Date: September 2018</td></tr></table>	Div: 7	TIP # B-5728	Date: September 2018		<p><b>Figure</b> <b>3-A</b></p>
Div: 7	TIP # B-5728							
Date: September 2018								