

Pre-Construction Notification



Pre-Construction Notification (PCN) Form

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

December 4, 2023 Ver 4.3

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

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

Below is a link to the online help file.

<https://edocs.deq.nc.gov/WaterResources/DocView.aspx?dbid=0&id=2196924>

A. Processing Information

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

Does this project involve maintenance dredging funded by the Shallow Draft Navigation Channel Dredging and Aquatic Weed Fund, electric generation projects located at an existing or former electric generating facility, or involve the distribution or transmission of energy or fuel, including natural gas, diesel, petroleum, or electricity? *

☐ Yes ☒ No

Is this application for a project associated with emergency response/repairs from Hurricane Helene impacts to your project or property?

☐ Yes ☒ No

Is this project connected with ARPA funding or S.L. 2023-134 (earmark)? *

☐ ARPA ☐ S.L. 2023-134 (earmark) ☒ No

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

Surry

Yadkin

Is this a NCDMS Project? *

☐ Yes ☒ No

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

DO NOT CHECK YES, UNLESS YOU ARE DMS 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-5831

WBS # *

45784.1.2

(for NCDOT use only)

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

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

Has this PCN previously been submitted? *

☐ Yes
☒ No

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

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

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

☐ Yes ☒ No

Regional General Permit (RGP) Number:

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

RGP Numbers (for multiple RGPS):

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

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

check all that apply

- ☒ 401 Water Quality Certification - Regular
☐ Non-404 Jurisdictional General Permit
☐ Individual 401 Water Quality Certification

- ☐ 401 Water Quality Certification - Express
☐ Riparian Buffer Authorization

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? *

William Barrett

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. Contact Person:

(for Corporations)

2d. Address *

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

Postal / Zip Code

27699-1598

State / Province / Region

NC

Country

US

2e. Telephone Number: *

(xxx)xxx-xxxx

(919)707-6103

2f. Fax Number:

(xxx)xxx-xxxx

2g. Email Address: *

ekcheely@ncdot.gov

3. Applicant Information (if different from owner)

3a. Name: *

William Barrett

3b. Business Name:

(if applicable)

3c. Address *

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

Postal / Zip Code

27699-1598

State / Province / Region

NC

Country

US

3d. Telephone Number: *

(919)707-6103

(xxx)xxx-xxxx

3e. Fax Number:

(xxx)xxx-xxxx

3f. Email Address: *

wabarrett@ncdot.gov

C. Project Information and Prior Project History

1. Project Information

1a. Name of project: *

B-5831 - Bridge 6 on I-77 Northbound over NC 268, Yadkin River, and Norfolk Southern Railroad

1b. Subdivision name:

(if appropriate)

1c. Nearest municipality / town: *

Elkin / Jonesville

2. Project Identification

2a. Property Identification Number:

(tax PIN or parcel ID)

2b. Property size:

(in acres)

2c. Project Address

Street Address

Address Line 2

City

Postal / Zip Code

State / Province / Region

Country

2d. Site coordinates in decimal degrees

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

Latitude: *

36.250466

ex: 34.208504

Longitude: *

-80.820817

-77.796371

3. Surface Waters

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

Yadkin River

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. *

030401010606

[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: *

Existing Conditions: The project corridor primarily consists of maintained/disturbed roadside along I-77 and NC-268 Bus. Forested communities exist along the Yadkin River and beyond ROW along roads.

General Land Use: The general area surrounding the project largely consists of forested communities, with scattered residential homes and open agricultural fields.

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)

310

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

The purpose of the project is to replace a fifty-eight-year-old bridge, built in 1965. The bridge is considered functionally obsolete due to a deck geometry of 3 out of 9 and an approach alignment of 3 out of 9 according to FHWA standards. Continued maintenance is a temporary solution to prolong the life of the fifty-eight-year-old structure which needs replacement.

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

This project replaces Bridge 850006 on I-77 NBL over the Yadkin River, Norfolk Southern Railroad, and NC 268 in Yadkin and Surry Counties. The bridge will be replaced in place. Traffic will be maintained on-site. Traffic will be shifted to the existing south bound bridge (Bridge 850013) during construction. Crossovers will be utilized. The crossover length will be approximately 2,300-feet to the north and 1,800-feet to the south.

The replacement structure will be a 63-inch Florida I-beam bridge. The 7-span structure will be approximately 815-feet long, providing a minimum 48-foot clear roadway width. The replacement structure will include two 12-foot travel lanes with 4-foot paved shoulders inside to median and 12-foot paved shoulders outside. NC 268 will be widened to the west under I-77 for 550 feet, to include two 11-foot travel lanes with 6-foot shoulders (9 feet with guardrail).

The proposed bridge will be replaced and constructed on existing alignment with two temporary workpads. Only one temporary workpad will be in place at any time during construction. The proposed workpads will not block more than 50% of Yadkin River at any one time.

Standard road and bridge 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:

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): Paul Masten and Chris Inscore

Agency/Consultant Company: AECOM

Other:

6. Future Project Plans

6a. Is this a phased project? *

☐ Yes ☒ No

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

D. Proposed Impacts Inventory

1. Impacts Summary



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

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

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	Bridge Replacement	Temporary	Workpad/Causeway	Yadkin River	Perennial	Both	160 Average (feet)	126 (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:

0

3i. Total temporary stream impacts:

126

3i. Total stream and ditch impacts:

126

3j. Comments:

The two temporary workpads will impact an area of 0.375 acres.
As noted on the permit drawings, only one temporary workpad will be in place at any time during construction and no more than 50% of the stream shall be blocked during construction.

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: *

No deck drains will be allowed to directly discharge into the Yadkin River.
Additional stormwater runoff from the proposed bridge will flow to grated inlets at the south end of bridge where it will be diffused onto a rip rap pad.
Existing drainage pathways will be used to the maximum extent practicable.
Stormwater runoff is to be discharged as far away from the stream and at the lowest velocities as practicable.
Only one temporary workpad will be in place at any time during construction and no more than 50% of the stream shall be blocked during construction.

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

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:

The stream impacts (workpads) are Temporary, which do not require 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:

There are no Riparian Buffers for the Yadkin River.

2. Stormwater Management Plan

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

☒ Yes ☐ No

Comments:

G. Supplementary Information



1. Environmental Documentation

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

☒ Yes ☐ No

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

☒ Yes ☐ No

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

☒ Yes ☐ No

2. Violations (DWR Requirement)

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

☐ Yes ☒ No

3. Cumulative Impacts (DWR Requirement)

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

☐ Yes ☒ No

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

Due to minimal transportation impact resulting from this bridge replacement, this project will not stimulate growth but may influence nearby land use.

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

What Federal Agency is involved?

FHWA

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

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

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

On-site field surveys.

Regarding 5g(1): bat use was observed on the adjacent bridge (No. 850013) but not on the bridge proposed for replacement (No. 850006).

NCDOT is utilizing the western bat PBO for this project to resolve Section 7 for gray bat. Required conservation measures identified in the PBO will be adhered to.

Surveys were conducted for Schweinitz's sunflower on 9/7/16, 9/25/18, 9/17/19, and 10/5/23 and no individuals were found during any of these surveys - Biological conclusion for sunflower remains No Effect. Biological conclusion not required for bog turtle or the proposed monarch butterfly. (IPaC last checked 6/18/25)

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? *

Review of online mapping resources.

7. Historic or Prehistoric Cultural Resources (Corps Requirement)

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

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

☐ Yes ☒ No

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

NEPA Documentation, Archaeology Memo/Form, Historic Architecture Memo/Form, and Tribal Coordination letter (included with this application as appendices).

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:

This project meets the FEMA requirements by obtaining State Floodplain Compliance (SFC) approval through the Hydraulics Unit's Highway Floodplain Program.

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

FEMA Floodmaps.

Miscellaneous

Comments

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

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

B-5831 Surry Yadkin June 18 2025.pdf

17.49MB

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: *

Erin K. Cheely



Signature*

Erin K. Cheely

Date

6/18/2025

Permit Drawings

		North Carolina Department of Transportation					
		Highway Stormwater Program					
		STORMWATER MANAGEMENT PLAN					
		FOR NCDOT PROJECTS					
(Version 3.00; Released August 2021)							
WBS Element: 45784.1.2		TIP/Proj No: B-5831		County(ies): Surry Yadkin		Page 1 of 2	
General Project Information							
WBS Element:		45784.1.2		TIP Number:		B-5831	
NCDOT Contact:		Tierre Peterson, PE		Project Type:		Bridge Replacement	
				Date:		2/13/2024	
Address:		1000 Birch Ridge Drive Raleigh, NC 27610		Contractor / Designer:		Rusty Lassiter (TGS Engineers)	
				Address:		706 Hillsborough St. Raleigh, NC 27603	
Phone:		919-707-6488		Phone:		919-773-8887 (Ext-121)	
Email:		trpeterson@ncdot.gov		Email:		rlassiter@tgsengineers.com	
City/Town:		Elkin		County(ies):		Surry Yadkin	
River Basin(s):		Yadkin-Pee Dee		CAMA County?		No No	
Wetlands within Project Limits?		No					
Project Description							
Project Length (lin. miles or feet):		0.371 miles		Surrounding Land Use:		Rural; Residential	
		Proposed Project		Existing Site			
Project Built-Up Area (ac.)		1.1 ac.		1.0 ac.			
Typical Cross Section Description:		Two 12-foot travel lanes with 4-foot paved shoulders inside to median and 12-foot paved shoulders outside NBL. NC 268 will be widened to the west under I-77 for 550-feet to include two 11-foot travel lanes with 6-foot shoulders (9-feet with guardrail)		Two 12-foot lanes with 3-foot shoulders inside to median and 10-foot paved shoulders outside of NBL. NC 268 has two 10-foot lanes with 5-foot grassed shoulders			
Annual Avg Daily Traffic (veh/hr/day):		Design/Future: 50,420		Year: 2045		Existing: 41,170	
						Year: 2025	
General Project Narrative: (Description of Minimization of Water Quality Impacts)		The proposed project replaces Bridge No. 6 on I-77 NBL over Yadkin River, Norfolk Southern Railroad, and NC 268 in Yadkin and Surry Counties . The replacement structure will be a 63-inch Florida I-beam bridge approximately 815-feet long, providing a minimum 48-feet clear roadway width. The proposed bridge will be replaced and constructed on existing alignment with two temporary workpads. Only one temporary workpad will be in place at anytime during construction Bridge No.6 is within the Yadkin-Pee Dee drainage basin and is not subject to riparian buffers. NC-SELDM was used to confirm the use of deck drains on the proposed bridge.No deck drains will be allowed to directly discharge into the Yadkin River. Additional stormwater runoff from the proposed bridge will flow to grated inlets at the south end of bridge where it will be diffused onto a rip rap pad. We are utilizing existing drainage pathways to the maximum extent practicable. Stormwater runoff is discharged as far away from the stream and at the lowest velocities as practicable.					



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS



(Version 3.00; Released August 2021)

WBS Element: 45784.1.2

TIP/Proj No.: B-5831

County(ies): Surry Yadkin

Page 2 of 2

General Project Information

Waterbody Information

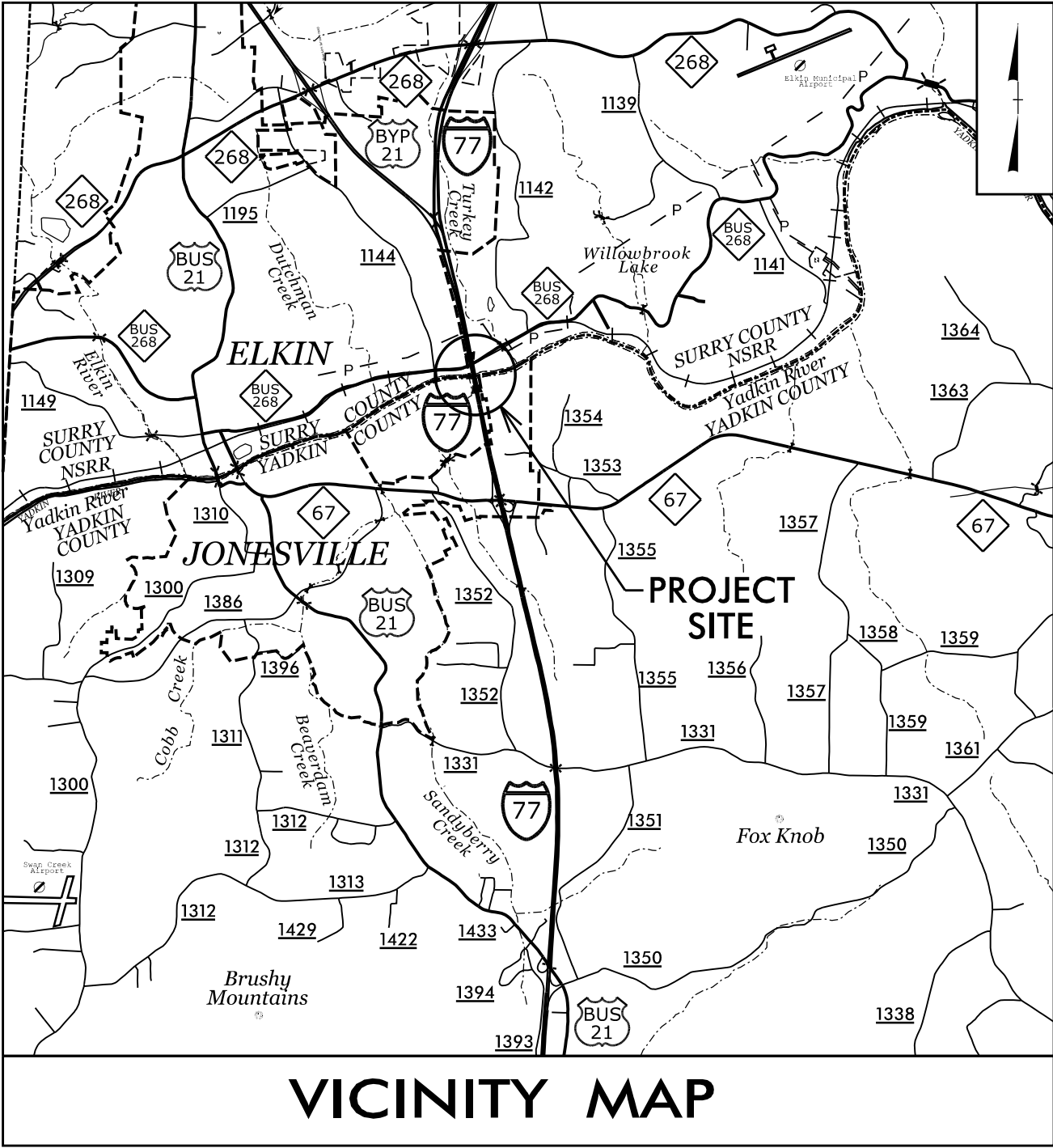
Surface Water Body (1):	Yadkin River		NCDWR Stream Index No.:	12-(53)	
NCDWR Surface Water Classification for Water Body	Primary Classification:		Class C		
	Supplemental Classification:				
Other Stream Classification:					
Impairments:	None				
Aquatic T&E Species?		Comments:			
NRTR Stream ID:	Yadkin River			Buffer Rules in Effect:	N/A
Project Includes Bridge Spanning Water Body?	Yes	Deck Drains Discharge Over Buffer?	N/A	Dissipator Pads Provided in Buffer?	
Deck Drains Discharge Over Water Body?	Yes	(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)					
Surface Water Body (2):			NCDWR Stream Index No.:		
NCDWR Surface Water Classification for Water Body	Primary Classification:				
	Supplemental Classification:				
Other Stream Classification:					
Impairments:					
Aquatic T&E Species?		Comments:			
NRTR Stream ID:				Buffer Rules in Effect:	
Project Includes Bridge Spanning Water Body?		Deck Drains Discharge Over Buffer?		Dissipator Pads Provided in Buffer?	
Deck Drains Discharge Over Water Body?		(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)					
Surface Water Body (3):			NCDWR Stream Index No.:		
NCDWR Surface Water Classification for Water Body	Primary Classification:				
	Supplemental Classification:				
Other Stream Classification:					
Impairments:					
Aquatic T&E Species?		Comments:			
NRTR Stream ID:				Buffer Rules in Effect:	
Project Includes Bridge Spanning Water Body?		Deck Drains Discharge Over Buffer?		Dissipator Pads Provided in Buffer?	
Deck Drains Discharge Over Water Body?		(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
2/16/2024
X:\NCDOT\B-5831\Hydraulics\PERMITS_Environmental\Drawings\PSH\la\b5831_prm_t.sh.dgn
User:masitter

TIP PROJECT: B-5831

CONTRACT:

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Plan Sheet Symbols
See Sheet RW01 thru RW04 For Survey Control & Right-of-Way Sheets



RIGHT-OF-WAY PLANS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

YADKIN & SURRY COUNTIES

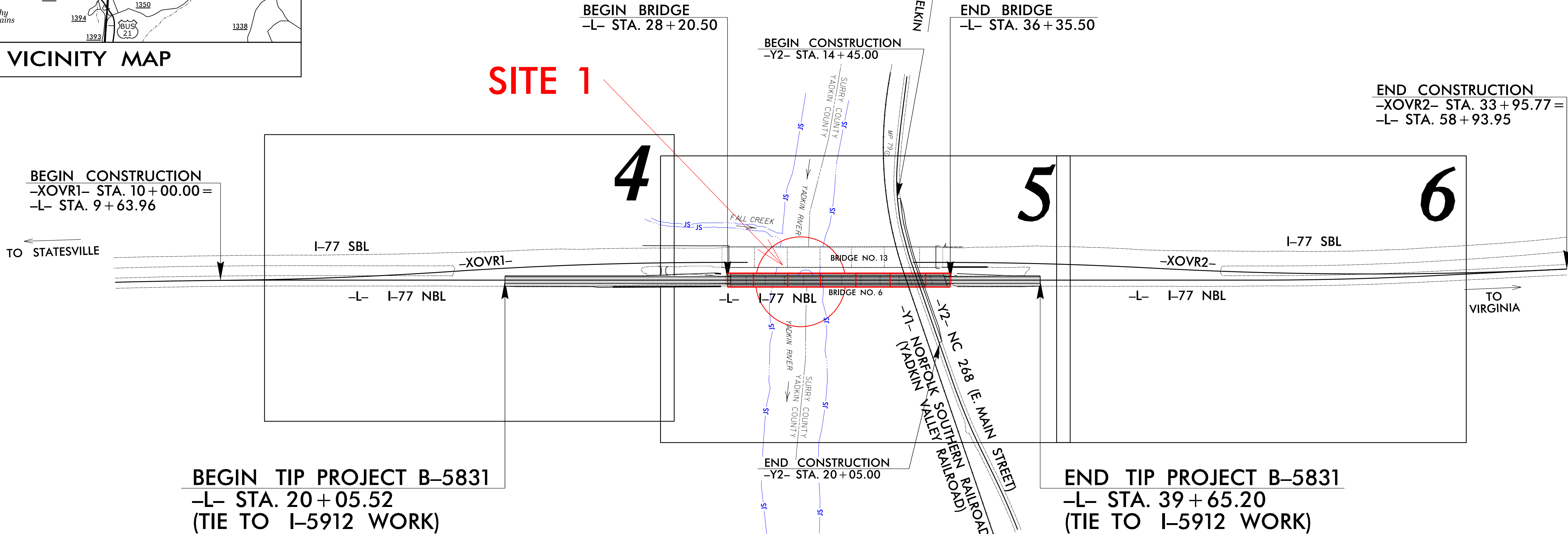
LOCATION: REPLACE BRIDGE NO. 6 OVER YADKIN RIVER,
NORFOLK SOUTHERN RAILROAD, AND NC 268 ON I-77 NBL

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

WETLAND AND SURFACE WATER IMPACTS PERMIT
2024.02.13

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5831	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45784.1.2		PE	
45784.2.1		RW, UTIL. CONST.	
	NHP-0077(006)		

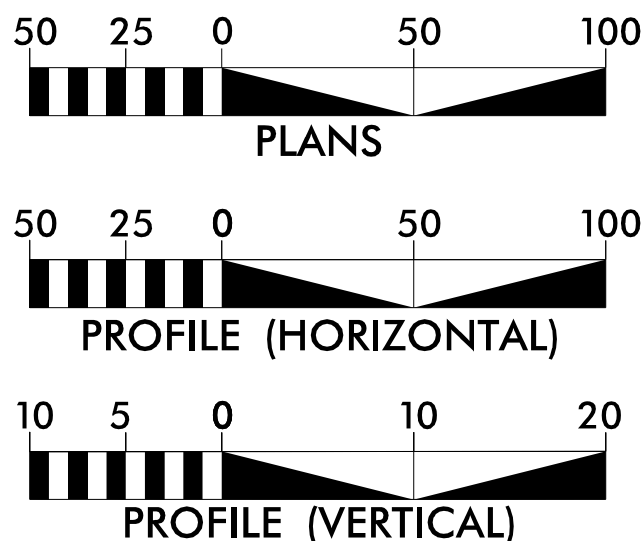
PERMIT DRAWING
SHEET 1 OF 5



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.
THIS PROJECT IS PARTIALLY WITHIN THE ELKIN CITY LIMITS MUNICIPAL BOUNDARY.
THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2025 = 41,170
ADT 2045 = 50,420
K = 7 %
D = 55 %
T = 21 % *
V = 75 MPH
* (TTST 17% + DUAL 4%)
FUNC CLASS = INTERSTATE
STATEWIDE TIER DESIGN

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-5831 = 0.217 mile
LENGTH STRUCTURES TIP PROJECT B-5831 = 0.154 mile
TOTAL LENGTH TIP PROJECT B-5831 = 0.371 mile

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



TGS ENGINEERS
706 HILLSBOROUGH ST.
SUITE 200
RALEIGH, NC 27603

By:
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JANUARY 10, 2024

LETTING DATE:
JUNE 17, 2025

V. MARCUS LOWERY, P.E.
PROJECT ENGINEER

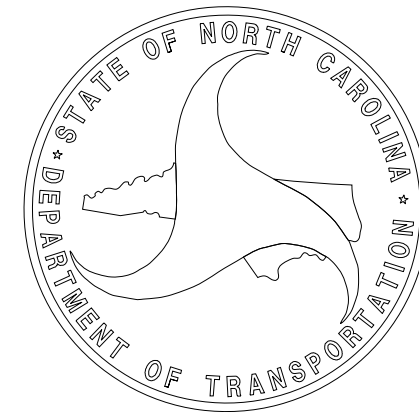
DAVID STUTTS, P.E.
NCDOT CONTACT

HYDRAULICS ENGINEER

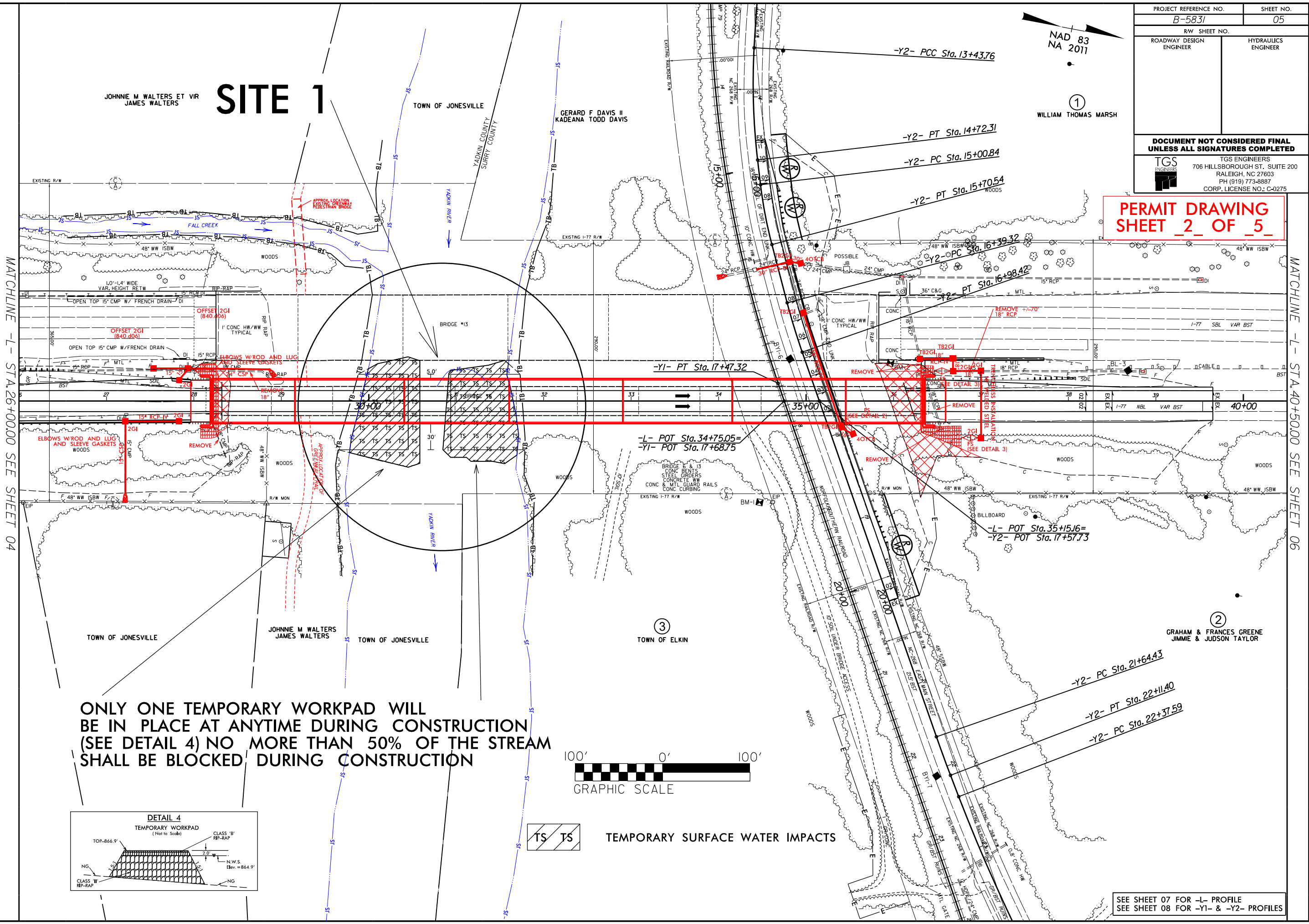
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ROADWAY DESIGN
ENGINEER

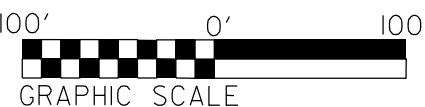
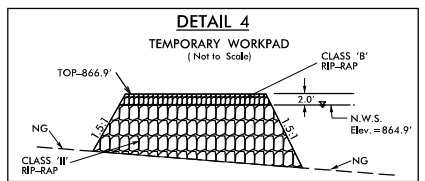
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8/17/99
5/24/2024
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User: jlossiter



ONLY ONE TEMPORARY WORKPAD WILL
BE IN PLACE AT ANYTIME DURING CONSTRUCTION
(SEE DETAIL 4) NO MORE THAN 50% OF THE STREAM
SHALL BE BLOCKED DURING CONSTRUCTION



TEMPORARY SURFACE WATER IMPACTS

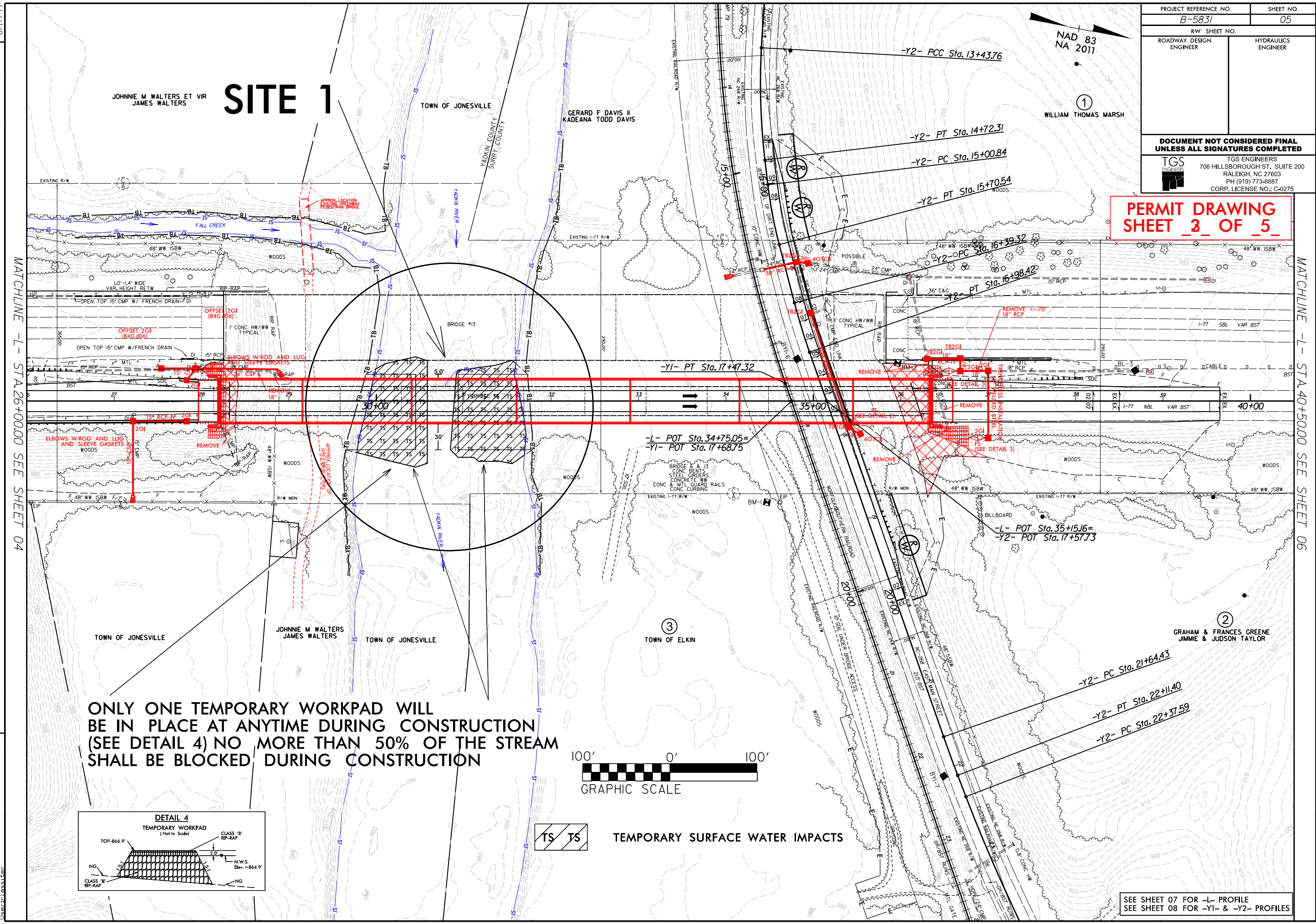
SEE SHEET 07 FOR -L- PROFILE
SEE SHEET 08 FOR -Y1- & -Y2- PROFILES

8/17/99
5/24/2024
X:\CADD\18-5831\Hydraulics\PERMITS\Environmental\Drawings\PSH\3b5831.prm.psh.05_Con.dgn
User: jwalter

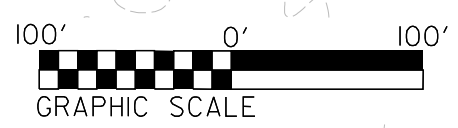
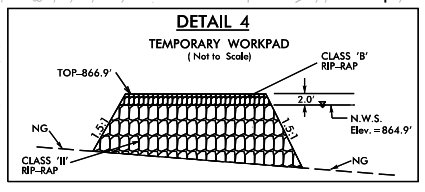
REVISIONS

MATCHLINE -L- STA.26+00.00 SEE SHEET 04

MATCHLINE -L- STA.40+50.00 SEE SHEET 06




ONLY ONE TEMPORARY WORKPAD WILL BE IN PLACE AT ANYTIME DURING CONSTRUCTION (SEE DETAIL 4) NO MORE THAN 50% OF THE STREAM SHALL BE BLOCKED DURING CONSTRUCTION



TS TS TEMPORARY SURFACE WATER IMPACTS

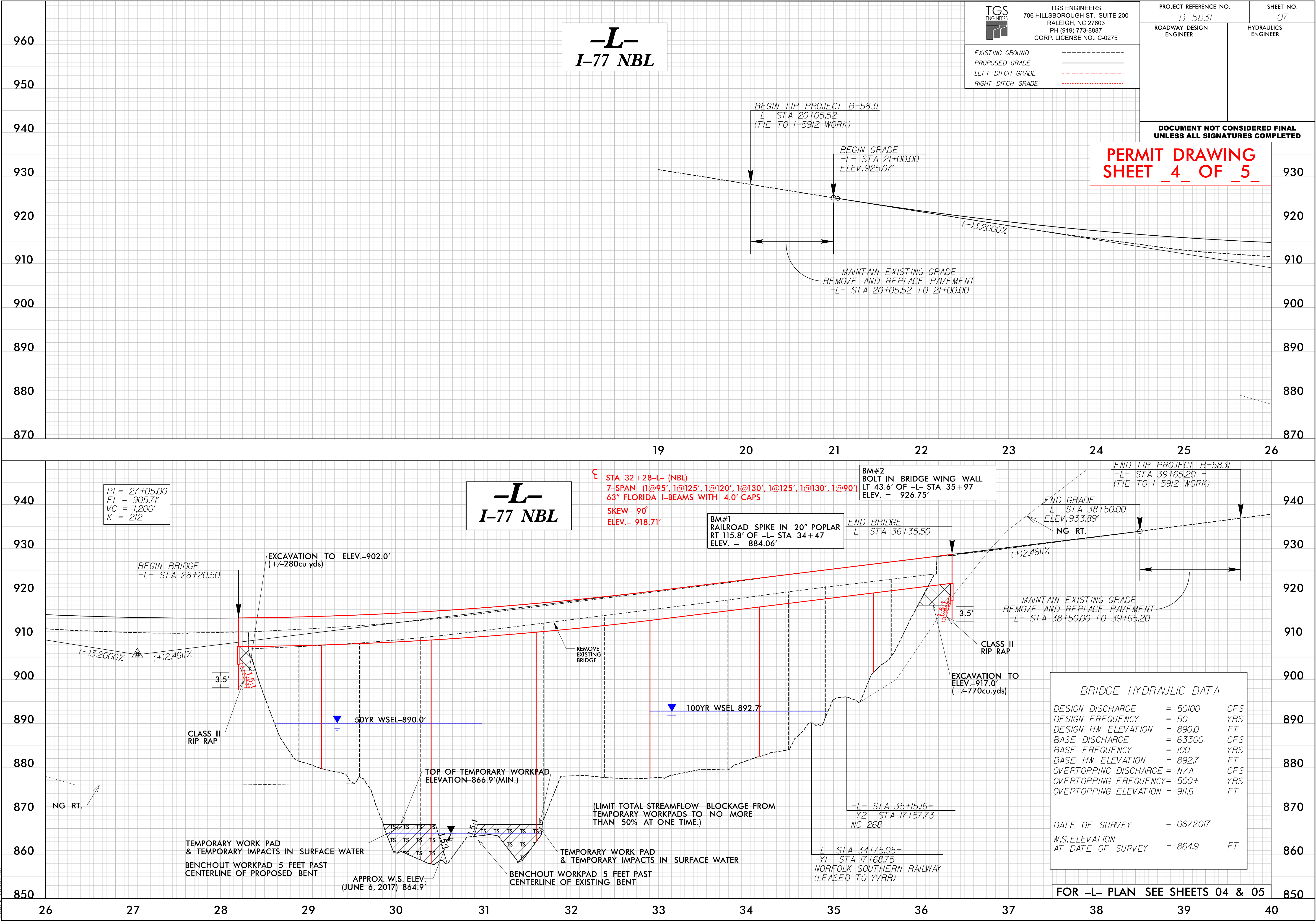
PERMIT DRAWING
SHEET 2 OF 5

PROJECT REFERENCE NO. <i>B-5831</i>		SHEET NO. <i>05</i>	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
 TGS ENGINEERS 706 HILLSBOROUGH ST., SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 CORP. LICENSE NO.: C-0275		TGS ENGINEERS 706 HILLSBOROUGH ST., SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 CORP. LICENSE NO.: C-0275	

SEE SHEET 07 FOR -L- PROFILE
SEE SHEET 08 FOR -Y1- & -Y2- PROFILES

5/28/99

2/16/2024
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User: jlasater



WETLAND AND SURFACE 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	29+85-31+65 -L-	Temporary Workpad							0.375		126	
TOTALS*:									0.375	0	126	0

*Rounded totals are sum of actual impacts

NOTES:

Site 1 Temporary Surface Waters Impacts=16,347 square feet

Site 1 Pier Impacts- 118 square feet

No wetlands impacted by this project

NC DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

2/12/2024

Yadkin/Surry COUNTY

B-5831

45784.1.2

SHEET

5

OF

5

Protected Species/ Section 7



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

August 15, 2024

TO: Bill Barrett, Environmental Program Consultant
Environmental Coordination & Permitting Group, EAU

FROM: Melissa Miller, Environmental Program Consultant
Biological Surveys Group, EAU

SUBJECT: Section 7 survey results for the gray bat (*Myotis grisescens*, MYGR), associated with the replacement of Bridge Number 850006 over NC 268, Norfolk Southern Railroad and the Yadkin River on I-77 NBL in Surry County, **TIP No. B-5831.**

The North Carolina Department of Transportation (NCDOT, Division 11) proposes to replace Bridge No. 850006 over NC 268, Norfolk Southern Railroad and the Yadkin River on I-77 NBL in Surry County, TIP No. B-5831. Bridge Number 850006 is a twelve span structure with steel beams, and a concrete deck, guard rails and end walls. The overall length of the bridge is 788 feet. Bridge No. 850013 also occurs in the project study area. This bridge is a seven span structure with a metal deck and concrete beams, guard rails and end walls. The overall length of this bridge is 760 feet. One culvert meeting NCDOT's Standard Operating Procedures for Preliminary Bat Habitat Assessments were identified meeting the criteria of greater than 3 feet wide and 60 feet in length during this site visit.

On July 9, 2024, RK&K biologists assessed all of the structures in the project study area. Crevices suitable for roosting are present on both bridges. No evidence of bats (bats, staining, guano) was observed on bridge 850006. Evidence of bats in the form of bats, guano and staining was observed on Bridge No. 850013. A small colony of 10 Big brown bats (*Eptesicus fuscus*, EPFU) was observed in an expansion joint on the north side of the bridge. Another bat cluster was observed roosting on the south side of the bridge. Confirmation of species was not obtained for this cluster. No evidence of bats was observed in the culvert. Trees greater than 3" dbh are present in the project area. There are no known caves within one half mile of the project footprint and no caves or mines were observed during the field visit. Two mines occur within a half mile of the project study area.

The Elkin Pit and Elkin Quarry surface mines are 0.5 miles east of the project study area. Large, continuous forests are present in the project vicinity, providing potential foraging and commuting habitat. This bridge was previously surveyed by NCDOT in 2021. No evidence of bats was observed during that survey.

As of August 15, 2024, the following federally protected bat species are listed in IPaC (<https://ipac.ecosphere.fws.gov/>) as potentially occurring in the action area:

Species	Federal Status	Habitat Present*	Biological Conclusion	Distance to Nearest Record**
MYGR	E	Yes	MANLAA	13.4 mile NE

*See detailed habitat information in table below

**Nearest known record from latest NHP, WRC, or NCDOT data

Presence (✓) or Probable Absence (X) of various habitat types for bat species potentially occurring in project area.

Species	Summer Roosting		Winter Roosting	Foraging Habitat	Commuting Habitat
	Tree	Structure			
MYGR	NA	✓	X	✓	✓

A Biological Conclusion of May Affect Not Likely to Adversely Affect is given to the above species based on the presence of suitable foraging, commuting and/or roosting habitat. No evidence of federally listed bats was found on either structure, no caves or appropriate type mines are in the area, and a large area of alternative available suitable habitat exists in the project vicinity. After consulting with Division 11 staff, it has been determined that the existing bridge deck cannot be removed during the winter months. Trees can be cut during the winter months. Blasting is not anticipated for this project, but it may occur. Several tools will be used during project construction including but not limited to pneumatic wrenches, pile drivers and jackhammers. This equipment is vibratory or percussive in nature. The maximum noise level for activities that will occur as part of this project is 101-110 dBA, attributed to a combination of tools listed above. Permanent roadway lighting does exist in the project area. Temporary lighting may be necessary during the active season however, lighting will only be used where and when required to allow for safe working conditions. Lights will be focused on the specific work area, if needed. By implementing avoidance and minimization measures as described above, this project is Not Likely to Adversely Affect federally listed bats.

If you need any additional information, please contact Melissa Miller at 919-707-6127.

Archaeology



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 Team.



PROJECT INFORMATION

Project No: **B-5831** *County:* Surry, Yadkin
WBS No: 45784 *Document:* Federal Categorical Exclusion
Federal Aid No: NHP-0077(006) *Funding:* ☐ State ☒ Federal
Federal Permit Required? ☒ Yes ☐ No *Permit Type:* USACE

Project Description:

NOTE: This project was originally reviewed in April 2016 and again in July 2020. The study area in 2016 included an approximately 983 meter (3,225 ft.) long and 92 meter (300 ft.) wide section along Interstate 77. The 2020 review included a larger study area (see below). The study area has not changed since the 2020 review so the recommendation of no survey required still applies.

Replace Bridge 6 on Interstate 77 (Northbound) over NC 268, the Southern Railroad, and the Yadkin River (Figures 1 and 2). The Area of Potential Effects (A.P.E.), based on the study area provided by the project manager, consists of an approximately 1,740 meter (5,710 ft.) long and 92 meter (300 ft.) wide section along Interstate 77, and an approximately 530 meter (1,740 ft.) long and 71 meter (235 ft.) wide section along NC 268 and the Southern Railroad. No design plans were provided. Federal permits are required. No easements will be required. The project is federally funded and will require federal permits, therefore Section 106 of the National Historic Preservation Act applies for this cultural resources review.

SUMMARY OF CULTURAL RESOURCES REVIEW

Brief description of review activities, results of review, and conclusions:

The 2020 review included an examination of a topographic map, the Surry and Yadkin Counties soil surveys, an aerial photograph, and listings of previously recorded sites, previous archaeological surveys, and previous environmental reviews at the Office of State Archaeology (O.S.A.). Also, a visual reconnaissance of the project area was conducted on 2/24/2016. The bridge is oriented approximately north-south. Surry County is on the north side of the Yadkin River and Yadkin County is on the south side.

The topographic maps (Elkin North, N.C. and Elkin South, N.C.) show the study area is located in a wide river valley (Figure 3). The landforms in the study area include floodplain and moderate to steep ridges on each side. Falls Creek joins the Yadkin River in the southwest quadrant. The level floodplain on either side of the Yadkin River has the highest potential for prehistoric archaeological sites. The sloped ridges have lower potential.

The Surry and Yadkin County soil surveys show the soil on the north (Surry) side of the bridge is Colvard and Suches soils (0-3% slopes), occasionally flooded, in the floodplain. The soil in the floodplain along the east edge of the study area is Udorthents, a soil described as "mine spoil" or "earthy fill." Fairview sandy clay loam (8-15% and 15-45% slopes) is the soil type on the ridge in

the northern part. The soil on the south (Yadkin) side of the bridge is Ronda loamy sand (0-5% slopes), occasionally flooded, Dan River/ Comus soils (0-4% slopes), occasionally flooded, and Hatboro soils (0-2% slopes), frequently flooded, in the floodplain. The Hatboro soil appears to mark the streambed of Fall Creek. Fall Creek joins the Yadkin River in the southwest quadrant, but was probably re-routed to that confluence when Interstate 77 was constructed. Prior to the construction of the interstate the creek probably joined the river in what is now the southeast quadrant. The soil on the ridge is Fariview-Stott Knob complex (25-45% slopes).

The aerial photograph shows that most of the study area is wooded (Figure 4). The aerial photograph with elevation contours shows the steep landforms in the study area (Figure 5).

A review of information at the OSA shows there are no previously recorded sites within or adjacent to the study area. The study area has not been previously surveyed for archaeological sites. There are several projects nearby which have been reviewed by the State Historic Preservation Office (HPO). These include a wastewater line along the north side of NC 268 (ER 14-1132), a walking trail along the north side of the Yadkin River (ER 15-2367), and a pedestrian bridge along the south side of the Yadkin River (ER 12-0889). No archaeological surveys were requested for any of the projects.

A visual reconnaissance of the project area was conducted by NCDOT archaeologists Scott Halvorsen and Caleb Smith on 2/24/2016. The reconnaissance was conducted on the north side of the river but not the south (we could not access that part of the study area) (Figures 6-9). Although we could not access this area, the topograph map and an aerial photograph with topographic contour lines show the landforms along the east side of Interstate 77 on the south side of the Yadkin River is a sloped ridge with a low potential for archaeological sites. The 2016 study area included the area within 46 meters (150 ft.) of centerline on both sides of the I-77 Northbound bridge. The study area on the west side of that bridge is mostly occupied by the I-77 Southbound bridge. The study area in the northeast quadrant consists of floodplain from the river north for 90 meters (295 ft.), then the Southern Railroad tracks, then NC 268, and then a slope up to a ridge. The floodplain appears to be poorly-drained. The soil survey describes the soil next to the bridge as "occasionally flooded", and the soil along the east edge as Udorthents, which is disturbed fill. Visual examination of the study area to the east of the bridge did not identify any visible evidence of fill, but it did appear to be a poorly-drained area. The 2020 study area includes a section along NC 268 and the Southern Railroad on both sides of the Interstate 77 bridges. The 2016 reconnaissance showed that the land along NC 268 is disturbed by the railroad tracks along the south side of the road, and is sloped on the north side.

(This project falls within a North Carolina County in which the following federally recognized tribes have expressed an interest: the Catawba Indian Nation. We recommend that you ensure that this documentation is forwarded to these tribes using the process described in the current NCDOT Tribal Protocol and PA Procedures Manual.)

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

The land on both sides of the river appears to have a low potential for archaeological sites. The north side includes poorly-drained floodplain, disturbed areas alongside NC 268 and the railroad tracks, and a sloped ridge. The south side includes a narrow strip of floodplain along the river, and a sloped ridge along the east side of Interstate 77.

SUPPORT DOCUMENTATION

See attached: ☒ Map(s) ☐ Previous Survey Info ☒ Photos ☐ Correspondence
Other:

FINDING BY NCDOT ARCHAEOLOGIST: NO ARCHAEOLOGY SURVEY REQUIRED

Caleb Smith

10/6/2023

NCDOT ARCHAEOLOGIST II

Date

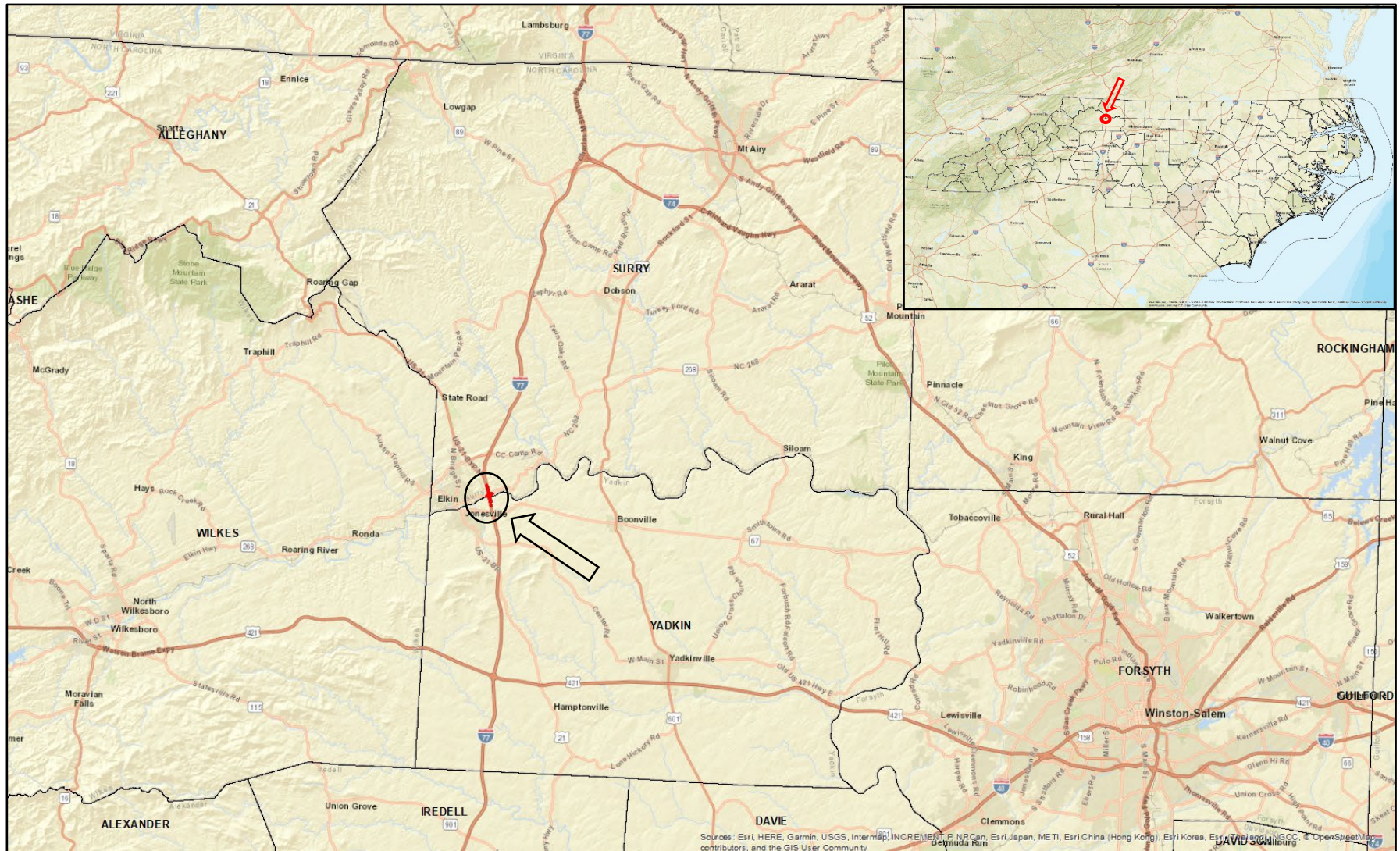


Figure 1: Location of the study area in Surry and Yadkin Counties, North Carolina.

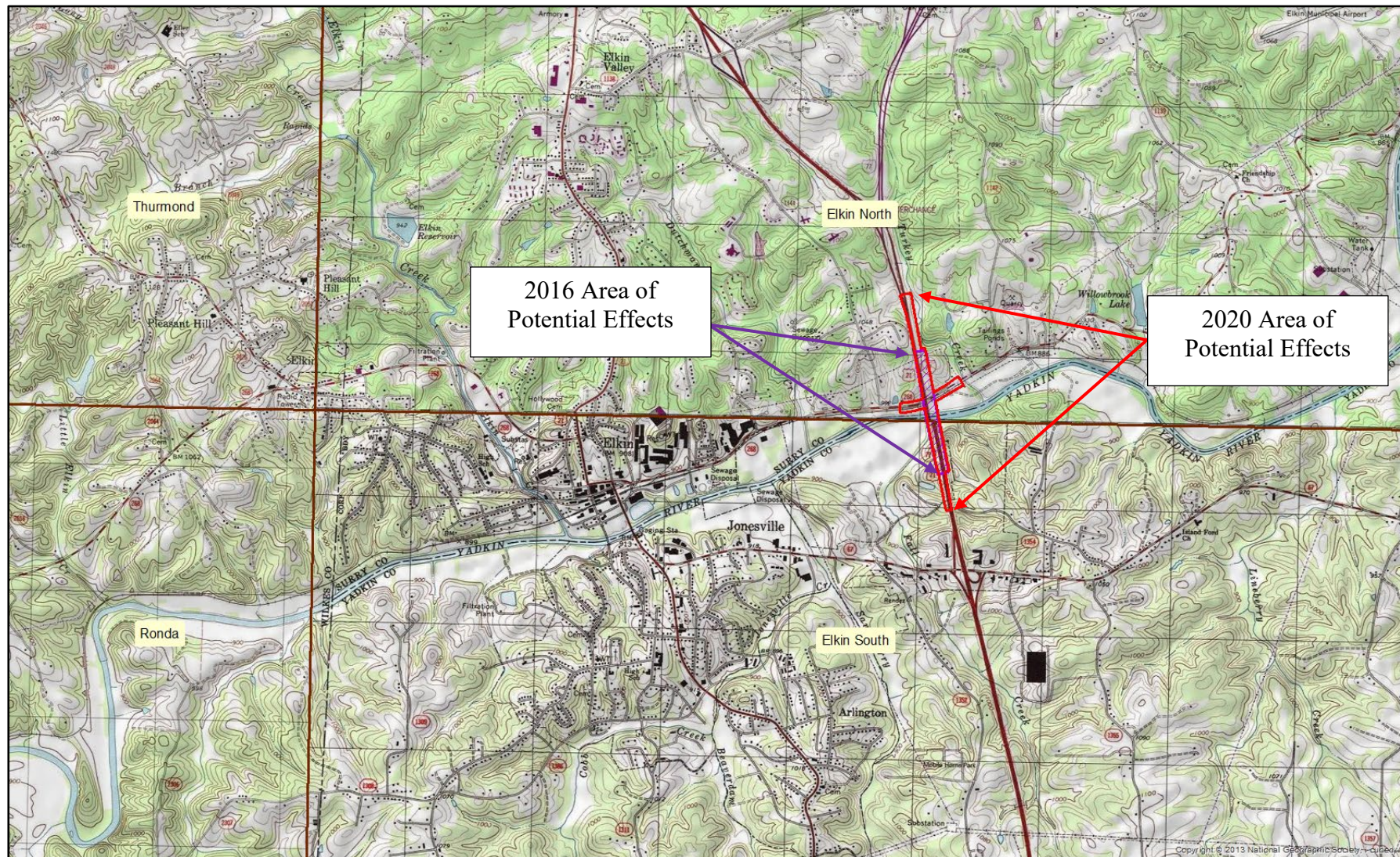


Figure 2: Location of the study area on the *Thurmond, Elkin North, Elkin South, and Ronda* topographic maps.

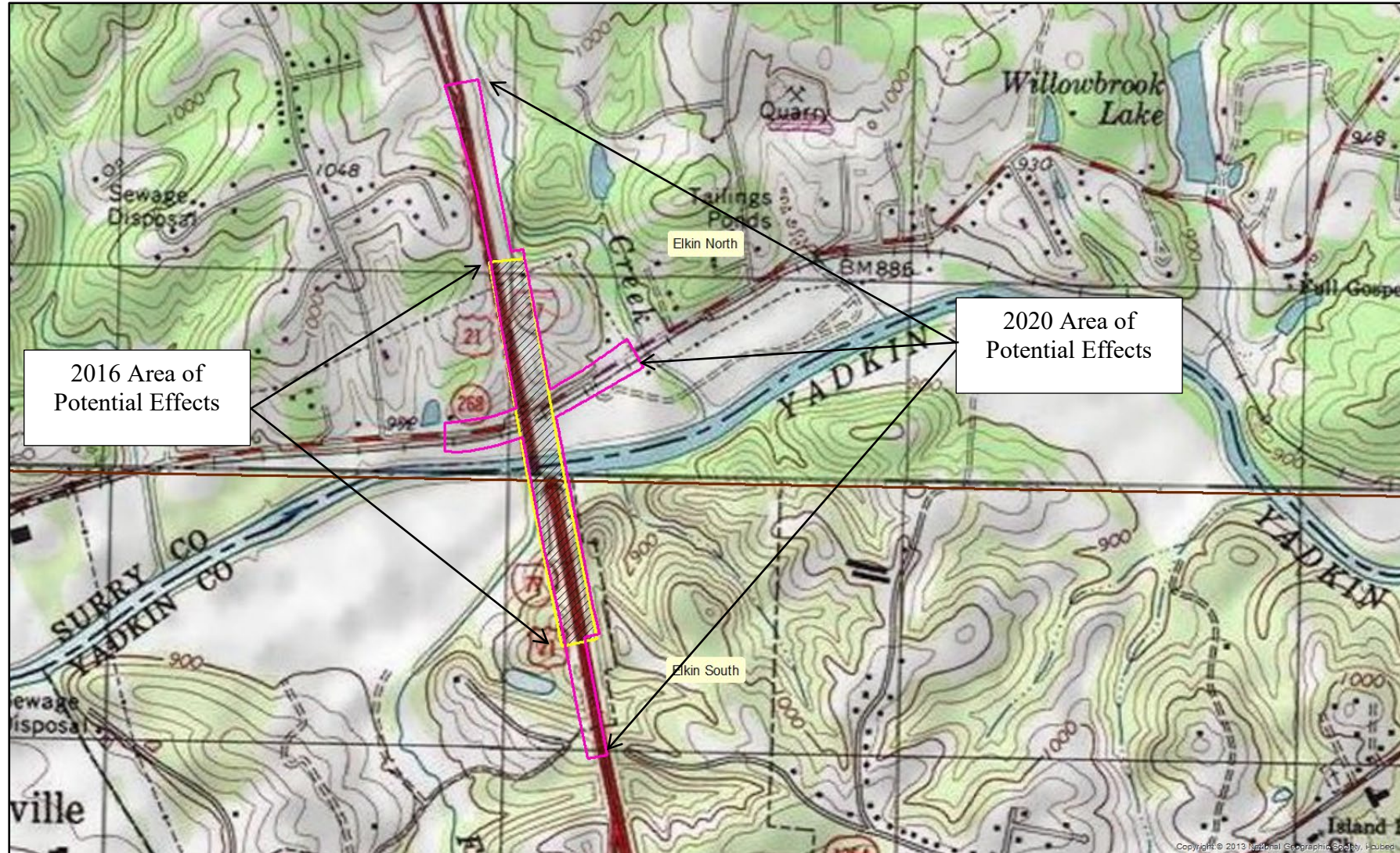


Figure 3: Topographic map of the study area (USGS *Elkin North* and *Elkin South* 1:24,000-scale topographic maps).



Figure 4: Aerial photograph of the study area.

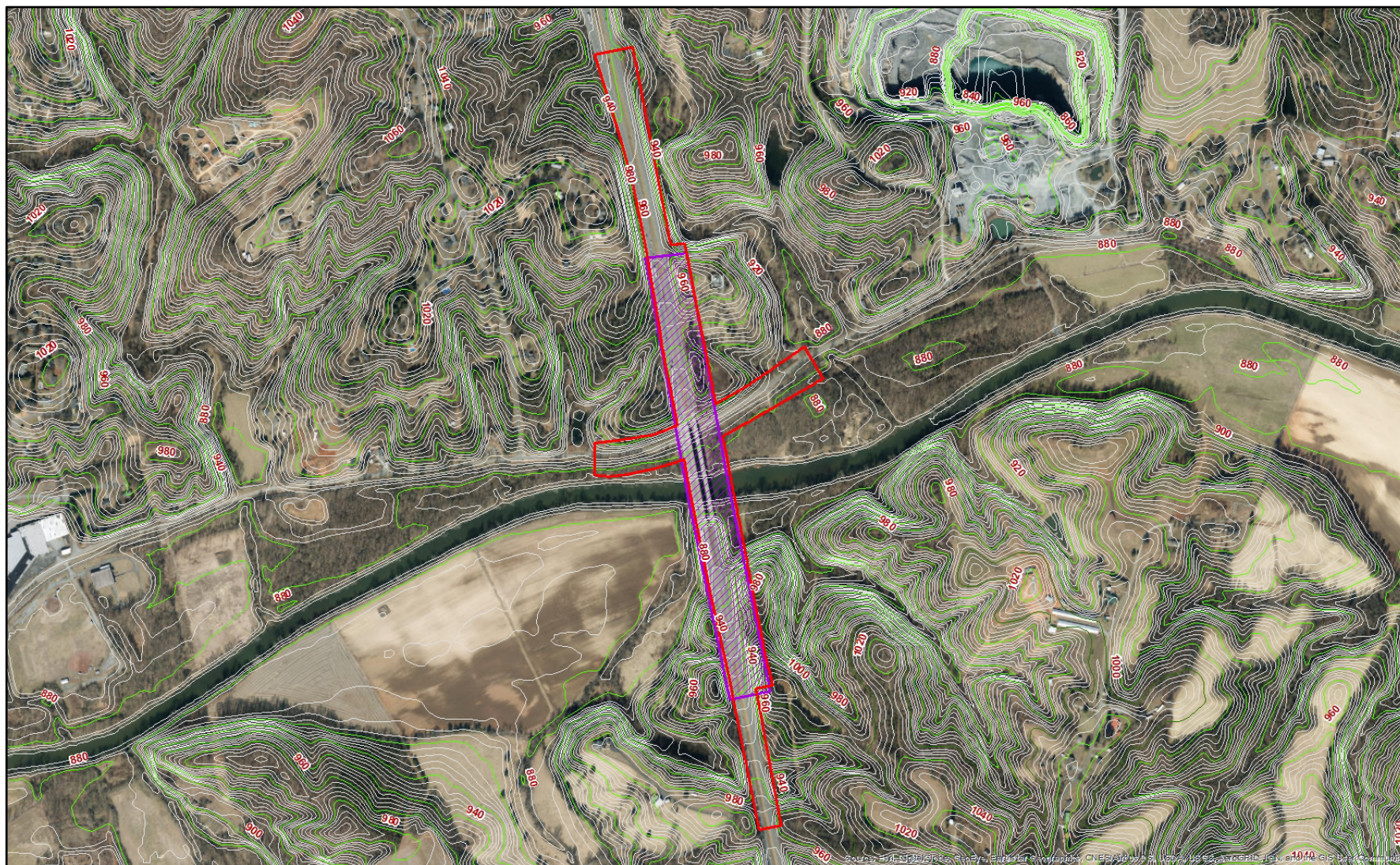


Figure 5: Aerial photograph of the study area with elevation contour lines.



Figure 6: South view of the floodplain in the northeast quadrant.



Figure 7: North view of the ridge side slope in the northeast quadrant.



Figure 8: West view of the floodplain and railroad tracks in the northeast quadrant.



Figure 9: South view of the floodplain in the southeast quadrant.

Historic Architecture and Landscapes

16-01-0084
Updated

HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED 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

Project No:	B-5831	County:	Surry
WBS No.:	45784.1.1	Document Type:	CE
Fed. Aid No:	NHP-0077(006)	Funding:	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
Federal Permit(s):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Permit Type(s):	NWP
<u>Project Description:</u> Replace Bridge No. 6 on I-77 (northbound lane) over Yadkin River.			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

Description of review activities, results, and conclusions:

Review of HPO quad maps, relevant background reports, historic designations roster, and indexes was undertaken on February 8, 2016. Based on this review there are no NR, DE, LL, SL, or SS in the Area of Potential Effects (APE). Both the Yadkin and Surry County tax data was utilized to check for structures greater than 50 years of age. There are no standing structures in the APE greater than fifty years of age. The bridge itself, Surry County Bridge No. 6, was built in 1965. The structure does not exemplify any distinctive engineering or aesthetic type and is not eligible for the National Register of Historic Places. No survey is required. **On June 12, 2020 the APE of this project extended beyond the area examined in the original screening. However, in the extended APE there are no properties over 50 years of age. No survey is required.**

Why the available information provides a reliable basis for reasonably predicting that there are no unidentified significant historic architectural or landscape resources in the project area:

Using HPO GIS website and county tax data provides reliable information regarding the structures in the APE. These combined utilities are considered valid for the purposes of determining the likelihood of historic resources being present.

SUPPORT DOCUMENTATION

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

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

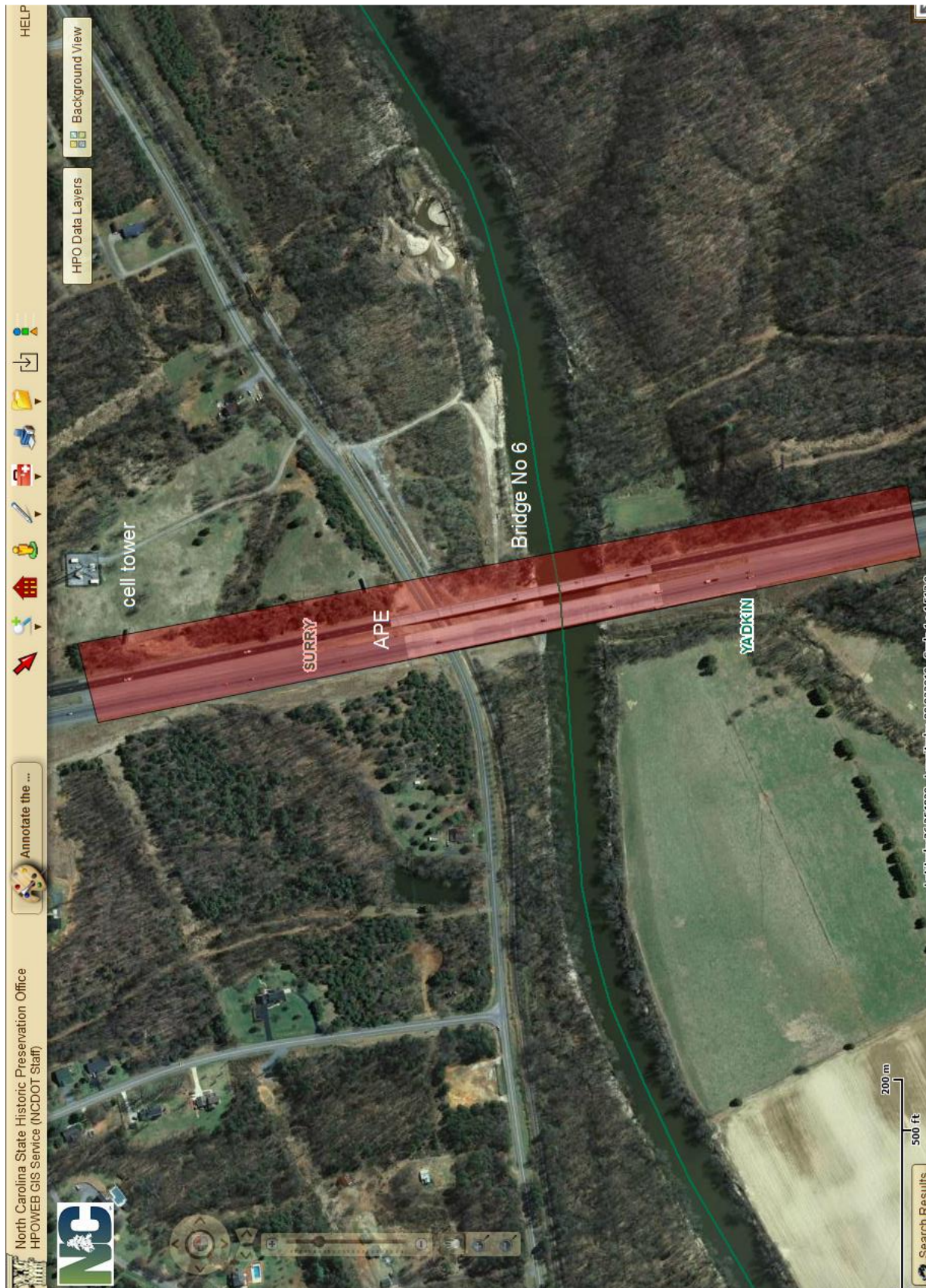
Shelby Reap

June 16, 2020

NCDOT Architectural Historian

Date

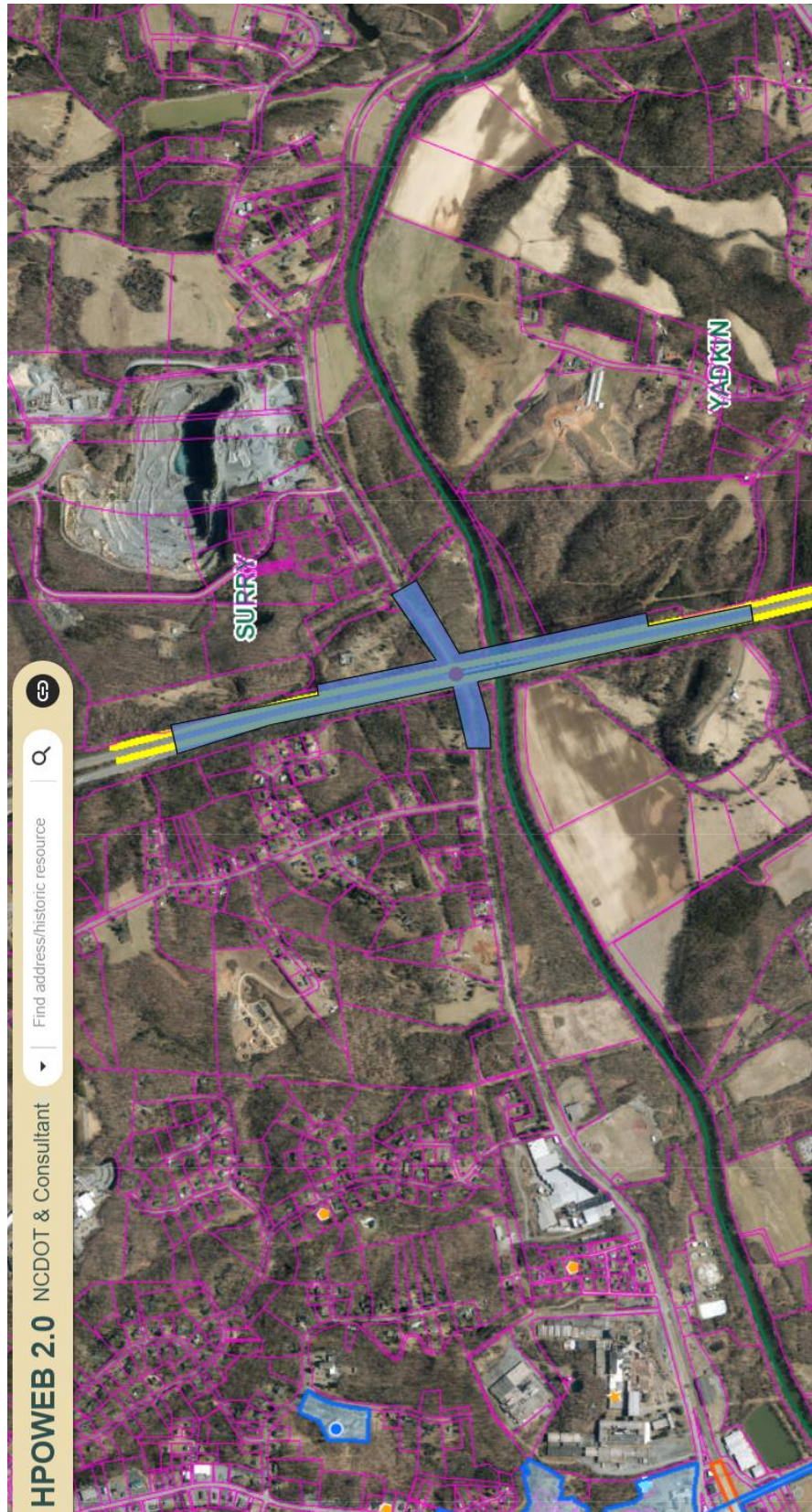
Historic Architecture and Landscapes NO SURVEY REQUIRED form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.



Original APE



Cell Tower located north of Bridge No 6



Revised APE

Tribal Coordination



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. Eric Boyette
SECRETARY

June 25, 2020

Dr. Wenonah Haire
Tribal Historic Preservation Officer
Catawba Indian Nation
1536 Tom Steven Road
Rock Hill SC, 29730

Dear Dr. Haire,

The North Carolina Department of Transportation has started the project development, environmental, and engineering work for the replacement of Bridge No. 6 over the Yadkin River, Yadkin Valley Railroad, and N.C. 268 on I-77 NBL on the Yadkin/Surry County border as project B-5831.


The US Army Corps of Engineers is the lead agency and a permit is anticipated under the Section 404 Process with the USACE.

The project vicinity map is attached. The coordinates of this project are approximately 36.250450, -80.820985.

This project was reviewed/surveyed for cultural resources by NCDOT under the terms of the 2015 Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation and the North Carolina State Historic Preservation Office for Minor Transportation Projects in North Carolina (PA). The results of that review/survey are attached. The environmental document for this undertaking is currently under development.

Please respond by July 27th so that your comments can be used to evaluate potential environmental impacts during the design phase of this project. If you have any questions concerning this project, or would like additional information, please contact me at (919) 707-6442 or email dstutts@ncdot.gov.

Thank You,

DocuSigned by:

A4A2999A8BC64F2...

David Stutts, PE

Structures Management Unit Project Engineer, NCDOT

cc: Matt Wilkerson, NCDOT Archaeology Team Lead

Lori Beckwith, USACE Division 11

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
STRUCTURES MANAGEMENT UNIT
1581 MAIL SERVICE CENTER
RALEIGH, NC 27699-1581

Telephone: (919) 707-6442

Fax: (919) 250-4082

Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH, NC 27610



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

<i>Project No:</i>	B-5831	<i>County:</i>	Surry/Yadkin
<i>WBS No:</i>	45784.1.1	<i>Document:</i>	Categorical Exclusion
<i>Federal Aid No:</i>	NHP- 0077(006)	<i>Funding:</i>	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal

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

Project Description: Replace Bridge 6 on I-77 (Northbound) over NC 268, the Southern Railroad, and the Yadkin River. Area of Potential Effects (A.P.E.) is approximately 763 meters (2,500 ft.) long and 92 meters (300 ft..) wide. No design plans were provided.

SUMMARY OF CULTURAL RESOURCES REVIEW

Brief description of review activities, results of review, and conclusions:

The review included an examination of a topographic map, the Surry and Yadkin Counties soil surveys, an aerial photograph, and listings of previously recorded sites, previous archaeological surveys, and previous environmental reviews at the Office of State Archaeology (O.S.A.). Also, a visual reconnaissance of the project area was conducted on 2/24/2016. The bridge is oriented approximately north-south. Surry County is on the north side of the Yadkin River and Yadkin County is on the south side.

The topographic maps (Elkin North, N.C. and Elkin South, N.C.) show the A.P.E. is located in a wide river valley. The A.P.E. includes floodplain and moderate to steep ridges on each side. Falls Creek joins the Yadkin River in the southwest quadrant. The floodplain on each side of the Yadkin River has the highest archaeological potential. The ridges have low potential.

The Surry and Yadkin County soil surveys show the soil on the north (Surry) side of the bridge is Colvard and Suches soils (0-3% slopes), occasionally flooded, in the floodplain. The soil in the floodplain along the east edge of the A.P.E. is Udorthents, a soil described as "mine spoil" or "earthy fill." Fairview sandy clay loam (8-15% and 15-45% slopes) is the soil type on the ridge in the northern part of the A.P.E. The soil on the south (Yadkin) side of the bridge is Ronda loamy sand (0-5% slopes), occasionally flooded, Dan River/ Comus soils (0-4% slopes), occasionally flooded, and Hatboro soils (0-2% slopes) frequently flooded, in the floodplain. The Hatboro soil appears to mark the bed of Fall Creek. Fall Creek joins the Yadkin River in the southwest quadrant, but was probably re-routed to that confluence when I-77 was constructed. Prior to the construction of I-77 it probably joined the river in what is now the southeast quadrant. The soil on the ridge is Fariview-Stott Knob complex (25-45% slopes).

The aerial photograph shows that most of the A.P.E. is wooded.

A review of information at the O.S.A. shows there are no previously recorded sites within or

adjacent to the A.P.E. The A.P.E. has not been previously surveyed for archaeological sites. There are several projects near the A.P.E. that have been reviewed by the State Historic Preservation Office (HPO). These include a wastewater line along the north side of NC 268 (ER 14-1132), a walking trail along the north side of the Yadkin River (ER 15-2367), and a pedestrian bridge along the south side of the Yadkin River (ER 12-0889). No archaeological surveys were requested for any of the projects.

A visual reconnaissance of the project area was conducted by NCDOT archaeologists Scott Halvorsen and Caleb Smith on 2/24/2016. The reconnaissance was conducted on the north side of the river but not the south (we could not figure out how to access that part of the A.P.E.). The examination of the north side of the river focused on the northeast quadrant. The A.P.E. includes the area within 46 meters (150 ft.) of centerline on both sides of the I-77 Northbound bridge. The A.P.E. on the west side of that bridge is mostly occupied by the I-77 Southbound bridge. The A.P.E. in the northeast quadrant consists of floodplain from the river north for 90 meters (295 ft.), then the Southern Railroad tracks, then NC 268, and then a slope up to a ridge. The floodplain along the north side of the river appears to be poorly-drained. The soil survey describes the soil next to the bridge as "occasionally flooded", and along the east edge of the A.P.E. as Udorthents, which is disturbed fill. Visual examination of the A.P.E. to the east of the bridge did not identify any visible evidence of fill, but it did appear to be a poorly-drained area.

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

The floodplain landforms on both sides of the river appear to have a moderate to high potential for archaeological sites, while the ridges have a low potential. The western half of the A.P.E. (the northwest and southwest quadrants) is occupied by existing I-77 Southbound, and has little potential for undisturbed archaeological sites. The soil survey indicates much of the floodplain soil in the northeast quadrant is disturbed fill. The floodplain in the southeast quadrant is a narrow strip between the river and the ridge. Visual examination of the northeast quadrant indicates the floodplain may be poorly-drained.

SUPPORT DOCUMENTATION

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

FINDING BY NCDOT ARCHAEOLOGIST

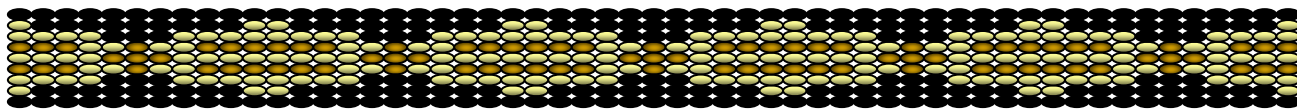
NO ARCHAEOLOGY SURVEY REQUIRED

Caleb Smith

4/12/2016

NCDOT ARCHAEOLOGIST II

Date



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

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

July 22, 2020

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

Re. THPO #	Project #	Project Description
2020-193-199	B-5831	Replacement of Bridge No. 6 over the Yadkin River, Yadkin Valley Railroad, and NC 268 on I-77 NBL on the Yadkin/Surry Co. border

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 Caitlin.Rogers@catawba.com.

Sincerely,

Wenonah G. Haire
Tribal Historic Preservation Officer

NEPA/SEPA Document

North Carolina Department of Transportation
NEPA/SEPA Consultation Form

TIP Project No. **B-5831**

WBS Element **45784.1.2**

Federal Aid Project No. **NHP-0077(006)** *construction only*

A. Project Description, Location, and Purpose:

This project replaces Bridge 850006 on I-77 NBL over the Yadkin River, Norfolk Southern Railroad, and NC 268 in Yadkin and Surry Counties. The bridge will be replaced in place. Traffic will be maintained on-site. Traffic will be shifted to the existing south bound bridge (Bridge 850013) during construction. Crossovers will be utilized. The crossover length will be approximately 2,300-feet to the north and 1,800-feet to the south. The project is shown in Figure 1.

The replacement structure will utilize 63-inch Florida I-beams. The 7-span structure will be approximately 815-feet long and include two 12-foot travel lanes and 12-foot offsets. The bridge length is based on preliminary design information and is set by minimum vertical roadway clearance requirement and horizontal requirements.

The bridge and approach project construction on I-77 NBL will extend approximately 825-feet from the southern end of the new bridge and 325-feet from the northern end of the new bridge. The approaches will provide two 12-foot travel lanes with 4-foot paved shoulders inside and 12-foot paved shoulders outside.

NC 268 will be widened to the north under I-77 for 550-feet to include a 6-foot shoulder (9-feet with guardrail).

The purpose of this project is to replace a fifty-eight year old bridge. NCDOT records indicate Bridge 850006 was built in 1965. The bridge is considered functionally obsolete due to a deck geometry of 3 out of 9 and an approach alignment of 3 out of 9 according to Federal Highway Administration (FHWA) standards. Continued maintenance is a temporary solution to prolong the life of the fifty-eight year old structure which needs replacement.

B. Consultation Phase:



Right-of-Way

C. NEPA/SEPA Class of Action Initially Approved as:

FHWA Class II (CE) 07.20.2020 TYPE 1(A)

D. Changes in Proposed Action & Environmental Consequences:

Design Changes

There have been no substantial design changes since the July 2020 CE.

Water Resources

The classification of the jurisdictional stream within the project area, Yadkin River, has not changed since the May 2020 NRTR Addendum and July 2020 CE. Water resources and classifications in the project study area have not changed since the July 2020 CE. No jurisdictional wetlands were identified in the study area.

Geoenvironmental

A spill occurred on I-77 south of MM83 in the Town of Elkin on August 22, 2020, in the southbound lane along the right side of the road at the bridge rail. An undetermined amount of diesel fuel was lost. A majority of the fuel spilled onto I-77 and drained through a vertical pipe into a bed of rip rap beneath the bridge. Excavation of the diesel fuel contaminated soil and rip rap was performed on August 24, 2020. No groundwater or competent rock was discovered during the excavation.

The NCDEQ Division of Waste Management Section provided a Notice of No Further Action (October 14, 2020) for the incident since soil contamination after cleanup does not equal or exceed the TPH action level. NCDOT concurs with the findings.

Archaeology

NCDOT examined topographic maps, soil surveys, aerial photography, listings of previously recorded sites, previous archaeological surveys, and previous reviews at the Office of State Archaeology. A visual reconnaissance of the project area was conducted in February 2016. There are no previously recorded sites within or adjacent to the APE. The APE has not been previously surveyed for archaeological sites. Land on both sides of the river appears to have low potential for archaeological sites. This project was reviewed in July 2020 and on October 6, 2023; it was determined that conditions and previously examined maps and files had not changed since the 2016 archaeological screening. A finding of *No Archaeology Survey Required* was rendered for this project on April 12, 2016, and remains valid.

Historic Architecture and Landscapes

A historic architectural review of the project area was undertaken in February 2016, and it was determined that there are no NR, DE, LL, SL, OR SS in the area of potential effects (APE). There are no National Register listed or eligible properties within the APE. This project was reviewed in May 2020 and on September 12, 2023; it was determined that conditions had not changed since the original screening that would alter the original no survey call. A finding of *No Survey Required* was rendered for this project on February 8, 2016, and remains valid.

Tribal Resources

One Federally recognized tribe with interests in Yadkin and Surry Counties, the Catawba Indian Nation, was notified in 2020 of this proposed project. The response received in July 2020 indicated no immediate concerns but requested notification if Native American artifacts and/or human remains are located during ground disturbing activities.

Protected Species

The USFWS IPaC data, reviewed on August 10, 2023, identified four species that could occur in or near the project area. Updated surveys will be conducted and concurrence from USFWS will be obtained prior to permit acquisition.

Schweinitz's sunflower: A pedestrian survey conducted in September 2016 and September 2018 did not find any individuals; although, suitable habitat does exist. NCNHP records, updated July 2023, indicated no known occurrences within 1.0 mile of the study area. Due to the lack of individuals, a biological conclusion of *No Effect* is rendered for this species in 2016 and 2018. Resurveys for this species will be conducted within 2 years of the Let date for this project.

Gray bat: USFWS and NCWRC data indicate that the closest known occurrence of MYGR is approximately 13.5 miles northeast of the site. NCNHP records, updated July 2023, indicated no known occurrences within 1.0 mile of the study area. A July 2021 survey determined that suitable roosting habitat was present in the project area. Based upon the bridge type, and lack of caves or mines in the project vicinity, a biological conclusion of *May Affect, Not Likely to Adversely Affect* was rendered for gray bats in 2021. Resurveys for this species will be conducted within 2 years of the Let date for this project.

Tricolored Bat: USFWS has added the Tricolored bat (*Perimyotis subflavus*) as “Proposed Endangered” and may be listed for the project study area. NCNHP records, updated July 2023, indicated no known occurrences within 1.0 mile of the study area. Habitat is present in potential roost trees and within bridges and culverts. Should the species become listed then NCDOT will need to reconsult with USFWS and may have additional project commitments implemented.

Northern long-eared bat and Small whorled pogonia: These species are not listed as being within range of the proposed project per USFWS IPaC data as of August 10, 2023. NCNHP records, updated July 2023, indicated no known occurrences within 1.0 mile of the study area.

Bog Turtle: Habitat for the bog turtle is not present in the study area. This species is listed as Threatened due to Similarity of Appearance; therefore, it is not afforded protection under Section 7 of the Endangered Species Act and does not require a biological conclusion. A search of the NCNHP database, updated July 2023, indicates no known occurrences of this species within 1.0 mile of the project study area.

Bald Eagle: The Yadkin River is large enough to support foraging habitat for the bald eagle. A review of the NCNHP database, updated July 2023, revealed no known occurrence of this species within 1.0 mile of the project study area. No individuals or nests were observed during the field review conducted on June 25, 2019.

E. Conclusion:

The above NEPA documentation has been reevaluated (as required by either 23 CFR 771 or by NC General Statute Chapter 113A Article 1). It has been determined that the current proposed action is essentially the same as the original proposed action. Proposed changes, if any, are noted in Section D. It has been determined that anticipated social, economic, and environmental impacts were accurately described in the above referenced documents unless noted otherwise herein. Therefore, the original Administrative Action remains valid.


F. Coordination

TGS personnel have shared TIP B-5831 current project parameters with qualified NCDOT and TGS representatives. TGS Project Engineer, Stacy Oberhausen, PE, hereby verifies the involvement of the following staff and the incorporation of their technical input:

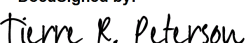
TGS Design Engineer/Project Manager:	Marcus Lowery, PE, PLS	08.07.2023
TGS Hydraulics Engineer:	Rusty Lassiter	08.07.2023
NCDOT Senior Environmental Specialist – ECAP, Western Region:	Bill Barrett	08.23.2023
NCDOT Division 11 Environmental Officer	Kevin Hining	08.10.2023
NCDOT Division 11 Construction Engineer	Ivan Dishman, PE	08.09.2023

G. Consultation Approval for NCDOT Project B-5831

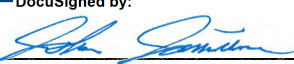
Prepared by: 10/16/2023 | 8:01 AM EDT
Date

DocuSigned by:

Stacy B. Oberhausen, PE, CPM
TGS Engineers

Prepared for: 10/16/2023 | 1:15 PM EDT
Date

DocuSigned by:

Pierre R. Peterson, PE
NCDOT, Structures Management Unit

Reviewed by: 10/16/2023 | 1:58 PM EDT
Date

DocuSigned by:

John Jamison, Environmental Policy Unit Head
NCDOT, Environmental Policy Unit

- ☒ **Approved**

In adherence with 23 CFR 771 (NEPA) or NC General Statute Chapter 113A Article 1 (SEPA), NCDOT approves this Consultation.
- or
- ☐ **Certified**

NCDOT staff certifies if FHWA signature was previously required or where changes have resulted in FHWA signature being required.

10/16/2023 | 11:00 AM PDT
Date

DocuSigned by:

David Stuts, PE, Project Engineer, PEF/Program Management
NCDOT, Structures Management Unit

FHWA Approved: FHWA signature required for Type I(B) CE, Type II(B) CE, Type III CE, FONSI or ROD

Date

N/A
William G. Marley, III, Planning and Environmental Engineer
Federal Highway Administration

H. Project Commitments (as of 10.16.2023)

TIP No. B-5831
Replace Bridge No. 6 on I-77 NBL over
the Yadkin River, Norfolk Southern Railroad, and NC 268
Yadkin and Surry Counties
WBS No. 45784.1.2
Federal Aid No. NHP-0077(006) *construction only*

The current status for the project commitments as shown in the CE are printed in italics

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

NCDOT Hydraulics Design Unit and Division 11– Construction in FEMA Floodplain

This project involves construction activities on or adjacent to FEMA-related stream(s). Therefore, the Division shall: (1) construct all vertical and horizontal elements within the floodplain as designed; and (2) consult with the Hydraulics Unit of any planned deviation of these elements within the floodplain prior to commencing any such changes; and (3) submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction. The Hydraulics Unit will then verify either: (1) the drainage structure(s) and roadway embankment located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically; or (2) any changes made to the plans were reviewed and approved to meet FEMA SFHA compliance; or (3) appropriate mitigation measures will be achieved prior to project close-out.

Structures Management Unit – Greenway Coordination

NCDOT will continue coordination with PTRC and Yadkin County to provide adequate clearance under the proposed bridge to accommodate a future greenway and continued coordination during the final design phase.

08.31.2023: NCDOT SMU will continue coordination with PTRC and Yadkin County.

NCDOT will continue coordination with PTRC and Yadkin County on all existing and proposed greenways within the project the project limits.

Division 11 and Structures Management Unit – Paddler Safety Plan

NCDOT shall require the contractor to install and maintain a rigid, non-drooping catchment device on the overhead structure of the bridge to prevent material from falling on river users or in the water.

~~Environmental Coordination & Permitting (ECAP) – Gray bat~~

~~The NCDOT Biological Surveys Group will be responsible for habitat assessment, and if needed, surveys for the gray bat prior to construction.~~

08.23.2023: Completing updated surveys, when applicable, and obtaining concurrence from the USFWS prior to permit acquisition is a standard NCDOT procedure; therefore, a project commitment is not required.

Type I or II Categorical Exclusion Action Classification Form

STIP No.:	B-5831
WBS Element:	45784.1.2
Federal Aid No.:	NHP-0077(006)

A. Project Description:

Replace Bridge No. 6 on I-77 NBL over Yadkin River, Norfolk Southern Railroad, and NC 268 in Yadkin and Surry Counties.

The replacement structure will use concrete girders approximately 815-feet long providing a clear roadway width of 48-feet. The new structure will be replaced in-place. The bridge will include two 12-foot lanes and 12-foot offsets. The bridge length is based on preliminary design information and is set by minimum vertical roadway clearance requirements and hydraulic considerations.

Bridge and approach project construction on I-77 NBL will extend approximately 825-feet from the southern end of the new bridge and 325-feet from the northern end of the new bridge. The approaches will provide two 12-foot travel lanes with 4-foot paved shoulders inside and 12-foot paved shoulders outside.

Traffic will be maintained on-site during construction. Traffic will be shifted to the existing south bound bridge (Bridge No. 13) during construction. Cross overs will be utilized. The crossover length will be approximately 2,295-feet to the north and 1,831-feet to the south. The project is shown in Figure 1.

NC 268 will be widened to the west under I-77 for 550-feet to include 6-foot shoulders (9-feet with guardrail).

B. Description of Need and Purpose:

The purpose of the proposed project is to replace a 55-year old functionally obsolete bridge. NCDOT records indicates Bridge 850006 has a sufficiency rating of 66.03 out of a possible 100 for a new structure in 2017. The bridge is considered functionally obsolete due to a deck geometry of 3 out of 9 according to Federal Highway Administration standards.

Routine maintenance has been performed on Bridge No. 850006; however, the addition of welded plates and painting performed was temporary pending construction of a new bridge. The temporary repair work did not address delamination, exposed rebar, spalling, corrosion, erosion and cracks.

C. Categorical Exclusion Action Classification:

Type I(A) - Ground Disturbing Action

D. Proposed Improvements:

23 CFR 771.117 (c)

28. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in 23 CFR 771.117 (e)(1-6).

E. Special Project Information:**Design:**

- Functional classification: Interstate
- Statewide Tier Guidelines
- Design Speed: 75-mph
- Posted Speed: 70-mph
- 2042 Design Year ADT: 40,025 vpd
- Design Exception: not required

Alternatives Considered:

The No-Build alternative would result in eventually closing the road which is unacceptable given the traffic service provided by I-77 NBL.

A three-lane option for I-77 NBL was considered but was determined not to be feasible and was removed from further study. The 2040 forecast of 48,100 average daily traffic did not justify a three lane typical.

Rehabilitation of the old bridge is not practical due to its age and being functionally obsolete. The extent of deterioration and the numerous locations of areas of disrepair on the bridge make rehabilitation inefficient, ineffective, and costly beyond reasonable limits.

Estimated Costs: The estimated construction costs are based on 2017 prices.

ITEM	Recommended Alternative	3-lane Alternative
Construction Costs	\$9,000,000	\$10,700,000
Right-of-Way Costs*	\$600,000	\$600,000
Total Estimated Cost	\$9,600,000	\$11,300,000

*Cost from 2020-2029 Draft STIP

Pedestrian and Bicycle Accommodations: I-77 is not part of a designated bicycle route nor is it listed in the STIP as needing incidental bicycle accommodations. Neither permanent nor temporary bicycle or pedestrian accommodations are required for this project.

The Piedmont Triad Regional Council (PTRC) requested accommodations for a river crossing as part of a regional trails network underneath the bridge. The request comes from the plan to connect Stone Mountain to Pilot Mountain via the Mountains to Sea Trail.

The current design includes accommodations for a greenway path under Bridge No. 6. NCDOT will continue coordination with PTRC and Yadkin County to provide adequate clearance under the proposed bridge to accommodate a future greenway and continued coordination during the final design phase.

A Complete Streets Project Sheet was approved by NCDOT in May 2020.

Public Involvement: A landowner notification letter was sent to all property owners affected by this project in February 2016. Property owners were invited to comment. No comments have been received to date.

Start of Study letters were sent to local officials, and environmental permit and resource agencies with jurisdiction in the proposed project area in December 2015. All comments have been addressed within this document.

In accordance with the NCDOT Tribal Protocol, the following Tribal Partners were notified on June 25, 2020 of the proposed project: Catawba Indian Nation. Comments received will be addressed during final design.

Bridge Demolition: Bridge No. 6 is constructed of concrete and steel and should be possible to remove with no resulting debris based on standard demolition practices.

Project Impact Criteria Checklists:

F2. Ground Disturbing Actions – Type I (Appendix A) & Type II (Appendix B)				
<p>Proposed improvement(s) that fit Type I Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix A) including 2, 3, 6, 7, 9, 12, 18, 21, 22 (ground disturbing), 23, 24, 25, 26, 27, 28, &/or 30; &/or Type II Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix B) answer the project impact threshold questions (below) and questions 8 – 31.</p> <ul style="list-style-type: none"> <i>If any question 1-7 is checked "Yes" then NCDOT certification for FHWA approval is required.</i> <i>If any question 8-31 is checked "Yes" then additional information will be required for those questions in Section G.</i> 				
<u>PROJECT IMPACT THRESHOLDS</u> (FHWA signature required if any of the questions 1-7 are marked "Yes".)			Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any question 8-31 is checked "Yes" then additional information will be required for those questions in Section G.				
<u>Other Considerations</u>			Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or is the project covered by a Programmatic Agreement under Section 7?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9	Is the project located in anadromous fish spawning waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11	Does the project impact Waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Other Considerations for Type I and II Ground Disturbing Actions (continued)		Yes	No
14	Does the project include a Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a No Effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control or the modification or construction of an interchange on an interstate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP, and where applicable, the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT Noise Policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

F. Additional Documentation as Required from Section F:**Question 8: Federally Protected Species**

Northern long-eared bat (NLEB): A review of NCNHP records, updated April 2020, indicates no known occurrences of federally protected species within 1.0-mile of the project study area. The nearest known Northern long-eared bat hibernaculum is approximately 56-miles southwest of the project and no known NLEB roost trees occur within 150-feet of the project area. 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 CFR § 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.

Gray bat: A review of the April 2020 NCNHP dataset indicates no known occurrences of gray bat within 1.0-mile of the study area. The NCDOT Biological Surveys Group will provide additional information regarding the potential presence of this species prior to project construction.

Question 16: Regulatory Floodway

Yadkin and Surry Counties are participants in the Federal Flood Insurance Program, administered by the Federal Emergency Management Agency (FEMA). The project is within a **Flood Hazard Zone, designated as Zone AE, for which the 100-year base flood elevations and corresponding regulatory floodway have been established.** Yadkin River is a FEMA mapped stream studied by the North Carolina Floodplain Mapping Program by Limited Detail methods. The bridge is located on DFIRM Panel 4961.

No structures will be adversely affected by the surface water elevation from the proposed project.

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine the status of project with regard to applicability of NCDOT's Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR). This project involves construction activities on or adjacent to FEMA-regulated streams(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

G. Project Commitments (attach as Green Sheet to CE Form):

NCDOT PROJECT COMMITMENTS

Replace Bridge No. 6 on I-77 NBL over Yadkin River, Norfolk Southern Railroad
and NC 268
Yadkin and Surry Counties
STIP No. B-5831

NCDOT Hydraulics Design Unit and Division 11– FEMA Coordination

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT's Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

This project involves construction activities on or adjacent to FEMA-related stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

Structures Management Unit – Greenway Coordination

NCDOT will continue coordination with PTRC and Yadkin County to provide adequate clearance under the proposed bridge to accommodate a future greenway and continued coordination during the final design phase.

Division 11 and Structures Management Unit – Paddler Safety Plan

NCDOT shall require the contractor to install and maintain a rigid, non-drooping catchment device on the overhead structure of the bridge to prevent material from falling on river users or in the water.

Environmental Coordination & Permitting (ECAP) – Gray bat

The NCDOT Biological Surveys Group will be responsible for habitat assessment, and if needed, surveys for the gray bat prior to construction.

H. Categorical Exclusion Approval:

STIP No:	<u>B-5831</u>
WBS No.:	<u>45784.1.2</u>
Federal Aid No.:	<u>NHP-0077(006)</u>

Prepared By:

7/17/2020 | 6:09 AM PDT

Date

DocuSigned by:

Stacy Oberhausen

E3EB7119684E416

Stacy B. Oberhausen, PE, CPM
TGS Engineers

Prepared For:North Carolina Department of Transportation**Reviewed By:**

7/20/2020 | 6:04 PM EDT

Date

DocuSigned by:

Philip S. Harris, III, PE

8C1643F6874A457

Philip S. Harris, III, PE, Unit Head
NCDOT, Environmental Analysis Unit

**Approved**

- If NO grey boxes are checked in Section F (pages 2 and 3), NCDOT approves the Type I or Type II Categorical Exclusion.

**Certified**

- If ANY grey boxes are checked in Section F (pages 2 and 3), NCDOT certifies the Type I or Type II Categorical Exclusion for FHWA approval.
- If classified as Type III Categorical Exclusion.

7/20/2020 | 2:00 PM EDT

Date

DocuSigned by:

Kevin Fischer

E3EB7119684E416

Kevin Fischer, PE, Assistant State Structures Engineer
NCDOT, Structures Management Unit

FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.N/A

Date

for John F. Sullivan, III, PE, Division Administrator
Federal Highway Administration

Note: Prior to ROW or Construction authorization, a consultation may be required (please see Section VII of the NCDOT-FHWA CE Programmatic Agreement for more details).



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. Eric Boyette
SECRETARY

June 25, 2020

Dr. Wenonah Haire
Tribal Historic Preservation Officer
Catawba Indian Nation
1536 Tom Steven Road
Rock Hill SC, 29730

Dear Dr. Haire,

The North Carolina Department of Transportation has started the project development, environmental, and engineering work for the replacement of Bridge No. 6 over the Yadkin River, Yadkin Valley Railroad, and N.C. 268 on I-77 NBL on the Yadkin/Surry County border as project B-5831.


The US Army Corps of Engineers is the lead agency and a permit is anticipated under the Section 404 Process with the USACE.

The project vicinity map is attached. The coordinates of this project are approximately 36.250450, -80.820985.

This project was reviewed/surveyed for cultural resources by NCDOT under the terms of the 2015 Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation and the North Carolina State Historic Preservation Office for Minor Transportation Projects in North Carolina (PA). The results of that review/survey are attached. The environmental document for this undertaking is currently under development.

Please respond by July 27th so that your comments can be used to evaluate potential environmental impacts during the design phase of this project. If you have any questions concerning this project, or would like additional information, please contact me at (919) 707-6442 or email dstutts@ncdot.gov.

Thank You,

DocuSigned by:

A4A2999A8BC64F2...

David Stutts, PE

Structures Management Unit Project Engineer, NCDOT

cc: Matt Wilkerson, NCDOT Archaeology Team Lead

Lori Beckwith, USACE Division 11

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
STRUCTURES MANAGEMENT UNIT
1581 MAIL SERVICE CENTER
RALEIGH, NC 27699-1581

Telephone: (919) 707-6442

Fax: (919) 250-4082

Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH, NC 27610



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

<i>Project No:</i>	B-5831	<i>County:</i>	Surry/Yadkin
<i>WBS No:</i>	45784.1.1	<i>Document:</i>	Categorical Exclusion
<i>Federal Aid No:</i>	NHP- 0077(006)	<i>Funding:</i>	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal

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

Project Description: Replace Bridge 6 on I-77 (Northbound) over NC 268, the Southern Railroad, and the Yadkin River. Area of Potential Effects (A.P.E.) is approximately 763 meters (2,500 ft.) long and 92 meters (300 ft..) wide. No design plans were provided.

SUMMARY OF CULTURAL RESOURCES REVIEW

Brief description of review activities, results of review, and conclusions:

The review included an examination of a topographic map, the Surry and Yadkin Counties soil surveys, an aerial photograph, and listings of previously recorded sites, previous archaeological surveys, and previous environmental reviews at the Office of State Archaeology (O.S.A.). Also, a visual reconnaissance of the project area was conducted on 2/24/2016. The bridge is oriented approximately north-south. Surry County is on the north side of the Yadkin River and Yadkin County is on the south side.

The topographic maps (Elkin North, N.C. and Elkin South, N.C.) show the A.P.E. is located in a wide river valley. The A.P.E. includes floodplain and moderate to steep ridges on each side. Falls Creek joins the Yadkin River in the southwest quadrant. The floodplain on each side of the Yadkin River has the highest archaeological potential. The ridges have low potential.

The Surry and Yadkin County soil surveys show the soil on the north (Surry) side of the bridge is Colvard and Suches soils (0-3% slopes), occasionally flooded, in the floodplain. The soil in the floodplain along the east edge of the A.P.E. is Udorthents, a soil described as "mine spoil" or "earthy fill." Fairview sandy clay loam (8-15% and 15-45% slopes) is the soil type on the ridge in the northern part of the A.P.E. The soil on the south (Yadkin) side of the bridge is Ronda loamy sand (0-5% slopes), occasionally flooded, Dan River/ Comus soils (0-4% slopes), occasionally flooded, and Hatboro soils (0-2% slopes) frequently flooded, in the floodplain. The Hatboro soil appears to mark the bed of Fall Creek. Fall Creek joins the Yadkin River in the southwest quadrant, but was probably re-routed to that confluence when I-77 was constructed. Prior to the construction of I-77 it probably joined the river in what is now the southeast quadrant. The soil on the ridge is Fariview-Stott Knob complex (25-45% slopes).

The aerial photograph shows that most of the A.P.E. is wooded.

A review of information at the O.S.A. shows there are no previously recorded sites within or

adjacent to the A.P.E. The A.P.E. has not been previously surveyed for archaeological sites. There are several projects near the A.P.E. that have been reviewed by the State Historic Preservation Office (HPO). These include a wastewater line along the north side of NC 268 (ER 14-1132), a walking trail along the north side of the Yadkin River (ER 15-2367), and a pedestrian bridge along the south side of the Yadkin River (ER 12-0889). No archaeological surveys were requested for any of the projects.

A visual reconnaissance of the project area was conducted by NCDOT archaeologists Scott Halvorsen and Caleb Smith on 2/24/2016. The reconnaissance was conducted on the north side of the river but not the south (we could not figure out how to access that part of the A.P.E.). The examination of the north side of the river focused on the northeast quadrant. The A.P.E. includes the area within 46 meters (150 ft.) of centerline on both sides of the I-77 Northbound bridge. The A.P.E. on the west side of that bridge is mostly occupied by the I-77 Southbound bridge. The A.P.E. in the northeast quadrant consists of floodplain from the river north for 90 meters (295 ft.), then the Southern Railroad tracks, then NC 268, and then a slope up to a ridge. The floodplain along the north side of the river appears to be poorly-drained. The soil survey describes the soil next to the bridge as "occasionally flooded", and along the east edge of the A.P.E. as Udorthents, which is disturbed fill. Visual examination of the A.P.E. to the east of the bridge did not identify any visible evidence of fill, but it did appear to be a poorly-drained area.

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

The floodplain landforms on both sides of the river appear to have a moderate to high potential for archaeological sites, while the ridges have a low potential. The western half of the A.P.E. (the northwest and southwest quadrants) is occupied by existing I-77 Southbound, and has little potential for undisturbed archaeological sites. The soil survey indicates much of the floodplain soil in the northeast quadrant is disturbed fill. The floodplain in the southeast quadrant is a narrow strip between the river and the ridge. Visual examination of the northeast quadrant indicates the floodplain may be poorly-drained.

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

Caleb Smith

4/12/2016

NCDOT ARCHAEOLOGIST II

Date



PAT McCrORY
Governor

NICHOLAS J. TENNYSON
Secretary

February 16, 2016

Dear Landowner:

The North Carolina Department of Transportation (Department) is constantly working to provide better and safer transportation facilities for public uses in North Carolina. The effects that these proposed facilities have on the human and natural environment are of great concern to the Department and must be adequately described in environmental documents, such as Environmental Assessments or Environmental Impact Statements. As part of this process, the Department is obligated to identify and document environmental resources so that they can be avoided or impacts reduced. Streams and wetlands are two of the resources that must be identified during the review process. The Department has begun planning studies for the proposed replacement of bridge No. 6 on I 77 NBL, over NC 268, South RR, & Yadkin River, Surry County, TIP Project B-5831.

Over the next several weeks, representatives of the Department, as well as the US Army Corps of Engineers, Wilmington District, Regulatory Division, may be present on your property for the purposes of conducting or verifying the limits of waters and wetlands pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899. These representatives will be wearing orange safety vests, have picture ID badges, and will be hanging pink and black flagging, or ribbons, on trees and shrubs to identify the limits of streams and wetlands, if present, on the property. This flagging does not indicate the location of a proposed transportation project, but it is very important in our environmental review process. Please do not disturb this flagging.

Please note that if the U.S. Army Corps of Engineers has already issued a Jurisdictional Determination on your property confirming the presence of streams and/or wetlands, or if you have general questions or comments about the project, contact the NCDOT Planning Engineer Jonathan Carr, by phone (919) 707-6014, or via email at jecarr@ncdot.gov. If you call, please mention NCDOT project number **B-5831**.

Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard W. Hancock'.

Richard W. Hancock, PE, Unit Head
Project Development and Environmental Analysis Unit





PAT McCrORY
Governor

NICHOLAS J. TENNYSON
Secretary

Febrero 16, 2016

Estimado propietario

El Departamento de Transporte de Carolina del Norte (Departamento) trabaja constantemente para ofrecer mejores y más seguras instalaciones de transporte para el uso público en Carolina del Norte. Los efectos que estas instalaciones propuestas tienen sobre el medio ambiente representan una gran preocupación para el Departamento y deben ser descritas adecuadamente en documentos ambientales, tales como Exclusiones Categóricas, Evaluaciones Ambientales o Declaraciones de Impacto Ambiental. Como parte de este proceso, el Departamento está obligado a identificar y documentar recursos ambientales con el fin de evitar o reducir los impactos. Los arroyos y los humedales son dos de los recursos que deben ser identificados durante el proceso de revisión. El Departamento ha iniciado los estudios de planeación relacionados con la propuesta reemplazo de la puente número 6 de I 77 NBL, encima de NC 268, South RR, & Yadkin River, en el condado Surry, Proyecto TIP B-5831.

Durante los próximos meses, es posible que representantes del Departamento, así como del Cuerpo de Ingenieros del Ejército de los Estados Unidos del distrito de Wilmington, pertenecientes a la División Regulatoria, se presenten en su propiedad con el propósito de conducir o verificar los límites de aguas y humedales de conformidad con la Sección 404 del Acta de Agua Limpia y/o la Sección 10 del Acta de Ríos y Puertos de 1899. Estos representantes vestirán chalecos de seguridad de color naranja, llevarán credenciales de identificación con fotografía y estarán colgando banderines de color rosa y negro, o listones, en árboles y arbustos para identificar los límites de arroyos y humedales que existan en la propiedad. Este mapeo ***no*** significa que en la zona se contemple un proyecto de transportación propuesto, pero es muy importante en nuestro proceso de revisión ambiental. Por favor no retire tales banderines o listones.

Por favor tome en cuenta que si el Cuerpo de Ingenieros del Ejército de los EE.UU. ha emitido una Determinación Jurisdiccional en su propiedad confirmando la presencia de arroyos y/o humedales, o si tiene preguntas o comentarios relacionados con el proyecto, por favor contacte la Línea Directa en Español del NCDOT llamando al 1-800-481-6494 o envíe su correspondencia a Jonathan Carr jecarr@ncdot.gov. Cuando llame, por favor mencione el Proyecto **TIP B-5831** del NCDOT.

Gracias por su cooperación.

Atentamente,

A handwritten signature in black ink, appearing to read 'Richard W. Hancock'.

Richard W. Hancock, PE, Unit Head
Unidad de Desarrollo de Proyectos y Análisis Ambientales



16-01-0084

Updated



HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED 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

Project No:	B-5831	County:	Surry
WBS No.:	45784.1.1	Document Type:	CE
Fed. Aid No:	NHP-0077(006)	Funding:	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
Federal Permit(s):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Permit Type(s):	NWP
<u>Project Description:</u> Replace Bridge No. 6 on I-77 (northbound lane) over Yadkin River.			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

<p><u>Description of review activities, results, and conclusions:</u> Review of HPO quad maps, relevant background reports, historic designations roster, and indexes was undertaken on February 8, 2016. Based on this review there are no NR, DE, LL, SL, or SS in the Area of Potential Effects (APE). Both the Yadkin and Surry County tax data was utilized to check for structures greater than 50 years of age. There are no standing structures in the APE greater than fifty years of age. The bridge itself, Surry County Bridge No. 6, was built in 1965. The structure does not exemplify any distinctive engineering or aesthetic type and is not eligible for the National Register of Historic Places. No survey is required. On June 12, 2020 the APE of this project extended beyond the area examined in the original screening. However, in the extended APE there are no properties over 50 years of age. No survey is required.</p>
<p><u>Why the available information provides a reliable basis for reasonably predicting that there are no unidentified significant historic architectural or landscape resources in the project area:</u> Using HPO GIS website and county tax data provides reliable information regarding the structures in the APE. These combined utilities are considered valid for the purposes of determining the likelihood of historic resources being present.</p>

SUPPORT DOCUMENTATION

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

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

Shelby Reap

June 16, 2020

NCDOT Architectural Historian

Date

Historic Architecture and Landscapes NO SURVEY REQUIRED form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.



NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

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PROJECT INFORMATION

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<i>WBS No:</i>	45784.1.1	<i>Document:</i>	Categorical Exclusion
<i>Federal Aid No:</i>	NHP-0077(006)	<i>Funding:</i>	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal

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FINDING BY NCDOT ARCHAEOLOGIST

NO ARCHAEOLOGY SURVEY REQUIRED

Caleb Smith

4/12/2016

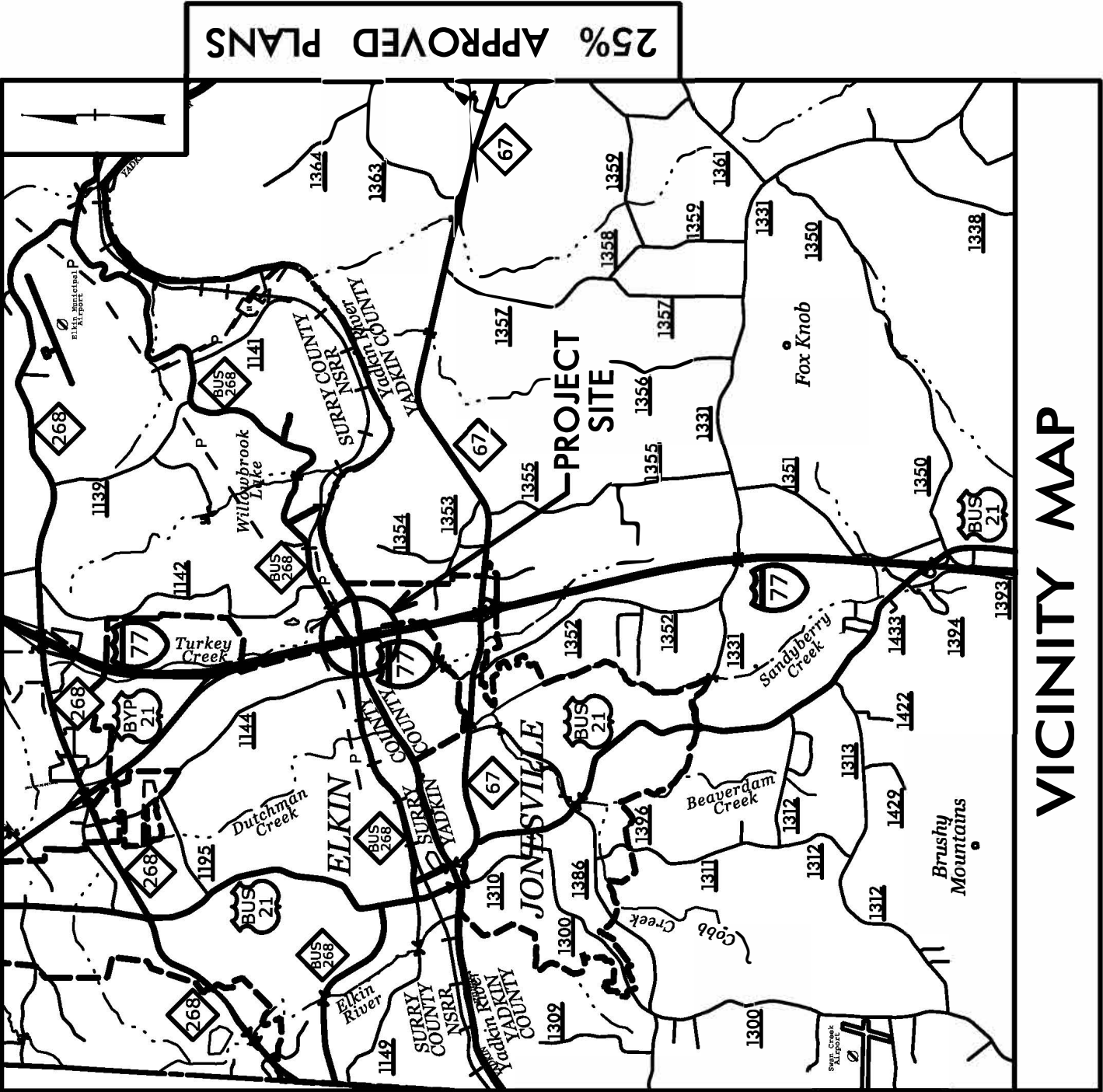
NCDOT ARCHAEOLOGIST II

Date

TIP PROJECT: B-5831

CONTRACT:

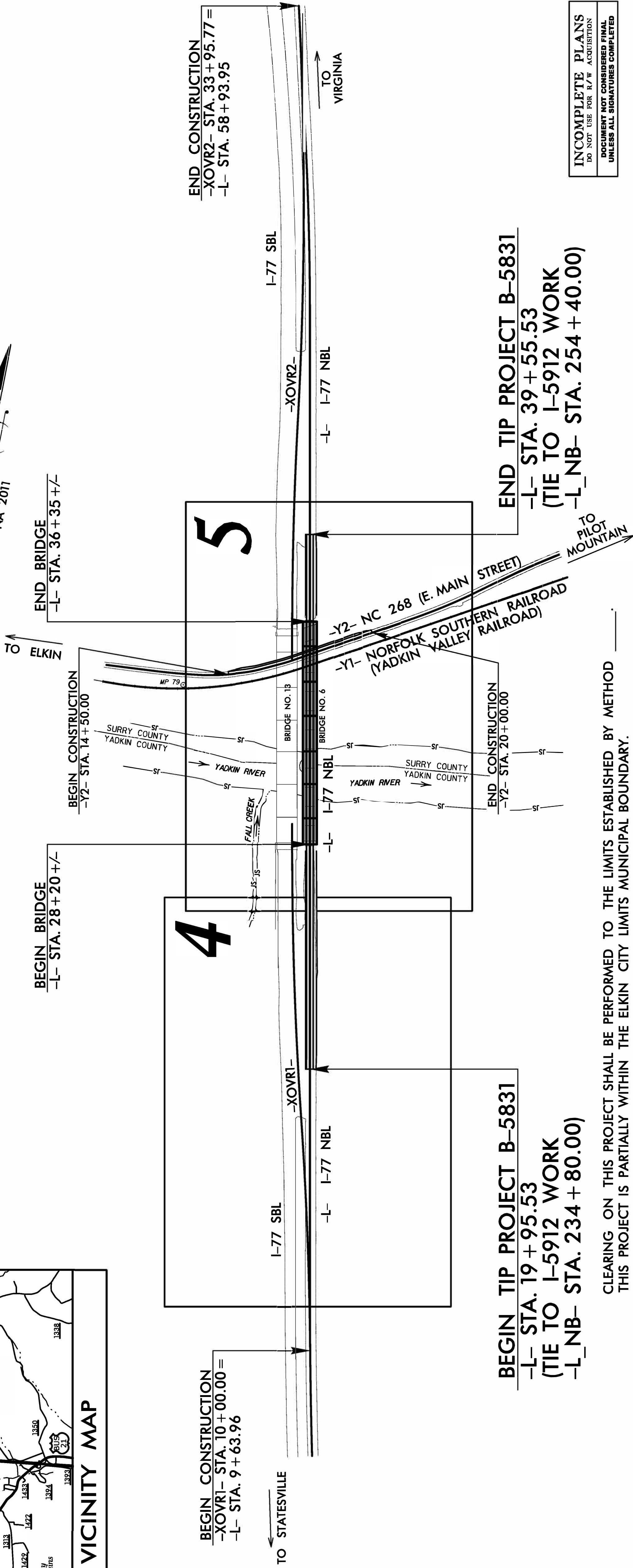
See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Plan Sheet Symbols
See Sheet RW01 thru RW04 For Survey Control & Right-of-Way Sheets



YADKIN & SURRY COUNTIES

LOCATION: REPLACE BRIDGE NO. 6 OVER YADKIN RIVER,
NORFOLK SOUTHERN RAILROAD, AND NC 268 ON I-77 NBL

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



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD _____.
THIS PROJECT IS PARTIALLY WITHIN THE ELKIN CITY LIMITS MUNICIPAL BOUNDARY.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STATE	N.C.	STATE PROJECT REFERENCE NO.	B-5831	SHEET NO.	1	TOTAL SHEETS
STATE PROJ. NO.	45784.1.1	P.A. PROJ. NO.	NHP-0077(006)	DESCRIPTION	PE	

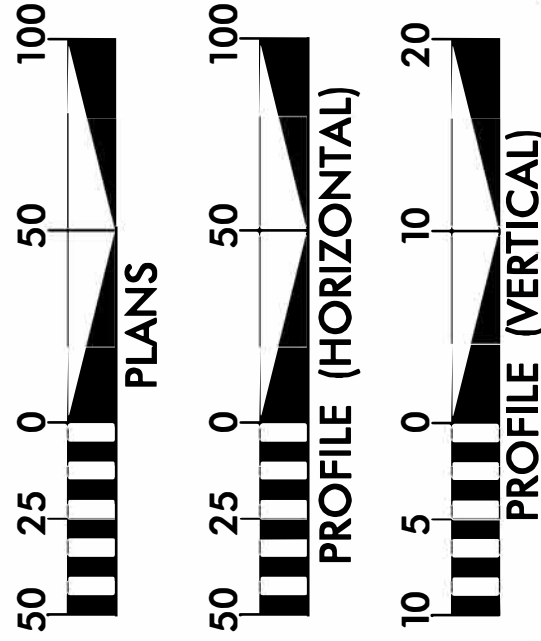
PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-5831	=	0.217 mile
LENGTH STRUCTURES TIP PROJECT B-5831	=	0.154 mile
TOTAL LENGTH TIP PROJECT B-5831	=	0.371 mile

DESIGN DATA

ADT 2022	=	39,775
ADT 2042	=	49,025
K	=	7 %
D	=	55 %
T	=	21 % *
V	=	75 MPH
* (TTST 17% + DUAL 4%)		
FUNC CLASS = INTERSTATE		
STATEWIDE TIER DESIGN		

GRAPHIC SCALES



Prepared For: DIVISION OF HIGHWAYS

1000 Birch Ridge Dr., Raleigh NC, 27610

TGS ENGINEERS
706 HILLSBOROUGH ST.
SUITE 300
RALEIGH, NC 27603

By:
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

JANUARY 22, 2021

LETTING DATE:

JANUARY 18, 2022

V. MARCUS LOWERY, P.E.

PROJECT ENGINEER

DAVID STUTTS, P.E.

NC DOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN
ENGINEER

SIGNATURE: P.E.



-XOVRI-
PI Sta 14+25.00 PI Sta 23+40.94
 $\Delta = 3' 21'' 28.0''$ (LT) $\Delta = 3' 52'' 48.7''$ (RT)
 $D = 0' 23'' 42.5''$ $D = 0' 23'' 42.5''$
 $L = 849.16'$ $L = 981.97'$
 $T = 425.00'$ $T = 491.17'$
 $R = 14,500.00'$ $R = 14,500.00'$
SE = SEE PLANS SE = SEE PLANS
DS = 70 MPH DS = 70 MPH

JOHNNIE M. WALTERS ET VIR
JAMES W. WALTERS
DB 823 PG 234
NAD 83 /NA 2011

PROJECT REFERENCE NO.
B-5831

SHEET NO.
2B-1

RW SHEET NO.
ROADWAY DESIGN ENGINEER

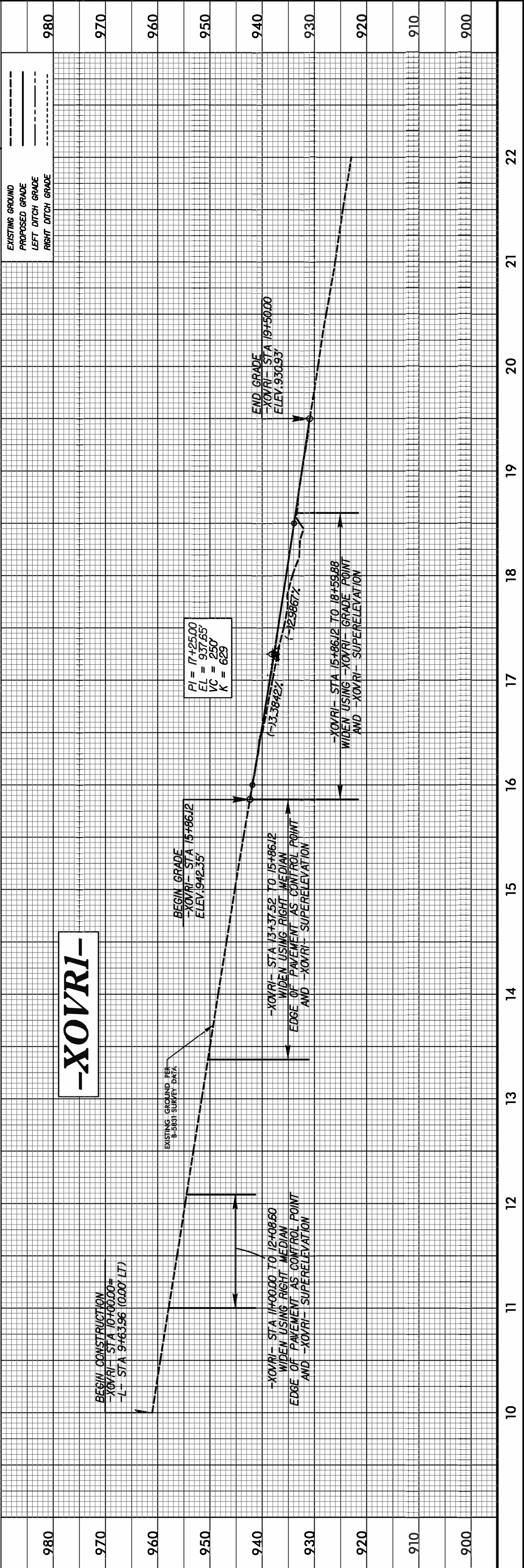
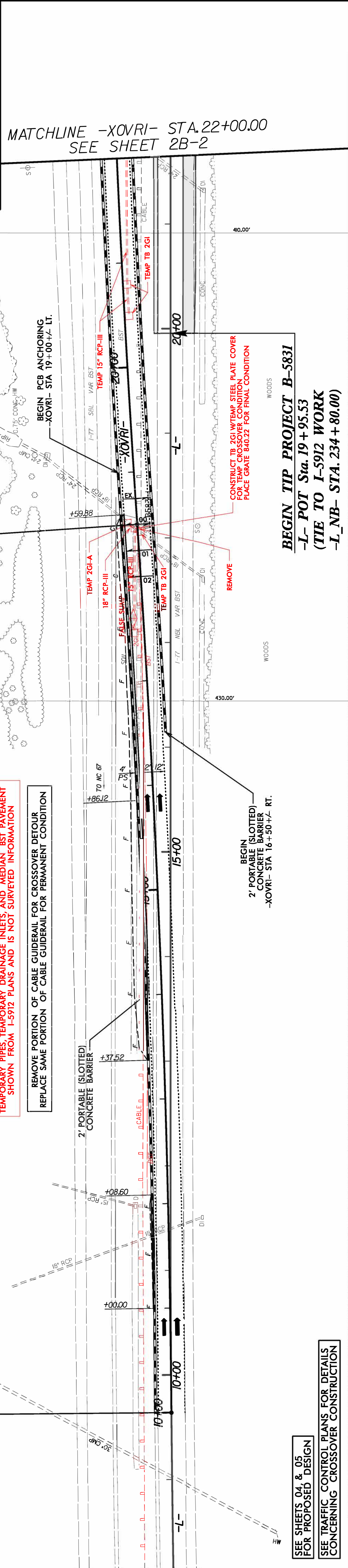
HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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

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



REVISIONS	

-XOVRI-
PI Sta 23+40.94
Δ = 3' 52" 487' (RT)
D = 0' 23" 42.5"
L = 98197'
T = 4917'
R = 145000'
SE = SEE PLANS
DS = 70 MPH

TEMPORARY PIPES, TEMPORARY DRAINAGE INLETS AND MEDIAN, BST PAVEMENT SHOWN FROM I-5912 PLANS AND IS NOT SURVEYED INFORMATION

REMOVE PORTION OF CABLE GUIDERAIL FOR CROSSOVER DETOUR
REPLACE SAME PORTION OF CABLE GUIDERAIL FOR PERMANENT CONDITION

PROJECT REFERENCE NO.
B-5831

SHEET NO.
2B-2

RW SHEET NO.

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL
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TGS ENGINEERS
706 HILLSBOROUGH ST., SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

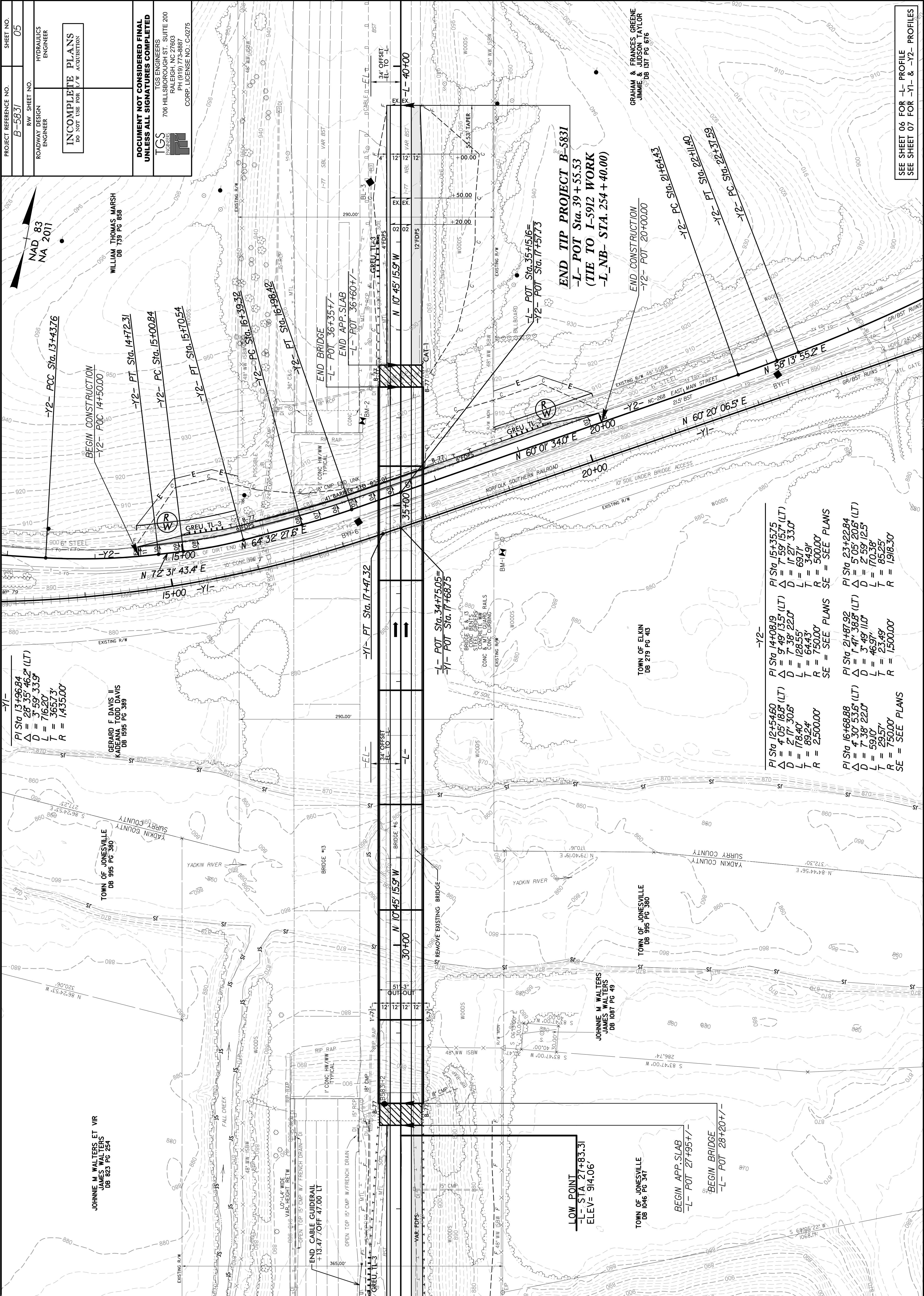
GERARD F. DAVIS II
KADEANA TODD DAVIS
DB 1595 PG 389

NAD 83 / NA 2011

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