

Type I or II Categorical Exclusion Action Classification Form

TIP Project No.	B-5644
WBS Element	45599.1.1
Federal Project No.	N/A

A. Project Description:

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 15 on NC 11 over Crooked Creek in Pender County (see Figure 1). The replacement structure will be a bridge approximately 70 feet long and provide a minimum 42'-6" clear roadway width. The bridge will include two 12-foot lanes and minimum 8-foot shoulders. The bridge length is based on preliminary design information and is set by hydraulic requirements. Right of way acquisition and construction are scheduled for state fiscal years 2021 and 2022, respectively.

Project construction will extend approximately 420 feet from the north end of the new bridge and 420 feet from the south end of the new bridge. The approaches will provide two 12-foot lanes and 8-foot shoulders (2-foot paved). The roadway will be designed as a Major Collector with a 50-mile per hour design speed.

B. Description of Need and Purpose:

The purpose of the proposed project is to replace a functionally obsolete bridge. Bridge No. 15 was built in 1962. The bridge is 41 feet long with an approximately 23-foot clear roadway width. Bridge No. 15 is a two-span structure that consists of reinforced concrete floor on I-Beams superstructure with asphalt wearing surface. It has vertical abutments and interior bent with timber piles and concrete caps.

NCDOT Bridge Management Unit records as of September 6, 2018 indicate Bridge No. 15 has a sufficiency rating of 21.75 out of a possible 100 for a new structure. Bridge No. 15 is considered functionally obsolete due to a structural evaluation of 3 out of 9 and full height checks in timber piles.

Components of the concrete substructure and superstructure have experienced increasing degrees of deterioration that can no longer be addressed by maintenance activities. NC 11 at Bridge No. 15 is expected to have an Average Annual Daily Traffic (AADT) volume of 2,067 vehicles per day (vpd) in 2021 and future traffic of 2,700 AADT in 2040. The substandard deck width, bridge railing and approach guardrail is becoming increasingly unacceptable and replacement of the bridge will result in safer traffic operations.

C. Categorical Exclusion Action Classification:

Type I(A) - Ground Disturbing Action

D. Proposed Improvements:

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:

Costs:

The estimated 2019 costs are:

Utilities – \$105,000.00

Construction - \$1,450,000.00

Total- \$1,555,000.00

Anticipated Permit or Consultation Requirements:

The US Army Corps of Engineers (USACE) Section 404 Nationwide Permits (NWP) 23 and 33 will likely be applicable. The USACE holds the final discretion as to which permit will be required to authorize project construction. If a Section 404 permit is required, then a Section 401 Water Quality Certification (WQC) from the NC Division of Water Resources (NCDWR) will be needed.

Pender County is under the jurisdiction of the Coastal Area Management Act (CAMA). A CAMA permit from the North Carolina Division of Coastal Management (NCDCM) will be required for impacts to Crooked Creek.

Bridge Demolition:

It should be possible to remove Bridge No. 15 with no resulting debris in the water using standard demolition practices.

Alternatives Discussion:

No Build: The no build alternative would result in eventually closing the bridge as its condition continues to deteriorate.

Rehabilitation: Rehabilitation would only provide a temporary solution for this functionally obsolete bridge. The bridge was constructed in 1962 and replacing the concrete, steel, and timber elements of the bridge would constitute effectively replacing the bridge.

On-Site Detour: An on-site detour was not evaluated for the bridge replacement due to the availability of an acceptable off-site detour.

Off-Site Detour (Preferred): A temporary off-site detour was selected as the preferred detour for the project. The detour is 1.61 miles in length and follows Garden Rd (SR 1328) to Pelham Rd (SR 1319) to Crooked Run Road (SR 1324), as shown in Figure 2.

The Cape Fear Council of Governments recommended that two off-site detours be implemented for the project, one for each direction of travel. In response, a second off-site detour was evaluated for the project, which proposed a northern route following Garden Road (SR 1328), Sills Creek (SR 1325) Road, and Crooked Run Road (SR 1324). This detour was eliminated from further consideration because two detours could confuse drivers, the Sill Creek Road/Crooked Run Road intersection is skewed with limited sight distance, Garden Road has narrow lanes with on-shoulder parking for residents, and increased project costs.

Other Agency Comments:

Pender County Schools noted that the project would have a high impact on the county school buses if the bridge were to be closed during construction. The Pender County Schools Transportation Director reported that altering the bus routes would cause a high impact on their efficiency rating, which their funding is based on.

In response to the Start of Study notification sent via email on January 19, 2016, the Cape Fear Council of Governments provided the following comments for Bridge No. 15:

- The bridge is located in a wetland rated by NC CREWS as Exceptional Significance.
- The bridge is located in the Penderlea Homesteads Historic District, which is listed in the National Register of Historic Places.
- The bridge is a primary route for the Penderlea Middle School.
- Bike or pedestrian facilities are currently planned nearby, but not on, the route, but that may change as the Cape Fear Regional Bike Plan, funded by NCDOT and kicking off shortly, is developed.
- Because there is somewhat of a street grid in the location of the bridge, it was recommended that detours be set up such that NC 11 southbound traffic detours north of the bridge and northbound traffic south of the bridge, so vehicles turn right onto and from NC 11.

Public Involvement:

A landowner notification letter was mailed on February 5, 2016, to property owners within the project study area. The letter informed citizens of the initiation of planning studies for the project. No comments were received in response to the notification letter.

F. Project Impact Criteria Checklists:

F2. Ground Disturbing Actions – Type I (Appendix A) & Type II (Appendix B)			
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.			
<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"/>

PROJECT IMPACT THRESHOLDS (continued) (FHWA signature required if any of the questions 1-7 are marked "Yes".)		Yes	No
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.

Other Considerations		Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or is the project covered by a Programmatic Agreement under Section 7?	<input checked="" type="checkbox"/>	<input 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"/>
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 checked="" type="checkbox"/>	<input 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"/>

<u>Other Considerations (continued)</u>		Yes	No
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 checked="" type="checkbox"/>	<input 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"/>

G. Additional Documentation as Required from Section F (ONLY for questions marked 'Yes'):

Response to Question 8:

Northern Long-Eared Bat (NLEB)- The US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), USACE, and NCDOT for the NLEB (*Myotis septentrionalis*) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for NLEB for the NCDOT program is "May Affect, Likely to Adversely Affect". The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Pender County, where TIP B-5644 is located.

Section 7 Additional Information:

Red-Cockaded Woodpecker (RCW) - Suitable habitat for the red-cockaded woodpecker (*Picoides borealis*) is present in the study area. The Natural Resources Technical Report (NRTR) left the biological opinion for the RCW as unresolved. An RCW survey was conducted in 2016 and no RCW cavity trees were found. A half-mile survey was not conducted for the RCW because the study area is surrounded by 200 feet of non-foraging habitat. Based on these findings and no documented occurrences within 1.0 mile, this project will have no effect on the RCW, as reported in the RCW survey report completed in November 2016.

Response to Question 14:

Bridge No. 15 and the detour route are located within the Penderlea Homesteads Historic District, which is listed on the National Register of Historic Places (PD0318-NR). The State Historic Preservation Office issued a determination of No Adverse Effect on May 21, 2019. The determination of effects states that replacement of the existing bridge (not NR-eligible) will not compromise the integrity of any contributing resource in the historic district. Bridge replacement activities include relocation of one power pole away from NC 11, minor clearing of scrub vegetation,

preservation of all driveways and other points of access. An off-site detour with no improvements was also included in the determination of No Adverse Effect.

Response to Question 16:

The project will decrease the base floodplain elevation of Turkey Creek.

Response to Question 30:

The project is partially located in an area with Prime Farmland soils, Norfolk loamy fine sand. The project is also adjacent to property within a designated Voluntary Agricultural District. The project area is bordered by forested land and roadway right of way. No active agricultural operations, agricultural resources or activities related to agricultural goods movement will be impacted by the project. If federal funds are used for the project, a farmland evaluation will be conducted.

NCDOT PROJECT COMMITMENTS

TIP Project No. **B-5644**

The NCDOT proposes to replace Bridge No. 15 on NC 11 over Crooked Creek
Pender County

Federal Aid Project No. N/A

WBS Element 45599.1.1

NCDOT Hydraulic Unit – FEMA Coordination

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP) to determine status of the project with regard to the 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 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.

NCDOT Division 3 – Historic Architecture

The new bridge will have a two-bar railing consistent with other bridges within the historic district and in compliance with the Section 106 "No Adverse Effects" determination.

NCDOT Division 3- Offsite Detour

NCDOT Division 3 will contact Pender County School District at (910) 259-2187 at least one month prior to construction to coordinate construction activities with school transportation schedules.

Pender County Emergency Services will be contacted at (910) 259-0891 at least one month prior to construction to make the necessary temporary reassignments to primary response units.

Categorical Exclusion Approval:

TIP Project No.	<u>B-5644</u>
WBS Element	<u>45599.1.1</u>
Federal Project No.	<u>N/A</u>

Prepared By:

July 8, 2020



<u>Date</u>	<u>Jennifer Graf, PMP, Senior Project Manager CDM Smith</u>
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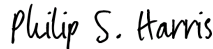
Prepared For:

Tierre R. Peterson, PE, Team Leader
North Carolina Department of Transportation

Reviewed By:

7/20/2020

DocuSigned by:



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<u>Date</u>	<u>Philip S. Harris III, PE, CPM- Environmental Analysis Unit Head North Carolina Department of Transportation</u>
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Approved

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

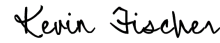


Certified

- 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

DocuSigned by:



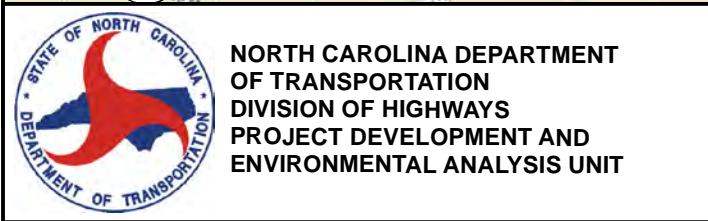
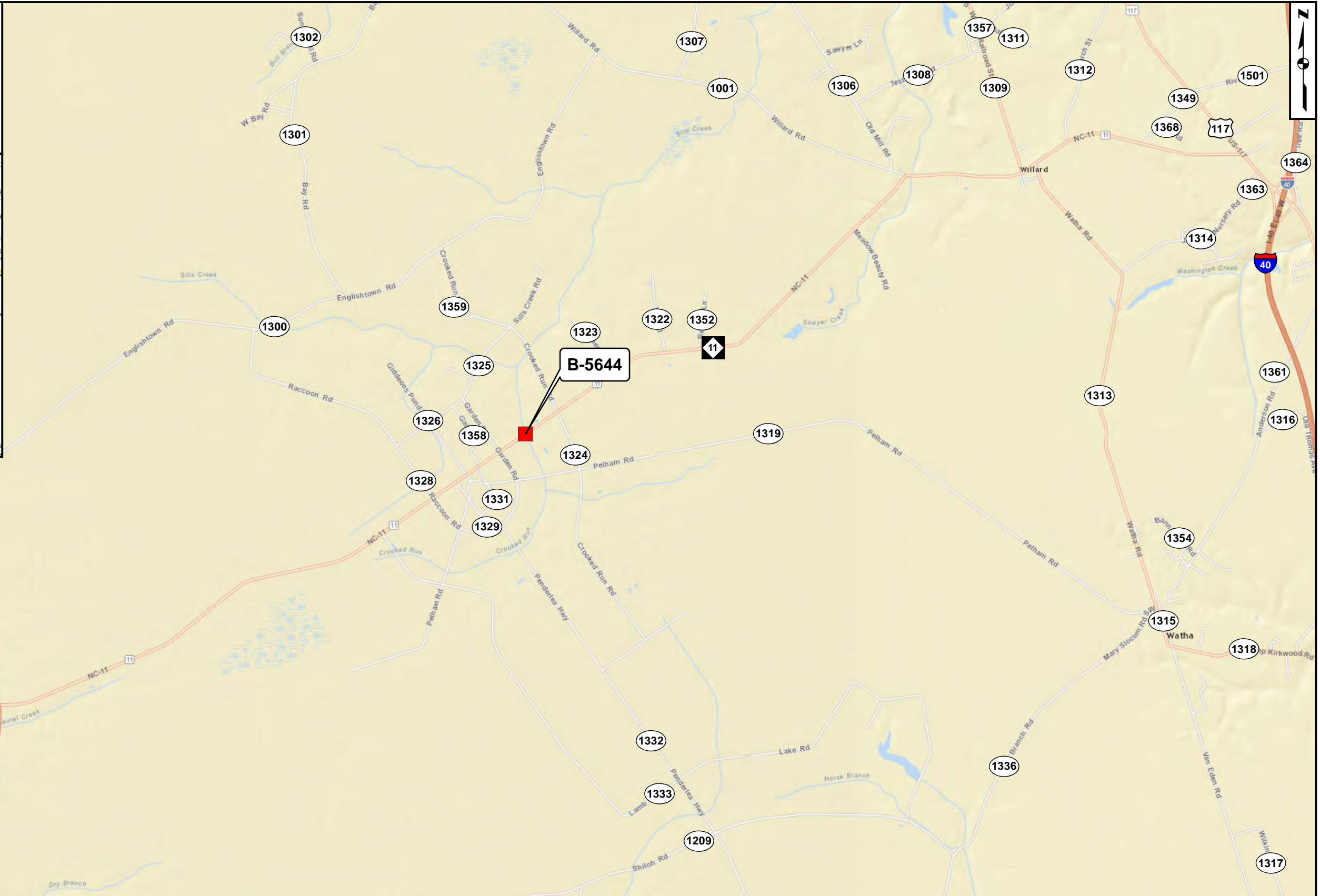
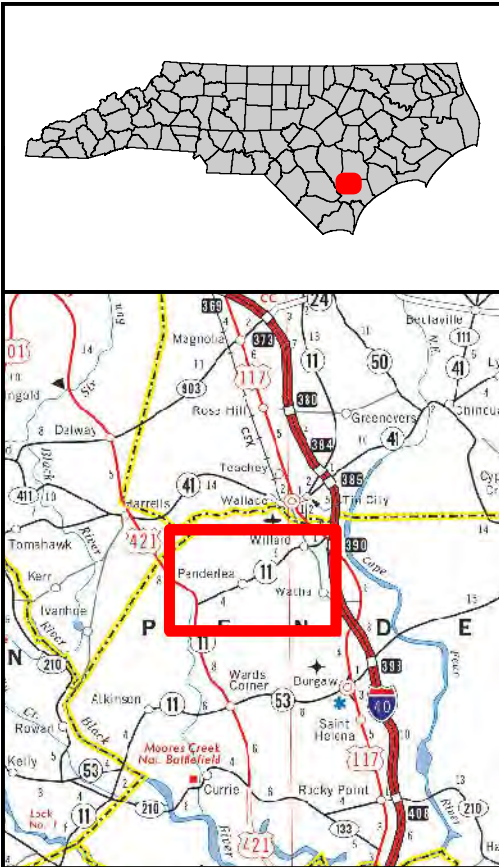
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<u>Date</u>	<u>Kevin Fischer, PE, Structures Management Unit North Carolina Department of Transportation</u>
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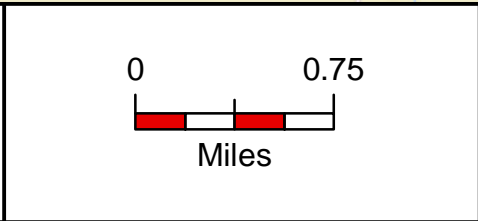
FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.

<u>Date</u>	<u>N/A for John F. Sullivan, III, PE, Division Administrator Federal Highway Administration</u>
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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).

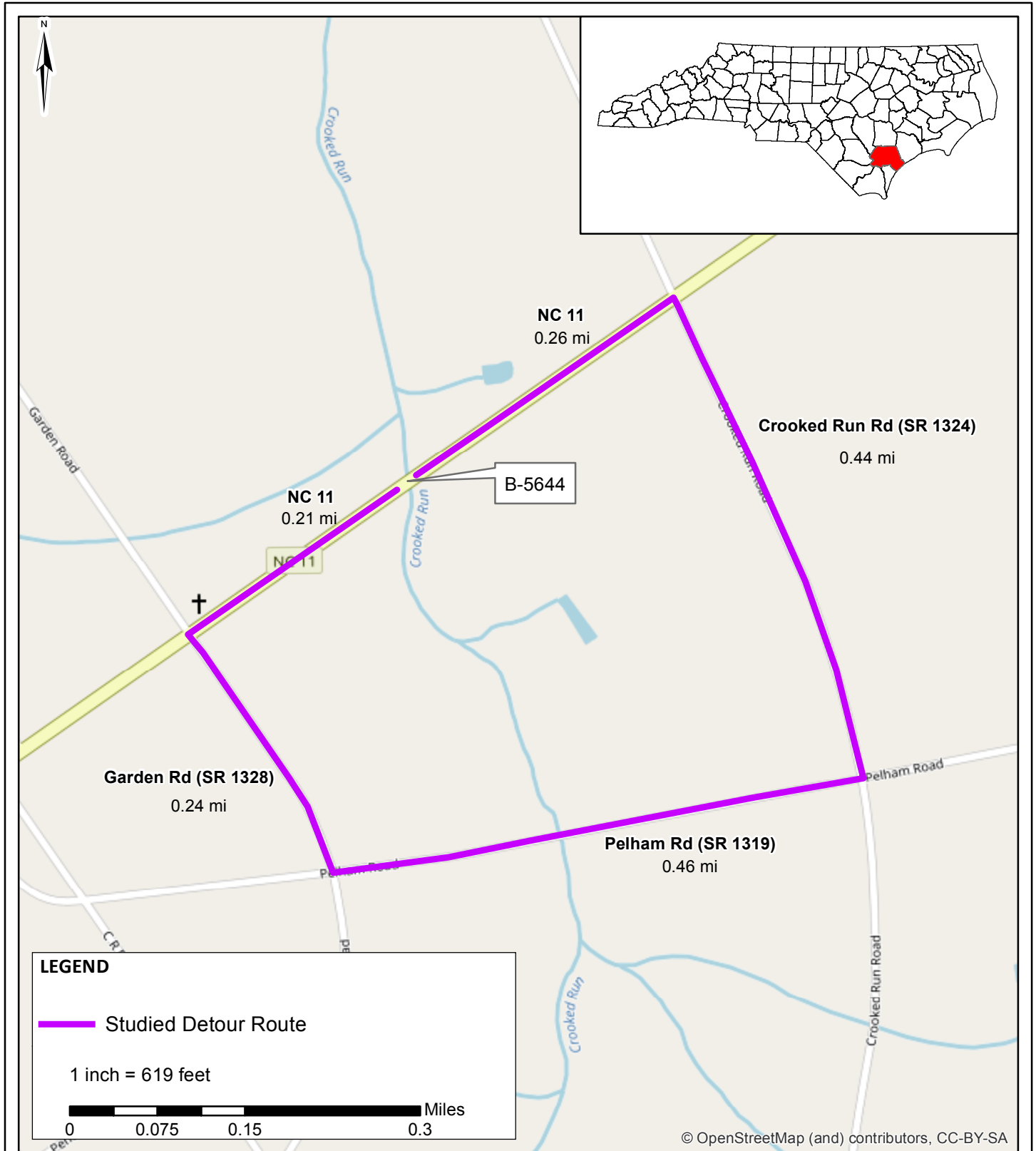


VICINITY MAP
 Replace Bridge No. 15 on NC 11
 over Crooked Run in Pender County
 TIP Project B-5644




Div: 3	TIP# B-5644
Date: DECEMBER 2015	

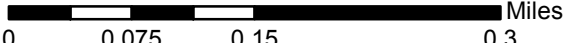
Figure
1



LEGEND

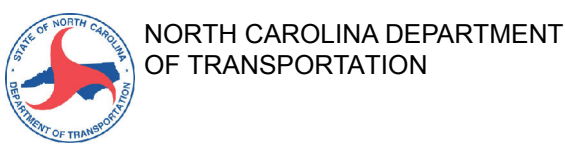
 Studied Detour Route

1 inch = 619 feet

 Miles

0 0.075 0.15 0.3

© OpenStreetMap (and) contributors, CC-BY-SA



**PROPOSED OFF-SITE
DETOUR MAP**

STIP B-5644

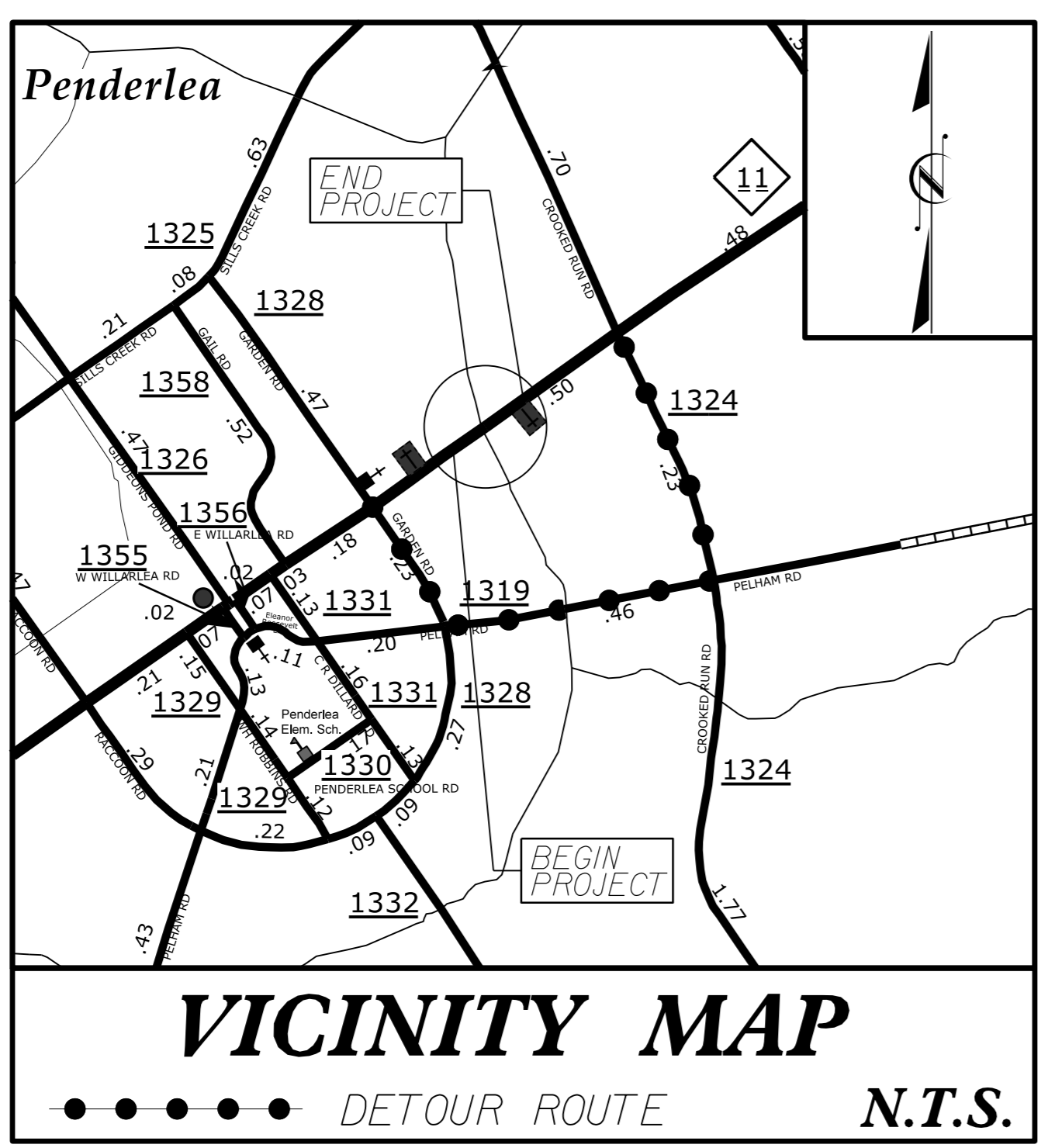
NC 11 Over Crooked Creek
in Pender County

County: PENDER
Div: 3
WBS: 45599.1.1
APRIL 2019
Figure 2

09/08/19

TIP PROJECT: B-5644

See Sheet I-A For Index of Sheets
See Sheet I-B For Conventional Symbols



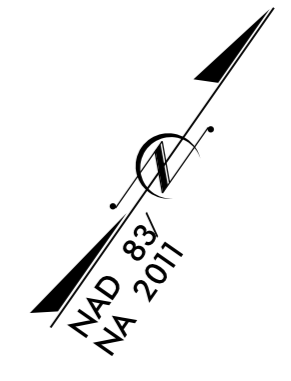
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PENDER COUNTY

**LOCATION: REPLACE BRIDGE NO.15 OVER CROOKED RUN
ON NC 11**

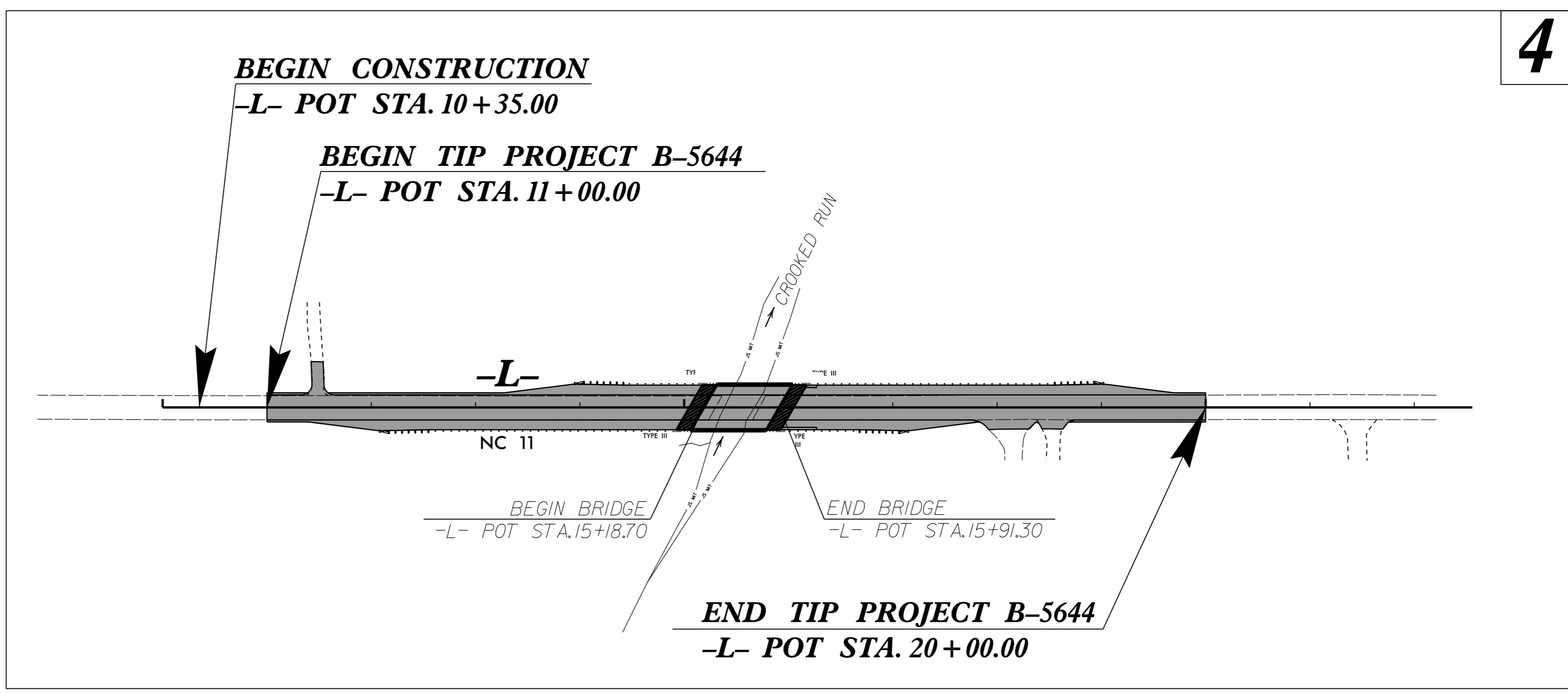
TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5644	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45599.1.1	N/A	P.E.	
45599.2.1	N/A	UTIL./ROW	

65% PLANS



← TO US 421



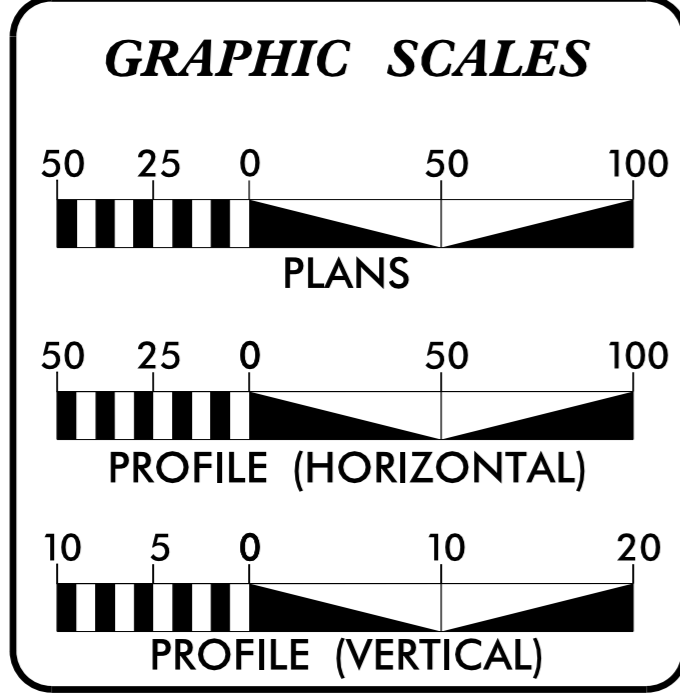
TO → US 117

THIS PROJECT IS WITHIN THE PENDERLEA HOMESTEAD HISTORIC DISTRICT.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD _____.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CONTRACT:



DESIGN DATA

ADT 2021 =	2,067 VPD
ADT 2040 =	2,700 VPD
K =	10%
D =	65%
T =	4%
V =	50 MPH
TTST =	1% DUALS = 3%
FUNC CLASS =	MAJOR COLLECTOR REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-5644	=	0.156 MILES
LENGTH BRIDGE TIP PROJECT B-5644	=	0.014 MILES
TOTAL LENGTH TIP PROJECT B-5644	=	0.170 MILES

Prepared in the Office of:
CDM Smith
CDM Smith Inc.
5400 Glenwood Avenue
Suite 400
Raleigh, NC 27612-3228
NC CDA No. F-1255

FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
2018 STANDARD SPECIFICATIONS

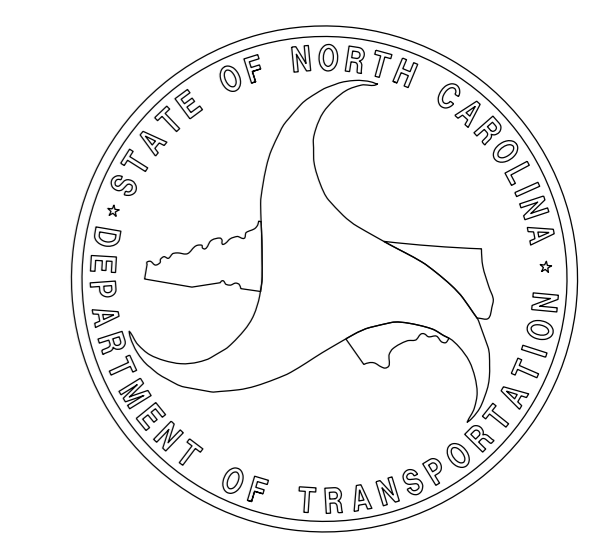
RIGHT OF WAY DATE: MAY 1, 2020	DAVID Z. KEISER, PE PROJECT ENGINEER
LETTING DATE: APRIL 20, 2021	ADAM M. CONRAD, PE PROJECT DESIGN ENGINEER
	TIERRE R. PETERSON, PE NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

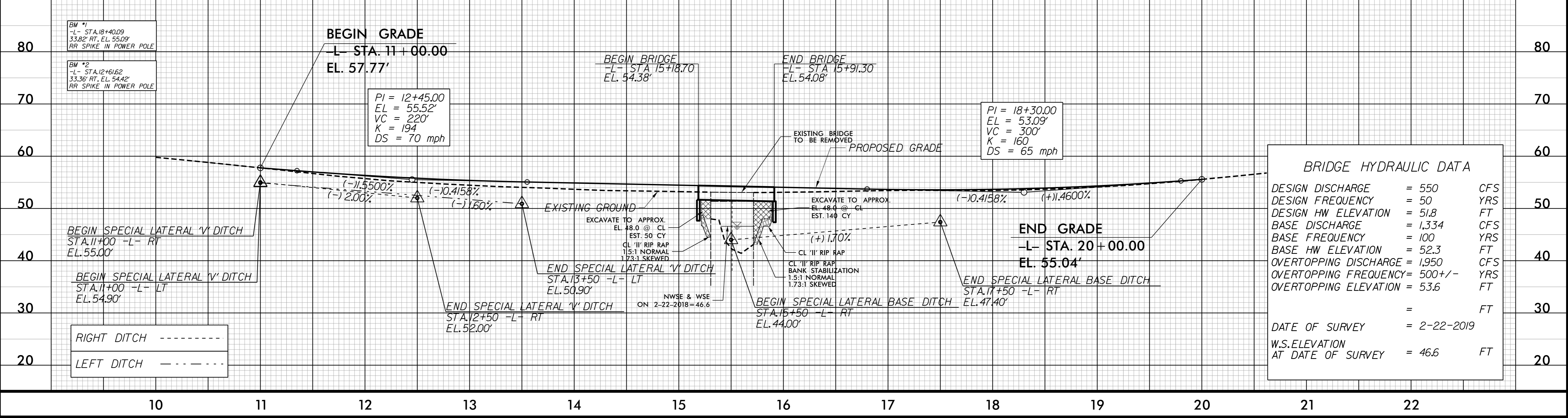
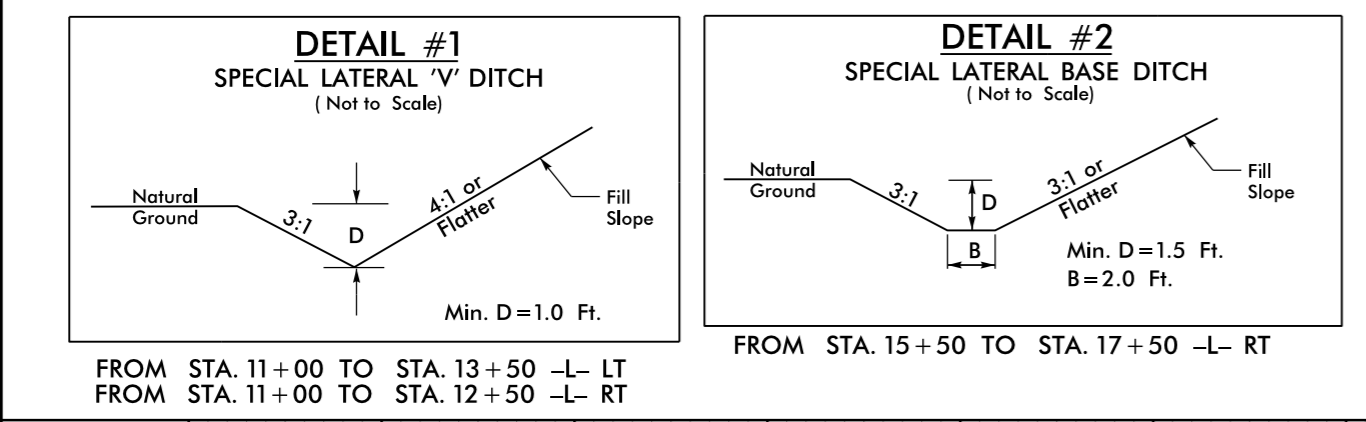
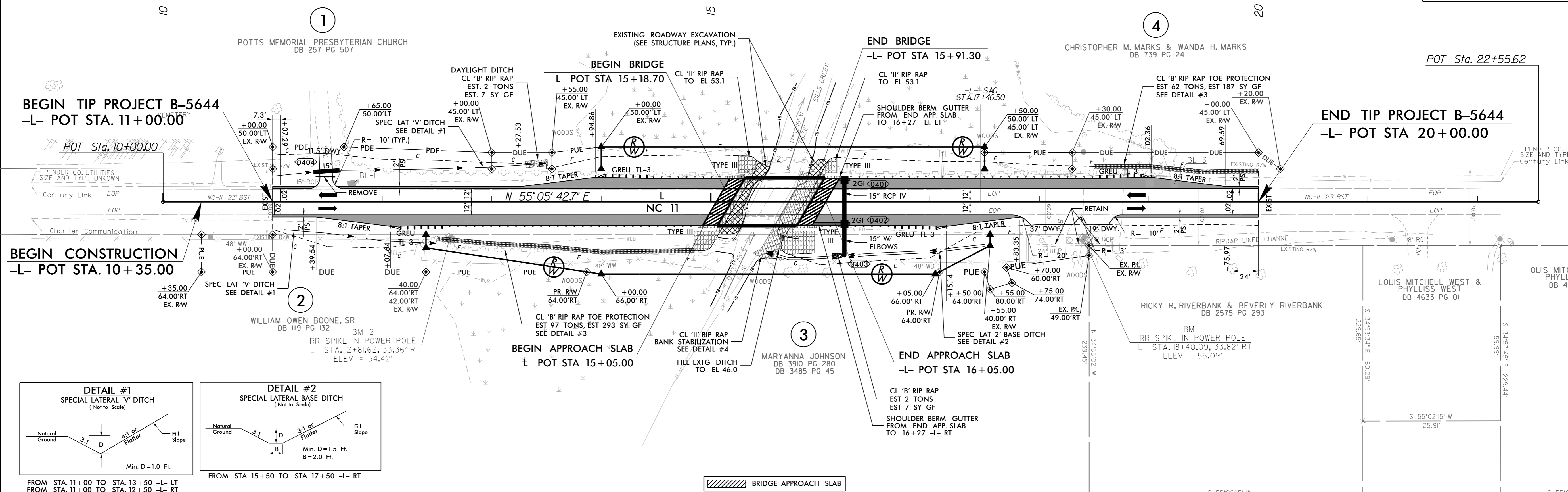
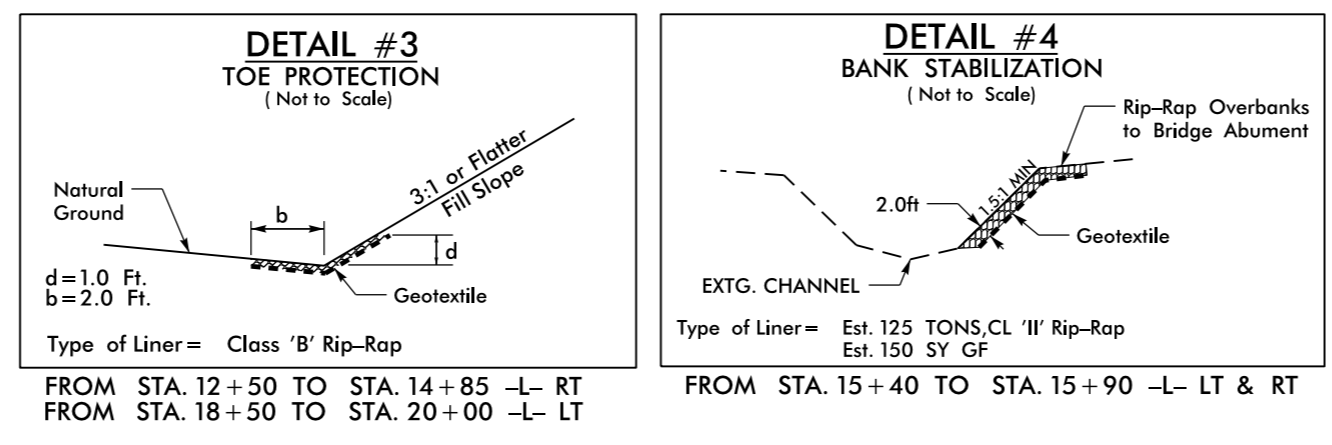
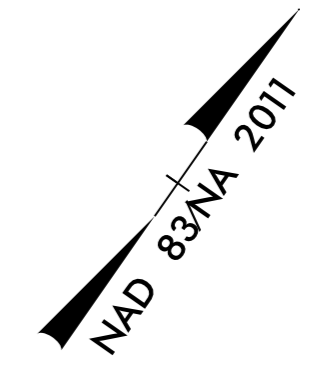
ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



-SYSTEM-
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USER: GYANTMN

PROJECT REFERENCE NO. B-5644	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
CDM Smith 3400 Greenwood Avenue Suite 400 Raleigh, NC 27612-3228 NC COA No. P-1255	SUNGATE DESIGN GROUP, P.A. 910 JONES FARMWAY ROAD HALETHORPE, MD 21050 NC COA No. C-2880
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



DESIGN DISCHARGE	= 550	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 51.8	FT
BASE DISCHARGE	= 1,334	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 52.3	FT
OVERTOPPING DISCHARGE	= 1,950	CFS
OVERTOPPING FREQUENCY	= 500 +/-	YRS
OVERTOPPING ELEVATION	= 53.6	FT
	=	FT
DATE OF SURVEY	= 2-22-2019	
W.S. ELEVATION AT DATE OF SURVEY	= 46.6	FT

REVISIONS

-SYSTEM: B6644_Rd1.psh_04.dgn
11/15/2019 10:41:00 AM

16-01-0014

HISTORIC ARCHITECTURE AND LANDSCAPES ASSESSMENT OF EFFECTS 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-5644	County:	Pender
WBS No.:	45599.1.1	Document Type:	
Fed. Aid No:		Funding:	X State <input type="checkbox"/> Federal
Federal Permit(s):	X Yes No	Permit Type(s):	USACE
Project Description: Replace Bridge No. 15 on NC 11 over Sills Creek (off-site detour, no improvements planned).			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

DESCRIPTION OF REVIEW ACTIVITIES, RESULTS, AND CONCLUSIONS: HPOWeb reviewed on 15 January 2016 and yielded one NR and no SL, DE, LD, or SS properties in the Area of Potential Effects (APE). APE extends 1000 feet from either end of the existing bridge (SW-NE) and 150 feet to either side of the NC 11 centerline (NW-SE) to encompass proposed construction activities. Pender County current GIS mapping, aerial photography, and tax information indicated an APE of cultivated fields, some woodland, and residential and church resources dating to the twentieth century (viewed 15 January 2016). The APE is entirely within the Penderlea Homesteads Historic District (PD0318 – NR) and contains several resources that may be affected by the proposed project, including the Potts Memorial Presbyterian Church and Cemetery (PD0150) (#4125 NC 11). Constructed in 1962, Bridge No. 15 is not eligible for the National Register as it is neither aesthetically nor technologically significant. Google Maps “Street View” and other visuals confirmed the presence and relative placement of the historic architectural and landscape resources in the APE (viewed 15 January 2016). The comprehensive county architectural survey (1996-7), as well as later investigations, recorded no properties in the APE apart from those associated with the Penderlea Homesteads Historic District (PD0318 – NR).

The project design is now sufficiently advanced to inform an effects consultation with representatives of the North Carolina State Historic Preservation Office and the Federal Highway Administration to determine compliance with Section 106 and GS 121-12(a), scheduled for 21 May 2019.

ASSESSMENT OF EFFECTS

Property Name:	Penderlea Homesteads Historic District	Status:	NR
Survey Site No.:	PD0318	PIN:	Multiple
Effects			
<input type="checkbox"/> No Effect <input checked="" type="checkbox"/> No Adverse Effect <input type="checkbox"/> Adverse Effect			
<u>Explanation of Effects Determination:</u> Replacement of existing bridge (not NR-eligible) will not compromise the integrity of any contributing resource in the historic district. Relocation of one power pole (SE of bridge) away from NC 11. Minor clearing of scrub vegetation. Preservation of all driveways and other points of access. No improvements planned for off-site detour.			
<u>List of Environmental Commitments:</u> Railing for new bridge to be of two-bar metal design.			

SUPPORT DOCUMENTATION

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

B-5644, Pender County
WBS 45599.1.1
Tracking No. 16-01-0014

FINDING BY NCDOT AND STATE HISTORIC PRESERVATION OFFICE

Historic Architecture and Landscapes – ASSESSMENT OF EFFECTS

Vanessa C. Patrick

21 May 2019

NCDOT Architectural Historian

Date

Renee Hedrick-Easley

5.21.19

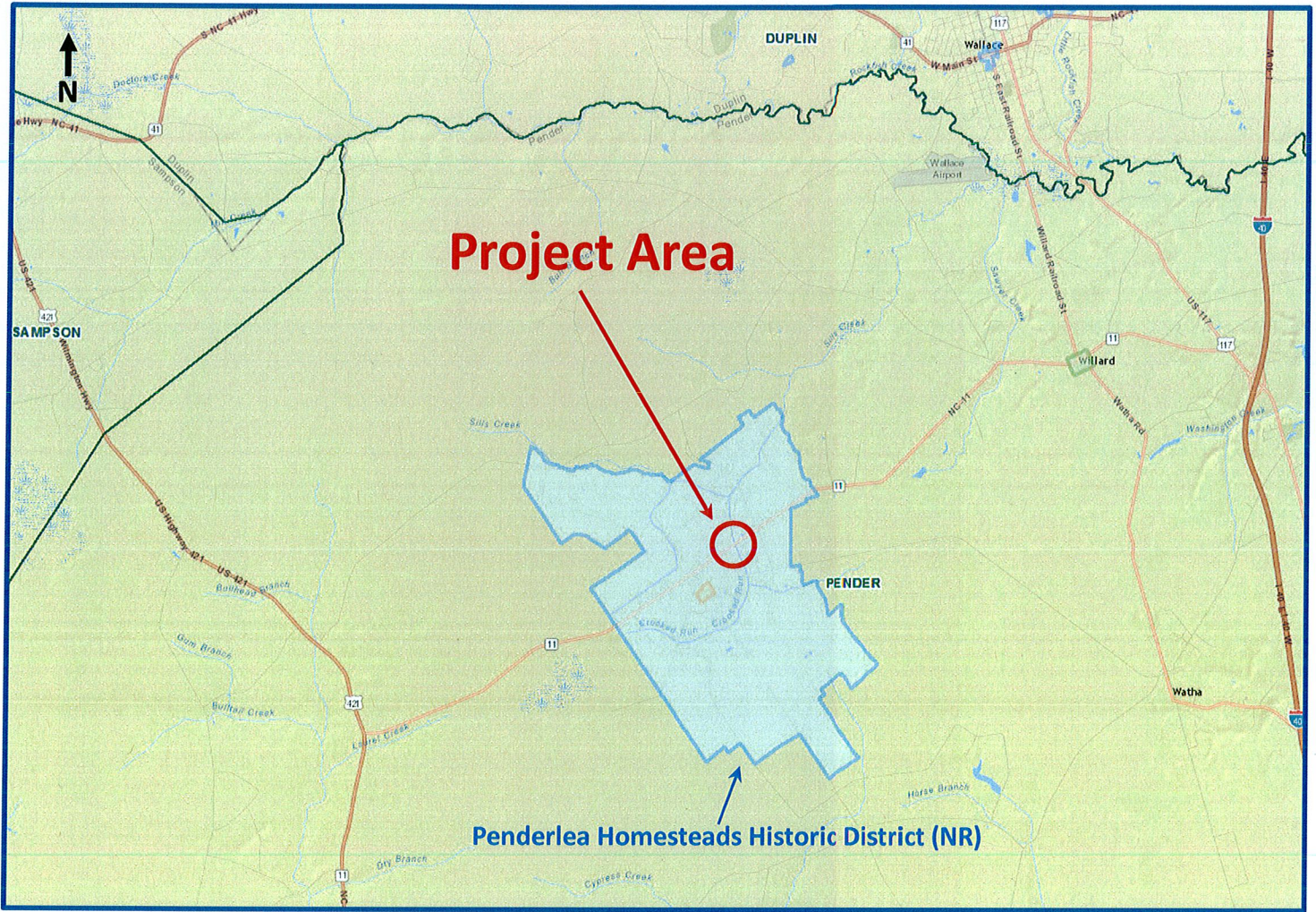
State Historic Preservation Office Representative

Date

Federal Agency Representative

Date

**B-5644, Pender
WBS 45599.1.1
Tracking No. 16-01-0014**



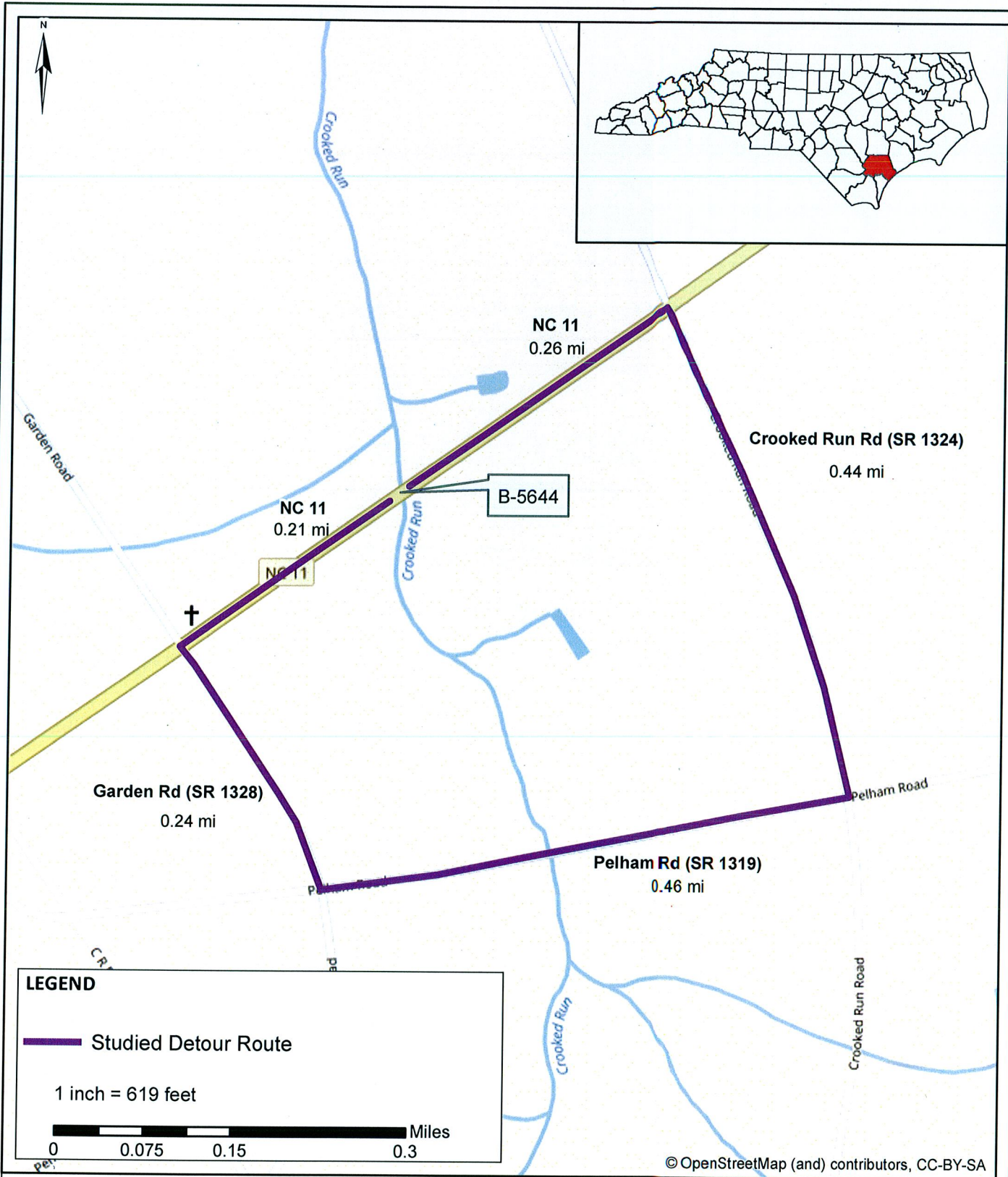
B-5644

Bridge No. 15 Replacement

Pender County

WBS No. 45599.1.1

Base map: HPOWeb, nts



© OpenStreetMap (and) contributors, CC-BY-SA



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION

DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

VICINITY MAP

STIP **B-5644**
on NC 11 Over Sills Creek
in Pender County

County: PENDER
Div: 3
WBS: 45599.1.1
APRIL 2019
Figure 2

PROJECT REFERENCE NO. **B-5644** SHEET NO. **4**

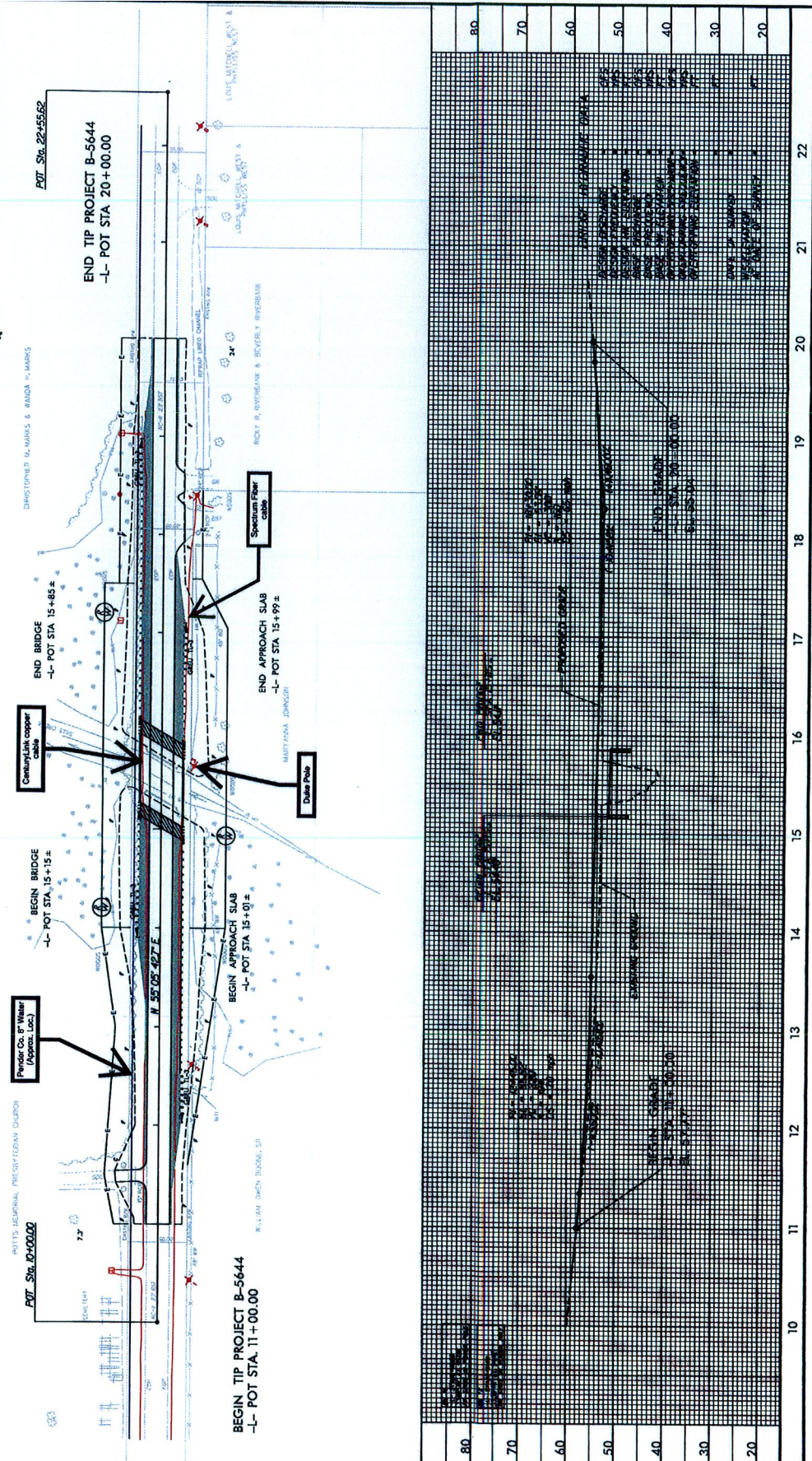
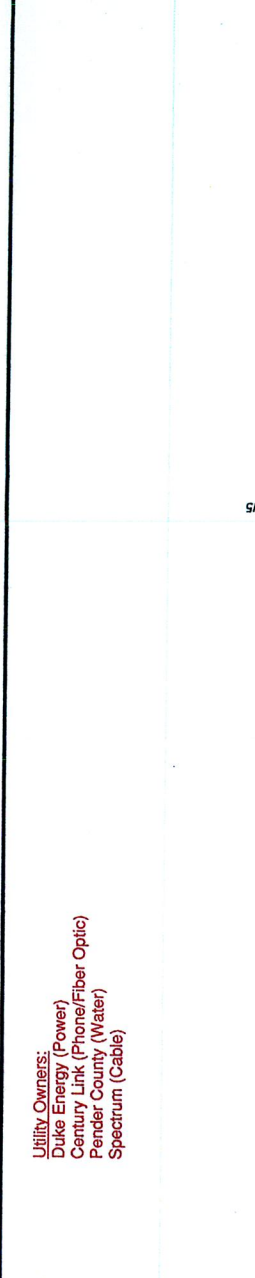
ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR CONSTRUCTION UNLESS ALL SIGNATURES COMPLETED

CDM Smith
3000 N. CENTRAL EXPRESSWAY
SUITE 200
DALLAS, TEXAS 75205
TEL: 972.962.2000
WWW.CDMSMITH.COM

UTILITY OWNERS:
 Duke Energy (Power)
 Century Link (Phone/Fiber Optic)
 Pender County (Water)
 Spectrum (Cable)



80	20
70	21
60	22
50	23
40	24
30	25
20	26

REVISIONS

16-01-0014



NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

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



PROJECT INFORMATION

Project No: **B-5644** County: **Pender**
 WBS No: **45599.1.1** Document: **M C C**
 F.A. No: Funding: State Federal
 Federal Permit Required? Yes No Permit Type: **usace**

Project Description: NCDOT proposes to replace Bridge No. 15 on NC 11 over Sills Creek/Crooked Run Gum in Pender County just northeast of Penderlea Homesteads community. While state-funded, a federal permit is required from the USACE, therefore, Section 106 of the National Historic Preservation Act applies. The bridge will be replaced, in place, with an offsite detour used during construction. Designs for the project are available and informed the establishment of the current Area of Potential Effects (APE). For purposes of this archaeological review, the Area of Potential Effects is the project length of 900 feet by the width of about 125 feet roughly centered on the current bridge and NC 11. Because of overlap, the majority of the APE may be considered disturbed by the existing roadway, bridge and associated soil disruption, or otherwise as having over 50% wet soils.

SUMMARY OF CULTURAL RESOURCES REVIEW

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

The project area along NC 11 is near the northeastern limits of the Penderlea Homesteads, a planned farming community established developed in the 1920s and in use during the 1930s in Pender County. The APE is mostly wooded with open fields at either end of the project, including one formal cemetery on western end, north of NC 11. The wooded area is generally low, poorly drained terrain as indicated on USGS mapping (Wallace West), GIS and as seen in aerial or virtual driveby views.

Virtual drive by viewing was accomplished using Google or Bing Maps. An obvious, formal cemetery is present north of NC 11 on the west side of the project, though beyond the limits of the APE. It will not be affected.

The Office of State Archaeology was consulted to determine if any previous archaeological reviews, surveys or sites area associated with the nearby vicinity. North Carolina archaeological site 31Pd11 is present a distance further south of the bridge about 2500 feet outside of the APE and will not be affected. There are no recorded archaeological sites in close proximity to the project area and APE. Few other sites have been recorded with the OSA in the general area, though the low number may be a result of a lack of coordinated, formal effort, as environmental reviews and archaeological surveys are also low in number, rather than a lack of human activity. One relevant review is the very nearby Bridge No. 203 (TIP B-5304 / PA 13-04-0047) which is 3000 feet north of the current APE. Similar in scale and setting, no archaeological survey was recommended.

Historic mapping was examined. The most notable is the Proposed Farm City, Pender County, North Carolina map of 1922 which shows the plans of the proposed community (1922, Cm912.71-1922n). Near

16-01-0014

the limits of the formal plans in an area set aside for "20 acre farms," nothing notable is mapped, including the creek which is crossed at this bridge project.

For this undertaking, the proposed bridge replacement of the existing transportation facility Bridge No. 015, little new soil disturbance will occur with the exception of the expected expanded fill work and easements beside the bridge. As much of the existing APE has been modified for the current roadway, bridge and drainage, expectations are low for encountering new archaeological sites, especially any that may be intact and significant.

As a result of this review, we conclude that the likelihood of encountering intact, NRHP-eligible resources are slim based on the limited new footprint of the undertaking at the same preexisting location, and previous bridge construction disturbances. The project should be considered compliant with Section 106. No archaeological survey is recommended for this undertaking as currently proposed.

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 scale and nature of the project is limited to the replacement of an existing bridge with a new structure at the same location. An offsite detour will be used. The APE of the project overlays the current transportation facility and is heavily disturbed by the original roadway and bridge construction. New impacts will be limited to work adjacent to the bridge, mainly fill. Review of background archaeological information, examination of mapping and virtual drive-by suggests low probability for the presence of significant, intact archaeological resources within the APE. The APE contains frequently flooded soils near the bridge. A cemetery near the APE will have a limited work on an associated driveway though no burials should be affected. Based on the minimal changes to the footprint of construction, wetness and the degree of existing disturbances, it is unlikely that intact, significant, NRHP-eligible archaeological resources would be encountered or impacted by the project. No archaeological survey is recommended. Therefore, this federally permitted undertaking should be considered compliant with Section 106.

This project falls within a North Carolina County in which the Catawaba Nation has expressed an interest. It is recommended that you contact each federal agency involved with this project to determine their Section 106 Tribal Consultaion requirements.

SUPPORT DOCUMENTATION

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

FINDING BY NCDOT ARCHAEOLOGIST

NO ARCHAEOLOGY SURVEY REQUIRED



NCDOT ARCHAEOLOGIST

6/19/2019

Date