



US Army Corps
Of Engineers
Wilmington District

PUBLIC NOTICE

Issue Date: August 8, 2008
Comment Deadline: September 8, 2008
Corps Action ID #:2008-01413
TIP Project No. X-0002B & C and U-2519

The Wilmington District, Corps of Engineers (Corps) has received an application from the **North Carolina Department of Transportation (NCDOT)** seeking Department of the Army authorization to **discharge dredged or fill material into waters of the United States** associated with **construction of the Fayetteville Outer Loop from I-95 South of Fayetteville to NC 24/87 in Cumberland and Robeson Counties, North Carolina.**

Specific plans and location information are described below and shown on the attached plans. This Public Notice with all attached plans are also available on the Wilmington District Web Site at www.saw.usace.army.mil/wetlands

Applicant: North Carolina Department of Transportation (NCDOT)
c/o Dr. Gregory J. Thorpe, PhD, Manager
Project Development and Environmental Analysis Branch
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Authority

The Corps will evaluate this application and decide whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures under Section 404 of the Clean Water Act (33 U.S.C. 1344).

Location

The proposed 27.8 mile controlled-access freeway is located beginning at an interchange with I-95 located just south of SR 1718 (Green Spring Road) in Robeson County, continues north through Cumberland County, turns eastward along the southern boundary of the Fort Bragg Military Reservation, and ends just west of US 401 (Ramsey Street). The proposed project is located in adjacent wetlands and tributaries that are hydrologically connected to the Lumber River, Hydrologic Cataloging Unit 03040203 and the Cape Fear River, Hydrologic Cataloging Unit 03030004. The project is more specifically located starting at Latitude 34.89727 N, Longitude 78.95899 W and ending at Latitude 35.11051, Longitude 78.97456.

Background

A NCDOT/FHWA Draft Environmental Impact Statement (DEIS) was approved on March 17, 1999 and on February 3, 2005 a Reevaluation of the DEIS was approved. A NCDOT/FHWA Condensed Final Environmental Impact Statement (FEIS) was approved on August 17, 2005 and on January 19, 2006 a Record of Decision (ROD) was issued for the proposed Fayetteville Outer Loop, TIP U-2519 and X-0002 project, State Project Number 8.2441301 and 8.T441302. The social, economic, and environmental impacts associated with various alternatives, including the No-build alternative, have been described in the above referenced environmental documents. The NCDOT/FHWA DEIS, Reevaluation, NCDOT/FHWA FEIS and NCDOT/FHWA ROD for the Fayetteville Outer Loop is available for review at the Wilmington Regulatory Field Office of the Wilmington District U.S. Army Corps of Engineers, 69 Darlington Avenue, Wilmington, North Carolina, or at the North Carolina Department of Transportation, Project Development and Environmental Analysis Branch, Transportation Building, 1 South Wilmington Street, Raleigh, North Carolina.

Applicant's Stated Purpose

The purpose of the proposed highway is to provide an additional transportation corridor on the south, west, and north sides of Fayetteville, extending from I-95 south of Fayetteville to just west of Ramsey Street (US 401) north of Fayetteville.

Existing Site Conditions

The project is located within the Sandhills ecoregion and the Inner Coastal Plain ecoregion of North Carolina's Coastal Plain Physiographic Province with the northern part of the project located in the Cape Fear River Basin, USGS 8-digit hydrological unit 03030004 and the southern one fifth of the project located in the Lumber River Basin, USGS 8-digit hydrological unit 03040203. The major tributaries to the Lumber River located within the project area are within the Cold Camp Creek Sub-basin and are Cold Camp Creek, Horsepen Branch, Buckhorn Swamp, and Long Branch. There are three sub-basins of the Cape Fear River watershed located within the project area: they are Rockfish Creek which drains the majority of the western and northern portions of the project area; Cross Creek which drains a small part of the northeastern portion of the project area; and Carvers Creek which drains the project area east of McArthur Road (SR 1600). Major tributaries in the Rockfish Creek Sub-basin are Rockfish Creek, Little Rockfish Creek, Stewart's Creek, Beaver Creek, Bones Creek, Persimmon Creek and Big Branch. Major tributaries in the Cross Creek Sub-basin are Cross Creek and Little Cross Creek. Major tributaries in the Carvers Creek Sub-basin are Carvers Creek and McPherson Creek

The Biotic communities identified in the project area include Mesic Pine Forest, Pine/Scrib Oak Sandhill, Xeric Sandhill Scrub, Coastal Plain Small Stream Swamp, Coastal Plain Semipermanent Impoundment, and Streamhead Pocosin. Topography is characterized as gentle rolling terrain with elevations ranging from 100 feet above mean sea level (MSL) in the stream valleys to 250 feet MSL atop the sandhill ridges.

Project Description

The following description of the work is taken from data provided by the applicant. The 27.8 mile proposed project starts at I-95 in Robeson County just south of the Cumberland/Robeson County line and Green Springs Road (SR 1718); extends northwest to an interchange with Leeper Road (SR 1717), crosses the Cumberland/Robeson County line and the CSX Railroad and continues to an interchange at Lake Upchurch Road; Passes east of Upchurchs Pond and continues northwest to an interchange with Camden Road (SR 1003) and turns north crossing King Road (SR 1112) and Stoney Point Road (SR 1104), Century Circle (SR 1140) and the Aberdeen and Rockfish Railroad; continues north to an interchange with South Raeford Road (US 401) and extends north between Lake Rim and Reilly Road (SR 1403) to an interchange at Cliffdale Road (SR 1400); extends north, then east along the Fort Bragg Military Reservation boundary to an interchange at Canopy Lane and crosses Reilly Road (SR 1403) and Yadkin Road (SR 1415) prior to the All American Freeway (SR 1007) interchange; continues east through interchanges with Bragg Boulevard (NC 24) and Murchison Road (NC 87/210) and extends south of Smith Lake to an interchange at McArthur Road (SR 1600); turns northeast and parallels Andrews Road (SR 1611) and ends just west of an existing interchange at Ramsey Street (US 401). The Fayetteville Outer Loop is represented by two TIPs with 10 Sections (X-0002 B & C, and U-2519 AA, AB, BA, BB, CA, CB, DA, & E). Sections X-0002 B & C and U-2519 DA & E have final design, sections U-2519 AA, AB, BA, BB, CA & CB are in preliminary design.

Department of the Army authorization for actual roadway construction is only being considered on those sections of road (X-0002 B & C and U-2519 DA & E) where final design has been completed and where all practicable measures to minimize impacts to waters and/or wetlands have been adopted. Work on those sections with preliminary design, as identified above, will only be authorized after all practicable measures to minimize impacts to jurisdiction aquatic resources have been adopted. Accordingly, NC DOT will be required to seek modifications to the existing permit, if issued, in order to commence work on the other sections of road identified above.

NC DOT is also proposing to provide compensatory mitigation for all impacts that have been identified to date, including for those sections where final design has not been completed. This proposal is more fully described below.

Jurisdictional aquatic resource impacts due to the proposed construction will occur at 32 sites. Table 1 contains a summary of the proposed jurisdictional wetland resources by TIP section.

Table 1. Summary of Impacts

Section	HUC	Riverine Wetlands (ac)*	Non-riverine Wetlands (ac)*	Streams (ft)	Ponds (ac)
X-0002 B	03030004	0.00	0.00	213	2.58

X-0002 C	03030004	3.28	4.12	2,714	0.60
U-2519 AA	03040203	4.30	1.30	687	0.12
U-2519 AB	03030004 03040203	9.60	0.00	4,291	0.00
U-2519 BA	03030004	0.80	5.30	331	0.30
U-2519 BB	03030004	2.90	0.08	2,301	0.07
U-2519 CA	03030004	0.00	0.36	418	0.00
U-2519 CB	03030004	0.00	1.17	1,391	0.00
U-2519DA	03030004	13.44	0.08	0	0.00
U-2519 E	03030004	0.52	1.18	886	0.00
Total		34.84	13.59	13,232	3.67

NCDOT proposes to compensate for the unavoidable impacts to jurisdictional wetlands and streams by providing off-site mitigation. As stated previously, the project is located in two Hydrologic Units (03030004, 03040203). NCDOT has proposed the use of credits from the Privateer Farms Wetland and Stream Mitigation Site located in the adjacent HUC 03030005 to cover 48.43 acres of jurisdictional wetland impacts and 13,232 linear feet of jurisdictional stream impacts (Final and Preliminary Design). NCDOT proposes a credit ratio for Privateer Farms Wetland and Stream Mitigation of 1.5 to 1.

Other Required Authorizations

This notice and all applicable application materials are being forwarded to the appropriate State agencies for review. The Corps will generally not make a final permit decision until the North Carolina Division of Water Quality (NCDWQ) issues, denies, or waives State certification required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice combined with appropriate application fee at the North Carolina Division of Water Quality central office in Raleigh will constitute initial receipt of an application for a 401 Water Quality Certification. A waiver will be deemed to occur if the NCDWQ fails to act on this request for certification within sixty days of the date of the receipt of this notice in the NCDWQ Central Office. Additional information regarding the Clean Water Act certification may be reviewed at the NCDWQ Central Office, Transportation Permitting Unit, 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for certification under Section 401 of the Clean Water Act should do so in writing delivered to

the North Carolina Division of Water Quality (NCDWQ), 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260 Attention: Mr. Brian Wren by August 29, 2008.

Cultural Resources

The Corps has consulted the latest published version of the National Register of Historic Places (NHRP) and is not aware that any registered properties, or properties listed as being eligible for inclusion therein are located within the project area or will be affected by the proposed work. In addition, NCDOT archaeologist identified six properties in the project area that were determined eligible for the National Register, including the Shaw-Gillis Historic District, the Keithville Rental Units, the Buena Vista House, William John Gillis House No.1, Wood's Store, and the McInnis House. Impacts to these properties were evaluated in the Draft Section 4(f) Statement in the NCDOT/FHWA DEIS. Archaeological field surveys have been conducted by NCDOT for the Preferred Alternative corridor. The results of these surveys are included in Section 6.3.1 of the NCDOT/FHWA FEIS.

In coordination with the State Historic Preservation Officer (SHPO), an intensive archaeological survey was prepared for the Preferred Alternative. The specific findings of this survey are documented in *Dimensions of Fall Line Site Function: Surveying and Testing the West Fayetteville North Carolina Outer Loop*, Technical Report #992 by New South Associates (2002). This initial survey identified forty-six cultural resources within the preferred corridor area. As a result of this survey, eighteen archaeological sites were recommended as eligible for the NHRP. Of these eighteen eligible archaeological sites, nine have been avoided by the preliminary design. The remaining nine eligible sites (31CD64, 31CD65, 31CD871, 31CD874, 31CD882, 31CD962, 31CD965, 31CD967/967**, and 31RB485) have a portion of their boundaries within the construction impact area of the project. Further work (i.e. data recovery efforts) is recommended at these impacted eligible sites.

In coordination with the SHPO and the Fort Bragg Cultural Resources Program (FBCRP), three additional intensive archaeological surveys were prepared for expanded coverage of the Preferred Alternative. The specific findings of these surveys are documented in three separate addenda, which will be integrated into one appendix to be attached to the original 2002 survey report by New South Associates. As part of the first addendum (*Cultural Resources Survey of 284 Acres South of Cliffdale Road, West Fayetteville Outer Loop, Cumberland and Hoke Counties, North Carolina*), ten cultural resources were identified within the expanded study area. As a result of this survey, one archaeological site (31CD1178) was recommended eligible for the NRHP and has been avoided by the preliminary design. As part of the second addendum (*Cultural Resources Survey of 534 Acres North of Cliffdale Road, West Fayetteville Outer Loop, Cumberland County, North Carolina*), twenty-one cultural resources were identified within the expanded study area. As a result of this survey, one archaeological site (31CD1181) was recommended eligible for the NHRP and will not be impacted by the proposed design. As part of the third addendum (*Cultural Resources Survey of 31 Additional Land Parcels of the Proposed West Fayetteville Outer Loop, Cumberland and Robeson Counties, North Carolina*), six cultural resources were identified, or revisited, within the expanded study area. As a result of this

survey, the historic archaeological component of site 31CD967/967** will require a GPR survey in order to determine the locations of unmarked burials that may or may not be impacted by the proposed project. If burials associated with 31CD967/967** are to be impacted by the proposed project, then such burials will be relocated per applicable State statutes (i.e. NC GS 65 or NC GS 70.3) after consultation with the Office of State Archaeology.

In April 2005, a Memorandum of Agreement (MOA) between the Federal Highway Administration (FHWA), the North Carolina Department of Transportation (NCDOT), and SHPO was generated regarding the implementation of mitigation efforts for all ten archaeological sites listed in Table 1.

Table 1. Archaeological Sites Referenced in the MOA

Site Number	TIP Section	NRHP Status	Resource Type	Impacted by the Project	NCDOT Recommendation	On Ft. Bragg Property
31CD64	U-2519CB	Eligible	Site	Yes	Phase III Data Recovery	Yes
31CD65	U-2519CB	Eligible	Site	Yes	Phase III Data Recovery	Yes
31CD871	X-0002C	Eligible	Site	Yes	Phase III Data Recovery	Yes
31CD874	X-0002C	Eligible	Site	Yes	Phase III Data Recovery	No
31CD882	U-2519CB	Eligible	Site	Yes	Phase III Data Recovery	No
31CD962	U-2519CA	Eligible	Site	Yes	Phase III Data Recovery	No
31CD965	U-2519CA	Eligible	Site	Yes	Phase III Data Recovery	No
31 CD967/967**	U-2519AB	Eligible^	Site/Cemetery	Maybe^	GPR, Avoid or Relocate per GS65170	No
31CD976**	U-251 9BA	---	Cemetery	Yes	Avoid or Relocate per GS 65170	No
31RB485	U-251 9AA	Eligible	Site	Yes	Phase III Data Recovery	No

*All Sites listed are located within the project corridor. Those marked "Yes" will be impacted to some degree by the project (i.e. they are within 10 ft. of the cut/fill construction line).
^The prehistoric component of Site 31 CD967/967** will be avoided by the project; however, OPR is required in order to delineate the historic cemetery component, which may or may not be impacted by the project.

Endangered and Threatened Species

The United States Fish and Wildlife Service list seven federally protected species for Cumberland, Hoke, and Robeson Counties as of the January 31, 2008 listing (Table 2).

Table 2. Federally Protected Species in Cumberland, and Robeson Counties

Common Name	Scientific Name	Federal Status	Habitat Present	Biological Conclusion
American alligator	<i>Alligator mississippiensis</i>	T (S/A)	N/A	N/A
Red-cockaded woodpecker	<i>Picoides borealis</i>	E	Yes	May affect, not likely to adversely affect
Saint Francis' satyr butterfly	<i>Neonympha mitchellii francisci</i>	E	Yes	May affect, not likely to adversely

				affect
American chaffseed	<i>Schwalbea americana</i>	E	Yes	No Effect
Michaux's sumac	<i>Rhus michauxii</i>	E	Yes	No Effect
Pondberry	<i>Lindera melissifolia</i>	E	Yes	No Effect
Rough leaved loosestrife	<i>Lysimachia asperulifolia</i> .	E	Yes	No Effect

NCDOT has conducted surveys along the proposed project corridors to identify suitable or critical habitat for species listed as federally endangered or threatened pursuant to the Endangered Species Act of 1973. Based on information provided by NCDOT, the Corps of Engineers has determined that the proposed project activities requiring DA authorization would have no effect on five of the listed species known to occur within Cumberland and Robeson Counties. These species are the American alligator, *Alligator mississippiensis*; Michaux's sumac, *Rhus michauxii*; American chaffseed, *Schwalbea americana*; Rough-leaved loosestrife, *Lysimachia asperulifolia*; and Pondberry, *Lindera melissifolia*. However, It has been determined that the proposed project activities requiring DA authorization may effect the Red-cockaded woodpecker (RCW), *Picoides borealis*, and Saint Francis' satyr butterfly, *Neonympha mitchellii francisci*, federally listed endangered species.

NCDOT prepared a Biological Assessment (BA) providing biological conclusions for the red-cockaded woodpecker (RCW), which was submitted to the USFWS in September 2004. A separate BA for the remaining federally protected species listed in Cumberland, and Robeson Counties was submitted in January 2005.

In a Biological Opinion (BO) dated March 28, 2005, the USFWS concurred with NCDOT's BA of No Effect (or Not Applicable in the case of American alligator) for the five species listed in Table 2 above. A BO for impacts to Red-cockaded Woodpecker was rendered by USFWS in April 2005. Detailed results of the 2007 and 2008 resurveys by NCDOT will be forwarded to USFWS under separate cover once final resurveys are completed later in 2008. Resurveys will also be conducted at least one year prior to construction as other sections of the proposed project near their respective let dates, the results of which will also be forwarded to USFWS. The District Engineer, based on available information, is not aware that the proposed activities requiring DA authorization will affect any other species not listed above, or their critical habitat, designated as endangered or threatened pursuant to the Endangered Species Act of 1973

Evaluation

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in

accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

Commenting Information

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials, including any consolidated State Viewpoint or written position of the Governor; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

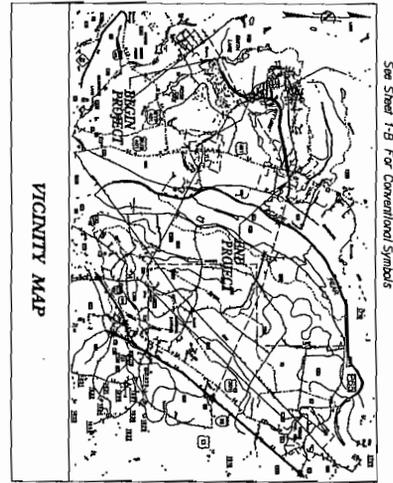
Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing shall be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, September 8, 2008. Comments should be submitted to Mr. Richard K. Spencer, Wilmington Regulatory Field Office, P.O. Box 1890, Wilmington, North Carolina 28402-1890.

*****SYSTEM *****
*****REVISION *****
*****DATE *****

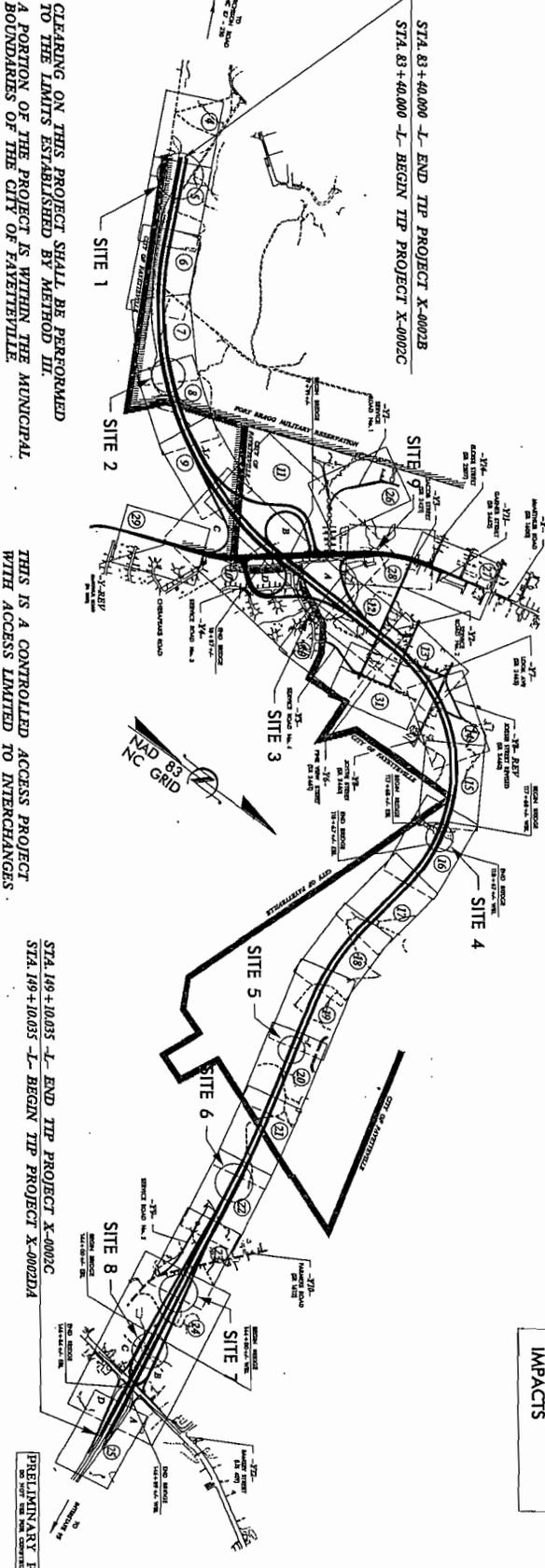
CONTRACT:

TIP PROJECT: X-0002C



VICINITY MAP

RIGHT OF WAY



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III. A PORTION OF THE PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF FAYETTEVILLE.

THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS LIMITED TO INTERCHANGES.

STA 149+10.035 -L- END TIP PROJECT X-0002C
STA 83+40.000 -L- BEGIN TIP PROJECT X-0002C

PRELIMINARY PLANS

GRAPHIC SCALES

PLANS: 1" = 10'

PROFILE (HORIZONTAL): 1" = 10'

PROFILE (VERTICAL): 1" = 2'

DESIGN DATA

ADT 2008 = 34,700
ADT 2030 = 59,600

DIV = 9 %
D = 55 %
T = 10 %
V = 11 km/h

* (TST 4 %; DUAL 6 %)
FUNC. CLASS = INTERSTATE

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT X-0002C = 6.385 km
LENGTH STRUCTURES TIP PROJECT X-0002C = 0.185 km*
TOTAL LENGTH OF TIP PROJECT X-0002C = 6.570 km

* NOTE: LENGTH BASED ON WBL BRIDGES

Approved in the Office of:
TRANSPORTATION & INFRASTRUCTURE

DATE: MAY 31, 2006

LETTING DATE: NOVEMBER 2008

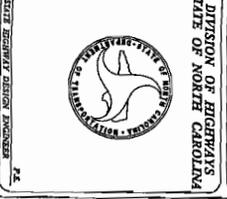
T.R. REED, P.E.
PROJECT ENGINEER

T.E. HUFERMAN, P.E.
PROJECT DISTRICT MANAGER

HYDRAULICS ENGINEER

ENGINEER: [Signature]

ROADWAY DESIGN ENGINEER: [Signature]



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
CUMBERLAND COUNTY
LOCATION: FAYETTEVILLE OUTER LOOP FROM 2.095km EAST OF NC87-NC210 TO US401
TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNING, SIGNALS AND STRUCTURES

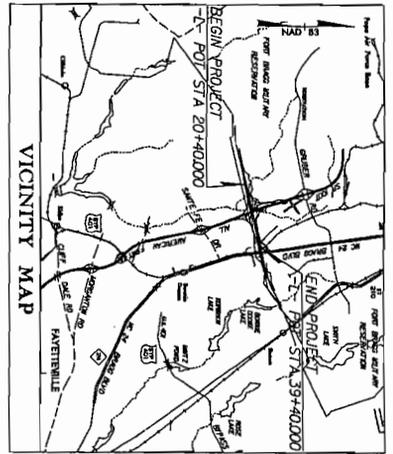
PROJECT NO.	NC X-0002C	SHEET NO.	1
DATE	05/31/06	SCALE	AS SHOWN
PROJECT DISTRICT	149	DATE	05/31/06
PROJECT ENGINEER	T.R. REED, P.E.	DATE	05/31/06
PROJECT DISTRICT MANAGER	T.E. HUFERMAN, P.E.	DATE	05/31/06
PROJECT DISTRICT	149	DATE	05/31/06
PROJECT ENGINEER	T.R. REED, P.E.	DATE	05/31/06
PROJECT DISTRICT MANAGER	T.E. HUFERMAN, P.E.	DATE	05/31/06

Permit Drawing
Sheet 1e of 14

WETLAND/STREAM IMPACTS

PROJECT: 34817.2.4

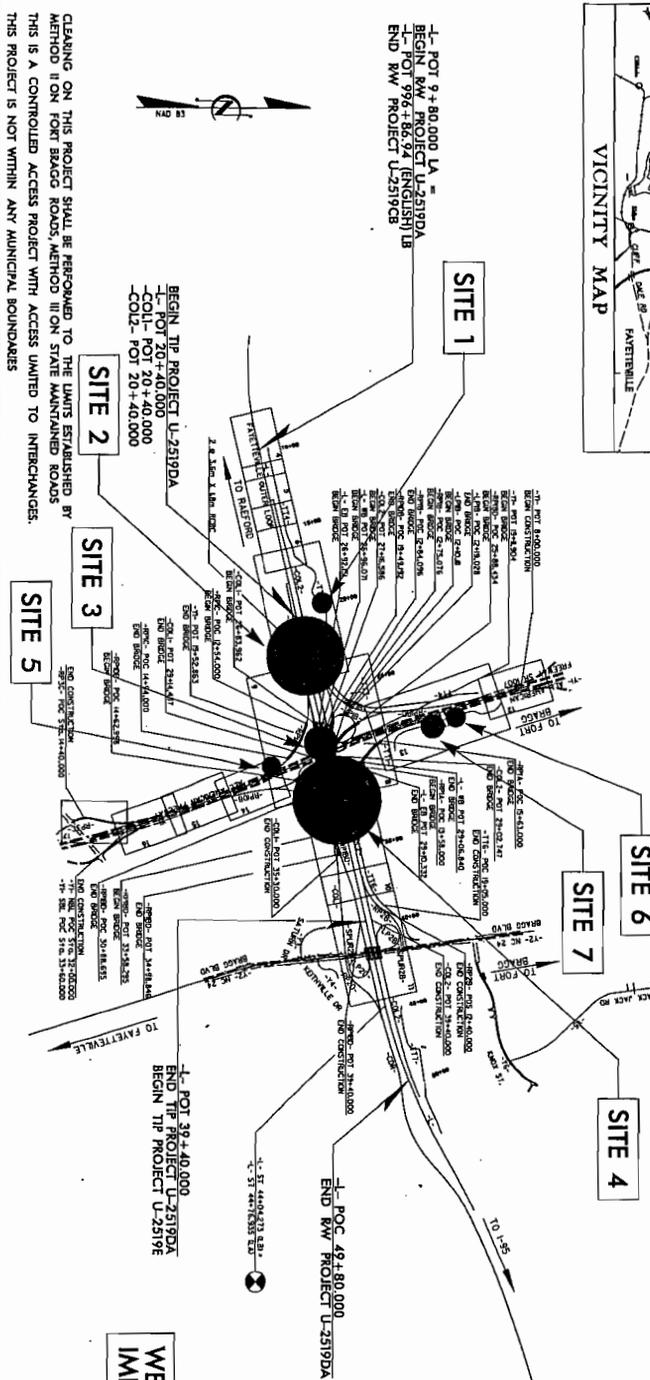
TIP PROJECT: U-2519DA



See Sheet 1-4 For Index of Sheets
See Sheet 1-9 For Conventional Symbols

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS CUMBERLAND COUNTY

LOCATION: FAYETTEVILLE OUTER LOOP
FROM EAST OF SR 1415 TO WEST OF
NC 24 (BRAGG BOULEVARD)
TYPE OF WORK: GRADING, DRAINAGE, PAVING,
STRUCTURES, CULVERTS, & SIGNING



WETLAND/STREAM
IMPAIRMENTS

PRELIMINARY PLANS

GRAPHIC SCALE

PLANS
1" = 100'

PROFILE (HORIZONTAL)
1" = 100'

PROFILE (VERTICAL)
1" = 10'

DESIGN DATA

ADT 2007 = 27300
ADT 2030 = 66200
DHV = 9 %
D = 55 %
T = 12 %
QUALS 8 %, TTST 4 %
V = 110 km/h

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-2519DA 1.667 KM
LENGTH STRUCTURES TIP PROJECT U-2519DA 0.233 KM
TOTAL LENGTH TIP PROJECT U-2519DA 1.900 KM

NOTE: EB LANE BRIDGE STATIONING USED TO DETERMINE LENGTH OF STRUCTURES

PLANS PREPARED BY:
FLORBERG & HUTCHINSON, INC.
CONSULTING ENGINEERS
4000 WILSON ROAD, SUITE 100
FAYETTEVILLE, NC 28404

PREPARED FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
2800 STADIUM DRIVE, SUITE 100
RALEIGH, NC 27601

RIGHT OF WAY DATE: MAY 19, 2006
LETTING DATE: MAY 19, 2009

PROJECT MANAGER: DENNIS J. MOYR, P.E.
PROJECT DESIGNER: HENRY W. BARE
PROJECT CHECKER: CATHY S. HOUSER, P.E.

HYDRAULICS ENGINEER
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

ROADWAY DESIGN
P.E.

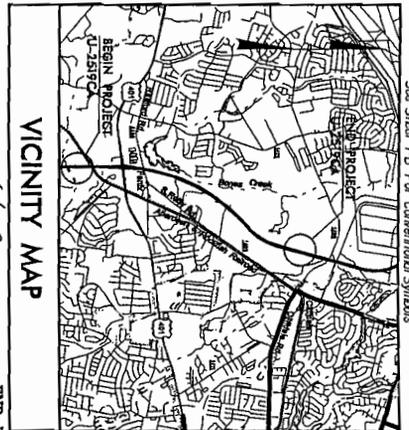
FIELD SURVEY ENGINEER
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
DIVISION ADMINISTRATION
DATE

		ALL DIMENSIONS IN THESE PLANS ARE IN METERS UNLESS OTHERWISE SHOWN	
PROJECT NO.	34817.2.4	DATE	11/11/09
PROJECT NAME	U-2519DA	SCALE	1" = 100'
PROJECT NUMBER	NHF-DPR-01000001	DESIGNER	P.E.
PROJECT TITLE	NHF-100(9) RW and Utilities	CHECKER	
PROJECT LOCATION		DATE	

Permit Drawing
Sheet 10 of 30

PROJECT: 34817.1.2

TIP PROJECT: U-2519CA



See Sheet 1-4 For Index of Streets
 See Sheet 1-8 For Conventional Symbols

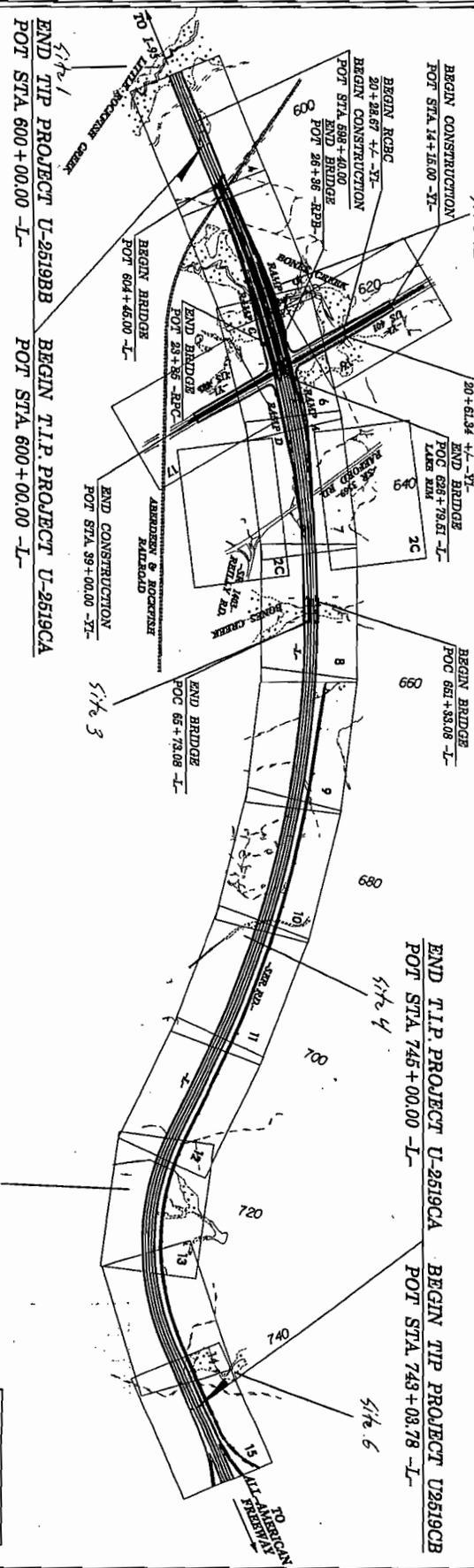
STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
CUMBERLAND COUNTY

LOCATION: FAYETTEVILLE OUTER LOOP FROM SOUTH OF
 US 401 TO SOUTH OF SR 1400 (CLIFFDALE RD.)

TYPE OF WORK: GRADING, DRAINAGE, STRUCTURES & PAVING

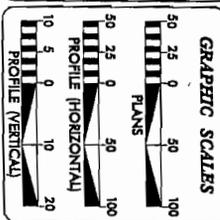
PLAN	DATE REVISION	REVISION NO.	BY	CHKD
N.C.	U-2519CA	1		
PROJECT NUMBER	34817.1.2	DATE	11/15/07	BY
PROJECT TITLE	FAYETTEVILLE OUTER LOOP	DATE	11/15/07	BY
PROJECT ENGINEER	KEITH E. HUDSON	DATE	11/15/07	BY
PROJECT DESIGNER	JASON I. GADDDY	DATE	11/15/07	BY
PROJECT CHECKER	ROBERT J. STROUPE, PE	DATE	11/15/07	BY
PROJECT SUPERVISOR	CATHY S. HOUSER, PE	DATE	11/15/07	BY
PROJECT MANAGER	ROBERT J. STROUPE, PE	DATE	11/15/07	BY
PROJECT ADMINISTRATOR	JASON I. GADDDY	DATE	11/15/07	BY
PROJECT SUPERVISOR	ROBERT J. STROUPE, PE	DATE	11/15/07	BY
PROJECT MANAGER	CATHY S. HOUSER, PE	DATE	11/15/07	BY
PROJECT ADMINISTRATOR	JASON I. GADDDY	DATE	11/15/07	BY

Permit Drawing
 Sheet 4 of 21



THIS IS A CONTROLLED ACCESS PROJECT
 WITH ACCESS BEING LIMITED TO INTERCHANGES

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



DESIGN DATA

ADT 2007 =	28,600
ADT 2027 =	41,100
DHV =	8 %
T =	55 %
V =	12 %
DUAL =	70 MPH
TTST =	4%
DUAL =	8%

PROJECT LENGTH

LENGTH OF ROADWAY T.I.P. PROJECT U-2519CA	=	2.28 MI.
LENGTH OF STRUCTURE T.I.P. PROJECT U-2519CA	=	0.47 MI.
TOTAL LENGTH OF T.I.P. PROJECT U-2519CA	=	1.75 MI.

NDOT CONTACTS:

PROJECT MANAGER	ROBERT J. STROUPE, PE
PROJECT SUPERVISOR	CATHY S. HOUSER, PE
PROJECT DESIGNER	JASON I. GADDDY
PROJECT CHECKER	KEITH E. HUDSON
PROJECT ADMINISTRATOR	G. SCOTT BOYLES, PE

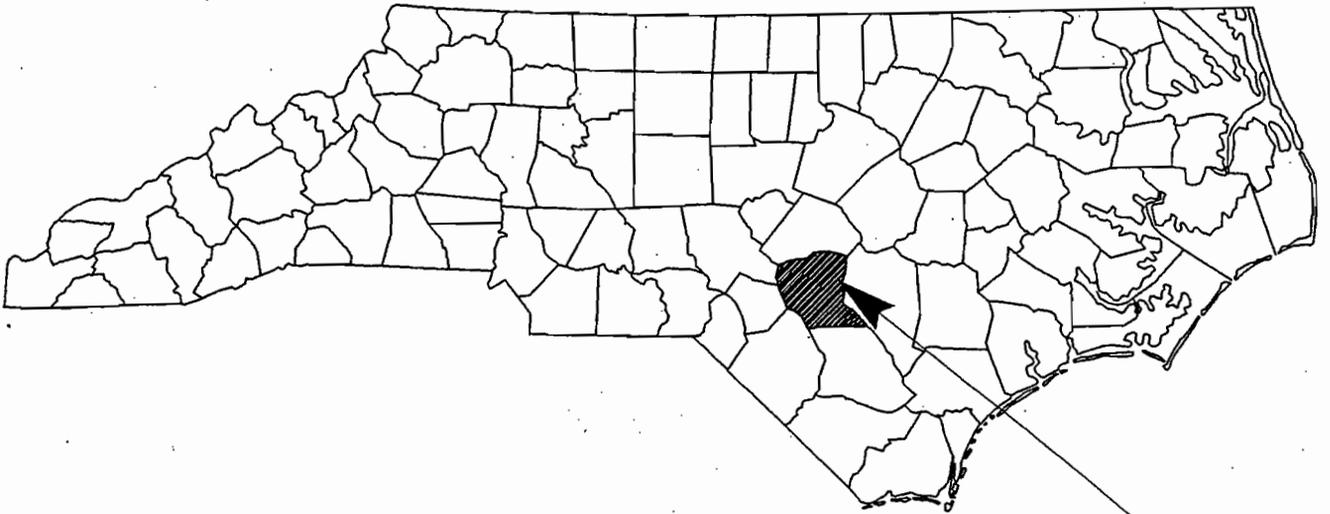
RIGHT OF WAY DATE: FEBRUARY 16, 2007
 LETTING DATE:

HYDRAULICS ENGINEER
 ROADWAY DESIGN ENGINEER

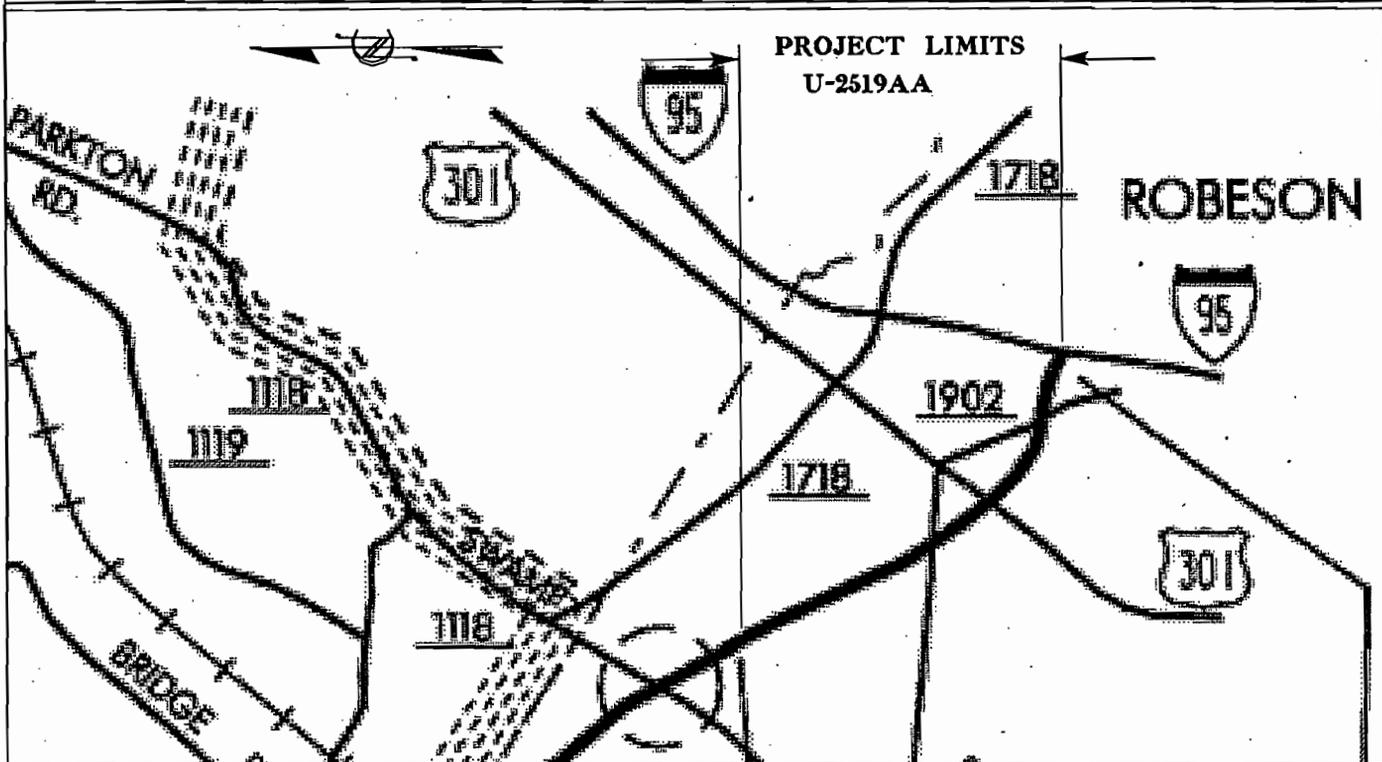
DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA
 FEDERAL HIGHWAY ADMINISTRATION

INCOMPLETE PLANS
 NO PART OF THESE PLANS
 SHALL BE USED FOR CONSTRUCTION

NORTH CAROLINA



CUMBERLAND COUNTY



VICINITY MAPS

NCDOT
DIVISION OF HIGHWAYS
CUMBERLAND COUNTY
PROJECT: (U-2519AA)

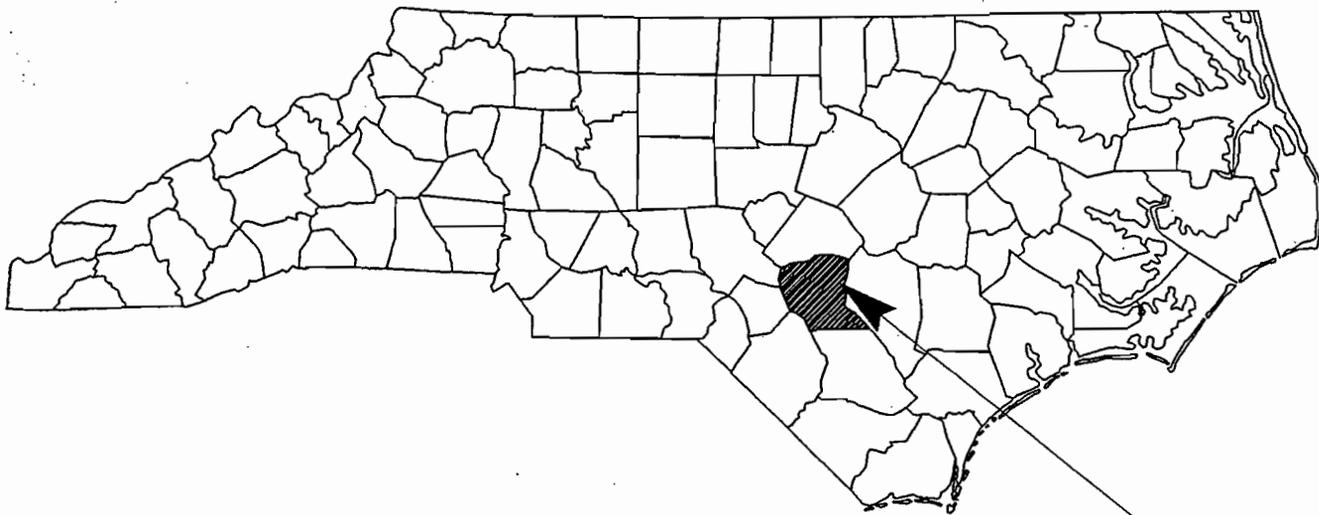
FAYETTEVILLE OUTER LOOP
Permit Drawing
Sheet 1 of 17

SHEET

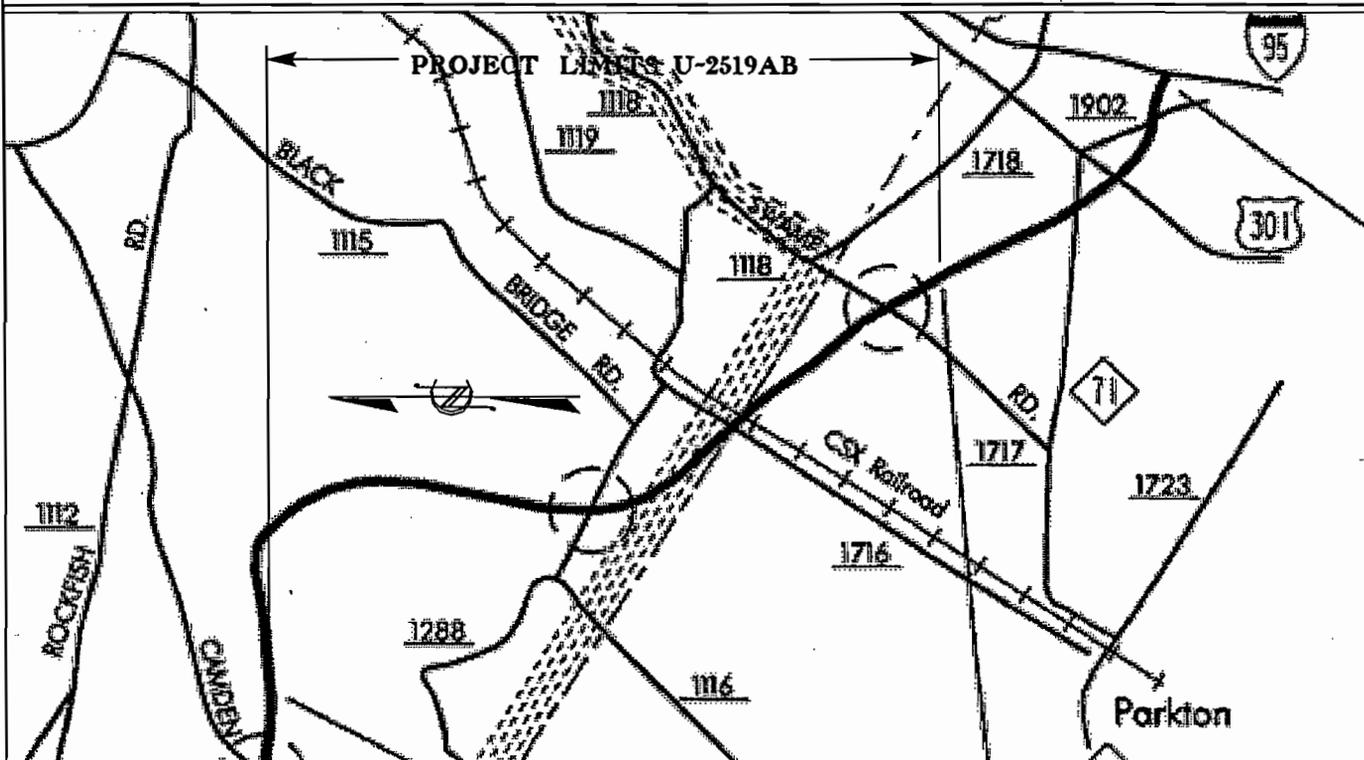
OF

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NORTH CAROLINA



CUMBERLAND COUNTY

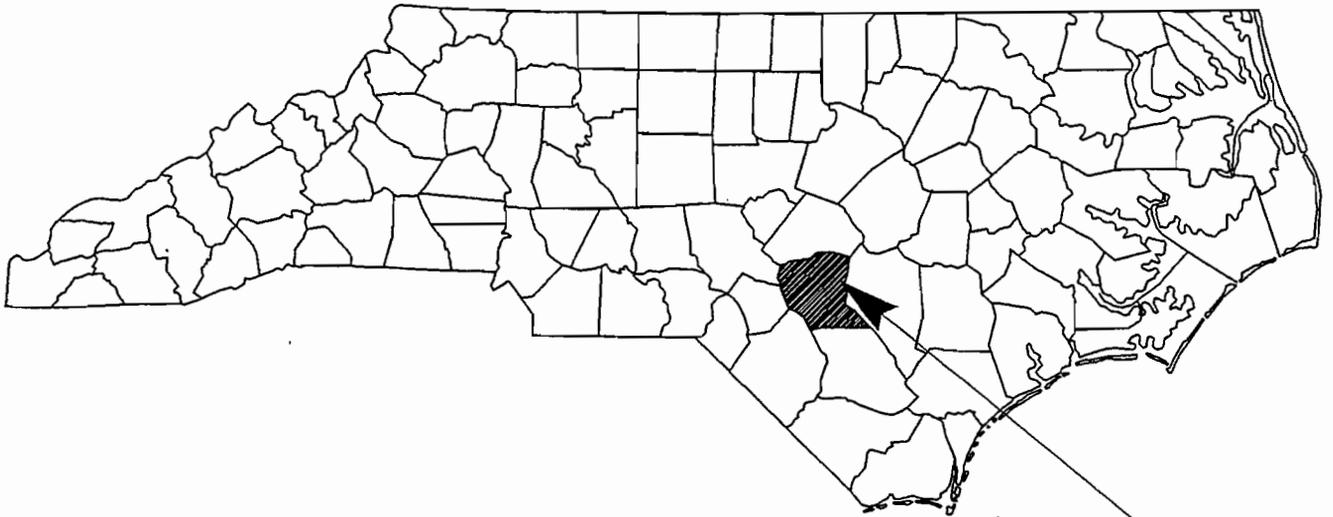


VICINITY MAPS

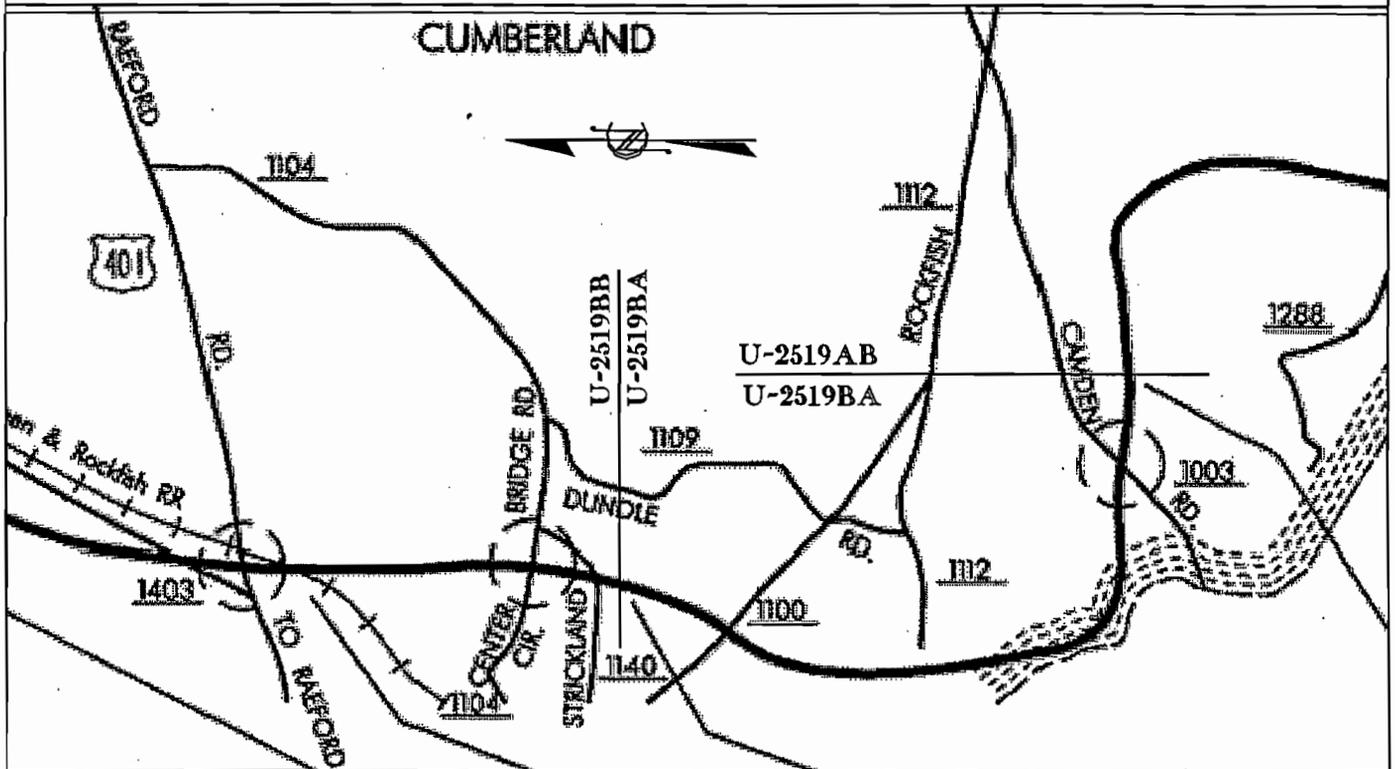
NCDOT
DIVISION OF HIGHWAYS
CUMBERLAND COUNTY
PROJECT: (U-2519AB)

FAYETTEVILLE OUTER LOOP
Permit Drawing
Sheet 1 of 16

NORTH CAROLINA



CUMBERLAND COUNTY



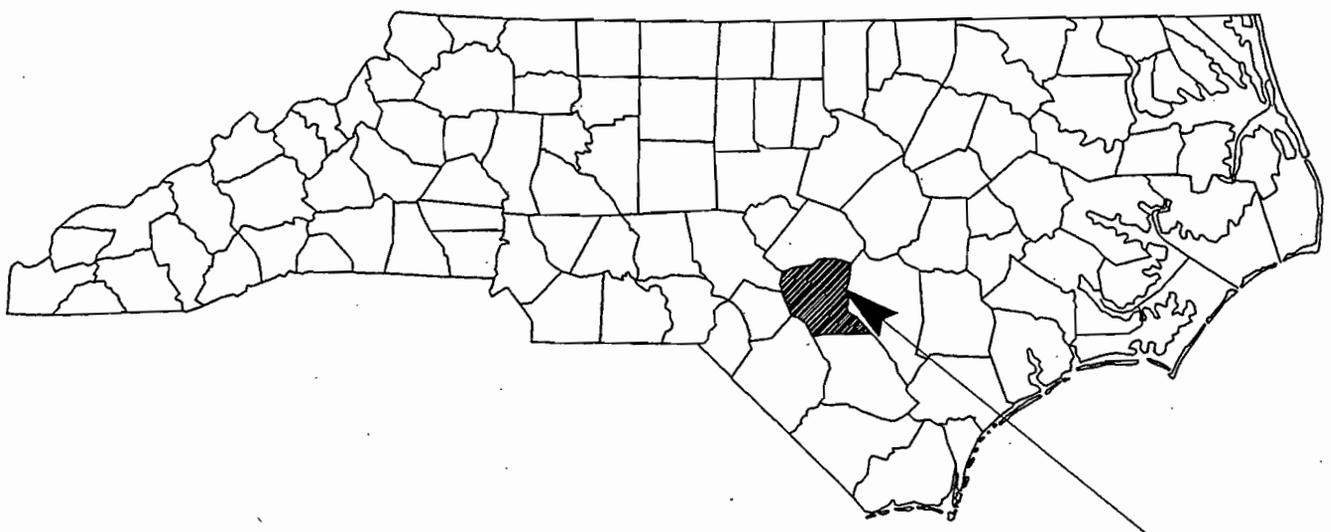
VICINITY MAPS

Permit Drawing
Sheet 1 of 15

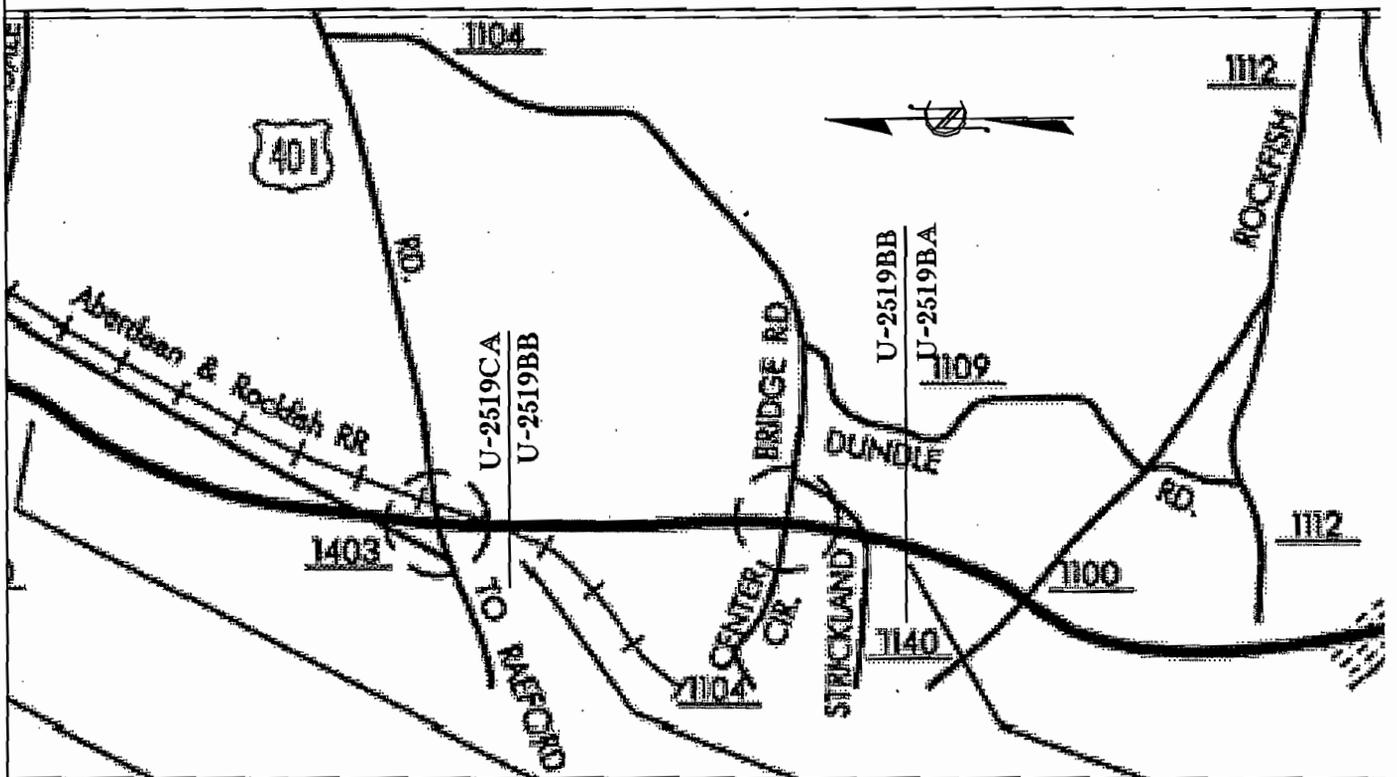
NCDOT
DIVISION OF HIGHWAYS
CUMBERLAND COUNTY
PROJECT: (U-2519BA)

FAYETTEVILLE OUTER LOOP

NORTH CAROLINA



CUMBERLAND COUNTY



VICINITY MAPS

NCDOT
DIVISION OF HIGHWAYS
CUMBERLAND COUNTY
PROJECT: (U-2519BB)

FAYETTEVILLE OUTER LOOP

Permit Drawing
Sheet 1 of 15