

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT SECRETARY

October 6, 2004

Addendum No. 1

RE:

TIP I-2511CB

Contract ID: C200929 WBS # 34163.3.10

Federal Aid No.: NHF-85-3(173)75

Rowan County

I-85 North of SR 1002 (Bringle Ferry Road)

to North of SR 2120 near Spencer

November 18, 2004 Letting

To Whom It May Concern:

Reference is made to the Request for Proposal recently furnished to you on the above project. The following revision has been made to the Request for Proposal:

The 401 and 404 permits are included. Please add Page Nos. 210a through 210zz behind Page No. 210 in your proposal.

Sincerely,

R.A. Garris, P.E. Contract Officer

Distribution:

Mr. W.S. Varnedoe, P.E.

Mr. Pat Ivey, P.E.

Ms. D.M. Barbour, P.E.

Mr. S.D. DeWitt, P.E.

Mr. J.V. Barbour, P.E.

Mr. Art McMillian, P.E.

Mr. S.D. Blevins, P.E.

Mr. Jay Bennett, P.E.

Mr. R.E. Davenport, P.E.

Mr. J.A. Gay, P.E.

Ms. Marsha Sample

Mr. Rodger Rochelle, P.E. (w/attachment)

Mr. Shannon Lassiter, P.E. (w/attachment)

Technical Review Committee

Project File (w/attachment)



DEPARTMENT OF THE ARMY WILMINGTON DISTRICT, CORPS OF ENGINEERS P.O. BOX 1890 WILMINGTON. NORTH CAROLINA 28402-1890

September 30, 2004

Regulatory Division

SUBJECT: Action ID 200221534, TIP No. I-2511CB

Dr. Gregory J. Thorpe, Ph.D. Environmental Management Director, PDEA N.C. Department of Transportation 1548 Mail Service Center Raleigh, NC 27699-1548

Dear Dr. Thorpe:

In accordance with your written request of February 20, 2004, and the resulting administrative record, enclosed are two copies of a Department of the Army permit to authorize the discharge of fill material into waters of the United States, for construction of Section CB of the I-85 widening and improvements (T.I.P. No. I-2511CB), impacting Town Creek and its unnamed tributaries, from north of SR 1002 (Bringle Ferry Road) to north of SR 2120 (Long Ferry Road), east of Spencer, in Rowan County, North Carolina.

You should acknowledge that you accept the terms and conditions of the enclosed permit by signing and dating each copy in the spaces provided ("Permittee" on page 3). Your signature, as permittee, shows that, as consideration for the issuance of this permit, you voluntarily accept and agree to comply with all of the terms and conditions of this permit. All pages of both copies of the signed permit with drawings should then be returned to this office for final authorization. A self-addressed envelope is enclosed for your convenience.

In addition, I have enclosed a copy of the Notification of Administrative Appeal Process and Options and Request for Appeal. Please carefully read Section "B" of this form for information regarding the appeal process for proffered permits

After the permit is authorized in this office, the original copy will be returned to you; the duplicate copy will be permanently retained in this office. Should you have questions, contact Mr. Eric Alsmeyer of my Raleigh Field Office regulatory staff at telephone (919) 876-8441, extension 23.

Sincerely,

E. David Franklin

Chief, NCDOT Team

S. Don't Fralli

Enclosures

DEPARTMENT OF THE ARMY PERMIT

NC Department of Transportation	ı		
Permittee			•
Permit No.			
USAED, Wilmington Issuing Office			
NOTE: The term "you" and its derivatives, as "this office" refers to the appropriate district or activity or the appropriate official of that office ac	division office of the cting under the author	e Corps of Engineers having ju ority of the commanding offic	risdiction over the permitted
You are authorized to perform work in accordance	e with the terms and	conditions specified below.	
Project Description:			
Place fill materia acre of wetlands, for construction of No. I-2511CB), impacting Town Creen	f Section CB of t	al of 2,218 linear feet of the I-85 widening and im med tributaries.	stream and 0.52 provements (T.I.P.
Project Location: From north of SR 1002 (east of Spencer, in Rowan County, N		oad) to north of SR 2120	(Long Ferry Road),
Permit Conditions:			
General Conditions:			
1. The time limit for completing the work authorized time to complete the authorized activity, sone month before the above date is reached.	orized ends on ubmit your request	December 31,2008 for a time extension to this of	If you find that you need ffice for consideration at least
2. You must maintain the activity authorized by tions of this permit. You are not relieved of this a good faith transfer to a third party in complete the authorized activity or should you desire to	s requirement if you liance with General	u abandon the permitted acti Condition 4 below. Should y	ivity, although you may make you wish to cease to maintain

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

ENG FORM 1721, Nov 86

this permit from this office, which may require restoration of the area.

EDITION OF SEP 82 IS OBSOLETE.

(33 CFR 325 (Appendix A))

- 4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
- 5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
- 6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

See enclosed sheet.

Further Information:

- 1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
 - () Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 - (k) Section 404 of the Clean Water Act (33 U.S.C. 1344).
 - () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
- 2. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
- 3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.

- e. Damage claims associated with any future modification, suspension, or revocation of this permit.
- 4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
- 5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

RefeSIL	10/04/04
(PERMITTEE)	(DATE)
NC DEPARTMENT OF TRANSPORTATION	
This permit becomes effective when the Federal official, design	ated to act for the Secretary of the Army, has signed below.
This permit becomes effective when the Federal official, design	ated to act for the Secretary of the Army, has signed below.
This permit becomes effective when the Federal official, design	ated to act for the Secretary of the Army, has signed below.
	ated to act for the Secretary of the Army, has signed below. (DATE)
This permit becomes effective when the Federal official, design (DISTRICT ENGINEER) CHARLES R. ALEXANDER, JR. COLONEL	
(DISTRICT ENGINEER) CHARLES R. ALEXANDER, JR. COLONEL	

and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

	(DATE)
(TRANSFEREE)	(DATE)



Michael F. Easley, Governor William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Alan W. Klimek, P.E., Director Division of Water Quality Coleen H. Sullins, Deputy Director Division of Water Quality

> > April 20, 2004

Mr. Gregory J. Thorpe, Ph.D., Environmental Director NCDOT Planning and Environmental Branch 1548 Mail Service Center Raleigh, NC, 27699-1548 RECEIVED APR 2 6 2004

Dear Dr. Thorpe:

RALEIGH REGULATORY FIELD OFFICE

Re: Water Quality Certification Pursuant to §401 of the Federal Clean Water Act. Improvements to I-85 from north of SR 1002 to north of SR 2120 in Rowan County. F.A. Project No. IR-IM-85-3(132)74; State Project No. 8.1631503 TIP No. I-2511CB DWQ Project No. 040271

Attached hereto is a copy of Certification No. 3456 issued to The North Carolina Department of Transportation dated April 20, 2004.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Alan W. Klimek, P.E.

Attachments

cc: Wilmington District Corps of Engineers
Eric Alsmeyer, USACE Raleigh Field Office
NCDWQ Mooresville Regional Office
Christopher Militscher, US Environmental Protection Agency – Region IV
William Gilmore, NC Ecological Enhancement Program
Central Files
File Copy



NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H, .0500. This Certification authorizes the NCDOT to incur the following permanent impacts:

I-2511 Section CB

- 0.05 acres of riverine wetlands through excavation and mechanized clearing;
- 0.47 acres of non-riverine wetlands through fill and mechanized clearing;
- 2218 linear feet of stream loss; 1642 linear feet requiring mitigation.

I-2511CB shall be constructed pursuant to the application dated February 20, 2004 to improve I-85 from north of SR 1002 to north of SR 2120 in Rowan County.

The Application provides adequate assurance that the discharge of fill material into the waters of the state with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your Application. All work authorized by this Certification must be done in strict compliance with the plans attached to the Application. If this project changes, incurring additional impacts to streams, wetlands or buffers, you are required to notify the DWQ in writing, and you may be required to submit a new application. Additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion Control, Non-discharge and Water Supply watershed regulations.

This Certification shall expire three (3) years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding US Army Corps of Engineers Permit, whichever is later.

Condition(s) of Certification:

- 1. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:
 - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the North Carolina Sediment and Erosion Control Planning and Design Manual.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the North Carolina Sediment and Erosion Control Manual. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. Any reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.

Gregory J. Thorpe, Ph.D. §401 Water Quality Certification No. 3456 I-2511CB

- No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas
 beyond the footprint of the impacts depicted in the Application. All construction activities shall
 be performed so that no violations of state water quality standards, statutes, or rules occur.
- 3. Sediment and erosion control measures shall not be placed in wetlands or waters to the maximum extent practicable. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored within 30 days after the project has been released.
- 4. The outside wetland or water boundary as well as along the construction corridor within these boundaries approved under this authorization shall be clearly marked by orange fabric fencing for the areas that have been approved to infringe within the wetland or water prior to any land disturbing activities.
- 5. NCDOT and its contractors and/or agents shall not excavate, fill, or perform mechanized land clearing at any time in the construction or maintenance of this project within waters and/or wetlands, except as authorized by this Certification, or any modification to this Certification. There shall be no excavation from or waste disposal into jurisdictional wetlands or waters associated with this Certification without appropriate modification. If this occurs, compensatory mitigation will be required since it is a direct impact from road construction activities.
- 6. Excavation of stream crossings should be conducted in the dry unless demonstrated by the applicant or its authorized agent to be unfeasible. Sandbags, cofferdams, flexible pipe, or other diversion structures should be used to minimize excavation in flowing water.
- 7. Stormwater management shall be constructed in accordance with the hydraulic design plans submitted in the February 20, 2004 application.
- 8. Culverts that are less than 48-inch in diameter should be buried to a depth equal to or greater than 20% of their size to allow for aquatic life passage. Culverts that are 48-inch diameter or larger should be buried at least 12 inches below the stream bottom to allow natural stream bottom material to become established in the culvert following installation and to provide aquatic life passage during periods of low flow. If any of the existing pipes are perched, they shall be removed and replaced, and re-installed correctly, unless demonstrated that this is topographically unfeasible.
- 9. Live or fresh concrete shall not come into contact with waters of the state until the concrete has hardened. This will lessen the chance of a fish kill.
- 10. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is strictly prohibited.
- 11. The removal of vegetation in riparian areas should be minimized. NCDOT is encouraged to use existing on-site vegetation and materials for stream bank stabilization and to minimize the use of rip rap. Riprap shall not be placed in the stream bottom. Riparian vegetation, using native trees and shrubs, must be re-established within the construction limits of the project by the end of the growing season following completion of construction to reestablish the riparian zone and to provide long-term erosion control.

- 12. Heavy equipment should be operated from the bank rather than in the stream channel unless demonstrated by the applicant or its authorized agent to be unfeasible. All mechanized equipment operated near surface waters should be inspected and maintained regularly to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids or other toxic substances.
- 13. Summary of Compensatory Mitigation: Compensatory mitigation shall be the same as that approved by the US Army Corps of Engineers, as long as the mitigation required equals a ratio of 1:1 restoration or creation of lost wetland acres as described in 15A NCAC 2H.0506 (h)(6), and consists of the following:

I-2511 Section CB

- 1375 linear feet on on-site stream relocation using natural channel design technique (plans submitted with February 20, 2004 application).
- 0.05 acres of on-site riverine wetland restoration from the adjacent I-2304 Section AA
- 267 linear feet of stream impacts will be mitigated through NCDENR Ecosystem Enhancement Program (EEP).
- 0.47 acres of impacts to non-riverine wetlands will be mitigated through EEP.

In accordance with 15A NCAC 2R.0500, this contribution will satisfy NC Division of Water Quality's compensatory mitigation requirements under 15A NCAC 2H.0506(h). Until the EEP receives and clears your payments, wetland or stream fill shall not occur. The payments to EEP shall be sent within two (2) months of issuance of the 404 permit.

- 14. Rock check dams at culvert outlets should be removed at project completion to avoid blocking movement of aquatic life.
- 15. Two copies of the final construction drawings shall be furnished to NCDWQ prior to the preconstruction meeting. Written verification shall be provided that the final construction drawings comply with the attached permit drawings contained in the Application dated February 20, 2004.
- 16. Upon completion of the project, the NCDOT shall complete and return the enclosed "Certification of Completion Form" to notify DWQ when all work included in the 401 Certification has been completed. The responsible party shall complete the attached form and return it to the 401/Wetlands Unit of the Division of Water Quality upon completion of the project.
- 17. NCDOT and its authorized agents shall conduct its activities in a manner consistent with State water quality standards and any other appropriate requirements of State law and Federal law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this Certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H.0507(d). Before modifying the Certification, DWQ shall notify NCDOT and the US Army Corps of Engineers, provide public notice in accordance with 15A NCAC 2H.0503 and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to NCDOT in writing, shall be provided to the United States Army Corps of Engineers for reference in any permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project.

Gregory J. Thorpe, Ph.D. §401 Water Quality Certification No. 3456 I-2511CB

NCDOT shall require its contractors (and/or agents) to comply with all of the terms of this Certification, and shall provide each of its contractors (and/or agents) a copy of this Certification.

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal Permit. This Certification shall expire upon the expiration of the 404 Permit.

If you do not accept any of the conditions of this certification, you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition that conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This certification and its conditions are final and binding unless you ask for a hearing.

This the 20th day of April 2004

DIVISION OF WATER QUALITY

Alan W. Klimek, P.E.

WQC No. 3456

NORTH CAROLINA - DIVISION OF WATER QUALITY 401 WATER QUALITY CERTIFICATION SUMMARY OF PERMITTED IMPACTS AND MITIGATION REQUIREMENTS

In accordance with 15A NCAC 2H.0500, NCDOT, DWQ Project No. 040271, is authorized to impact the surface waters of the State of North Carolina as indicated below for the purpose of improving I-85 from north of SR 1002 to north of SR 2120 in Rowan County. All activities associated with these authorized impacts must be conducted in accordance with the conditions listed in the attached Certification transmittal letter. THIS CERTIFICATION IS NOT VALID WITHOUT THE ATTACHMENTS.

Summary of Impacts

I-2511 Section CB

- 0.05 acres of riverine wetlands through excavation and mechanized clearing;
- 0.47 acres of non-riverine wetlands through fill and mechanized clearing;
- 2218 linear feet of jurisdictional stream loss.

On-site mitigation to be performed by NCDOT:

- 1375 linear feet of on-site stream relocation using natural channel design.
- 0.05 acres of on-site riverine wetland restoration from adjacent I-2304 Section AA.

COMPENSATORY MITIGATION REQUIREMENTS:

LOCATION:

I-85

COUNTY:

Rowan County

BASIN/SUBBASIN: Yadkin-Pee Dee, Hydrologic Unit 03040103

As required by 15A NCAC 2B .0250 and 15A NCAC 2H .0506(h), and the conditions of this Certification, you are required to compensate for the above impacts through the restoration, creation, enhancement or preservation of wetlands, buffers, and surface waters as outlined below prior to conducting any activities that impact or degrade waters of the state. Mitigation to be performed by NC Ecological Enhancement Program in Hydrologic Unit 03040103:

- 267 linear feet of stream.
- 0.47 acres of non-riverine wetlands.

One of the options you have available to satisfy the compensatory mitigation requirements is through payment of a fee to the Ecosystem Enhancement Program per 15A NCAC 2R .0503. If you choose this option, please sign this form and mail it to the address listed below. An invoice for the appropriate amount of payment will be sent to you upon receipt of this form. PLEASE NOTE, THE ABOVE IMPACTS ARE NOT AUTHORIZED UNTIL YOU RECEIVE NOTIFICATION THAT YOUR PAYMENT HAS BEEN PROCESSED BY THE ECOSYSTEM ENHANCEMENT PROGRAM.

	Data
Signature	Date

ECOSYSTEM ENHANCMENT PROGRAM 1652 Mail Service Center RALEIGH, NC, 27699-1652

SPECIAL CONDITIONS (Action ID. 200221534; NCDOT/TIP I-2511CB)

Work Limits

- a. All work authorized by this permit must be completed in strict compliance with the attached plans, which are a part of this permit. The permittee will ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Any deviation in the construction design plans will be brought to the attention of the U.S. Army Corps of Engineers (USACE), Raleigh Regulatory Field Office, prior to any active construction in waters or wetlands, and any modification to the permit plans must be approved by the USACE prior to implementation.
- b. Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill, or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands, or any activities that cause the degradation of waters or wetlands, except as authorized by this permit, or any modification to this permit. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. There shall be no excavation from, waste disposal into, or degradation of, jurisdictional waters or wetlands associated with this permit without appropriate modification of this permit, including appropriate compensatory mitigation. This prohibition applies to all borrow and fill activities connected with this project.
- c. Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.

Related Laws

- d. The North Carolina Division of Water Quality has issued a conditioned Water Quality Certification for your project; the conditions of that certification are hereby incorporated as special conditions of this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
- e. All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-5083, Ext. 526 or (800) 662-7956 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

Project Maintenance

- f. Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used.
- g. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit, and any authorized modifications. A copy of this permit, and any authorized modifications, including all conditions, shall be available at the project site during construction and maintenance of this project
- h. The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).
- i. The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.

Enforcement

j. Violations of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act must be reported in writing to the Wilmington District U.S. Army Corps of Engineers within 24 hours of the permittee's discovery of the violation.

Mitigation

k. The permittee shall mitigate for 1,642 linear feet of impact to streams with important aquatic function, and 0.52 acre of permanent bottomland forest and emergent marsh wetland impact for this project, as described below (1,375 linear feet of onsite stream relocation, 0.1 acre of restoration equivalent riverine wetlands, and 0.94 acre of restoration equivalent non-riverine wetlands, through the North Carolina Ecosystem Enhancement Program (EEP), in the Yadkin River basin (Cataloging Unit 03040103)).

Onsite Stream Relocation

- 1. IMPLEMENTATION: The permittee shall mitigate for 1,375 linear feet of unavoidable impact to streams with important aquatic function, associated with this project, by completing 1,375 linear feet of onsite stream relocation, as described in the permit application. All stream relocations shall be constructed in accordance with the North Carolina Wildlife Resources Commission's (NCWRC) "Stream Relocation Guidelines." NCDOT shall consult with NCWRC on all stream relocations and implement all practicable recommendations in the design of specific site requirements for re-establishment of bank vegetation, and placement of meanders and habitat structures. Vegetation shall be used to the maximum extent practicable to stabilize banks, and riprap and other man-made structural measures shall be minimized. The permittee shall construct all channel relocations in a dry work area, and stabilize the new channel before stream flows are diverted. Whenever possible, the permittee shall allow new channels to stabilize for an entire growing season.
- m. AS-BUILT SURVEY: The permittee shall complete an as-built channel survey within sixty days of completion of the stream relocation construction. The permittee shall document changes in the dimension, pattern, profile, vegetation plantings, and structures installed, of the relocated channel from the proposed design. The permittee shall also include in the as-built survey: photo documentation at representative segments and structures; and a plan view diagram.
- n. MONITORING SCHEDULE: The permittee shall perform the following components of Level I monitoring each year for the 5-year monitoring period: Reference photos; plant survival (i.e., identify specific problem areas (missing, stressed, damaged or dead plantings), estimated causes, and proposed/required remedial action); visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. The permittee shall submit the monitoring reports to the Corps of Engineers, Raleigh Regulatory Field Office Project Manager, within sixty days after completing the monitoring. If less than two bankfull events occur during the first 5 years, the permittee shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the five-year monitoring period, the Corps of Engineers, in consultation with the resource agencies, may determine that further monitoring is not required. It is suggested that all bankfull occurrences be monitored and reported through the required monitoring period. The permittee shall perform and submit photo documentation twice each year (summer and winter) for the 5-year monitoring period, and for any subsequently required monitoring period.
- o. MONITORING DATA/REPORT: The permittee shall include the following information in the Level I monitoring report for the site: reference photos; plant survival notes and recommendations, as appropriate; and a report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. The permittee shall complete the Monitoring Data Record, Sections 1, 2 and 3 (pages 1, 2 and 3, attached), for each representative segment of the channel, and for each year of monitoring (twice each year, summer and winter, for reference photos). The permittee shall include in the monitoring reports a

discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

p. STREAM MITIGATION SUCCESS CRITERIA: The mitigation success criteria, and required remediation actions, will be generally based on the attached Appendix II, and the Photo Documentation, Ecological Function, and Channel Stability criteria in the "Stream Mitigation Guidelines", dated April, 2003 (available on the internet at http://www.saw.usace.army.mil/wetlands/Mitigation/stream_mitigation.html), pages 24 and 25, under "Success Criteria: ".

EEP Mitigation

- q. Compensatory mitigation for the unavoidable impacts to 0.05 acre of riverine wetlands, 0.47 acre of non-riverine wetlands, and 267 linear feet of stream associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in letters dated May 18, 2004 and September 23, 2004, from William D. Gilmore, EEP Transition Manager. Pursuant to the EEP Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003, the EEP will provide 0.1 acre of restoration equivalent riverine wetlands, 0.94 acre of restoration equivalent non-riverine wetlands, and 534 linear feet of restoration equivalent warm water stream channel in the Yadkin River basin (Hydrologic Cataloging Unit 03040103) by one year from the date of this permit. For wetlands, a minimum of 1:1 (impact to mitigation) must be in the form of wetland restoration. The NCDOT shall, within 30 days of the issue date of this permit, certify that sufficient funds have been provided to EEP to complete the required mitigation, pursuant to Paragraph V. of the MOA.
- r. Failure to institute and carry out the details of special conditions a. q., above, may result in a directive to cease all ongoing and permitted work within waters and/or wetlands associated with TIP I-2511CB, or such other remedy as the District Engineer or his authorized representatives may seek.

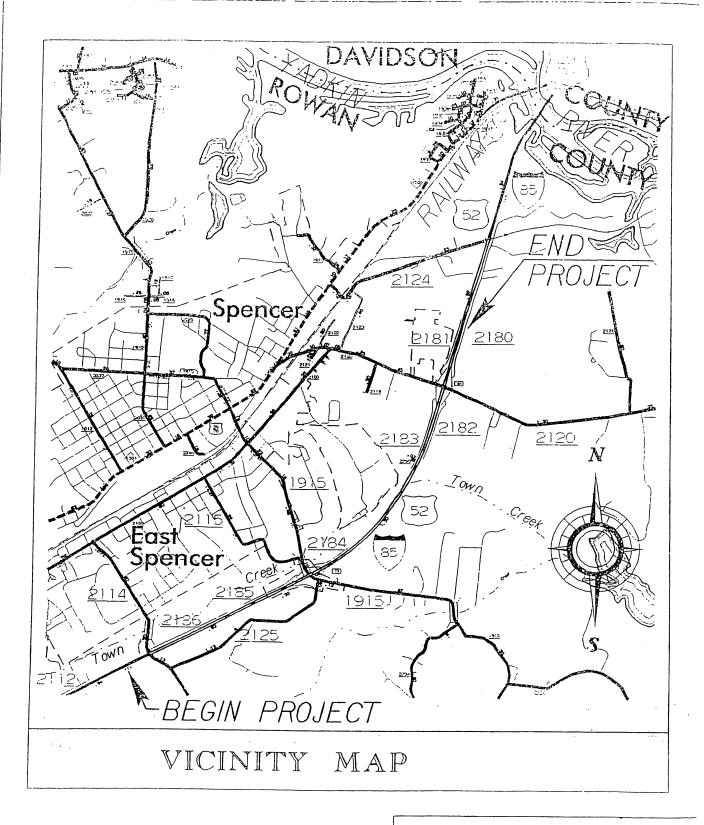
Instream Work Moratorium

s. NCDOT shall not perform any work in the waters of Town Creek, including channel diversion, during the period of April 1 to June 1 of any year. NCDOT may perform work in dewatered portions of the stream during the moratorium.

Pre-Construction

t. Prior to commencing construction within jurisdictional waters of the United States, the permittee shall forward the latest version of project construction drawings to the USACE, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager. Half-size drawings are acceptable.

- u. The permittee shall schedule an environmental preconstruction meeting between its representatives, the contractor's representatives, and the USACE, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all of the terms and conditions contained within this Department of the Army Permit. The permittee shall provide the USACE, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager, with a copy of the final plans at least two weeks prior to the preconstruction meeting along with a description of any changes that have been made to the project's design, construction methodology or construction timeframe. The permittee shall schedule the environmental preconstruction meeting for a time when the USACE and North Carolina Division of Water Quality (NCDWQ) Project Managers can attend. The permittee shall invite the USACE and NCDWQ Project Managers a minimum of four weeks in advance of the scheduled meeting in order to provide those individuals with ample opportunity to schedule and participate in the required meeting.
- v. To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall provide the USACE with appropriate maps indicating the locations of proposed borrow or waste sites as soon as the permittee has that information. The permittee will coordinate with the USACE before approving any borrow or waste sites that are within 400 feet of any streams or wetlands. The permittee shall ensure that all such areas comply with condition (b.) of this permit, and shall require and maintain documentation of the location and characteristics of all borrow and disposal sites associated with this project. This information will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with the preceding condition (b.). All information will be available to the USACE upon request. NCDOT shall require its contractors to complete and execute reclamation plans for each waste and borrow site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps of Engineers within 30 days of the completion of the reclamation work.



NCDOT

DIVISION OF HIGHWAYS ROWAN COUNTY

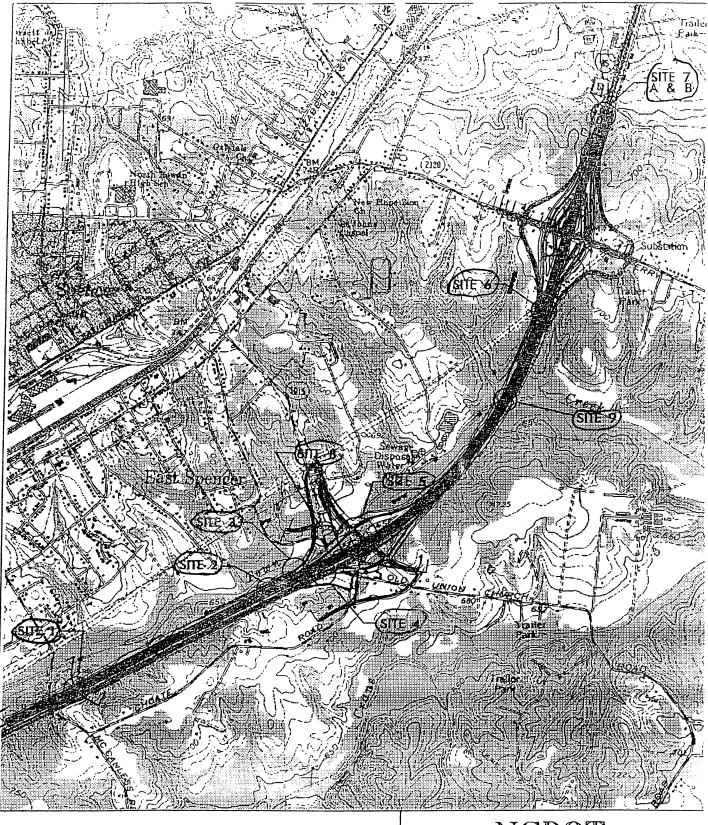
PROJECT: 8.1631503 (I-2511CB)

I-85 FROM N OF SR 1002 (BRINGLE FERRY RD.) TO N OF SR 2120 (LONG FERRY RD.) NEAR SPENCER

210q

SHEET | OF 21

- / m / m



SITE MAP

NCDOT

DIVISION OF HIGHWAYS ROWAN COUNTY

PROJECT: 8.1631503 (I-2511CB)

I-85 N OF SR 1002 (BRINGLE FERRY RD.) TO N OF SR 2120 (LONG FERRY RD.) NEAR SPENCER DENOTES FILL IN SURFACE WATER

DENOTES FILL IN SURFACE WATER (POND)

DENOTES TEMPORARY FILL IN WETLAND

DENOTES EXCAVATION IN WETLAND

DENOTES TEMPORARY FILL IN SURFACE WATER

DENOTES MECHANIZED CLEARING

→ FLOW DIRECTION

- TOP OF BANK

- EDGE OF WATER

 $\frac{\mathsf{C}}{-}$ — PROP.LIMIT OF CUT

_F__ — PROP.LIMIT OF FILL

-NG-- NATURAL GROUND

- — <u>PL</u> — - PROPERTY LINE

-TDE - TEMP. DRAINAGE

— EAB— EXIST. ENDANGERED

- EPB - EXIST. ENDANGERED

BOULDER

PROP. RIGHT OF WAY

EASEMENT _ PERMANENT DRAINAGE

EASEMENT

ANIMAL BOUNDARY

PLANT BOUNDARY

— WATER SURFACE

CORE FIBER ROLLS

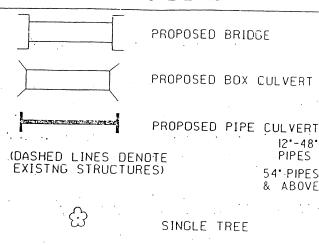
LIVE STAKES

WLB-

WLB

TB.

-PDE -



DRAINAGE INLET

ADJACENT PROPERTY OWNER
OR PARCEL NUMBER
IF AVAILABLE

PREFORMED SCOUR HOLE

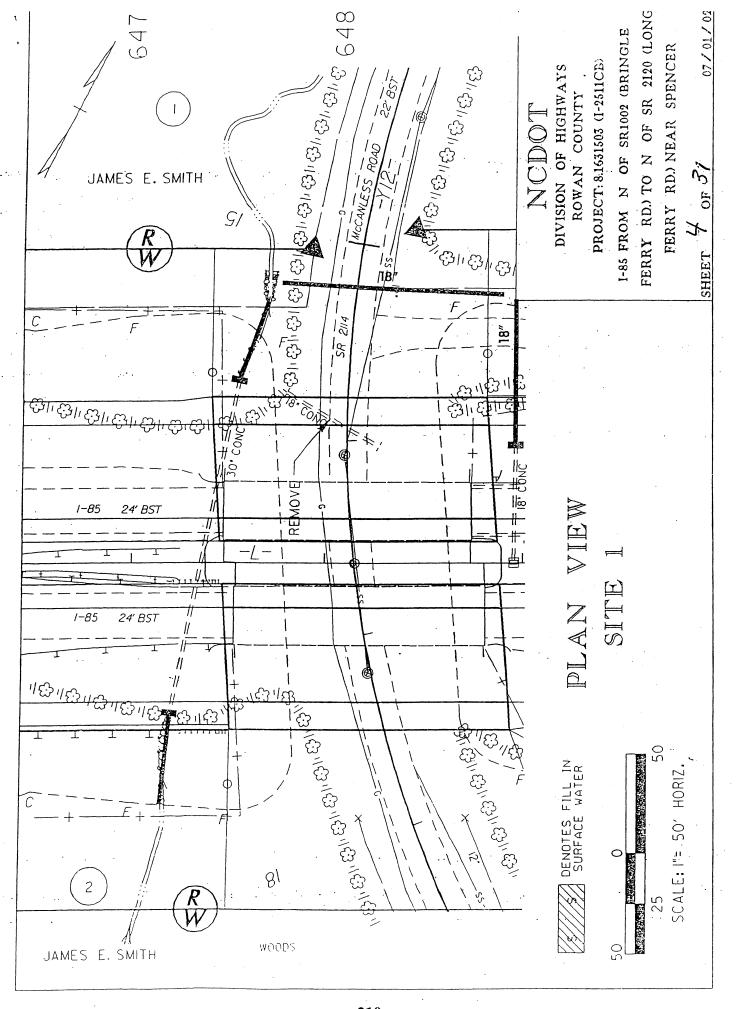


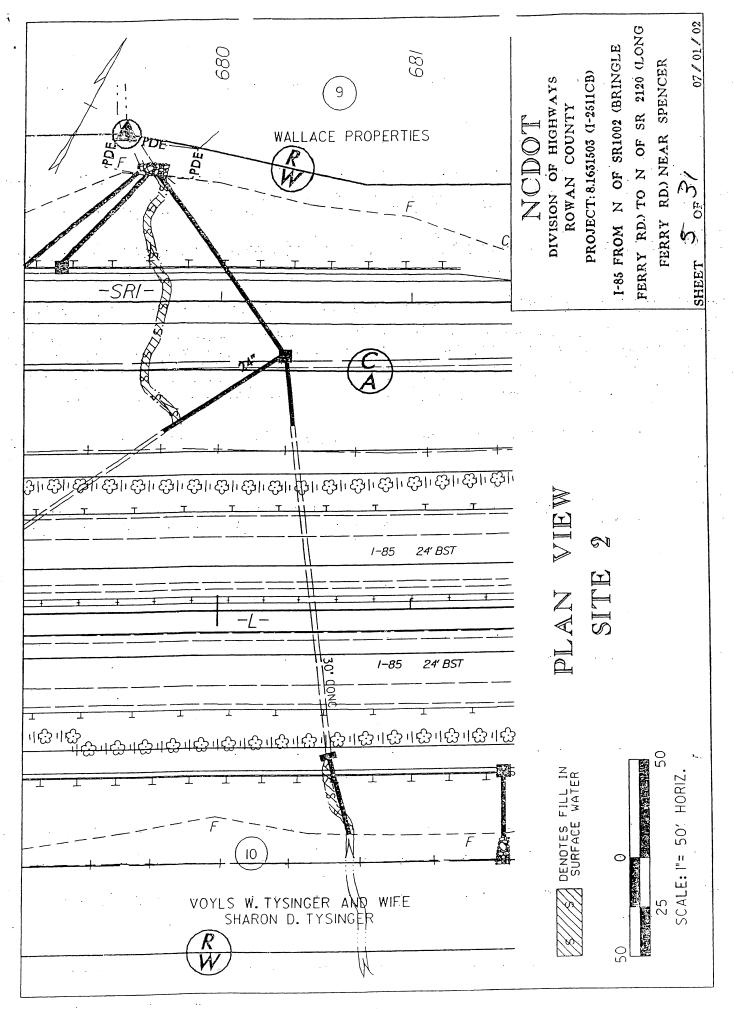
NCDOT

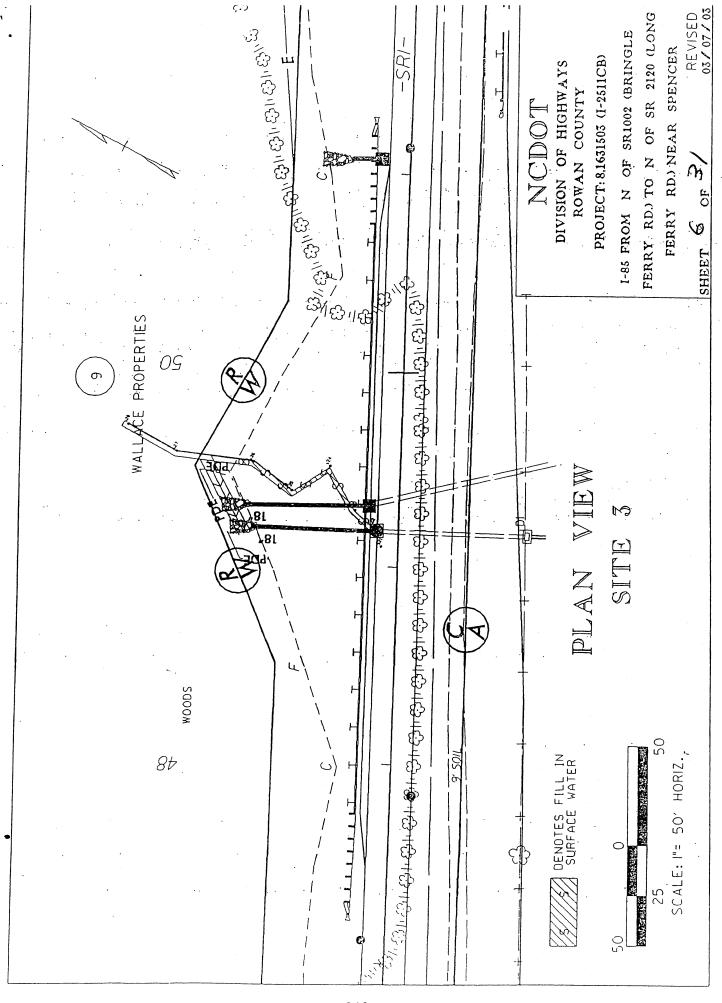
DIVISION OF HIGHWAYS ROWAN COUNTY

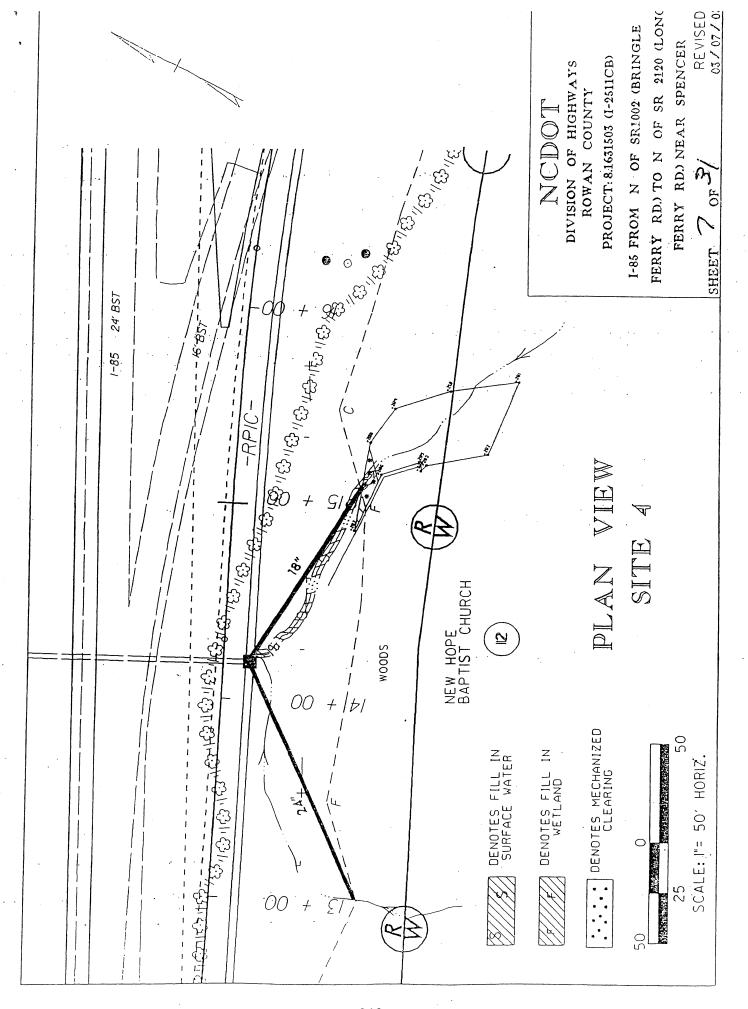
PROJECT: 8.1631503 (I-2511CB)

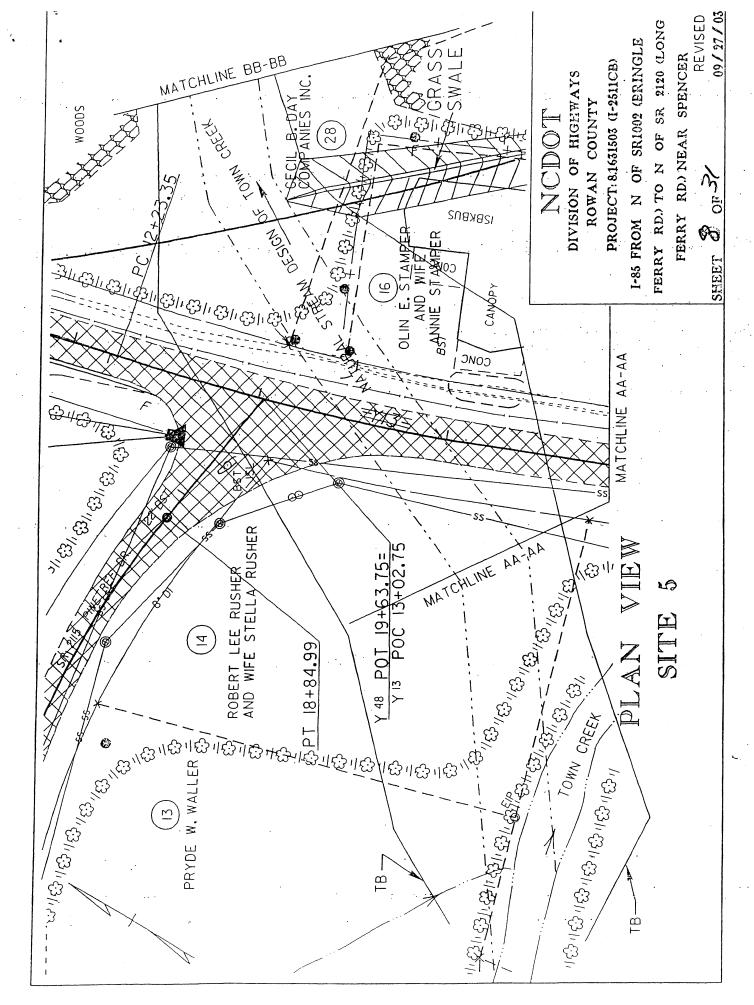
I-85 FROM N OF SR 1002 (BRINGLE FERRY RD.) TO N OF SR 2120 (LONG FERRY RD.) NEAR SPENCER

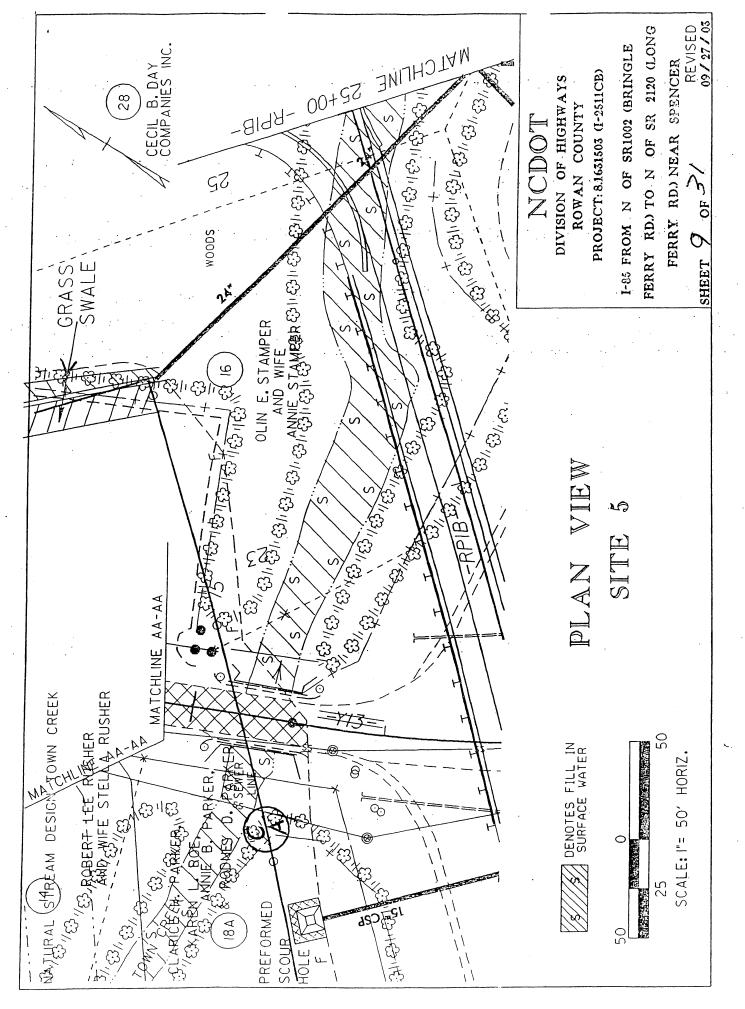


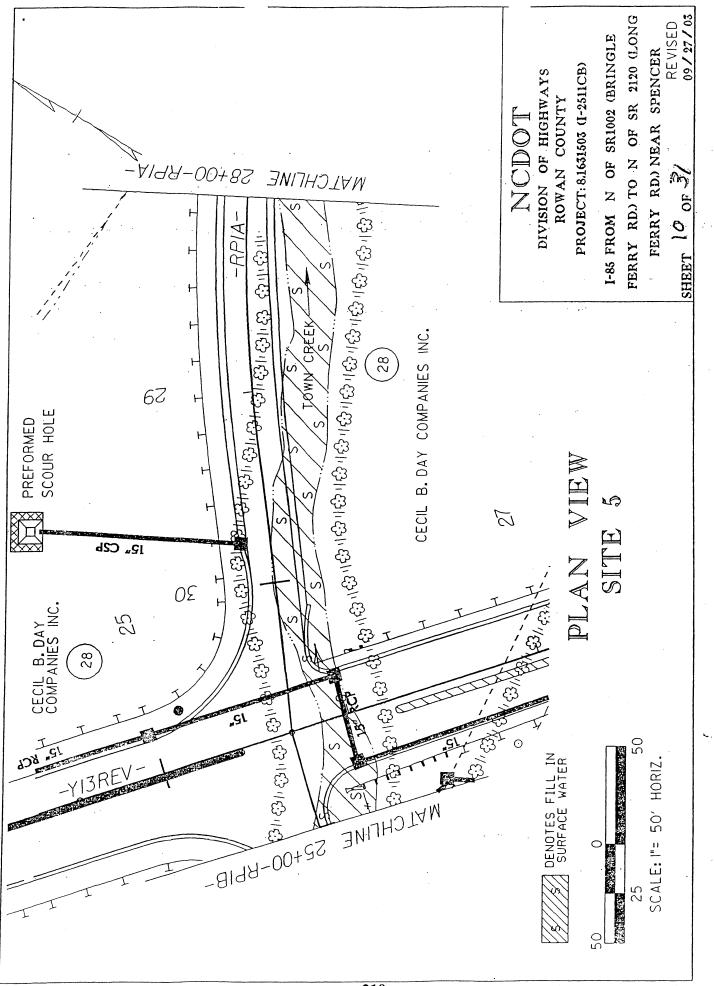


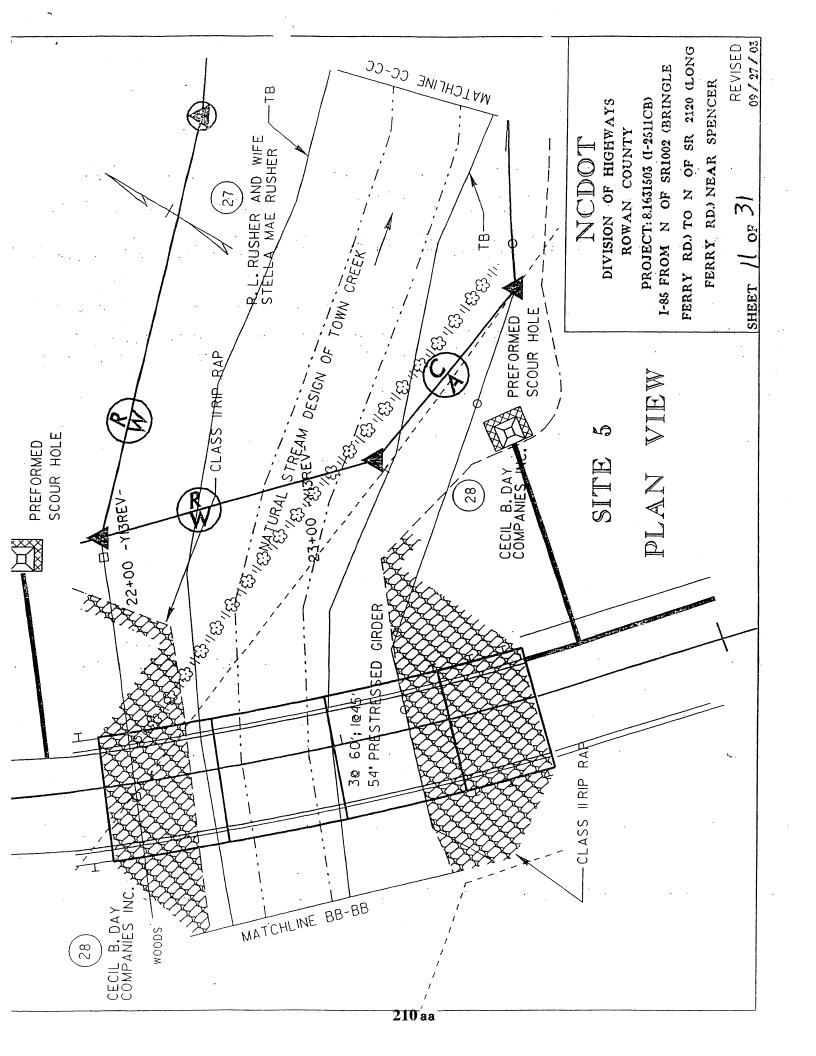


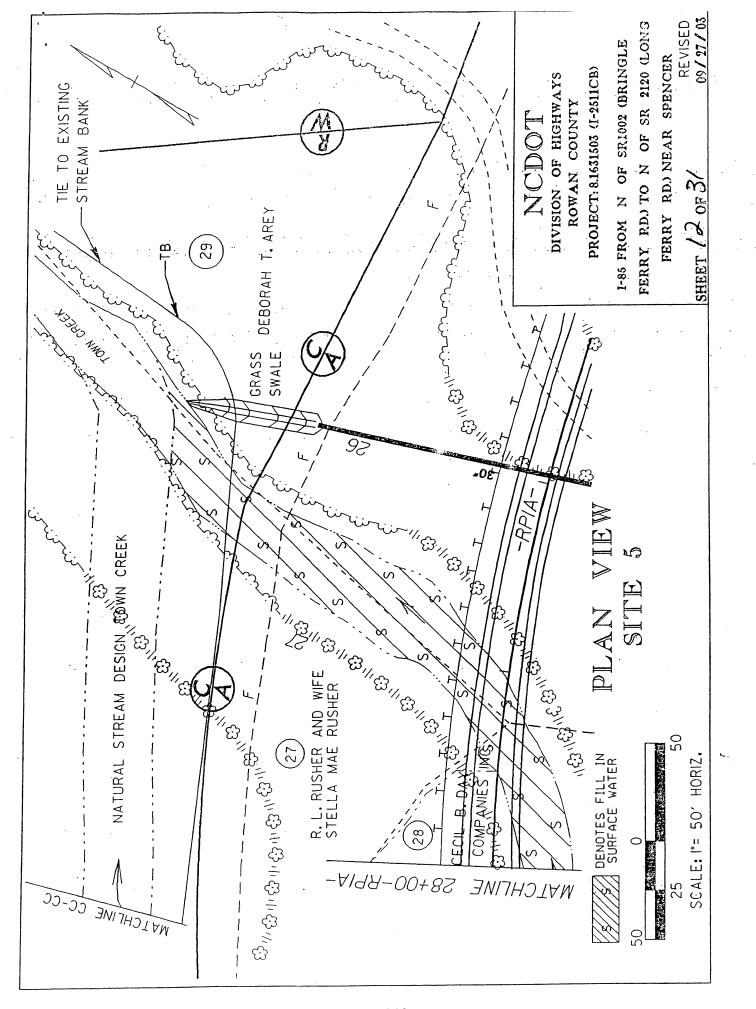












Stream Mitigation Plan I-2511CB Rowan County January 21, 2003

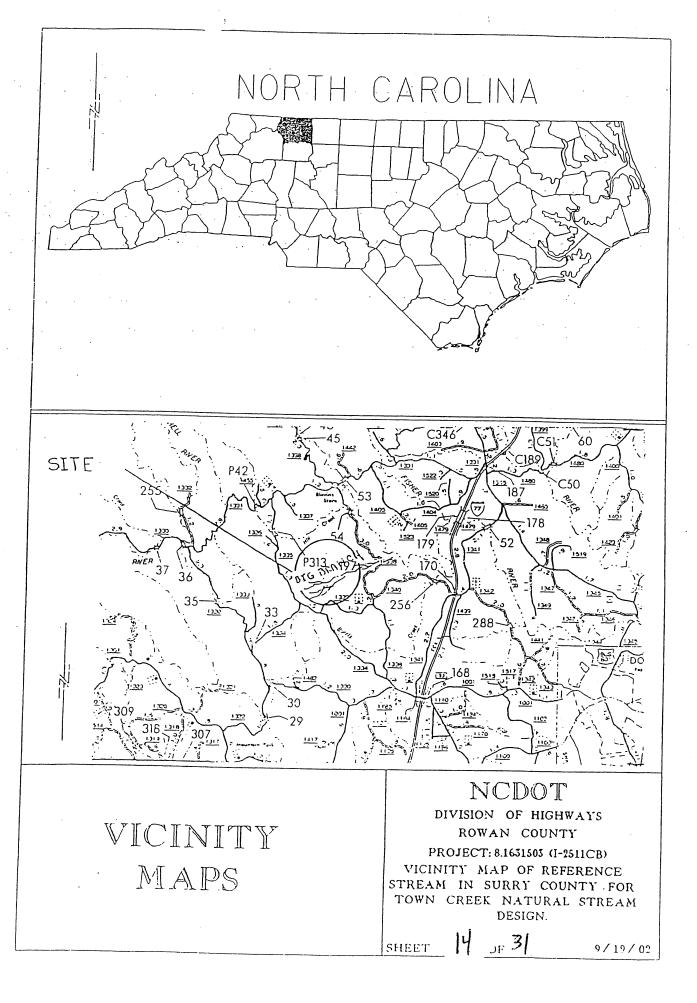
This project involves relocation and restoration of approximately 1375ft. of Town Creek. Town Creek is unavoidably being impacted by the proposed I-85 widening from north of SR 1002(Bringle Ferry Rd.) to north of SR 2110(Long Ferry Rd.) near Spencer. Upstream of the site Town Creek flows through Salisbury where it passes through several road culverts and an 800ft. bottomless culvert as it leaves the city limits. Downstream Town Creek flows through a 4-barrel culvert under I-85 before reaching High Rock Lake. The existing stream has been channelized and relocated over the years and is apparent from the trapezoidal shape of the stream and earth berm adjacent to the stream bank. The stream has very little riffle/ pool sequence and sinuosity. The side slopes are 1:1 and are relatively stable in wooded areas. The existing stream reach is entrenched and most nearly fits the geomorphic characteristics of a G4 stream type (see Morphological Measurement Table).

The drainage area contributing to this project site is 16.3sq.mi. Town Creek for the most part lies between I-85 and the Southern Railroad and is predominately wooded and agrarian in the upper half and heavily developed from Salisbury to Spencer. Development in the basin is estimated to be between 10 and 15% and is expected to increase. The stream extends approximately 12mi. upstream of the site.

As stated above the existing stream is entrenched. Morphological data was difficult to collect on the existing stream but was attempted and is shown on the Morphological Measurement Table. Pebble counts were conducted at two locations and the D50 size material was approximately 0.16ft. (52mm). The bankfull depth and width were determined for the existing stream so that a bankfull discharge could be developed for design purposes.

The reference stream for the proposed project is Big Branch in Surry County (see attached location map). The drainage area for Big Branch is 1.9sq.mi. Morphological ratios from the reference stream were used in conjunction with the bankfull depth from the existing stream to extrapolate pertinent data to the proposed stream. Big Branch best fits the geomorphic characteristics of an E4 stream type (see Morphological Measurement Table).

The proposed stream reach has a drainage area of 16.3sq.mi. and will be 1375ft. long. The width/depth ratio was adjusted to 14.5 so that the stream could be constructed as a C4 stream type. Bed material from the existing stream will be removed, stockpiled and placed on the riffles of the proposed stream (see plan for location.).



Sediment Transport:

The following is the comparison for shear stress and stream power for the existing and proposed Town Creek.

The shear calculations come from the HYCHL program in the FHWA Integrated Drainage Design Computer System, Version 6.0 (HYDRAIN). HYCHL can analyze channels for stability through application of tractive force theory. The program compares shear exerted on the lining with the permissible shear stress of the lining. HYCHL can analyze composite linings (i.e. a bed lining and a side slope lining). Attached are the results calculated by HYCHL for the proposed stream having a natural cobble bed liner (d50=0.16ft.) and vegetative side slope lining. The results were determined for the existing bankfull elevation, the proposed bankfull elevation, and the proposed Q2 elevation. The results indicate a stable composite lining for the proposed stream. Stream power in lb/ft-s is given by the equation $\omega = \tau$ V, where τ is the average channel shear stress in lb/ft² given by HYCHL.

	STREAM POWER	BED SHEAR	SIDE SHEAR	PERMISSIBLE SHEAR	
				Bed	Side
EXISTING STREAM (bkf)	3.1	1.12	0.86	1.5	2.0
PROPOSED STREAM (bkf)	2.9	1.03	0.80	1.5	2.0
PROPOSED Q2	2.6	1.43	1.39	1.5	2.0

Commands Read From File: :-2511t1.chl

"JOB -TOWN CREEK NATURAL STREAM DESIGN(1-2511CB) UNI

++ UNITS PARAMETER = 0 (ENGLISH)

CHL .0043,500

TRP 25 2

** LEFT SIDE SLOPE 2.0 AND RIGHT SIDE SLOPE

** THE BASE WIDTH OF THE TRAPEZOID (ft) 25.00

N .04,.09

** LOW FLOW N VALUE= .040

** SIDE SLOPE N VALUE= .090

LRR 0.16,3

** D50 (ft) .16

CPS I

LVG C

PSS 1.5,2

** USER SUPPLIED - LOW PERMIS. SHEAR = (lb/ft^2) 1.50

** USER SUPPLIED - HIGH PERMIS. SHEAR = (lb/ft^2) 2.00

END

-TOWN CREEK NATURAL STREAM DESIGN(I-2511CB)

INPUT REVIEW

DEFAULT ANGLE OF REPOSE (degrees): 35.71

DESIGN PARAMETERS:

.

2.0

DESIGN DISCHARGE (ft^3/s):

500.00

CHANNEL SHAPE:

TRAPEZOIDAL

CHANNEL SLOPE (ft/ft):

.004

LINING TRANSITION HEIGHT (ft):

1.00

HYDRAULIC CALCULATIONS USING NORMAL DEPTH

DESIGN MUMIXAM ---------FLOW (cfs) 500.00 794.65 4.17 5.59 DEPTH (ft) 138.89 202.26 AREA (ft^2) WETTED PERIMETER (ft) 43.63 50.00 3.18 4.05 HYDRAULIC RADIUS (ft) 3.60 3.93 VELOCITY (ft/s) MANNINGS N (LOW FLOW) .040 .040 .090 .090 MANNINGS N (SIDE SLOPE) EFFECTIVE MANNINGS N .059 .063

.11

STABILITY ANALYSIS

REYNOLDS NUMBER (10^5)

CONDITION	LINING TYPE		PERMIS SHR (lb/ft^2)	CALC. SHR (lb/ft^2)	STAB. FACTOR	REMARKS
LOW FLOW LINING BOTTOM; STRAIGHT SIDE SLOPE LINING	RIPRAP		1.50	1.12	1.34	STABLE
SIDE; STRAIGHT	VEGETATIVE	С	2.00	.86	2.33	STABLE

RATIO OF SIDE SHEAR TO BOTTOM SHEAR = .77

** NORMAL END OF HYCHL ***

EXISTING BANKFULL

Commands Read From File: 1-2511t.chl

- JOB - TOWN CREEK NATURAL STREAM DESIGN(I-2511CB) UNI

· · UNITS PARAMETER = 0 (ENGLISH)

CHL .0043,500

TRP 30 2

** LEFT SIDE SLOPE 2.0 AND RIGHT SIDE SLOPE 2.0

** THE BASE WIDTH OF THE TRAPEZOID (ft) 30.00

N .04,.1

** LOW FLOW N VALUE= .040

** SIDE SLOPE N VALUE= .100

LRR 0.16,3

** D50 (ft) .16

CPS 1

LVG B

PSS 1.5,2

** USER SUPPLIED - LOW PERMIS. SHEAR = (1b/ft^2)

** USER SUPPLIED - HIGH PERMIS. SHEAR = (1b/ft^2) 2.00

-TOWN CREEK NATURAL STREAM DESIGN (I-2511CB)

-----INPUT REVIEW

DEFAULT ANGLE OF REPOSE (degrees):

DESIGN PARAMETERS:

DESIGN DISCHARGE (ft^3/s):

500.00

PROPOSED BANKFULL

TRAPEZOIDAL

CHANNEL SHAPE: CHANNEL SLOPE (ft/ft):

.004

LINING TRANSITION HEIGHT (ft):

,_____ IYDRAULIC CALCULATIONS USING NORMAL DEPTH _______

	DESIGN	MAXIMUM
'LOW (cfs)	500.00	887.62
EPTH (ft)	3.82	5.59
REA (ft^2)	143.84	230.21
ETTED PERIMETER (ft)	47.09	55.00
YDRAULIC RADIUS (ft)	3.05	4.19
ELOCITY (ft/s)	3.48	3.86
ANNINGS N (LOW FLOW)	.040	.040
ANNINGS N (SIDE SLOPE)	.100	.100
FFECTIVE MANNINGS N	.059	.066
EYNOLDS NUMBER (10^5)	.11	

TABILITY ANALYSIS

CONDITION	LINING TYPE	PERMIS SHR (1b/ft^2)	CALC. SHR (1b/ft^2)	STAB. FACTOR	REMARKS
OW FLOW LINING BOTTOM; STRAIGHT DE SLOPE LINING	RIPRAP	1.50	1.03	1.46	STABLE
SIDE; STRAIGHT	VEGETATIVE	B 2.00	. 80	2.51	STABLE

TIO OF SIDE SHEAR TO BOTTOM SHEAR = .78

* NORMAL END OF HYCHL ***

JOB - TOWN CREEK NATURAL STREAM DESIGN(I-2511CB)

· · UNITS PARAMETER = 0 (ENGLISH)

CHL .0043 1000 TRP 30 6.7

** LEFT SIDE SLOPE 6.7 AND RIGHT SIDE SLOPE 6.7

** THE BASE WIDTH OF THE TRAPEZOID (ft) 30.00

N .04 .1

** LOW FLOW N VALUE = .040

** SIDE SLOPE N VALUE= .100

LRR 0.16 3

** D50 (ft) .16

CPS 1.0

PSS 1.5 2

LVG B

** USER SUPPLIED - LOW PERMIS. SHEAR = (lb/ft^2) 1.50

** USER SUPPLIED - HIGH PERMIS. SHEAR = (lb/ft^2) 2.00

-TOWN CREEK NATURAL STREAM DESIGN(I-2511CB)

_____ INPUT REVIEW

DEFAULT ANGLE OF REPOSE (degrees):

DESIGN PARAMETERS:

DESIGN DISCHARGE (ft^3/s):

1000.00

PROPOSED Q2

CHANNEL SHAPE:

TRAPEZOIDAL

CHANNEL SLOPE (ft/ft):

.004

LINING TRANSITION HEIGHT (ft):

HYDRAULIC CALCULATIONS USING NORMAL DEPTH ______

	DESIGN	MAXIMUM
FLOW (cfs)	1000.00	1095.98
DEPTH (ft)	5.33	5.59
AREA (ft^2)	349.91	377.10
WETTED PERIMETER (ft)	102.17	105.74
HYDRAULIC RADIUS (ft)	3.42	3.57
VELOCITY (ft/s)	2.86	2.91
MANNINGS N (LOW FLOW)	.040	.040
MANNINGS N (SIDE SLOPE)	.100	.100
EFFECTIVE MANNINGS N	.077	.078
REYNOLDS NUMBER (10^5)	.11	

STABILITY ANALYSIS

CONDITION	LINING TYPE		PERMIS SHR (lb/ft^2)	CALC. SHR (1b/ft^2)		REMARKS
OW FLOW LINING						
BOTTOM; STRAIGHT	RIPRAP		1.50	1.43	1.05	STABLE
SIDE; STRAIGHT	VEGETATIVE	В	2.00	1.39	1.44	STABLE

ATIO OF SIDE SHEAR TO BOTTOM SHEAR = .97

** NORMAL END OF HYCHL ***

Variables	Existing Channel	Proposed React.	USGS Station	Reference Reach
Stream type	G4	C4	NONE	E4
2. Drainage area (D.A.)	16.3sq.mi.	16.3sq.mi.		1.9sq.mi.
3. Bankfull width (Wbkl)	40ft.	45ft.		21.5ft.
4. Bankfull mean depth (dbkf)	3.6ft.	3.1ft. ·		2.0ft.
5. Width/depth ratio (W _{bkf} /d _{bkf})	11	14.5		10.8
6. Bankfull cross-sectional area (A _{bkf})	138sq.ft.	139sq.ft.		42.8ft.
7. Bankfull mean velocity (Vькі)	3.6fps	3.5fps		
8. Bankfull discharge (Qық)	450cfs	500cfs		
9. Bankfull max depth (d _{mbkf})	4.0ft.	3.7.		2.6ft.
10. Width of floodprone area (W _{fpa})	. 54ft.	130ft.		70ft.
11. Entrenchment ratio (W _{fpa} /W _{bkl})	1.35	2.9		3.26
12. Meander length (L _m)	N/A	715ft.		54ft.
13. Ratio of meander length to bankfull width (L _m /W _{bkf})	N/A	16		2.58
14. Radius of curvature (R _c)	N/A	353ft.		223ft.
15. Ratio of radius of curvature to bankfull width (R₀Wы)	N/A	7.8		10.4
16. Belt width (Wbit)	N/A	190ft.		37ft.
17. Meander width ratio (W _{blt} /W _{bkf})	N/A	4.2		1.8
18. Sinuosity (stream length/valley length) (K)	1.1	1.16		1.1
19. Valley Slope (VS)	0.0044	0.005	÷	0.0087
20. Average slope (CS)	0.0041	0.0043		0.0087
21. Pool slope	N/A	0.0001		0.0001
22. Ratio of pool slope to average slope	N/A	0.02	·	0.02
23. Maximum pool depth (dp _{max})	N/A	7.2ft.		4.0ft.
24. Ratio of pool depth to average bankfull depth (dp/d _{bkl})	N/A	2.3		2
25. Pool width (Wp)	N/A	37ft.		17.8ft.
26. Ratio of pool width to bankfull width	N/A	0.82		0.83
27. Pool to pool spacing	N/A	353ft.		138.7ft.
28. Ratio of pool to pool spacing to bankfull width	N/A	7.8		6.68
29. Ratio of lowest bank height to bankfull height (or max bankfull depth) (BH _{low} /d _{mbkf})	1.8	1		1 ,

Note: See sheet 9C of 18 for vicinity map of reference stream

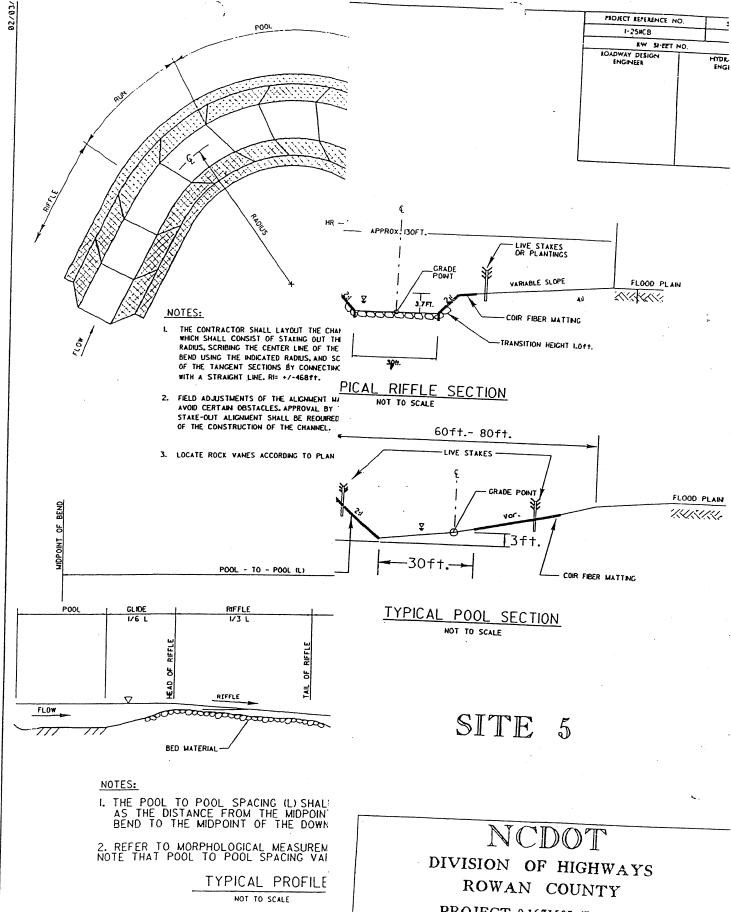
NATURAL CHANNEL DESIGN DATA

MORPHOLOGICAL MEASUREMENT TABLE

Reference Reach Name: Big Branch

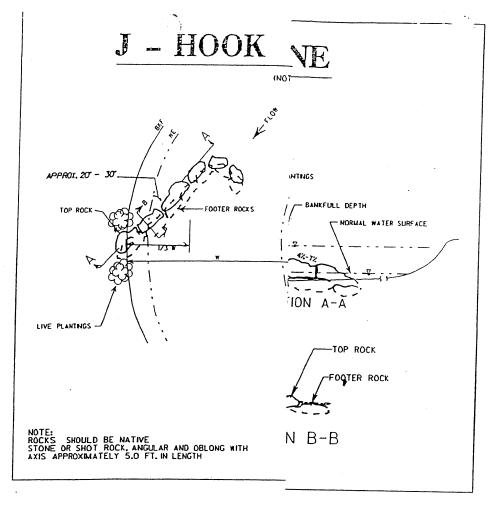
SITE _5_

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
ROWAN COUNTY
PROJECT: 8.1631503(I-2511CB)
I-85 FROM N OF SR1002(BRINGLE FERRY
ROAD TO N OF SR2120(LONG FERRY
ROAD) NEAR SPENCER
DATE: SEPTEMBER 2001
SHEET 19 OF 31



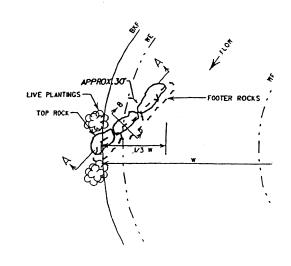
PROJECT: 8.1631503 (I-2511CB)

I-85 FROM N OF SR1002(BRINGLE FERRY
ROAD TO N OF SR2120 (LONG FERRY ROAD
NEAR SPENCER



ROCK

(NOT



NOTE:
ROCKS SHOULD BE NATIVE
STONE OR SHOT ROCK, ANGULAR AND OBLONG WITH
AXIS APPROXIMATELY 5.0 ft. IN LENGTH

NCDOT

DIVISION OF HIGHWAYS ROWAN COUNTY

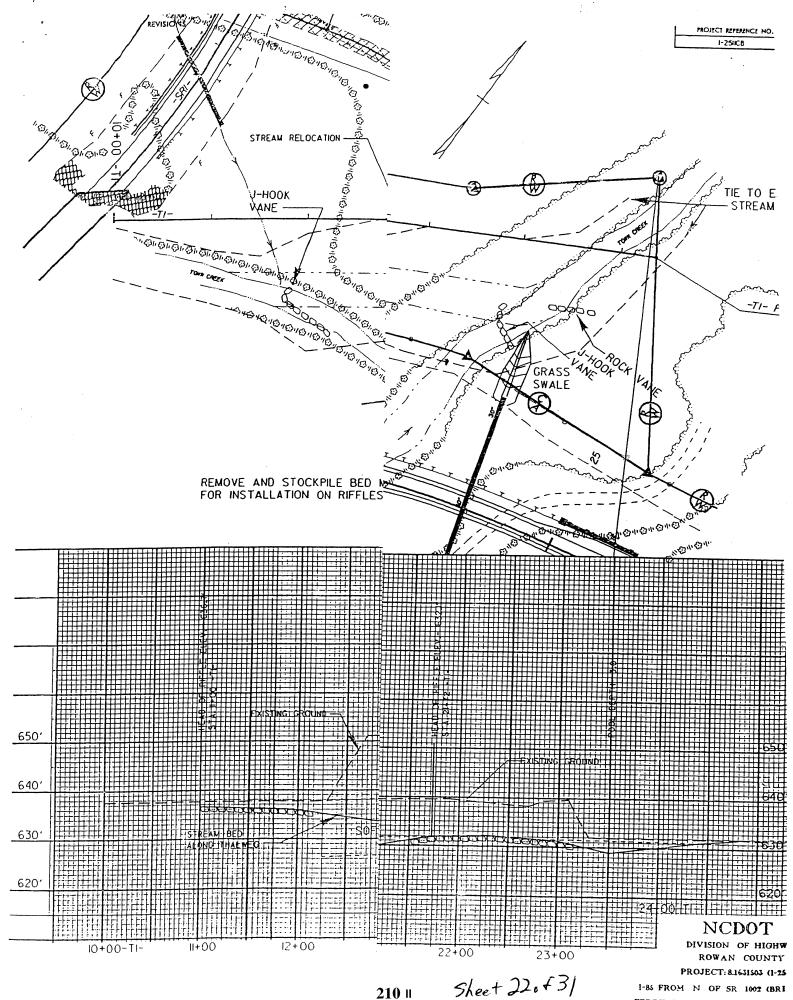
PROJECT: 8.1631503 (I-2511CB)

I-85 FROM N OF SR1002(BRINGLE FERRY

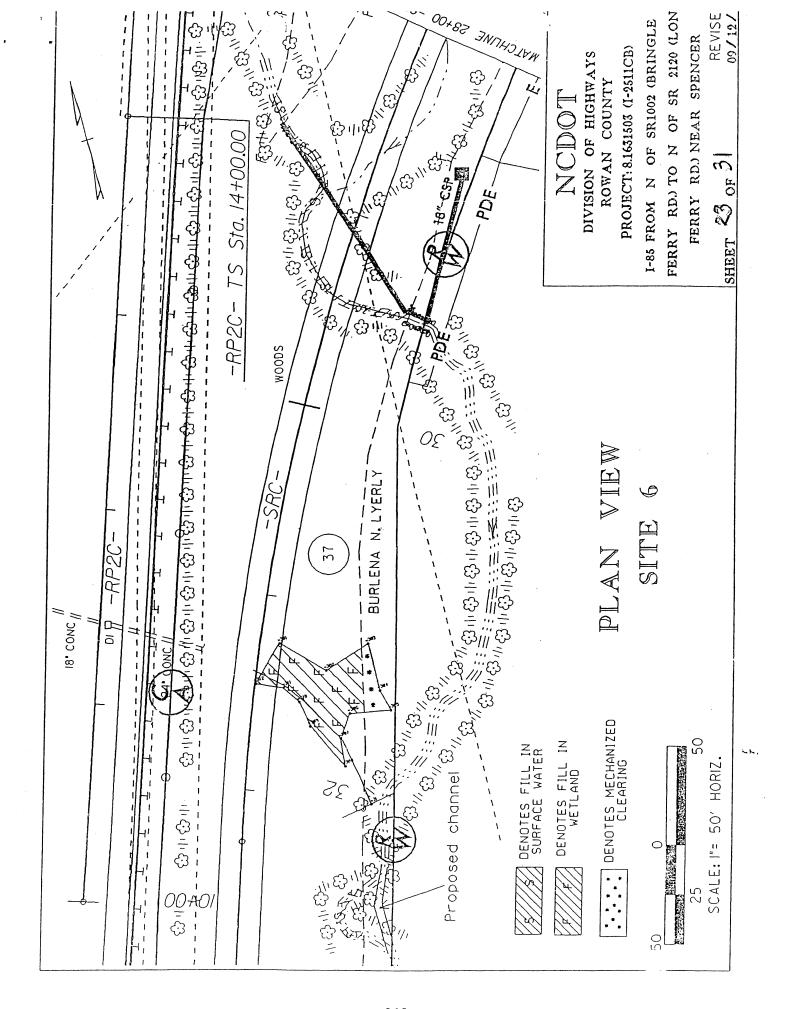
ROAD TO N OF SR2120 (LONG FERRY ROAD)

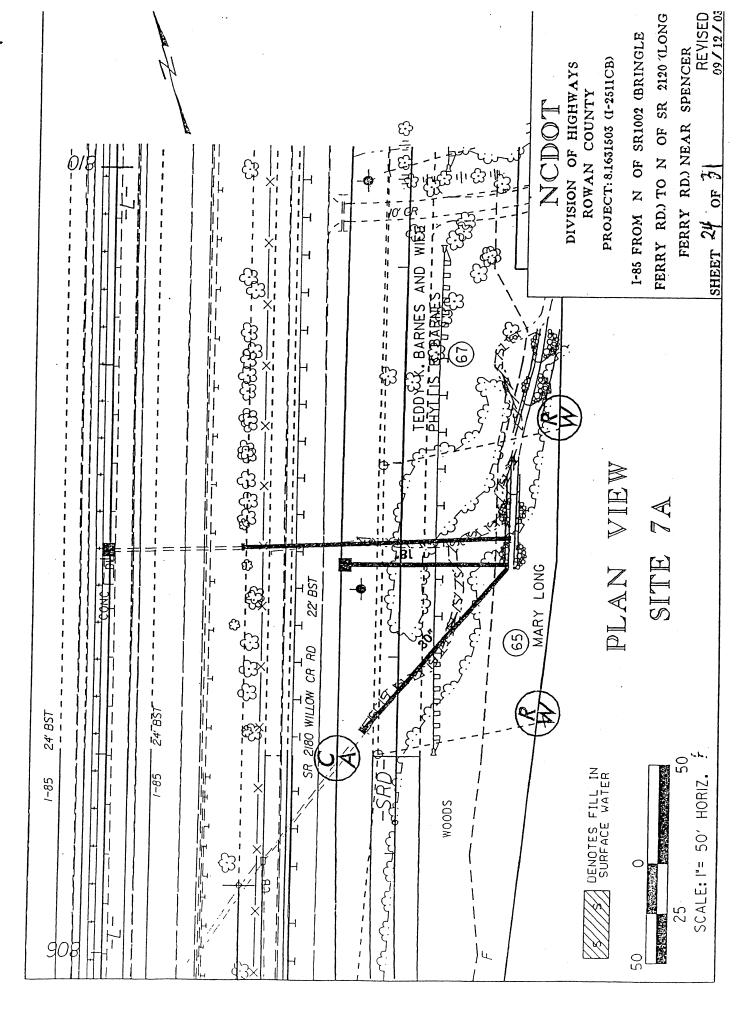
NEAR SPENCER

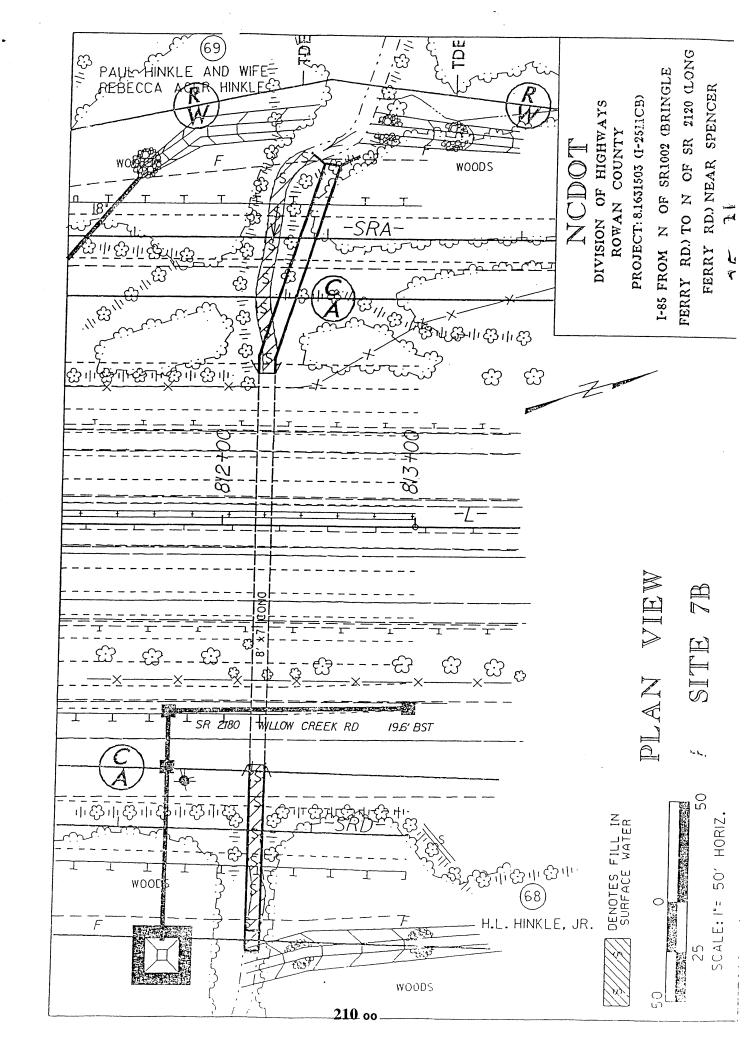
210 kk OF 3/

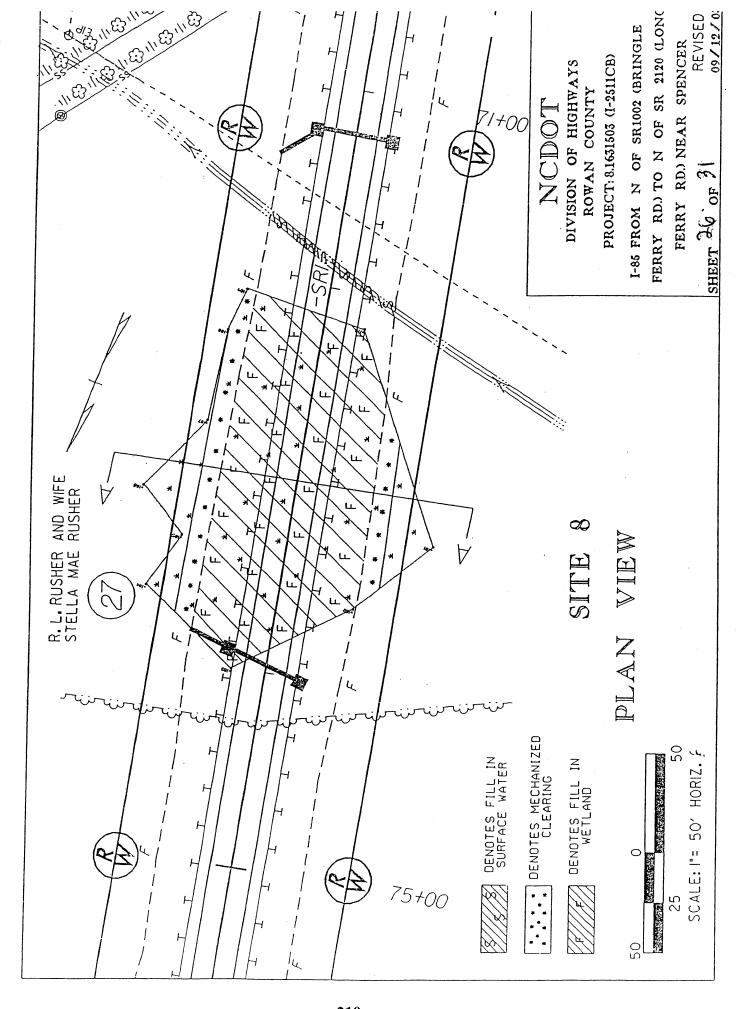


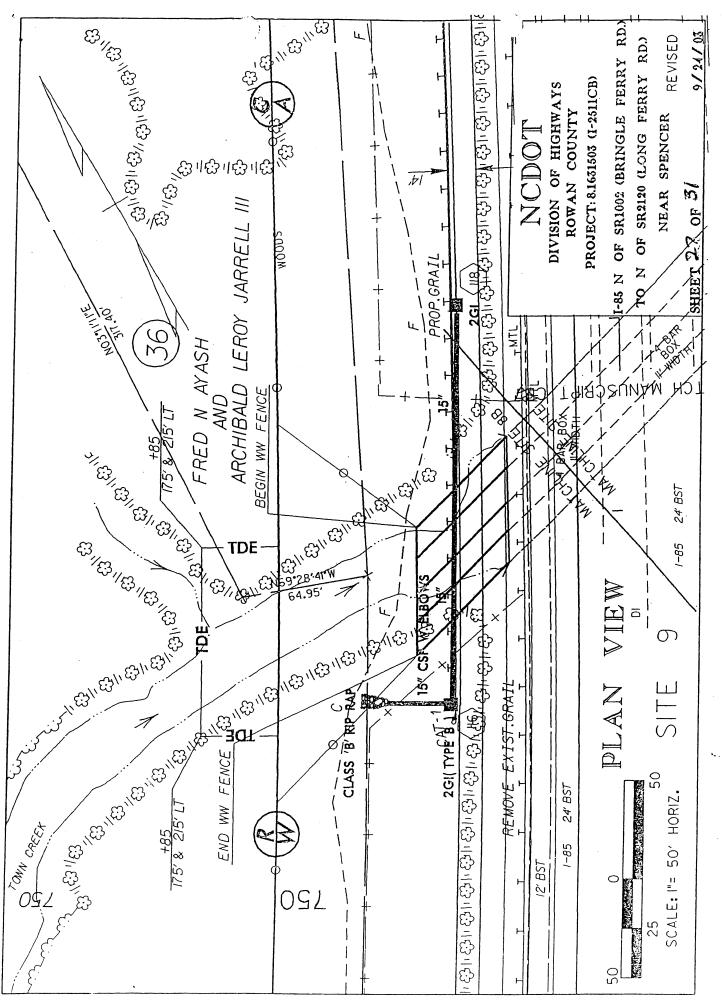
FERRY RDJ TO N OF SR 2120

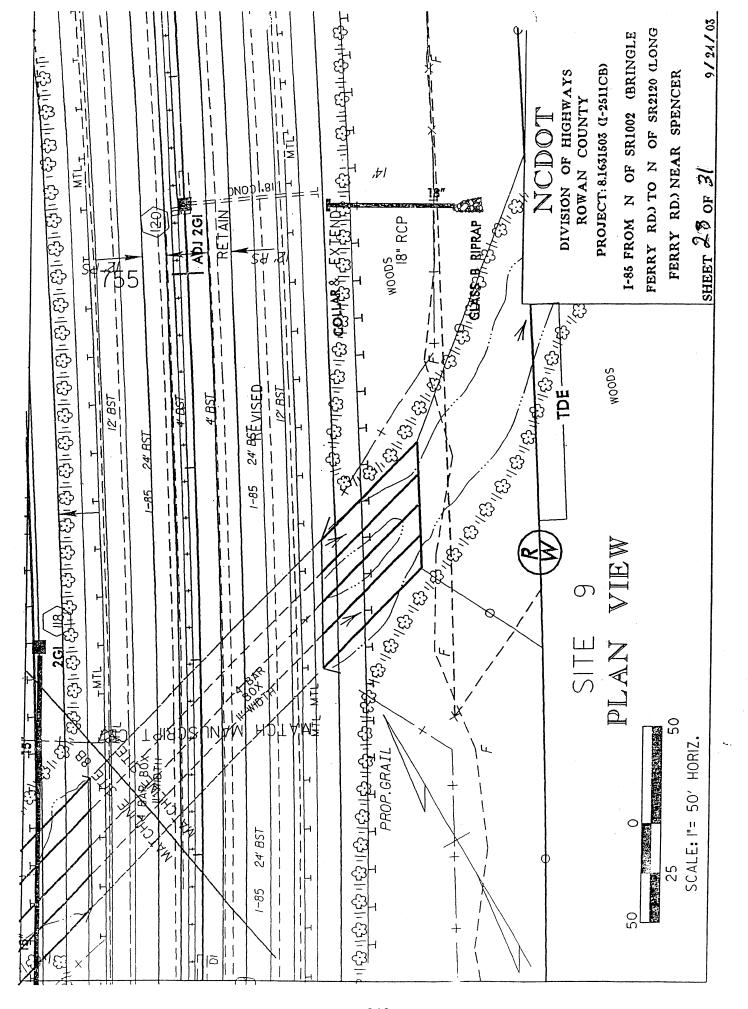












PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL	NO. NAMES	ADDRESSES
1	JAMES E.SMITH	453 STEEPLECHASE TRAIL SALISBURY N.C. 28144
2	JAMES E.SMITH	453 STEEPLECHASE TRAIL SALISBURY N.C. 28144
9	WALLACE PROPERTIES	301 N. MAIN ST. SALISBURY N.C. 28145-0102
10	VOYLS W.& SHARON TYSINGER	740 CHOATE RD. SALISBURY N.C. 28146
12	NEW HOPE BAPTIST CHURCH	830 CHOATE RD. SALISBURY N.C. 28146
16	OLIN E. STAMPER & WIFE	308 HENDERSON ST. SALISBURY N.C. 28144
27	ROBERT LEE & STELLA RUSHER	721 ANDREWS ST. SALISBURY N.C. 28144-8714
28	CECIL B.DAY COMPANIES, INC.	7000 CENTRAL PARKWAY NE STE.850 ATLANTA GA.30328
29	DEBORAH T. AREY	2685 PROVIDENCE CHURCH RD. SALISBURY N.C. 28146

NCDOT

DIVISION OF HIGHWAYS ROWAN COUNTY PROJECT: 8.1631503 (I-2511CB)

I-85 FROM N OF SR 1002 (BRINGLE FERRY RD.) TO N OF SR 2120 (LONG FERRY RD.) NEAR SPENCER

210 tt

SHEET 30 OF 31

7/02/02

PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
37	BURLENA N.LYERLY	1031 OLD MOCKSVILLE RD. SALISBURY N.C. 28144
65	MARY LONG	OVERHILL DR. SALISBURY N.C. 28144
67	TEDDY BARNES & WIFE	405 WILLOW CREEK DR. SALISBURY, N.C. 28146- 2469
18A	CLARICE H.& KAREN L.ROE	2 LAUREL BROOK CT. GREENSBORO, N.C. 27407- 5037

NCDOT

DIVISION OF HIGHWAYS ROWAN COUNTY

PROJECT: 8.1631503 (I-2511CB)

I-85 FROM N OF SR 1002 (BRINGLE FERRY RD.) TO N OF SR 2120 (LONG FERRY RD.) NEAR SPENCER

SHEET 3! OF 31

Channel Mitigation Monitoring Sheets I, II, III, AND IV

Monitoring Data Record

Project Title:	COE Action ID:200221216
Character Names	DWQ Number:
City, County and other Location Information:	Diversion.
Date Construction Completed:	Monitoring Year: () of 5
Engagine	8 digit HUC unit
Ecolegion	
•	
Rosgen Classification:	Watershed Size:
Length of Project: Orban of Rufai:	Date:
Monitoring DATA collected by:	Date:
Applicant Information:	
Address:	Email address:
Telephone Number:	Email address:
	ant Information:
Address:	
Telephone Number:	Email address:
Project Status:	
Monitoring Level 1 requires completion of Section	WQ (404 permit/ 401 Cert.): <u>Level</u> <u>1</u> 2 3 1, Section 2 and Section 3
designation (name, number, letter, etc.) assigned to each reference photo cross section locations, should show both banks and i document physical stability should be taken in winter summer (at representative locations). Attach photos a	location. Photos should be provided for all structures and nelude an upstream and downstream view. Photos taken to . Photos taken to document vegetation should be taken in and a description of each reference photo or location. We
recommend the use of a photo identification board in	
Total number of reference photo locations	at this site:
Dates reference photos have been taken at	this site:
Individual from whom additional photos	can be obtained (name, address, phone):
Other Information relative to site photo reference:	
If required to complete Level 3 monitoring only st	on here: otherwise, complete section 2.

lentify specific problem areas (missing, stressed, damaged or dead plantings):	
stimated causes, and proposed/required remedial action:	
ADDITIONAL COMMENTS:	

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. <u>Physical measurements of channel stability/morphology will not be required.</u> Include a discussion of any deviations from as-built
and an evaluation of the significance of these deviations and whether they are indicative of a
stabilizing or destabilizing situation.

Date	Station	Station	Station	Station	Station
Inspected	Number	Number	Number	Number	Number
Structure					
Туре					
Is water					
piping					·
through or					
around			·		
structure?					
Head cut or					
down cut	· ·				·
present?					
Bank or scour					
erosion					
present?					
Other					
problems		·			
noted?					

NOTE: Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

· · ·		
Applicant: NCDOT/TIP I-2511CB	File Number: 200221534	Date: September 30, 2004
Attached is:		See Section below
X INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
PROFFERED PERMIT (Standard Permit or Letter of permission)		В
PERMIT DENIAL		C
APPROVED JURISDICTIONAL DETERMINATION		D
PRELIMINARY JURISDICTIONAL DETERMINATION		Е

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

- A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.
- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.
- B: PROFFERED PERMIT: You may accept or appeal the permit
- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final
 authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your
 signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights
 to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.
- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT				
REASONS FOR APPEAL OR OBJECTIONS: (Describe				
REASONS FOR APPEAL OR OBJECTIONS: (Describe initial proffered permit in clear concise statements. You may attack	b additional information to this for	rm to clarify where your reasons		
initial profiered permit in clear concise statements. You may attac	n auditional information to this 10.	III to clairly whole your reasons		
or objections are addressed in the administrative record.)				
	CAL 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Come mamaradus fauth		
ADDITIONAL INFORMATION: The appeal is limited to a review	w of the administrative record, the	when determined is readed to		
record of the appeal conference or meeting, and any supplemental	information that the review office	nolves to the record Tierran		
clarify the administrative record. Neither the appellant nor the Cor	rps may add new information or a	manyses to the record. However,		
you may provide additional information to clarify the location of in		иннизитануе гесога.		
POINT OF CONTACT FOR QUESTIONS OR INFOR	MATION:			
If you have questions regarding this decision and/or the appeal	If you only have questions regar	ding the appeal process you may		
process you may contact:	also contact:			
Mr. Eric C. Alsmeyer, Regulatory Project Manager	Mr. Arthur Middleton, Administ	trative Appeal Review Officer		
U.S. Army Corps of Engineers, Wilmington District	CESAD-ET-CO-R			
Raleigh Regulatory Field Office	U.S. Army Corps of Engineers,	South Atlantic Division		
6508 Falls of Neuse Road, Suite 120	60 Forsyth Street, Room 9M15			
Raleigh North Carolina 27615-6814	Atlanta, Georgia 30303-8801			
RIGHT OF ENTRY: Your signature below grants the right of enti	ry to Corps of Engineers personne	el, and any government		
consultants, to conduct investigations of the project site during the	course of the appeal process. Yo	ou will be provided a 15 day		
notice of any site investigation, and will have the opportunity to pa	articipate in all site investigations.			
none of the original of the or	Date:	Telephone number:		
T in the second		*		

DIVISION ENGINEER:
Commander

Signature of appellant or agent.

U.S. Army Engineer Division, South Atlantic 60 Forsyth Street, Room 9M15 Atlanta, Georgia 30303-3490