




STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

April 19, 2005

MEMORANDUM TO: Mr. B. G. Payne, P.E.
Division 10 Engineer

FROM: Philip S. Harris, III, P.E., Manager 
Office of the Natural Environment
Project Development and
Environmental Analysis Branch

SUBJECT: Stanly County, NC 24/27 from east of Big Bear Creek to
Oakboro Rd. (SR 1963)/Saint Martin Rd. Intersection; State
Project Number 6.689004T; TIP Number R-0967CC

Attached is the modification to the Water Quality Certification No. 04-1056 for the construction of the above referenced project. All environmental permits have been received for the construction of this project.

Attachment

cc: Mr. Art McMillan, P.E.
Mr. Omar Sultan
Mr. Jay Bennett, P.E.
Mr. David Chang, P.E.
Mr. Randy Garris, P.E.
Mr. Greg Perfetti, P.E.
Mr. Mark Staley
Mr. John F. Sullivan, III, FHWA
Mr. Larry Thompson, Division 10 DEO



Nancy

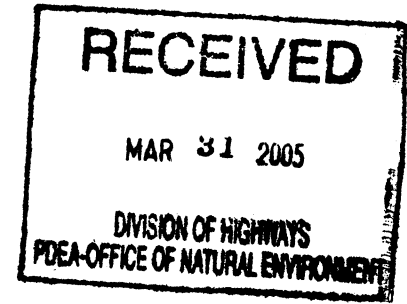
Michael F. Easley, Governor

William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E. Director
Division of Water Quality

March 15, 2005

Dr. Gregory J. Thorpe, PhD, Manager
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548



**RE: Certification Pursuant to Section 401 of the Federal Clean Water Act,
Modification to the Improvements to NC 24/27 from East of Big Bear Creek to SR 1963
TIP No. R-967CC, State Project No. 6.689004T, WQC Project No. 04-1056, Stanly County**

Dear Dr. Thorpe:

Attached is a modification to Certification No. 04-1056 issued to the North Carolina Department of Transportation (NCDOT) on September 24, 2004. The attached modification authorizes **an increase of 0.04 acres of temporary surface water impacts and a decrease of 68 linear feet of permanent surface water impacts**. This modification is applicable only to the additional proposed activities. All of the authorized activities and conditions of certification associated with the original Water Quality Certification dated September 24, 2005, still apply except where superceded by this certification.

This letter completes the review of the Division of Water Quality under Section 401 of the Clean Water Act. If you have any questions, **please telephone Polly Lespinasse in the Mooresville Regional Office at 704-663-1699.**

Sincerely,

for Alan W. Klimek, P.E.

Attachments

cc: Steve Lund, USACE Asheville Field Office
Rob Ridings, DWQ Wetlands Unit
Bill Gilmore, NC Ecosystem Enhancement Program
Central Files
File Copy

One
North Carolina
Naturally

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, Section .0500. The attached modification authorizes an increase of 0.04 acres of temporary surface water impacts and a decrease of 68 linear feet of permanent surface water impacts. This modification is applicable only to the additional proposed activities. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated September 24, 2004, still apply except where superceded by this certification.

This certification is issued based on the design submitted in your modification dated February 15, 2005. The authorized **modified** impacts are described in Table 1 below:

Table 1: Surface Water Impacts for the Yadkin-Pee Dee River Basin

Section	Previously Authorized Permanent Stream Impacts (lf)	Proposed (02/15/05) Permanent Stream Impacts (lf)	Proposed (02/15/05) Temporary Stream Impacts (acres)	Stream Type	Mitigation Required (lf)
Site 3 (Station 192+4 to 193+45-L-lt. & rt.)	391	328	None	Perennial	328
Site 4 (Station 194+5 to 194+80-L-lt.)	211	206	0.02	Perennial	206
Site 5 (Station 200+1 to 200+60-L-lt. & rt.)	162	161	0.01	Perennial	161
Site 8 (Station 234+6 to 234+70-L-rt.)	133	134	0.01	Perennial	134

This approval is only valid for the purpose and design that you submitted in your original application authorized by DWQ on September 24, 2004, and the modification submitted on February 15, 2005. Should your project change, you are required to notify the DWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, 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) those required by 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 (USACE) Permit, whichever is sooner.

Conditions of Certification:

1. All temporary fills in wetlands and surface waters shall be removed upon completion of the project. In addition, the post-construction removal of any temporary bridge structures or fill will need to return the project site to its preconstruction contours and elevations. The revegetation of the impacted areas with appropriate native species will be required.
2. Erosion and sediment control practices must utilize Best Management Practices (BMP) and be in full compliance with all specifications governing the proper design, installation, and operation and maintenance of such BMP in order to protect surface water standards:
 - a. 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 pit sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.

- b. 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*.
 - c. The reclamation measures and implementation of these measures must be in accordance with the requirements of the Sedimentation Pollution Control Act.
3. For projects impacting waters classified by the NC Environmental Management Commission as Trout (Tr) or High Quality Waters (HQW), the NCDOT shall strictly adhere to sediment and erosion control Best Management Practices as described for High Quality Waters entitled "Design Standards in Sensitive Watersheds" (15A NCAC 04B.0124) throughout design and construction of the project.
 4. 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 Division of Land Resources has released the project.
 5. Upon completion of the project, the NCDOT shall complete and return the enclosed "Certification of Completion Form" to notify the 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.
 6. All other conditions written into the previous Water Quality Certification, dated September 24, 2004, for the project still apply.
 7. Continuing Compliance. NCDOT shall conduct its activities in a manner consistent with state water quality standards [including any requirements for compliance with section 303(d) of the Clean Water Act] and any other appropriate requirements of state 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 15 A NCAC 2H.0507(d). Before codifying the certification, DWQ shall notify NCDOT and the USACE, 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 USACE 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.

Violations of any condition herein set forth shall result in revocation of this Certification and may result in criminal and/or civil penalties. 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 15th day of March 2005

DIVISION OF WATER QUALITY



Alan W. Klimek, P.E.
Director

Certificate of Completion

DWQ Project No. _____ County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Upon completion of all work approved within the 401 Water Quality Certification and Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401/Wetlands Unit, North Carolina Division of Water Quality, 1621 Mail Service Center, Raleigh, NC, 27699-1621. This form may be returned to DWQ by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

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

Signature: _____ Date: _____

Agent's Certification

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

Signature: _____ Date: _____

If this project was designed by a Certified Professional

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

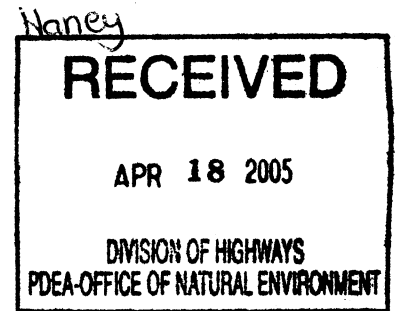
Signature: _____ Registration No.: _____ Date: _____



REPLY TO
ATTENTION OF:

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

April 13, 2005



Regulatory Division

Action ID No. 200431291, TIP R-0967 CC

Dr. Gregory J. Thorpe, Ph.D., Director
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

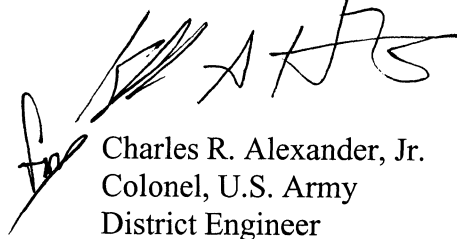
Dear Dr. Thorpe:

Reference the Department of the Army permit issued on January 28, 2005 to the North Carolina Department of Transportation to discharge dredged or fill material into .14 acres of wetland and 1272 linear feet of stream channel in and adjacent to the waters of Little Bear Creek, Scaly Bark Creek and unnamed tributaries to facilitate the widening of 5.6 miles of NC Highway 24/27 from east of Big Bear Creek to SR 1963 (Oakboro Road) west of Albemarle, Stanly County, North Carolina (TIP No. R-0967 CC). Also reference your written request of February 4, 2005, to modify this permit to increase the amount of temporary construction fill in surface waters by 0.04 acres and decrease the length of stream channel impacts by 68 linear feet as a result of design changes.

The permit is hereby modified to include the work as shown on the enclosed plans. The authorized amount of temporary fill in surface waters has been increased from 0.0 to 0.04 acres and the amount of permanent stream channel impacts has been decreased from 1272 to 1204 linear feet. In addition, Special Condition No. 15 of the permit is hereby modified, in part, to reflect a revised stream channel preservation requirement of 12,040 provided by the Ecosystem Enhancement Program (EEP). It is understood that all other conditions of the original permit remain applicable and that the expiration date is unchanged.

If you have any questions, please contact Mr. Steven Lund, Asheville Regulatory Field Office at telephone (828) 271-7980, extension 223.

Sincerely,



Charles R. Alexander, Jr.
Colonel, U.S. Army
District Engineer

Enclosures

Copies furnished w/enclosures:

Director, Atlantic Marine Center
National Ocean Survey, NOAA
Attention: CAM04
439 West York Street
Norfolk, Virginia 23510

Copies furnished wo/enclosure:

Mr. William D. Gilmore, P.E.
EEP Transition Manager
NC Ecosystem Enhancement Program
1652 Mail Service Center
Raleigh, NC 27699-1652

Mr. John Hennessey
NC Division of Water Quality
Wetlands/401 Unit
1650 Mail Service Center
Raleigh, NC 27699-1650

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS							
			Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation In Wetlands (ac)	Mechanized Clearing (Method III) (ac)	Fill In SW (Natural) (ac)	Fill In SW (Pond) (ac)	Temp. Fill In SW (ac)	Existing Channel Impacted (ft)	Natural Stream Design (ft)			
1	172+00 to 172+70 -L- Rt.	Lateral Encroachment (Roadway Cut and Fill)	0.04		0.04									
2	184+00 to 184+20 -L- Rt.	Lateral Encroachment (Roadway Fill)	0.04											
3	192+40 to 193+45 -L- Lt & Rt	1 @ 1350 mm RCP and 2 @ 1050 mm RCP					0.025 -						328 -	
4	194+50 to 194+80 -L- Lt.	Channel Change and 3 @ 3.0m x 3.4m RCBC					0.09			0.02 -			206 -	
5	200+10 to 200+60 -L- Lt & Rt	Extension of 2 @ 2.4m x 1.8m RCBC					0.042 -			0.01 -			161 -	
6	222+88 -L- Lt.	Extension of 1350 mm RCP					0.002						28	
7	228+30 to 228+60 -L- Rt & Lt	1 @ 900 mm RCP and 1 @ 1350 mm RCP					0.02						155	
8	234+60 to 234+70 -L- Rt.	Extension of 2 @ 2.4m x 1.8m RCBC					0.02			0.007 -			134 -	
9	240+95 to 242+20 -L-TRAN Rt-	Lateral Encroachment (Roadway Fill)	0.03			0.03							192	
TOTALS:			0.11	0	0.04	0.03	0.219	0	0.037	1204	0			

English Equivalence for All Impacts

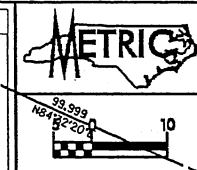
NCDOT

DIVISION OF HIGHWAYS
STANLY COUNTY
PROJECT 6.689004T (R-0967CC)

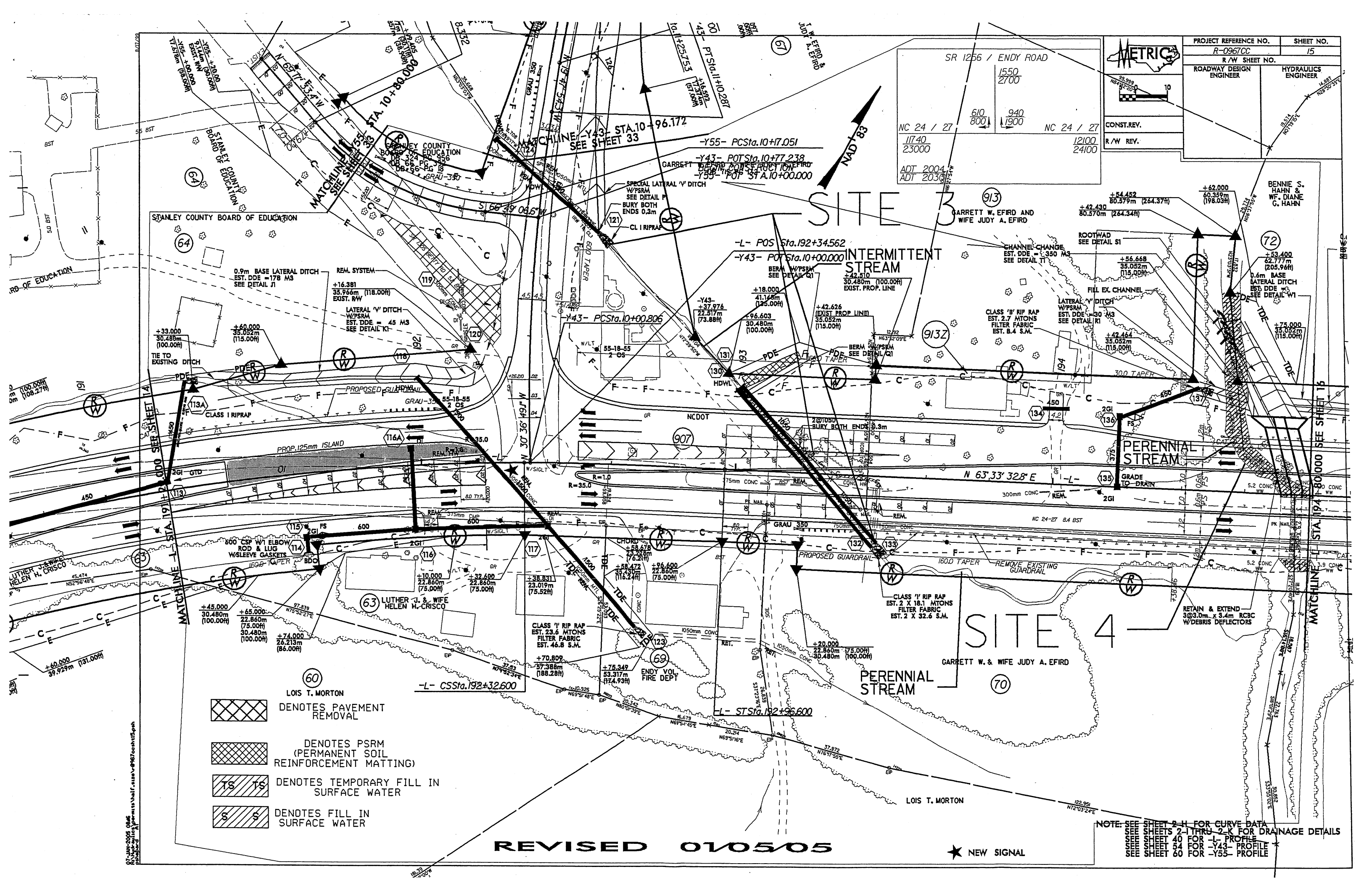
NC 24/27 FROM EAST OF BIG BEAR CREEK TO SR 1963 IN ALBEMARLE




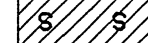
REV. 01/05/05
6/6/2003

SHEET 3B OF 5



PROJECT REFERENCE NO.	SHEET NO.
R-0967CC	15
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.	
R/W REV.	



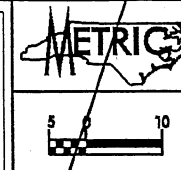
-  DENOTES PAVEMENT REMOVAL
-  DENOTES PSRM (PERMANENT SOIL REINFORCEMENT MATTING)
-  DENOTES TEMPORARY FILL IN SURFACE WATER
-  DENOTES FILL IN SURFACE WATER

REVISED 010505

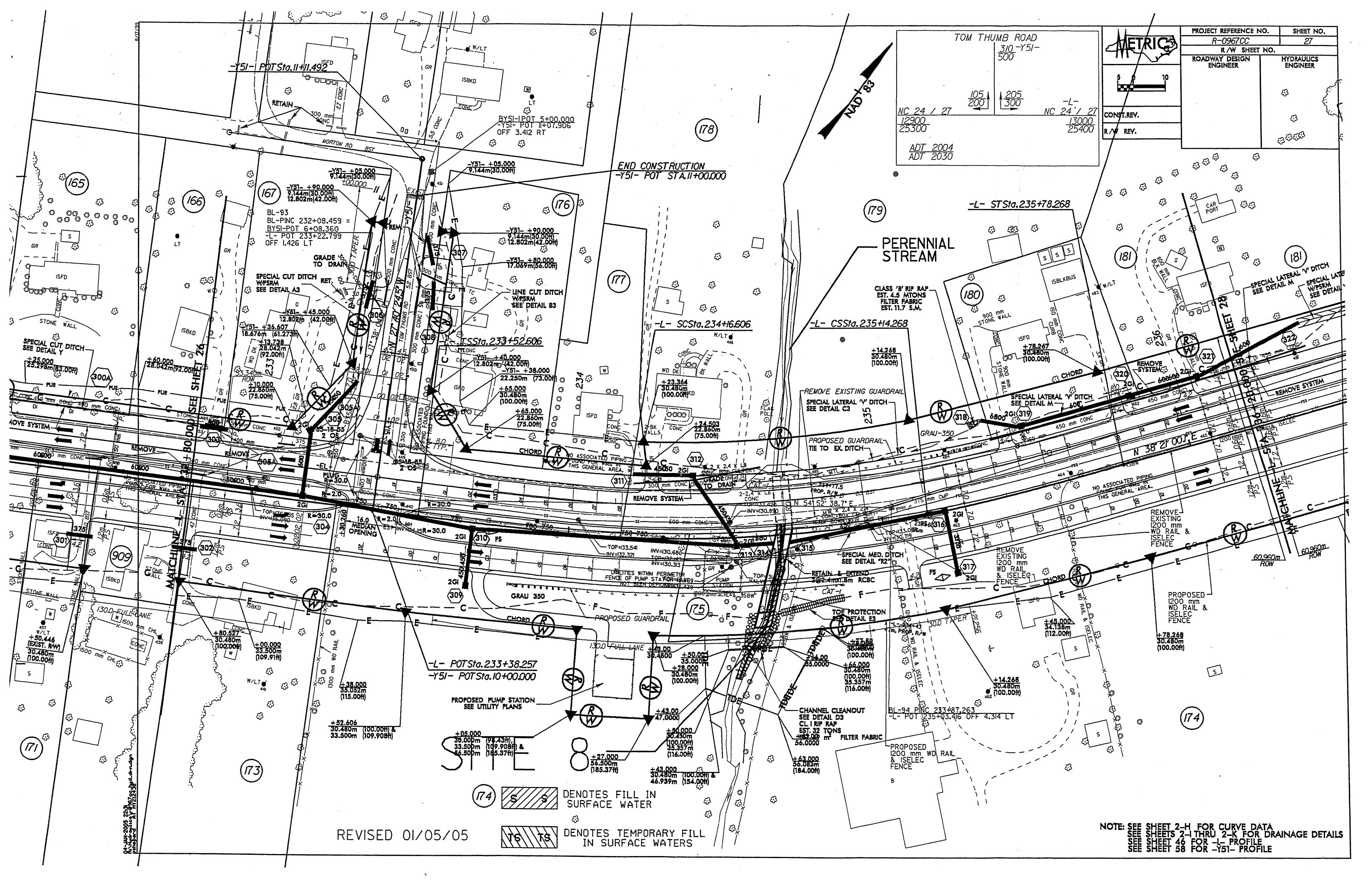
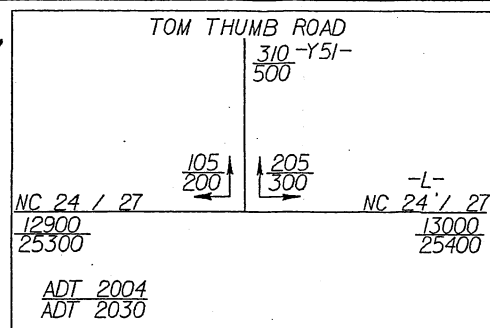
★ NEW SIGNAL

NOTE: SEE SHEET 2-H FOR CURVE DATA
 SEE SHEETS 2-I THRU 2-K FOR DRAINAGE DETAILS
 SEE SHEET 40 FOR -L- PROFILE
 SEE SHEET 54 FOR -Y43- PROFILE
 SEE SHEET 60 FOR -Y55- PROFILE

01-14-2005 (04)
 R. J. HARRIS
 01-14-2005 (04)
 R. J. HARRIS



PROJECT REFERENCE NO. R-0967CC	SHEET NO. 27
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.	
R/W REV.	



DENOTES FILL IN SURFACE WATER
 DENOTES TEMPORARY FILL IN SURFACE WATERS

REVISED 01/05/05

NOTE: SEE SHEET 2-H FOR CURVE DATA
 SEE SHEETS 2-I THRU 2-K FOR DRAINAGE DETAILS
 SEE SHEET 46 FOR -L- PROFILE
 SEE SHEET 58 FOR -Y51- PROFILE

04-JAN-2005 22:33
 11/21/05 11:52 AM
 11/21/05 11:52 AM

PROJECT COMMITMENTS

NC 24/27
NC 24/27 from east of Big Bear Creek
To Oakboro Rd. (SR 1963)/Saint Martin Rd. Intersection
Stanly County
State Project No. 6.689004T
R-0967CC

COMMITMENTS DEVELOPED THROUGH PROJECT DEVELOPMENT AND DESIGN

Current status, changes, or additions to the project commitments as shown in the environmental document for the project are printed in Italics.

Design Services Unit

The design of the access to Locust Elementary School will be coordinated with the local government.

This commitment is applicable to Section CA.

NCDOT will coordinate with the Town of Locust during the design phase of the project to discuss treatments in Locust's central business district.

This commitment is applicable to Section CA.

The design of the access to West Stanly High School will be coordinated with the local government.

This commitment is applicable to Section CB.

COMMITMENTS DEVELOPED THROUGH PERMITTING

Hydraulics, Division 10 Construction

A low flow sill will be constructed at the inlet of one cell of the double-cell box culvert extension at Permit Site 8 on Scaly Bark Creek. Low-elevation, alternating baffles will be constructed within the opposite cell of this same culvert at intervals sufficient to retain bed material and provide aquatic passage at low flow conditions.

Project Development and Environmental Analysis (PDEA)

Compensatory mitigation for unavoidable impacts to 0.14 acres of riverine wetlands and 1,204 linear feet of warm-water stream channel associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP) as outlined in the letter dated

May 20, 2004 from William D. Gilmore, EEP Transition Manager. The EEP will provide 1.4 acres of preservation of riverine wetlands and 12,040 linear feet of stream preservation in the Southern Piedmont Eco-Region at the Drowning Creek/Camp McCall Site in Moore and Richmond Counties that has been acquired and protected by the EEP. 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 a minimum of 0.14 acres of restoration of riverine wetlands and 1,204 linear feet of restoration of warm-water stream channel in the Yadkin River Basin (Hydrologic Cataloging Unit 03040105) by July 22, 2005 and half of the proposed preservation mitigation would be available at that time for mitigation for other projects. The NCDOT shall, within 30 days of the issue date of the Section 404 permit, certify that sufficient funds have been provided to EEP to complete the required mitigation, pursuant of Paragraph V. of the MOA.

Division 10 Construction, Roadside Environmental Unit (REU)

All temporary fills in wetlands and surface waters shall be removed upon completion of the project. In addition, the post-construction removal of any temporary bridge structures or fill will need to return the project site to its preconstruction contours and elevations. The revegetation of the impacted areas with appropriate native species will be required.

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 Division of Land Resources has released the project.

Division 10 Construction, Hydraulics Unit

The dimension, pattern and profile of the stream above and below the crossing should not be modified by widening the stream channel or reducing the depth of the stream. Disturbed floodplains and streams should be restored to natural geomorphic conditions. All stream relocation and restoration activities shall comply with the final natural channel design plans approved by the NC Division of Water Quality.

Roadway Design, Hydraulics

Two copies of the final construction drawings shall be furnished to NCDWQ prior to the pre-construction meeting. Written verification shall be provided that the final construction drawings comply with the permit drawings contained in the application dated May 11, 2004 and the modification request dated February 4, 2005.

NCDOT will ensure that the construction design plans for this project do not deviate from the permit plans attached to the Section 404 permit. Written verification shall be provided that the final construction drawings comply with the permit drawings prior to any active construction in waters of the United States, including wetlands. Any deviation in the construction design plans will be brought to the attention of the Corps of

Engineers, Asheville Regulatory Office prior to any active construction in waters and wetlands.

Division 10 Construction, Hydraulics

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 in 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. These measurements must be based on natural thalweg depths.

Division 10 Construction, Hydraulics, Roadway Design

All work must be performed in strict compliance with the plans that were attached to the permit application dated May 11, 2004 and permit modification request dated February 4, 2005, which are a part of the Section 404 permit. Any modifications to the permit plans must be approved by the Corps of Engineers prior to implementation.

Division 10 Construction

NCDOT shall schedule a preconstruction meeting between their representatives, the contractor and the Corps of Engineers, Asheville Regulatory Field Office, NCDOT Regulatory Project Manager prior to any work in jurisdictional waters and wetlands to ensure that there is a mutual understanding of all terms and conditions contained in the Section 404 permit. NCDOT shall provide the Corps of Engineers, Regulatory Project Manager with a copy of the final plans at least two weeks prior to the pre-construction meeting along with a description of any changes that have been made to the project's design, construction methodology or construction timeframe. NCDOT shall schedule the pre-construction meeting for a time when the Corps of Engineers and North Carolina Division of Water Quality (NCDWQ) Project Managers can attend. NCDOT shall notify the Corps of Engineers and NCDWQ Project Managers a minimum of thirty (30) days in advance of the meeting.

During the clearing phase of the project, heavy equipment must not be operated in surface waters or stream channels. Temporary stream crossings will be used to access the opposite sides of stream channels. All temporary diversion channels and stream crossings will be constructed of nonerodable materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.

Division 10 Construction, Hydraulics, Roadway Design, REU, PDEA

NCDOT shall implement the recommendations (1-13) in the September 3, 2004 letter from the North Carolina Wildlife Resources Commission. A copy of this letter can be obtained by contacting Matt Haney at (919) 715-1428.