



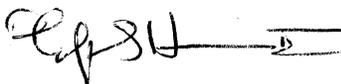
STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

November 10, 2004

MEMORANDUM TO: Mr. J. M. Mills, P.E.  
Division 7 Engineer

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

SUBJECT: Caswell County; Replace No. 70 on SR 1723 over Lynch Creek;  
T.I.P. Number B-3630; State Project No. 8.2481501;  
F. A. Project No. BRZ-1723(2)

Attached is the U. S. Army Corps of Engineers Nationwide Permit Number 33 and the modification of the U.S. Army Corps of Engineers Nationwide Permit Number 23. All environmental permits have been received for the construction of this project.

PSH/gyb

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. Jerry Parker, Division 7 DEO

# PROJECT COMMITMENTS

Caswell County  
Bridge No. 70 on SR 1723  
Over Lynch Creek  
Federal Project BRZ-1723 (2)  
State Project 8.2481501  
TIP No. B-3630

In addition to the standard Nationwide Permit #23 Conditions, the General Nationwide Permit Conditions, Section 404 Only Conditions, Regional Conditions, State Consistency Conditions, NCDOT's Guidelines for Best Management Practices for Protection of Surface Waters, NCDOT's Guidelines for Best Management Practices for Bridge Demolition and Removal, General Certification Conditions, and the Section 401 Conditions of Certification, the following special commitments have been agreed to by NCDOT:

## **Commitments Developed through Project Development and Design**

### ***Division 7 Construction***

Bridge Demolition: Best Management Practices for Bridge Demolition & Removal will be implemented. The existing bridge is constructed entirely of timber. Therefore, Bridge No. 70 will be removed without dropping any component into Waters of the United States during construction.

In order to allow Emergency Management Services (EMS) time to prepare for road closure, the NCDOT Resident Engineer will notify Joe G. Wright, Jr. with Caswell County EMS at (336) 694-5177 of the bridge removal 30 days prior to road closure.

Due to potential sedimentation concerns resulting from removal of the bridge, where it is possible to do so, a turbidity curtain shall be included to contain and minimize sedimentation in the stream.

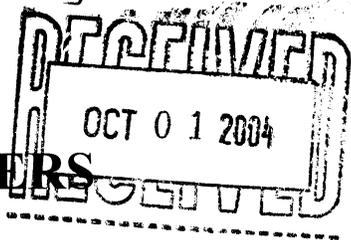
## **Commitments Developed Through 404/401 Permitting**

No commitments were made during the project's permit process.

## **Commitments Developed Through 404/401 Modification Permitting**

No commitments were made during the project's permit process

K. Hey



# U.S. ARMY CORPS OF ENGINEERS WILMINGTON DISTRICT

Action ID. 200420043 & 200520059

County Caswell

## GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

**Property Owner/Agent:** NCDOT/Bridge No. 70/SR 1723/ TIP No. B-3630

**Address:** Attn: Mr. Gregory J. Thorpe, Ph.D., Manager, Planning & Environmental Branch  
1548 Mail Service Center, Raleigh, North Carolina 27699-1548

**Telephone No.:** (919) 733-3141

**Size and Location of project (waterway, road name/number, town, etc.):** Bridge No. 70, on SR 1723, east of the intersection with NC 86, south of Hightowers, in Caswell County, North Carolina. The project is located adjacent to Lynch Creek.

### Description of Activity

Mechanized landclearing, excavation and the discharge of fill material associated with the replacement of Bridge No. 70 with a new bridge (new bridge approximate 120 foot long). The project involves the construction of the new bridge at the location of the existing bridge. The project will include required upgrades to the approach roadway to the new bridge that will result in the impact of approximately 120 linear feet of jurisdictional stream channel of Lynch Creek. The new relocated stream channel will be 124 linear feet long constructed using natural stream design methods maintaining existing channel dimensions. Traffic will be detoured along surrounding roads during construction. Note: This verification does not include impacts to waters of the United States, including wetlands, from any spoil disposal or borrow sites. These impacts would have to be permitted separately if they become necessary. NCDOT shall follow the current version of the Best Management Practices for Bridge Demolition and Removal for the existing bridge. **In response to your request of October 20, 2004, this verification is modified to authorize permanent impacts to 138 linear feet of stream channel (increase impact of 18 linear feet of stream channel) and temporary stream channel impacts associated with a temporary access crossing. Also, this verification is modified to approve the new relocated stream channel design that will result in the construction of 83 linear feet of stream channel to mitigate for the impacted stream channel resulting from the road project construction. All other the conditions of this verification are unchanged and remain in force.**

Section 404 (Clean Water Act, 33 USC 1344) only.

Section 10 (River and Harbor Act of 1899) only.

Section 404 and Section 10.

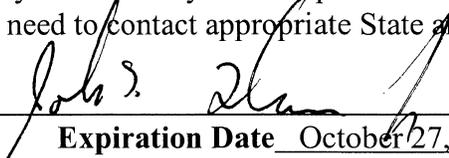
23 & 33 Nationwide General Permits.

Any violation of the conditions of the Regional General or Nationwide Permit referenced above may subject the permittee to a stop work order, a restoration order, and/or appropriate legal

action.

This Department of the Army Regional General/Nationwide Permit verification does not relieve the undersigned permittee of the responsibility to obtain any other required Federal, State, or local approvals/permits. The permittee may need to contact appropriate State and local agencies before beginning work.

**Regulatory Project Manager Signature** \_\_\_\_\_

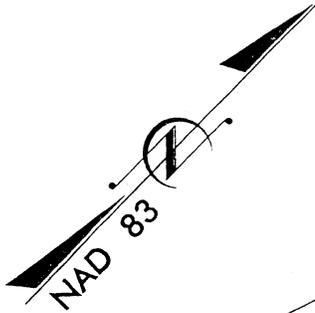


**Date** October 27, 2003

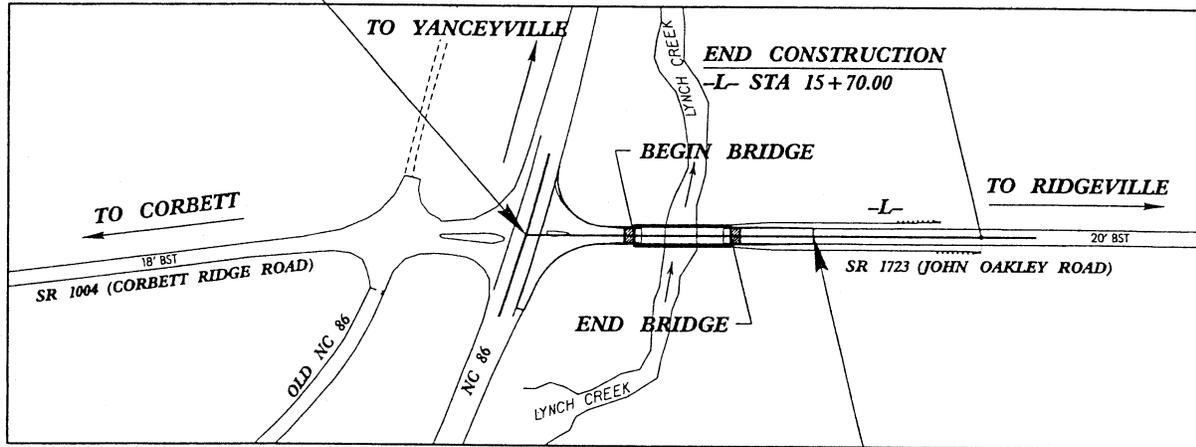
**Expiration Date** October 27, 2005

SURVEY PLATS, FIELD SKETCH, WETLAND DELINEATION FORM, ETC., MUST BE ATTACHED TO THE FILE COPY OF THIS FORM, IF REQUIRED OR AVAILABLE





**STA 10+00.00 -L- BEGIN STATE PROJECT 8.2481501**  
**STA 10+00.00 -L- BEGIN F.A. PROJECT BRZ-1723(2)**



**STA 13+60.00 -L- END STATE PROJECT 8.2481501**  
**STA 13+60.00 -L- END F.A. PROJECT BRZ-1723(2)**

SITE  
MAP

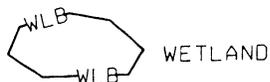
**N.C.D.O.T.**  
**DIVISION OF HIGHWAYS**  
CASWELL  
COUNTY

BRIDGE NO. 70 ON SR 1723  
OVER LYNCH CREEK

STATE PROJECT #8.2481501 B-3630  
SHEET 2 OF 7

# LEGEND

— WLB — WETLAND BOUNDARY



— FLOW DIRECTION

— TB — TOP OF BANK

— WE — EDGE OF WATER

— C — PROP. LIMIT OF CUT

— F — PROP. LIMIT OF FILL

—▲— PROP. RIGHT OF WAY

— NG — NATURAL GROUND

— PL — PROPERTY LINE

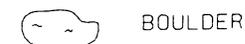
— TDE — TEMP. DRAINAGE EASEMENT

— PDE — PERMANENT DRAINAGE EASEMENT

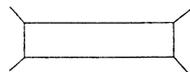
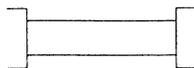
— EAB — EXIST. ENDANGERED ANIMAL BOUNDARY

— EPB — EXIST. ENDANGERED PLANT BOUNDARY

— WATER SURFACE



— CORE FIBER ROLLS

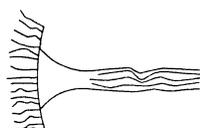


— PROPOSED PIPE CULVERT  
12'-48'  
PIPES  
54' PIPES  
& ABOVE

(DASHED LINES DENOTE EXISTING STRUCTURES)



— WOODS LINE



ROOTWAD



— BZ1 — BUFFER ZONE 1

— BZ2 — BUFFER ZONE 2

## WETLANDS/STREAMS

**N.C.D.O.T.**  
**DIVISION OF HIGHWAYS**

CASWELL  
COUNTY

BRIDGE NO. 70 ON SR 1723  
OVER LYNCH CREEK

STATE PROJECT #8.2481501 B-3630  
SHEET 3 OF 7

6/2/99

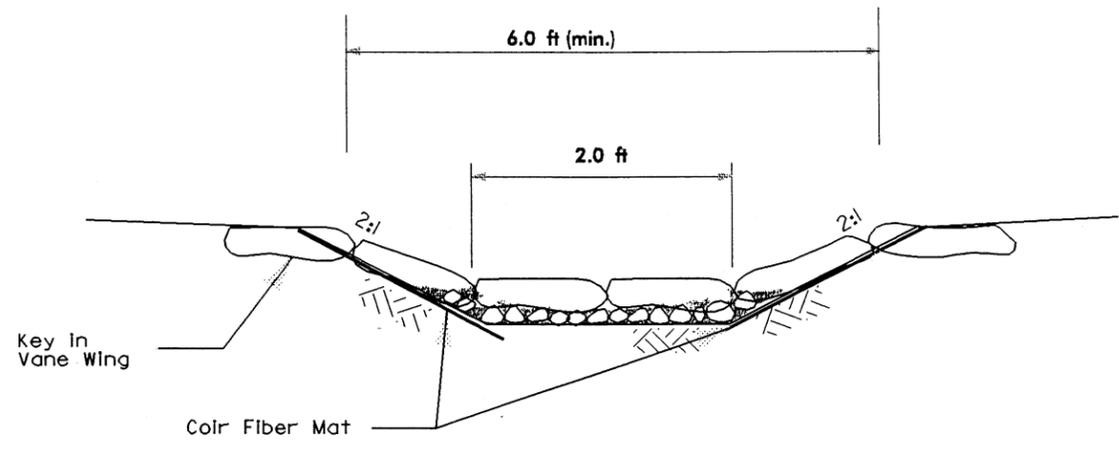
19-10T\_2004\_09:34  
H:\Fogdwin\2004\step-pool.dgn  
c:\land

PROJECT REFERENCE NO.	SHEET NO.
B-3630	2-E

# STEP POOL DETAIL

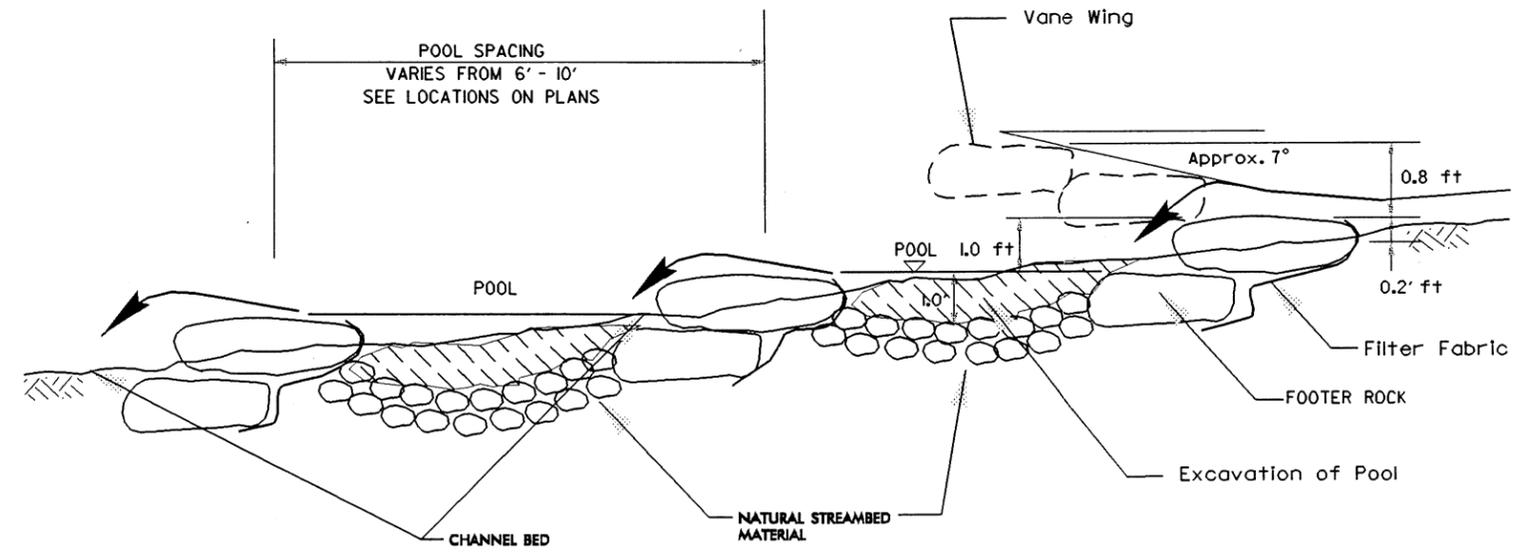
## STA 12+65 TO 12+81

## & STA 13+00 TO STA 13+34 -L- RT



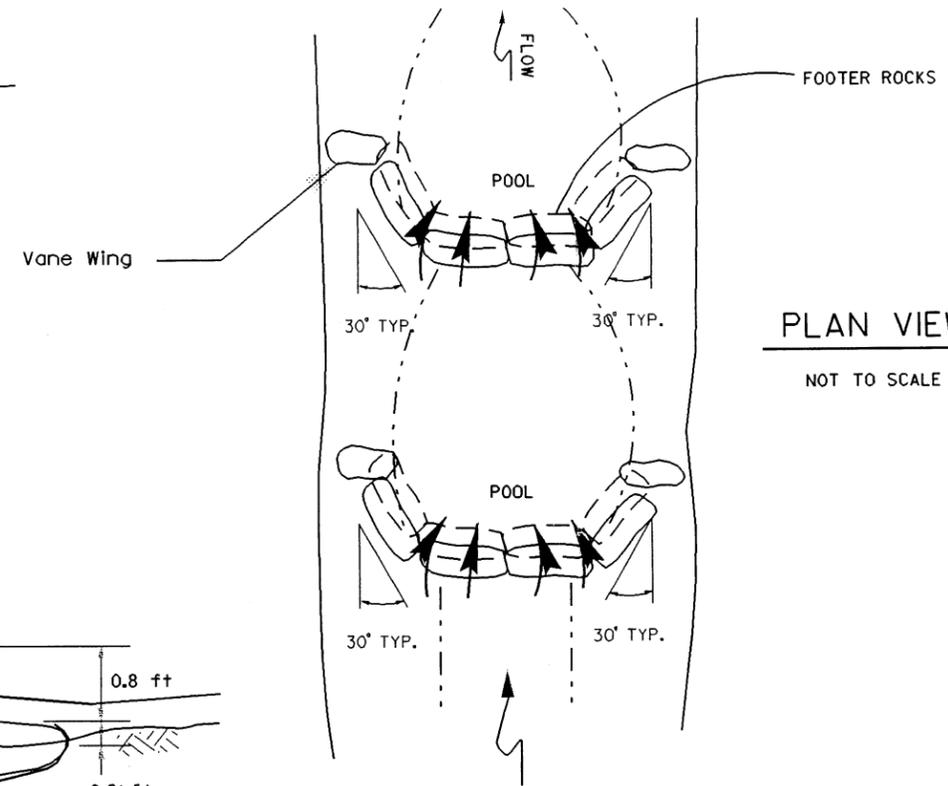
TYPICAL CROSS SECTION

NOT TO SCALE



PROFILE

NOT TO SCALE



PLAN VIEW

NOT TO SCALE

**NOTE:**  
FOOTER ROCK SHOULD BE ANGULAR AND OBLONG WITH WIDE AXIS APPROXIMATELY 0.60m IN LENGTH. ROCK SHOULD FIT TIGHTLY TOGETHER WITH MINIMAL VOIDS.

THE NUMBER OF ROCK VANES REQUIRED, MAY VARY, DEPENDING ON SITE CONDITIONS.

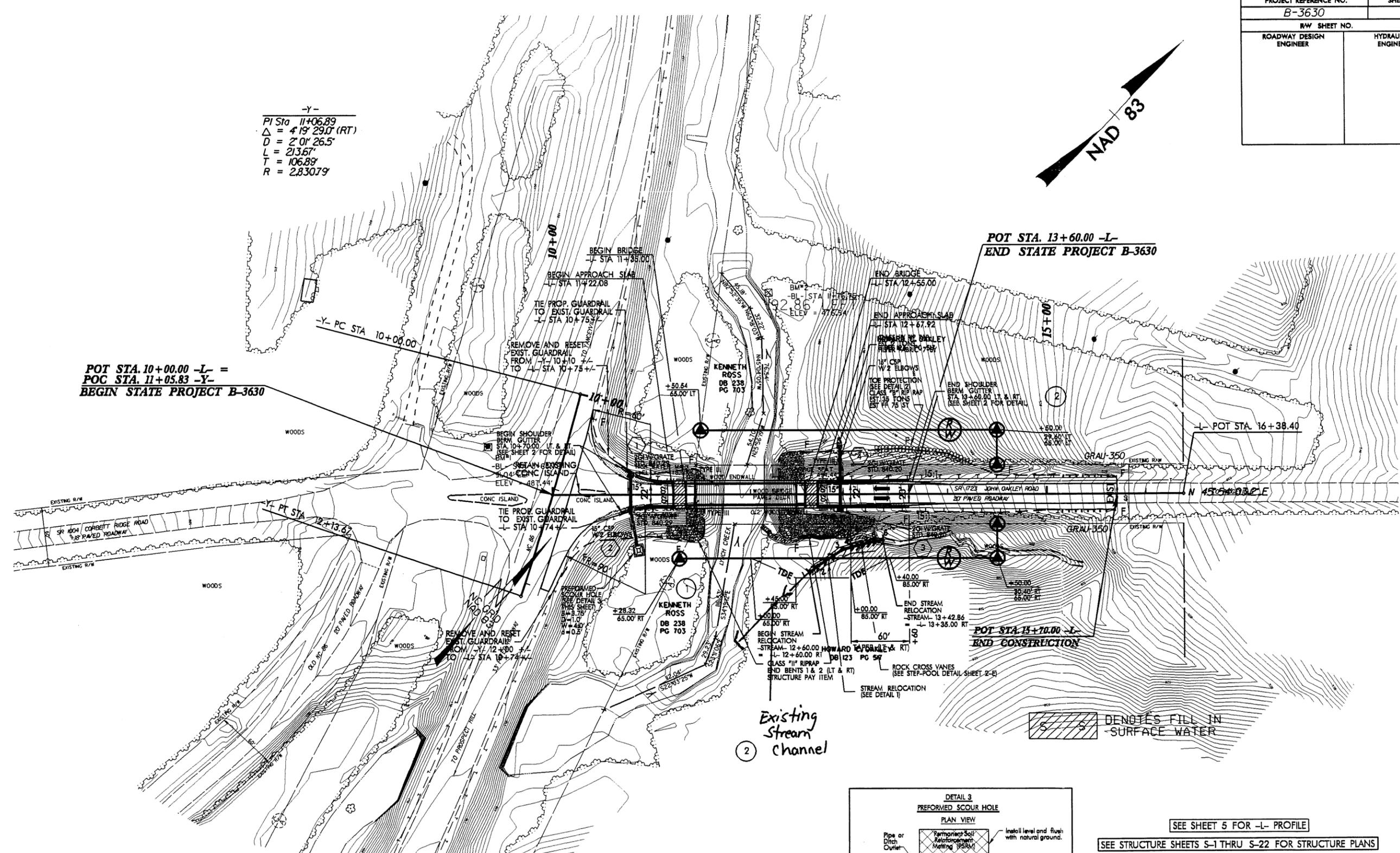
**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION



-Y-  
 PI Sta 11+06.89  
 $\Delta = 4' 19'' 29.0''$  (RT)  
 $D = 2' 01'' 26.5''$   
 $L = 213.67'$   
 $T = 106.89'$   
 $R = 2,830.79'$

POT STA. 10+00.00 -L- =  
 POC STA. 11+05.83 -Y-

POT STA. 13+60.00 -L-  
 END STATE PROJECT B-3630

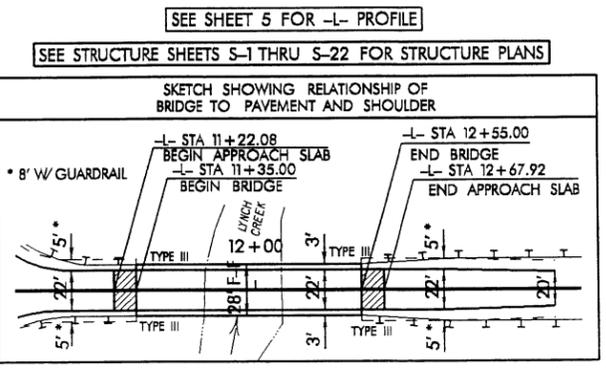
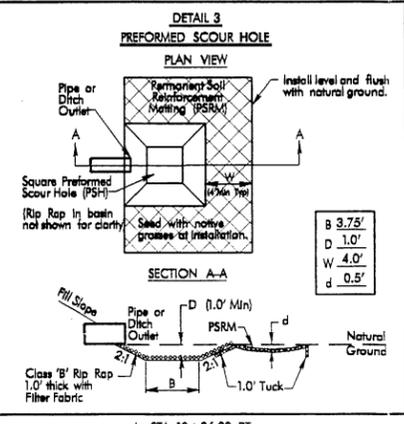
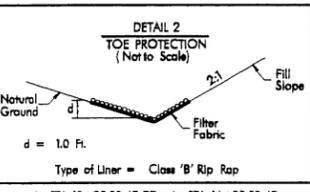
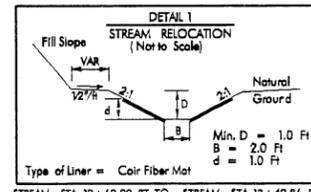


REVISIONS

**DATUM DESCRIPTION**  
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY OTHERS FOR MONUMENT "B3630-2"  
 WITH NAD 83 STATE PLANE GRID COORDINATES OF NORTHING: 933622859 (11) EASTING: 1935122489 (11)  
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 1.000031020  
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B3630-2" TO -L- STATION 10+00.00 IS  
 $N 02^{\circ} 18' 30.25''$  W 76.8114 (11)  
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES  
 VERTICAL DATUM USED IS NAD 88

**STREAM CENTERLINE INFORMATION**

1 - POT Sta. 12+60.00	
2 - POT Sta. 12+71.29	N 3° 19' 11.7" E
3 - POT Sta. 12+99.07	N 12° 0' 17.8" E
4 - POT Sta. 13+08.58	N 27° 22' 47.7" E
5 - POT Sta. 13+34.29	N 32° 24' 19.6" E
6 - POT Sta. 13+42.86	N 41° 12' 00.8" E



8/17/99

05-001-2004 1129  
 W:\PROJECTS\B-3630\design\B3630-04\_04\006.psh

**TIP Project:** B-3630

**Description:** Bankfull data associated with the relocation of UT to Lynch Creek. Stream parallels SR 1723 to the East. The TIP Project involves the replacement of Bridge #70 over Lynch Creek on SR 1723.

DA = 14 acres (0.022 mi<sup>2</sup>)  
NC Rural Piedmont

From Piedmont Regional Curves:

$$w_{\text{bkf}} = 2.7'$$

$$d_{\text{bkf}} = 0.6'$$

$$Q_{\text{bkf}} = 5.0 \text{ cfs}$$

$$A_{\text{bkf}} = 1.6 \text{ ft}^2$$

PROPERTY OWNERS  
NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
1	KENNETH ROSS	4129 GUESS ROAD DURHAM, NC 27702
2	HOWARD C. OAKLEY	531 HENRY WARREN ROAD PROSPECT HILL, NC 27314

**N.C.D.O.T.**  
**DIVISION OF HIGHWAYS**  
CASWELL  
COUNTY

BRIDGE NO. 70 ON SR 1723  
OVER LYNCH CREEK

STATE PROJECT #8.2481501 B-3630  
SHEET 7 OF 7



## WQC #3403

### **GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR CORPS OF ENGINEERS NATIONWIDE PERMIT NUMBER 23 (APPROVED CATEGORICAL EXCLUSIONS) AND RIPARIAN AREA PROTECTION RULES (BUFFER RULES)**

This General 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 Regulations in 15A NCAC 2H, Section .0500 and 15A NCAC 2B .0200 for the discharge of fill material to waters and wetland areas as described in 33 CFR 330 Appendix A (B) (23) and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 2B .0200. This Certification replaces Water Quality Certification Number 2670 issued on January 21, 1992, Certification Number 2734 issued on May 1 1993, Certification Number 3107 issued on February 11, 1997 and Water Quality Certification Number 3361 issued March 18, 2002. This WQC is rescinded when the Corps of Engineers re-authorizes Nationwide Permit 23 or when deemed appropriate by the Director of the DWQ.

The State of North Carolina certifies that the specified category of activity will not violate applicable portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with the conditions hereinafter set forth.

#### Conditions of Certification:

1. Proposed fill or substantial modification of wetlands or waters (including streams) under this General Certification requires notification to the Division of Water Quality. Two copies shall be submitted to DWQ at the time of notification in accordance with 15A NCAC 2H .0501(a). Written concurrence from DWQ is not required unless any standard conditions of this Certification cannot be met;
2. Appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the "North Carolina Sediment and Erosion Control Planning and Design Manual" or the "North Carolina Surface Mining Manual" whichever is more appropriate (available from the Division of Land Resources (DLR) in the DENR Regional or Central Offices) shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standard;
3. In accordance with 15A NCAC 2H .0506 (h) compensatory mitigation may be required for impacts to 150 linear feet or more of streams and/or one acre or more of wetlands. In addition, buffer mitigation may be required for any project with Buffer Rules in effect at the time of application for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A determination of buffer, wetland and stream mitigation requirements shall be made for any Certification for this Nationwide Permit. The most current design and monitoring protocols from DWQ shall be followed and written plans submitted for DWQ approval as required in those protocols. When compensatory mitigation is required for a project, the mitigation plans must be approved by DWQ in writing before the impacts approved by the Certification occur. The mitigation plan must be implemented and/or constructed before any permanent building or structure on

## WQC #3403

site is occupied. In the case of public road projects, the mitigation plan must be implemented before the road is opened to the travelling public;

4. Compensatory stream mitigation shall be required at a 1:1 ratio for not only perennial but also intermittent stream impacts equal to or exceeding 150 feet and that require application to DWQ in watersheds classified as ORW, HQW, Tr, WS-I and WS-II unless the project is a linear, publicly-funded transportation project, which has a 150-foot per-stream impact allowance;
5. All sediment and erosion control measures placed in wetlands or waters shall be removed and the original grade restored within two months after the Division of Land Resources has released the project;
6. Measures shall be taken to prevent live or fresh concrete from coming into contact with freshwaters of the state until the concrete has hardened;
7. In accordance with North Carolina General Statute Section 143-215.3D(e), any request for written concurrence for a 401 Water Quality Certification must include the appropriate fee. If a project also requires a CAMA Permit, one payment to both agencies shall be submitted and will be the higher of the two fees;
8. Impacts to any stream length in the Neuse, Tar-Pamlico, Randleman and Catawba River Basins (or any other river basins with Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) requires written concurrence from DWQ in accordance with 15A NCAC 2B.0200. Activities listed as "exempt" from these rules do not need to apply for written concurrence under this Certification. New development activities located in the protected 50-foot wide riparian areas (whether jurisdictional wetlands or not) within the Neuse, Tar-Pamlico, Randleman and Catawba River Basins shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 2B .0200. All new development shall be located, designed, constructed, and maintained to have minimal disturbance to protect water quality to the maximum extent practicable through the use of best management practices;
9. Additional site-specific conditions may be added to projects for which written concurrence is required or requested under this Certification in order to ensure compliance with all applicable water quality and effluent standards;
10. Concurrence from DWQ that this Certification applies to an individual project shall expire three years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding Nationwide and Regional General Permits, whichever is sooner;
11. When written concurrence is required, the applicant is required to use the most recent version of the Certification of Completion form to notify DWQ when all work included in the 401 Certification has been completed.

Non-compliance with or violation of the conditions herein set forth by a specific fill project shall result in revocation of this Certification for the project and may result in criminal and/or civil penalties.

## WQC #3403

The Director of the North Carolina Division of Water Quality may require submission of a formal application for individual certification for any project in this category of activity that requires written concurrence under this certification, if it is determined that the project is likely to have a significant adverse effect upon water quality or degrade the waters so that existing uses of the wetland, stream or downstream waters are precluded.

Public hearings may be held for specific applications or group of applications prior to a Certification decision if deemed in the public's best interest by the Director of the North Carolina Division of Water Quality.

Effective date: March 2003

DIVISION OF WATER QUALITY

By

Alan W. Klimek, P.E.

Director

WQC # 3403

## WQC #3366

### **GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR CORPS OF ENGINEERS NATIONWIDE PERMIT NUMBER 33 (TEMPORARY CONSTRUCTION, ACCESS AND DEWATERING) AND RIPARIAN AREA PROTECTION RULES (BUFFER RULES)**

This General 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 Regulations in 15A NCAC 2H, Section .0500 and 15A NCAC 2B .0200 for the discharge of fill material to waters and wetland areas as described in 33 CFR 330 Appendix A (B) (33) of the Corps of Engineers regulations (i.e., Nationwide Permit No. 33) and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 2B .0200. The category of activities shall include any fill activity for temporary construction, access and de-watering. This Certification replaces Water Quality Certification Number 2727 issued on May 1, 1992 and Certification Number 3114 issued on February 11, 1997. This WQC is rescinded when the Corps of Engineers reauthorize Nationwide Permit 33 or when deemed appropriate by the Director of the DWQ.

The State of North Carolina certifies that the specified category of activity will not violate appropriate portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with the conditions hereinafter set forth.

#### Conditions of Certification:

1. These activities do not require written concurrence from the Division of Water Quality as long as they comply with all conditions of this General Certification. If any condition in this Certification cannot be met, application to and written concurrence from DWQ are required. Also, Condition No. 2 is applicable to all streams in basins with riparian area protection rules;
2. Impacts to any stream length in the Neuse, Tar-Pamlico and Randleman River Basins (or any other major river basins with Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) requires written concurrence from DWQ in accordance with 15A NCAC 2B.0200. Activities listed as "exempt" from these rules do not need to apply for written concurrence under this Certification. New development activities located in the protected 50-foot wide riparian areas (whether jurisdictional wetlands or not) within the Neuse, Tar-Pamlico, Randleman and Catawba River Basins shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 2B .0200. All new development shall be located, designed, constructed, and maintained to have minimal disturbance to protect water quality to the maximum extent practicable through the use of best management practices;
3. Appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the "North Carolina Sediment and Erosion Control Planning and Design Manual" or the "North Carolina Surface Mining Manual" whichever is more appropriate (available from the Division of Land Resources (DLR) in the DENR Regional or Central Offices) shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standard;

## WQC #3366

4. All sediment and erosion control measures placed in wetlands or waters shall be removed and the original grade restored within two months after the Division of Land Resources has released the project;
5. If an environmental document is required, this Certification is not valid until a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) is issued by the State Clearinghouse;
6. Placement of culverts and other structures in waters, streams, and wetlands must be placed below the elevation of the streambed to allow low flow passage of water and aquatic life unless it can be shown to DWQ that providing passage would be impractical. Design and placement of culverts including open bottom or bottomless arch culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in aggradation, degradation or significant changes in hydrology of wetlands or stream beds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium shall be maintained if requested in writing by DWQ. Additionally, when roadways, causeways or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges must be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in aggradation, degradation or significant changes in hydrology of streams or wetlands;
7. Measures shall be taken to prevent live or fresh concrete from coming into contact with waters of the state until the concrete has hardened;
8. All temporary fill shall be removed to the original grade after construction is complete and the site shall be stabilized to prevent erosion;
9. Pipes shall be installed under the road or causeway in all streams to carry at least the 25 year storm event as outlined in the most recent edition of the "North Carolina Sediment and Erosion Control Planning and Design Manual" or the "North Carolina Surface Mining Manual" so as not to restrict stream flow during use of this Certification;
10. In accordance with North Carolina General Statute Section 143-215.3D(e), any request for written concurrence for a 401 Water Quality Certification must include the appropriate fee. If a project also requires a CAMA Permit, one payment to both agencies shall be submitted and will be the higher of the two fees;
11. Additional site-specific conditions may be added to projects for which written concurrence is required or requested under this Certification in order to ensure compliance with all applicable water quality and effluent standards;
12. Concurrence from DWQ that this Certification applies to an individual project shall expire three years from the date of the cover letter from DWQ or on the same day as the expiration date of these corresponding Nationwide and Regional General Permits, whichever is sooner;

## WQC #3366

13. When written concurrence is required, the applicant is required to use the most recent version of the Certification of Completion form to notify DWQ when all work included in the 401 Certification has been completed.

Non-compliance with or violation of the conditions herein set forth by a specific fill project shall result in revocation of this Certification for the project and may result in criminal and/or civil penalties.

The Director of the North Carolina Division of Water Quality may require submission of a formal application for individual certification for any project in this category of activity that requires written concurrence under this certification, if it is determined that the project is likely to have a significant adverse effect upon water quality or degrade the waters so that existing uses of the wetland, stream or downstream waters are precluded.

Public hearings may be held for specific applications or group of applications prior to a Certification decision if deemed in the public's best interest by the Director of the North Carolina Division of Water Quality.

Effective date: 18 March 2002

DIVISION OF WATER QUALITY

By

Gregory J. Thorpe, Ph.D.

Acting Director

WQC # 3366