



201331135 NO. 373 P. 2
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

October 20, 2003

Dr. Gregory J. Thorpe, Ph.D., Environmental Director
NCDOT Planning and Environmental Branch
1548 Mail Service Center
Raleigh, NC, 27699-1548

Dear Dr. Thorpe:

Re: Water Quality Certification Pursuant to §401 of the Federal Clean Water Act,
NC 24-27 widening to a multi-lane facility from west of SR 1142 (Browns Hill Road) to east of Big
Bear Creek near SR 1253 (Sam Road), Stanly County.
State Project No. 6.689002T
TIP Nos. R-967CA and CB
DWQ Project No. 030891

Attached hereto is a copy of Certification No. 3440 issued to The North Carolina Department of
Transportation dated October 20, 2003.

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

RECEIVED

OCT 27 2003

Sincerely,

Alan W. Klimek, P.E.

CESAW-CO-RA

Attachments

cc: Wilmington District Corps of Engineers
Steve Lund, USACE Asheville 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:

R-967CA

- 0.05 acres of riverine wetlands through fill, excavation and mechanized clearing;
- 318 linear feet of on-site stream relocation;
- 499 linear feet of jurisdictional stream loss.

R-967CB

- 0.16 acres of riverine wetlands through fill, excavation and mechanized clearing;
- 863 linear feet of jurisdictional stream loss.

The R-967CA and CB projects shall be constructed pursuant to the Application dated July 21, 2003 and the October 1, 2003 Addendum to construct the multi-lane widening of NC 24-27 from west of SR 1142 (Browns Hill Road) to east of Big Bear Creek in Stanley 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. Construction shall be performed so that no violations of state water quality standards, statutes, or rules occur.
 - a. 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 water quality standards.
 - b. The erosion and sediment control measures for the R-967CA and CB projects must equal or exceed the proper design, installation, operation and maintenance outlined in the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*. These 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 projects included under this Certification.

- c. For borrow pit sites, the erosion and sediment control measures must equal or exceed the proper design, installation, operation and maintenance outlined in the most recent version of the *North Carolina Surface Mining Manual*.
 - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
2. 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.
3. 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. 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 Preconstruction Notice Application. 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.
4. Live or fresh concrete shall not come into contact with waters of the state until the concrete has hardened.
5. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is strictly prohibited.
6. Stormwater shall not be routed to flow directly into streams. Existing wooded stream buffers shall not be mowed in order to allow them to provide diffuse stormwater flow and/or stream bank stabilization.
7. 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.
8. The natural dimension, pattern and profile of the stream above and below the crossing should not be modified by widening the stream channel or changing the depth of the stream.
9. 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.
10. 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.
11. Placement of culverts and other structures in waters, streams, and wetlands shall 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 and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds 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.

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. *On-Site Stream Relocation:* The 318-foot on-site stream relocation shall utilize natural channel design.
 - o The relocation must be constructed in a dry work area, and stabilized before the stream flow is diverted. The stream relocation shall be completed and stabilized prior to diverting water into the new channel. The channel must be allowed to stabilize for an entire growing season. Vegetation used for bank stabilization shall be limited to native woody species, and should include establishment of a 30-foot wide wooded and an adjacent 20-foot wide vegetated buffer on both sides of the relocated channel to the *maximum extent practical*. A transitional phase incorporating coir fiber and seedling establishment is allowable. Riprap may be allowed if it is necessary to maintain the physical integrity of the stream, but the Applicant must provide written justification and the calculations used to determine the extent of riprap coverage requested.
 - o If the relocated channel or the associated riparian area has been determined to be unstable, the stream shall be repaired or stabilized using only natural channel design techniques. Additionally, the vegetation in the riparian area shall be maintained and/or replaced according to the approved plans. Riprap and other hard structures may *only* be used if required by the Division of Land Resources or a Delegated Local Program. Additionally, all repair designs must be submitted to and receive written approval from the Division before the repair work is performed.
 - o Monitoring for geomorphological stability shall be performed for the relocated channel in accordance with accepted protocols established by US Army Corps of Engineers (USACE) and NCDWQ.
 - o The relocated channel and associated riparian buffer areas shall be preserved in perpetuity through a deed notification, preservation easement or some other legally binding mechanism or agreement. The above easement or other legally binding mechanism or agreement must be in place before any construction impacts approved un this Certification can take place. The NCDOT shall provide NCDWQ with evidence that the additional right of way has been purchased within two (2) months of issuance of the US Army Corps of Engineers 404 Permit.
 - o The on-site stream relocation must be completely constructed and maintained according to the plans approved by the Division before the R-967CA part of the project is opened to the public and any mitigation credit is given.

- 14. *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). NCDOT has proposed to provide mitigation for all stream impacts at a 2:1 ratio in their Application Addendum dated October 1, 2003.

R-967CA

Compensatory mitigation for 499 linear feet of stream impacts and 0.05 acres of wetland impacts shall be provided through the following schemes:

- 318 linear feet of on-site stream relocation as described above.
- Remaining stream mitigation provided at Back Creek Mitigation Site.
- 0.1 acres of wetland restoration will be provided at the Back Creek Mitigation Site (Yadkin River Basin, HU 03040105) in Mecklenburg County.

The Back Creek Mitigation Site has a total of 3380 linear feet of stream restoration available: 300 linear feet of enhancement (at utility crossings) and 3080 linear feet of restoration. Areas within this mitigation site that are within 50 feet of the restored channel and cannot support a forest canopy will be considered as stream enhancement by DWQ rather than stream restoration. In addition, DWQ concurs with DOT's selection of Alternative 2 for the upstream tributary. *A restoration plan for this tributary must be sent to DWQ for written approval by December 15, 2003.*

R-967CB

Compensatory mitigation for 0.16 acres of wetland impacts (at a 1:1 ratio) and 863 linear feet of stream impacts (at a 2:1 ratio totaling 1,726 linear feet) shall be provided through the following scheme:

- NC Ecological Enhancement Program (EEP) has agreed to provide all of the compensatory mitigation for these impacts.

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 payment, wetland or stream fill shall not occur. The payment to EEP shall be sent within two (2) months of issuance of the 404 permit.

- 15. 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 attached permit drawings contained in the Application dated July 21, 2003.
- 16. 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.

17. 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.

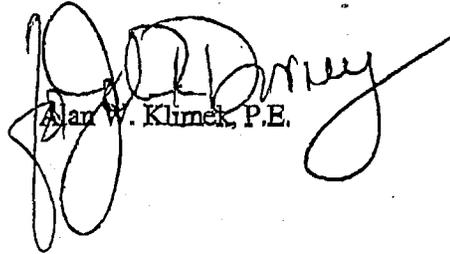
NCDOT shall require its contractors (and/or agents) to comply with all of the terms of this Certification, and shall provide each of its contractors (and/or agents) a copy of this Certification.

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: *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 October 2003

DIVISION OF WATER QUALITY


Alan W. Klimek, P.E.

WQC No. 3440

SPECIAL CONDITION (Action ID: 200331135); NCDOT TIP NO. R0967CA/CB

1. All work authorized by this permit must be performed in strict compliance with the attached plans, which are a part of this permit.
2. All conditions of Section 401, Clean Water Act, Water Quality Certification No. 3440, issued by the North Carolina Division of Water Quality on October 20, 2003, will be regarded as conditions of this Department of the Army (DA) permit.
3. The permittee shall schedule a preconstruction meeting between their representatives, the contractor and a representative of the Corps of Engineers, Asheville Regulatory Field Office prior to any work in jurisdictional waters and wetlands to ensure that there is a mutual understanding of all terms and conditions contained in this DA permit. The permittee shall notify the Corps of Engineers a minimum of thirty (30) days in advance of the meeting.
4. The permittee and his 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 permit or any modification to this permit. There shall be no excavation from, waste disposal into, or degradation of jurisdictional waters or wetlands associated with this permit without the necessary modification of this permit to include appropriate compensatory mitigation. This prohibition applies to all borrow and fill activities associated with this project.
5. To ensure that all borrow and waste activities occur on uplands and do not result in the degradation of adjacent waters and wetlands, 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 ensure that all such areas comply with Special Condition No. 4 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 documentation will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with Special Condition No. 4 above. All information will be available to the Corps of Engineers upon request. The permittee 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 10 days of the completion of the reclamation work.
6. The permittee shall require his 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 his contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit.

7. The permittee will ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Any deviations in the construction design plans will be brought to the attention of the Corps of Engineers, Asheville Regulatory Field Office prior to any active construction in waters or wetlands.

8. Adequate sedimentation and erosion control measures must be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures must be inspected and maintained regularly, especially following rainfall events.

9. 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. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.

10. All temporary diversion channels and stream crossings will be constructed of non-erodable materials. Any such structures located outside of the authorized construction limits of the project will be reported in writing to the Corps of Engineers, Asheville Regulatory Field Office, together with a location map and restoration plan for any necessary permit modification.

11. All authorized culverts will be installed to allow the passage of low stream flows and the continued movement of fish and other aquatic life as well as to prevent headcutting of the streambed. For all box culverts and for pipes greater than 48 inches in diameter, the bottom of the pipe will be buried at least one foot below the bed of the stream. For culverts 48 inches in diameter or smaller, the bottom of the pipe must be buried below the bed of the stream to a depth equal to or greater than 20 percent of the diameter of the culvert.

12. In order to allow for the continued movement of bed load and aquatic organisms, existing stream channel widths and depths will be maintained at the inlet and outlet ends of culverts. Riprap armoring of streams at culvert inlets and outlets shall be minimized above the ordinary high water elevation in favor of bioengineering techniques such as bank sloping, erosion control matting and revegetation with deep-rooted, woody plants.

13. All mechanized equipment operating near surface waters shall be regularly inspected to prevent contamination of streams from leakage of fuels, lubricants, hydraulic fluids or other toxic materials. No equipment staging or storage of construction material will occur in wetlands. Hydroseeding equipment will not be discharged or washed out into any surface waters or wetlands.

14. The authorized channel relocation at Site 1, Section CA will be constructed in a dry work area and stabilized before stream flow is diverted through it. The Corps of Engineers, Asheville Regulatory Field Office will be notified in advance by facsimile transmission or electronic mail of the intended diversion of water into the new channel. Monitoring of the relocated channel will be accomplished according to Monitoring Level 2 of the US Army Corps of Engineers, Wilmington District, Stream Mitigation Guidelines of April 2003.

15. Compensatory mitigation for unavoidable impacts to .16 acres of wetland and 863 linear feet of stream channel on the CB Section of the project shall be provided by the Ecosystem Enhancement Program (EEP) as outlined in the November 18, 2003 letter from William D. Gilmore, EEP Transition Manager. The EEP will provide 1.6 acres of preservation of riverine wetlands at the Drowning Creek Site in Moore County and 8630 linear feet of preservation of warm water stream channel at the Broad River Greenway Site in Cleveland County in the Southern Piedmont Eco-Region which have 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 .16 acres of restoration of riverine wetlands and 863 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 project impacts. Construction within wetlands on Section CB of the permitted highway project shall begin only after the EEP has provided written confirmation to the District Engineer that EEP and not NCDOT is responsible for providing the required mitigation, pursuant to Paragraph VI.B.7 of the MOA. 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.

16. In order to compensate for unavoidable impacts to functional stream channel and wetlands on the CA Section of the project, the permittee will utilize .1 acres of successfully restored forested riverine wetland and 499 linear feet of successfully restored stream channel at their Back Creek Mitigation Site in Mecklenburg County, North Carolina. The mitigation work will be accomplished in accordance with the permittee's *Back Creek Site, Detailed Stream and Wetland Mitigation Plan, Mecklenburg County, North Carolina*, dated January 2003 as well as the terms and conditions of any applicable Nationwide Permit No. 27. Construction of the mitigation area must be authorized by a separate permit and will be accomplished according to the schedule established in the permittee's letter of December 12, 2003. Monitoring of wetland restoration success will be accomplished in accordance with the referenced plan. Monitoring of stream restoration success will be accomplished in accordance with Monitoring Level 1 of the US Army Corps of Engineers, Wilmington District, Stream Mitigation Guidelines of April 2003. The permittee will provide a survey identifying the location of the .1 acres of wetland and the 499 linear feet of stream channel that will satisfy this mitigation requirement.

17. The permittee will report any violations of the above conditions and any violation of Section 404 of the Clean Water Act from unauthorized work in writing to the Wilmington District, US Army Corps of Engineers within 24 hours of the violation.