




STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

October 7, 2004

MEMORANDUM TO: Mr. Jon G. Nance, P.E.
Division 5 Engineer

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

SUBJECT: Wake County; Division 5; Widening of US 1/64 from the US 1/64/SR
1009 (Tryon Road) Interchange to south of I-40 Cary; State Project No.
8.1403101; TIP Project No. U-3101C

Attached is the modification to WQC No. 041055.

PSH/gyb

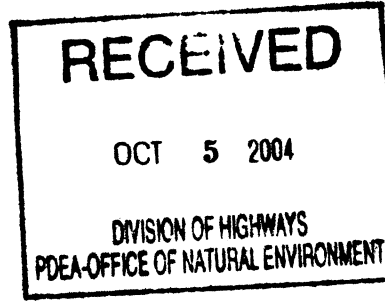
Attachment

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. Chris Murray, Division 5 DEO
Ms. Cathy Houser, PE



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



October 5, 2004
Wake County
DWQ Project No. 041055
TIP No. U-3101C

Dr. Gregory J. Thorpe, PhD., Manager
Planning & Environmental Branch
N.C. Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina, 27699-1548

Dear Dr. Thorpe:

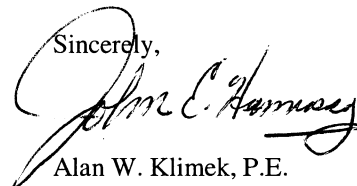
Re: Certification Pursuant to Section 401 of the Federal Clean Water Act and Neuse Buffer Certification, Modification for the purpose of widening US 1/64 from US 64 to south of SR 1313 in Cary, Wake County, TIP U-3101C, WBS Element 34897.1.1, State Project No. 8.1403101, WQC Project No. 041055.

Attached hereto is a modification to Certification No. 041055 issued to the North Carolina Department of Transportation on August 27, 2004. The attached modification authorizes the following:

Site Location	Action taken	Fill (ac)	Mechanized Clearing (ac)
Site 10 STA 64+10 L	Wetland fill and mechanized clearing	0.006	0.016
Total New Impacts			0.022

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 August 27, 2004 still apply except where superseded by this certification.

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

Sincerely,

Alan W. Klimek, P.E.
Director

Attachments:

Modification to WQC No. 010681

cc: Wilmington District US Army Corps of Engineers
Mr. Eric Alsmeyer, US Army Corps of Engineers Raleigh Field Office
NCDWQ Raleigh Regional Office
Mr. Jon G. Nance, Division 5 Engineer, 2612 N. Duke Street, Durham, NC 27704
Mr. Chris Murray, Division 5 Environmental Officer, 2612 N. Duke Street, Durham, NC 27704
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, Section .0500. The attached modification authorizes the following:

Site Location	Action taken	Fill (ac)	Mechanized Clearing (ac)
Site 10 STA 64+10 L	Wetland fill and mechanized clearing	0.006	0.016
Total New Impacts			0.022

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 August 27, 2004 still apply except where superceded by this certification.

The application provides adequate assurance that the fill and mechanized clearing in wetlands in conjunction with the proposed road widening 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. 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 total wetland fills for this project (now or in the future exceed one acre, 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, Coastal Stormwater, Non-discharge and Water Supply watershed regulations.

Condition(s) of Certification:

1. Appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of two manuals. Either the "North Carolina Sediment and Erosion Control Planning and Design Manual" or the "North Carolina Surface Mining Manual" (available from the Division of Land Resources in the DEHNR Regional or Central Offices). The control practices shall be utilized to prevent exceedances of the appropriate turbidity water quality standard (50 NTUs in all fresh water streams and rivers not designated as trout waters; 25 NTUs in all lakes and reservoirs, and all saltwater classes; and 10 NTUs in trout waters).
2. Pursuant to NCAC15A 2B.0233(6), sediment and erosion control devices shall not be placed in Zone 1 of any Neuse Buffer without prior approval by the NCDWQ. At this time, the NCDWQ has approved no sediment and erosion control devices in Zone 1 anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.
3. All protected riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated with native woody species upon completion of the project construction. A post-construction as-built with the restoration activities included shall be submitted to the DWQ no later than 60 days after the project is closed out by the Department of Transportation.

4. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by orange fabric fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.
5. No live or fresh concrete shall come into contact with waters of the state until the concrete has hardened.
6. There shall be no excavation from or waste disposal into jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit. Should waste or borrow sites be located in wetlands or stream, compensatory mitigation will be required since it is a direct impact from road construction activities.
7. No additional compensatory mitigation shall be done in accordance with this modification.
8. All other conditions written into previous Water Quality Certifications for this project still apply.

Violations of any condition herein set forth shall 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 404 Permit. This Certification shall expire upon 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, P.O. Box 27447, Raleigh, N.C. 27611-7447. This certification and its conditions are final and binding unless you ask for a hearing.

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 contact Nicole Thomson at 919-715-3415.

Sincerely,



Alan W. Klimek, P.E.

Modification to WQC No. 041055

U.S. ARMY CORPS OF ENGINEERS WILMINGTON DISTRICT

Action ID. 200120922 & 200421562

County Wake

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Property Owner/Agent: NCDOT/US 1-64/ TIP U-3101C

Address: Attn: Mr. Gregory J. Thorpe, PhD., Planning & Environmental Branch
1584 Mail Service Center
Raleigh, North Carolina 27699-1548

Telephone No.: (919) 733-3141

Size and Location of project (waterway, road name/number, town, etc.): US 1/64 widening located south of the I-40 interchange to SR 1009 (Tryon Road) south of Cary, in Wake County, North Carolina. The project is located adjacent to Swift Creek, Long Branch, Lynn Branch.

Description of Activity

The proposed project involves the widening of US 1/64 from a four lane to a six lane facility south of Cary in Wake County. The proposed typical section is a six-lane divided highway with a median concrete barrier. Widening to the inside will eliminate the existing grass median. There will be minor widening to the outside. The US 1/64 interchanges at SR 1313 (Walnut Street) and at Cary Parkway will also be modified (previously know as TIP U-3101D). The D section has been included as part of the C section. The total project length will be 3.56 miles. Traffic will remain onsite during construction. Project construction will require approximately 180 linear feet of temporary stream channel impacts to allow for culvert construction and dewatering. (These temporary construction fill impacts are authorized under NW 33.) This project will impact 9 separate stream channels for a total of 910 linear feet of surface waters of which 874 linear feet are perennial stream channels that require compensatory mitigation and 4 separate wetlands for a total of 0.066 of wetland impacts (no compensatory mitigation required since total is less than 0.10 acre). The project includes 157 linear feet of stream channel relocation / onsite mitigation. This project is included in the list of transition period projects that the Natural Resources Ecosystem Enhancement Program (EEP) will provide compensatory mitigation for unavoidable jurisdictional waters impacts. The remaining 717 linear feet of stream channel impacts will be mitigated through the EEP at a ratio up to 2:1 in Cataloging Unit 3020201 of the Neuse River Basin (see attached special condition. **) 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.

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

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

Section 404 and Section 10.

14 & 33 Nationwide General Permits.

The work is authorized by the above referenced permit(s) provided it is accomplished in strict accordance with the attached conditions, special conditions listed at the end of this form, and the submitted plans. Any violation of the attached conditions or special conditions, or deviation from the submitted plans may subject the permittee to a stop work order, a restoration

order and/or appropriate legal action.

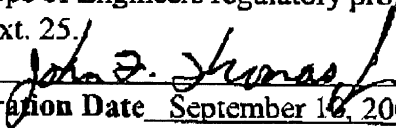
This verification will remain valid until the expiration date shown below, unless the nationwide authorization is modified, reissued or revoked. If, prior to the expiration date shown below, the nationwide permit authorization is reissued and/or modified, this verification will remain valid until expiration date shown below, provided it complies with all modifications. If the nationwide permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e. are under construction) or are under contract to commence in reliance upon the nationwide permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State, or local approvals/permits. Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Quality at telephone (919) 733-1786 to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management.

If you have any questions regarding this verification, any of the attached conditions or special conditions of the Permit, or the Corps of Engineers regulatory program, please contact John Thomas at telephone 919 876-8441 ext. 25.

Regulatory Project Manager Signature



Date September 10, 2004

Expiration Date September 16, 2006

** The project includes 157 linear feet of stream channel relocation / onsite mitigation.

Compensatory mitigation for the remaining unavoidable impacts to 717 linear feet of stream channels associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated August 30, 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 a minimum ratio of 1:1 inkind restoration of riverine wetlands and water stream channel (e.g. warm) in the Neuse River basin (Hydrologic Cataloging Unit 3020201) by July 22, 2005 and half of the proposed preservation mitigation would be available at that time for mitigation for other project impacts. 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.

PROJECT COMMITMENTS

US 1/64 from the US 1/64/SR 1009 (Tryon Road) Interchange to south of I-40
Cary
Wake County, State Project # 8.1403101,
F.A. Project # STPNHF-1(4)
TIP No. U-3101C

COMMITMENTS DEVELOPED THROUGH PROJECT DEVELOPMENT AND DESIGN

Hydraulics Unit

NCDOT will investigate runoff problems at a residential property near Walnut Street to determine if and how stormwater enhancements can be made.

PDEA Branch, Roadside Environmental Unit (REU)

NCDOT will consider providing a visual barrier or screening, funded by or with assistance from the Town of Cary, for the Kingston Ridge neighborhood near the future intersection of Walnut Street and the proposed US 1/64 on- and off-ramps.

PDEA and Right of Way Branches

At the time of right of way acquisition, NCDOT will investigate the possibility of relocating four (4) residential properties located off Kingston Ridge Road near Walnut Street. The properties are on a septic sewer system and the reduced land area after acquisition may require NCDOT to purchase the entire property and relocate the owners.

COMMITMENTS DEVELOPED THROUGH PERMITTING

The standard Nationwide Permit No. 14 Conditions, Nationwide Permit No. 33 Conditions, Regional Conditions, General Certification Conditions, State Consistency Conditions, Water Quality Certification No. 3404 Conditions, Water Quality Certification No. 3366, Neuse River Buffer Rules Conditions, and Section 401 only Conditions have been agreed to by NCDOT.

Project Development and Environmental Analysis Branch, Division 5, REU

The project includes 157 linear feet of stream channel relocation/onsite mitigation. Compensatory mitigation for the remaining unavoidable impacts to 717 linear feet of stream channels associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated August 30, 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 a minimum ratio of 1:1 in-kind restoration of water stream channel (e.g. warm) in the Neuse River basin (Hydrologic Cataloging Unit 3020201) by July 22, 2005 and half of the proposed preservation mitigation would be available at that time for mitigation for other project impacts. The NCDOT shall, within 30 days of the issue date of the Nationwide 14 and 33 Permits,

certify that sufficient funds have been provided to EEP to complete the required mitigation, pursuant to Paragraph V. of the MOA.

Mitigation for impacts to 173,822 square feet of protected riparian buffers in Zone 1 and 106,840 square feet of protected riparian buffers in Zone 2 will be mitigated for as described below:

Zone of Impact	Impacts (Square Feet)	Replacement Ratio	Total Mitigation Required (Square Feet)	Onsite Mitigation Provided (Square Feet)	Offsite Mitigation Required (Square Feet)
Zone 1	173,822	3:1	521,466	52,258	469,208
Zone 2	106,840	1.5:1	160,260	3,845	156,415
Total	280,662		681,726	56,103	625,623

NCDOT has chosen to perform compensatory mitigation for impacts to protected buffers through an in lieu payment to the North Carolina Ecosystem Enhancement Program (NCEEP), and the EEP has agreed to implement the mitigation for the project. Mitigation for unavoidable impacts to Neuse Riparian Buffers shall be provided through an in-lieu payment to the NCEEP at a rate of \$0.96 per square foot for 625,623 square feet of buffer impact. Therefore, a total payment of \$600,598.08 shall be submitted to the NCEEP to offset the impacts. No construction activities in Neuse River Riparian buffers shall begin until payment for buffer mitigation is made and the Ecosystem Enhancement Program receives and clears NCDOT's check (made payable to DENR-Ecosystem Enhancement Program).

Compensatory mitigation for 469 linear feet of impacts to jurisdictional streams shall be provided by onsite stream relocations of 157 linear feet of a tributary to Swift Creek and 312 linear feet of offsite mitigation. The onsite stream relocation shall be constructed in accordance with the design submitted in the June 28, 2004 application. All stream relocations shall have 50-foot wooded buffers planted on both sides of the stream. As-Builts for the completed streams shall be submitted to the North Carolina Division of Water Quality Transportation Permitting Unit within 30 days of the completion of the construction of the relocations. If the parameters of this condition are not met, then the NCDOT shall supply additional stream mitigation for the 157 linear feet of impacts. In addition to the 157 linear feet of on-site mitigation, compensatory mitigation for an additional 312 linear feet of streams is required.

All channel relocations will be constructed in a dry work area, and stabilized before stream flows are diverted. Channel relocations will be completed and stabilized prior to diverting water into the new channel. Whenever possible, channel relocations shall 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. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but NCDOT must provide written justification and any calculations used to determine the extent of rip-rap coverage requested.

Pursuant to NCAC15A 2B.0233(6), sediment and erosion control devices shall not be placed in Zone 1 of any Neuse Buffer without prior approval by the NCDWQ. At this time, the NCDWQ has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.

All protected riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated with native woody species upon completion of the project construction. A post-construction as-built with the restoration activities included shall be submitted to the DWQ no later than 60 days after the project is closed out by the NCDOT.