

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY GOVERNOR LYNDO TIPPETT Secretary

June 30, 2005

MEMORANDUM TO:

Mr. Jon G. Nance, P.E. Division 5 Engineer

Philip S. Harris, III, P.E.

Natural Environment Unit Head Project Development and Environmental Analysis Branch

FROM:

SUBJECT:

Wake and Durham Counties; Division 5; NC 55 Widening From US 64 to SR 1121 (Cornwallis Road); State Project No. 8.1403901; TIP Project No. R-2906

Attached is the modification to the Section 404 Individual Permit and Section 401 Water Quality Certification for the above referenced project. 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. Chris Murray, Division 5 DEO
Ms. Cathy Houser, PE

TELEPHONE: 919-733-3141 FAX: 919-733-9794

PROJECT COMMITMENTS

NC 55 Widening From US 64 to SR 1121 (Cornwallis Road) Federal Aid No. HPSTP-55(12) State Project No. 8.1403901 T.I.P. No. R-2906

In addition to the standard Section 404 Individual Permit (IP) General Conditions and Section 401 Water Quality Certification (WQC) Conditions, the following special commitments have been agreed to by NCDOT:

Commitments Developed Through Permit Modifications

Division 5 Construction/Roadside Environmental Unit

For the 75 linear feet of stream being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with native vegetation.

Other standard conditions are contained in the Section 401 permit dated June 28, 2005. All other conditions of previous Section 404 and 401 permits still apply.



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

June 21, 2005

Beauring REC	E	VED	
JUN	22	2005	
DIVISIO PDEA-OFFICE OF	N OF H	IGHWAYS IAL ENVIRONME	NT

Regulatory Division

Action ID. 200120353

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

Dear Dr. Thorpe:

Reference the Department of the Army permit issued June 19, 2001, AID 200120353; TIP R-2906; NC 55 Widening, for the discharge of fill material in waters of the United States, including wetlands, to facilitate construction of widening of NC 55 (T.I.P. No. R-2906), in the Cape Fear and Neuse River basins, from north of US 64 in Wake County, to north of SR 1121 in Durham County, North Carolina. Reference also your written requests of April 15, 2005, for permit modifications, to extend a pipe at Section A, Station 264+24, Site AY, and to reinstall gravity sewer lines, including stream dewatering, at Section C, Site AJ. The modifications are necessary because of changing site conditions and because the original sewer line installation did not meet NCDOT specifications.

We have reviewed your request, and the permit is hereby modified to include the additional work as shown in the attached revised drawings, subject to the following condition:

Compensatory mitigation for the additional unavoidable impacts to 26 linear feet of stream associated with the proposed project, associated with the April 15, 2005, modification request, shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated April 19, 2005, from William, D. Gilmore, P.E., EEP Director. The EEP will provide an additional 52 linear feet of restoration–equivalent warm water stream mitigation in the Cape Fear River basin (Hydrologic Cataloging Unit 03030002) by July 22, 2005.

It is understood that all other conditions of the permit remain applicable and the permit expiration date is December 31, 2006.

If you have any questions, please call Mr. Eric Alsmeyer of my Raleigh Field Office regulatory staff at telephone (919) 876-8441, extension 23.

Sincerely,

A. Kenneth Jolly

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

Enclosure

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Copies Furnished (with enclosure):

Mr. John Dorney Division of Water Quality-Wetlands Section North Carolina Department of Environment and Natural Resources 1650 Mail Service Center Raleigh, NC 27626-0535

NCDOT ATTN: Mr. Jon Nance Division Engineer 2612 North Duke Street Durham, NC 27704

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-	-447-18+00 10 21+50							0.037	193	0	0	
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E B	199+25 +/-	NONE	0.063		·							
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	Channel	Un-Site	Stream	Channel	Stream	Stream	Surface	Permit	Number	
- FI	Stream	Proposed	Relocated	Temporary	Existing	Existing	Fill In	Plan View	Station	Site
n	2			rary Impacts	Additional Temporary Impact	Addi				

corresponds with sites identified in the original permit application dated January 3, 2001. be no additional permanent fill placed in the existing stream and no relocation of the stream associated with this utility work. The site is identified as Al' and AJ', which This revision involves the relocation of two gravity sewer lines that are in conflict with proposed culvert construction at approximate Station 21+42, -Y47-. There will

Z							Site	
-L- 639+00						Number	Station	
40 of 52					Drawing	Permit	Plan View	
0						Surface	Fill In	
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construction, water will be diverted around a portion of the existing culvert to facilitate construction of the culvert extension to the east. The water line can be installed 639+76 -L-. The existing water line is being impacted by the culvert extension and the new culvert construction to the south. Due to the anticipated method of by open cut through the channel at this location at that time. This revision involves the relocation of an existing ductile iron water line outside the wingwalls of the proposed culvert and culvert extensions at approximate Station

NC DEPARTMENT OF TRANSPORTATION Expressway to SR 1121, Cornwallis NC 55 From North of North Wake **DURHAM-WAKE COUNTY DIVISION OF HIGHWAYS R-2906C UTILITY WORK** PROJECT 8.1403901 **Road In Durham** Sheet 11 of 11 Revised: 4/11/2005

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Division of Water Quality

June 28, 2005



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

Dear Dr. Thorpe:

Re: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act for NC 55 widening in Wake and Durham Counties, TIP No. R-2906A, R-2906C, State Project No. 8.1403901, Federal Aid Project No. HPSTP-55(12). DWQ Project No. 010120

Attached hereto is a modification of Certification No. 3317 issued to The North Carolina Department of Transportation dated March 13, 2001. The attached modification authorizes NC DOT to impact an additional 0.011 acres of permanent fill in surface water and an additional 26 linear feet of permanent stream impact on the A section. In addition, you have our approval for 75 linear feet of temporary fill in surface water for the C section. This modification associated with the original Water Quality Certification dated March 13, 2001 and subsequent modifications still apply except where superceded by this certification.

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

Sincerely.

Alan W. Klimek, P.E.

Modification to WQC No. 3317

cc: Wilmington District Corps of Engineers
Mr. Eric Alsmeyer, Corps of Engineers Raleigh Field Office
Mr. Christopher Militscher, US EPA, Region IV
Mr. Travis Wilson, NC WRC
Mr. Gary Jordan, USFW
Mr. Jon G. Nance, PE, Division 5 Engineer, 2612 N. Duke St., Durham, NC 27704
Mr. Chris Murray, Division 5 Environmental Officer, 2612 N. Duke St., Durham, NC 27704
Ms. Rachelle Beauregard, NEU, 2728-168 Capital Blvd, Parker Lincoln Bldg, Raleigh, NC 27604
Mr. William Gilmore, Ecosystem Enhancement Program
NCDWQ Raleigh Regional Office
Central Files
File Copy

Transportation Permitting Unit 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 2321 Crabtree Boulevard, Suite 250, Raleigh, North Carolina 27604 Phone: 919-733-1786 / FAX 919-733-6893 / Internet: <u>http://h2o.enr.state.nc.us/ncwetlands</u>



Modification of APPROVAL OF 401 Water Quality Certification and ADDITIONAL CONDITIONS

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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 project shall be constructed pursuant to the modifications dated received April 20, 2005 to widen NC 55 in Wake and Durham Counties. The attached modification authorizes additional 0.011 acres of permanent fill in surface water and an additional 26 linear feet of permanent stream impact on the A section (Site AY STA 264+24+/-) for the purpose of the installation of a 48-inch steel pipe under the existing roadway and the extension and connection of an 18-inch RCP to the newly constructed 15-inch RCP and the enlargement of 2 CSP elbows. This modification also authorizes an additional 75 linear feet of temporary stream impacts on the C section (Site AJ STA Y47 21+42) for the purpose of replacing 2 gravity sewer lines in Wake and Durham Counties. 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 March 13, 2001 and all subsequent modifications still apply except where superceded by this certification.

The application provides adequate assurance that the discharge of fill material into the waters of the Neuse River Basin in conjunction 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 modified applications dated received April 20, 2005. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated March 13,2001 still apply except where superceded by this certification. 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) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification 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 Corps of Engineers Permit, whichever is sooner.

Condition(s) of Certification:

1. Construction will be conducted in such a manner as to prevent a significant increase in turbidity outside the area of construction or construction-related discharge. 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 assure compliance with the appropriate turbidity water quality standard.

a. The erosion and sediment control measures for the project 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 project.

b. 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. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.

2. All 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 after the Division of Land Resources has released the project;

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- 3. If an environmental document is required, this Certification is not valid until a FONSI or ROD is issued by the State Clearinghouse. All water quality-related conditions of the FONSI or ROD shall become conditions of this Certification;
- 4. No live or fresh concrete shall come into contact with waters of the state until the concrete has hardened.
- 5. 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.
- 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.
- 7. Placement of culverts and other structures in waters, streams, and wetlands must be placed below the elevation of the streambed, unless otherwise authorized by this certification, 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.
- 8. We understand that you have chosen to perform compensatory mitigation for impacts to streams through the North Carolina Ecosystem Enhancement Program (NCEEP), and that the EEP has agreed to implement the mitigation for the project. Mitigation for unavoidable impacts to streams shall be provided according to the letter received from EEP dated April 19, 2005 and that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project.
- 9. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S.
- 10. For the 75 linear feet of streams being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with native vegetation.
- 11. 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.
- 12. 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.
- 13. Any riprap used must not interfere with thalweg performance and aquatic life passage during low flow conditions.

14. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.

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- 15. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
- 16. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.
- 17. NCDOT, and its authorized agents, shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) 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.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.
- 18. A copy of this Water Quality Certification shall be posted on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.
- 19. 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, unless otherwise authorized by this certification. 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.
- 20. 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.
- 21. Any violations, during the construction of the approved project, of this 401 Water Quality Certification or the North Carolina State Water Quality Standards as defined in 15A NCAC 2B .0200 Rules, shall be reported immediately to the North Carolina Division of Water Quality.

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 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit.

If this Certification is unacceptable to you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification. This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, P.O. Box 27447, Raleigh, N.C. 27611-7447. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

This the 28th Day of June 2005

DIVISION OF WATER QUALITY

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Alan W. Klimek, P.E. Director

WQC No. 3317

3.

Certificate of Completion

DWQ Project No.:			County:		
	111				
Applicant:				<u>,</u>	
Project Name:				 1 	
Date of Issuance of 401 Wat	er Quality Certifi	cation:			

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, 1650 Mail Service Center, Raleigh, NC, 27699-1650. 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 be 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 be 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 be 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: