

## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT SECRETARY

April 4, 2007

MEMORANDUM TO:

Mr. Jon G. Nance, PE

Division Five Engineer

FROM:

Philip S. Harris, III, P.E., Unit Head

Natural Environment Unit

Project Development and Environmental Analysis Branch

SUBJECT:

Wake County, Replace Bridge No.63 over Middle Creek;

T.I.P. Number B-3916; State Project 8.1404501; WBS No.

333501.1

Attached is the U. S. Army Corps of Engineers Regional General Permit Number 31, the 401 Water Quality Certification and the Neuse Buffer Authorization for the above referenced project. All environmental permits have been received for the construction of this project.

PSH/gyb

Attachment

Cc:

Mr. Majed Alghandour, P. E., Programming and TIP

Mr. Jay Bennett, P.E., Roadway Design

Dr. David Chang, P.E., Hydraulics

Mr. Randy Garris, P.E. State Contract Officer

Mr. Art McMillan, P.E., Highway Design

Mr. Greg Perfetti, P.E., Structure Design

Mr. Mark Staley, Roadside Environmental

Mr. John F. Sullivan, FHWA

Mr. Eric Midkiff, P.E., PDEA Central Region Unit Head

Mr. Chris Murray, Division Environmental Officer

TELEPHONE: 919-733-3141 FAX: 919-715-1501

WEBSITE: WWW.DOH.DOT.STATE.NC.US

### PROJECT COMMITMENTS

Wake County
Replacement of Bridge No. 63 over Middle Creek
State Project 8.1404501
WBS No. 33350.1.1
TIP No. B-3916

In addition to the standard Section 404 General Permit No. 31 conditions, Section 401 Water Quality Certification No. 3627, and Neuse Buffer Certification Conditions, NCDOT's Guidelines for Best Management Practices for the Protection of Surface Waters, and NCDOT's Guidelines for Best Management Practices for Bridge Demolition and Removal, the following special commitments have been agreed to by NCDOT:

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

### NCDOT Division 5, Roadway Design Unit, and Hydraulic Unit

The Neuse River Riparian Buffer Rules will be implemented during the design, construction, and maintenance of the project.

This is a standard procedure during the design, construction, and maintenance of NCDOT projects located within the Neuse River Basin.

### Commitments Developed Through the Permitting Process

### NCDOT Division 5, Division 5 Construction, Roadside Environmental

The streams requiring temporary fill shall be lined with geo-fabric matting prior to the placement of fill in the channel. Upon completion of the project, the fill and geo-fabric shall be removed and the pre-existing stream contours shall be restored to the pre-construction contours and revegetated with native woody species.

NCDOT's Design Standards for Sensitive Watersheds will be implemented.

#### U.S. ARMY CORPS OF ENGINEERS

#### WILMINGTON DISTRICT

Action ID: 200220001 County: Wake USGS Quad: Lake Wheeler

#### GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Property Owner: NCDOT; Division of Highways; Gregory J. Thorpe, Ph.D., Dir., PDEA

Mailing Address: 1598 Mail Service Center

Raleigh, North Carolina 27699-1598

Telephone No.: (919) 715-1521 (Erica McLamb)

Location of property (road name/number, town, etc.): TIP#B-3916; Bridge No. 63; On US 401; southwest of Garner, North Carolina

Site Coordinates: 35.6318°N 78.7161°W

Waterway: Middle Creek and unnamed tributaries River Basin: Neuse HUC: 03020201

Description of projects area and activity (see page 2 for a summary of authorized impacts): TIP#B-3916; Discharge of fill material for replacement of Bridge No. 63 with a new bridge, temporary bridge demolition, temporary construction access, and temporary detour bridge, in accordance with the drawings submitted on 3/20/2007.

| Applicable Law: | $\boxtimes$ | Section 404 (Clean Water Act, 33 USC 1344)      |   |
|-----------------|-------------|---|---|
|                 |             | Section 10 (Rivers and Harbors Act, 33 USC 403) | ) |

Authorization: Regional General Permit Number: 31

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted plans. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order and/or appropriate legal action.

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 (telephone (919) 733-1786) to determine Section 401 requirements.

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.

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact Eric Alsmeyer at telephone (919) 876-8441, ext 23.

Corps Regulatory Official \_\_\_\_\_\_ Date: 03/26/2007 Verification Expiration Date: 8/31/2008

Copy Furnished: NCDOT-ONE (Erica McLamb) by e-mail

NCDOT-ONE (Rachelle Beauregarde) by e-mail

**Summary of Authorized Impacts and Required Mitigation** 

|            |              |                |                 |           | <del></del>  |              |                        | T         | 0. (10                |  |
|------------|--------------|----------------|-----------------|-----------|--------------|--------------|------------------------|-----------|-----------------------|--|
| Action ID  | GP#          | Open W         | Open Water (ac) |           | Wetland (ac) |              | Unimportant Steam (If) |           | Important Stream (If) |  |
| #          | Gr#          | Temporary      | Permanent       | Temporary | Permanent    | Temporary    | Permanent              | Temporary | Permanent             |  |
| 200220001  | 31           |                |                 | 0.13      | <0.01        |              |                        | 733       | 50                    |  |
|            |              |                |                 |           |              |              |                        |           |                       |  |
| Impact     | Totals       | 0              | 0               | 0.13      | <0.01        | 0            | 0                      | 733       | 50                    |  |
| Total L    | oss of Wate  | rs of the U.S. | (ac)            | <0.01     | Total I      | Loss of Wate | ers of the U.          | S. (lf)   | 50                    |  |
| Required W | etland Mitig | gation (ac)    |                 |           | Required S   | Stream Mitig | gation (lf)            |           |                       |  |

Additional Remarks and/or Special Permit Conditions:

No stream/wetland mitigation is required.

Note: This verification does not include fill impacts to waters of the United States from any borrow sites or spoil disposal. These impacts would have to be permitted separately.

### WILMINGTON DISTRICT POST-CONSTRUCTION COMPLIANCE FORM

| Action ID Number: 200220001  | County: Wake   |
|--|--|
| Permittee: NCDOT; Division of H 401; southwest of Garner, North C        | ighways; Gregory J. Thorpe, Ph.D., Dir., PDEA TIP#B-3916; Bridge No. 63; On US<br>Carolina   |
| Date Permit Issued: 03/26/2007   |  |
| Project Manager: Eric Alsmeyer   |  |
| Upon completion of the activity au certification and return it to the fo | thorized by this permit and any mitigation required by the permit, sign this bllowing address:   |
|  | US Army Corps Of Engineers   |
|  | Wilmington District  |
|  | Raleigh Regulatory Field Office  |
|  | 6508 Falls Of The Neuse Road   |
|  | Suite 120  |
|  | Raleigh, North Carolina 27615  |
|  | tivity is subject to a compliance inspection by a U. S. Army Corps of Engineers ly with this permit you are subject to permit suspension, modification, or revocation. |
|  | norized by the above referenced permit has been completed in accordance with the rmit, and required mitigation was completed in accordance with the permit conditions  |
|  |  |
| Signature of Permittee   | Date   |
|  |  |

## DEPARTMENT OF THE ARMY Wilmington District, Corps of Engineers Post Office Box 1890 Wilmington, North Carolina 28402-1890

Regional General Permit No. 198200031
Name of Permittee: General Public
Effective Date: September 1, 2003
Expiration Date: August 31, 2008

### DEPARTMENT OF THE ARMY REGIONAL GENERAL PERMIT

A regional general permit (RGP) to perform work in or affecting navigable waters of the United States and waters of the United States, upon recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899 (33 U.S.C. 403), and Section 404 of the Clean Water Act (33 U.S.C. 1344), is hereby modified and re-issued by authority of the Secretary of the Army by the

District Engineer U.S. Army Engineer District, Wilmington Corps of Engineers Post Office Box 1890 Wilmington, North Carolina 28402-1890

TO AUTHORIZE THE DISCHARGE OF DREDGED OR FILL MATERIAL IN WATERS OF THE UNITED STATES, INCLUDING WETLANDS, ASSOCIATED WITH THE CONSTRUCTION, MAINTENANCE AND REPAIR OF BRIDGES, INCLUDING COFFERDAMS, ABUTMENTS, FOUNDATION SEALS, PIERS, APPROACH FILLS, DETOUR FILLS, BOX CULVERT INSTALLATION AND TEMPORARY CONSTRUCTION AND ACCESS FILLS, IN WATERS OF THE UNITED STATES AS PART OF WORK CONDUCTED BY THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) OR OTHER STATE, FEDERAL OR LOCAL GOVERNMENTAL ENTITY, IN THE STATE OF NORTH CAROLINA.

#### 1. Special Conditions.

a. Written confirmation that the proposed work complies with this RGP must be received from the Wilmington District Engineer prior to the commencement of any work. To enable this determination to be made, the permittee must furnish the Wilmington District Engineer a preconstruction notification with the following information:

- (1) A map indicating the location of the work.
- (2) Plans of the proposed work showing all pertinent structures, elevations, dimensions and quantities of materials and locations of all structures and/or fill in wetlands or waterward of the normal/high water elevation contours.
- (3) A brief discussion of the affected aquatic resources, including streams and wetlands. The discussion shall include the identification and types of vegetation present.
  - (4) Approximate commencement and completion dates.
  - (5) A description of methods to be employed to avoid and/or minimize permanent and temporary impacts to aquatic resources caused by the proposed work.
- (6) Plans, including timetables and techniques, for construction, stabilization and removal of all unavoidable temporary fills.
  - (7) Names and addresses of adjoining property owners.
- b. In the case of fills of one acre or less, including permanent approach fills, detour fills and fills associated with culvert installation, the Corps of Engineers' Project Manager will determine, after appropriate onsite visits and review of plans, if the impacts on aquatic resources, including streams and wetlands, are likely to be such as to require review by Federal and State agencies. If it is determined that impacts are minimal or can be made minimal by changes agreed to by the applicant, a letter of authorization to proceed will be provided. If it is determined that review by Federal and State agencies is necessary to fully evaluate impacts, copies of all plans and materials will be forwarded to the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), the U.S. Environmental Protection Agency (EPA) and the North Carolina Department of Environment and Natural Resources (NCDENR). These agencies will furnish comments to the Wilmington District Engineer within thirty (30) days.
- c. In cases of fills greater than one acre, copies of all plans and materials will be forwarded to the USFWS, the NMFS, the EPA and the NCDENR. These agencies will furnish comments to the Wilmington District Engineer in thirty (30) days. In cases of land disturbing activities comprising more than one acre, a Sedimentation/Erosion Control Plan will be filed with the North Carolina Division of Land Resources, Land Quality Section, thirty (30) days prior to commencing work.
- d. Where work is proposed within the twenty (20) coastal counties, as defined by the North Carolina Division of Coastal Management, the applicant shall forward a copy of the preconstruction notification to:

#### National Marine Fisheries Service 101 Pivers Island Road Beaufort, North Carolina 28516

The counties in which this condition applies are:

| Beaufort    | Hertford   | Bertie  | Hyde     | Brunswick  |
|-------------|------------|---------|----------|------------|
| New Hanover | Camden     | Onslow  | Carteret | Pamlico    |
| Chowan      | Pasquotank | Craven  | Pender   | Currituck  |
| Perquimans  | Dare       | Tyrrell | Gates    | Washington |

- e. In the event that any Federal agency maintains an objection or any required State authorization is outstanding, no notice to proceed will be given until objections are resolved and State authorizations are issued.
- f. No work will proceed until after the applicant has received written notice to proceed from the Wilmington District Engineer. This notice may include additional conditions and/or restrictions. Copies of the notice to proceed will be furnished to the USFWS, the NMFS, the EPA and the NCDENR with a brief description of the work, including the area of wetlands affected and the quantity of fill material.
- g. Upon completion of any work authorized by this RGP, all temporary fills will be completely removed and the area reestablished as a wetland by restoring natural hydrology and native vegetation. Stream contours and riparian vegetation will be reestablished upon the removal of temporary culverts. In such instances, a restoration plan will be submitted to the Wilmington District Engineer for approval. Information in the restoration plan will be in accordance with special condition i. below.
- h. Appropriate soil and erosion control measures must be established and maintained during construction. All fills, temporary and permanent, must be adequately stabilized at the earliest practicable date to prevent erosion of fill material into adjacent waters or wetlands.
- i. In cases where new alignment approaches are to be constructed and the existing wetland approach fill is to be abandoned and no longer to be maintained as a roadway, the abandoned fill shall be removed and the area reestablished as a wetland. In such instances, a restoration plan will be submitted to the Wilmington District Engineer for approval. Information in the restoration plan will be in accordance with special condition i. below.
- j. Discharges of dredged or fill material into waters of the United States, including wetlands, must be minimized or avoided to the maximum extent practicable. In reviewing an activity, the Wilmington District Engineer will first determine whether the activity will result in more than minimal adverse environmental affects. For activities that are determined to have more than minimal impacts, compensatory mitigation will be required. To expedite the process, the applicant will provide a mitigation plan with the request for authorization. Site specific mitigation proposals will include, but are not necessarily limited to, a description of work, a

schedule of work and a monitoring plan, and they will be in accordance with currently approved Wilmington District and/or Corps-wide mitigation guidelines. The applicant may propose other forms of mitigation, such as mitigation bank credits or in-lieu fee mitigation with the notification, which in some situations and at the discretion of the Wilmington District, may be considered acceptable mitigation.

- k. Activities in any North Carolina designated "Mountain Trout Waters" must comply with all pH, temperature and turbidity criteria established for such waters by the North Carolina Wildlife Resources Commission (NCWRC) and/or the North Carolina Division of Water Quality (NCDWQ). Work that may result in the sedimentation of trout waters will generally be prohibited from October 15 to April 15, of any year, to avoid impacts on trout spawning.
- 1. Before discharging dredged or fill material into waters of the United States, including wetlands, in the twenty-five (25) mountain counties of North Carolina that contain trout waters, the applicant will obtain and provide a letter of comments and recommendations from the North NCWRC on the proposed activities. A discussion of alternatives to working in the mountain trout waters and why alternatives were not selected, and a plan to provide compensatory mitigation for all unavoidable adverse impacts to the mountain trout waters shall also be submitted with the letter from NCWRC. To facilitate coordination with the NCWRC, the proponent may provide a copy of the notification to the NCWRC concurrent with the notification to the District Engineer. The NCWRC will respond both to the proponent and directly to the Corps of Engineers.

The applicant should contact:

North Carolina Wildlife Resources Commission Habitat Conservation Program Manager 1721 Mail Service Center Raleigh, North Carolina 27699-1721 Telephone (919) 733-7638

The counties in which this condition applies are:

| Alleghany    | Ashe     | Avery      | Buncombe | Burke |       |
|--------------|----------|------------|----------|-------|-------|
| Caldwell     | Cherokee | Clay       | Graham   | Haywo | od    |
| Henderson    | Jackson  | Macon      | Madison  | McDov | well  |
| Mitchell     | Polk     | Rutherford | Stokes   | Surry | Swain |
| Transylvania | Watauga  | Wilkes     | Yancey   | •     |       |

- m. This permit does not authorize the use of culverts in areas designated as anadromous fish spawning areas by the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC).
- n. Discharges into Waters of the United States designated by either the North Carolina Division of Marine Fisheries (NCDMF) or the NCWRC as anadromous fish spawning area are prohibited during the period between February 15 and June 30, without prior written approval

from NCDMF or NCWRC and the Corps. Discharges into waters of the United States designated by NCDMF as primary nursery areas and discharges into waters of the United States designated by NCWRC as inland nursery areas shall be coordinated with NCDMF and NCWRC prior to being authorized by this RGP. Coordination with NCDMF and NCWRC may result in a required construction moratorium during periods of significant biological productivity or critical life stages.

The Applicant should contact:

NC Division of Marine Fisheries 3441 Arendell Street Morehead City, NC 28557 Telephone 252-726-7021 or 800-682-2632 North Carolina Wildlife Resources Commission Habitat Conservation Program Manager 1721 Mail Service Center Raleigh, NC 27699-1721 Telephone (919) 733-7638

- o. No activity may result in substantial permanent disruption of the movement of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area.
- p. This permit generally allows the permanent installation of culverts to 100 feet in length. For culverts longer than 100 feet, the proposed application will be closely evaluated to determine if unacceptable impacts on movement of aquatic organisms would result. In such cases, approval may not be provided.
- q. If the project is located within the twenty (20) counties of North Carolina designated as coastal counties by the Coastal Area Management Act (CAMA), then all pipe and culvert inverts will be buried at least one foot below normal bed elevation when they are placed within the Public Trust Area of Environmental Concern (AEC) and/or the Estuarine Waters AEC as designated by CAMA, and/or all streams appearing as blue lines on United States Geological Survey (USGS) quad sheets. If the project is not located within the twenty (20) counties of North Carolina designated as coastal counties by CAMA, then culvert inverts will be buried at least one foot below the bed of the stream for culverts greater than 48 inches in diameter. For culverts 48 inches in diameter or smaller, culverts 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. Bottomless arch culverts will satisfy this condition. A waiver from the depth specifications in this condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this condition would result in more adverse impacts to the aquatic environment.
- r. All activities authorized by this RGP shall, to the extent practicable, be conducted "in the dry", with barriers installed between work areas and aquatic habitat to protect that habitat from cement or other pollutants. Where concrete is utilized, measures will be taken to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with waters of the state until the concrete has hardened. Water in the work area will be pumped to holding and settling ponds as practicable, and water will not be allowed to re-enter the water column until decanted.

s. If the project authorized by this RGP is proposed by a Federal or State agency, and is located within the twenty (20) counties of North Carolina designated as coastal counties by the CAMA, then prior to project initiation the proponent must obtain a determination of consistency with the state's coastal management program from the N.C. Division of Coastal Management (DCM). A copy of the state's consistency determination must be provided to the appropriate Wilmington District Regulatory Office at the following address:

Wilmington Regulatory Field Office P.O. Box 1890` Wilmington, NC 28402 Washington Regulatory Field Office P.O. Box 1000 Washington, NC 27889

The state's consistency determination will be conveyed in the form of a CAMA permit if the project is located within a designated CAMA Area of Environmental Concern (AEC), and will be conveyed in the form of a Consistency Determination letter from DCM if the project is not located within a designated CAMA AEC.

- t. No work shall be authorized by the RGP within the twenty coastal counties, as defined by the North Carolina Division of Coastal Management, without prior consultation with NOAA Fisheries. For each activity reviewed by the Corps of Engineers where it is determined that the activity may affect Essential Fish Habitat (EFH) for Federally managed species, an EFH Assessment shall be prepared by the applicant and forwarded to the Corps of Engineers and NOAA Fisheries for review and comment prior to authorization of work.
- u. All work will comply with Water Quality Certification No. 3404, issued by the NCDWQ on 28 March 2003.
- v. The activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows and the structure or discharge of dredged or fill material must withstand expected high flows

### 2. General Conditions.

a. All activities authorized by this RGP that involve the discharge of dredged or fill material in waters of the United States will be consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, pre-treatment standards and management practices established pursuant to the Clean Water Act (33 U.S.C. 1344) and applicable State and local law. If the proposed activity involves the discharge of dredged or fill material in waters of the United States, prior to the commencement of any work, the applicant will satisfy the NCDWQ regarding the need for a Water Quality Certification pursuant to Section 401 of the Clean Water Act.

- b. There will be no unreasonable interference with navigation or the right of the public to riparian access by the existence or use of activities authorized by this RGP.
- c. A permittee, upon receipt of written notice from the Wilmington District Engineer of failure to comply with the terms or conditions of this RGP, will, within 60 days, without expense to the U.S. Government, and in such manner as the Wilmington District Engineer may direct, affect compliance with the terms and conditions or return the worksite to a pre-work condition.
- d. The permittee must make every reasonable effort to perform the work authorized herein in a manner so as to minimize any adverse impact on fish, wildlife and natural environmental values.
- e. The permittee must perform the work authorized herein in a manner so as to minimize any degradation of water quality. The activity will be conducted in such a manner as to prevent a significant increase in turbidity outside the area of construction or construction-related discharge. Increases such that the turbidity in the water body is 50 NTU's or less in all rivers not designated as trout waters by the North Carolina Division of Environmental Management (NCDEM), 25 NTU's or less in all saltwater classes and in all lakes and reservoirs, and 10 NTU's or less in trout waters, are not considered significant.
- f. The permittee will permit the Wilmington District Engineer or his representative to make periodic inspections at any time deemed necessary in order to assure that the activity is being performed or maintained in strict accordance with the Special and General Conditions of this permit.
- g. This RGP does not convey any rights, either in real estate or material, or any exclusive privileges; and it does not authorize any injury to property or invasion of rights or any infringement of Federal, State or local laws or regulations, nor does it obviate the requirement to obtain State or local assent required by law for the activity authorized herein. These may include, but are not necessarily limited to, a Dredge and/or Fill Permit (N.C.G.S. 113-229), a CAMA Permit (N.C.G.S. 113A-118), an Easement to Fill (N.C.G.S. 146-12) and a Water Quality Certification pursuant to Section 401 of the Clean Water Act.
- h. Authorization provided by this RGP may be modified, suspended or revoked in whole or in part if the Wilmington District Engineer, acting on behalf of the Secretary of the Army, determines that such action would be in the best public interest. Unless subject to modification, suspension or revocation, the term of this RGP shall be five years. Any modification, suspension or revocation of this authorization will not be the basis for any claim for damages against the U.S. Government.
- i. This RGP does not authorize the interference with any existing or proposed Federal project and the permittee will not be entitled to compensation for damages or injury to the structures or work authorized herein which may be caused by or results from existing or future operations undertaken by the United States in the public interest.

- j. This RGP will not be applicable to proposed construction when the Wilmington District Engineer determines that the proposed activity would significantly affect the quality of the human environment and determines that an Environmental Impact Statement (EIS) must be prepared.
- k. This RGP will not be applicable to proposed construction when the Wilmington District Engineer determines, after any necessary investigations, that the proposed activity would adversely affect areas that possess historic, cultural, scenic, conservation or recreational values. Application of this exemption applies to:
- (1) Rivers named in Section 3 of the Wild and Scenic Rivers Act (15 U.S.C. 1273), those proposed for inclusion as provided by Sections 4 and 5 of the Act and wild, scenic and recreational rivers established by State and local entities.
- (2) Historic, cultural or archeological sites listed in or eligible for inclusion in the National Register of Historic Places as defined in the National Historic Preservation Act of 1966 as amended, the Abandoned Shipwreck Act of 1987 and the Native American Graves Protection and Repatriation Act.
- (3) Sites included in or determined eligible for listing in the National Registry of Natural Landmarks.
- (4) Endangered or threatened species or critical habitat of such species as determined by the Secretaries of Interior or Commerce and concerned in accordance with the Endangered Species Act (16 U.S.C. 1531).
- (5) NOAA designated marine sanctuaries, National Estuarine Research Reserves, and coral reefs.
- l. Permittees are advised that activities in or near a floodway may be subject to the National Flood Insurance Program, which prohibits any activities, including fill within a floodway that results in any increase in base flood elevations.
- m. At his discretion, the Wilmington District Engineer may determine that this RGP will not be applicable to a specific construction proposal. In such case, the procedure for processing an individual permit in accordance with 33 CFR 325 will be available.
- n. The permittee or the permittee's successors will maintain the authorized work in good condition and in conformance with the terms and conditions of the RGP.

o. The discharge of dredged or fill material shall consist of suitable material free from toxic pollutants in toxic amounts.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Colonel, U. S. Army District Engineer

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





March 23, 2007 Wake County DWQ Project No. 20070489 Bridge 63 on US 401 TIP No. B-3916

### APPROVAL of 401 WATER QUALITY CERTIFICATION and NEUSE BUFFER AUTHORIZATION, with ADDITIONAL CONDITIONS

Dr. Gregory J. Thorpe, Ph.D., Director NCDOT PDEA 1598 Mail Service Center Raleigh, NC 27699-1548

Dear Dr. Thorpe:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge 63 in Wake County:

Stream Impacts in the Neuse River Basin

| Site  | Permanent Fill in Perennial<br>Stream (linear ft) | Temporary Fill in Perennial Stream (linear ft) | Total Stream Impact (linear ft) |
|-------|---|--|---------------------------------|
| 2     | 0   | 20   | 20                              |
| 3     | 0   | 371  | 371                             |
| 6     | 0   | 52   | 52                              |
| 8     | 0   | 62   | 62                              |
| 10    | 50  | 228  | 278                             |
| Total | 50  | 733  | 783                             |

Total Stream Impact for Project: 783 linear feet.

Riverine Wetland Impacts in the Neuse River Basin

| Site  | Permanent Fill (ac) | Temporary Fill (ac) | Total Wetland Impact (ac) |
|-------|---------------------|---------------------|---------------------------|
| 1     | 0                   | 0.01                | 0.01                      |
| 4     | 0                   | 0.06                | 0.06                      |
| 5     | 0                   | 0.07                | 0.07                      |
| 7     | 0                   | 0.01                | 0.01                      |
| 9     | 0.01                | 0                   | 0.01                      |
| Total | 0.01                | 0.15                | 0.16                      |

Total Wetland Impact for Project: 0.16 acres.





Open Water (Stream) Impacts in the Neuse River Basin

| Site   | Permanent Fill in<br>Open Waters (ac) | Temporary Fill in<br>Open Waters (ac) | Total Fill in Open Waters (ac) |
|--------|---------------------------------------|---------------------------------------|--------------------------------|
| Bridge | 0.01                                  | 0                                     | 0.01                           |
| Bents  |                                       |                                       |                                |
| Total  | 0.01                                  | 0                                     | 0.01                           |

Total Open Water Impact for Project: 0.01 acres.

**Neuse Riparian Buffer Impacts** 

| Site   | Zone 1<br>Impact<br>(sq ft) | minus<br>Wetlands<br>in Zone 1<br>(sq ft) | = Zone 1<br>Buffers (not<br>wetlands)<br>(sq ft) | Zone 1 Buffer<br>Mitigation<br>Required<br>(using 3:1 ratio) |     | Zone 2<br>Impact<br>(sq ft) | minus<br>Wetlands<br>in Zone 2<br>(sq ft) | = Zone 2 Buffers (not wetlands) (sq ft) | Zone 2 Buffer<br>Mitigation<br>Required (using<br>1.5:1 ratio) |
|--------|-----------------------------|---|--|--|-----|-----------------------------|---|---|--|
| 1      | 4,723                       | 0   | 4,723  | N/A  |     | 3,703                       | 0   | 3,703                                   | N/A  |
| 2      | 401                         | 0   | 401  | N/A  |     | 58                          | 0   | 58                                      | N/A  |
| 3      | 12,457                      | 0   | 12,457   | N/A  |     | 4,612                       | 0   | 4,612                                   | N/A  |
| 4      | 1,392                       | 0   | 1,392  | N/A  |     | 277                         | 0   | 277                                     | N/A  |
| 5      | 121                         | 0   | 121  | N/A  | - 4 | 240                         | 0   | 240                                     | N/A  |
| 6      | 1,972                       | 0   | 1,972  | 5,916  |     | 25                          | 0   | 25                                      | 37.5   |
| Totals | 21,066                      | 0   | 21,066   | 5,916  |     | 8,915                       | 0   | 8,915                                   | 37.5   |

<sup>\*</sup> n/a = Total for Site is less than 1/3 acre and 150 linear feet of impact, no mitigation required; or if activity is deemed "allowable".

Total Buffer Impact for Project: 29,981 square feet.

The project shall be constructed in accordance with your application dated received March 20, 2007. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3627. This certification corresponds to the General Permit 31 issued by the Corps of Engineers. This approval is also valid for the Neuse Riparian Buffer Rules (15A NCAC 2B.0233). In addition, you should acquire any other federal, state or local permits before you proceed with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This approval will expire with the accompanying 404 permit.

This approval is valid solely for the purpose and design described in your application (unless modified below). Should your project change, you must 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, or of total impacts to streams (now or in the future) exceed 150 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you must adhere to the conditions listed in the attached certification as well as those listed below.

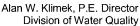




#### **Conditions of Certification:**

- 1. Compensatory mitigation for impacts to 1,972 square feet of protected riparian buffers in Zone 1 and 25 square feet of protected riparian buffers in Zone 2 shall be required. We understand that you have chosen to perform compensatory mitigation for impacts to protected buffers through use of the North Carolina Ecosystem Enhancement Program (EEP). Mitigation for unavoidable impacts to Neuse, Catawba, Randleman or Tar-Pamlico) Riparian Buffers shall be provided in the Neuse River Basin and done in accordance with 15A NCAC 2B.0233. This certification is valid provided that EEP will assume responsibility for satisfying the compensatory mitigation requirements for the above-referenced project, in accordance with the Tri-Party MOA signed on July 22, 2003 and the Dual-Party MOA signed on April 12, 2004.
- 2. A copy of the final construction drawings shall be furnished to NCDWQ Central Office prior to the preconstruction meeting. The permittee shall provide written verification that the final construction drawings comply with the permit drawings contained in the application dated March 20, 2007. Any deviations from the approved drawings are not authorized unless approved by the NC Division of Water Quality.
- 3. The streams requiring temporary fill shall be lined with geo-fabric matting prior to the placement of fill in the channel. Upon completion of the project, the fill and geo-fabric shall be removed and the pre-existing stream contours will be restored and the banks revegetated.
- 4. In accordance with 15A NCAC 02B.0233, temporary roads used for bridge construction or replacement are allowable in the Neuse Riparian Buffer provided that restoration activities are conducted immediately after construction. All non-maintained riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revagetated with native woody species.
- 5. Upon completion of the project, temporary fill in wetlands shall be removed and pre-existing elevations and drainage patters shall be restored.
- 6. Placement of culverts and other structures in waters, streams, and wetlands shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. 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 is being maintained if requested in writing by DWQ. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NC DWQ for guidance on how to proceed and to determine whether or not a permit modification will be required.
- 7. Riprap should not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed.
- 8. For any streams being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with appropriate native species.
- 9. The post-construction removal of any temporary bridge structures must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species.
- 10. Strict adherence to the most recent version of NCDOT's Best Management Practices For Bridge Demolition and Removal approved by the US Army Corps of Engineers is a condition of the 401 Water Quality Certification.







- 11. Bridge deck drains should not discharge directly into the stream. Stormwater should be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of *Stormwater Best Management Practices*.
- 12. All stormwater runoff shall be directed as sheetflow through stream buffers at nonerosive velocities, unless otherwise approved by this certification.
- 13. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegated. Maintained buffers shall be permanently revegetated with non-woody species by the end of the growing season following completion of construction. For the purpose of this condition, maintained buffer areas are defined as areas within the transportation corridor that will be subject to regular DOT maintenance activities including mowing. The area with non-maintained buffers shall be permanently revegetated, with native woody species before the next growing season following completion of construction.
- 14. 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.
- 15. If concrete is used during construction, a dry work area should be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete should not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.
- 16. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.
- 17. The dimension, pattern and profile of the stream above and below the crossing should not be modified. Disturbed floodplains and streams should be restored to natural geomorphic conditions.
- 18. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.
- 19. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream.
- 20. 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.
- 21. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
- 22. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
- 23. The permittee 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 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.



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



- 24. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification.
- 25. 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.
- 26. 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.
- 27. Upon completion of the project, the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify DWQ when all work included in the 401 Certification has been completed.
- 28. Native riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.
- 29. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities.
- 30. 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 waters standards:
  - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the North Carolina Sediment and Erosion Control Planning and Design Manual.
  - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
  - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
  - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
- 31. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored upon completion of the project.

If you do not accept any of the conditions of this certification, you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition that conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699. 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 Rob Ridings at (919) 733-9817.

NorthCarolina Naturally



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



Sincerely,

Alan W. Klimek, P.E.

Attachments (General Certification 3627 and Certificate of Completion form)

cc: Chris Murray, Division 5 Environmental Officer
Erica McLamb, NCDOT PDEA
Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office
Chris Militscher, Environmental Protection Agency
Travis Wilson, NC Wildlife Resources Commission
Gary Joran, US Fish and Wildlife Service
Beth Harmon, Ecosystem Enhancement Program
DWQ Raleigh Regional Office copy
File Copy

# GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR CORPS OF ENGINEERS NATIONWIDE PERMIT NUMBER 14 (ROAD CROSSINGS) AND REGIONAL GENERAL PERMIT 198200031 (WORK ASSOCIATED WITH BRIDGE CONSTRUCTION, MAINTENANCE OR REPAIR CONDUCTED BY NCDOT OR OTHER GOVERNMENT AGENCIES) 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 (DWQ) Regulations in 15A NCAC 2H, Section .0500 and 15A NCAC 2B .0200 for the discharge of fill material to waters and adjacent wetland areas or to wetland areas that are not a part of the surface tributary system to interstate waters or navigable waters of the United States (i.e., isolated wetlands) as described in 33 CFR 330 Appendix A (B) (14) of the Corps of Engineers regulations (Nationwide Permit No. 14 and Regional General Permit 198200031) and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 2B .0200. The category of activities shall include any fill activity for road crossings and is limited to fill less than one-third acre in tidal waters and less than one-half acre in non-tidal waters. This Certification replaces Water Quality Certification Number 2177 issued on November 5, 1987, Water Quality Certification Number 2666 issued on January 21, 1992, Water Quality Certification Number 2732 issued on May 1, 1992, Water Quality Certification Number 3103 issued on February 11, 1997, Water Quality Certification Number 3289 issued on June 1, 2000 and Water Quality Certification Number 3375 issued March 18, 2002 and WQC 3404 issued March 28, 2003. This WQC is rescinded when the Corps of Engineers re-authorizes Nationwide Permit 14 or Regional General Permit 198200031 or when deemed appropriate by the Director of 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. Enumerating and Reporting of Impacts:
  - Streams Impacts to streams as determined by the Division of Water Quality shall be measured as length of the centerline of the normal flow channel. Permanent and/or temporary stream impacts shall be enumerated on the entire project for all impacts regardless of which 404 Nationwide Permits are used. Stream relocations and stream bed and/or bank hardening are considered to be permanent stream impacts. Any activity that results in a loss of use of stream functions including but not limited to filling, relocating, flooding, dredging and complete shading shall be considered stream impacts. Enumeration of impacts to streams shall include streams enclosed by bottomless culverts, bottomless arches or other spanning structures when a 404 Permit is used anywhere in a project unless the entire structure (including construction impacts) spans the entire bed and both banks of the stream, is only used for a road, driveway or path crossing, and is not mitered to follow the stream pattern. Impacts for dam footprints and flooding will count toward the threshold for stream impacts, but flooding upstream of the dam will not (as long as no filling, excavation, relocation or other modification of the existing stream dimension, pattern or profile occurs) count towards mitigation requirements.
  - Wetlands Impacts to wetlands as determined by the Division of Water Quality shall be measured as area. Permanent and/or temporary wetland impacts shall be enumerated on the entire project for all impacts regardless of which 404 Nationwide Permits are used. Any activity that results in a loss of use of wetland functions including but not limited to filling, draining, and flooding shall be considered wetland impacts. Enumeration of impacts to wetlands shall include activities that change the hydrology of a wetland when a 404 Permit is used anywhere in a project.

- Lakes and Ponds Lake and Pond Impacts Enumeration- Impacts to waters other
  than streams and wetlands as determined by the Division of Water Quality shall be
  measured as area. Permanent and/or temporary water impacts shall be enumerated
  on the entire project for all impacts proposed regardless of which 404 Nationwide
  Permits are used. Any activity that results in a loss of use of aquatic functions
  including but not limited to filling and dredging shall be considered waters impacts;
- Proposed fill or substantial modification of wetlands or waters (including streams) under this General Certification requires application to and prior written concurrence from the Division of Water Quality;
- Application to and payment of a fee to DWQ is not required for construction of a driveway
  to a single family lot as long as the driveway impacts less than 25 feet of stream channel
  including any in-stream stabilization needed for the crossing;
- 4. Impacts to any stream length in the Neuse, Tar-Pamlico or 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 for this Certification 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 and Tar-Pamlico 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;
- 5. Irrespective of other application thresholds in this General Certification, all impacts to perennial waters and their associated buffers require written approval from DWQ since such impacts are allowable as provided in 15A NCAC 2B. 0212 (WS-I), 2B .0213 (WS-II), 2B .0214 (WS-III) and 2B .0215 (WS-IV). Only water dependent activities, public projects and structures with diminimus increases in impervious surfaces will be allowed as outlined in those rules. All other activities require a variance from the delegated local government and/or the NC Environmental Management Commission before the 401 Water Quality Certification can be processed. In addition, a 30 foot wide vegetative buffer for low density development or a 100 foot wide vegetative buffer for high density development must be maintained adjacent to all perennial waters except for allowances as provided under the Water Supply Watershed Protection Rules. For the purposes of this condition, perennial waters are defined as those shown as perennial waters on the most recent USGS 1:24,000 topographic map or as otherwise determined by local government studies;
- 6. Additional site-specific stormwater management requirements may be added to this Certification at DWQ's discretion on a case by case basis for projects that have or are anticipated to have impervious cover of greater than 30 percent. Site-specific stormwater management shall be designed to remove 85% TSS according to the latest version of DWQ's Stormwater Best Management Practices manual at a minimum.

Additionally, in watersheds within one mile and draining to 303(d) listed waters, as well as watersheds that are classified as nutrient sensitive waters (NSW), water supply waters (WS), trout waters (Tr), high quality waters (HQW), and outstanding resource waters (ORW), the Division shall require that extended detention wetlands, bio-retention areas, and ponds followed by forested filter strips (designed according to latest version of the NC DENR Stormwater Best Management Practices Manual) be constructed as part of the stormwater management plan when a site-specific stormwater management plan is required.

Alternative designs may be requested by the applicant and will be reviewed on a case-bycase basis by the Division of Water Quality.

Approval of stormwater management plans by the Division of Water Quality's other existing state stormwater programs including appropriate local programs are sufficient to satisfy this Condition as long as the stormwater management plans meet or exceed the design requirements specified in this condition. This condition applies unless more stringent requirements are in effect from other state water quality programs.

- Unless specified otherwise in the approval letter, the final, written stormwater management plan shall be approved in writing by the Division of Water Quality's Wetlands Unit before the impacts specified in this Certification occur.
- The facilities must be designed to treat the runoff from the entire project, unless otherwise explicitly approved by the Division of Water Quality.
- Also, before any permanent building or other structure is occupied at the subject site, the facilities (as approved by the Wetlands Unit) shall be constructed and operational, and the stormwater management plan (as approved by the Wetlands Unit) shall be implemented.
- The structural stormwater practices as approved by the Wetlands Unit as well as drainage patterns must be maintained in perpetuity.
- No changes to the structural stormwater practices shall be made without written authorization from the Division of Water Quality.
- 7. Compensatory stream mitigation shall be required at a 1:1 ratio for not only perennial but also intermittent stream impacts 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;
- 8. In accordance with North Carolina General Statute Section 143-215.3D(e), any application 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 through the Division of Coastal Management and will be the higher of the two fees;
- 9. 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. For linear public transportation projects, impacts equal to or exceeding 150 feet per stream may require mitigation. 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, unless otherwise specified in the approval letter. The mitigation plan must be implemented and/or constructed before any permanent building or structure on 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. Projects may also be implemented once payment is made to a private mitigation bank or other in-lieu fee program, as specified in the written concurrence of 401 Certification for a project. Please note that if a stream relocation is conducted as a stream restoration as defined in The Internal Technical Guide for Stream Work in North Carolina, April 2001, the restored length can be used as compensatory mitigation for the impacts resulting from the relocation;

- 10. For any project involving re-alignment of streams, a stream relocation plan must be included with the 401 application for written DWQ approval. Relocated stream designs should include the same dimensions, patterns and profiles as the existing channel, to the maximum extent practical. The new channel should be constructed in the dry and water shall not be turned into the new channel until the banks are stabilized. 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 the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested. If suitable stream mitigation is not practical on-site, then stream impact will need to be mitigated elsewhere;
- 11. 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 to do so 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;
- 12. That 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:
- 13. All sediment and erosion control measures placed in wetlands and waters shall be removed and the original grade restored within two months after the Division of Land Resources has released the project;
- 14. That additional site-specific conditions may be added to projects proposed under this Certification in order to ensure compliance with all applicable water quality and effluent standards;
- 15. Measures shall be taken to prevent live or fresh concrete from coming into contact with freshwaters of the state until the concrete has hardened;
- 16. 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;
- 17. If this Certification is used to access building sites, all lots owned by the applicant must be buildable without additional fill beyond that explicitly allowed under other General

Certifications. For road construction purposes, this Certification shall only be utilized from natural high ground to natural high ground;

- 18. 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;
- 19. 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 Permit 14 or Regional General Permit 198200031, whichever is sooner.

Non-compliance with or violation of the conditions herein set forth by a specific fill project may result in revocation of this Certification for the project and may also 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 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: 19 March 2007

**DIVISION OF WATER QUALITY** 

Clan Klinde

Ву

Alan W. Klimek, P.E.

Director

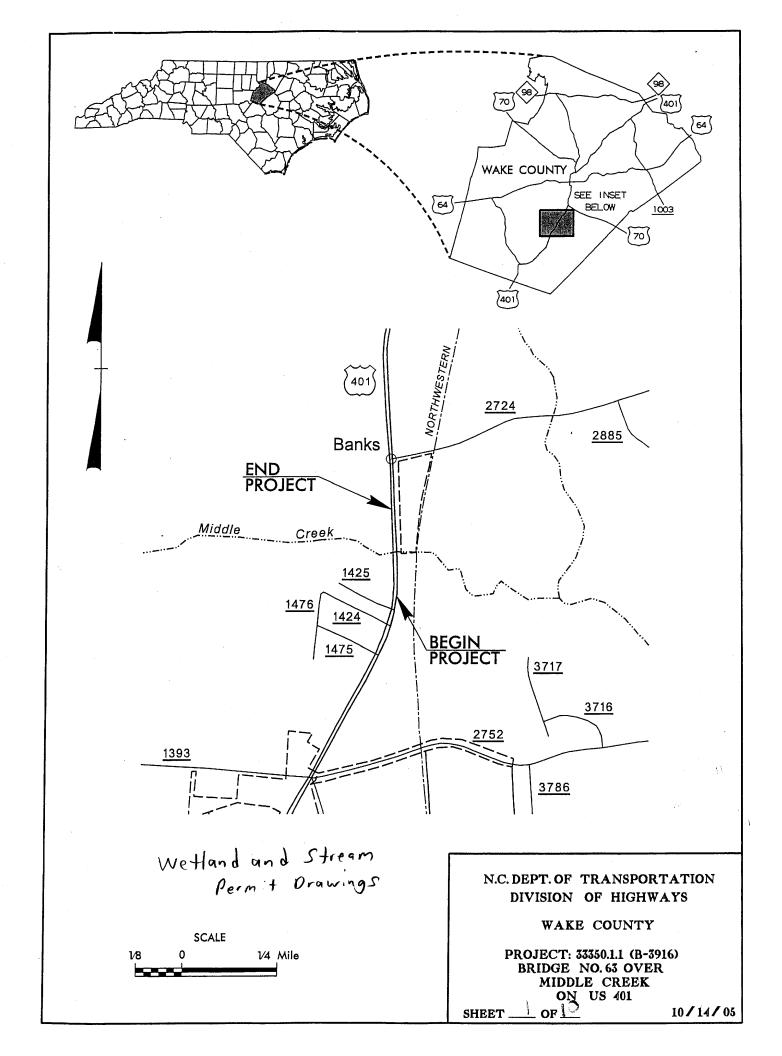


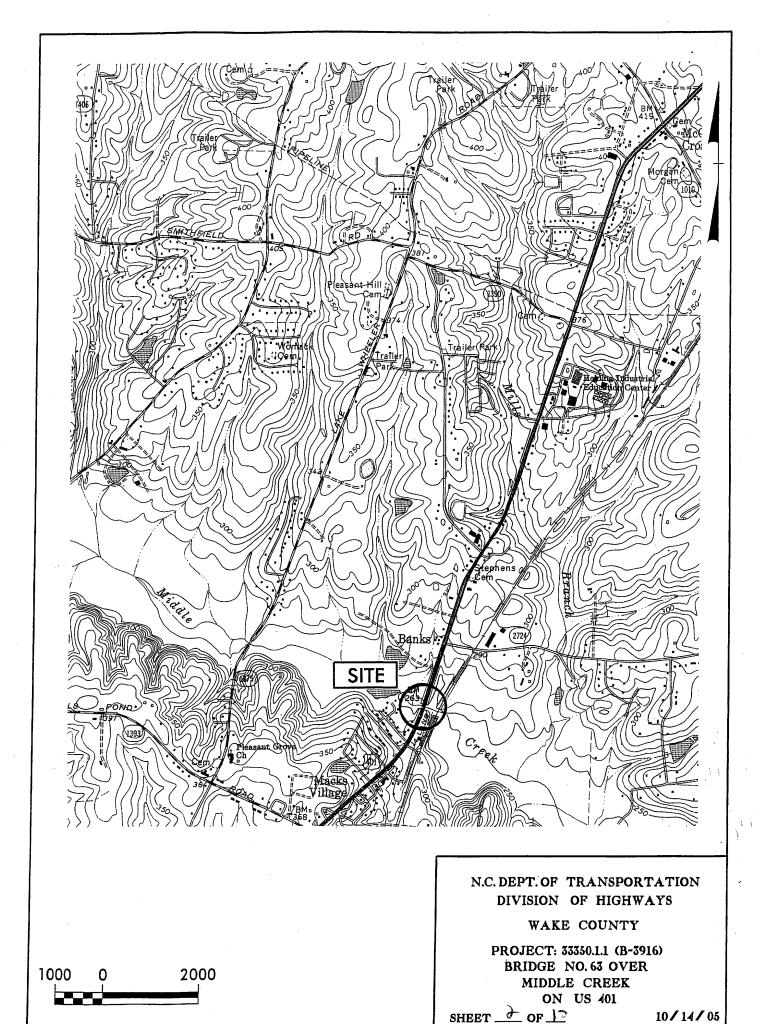


Alan W. Klimek, P.E. Director Division of Water Quality

| DWQ Project No.:  | County:   |
|---|---|
| Applicant:  |   |
|   |   |
| Date of Issuance of 401 Water Quality   | ty Certification:   |
| any subsequent modifications, the appl<br>Unit, North Carolina Division of Water    | within the 401 Water Quality Certification or applicable Buffer Rules, and icant is required to return this certificate to the 401 Transportation Permitting r Quality, 1650 Mail Service Center, Raleigh, NC, 27699-1650. This form ant, the applicant's authorized agent, <b>or</b> the project engineer. It is not of these.   |
|   | , hereby state that, to the best of my abilities, due care and diligence struction such that the construction was observed to be built within substantial r Quality Certification and Buffer Rules, the approved plans and sterials.  |
| Signature:  | Date:   |
| was used in the observation of the cons   | , hereby state that, to the best of my abilities, due care and diligence struction such that the construction was observed to be built within substantial r Quality Certification and Buffer Rules, the approved plans and sterials.  |
| Signature:  | Date:   |
| Permittee hereby state that, to the best of construction such that the construction | , as a duly registered Professional Engineer in the State of North serve (periodically, weekly, full time) the construction of the project, for the of my abilities, due care and diligence was used in the observation of the was observed to be built within substantial compliance and intent of the 401 Rules, the approved plans and specifications, and other supporting materials. |
| Signature   | Registration No.  |
| Date  |   |







### Project No. 33350.1.1 (B-3916)

### Property Owner List

| Parcel Number | Name                           | Address                                |
|---------------|--------------------------------|--|
| 2             | William L. Carter              | 3206 Hampton Road<br>Raleigh, NC 27607 |
| 3             | Carolina Power & Light Company | P.O. Box 1551<br>Raleigh, NC 27602     |

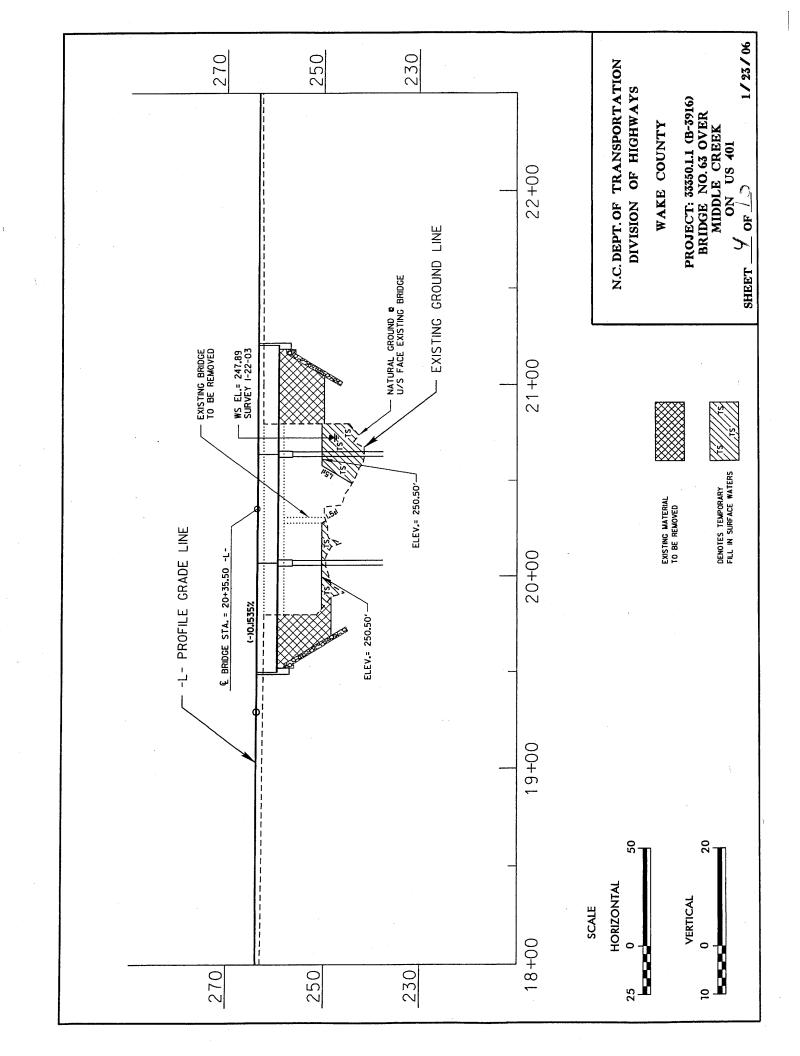
N.C. DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS

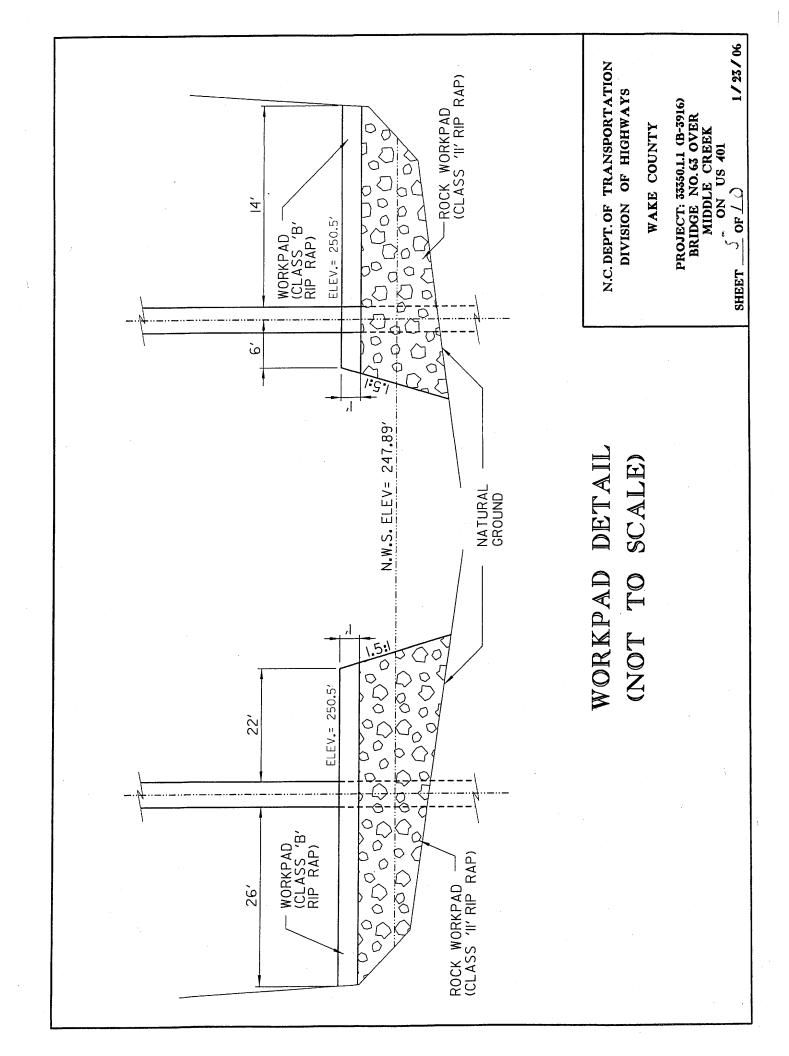
WAKE COUNTY

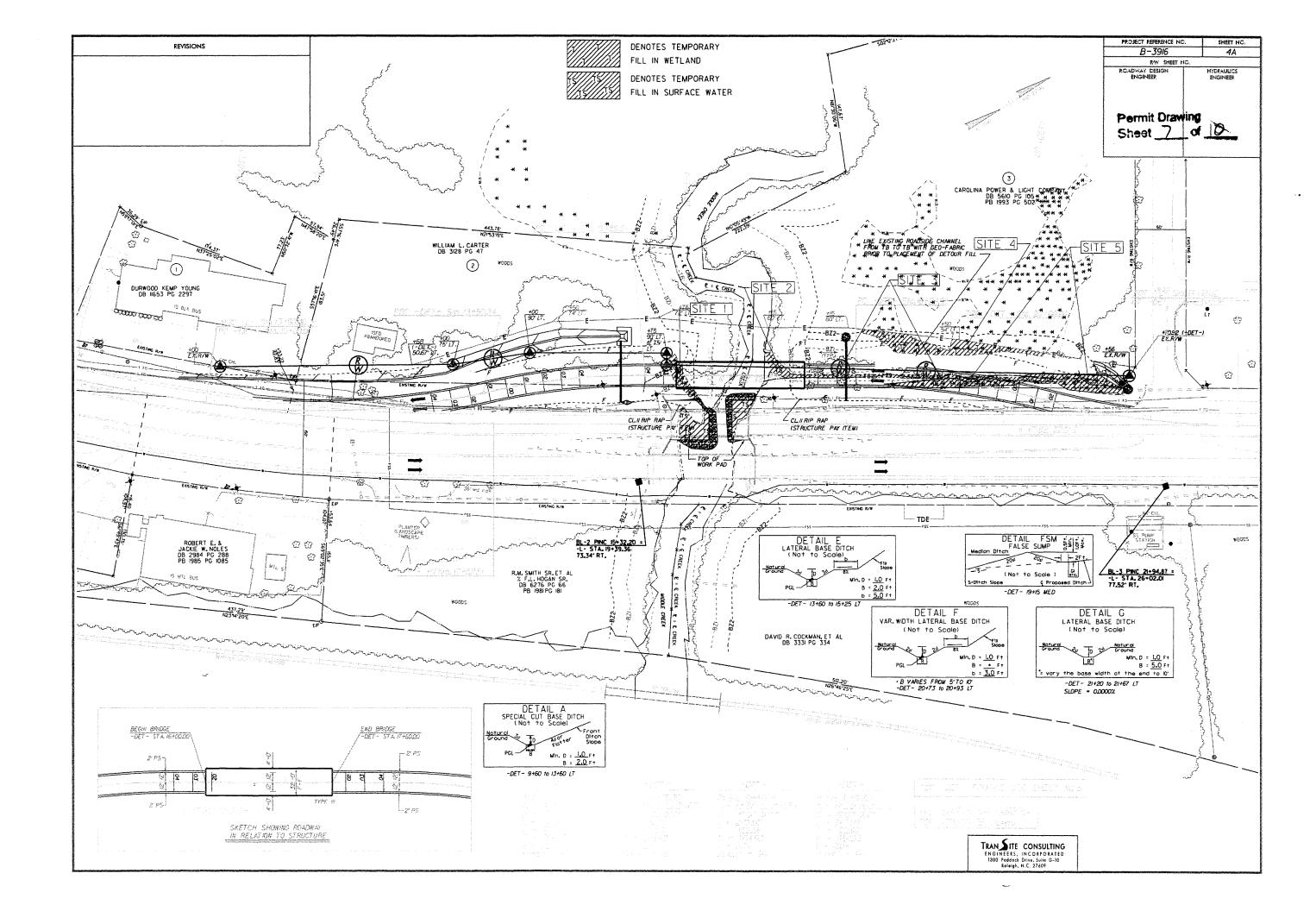
PROJECT: 33350.1.1 (B-3916) BRIDGE NO. 63 OVER MIDDLE CREEK ON US 401

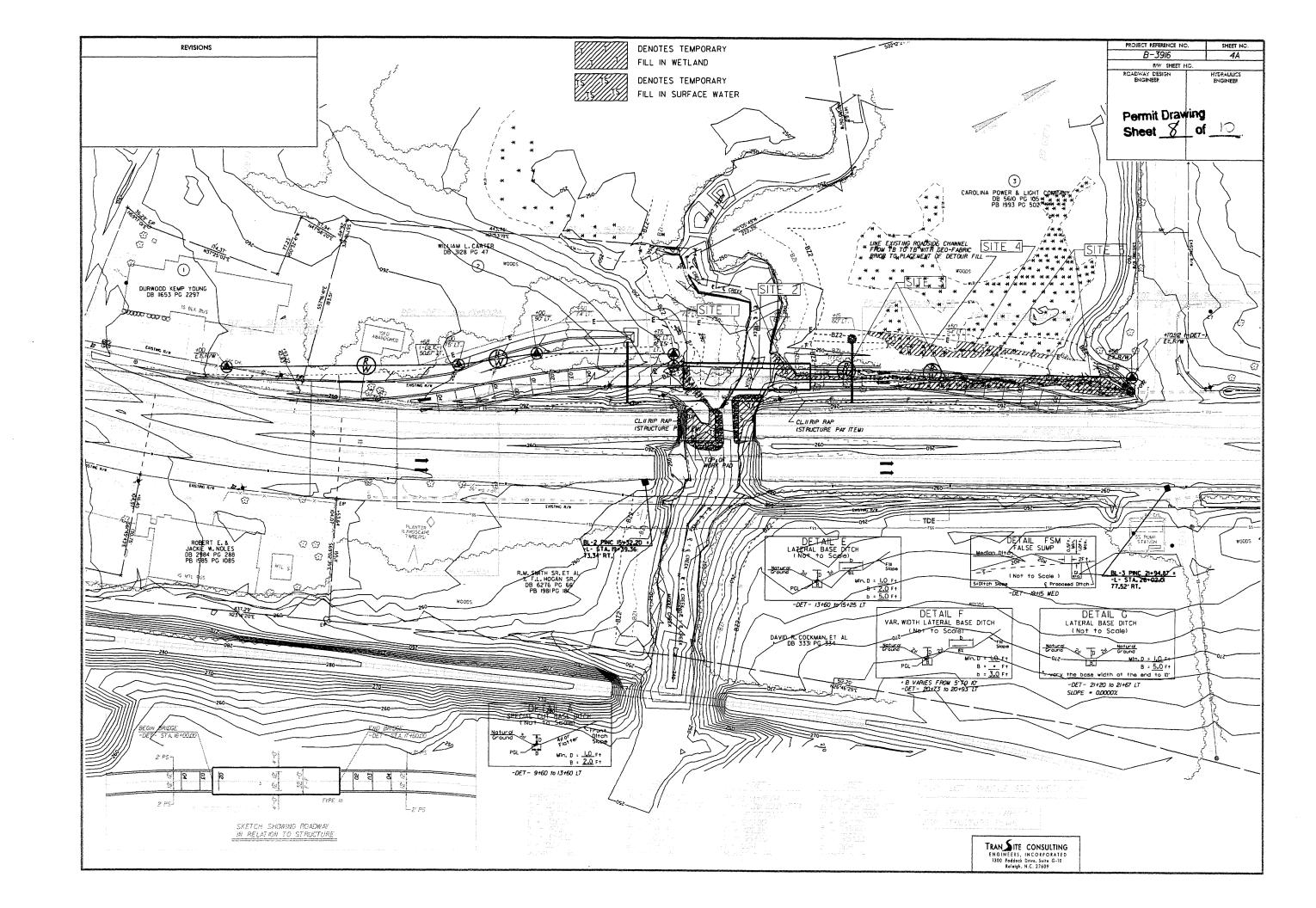
Permit SHEET 3 OF 1

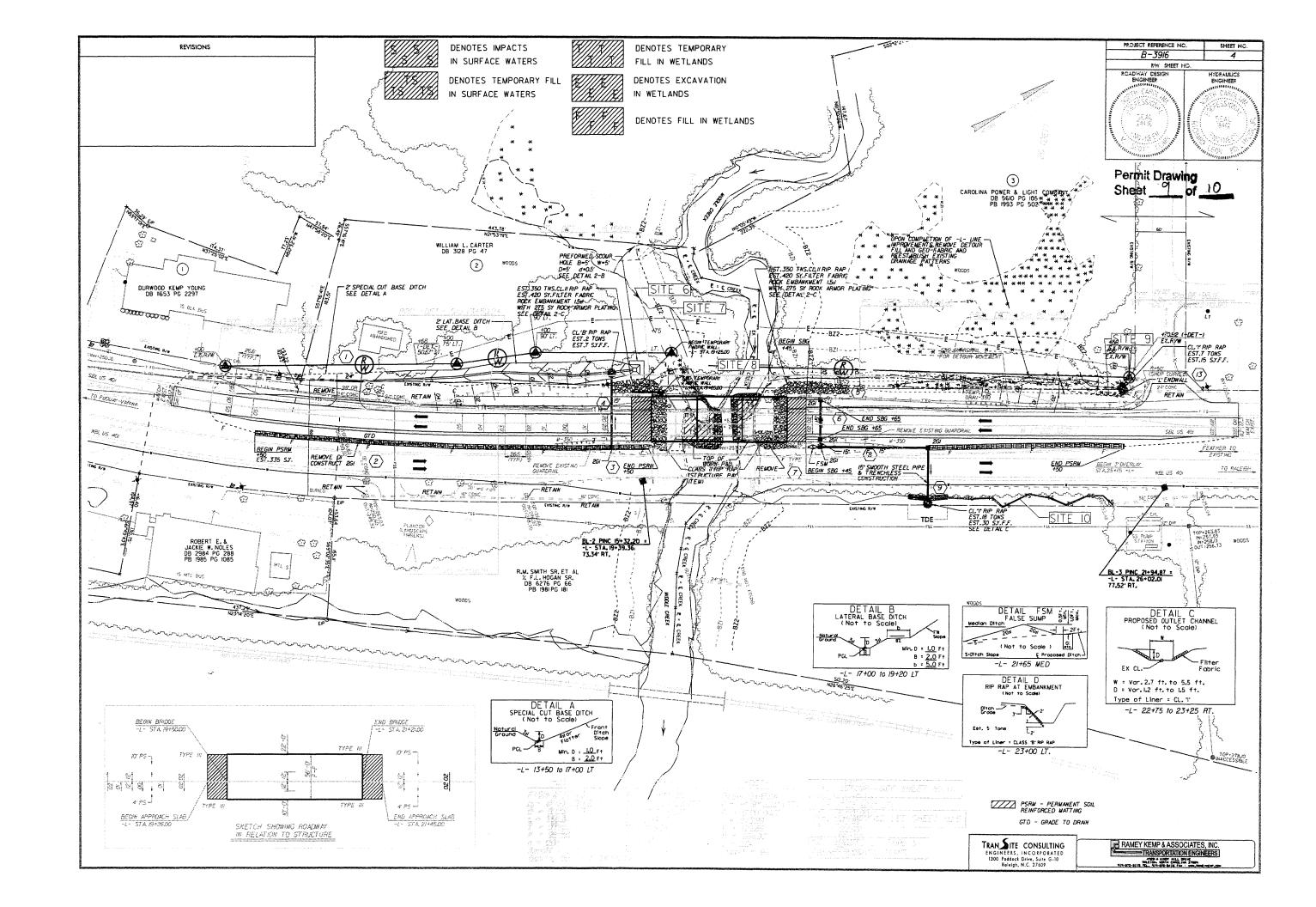
10/14/05

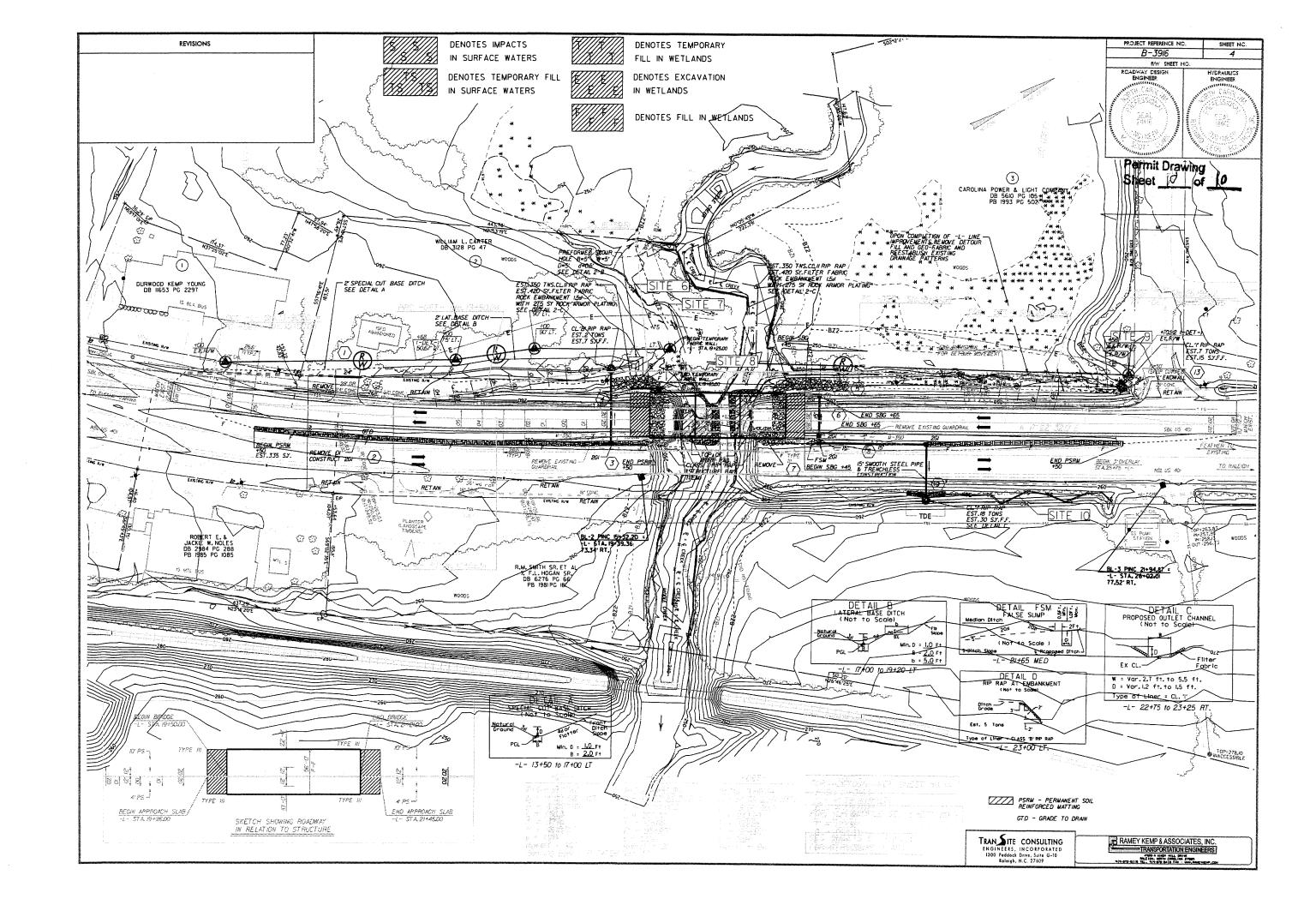


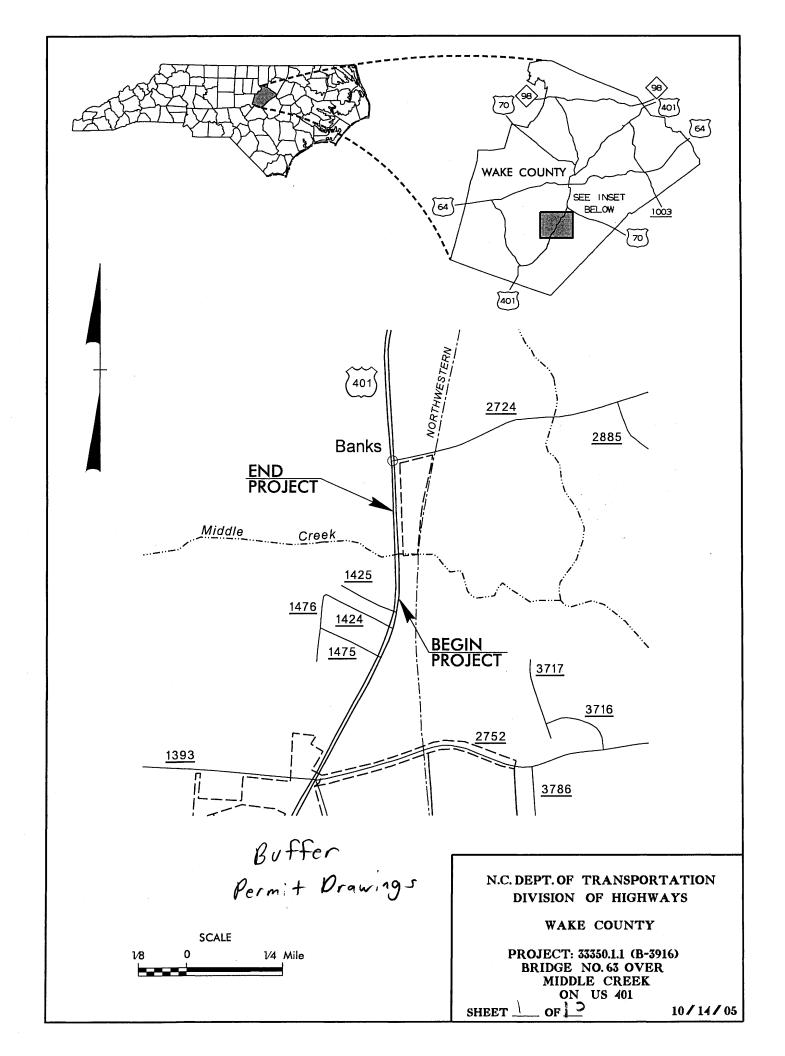


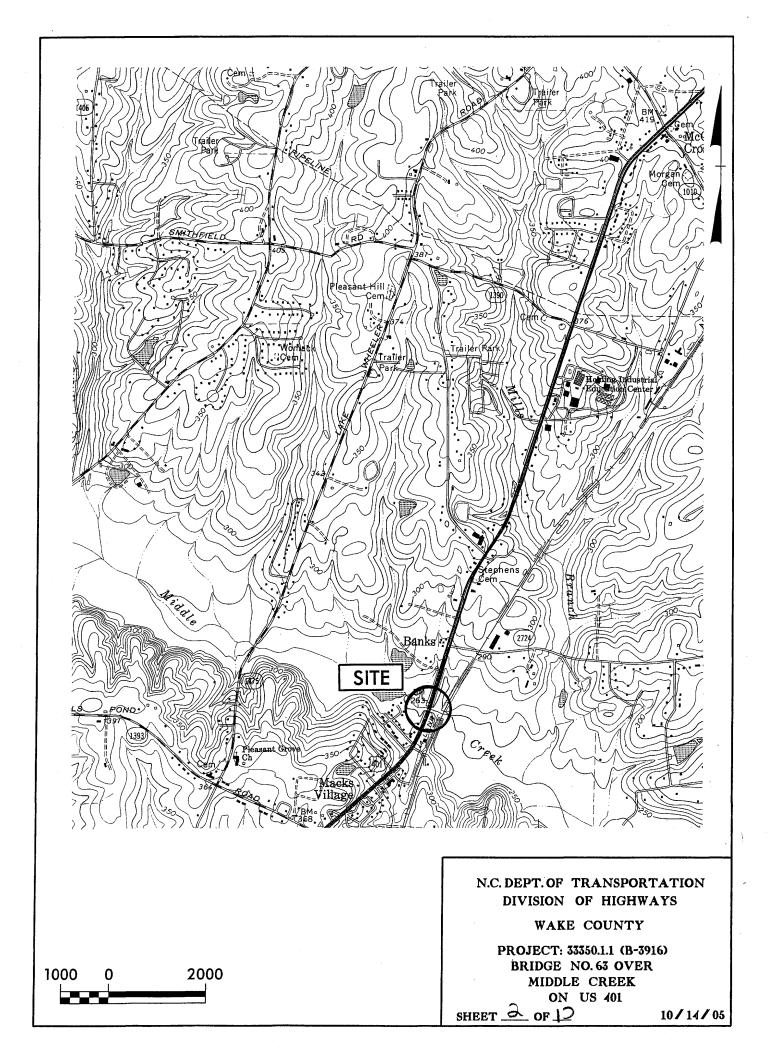












### Project No. 33350.1.1 (B-3916)

### **Property Owner List**

| Parcel Number | Name                           | Address                                |
|---------------|--------------------------------|--|
| 2             | William L. Carter              | 3206 Hampton Road<br>Raleigh, NC 27607 |
| 3             | Carolina Power & Light Company | P.O. Box 1551<br>Raleigh, NC 27602     |

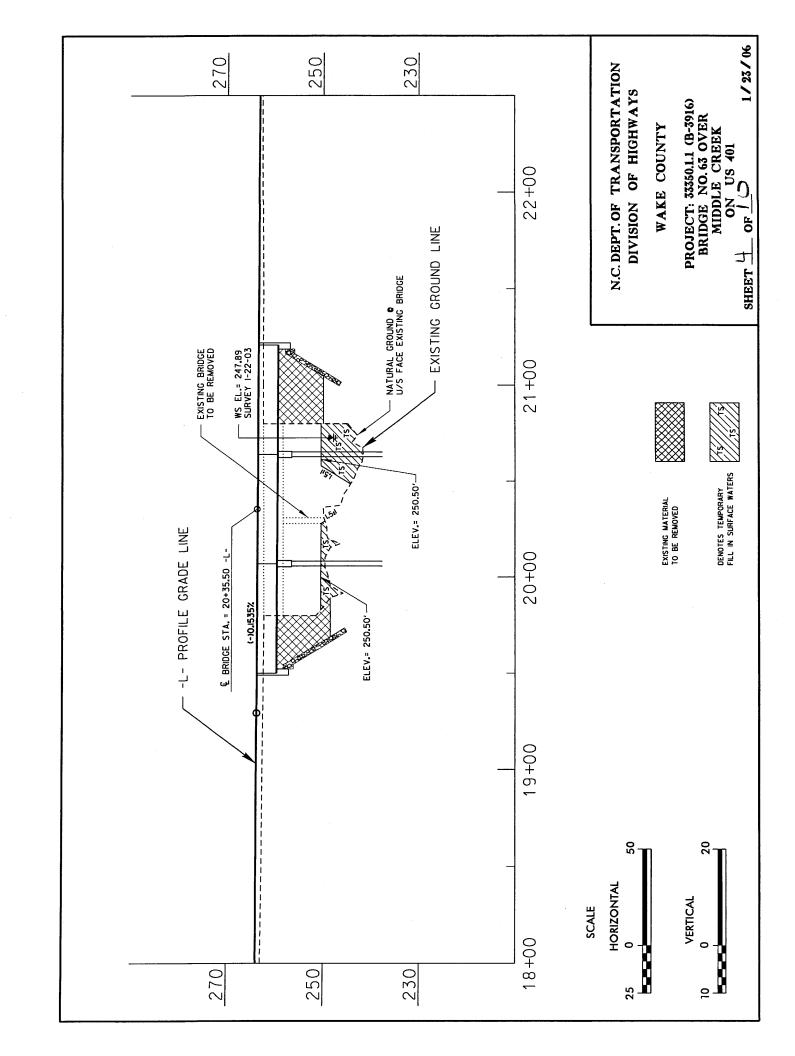
N.C. DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS

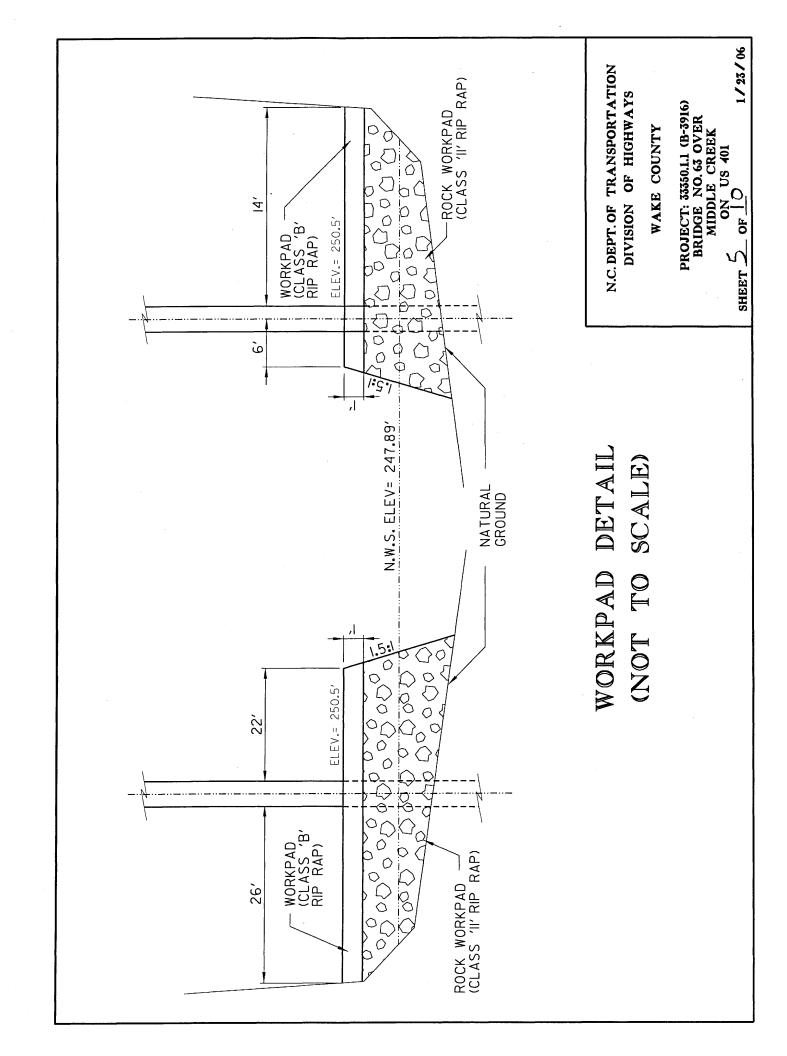
WAKE COUNTY

PROJECT: 33350.1.1 (B-3916) BRIDGE NO.63 OVER MIDDLE CREEK

SHEET 3 OF ON US 401

10/14/05





|          |   |  | BUFFE            | RIMPA             | BUFFER IMPACTS SUMMARY | MMARY            |                 |                |                 |                                   |                      |                 |                 |
|----------|---|--|------------------|-------------------|------------------------|------------------|-----------------|----------------|-----------------|-----------------------------------|----------------------|-----------------|-----------------|
|          |   |  |                  |                   |                        |                  | IMPACT          |                |                 |                                   |                      | BUFFER          | ER              |
|          |   |  |                  | TYPE              |                        | /                | ALLOWABLE       |                |                 | MITIGABLE                         |                      | REPLACEMENT     | EMENT           |
| SITE NO. | STRUCTURE SIZE / TYPE   | STATION (FROM/TO)                        | ROAD<br>CROSSING | BRIDGE            | PARALLEL<br>IMPACT     | ZONE 1<br>(ff²)  | ZONE 2<br>(ff²) | TOTAL<br>(ff²) | ZONE 1<br>(ff²) | ZONE 2<br>(ff²)                   | TOTAL<br>(ff²)       | ZONE 1<br>(ff²) | ZONE 2<br>(ff²) |
| -        | Detour Bridge, $L_T$ = 160'-0" - Middle Cr  | -DET-                                    |                  | ×                 |                        | 4723             | 3703            | 8426           |                 |                                   |                      |                 |                 |
|          |   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
| 2        | -DET- Roadway Fill - Middle Cr  | -DET-                                    | ×                |                   |                        | 401              | 28              | 459            |                 |                                   |                      |                 |                 |
|          |   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
| 3        | -DET- Roadway Fill - UT   | -DET-                                    | ×                |                   |                        | 12457            | 4612            | 17069          |                 |                                   |                      |                 |                 |
|          | Buffers   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
|          |   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
| 4        | Bridge, L <sub>T</sub> = 171'-0" - Middle Cr  | -L- 19+50 / -L- 21+20                    |                  | ×                 |                        | 1392             | 277             | 1669           |                 |                                   |                      |                 |                 |
|          |   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
| 5        | -L- Roaday Fill - Middle Cr   | -L- 21+20 / -L- 21+53                    | ×                |                   |                        | 121              | 240             | 361            |                 |                                   |                      |                 |                 |
|          |   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
| 9        | =-L- Roadway Permant Fill to UT   | -L- 21+53 /-L- 25+48                     |                  |                   | ×                      |                  |                 |                | 1971            | 25                                | 1996                 |                 |                 |
|          |   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
|          |   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
|          |   |  |                  |                   |                        |                  |                 | , mark         |                 |                                   |                      |                 |                 |
|          |   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
|          |   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
|          |   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
|          |   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
|          |   |  |                  |                   |                        |                  |                 |                |                 |                                   |                      |                 |                 |
| TOTALS:  |   | :<br>:                                   |                  |                   |                        | 19094.0          | 8890.0          | 27984.0        | 1971.0          | 25.0                              | 1996.0               |                 |                 |
| Buffe    | Buffered Stream Length Impacted to Middle Creek =23 feet - widest width of road crossing impacts measure parrellel to stream ( - ) existing transportation facility | =23 feet - widest width of road crossing | impacts measu    | re parrellel to s | stream ( - ) exist     | ting transportal | tion facility   |                | N.C             | N.C. DEPARTMENT OF TRANSPORTATION | ENT OF TR            | SANSPORTA       | TION            |
|          |   |  |                  |                   |                        | ,                |                 |                |                 | ואות                              | DIVISION OF UICHWAYS | UM/AVC          |                 |

DIVISION OF HIGHWAYS

PROJECT 33350.1.1 (B-3916) BRIDGE #63 OVER MIDDLE CREEK ON US 401 WAKE COUNTY

9 SHEET

OF 10

2/9/2007

