



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

March 13, 2007

MEMORANDUM TO: Mr. Richard E. Greene, Jr., PE
Division Four Engineer

FROM: Philip S. Harris, III, P.E., Unit Head *PHS*
Natural Environment Unit *E. F. Lewis*
Project Development and Environmental Analysis Branch

SUBJECT: Halifax County, Replace Bridge No.82 on NC 561 over
Marsh Swamp; T.I.P. Number B-3853; Federal Aid Project
BRSTP-561(1); State Project 8.1301901

Attached are the modifications to the U. S. Army Corps of Engineers 404 Nationwide Permit Number 23, the general conditions for the 401 Water Quality Certification and the 401 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. Rob Hanson, P.E., PDEA Eastern Region Unit Head
Mr. Jamie Guerrero, Division Environmental Officer

PROJECT COMMITMENTS

Halifax County
Bridge No. 82 on NC 561
Over Marsh Swamp
Federal Aid Project - BRSTP-561(1)
State Project 8.1301901
TIP No. B-3853

In addition to the standard Nationwide Permit #23 Conditions, the General Nationwide Permit Conditions, Section 404 Only Conditions, Regional Conditions, State Consistency Conditions, NCDOT's Guidelines for Best Management Practices for Bridge Demolition and Removal, NCDOT's Guidelines for Best Management Practices for the Protection of Surface Waters, "Design Standards in Sensitive Watersheds", General Certification Conditions, Neuse Riparian Buffer Rules, and the Section 401 Conditions of Certification; the following Special Commitments have been agreed to by NCDOT:

Commitments Developed During Permitting for Modification:

REU/ PDEA

Onsite wetland restoration to restore 0.48 acres of riverine swamp wetland will be undertaken pursuant to NCDOT's July 6, 2006, document titled "Marsh Swamp Wetland Restoration Plan at Bridge No.82 on NC 561, Halifax County, TIP # B-3853" which was included with NCDOT's October 18, 2006, nationwide # 23 and 33 application for the replacement of Bridge # 82. According to that document, NCDOT is proposing to restore 0.48 acres of riverine swamp wetland by removing an abandoned causeway and connecting road back to wetland elevations using target elevations of the existing adjacent wetlands. Additionally, NCDOT will restore 0.304 acres of proposed temporary fill in jurisdictional wetlands needed for the onsite detour to pre-construction contours. All restoration areas will be planted at a density of 680 trees/acre on 8 foot centers with the following species: Swamp Chestnut Oak (*Quercus michauxii*), Cherry-bark Oak (*Quercus falcata*), Willow Oak (*Quercus phellos*), Black Gum (*Nyssa sylvatica*), Water Tupelo (*Nyssa aquatica*), and Bald Cypress (*Taxodium distichum*). All species of trees don't need to be utilized but no one species can encompass more than 33% of the total restoration area. The restoration areas (abandoned causeway and temporary detour road) will be photo-documented immediately prior to planting, upon completion of the initial planting and any required replanting operations. NCDOT will provide an as-built plan to USACE, including corner stake GPS coordinates, documented qualities of plant materials, final elevations, and photo documentation within 45 days of completion of work. The mitigation will be commenced within the first growing season immediately after the construction of TIP No. B-3853 has been completed. NCDOT will be responsible for monitoring the area for a period of 3 years. Site conditions will be assessed at the end of each growing season during the 3-year monitoring period. NCDOT will provide an annual monitoring report by December 1 of each year documenting success, including: photo documentation, and problems, if any, encountered during the monitoring year timeframe. If at the end the third and final year of monitoring, the success criteria (survival of 320 three year old planted trees per acre and wetland hydrology present) are not met, a re-evaluation of the site will be made by NCDOT and USACE to determine a course of action to meet the permit requirements for this permit. The Wilmington District, U.S. Army Corps of Engineers, Regulatory Division; must approve any deviation from this schedule. 0.274 acres of the abandoned causeway restoration if successful will be credited towards the mitigation requirements for this project. The remaining 0.206 acres may be used for a future project in the same watershed pending U.S. Army Corps of Engineers approval.

Division 4 Construction/REU

All temporary fill material placed in wetlands will be placed on soil stabilization cloth to aid in the removal of temporary fill. All temporary fill material will be stabilized to prevent temporary fill from entering Marsh Swamp or adjacent wetlands outside the permitted work area. All temporary fill material in wetlands and waters will be removed to pre-construction contours within 30 days of completion of the project.

To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall provide the USACE with appropriate maps indicating the locations of proposed borrow or waste sites as soon as the permittee has that information. The permittee will coordinate with the USACE before approving any borrow or waste sites that are within 400 feet of any streams or wetlands. The permittee shall ensure that all such areas comply with condition (f) of this permit, and shall require and maintain documentation of the location and characteristics of all borrow and disposal sites associated with this project. This information will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with the preceding condition (f). All information will be available to the USACE upon request. NCDOT shall require its contractors to complete and execute reclamation plans for each waste and borrow site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps of Engineers within 30 days of the completion of the reclamation work.

Pursuant to NCAC15A 2B.0259(6), sediment and erosion control devices shall not be placed in Zone1 of any Tar-Pamlico 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.

March 8, 2007

Regulatory Division

Action ID No. SAW 2006-41559-142

Mr. Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Mr. Thorpe:

Reference the Department of the Army (DA) Nationwide Permit 23, Categorical Exclusion, issued to you on January 30, 2007, associated with the replacement of Bridge No. 82 on NC Highway 561 over Marsh Swamp, Federal Aid Project No. BRSTP-561 (1), State Project No. 8.1301901, T.I.P. B-3853, Halifax County, North Carolina. Also reference your subsequent written request dated March 6, 2007, for a permit modification to impact additional jurisdictional wetlands associated with the construction of an access driveway.

The proposed modification will require additional fill material which will permanently impact 0.03 acres of jurisdictional wetlands. The additional impacts are needed to construct a driveway so an adjacent property owner can access their property in the project area.

This modification request was coordinated with the appropriate State and Federal agencies and the coordination revealed no objections to this modification request. Therefore, the permit is hereby modified in accordance with the specific work activities described above and in accordance with the revised submitted construction plans. It is understood that all conditions of the original permit remain applicable and that the expiration date is unchanged. In addition, based on the revised wetland impacts for the project and an error in the title (Marsh, not Morgan) of the Swamp in special condition b, Special Condition (a) and (b) of the original permit is hereby modified as follows:

a. Onsite wetland restoration to restore 0.48 acres of riverine swamp wetland will be undertaken pursuant to NCDOT's July 6, 2006, document titled "Marsh Swamp Wetland Restoration Plan at Bridge No. 82 on NC 561, Halifax County, TIP # B-3853" which was included with NCDOT's October 18, 2006, nationwide # 23 and 33 application for the replacement of Bridge # 82. According to that document, NCDOT is proposing to restore 0.48 acres of riverine swamp wetland by removing an abandoned causeway and connecting road back to wetland elevations using target elevations of the existing adjacent wetlands. Additionally,

NCDOT will restore 0.304 acres of proposed temporary fill in jurisdictional wetlands needed for the onsite detour to pre-construction contours. All restoration areas will be planted at a density of 680 trees/acre on 8 foot centers with the following species: Swamp Chestnut Oak (*Quercus michauxii*), Cherry-bark Oak (*Quercus falcate*), Willow Oak (*Quercus phellos*), Black Gum (*Nyssa sylvatica*), Water Tupelo (*Nyssa aquatica*), and Bald Cypress (*Taxodium distichum*). All species of trees don't need to be utilized but no one species can encompass more than 33% of the total restoration area. The restoration areas (abandoned causeway and temporary detour road) will be photo-documented immediately prior to planting, upon completion of the initial planting and any required replanting operations. NCDOT will provide an as-built plan to USACE, including corner stake GPS coordinates, documented qualities of plant materials, final elevations, and photo documentation within 45 days of completion of work. The mitigation will be commenced within the first growing season immediately after the construction of TIP No. B-3853 has been completed. NCDOT will be responsible for monitoring the area for a period of 3 years. Site conditions will be assessed at the end of each growing season during the 3-year monitoring period. NCDOT will provide an annual monitoring report by December 1 of each year documenting success, including: photo documentation, and problems, if any, encountered during the monitoring year timeframe. If at the end the third and final year of monitoring, the success criteria (survival of 320 three year old planted trees per acre and wetland hydrology present) are not met, a re-evaluation of the site will be made by NCDOT and USACE to determine a course of action to meet the permit requirements for this permit. The Wilmington District, U.S. Army Corps of Engineers, Regulatory Division; must approve any deviation from this schedule. 0.274 acres of the abandoned causeway restoration if successful will be credited towards the mitigation requirements for this project. The remaining 0.206 acres may be used for a future project in the same watershed pending U.S. Army Corps of Engineers approval.

b. All temporary fill material placed in wetlands will be placed on soil stabilization cloth to aid in the removal of temporary fill. All temporary fill material will be stabilized to prevent temporary fill from entering Marsh Swamp or adjacent wetlands outside the permitted work area. All temporary fill material in wetlands and waters will be removed to pre-construction contours within 30 days of completion of the project.

Any questions regarding this correspondence may be directed to Mr. William Wescott, NCDOT Coordinator/Regulatory Project Manager at the Washington Regulatory Field Office, telephone (252) 975-1616, extension 31.

Sincerely,

FILENAME:B-3853Bridge82MOD

CESAW-RG-W/Biddlecome/slb/s

Mail
File/

William J. Biddlecome
Regulatory Project Manager

Copies Furnished:

Mr. Rob Ridings
Water Quality Section
Division of Environmental Management
North Carolina Department of Environment
and Natural Resources
1650 Mail Service Center
Raleigh, North Carolina 27699-1650

Mr. Travis Wilson
Eastern Region Highway Project Coordinator
Habitat Conservation Program
1142 I-85 Service Road
Creedmoor, North Carolina 27522

Mr. Gary Jordan
U.S. Fish and Wildlife Service
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Mr. Ron Sechler
National Marine Fisheries Service
101 Pivers Island
Beaufort, North Carolina 28516

Ms. Kathy Matthews
USEPA-Region 4 Wetlands Section
109 T.W. Alexander Drive
Durham, North Carolina 27711
Mail Code : E143-04



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

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

March 9, 2007
Halifax County
DWQ Project No. 20061693 ver.2
Bridge 82 on NC 561
TIP No. B-3853

MODIFICATION of APPROVAL of 401 WATER QUALITY CERTIFICATION, with ADDITIONAL CONDITIONS

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

Dear Dr. Thorpe

You have our approval, in accordance with the conditions listed below, for the following additional impacts for the purpose of replacing Bridge 82 in Halifax County:

Riverine Wetland Impacts in the Tar-Pamlico River Basin

| Site | Permanent Fill (ac) | Hand Clearing (ac) | Total Wetland Impact (ac) |
|--------------|------------------------|-----------------------|---------------------------|
| Driveway | 0.025 | 0.204 | 0.229 |
| Total | 0.025 | 0.204 | 0.229 |

Total Additional Riverine Wetland Impact for Project: 0.229 acres.

The project shall be constructed in accordance with your application modification dated received March 8, 2007. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3403 and 3366. This certification corresponds to the Nationwide Permit 23 and Nationwide Permit 33 issued by the Corps of Engineers. This approval is also valid for the Tar-Pamlico Riparian Buffer Rules (15A NCAC 2B.0250). 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. All other conditions written into previous Water Quality Certification dated February 12, 2007, for this project still apply.

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: <http://h2o.enr.state.nc.us/ncwetlands>

Our
North Carolina
Naturally



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

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

2. 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.
3. 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*.
4. Riprap should not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage.
5. 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.
6. Any stormwater runoff entering through wetlands shall be directed at nonerosive velocities. Any stormwater runoff entering through stream buffers shall be directed as sheetflow at nonerosive velocities.
7. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated. 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.
8. Pursuant to NCAC15A 2B.0259(6), sediment and erosion control devices shall not be placed in Zone 1 of any Tar-Pamlico 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
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.
15. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.



Michael F. Easley, Governor
 William G. Ross Jr., Secretary
 North Carolina Department of Environment and Natural Resources

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

16. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
17. 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.
18. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification.
19. 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.
20. 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.
21. 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.
22. Native riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.
23. 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.
24. 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.



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

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

25. 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

Sincerely,

A handwritten signature in black ink, appearing to read "Alan W. Klimek".

Alan W. Klimek, P.E.

cc: Jamie Guerrero, Division 4 Environmental Officer
William Wescott, US Army Corps of Engineers, Washington Field Office
Travis Wilson, NC Wildlife Resources Commission
Chris Underwood, NCDOT PDEA
DWQ Raleigh Regional Office copy
File Copy



RECEIVED

FEB 20 2007

 DIVISION OF HIGHWAYS
 PDEA-OFFICE OF NATURAL ENVIRONMENT

Underwood

February 12, 2007
 Halifax County
 DWQ Project No. 20061693
 Bridge 82 on NC 561
 TIP No. B-3853

CORRECTION of APPROVAL of 401 WATER QUALITY CERTIFICATION and TAR-PAMLICO BUFFER AUTHORIZATION, with ADDITIONAL CONDITIONS

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

Dear Dr. Thorpe

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge 82 in Halifax County:

Stream Impacts in the Tar-Pamlico River Basin

| Site | Temporary Fill in Perennial Stream (linear ft) | Total Stream Impact (linear ft) |
|--------------|--|---------------------------------|
| 1 | 75 | 75 |
| Total | 75 | 75 |

Total Stream Impact for Project: 75 linear feet.

Riverine Wetland Impacts in the Tar-Pamlico River Basin

| Site | Permanent Fill (ac) | Temporary Fill (ac) | Hand Clearing (ac) | Total Wetland Impact (ac) |
|--------------|---------------------|---------------------|--------------------|---------------------------|
| 1 | 0.244 | 0.304 | 0.370 | 0.918 |
| Total | 0.244 | 0.304 | 0.370 | 0.918 |

Total Riverine Wetland Impact for Project: 0.918 acres.

Tar-Pamlico Riparian Buffer Impacts

| Site | Zone 1 Impact (sq ft) | minus Wetlands in Zone 1 (sq ft) | = Zone 1 Buffers (not wetlands) (sq ft) | Zone 1 Buffer Mitigation Required (using 3:1 ratio) | Zone 2 Impact (sq ft) | minus Wetlands in Zone 2 (sq ft) | = Zone 2 Buffers (not wetlands) (sq ft) | Zone 2 Buffer Mitigation Required (using 1.5:1 ratio) |
|---------------|-----------------------|----------------------------------|---|---|-----------------------|----------------------------------|---|---|
| 1 | 8,178 | 0 | 8,178 | N/A | 3,984 | 0 | 3,984 | N/A |
| Totals | 8,178 | 0 | 8,178 | 0 | 3,984 | 0 | 3,984 | 0 |

* n/a = Total for Site is less than 1/3 acre and 150 linear feet of impact, no mitigation required

Total Buffer Impact for Project: 12,162 square feet.



The project shall be constructed in accordance with your application dated received October 27, 2006. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3403 and 3366. This certification corresponds to the Nationwide Permit 23 and Nationwide Permit 33 issued by the Corps of Engineers. This approval is also valid for the Tar-Pamlico Riparian Buffer Rules (15A NCAC 2B.0250). 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 certification replaces the one issued on November 22, 2006.**

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. 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.
2. 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*.
3. Riprap should not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage.
4. 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.
5. Any stormwater runoff entering through wetlands shall be directed at nonerosive velocities. Any stormwater runoff entering through stream buffers shall be directed as sheetflow at nonerosive velocities.
6. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated. 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.
7. Pursuant to NCAC15A 2B.0259(6), sediment and erosion control devices shall not be placed in Zone 1 of any Tar-Pamlico 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.



8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
15. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
16. 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.
17. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification..
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. 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.
20. 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.
21. Native riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.



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

22. 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.

23. 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.

24. 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

Sincerely,

A handwritten signature in black ink that reads "Alan W. Klimek, P.E." The signature is written in a cursive style.

Alan W. Klimek, P.E.

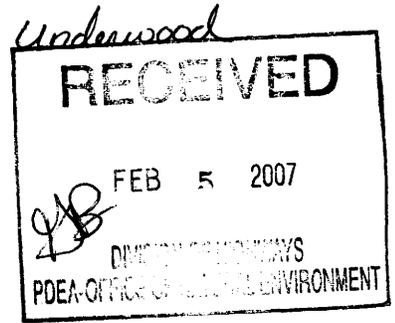
cc: Jamie Guerrero, Division 4 Environmental Officer
William Wescott, US Army Corps of Engineers, Washington Field Office
Travis Wilson, NC Wildlife Resources Commission
Gary Jordan, US Fish & Wildlife Service
Chris Underwood, NCDOT PDEA
DWQ Raleigh Regional Office copy
File Copy



IN REPLY REFER TO

**DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS**

Washington Regulatory Field Office
P.O. Box 1000
Washington, North Carolina 27889-1000
January 30, 2007



Regulatory Division

Subject: Action ID No. SAW 2006-41559-142 and Nationwide Permit No. 23 (Approved Categorical Exclusions)

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

Dear Dr. Thorpe:

Reference your Categorical Exclusion Document, approved on October 29, 2002, and your subsequent correspondence dated October 18, 2006, for the replacement of Bridge No. 82 on NC Highway 561 over Marsh Swamp, Federal Aid Project No. BRSTP-561 (1), State Project No. 8.1301901, T.I.P. No. B-3853, Halifax County, North Carolina. The project involves an on site detour and will replace the existing structure in the same location with a 180-foot bridge adversely impacting 0.918 acres of riverine wetlands and 0.017 acres of open waters adjacent to Marsh Swamp.

For the purposes of the Corps of Engineers Regulatory Program, Title 33, Code of Federal Regulations (CFR), Part 330.6, published in the Federal Register on November 22, 1991, lists nationwide permits. Authorization pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, was provided for activities undertaken, assisted, authorized, regulated, funded or financed, in whole or part, by another Federal agency or department where that agency or department has determined, pursuant to the CEQ Regulation for the Implementing the Procedural Provisions of the National Environmental Policy Act, that the activity, work or discharge is categorically excluded from environmental documentation because it is included within a category of actions which neither individually nor cumulatively have a significant effect on the human environment, and the Office of the Chief of Engineers has been furnished notice of the agency's or department's application for the categorical exclusion and concurs with that determination.

Review of this project indicates that the construction of the new bridge will adversely impact 0.918 acres of riverine wetlands consisting of 0.244 acres of permanent fill, 0.304 acres of temporary fill, and 0.370 acres of temporary impacts from hand-clearing activities in wetlands. There will also be temporary impacts to 0.017 acres of surface waters for the construction of a

temporary work bridge. The permanent wetland impacts are for the widening of the approach fills which are needed for the replacement bridge.

Your work is authorized under Nationwide Permit 23, Categorical Exclusion, and Nationwide Permit 33, Temporary Construction, Access and Dewatering, provided it is accomplished in strict accordance with the enclosed Nationwide Permit Conditions and the following special conditions:

a. Onsite wetland restoration to restore 0.48 acres of riverine swamp wetland will be undertaken pursuant to NCDOT's July 6, 2006, document titled "Marsh Swamp Wetland Restoration Plan at Bridge No. 82 on NC 561, Halifax County, TIP # B-3853" which was included with NCDOT's October 18, 2006, nationwide # 23 and 33 application for the replacement of Bridge # 82. According to that document, NCDOT is proposing to restore 0.48 acres of riverine swamp wetland by removing an abandoned causeway and connecting road back to wetland elevations using target elevations of the existing adjacent wetlands. Additionally, NCDOT will restore 0.304 acres of proposed temporary fill in jurisdictional wetlands needed for the onsite detour to pre-construction contours. All restoration areas will be planted at a density of 680 trees/acre on 8 foot centers with the following species: Swamp Chestnut Oak (*Quercus michauxii*), Cherry-bark Oak (*Quercus falcate*), Willow Oak (*Quercus phellos*), Black Gum (*Nyssa sylvatica*), Water Tupelo (*Nyssa aquatica*), and Bald Cypress (*Taxodium distichum*). All species of trees don't need to be utilized but no one species can encompass more than 33% of the total restoration area. The restoration areas (abandoned causeway and temporary detour road) will be photo-documented immediately prior to planting, upon completion of the initial planting and any required replanting operations. NCDOT will provide an as-built plan to USACE, including corner stake GPS coordinates, documented qualities of plant materials, final elevations, and photo documentation within 45 days of completion of work. The mitigation will be commenced within the first growing season immediately after the construction of TIP No. B-3853 has been completed. NCDOT will be responsible for monitoring the area for a period of 3 years. Site conditions will be assessed at the end of each growing season during the 3-year monitoring period. NCDOT will provide an annual monitoring report by December 1 of each year documenting success, including: photo documentation, and problems, if any, encountered during the monitoring year timeframe. If at the end the third and final year of monitoring, the success criteria (survival of 320 three year old planted trees per acre and wetland hydrology present) are not met, a re-evaluation of the site will be made by NCDOT and USACE to determine a course of action to meet the permit requirements for this permit. The Wilmington District, U.S. Army Corps of Engineers, Regulatory Division; must approve any deviation from this schedule. 0.244 acres of the abandoned causeway restoration if successful will be credited towards the mitigation requirements for this project. The remaining 0.236 acres may be used for a future project in the same watershed pending U.S. Army Corps of Engineers approval.

b. All temporary fill material placed in wetlands will be placed on soil stabilization cloth to aid in the removal of temporary fill. All temporary fill material will be stabilized to prevent

temporary fill from entering Morgan Swamp or adjacent wetlands outside the permitted work area. All temporary fill material in wetlands and waters will be removed to pre-construction contours within 30 days of completion of the project.

c. All measures will be taken to avoid any temporary fill from entering into Marsh Swamp from bridge demolition. Bridge demolition shall follow NCDOT best management practices for construction and maintenance activities dated August 2003 and incorporate NCDOT policy entitled "Bridge Demolition and Removal in Waters of the United States" dated September 20, 1999.

d. No bridge demolition debris or excavated or fill material will be placed at any time, in any wetlands or surrounding waters, outside of the alignment of the fill area indicated on the work plans.

e. All excavated materials will be confined above normal high water and landward of regularly or irregularly flooded wetlands behind adequate dikes or retaining structures to prevent spillover of solids into any wetlands or surrounding waters.

f. Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill, or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands, or any activities that cause the degradation of waters or wetlands, except as authorized by this permit, or any modification to this permit. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. There shall be no excavation from, waste disposal into, or degradation of, jurisdictional waters or wetlands associated with this permit without appropriate modification of this permit, including appropriate compensatory mitigation. This prohibition applies to all borrow and fill activities connected with this project.

g. To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall provide the USACE with appropriate maps indicating the locations of proposed borrow or waste sites as soon as the permittee has that information. The permittee will coordinate with the USACE before approving any borrow or waste sites that are within 400 feet of any streams or wetlands. The permittee shall ensure that all such areas comply with condition (f) of this permit, and shall require and maintain documentation of the location and characteristics of all borrow and disposal sites associated with this project. This information will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with the preceding condition (f). All information will be available to the USACE upon request. NCDOT shall require its contractors to complete and execute reclamation plans for each waste and borrow site and provide written

documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps of Engineers within 30 days of the completion of the reclamation work.

h. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions and any Corps approved modifications shall be available at the project site during construction and maintenance of this project.

i. Any violation of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act must be reported in writing to the Wilmington District, U.S. Army Corps of Engineers, within 24 hours of the violation

j. Failure to institute and carry out the details of special conditions a. - i., above, may result in a directive to cease all ongoing and permitted work within waters and/or wetlands associated with TIP No. B-3853, or such other remedy as the District Engineer or his authorized representatives may seek.

This nationwide permit does not relieve you of the responsibility to obtain any required State or local approval. This permit is valid until the NWP is modified, reissued, or revoked. All of the existing NWPs are scheduled to be modified, reissued, or revoked prior to March 18, 2007. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this nationwide permit. If, prior to the expiration date of March 18, 2007, the nationwide permit authorization is reissued and/or modified, this verification will remain valid until March 18, 2007, provided it complies with all new and/or modified terms and conditions. The District Engineer may, at any time, exercise his discretionary authority to modify, suspend, or revoke a case specific activity's authorization under any NWP.

Thank you for your time and cooperation. If you have any questions, you may contact Mr. William Wescott at the Washington Regulatory Field Office, Post Office Box 1000, Washington, North Carolina, 27889, or telephone 252-975-1616, extension 31.

Sincerely,

William Biddlecome

William Biddlecome
Project Manager

Enclosures

Copies Furnished (without enclosures)

Mr. Rob Ridings
Water Quality Section
North Carolina Division of Environment
and Natural Resources
1650 Mail Service Center
Raleigh, North Carolina 27699-1650

Mr. Travis Wilson
Eastern Region Highway Project Coordinator
Habitat Conservation Program
1142 I-85 Service Road
Creedmoor, North Carolina 27522

Mr. Gary Jordan
U.S. Fish and Wildlife Service
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Mr. Ron Sechler
National Marine Fisheries Service
101 Pivers Island
Beaufort, North Carolina 28516

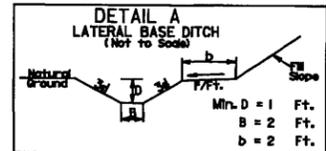
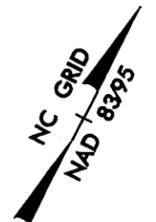
Mr. Chris Militscher
U.S. Environmental Protection Agency
C/O FHWA, Raleigh Office
310 New Bern Avenue, Room 206
Raleigh, North Carolina 27601

Ms. Kathy Matthews
USEPA-Region 4 Wetlands Section
109 T.W. Alexander Drive
Durham, North Carolina 27711
Mail Code:E143-04

Mr. William D. Gilmore, P.E.
EEP Director
North Carolina Ecosystem Enhancement Program
1652 Mail Service Center
Raleigh, North Carolina 27699-1652

Mr. Garcy Ward
NCDWQ Washington Regional Office
943 Washington Square Mall
Washington, North Carolina 27889

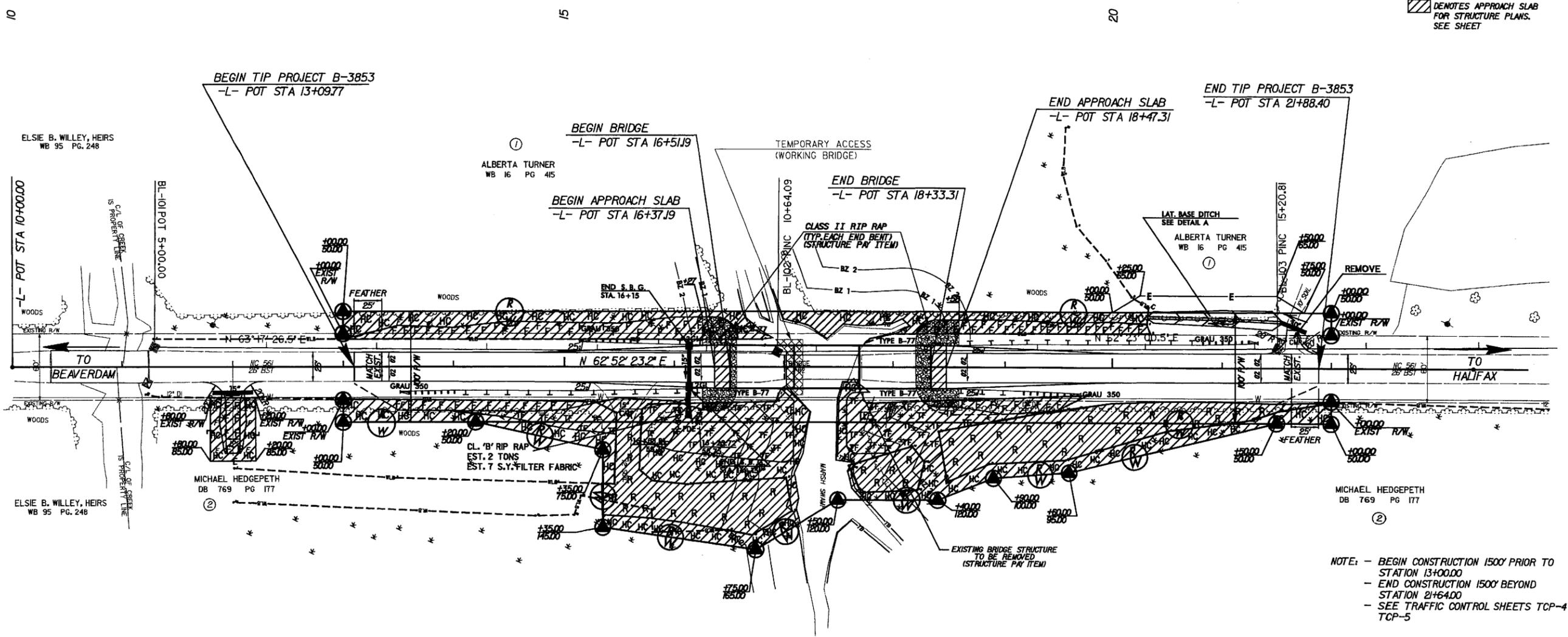
| | |
|---|-----------------------|
| PROJECT REFERENCE NO. B-3853 | SHEET NO. 4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION | |



-L- STA 20+32 TO 21+55 LT
EST. DDE = 75 CY

NOTE: SEE SHIT 2-B FOR DETOUR.
SEE SHIT 5 FOR PROFILE.
SEE SHIT 5- FOR STRUCT. PLANS.

▨ DENOTES APPROACH SLAB FOR STRUCTURE PLANS. SEE SHEET

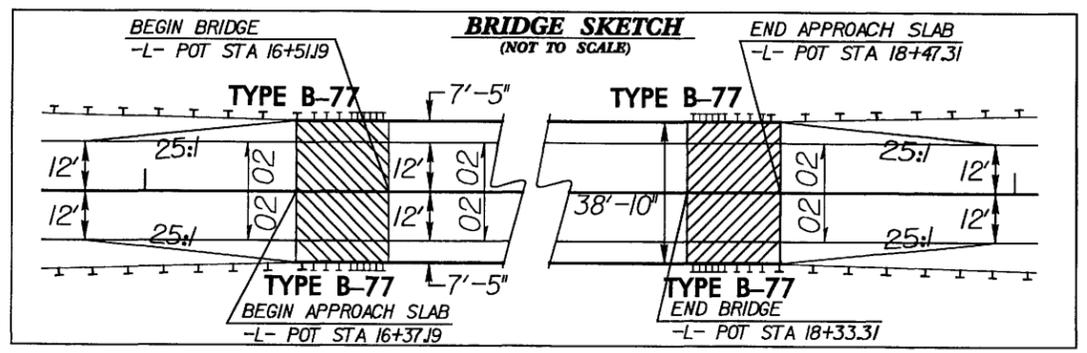


NOTE: - BEGIN CONSTRUCTION 1500' PRIOR TO STATION 13+00.00
- END CONSTRUCTION 1500' BEYOND STATION 21+64.00
- SEE TRAFFIC CONTROL SHEETS TCP-4 & TCP-5

- FILL IN WETLAND
- PERMANENT SURFACE WATER IMPACT
- HAND CLEARING
- TEMPORARY SURFACE WATER IMPACT
- TEMPORARY FILL IN WETLAND
- WETLAND RESTORATION AREA

WETLAND PERMIT

38.5 SQUARE FOOT OF SURFACE WATER IMPACTS
TOTAL RESTORATION AREA = 0.48 ACRES



REVISIONS