



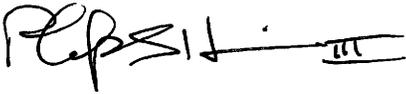
STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY PERDUE  
GOVERNOR

EUGENE CONTI  
SECRETARY

June 2, 2009

MEMORANDUM TO: Mr. H. Allen Pope, PE  
Division Three Engineer

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

SUBJECT: Brunswick County, Replace Bridge No. 9 on NC 130 over Bear Branch; T.I.P.  
Number B-4030; Federal Aid Project No. BRSTP-130(3); WBS No. 33397.1.1

Attached are the U.S. Army Corps of Engineers Section 404 Nationwide Permit Numbers 23 & 33, N.C. Division of Water Quality Section 401 General Water Quality Certification, and the N.C. Division Coastal Management CAMA Permit for the above referenced project. All environmental permits have been received for the construction of this project.

A copy of this permit package will be posted on the NCDOT website at:  
<http://www.ncdot.gov/doh/preconstruct/pe/neu/permit.html>

PSH/gyb

Attachment

Cc: W/attachment  
Mr. Randy Garris, P.E. State Contract Officer  
Mr. Mason Herndon, Division Env. Officer

Cc: W/o attachment (see website for attachments)  
Mr. Majed Alghandour, P. E., Programming and TIP  
Mr. Jay Bennett, P.E., Roadway Design  
Dr. David Chang, P.E., Hydraulics  
Mr. Art McMillan, P.E., Highway Design  
Mr. Tom Koch, P.E., Structure Design  
Mr. Mark Staley, Roadside Environmental  
Mr. John F. Sullivan, FHWA  
Mr. Ron Hancock, P.E., State Roadway Construction Engineer  
Mr. Mike Robinson, P.E., State Bridge Construction Engineer  
Mr. Rob Hanson, P.E., PDEA Eastern Region Unit Head  
Ms. Beth Harmon, EEP

## PROJECT COMMITMENTS

Brunswick County  
Bridge No. 9 on NC 130  
Over Bear Branch  
Federal Aid Project BRSTP-130(3)  
WBS No. 33397.1.1  
TIP No. B-4030

### **Commitments Developed Through Planning**

#### Coastal Area Management Act (CAMA)

The North Carolina Division of Coastal Management (DCM) lists Brunswick County, NC as a CAMA County. Therefore, a CAMA permit would be required for impacts to Waters of the United States, including wetlands.

*A CAMA Major permit has been obtained by the NCDOT.*

#### State Stormwater Management Permit

Since the proposed project is in a coastal county and would require a CAMA permit, a State Stormwater Management permit will also be required.

*A State Stormwater Management permit has been obtained by the NCDOT.*

### **Commitments Developed Through Permitting**

#### ***Division 3 Construction***

All work must be performed in strict compliance with the submitted plans dated April 22, 2009 and May 14, 2009 received via email. Any modification to the authorized permit plans must be approved by the USACE prior to implementation.

The subaqueous utility line shall be placed a minimum of two feet below the deepest point of the channel of Bear Branch.

The vertical navigational clearance under the proposed bridge and the temporary work bridge shall be the same as the vertical navigational clearance under the existing bridge (5.6 feet). Any proposed changes to these clearances shall require prior approval from NCDOT.

#### ***Division 3 Construction & Roadside Environmental Unit***

All fill material must be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands. The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades in those areas, prior to project completion.

### ***Division 3 Construction & Roadside Environmental Unit***

Special care should be taken while removing the temporary causeway. Although the restoration plan calls for tree planting, a temporary ground cover should be installed to avoid any movement of unconsolidated soil into the abutting watercourse.

### ***Natural Environment Unit***

Compensatory mitigation for the unavoidable impacts to 0.45 acres of riparian wetlands associated with the proposed project will be debited from NC EEP at a 2:1 ratio.

*A copy of the EEP acceptance letter was emailed to the USACE on 5/14/09.*

### ***Natural Environment Unit, Roadside Environmental Unit, Division 3 Construction***

The temporary detour area must be restored to its former condition with multiple year monitoring showing that the wetlands have successfully recovered. The approved restoration plan (received via email on May 14, 2009) must be implemented.

Upon removal of all temporary wetland fill, restoration of 0.41 acres of riparian wetlands shall be carried out in accordance with the restoration plan dated as received on 5/14/09. If existing wetlands temporarily impacted during construction do not re-attain their pre-project wetland functions within 3 years, then the temporary impacts shall be reclassified as permanent impacts. To mitigate for additional permanent impacts, the restoration plan shall be revised or a revised EEP acceptance letter shall be provided to NCDCM for approval.

NOTE: The USACE Section 404 permit authorized 0.05 ac of mechanized clearing associated with the temporary onsite detour as a temporary impact. The NCDWQ Water Quality Certification and the CAMA Major Development permit include this impact as permanent. If this 0.05 ac is restored to wetland status, it is likely NCDOT will request the appropriate permit modifications as well as a reduction in the amount compensatory mitigation provided by NCEEP.

U.S. ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT

Action ID: 2004 422

County: Brunswick

USGS Quad: Freeland *Underwood*

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION **RECEIVED**

Applicant: NC DOT  
Address: attn: Dr. Gregory Thorpe, Director, PDEA  
1548 Mail Service Center  
Raleigh, NC 27699-1548

Agent: NC DOT  
attn: Chris Underwood, NEU  
1548 Mail Service Center  
Raleigh, NC 27699-1548

**RECEIVED**  
MAY 19 2009  
*[Signature]*  
DIVISION OF HIGHWAYS  
PDEA-OFFICE OF NATURAL ENVIRONMENT

Size and location of property (water body, road name/number, town, etc.): This project (B-4030) involves the replacement of Bridge 9 with a longer, wider and safer span over Bear Branch along NC Hwy 130, Brunswick County. The project will utilize an on-site detour which is scheduled to removed once the construction is complete.

Description of projects area and activity: This verification covers permanent impact to 0.45 acres of riparian wetlands and <0.01 acres of stream impact for shoreline stabilization to support the bridge replacement. This authorization further covers 0.46 acres of riparian wetland temporary impact to support the onsite detour. This detour will be removed before construction is complete.

Applicable Law:  Section 404 (Clean Water Act, 33 USC 1344)  
 Section 10 (Rivers and Harbors Act, 33 USC 403)  
Authorization: Regional General Permit Number: \_\_\_\_\_  
Nationwide Permit Number: NW-23,33

**SEE ATTACHED SPECIAL CONDITIONS AND NATIONWIDE CONDITIONS.**

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted application revisions dated April 22, 2009 and May 14, 2009 received via email. 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.

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

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.

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

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 Brad Shaver at 910-251-4611.

Corps Regulatory Official *Brad E Shaver*

Date: 5/15/2009

Expiration Date of Verification: 5/15/2011

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the attached customer Satisfaction Survey or visit <http://www.saw.usace.army.mil/WETLANDS/index.html> to complete the survey online.

### Determination of Jurisdiction:

- Based on preliminary information, there appear to be waters of the US including wetlands within the above described project area. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process ( Reference 33 CFR Part 331).
- There are Navigable Waters of the United States within the above described project area subject to the permit requirements of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are waters of the US and/or wetlands within the above described project area subject to the permit requirements of Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- The jurisdictional areas within the above described project area have been identified under a previous action. Please reference jurisdictional determination issued.

Basis of Jurisdictional Determination: **The project area exhibits an ordinary high water mark (Bear Branch) and has abutting wetlands that meet the 1987 Corps Delineation Manual.**

Corps Regulatory Official: \_\_\_\_\_

*Brad E. Hane*

Date 5/15/2009

Expiration Date 5/15/2011

Copy Furnished:

NC DOT Division 3 attn: Mason Herndon 124 Division Drive Wilmington NC 28401

NC DENR-DWQ attn: Ken Averitte 225 Green Street Suite 714 Fayetteville, NC 28301-5094

NC DENR-DCM attn: Stephen Lane 400 Commerce Ave Morehead City, NC 28557

Action ID Number: 2004 422

County: Brunswick

Permittee: NCDOT-Division 3

Date Verification Issued: 5/15/2009

Project Manager: Shaver

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT  
WILMINGTON REGULATORY FIELD OFFICE  
POST OFFICE BOX 1890  
WILMINGTON, NORTH CAROLINA 28402-1890

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date

## SPECIAL CONDITIONS

B-4030 Bridge 9 Replacement over Bear Branch, Brunswick County

Action ID 2004 422

### COMPLIANCE WITH PLANS

1. All work must be performed in strict compliance with the submitted plans dated April 22, 2009 and May 14, 2009 received via email, which are authorized by this permit. Any modification to the authorized permit plans must be approved by the USACE prior to implementation. The revised impact sheets and restoration plan authorized are attached.

### COMPLIANCE WITH SPECIAL CONDITIONS

2. Failure to institute and carry out the details of the following special conditions, below, will result in a directive to cease all ongoing and permitted work within waters and/or wetlands associated with the permitted project, or such other remedies and/or fines as the District Engineer or his authorized representatives may seek.

### CONSTRUCTION PLANS

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

### CONTRACTOR COMPLIANCE

4. 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, and any authorized modifications. A copy of this permit including the authorized plans referenced in Special Condition (1) and authorized modifications, including all conditions, shall be available at the project site during construction and maintenance of this project.

### ACTIVITIES NOT AUTHORIZED

5. 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 shall any activities take place that cause the degradation of waters or wetlands. In addition, except as specified in the plans attached 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, in such a manner as to impair normal flows and circulation patterns within, into, or out of waters or wetlands or to reduce the reach of waters or wetlands.

This permit does not authorize temporary placement or double handling of excavated or fill material or construction equipment within waters or wetlands outside the permitted area.

### BORROW AND WASTE

6. 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. All jurisdictional wetland lines on borrow and waste sites shall be verified by the Corps of Engineers and shown on the approved reclamation plans. The permittee shall ensure that all such areas comply with the **preceding condition** 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**. 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.

#### REPORTING OF VIOLATIONS

7. The permittee will report any violation of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act in writing to the Wilmington District, U. S Army Corps of Engineers, within 24 hours of the permittee's discovery of the violation.

#### SEDIMENTATION AND EROSION CONTROL MEASURES

8. All fill material must be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands. The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades in those areas, prior to project completion.

9. Special care should be taken while removing the temporary causeway. Although the restoration plan calls for tree planting, a temporary ground cover should be installed to avoid any movement of unconsolidated soil into the abutting watercourse.

#### MITIGATION

10. Compensatory mitigation for the unavoidable impacts to 0.45 acres of riparian wetlands associated with the proposed project will be debited from NC EEP at a 2:1 ratio. Provide receipt of this transaction once complete.

11. The temporary detour area must be restored to its former condition with multiple year monitoring showing that the wetlands have successfully recovered. The approved restoration plan (received via email on May 14, 2009) must be implemented.



Brad Shaver

5/15/2009  
Date

## Restoration Plan

The proposed 0.41 acres of riparian wetland restoration will consist of the removal of fill material used for the temporary onsite detour in existing wetland areas. Geotextile fabric will be placed on natural ground prior to placement of fill during construction of the detour. Once project is complete this fill material will be removed to pre-project elevations, in order to match adjacent wetlands. These areas will be re-vegetated with native tree species at a density averaging 680 trees/acre. The following species will be planted in the restoration area: green ash (*Fraxinus pennsylvanica*), laurel oak (*Quercus laurifolia*), black gum (*Nyssa sylvatica*).

Monitoring of the restoration area will consist of visual/photograph annual reporting for a minimum of three years following planting. Following the third year monitoring, NCDOT, Regulatory and Resource agencies will meet on-site to determine if the site temporarily impacted has re-attained wetland jurisdictional status with planted species present. If the site has not re-attained wetland jurisdictional status, NCDOT and the U.S. Army Corps of Engineers will determine whether compensatory wetland mitigation will be required.

Rec'd Via Email 5/14/2009  
BEJ

**NATIONWIDE PERMIT 23  
DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS  
FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS  
FEDERAL REGISTER  
AUTHORIZED MARCH 19, 2007**

**Approved Categorical Exclusions.** Activities undertaken, assisted, authorized, regulated, funded, or financed, in whole or in part, by another Federal agency or department where:

(a) That agency or department has determined, pursuant to the Council on Environmental Quality's implementing regulations for the National Environmental Policy Act (40 CFR part 1500 et seq.), that the activity 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

(b) The Office of the Chief of Engineers (Attn: CECW-CO) has concurred with that agency's or department's determination that the activity is categorically excluded and approved the activity for authorization under NWP 23.

The Office of the Chief of Engineers may require additional conditions, including pre-construction notification, for authorization of an agency's categorical exclusions under this NWP.

**Notification:** Certain categorical exclusions approved for authorization under this NWP require the permittee to submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 27). The activities that require pre-construction notification are listed in the appropriate Regulatory Guidance Letters. (Sections 10 and 404)

**Note:** The agency or department may submit an application for an activity believed to be categorically excluded to the Office of the Chief of Engineers (Attn: CECW-CO). Prior to approval for authorization under this NWP of any agency's activity, the Office of the Chief of Engineers will solicit public comment. As of the date of issuance of this NWP, agencies with approved categorical exclusions are the: Bureau of Reclamation, Federal Highway Administration, and U.S. Coast Guard. Activities approved for authorization under this NWP as of the date of this notice are found in Corps Regulatory Guidance Letter 05-07, which is available at:

<http://www.usace.army.mil/inet/functions/cw/cecwo/reg/rglsindx.htm> . Any future approved categorical exclusions will be announced in Regulatory Guidance Letters and posted on this same web site.

**NATIONWIDE PERMIT 33**  
**DEPARTMENT OF THE ARMY**  
**CORPS OF ENGINEERS**  
**FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS**  
**FEDERAL REGISTER**  
**AUTHORIZED MARCH 19, 2007**

**Temporary Construction, Access, and Dewatering.** Temporary structures, work, and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps of Engineers or the U.S. Coast Guard. This NWP also authorizes temporary structures, work, and discharges, including cofferdams, necessary for construction activities not otherwise subject to the Corps or U.S. Coast Guard permit requirements. Appropriate measures must be taken to maintain near normal downstream flows and to minimize flooding. Fill must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. The use of dredged material may be allowed if the district engineer determines that it will not cause more than minimal adverse effects on aquatic resources. Following completion of construction, temporary fill must be entirely removed to upland areas, dredged material must be returned to its original location, and the affected areas must be restored to pre-construction elevations. The affected areas must also be revegetated, as appropriate. This permit does not authorize the use of cofferdams to dewater wetlands or other aquatic areas to change their use. Structures left in place after construction is completed require a section 10 permit if located in navigable waters of the United States. (See 33 CFR part 322.)

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 27). The pre-construction notification must include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions. (Sections 10 and 404)

## NATIONWIDE PERMIT CONDITIONS

The following General Conditions must be followed in order for any authorization by a NWP to be valid:

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized

under any NWP which “may affect” a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have “no effect” on listed species or critical habitat, or until Section 7 consultation has been completed.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal “takes” of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at <http://www.fws.gov/> and <http://www.noaa.gov/fisheries.html> respectively.

18. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State

Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWP. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWP.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

22. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:  
“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate

the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

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(Transferee)

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(Date)

26. Compliance Certification. Each permittee who received an NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;
- (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

27. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) Forty-five calendar days have passed from the district engineer’s receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is “no effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained.

Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);

(4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.

(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment

(after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

28. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

### **FURTHER INFORMATION**

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project.

### **DEFINITIONS**

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration, establishment (creation), enhancement, or preservation of aquatic resources for the purpose of compensating for unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Discharge: The term "discharge" means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a

decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

*Ephemeral stream*: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

*Establishment (creation)*: The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

*Historic Property*: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

*Independent utility*: A test to determine what constitutes a single and complete project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

*Intermittent stream*: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

*Loss of waters of the United States*: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

*Non-tidal wetland*: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

*Open water*: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or

flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through

which surface and subsurface hydrology connects waterbodies with their adjacent uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 20.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete project: The term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete project must have independent utility (see definition). For linear projects, a “single and complete project” is all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream’s course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWP, a waterbody is a jurisdictional water of the United States that, during a year with normal patterns of precipitation, has water flowing or standing above ground to the extent that an ordinary high water mark (OHWM) or other indicators of jurisdiction can be determined, as well as any wetland area (see 33 CFR 328.3(b)). If a jurisdictional wetland is adjacent--meaning bordering, contiguous, or neighboring--to a jurisdictional waterbody displaying an OHWM or other indicators of jurisdiction, that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

## **REGIONAL CONDITIONS FOR NATIONWIDE PERMITS IN THE WILMINGTON DISTRICT**

### **1.0 Excluded Waters**

The Corps has identified waters that will be excluded from the use of all NWP's during certain timeframes. These waters are:

#### **1.1. Anadromous Fish Spawning Areas**

Waters of the United States identified by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas are excluded during the period between February 15 and June 30, without prior written approval from NCDMF or NCWRC and the Corps.

#### **1.2. Trout Waters Moratorium**

Waters of the United States in the twenty-five designated trout counties of North Carolina are excluded during the period between October 15 and April 15 without prior written approval from the NCWRC. (see Section I. b. 7. for a list of the twenty-five trout counties).

#### **1.3. Sturgeon Spawning Areas**

Waters of the United States designated as sturgeon spawning areas are excluded during the period between February 1 and June 30, without prior written approval from the National Marine Fisheries Service (NMFS).

### **2.0 Waters Requiring Additional Notification**

The Corps has identified waters that will be subject to additional notification requirements for activities authorized by all NWP's. These waters are:

#### **2.1. Western NC Counties that Drain to Designated Critical Habitat**

Waters of the U.S. that requires a Pre-Construction Notification pursuant to General Condition 27 (PCN) and located in the sixteen counties listed below, applicants must provide a copy of the PCN to the US Fish and Wildlife Service, 160 Zillicoa Street, Asheville, North Carolina 28805. This PCN must be sent concurrently to the US Fish and Wildlife Service and the Corps Asheville Regulatory Field Office. Please see General Condition 17 for specific notification requirements related to Federally Endangered Species and the following website for information on the location of designated critical habitat.

Counties with tributaries that drain to designated critical habitat that require notification to the Asheville US Fish and Wildlife Service: Avery, Cherokee, Forsyth, Graham, Haywood,

Henderson, Jackson, Macon Mecklenburg, Mitchell, Stokes, Surry, Swain, Transylvania, Union and Yancey.

Website and office addresses for Endangered Species Act Information:

The Wilmington District has developed the following website for applicants which provide guidelines on how to review linked websites and maps in order to fulfill NWP general condition 17 requirements.

<http://www.saw.usace.army.mil/wetlands/ESA>

Applicants who do not have internet access may contact the appropriate US Fish and Wildlife Service offices or the US Army Corps of Engineers office listed below.

US Fish and Wildlife Service  
Asheville Field Office  
160 Zillicoa Street  
Asheville, NC 28801  
Telephone: (828) 258-3939

Asheville US Fish and Wildlife Service Office counties: All counties west of and including Anson, Stanly, Davidson, Forsyth and Stokes Counties

US Fish and Wildlife Service  
Raleigh Field Office  
Post Office Box 33726  
Raleigh, NC 27636-3726  
Telephone: (919) 856-4520

Raleigh US Fish and Wildlife Service Office counties: all counties east of and including Richmond, Montgomery, Randolph, Guilford, and Rockingham Counties.

**2.2. Special Designation Waters**

Prior to the use of any NWP in any of the following North Carolina identified waters and contiguous wetlands, applicants must comply with Nationwide Permit General Condition 27 (PCN). The North Carolina waters and contiguous wetlands that require additional notification requirements are:

“Outstanding Resource Waters” (ORW) and “High Quality Waters” (HQW) (as designated by the North Carolina Environmental Management Commission), or  
“Inland Primary Nursery Areas” (IPNA) (as designated by the North Carolina Wildlife Resources Commission), or “Contiguous Wetlands” (as defined by the North Carolina Environmental Management Commission), or “Primary Nursery Areas” (PNA) (as designated by the North Carolina Marine Fisheries Commission).

### **2.3. Coastal Area Management Act (CAMA) Areas of Environmental Concern**

Non-Federal applicants for any NWP in a designated “Area of Environmental Concern” (AEC) in the twenty (20) counties of Eastern North Carolina covered by the North Carolina Coastal Area Management Act (CAMA), must also obtain the required CAMA permit. Construction activities for non-Federal projects may not commence until a copy of the approved CAMA permit is furnished to the appropriate Wilmington District Regulatory Field Office (Wilmington Field Office – P.O. Box 1890, Wilmington, NC 28402 or Washington Field Office – P.O. Box 1000, Washington, NC 27889).

### **2.4. Barrier Islands**

Prior to the use of any NWP on a barrier island of North Carolina, applicants must comply with Nationwide Permit General Condition 27 (PCN).

### **2.5. Mountain or Piedmont Bogs**

Prior to the use of any NWP in a “Mountain or Piedmont Bog” of North Carolina, applicants shall comply with Nationwide Permit General Condition 27 (PCN).

Note: The following wetland community types identified in the N.C. Natural Heritage Program document, “Classification of Natural communities of North Carolina (Michael P. Schafale and Alan S. Weakley, 1990), are subject to this regional condition.

Mountain Bogs	Piedmont Bogs
Swamp Forest-Bog Complex	Upland depression Swamp Forest
Swamp Forest-Bog Complex (Spruce Subtype)	
Southern Appalachian Bog (Northern Subtype)	
Southern Appalachian Bog (Southern Subtype)	
Southern Appalachian Fen	

### **2.6. Animal Waste Facilities**

Prior to use of any NWP for construction of animal waste facilities in waters of the US, including wetlands, applicants shall comply with Nationwide Permit General Condition 27 (PCN).

### **2.7. Trout Waters**

Prior to any discharge of dredge or fill material into streams or waterbodies within the twenty-five (25) designated trout counties of North Carolina, the applicant shall comply with

Nationwide Permit General Condition 27 (PCN). The applicant shall also provide a copy of the notification to the appropriate NCWRC office to facilitate the determination of any potential impacts to designated Trout Waters. Notification to the Corps of Engineers will include a statement with the name of the NCWRC biologist contacted, the date of the notification, the location of work, a delineation of wetlands, a discussion of alternatives to working in the mountain trout waters, why alternatives were not selected, and a plan to provide compensatory mitigation for all unavoidable adverse impacts to mountain trout waters.

#### NCWRC and NC Trout Counties

Mr. Ron Linville			
Western Piedmont Region Coordinator	Alleghany	Caldwell	Watauga
3855 Idlewild Road	Ashe	Mitchell	Wilkes
Kernersville, NC 27284-9180	Avery	Stokes	
Telephone: (336) 769-9453	Burke	Surry	

Mr. Dave McHenry			
Mountain Region Coordinator	Buncombe	Henderson	Polk
20830 Great Smoky Mtn. Expressway	Cherokee	Jackson	Rutherford
Waynesville, NC 28786	Clay	Macon	Swain
Telephone: (828) 452-2546	Graham	Madison	Transylvania
Fax: (828) 452-7772	Haywood	McDowell	Yancey

### 3.0 List of Corps Regional Conditions for All Nationwide Permits

The following conditions apply to all Nationwide Permits in the Wilmington District:

#### 3.1. Limitation of Loss of Perennial Stream Bed

NWPs may not be used for activities that may result in the loss or degradation of greater than 300 total linear feet of perennial streams. The NWPs may not be used for activities that may result in the loss or degradation of greater than 300 total linear feet of ephemeral and intermittent streams that exhibit important aquatic function(s)\* Loss of stream includes the linear feet of stream bed that is filled, excavated, or flooded by the proposed activity. The District Commander can waive the 300 linear foot limit for ephemeral and intermittent streams on a case-by-case basis if he determines that the proposed activity will result in minimal individual and cumulative adverse impacts to the aquatic environment. Waivers for the loss of ephemeral and intermittent streams must be in writing. This waiver only applies to the 300 linear feet threshold for NWPs. Mitigation may still be required for impacts to ephemeral and intermittent streams, on a case-by-case basis, depending on the impacts to the aquatic environment of the proposed project. [\*Note: The Corps uses the Stream Quality Assessment Worksheet, located with Permit Information on the Regulatory Program Web Site, to aid in the determination of aquatic function within the intermittent stream channel.]

### **3.2. Mitigation for Loss of Stream Bed Exceeding 150 Feet.**

For any NWP that results in a loss of more than 150 linear feet of perennial and/or ephemeral/intermittent stream, the applicant shall provide a mitigation proposal to compensate for the loss of aquatic function associated with the proposed activity. For stream losses less than 150 linear feet, that require a PCN, the District Commander may determine, on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effect on the aquatic environment.

### **3.3. Pre-construction Notification for Loss of Streambed Exceeding 150 Feet.**

Prior to use of any NWP for any activity which impacts more than 150 total linear feet of perennial stream or ephemeral/ intermittent stream, the applicant must comply with Nationwide Permit General Condition 27 (PCN). This applies to NWPs that do not have specific notification requirements. If a NWP has specific notification requirements, the requirements of the NWP should be followed.

### **3.4. Restriction on Use of Live Concrete**

For all NWPs which allow the use of concrete as a building material, 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.

### **3.5. Requirements for Using Riprap for Bank Stabilization**

For all NWPs that allow for the use of riprap material for bank stabilization, the following measures shall be applied:

**3.5.1.** Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters.

**3.5.2.** The placement of riprap shall be limited to the areas depicted on submitted work plan drawings.

**3.5.3.** The riprap material shall be clean and free from loose dirt or any pollutant except in trace quantities that would not have an adverse environmental effect.

**3.5.4.** It shall be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal conditions.

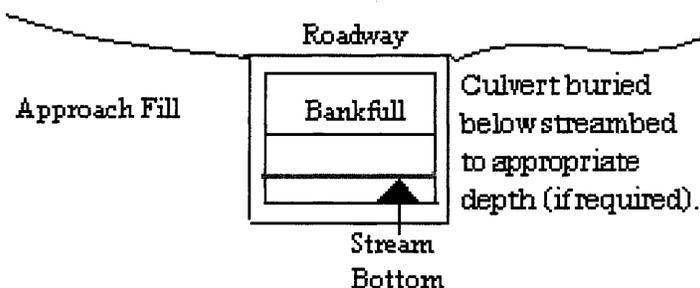
**3.5.5.** The riprap material shall consist of clean rock or masonry material such as, but not limited to, granite, marl, or broken concrete.

**3.5.6.** A waiver from the specifications in this Regional Condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this Regional condition would result in greater adverse impacts to the aquatic environment.

### **3.6. Safe Passage Requirements for Culvert Placement**

For all NWP's that involve the construction/installation of culverts, measures will be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed opening should be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gage data, if available. In the absence of such data, bankfull flow can be used as a comparable level.

In the twenty (20) counties of North Carolina designated as coastal counties by the Coastal Area Management Act (CAMA): All pipe and culvert bottoms shall 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.



In all other counties: Culverts greater than 48 inches in diameter will be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter or less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain the existing channel slope. The bottom of the culvert must be placed at a depth below the natural stream bottom to provide for passage during drought or low flow conditions.

Destabilizing the channel and head cutting upstream should be considered in the placement of the culvert.

A waiver from the depth specifications in this condition may be requested in writing. The waiver will be issued if it can be demonstrated that the proposal would result in the least impacts to the aquatic environment.

All counties: Culverts placed in wetlands do not have to be buried.

### **3.7. Notification to NCDENR Shellfish Sanitation Section**

Applicants shall notify the NCDENR Shellfish Sanitation Section prior to dredging in or removing sediment from an area closed to shell fishing where the effluent may be released to an area open for shell fishing or swimming in order to avoid contamination from the disposal area and cause a temporary shellfish closure to be made. Such notification shall also be provided to the appropriate Corps of Engineers Regulatory Field Office. Any disposal of sand to the ocean beach should occur between November 1 and April 30 when recreational usage is low. Only clean sand should be used and no dredged sand from closed shell fishing areas may be used. If beach disposal were to occur at times other than stated above or if sand from a closed shell fishing area is to be used, a swimming advisory shall be posted, and a press release shall be issued.

### **3.8. Preservation of Submerged Aquatic Vegetation**

Adverse impacts to Submerged Aquatic Vegetation (SAV) are not authorized by any NWP within any of the twenty coastal counties defined by North Carolina's Coastal Area Management Act of 1974 (CAMA).

### **4.0 Additional Regional Conditions for Specific Nationwide Permits**

#### **4.1 The following regional condition is required for NWP #23 – Approved Categorical Exclusions**

No development activities authorized by this NWP may begin until the permittee obtains a consistency determination or a CAMA permit from the North Carolina Division of Coastal Management, if either required.

## **NC DIVISION OF WATER QUALITY - GENERAL CERTIFICATION CONDITIONS**

For the most recent General Certification conditions, call the NC Division of Water Quality, Wetlands/401 Certification Unit at (919) 733-1786 or access the following website:  
<http://h2o.enr.state.nc.us/ncwetlands/certs.html>

## **NC DIVISION OF COASTAL MANAGEMENT - STATE CONSISTENCY**

In a letter dated May 7, 2007, the North Carolina Division of Coastal Management found this NWP consistent with the North Carolina Coastal Zone Management Program. Updates on CAMA Consistency for NC can be found on the NC DCM web site at:  
<http://dcm2.enr.state.nc.us/Permits/consist.htm>

## **EASTERN BAND OF THE CHEROKEE INDIANS TRIBAL WATER QUALITY CERTIFICATIONS**

In a letter dated May 8, 2007, US EPA, on behalf of the Eastern Band of Cherokee Indians, provided Tribal General Conditions for Nationwide Permits on Cherokee Indian Reservation. These Tribal General Conditions are located on the Corps website at:  
<http://www.saw.usace.army.mil/WETLANDS/NWP2007/EBCI-certs.html>

### **Citations:**

2007 Nationwide Permits Public Notice for Final Issue Date: March 15, 2007

Correction Notice for Nationwide Permits, Federal Register / Vol. 72, No. 88 / Tuesday, May 8, 2007 / Notices p.26082

2007 SAW Regional Conditions – Authorized June 1, 2007

This and other information can be found on the Corps web site at:  
<http://www.saw.usace.army.mil/WETLANDS/NWP2007/nationwide-permits.html>

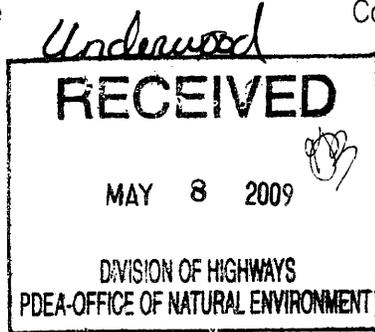


North Carolina Department of Environment and Natural Resources  
Division of Water Quality

Beverly Eaves Perdue  
Governor

Coleen H. Sullins  
Director

Dee Freeman  
Secretary



May 6, 2009  
Brunswick County  
TIP Project B-4030  
DWQ Project No. 090072  
State Project No. 8.1231801

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

Gregory J. Thorpe, Ph.D., Environmental Management Director  
NCDOT  
1598 Mail Service Center  
Raleigh, North Carolina 27699-1598

Dear Dr. Thorpe:

You have our approval, in accordance with the conditions listed below, for the following stream and wetland impacts for the purpose of replacing Bridge No. 9 on Highway 130 in Brunswick County. This bridge crosses Bear Branch, class "C-Swamp" waters in the Lumber River Basin.

**Wetland Impacts in the Lumber River Basin (non-riverine)**

Site (per plans)	Fill (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Area under Bridge (ac)	Total Wetland Impact (ac)
Site 1	0.04						0.04
Site 2	0.08			0.06			0.14
Site 3	0.07						0.07
Site 4	0.02		0.11	0.07			0.20
Site 5		0.13		0.02			0.15
Site 6		0.28		0.03			0.31
<b>Total</b>	<b>0.21</b>	<b>0.41</b>	<b>0.11</b>	<b>0.18</b>			<b>0.91</b>

**Total Wetland Impact for Project: 0.91 acres**

**Stream Impacts in the Lumber River Basin**

Site	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
Ditch outlet, SW quad Sta.16+90 (approx)			20 (approx. 100 sq.ft. of rip-rap for outlet stabilization)		20	
<b>Total</b>			20LF		<b>20 LF</b>	

**Total Stream Impact for Project: 20 linear feet**

The project shall be constructed in accordance with your application dated January 21, 2009, received January 23, 2009, and as modified in supporting information requested by DWQ on February 20, 2009, received April 27, 2009. After reviewing your application and revised information, we have decided that these impacts are covered by General Water Quality Certification Numbers 3699, 3701, and 3688, which correspond to Nationwide Permits 12, 23, and 33 respectively, as issued by the Corps of Engineers. 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 the following additional conditions.

**Additional conditions**

- 1) 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.
- 2) 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.
- 3) 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.

- 4) 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.
- 5) The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage.
- 6) 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.
- 7) 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.
- 8) 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.
- 9) No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
- 10) Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
- 11) 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.
- 12) All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification.
- 13) 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.
- 14) 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.
- 15) 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.
- 16) Native riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.
- 17) 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.

Permit Class  
**AMENDED**

Permit Number  
**68-09**

STATE OF NORTH CAROLINA  
Department of Environment and Natural Resources  
and  
Coastal Resources Commission

# Permit

for

Major Development in an Area of Environmental Concern  
pursuant to NCGS 113A-118

Excavation and/or filling pursuant to NCGS 113-229

Issued to N.C. Department of Transportation, 1598 Mail Service Center, Raleigh, NC 27699-1548

Authorizing development in Brunswick County at Bear Branch, Bridge No. 9 on  
NC Hwy 130 as requested in the permittee's application dated 1/21/09 (MP-1),  
and revised 3/30/09 (MP-2, MP-5), and including the attached drawings as referenced in Condition No. 1 of this permit.

This permit, issued on 6/23/09, is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to fines, imprisonment or civil action; or may cause the permit to be null and void.

### Bridge No. 9 Replacement (TIP No. B-4030)

- 1) Unless specifically altered herein, all work authorized by this permit shall be carried out in accordance with the following workplan drawings:  
  
½ size drawings: One (1) drawing dated 3/19/09, eleven (11) drawings dated 3/30/09, and sixteen (16) drawings dated 4/1/09.
- 2) Unless specifically altered herein, the NCDOT document "Best Management Practices for Bridge Demolition and Removal" (final 9/20/99) shall be followed during demolition and construction activities.

(See attached sheets for Additional Conditions)

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date. An appeal requires resolution prior to work initiation or continuance as the case may be.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.

Any maintenance work or project modification not covered hereunder requires further Division approval.

All work must cease when the permit expires on

No Expiration Date, pursuant to GS 136-44.7B

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.

Signed by the authority of the Secretary of DENR and the Chairman of the Coastal Resources Commission.



for James H. Gregson, Director  
Division of Coastal Management

This permit and its conditions are hereby accepted.

 for Gregory J. Thayer, Inc.  
Signature of Permittee

### ADDITIONAL CONDITIONS

- 3) The bridge and on-site temporary detour bridge shall be constructed using top down construction methodologies. Any other construction method shall require prior approval from DCM.
- 4) The temporary detour bridge shall have a minimum vertical navigational clearance of 4 feet over the waters of Bear Branch, as measured from the normal water level to the lowest portion of the temporary bridge superstructure.
- 5) Pilings from the existing bridge, as well as any remnant pilings from previous bridges, shall be removed in their entirety, except that in the event that a piling breaks during removal and cannot be removed in its entirety, the piling may be cut off flush with the bed of the water body and DCM shall be notified of each occurrence within one working day.
- 6) Debris resulting from demolition of the existing bridge and/or the temporary detour bridge, shall not enter wetlands or waters of the State, even temporarily.
- 7) Any waste materials or debris generated in the demolition and removal of the existing bridge and/or construction of the new bridge or roadway shall be disposed of at an approved upland site or shall be recycled in an environmentally appropriate manner provided appropriate authorizations from any relevant state, federal, or local authorities are obtained.
- 8) All fill material shall be clean and free of any pollutants except in trace quantities.
- 9) Excavated material may either be used in fill areas associated with the project or shall be removed from the site and taken to a high ground location.
- 10) No excavation or filling shall be allowed in any vegetated wetlands or surrounding waters outside of the alignment of the fill areas as indicated on the attached workplan drawings, without permit modification.
- 11) Live concrete shall not be allowed to contact waters of the State or water that will enter waters of the State.

**NOTE:** The permittee is encouraged to minimize the need to cross wetlands in transporting equipment to the maximum extent practicable.

- 12) Construction mats shall be utilized, if necessary, to support equipment within wetland areas to minimize any additional temporary wetland impacts. These mats shall be removed immediately following project completion.
- 13) Construction staging areas shall be located only in upland areas, and not in wetlands or waters of the State.
- 14) There shall be no clearing or grubbing of wetlands outside of the areas indicated on the attached workplan drawings without prior approval from the Division of Coastal Management.

**ADDITIONAL CONDITIONS**

- 15) Placement of riprap shall be limited to the areas as depicted on the attached work plan drawings. The riprap material shall be free from loose dirt or any pollutant. The riprap material shall consist of clean rock or masonry materials, such as but not limited to, granite, marl, or broken concrete.
- 16) The riprap at the embankment shall not extend waterward more than 5' from the normal water level at any point along its alignment.
- 17) Riprap shall be of sufficient size to prevent its movement from the authorized alignment by current action.
- 18) The permittee shall exercise all available precautions during the construction of the bridge to prevent waste and/or debris from entering the adjacent waters and wetlands.
- 19) All temporary fill shall be placed on geo-textile fabric to facilitate the total removal of fill upon completion of the project.
- 20) The temporary detour bridge and causeway shall be removed in their entirety within 90 days after it is no longer needed and saved for reuse, recycled, or disposed of at an approved high ground site.

**Sedimentation and Erosion Control**

- 21) This project shall conform to all requirements of the NC Sedimentation Pollution Control Act and NC DOT's Memorandum of Agreement with the Division of Land Resources.
- 22) Unless specifically altered herein, the permittee shall follow "Best Management Practices for the Protection of Surface Waters (3/97)" and shall also implement sedimentation and erosion control measures sufficient to protect aquatic resources.
- 23) Appropriate sedimentation and erosion control devices, measures or structures shall be implemented to ensure that eroded materials do not enter adjacent wetlands, watercourses and property (e.g. silt fence, diversion swales or berms, etc.).
- 24) In order to protect water quality, runoff from construction shall not visibly increase the amount of suspended sediments in adjacent waters.

**Utilities Relocation**

- 25) The subaqueous utility line shall be placed a minimum of two feet below the deepest point of the channel of Bear Branch.
- 26) Any relocation of utility lines that is not already depicted on the attached work plan drawings, or described within the attached permit application, shall require additional approval by DCM, either under the authority of this permit, or by the utility company obtaining separate authorization.

## ADDITIONAL CONDITIONS

### Stormwater Management

- 27) The Division of Water Quality (DWQ) approval of this project under stormwater management rules of the Environmental Management Commission is covered by way of Stormwater Project No. SW8080713, which was issued on 7/18/08. Any violation of the permit approved by the DWQ shall be considered a violation of this CAMA permit.

### Wetland Mitigation

- 28) Upon removal of all temporary wetland fill, restoration of 0.41 acres of riparian wetlands shall be carried out in accordance with the restoration plan dated as received on 5/14/09. If existing wetlands temporarily impacted during construction do not re-attain their pre-project wetland functions within 3 years, then the temporary impacts shall be reclassified as permanent impacts. To mitigate for additional permanent impacts, the restoration plan shall be revised or a revised EEP acceptance letter shall be provided to DCM for approval.
- 29) Any subsequent changes to the mitigation plan authorized by this CAMA permit shall require additional authorization from the N.C. Division of Coastal Management.

**NOTE:** The Ecosystem Enhancement Program (EEP) has agreed to provide compensatory mitigation (per 4/30/09 acceptance letter to NCDOT) for permanent impacts to 0.50 acres of riparian wetlands associated with the proposed project in accordance with Section X of Amendment No.2 of the Memorandum of Agreement between the NC Department of Transportation (NCDOT), the U.S. Army Corps of Engineers (USACE), and the NC Department of Environment and Natural Resources (NCDENR), executed on March 8, 2007.

### General

- 30) If it is determined that additional permanent and/or temporary impacts will occur that are not shown on the attached permit drawings, additional authorization from DCM shall be required.
- 31) The N.C. Division of Water Quality (DWQ) authorized the proposed project (DWQ Project No. 20090072), on 5/6/09. Any violation of the Certification approved by the DWQ shall be considered a violation of this CAMA permit.

**NOTE:** The permittee and/or contractor are strongly encouraged to contact the DCM Transportation Field Representative in Morehead City to request a pre-construction conference prior to project initiation.

**NOTE:** The U.S. Army Corps of Engineers authorized the proposed project under Nationwide Permit Numbers 23 and 33 (Action ID No. 2004422), which were issued on 5/15/09.

**NOTE:** This permit does not eliminate the need to obtain any additional state, federal, or local permits, approvals, or authorizations that may be required.





# PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
1	RALPH C. KING ET UX	4780 WHITEVILLE RD NW ASH, NC 28420
3	JOSEPH CLYMER SMITH, ET AL	P.O. BOX 2403 CULLOWHEE, NC 28723
4	WILLIE R. WARREN ET UX	4968 WHITEVILLE RD NW ASH, NC 28420

**NCDOT**

**DIVISION OF HIGHWAYS**

**BRUNSWICK COUNTY**

**PROJECT: 33397.L1 (B-4030)  
BRIDGE NO. 9 ON OVER  
BEAR BRANCH ON NC 130**

**SHEET**

**OF**

3/30/09

Permit Drawing  
Sheet 3 of 14

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4030	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33397.1.1	BRSTP-130 (3)	PE	
33397.2.1	BRSTP-130 (3)	RW + UTIL.	
33397.3.1	BRSTP-130 (3)	CONST.	

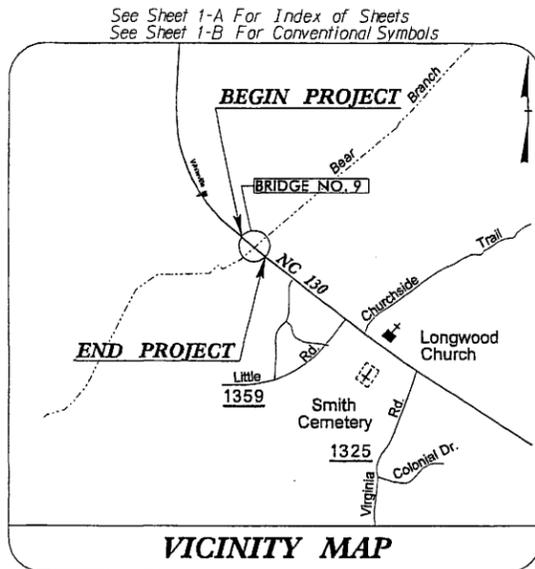
Permit Drawing  
Sheet 4 of 14



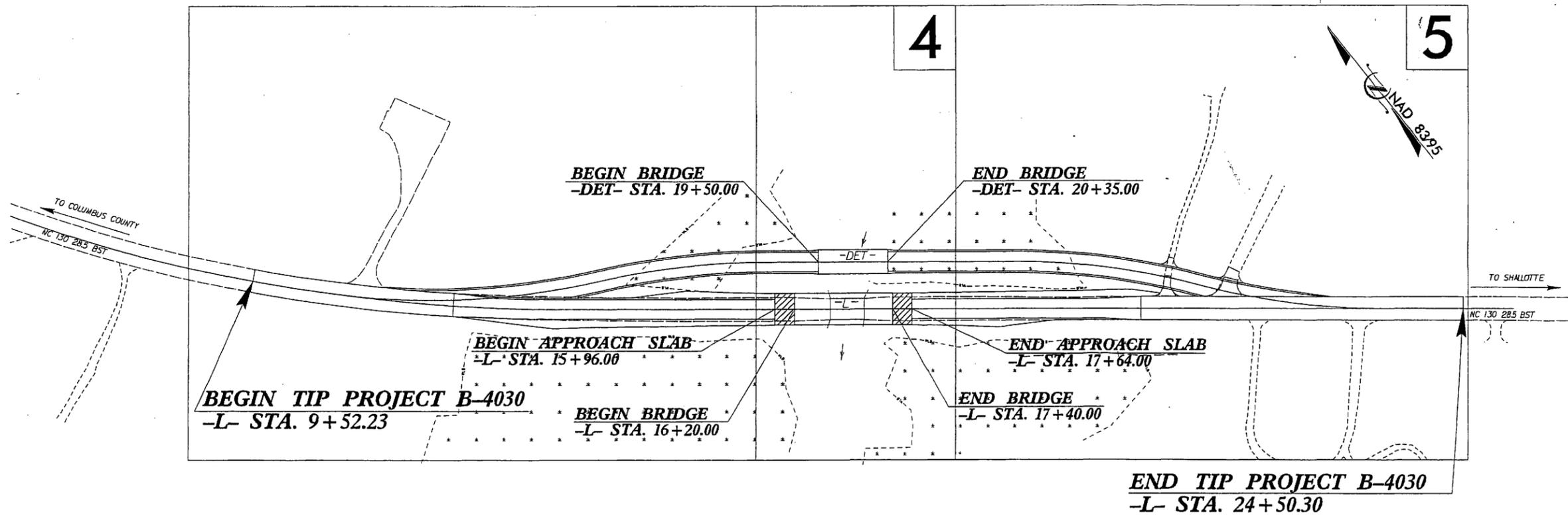
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**BRUNSWICK COUNTY**

LOCATION: BRIDGE NO.9 OVER BEAR BRANCH ON NC 130  
TYPE OF WORK: GRADING, DRAINAGE, PAVING & STRUCTURE

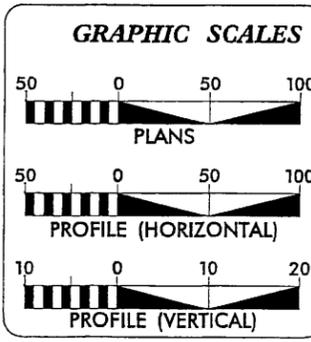


WETLAND/STREAM  
IMPACTS



NCDOT CONTACT : DOUG TAYLOR, P.E.  
ROADWAY DESIGN-ENGINEERING COORDINATION

INCOMPLETE PLANS  
DO NOT USE FOR R/W ACQUISITION  
PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION



**DESIGN DATA**

ADT 2009 =	4950
ADT 2029 =	7900
DHV =	9 %
D =	55%
T =	7 % *
V =	60 MPH
* TTST	4% DUAL 3%
FUNC. CLASS =	RURAL MINOR ARTERIAL

**PROJECT LENGTH**

Length Roadway Tip Project B-4030 =	0.261 Miles
Length Structure Tip Project B-4030 =	0.023 Miles
Total Length Tip Project B-4030 =	0.284 Miles

Prepared in the Office of:  
**THE LPA GROUP**  
TRANSPORTATION CONSULTANTS  
THE LPA GROUP of North Carolina, p.a.  
5000 Falls of Neuse Rd., Suite 304  
Raleigh, North Carolina 27609

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
JANUARY 18, 2008

LETTING DATE:  
JULY 21, 2009

Jeanne K. Richter, P.E.  
PROJECT ENGINEER

Jody L. Cole  
PROJECT DESIGN ENGINEER

**HYDRAULICS ENGINEER**

THE LPA GROUP  
TRANSPORTATION CONSULTANTS  
THE LPA GROUP of North Carolina, p.a.  
5000 Falls of Neuse Rd., Suite 304  
Raleigh, North Carolina 27609

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
JANUARY 18, 2008

LETTING DATE:  
JULY 21, 2009

Jeanne K. Richter, P.E.  
PROJECT ENGINEER

Jody L. Cole  
PROJECT DESIGN ENGINEER

**DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA**

STATE HIGHWAY DESIGN ENGINEER

TIP PROJECT: B-4030

CONTRACT: C202102

3/30/09

09/08/99



ENGLISH

..... DENOTES MECHANIZED CLEARING  
 // DENOTES TEMPORARY FILL IN WETLAND

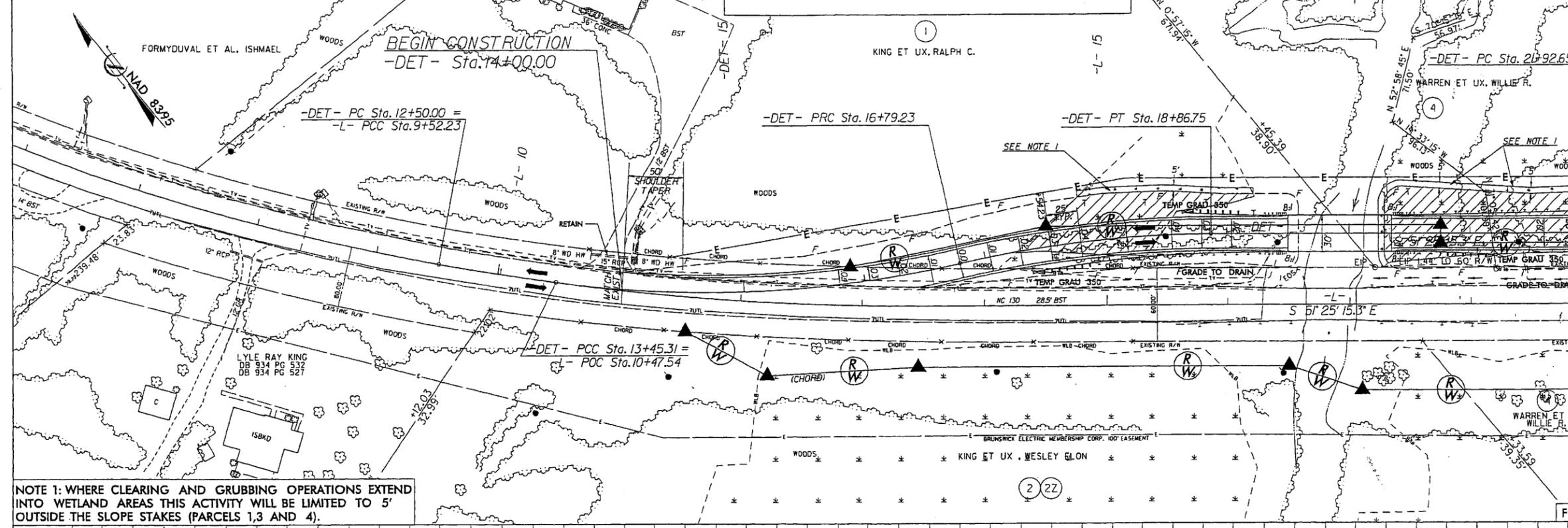
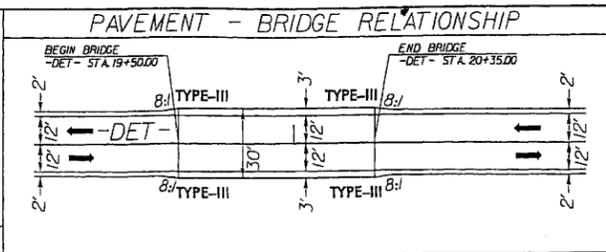
Permit Drawing Sheet 5 of 14

MATCH LINE -DET- STA. 22+00 SEE SHEET 2C

FOR -L- PLAN AND PROFILE, SEE SHEETS 4-5

-DET-

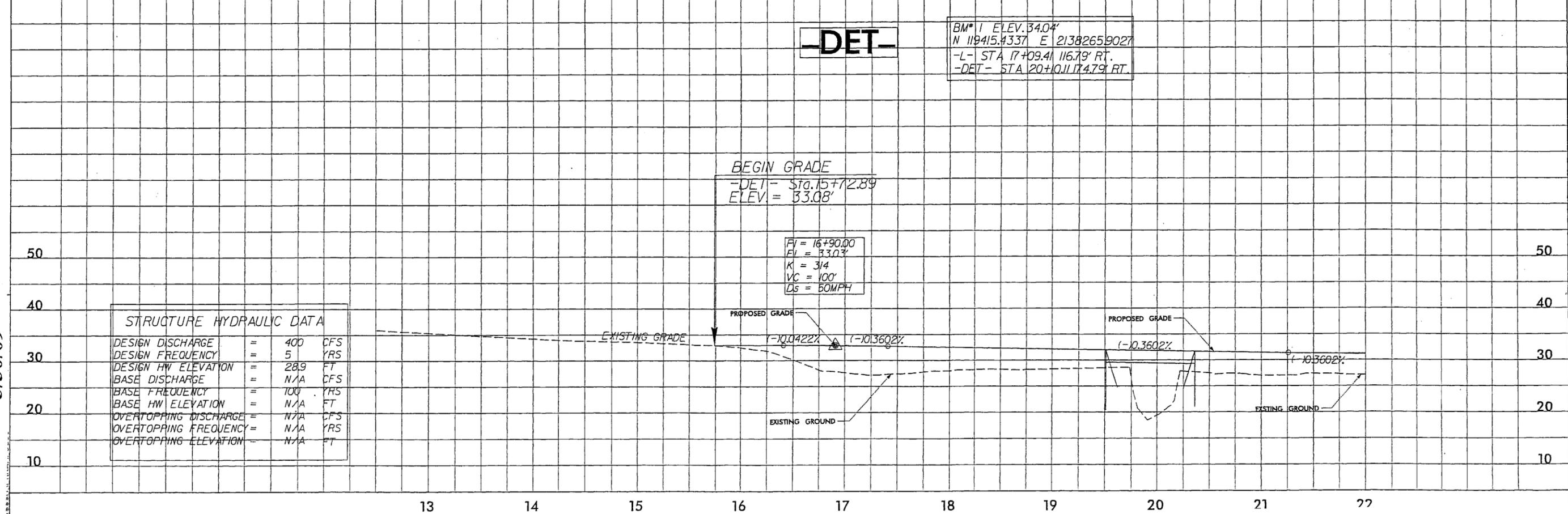
PI Sta 12+97.66 Δ = 2° 30' 06.9" (LT) D = 2° 37' 30.3" L = 95.31' T = 47.66' R = 2182.62' e(max) = EXISTING Ds = 50 MPH	PI Sta 15+14.10 Δ = 20° 39' 41.5" (LT) D = 6° 11' 14.8" L = 333.93' T = 168.80' R = 926.00' e(max) = EXISTING Ds = 50 MPH	PI Sta 17+83.43 Δ = 12° 50' 23.2" (RT) D = 6° 11' 14.8" L = 207.51' T = 104.19' R = 926.00' e(max) = .04 Ds = 50 MPH
--	--	---



NOTE 1: WHERE CLEARING AND GRUBBING OPERATIONS EXTEND INTO WETLAND AREAS THIS ACTIVITY WILL BE LIMITED TO 5' OUTSIDE THE SLOPE STAKES (PARCELS 1,3 AND 4).

-DET-

BM\*1 ELEV. 34.04'  
 N 119415.4337 E 2138265.9027  
 -L- STA 17+09.41 116.79' RT.  
 -DET- STA 20+10.11 174.79' RT.



STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE	=	400	CFS
DESIGN FREQUENCY	=	5	YRS
DESIGN HW ELEVATION	=	28.9	FT
BASE DISCHARGE	=	N/A	CFS
BASE FREQUENCY	=	100	YRS
BASE HW ELEVATION	=	N/A	FT
OVERTOPPING DISCHARGE	=	N/A	CFS
OVERTOPPING FREQUENCY	=	N/A	YRS
OVERTOPPING ELEVATION	=	N/A	FT

3/30/09

REVISIONS

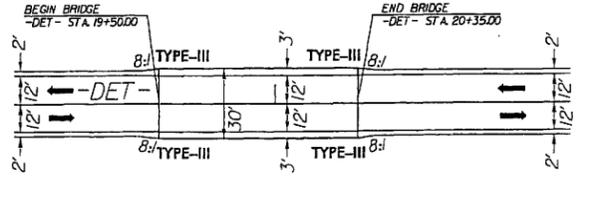
B.17/99

B/17/99

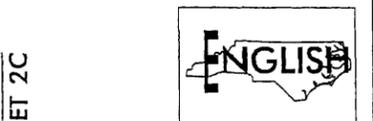
-DET-

PI Sta 12+97.66 Δ = 2° 30' 06.9" (LT) D = 2' 37' 30.3" L = 95.31' T = 47.66' R = 2,182.62' e(max) = EXISTING Ds = 50 MPH	PI Sta 15+14.10 Δ = 20° 39' 41.5" (LT) D = 6' 11' 14.8" L = 333.93' T = 168.80' R = 926.00' e(max) = EXISTING Ds = 50 MPH	PI Sta 17+83.43 Δ = 12° 50' 23.2" (RT) D = 6' 11' 14.8" L = 207.51' T = 104.19' R = 926.00' e(max) = .04 Ds = 50 MPH
---	--	---

### PAVEMENT - BRIDGE RELATIONSHIP



PROJECT REFERENCE NO. B-4030	SHEET NO. 2B
ROADWAY DESIGN ENGINEER SMITH ET AL., JOSEPH CLYMER	HYDRAULICS ENGINEER

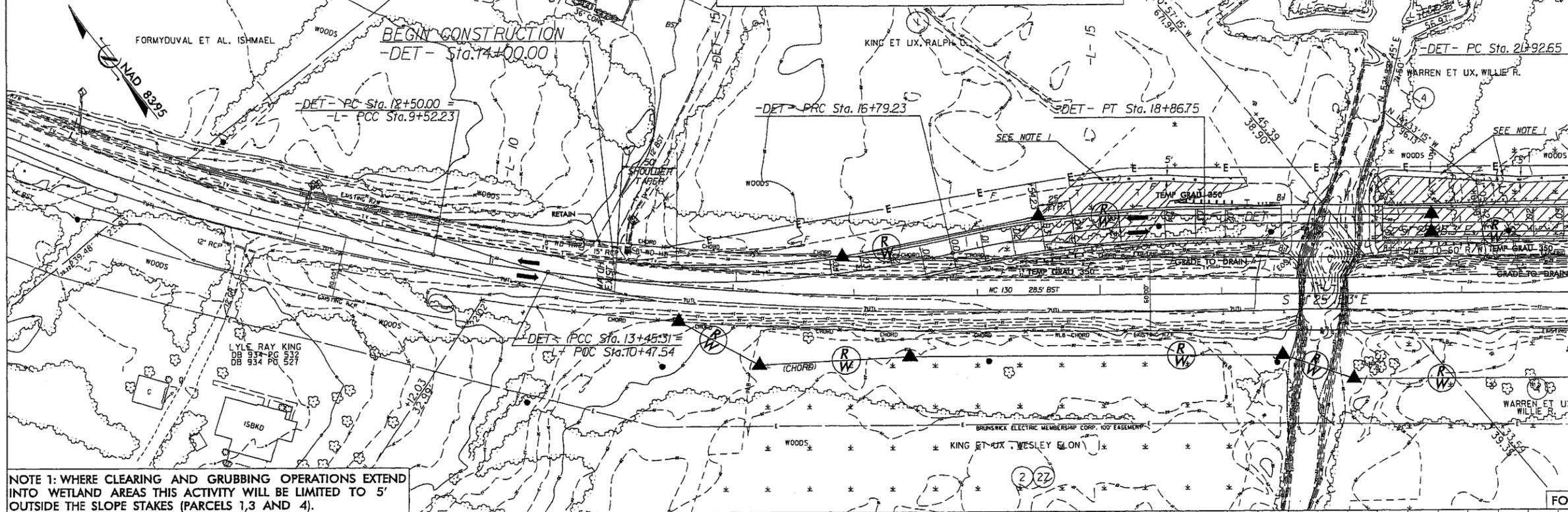


ENGLISH

- DENOTES MECHANIZED CLEARING
- ▨ DENOTES TEMPORARY FILL IN WETLAND

Permit Drawing Sheet 6 of 14

MATCH LINE -DET- STA. 22+00 SEE SHEET 2C

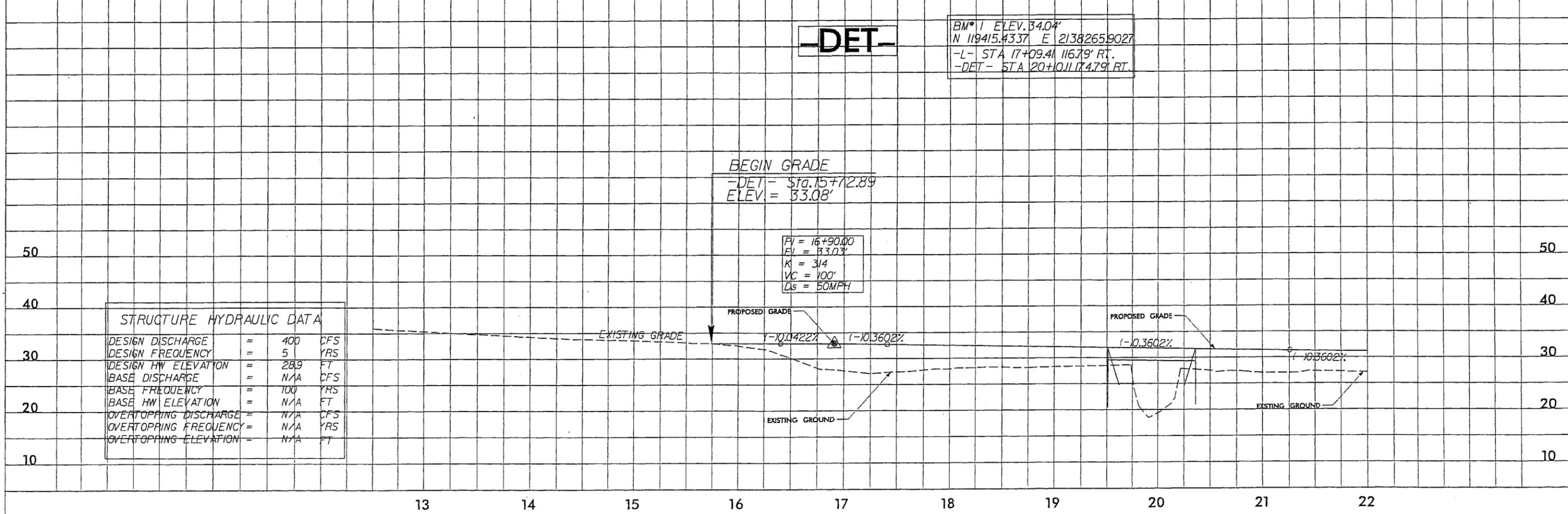


NOTE 1: WHERE CLEARING AND GRUBBING OPERATIONS EXTEND INTO WETLAND AREAS THIS ACTIVITY WILL BE LIMITED TO 5' OUTSIDE THE SLOPE STAKES (PARCELS 1,3 AND 4).

FOR -L- PLAN AND PROFILE, SEE SHEETS 4-5

-DET-

BM\*1 ELEV. 34.04'  
N 119415.4337 E 2138265.9027  
-L- STA 17+09.41 116.79' RT.  
-DET- STA 20+00.11 174.79' RT.



DESIGN DISCHARGE	=	400	CFS
DESIGN FREQUENCY	=	5	YRS
DESIGN HW ELEVATION	=	28.9	FT
BASE DISCHARGE	=	N/A	CFS
BASE FREQUENCY	=	100	YRS
BASE HW ELEVATION	=	N/A	FT
OVERTOPPING DISCHARGE	=	N/A	CFS
OVERTOPPING FREQUENCY	=	N/A	YRS
OVERTOPPING ELEVATION	=	N/A	FT

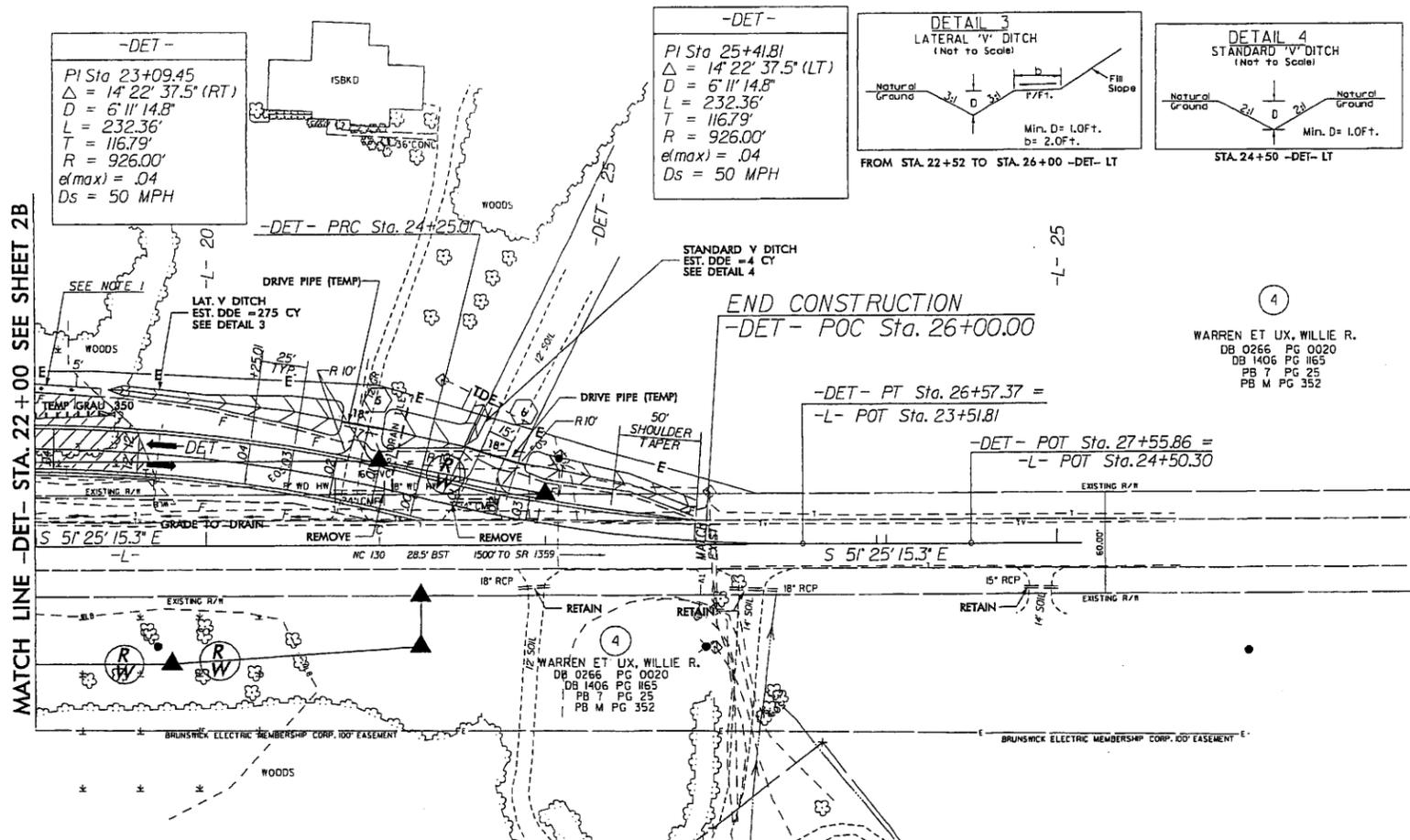
3/30/09

NOTE 1: WHERE CLEARING AND GRUBBING OPERATIONS EXTEND INTO WETLAND AREAS THIS ACTIVITY WILL BE LIMITED TO 5' OUTSIDE THE SLOPE STAKES (PARCELS 1,3 AND 4).

8/17/99

PROJECT REFERENCE NO. B-4030	SHEET NO. 2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER JANNE E. RICHES	HYDRAULICS ENGINEER HENRY WELLS

••••• DENOTES MECHANIZED CLEARING  
 ▨ DENOTES TEMPORARY FILL IN WETLAND



Permit Drawing Sheet 7 of 14

FOR -L- PLAN AND PROFILE, SEE SHEETS 4-5

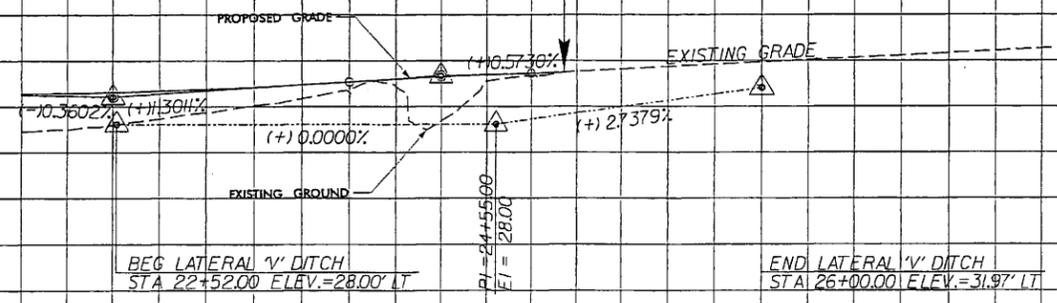
**-DET-**

DITCH LEGEND	
---	LEFT DITCH

END GRADE  
 -DET- STA. 24+93.10  
 ELEV. = 33.68'

PI = 22+50.00  
 EL = 31.0'  
 VC = 250'  
 K = 150  
 Ds = 50MPH

PI = 24+25.00  
 EL = 33.29'  
 VC = 100'  
 K = 137  
 Ds = 50MPH



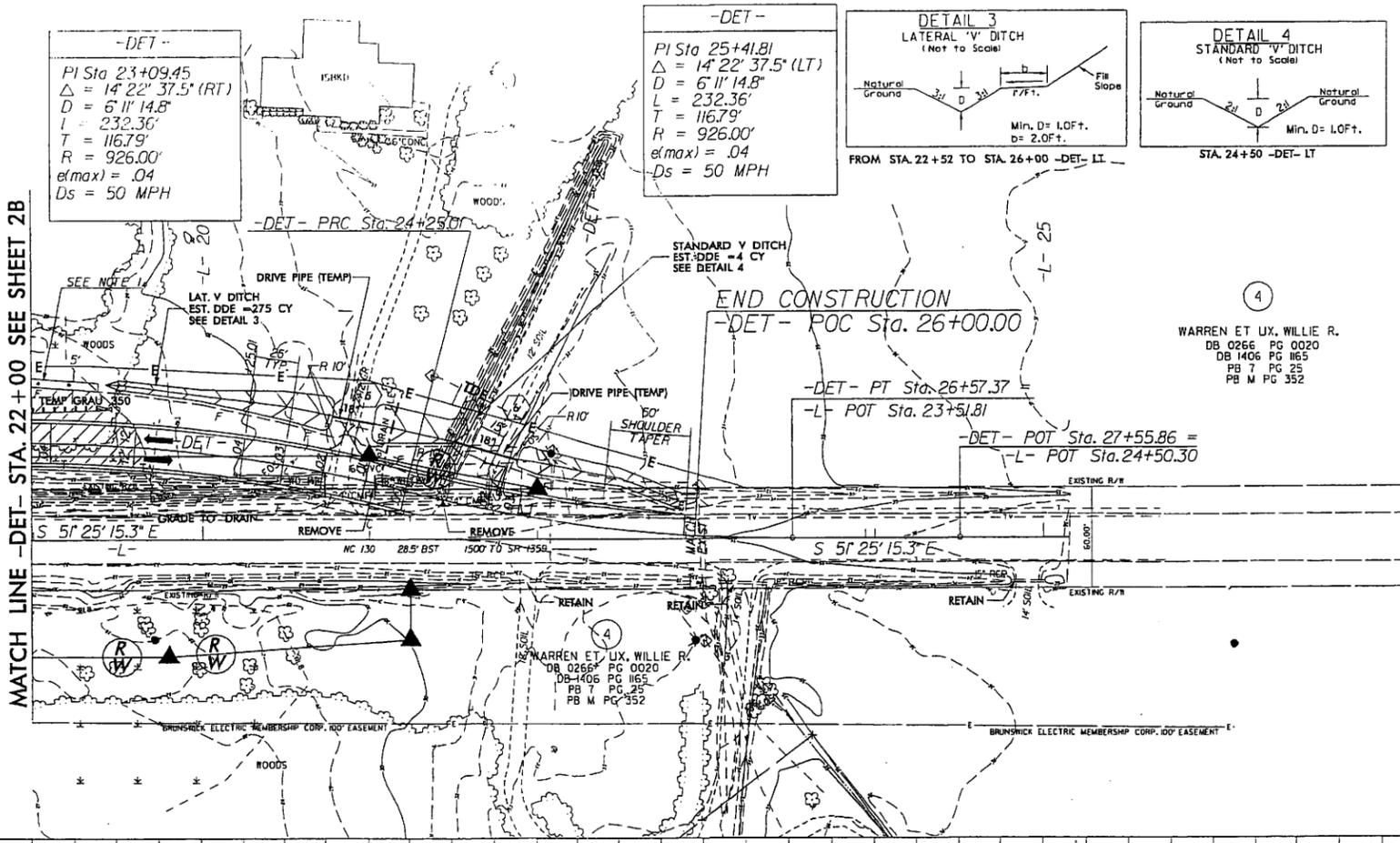
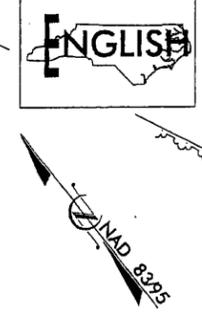
REVISIONS

3/30/09

8/17/99  
 NOTE 1: WHERE CLEARING AND GRUBBING OPERATIONS EXTEND INTO WETLAND AREAS THIS ACTIVITY WILL BE LIMITED TO 5' OUTSIDE THE SLOPE STAKES (PARCELS 1,3 AND 4).

..... DENOTES MECHANIZED CLEARING  
 ▨ DENOTES TEMPORARY FILL IN WETLAND

PROJECT REFERENCE NO. B-4030	SHEET NO. 2C
R/W SHEET NO. ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



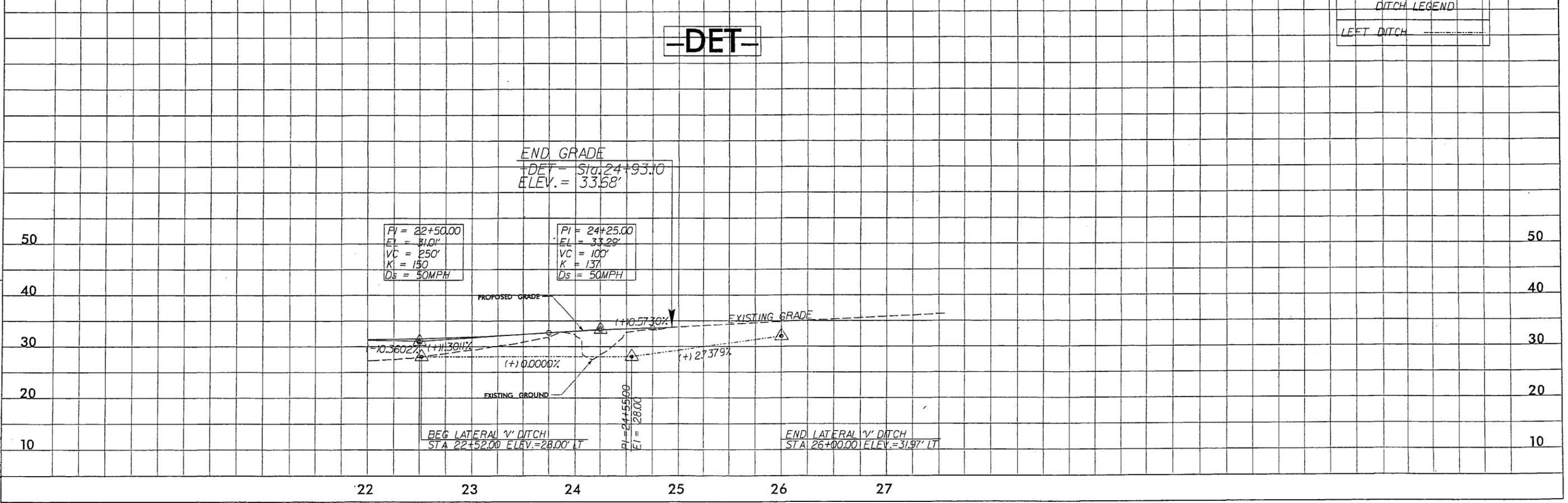
Permit Drawing Sheet 8 of 14

WARREN ET UX, WILLIE R.  
 DB 0266 PG 0020  
 DB 1406 PG 165  
 PB 7 PG 25  
 PB M PG 352

FOR -L- PLAN AND PROFILE, SEE SHEETS 4-5

-DET-

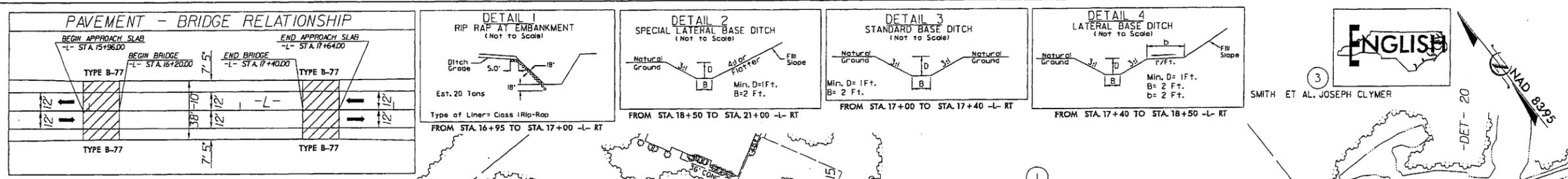
DITCH LEGEND	
---	LEFT DITCH



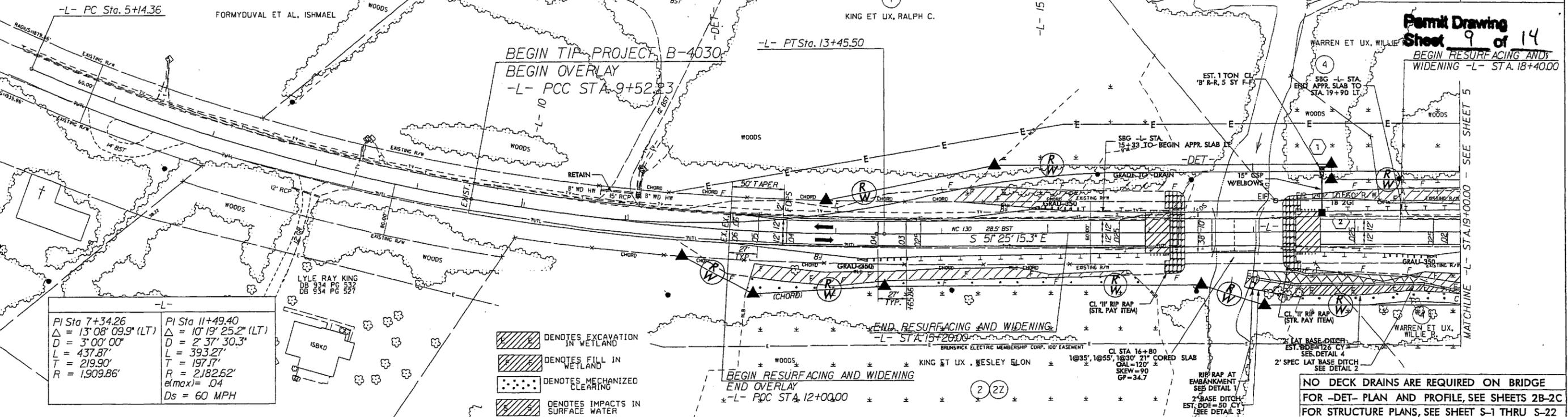
3/30/09

8/17/99

PROJECT REFERENCE NO. B-4030	SHEET NO. 4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
SMITH ET AL, JOSEPH CLYMER	SEAL 24277 ENGINEER HENRY WELLS JR.



**Permit Drawing**  
 Sheet 9 of 14  
 BEGIN RESURFACING AND WIDENING -L- STA. 18+40.00



PI Sta 7+34.26 Δ = 13° 08' 09.9" (LT) D = 3' 00' 00" L = 437.87' T = 219.90' R = 1,909.86'	PI Sta 11+49.40 Δ = 10° 19' 25.2" (LT) D = 2' 37' 30.3" L = 393.27' T = 197.17' R = 2,182.62' e(max) = .04 Ds = 60 MPH
---	---

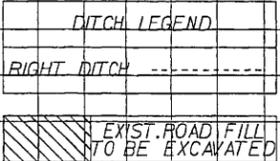
- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES IMPACTS IN SURFACE WATER

**NO DECK DRAINS ARE REQUIRED ON BRIDGE**  
 FOR -DET- PLAN AND PROFILE, SEE SHEETS 2B-2C  
 FOR STRUCTURE PLANS, SEE SHEET S-1 THRU S-22

REVISIONS

-L-

BM# 1 ELEV. 34.04'  
 N 119° 45' 43.37" E 2138.265.9027  
 -BL- STA 16+68.1001 RT.  
 -L- STA 17+09.4116.79' RT.  
 -DET- STA 20+10.1174.79' RT.



**BEGIN PROJECT B-4030**  
 -L- Sta. 9+52.23  
**BEGIN OVERLAY**

**BEGIN GRADE**  
**END OVERLAY**  
 -L- Sta. 12+00.00  
 ELEV. = 34.27'

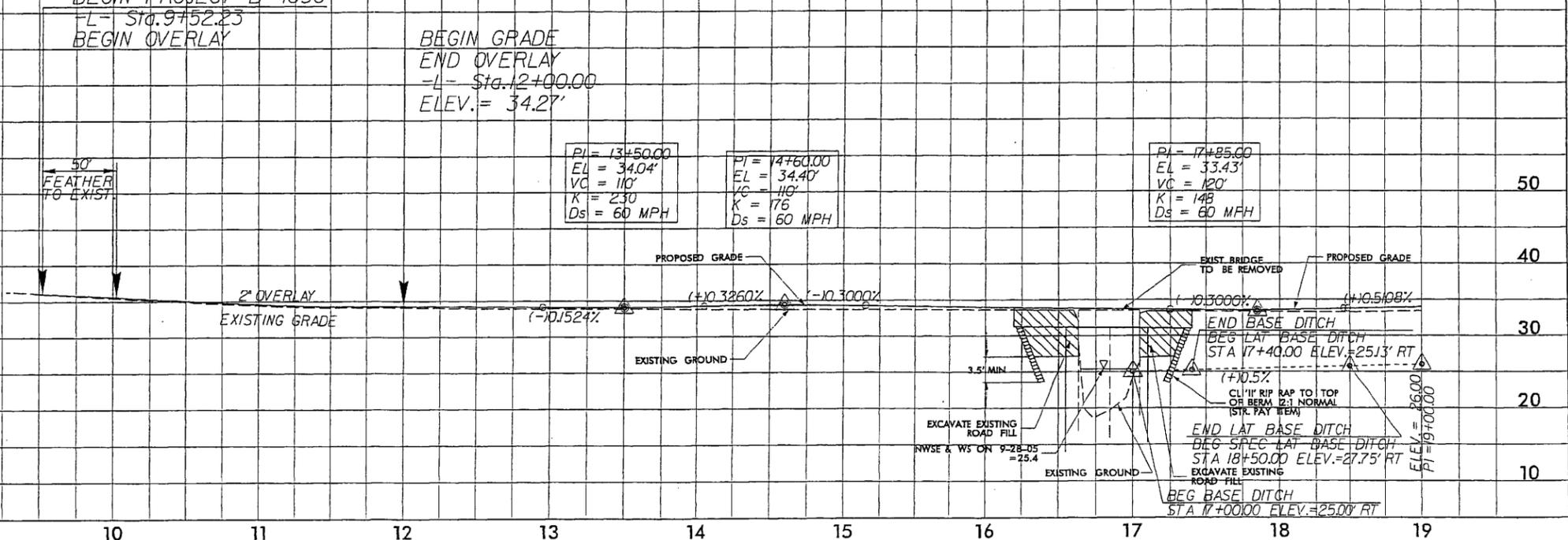
PI = 13+50.00  
 EL = 34.04'  
 VC = 110'  
 K = 230  
 Ds = 60 MPH

PI = 14+60.00  
 EL = 34.40'  
 VC = 110'  
 K = 175  
 Ds = 60 MPH

PI = 17+85.00  
 EL = 33.43'  
 VC = 120'  
 K = 148  
 Ds = 60 MPH

**STRUCTURE HYDRAULIC DATA**

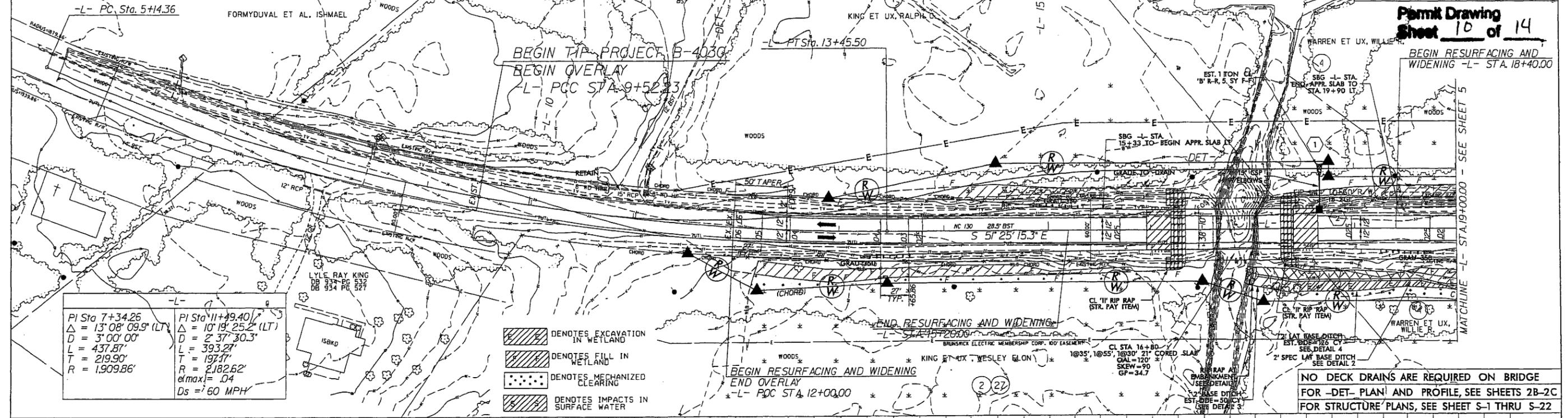
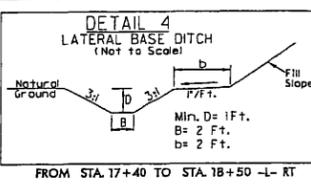
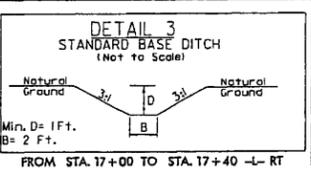
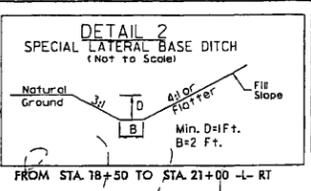
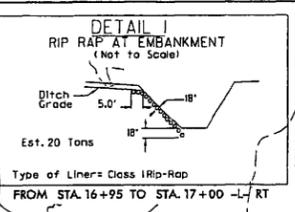
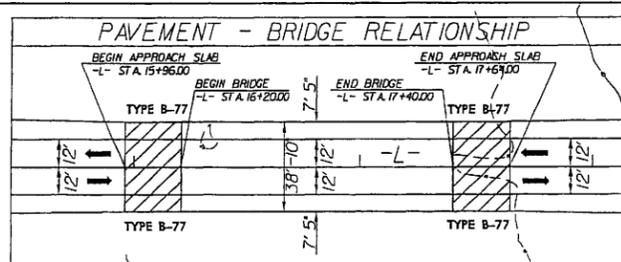
DESIGN DISCHARGE	=	1000 CFS
DESIGN FREQUENCY	=	50 YRS
DESIGN HW ELEVATION	=	29.5 FT
BASE DISCHARGE	=	1210 CFS
BASE FREQUENCY	=	100 YRS
BASE HW ELEVATION	=	29.8 FT
OVERTOPPING DISCHARGE	=	2000+ CFS
OVERTOPPING FREQUENCY	=	500+ YRS
OVERTOPPING ELEVATION	=	33.5 FT



3/30/09



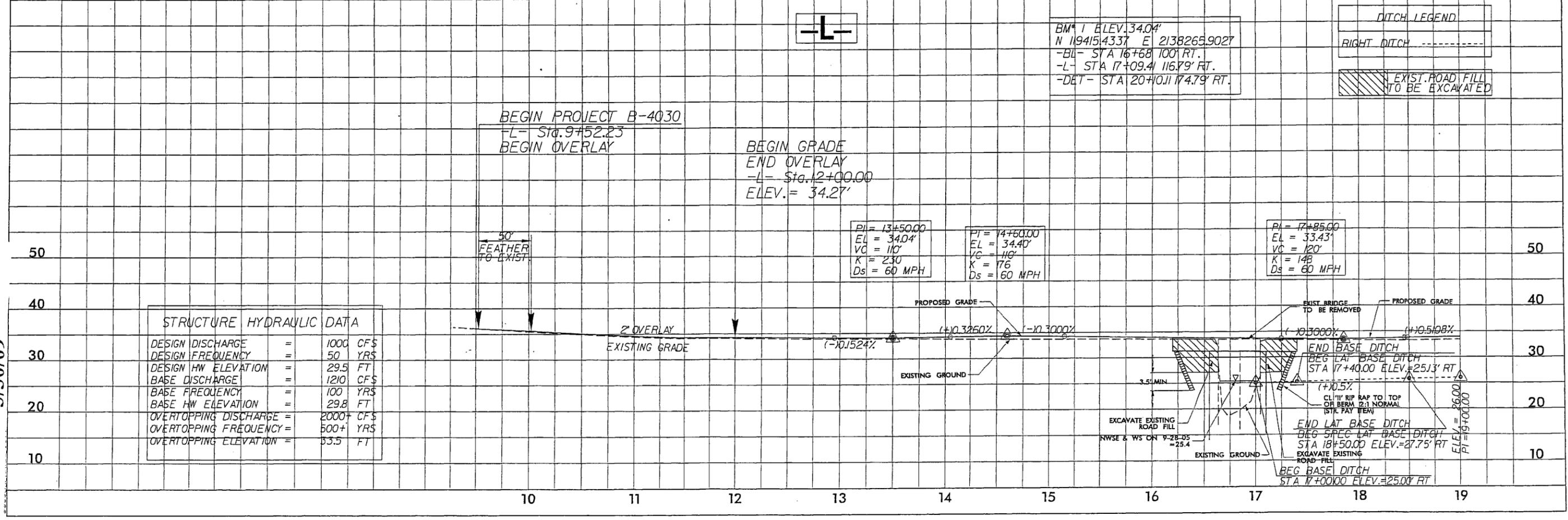
SMITH ET AL., JOSEPH CLYMER



PI Sta 7+34.26	PI Sta 11+49.40
$\Delta = 13^{\circ} 08' 09.9''$ (LT)	$\Delta = 10^{\circ} 19' 25.2''$ (LT)
D = 3' 00' 00"	D = 2' 37' 30.3"
L = 437.81'	L = 393.21'
T = 219.90'	T = 197.77'
R = 1,909.86'	R = 2,182.62'
	$e_{max} = .04$
	Ds = 60 MPH

- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES IMPACTS IN SURFACE WATER

NO DECK DRAINS ARE REQUIRED ON BRIDGE  
FOR -DET- PLAN AND PROFILE, SEE SHEETS 2B-2C  
FOR STRUCTURE PLANS, SEE SHEET S-1 THRU S-22



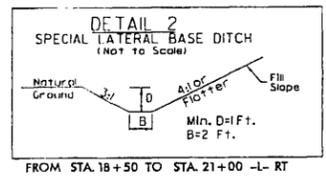
3/30/09

REVISIONS

8/17/99



PROJECT REFERENCE NO. B-4030	SHEET NO. 5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

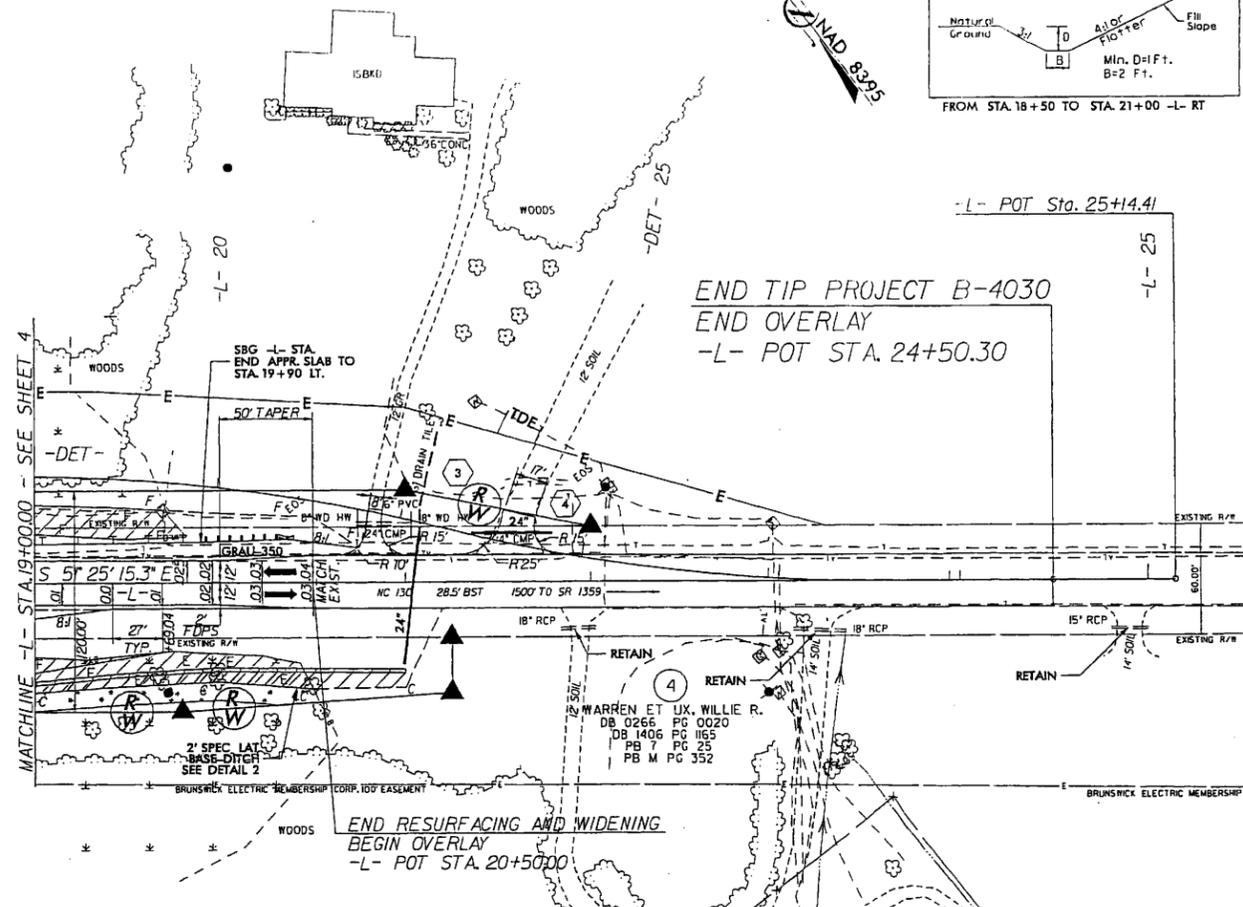


- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING

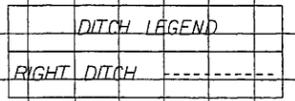
Permit Drawing Sheet 11 of 14

END TIP PROJECT B-4030  
END OVERLAY  
-L- POT STA. 24+50.30

WARREN ET UX, WILLIE R.  
DB 0266 PG 0020  
DB 1406 PG 1165  
PB 7 PG 25  
PB M PG 352



FOR -DET- PLAN AND PROFILE, SEE SHEETS 2B-2C



END PROJECT B-4030  
-L- Sta. 24+50.30  
END OVERLAY

END GRADE  
BEGIN OVERLAY  
-L- Sta. 20+50.00  
ELEV. = 33.87

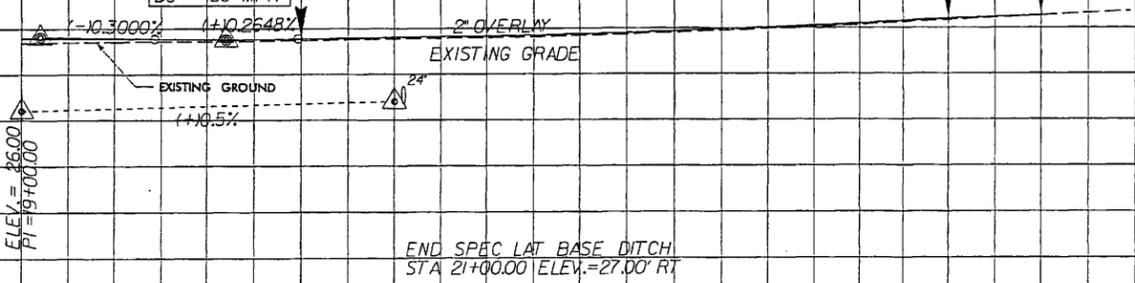
PI = 19+10.00  
EL = 34.06'  
VC = 123'  
K = 152  
Ds = 60 MPH

PI = 20+10.00  
EL = 33.76'  
VC = 77'  
K = 136  
Ds = 60 MPH

50'  
FEATHER  
TO EXIST

PIPE HYDRAULIC DATA  
DRAINAGE STRUCTURE NO. 3

DRAINAGE AREA	= 5	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 13.6	CFS
DESIGN HW ELEVATION	= 29.5	FT
100 YEAR DISCHARGE	= 16.0	CFS
100 YEAR HW ELEVATION	= 29.7	FT
OVERTOPPING FREQUENCY	= >500	YRS
OVERTOPPING DISCHARGE	= 18.1	CFS
OVERTOPPING ELEVATION	= 33.81	FT



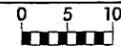
REVISIONS

3/30/09

19 20 21 22 23 24

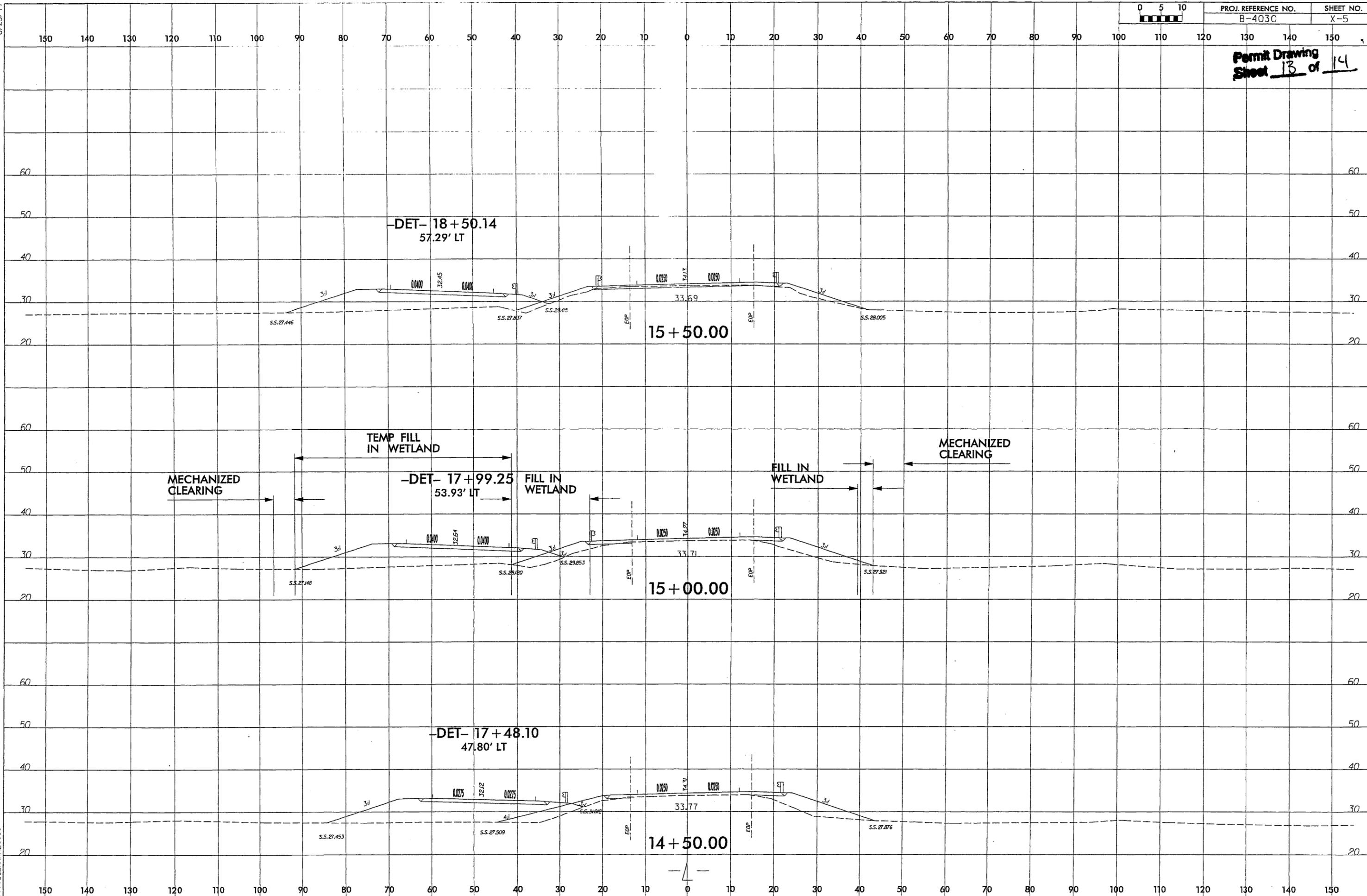


8/23/99



PROJ. REFERENCE NO. B-4030 SHEET NO. X-5

Permit Drawing Sheet 13 of 14



-DET- 18 + 50.14  
57.29' LT

15 + 50.00

TEMP FILL  
IN WETLAND

MECHANIZED  
CLEARING

-DET- 17 + 99.25  
53.93' LT

FILL IN  
WETLAND

FILL IN  
WETLAND

MECHANIZED  
CLEARING

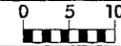
15 + 00.00

-DET- 17 + 48.10  
47.80' LT

14 + 50.00

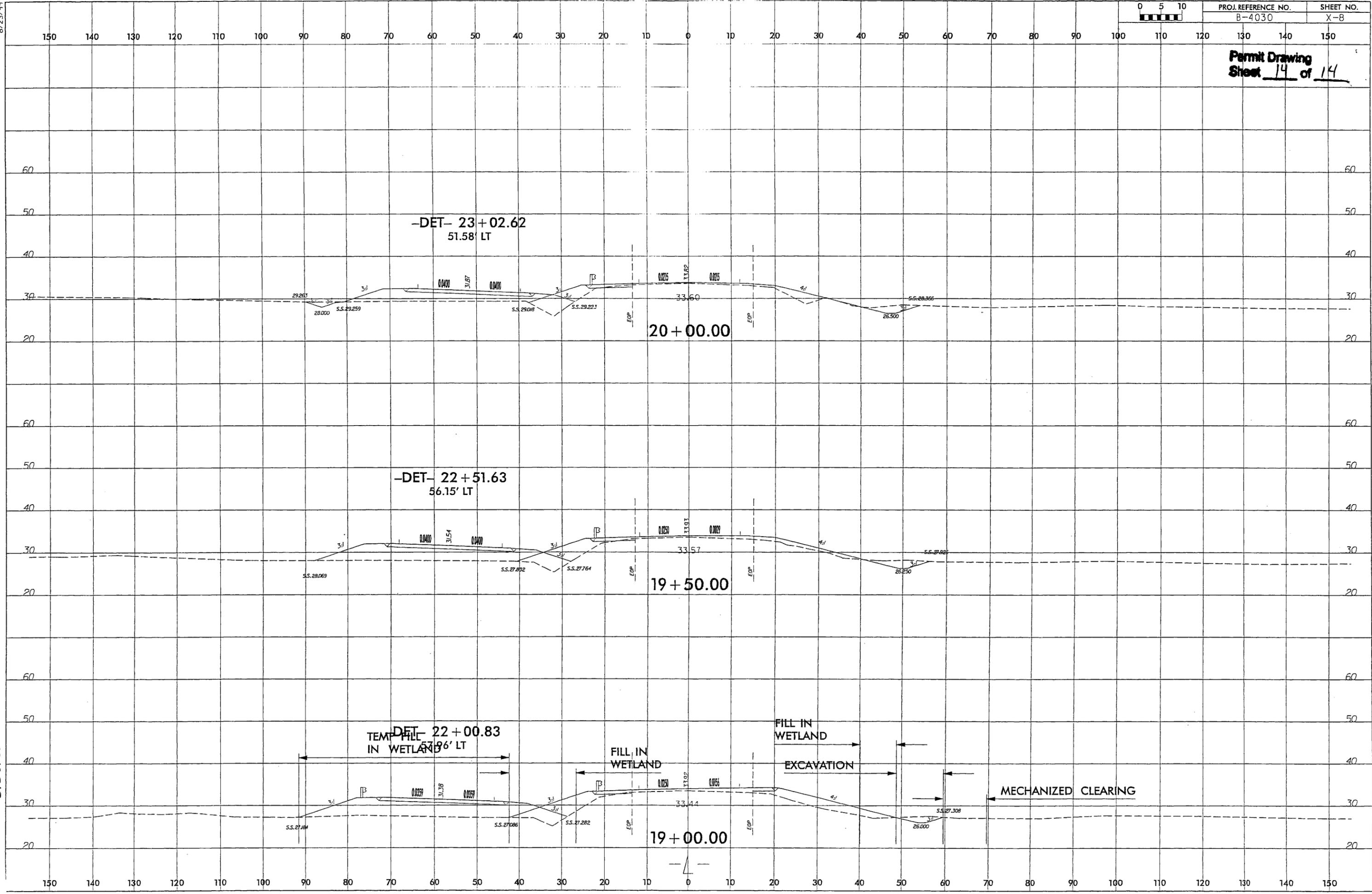
3/30/09

8/23/99



PROJ. REFERENCE NO. B-4030 SHEET NO. X-8

Permit Drawing Sheet 14 of 14



-DET- 23+02.62  
51.58' LT

20+00.00

-DET- 22+51.63  
56.15' LT

19+50.00

TEMP. FILL  
IN WETLAND  
-DET- 22+00.83  
57.86' LT

FILL IN  
WETLAND

FILL IN  
WETLAND

EXCAVATION

MECHANIZED CLEARING

19+00.00

3/30/09

8/14/99

STANDARD BASE DITCH (NOT TO SCALE) SPECIAL LATERAL BASE DITCH (NOT TO SCALE)

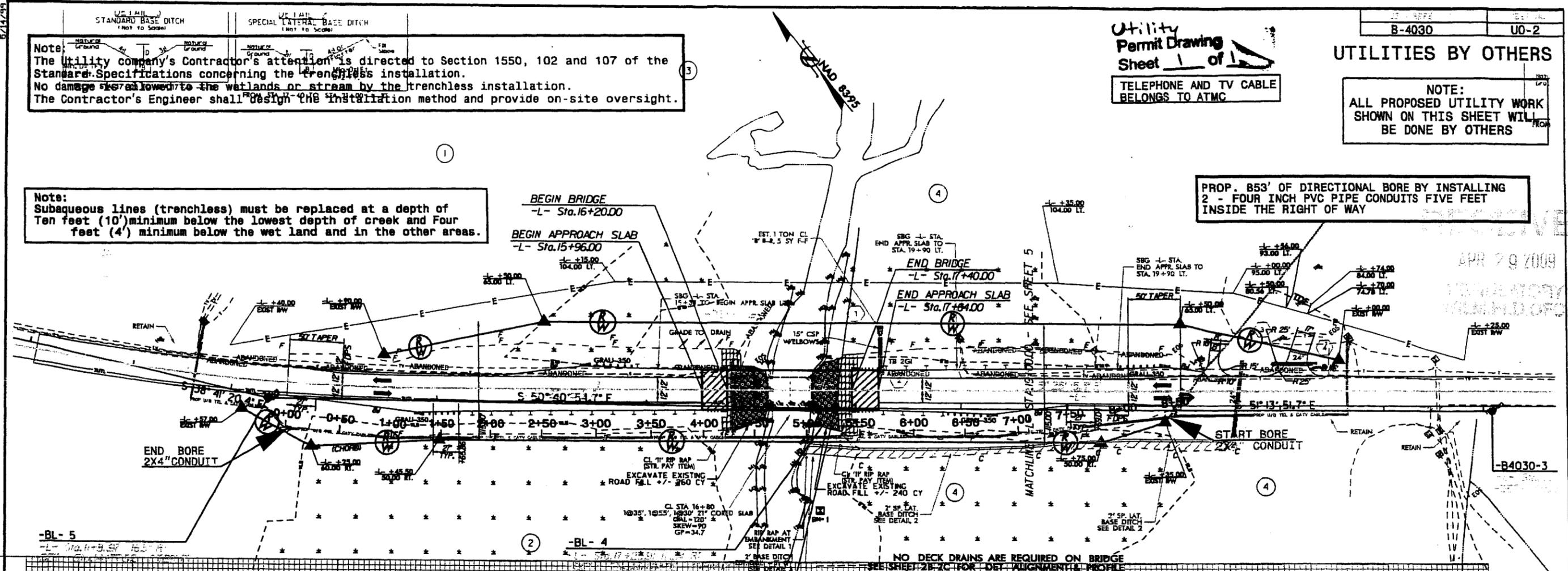
Utility Permit Drawing Sheet 1 of 1 TELEPHONE AND TV CABLE BELONGS TO ATMC

UTILITIES BY OTHERS NOTE: ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

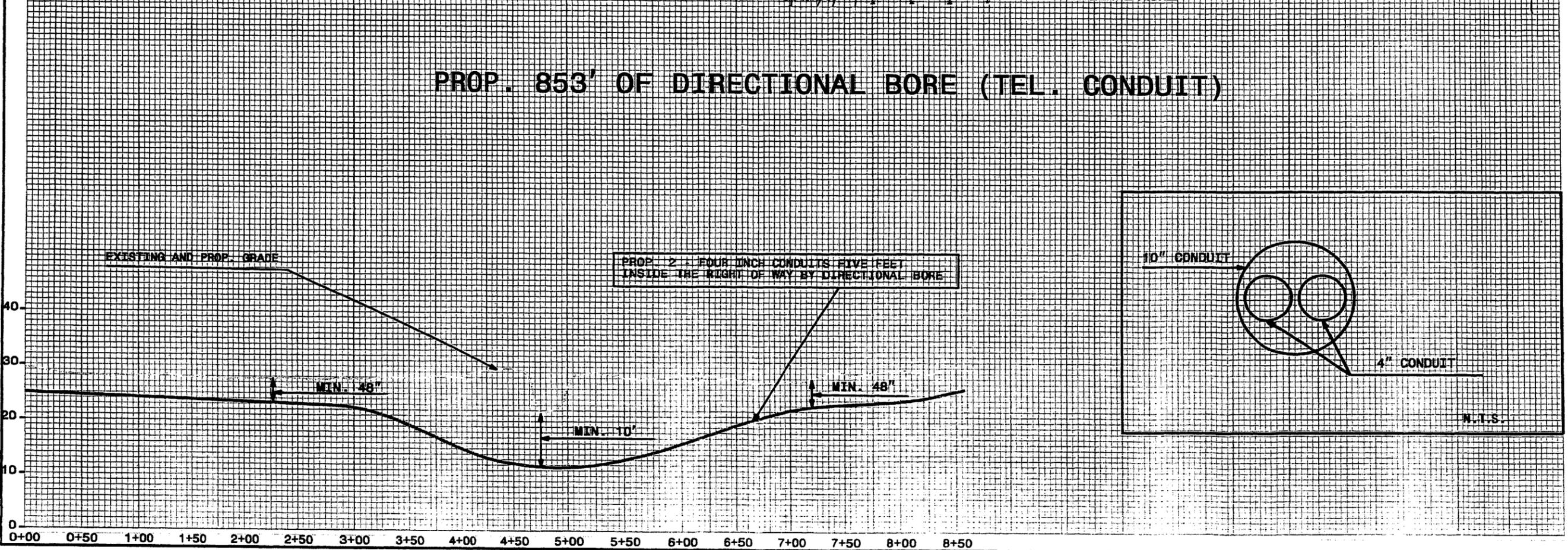
Note: The Utility Company's Contractor's attention is directed to Section 1550, 102 and 107 of the Standard Specifications concerning the trenchless installation. No damage is to be allowed to the wetlands or stream by the trenchless installation. The Contractor's Engineer shall design the installation method and provide on-site oversight.

Note: Subaqueous lines (trenchless) must be replaced at a depth of Ten feet (10') minimum below the lowest depth of creek and Four feet (4') minimum below the wet land and in the other areas.

PROP. 853' OF DIRECTIONAL BORE BY INSTALLING 2 - FOUR INCH PVC PIPE CONDUITS FIVE FEET INSIDE THE RIGHT OF WAY



PROP. 853' OF DIRECTIONAL BORE (TEL. CONDUIT)



3/19/09

APR 29 2009

B-4030-3