



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

January 17, 2012

U. S. Army Corps of Engineers  
Regulatory Field Office  
3331 Heritage Trade Drive, Suite 105  
Wake Forest, NC 27587

ATTN: Mr. Monte Matthews  
NCDOT Coordinator

Subject: **Revised Application for Section 404 Nationwide Permit 13, 23, 33 and Written Section 401** for the proposed replacement of Bridge No. 9 over Prather's Creek on US 221 in Alleghany County, Federal Aid Project No. BRSTP-221(16); Division 11; TIP No. B-4406; \$240.00 WBS 33685.1.1

Reference: NCDOT Permit Application, dated October 11, 2011  
NCDWQ On Hold Letter, dated December 2, 2011

Dear Sir:

This revised permit application is to address the "On Hold" Letter submitted on December 2, 2011 from the Division of Water Quality and to replace the application dated October 11, 2011 in which impact amounts were incorrectly stated for the UT to Prathers Creek. In addition, excavation in the wetland for a ditch has been removed which addresses the Division of Water Quality's concern of potential wetland drainage due to the removal of wetland hydrology via the ditch.

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 9 over Prather's Creek on US 221. There will be 196 feet of permanent surface water impacts (99 feet of which are due to bank stabilization), 60 feet of temporary surface water impacts and 0.08 acre of permanent impacts to wetlands. Bridge No. 9 will be replaced with a double-span structure 125 feet long.

Please see enclosed copies of the Pre-Construction Notification (PCN), EEP acceptance letter, Stormwater Management Plan, Revised Permit Drawings, Design Plans and Rapanos forms. The Categorical Exclusion (CE) was completed in November 2007 and distributed

shortly thereafter. A Right of Way Consultation was completed October 2010. Additional copies are available upon request.

Comments from the North Carolina Wildlife Resources Commission (NCWRC) will be required prior to authorization by the Corps of Engineers. By copy of this letter and attachments, NCDOT hereby requests NCWRC review. NCDOT requests that NCWRC forward their comments to the Corps of Engineers and the NCDOT within 30 calendar days of receipt of this application.

This project calls for a letting date of April 17, 2012 and a review date of February 28, 2012; however, the let date may advance as additional funding becomes available.

A copy of this permit application and its distribution list will be posted on the NCDOT Website at: <http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html>. If you have any questions or need additional information, please contact Jennifer Harrod at (919) 707-6124 or [jwharrod@ncdot.gov](mailto:jwharrod@ncdot.gov).

Sincerely,



*fej* Gregory J. Thorpe, Ph.D., Manager  
Project Development and Environmental Analysis Unit

cc:  
NCDOT Permit Application Standard Distribution List



Office Use Only:  
 Corps action ID no. \_\_\_\_\_  
 DWQ project no. \_\_\_\_\_  
 Form Version 1.3 Dec 10 2008

## Pre-Construction Notification (PCN) Form

### A. Applicant Information

#### 1. Processing

1a. Type(s) of approval sought from the Corps:	<input checked="" type="checkbox"/> Section 404 Permit	<input type="checkbox"/> Section 10 Permit
1b. Specify Nationwide Permit (NWP) number: 13 23 33 or General Permit (GP) number:		
1c. Has the NWP or GP number been verified by the Corps?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1d. Type(s) of approval sought from the DWQ (check all that apply):		
<input checked="" type="checkbox"/> 401 Water Quality Certification – Regular <span style="margin-left: 100px;"><input type="checkbox"/> Non-404 Jurisdictional General Permit</span> <input type="checkbox"/> 401 Water Quality Certification – Express <span style="margin-left: 100px;"><input type="checkbox"/> Riparian Buffer Authorization</span>		
1e. Is this notification solely for the record because written approval is not required?	For the record only for DWQ 401 Certification: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For the record only for Corps Permit: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1f. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts? If so, attach the acceptance letter from mitigation bank or in-lieu fee program.	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h below.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1h. Is the project located within a NC DCM Area of Environmental Concern (AEC)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

#### 2. Project Information

2a. Name of project:	Replacement of Bridge 9 over Prather's Creek on NC 221
2b. County:	Alleghany
2c. Nearest municipality / town:	Sparta
2d. Subdivision name:	<i>not applicable</i>
2e. NCDOT only, T.I.P. or state project no.:	B-4406

#### 3. Owner Information

3a. Name(s) on Recorded Deed:	North Carolina Department of Transportation
3b. Deed Book and Page No.	<i>not applicable</i>
3c. Responsible Party (for LLC if applicable):	<i>not applicable</i>
3d. Street address:	1598 Mail Service Center
3e. City, state, zip:	Raleigh, NC 27699-1598
3f. Telephone no.:	(919) 707-6124
3g. Fax no.:	(919) 212-5785
3h. Email address:	jwharrod@ncdot.gov

<b>4. Applicant Information (if different from owner)</b>	
4a. Applicant is:	<input type="checkbox"/> Agent <input type="checkbox"/> Other, specify:
4b. Name:	<i>not applicable</i>
4c. Business name (if applicable):	
4d. Street address:	
4e. City, state, zip:	
4f. Telephone no.:	
4g. Fax no.:	
4h. Email address:	
<b>5. Agent/Consultant Information (if applicable)</b>	
5a. Name:	<i>not applicable</i>
5b. Business name (if applicable):	
5c. Street address:	
5d. City, state, zip:	
5e. Telephone no.:	
5f. Fax no.:	
5g. Email address:	

<b>B. Project Information and Prior Project History</b>	
<b>1. Property Identification</b>	
1a. Property identification no. (tax PIN or parcel ID):	<i>not applicable</i>
1b. Site coordinates (in decimal degrees):	Latitude: 36.52298 (DD.DDDDDDD) Longitude: - 81.18450 (-DD.DDDDDDD)
1c. Property size:	1.4 acres
<b>2. Surface Waters</b>	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Prather's Creek
2b. Water Quality Classification of nearest receiving water:	B;Tr
2c. River basin:	New
<b>3. Project Description</b>	
3a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: Rural residential and agricultural land	
3b. List the total estimated acreage of all existing wetlands on the property: 0.10	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 275.10	
3d. Explain the purpose of the proposed project: To replace a structurally deficient and functionally obsolete bridge.	
3e. Describe the overall project in detail, including the type of equipment to be used: The project involves replacing a 37-foot bridge with a 125-foot, 2-span bridge on new alignment while maintaining traffic utilizing the existing bridge. Standard road building equipment, such as trucks, dozers, and cranes will be used.	
<b>4. Jurisdictional Determinations</b>	
4a. Have jurisdictional wetland or stream determinations by the Corps or State been requested or obtained for this property / project (including all prior phases) in the past? Comments: Request was sent by EcoScience on behalf of NCDOT to John Thomas August 2005. NCDOT received nothing back. NCDOT requests a FINAL JD with this permit.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
4b. If the Corps made the jurisdictional determination, what type of determination was made?	<input type="checkbox"/> Preliminary <input type="checkbox"/> Final
4c. If yes, who delineated the jurisdictional areas? Name (if known):	Agency/Consultant Company: Other:
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation.	
<b>5. Project History</b>	
5a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
5b. If yes, explain in detail according to "help file" instructions. The original permit application dated October 11, 2011 was mailed out on October 21, 2011 and emailed on October 24, 2011. No permits were issued. This application replaces it.	
<b>6. Future Project Plans</b>	
6a. Is this a phased project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6b. If yes, explain.	

<b>C. Proposed Impacts Inventory</b>						
<b>1. Impacts Summary</b>						
1a. Which sections were completed below for your project (check all that apply):						
<input checked="" type="checkbox"/> Wetlands		<input checked="" type="checkbox"/> Streams - tributaries		<input type="checkbox"/> Buffers		
<input type="checkbox"/> Open Waters		<input type="checkbox"/> Pond Construction				
<b>2. Wetland Impacts</b>						
If there are wetland impacts proposed on the site, then complete this question for each wetland area impacted.						
2a. Wetland impact number – Permanent (P) or Temporary (T)	2b. Type of impact	2c. Type of wetland (if known)	2d. Forested	2e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	2f. Area of impact (acres)	
Site 1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Roadway fill	Riverine	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.05	
Site 1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Mechanized clearing in wetlands	Riverine	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.01	
Site 1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
<b>2g. Total wetland impacts</b>					0.06 Permanent 0.00 Temporary	
2h. Comments:						
<b>3. Stream Impacts</b>						
If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.						
3a. Stream impact number - Permanent (P) or Temporary (T)	3b. Type of impact	3c. Stream name	3d. Perennial (PER) or intermittent (INT)?	3e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	3f. Average stream width (feet)	3g. Impact length (linear feet)
Site 1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	*Roadway fill	UT to Prather's Creek	<input type="checkbox"/> PER <input checked="" type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	2	97
Site 2 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Streambank stabilization	Prather's Creek	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	12	63
Site 2 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Fill (Proposed bridge wing wall)	Prather's Creek	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	12	30
Site 2 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Streambank stabilization	Prather's Creek	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	12	18
Site 2 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Fill (**Existing bridge removal wing wall)	Prather's Creek	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	12	30
Site 2 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Streambank stabilization	Prather's Creek	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	12	18
<b>3h. Total stream and tributary impacts</b>						196 Perm 60 Temp
3i. Comments: *UT is jurisdictional as shown in site 1 blow-up **wing walls are temporary structures to keep debris from falling into water						

<b>4. Open Water Impacts</b>								
If there are proposed impacts to lakes, ponds, estuaries, tributaries, sounds, the Atlantic Ocean, or any other open water of the U.S. then individually list all open water impacts below.								
4a. Open water impact number – Permanent (P) or Temporary (T)	4b. Name of waterbody (if applicable)	4c. Type of impact			4d. Waterbody type	4e. Area of impact (acres)		
O1 <input type="checkbox"/> P <input type="checkbox"/> T								
O2 <input type="checkbox"/> P <input type="checkbox"/> T								
O3 <input type="checkbox"/> P <input type="checkbox"/> T								
O4 <input type="checkbox"/> P <input type="checkbox"/> T								
<b>4f. Total open water impacts</b>						X Permanent X Temporary		
4g. Comments:								
<b>5. Pond or Lake Construction</b>								
If pond or lake construction proposed, then complete the chart below.								
5a. Pond ID number	5b. Proposed use or purpose of pond	5c. Wetland Impacts (acres)			5d. Stream Impacts (feet)			5e. Upland (acres)
		Flooded	Filled	Excavated	Flooded	Filled	Excavated	Flooded
P1								
P2								
<b>5f. Total</b>								
5g. Comments:								
5h. Is a dam high hazard permit required?				<input type="checkbox"/> Yes <input type="checkbox"/> No      If yes, permit ID no:				
5i. Expected pond surface area (acres):								
5j. Size of pond watershed (acres):								
5k. Method of construction:								

**6. Buffer Impacts (for DWQ)**

If project will impact a protected riparian buffer, then complete the chart below. If yes, then individually list all buffer impacts below. If any impacts require mitigation, then you **MUST** fill out Section D of this form.

6a. Project is in which protected basin?			<input type="checkbox"/> Neuse <input type="checkbox"/> Catawba	<input type="checkbox"/> Tar-Pamlico <input type="checkbox"/> Randleman	<input type="checkbox"/> Other:
6b. Buffer impact number – Permanent (P) or Temporary (T)	6c. Reason for impact	6d. Stream name	6e. Buffer mitigation required?	6f. Zone 1 impact (square feet)	6g. Zone 2 impact (square feet)
B1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No		
B2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No		
B3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>6h. Total buffer impacts</b>					
6i. Comments:					

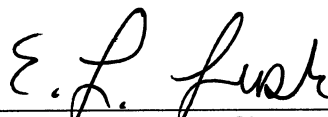


<b>D. Impact Justification and Mitigation</b>		
<b>1. Avoidance and Minimization</b>		
1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project. The proposed bridge is a spanning structure. 2:1 fill slopes will be utilized where practicable.		
1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. Surficial bridge runoff will not be directed into Prather's Creek via deck drains. Temporary impacts at the bridge are wing walls to prevent debris from falling into water during bridge removal. There will be no interior bents in the water. Policies outlined in Best Management Practices (BMP's) for protection of surface waters and a strict erosion control schedule will be followed. A moratorium prohibiting in-stream work is in place from October 15 to April 15 to protect trout spawning. Design Standards in Sensitive Watersheds will be adhered to.		
<b>2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State</b>		
2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, explain:	
2b. If yes, mitigation is required by (check all that apply):	<input type="checkbox"/> DWQ <input checked="" type="checkbox"/> Corps	
2c. If yes, which mitigation option will be used for this project?	<input type="checkbox"/> Mitigation bank <input checked="" type="checkbox"/> Payment to in-lieu fee program <input type="checkbox"/> Permittee Responsible Mitigation	
<b>3. Complete if Using a Mitigation Bank</b>		
3a. Name of Mitigation Bank: not applicable		
3b. Credits Purchased (attach receipt and letter)	Type	Quantity
3c. Comments:		
<b>4. Complete if Making a Payment to In-lieu Fee Program</b>		
4a. Approval letter from in-lieu fee program is attached.	<input checked="" type="checkbox"/> Yes	
4b. Stream mitigation requested:	97 linear feet (97 linear feet of impact)	
4c. If using stream mitigation, stream temperature:	<input type="checkbox"/> warm <input type="checkbox"/> cool <input checked="" type="checkbox"/> cold	
4d. Buffer mitigation requested (DWQ only):	square feet	
4e. Riparian wetland mitigation requested:	0.06 acres (0.06 acres of impact)	
4f. Non-riparian wetland mitigation requested:	acres	
4g. Coastal (tidal) wetland mitigation requested:	acres	
4h. Comments:		
<b>5. Complete if Using a Permittee Responsible Mitigation Plan</b>		
5a. If using a permittee responsible mitigation plan, provide a description of the proposed mitigation plan.		

<b>6. Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ</b>					
6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?				<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.					
Zone	6c. Reason for impact	6d. Total impact (square feet)	Multiplier	6e. Required mitigation (square feet)	
Zone 1			3 (2 for Catawba)		
Zone 2			1.5		
			<b>6f. Total buffer mitigation required:</b>		
6g. If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment to private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund).					
6h. Comments:					

<b>E. Stormwater Management and Diffuse Flow Plan (required by DWQ)</b>	
<b>1. Diffuse Flow Plan</b>	
1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1b. If yes, then is a diffuse flow plan included? If not, explain why. Comments:	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>2. Stormwater Management Plan</b>	
2a. What is the overall percent imperviousness of this project?	N/A
2b. Does this project require a Stormwater Management Plan?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2c. If this project DOES NOT require a Stormwater Management Plan, explain why:	
2d. If this project DOES require a Stormwater Management Plan, then provide a brief, narrative description of the plan: See attached permit drawings.	
2e. Who will be responsible for the review of the Stormwater Management Plan?	<input type="checkbox"/> Certified Local Government <input type="checkbox"/> DWQ Stormwater Program <input checked="" type="checkbox"/> DWQ 401 Unit
<b>3. Certified Local Government Stormwater Review</b>	
3a. In which local government's jurisdiction is this project?	not applicable
3b. Which of the following locally-implemented stormwater management programs apply (check all that apply):	<input type="checkbox"/> Phase II <input type="checkbox"/> NSW <input type="checkbox"/> USMP <input type="checkbox"/> Water Supply Watershed <input type="checkbox"/> Other:
3c. Has the approved Stormwater Management Plan with proof of approval been attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>4. DWQ Stormwater Program Review</b>	
4a. Which of the following state-implemented stormwater management programs apply (check all that apply):	<input type="checkbox"/> Coastal counties <input type="checkbox"/> HQW <input type="checkbox"/> ORW <input type="checkbox"/> Session Law 2006-246 <input type="checkbox"/> Other:
4b. Has the approved Stormwater Management Plan with proof of approval been attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>5. DWQ 401 Unit Stormwater Review</b>	
5a. Does the Stormwater Management Plan meet the appropriate requirements?	<input type="checkbox"/> Yes <input type="checkbox"/> No N/A
5b. Have all of the 401 Unit submittal requirements been met?	<input type="checkbox"/> Yes <input type="checkbox"/> No N/A

<b>F. Supplementary Information</b>	
<b>1. Environmental Documentation (DWQ Requirement)</b>	
1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.)  Comments:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>2. Violations (DWQ Requirement)</b>	
2a. Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2b. Is this an after-the-fact permit application?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2c. If you answered "yes" to one or both of the above questions, provide an explanation of the violation(s):	
<b>3. Cumulative Impacts (DWQ Requirement)</b>	
3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3b. If you answered "yes" to the above, submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent DWQ policy. If you answered "no," provide a short narrative description.  Due to the minimal transportation impact resulting from this bridge replacement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary.	
<b>4. Sewage Disposal (DWQ Requirement)</b>	
4a. Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility.  not applicable	

<b>5. Endangered Species and Designated Critical Habitat (Corps Requirement)</b>		
5a. Will this project occur in or near an area with federally protected species or habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5c. If yes, indicate the USFWS Field Office you have contacted.	<input type="checkbox"/> Raleigh <input type="checkbox"/> Asheville	
5d. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? Endangered and Threatened species that require surveys are not listed for Alleghany County.		
<b>6. Essential Fish Habitat (Corps Requirement)</b>		
6a. Will this project occur in or near an area designated as essential fish habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6b. What data sources did you use to determine whether your site would impact Essential Fish Habitat? NMFS County Index		
<b>7. Historic or Prehistoric Cultural Resources (Corps Requirement)</b>		
7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7b. What data sources did you use to determine whether your site would impact historic or archeological resources? NEPA Documentation		
<b>8. Flood Zone Designation (Corps Requirement)</b>		
8a. Will this project occur in a FEMA-designated 100-year floodplain?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
8b. If yes, explain how project meets FEMA requirements: NCDOT Hydraulics Unit coordination with FEMA		
8c. What source(s) did you use to make the floodplain determination? FEMA Maps		
<u>Dr. Gregory J. Thorpe, Ph D</u> Applicant/Agent's Printed Name	 _____ Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	1.17.12 _____ Date



December 20, 2011

Mr. Gregory J. Thorpe, Ph.D.  
Manager, Project Development and Environmental Analysis Branch  
North Carolina Department of Transportation  
1548 Mail Service Center  
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

Subject: EEP Mitigation Acceptance Letter:

B-4406, Replace Bridge Number 9 over Prathers Creek on US 221, Alleghany County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory stream and riparian wetland mitigation for the subject project. Based on the information supplied by you on August 15, September 16 and December 19, 2011, the impacts are located in CU 05050001 of the New River Basin in the Northern Mountains (NM) Eco-Region, and are as follows:

New 05050001 NM	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non- Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	97	0	0	0.06	0	0	0	0

This mitigation acceptance letter replaces the mitigation acceptance letter issued on August 16 and September 20, 2011. EEP commits to implementing sufficient compensatory stream and riparian wetland mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies in accordance with the N.C. Department of Environment and Natural Resources' Ecosystem Enhancement Program In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

Michael Ellison  
EEP Deputy Director

cc: Mr. Monte Matthews, USACE – Raleigh Regulatory Field Office  
Mr. Brian Wrenn, Division of Water Quality, Wetlands/401 Unit  
File: B-4406 Revised 2

*Restoring... Enhancing... Protecting Our State*





North Carolina Department of Transportation  
 Highway Stormwater Program  
**STORMWATER MANAGEMENT PLAN**



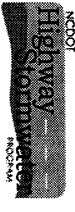
Released: July 2010 (DRAFT)

Version 1.1

Page \_\_\_\_\_ of \_\_\_\_\_

**General Project Information**

<b>Project No.:</b>	B-4406	<b>Date:</b>	12/19/2011
<b>City/Town:</b>		<b>Designer:</b>	Wang Engineering
<b>County(ies):</b>	Alleghany County	<b>Project Manager:</b>	Tommy Register
<b>River Basin(s):</b>	New	<b>CAMA County?</b>	no
<b>Primary Receiving Water:</b>	Prathers Creek	<b>TVA County?</b>	yes
<b>NCDWQ Surface Water Classification for Primary Receiving Water</b>	Primary:	<b>NCDWQ Stream Index:</b>	
	Supplemental:	"B" Trout Waters	
<b>Other Stream Classification:</b>			
<b>303(d) Stream?</b>	no	<b>Type(s) of Impairment:</b>	
<b>State Stormwater Permit Required?</b>	no	<b>If yes, why?</b>	
<b>Could the Project Impact Threatened or Endangered Species?</b>			no
<b>Description:</b>			
<b>Anadromous Fish Present?</b>			
<b>Description:</b>		<b>Buffer Rules:</b>	
<b>Buffer Rules in Effect?</b>			
<b>Existing Site</b>			
<b>Description of Existing Project Area:</b>	The existing project area consist of an existing short bridge with two lanes crossing with vertical abutments on a curvey road		
<b>Average Daily Traffic (existing):</b>	840 ADT 2012		
<b>Existing Cross Section:</b>	2 lane shoulder section on fill		
<b>Surrounding Land Use:</b>	rural, some woods, mostly Christmas tree farms with some residential housing		
<b>General Comments:</b>			
<b>Project Description</b>			
<b>Description of Proposed Project:</b>	The proposed project area consist of a new longer bridge with sloping spill thru abutments with an improved roadway alignment immediately downstream of the existing bridge		
<b>Average Daily Traffic (proposed):</b>	1240		
<b>Proposed Cross-Section:</b>	2 lane shoulder section on fill		
<b>Interchange Modification:</b>	no		
<b>Terminus:</b>			
<b>Terminus:</b>			
<b>Project Length (lin. miles/feet):</b>	0.134 miles/700 feet		
<b>General Comments:</b>			



Released: July 2010 (DRA47)

# North Carolina Department of Transportation Highway Stormwater Program STORMWATER MANAGEMENT PLAN

Version 1.1



Page

of

## Environmental Summary

### Riparian Buffer and Jurisdictional Stream Impacts and Associated SCMs

Station	Stream Name	Stream Type	Jurisdictional Stream	Buffer?	Classification?	Proposed Structure	SCM Type	Checklist Complete?	DA (ac.)	Q <sub>2</sub> (ft <sup>3</sup> /s)	Q <sub>10</sub> (ft <sup>3</sup> /s)	WQV <sup>a</sup> (ft <sup>3</sup> )
12+81 to 15+66 Rt	UT to Prathers Creek			No		Roadway Fill						
16+15 to 16+30 Lt	Prathers Creek			No		existing bridge removal						
16+30 Lt	Prathers Creek			No		existing bridge removal						
16+33 Rt	Prathers Creek			No		stream bank stabilization						
16+52 Lt	Prathers Creek			No		existing bridge removal						
16+73 Rt	Prathers Creek			No		stream bank stabilization						

General Comments:





**Jurisdictional Wetlands**

Station	Type of Impact	Minimization of Impact
12+77 to 16+30	Roadway fill and mechanised clearing for construction	2:1 roadway fill slope and keep ditch as close to fill slope as possible
<b>General Comments:</b>		





North Carolina Department of Transportation  
Highway Stormwater Program  
STORMWATER MANAGEMENT PLAN

Version 1.1

Page \_\_\_\_\_ of \_\_\_\_\_

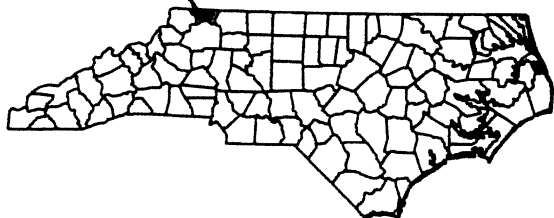
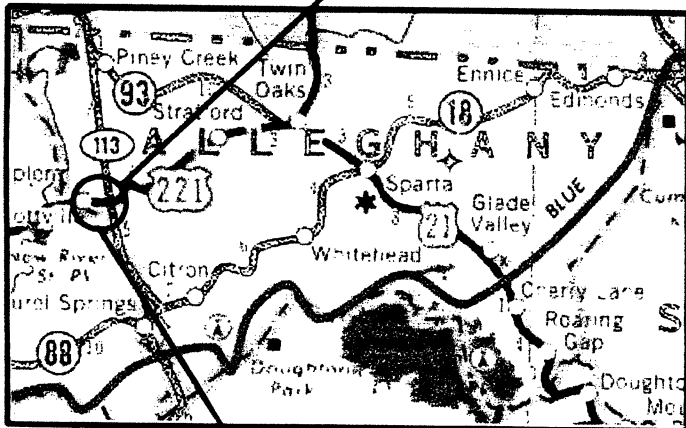
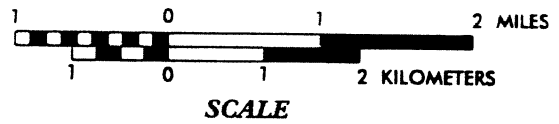
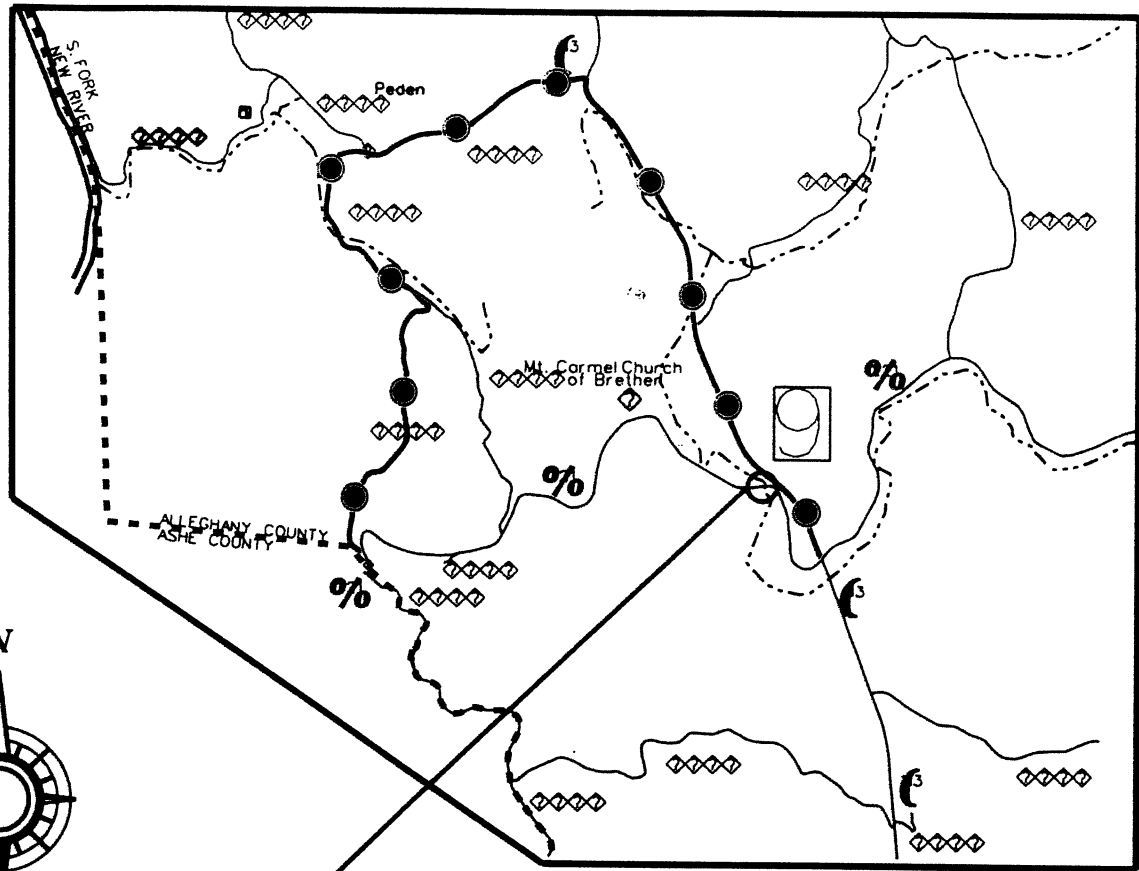


Released: July 2010 (DRAFT)

**Additional Comments**

The proposed bridge has no deck drains. The runoff of the proposed bridge is directed to a 2GJ just off the end of the bridge which discharges to a wetland and then is directed to a 2' base ditch before entering the stream.

**References**



**LEGEND**

●—●—● Studied Detour Route

	<p>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION PROJECT DEVELOPMENT &amp; ENVIRONMENTAL ANALYSIS</p>
	<p>ALLEGHANY COUNTY BRIDGE NO. 9 ON US 221 OVER CREEK</p>
	<p>TIP NO. B-4406</p>
	<p>VICINITY MAP FIGURE 1</p>

Revised Permit Drawing  
Sheet 1 of 1

# PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
1	DOROTHY W. STURGILL	US HWY 221 1750 HWY 88 WEST WEST JEFFERSON NC 28694
3	T. KENNETH BRADY	US HWY 221 PO BOX 277 SPARTA NC 28675

Permit Drawing  
Sheet \_\_\_ of \_\_\_

**NCDOT**  
DIVISION OF HIGHWAYS  
ALLEGHANY COUNTY  
PROJECT: 33685.1.1 (B-4406)  
US 221 OVER PRATHERS CREEK

SHEET 2 OF 10/16/01

*Revised*  
Permit Drawing  
Sheet 2 of 11

WETLAND PERMIT IMPACT SUMMARY																				
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS												
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)								
1	12+77 / 13+35 Rt	Roadway fill	0.01																	
	14+73 to 14+90.5 Rt	Roadway fill																		
	15+35 Rt to 16+14 Lt	Roadway fill	0.04			0.01														
2	16+15 / 16+30 Lt	stream bank stabilization																		
	16+30 Lt	proposed bridge										0.002								
	16+33 Rt	stream bank stabilization																		
	16+52 Lt	existing brg removal										0.002								
	16+73 Rt	stream bank stabilization																		
TOTALS:			0.05		0.00	0.01						<0.01		196						

\* Note on Site 1, the 18' and the 79' of existing JS impacts are being replaced with 240' of open channel similar in size and shape

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

COUNTY  
WBS - 33685.1.1 (B-4406)

12/8/2011

SHEET

Revised Permit Drawing Sheet 3 of 11

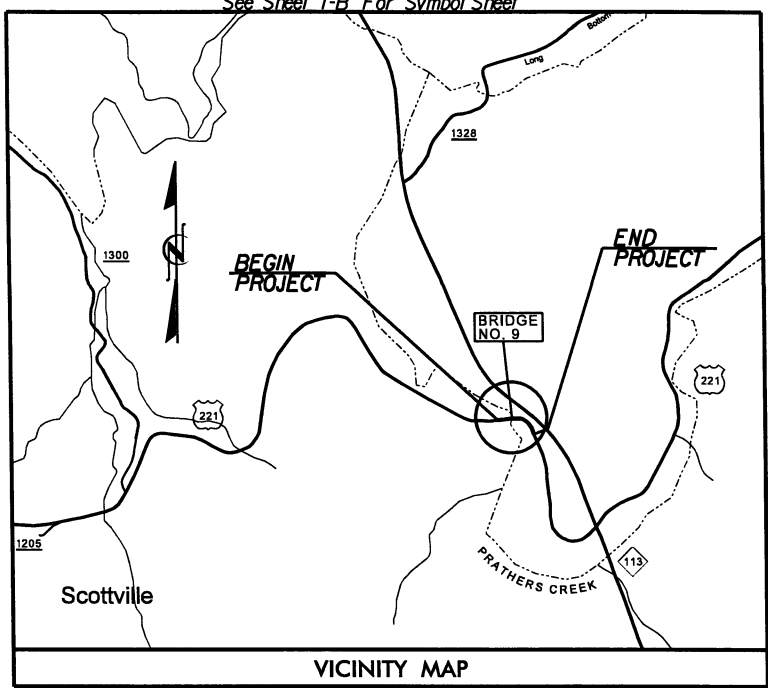
09/08/99

\$\$\$\$SYTIME\$\$\$\$  
 \$\$\$DCNS\$\$\$\$  
 \$\$\$USERNAME\$\$\$\$

**TIP PROJECT: B-4406**

**CONTRACT:**

See Sheet 1-A For Index of Sheets  
 See Sheet 1-B For Symbol Sheet



VICINITY MAP

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS  
**ALLEGHANY COUNTY**

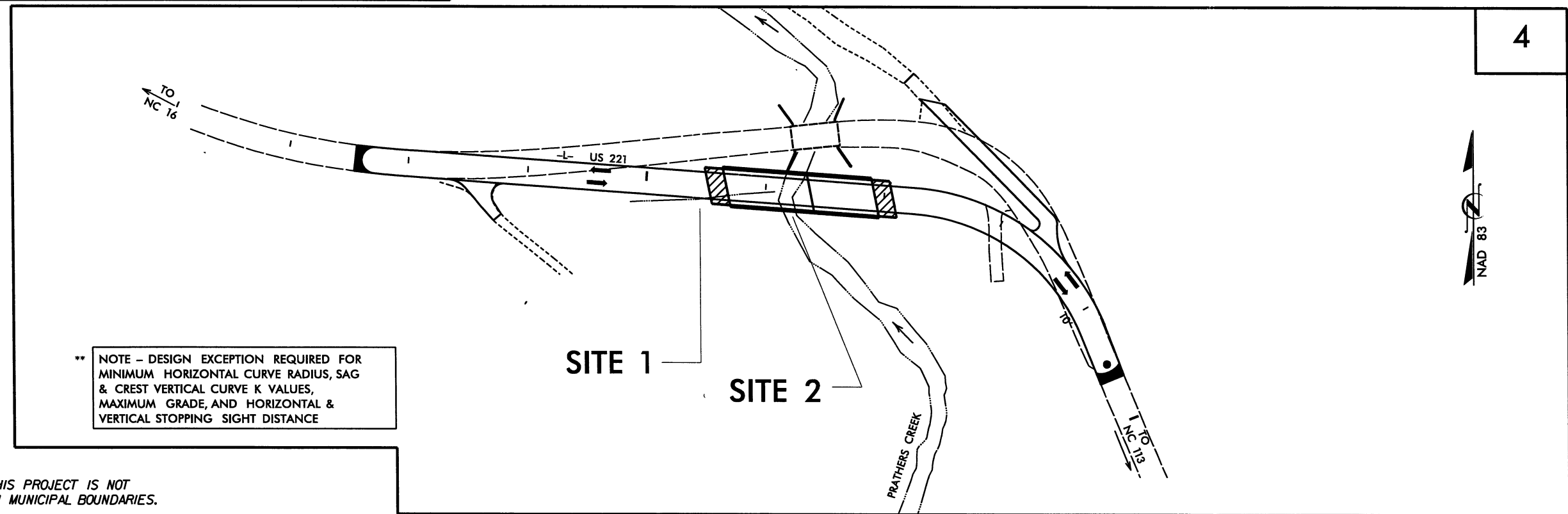
LOCATION: BRIDGE NO. 9 OVER PRATHERS CREEK ON US 221

TYPE OF WORK: GRADING, DRAINAGE, STRUCTURE, AND PAVING

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4406	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33685.1.1	BRSTP-221(16)	PE	
33685.2.1	BRSTP-221(16)	RW /UTIL	

**WETLAND/STREAM IMPACTS**

**PRELIMINARY PLANS**  
 DO NOT USE FOR CONSTRUCTION

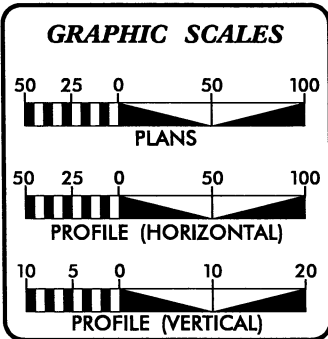


\*\* NOTE - DESIGN EXCEPTION REQUIRED FOR MINIMUM HORIZONTAL CURVE RADIUS, SAG & CREST VERTICAL CURVE K VALUES, MAXIMUM GRADE, AND HORIZONTAL & VERTICAL STOPPING SIGHT DISTANCE

THIS PROJECT IS NOT WITHIN MUNICIPAL BOUNDARIES.

NC DOT CONTACT: K. ZAK HAMIDI, P.E., PROJECT ENGINEER - ROADWAY DESIGN

\*CLEARING ON THIS PROJECT SHALL BE ESTABLISHED BY METHOD III \*



**DESIGN DATA**

ADT 2012 =	840
ADT 2032 =	1,240
DHV =	9 %
D =	55 %
T =	5 % *
** V =	60 MPH
* TTST 1 % + DUAL 4 %	
FUNC CLASS =	RURAL MAJOR COLLECTOR REGIONAL TIER

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT B-4406	=	0.110 mi.
LENGTH STRUCTURE TIP PROJECT B-4406	=	0.024 mi.
TOTAL LENGTH TIP PROJECT B-4406	=	0.134 mi.

Prepared in the Office of:  
**WANG ENGINEERING COMPANY, INC.**  
 CARY, N.C.  
 FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: MARCH 16, 2011

LETTING DATE: APRIL 17, 2012

MATTHEW COPPLE, P.E.  
 PROJECT ENGINEER

\_\_\_\_\_  
 PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER  
 SUNGATE DESIGN GROUP, PA

\_\_\_\_\_  
 P.E.

SIGNATURE: \_\_\_\_\_  
 ROADWAY DESIGN ENGINEER  
 WANG ENGINEERING

\_\_\_\_\_  
 P.E.

SIGNATURE: \_\_\_\_\_  
 STATE HIGHWAY DESIGN ENGINEER


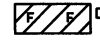
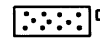


DIVISION OF HIGHWAYS  
 STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

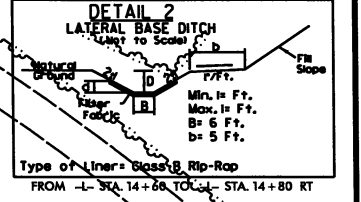
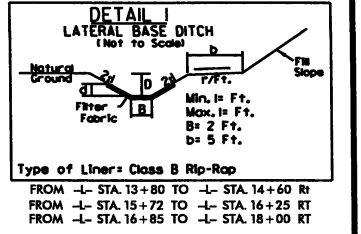
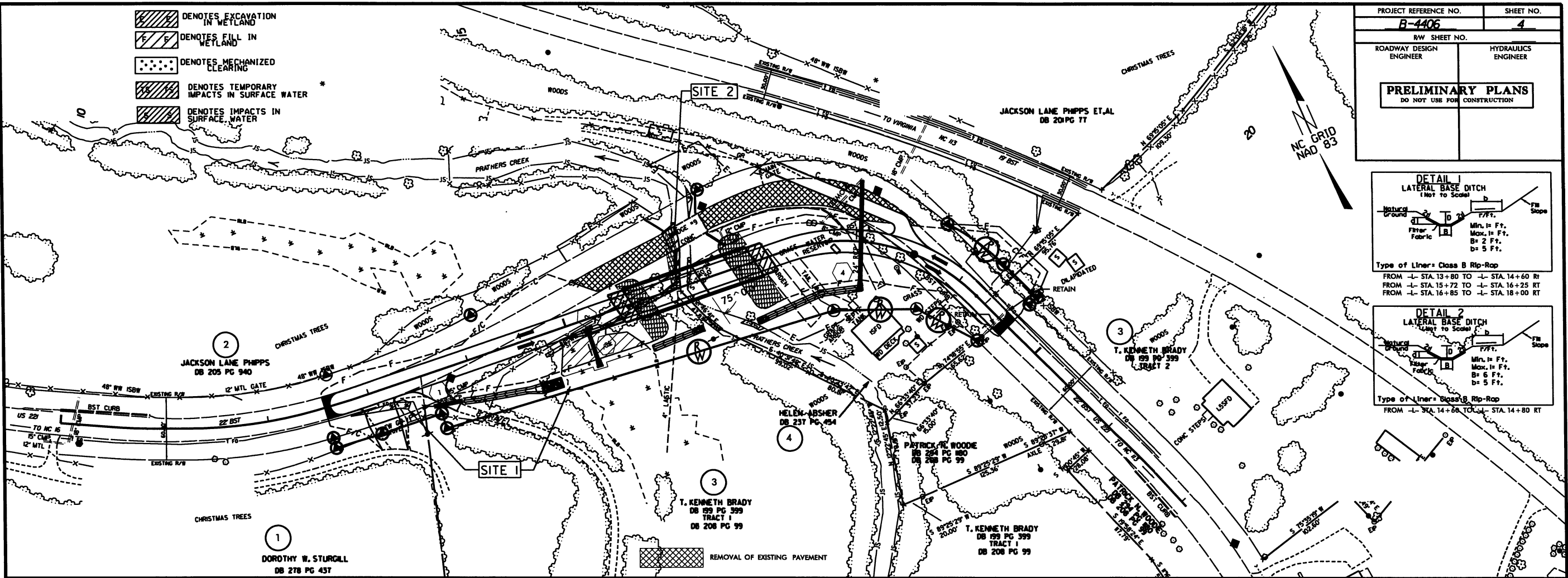
Permit Drawing  
 Sheet 1 of 7

Revised Permit Drawing

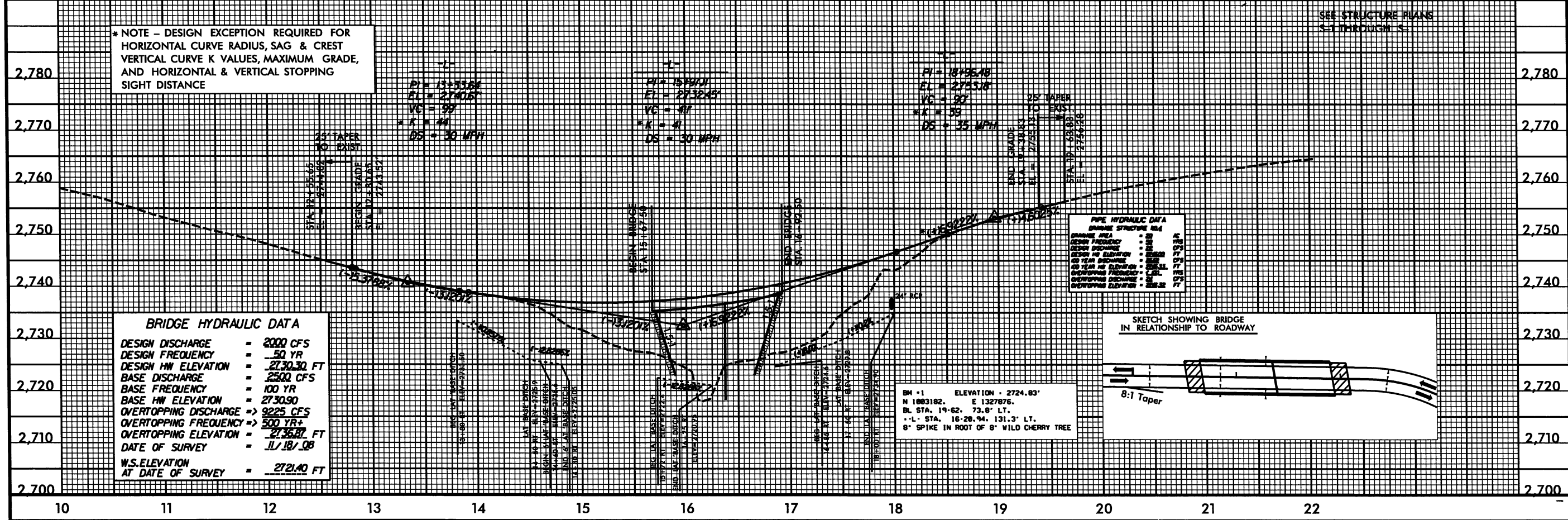
11/27/11

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

PROJECT REFERENCE NO. <b>B-4406</b>	SHEET NO. <b>4</b>
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



5/24/11 - R/W CHANGES AND REMOVAL OF DRIVEWAY ON PARCEL NO. 4  
11/29/11 - DRIVEWAY ADDED TO PARCEL NO. 1



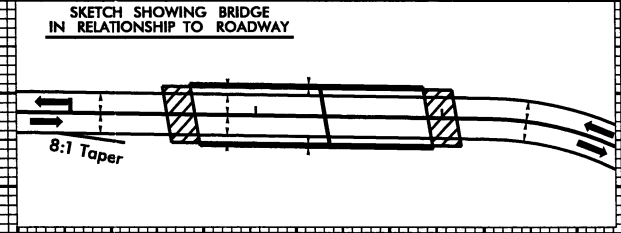
\* NOTE - DESIGN EXCEPTION REQUIRED FOR HORIZONTAL CURVE RADIUS, SAG & CREST VERTICAL CURVE K VALUES, MAXIMUM GRADE, AND HORIZONTAL & VERTICAL STOPPING SIGHT DISTANCE

**BRIDGE HYDRAULIC DATA**

DESIGN DISCHARGE	=	2000 CFS
DESIGN FREQUENCY	=	50 YR
DESIGN HW ELEVATION	=	2730.30 FT
BASE DISCHARGE	=	2500 CFS
BASE FREQUENCY	=	100 YR
BASE HW ELEVATION	=	2730.90
OVERTOPPING DISCHARGE	=>	9225 CFS
OVERTOPPING FREQUENCY	=>	500 YR+
OVERTOPPING ELEVATION	=	2736.87 FT
DATE OF SURVEY	=	11/18/08
W.S. ELEVATION AT DATE OF SURVEY	=	2721.40 FT

**PIPE HYDRAULIC DATA**  
CHANNEL STRUCTURE N/A

CHANNEL AREA	=	82	AC
DESIGN FREQUENCY	=	50	YR
DESIGN DISCHARGE	=	25	CFS
DESIGN HW ELEVATION	=	2730.30	FT
10 YEAR HW ELEVATION	=	2732.41	FT
50 YEAR HW ELEVATION	=	2736.87	FT
OVERTOPPING FREQUENCY	=	500	YR
OVERTOPPING DISCHARGE	=	9225	CFS
OVERTOPPING ELEVATION	=	2736.87	FT



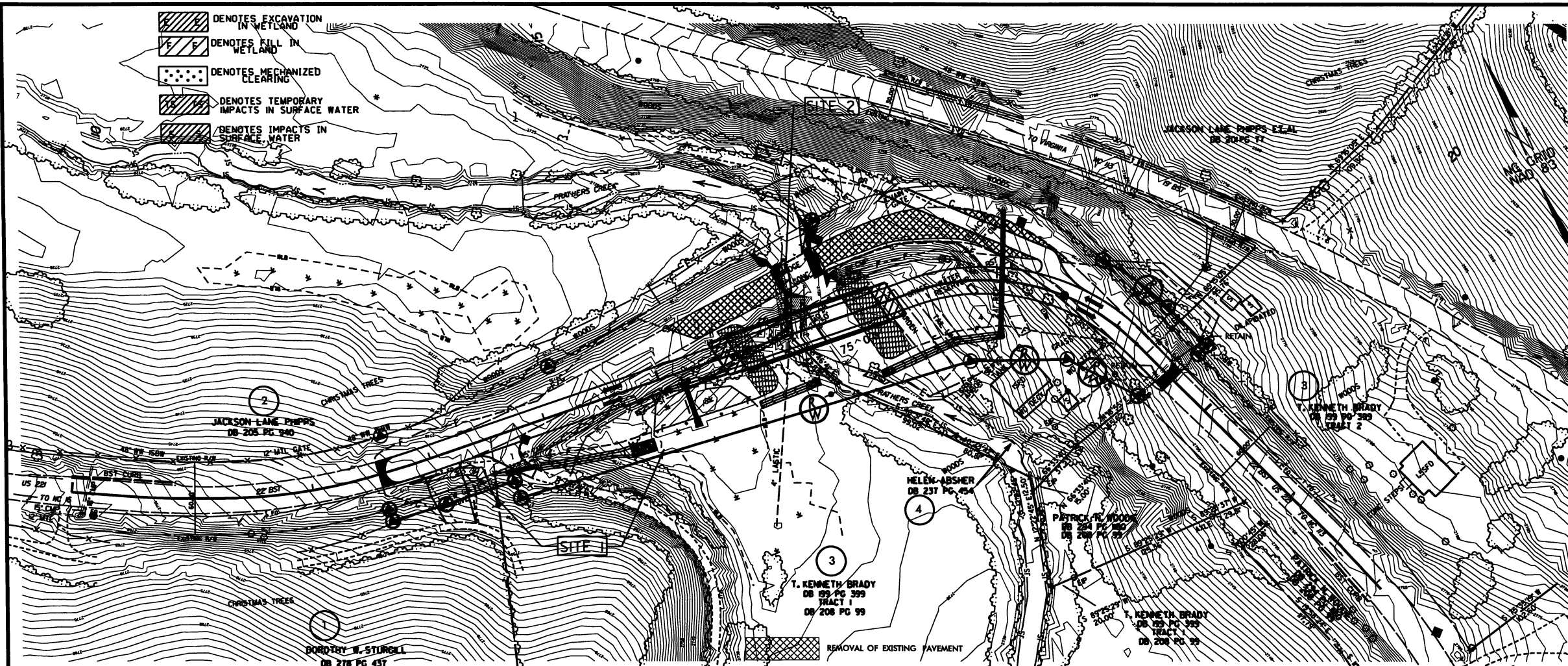
BH #1 ELEVATION = 2724.83'  
N 1883182, E 1327876.  
BL STA. 19+62, 73.8' LT.  
-L- STA. 16+28.94, 131.3' LT.  
8" SPIKE IN ROOT OF 8" WILD CHERRY TREE

Revised Permit Drawing

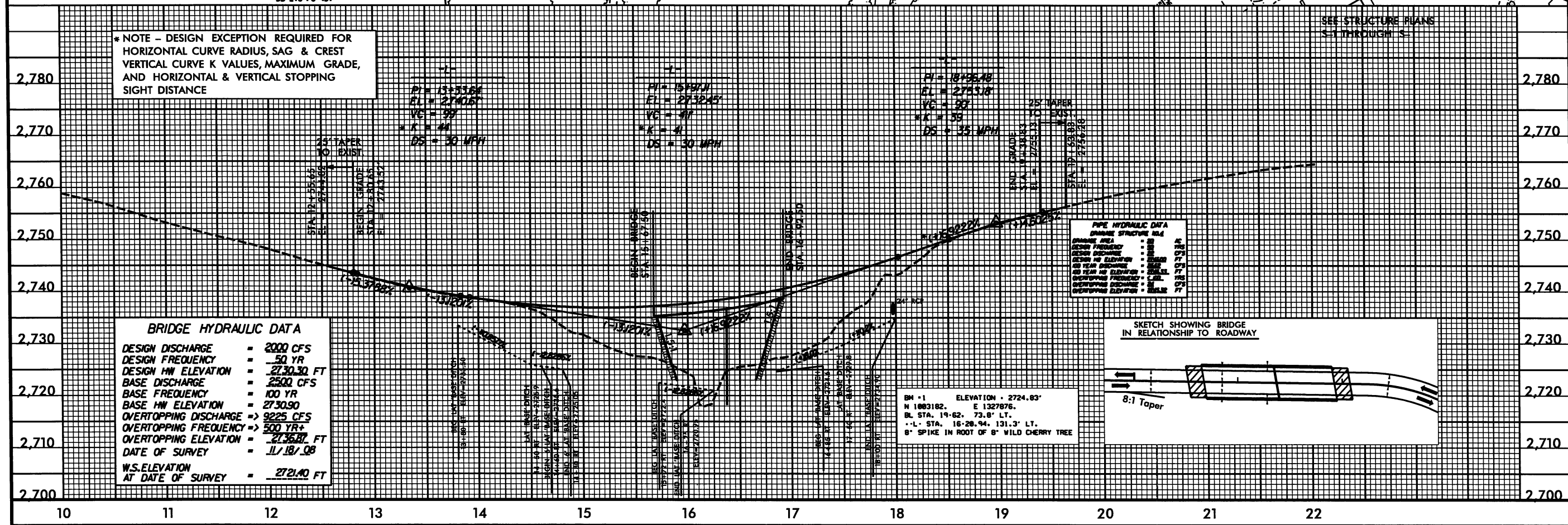
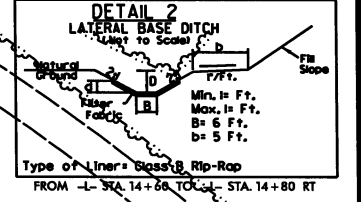
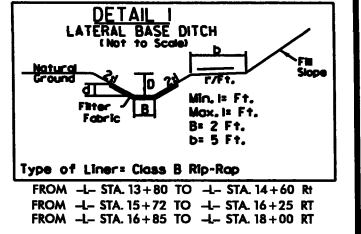


11/17/11



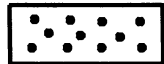


5/24/11 - R/W CHANGES AND REMOVAL OF DRIVEWAY ON PARCEL NO. 4  
11/28/11 - DRIVEWAY ADDED TO PARCEL NO. 1



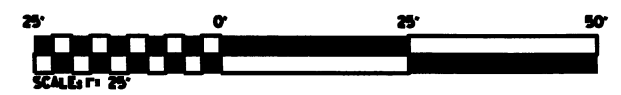
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R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



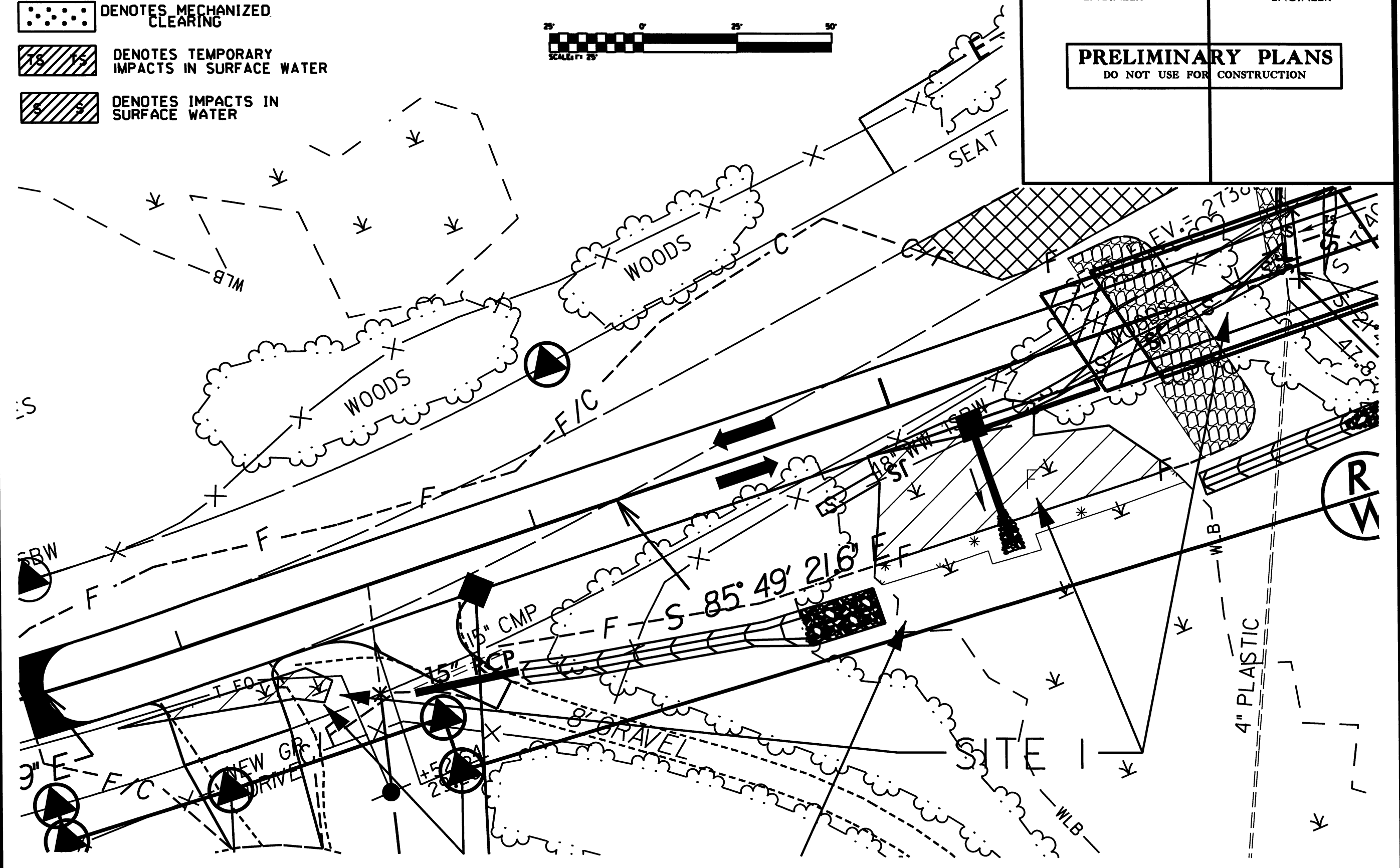
Revised Permit Drawing






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

# SITE 1 CLOSE UP

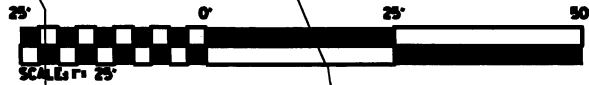


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<b>B-4406</b>	
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
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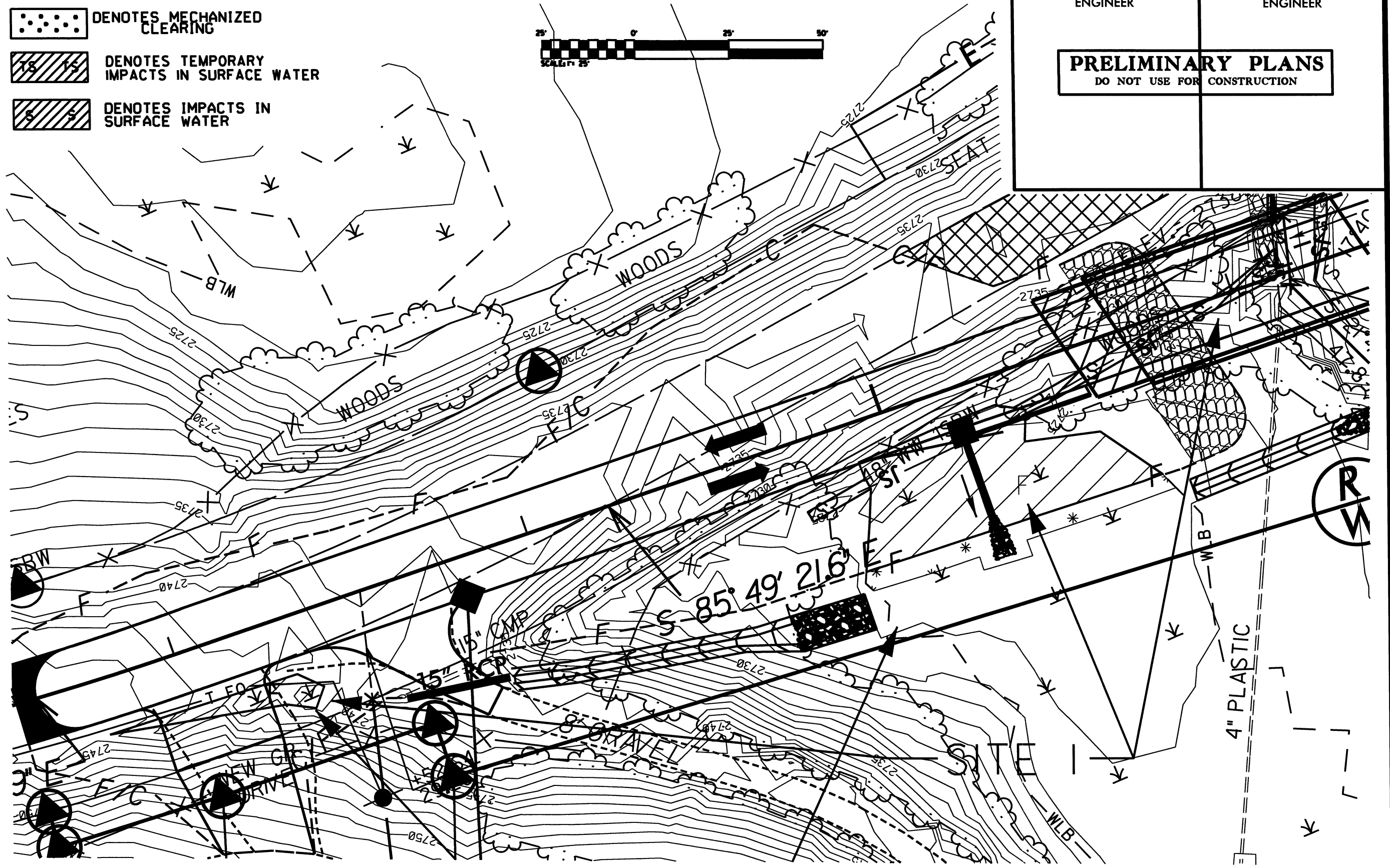



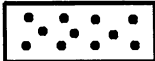


-  DENOTES EXCAVATION IN WETLAND
-  DENOTES FILL IN WETLAND
-  DENOTES MECHANIZED CLEARING
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER
-  DENOTES IMPACTS IN SURFACE WATER

# SITE 1 CLOSE UP



PROJECT REFERENCE NO.	
<b>B-4406</b>	
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
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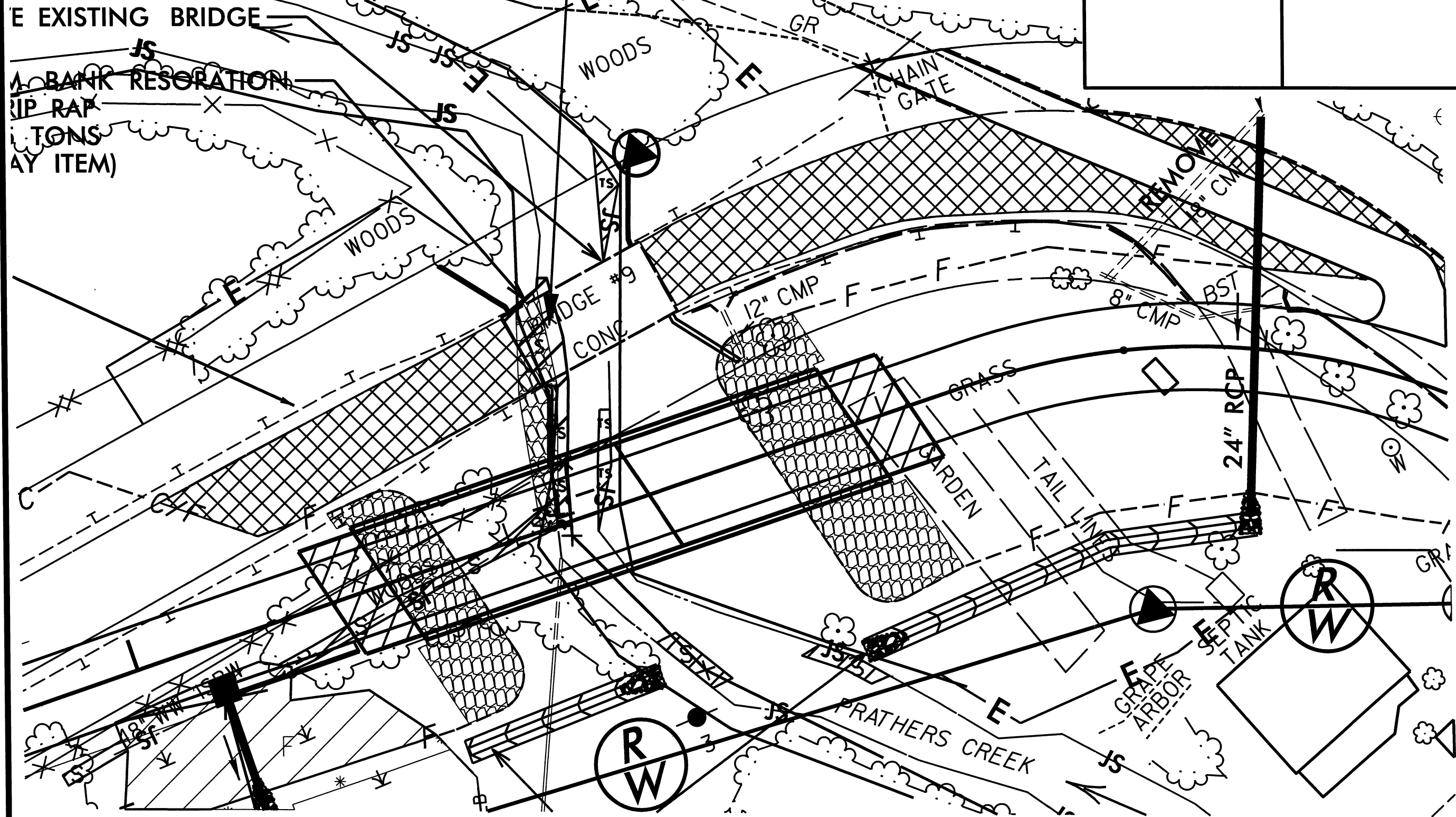


-  DENOTES FILL IN WETLAND
-  DENOTES MECHANIZED CLEARING
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER
-  DENOTES IMPACTS IN SURFACE WATER


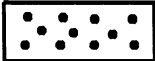


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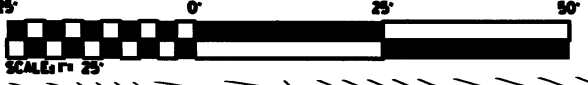
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RW SHEET NO. _____	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>PRELIMINARY PLANS</b>  <small>DO NOT USE FOR CONSTRUCTION</small> </div>	





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

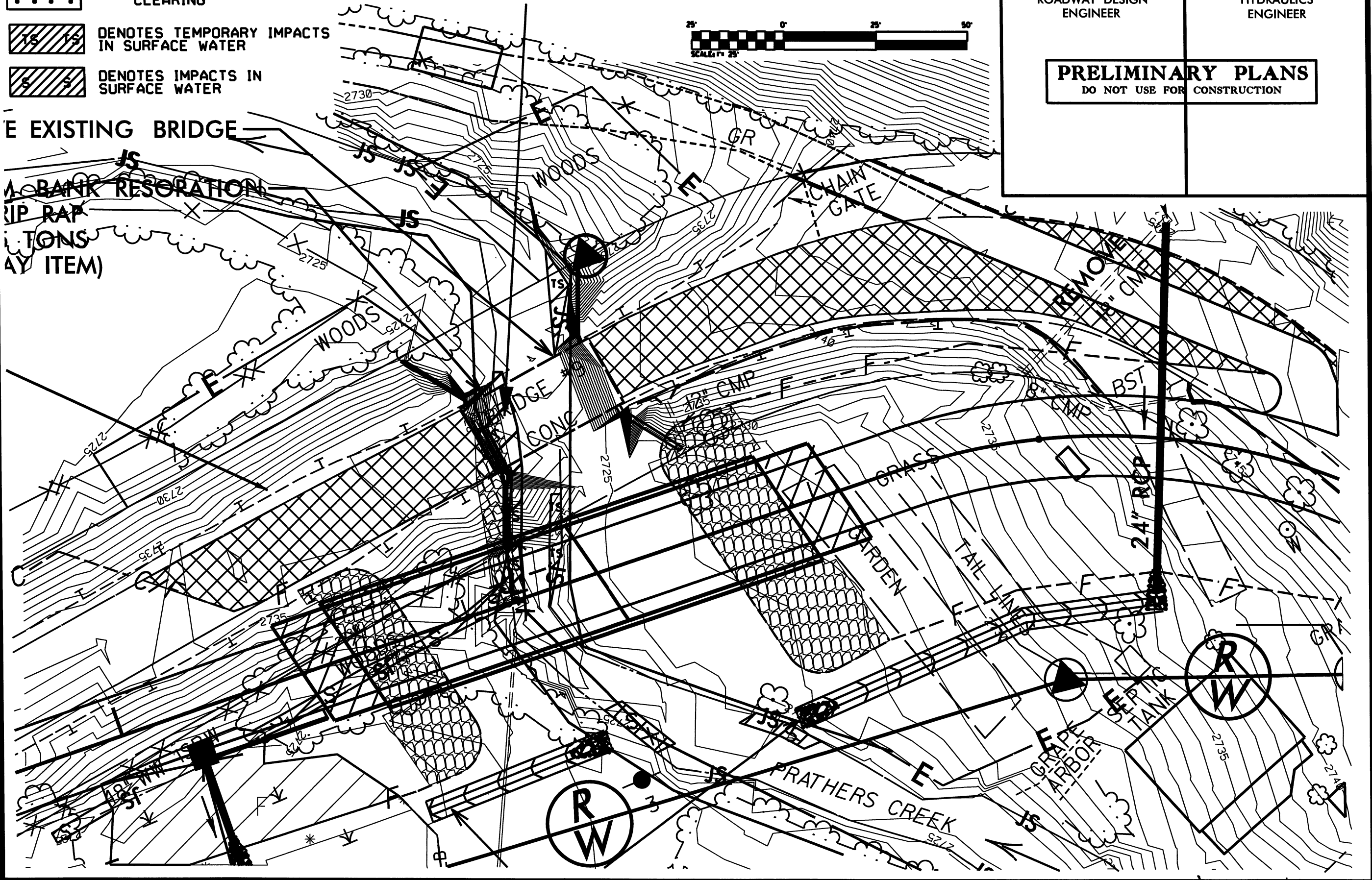
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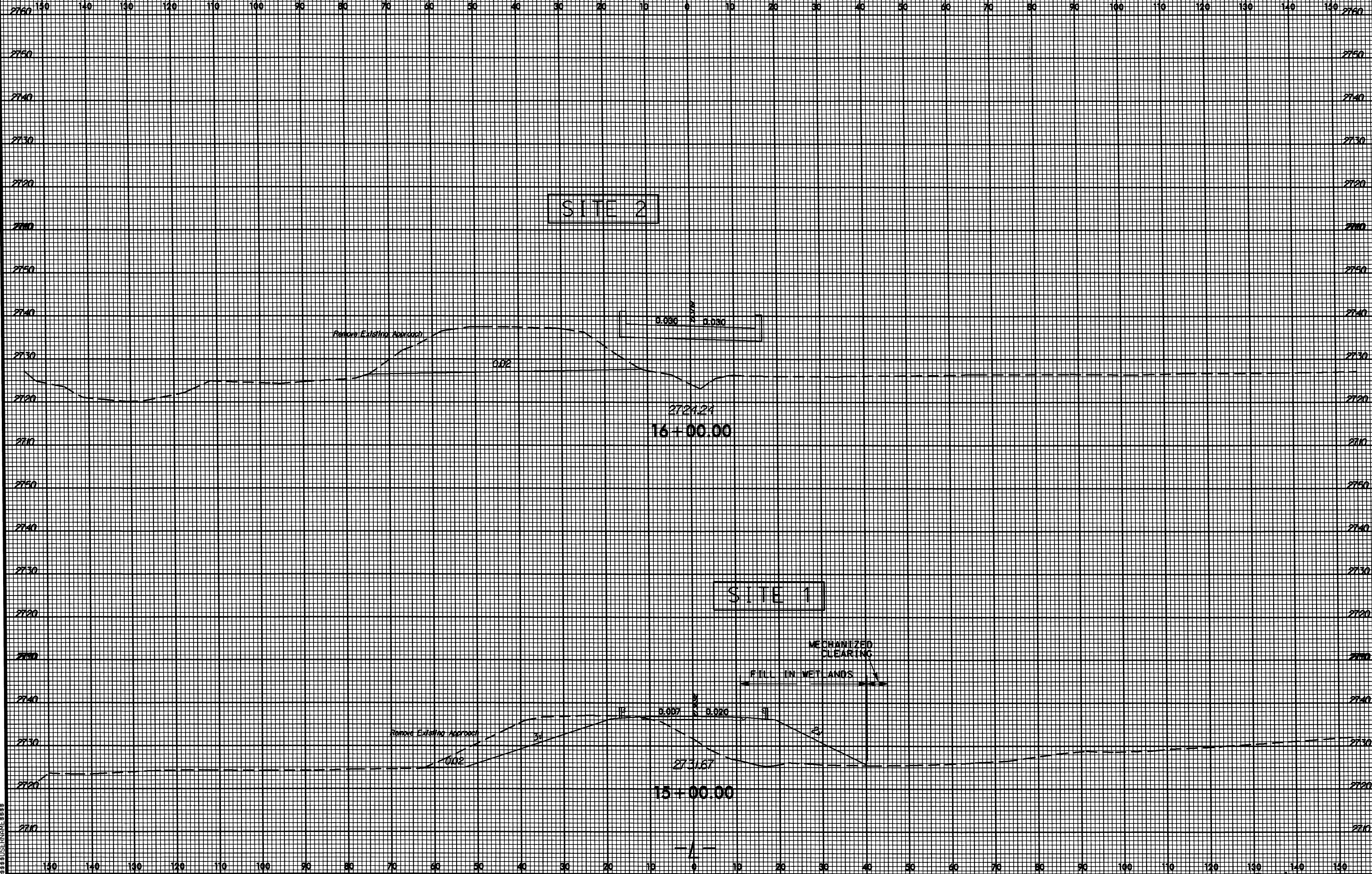
PROJECT REFERENCE NO. <b>B-4406</b>	SHEET NO. _____
RW SHEET NO. _____	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>PRELIMINARY PLANS</b>              DO NOT USE FOR CONSTRUCTION           </div>	

**E EXISTING BRIDGE**

**A BANK RESTORATION  
UP RAP  
TONS  
(AY ITEM)**



8/23/99



\$\$\$\$\$SYTIME\$\$\$\$\$  
\$\$\$\$\$USE PLANES\$\$\$\$\$

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4406	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33685.1.1	BRSTP-221(16)	PE	
33685.2.1	BRSTP-221(16)	RW /UTIL	

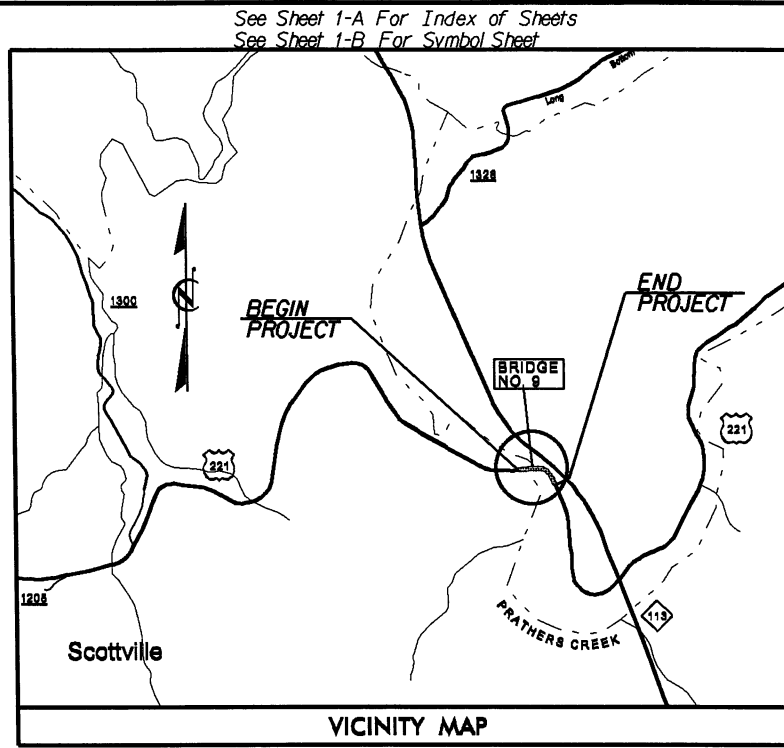
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**ALLEGHANY COUNTY**

LOCATION: BRIDGE NO. 9 OVER PRATHERS CREEK ON US 221

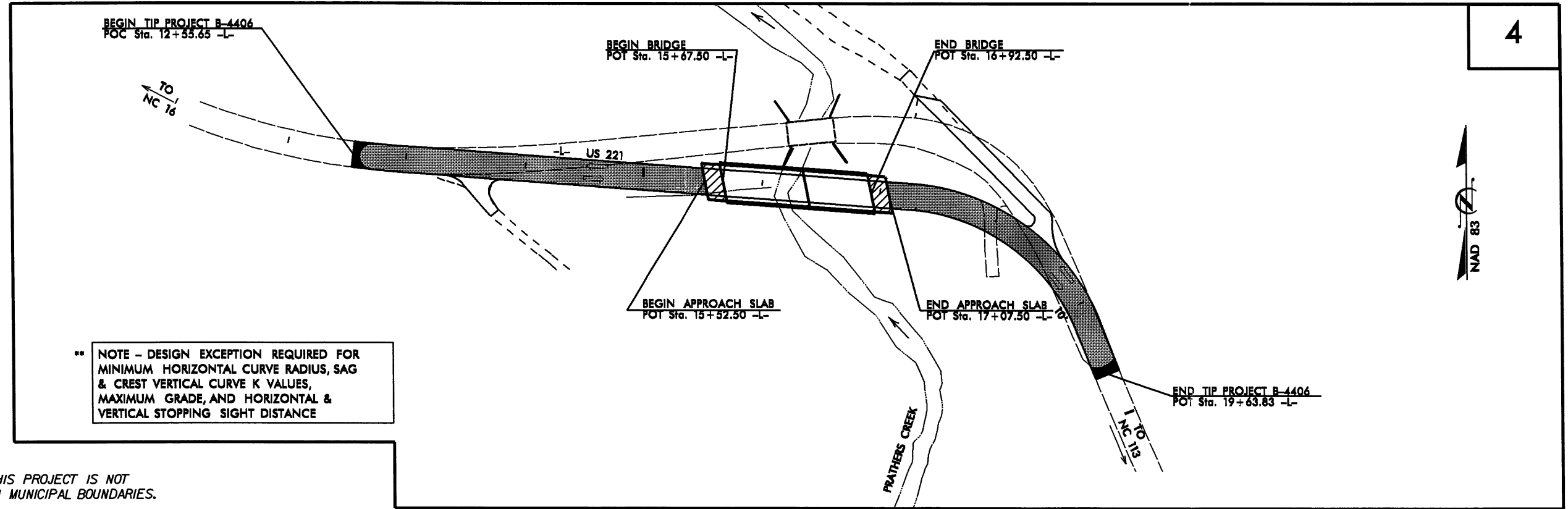
TYPE OF WORK: GRADING, DRAINAGE, STRUCTURE, AND PAVING

PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION



VICINITY MAP

RW PLANS



\*\* NOTE - DESIGN EXCEPTION REQUIRED FOR MINIMUM HORIZONTAL CURVE RADIUS, SAG & CREST VERTICAL CURVE K VALUES, MAXIMUM GRADE, AND HORIZONTAL & VERTICAL STOPPING SIGHT DISTANCE

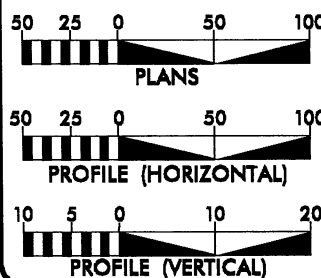
THIS PROJECT IS NOT WITHIN MUNICIPAL BOUNDARIES.

NCDOT CONTACT: K.ZAK HAMIDI, P.E., PROJECT ENGINEER - ROADWAY DESIGN

"CLEARING ON THIS PROJECT SHALL BE ESTABLISHED BY METHOD III."

CONTRACT: TIP PROJECT: B-4406

GRAPHIC SCALES



DESIGN DATA

ADT 2012 = 840  
ADT 2032 = 1,240  
DHV = 9 %  
D = 55 %  
T = 5 % \*  
\*\* V = 60 MPH  
\* TTST 1 % + DUAL 4 %  
FUNC CLASS = RURAL MAJOR COLLECTOR  
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4406 = 0.110 mi.  
LENGTH STRUCTURE TIP PROJECT B-4406 = 0.024 mi.  
TOTAL LENGTH TIP PROJECT B-4406 = 0.134 mi.

Prepared in the Office of:  
**WANG ENGINEERING COMPANY, INC.**  
CARY, N.C.  
FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
MARCH 16, 2011

LETTING DATE:  
APRIL 17, 2012

CLIFTON T. REGISTER, P.E.  
PROJECT ENGINEER

MATTHEW COPPLE, P.E.  
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER  
SUNGATE DESIGN GROUP, PA

SIGNATURE:  
ROADWAY DESIGN ENGINEER  
WANG ENGINEERING

SIGNATURE: P.E.

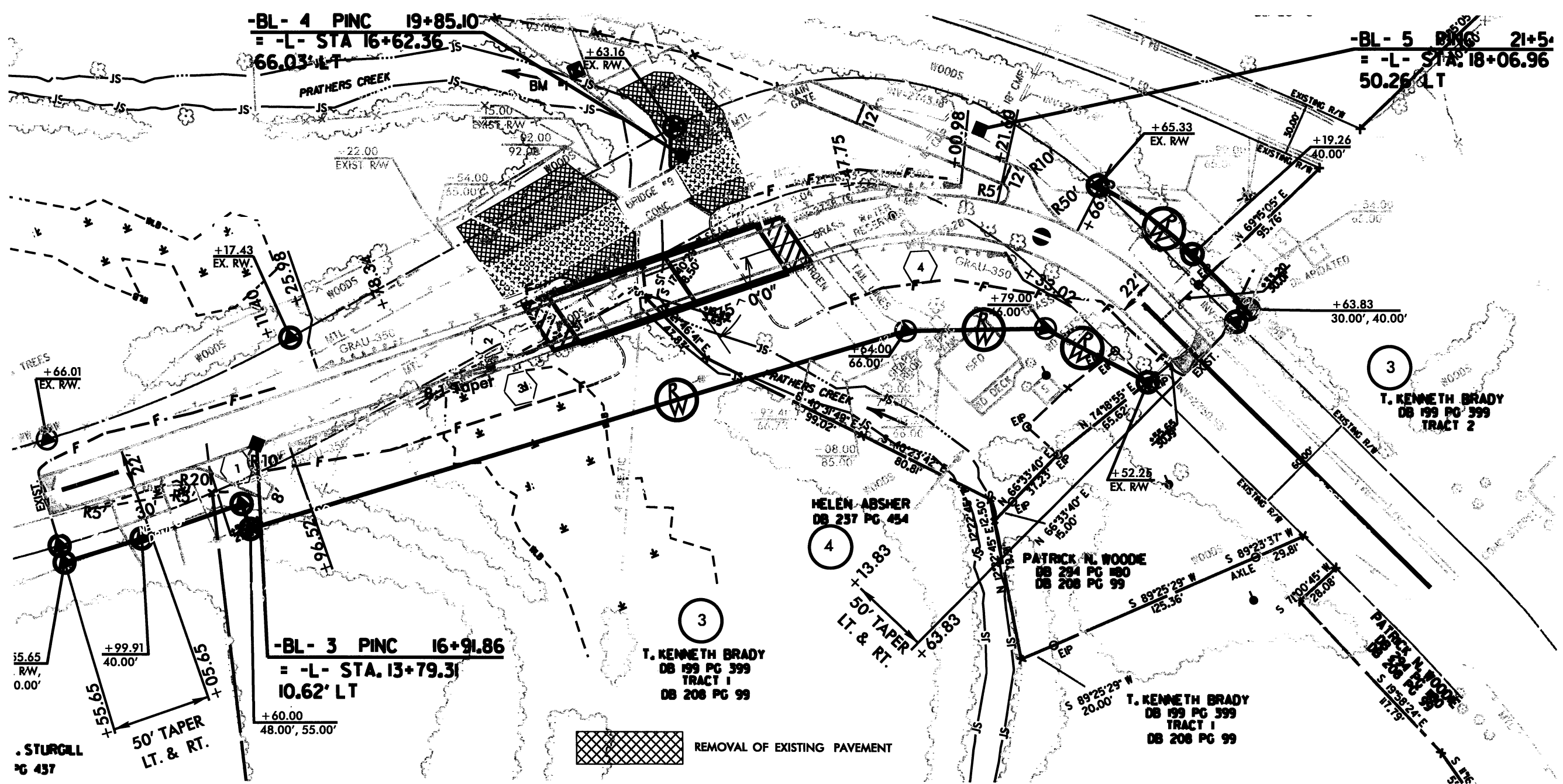
DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA



STATE HIGHWAY DESIGN ENGINEER P.E.

\$\$\$\$\$SYTIME\$\$\$\$\$  
\$\$\$\$\$DGN\$\$\$\$\$  
\$\$\$\$\$USERNAME\$\$\$\$\$





-BL- 4 PINC 19+85.10  
 = -L- STA 16+62.36  
 66.03' LT

-BL- 5 PINC 21+5.0  
 = -L- STA 18+06.96  
 50.26' LT

-BL- 3 PINC 16+91.86  
 = -L- STA. 13+79.31  
 10.62' LT

REMOVAL OF EXISTING PAVEMENT

RED FOR  
 CREST  
 GRADE,  
 PING

-L-  
 PI = 13+33.64  
 EL = 2740.67'  
 VC = 99'  
 \* K = 44  
 DS = 30 MPH

-L-  
 PI = 15+97.11  
 EL = 2732.45'  
 VC = 41'  
 \* K = 41  
 DS = 30 MPH

-L-  
 PI = 18+96.48  
 EL = 2753.18'  
 VC = 90'  
 \* K = 39  
 DS = 35 MPH

25' TAPER  
 TO EXIST.  
 STA. 12+33.00  
 EL = 2744.82'  
 BEGIN GRADE  
 STA. 12+80.65  
 EL = 2743.52'

CL STA 16+30.00 -L-  
 EL = 2738.37'  
 1@70', 1@55', 24" CORED SLAB  
 (OAL = 125')  
 SKEW = 80-DEG  
 BRIDGE 5+67.50  
 BRIDGE 16+92.50

25' TAPER  
 TO EXIST.  
 END GRADE  
 STA. 19+38.83  
 EL = 2755.13'  
 STA. 19+63.83  
 EL = 2756.28'  
 \* (+1.69222%  
 (+1.45025%



**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: NC B-4406 County/parish/borough: Alleghany City: Sparta  
Center coordinates of site (lat/long in degree decimal format): Lat. 36.52298°  N, Long. 81.18450.0°  W.  
Universal Transverse Mercator:

Name of nearest waterbody: Prather's Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Prather's Creek

Name of watershed or Hydrologic Unit Code (HUC): 05050001

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

Office (Desk) Determination. Date:

Field Determination. Date(s): 9/9/2010

**SECTION II: SUMMARY OF FINDINGS**

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION.**

There  **Are** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: .

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There  **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- Impoundments of jurisdictional waters
- Isolated (interstate or intrastate) waters, including isolated wetlands

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Non-wetland waters: 50 linear feet: 12 width (ft) and/or acres.

Wetlands: 0.1 acres.

**c. Limits (boundaries) of jurisdiction based on: Not Applicable.**

Elevation of established OHWM (if known): .

**2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: .

<sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup> Supporting documentation is presented in Section III.F.

### SECTION III: CWA ANALYSIS

#### A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: Prather's Creek.

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

#### B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 3 square miles

Drainage area: 20 acres

Average annual rainfall: 48 inches

Average annual snowfall: 6.4 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through Pick List tributaries before entering TNW.

Project waters are 1 (or less) river miles from TNW.

Project waters are Pick List river miles from RPW.

Project waters are 1 (or less) aerial (straight) miles from TNW.

Project waters are Pick List aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW<sup>5</sup>: direct.

Tributary stream order, if known: first order.

<sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

Tributary is:  Natural  
 Artificial (man-made). Explain:  
 Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: 2 feet  
Average depth: 0.1 feet  
Average side slopes: **Vertical (1:1 or less).**

Primary tributary substrate composition (check all that apply):

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover:  
 Other. Explain: leaves.

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain: absent.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): 0 %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime:

Other information on duration and volume:

Surface flow is: **Confined.** Characteristics:

Subsurface flow: **Unknown.** Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks  
 OHWM<sup>6</sup> (check all indicators that apply):  
 clear, natural line impressed on the bank  the presence of litter and debris  
 changes in the character of soil  destruction of terrestrial vegetation  
 shelving  the presence of wrack line  
 vegetation matted down, bent, or absent  sediment sorting  
 leaf litter disturbed or washed away  scour  
 sediment deposition  multiple observed or predicted flow events  
 water staining  abrupt change in plant community  
 other (list):  
 Discontinuous OHWM.<sup>7</sup> Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by:  Mean High Water Mark indicated by:  
 oil or scum line along shore objects  survey to available datum;  
 fine shell or debris deposits (foreshore)  physical markings;  
 physical markings/characteristics  vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list):

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: seasonal water is typically turbid.

Identify specific pollutants, if known:

<sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: 0.1 acres

Wetland type. Explain: Riparian.

Wetland quality. Explain: Poor; in agricultural field.

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Ephemeral flow**. Explain:

Surface flow is: **Overland sheetflow**

Characteristics:

Subsurface flow: **Unknown**. Explain findings:

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
  - Discrete wetland hydrologic connection. Explain:
  - Ecological connection. Explain:
  - Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **1 (or less)** river miles from TNW.

Project waters are **1 (or less)** aerial (straight) miles from TNW.

Flow is from: **No Flow**.

Estimate approximate location of wetland as within the **50 - 100-year** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain: herbacious 100%.
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **1**

Approximately ( 0.1 ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)  
yes

Size (in acres)  
0.1

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed: wetland has been manipulated to drain agricultural field.

### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

**Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:**

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

### D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs: 50 linear feet 12 width (ft), Or,      acres.
  - Wetlands adjacent to TNWs: 0.1 acres.
2. **RPWs that flow directly or indirectly into TNWs.**
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: score 25.75 - intermittent.
  - Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: **50** linear feet **1** width (ft).
  - Other non-wetland waters:        a cres.
- Identify type(s) of waters: .

**3. Non-RPWs<sup>8</sup> that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters:        linear feet        width (ft).
  - Other non-wetland waters:        acres.
- Identify type(s) of waters: .

**4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
  - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
  - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: **0.1** acres.

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area:        acres.

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area:        acres.

**7. Impoundments of jurisdictional waters.<sup>9</sup>**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):<sup>10</sup>**

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

<sup>8</sup>See Footnote # 3.

<sup>9</sup>To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

**Identify water body and summarize rationale supporting determination:**

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width h (ft).
- Other non-wetland waters: acres.  
Identify type(s) of waters: .
- Wetlands: acres.

**F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):**

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
  - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):**

- Maps, plans, plats or plat submitted by or on behalf of the applicant/consultant: .
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - Office concurs with data sheets/delineation report.
  - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): .  
or  Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**