



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT L. MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

July 11, 2013

Wilmington Regulatory Field Office
US Army Corps of Engineers
69 Darlington Avenue
Wilmington, North Carolina 28403

ATTN: Mr. Ronnie Smith
NCDOT Coordinator

Dear Sir:

Subject: **Application for a Section 404 Nationwide Permit 3** for the proposed replacement of Bridge No. 85 over Toms Fork Creek on SR 1119 in Columbus County. Federal Aid Project No. BRZ-1119(3), TIP No. B-4475

The North Carolina Department of Transportation (NCDOT) proposes to replace the 53-foot, 3-span Bridge No. 85 with a 90-foot, 2-span bridge on the existing alignment. Traffic will follow an offsite detour during construction. Permanent impacts to jurisdictional resources include 0.02 acre of wetland fill.

Please see enclosed copies of the Pre-Construction Notification (PCN), Preliminary Jurisdictional Determination Form, permit drawings, stormwater management plan, and design plans for the above referenced project. The Categorical Exclusion (CE) was completed in April 2012. Copies were distributed shortly thereafter. Additional copies are available at the NCDOT website: <http://207.4.62.65/PDEA/EnvironmentalDocs/>.

This project calls for a letting date of February 18, 2014 and a review date of December 31, 2013. The project schedule may be advanced if funding becomes available.

Regulatory Approvals

Section 404 Permit: All aspects of this project are being processed by the Federal Highway Administration as a "Categorical Exclusion" in accordance with 23 CFR 771.115(b). The NCDOT requests that these activities be authorized by Nationwide Permit 3.

Section 401 Permit: We anticipate 401 General Certification number 3883 will apply to this project.

A copy of this permit application and its distribution list will be posted at the NCDOT Website at <https://connect.ncdot.gov/resources/Environmental>. If you have any questions or need additional information, please contact Tyler Stanton at tstanton@ncdot.gov or (919) 707-6156.

Sincerely,

The image shows a handwritten signature in blue ink that reads "G. J. Thorpe". To the left of the signature, the word "for" is written in a smaller, cursive blue font.

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: 3 or General Permit (GP) number:		
1c. Has the NWP or GP number been verified by the Corps?	<input checked="" type="checkbox"/> Yes	<input 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 <input type="checkbox"/> Non-404 Jurisdictional General Permit <input type="checkbox"/> 401 Water Quality Certification – Express <input type="checkbox"/> Riparian Buffer Authorization		
1e. Is this notification solely for the record because written approval is not required?	For the record only for DWQ 401 Certification: <input checked="" type="checkbox"/> Yes <input 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 type="checkbox"/> Yes	<input checked="" 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 No. 85 over Toms Fork Creek on SR 1119
2b. County:	Columbus
2c. Nearest municipality / town:	Tabor City
2d. Subdivision name:	<i>not applicable</i>
2e. NCDOT only, T.I.P. or state project no.:	B-4475

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) 707-6156
3g. Fax no.:	(919) 250-4224
3h. Email address:	tstanton@ncdot.gov

4. Applicant Information (if different from owner)	
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:	
5. Agent/Consultant Information (if applicable)	
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. Project Information and Prior Project History	
1. Property Identification	
1a. Property identification no. (tax PIN or parcel ID):	<i>not applicable</i>
1b. Site coordinates (in decimal degrees):	Latitude: 34.0881 (DD.DDDDDD) Longitude: - 78.8023 (-DD.DDDDDD)
1c. Property size:	0.73 acres
2. Surface Waters	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Toms Fork Creek
2b. Water Quality Classification of nearest receiving water:	C;Sw
2c. River basin:	Lumber
3. Project Description	
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: Existing conditions at the site include maintained / disturbed roadside shoulder and forested areas. Land use in the project vicinity is predominantly agriculture with some residential properties.	
3b. List the total estimated acreage of all existing wetlands on the property: 0.26	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 140	
3d. Explain the purpose of the proposed project: To replace a structurally deficient bridge	
3e. Describe the overall project in detail, including the type of equipment to be used: The project involves replacing a 53-foot 3-span bridge with a 90-foot, dual-span bridge on the existing alignment. Traffic will follow an offsite detour during construction. Standard road building equipment, such as trucks, dozers, and cranes will be used.	
4. Jurisdictional Determinations	
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: A preliminary JD request was signed March 2, 2010	<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 checked="" type="checkbox"/> Preliminary <input type="checkbox"/> Final
4c. If yes, who delineated the jurisdictional areas? Name (if known): Tyler Stanton	Agency/Consultant Company: NCDOT Other:
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation. March 2, 2010	
5. Project History	
5a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
5b. If yes, explain in detail according to "help file" instructions.	
6. Future Project Plans	
6a. Is this a phased project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6b. If yes, explain.	

C. Proposed Impacts Inventory						
1. Impacts Summary						
1a. Which sections were completed below for your project (check all that apply):						
<input checked="" type="checkbox"/> Wetlands		<input type="checkbox"/> Streams - tributaries		<input type="checkbox"/> Buffers		
<input type="checkbox"/> Open Waters		<input type="checkbox"/> Pond Construction				
2. Wetland Impacts						
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	Fill	Riverine	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.02	
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		
Site 3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 5 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 6 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
2g. Total wetland impacts					0.02 Permanent	
2h. Comments: There will be 0.06 ac of hand clearing in wetlands. Additionally there will be 0.01 ac of temporary fill for erosion control devices in the hand clearing areas.						
3. Stream Impacts						
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 type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
3h. Total stream and tributary impacts					X Perm X Temp	
3i. Comments:						

4. Open Water Impacts

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				
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				
4f. Total open water impacts				X Permanent X Temporary

4g. Comments:

5. Pond or Lake Construction

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								
5f. Total								

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"/> Tar-Pamlico <input type="checkbox"/> Other: <input type="checkbox"/> Catawba <input type="checkbox"/> Randleman			
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		
6h. Total buffer impacts					
6i. Comments:					

D. Impact Justification and Mitigation		
1. Avoidance and Minimization		
1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project. The proposed bridge is 37 feet longer than the existing bridge and will eliminate one bent from the water. There will be minimal permanent fill in jurisdictional areas. The removal of existing road fill for longer bridge and increasing bridge openings will improve hydrological conveyance and wildlife passage, and reduce bridge opening velocities.		
1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. Construction will be top-down. Best Management Practices for the Protection of Surface Waters as well as Bridge Demolition and Removal will be implemented.		
2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State		
2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, explain: Due to the minimal amount of impacts compensatory mitigation is not proposed.	
2b. If yes, mitigation is required by (check all that apply):	<input type="checkbox"/> DWQ <input type="checkbox"/> Corps	
2c. If yes, which mitigation option will be used for this project?	<input type="checkbox"/> Mitigation bank <input type="checkbox"/> Payment to in-lieu fee program <input type="checkbox"/> Permittee Responsible Mitigation	
3. Complete if Using a Mitigation Bank		
3a. Name of Mitigation Bank: not applicable		
3b. Credits Purchased (attach receipt and letter)	Type	Quantity
3c. Comments:		
4. Complete if Making a Payment to In-lieu Fee Program		
4a. Approval letter from in-lieu fee program is attached.	<input type="checkbox"/> Yes	
4b. Stream mitigation requested:	linear feet	
4c. If using stream mitigation, stream temperature:	<input type="checkbox"/> warm <input type="checkbox"/> cool <input type="checkbox"/> cold	
4d. Buffer mitigation requested (DWQ only):	square feet	
4e. Riparian wetland mitigation requested:	acres	
4f. Non-riparian wetland mitigation requested:	acres	
4g. Coastal (tidal) wetland mitigation requested:	acres	
4h. Comments:		
5. Complete if Using a Permittee Responsible Mitigation Plan		
5a. If using a permittee responsible mitigation plan, provide a description of the proposed mitigation plan.		

6. Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ

6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?

Yes 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	
6f. Total buffer mitigation required:				

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:

E. Stormwater Management and Diffuse Flow Plan (required by DWQ)	
1. Diffuse Flow Plan	
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
2. Stormwater Management Plan	
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 and stormwater management plan.	
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
3. Certified Local Government Stormwater Review	
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
4. DWQ Stormwater Program Review	
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 checked="" type="checkbox"/> No
5. DWQ 401 Unit Stormwater Review	
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

F. Supplementary Information	
1. Environmental Documentation (DWQ Requirement)	
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
2. Violations (DWQ Requirement)	
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):	
3. Cumulative Impacts (DWQ Requirement)	
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.	
4. Sewage Disposal (DWQ Requirement)	
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	

5. Endangered Species and Designated Critical Habitat (Corps Requirement)		
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? NCNHP, USFWS website, field surveys		
6. Essential Fish Habitat (Corps Requirement)		
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		
7. Historic or Prehistoric Cultural Resources (Corps Requirement)		
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		
8. Flood Zone Designation (Corps Requirement)		
8a. Will this project occur in a FEMA-designated 100-year floodplain?	<input checked="" type="checkbox"/> Yes	<input 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		
Dr. Gregory J. Thorpe, Ph D Applicant/Agent's Printed Name	 _____ Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	7.11.13 Date



North Carolina Department of Transportation
Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR LINEAR ROADWAY PROJECTS



(Version 1.2; Released September 2011)

Project/TIP No.: B-4475 **County(ies):** Columbus **Page** 1 **of** 1

General Project Information

Project No.:	B-4475	Project Type:	Bridge Replacement	Date:	3/8/2013
NCDOT Contact:	Bill Zerman, PE	Contractor / Designer:	Sungate Design Group, P.A.		
Address:	1020 Birch Ridge Road Raleigh, NC 27610	Address:	915 Jones Franklin Road Raleigh, NC 27606		
	Phone: 919-707-6755		Phone:	919-859-2243	
	Email: bzerman@ncdot.gov		Email:	jdalton@sungatedesign.com	
City/Town:		County(ies):	Columbus		
River Basin(s):	Lumber	CAMA County?	No		
Primary Receiving Water:	Toms Fork Creek	NCDWQ Stream Index No.:	15-17-1-10		
NCDWQ Surface Water Classification for Primary Receiving Water		Primary:	Class C		
		Supplemental:	Swamp Waters (Sw)		
Other Stream Classification:	None				
303(d) Impairments:	None				
Buffer Rules in Effect	N/A				

Project Description

Project Length (lin. Miles or feet):	0.06 miles	Surrounding Land Use:	Rural, Agriculture, Swamp		
	Proposed Project		Existing Site		
Project Built-Upon Area (ac.)	0.22 ac.		0.14 ac.		
Typical Cross Section Description:	2-Lane Shoulder Section		2-Lane Shoulder Section		
Average Daily Traffic (veh/hr/day):	Design/Future: 800	Existing:	1390		

General Project Narrative: B-4475 involves the removal and replacement of Columbus County bridge number 85. A rip-rap dissipator pad is proposed at the outlet of the bridge end drain to provide diffuse flow. A preformed scour holes was not used on this project due to proximity to wetlands. A proposed interior bent is located within the stream. This was necessary in order to provide a span length that could be constructed using Top Down methods to avoid further impacts. Rock plating was used on the fill slopes from station 14+25 to 15+14.5 -L- right to reduce impacts to the wetlands. Permanent Soil Reinforcement Matting was used on the fill slopes from station 14+50 to 15+14 -L- left to also reduce impacts to the wetlands.

References

09/08/2013

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4475	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
38380.1.1	BRZ-1119(3)	P.E.	
38380.2.1	BRZ-1119(3)	ROW & UTIL	

COLUMBUS COUNTY

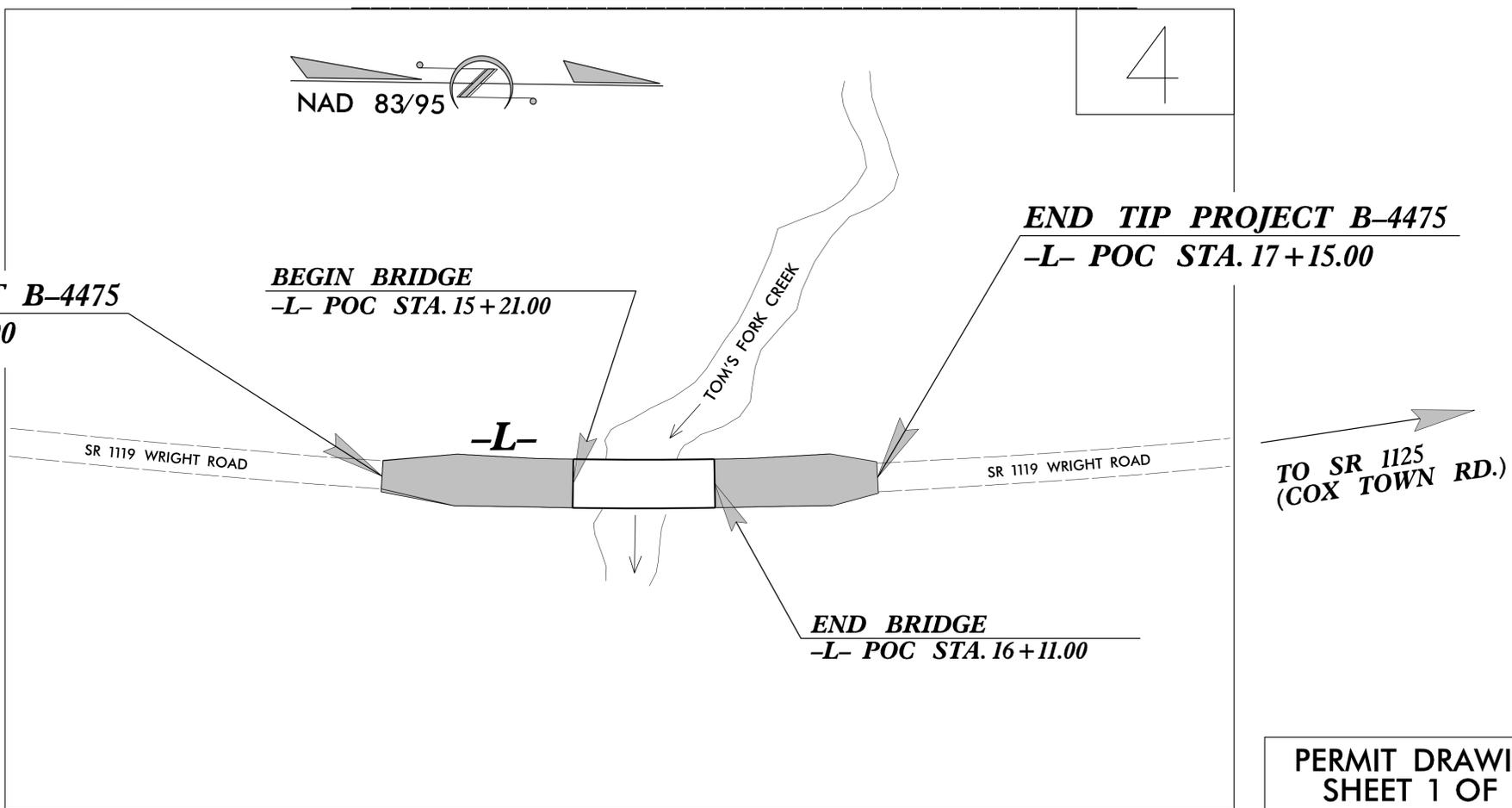
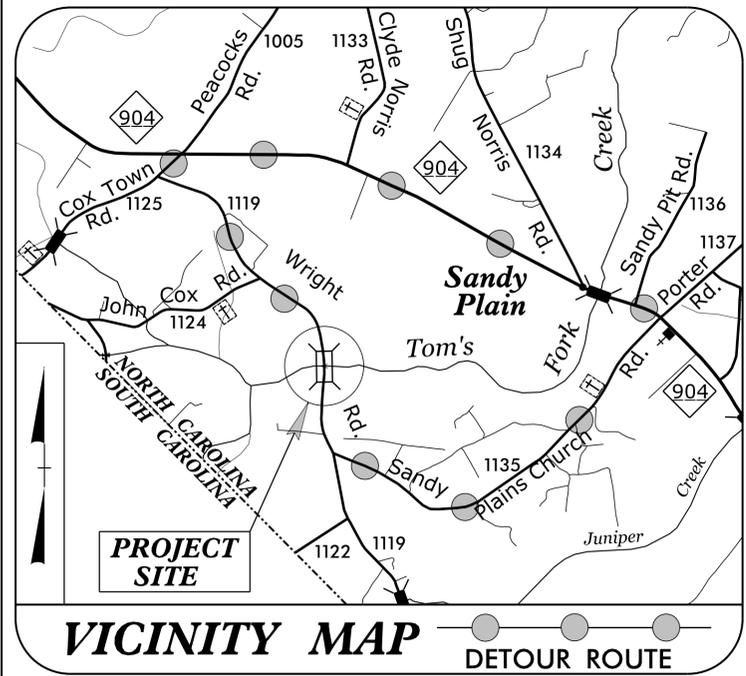
LOCATION: BRIDGE No. 85 ON SR 1119 (WRIGHT ROAD)
OVER TOM'S FORK CREEK

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

WETLAND AND SURFACE WATER IMPACTS PERMIT



TIP PROJECT: B-4475



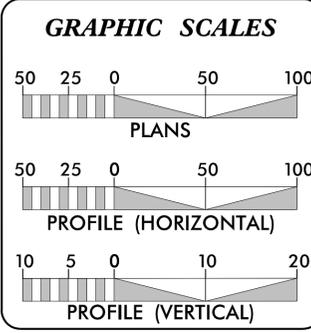
THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

CLEARING ON THIS PROJECT SHALL BE PERFORMED
TO THE LIMITS ESTABLISHED BY METHOD II.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

4/9/2013 B4475_Hyd_prm_wet_TSH.dgn User: jdalton

CONTRACT:



DESIGN DATA

ADT 2012 =	800
ADT 2033 =	1390
DHV =	14 %
D =	65 %
T =	3 % *
V =	60 MPH
* (TTST 1% + DUAL 2%)	
FUNC CLASS =	LOCAL
SUB-REGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4475 =	0.043 MI
LENGTH STRUCTURE TIP PROJECT B-4475 =	0.017 MI
TOTAL LENGTH TIP PROJECT B-4475 =	0.060 MI

Prepared In the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

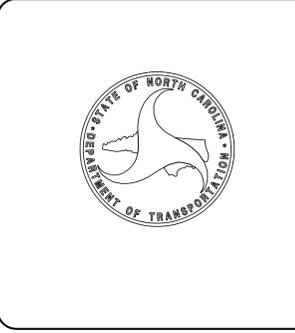
2012 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE: SEPTEMBER 26, 2012	REKHA PATEL, PE PROJECT ENGINEER
LETTING DATE: FEBRUARY 18, 2014	BRIAN P. ROBINSON PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

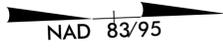
ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



PROJECT REFERENCE NO.	SHEET NO.
B-4475	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

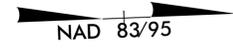
PERMIT DRAWING
SHEET 2 OF 7



- HC HC** DENOTES HAND CLEARING
- F F** DENOTES FILL IN WETLAND
- HC HC** DENOTES HAND CLEARING
-

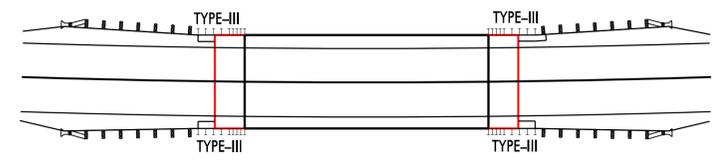
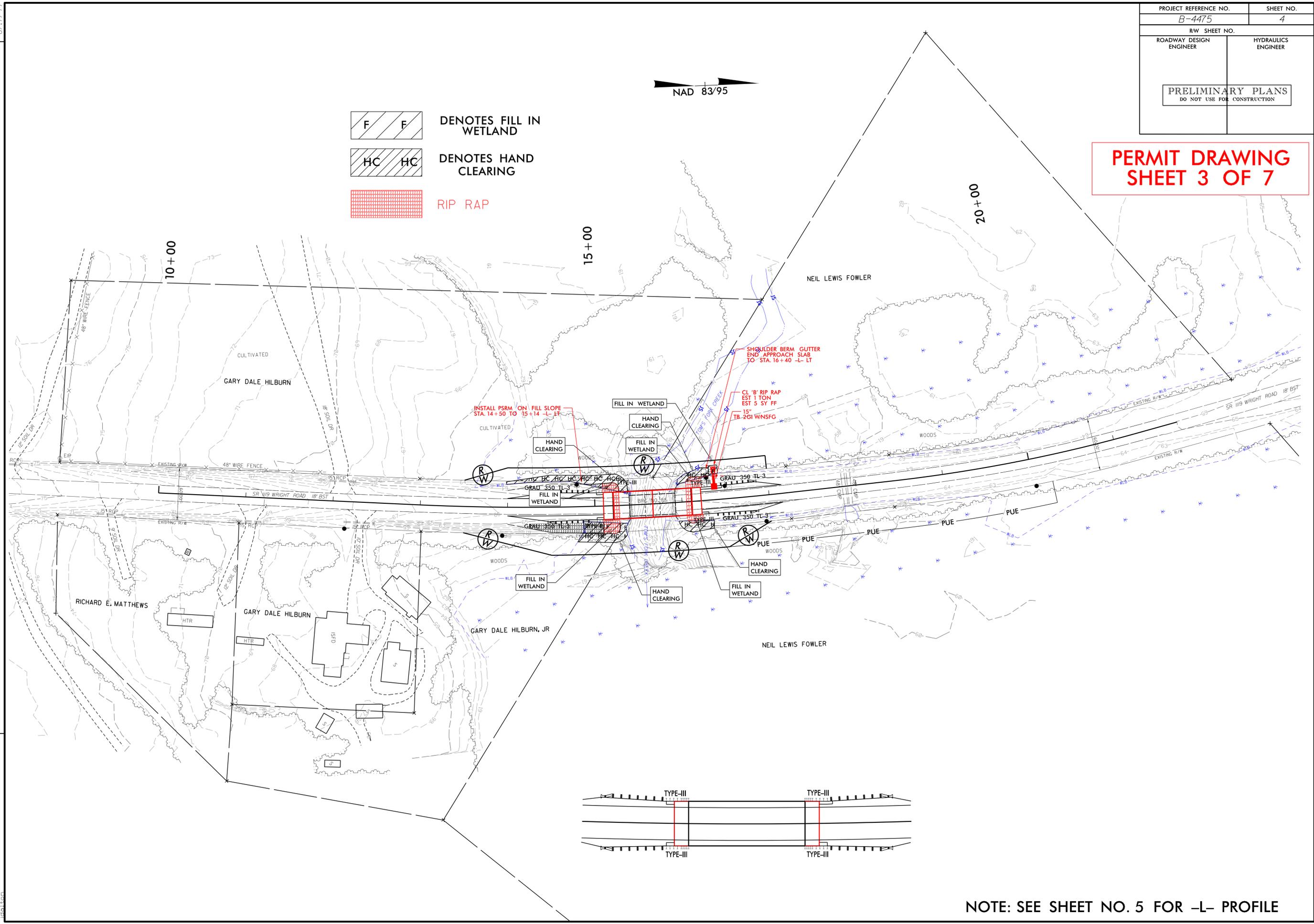
PROJECT REFERENCE NO. B-4475	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

**PERMIT DRAWING
SHEET 3 OF 7**



- F F
 DENOTES FILL IN WETLAND
- HC HC
 DENOTES HAND CLEARING
- [Red Grid Pattern]
 RIP RAP

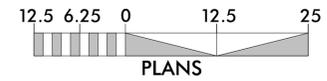
REVISIONS
 3-20-13 R/W REVISION: CHANGED PARCEL NUMBER ON PARCEL 2 TO 2A AND 2B.
 REMOVED PUE ON PARCEL 2A AND 2B AND ELIMINATED A CLAIM ON PARCEL 2A (GARY HILBURN).
 County: Design\B4475\Hydraulics\PERMITS\Environmental\Drawings\B4475_Hyd_prm_wet_psh_04.dgn



NOTE: SEE SHEET NO. 5 FOR -L- PROFILE

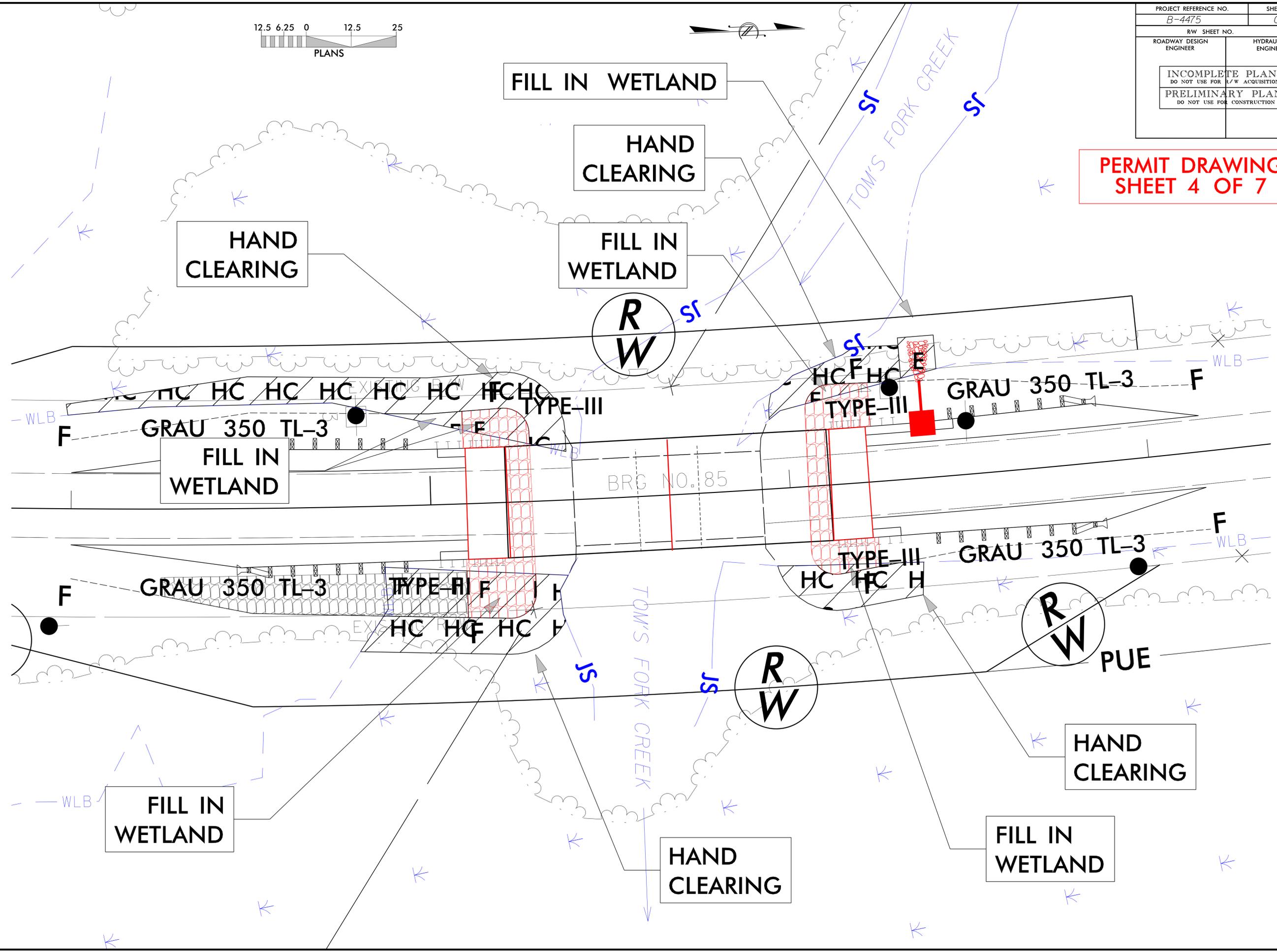
8/17/99
4/19/2013
L:\Projects\1042\11122 - B-4475 - Columbus County\Design\B4475\Hydraulics\PERMITS\Environmental\Drawings\B4475_Hyd_prm_wet_psh_04a.dgn

REVISIONS



PROJECT REFERENCE NO. B-4475	SHEET NO. 04A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

**PERMIT DRAWING
SHEET 4 OF 7**



FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

R
W

R
W

R
W

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

TYPE-III

TYPE-III

TYPE-III

TYPE-III

HC HC HC

HC HC H

HC F HC E

HC HC HC HC HC HC HC HC HC HC

FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

R
W

R
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R
W

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

TYPE-III

TYPE-III

TYPE-III

TYPE-III

HC HC HC

HC HC H

HC F HC E

HC HC HC HC HC HC HC HC HC HC

FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

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HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

TYPE-III

TYPE-III

TYPE-III

TYPE-III

HC HC HC

HC HC H

HC F HC E

HC HC HC HC HC HC HC HC HC HC

FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

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HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

TYPE-III

TYPE-III

TYPE-III

TYPE-III

HC HC HC

HC HC H

HC F HC E

HC HC HC HC HC HC HC HC HC HC

FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

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FILL IN WETLAND

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HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

TYPE-III

TYPE-III

TYPE-III

TYPE-III

HC HC HC

HC HC H

HC F HC E

HC HC HC HC HC HC HC HC HC HC

FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

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HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

TYPE-III

TYPE-III

TYPE-III

TYPE-III

HC HC HC

HC HC H

HC F HC E

HC HC HC HC HC HC HC HC HC HC

FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

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HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

TYPE-III

TYPE-III

TYPE-III

TYPE-III

HC HC HC

HC HC H

HC F HC E

HC HC HC HC HC HC HC HC HC HC

FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

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HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

TYPE-III

TYPE-III

TYPE-III

TYPE-III

HC HC HC

HC HC H

HC F HC E

HC HC HC HC HC HC HC HC HC HC

FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

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HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

TYPE-III

TYPE-III

TYPE-III

TYPE-III

HC HC HC

HC HC H

HC F HC E

HC HC HC HC HC HC HC HC HC HC

FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

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HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

TYPE-III

TYPE-III

TYPE-III

TYPE-III

HC HC HC

HC HC H

HC F HC E

HC HC HC HC HC HC HC HC HC HC

FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

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HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

TYPE-III

TYPE-III

TYPE-III

TYPE-III

HC HC HC

HC HC H

HC F HC E

HC HC HC HC HC HC HC HC HC HC

FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

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HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

GRAU 350 TL-3

TYPE-III

TYPE-III

TYPE-III

TYPE-III

HC HC HC

HC HC H

HC F HC E

HC HC HC HC HC HC HC HC HC HC

FILL IN WETLAND

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

HAND CLEARING

FILL IN WETLAND

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HAND CLEARING

FILL IN WETLAND

HAND CLEARING

5/14/99

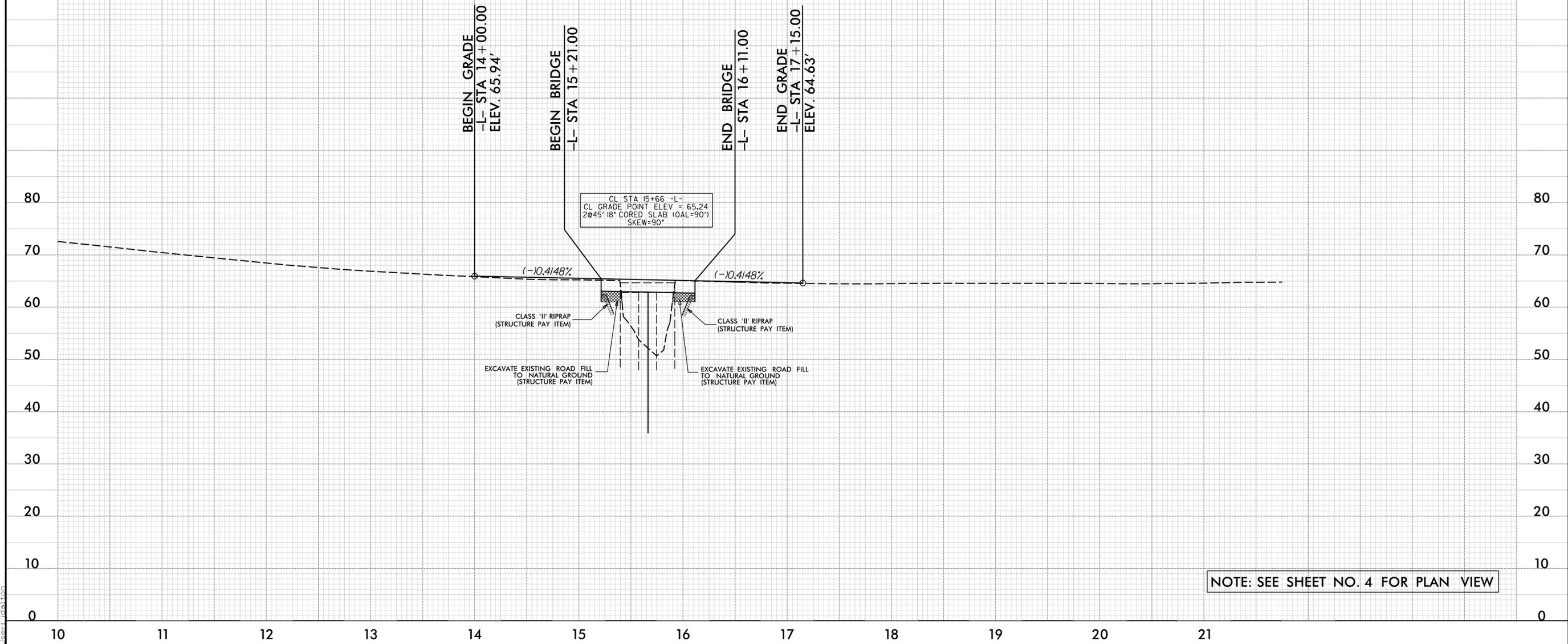
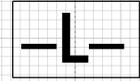
PROJECT REFERENCE NO. B-4475	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

**PERMIT DRAWING
SHEET 5 OF 7**

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 720	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 62.0	FT
BASE DISCHARGE	= 1100	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 62.8	FT
OVERTOPPING DISCHARGE	= +1560	CFS
OVERTOPPING FREQUENCY	= +500	YRS
OVERTOPPING ELEVATION	= 64.4	FT

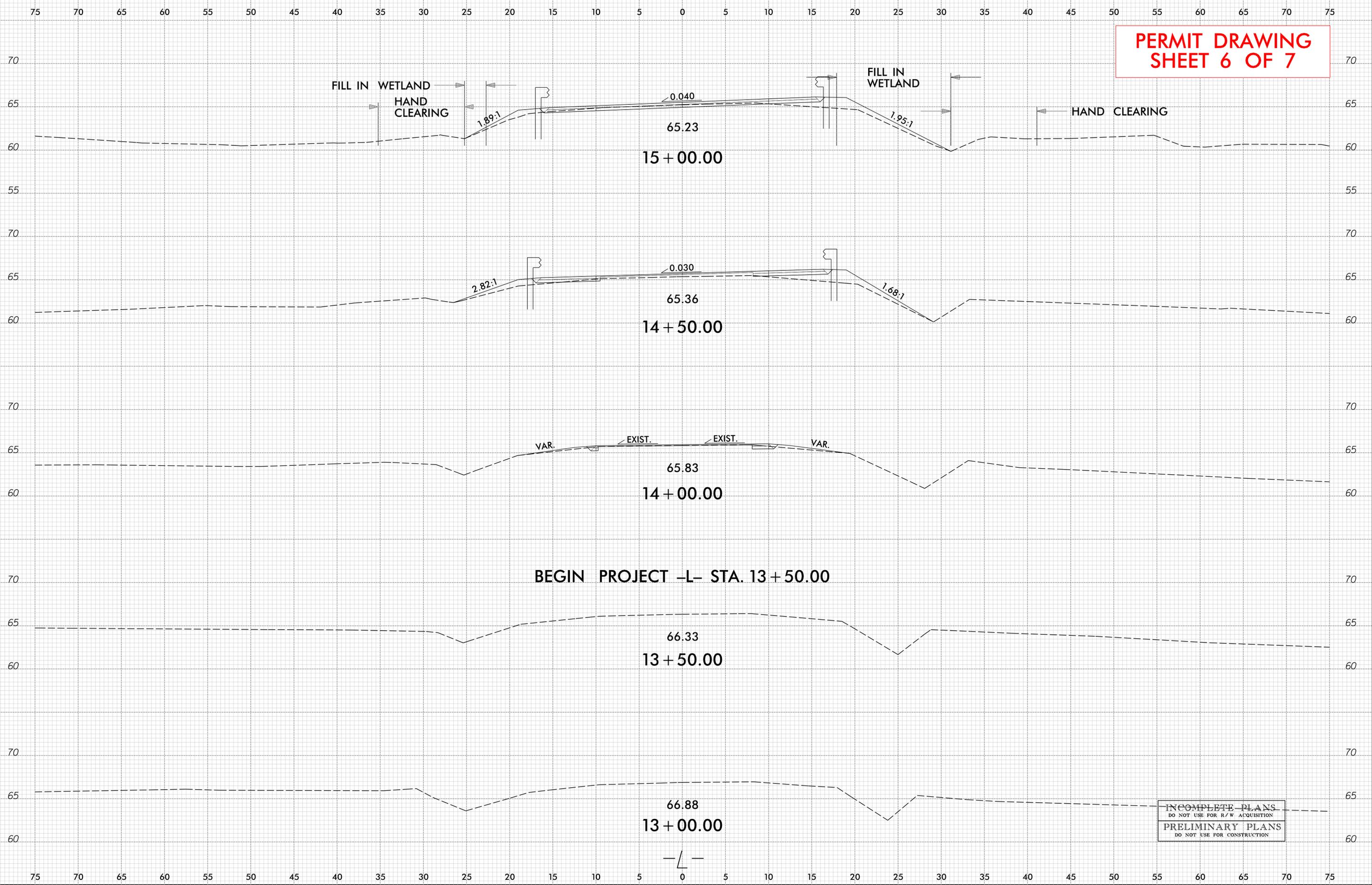
BM#1
RR SPIKE IN BASE OF 20" PINE TREE
ELEV = 70.49'
-BL- STA. 6+10.73 36.3' RIGHT
-L- STA. 11+50.46 49.02' RIGHT



NOTE: SEE SHEET NO. 4 FOR PLAN VIEW

4/19/2015 14:45:53 Hyd_perm_wet_psh_05.dgn User: jld

8/23/99



**PERMIT DRAWING
SHEET 6 OF 7**

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

4/19/2013
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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)
	14+00 to 17+15 -L-	Fill	0.02				0.06					
TOTALS:			0.02				0.06					

* NOTE: 0.01 Acre of Temporary Fill in Wetlands will be required in the Hand Clearing areas for erosion control measures.

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

 COLUMBUS COUNTY
 WBS - 38380.1.1 (B-4475)

SHEET 7 OF 7 4/19/2013