



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

November 6, 2009

U. S. Army Corps of Engineers
Regulatory Field Office
Post Office Box 1000
Washington, NC 27889-1000

ATTN: Mr. Tom Steffens
NCDOT Coordinator

Dear Sir,

Subject: **Application for Section 404 Nationwide Permit 23, Section 401 Water Quality Certification, and Neuse Riparian Buffer Authorization** for the proposed replacement of Bridge No. 79 over Gum Swamp Creek on SR 1544 in Lenoir County. Federal Aid Project No. BRZ-1544(3), Debit \$240 from WBS Element 33776.1.1, **TIP No. B-4570.**

Please find enclosed the PCN form, permit drawings, and half-size plan sheets for the above referenced project. A Categorical Exclusion (CE) was completed for this project on February 4, 2008, and distributed shortly thereafter. Additional copies are available upon request. The North Carolina Department of Transportation (NCDOT) proposes to replace existing Bridge No. 79 over Gum Swamp Creek on SR 1544 in Lenoir County. The project involves replacement of the existing 61-foot structure with a 70-foot long bridge at approximately the same location. The proposed bridge will be a single span cored slab structure. There will be 7 feet of permanent impacts to Gum Swamp Creek and 0.09 acre of permanent impacts to its adjacent wetlands. There will be 4,798 total square feet of impacts to Neuse Riparian Buffers, with 3,929 square feet of impacts in Zone 1 and 869 square feet of impacts in Zone 2. Traffic will be detoured off-site, on surrounding roads, during construction.

Please note that this project is an accelerated bridge project on NCDOT's Maintenance of Effort list. The NCDOT Administration has deemed these projects highest priority. This project calls for a letting date of March 16, 2010 and a review date of January 26, 2010; however, the let date may advance as additional funding becomes available.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
1598 MAIL SERVICE CENTER

TELEPHONE: 919-431-2000
FAX: 919-431-2002
WEBSITE: WWW.NCDOT.ORG

LOCATION:
4701 ATLANTIC AVENUE
SUITE 116
RAI FIGH NC 27604

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 a Nationwide Permit 23 (72 CFR; 11092-11198, March 12, 2007).

Section 401 Water Quality Certification: We anticipate 401 General Certification number 3701 will apply to this project. All general conditions of the Water Quality Certifications will be met. In accordance with 15A NCAC 2H, Section .0500(a), we are providing five copies of this application to the NCDWQ for their approval.

Neuse Riparian Buffer Authorization: NCDOT is requesting a Neuse Riparian Buffer Authorization from the NCDWQ.

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

Thank you for your time and assistance with this project. Please contact Veronica Barnes at vabarnes@ncdot.gov or (919) 431-6758 if you have any questions or need additional information.

Sincerely,



 Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA

W/attachment

Mr. Brian Wrenn, NCDWQ (5 Copies)

W/o attachment (see website for attachments)

Dr. David Chang, P.E., Hydraulics

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

Mr. Victor Barbour, P.E., Project Services Unit

Mr. Mark Staley, Roadside Environmental

Mr. C. E. Lassiter, P.E., Div. 2 Engineer

Mr. Jay Johnson, Div. 2 Environmental Officer

Mr. Scott McLendon, USACE, Wilmington

Mr. Gary Jordan, USFWS

Mr. Travis Wilson, NCWRC

Mr. Ron Sechler, NMFS

Ms. Anne Deaton, NCDMF

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

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

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

Ms. Dionne Brown, PDEA



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: 23	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 checked="" 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 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 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:	Replace Bridge No. 79 over Gum Swamp Creek on SR 1544.
2b. County:	Lenoir
2c. Nearest municipality / town:	Falling Creek
2d. Subdivision name:	not applicable
2e. NCDOT only, T.I.P. or state project no:	B-4570

3. Owner Information

3a. Name(s) on Recorded Deed:	North Carolina Department of Transportation
3b. Deed Book and Page No.	not applicable
3c. Responsible Party (for LLC if applicable):	not applicable
3d. Street address:	4701 Atlantic Ave, Suite 116
3e. City, state, zip:	Raleigh, NC 27604
3f. Telephone no.:	(919) 431-6758
3g. Fax no.:	(919) 431-2002
3h. Email address:	vabarnes@ncdot.gov

4. Applicant Information (if different from owner)	
4a. Applicant is:	<input type="checkbox"/> Agent <input type="checkbox"/> Other, specify:
4b. Name:	not applicable
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:	not applicable
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):	N/A
1b. Site coordinates (in decimal degrees):	Latitude: 35.300619 (DD.DDDDDD) Longitude: - 77.696733 (-DD.DDDDDD)
1c. Property size:	0.78 acres
2. Surface Waters	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Gum Swamp Creek
2b. Water Quality Classification of nearest receiving water:	C, Sw, NSW
2c. River basin:	Neuse
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 on the site include Oak-Pine forest, Hardwood Swamp forest and general land use is cropland and pasture.	
3b. List the total estimated acreage of all existing wetlands on the property: 0.09	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 544	
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 61-foot bridge with a 70-foot, 1-span bridge on the existing alignment with an off-site detour. 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: 200610721	<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 checked="" type="checkbox"/> Final
4c. If yes, who delineated the jurisdictional areas? Name (if known): Lauren Cobb	Agency/Consultant Company: Environmental Services, Inc Other:
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation. May 9, 2006	
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. N/A	
6. Future Project Plans	
6a. Is this a phased project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6b. If yes, explain. N/A	

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 checked="" type="checkbox"/> Streams - tributaries		<input checked="" 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)	
W1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Permanent fill	Riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.04	
W2 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Mechanized clearing	Riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.05	
W3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
W4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
W5 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
W6 <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					0.09 Permanent 0.0 Temporary	
2h. Comments:						
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)
S1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Permanent fill	Gum Swamp	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	70	7
S2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
S3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
S4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
S5 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
S6 <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						7 Perm 0 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				
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				

4f. Total open water impacts

4g. Comments: N/A

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: N/A

5h. Is a dam high hazard permit required?	<input type="checkbox"/> Yes <input checked="" 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 checked="" 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 checked="" type="checkbox"/> P <input type="checkbox"/> T	Bridge	Gum Swamp	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	353	0
B2 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Road way	Gum Swamp	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3576	869
B3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No		
6h. Total buffer impacts				3929	869

6i. Comments: N/A

D. Impact Justification and Mitigation		
1. Avoidance and Minimization		
1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project. Measures taken during the design process to avoid or minimize impacts include the use of NCDOT Best Management Practices, increasing the length of the proposed bridge, and reducing the number of berms in the water		
1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. Construction techniques used to minimize impacts include spanning the stream to avoid needing temporary in stream access.		
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 Due to minimal permanent impacts NCDOT does not propose mitigation for this project.	
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:	0 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):	N/A square feet	
4e. Riparian wetland mitigation requested:	acres	
4f. Non-riparian wetland mitigation requested:	N/A acres	
4g. Coastal (tidal) wetland mitigation requested:	N/A acres	
4h. Comments: N/A		
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	N/A		3 (2 for Catawba)	
Zone 2	N/A		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).
N/A

6h. Comments: N/A

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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1b. If yes, then is a diffuse flow plan included? If no, explain why. Comments: see attached permit drawings	<input checked="" 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 attachment 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 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 type="checkbox"/> No
5. DWQ 401 Unit Stormwater Review	
5a. Does the Stormwater Management Plan meet the appropriate requirements?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5b. Have all of the 401 Unit submittal requirements been met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
5c. If yes, indicate the USFWS Field Office you have contacted.	<input checked="" 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? USFWS list of Threatened and Endangered Species for Lenior County (January 31, 2008)		
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? Index of Waterbodies with Essential Fish Habitat		
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?		
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 will coordinate with FEMA		
8c. What source(s) did you use to make the floodplain determination? FEMA maps		
Gregory J. Thompson, PhD Applicant/Agent's Printed Name	 Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	11-6-09 Date

U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT

COPY

Action Id. 200610721

County: Lenoir

U.S.G.S. Quad: Falling Creek

NOTIFICATION OF JURISDICTIONAL DETERMINATION

Property Owner/Agent: North Carolina Department of Transportation

Address: Division 2 Environmental Officer

Post Office Box 1587

Greenville, NC 27835

Telephone No.: 252-830-3490

Property description:

Size (acres) corridor

Nearest Town Kinston

Nearest Waterway Gum Swamp Creek

River Basin Neuse

USGS HUC 03020202

Coordinates N 35.3006 W 77.6970

Location description Bridge no. 110 on NCSR 1544 over Gum Swamp Creek, west of Kinston, Lenoir County, North Carolina. TIP # B-4570.

Indicate Which of the Following Apply:

A. Preliminary Determination

- Based on preliminary information, there may be wetlands on the above described property. We strongly suggest you have this property inspected to determine the extent of Department of the Army (DA) jurisdiction. To be considered final, a jurisdictional determination must be verified by the Corps. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331).

B. Approved Determination

- There are Navigable Waters of the United States within the above described property subject to the permit requirements of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

- There are waters of the U.S. including wetlands on the above described project area subject to the permit requirements of Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

We strongly suggest you have the wetlands on your property delineated. Due to the size of your property and/or our present workload, the Corps may not be able to accomplish this wetland delineation in a timely manner. For a more timely delineation, you may wish to obtain a consultant. To be considered final, any delineation must be verified by the Corps.

The waters of the U.S. including wetland on your project area have been delineated and the delineation has been verified by the Corps. We strongly suggest you have this delineation surveyed. Upon completion, this survey should be reviewed and verified by the Corps. Once verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, provided there is no change in the law or our published regulations, may be relied upon for a period not to exceed five years.

The wetlands have been delineated and surveyed and are accurately depicted on the plat signed by the Corps Regulatory Official identified below on _____. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

- There are no waters of the U.S., to include wetlands, present on the above described property which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

- The property is located in one of the 20 Coastal Counties subject to regulation under the Coastal Area Management Act (CAMA). You should contact the Division of Coastal Management in Washington, NC, at (252) 946-6481 to determine their requirements.

4000
Action ID: 200610721

Placement of dredged or fill material within waters of the US and/or wetlands without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). If you have any questions regarding this determination and/or the Corps regulatory program, please contact William Wescott at 252-975-1616 extension 31.

C. Basis For Determination

Areas exhibit the three parameters specified in the 1987 USACE Wetland Delineation Manual and are adjacent to Gum Swamp Creek. Gum Swamp Creek connects to Falling Creek which connects to the Neuse River.

D. Remarks

E. Appeals Information (This information applies only to approved jurisdictional determinations as indicated in B. above)

This correspondence constitutes an approved jurisdictional determination for the above described site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the South Atlantic Division, Division Office at the Following address:

Mr. Michael F. Bell, Administrative Appeal Review Officer
CESAD-ET-CO-R
U.S. Army Corps of Engineers, South Atlantic Division
60 Forsyth Street, Room 9M15
Atlanta, Georgia 30303-8801

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by 7/8/2006.

It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.

Corps Regulatory Official: William Wescott, P.W.S.

Date 05/09/2006

Expiration Date 05/09/2011

Copy furnished:

Environmental Services, Inc. -- Lauren Cobb

STORMWATER MANAGEMENT PLAN

Project: 33776.1.1
TIP No. B-4570
Lenoir County
Date: 10/27/2009

Hydraulics Project Manager: James R. Rice, P.E. (HDR),
Marshal Clawson, P.E. (NCDOT Hydraulics Unit)

ROADWAY DESCRIPTION

The project B-4570 consists of constructing a new bridge 70 feet long to replace the existing bridge #79 in Lenoir County on SR 1544 over Gum Swamp. The total project length is 0.085 miles. The project creates impacts to Gum Swamp, which is located in the Neuse River Basin. The project drainage system consists only of deck drains.

Jurisdictional Stream: Gum Swamp

ENVIRONMENTAL DESCRIPTION

The project is located within the Neuse River Basin and Lenoir County which is not a CAMA county. Gum Swamp has been classified as a jurisdictional stream and therefore riparian buffer rules apply. There are ponds directly up and down stream of the proposed crossing. These ponds both show up on the USGS and soils maps, so they will be protected by buffers as well.

There are numerous beaver impoundments in the area which have backed up water. On the North West corner, the surface water comes all the way to the toe of the existing roadway fill slope and roughly follows the tree line heading North away from the project area. A top of bank was estimated in the field and plotted on the plans. This estimated top of bank is what the Buffer Zones were based on. Since the surface water comes all the way to the toe of existing fill slope on the North West corner, there will not be any buffer impacts to this quadrant.

In order to maintain existing drainage patterns, a lateral ditch was required on the South West corner. This ditch ties back into the existing drainage ditch before reaching the buffer for Gum Swamp.

There are wetland areas that will be impacted by the proposed project. Wetland impacts have been reduced to a minimum by keeping roadway fill slopes at 3:1. At the bridge, a single span bridge will be utilized to eliminate the need for piers in the channel. The only permanent impacts to the Gum Swamp surface waters will be a small impact due to the spillthrough rip rap and a small area due to roadway fill. There will be a small temporary surface water impact due to the removal of the existing pier.

The existing structure has deck drains that discharge directly into the surface water. Deck drains have been added to the proposed structure. The deck drains on the proposed structure will not discharge directly into the surface water, but they will discharge on the spill-through rip rap under the bridge. Deck drains were required due to the length of the structure, the structure profile's low gradient, and width of shoulder.

BEST MANAGEMENT PRACTICES AND MAJOR STRUCTURES

The primary goal of Best Management Practices (BMPs) is to prevent degradation of the states surface waters by the location, construction and operation of the highway system. The BMPs are activities, practices and procedures taken to prevent or reduce stormwater pollution and should be used whenever possible.

The BMP measures used on this project to reduce stormwater impacts are:

- Bridge Deck Drains have been placed so they do not directly discharge into Gum Swamp.

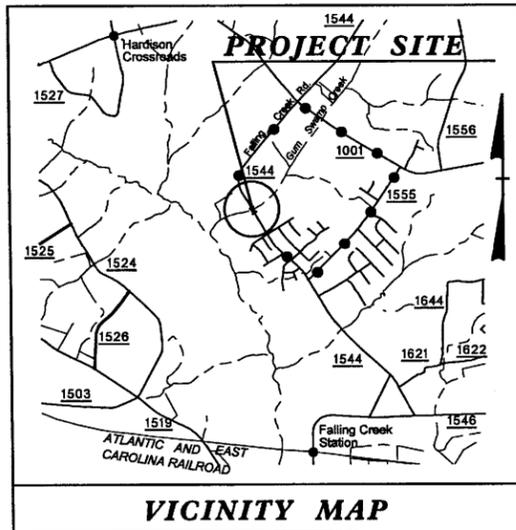
09/08/99

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

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4570	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33776.1.1	BRZ-1544(3)	PE	

TIP PROJECT: B-4570

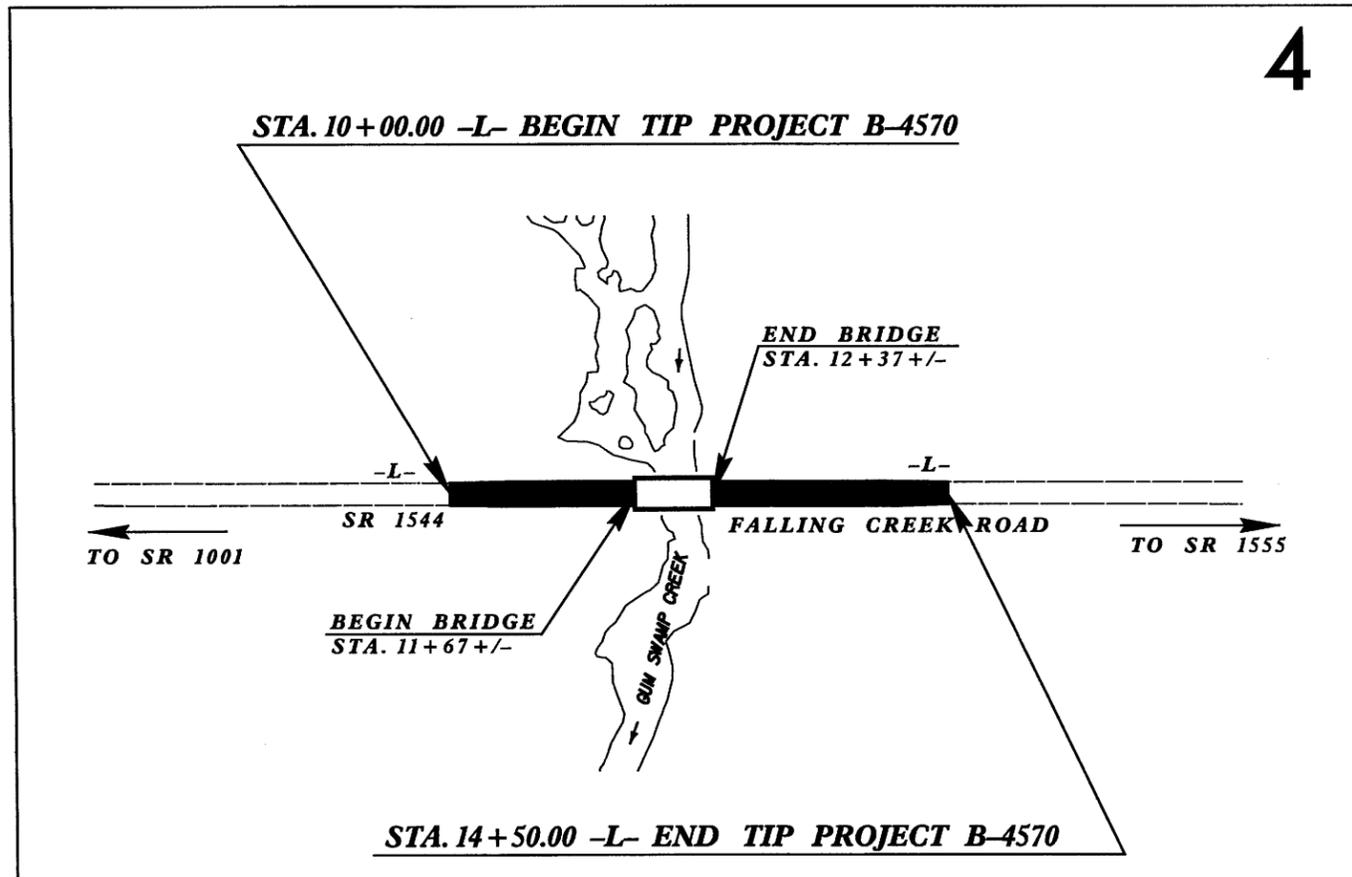


DETOUR ROUTE

LENOIR COUNTY

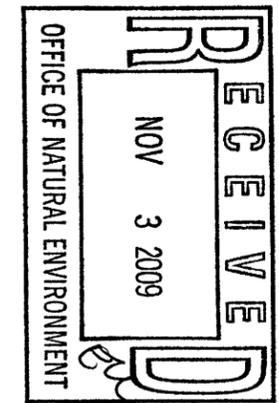
LOCATION: BRIDGE NO. 79 OVER GUM SWAMP CREEK
ON SR 1544 (FALLING CREEK ROAD)

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



NOTE: THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

NOTE: CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD _____.

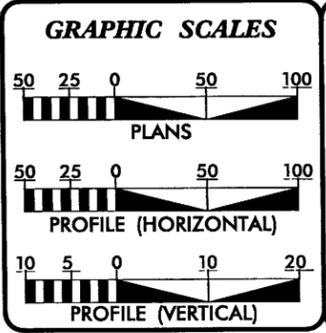


B-4570
BUFFER IMPACTS

PERMIT SHEET
6 OF 13

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

CONTRACT:



DESIGN DATA

ADT 2011	=	2222
ADT 2031	=	3778
DHV	=	10 %
D	=	60 %
T	=	3 % *
V	=	60 MPH
* TTST 1%		DUAL 2%
Func. Class.	=	Rural Local

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4570	=	.072 MILES
LENGTH OF STRUCTURE TIP PROJECT B-4570	=	.013 MILES
TOTAL LENGTH OF TIP PROJECT B-4570	=	.085 MILES

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

2006 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE: JANUARY 15, 2010	BRENDA MOORE, P.E. PROJECT ENGINEER
LETTING DATE: JANUARY 18, 2011	JOYCE DREW PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

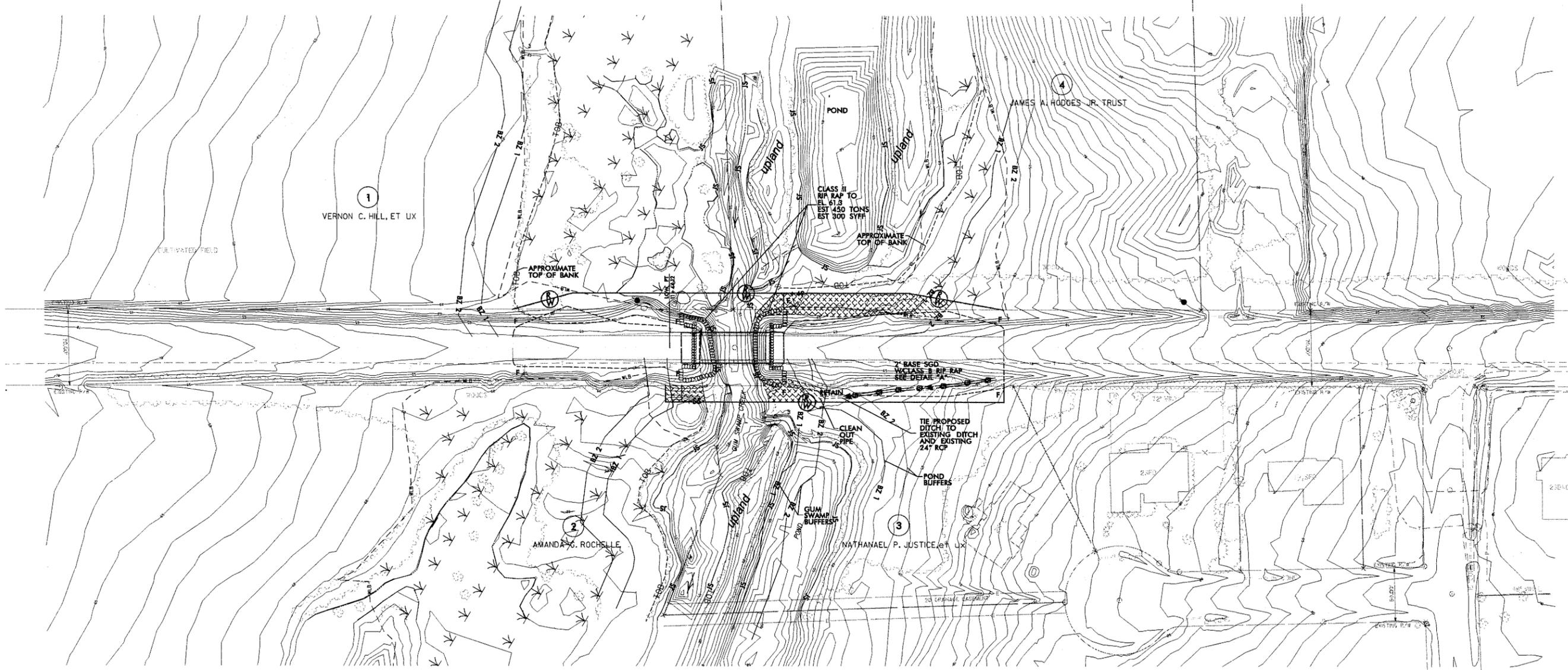
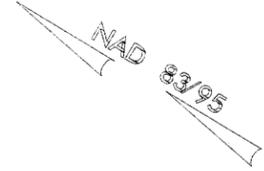
STATE HIGHWAY DESIGN ENGINEER

10/22/2009 2:48:29 PM R:\ZB\Bridges\B4570\Hydraulics\Permits\Environmental\Drawings\B4570_hyd_prm_buf_tsh.dgn

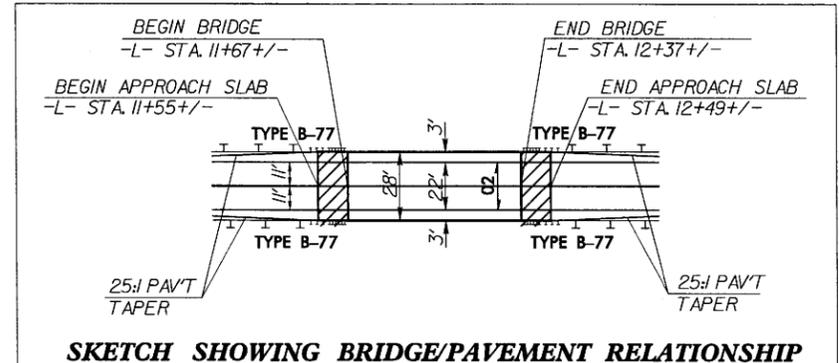
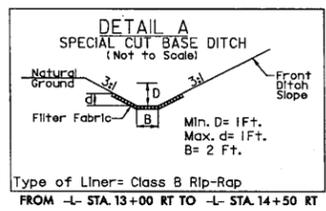
PROJECT REFERENCE NO. B-4570	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

LEGEND

- ALLOWABLE IMPACTS ZONE 1
- ALLOWABLE IMPACTS ZONE 2



REVISIONS



NOTE:
BUFFER IMPACTS ARE TAKEN FROM EXISTING TOE OF FILL TO PROPOSED ROW LINE.

FOR -L- PROFILE SEE SHEET NO. 5

8/17/09
 11/2/2009
 4:11:10 PM
 C:\Users\jacob\Documents\Projects\Permits_Environment\B-4570_Hydro\B-4570_Hydro.dwg
 11/2/2009 4:11:10 PM

STRUCTURE HYDRAULIC DATA

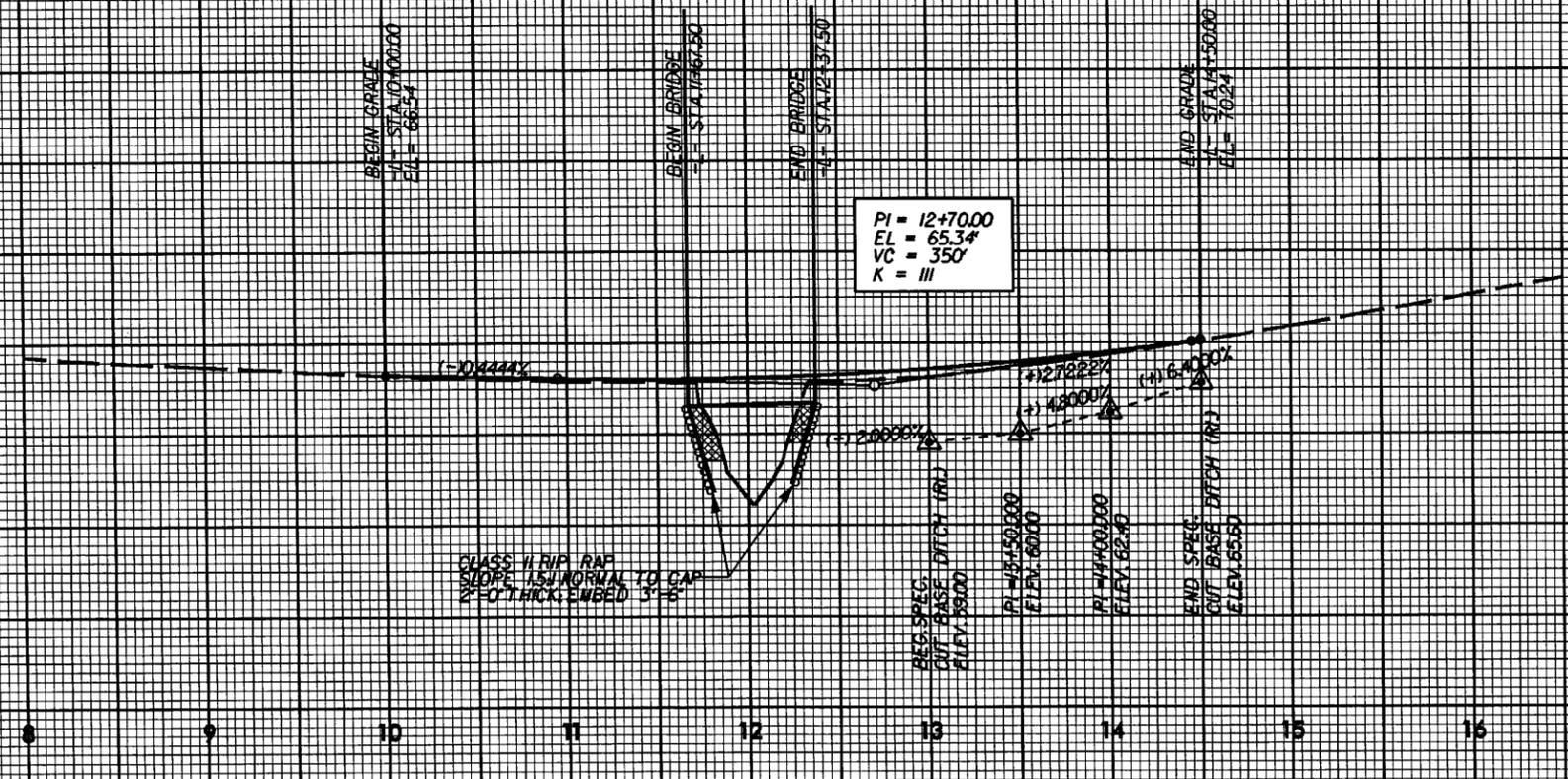
DESIGN DISCHARGE = 1020 CFS
 DESIGN FREQUENCY = 25 YRS
 DESIGN HW ELEVATION = 59.2 FT
 BASE DISCHARGE = 1600 CFS
 BASE FREQUENCY = 100 YRS
 BASE HW ELEVATION = 60.3 FT
 OVERTOPPING DISCHARGE = 6050 CFS
 OVERTOPPING FREQUENCY = 500+ YRS
 OVERTOPPING ELEVATION = 66.0 FT

BM#1 RR SPIKE IN 18" PINE
 149.23' LT OF -L- STA.13+42.20
 ELEV. 63.76'

-L-

@ 12+02.50 -L-
 SINGLE SPAN 24' CORED SLAB @ 70'
 SKEW = 90 EL = 66.16'

PI = 12+70.00
 EL = 65.34'
 VC = 350'
 K = III



RIGHT DITCH - - - - -

5/14/99

PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES	SITE NO.
1	VERNON C. HILL	199 WILL BAKER RD KINSTON, NC 28504	1
2	AMANDA G. ROCHELLE	3417 WADELAND DR KINSTON, NC 28504	1
3	NATHANAEL P. JUSTICE	2831 KING WILLIAM CT KINSTON, NC 28504	1
4	JAMES A. HODGES JR. TRUST	PO BOX 1 KINSTON, NC 28502	1

NORTH CAROLINA

DIVISION OF HIGHWAYS
 LENOIR COUNTY
 PROJECT: 33776.1.1 (B-4570)
 REPLACEMENT OF BRIDGE #79
 OVER GUM SWAMP CREEK
 ON SR 1544

09/08/09

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

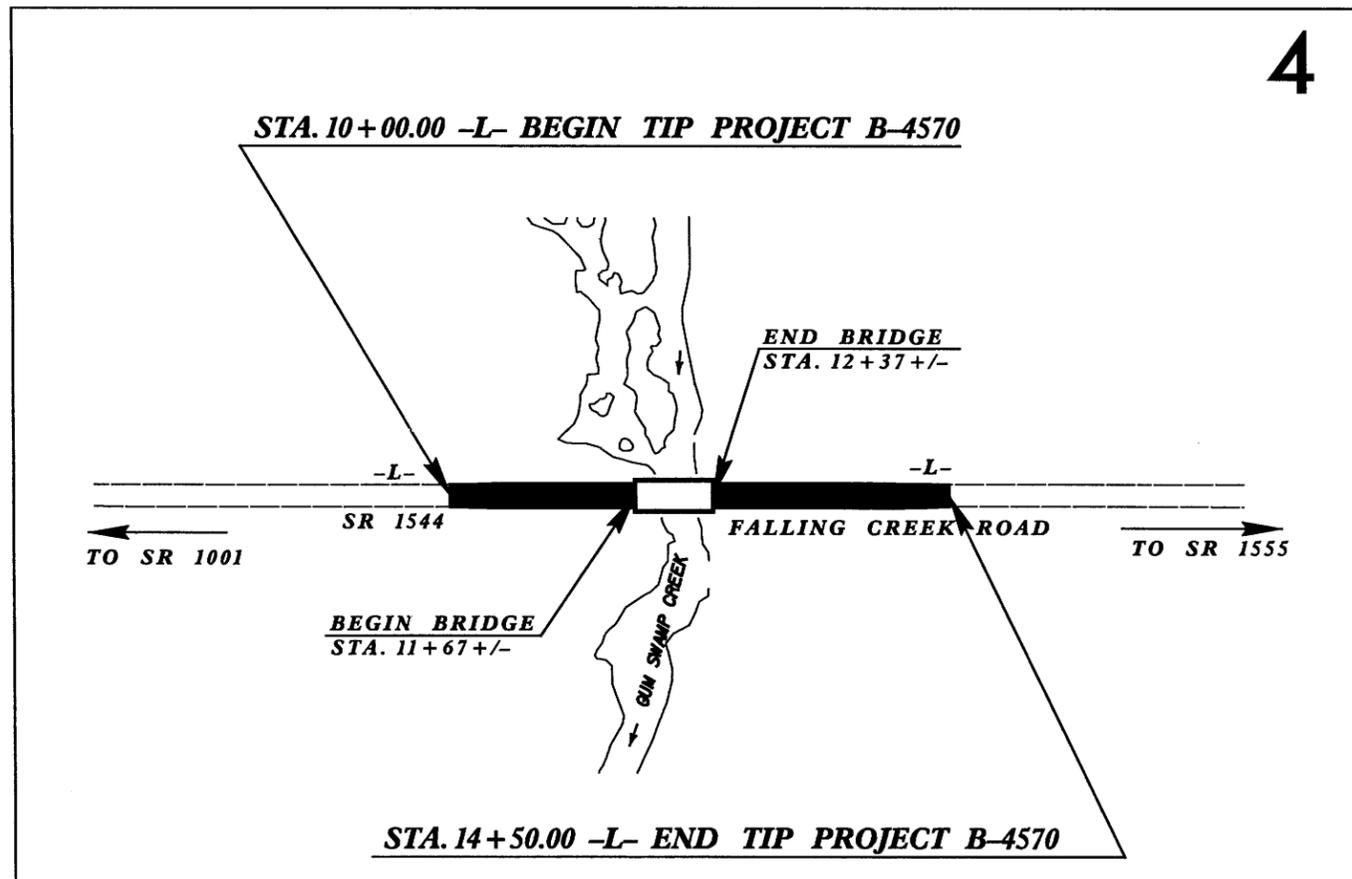
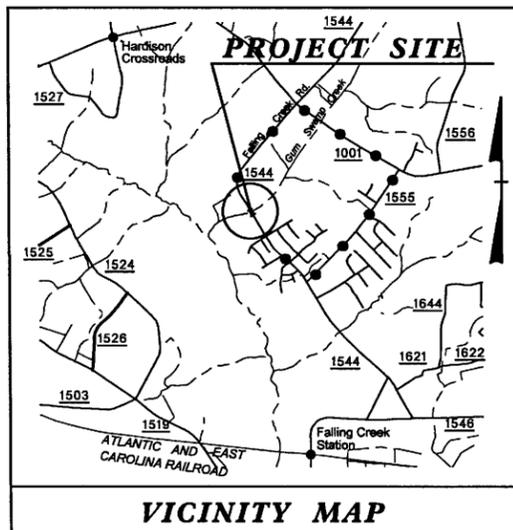
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

LENOIR COUNTY

LOCATION: BRIDGE NO. 79 OVER GUM SWAMP CREEK
ON SR 1544 (FALLING CREEK ROAD)

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4570	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33776.1.1	BRZ-1544(3)	PE	



4

B-4570 WETLAND & STREAM IMPACTS

NOTE: THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

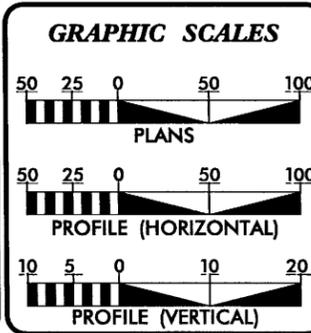
NOTE: CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD _____.

PERMIT SHEET
10 OF 13

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

CONTRACT: TIP PROJECT: B-4570

CONTRACT:



DESIGN DATA

ADT 2011	=	2222
ADT 2031	=	3778
DHV	=	10 %
D	=	60 %
T	=	3 % *
V	=	60 MPH
* TTST	1%	DUAL 2%
Func. Class.	=	Rural Local

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4570	=	.072 MILES
LENGTH OF STRUCTURE TIP PROJECT B-4570	=	.013 MILES
TOTAL LENGTH OF TIP PROJECT B-4570	=	.085 MILES

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JANUARY 15, 2010	BRENDA MOORE, P.E. PROJECT ENGINEER
LETTING DATE: JANUARY 18, 2011	JOYCE DREW PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

P.E.

ROADWAY DESIGN ENGINEER

P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

P.E.

10/22/2009 2:53:54 PM R:\781rdge\B4570\Hydraulics\Permits_Environmental\Drawings\B4570_hyd_pfm_wet_tsh.dgn

8/17/99

11/3/2009 2:44:38 PM R:\28\bridge.B4570\Hydraulics\Permits_Environmental\Drawings\B4570_brd_perm_emb_wetland_withcondon

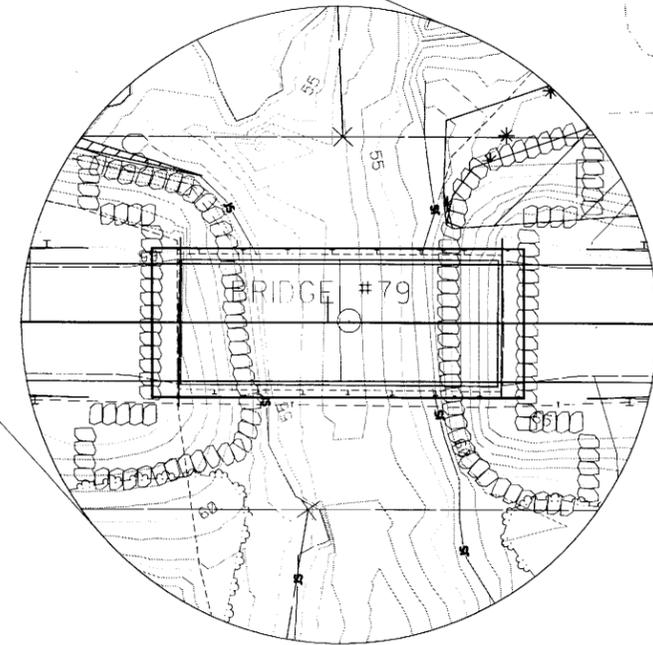
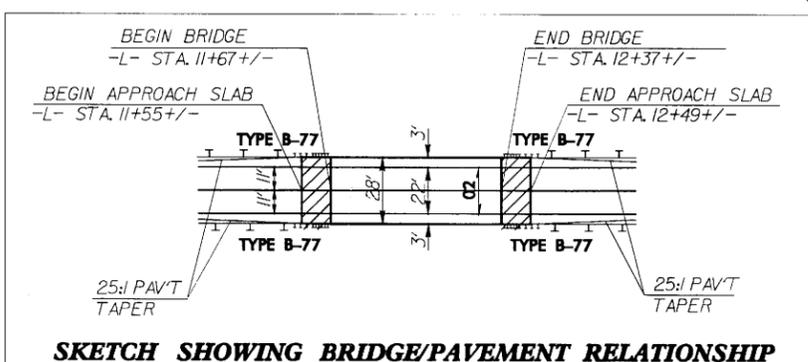
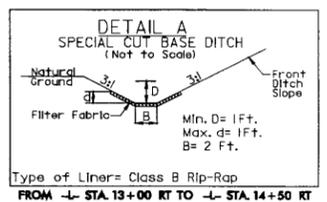
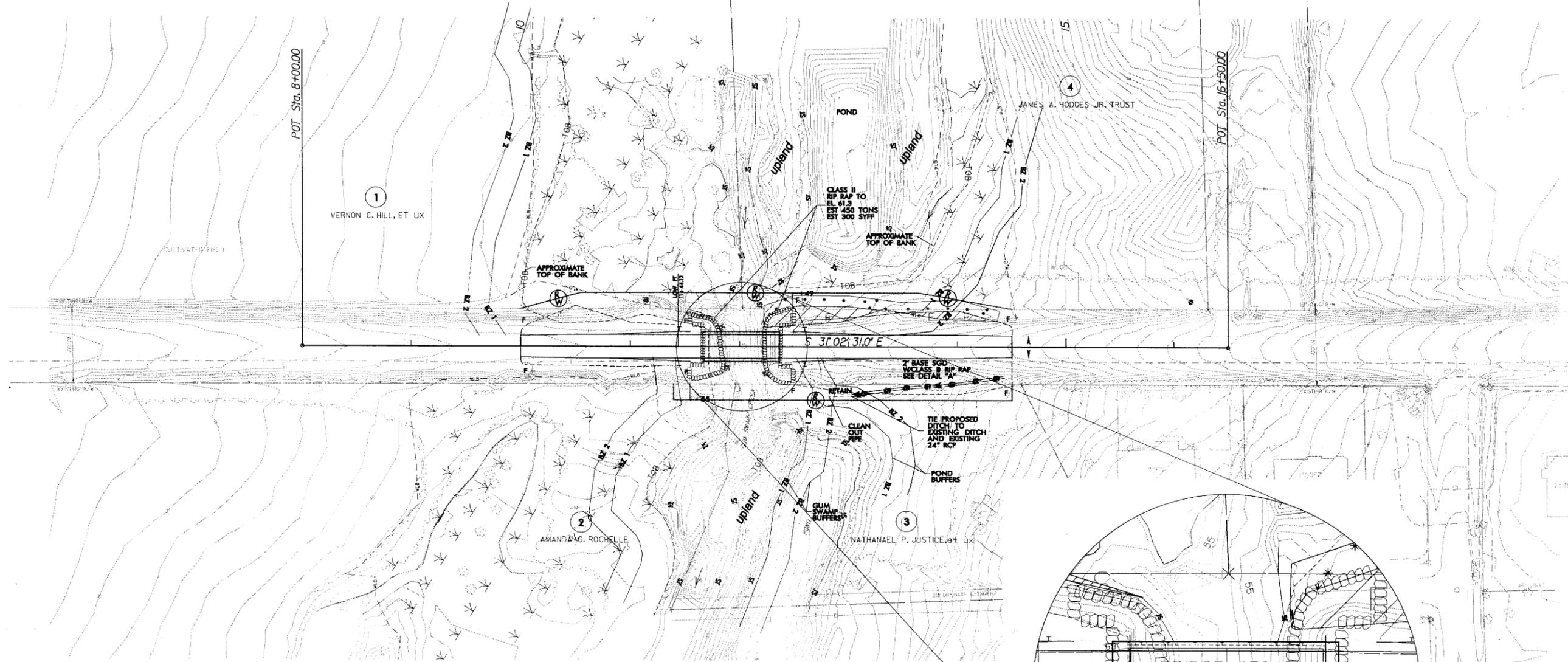
REVISIONS

LEGEND

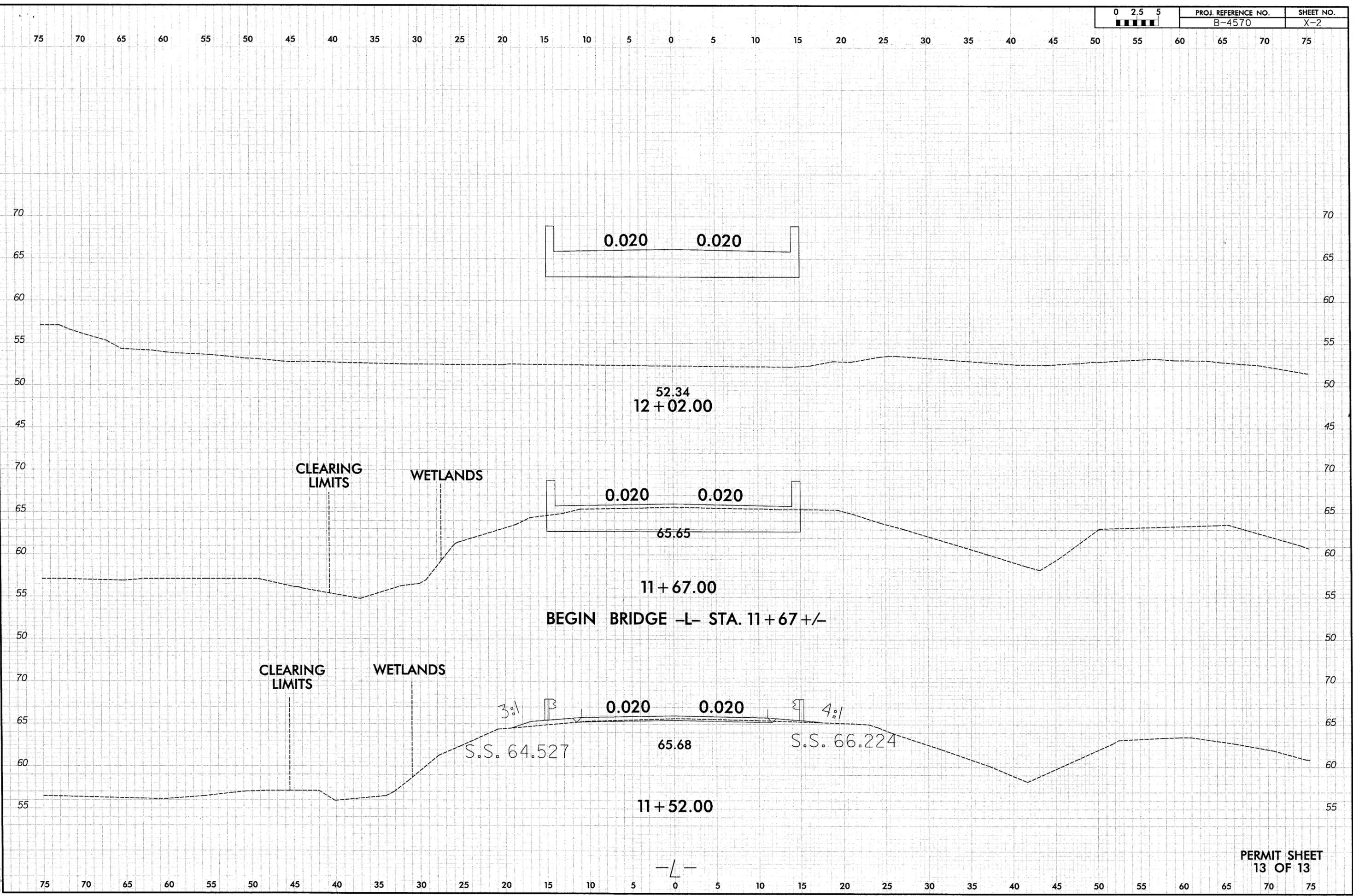
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES IMPACTS IN SURFACE WATER

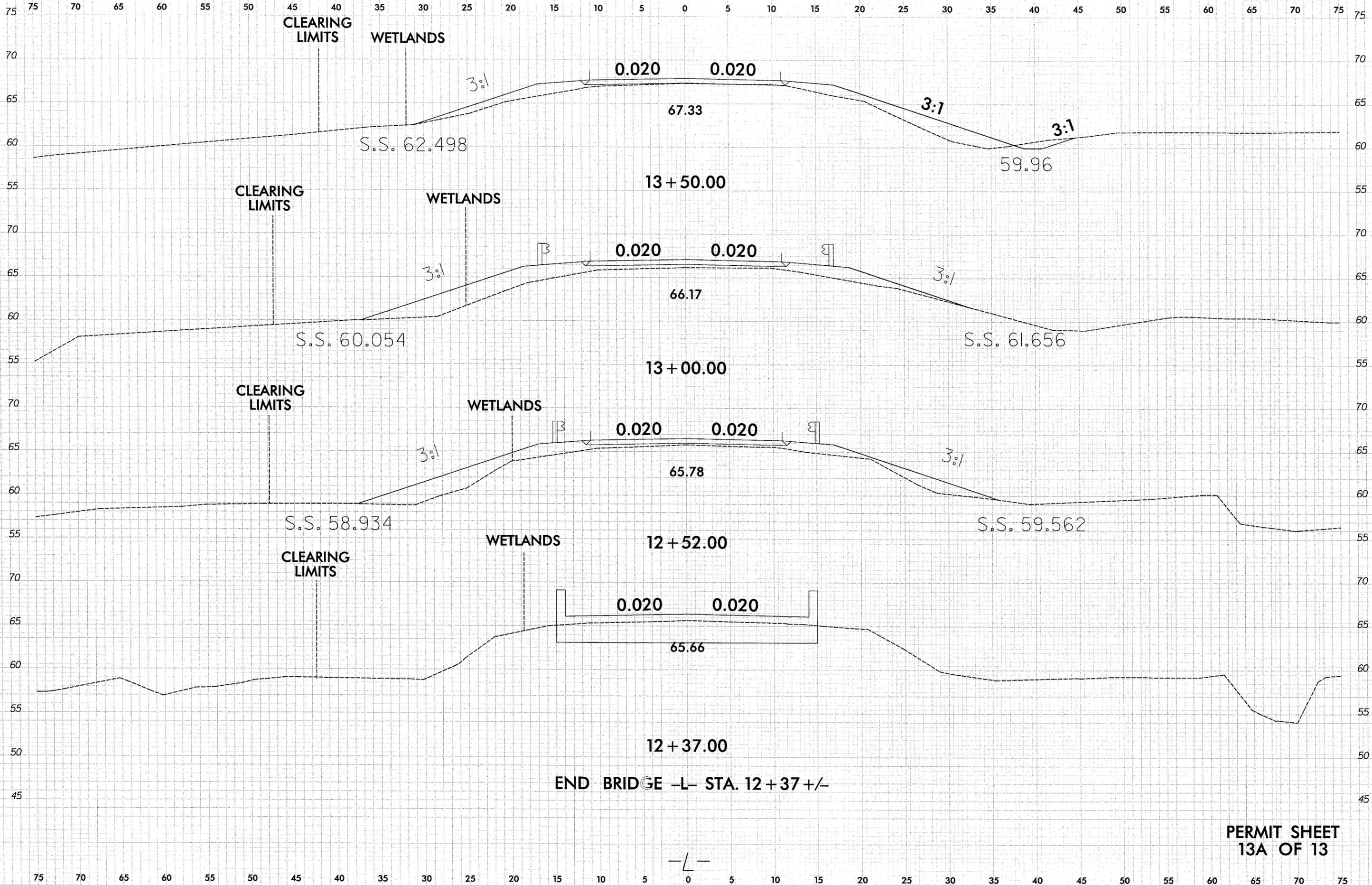


PROJECT REFERENCE NO. <i>B-4570</i>	SHEET NO. 4
HW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



10/29/2009
R:\Bridge\B4570\Hydro\Drawings\Permits\Environmental\Drawings\B4570\hyd_perm_xpl.dgn
cnjers





END BRIDGE -L- STA. 12+37+/-

10/29/2009 R:\28\bridge B4570\Hydraulics\Permits\Environmental\Drawings\B4570_hyd_perm_xpl.dgn

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4570	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33776.1.1	BRZ-1544(3)	PE	
33776.2.1	BRZ-1544(3)	R/W, UTL.	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

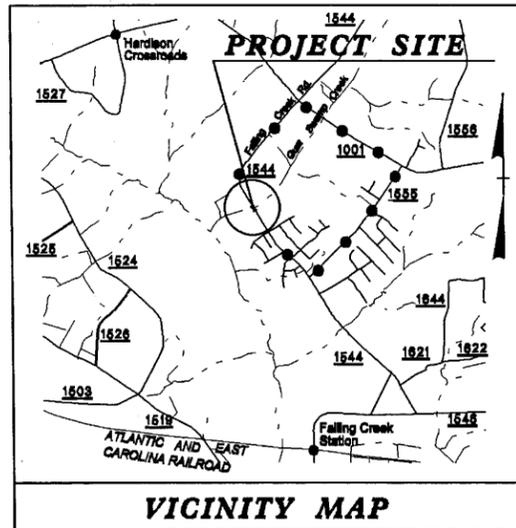
LENOIR COUNTY

LOCATION: BRIDGE NO. 79 OVER GUM SWAMP CREEK
ON SR 1544 (FALLING CREEK ROAD)

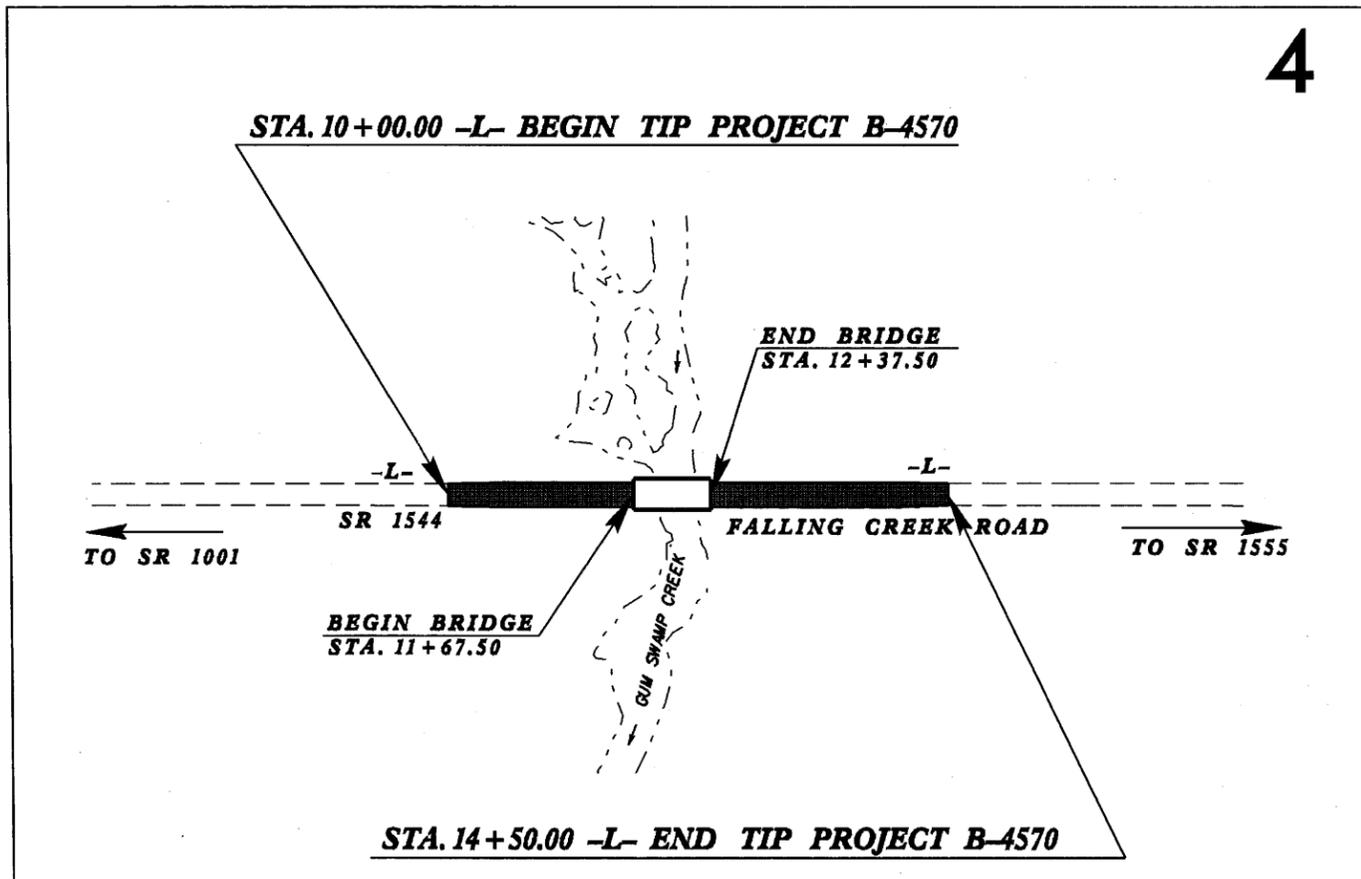
TYPE OF WORK: GRADING, DRAINAGE, PAVING, GUARDRAIL,
AND STRUCTURE



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



VICINITY MAP
DETOUR ROUTE

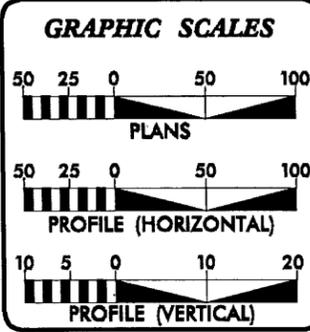


NOTE: THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

NOTE: CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

TIP PROJECT: B-4570

CONTRACT:



DESIGN DATA

ADT 2011	=	2222
ADT 2031	=	3778
DHV	=	10 %
D	=	60 %
T	=	3 % *
V	=	60 MPH
* TTST 1%		DUAL 2%
Func. Class.	=	Rural Local

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4570	=	.072 MILES
LENGTH OF STRUCTURE TIP PROJECT B-4570	=	.013 MILES
TOTAL LENGTH OF TIP PROJECT B-4570	=	.085 MILES

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
NOVEMBER 2, 2009

LETTING DATE:
MARCH 16, 2010

BRENDA MOORE, P.E.
PROJECT ENGINEER

JOYCE DREW
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

ROADWAY DESIGN ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

09/08/99

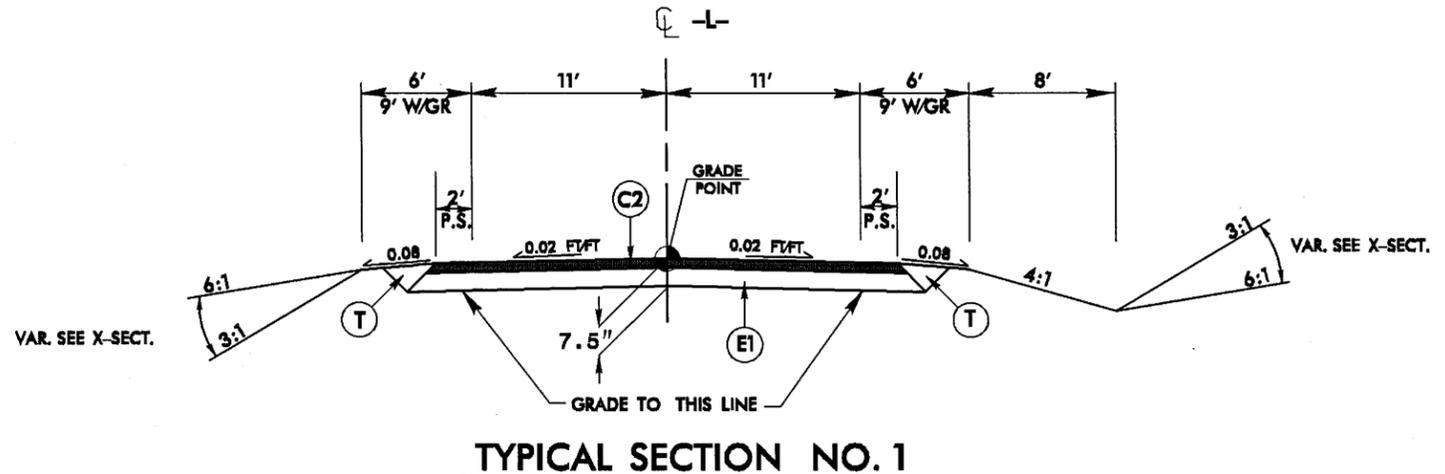
02-NOV-2009 13:40
R:\Roadway\Proj\14570_rdy_tsh.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$

6/2/99

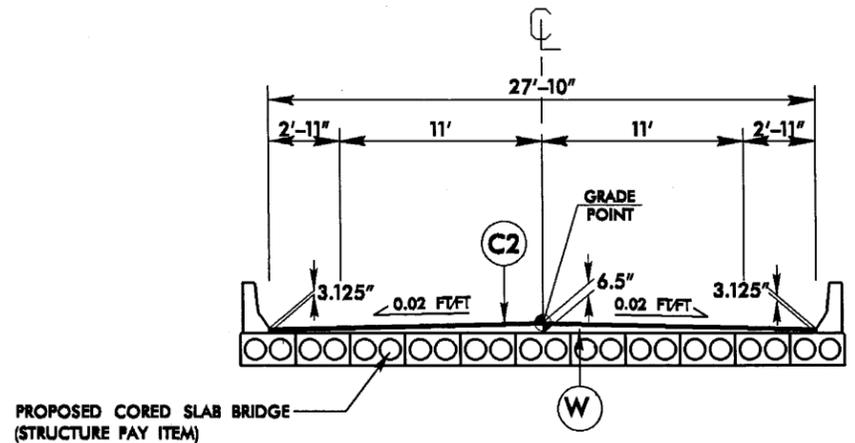
PROJECT REFERENCE NO. B-4570	SHEET NO. 2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

FINAL PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
C2	PROP. APPROX. 2 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1 1/2" IN DEPTH.
E1	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5 1/2" IN DEPTH.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL THIS SHEET)

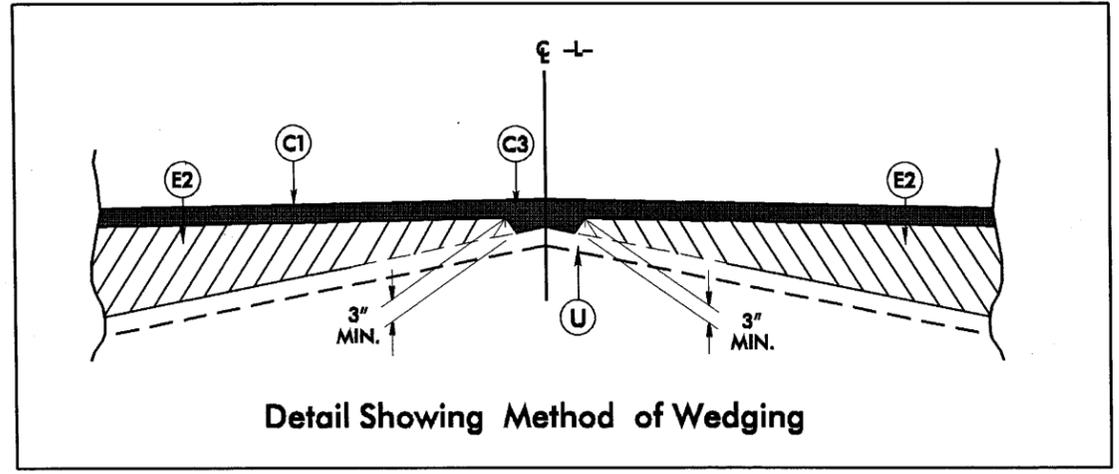
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



USE TYPICAL SECTION NO. 1
 -L- STA. 10+00.00 TO STA. 11+67.50 (BEGIN BRIDGE)
 -L- STA. 12+37.50 (END BRIDGE) TO STA. 14+50.00



USE TYPICAL SECTION NO. 2
 -L- STA. 11+67.50 (BEGIN BRIDGE) TO STA. 12+37.50 (END BRIDGE)



02-NOV-2009 13:40
 R:\PROJECTS\B-4570\RDG\tyr.dgn
 8:51:58 AM

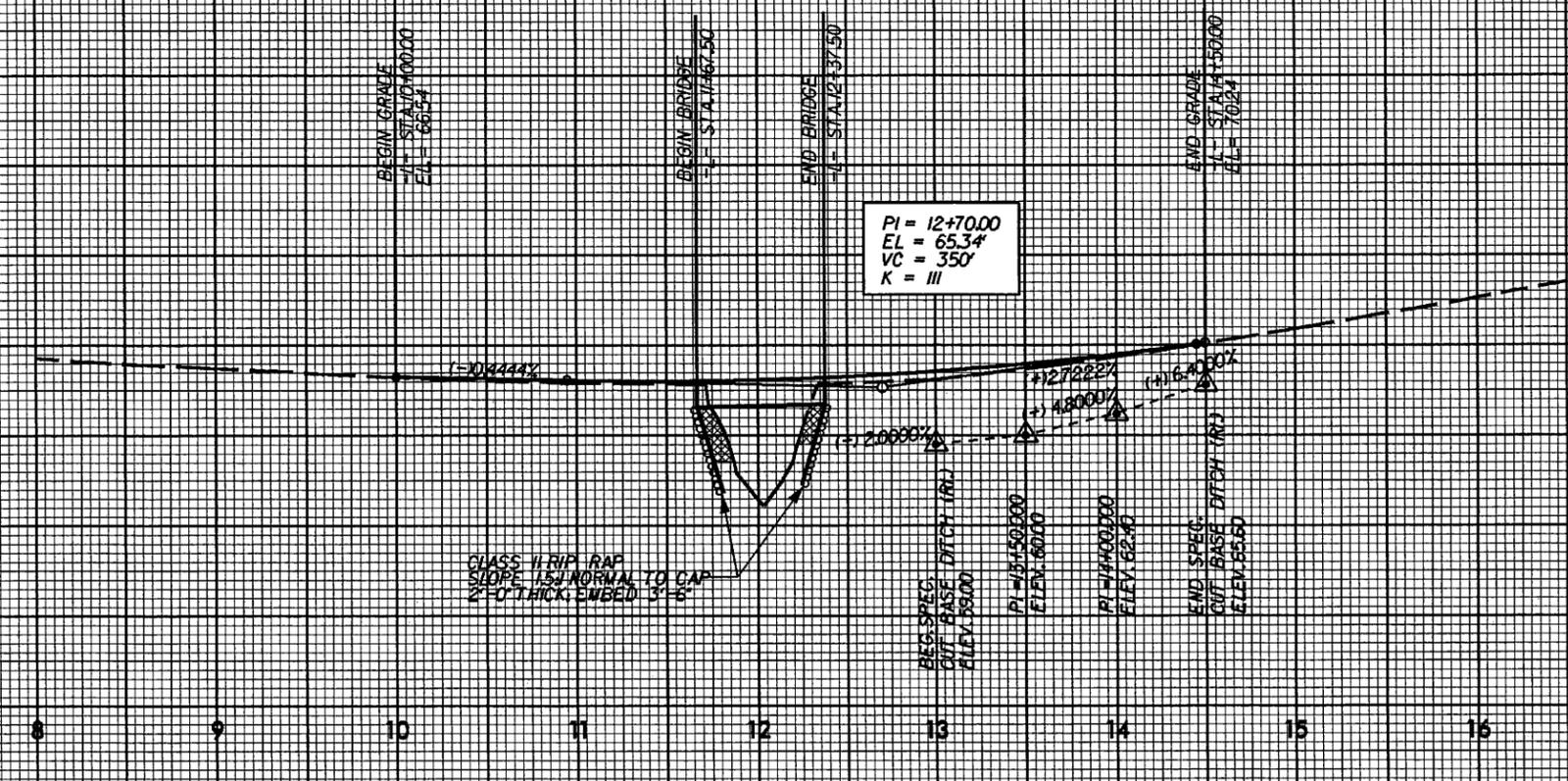
STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE = 1020 CFS
DESIGN FREQUENCY = 25 YRS
DESIGN HW ELEVATION = 59.2 FT
BASE DISCHARGE = 1600 CFS
BASE FREQUENCY = 100 YRS
BASE HW ELEVATION = 60.3 FT
OVERTOPPING DISCHARGE = 6050 CFS
OVERTOPPING FREQUENCY = 500+ YRS
OVERTOPPING ELEVATION = 66.0 FT

BM*1 RR SPIKE IN 18" PINE
149.23' LT OF -L- STA.13+42.20
ELEV. 63.76'

-L-

Q 12+02.50 -L-
SINGLE SPAN 24' CORED SLAB @ 70'
SKEW = 90 EL = 66.6'



RIGHT DITCH -----

5/14/99

02-NOV-2009 13:54
B:\PROJECTS\B-4570\rdw\pfl.dgn