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
3331 Heritage Trace Drive, Suite 105
Wake Forest, NC 27587

ATTN: Mr. Andy Williams
NCDOT Coordinator

Dear Madam:

Subject: **Application for Section 404 Nationwide Permits 13 and 33 for the** Replacment of Bridge 118 over Massy Creek on SR 2192 (Smothers Rd.), Rockingham County, Federal Aid Project Number BRZ-2192(1), Division 9, T.I.P No. B-4625.

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 118 on SR 2192 (Smothers Rd) over the Massy Creek. There will be less than 0.01 acre of permanent surface water impact resulting from the construction of a temporary access pad which will be located partially in the Massy Creek (NWP 33). There will also be 28 linear feet of stream impact resulting from placement of rip rap on the embankment for bank stabilization (NWP 13).

Please see the enclosed copies of the Pre-Construction Notification (PCN), stormwater management plan, Notification of Jurisdictional Determination, permit drawings, and design plans for the above-referenced project. The Programmatic Categorical Exclusion (PCE) was completed for this project in January 2009 and distributed shortly thereafter. Additional copies are available upon request. At this time there have been no consultations with FHWA.

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
NATURAL ENVIRONMENT UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-431-2000

FAX: 919-431-2001

WEBSITE: WWW.NCDOT.ORG

LOCATION:
4701 Atlantic Ave.,
Suite 116
Raleigh, NC 27604

A copy of this permit application will be posted on the NCDOT Website at: http://www.ncdot.org/doh/preconstruct/pe/. If you have any questions or need additional information, please call Erica McLamb at (919) 431-1595.

Sincerely,

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

w/attachment
Mr. Brian Wrenn, NCDWQ (2 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. J. M. Mills, P.E., Division 7 Engineer
Mr. Jerry Parker, Division 7 Environmental Officer
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Ms. Christy Huff, PDEA Project Planning Engineer
Mr. Scott McLendon, USACE, Wilmington
Mr. Gary Jordan, USFWS
Mr. Travis Wilson, NCWRC

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:	☒ Section 404 Permit	☐ Section 10 Permit
1b. Specify Nationwide Permit (NWP) number: 33 13	or General Permit (GP) number:	
1c. Has the NWP or GP number been verified by the Corps?	☐ Yes	☒ No

1d. Type(s) of approval sought from the DWQ (check all that apply):

☐ 401 Water Quality Certification – Regular ☐ Non-404 Jurisdictional General Permit

☐ 401 Water Quality Certification – Express ☐ 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: ☒ Yes ☐ No	For the record only for Corps Permit: ☐ Yes ☒ 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.		☐ Yes ☒ No
1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h below.		☐ Yes ☒ No
1h. Is the project located within a NC DCM Area of Environmental Concern (AEC)?		☐ Yes ☒ No

2. Project Information

2a. Name of project:	Replacment of Bridge 118 over Massy Creek on SR 2192 (Smothers Rd.)
2b. County:	Rockingham
2c. Nearest municipality / town:	Pleasantville
2d. Subdivision name:	*not applicable*
2e. NCDOT only, T.I.P. or state project no:	B-4625

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:	1598 Mail Service Center
3e. City, state, zip:	Raleigh, NC 27699-1598
3f. Telephone no.:	(919) 431-1595
3g. Fax no.:	(919) 431-2002
3h. Email address:	emclamb@ncdot.gov

4. Applicant Information (if different from owner)	
4a. Applicant is:	☐ Agent ☐ 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):	*not applicable*		
1b. Site coordinates (in decimal degrees):	Latitude: 36.41 (DD.DDDDDD)	Longitude: - 79.83 (-DD.DDDDDD)	
1c. Property size:	1.0 acres		
2. Surface Waters			
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Massy Creek		
2b. Water Quality Classification of nearest receiving water:	WS IV		
2c. River basin:	Roanoke		
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 land conditions in the project area consist of Broadleaf Deciduous Forest Land , crop and pasture land, and low density residential development.			
3b. List the total estimated acreage of all existing wetlands on the property: 0			
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 111 linear feet			
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 52-foot bridge with a longer, 3-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: Issued on 01/24/06, expires 01/24/2011	☒ Yes	☐ No	☐ Unknown
4b. If the Corps made the jurisdictional determination, what type of determination was made?	☐ Preliminary	☒ Final	
4c. If yes, who delineated the jurisdictional areas? Name (if known): Erica McLamb, Bill Barrett, Carla Dagnino, and Susan Thebert	Agency/Consultant Company: NCDOT Other:		
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation. January 24, 2009			
5. Project History			
5a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	☐ Yes	☒ No	☐ Unknown
5b. If yes, explain in detail according to "help file" instructions.			
6. Future Project Plans			
6a. Is this a phased project?	☐ Yes	☒ 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):

☐ Wetlands ☒ Streams - tributaries ☐ Buffers

☐ Open Waters ☐ 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 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 2 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 3 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 4 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 5 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 6 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
				2g. **Total wetland impacts**	X Permanent X 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)
Site 1 ☐ P ☒ T	Temporary Work Pad	Massy Creek	☒ PER ☐ INT	☒ Corps ☐ DWQ		<0.01 ac
Site 2 ☒ P ☐ T	Bank Stabilization	Massy Creek	☒ PER ☐ INT	☒ Corps ☐ DWQ		28
Site 3 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
Site 4 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
Site 5 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
Site 6 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
					3h. **Total stream and tributary impacts**	28 Perm <0.01 ac 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 ☐ P ☐ T				
O2 ☐ P ☐ T				
O3 ☐ P ☐ T				
O4 ☐ P ☐ 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?	☐ Yes ☐ 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?	☐ Neuse ☐ Catawba	☐ Tar-Pamlico ☐ Randleman	☐ 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 ☐ P ☐ T			☐ Yes ☐ No		
B2 ☐ P ☐ T			☐ Yes ☐ No		
B3 ☐ P ☐ T			☐ Yes ☐ 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 replacement bridge is 58 feet longer than the current bridge, increasing flood plain access.

An offsite detour will be utilized during construction.

Bridge end drains are located outside of wetland areas.

The proposed bridges bents will not be located in the stream channel.

The proposed bridge will use the existing alignment and will be approximately the same grade as the existing bridge.

Stormwater impacts have been minimized by utilizing sheet flow on grass shoulders along the roadway, and by dissipating storm water from the bridge drain in riprap pads upstream of the top of banks.

The existing drainage patterns have been maintained with the hydraulic design of the project.

1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques.

NCDOT will implement Best Management Practices for Bridge Demolition and Removal. NCDOT BMP's for the Protection of Surface Waters will be strictly enforced during construction of this project.

At all the sites, stormwater will be treated and non-erosive velocities will be achieved where practicable.

The proposed bridge will be 54 feet longer, therefore increasing floodplain 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?	☐ Yes ☒ No If no, explain:
2b. If yes, mitigation is required by (check all that apply):	☐ DWQ ☐ Corps
2c. If yes, which mitigation option will be used for this project?	☐ Mitigation bank ☐ Payment to in-lieu fee program ☐ 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.	☐ Yes
4b. Stream mitigation requested:	linear feet
4c. If using stream mitigation, stream temperature:	☐ warm ☐ cool ☐ 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?	☐ Yes ☒ No
1b. If yes, then is a diffuse flow plan included? If no, explain why. Comments: see attached permit drawings.	☐ Yes ☒ 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?	☒ Yes ☐ 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 attached stormwater management plan.	
2e. Who will be responsible for the review of the Stormwater Management Plan?	☐ Certified Local Government ☐ DWQ Stormwater Program ☐ 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):	☐ Phase II ☐ NSW ☐ USMP ☐ Water Supply Watershed ☐ Other:
3c. Has the approved Stormwater Management Plan with proof of approval been attached?	☐ Yes ☐ No
4. DWQ Stormwater Program Review	
4a. Which of the following state-implemented stormwater management programs apply (check all that apply):	☐ Coastal counties ☐ HQW ☐ ORW ☐ Session Law 2006-246 ☐ Other:
4b. Has the approved Stormwater Management Plan with proof of approval been attached?	☐ Yes ☐ No
5. DWQ 401 Unit Stormwater Review	
5a. Does the Stormwater Management Plan meet the appropriate requirements?	☒ Yes ☐ No
5b. Have all of the 401 Unit submittal requirements been met?	☒ Yes ☐ 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?	☒ Yes	☐ 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)?	☒ Yes	☐ 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:	☒ Yes	☐ 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)?	☐ Yes	☒ No
2b. Is this an after-the-fact permit application?	☐ Yes	☒ 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?	☐ Yes ☒ 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?	☐ Yes ☒ No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	☒ Yes ☐ No
5c. If yes, indicate the USFWS Field Office you have contacted.	☒ Raleigh ☐ Asheville

5d. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat?

Potential habitat in the project area for the smooth coneflower is marginal and limited to woodland edges. The road shoulders in the project area are regularly mowed, further limiting the potential for the smooth coneflower to become established in the project area. Surveys for the smooth coneflower were conducted on May 14, 2009. No specimens were observed during the 3.0 man hour survey. NCNHP records updated on October 21, 2009 indicate that there are no known populations of smooth coneflower within 1-mile of the project area. The proposed project will have no effect on the smooth coneflower.

Massy Creek does provide potential habitat for the James spinymussel within the project area, however, the fact that the banks are unstable and the streambed is comprised of mostly shifting sand indicates degraded habitat for James spinymussel. A mussel screening was performed on August 16, 2005 by NCDOT biologists. No freshwater mussels were found in the 2.0 man hour survey. Due to the absence of mussels within the project area and the degraded habitat, it is unlikely the James spinymussel is found in the project area. No further surveys are required. NCNHP records updated on October 21, 2009 indicate that there are no known populations of smooth coneflower within 1-mile of the project area. The proposed project will have no effect on the James spinymussel.

The project study area was evaluated for potential habitat for the Roanoke logperch on April 24, 2008. Massy Creek is comparatively smaller that other waterwayswhere the Roanoke logperch is known to live. It also has an unsuitable shifting sand and silt substrate that is typically not preferred by the species. The only record of the Roanoke logperch in North Carolina is approximately 12 miles downstream for the Massy Creek. In general, in stream habitat available in Massy Creek is not suitable for the Roanoke logperch. No specimens were observed during the 8.75 man hour survey. NCNHP records updated on October 21, 2009 indicate that there are no known populations of smooth coneflower within 1-mile of the project area. Therefore the Biological Conclusion if No Effect.

6. **Essential Fish Habitat (Corps Requirement)**	
6a. Will this project occur in or near an area designated as essential fish habitat?	☐ Yes ☒ 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)?	☐ Yes ☒ 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?	☒ Yes ☐ 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	E. J. Lusk Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	11.6.09 Date

McLamb

U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT

Action ID: **200620236** County: **Rockingham**

NOTIFICATION OF JURISDICTIONAL DETERMINATION

Property Owner: **NC Department of Transportation, Project Development and Environmental Analysis**
Attn: Phillip S. Harris, III
Mailing Address: **1598 Mail Service Center**
Raleigh, North Carolina 27699-1598 Telephone No.: **(919) 715-1500**

Property / Project Area Description:

NCDOT TIP No.: **B-4625** Nearest Town: **Reidsville**
USGS Quad: **SW Eden** Site Coordinates: **36.4077 °N 79.8334 °W**
River Basin: **Roanoke** HUC: **03010103**
Nearest Waterway: **Massey Creek**
Location (road name/number, intersection, etc.): **The site is located at Bridge 118 over Massey Creek, along Smothers Road (SR 2192), west of Reidsville, Rockingham County, North Carolina.**

Indicate Which of the Following Apply:

☐ Based on preliminary information, there may be waters of the U.S., to include 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).

☐ 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., to include 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 waters of the U.S., to include 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., to include wetlands, 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 waters of the U.S., to include 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.

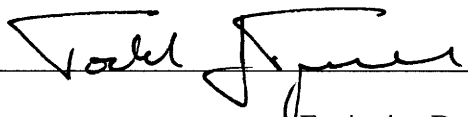
☐ There are no waters of the U.S., to include wetlands, present on the above described property which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for 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.

Basis of Jurisdictional Determination: **The site contains Massey Creek, a stream channel with ordinary high water marks, defined bed and bank, and adjacent wetlands. The stream channel is a tributary to the Dan River in the Roanoke River Basin.**

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 **Todd Tugwell** at telephone **(919) 876-8441, ext 26**.

Additional Remarks:

Corps Regulatory Official 

Date: **01/24/06** Expiration Date: **01/24/11**

FOR OFFICE USE ONLY:

- A plat or sketch of the property and the wetland data form(s) must be attached to the file copy of this form.
- A copy of the "Notification Of Administrative Appeal Options And Process And Request For Appeal" form must be transmitted with the property owner/agent copy of this form.
- If the property contains isolated wetlands/waters, please indicate in "Remarks" section and attach the "Isolated Determination Information Sheet" to the file copy of this form

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: **NC Department of Transportation,**	File Number: **200620236**	Date: **01/24/06**
Attached is:		See Section below
☐ INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
☐ PROFFERED PERMIT (Standard Permit or Letter of permission)		B
☐ PERMIT DENIAL		C
☒ APPROVED JURISDICTIONAL DETERMINATION		D
☐ PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact: Todd Tugwell Raleigh Regulatory Field Office US Army Corps of Engineers 6508 Falls of the Neuse Road, Suite 120 Raleigh, North Carolina 27615	If you only have questions regarding the appeal process you may also contact: Mr. Michael 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

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:

DIVISION ENGINEER:
Commander
U.S. Army Engineer Division, South Atlantic
60 Forsyth Street, Room 9M15
Atlanta, Georgia 30303-3490

STORMWATER MANAGEMENT PLAN

Project: 384442.1.1
TIP No. B-4625
Rockingham County 11/03/2009

Hydraulics Project Manager: Steve Bondor, P.E. (Greenhorne & O'Mara),
Marshall Clawson, P.E. (NCDOT Hydraulics Unit)

ROADWAY DESCRIPTION

The project consists of construction of a new 110 feet long 21" depth cored slab bridge to replace the existing 50 foot long bridge #118 on SR 2192 over Massey Creek. The total project length is 0.1 miles. Massey Creek is located in the Roanoke River Basin. The project drainage system consists of grass shoulders, grated inlets with associated pipe system, and rip rap outlet protection at a pipe outfalls.

Jurisdictional Streams: Massey Creek

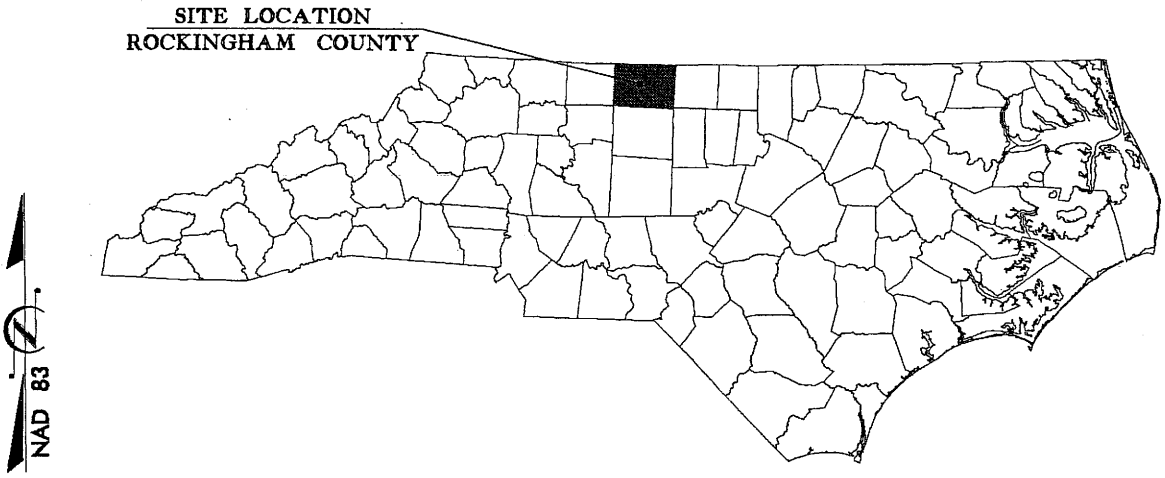
ENVIRONMENTAL DESCRIPTION

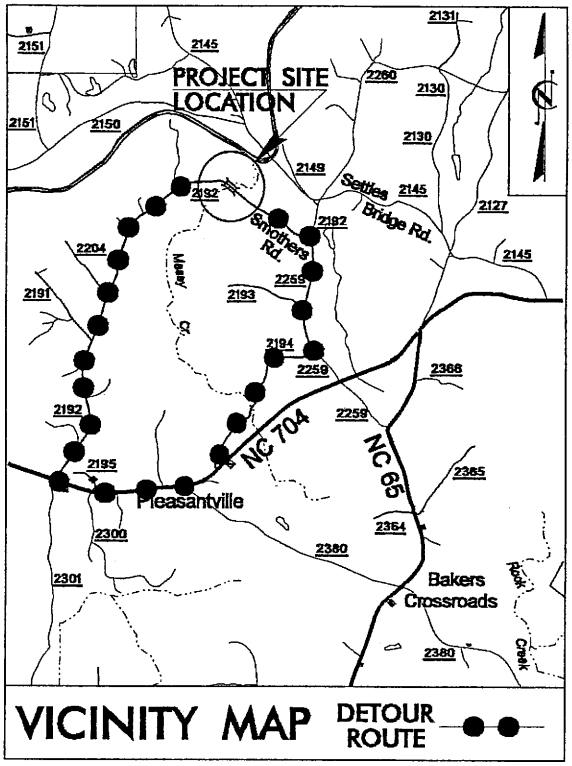
The project is located within the Roanoke River Basin in Rockingham County. The stream is classified as Class WS-IV. There are wetlands located approximately 300' beyond the project limit that are not impacted by the project. Stormwater impacts to the stream have been minimized by utilizing sheet flow on grass shoulders along the roadway, and by dissipating storm water from the bridge drain in riprap pads upstream of the top of banks. The existing drainage patterns have been maintained with the hydraulic design of the project.

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

- Sheet flow on grass shoulders
- Rip rap outlet protection at pipe outlet





VICINITY MAP

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
ROCKINGHAM COUNTY

PROJECT: 38442.1.1 (B-4625)

BRIDGE NO.118 OVER MASSY CREEK
ON SR 2192(SMOTHERS RD)

SHEET 1 OF 7 10/29/09

PROPERTY OWNERS

PARCEL	OWNER NAME	ADDRESS
5	MS. MINNIE CORINA MOYER	1735 SMOTHERS RD MADISON, NC 27025
6	MS. DAWN MORPHIES STONE	290 PATRICIA LN STOKESDALE, NC 27357
2	MR. JAMES FRANKLIN DRAPER, SR./ DIANE D. KACERGUIS L/E	6008 SPRING VALLEY DR RALIEGH, NC 27604
1	MS. OPAL MATHERSON DYE	229 HENRY RD MADISON, NC 27025
4	MR. AND MRS. JAMES DONALD & LINDA GARRISON CARTER	602 FOREST DR REIDSVILLE, NC 27320
3	MS. ADDIE SUE BARNES	6014 US 29 BUSINESS REIDSVILLE, NC 27320

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROCKINGHAM COUNTY
PROJECT: 38442.1.1 (B-4625)

BRIDGE NO.118 OVER MASSY CREEK ON SR 2192(SMOTHERS RD)

SHEET 2 OF 7 10/29/09

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND 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)	SURFACE WATER IMPACTS: Permanent SW Impacts (ac)	Temp. SW Impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-L-15+01 TO 15+06	TEMPORARY ACCESS PAD							0.003			
2	-L-14+85 TO 14+96	RIPRAP at EMBANKMENT								28		
TOTALS:			0.00	0.00	0.00	0.00	0.00	0.00	0.003	28	0.00	0.00

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
ROCKINGHAM COUNTY
PROJECT 38442.1.1 (B-4625)
BRIDGES NO. 118
OVER MASSY CREEK ON SR 2192
SHEET 3 OF 7 8/4/2009

ATN Revised 3/31/05

09/08/99

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

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

ROCKINGHAM COUNTY

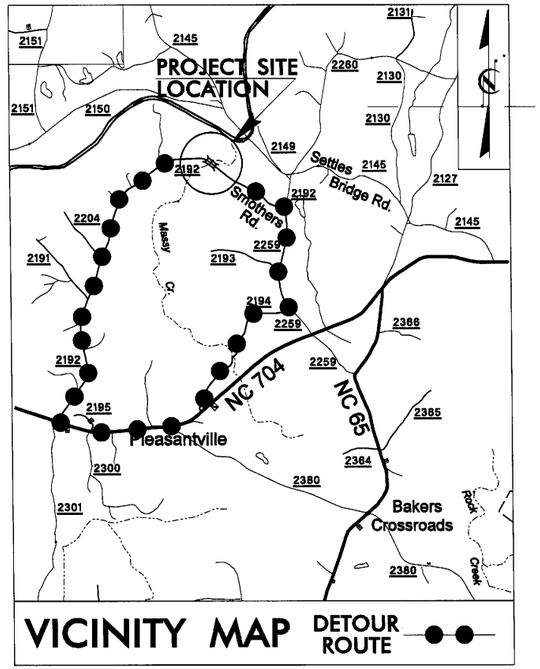
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4625	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
38442.1.1	BRZ-2192(1)	PE	

Permit Drawing Sheet 4 of 7

RECEIVED
NOV 3 2009
OFFICE OF NATURAL ENVIRONMENT

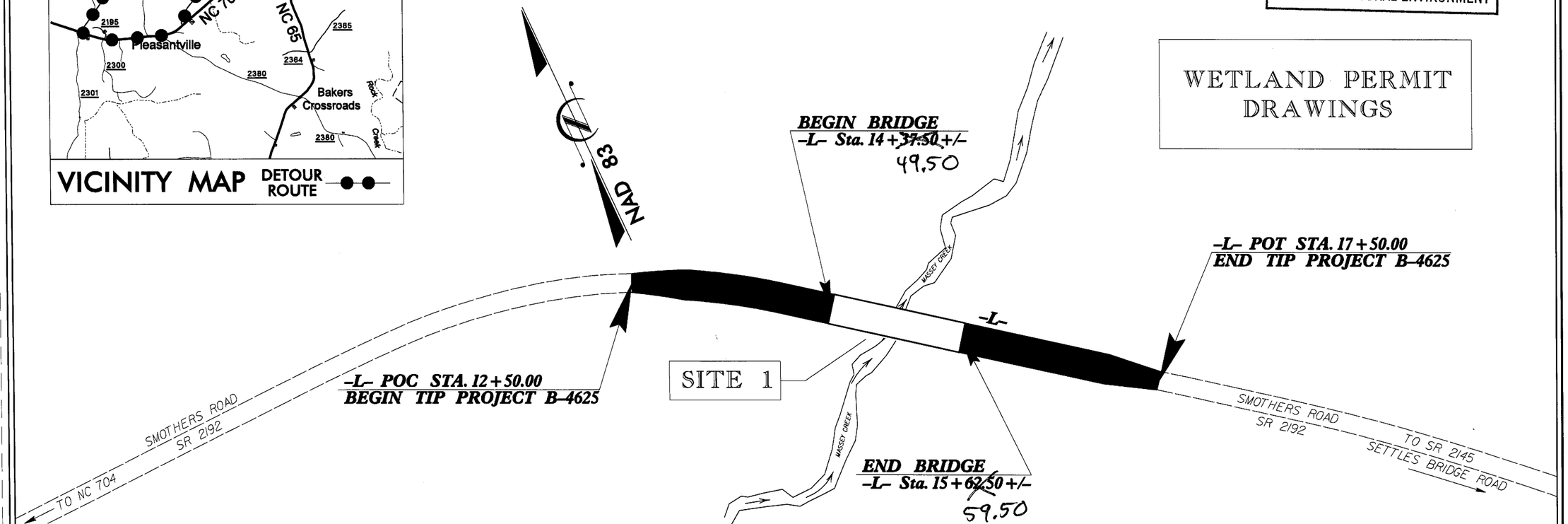
LOCATION: BRIDGE NO. 118 OVER MASSY CREEK ON SR 2192 (SMOTHERS RD.)

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



VICINITY MAP DETOUR ROUTE

WETLAND PERMIT DRAWINGS



THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES

METHOD OF CLEARING _____

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

TIP PROJECT: B-4625

CONTRACT:

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2005 = 400
ADT 2030 = 700
DHV = 13 %
D = 60 %
T = 2 % *
V = 50 MPH

* TTST 1% DUAL 1%

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4625 = 0.071 MI
LENGTH STRUCTURE TIP PROJECT B-4625 = +/- 0.024 MI
TOTAL LENGTH TIP PROJECT B-4625 = 0.095 MI

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: September 18, 2009

LETTING DATE: September 21, 2010

ROGER D. THOMAS, PE
PROJECT ENGINEER

BRIAN P. ROBINSON
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

P.E.
STATE HIGHWAY DESIGN ENGINEER

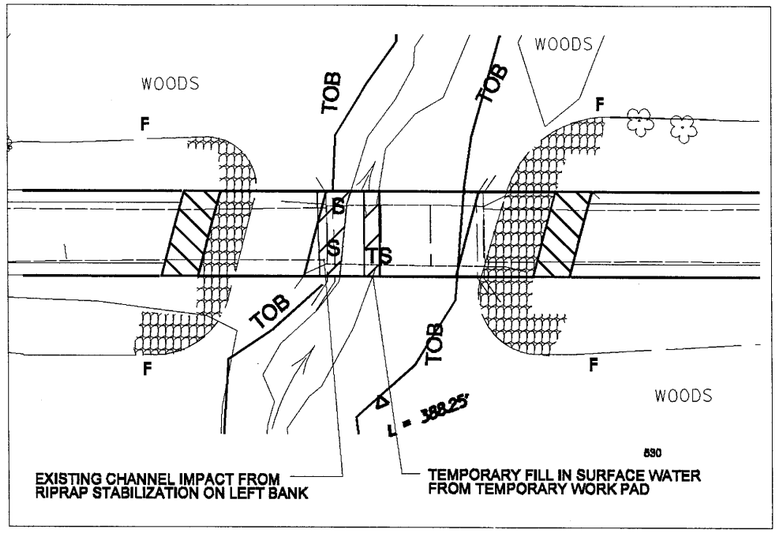
B-9625	1	4
R/W SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Permit Drawing
Sheet 5 of 17

REVISIONS 8/17



S S DENOTES IMPACTS IN SURFACE WATER

TS TS DENOTES TEMPORARY SURFACE WATER IMPACT

SITE 1 – ENLARGED VIEW

NAD 83

(1) OPAL MATHERSON DYE DB 484 PG 494 PB 2 PG 23

(6) DAWN MORPHIES STONE DB 1207 PG 1762

(2) JAMES FRANKLIN DRAPER, SR. & DIANE D. KACERGUIS DB 992 PG 628 PB 2 PG 23

(4) JAMES DONALD & LINDA GARRISON CARTER DB 952 PG 1962 PB 2 PG 23

(3) ADDIE SUE & ROBERT BARNES DB 697 PG 340

(5) MINNIE CORINA MOYER DB 697 PG 342

10 TONS CL B STONE

CL II RIPRAP +40

CL II RIPRAP +30

CL II RIPRAP +65

JAMES FRANKLIN DRAPER, SR. & DIANE D. KACERGUIS STA. -L- 14+80 TO 17+00LT DB 992 PG 628 PB 2 PG 23 LINED WITH PERM

2GI FLAT GRATE

18" CSP WITH 2 ELBOWS

CL. B OUTLET PROTECTION

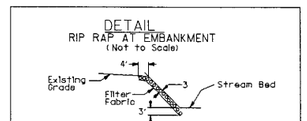
SHOULDER BERM GUTTER STA. -L- 15+38 TO 15+60RT

4" x 8" SLOTTED DECK DRAINS STA. -L- 14+61, 14+83, AND 14+78 RT

4" x 8" SLOTTED DECK DRAINS AT STA. -L- 15+38 AND 15+60RT

SITE 1
SEE ENLARGED VIEW ABOVE

DETAIL
RIP RAP AT EMBANKMENT
(Not to Scale)



Type of Liner= 40 TONS CL 2 Rip-Rap
Filter Fabric= 30sy

STA. 20+20
EXTEND WIDTH OF BRIDGE

NOTE: SEE SHEET 5 FOR –L– PROFILE

SYSTIME
DESIGN
ICEDNAME

B-4625	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

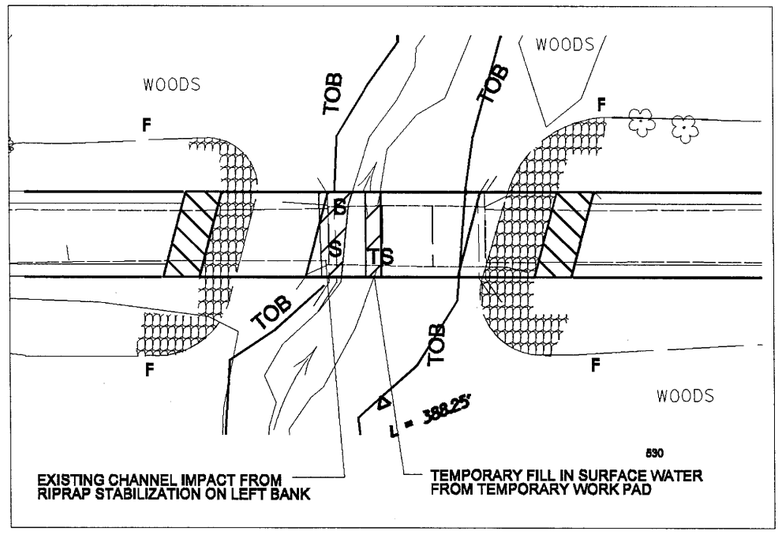
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Permit Drawing
Sheet 6 of 7

REVISIONS 8/17

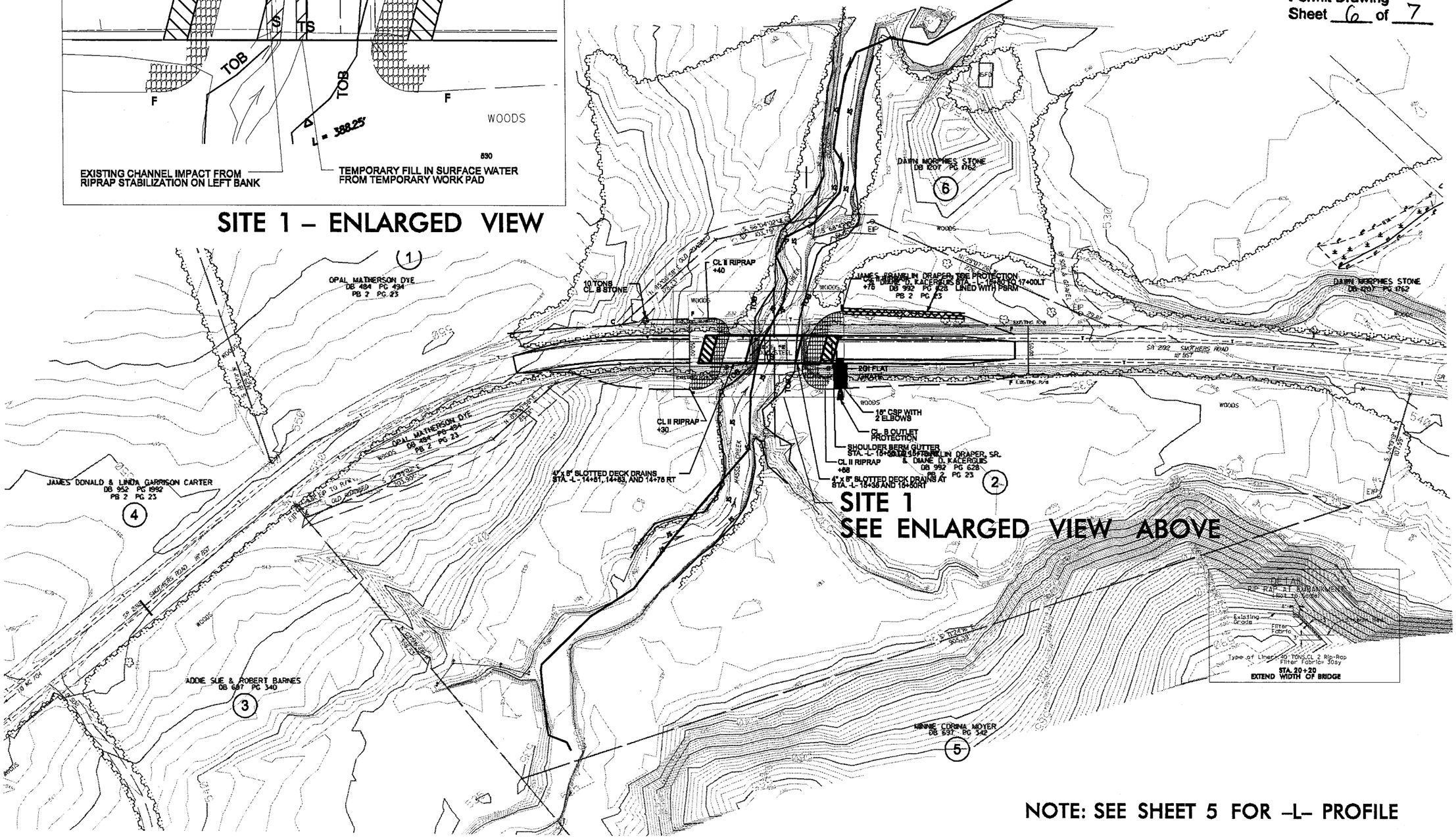
S S DENOTES IMPACTS IN SURFACE WATER

TS TS DENOTES TEMPORARY SURFACE WATER IMPACT



SITE 1 – ENLARGED VIEW

NAD 83



SITE 1
SEE ENLARGED VIEW ABOVE

NOTE: SEE SHEET 5 FOR –L– PROFILE

$$SYSTIME$$
$$USERNAME$$

B-4625 | 5

ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Permit Drawing Sheet 7 of 7

5/14

BM #1
R/R SPIKE IN BASE OF 10" GUM
ELEV = 544.24'
-BL- STA. 10+32.26 168.38' LT
-L- STA. 10+30.23 183.28' LT

BM #2
R/R SPIKE IN BASE OF 9" SYCAMORE
ELEV = 532.75'
-BL- STA. 16+11.24 127.45' RT
-L- STA. 16+02.49 117.94' RT

BEGIN GRADE
-L- STA. 12+50.00
ELEV = 545.49'

BEGIN BRIDGE
-L- STA. 14+49.50

END BRIDGE
-L- STA. 15+59.50

END GRADE
-L- STA. 17+50.00
ELEV = 541.10'

PI = 13+60.00
ELEV = 542.74'
VC = 170'
K = 82

560
550
540
530
520
510
500
490
480
470
460
450

-L-

V2.500%

L=10.420%

1.5H : 1V TYP

EXCAVATION = 1,100 CU YD

CL 2 RIPRAP 2'-THICKNESS KEY IN 3.5' TYP

CL 2 RIPRAP BANK STABILIZATION

TEMPORARY WORK PAD

BEGIN RESURFACING
-L- STA. 12+00.00

END RESURFACING
-L- STA. 18+00.00

STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE	= 1210	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 533.7	FT
BASE DISCHARGE	= 1863	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 535.1	FT
OVERTOPPING DISCHARGE	= 9810	CFS
OVERTOPPING FREQUENCY	= 500+Y	YRS
OVERTOPPING ELEVATION	= 544.6	FT

NOTE: SEE SHEET 4 FOR PLAN VIEW

10 11 12 13 14 15 16 17 18

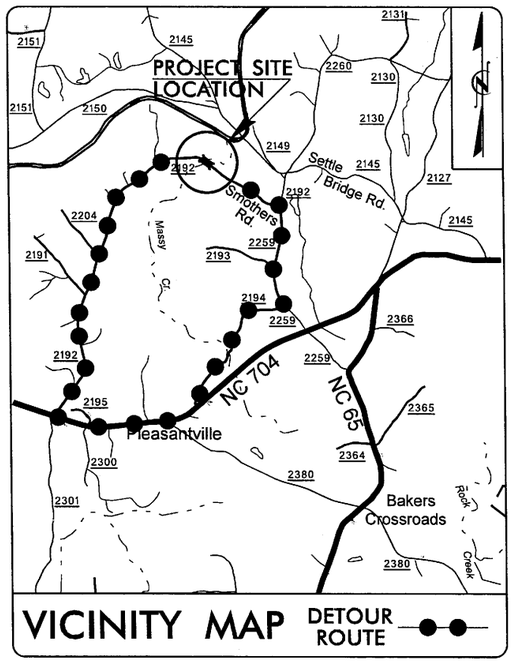
$$$$USERNAME$$$$ $$$$SYSTIME$$$$ $$$$DGN$$$$

09/08/09

TIP PROJECT: B-4625

CONTRACT:

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

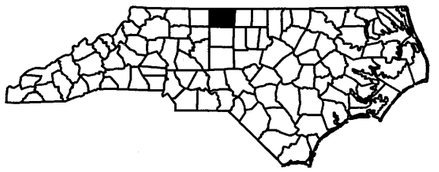


VICINITY MAP DETOUR ROUTE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

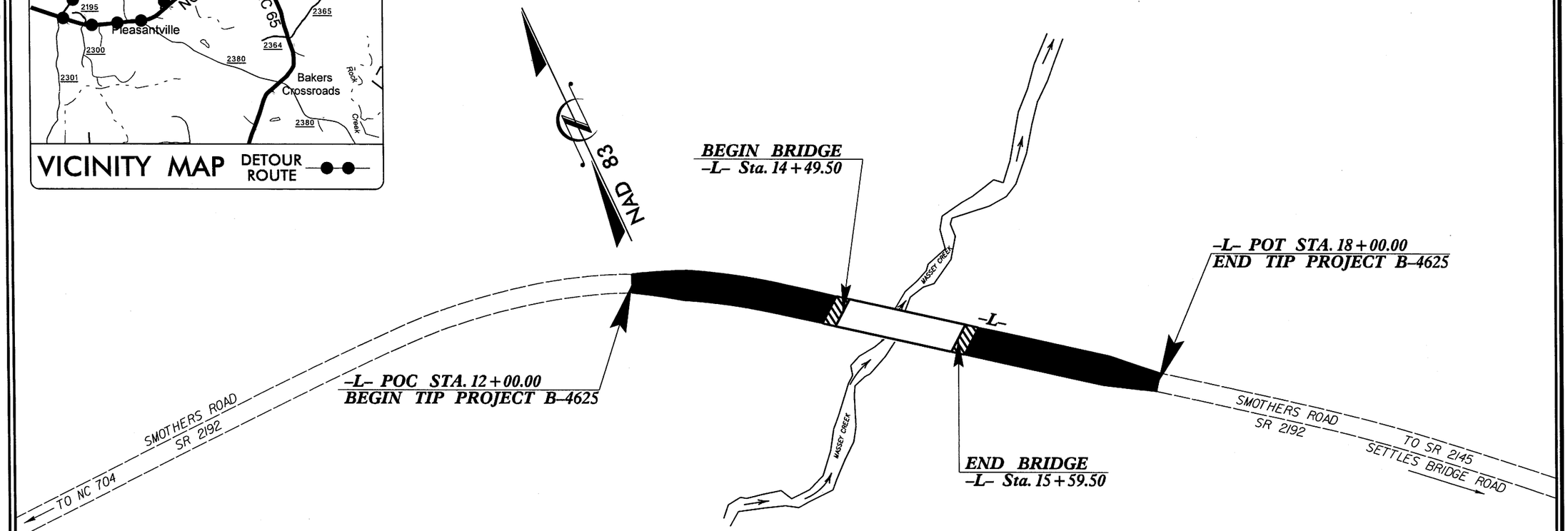
ROCKINGHAM COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4625	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
38442.1.1	BRZ-2192(1)	PE	



LOCATION: BRIDGE NO. 118 OVER MASSY CREEK ON SR 2192 (SMOTHERS RD.)

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



THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES

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

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2008 = 440
ADT 2030 = 700
DHV = 13 %
D = 60 %
T = 2 % *
V = 50 MPH
* TTST 1% DUAL 1%
FUNC. CLASS = LOCAL
SUB-REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4625 = 0.093 MI
LENGTH STRUCTURE TIP PROJECT B-4625 = 0.021 MI
TOTAL LENGTH TIP PROJECT B-4625 = 0.114 MI

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: NOT AUTHORIZED

LETTING DATE: March 10, 2010 DPOC

ROGER D. THOMAS, PE
PROJECT ENGINEER

BRIAN P. ROBINSON
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

P.E.
STATE HIGHWAY DESIGN ENGINEER

28-OCT-2009 11:29
C:\roadway\proj\b4625_rdy_tsh.dgn
$$$$USERNAME$$$$

3/15/06

PROJECT REFERENCE NO.	SHEET NO.
B-4625	1-B

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Note: Not to Scale

****S.U.E. = Subsurface Utility Engineering***

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- Property Corner
- Property Monument — ECM
- Parcel/Sequence Number — 23
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLS
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — S
- Well — W
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch — FLOW
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line
- Proposed Right of Way Line with Iron Pin and Cap Marker
- Proposed Right of Way Line with Concrete or Granite Marker
- Existing Control of Access — CA
- Proposed Control of Access — CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Wheel Chair Ramp — WCR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole — HH
- H-Frame Pole
- Recorded U/G Power Line — P
- Designated U/G Power Line (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Booth
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- Recorded U/G Telephone Cable — T
- Designated U/G Telephone Cable (S.U.E.*) — T
- Recorded U/G Telephone Conduit — TC
- Designated U/G Telephone Conduit (S.U.E.*) — TC
- Recorded U/G Fiber Optics Cable — T FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line — W
- Designated U/G Water Line (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Satellite Dish
- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- Recorded U/G Gas Line — G
- Designated U/G Gas Line (S.U.E.*) — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- Recorded SS Forced Main Line — FSS
- Designated SS Forced Main Line (S.U.E.*) — FSS

MISCELLANEOUS:

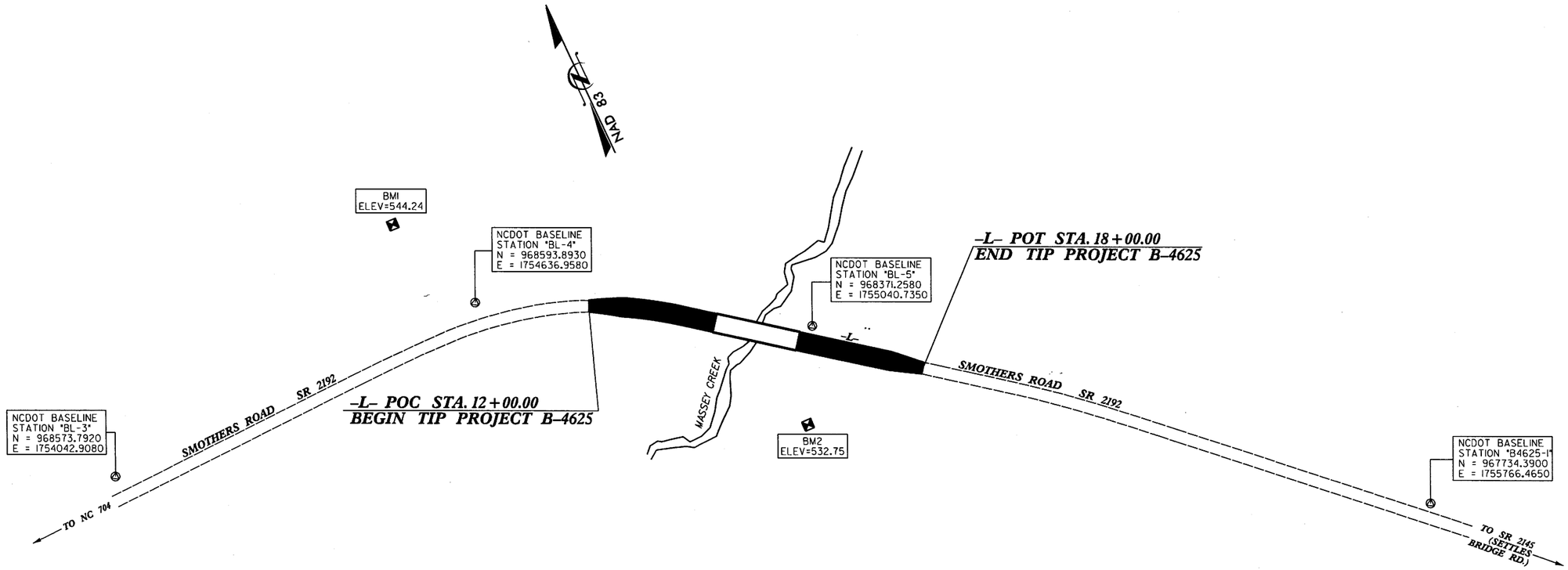
- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line — ?UTL
- U/G Tank; Water, Gas, Oil
- A/G Tank; Water, Gas, Oil
- U/G Test Hole (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

12/01/2005

PROJECT REFERENCE NO.	SHEET NO.
B-4625	1C
Location and Surveys	

B-4625 SURVEY CONTROL SHEET

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



BASELINE DATA

BL

POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
3	BL-3	968573.7920	1754042.9080	554.55	OUTSIDE PROJECT LIMITS	
4	BL-4	968593.8930	1754636.9580	548.97	10+98.83	22.78 LT
5	BL-5	968371.2580	1755040.7350	540.47	15+56.45	13.33 LT
1	B4625-1	967734.3900	1755766.4650	554.96	OUTSIDE PROJECT LIMITS	
2	B4625-2	967322.8880	1756556.3140	600.40	OUTSIDE PROJECT LIMITS	

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B4625-1" WITH NAD 83 STATE PLANE GRID COORDINATES OF NORTHING: 967734.3900(ft) EASTING: 1755766.4650(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9999457911 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B4625-1" TO -L- STATION 12+00.00 IS N 51°47'37.7" W 1316.22' ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

BENCHMARK DATA

BM1 ELEVATION = 544.24
N 968760 E 1754569
L STATION 10+30 183 LEFT
R/R SPIKE IN BASE OF 10" GUM

BM2 ELEVATION = 532.75
N 968239 E 1754999
L STATION 16+02 118 RIGHT
R/R SPIKE IN BASE OF 9" SYCAMORE

NOTES

1. *THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT: HTTP://WWW.DOH.DOT.STATE.NC.US/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/*

   THE FILES TO BE FOUND ARE AS FOLLOWS:
   b4625_ls_control_081120.txt

   SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

⏢ *INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.*
PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.
NETWORK ESTABLISHED FROM NGS ONLINE POSITIONING SERVICE (OPUS)

NOTE: DRAWING NOT TO SCALE

28-OCT-2009 11:29
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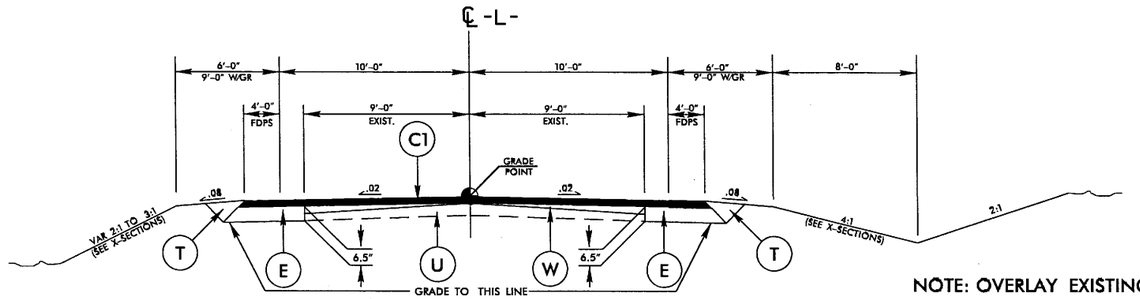
ssmith
USER:ssmith

6/2/99

PROJECT REFERENCE NO.	SHEET NO.
B-4625	2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



TYPICAL SECTION NO. 1

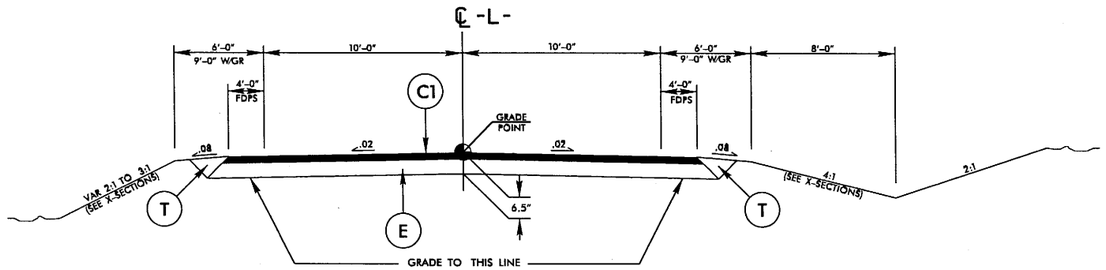
USE TYPICAL SECTION NO. 1

-L- STATION 13+00.00 TO 13+50.00
-L- STATION 16+25.00 TO 17+00.00

NOTE: OVERLAY EXISTING PAVEMENT WITH (C1)

-L- STATION 12+00.00 TO 12+50.00
-L- STATION 17+50.00 TO 18+00.00

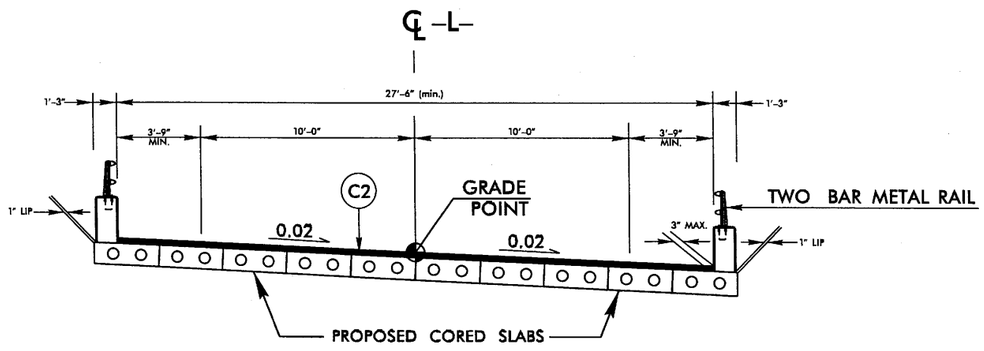
NOTE:
TRANSITION FROM EXISTING TO T.S.NO.1
-L- STATION 12+50.00 TO 13+00.00
TRANSTION FROM T.S.NO.1 TO EXISTING
-L- STATION 17+00.00 TO 17+50.00



TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2

-L- STATION 13+50.00 TO 14+48.21 (BEGIN BRIDGE)
-L- STATION 15+60.79 (END BRIDGE) TO 16+25.00



TYPICAL SECTION ON STRUCTURE (SEE STRUCTURE PLANS)

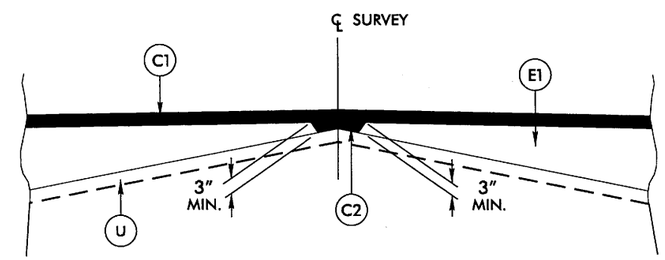
USE TYPICAL ON STRUCTURE

-L- STATION 14+48.21 (BEGIN BRIDGE) TO 15+60.79 (END BRIDGE)

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	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 1.5" IN DEPTH.
E	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E1	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 5.5" IN DEPTH.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL)

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



DETAIL SHOWING METHOD OF WEDGING

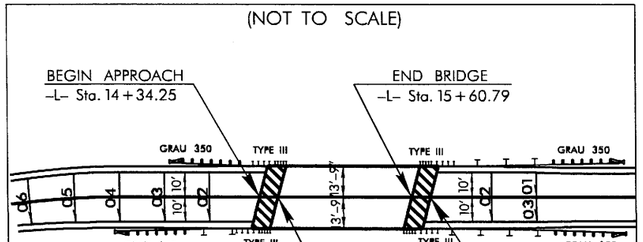
28-OCT-2009 11:29
i:\roadgen\DEC\b4625_rdy_typ.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
B-4625	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

8/17/99 REVISIONS

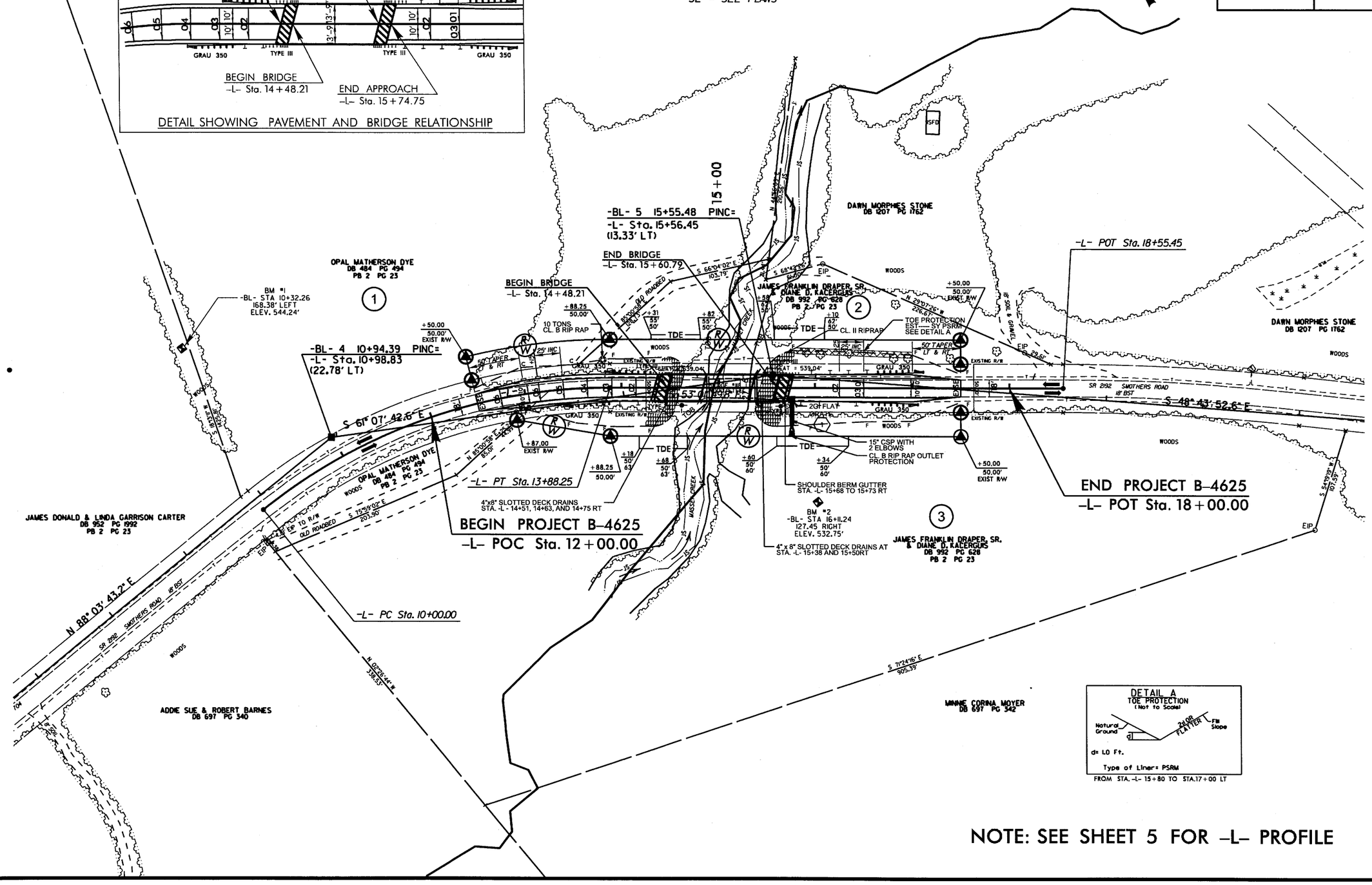
(NOT TO SCALE)



DETAIL SHOWING PAVEMENT AND BRIDGE RELATIONSHIP

-L-
PI Sta 12+01.91
Δ = 38° 49' 31.7" (RT)
L = 388.25'
D = 10° 00' 00.0"
T = 201.91'
R = 572.96'
SE = SEE PLANS

NAD 83



DETAIL A
TOE PROTECTION
(Not to Scale)

d= 1.0 Ft.
Type of Liner= PSRM
FROM STA. -L- 15+80 TO STA. 17+00 LT

NOTE: SEE SHEET 5 FOR -L- PROFILE

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5/14/99

PROJECT REFERENCE NO.	SHEET NO.
B-4625	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-L-

BM #1
R/R SPIKE IN BASE OF 10" GUM
ELEV = 544.24'
-BL- STA. 10 + 32.26 168.38' LT
-L- STA. 10 + 30.23 183.28' LT

BM #2
R/R SPIKE IN BASE OF 9" SYCAMORE
ELEV = 532.75'
-BL- STA. 16 + 11.24 127.45' RT
-L- STA. 16 + 02.49 117.94' RT

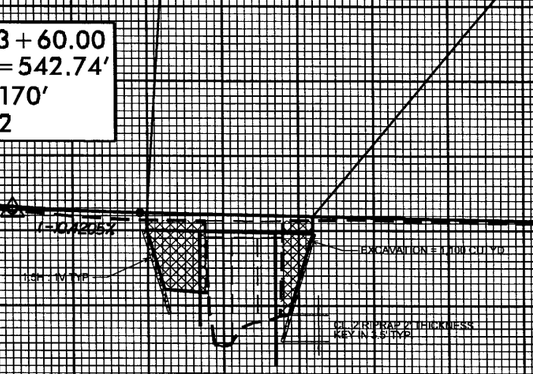
BEGIN GRADE
-L- STA. 12 + 50.00
ELEV = 545.49'

BEGIN BRIDGE
-L- STA. 14 + 48.21

END BRIDGE
-L- STA. 15 + 60.79

END GRADE
-L- STA. 17 + 50.00
ELEV = 541.10'

PI = 13 + 60.00
ELEV = 542.74'
VC = 170'
K = 82



BEGIN RESURFACING
-L- STA. 12 + 00.00

END RESURFACING
-L- STA. 18 + 00.00

STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE	= 1210	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 533.7	FT
BASE DISCHARGE	= 1863	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 535.1	FT
OVERTOPPING DISCHARGE	= 9810	CFS
OVERTOPPING FREQUENCY	= 500++	YRS
OVERTOPPING ELEVATION	= 541.6	FT

NOTE: SEE SHEET 4 FOR PLAN VIEW

560 550 540 530 520 510 500 490 480 470 460 450

10 11 12 13 14 15 16 17 18

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rsmith

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	B-4625	X-1

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

550 545 540 535 530

2:1 A:1 0.046

541.590

542.80

2:1

13 + 50.00

2:1 A:1 0.060

542.758

543.92

2:1

13 + 00.00

EXISTING EXISTING

545.27

12 + 50.00

EXISTING EXISTING

546.62

12 + 00.00

-L-

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	B-4625	X-2

0.020 0.020

541.36

14+49.50

0.026

541.92

2:1

2:1

14+00.00

0.031

542.11

3:1

2:1

13+88.25

-L-

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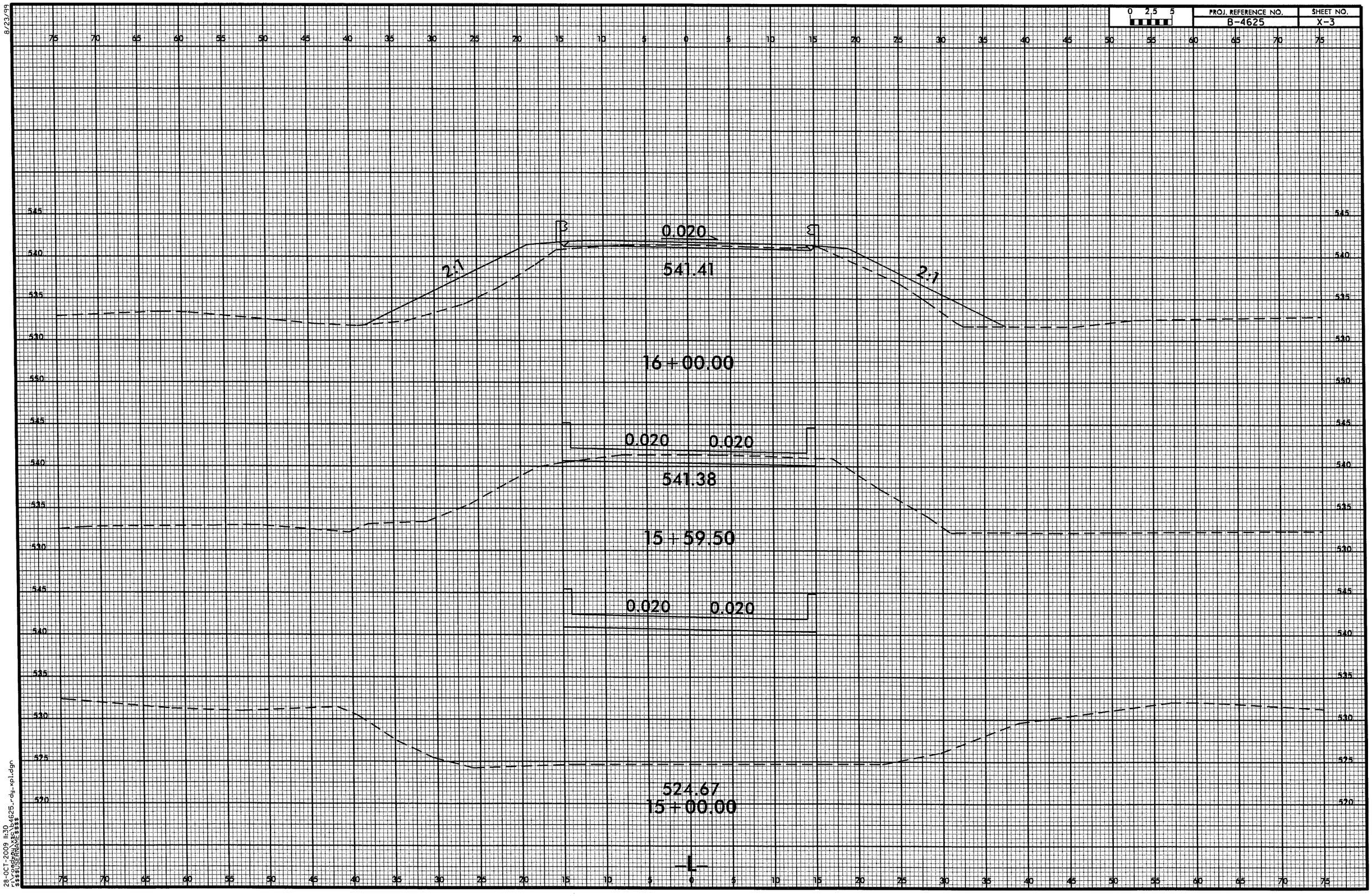
	B-4625	X-3



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8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	B-4625	X-4

EXISTING EXISTING

540.81

18+00.00

EXISTING EXISTING

540.90

17+50.00

0.006 0.028

2:1 2:1

540.98

17+00.00

0.010 0.030

2:1 2:1

541.14

16+50.00

-L-

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$$$$USERNAME$$$$

CATEGORICAL EXCLUSION ACTION CLASSIFICATION FORM

TIP Project No.	**B-4625**
W.B.S. No.	**38442.1.1**
Federal Project No.	**BRZ-2192(1)**

A. Project Description:

The purpose of this project is to replace Rockingham County Bridge No. 118 on SR 2192 (Smothers Road) over Massy Creek. Bridge No. 118 is 52 feet long. The replacement structure will be a bridge approximately 110-feet long providing a minimum 27.5-feet clear deck width, which is an improvement from the existing clear deck width of 18-feet and 10-inches. The bridge will include two 10-foot lanes and 3.75-foot offsets. Bicycle safe railing 54-inches in height will be provided. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 250-feet from the northwest end of the new bridge and 240-feet from the southeast end of the new bridge. The approaches will be widened to include a 20-foot pavement width providing two 10-foot lanes. Six-foot shoulders including 4-foot paved shoulders will be provided on each side (9-foot shoulders where guardrail is included). The roadway will be designed as a Rural Local Route using Sub-Regional Tier Design guidelines with a 50 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

B. Purpose and Need:

NCDOT Bridge Management Unit records indicate Bridge No. 118 has a sufficiency rating of 21 out of a possible 100 for a new structure.

The bridge is considered structurally deficient due to substructure condition appraisal of 2 out of 9 according to Federal Highway Administration (FHWA) standards and therefore eligible for FHWA's Highway Bridge Program. The bridge also meets the criteria for functionally obsolete due to a deck geometry appraisal of 3 out of 9.

Due to pile deterioration, continuous maintenance, as well as an aging structure (56 years old), the bridge is approaching the end of its useful life and is in need of replacement.

The superstructure and substructure of Bridge No. 118 have timber elements that are fifty-six years old. Timber components have a typical life expectancy between 40 to 50 years due to the natural deterioration rate of wood. Rehabilitation of a timber structure is generally practical only when a few

elements are damaged or prematurely deteriorated. However, past a certain degree of deterioration, most timber elements become impractical to maintain and upon eligibility are programmed for replacement. Timber components of bridge No. 118 are experiencing an increasing degree of deterioration that can no longer be addressed by reasonable maintenance activities.

Bridge No. 118 carries 440 vehicles per day with 700 vehicles per day projected for the future. The posted weight limit on the bridge is down to 10 tons for single vehicles and 18 tons for truck-tractor semi-trailers. The substandard deck width, railing and approach guardrail are becoming increasingly unacceptable and replacement of the bridge will result in safer traffic operations by improving the aforementioned safety features.

C. Proposed Improvements:

Circle one or more of the following Type II improvements which apply to the project:

1. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g., parking, weaving, turning, climbing).

    a. Restoring, Resurfacing, Rehabilitating, and Reconstructing pavement (3R and 4R improvements)
    b. Widening roadway and shoulders without adding through lanes
    c. Modernizing gore treatments
    d. Constructing lane improvements (merge, auxiliary, and turn lanes)
    e. Adding shoulder drains
    f. Replacing and rehabilitating culverts, inlets, and drainage pipes, including safety treatments
    g. Providing driveway pipes
    h. Performing minor bridge widening (less than one through lane)
    i. Slide Stabilization
    j. Structural BMP's for water quality improvement

2. Highway safety or traffic operations improvement projects including the installation of ramp metering control devices and lighting.

    a. Installing ramp metering devices
    b. Installing lights
    c. Adding or upgrading guardrail
    d. Installing safety barriers including Jersey type barriers and pier protection
    e. Installing or replacing impact attenuators
    f. Upgrading medians including adding or upgrading median barriers
    g. Improving intersections including relocation and/or realignment
    h. Making minor roadway realignment
    i. Channelizing traffic
    j. Performing clear zone safety improvements including removing hazards and flattening slopes
    k. Implementing traffic aid systems, signals, and motorist aid

l. Installing bridge safety hardware including bridge rail retrofit

3. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings.

   a. Rehabilitating, reconstructing, or replacing bridge approach slabs
   b. Rehabilitating or replacing bridge decks
   c. Rehabilitating bridges including painting (no red lead paint), scour repair, fender systems, and minor structural improvements
   d. Replacing a bridge (structure and/or fill)

4. Transportation corridor fringe parking facilities.

5. Construction of new truck weigh stations or rest areas.

6. Approvals for disposal of excess right-of-way or for joint or limited use of right-of-way, where the proposed use does not have significant adverse impacts.

7. Approvals for changes in access control.

8. Construction of new bus storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and located on or near a street with adequate capacity to handle anticipated bus and support vehicle traffic.

9. Rehabilitation or reconstruction of existing rail and bus buildings and ancillary facilities where only minor amounts of additional land are required and there is not a substantial increase in the number of users.

10. Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic.

11. Construction of rail storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and where there is no significant noise impact on the surrounding community.

12. Acquisition of land for hardship or protective purposes, advance land acquisition loans under section 3(b) of the UMT Act. Hardship and protective buying will be permitted only for a particular parcel or a limited number of parcels. These types of land acquisition qualify for a CE only where the acquisition will not limit the evaluation of alternatives, including shifts in alignment for planned construction projects, which may be required in the NEPA process. No project development on such land may proceed until the NEPA process has been completed.

13. Acquisition and construction of wetland, stream and endangered species mitigation sites.

14. Remedial activities involving the removal, treatment or monitoring of soil or groundwater contamination pursuant to state or federal remediation guidelines.

D. Special Project Information:

The estimated costs, based on 2008 prices, are as follows:

Structure	$ 341,000
Roadway Approaches	118,000
Structure Removal	21,000
Misc. & Mob.	107,000
Eng. & Contingencies	88,000
Total Construction Cost	$ 675,000
Right-of-way Costs	22,000
Right-of-way Utility Costs	5,000
Total Project Cost	$ 702,000

Estimated Traffic:

Current	-	440 vpd
Year 2030	-	700 vpd
TTST	-	1%
Dual	-	1%

Accidents: Traffic Engineering has evaluated a recent three year period and found two accidents occurring in the vicinity of the project. None were associated with the geometry of the bridge or its approach roadways.

Design Exceptions: There are no anticipated design exceptions for this project.

Bicycle Designation: This portion of SR 2192 is designated as Routes 1 and 5 of the Rockingham County Bike Plan. Bicycle accommodations will be provided.

Bridge Demolition: Bridge No. 118 includes a superstructure composed of steel and timber and can be removed by standard techniques with no resulting fill. The substructure is composed of two mass concrete footings (in-water) which will likely result in cumulative temporary fill of 9 cubic yards.

Alternatives Discussion:

No Build – The no build alternative would result in eventually closing the road which is unacceptable given the volume of traffic served by SR 2192.

Rehabilitation – The bridge was constructed in 1952 and the timber materials within the bridge are reaching the end of their useful life. Rehabilitation would require replacing the timber components which would constitute effectively replacing the bridge.

Offsite Detour – Bridge No. 118 will be replaced on the existing alignment. Traffic will be detoured offsite (see Figure 1) during the construction period. NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include SR 2259 and NC 704. The majority of traffic on the road is through traffic. The detour for the average road user would result in 4 minutes additional travel time (3.3 miles additional travel). Up to a 6-month duration of construction is expected on this project.

Based on the Guidelines, the criteria above indicate that on the basis of delay alone the detour is acceptable. Rockingham County Emergency Services along with Rockingham County Schools Transportation have also indicated that the detour is acceptable. NCDOT Division 7 has indicated the condition of all roads, bridges and intersections on the offsite detour are acceptable without improvement and concurs with the use of the detour.

Onsite Detour – An onsite detour was not evaluated due to the presence of an acceptable offsite detour.

Staged Construction – Staged construction was not considered because of the availability of an acceptable offsite detour.

New Alignment – Given that the alignment for SR 2192 is acceptable, a new alignment was not considered as an alternative.

Other Agency Comments:

The **U. S. Fish & Wildlife Service** in standardized letters provided a request that they prefer any replacement structure to be a spanning structure, off-site detours are most desirable rather than construction of a temporary, on-site structure and wetland, forest and designated buffer impacts should be avoided and minimized to the maximum extent practical.

Response: The NCDOT plans to replace the existing structure with a structure at its existing location while maintaining traffic on an off-site detour. There are no protected resources at this site and no applicable buffer rules to the Roanoke River Basin.

The **N. C. Wildlife Resource Commission** recommended the Bridge No. 118 over Massy Creek be replaced with a bridge and that standard recommendations apply.

Response: The NCDOT plans to replace the existing structure with a structure. Best Management Practices will be applied during construction.

The **North Carolina Department of Cultural Resources** recommended that a comprehensive survey be conducted by an experienced archaeologist to identify and evaluate the significance of archaeological remains since there had been no previously recorded sites in the project area.

Response: In January and February of 2008, the NCDOT Human Environment Unit conducted archaeological investigations for the proposed bridge replacement project. The survey concluded a finding of "no historic properties affected" for the archaeological resource, and no further archaeological work was recommended.

The **NCDENR Division of Water Resources** had standard comments for the proposed bridge project.

The **US Environmental Protection Agency** did not have any significant comments or concerns for the proposed bridge project.

The **County of Rockingham** and the **Army Corps of Engineers** did not comment on the proposed bridge project.

Public Involvement:

A newsletter has been sent to all those living along SR 2192 within the area of potential effect. No comments have been received to date; therefore, a Citizen's Informational Workshop was determined unnecessary.

E. Threshold Criteria

The following evaluation of threshold criteria must be completed for Type II actions

ECOLOGICAL		YES	NO
(1)	Will the project have a substantial impact on any unique or important natural resource?		X
(2)	Does the project involve habitat where federally listed endangered or threatened species may occur?		X
(3)	Will the project affect anadromous fish?		X
(4)	If the project involves wetlands, is the amount of permanent and/or temporary wetland taking less than one-tenth (1/10) of an acre and have all practicable measures to avoid and minimize wetland takings been evaluated?	X	
(5)	Will the project require the use of U. S. Forest Service lands?		X
(6)	Will the quality of adjacent water resources be adversely impacted by proposed construction activities?		X
(7)	Does the project involve waters classified as Outstanding Water Resources (OWR) and/or High Quality Waters (HQW)?		X
(8)	Will the project require fill in waters of the United States in any of the designated mountain trout counties?		X
(9)	Does the project involve any known underground storage tanks (UST's) or hazardous materials sites?		X

PERMITS AND COORDINATION		YES	NO
(10)	If the project is located within a CAMA county, will the project significantly affect the coastal zone and/or any "Area of Environmental Concern" (AEC)?		X
(11)	Does the project involve Coastal Barrier Resources Act resources?		X
(12)	Will a U. S. Coast Guard permit be required?		X
(13)	Will the project result in the modification of any existing regulatory floodway?	X	

(14)	Will the project require any stream relocations or channel changes?		X

SOCIAL, ECONOMIC, AND CULTURAL RESOURCES		YES	NO
(15)	Will the project induce substantial impacts to planned growth or land use for the area?		X
(16)	Will the project require the relocation of any family or business?		X
(17)	Will the project have a disproportionately high and adverse human health and environmental effect on any minority or low-income population?		X
(18)	If the project involves the acquisition of right of way, is the amount of right of way acquisition considered minor?	X	
(19)	Will the project involve any changes in access control?		X
(20)	Will the project substantially alter the usefulness and/or land use of adjacent property?		X
(21)	Will the project have an adverse effect on permanent local traffic patterns or community cohesiveness?		X
(22)	Is the project included in an approved thoroughfare plan and/or Transportation Improvement Program (and is, therefore, in conformance with the Clean Air Act of 1990)?	X	
(23)	Is the project anticipated to cause an increase in traffic volumes?		X
(24)	Will traffic be maintained during construction using existing roads, staged construction, or on-site detours?	X	
(25)	If the project is a bridge replacement project, will the bridge be replaced at its existing location (along the existing facility) and will all construction proposed in association with the bridge replacement project be contained on the existing facility?	X	
(26)	Is there substantial controversy on social, economic, or environmental grounds concerning the project?		X
(27)	Is the project consistent with all Federal, State, and local laws relating to the environmental aspects of the project?	X	
(28)	Will the project have an "effect" on structures/properties eligible for or listed on the National Register of Historic Places?		X

(29)	Will the project affect any archaeological remains which are important to history or pre-history?		X
(30)	Will the project require the use of Section 4(f) resources (public parks, recreation lands, wildlife and waterfowl refuges, historic sites, or historic bridges, as defined in Section 4(f) of the U. S. Department of Transportation Act of 1966)?		X
(31)	Will the project result in any conversion of assisted public recreation sites or facilities to non-recreation uses, as defined by Section 6(f) of the Land and Water Conservation Act of 1965, as amended?		X
(32)	Will the project involve construction in, across, or adjacent to a river designated as a component of or proposed for inclusion in the National System of Wild and Scenic Rivers?		X

F. Additional Documentation Required for Unfavorable Responses in Part E

Response to Question 13: Rockingham County is a participant in the Federal Flood Insurance Program, administered by the Federal Emergency Management Agency (FEMA). The project is within a limited detailed flood study, designated as Zone AE, for which the 100-year base flood elevations and corresponding regulatory floodway have been established. The Hydraulic Unit will coordinate with FEMA to determine if a Conditional Letter of Map Revision (CLOMR) and a subsequent final Letter of Map Revision (LOMR) are required for this project. The Division will submit sealed as-built construction plans to the Hydraulic Unit upon project completion certifying the project was built as shown on the construction plans.

G. CE Approval

TIP Project No.	**B-4625**
W.B.S. No.	**38442.1.1**
Federal Project No.	**BRZ-2192(1)**

Project Description:

The purpose of this project is to replace Rockingham County Bridge No. 118 on SR 2192 (Smothers Road) over Massy Creek. Bridge No. 118 is 52 feet long. The replacement structure will be a bridge approximately 125 feet long providing a minimum 28 feet clear deck width. The bridge will include two 10-foot lanes and 4-foot offsets. Bicycle safe railing 54-inches in height will be provided. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 190 feet from the northwest end of the new bridge and 190 feet from the southeast end of the new bridge. The approaches will be widened to include a 20-foot pavement width providing two 10-foot lanes. Six-foot shoulders including 4-foot paved shoulders will be provided on each side (9-foot shoulders where guardrail is included). The roadway will be designed as a Rural Local Route using Sub-Regional Tier Design guidelines with a 50 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

Categorical Exclusion Action Classification:

____ TYPE II(A)
_X_ TYPE II(B)

Approved:

1/27/09 [signature]
Date — Bridge Project Development Engineer
Project Development & Environmental Analysis Branch

1/27/09 [signature]
Date — Project Engineer
Project Development & Environmental Analysis Branch

1/27/09 [signature]
Date — Project Planning Engineer
Project Development & Environmental Analysis Branch

For Type II(B) projects only:

1/29/09 for [signature]
Date — John F. Sullivan, III, PE, Division Administrator
Federal Highway Administration

PROJECT COMMITMENTS:

Rockingham County
Bridge No. 118 on SR 2192
Over Massy Creek
Federal Aid Project No. BRZ-2192(1)
W.B.S. No. 38442.1.1
T.I.P. No. B-4625

Division Seven Construction, Resident Engineer's Office – Offsite Detour
In order to have time to adequately reroute school busses, Bob Gauldin, Director of Transportation for Rockingham County Schools should be contacted at (336) 634-3275 at least one month prior to road closure.

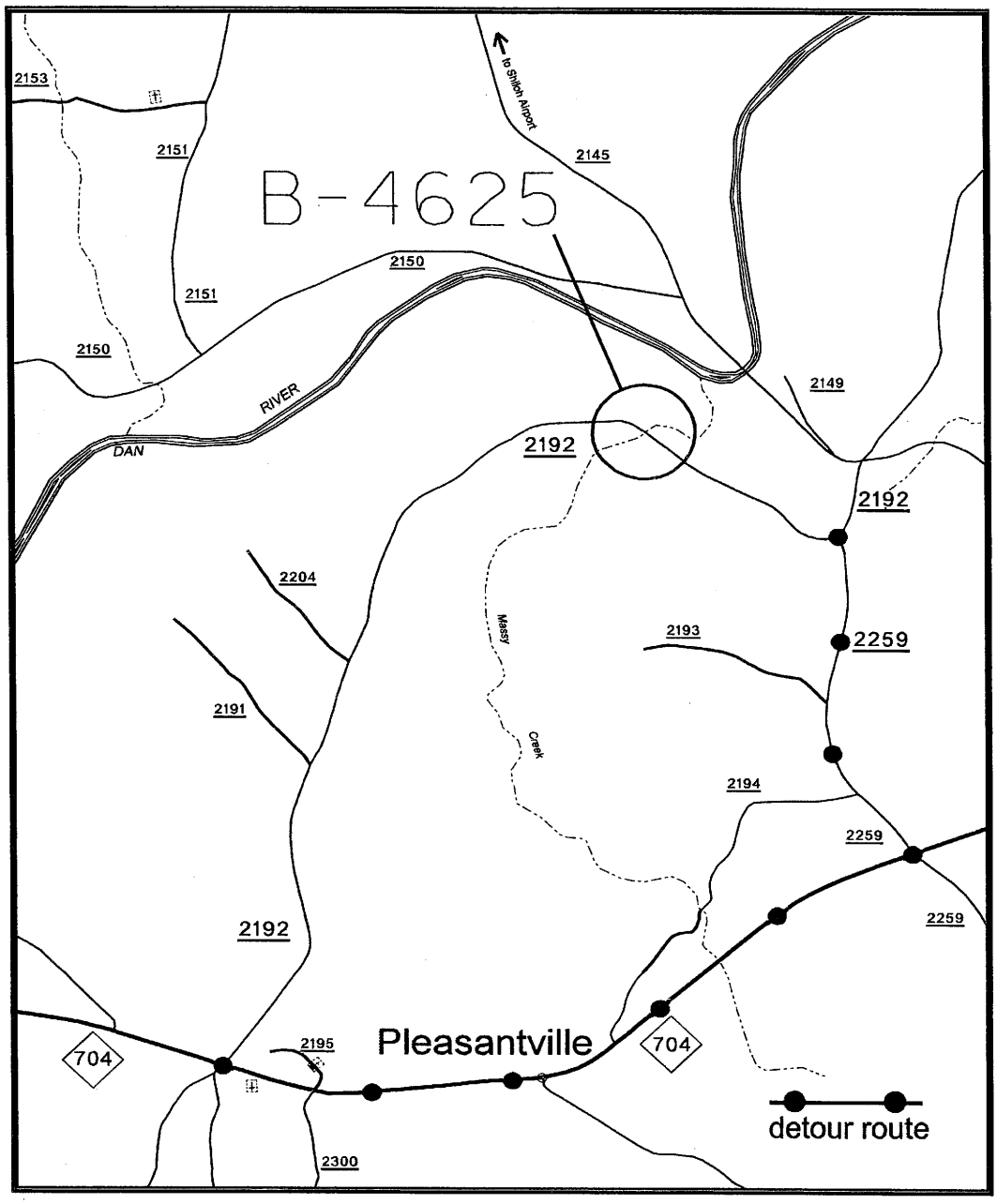
Steve Hale, Director of Rockingham County Emergency Medical Services needs to be contacted at (336) 634-3001 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

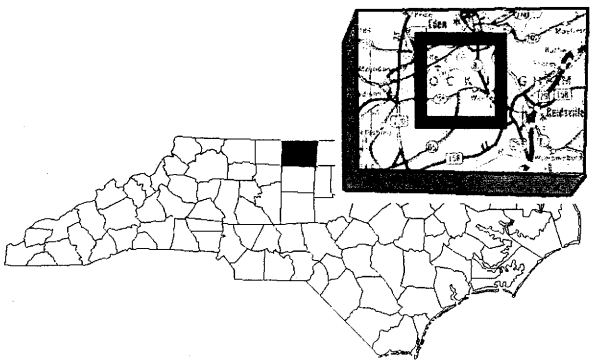
Hydraulic Unit – FEMA Coordination
The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), the delegated state agency for administering FEMA's National Flood Insurance Program, to determine status of project with regard to applicability of NCDOT'S Memorandum of Agreement with FMP (dated 6/5/08), or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

Resident Engineer – As-built Construction Plans
This project involves construction activities on or adjacent to FEMA – regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

Design Branch, Division Office – School Bus Turn Around
The Director of School Transportation has requested a temporary bus turn around at the bridge on SR 2192. An existing driveway will be suitable with the addition of gravel and possible pipe replacement. This can be included as a part of the special provisions of the construction contract.

Roadway Design, Structure Design – Bicycle Accommodations
Bicycle accommodations will be provided on the bridge approaches. On both sides of the bridge, 3.75-foot offsets with bicycle safe 54-inch bridge railing will be provided. The approaches will include a 4-foot paved shoulder.

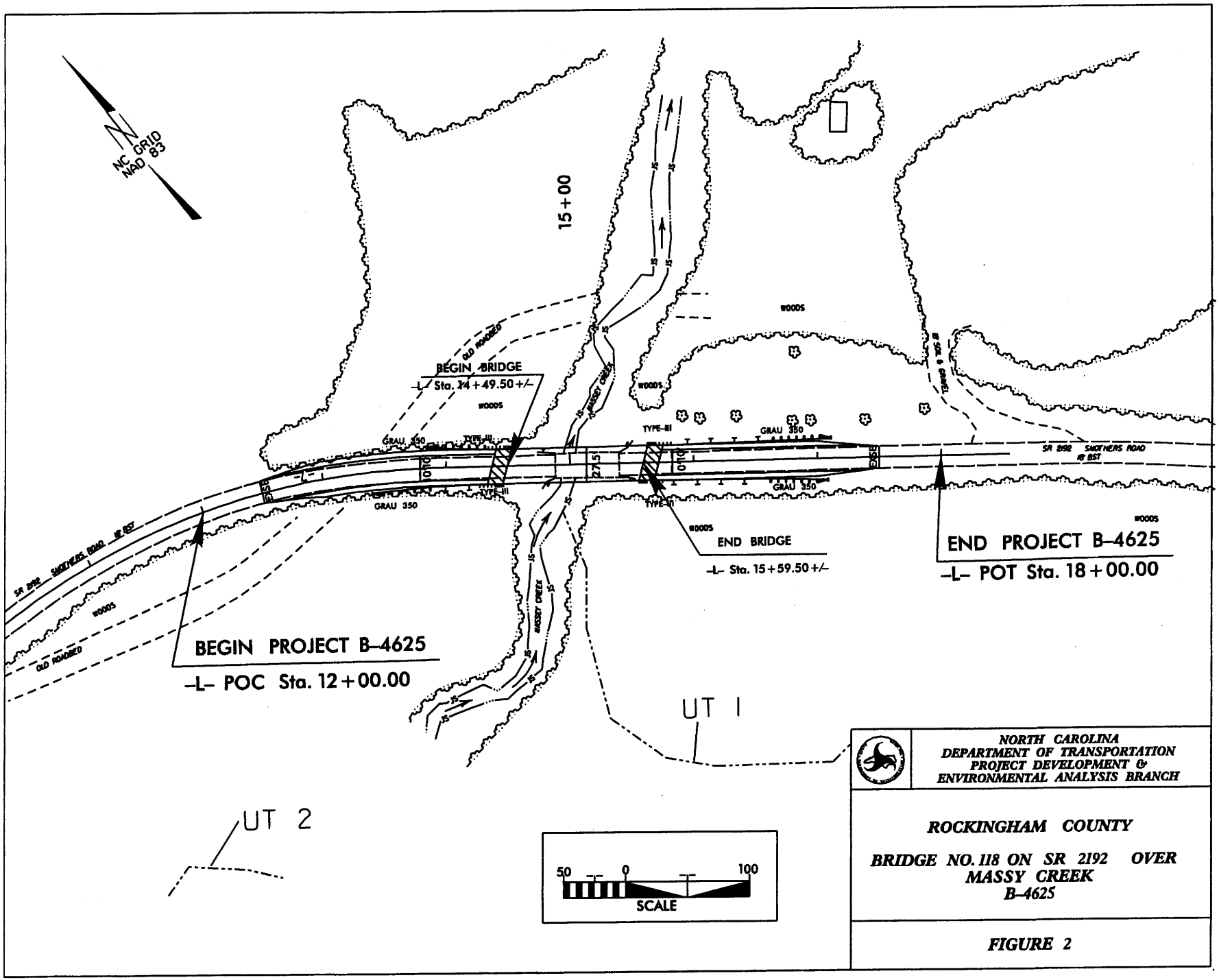




NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT &
ENVIRONMENTAL ANALYSIS BRANCH

ROCKINGHAM COUNTY
REPLACE BRIDGE 118 ON SR 2192
OVER MASSY CREEK
B-4625

Figure 1



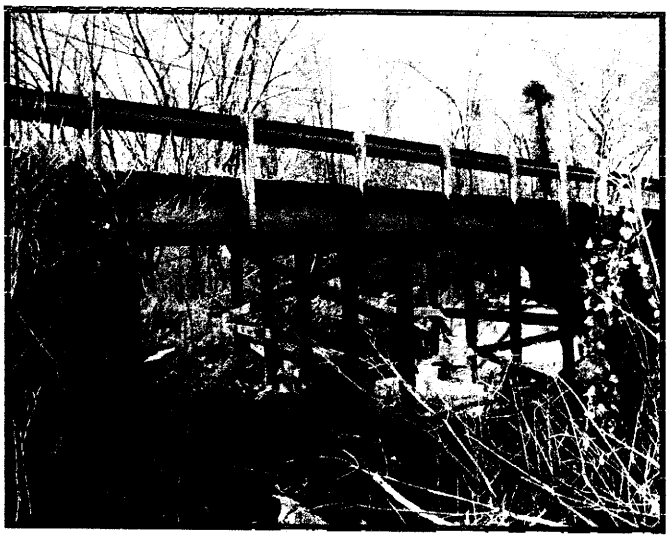
NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT &
ENVIRONMENTAL ANALYSIS BRANCH

ROCKINGHAM COUNTY

BRIDGE NO. 118 ON SR 2192 OVER
MASSY CREEK
B-4625

FIGURE 2

East approach of Bridge No. 118



North face of Bridge No. 118

Looking upstream from Bridge No. 118

Facing east from Bridge No. 118

North Carolina Department of Transportation
Division of Highways
Planning & Environmental Branch

Rockingham County
Replace Bridge No. 118 on SR 2192
Over Massy Creek
B-4625

Figure 3

North Carolina Department of Cultural Resources

State Historic Preservation Office

Peter B. Sandbeck, Administrator

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

July 23, 2008

MEMORANDUM

TO: Matt Wilkerson
Office of Human Environment
NCDOT Division of Highways

FROM: Peter Sandbeck

SUBJECT: Archaeological Investigations, Replacement of Bridge 118 on SR 2192 (Smothers Road), B-4625, Rockingham County, ER 05-0882

Thank you for your letter of June 26, 2008, transmitting the survey report by Megan O'Connell of your staff for the above project.

For purposes of compliance with Section 106 of the National Historic Preservation Act, we concur that the following property is not eligible for listing in the National Register of Historic Places under criterion D:

31RK202

This Late Woodland Dan River phase site does not contain sufficient integrity to yield information important to prehistory.

We concur with your finding of "no historic properties affected" and recommend no additional archaeological investigation in connection with this bridge replacement project as currently proposed.

The report meets our office's guidelines and those of the Secretary of the Interior. Specific concerns and /or corrections which need to be addressed in the preparation of a final report are attached for the author's use.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/807-6579. In all future communication concerning this project, please cite the above-referenced tracking number.

cc: Megan O'Connell, NCDOT

North Carolina Department of Cultural Resources

State Historic Preservation Office

Peter B. Sandbeck, Administrator

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

August 4, 2005

MEMORANDUM

TO: Chavonda D. Brown
NCDOT, PDEA

FROM: Peter Sandbeck PBS for Peter Sandbeck

SUBJECT: Replacement of Bridge No. 118 on SR 2192 over Massy Creek, TIP No. B-4625, Rockingham County, ER 05-0882

Thank you for your memorandum of April 6, 2005, concerning the above project. We apologize for the delay in our response.

There are no known recorded archaeological sites within the project boundaries. However, the project area has never been systematically surveyed to determine the location or significance of archaeological resources. There is a high probability for the presence of Native American archaeological sites.

We recommend that a comprehensive survey be conducted by an experienced archaeologist to identify and evaluate the significance of archaeological remains that may be damaged or destroyed by the proposed project. Potential effects on unknown resources must be assessed prior to the initiation of construction activities.

Two copies of the resulting archaeological survey report, as well as one copy of the appropriate site forms, should be forwarded to us for review and comment as soon as they are submitted by the consulting archaeologist and well in advance of any construction activities.

We have determined that the project as proposed will not affect any historic structures.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763. In all future communication concerning this project, please cite the above-referenced tracking number.

cc: Matt Wilkerson, NCDOT

	Location	Mailing Address	Telephone/Fax
ADMINISTRATION	507 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-4763/733-8653
RESTORATION	515 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-6547/715-4801
SURVEY & PLANNING	515 N. Blount Street, Raleigh, NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-6545/715-4801