



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

December 28, 2004

MEMORANDUM TO: Mr. Jon G. Nance, P.E.
Division 5 Engineer

FROM: Philip S. Harris, III, P.E., Manager *PHS*
Office of the Natural Environment
Project Development and
Environmental Analysis Branch

SUBJECT: Franklin County; Division 5; Replace Bridge No. 40 on SR 1235
(Dyking Road) over Bear Swamp Creek; State Project No. 8.2360601;
TIP Project No. B-4515

Attached is the Division of Water Quality approval of the Tar-Pamlico Buffer Rules Authorization Certificate. All environmental permits have been received for the construction of this project.

PSH/gyb

Attachment

cc: Mr. Art McMillan, P.E.
Mr. Omar Sultan
Mr. Jay Bennett, P.E.
Mr. David Chang, P.E.
Mr. Randy Garris, P.E.
Mr. Greg Perfetti, P.E.
Mr. Mark Staley
Mr. John F. Sullivan, III, FHWA
Mr. Chris Murray, Division 5 DEO
Ms. Cathy Houser, PE

PROJECT COMMITMENTS

FRANKLIN COUNTY
BRIDGE NO. 40 ON SR 1235 (DYKING ROAD)
OVER BEAR SWAMP CREEK

FEDERAL-AID PROJECT NO. BRZ-1235(1)
STATE PROJECT NO. 8.2360601
T.I.P. NO. B-4515

In addition to the standard Buffer Certification Conditions attached to this Green Sheet, the NCDOT's Guidelines for Best Management Practices for the Protection of Surface Waters and NCDOT's Guidelines for Best Management Practices for Bridge Demolition and Removal, the following special commitments have been agreed to by NCDOT:

COMMITMENTS DEVELOPED THROUGH PROJECT DESIGN AND DEVELOPMENT

NCDOT Division 5 and Structure Design

The Tar-Pamlico River Buffer Rules will be implemented during the design, construction and maintenance of the project.

(This condition was adhered to during project design.)

NCDOT Division 5

The Division will provide adequate notice to Franklin County Schools so they may plan their bus routing.

COMMITMENTS DEVELOPED THROUGH PROJECT BUFFER CERTIFICATION

Division 5 Construction Engineers, Roadside Environmental Unit

Pursuant to NCAC15A 2B.0259(6), sediment and erosion control devices shall not be placed in Zone 1 of any Tar-Pamlico Buffer without approval by the NCDWQ. At this time, the NCDWQ has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.



December 7, 2004
Franklin County
DWQ Project No. 041781
TIP No. B-4515

**APPROVAL of TAR-PAMLICO RIVER BUFFER RULES AUTHORIZATION CERTIFICATE with
ADDITIONAL CONDITIONS**

Dr. Gregory J. Thorpe, PhD., Manager
Planning & Environmental Branch
N.C. Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina, 27699-1548

Dear Dr. Thorpe:

You have our approval, in accordance with the conditions listed below, to impact 4,444 square feet (1,339 square feet in Zone 1 and 3,105 square feet in Zone 2) of protected Tar-Pamlico River Riparian Buffer for the purpose of replacing Bridge No. 40 Over Bear Swamp Creek on to SR 1235 (Dyking Road) in Franklin County. The project shall be constructed in accordance with your application dated received November 2, 2004. This approval shall act as your Authorization Certificate as required within the Tar-Pamlico River Riparian Buffer Rules (15A NCAC 2B .0259). In addition, you should get any other required federal, state or local permits before you go ahead with your project including (but not limited to) Sediment and Erosion Control.

This approval is valid solely for the purpose and design described in your application (unless modified below). Should your project change, you must notify the DWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If total wetland fills for this project (now or in the future) exceed one acre, or of total impacts to streams (now or in the future) exceed 150 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you must adhere to the conditions listed in the attached certification.

- 1.) Upon completion of the project, the NCDOT shall complete and return the enclosed "Certification of Completion Form" to notify DWQ when all work included in the 401 Certification has been completed. The responsible party shall complete the attached form and return it to the 401/Wetlands Unit of the Division of Water Quality upon completion of the project.
- 2.) If the old bridge is removed, no discharge of bridge material into surface waters is preferred. Strict adherence the Corps of Engineers guidelines for bridge demolition will be a condition of the 401 Water Quality Certification.
- 3.) All stormwater runoff shall be directed to sheetflow through stream buffers at nonerosive velocities, unless approved otherwise by this certification.
- 4.) During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.
- 5.) Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.

- 6.) The dimension, pattern and profile of the stream above and below the crossing should not be modified by widening the stream channel or reducing the depth of the stream. Disturbed floodplains and streams should be restored to natural geomorphic conditions.
- 7.) Any riprap used must not interfere with thalweg performance and aquatic life passage during low flow conditions.
- 8.) All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.
- 9.) Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
- 10.) The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.
- 11.) There shall be no excavation from or waste disposal into jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit. Should waste or borrow sites be located in wetlands or stream, compensatory mitigation will be required since it is a direct impact from road construction activities.
- 12.) Pursuant to NCAC15A 2B.0259(6), sediment and erosion control devices shall not be placed in Zone 1 of any Tar-Pamlico Buffer without prior approval by the NCDWQ. At this time, the NCDWQ has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.
- 13.) Heavy equipment must be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the stream.
- 14.) No live or fresh concrete shall come into contact with waters of the state until the concrete has hardened
- 15.) The presence of equipment in the channels must be minimized. Under no circumstances must rock, sand or other materials be dredged from the wetted stream channel under authorization of this permit, except in the immediate vicinity of the culverts.
- 16.) All work shall be performed during low or normal flow conditions.
- 17.) A copy of this Water Quality Certification shall be posted on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.
- 18.) All protected riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated with native woody species upon completion of the project construction. A post-construction as-built with the restoration activities included shall be submitted to the DWQ no later than 60 days after the project is closed out by the Department of Transportation.

If you do not accept any of the conditions of this certification, you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition that conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, P.O. Box 27447, Raleigh, N.C. 27611-7447. This certification and its conditions are final and binding unless you ask for a hearing.

This letter completes the review of the Division of Water Quality under Section 401 of the Clean Water Act. If you have any questions, please contact Nicole Thomson at 919-715-3415.

Sincerely,



Mark W. Klimek, P.E.

JEH/njt

Attachment

cc: Wilmington District, US Army Corps of Engineers
Mr. Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office
Mr. Jon G. Nance, PE, Division 5 Engineer, 2612 N. Duke Street, Durham, NC 27704
Mr. Chris Murray, Division 5 Environmental Officer, 2612 N. Duke Street, Durham, NC 27704
NCDWQ Raleigh Regional Office
Central Files
File Copy

c:\Correspondence\DWQ041781\120304wqc.doc



DWQ Project No.: _____ County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401/Wetlands Unit, North Carolina Division of Water Quality, 1621 Mail Service Center, Raleigh, NC, 27699-1621. This form may be returned to DWQ by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Agent's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

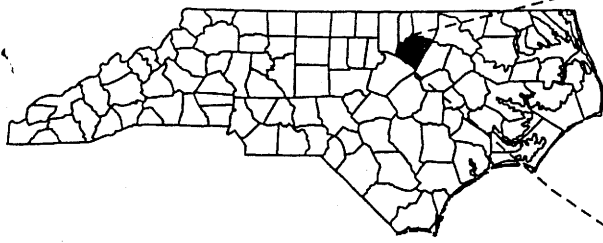
Engineer's Certification

_____ Partial _____ Final

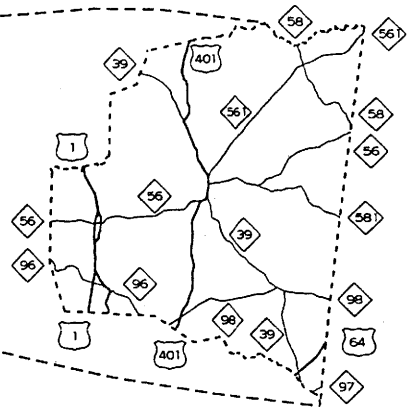
I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project, for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature _____ Registration No. _____

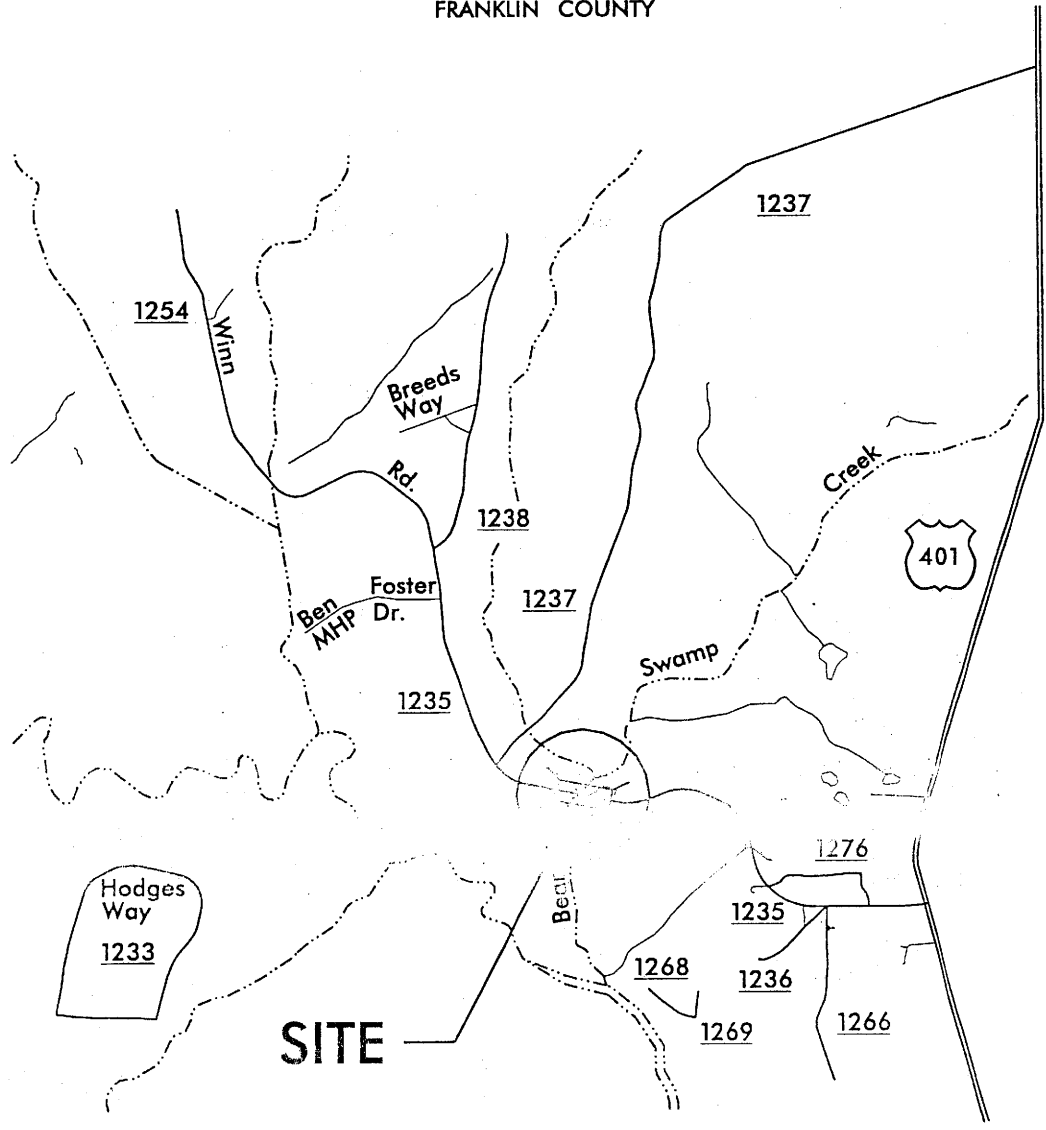
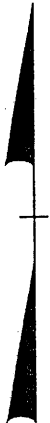
Date _____



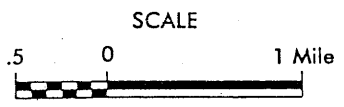
SEE INSET
BELOW



FRANKLIN COUNTY



SITE



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

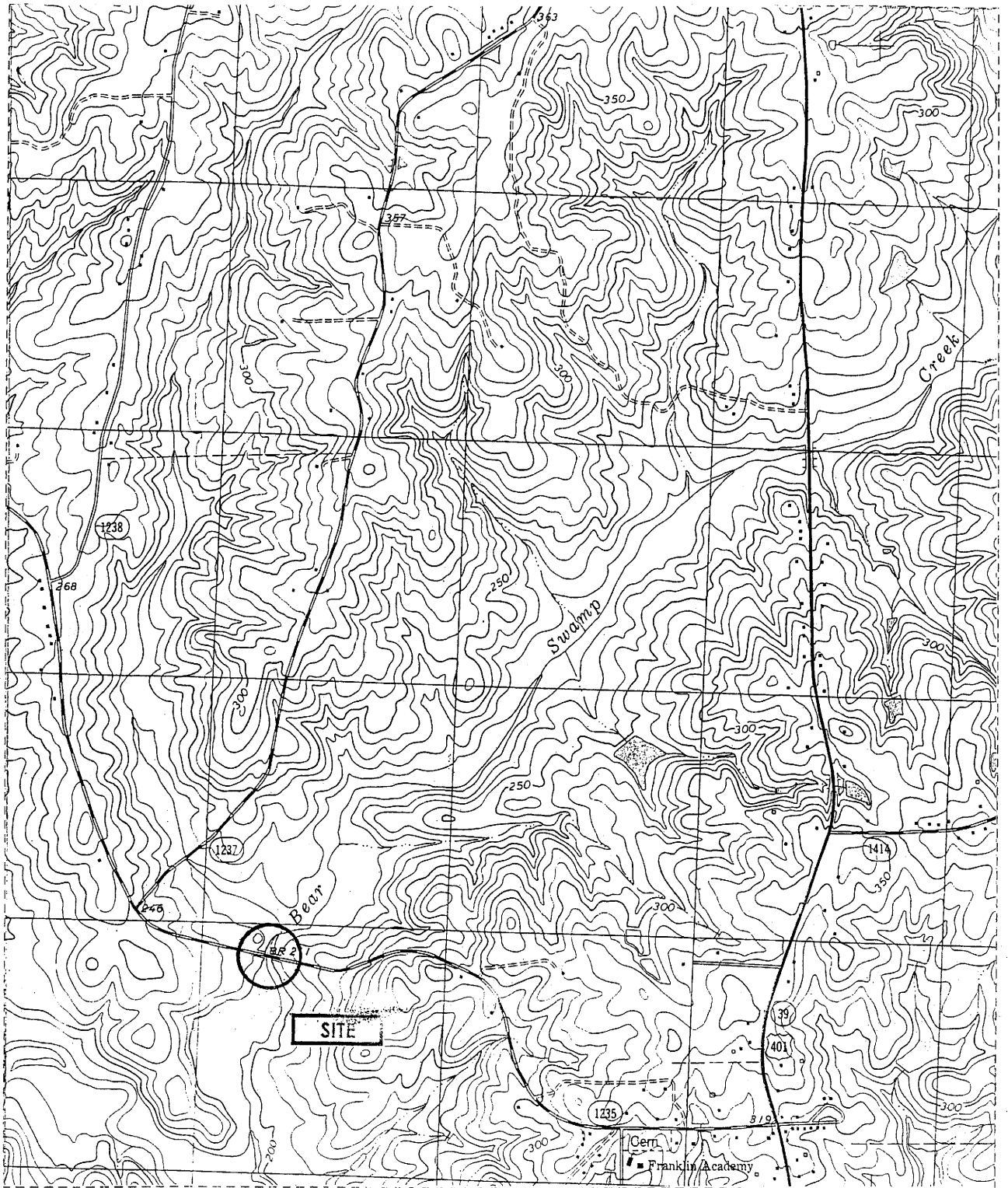
FRANKLIN COUNTY

PROJECT: 8.2360601 (B-4515)
BRIDGE NO. 40

ON SR 1235 (DYKING ROAD)
OVER BEAR SWAMP CREEK

SHEET 1 OF 2

12/8/03



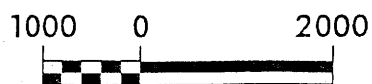
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

FRANKLIN COUNTY

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BRIDGE NO. 40
ON SR 1235 (DYKING ROAD)
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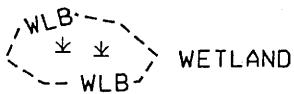
SHEET 2 OF 8

12 / 8 / 03



LEGEND

---WLB--- WETLAND BOUNDARY



DENOTES FILL IN WETLAND

DENOTES FILL IN SURFACE WATER

DENOTES FILL IN SURFACE WATER (POND)

DENOTES TEMPORARY FILL IN WETLAND

DENOTES EXCAVATION IN WETLAND

DENOTES TEMPORARY FILL IN SURFACE WATER

DENOTES MECHANIZED CLEARING

— BZ — RIPARIAN BUFFER ZONE

← ← FLOW DIRECTION

— TB — TOP OF BANK

--- WE --- EDGE OF WATER

— C — PROP. LIMIT OF CUT

— F — PROP. LIMIT OF FILL

▲ PROP. RIGHT OF WAY

--- NG --- NATURAL GROUND

--- PL --- PROPERTY LINE

— TDE — TEMP. DRAINAGE EASEMENT

— PDE — PERMANENT DRAINAGE EASEMENT

— EAB — EXIST. ENDANGERED ANIMAL BOUNDARY

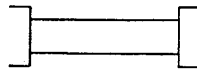
— EPB — EXIST. ENDANGERED PLANT BOUNDARY

▽ WATER SURFACE

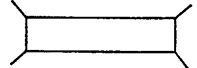
X X X LIVE STAKES

BOULDER

--- COIR FIBER ROLLS



PROPOSED BRIDGE



PROPOSED BOX CULVERT



PROPOSED PIPE CULVERT

(DASHED LINES DENOTE EXISTING STRUCTURES)



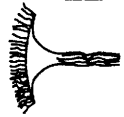
SINGLE TREE



WOODS LINE



DRAINAGE INLET



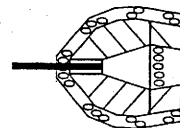
ROOTWAD



RIP RAP



ADJACENT PROPERTY OWNER OR PARCEL NUMBER IF AVAILABLE



RIP RAP ENERGY DISSIPATOR BASIN

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

FRANKLIN COUNTY

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BRIDGE NO. 40

ON SR 1235 (DYKING ROAD)

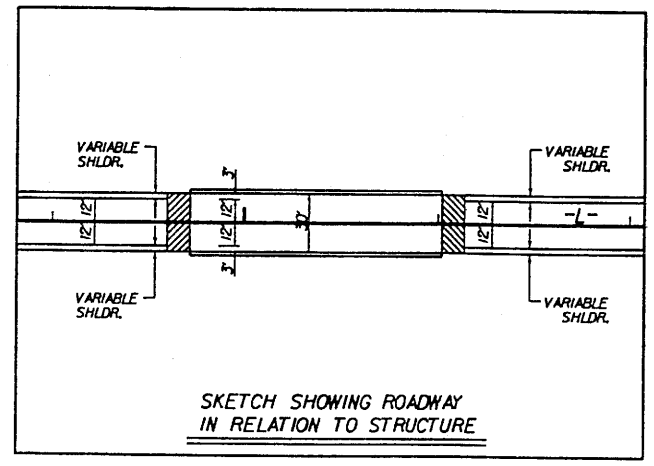
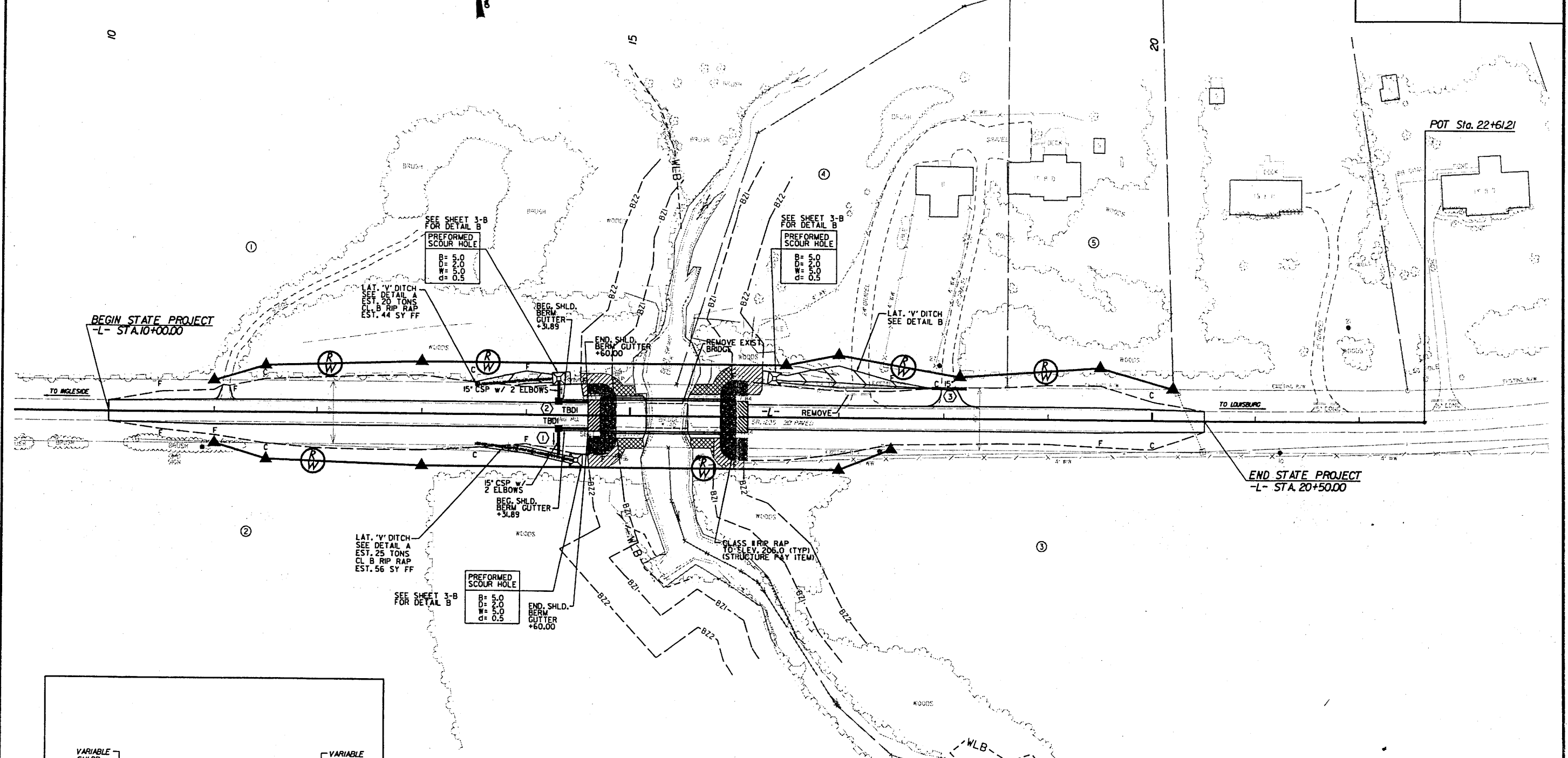
OVER BEAR SWAMP CREEK

SHEET 3 OF 8

12/8/03

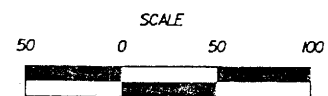
PROJECT REFERENCE NO. B-4515	SHEET NO. 4
RW SHEET NO. 40+8	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

REVISIONS



DATUM DESCRIPTION
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B4515-1" WITH NAD 83/95 STATE PLANE GRID COORDINATES OF NORTHING: 868256.3278(11) EASTING: 220076.3399(11) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99999088 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B4515-1" TO +L- STATION 10+00.00 IS S 78° 04' 41.6" E 11612.1' ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

DENOTES MITIGABLE IMPACTS ZONE 1
 DENOTES MITIGABLE IMPACTS ZONE 2
 DENOTES APPROACH SLAB



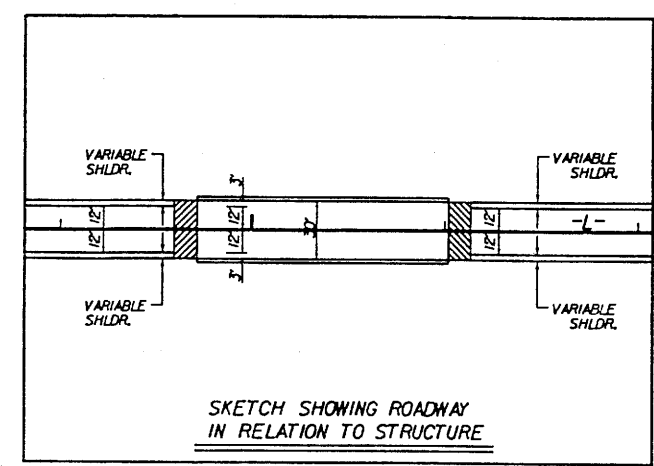
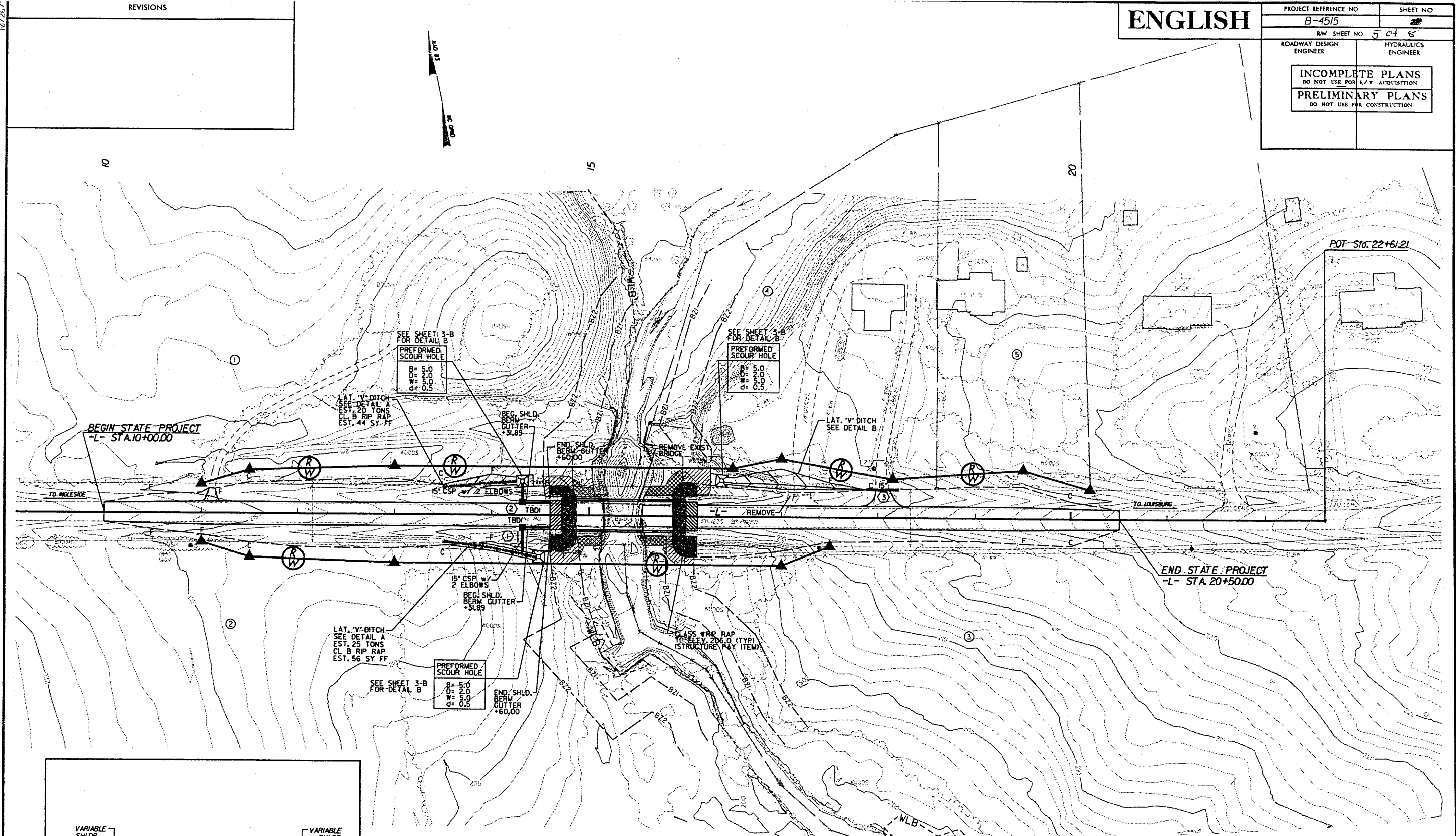
FOR -L- PROFILE SEE SHEET NO.5

SEE SHEETS S-1 THRU S- FOR STRUCTURE PLANS

Romey Kemp & Associates, Inc.
 Transportation Consulting Engineers
 4328-A Windy Hill Drive Raleigh, North Carolina 27609
 1931 812-545 Fax 1931 818-546

10/25/14

PROJECT REFERENCE NO. B-4515	SHEET NO. 5
RW SHEET NO. 5 of 5	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

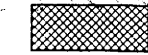



DATUM DESCRIPTION

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THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B4515-1" TO +L- STATION 10+00.00 IS 578° 04' 41.6" E 176.121'

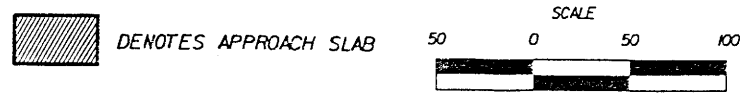
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS MVD 88

 DENOTES MITIGABLE IMPACTS ZONE 1

 DENOTES MITIGABLE IMPACTS ZONE 2

FOR -L- PROFILE SEE SHEET NO.5

SEE SHEETS S-1 THRU S- FOR STRUCTURE PLANS



Romey Kemp & Associates, Inc.
 Transportation Consulting Engineers

4528-A Wintley Hill Drive Raleigh, North Carolina 27609
 1991 812-545 Fax 1991 812-546

SYSTEMS DESIGN & CONSTRUCTION
 10/25/91

BM2 : R/R SPIKE IN 2" PINE, 201.69' LT
STA. 7+64.46 ELEV. 238.48

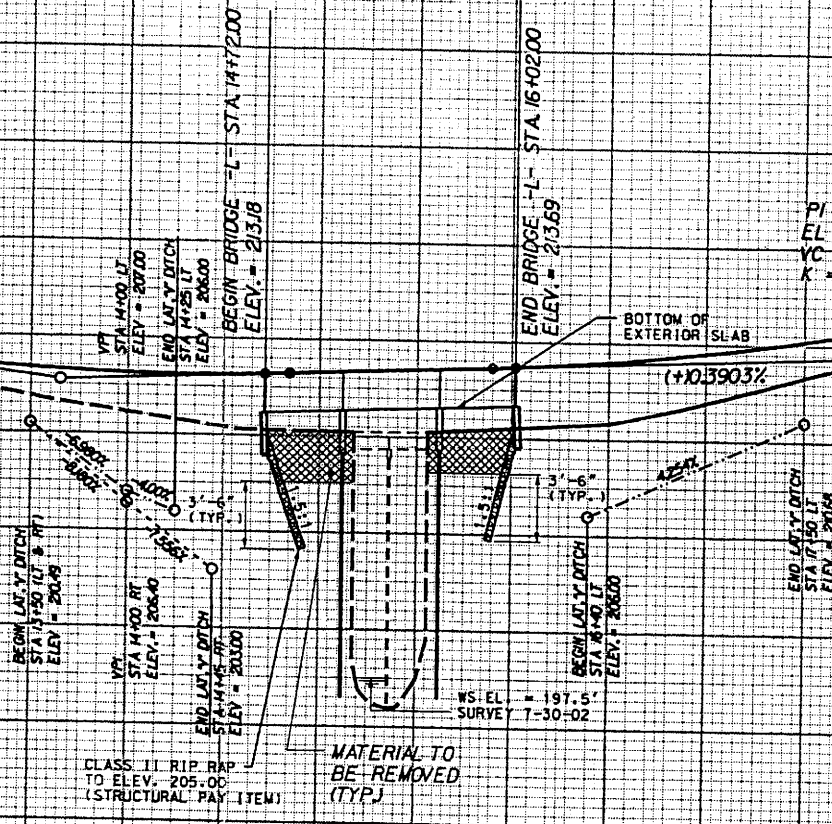
-L-
(FOR PLAN, SEE SHEET NO. 4)

SEE SHEETS S-1 THRU S-7
FOR STRUCTURE PLANS

BEGIN GRADE -L- STA. 10+00.00
ELEV. = 217.77 (INCLUDES 25'
RESURFACING)

MATERIAL TO BE REMOVED = 950 CY.
EXISTING BRIDGE OPENING = 358 sf.
PROPOSED BRIDGE OPENING = 680 sf.

DESIGN DISCHARGE	= 2000 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 207.0 FT
BASE DISCHARGE	= 2900 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 209.7 FT
OVERTOPPING DISCHARGE	= 4400 CFS
OVERTOPPING FREQUENCY	= 500 YRS
OVERTOPPING ELEVATION	= 212.0 FT



SYSTEM TIME 11:58:58 AM 11/11/03

Project No. 8.2360601 (B-4515)

Property Owner List

Parcel Number	Name	Address
1	William E. Stephens & Sylvia B. Stephens	148 Beasley Rd. Louisburg, NC 27549
2	Church of Latter-Day Saints	50 E. North Temple Salt Lake City, UT 84150
3	George D. Davis III & Wife Teresa W. Davis	665 W. Dyking Rd. Louisburg, NC 27549
4	Robert L. Stallings & Wife Rebecca W. Stallings	736 Dyking Rd. Louisburg, NC 27549
5	Robert L. Stallings & Wife Rebecca W. Stallings	736 Dyking Rd. Louisburg, NC 27549

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

FRANKLIN COUNTY

PROJECT: 8.2360601 (B-4515)

BRIDGE NO. 40

ON SR 1235 (DYKING ROAD)
OVER BEAR SWAMP CREEK

SHEET 7 OF 8

12/8/03

BUFFER IMPACTS SUMMARY

SITE NO.	STRUCTURE SIZE / TYPE	STATION	IMPACT							BUFFER REPLACEMENT				
			TYPE		ALLOWABLE			MITIGABLE			ZONE 1 (ft ²)		ZONE 2 (ft ²)	
			ROAD CROSSING	PARALLEL IMPACT	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)	ZONE 1 (ft ²)	ZONE 2 (ft ²)		
1	Bridge	14+50 to 16+30	X		1339.1	3105.2	4444.3							
TOTALS:					1339.1	3105.2	4444.3							

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 FRANKLIN COUNTY
 PROJECT: 8.2360601 (B-4515)
 BRIDGE #40 ON SR 1235 (DYKING ROAD)
 OVER BEAR SWAMP CREEK
 SHEET 8 OF 8 12/8/2003