



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI
SECRETARY

March 18, 2011

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

Attention: Thomas Steffens
NCDOT Coordinator

Dear Sir:

Subject: **Application for Section 404 General Permit 198200031, Section 401 Water Quality Certification, and Tar-Pamlico Riparian Buffer Authorization** for the proposed replacement of Bridge 7 over the Tar River on SR 1250, Edgecombe County. TIP No. B-4503; Federal Aid Project No. BRSTP-1250(2); Debit \$240.00 from WBS 33734.1.1.

Please find enclosed the PCN form, permit drawings, buffer drawings, and half-size plan sheets for the above referenced project. A Categorical Exclusion (CE) was completed for this project in March 2008, and distributed shortly thereafter. Additional copies will be made available upon request. The North Carolina Department of Transportation (NCDOT) proposes to replace existing Bridge No. 7 on SR 1250 over the Tar River in Edgecombe County. The project involves replacement of the existing 238-foot structure with a 270-foot long bridge in approximately the same location. There will be no permanent impacts to Waters of the United States associated with this project. There will, however, be 9,995 sq. ft. of riparian buffer impacts.

The let date for this project is November 15, 2011; however, the let date may advance as additional funds become available.

Regulatory approvals

Section 404 Permit: All aspects of this project are being processed by the Federal Highway Administration as a "Categorical Exclusion" in accordance with 23 CFR 771.115(b). The NCDOT requests that these activities be authorized by a General Permit No. 198200031.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6100
FAX: 919-212-5785

WEBSITE: WWW.NCDOT.ORG

LOCATION:
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610-4328

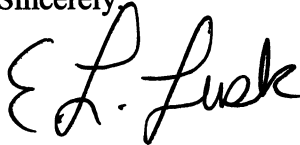
Section 401 Water Quality Certification: We anticipate 401 General Certification number 3701 will apply to this project. All general conditions of the Water Quality Certification will be met. NCDOT is providing five copies of this application to the NCDWQ for their review and approval. Authorization to debit the \$240 Permit Application Fee from WBS Element 33752.1.1 is hereby given.

Tar-Pamlico Riparian Buffer Authorization: NCDOT requests that the NC Division of Water Quality review this application and issue a written approval for a Tar-Pamlico Riparian Buffer Authorization.

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

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Tyler Stanton at tstanton@ncdot.gov or (919) 707-6156.

Sincerely,

A handwritten signature in black ink, appearing to read "G. J. Thorpe".

for

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

Cc:

NCDOT Permit Application Standard Distribution List



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

Pre-Construction Notification (PCN) Form

A. Applicant Information

1. Processing

1a. Type(s) of approval sought from the Corps:	☒ Section 404 Permit ☐ Section 10 Permit
1b. Specify Nationwide Permit (NWP) number:	or General Permit (GP) number: 198200031
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:	Replacement of Bridge 7 over the Tar River on SR 1250
2b. County:	Edgecombe
2c. Nearest municipality / town:	Rocky Mount
2d. Subdivision name:	<i>not applicable</i>
2e. NCDOT only, T.I.P. or state project no:	B-4503

3. Owner Information

3a. Name(s) on Recorded Deed:	North Carolina Department of Transportation
3b. Deed Book and Page No.	<i>not applicable</i>
3c. Responsible Party (for LLC if applicable):	<i>not applicable</i>
3d. Street address:	1598 Mail Service Center
3e. City, state, zip:	Raleigh, NC 27699-1598
3f. Telephone no..	(919) 212-5757
3g. Fax no..	(919) 212-5785
3h. Email address:	tstanton@ncdot.gov

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

B. Project Information and Prior Project History		
1. Property Identification		
1a. Property identification no. (tax PIN or parcel ID):	<i>not applicable</i>	
1b. Site coordinates (in decimal degrees):	Latitude: 35.977896 (DD.DDDDDD)	Longitude: - 77.757739 (-DD.DDDDDD)
1c. Property size:	1.5 acres	
2. Surface Waters		
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Tar River	
2b. Water Quality Classification of nearest receiving water:	C;NSW	
2c. River basin:	Tar Pamlico	
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: The primary natural community found on the site is mesic mixed hardwood forest; the principle land uses in the project vicinity include agriculture, mining, and residential development.		
3b. List the total estimated acreage of all existing wetlands on the property: N/A		
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 220		
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 238-foot bridge with a 270-foot, 3-span bridge on the existing alignment with an off-site detour. Standard road and bridge 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:	☒ 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): Steven Busbee	Agency/Consultant Company: STV/Ralph Whitehead Associates Other:	
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation. The JD was issued on 5/9/2006 and expires on 5/9/2011		
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	
2g. Total wetland impacts					

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	Fill	Tar River	☒ PER ☐ INT	☒ Corps ☐ DWQ	75	80*
Site 2 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
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						0 Perm 80Temp

3i. Comments: *Temporary work pads will result in 0.12ac.(5,400 sq. ft.) of temporary fill.

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				0 Permanent 0 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	Road Crossing	Tar River	☐ Yes ☒ No	0	873				
B2 ☒ P ☐ T	Bridge	Tar River	☐ Yes ☒ No	6,235	1,957				
B3 ☒ P ☐ T	Road Crossing	Tar River	☐ Yes ☒ No	0	930				
6h. Total buffer impacts				6,235	3,760				
6i. Comments:									

D. Impact Justification and Mitigation		
1. Avoidance and Minimization		
1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project. The proposed bridge is 32 feet longer than the existing bridge, the proposed bridge will be at approximately the same grade as the existing structure, preformed scourholes, and the implementation of Design Standards in Sensitive Watersheds.		
1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. NCDOT Best Management Practices for Bridge Demolition, Removal and Construction will be followed, as well as those for Sedimentation and Erosion Control, adhere to in-water work moratorium for anadromous fish from Feb. 15 to June 15, and the utilization of an off-site detour		
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: Due to the minimal impacts to Waters of the U.S., no compensatory mitigation is proposed.	
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.	
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? N/A	☐ Yes ☐ No
5b. Have all of the 401 Unit submittal requirements been met? N/A	☐ 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? NHP, USFWS, NCDOT field surveys		
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		
<u>Dr. Gregory J. Thorpe, Ph D</u> Applicant/Agent's Printed Name	 _____ Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	3-18-11 _____ Date

STORMWATER MANAGEMENT PLAN

Project: 33734.1.1

TIP No. B-4503

County: Edgecombe

Date: 1/12/2011

Hydraulics Project Manager: Andrew Nottingham, PE (NCDOT Hydraulics Unit)

ROADWAY DESCRIPTION

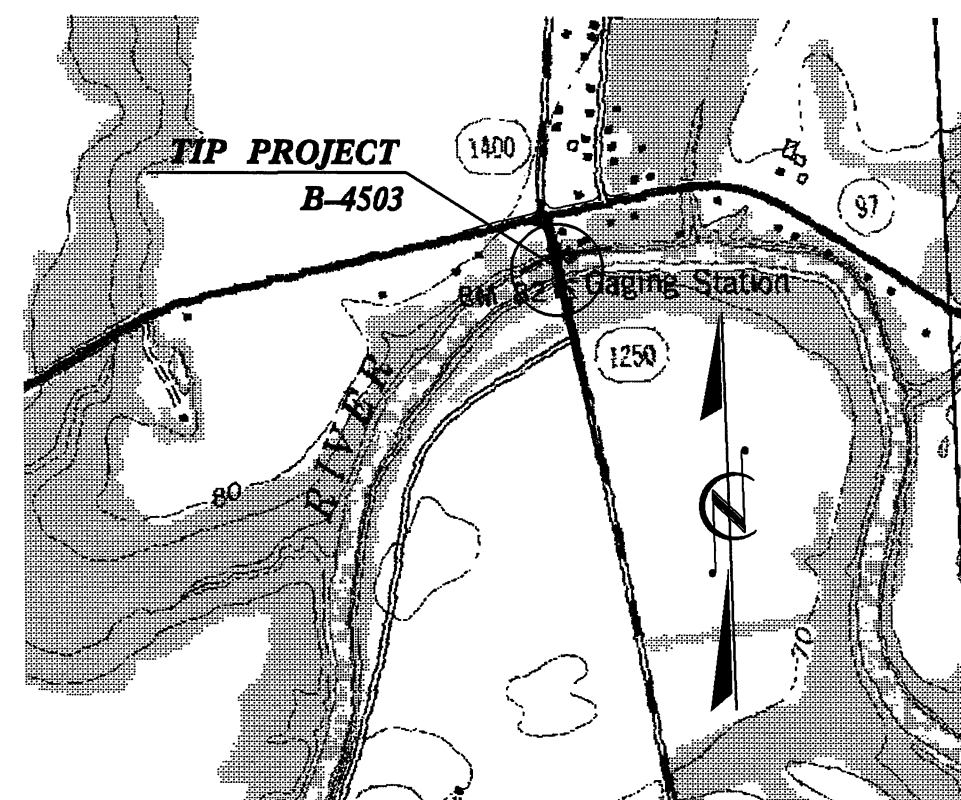
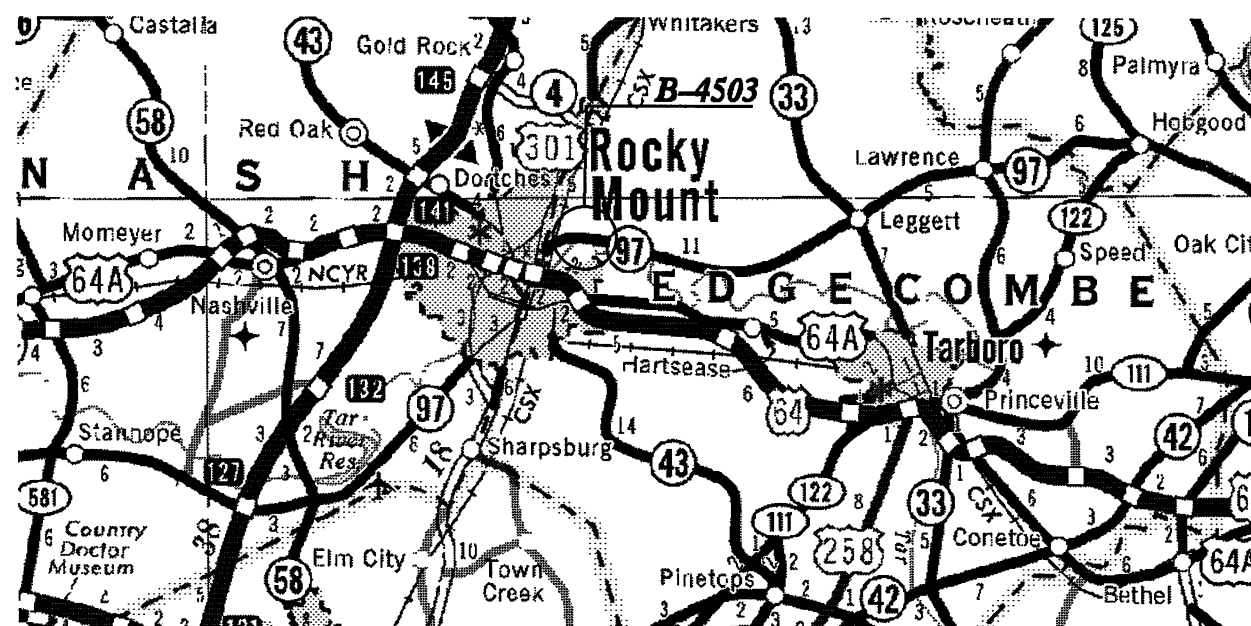
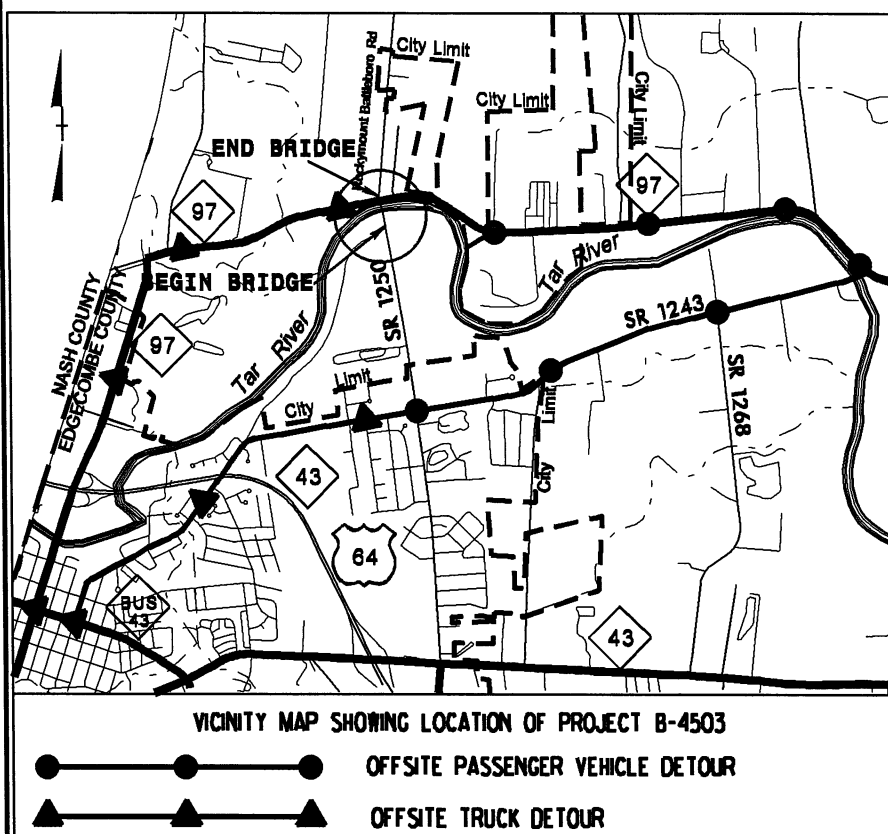
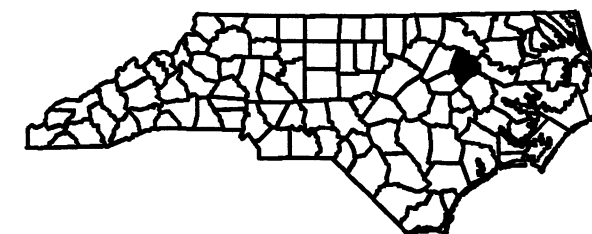
The project B-4503 consists of constructing a new two-lane bridge 270 feet long to replace the existing bridge #7 in Edgecombe County on SR-1250 over the Tar River. The total project length is 0.180 miles. The project creates impacts to The Tar River, which is part of the Tar/ Pamlico River Basin. The project drainage systems primarily consist of open ditches.

ENVIRONMENTAL DESCRIPTION

The project is located within Edgecombe County. The surrounding land is part of the wide floodplain of the Tar River and consists of agriculture, light industrial/commercial, and rural housing. There are no wetlands in the project vicinity. The Tar River is classified as C, NSW. The Tar River has riparian buffers that will be impacted by roadway fill and temporarily by clearing and construction staging operations.

BEST MANAGEMENT PRACTICES AND MAJOR STRUCTURES

- Rip rap preformed scour holes at pipe outlets on the south end of the bridge will attenuate and disperse storm water flows. They are located outside of the 50' riparian buffer.
- A short enclosed drainage system on north end of bridge will direct storm water away from the receiving waters to allow for attenuation and infiltration.
- Deck drains have been eliminated to remove direct discharge from the bridge deck.
- Temporary rock work pads in the Tar River will be required to construct the proposed 3 @ 90 ft span concrete box beam bridge.

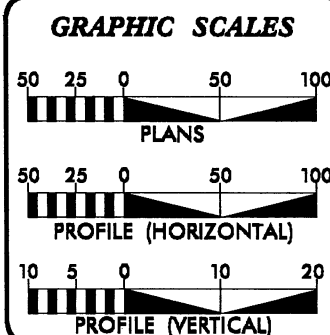
[illegible]

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

TIP PROJECT: B-4503

CONTRACT:



DESIGN DATA

ADT 2010 = 5278
ADT 2030 = 9500
DHV = 10 %
D = 60 %
T = 6 % *
V = 60 MPH
* TTST 2 % DUAL 4 %
FUNC. CLASS=RURAL LOCAL

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4503	=	0.129 MILES
LENGTH OF STRUCTURE TIP PROJECT B-4503	=	0.051 MILES
TOTAL LENGTH OF TIP PROJECT B-4503	=	0.180 MILES

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
NOVEMBER 19, 2010

LETTING DATE:
NOVEMBER 15, 2011

TONY HOUSER, P.E.
PROJECT ENGINEER

LEE ANN MOORE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ **P.E.** _____

**ROADWAY DESIGN
ENGINEER**

SIGNATURE: _____ **P.E.** _____

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA



P.E.

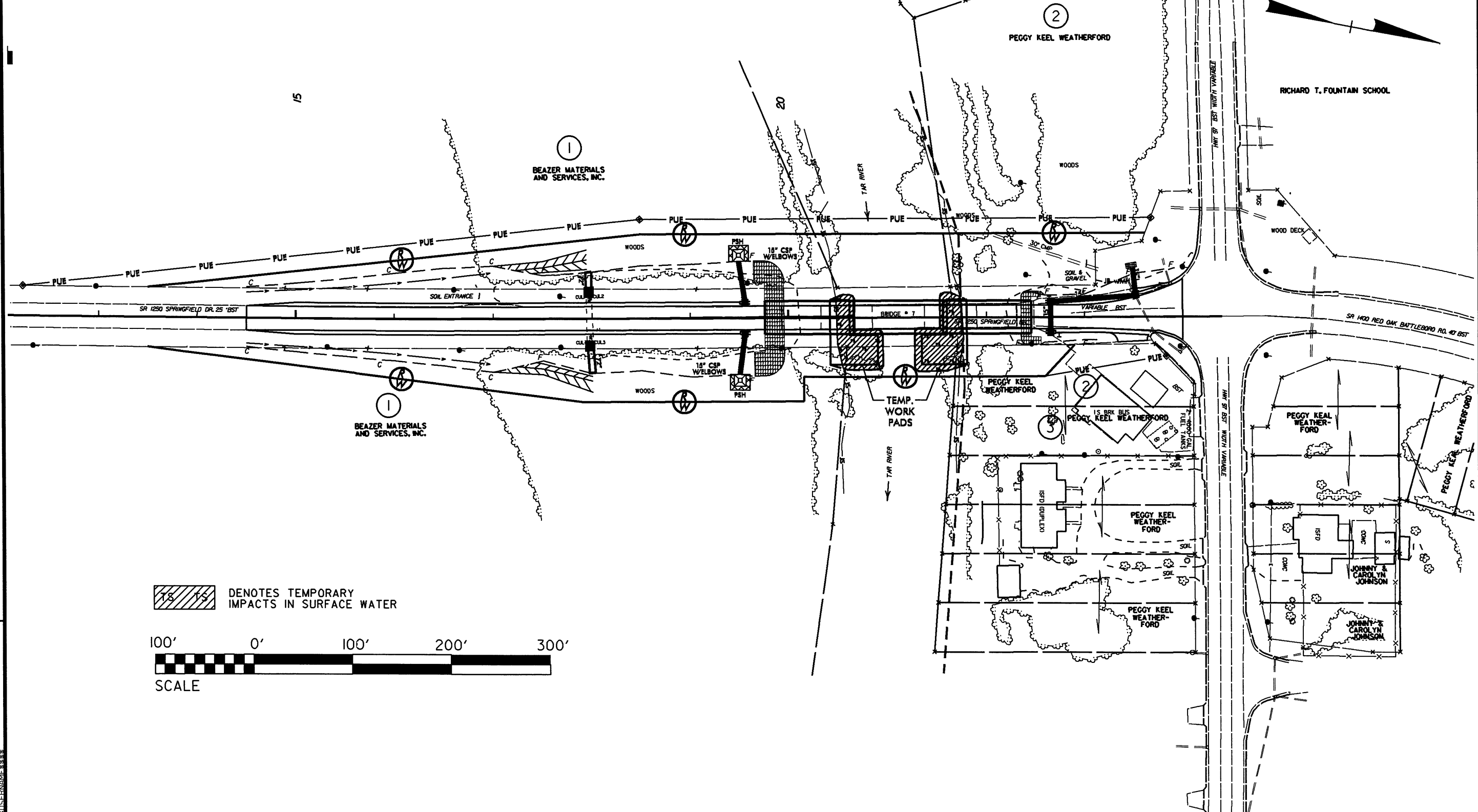
STATE HIGHWAY DESIGN ENGINEER

8/17/99

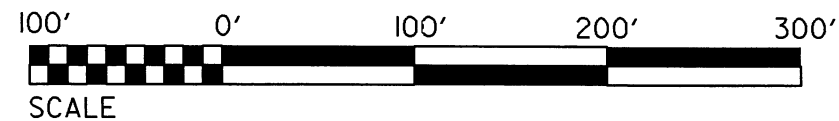
Permit Drawing
Sheet 2 of 6

PROJECT REFERENCE NO.		SHEET NO.	
B-4503		4	
RWY SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

WETLAND AND SURFACE WATER IMPACTS



 DENOTES TEMPORARY
IMPACTS IN SURFACE WATER



NOTE: FOR -L- PROFILE, SEE SHEET 5

8/17/99

REVISIONS

WETLAND AND SURFACE WATER IMPACTS WITH CONTOURS

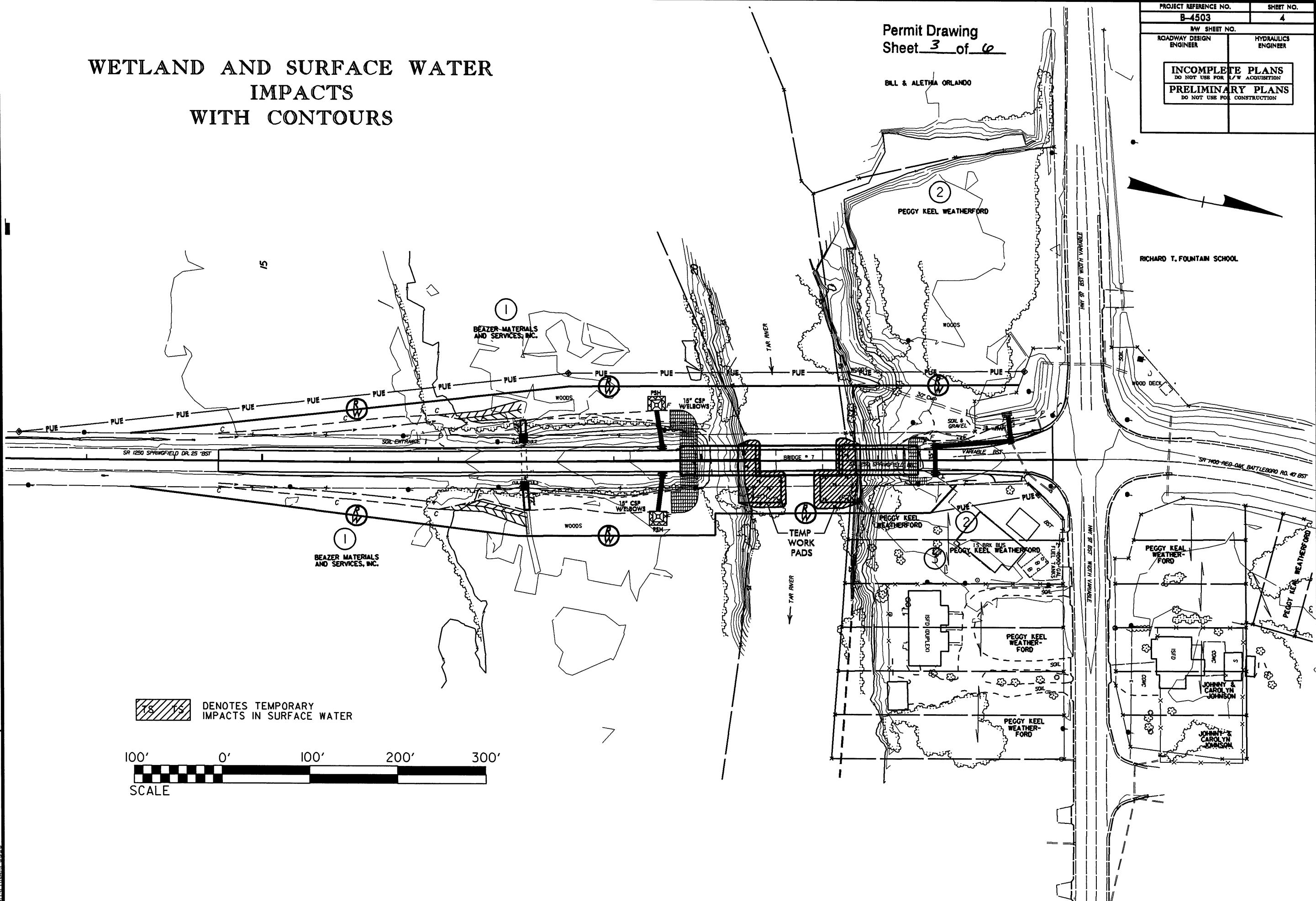
Permit Drawing
Sheet 3 of 6

BILL & ALETHA ORLANDO

PROJECT REFERENCE NO. B-4503		SHEET NO. 4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			



RICHARD T. FOUNTAIN SCHOOL



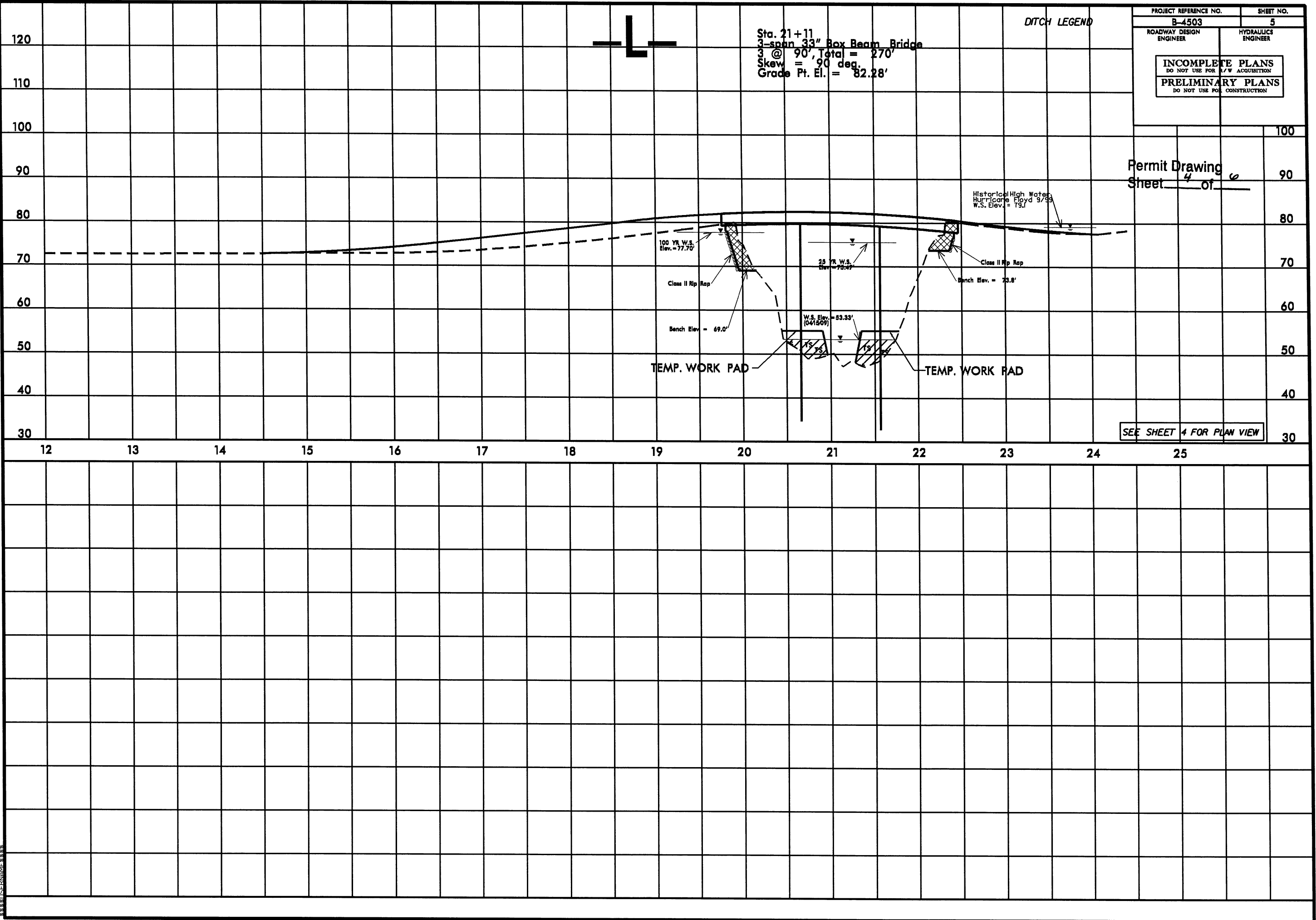
 DENOTES TEMPORARY
IMPACTS IN SURFACE WATER



NOTE: FOR -L- PROFILE, SEE SHEET 5

5/28/99

SYNOPSIS OF DESIGN INFORMATION



WETLAND PERMIT IMPACT SUMMARY

			WETLAND IMPACTS						SURFACE WATER IMPACTS				
Site No	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp (ft)	Natural Stream Design (ft)	
1	20+48/21+77	270' BRIDGE							0.12		80		
TOTALS:									0.12		80		

Permit Drawing
Sheet 5 of 6

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
EDGEcombe COUNTY
WBS - 33734 (B-4503)

SHEET 1/12/2011

PROPERTY OWNERS

Peggy Keel Weatherford	3952 Old Battleboro Rd	Battleboro	NC 27809
Beazer Materials and Services	100 Crescent Centre Pkway	Tucker	GA 30084

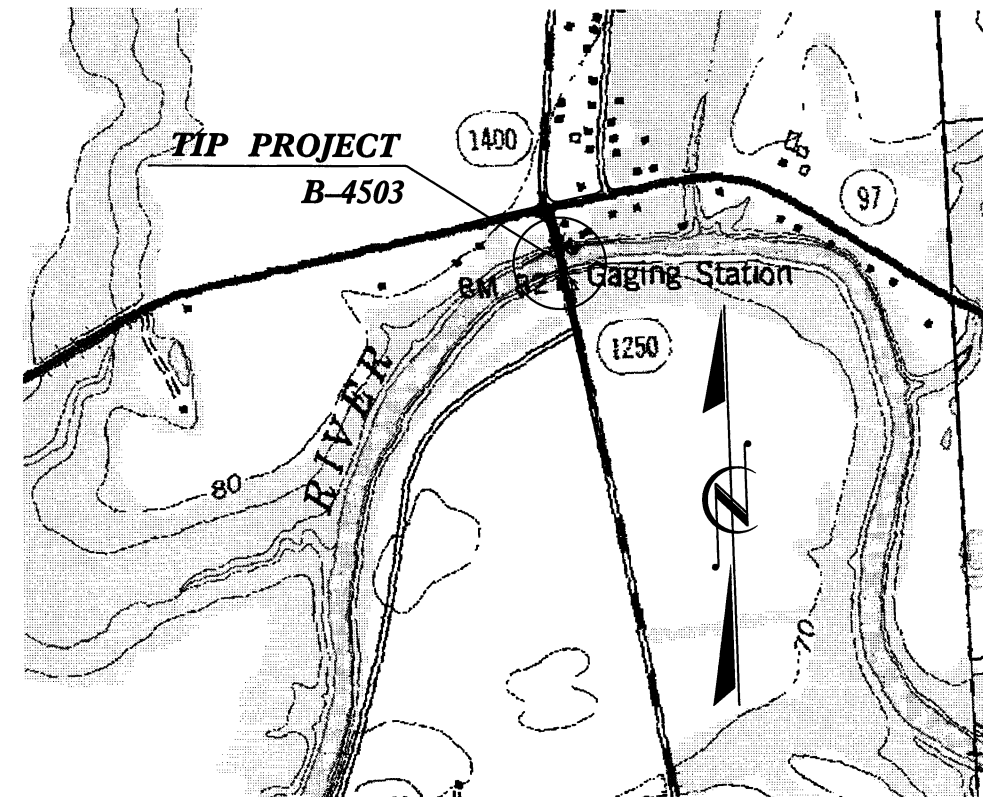
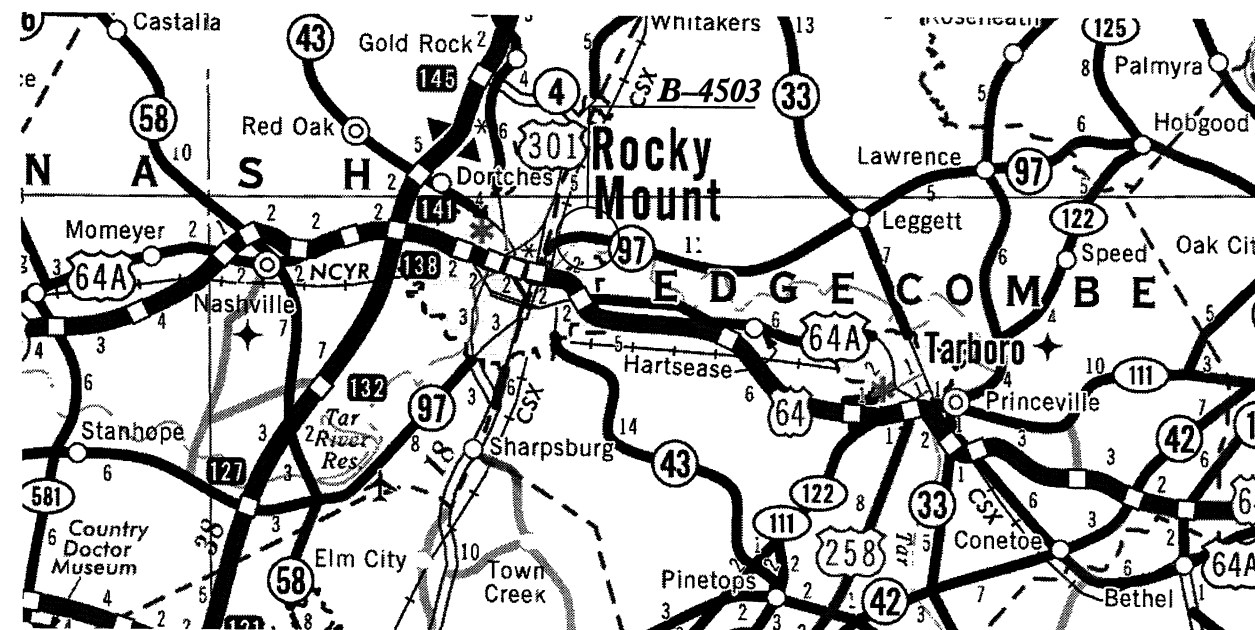
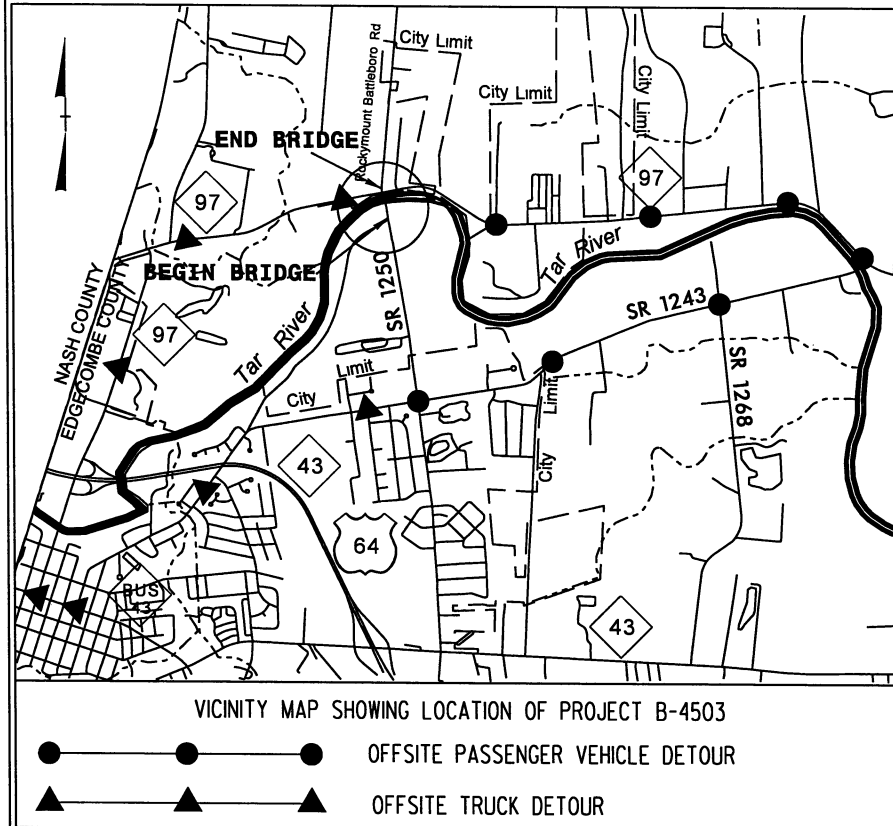
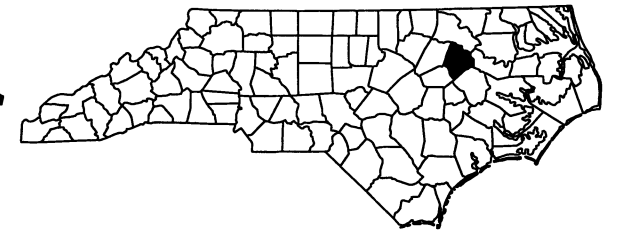
Permit Drawing
Sheet 6 of 6

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
EDGECOMBE COUNTY
WBS - 33734 (B-4503)

Buffer Drawing
Sheet 1 of 5

**LOCATION: BRIDGE NO. 7 OVER THE TAR RIVER
ON SR 1250 (SPRINGFIELD DR.)**

TAR RIVER BUFFER IMPACTS PERMIT DRAWINGS

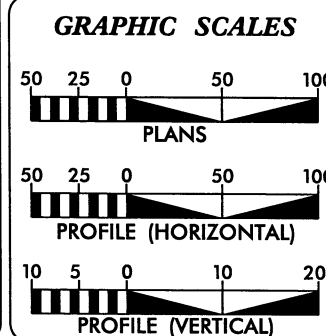


INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

TIP PROJECT: B-4503

CONTRACT:



DESIGN DATA

ADT 2010 = 5278
ADT 2030 = 9500
DHV = 10 %
D = 60 %
T = 6 % *
V = 60 MPH
* TTST 2 % DUAL 4 %
FUNC. CLASS=RURAL LOCAL

LENGTH OF ROADWAY TIP PROJECT B-4503 = 0.129 MILES
 LENGTH OF STRUCTURE TIP PROJECT B-4503 = 0.051 MILES
 TOTAL LENGTH OF TIP PROJECT B-4503 = 0.180 MILES

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
NOVEMBER 19, 2010

LETTING DATE:
NOVEMBER 15, 2011

TONY HOUSER, P.E.
PROJECT ENGINEER

LEE ANN MOORE
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

8/17/99

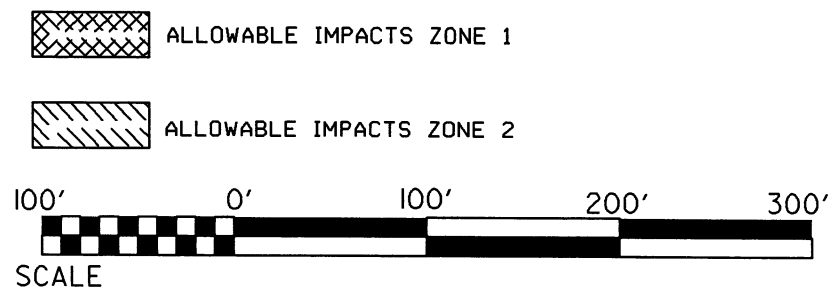
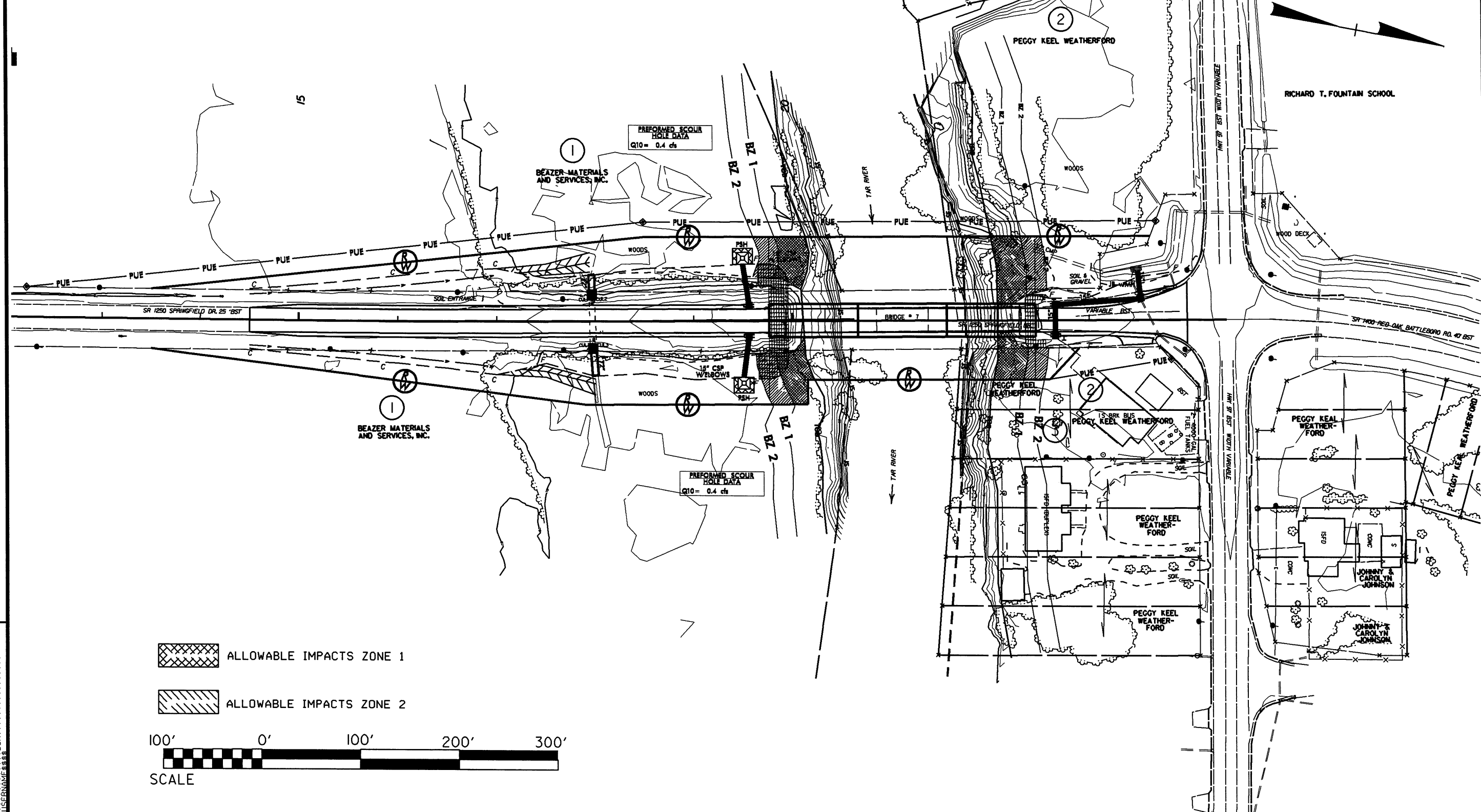
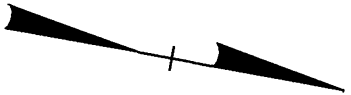
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TAR RIVER BUFFER IMPACTS WITH CONTOURS

Buffer Drawing
Sheet 3 of 5

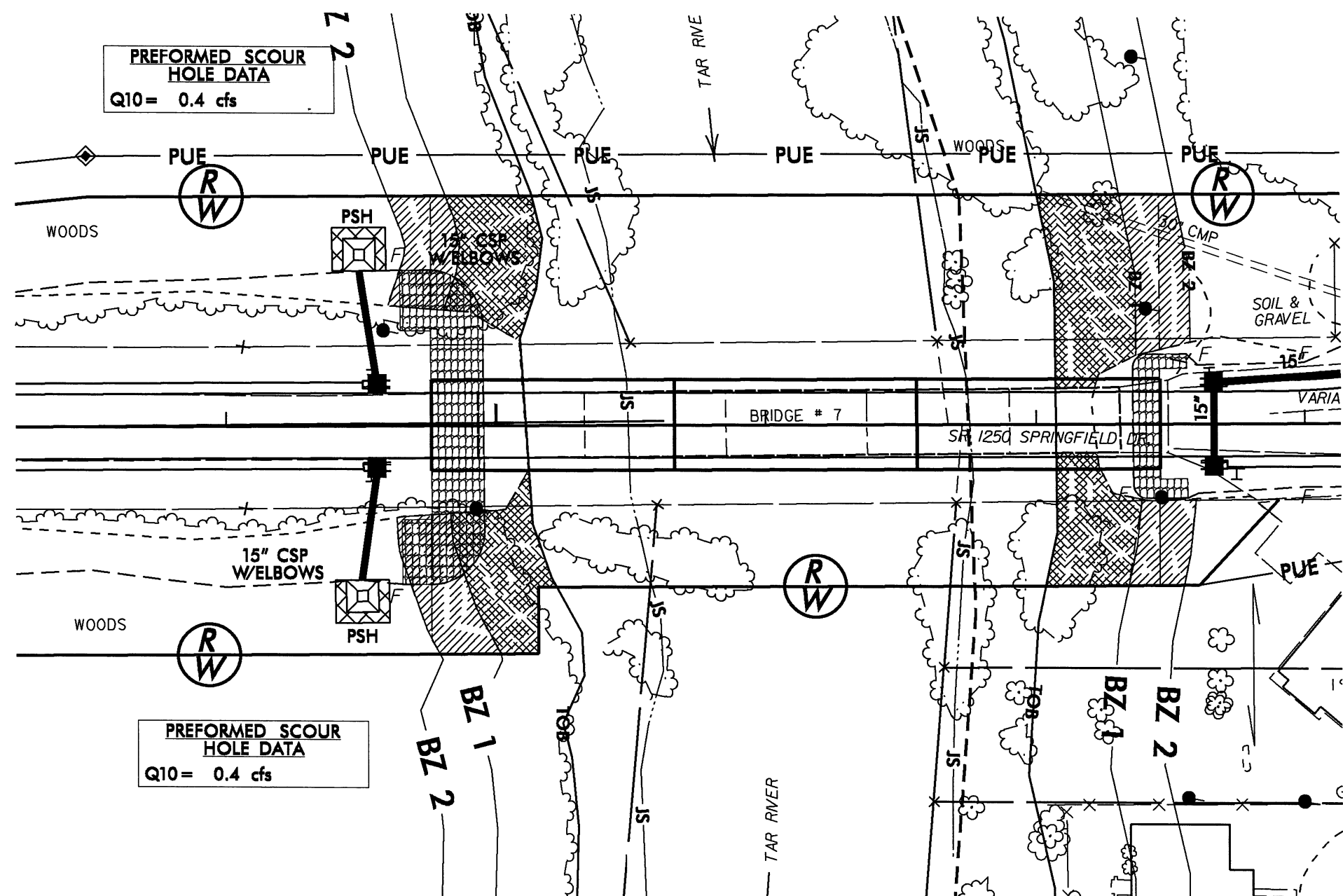
PROJECT REFERENCE NO.	SHEET NO.
B-4503	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



NOTE: FOR -L- PROFILE, SEE SHEET 5

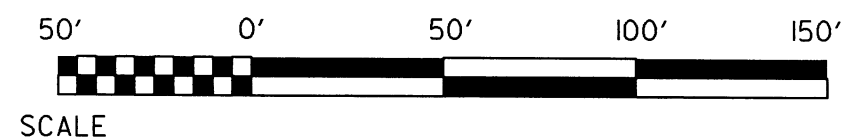
TAR RIVER BUFFER IMPACTS ENLARGEMENT

Buffer Drawing
Sheet 4 of 5



 ALLOWABLE IMPACTS ZONE 1

 ALLOWABLE IMPACTS ZONE 2



NOTE: FOR -L- PROFILE, SEE SHEET 5

BUFFER IMPACTS SUMMARY

[illegible]

TOTALS:

Buffer Drawing
Sheet 5 of 5

**NC DEPT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

EDGECOMBE COUNTY
PROJECT: 33734 (B-4503)

BRIDGE NO 7 OVER TAR RIVER
ON SR 1250

1/12/2011

SHEET OF

Rev May 2006

03/08/99

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

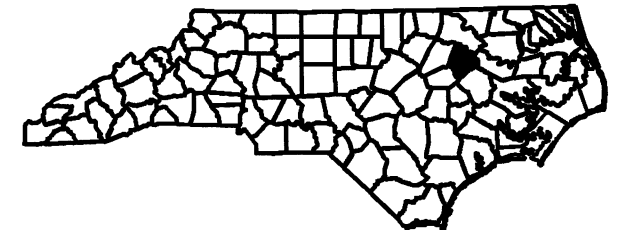
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

EDGECOMBE COUNTY

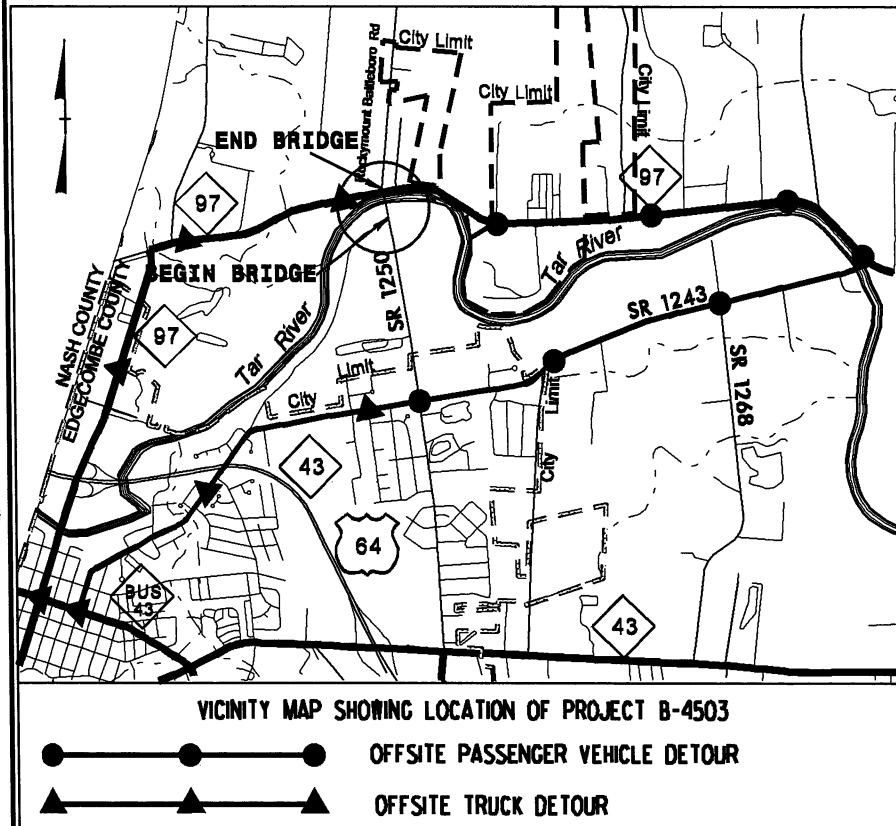
**LOCATION: BRIDGE NO. 7 OVER THE TAR RIVER
ON SR 1250 (SPRINGFIELD DR.)**

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4503	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
33734.1.1	BRSTP-1250(2)	P.E.	
33734.2.1	BRSTP-1250(2)	ROW & UTIL	



TIP PROJECT: B-4503



SR 1250
SPRINGFIELD DR.
TO US 64 A

BEGIN TIP PROJECT B-4503
-L- POT STA. 14 + 50.00

BEGIN BRIDGE
-L- POT STA 19 + 76.00

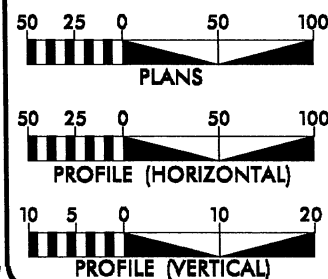
END BRIDGE
-L- POT STA 22 + 46.00

END TIP PROJECT B-4503
-L- POT STA. 24 + 00.00

THIS PROJECT WAS DESIGNED USING
THE SUB REGIONAL TIER DESIGN GUIDELINES
FOR BRIDGE PROJECTS

THERE IS NO CONTROL OF ACCESS ON THIS PROJECT
A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF ROCKY MOUNT
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III

GRAPHIC SCALES



DESIGN DATA

ADT 2010 = 5278
ADT 2030 = 9500
DHV = 10 %
D = 60 %
T = 6 % *
V = 60 MPH
* TTST 2 % DUAL 4 %
FUNC. CLASS = RURAL LOCAL

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4503 = 0.129 MILES
LENGTH OF STRUCTURE TIP PROJECT B-4503 = 0.051 MILES
TOTAL LENGTH OF TIP PROJECT B-4503 = 0.180 MILES

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
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TONY HOUSER, P.E.
PROJECT ENGINEER

LEE ANN MOORE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

**ROADWAY DESIGN
ENGINEER**

SIGNATURE: P.E.

**DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**



STATE HIGHWAY DESIGN ENGINEER P.E.

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

03-JAN-2011 11:16
R:\Roadway\Projects\B4503_rdy_tsh.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$

CONTRACT:

Note: Not to Scale***S.U.E. = Subsurface Utility Engineering**STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYSPROJECT REFERENCE NO.
B-4503SHEET NO.
1B

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

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

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○
Well	○
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	WLB
Proposed Lateral, Tail, Head Ditch	-----
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	-----
Proposed Control of Access	-----
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 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	XXXX
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	⊕
Storm Sewer	S

UTILITIES:

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	⊕
Power Line Tower	⊗
Power Transformer	⊗
U/G Power Cable Hand Hole	PH
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	⊕
Telephone Booth	⊕
Telephone Pedestal	⊕
Telephone Cell Tower	⊕
U/G Telephone Cable Hand Hole	PH
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	⊕
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	⊕
TV Tower	⊕
U/G TV Cable Hand Hole	PH
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	⊕
Utility Unknown U/G Line	U/L
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.

SURVEY CONTROL SHEET B-4503

PROJECT REFERENCE NO.	SHEET NO.
B-4503	1 C
Location and Surveys	

BASELINE DATA

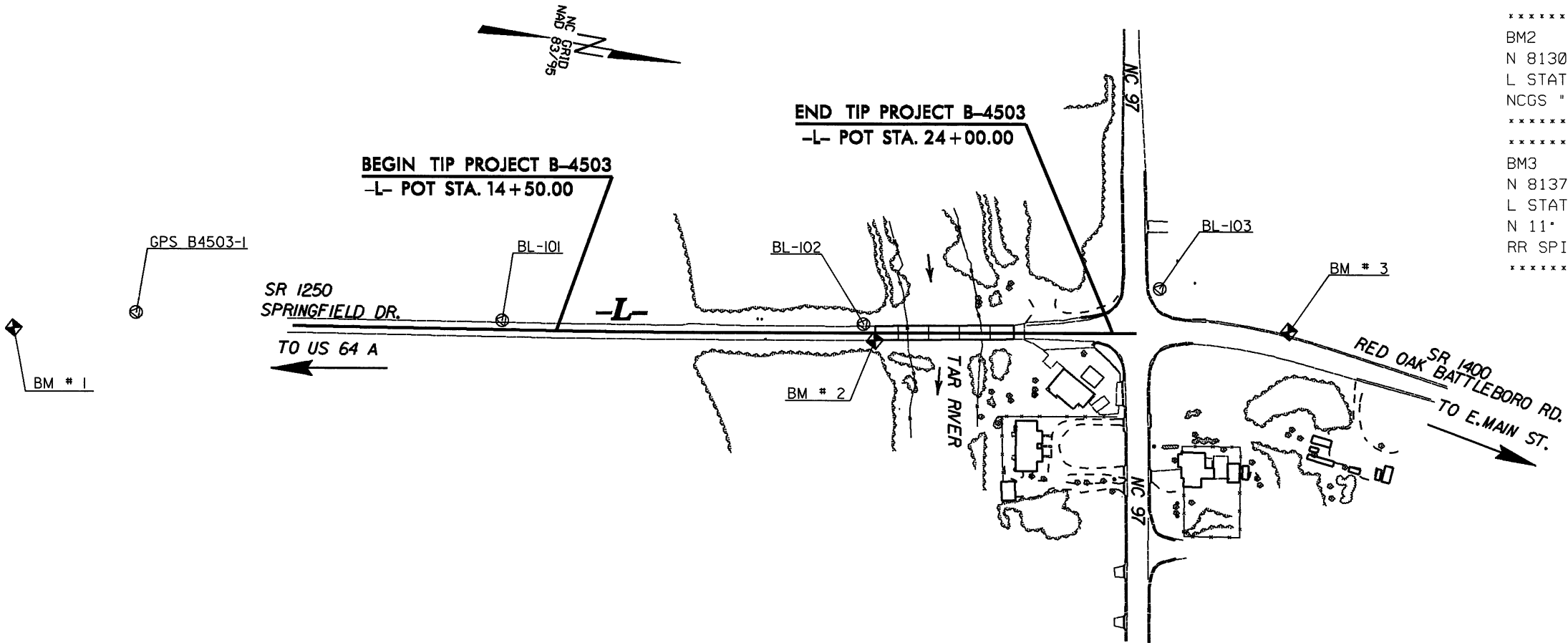
BL	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
1		GPS B4503-1	811789.7281	2367776.8818	72.01	OUTSIDE PROJECT LIMITS	
101		BL-101	812406.2540	2367673.1920	71.75	13+56.86	15.72 LT
102		BL-102	813013.1510	2367563.5980	79.11	19+73.85	15 01 LT
103		BL-103	813499.6060	2367409.2220	77.18	OUTSIDE PROJECT LIMITS	

BENCHMARK DATA

BM1 ELEVATION = 71.59 (DOT)
N 811588 E 2367842
L STATION 10+00
S 11° 13' 27.6" E DIST 478.31
NCGS "GATE 1963"

BM2 ELEVATION = 80.53 (DOT)
N 813037 E 2367587
L STATION 19+93 13 RIGHT
NCGS "4-JS-29 1960" (ON BRIDGE)

BM3 ELEVATION = 76.87
N 813728 E 2367439
L STATION 24+40
N 11° 45' 21.8" W DIST 259.34
RR SPIKE IN BASE OF POWER POLE



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS B4503-1" WITH NAD 83/95 STATE PLANE GRID COORDINATES OF NORTHING: 811789.7281(±) EASTING: 2367776.8818(±) ELEVATION: 72.01(±) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99995324 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS B4503-1" TO -L- STATION 14+50.00 IS N 08°18'53.0" W 718.54' ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

NOTES:

1. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.NCDOT.ORG/DOH/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/](http://www.ncdot.org/doh/preconstruct/highway/location/project/)

THE FILES TO BE FOUND ARE AS FOLLOWS:
B4503_LS_CONTROL_090520.TXT

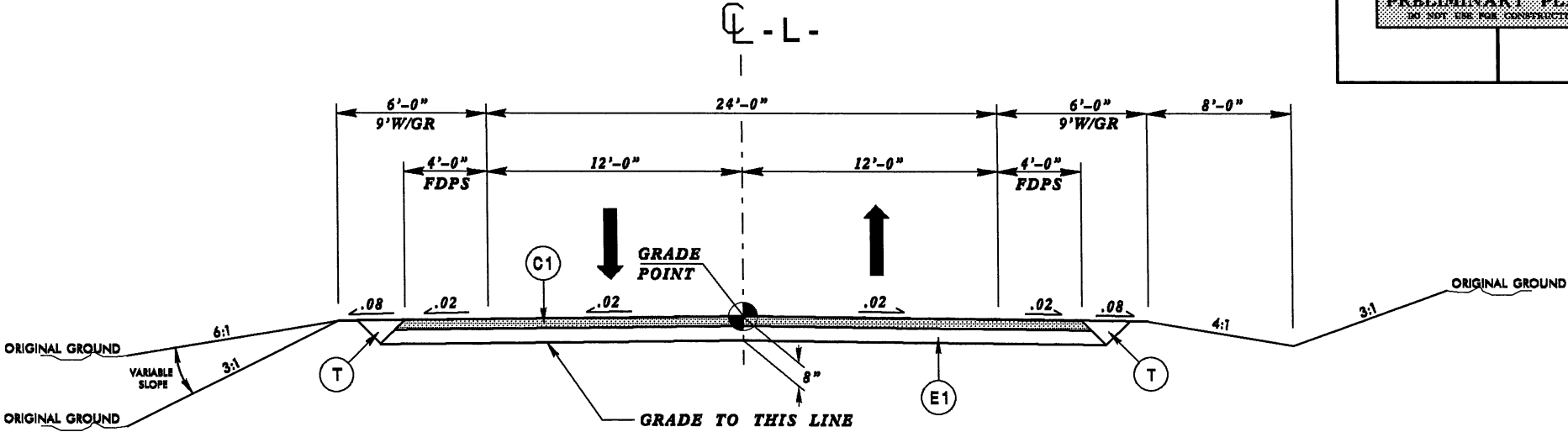
SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

⊙ 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

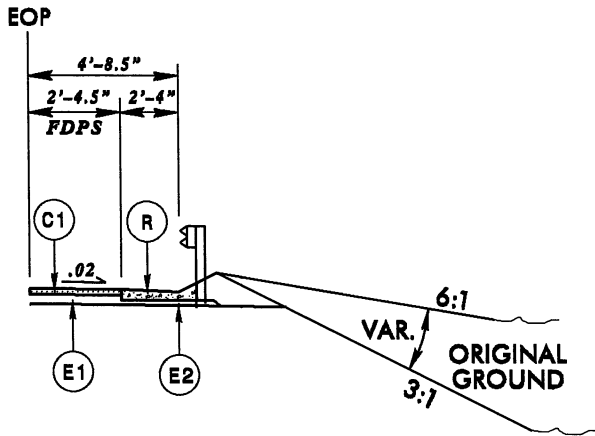
PAVEMENT SCHEDULE (PRELIMINARY PAVEMENT DESIGN)	
C1	PROP APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5B, AT AN AVERAGE RATE OF 185 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 1" OR GREATER THAN 1.5" IN DEPTH.
D1	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 119.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 2.5" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE TYPE B26.0B, 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.
R	SHOULDER BERM GUTTER.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	WEDGING

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



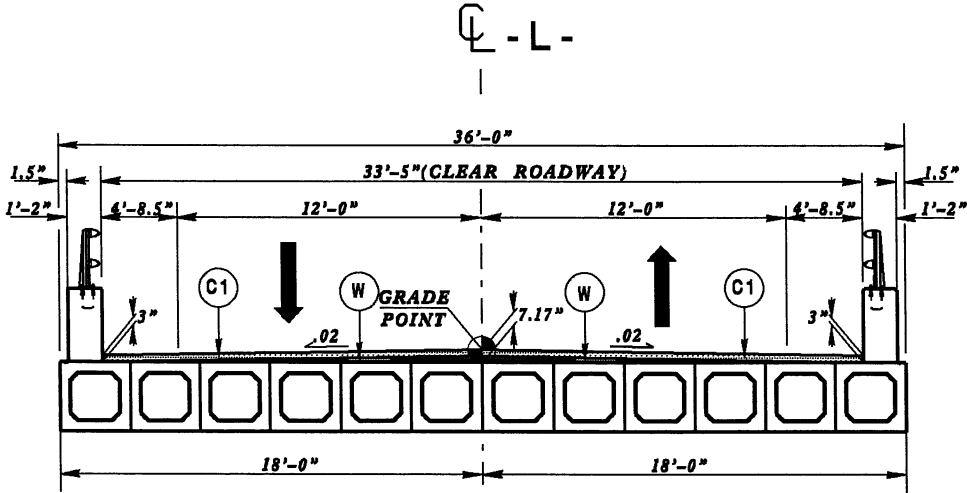
TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1:
-L- STA. 14+50.00 TO 19+76.00 (BEG. BRIDGE)
-L- STA. 22+46.00 (END BRIDGE) TO 24+00.00



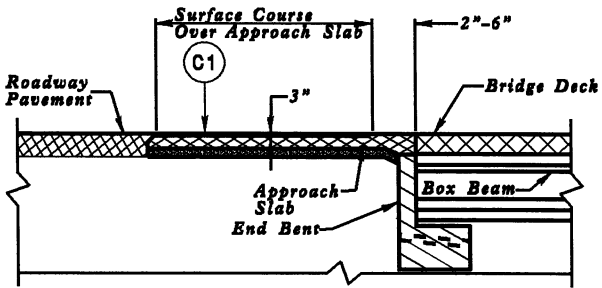
SHOULDER BERM GUTTER DETAIL

-L- STA. 19+51.00 TO 19+61.00 (BEGIN APPROACH SLAB) RT. & LT.
-L- STA. 22+61.00 TO 22+71.00 (END APPROACH SLAB) RT. & LT.

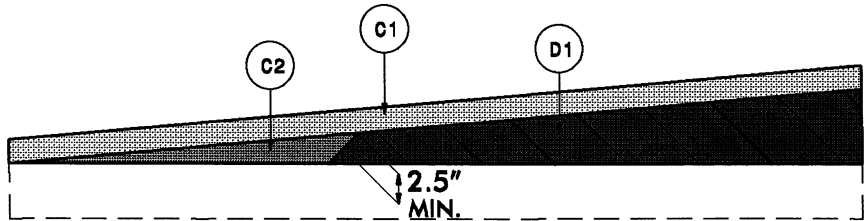


TYPICAL SECTION ON BRIDGE

USE BRIDGE TYPICAL:
-L- STA. 19+76 (BEG. BRIDGE) TO STA. 22+46 (END BRIDGE)



DETAIL OF ASPHALT WEARING SURFACE ON APPROACH SLAB



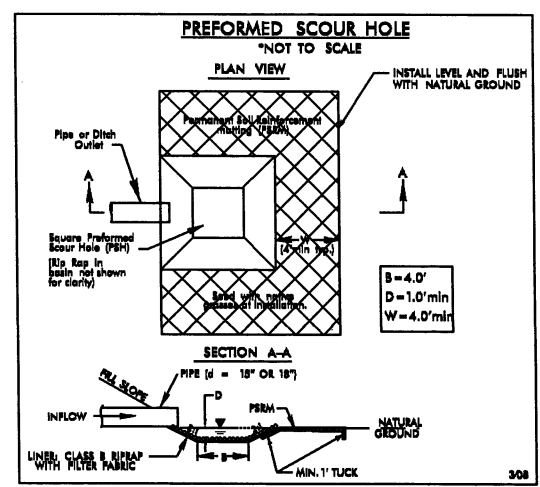
WEDGING DETAIL FOR RESURFACING

REMOVAL OF EXISTING ASPHALT PAVEMENT SUMMARY

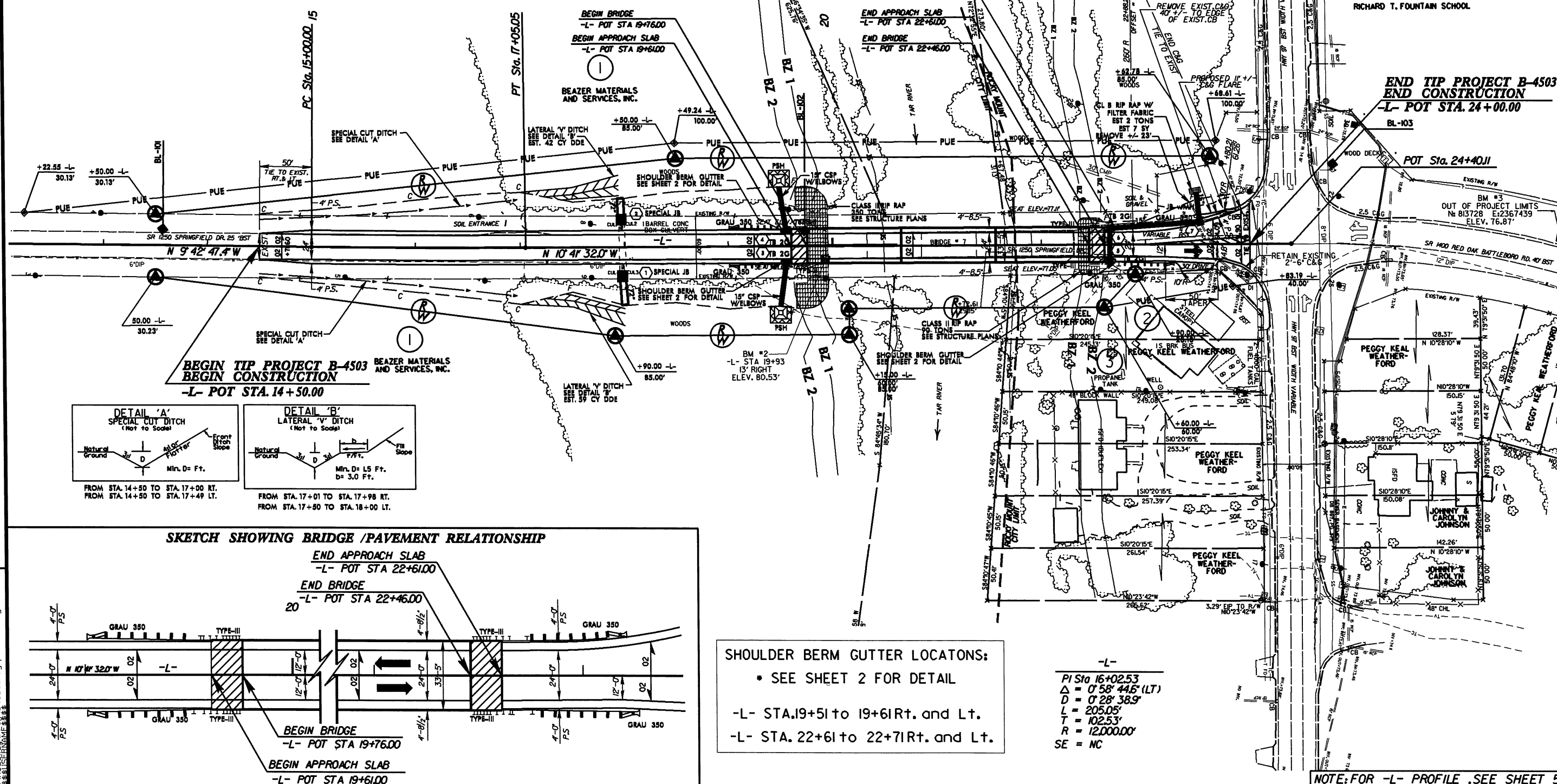
SURVEY LINE	STATION	STATION	LOCATION LVR/VCL	YD ³
-L-	14+50.00	15+73.32	RT/LT	343
-L-	22+46.00	24+00.00	RT/LT	762
TOTAL:				1,105
SAY:				1,160

GUARDRAIL SUMMARY

[illegible]



PROJECT REFERENCE NO.	SHEET NO.
B-4503	4
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR F.P. ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



SHOULDER BERM GUTTER LOCATIONS:

- * SEE SHEET 2 FOR DETAIL

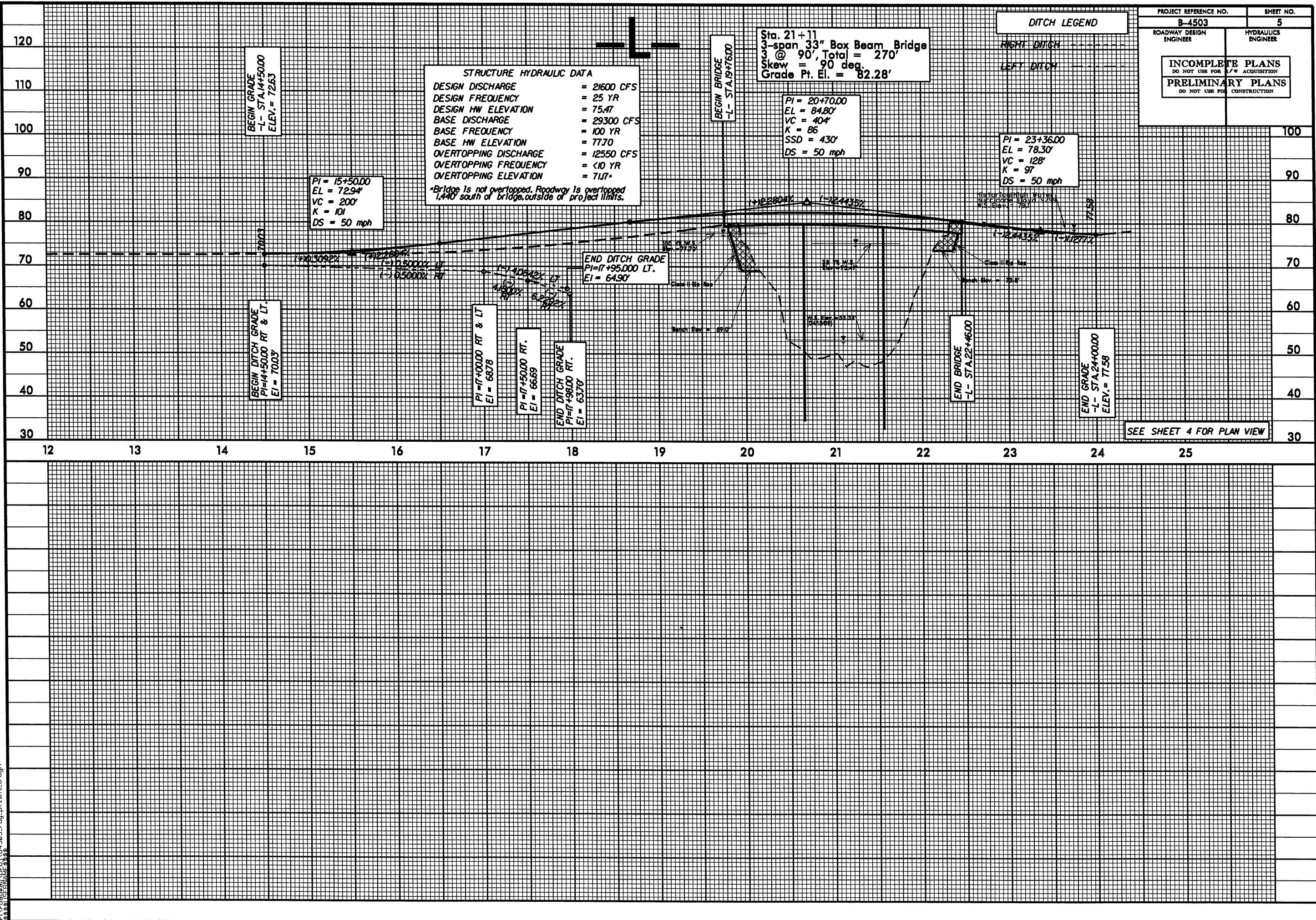
-L- STA. 19+51 to 19+61 Rt. and Lt.

-L- STA. 22+61 to 22+71 Rt. and Lt.

-L-

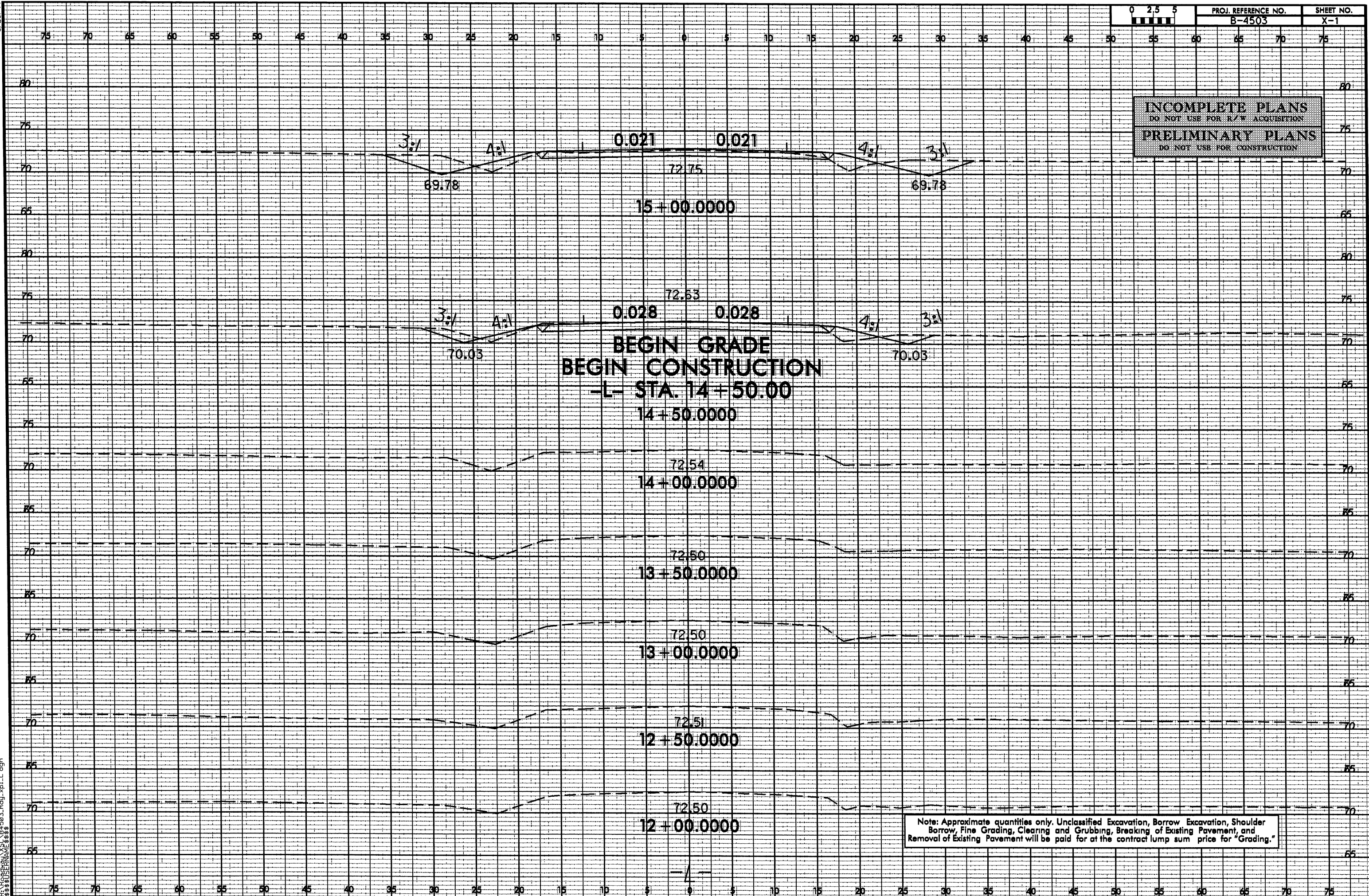
PI Sta 16+02.53
 $\Delta = 0^\circ 58' 44.6''$ (LT)
 $D = 0^\circ 28' 38.9''$
 $L = 205.05'$
 $T = 102.53'$
 $R = 12,000.00'$
SE = NC

NOTE: FOR -L- PROFILE .SEE SHEET 5

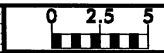


8/23/99

03-JAN-2011 14:16
R:\Roadway\SSC\B4503_Rd\xp.L.dgn
\$\$\$\$\$USER\$NAME\$\$\$\$\$

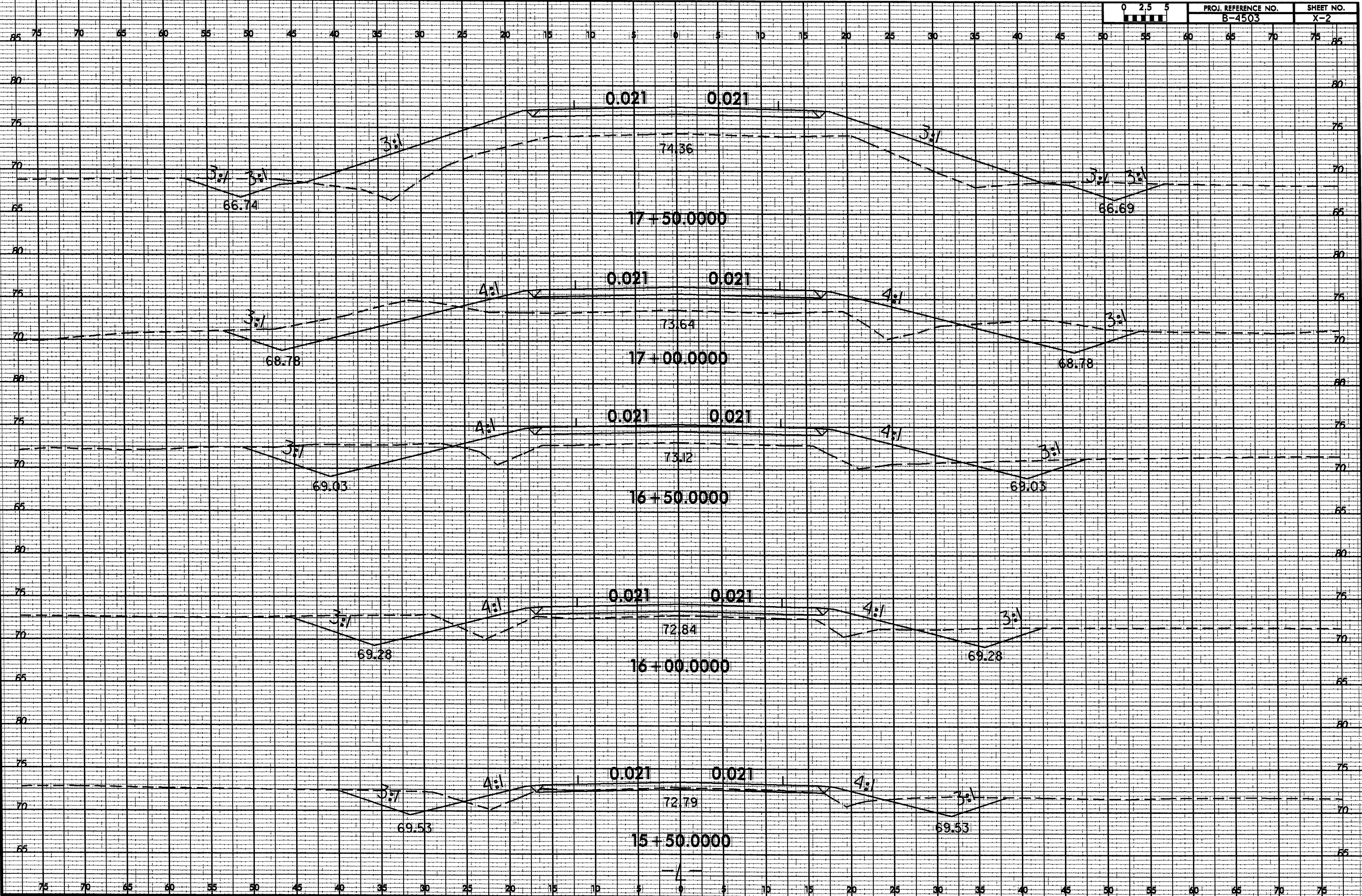


8/23/99



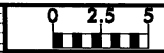
PROJ. REFERENCE NO.
B-4503

SHEET NO.
X-2



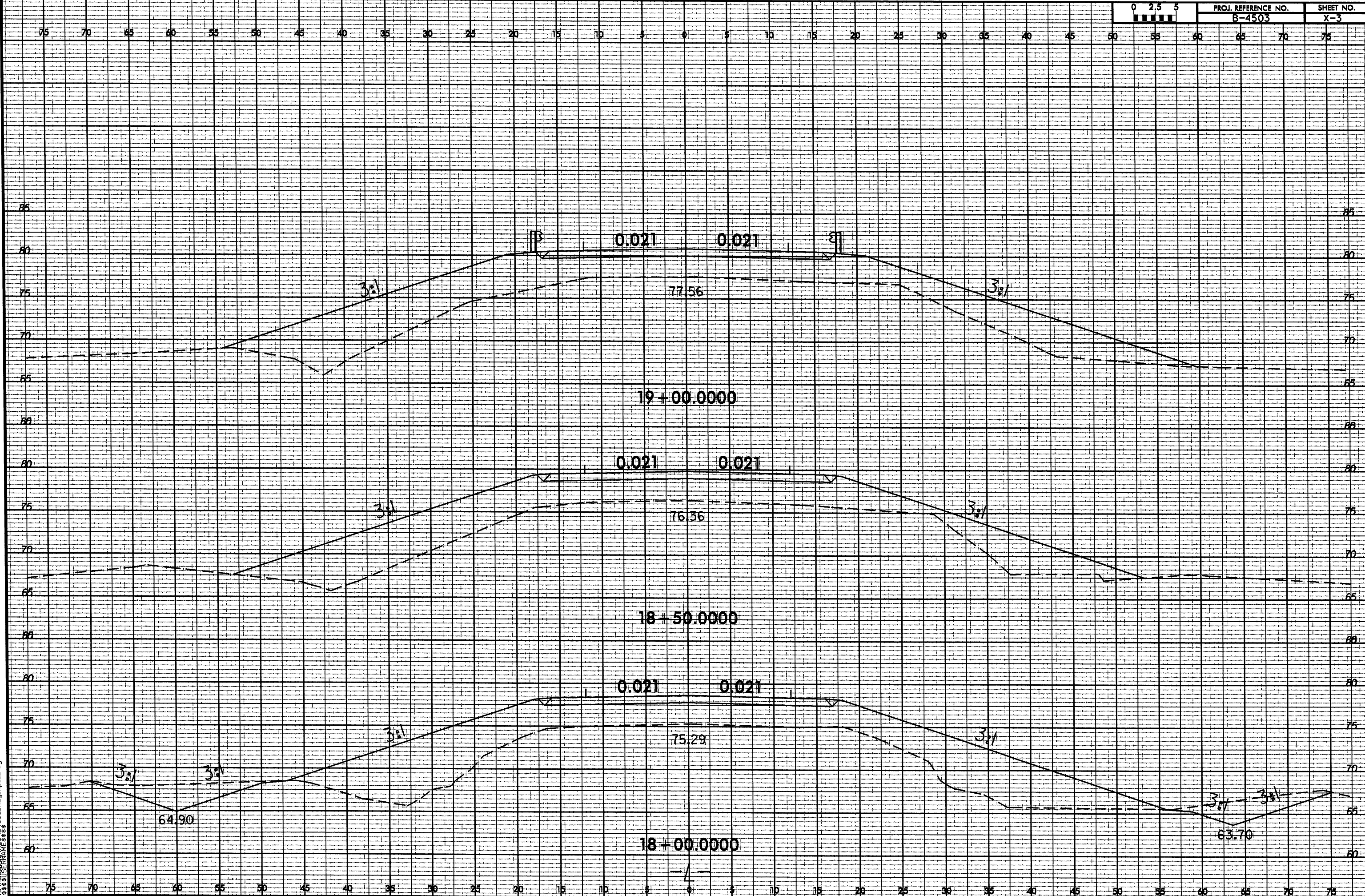
8/23/99

03-JAN-2011 11:16
R:\F008R\XSC\B4503_Rdy_xp1.L dgn
\$\$\$\$\$USERNAME\$\$\$\$



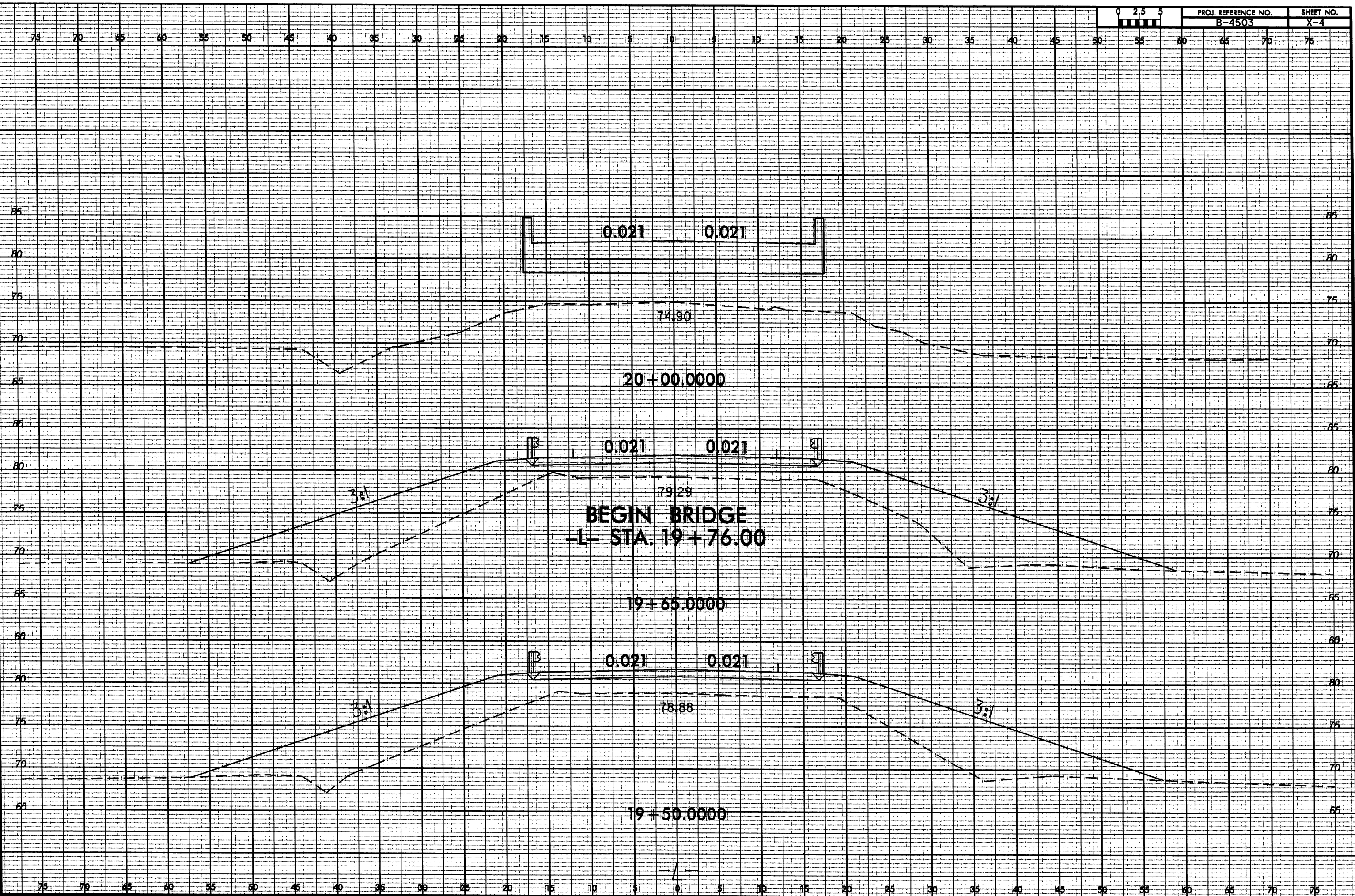
PROJ. REFERENCE NO.
B-4503

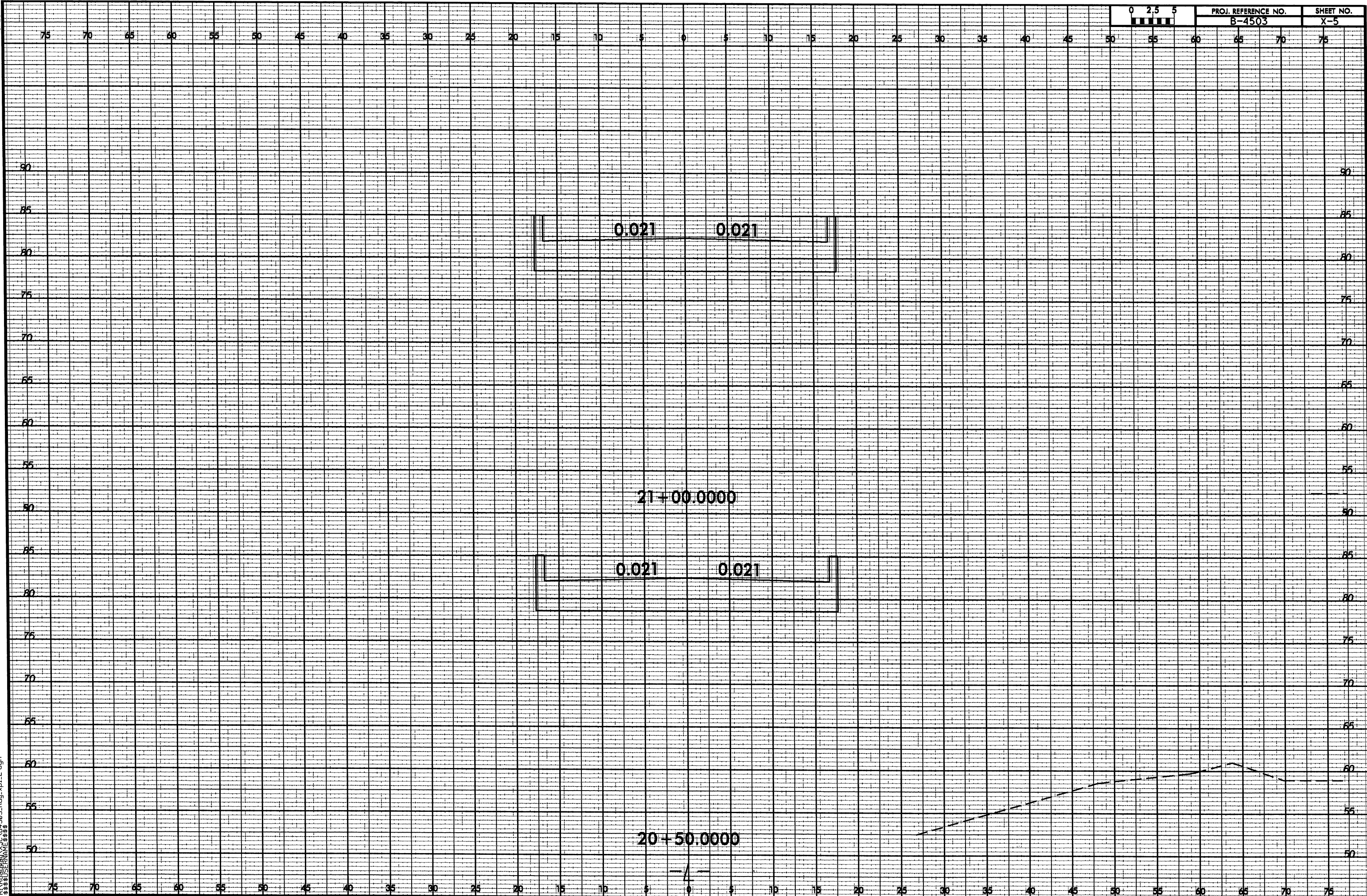
SHEET NO.
X-3



8/23/99

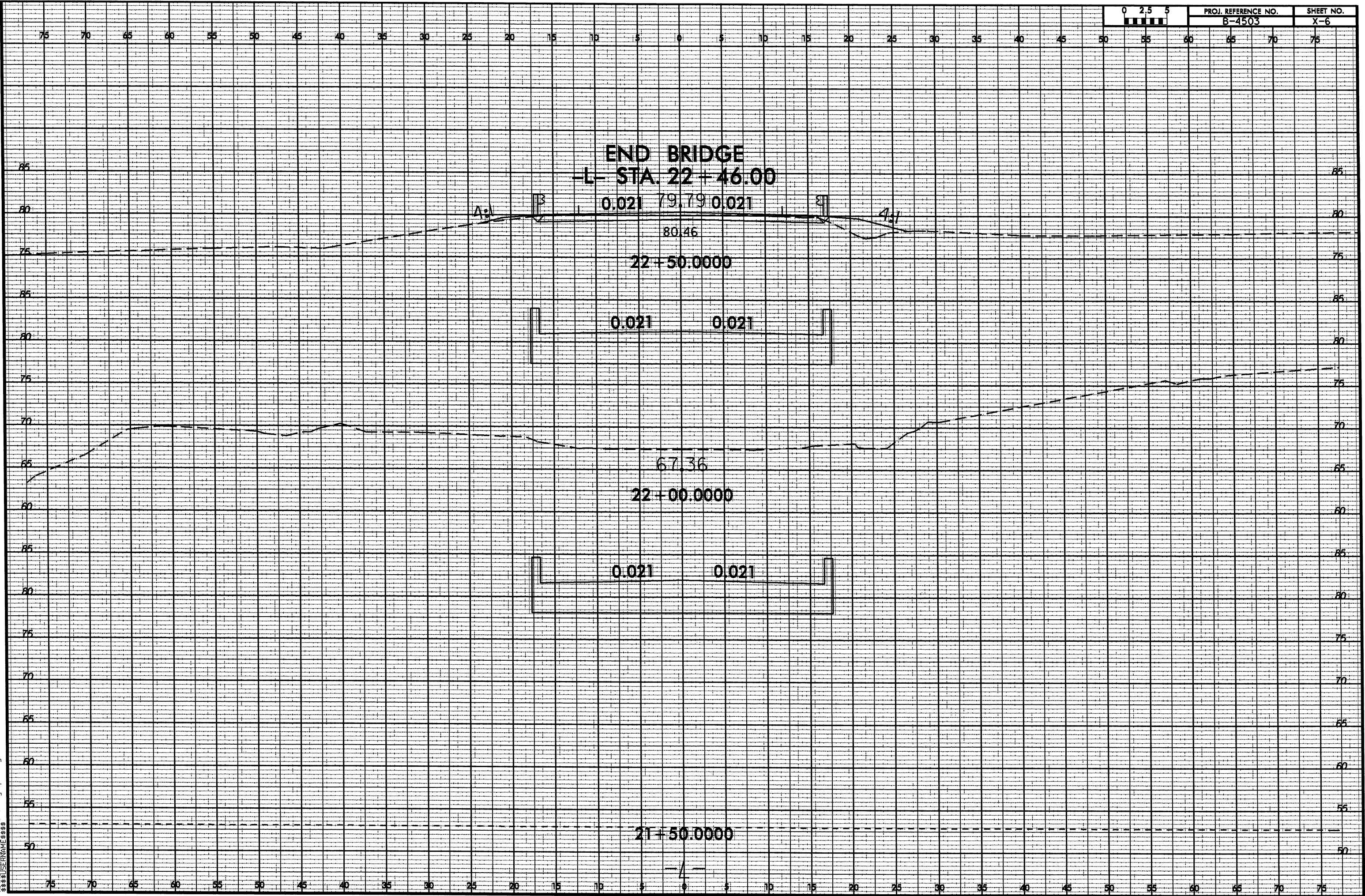
03-JAN-2011 11:16
R:\Roadway\XSC_B4503_Rdy-1.dgn
\$\$\$\$\$USERNAME\$\$\$\$



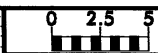


8/23/99

03-JAN-2011 11:16
R:\F0000000\XSC-B4503-Rdy.xpl.dgn
\$\$\$\$\$SERVNAME\$\$\$\$



8/23/99



PROJ. REFERENCE NO.
B-4503

SHEET NO.
X-7

END GRADE
END CONSTRUCTION
-L- STA. 24 + 00.00

24 + 40.1053

78.30

0.005

0.018

77.58

24 + 00.0000

0.021

0.021

77.88

23 + 50.0000

0.021

0.021

78.91

23 + 00.0000

0.021

0.021

79.79

22 + 60.0000

03-JAN-2011 14:06
R:\PROJECTS\XSC\B4503_Rdg_xpl.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$