



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

March 25, 2004

Stormwater Section
Division of Water Quality
943 Washington Square Mall
Washington, NC 27889

Attention: Mr. Bill Moore

Dear Mr. Moore,

Subject: Replacement of bridge number 24 over on SR 1140 over Hall's Creek, Pasquotank County, Federal Project Number BRZ-1140(2), State Project Number 8.2110401, TIP B-4222, \$420.00 Debit work order 8. 2110401, WBS Element 33566.1.1.

Enclosed is a stormwater permit application form, stormwater management narrative, and one copy of the project plans. Please, debit the amount of \$420.00 from TIP B-4222, Federal Project Number BRZ-1140(2), State Project Number 8.2110401, WBS Element 33566.1.1. Please review this project for authorization by your section of NCDWQ. If you have any questions regarding this project or need additional information, please feel free to contact Mr. Marshall Clawson, P.E. of NCDOT Hydraulics Unit at (919) 250-4100, or Michael Turchy of NCDOT Project Development and Environmental Analysis Branch at (919) 715-1468.

Sincerely,

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

Gregory J. Thorpe, Ph.D., Environmental Management Director
Project Development and Environmental Analysis Branch

cc: Ms. Cathy Brittingham, NCDOT
Mr. David Franklin, USACE, Wilmington
Mr. John Dorney, DWQ, Raleigh
Mr. Jay Bennett, P.E., Roadway Design
Mr. Omar Sultan, Programming and TIP
Ms. Art McMillan, P.E., Highway Design
Mr. David Chang, P.E., Hydraulics
Mr. Greg Perfetti, P.E., Structure Design
Mr. Mark Staley, Roadside Environmental
Mr. Don Conner, P.E., Division Engineer
Mr. Clay Willis, DEO

OFFICE USE ONLY

Date Received	Fee Paid	Permit Number

**State of North Carolina
Department of Environment and Natural Resources
Division of Water Quality**

STORMWATER MANAGEMENT PERMIT APPLICATION FORM

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
LINEAR ROADWAY PROJECT**

This form may be photocopied for use as an original.

DWQ Stormwater Management Plan Review:

A complete stormwater management plan submittal includes this application form, a supplement form for each BMP proposed (see Section V), design calculations, and plans and specifications showing all road and BMP details.

I. PROJECT INFORMATION

NCDOT Project Number: 8.2110401 (B-4222) County: Pasquotank

Project Name: Bridge #24 over Hall's Creek on SR 1140 (Hall's Creek Road)

Project Location: North of Nixonton on SR 1140 (Hall's Creek Road)

Contact Person: Marshall Clawson Phone: (919) 250-4100 Fax: (919) 250-4108

Receiving Stream Name: Hall's Creek River Basin: Pasquotank Class: C Sw

Proposed linear feet of project: 0.099 Miles

Proposed Structural BMP and Road Station *(attach a list of station and BMP type if more room is needed):*

N/A

Type of proposed project: *(check all that apply):*

- New
 Widening
 2 lane*
 4 lane*
 Curb and Gutter
 Bridge Replacement
 Other *(Describe)* _____

**2 lane and 4 lane imply that roadside ditches are used unless Curb and Gutter is also checked.*

II. REQUIRED ITEMS CHECKLIST

Initial in the space provided below to indicate the following design requirements have been met and supporting documentation is attached. Supporting documentation shall, at a minimum, consist of a brief narrative description including (1) the scope of the project, (2) how the items below are met, (3) how the proposed best management practices minimize water quality impacts, and (4) any significant constraints and/or justification for not meeting a, b, c and d to the maximum extent practicable.

Designer's Initials

- MS a. The amount of impervious surface has been minimized as much as possible.
MS b. The runoff from the impervious areas has been diverted away from surface waters as much as possible.
MS c. Best Management Practices are employed which minimize water quality impacts.
MS d. Vegetated roadside ditches are 3:1 slope or flatter.

III. OPERATION AND MAINTENANCE AGREEMENT

I acknowledge and agree by my initials below that the North Carolina Department of Transportation is responsible for the implementation of the four maintenance items listed. I agree to notify DWQ of any operational problems with the BMP's that would impact water quality or prior to making any changes to the system or responsible party.

Maintenance Engineer's Initials

- RKS a. BMP's shall be inspected and maintained in good working order.
RKS b. Eroded areas shall be repaired and reseeded as needed.
RKS c. Stormwater collection systems, including piping, inlets, and outlets, shall be maintained to insure proper functioning.

Maintenance Engineer's Name: Ronald K. Surge
Title: County Maintenance Engineer

IV. APPLICATION CERTIFICATION

I, (print or type name) Philip S. Harris III of PDEA Branch, certify that the information included on this permit application form is, to the best of my knowledge, correct and that the project will be constructed in conformance with the approved plans and that the proposed project complies with the requirements of 15A NCAC 2H .1000.

Title: Manager, Office of Natural Environment - PDEA
Address: 1 SOUTH WILMINGTON ST.
Signature: Philip S. Harris III Date: 3/24/04

V. SUPPLEMENT FORMS

The applicable state stormwater management permit supplement form(s) listed below must be submitted for each BMP specified for this project. Contact the Stormwater and General Permits Unit at (919) 733-5083 for the status and availability of these forms.

- Form SWU-102 Wet Detention Basin Supplement
- Form SWU-103 Infiltration Basin Supplement
- Form SWU-104 Low Density Supplement
- Form SWU-105 Curb Outlet System Supplement
- Form SWU-106 Off-Site System Supplement
- Form SWU-107 Underground Infiltration Trench Supplement
- Form SWU-108 Neuse River Basin Supplement
- Form SWU-109 Innovative Best Management Practice Supplement
- Form SWU-110 Extended Dry Detention Basin Supplement

STORMWATER MANAGEMENT PLAN

TIP No. B-4222
Pasquotank County
3/19/04

Project Description

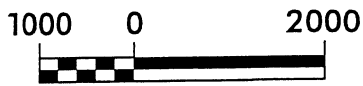
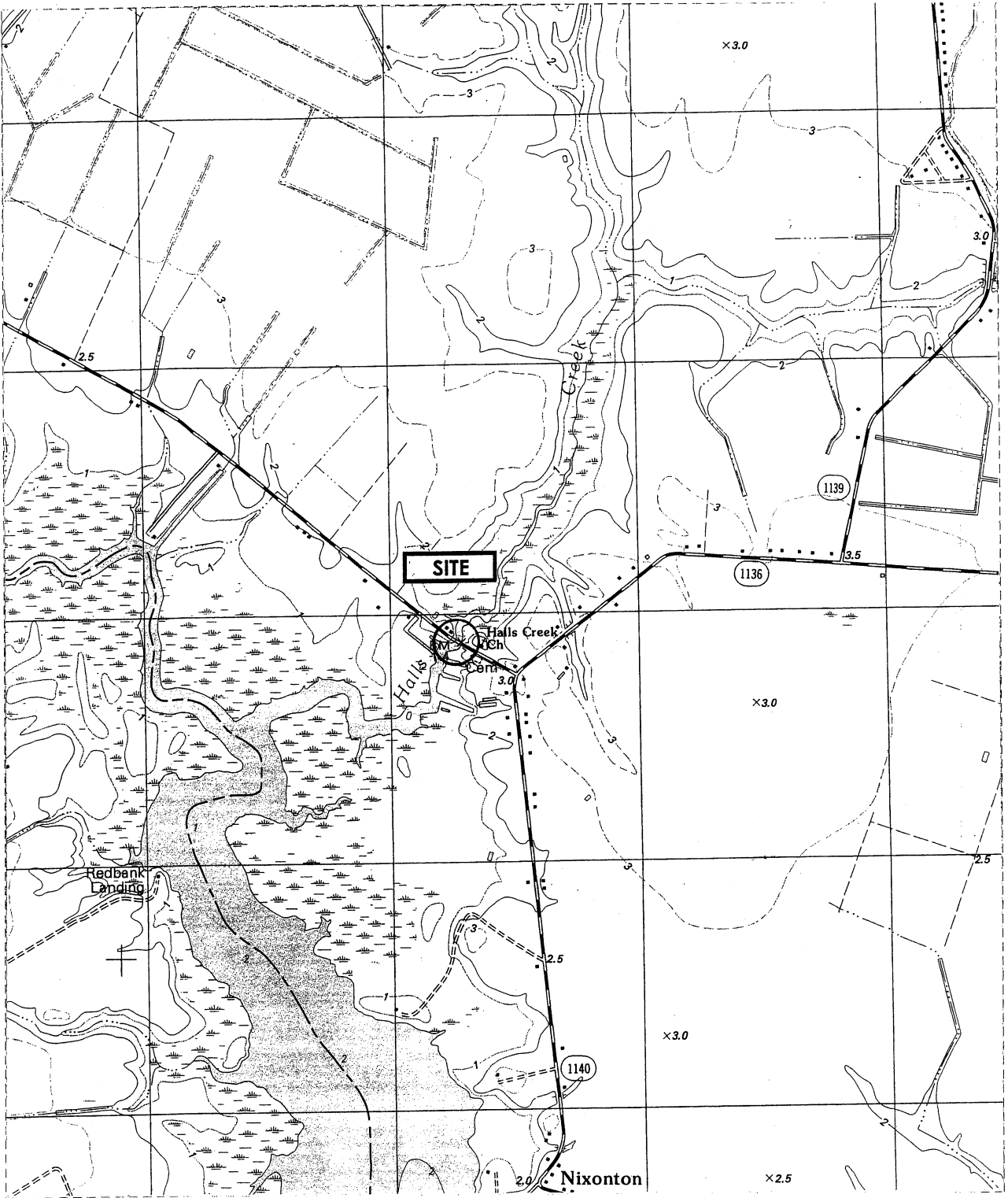
The project consists of the replacement of Bridge #24 over Halls Creek on SR 1140. The proposed bridge is 2 @ 52' – Cored Slab structure. The proposed typical section consists of a two lane grass shoulder. The only drainage pipes proposed are 2 – 15" driveway pipes. Otherwise, all drainage is conveyed in grass lined roadway ditches. No deck drains are proposed on the bridge and therefore no water will be directly discharged into Halls Creek.

Project Involvement

The project will require temporary cofferdams in order to construct the interior piers for the proposed bridge. Also, if necessary during construction, portions of the existing bulkhead may need to be replaced. However, if the bulkheads remain stable during construction they will be left, as is.

Best Management Practices

Best Management Practices (BMPs) utilized on the project are as follows: promotion of sheet flow and infiltration with grass shoulders and flat slope grass ditches and the avoidance of direct discharge into Halls Creek by not using bridge deck drains. Additional Best Management Practices consisting of temporary sediment and erosion control procedures will be utilized by NCDOT during construction.



N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS

PASQUOTANK COUNTY

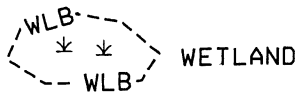
PROJECT: 8.2110401 (B-4222)
 PROPOSED REPLACEMENT OF
 BRIDGE No. 24 ON SR 1140
 OVER HALLS CREEK

SHEET 2 OF 7

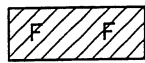
9/29/03

LEGEND

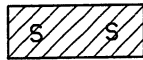
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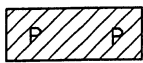
WETLAND



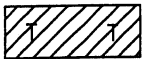
DENOTES FILL IN WETLAND



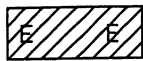
DENOTES FILL IN SURFACE WATER



DENOTES FILL IN SURFACE WATER (POND)



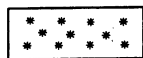
DENOTES TEMPORARY FILL IN WETLAND



DENOTES EXCAVATION IN WETLAND



DENOTES TEMPORARY FILL IN SURFACE WATER



DENOTES MECHANIZED CLEARING

← ← 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

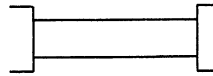


BOULDER

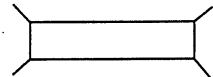
--- COIR FIBER ROLLS



ADJACENT PROPERTY OWNER OR PARCEL NUMBER



PROPOSED BRIDGE



PROPOSED BOX CULVERT



PROPOSED PIPE CULVERT

(DASHED LINES DENOTE EXISTING STRUCTURES)



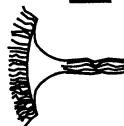
SINGLE TREE



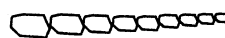
WOODS LINE



DRAINAGE INLET



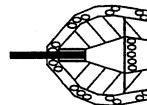
ROOTWAD



VANE



RIP RAP



RIP RAP ENERGY DISSIPATOR BASIN

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

PASQUOTANK COUNTY

PROJECT: 8.2110401 (B-4222)
PROPOSED REPLACEMENT OF
BRIDGE No. 24 ON SR 1140
OVER HALL'S CREEK

SHEET 3 OF 7

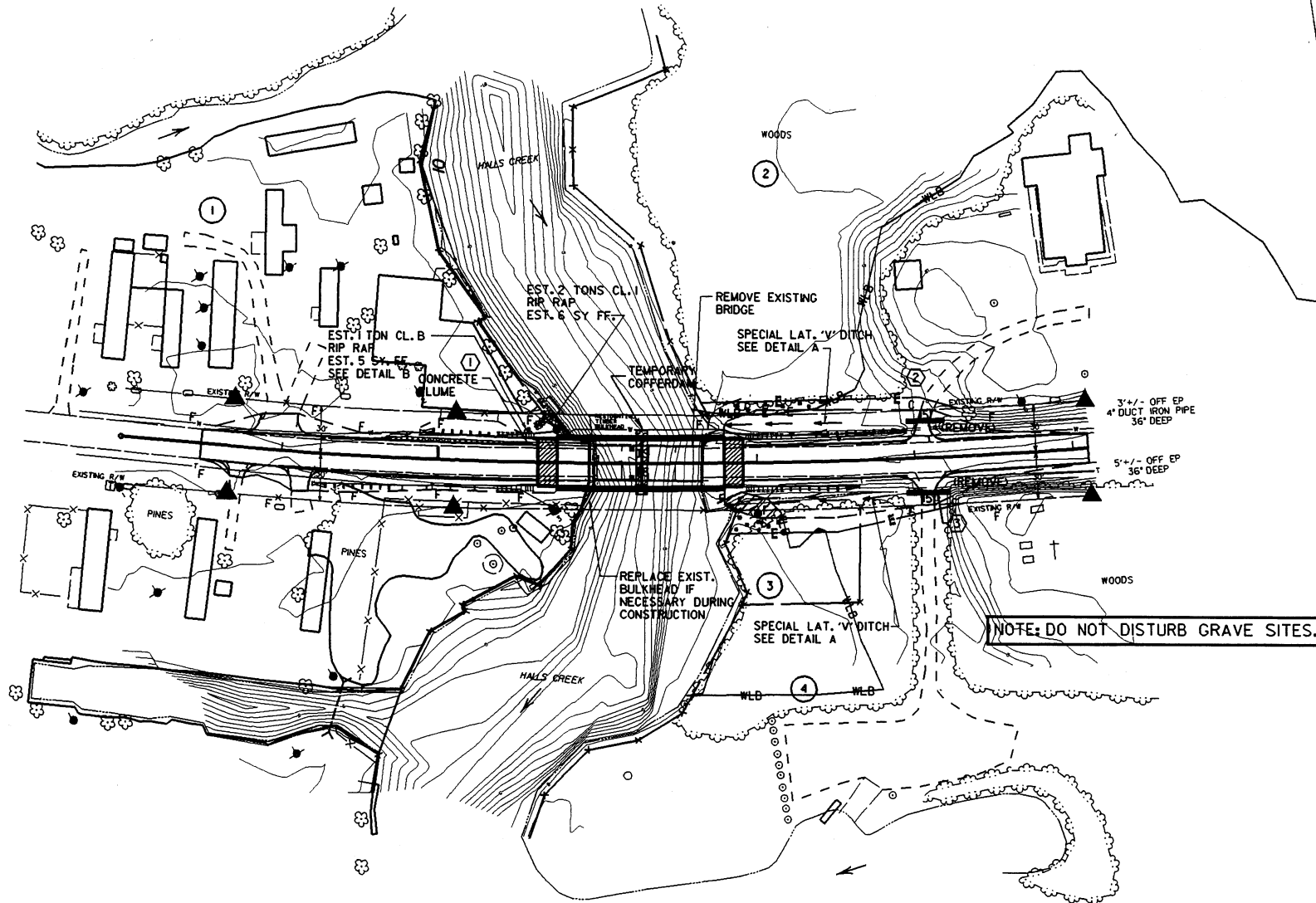
9/29/03

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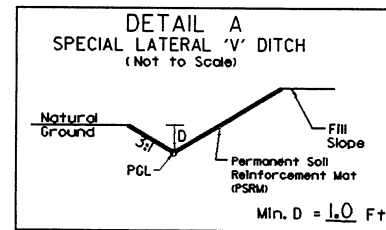
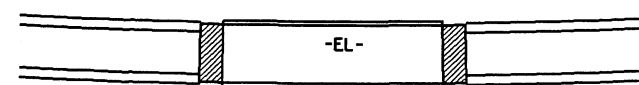
REVISIONS

ENGLISH

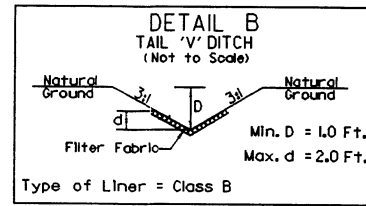
PROJECT REFERENCE NO. B-4222	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTE: DO NOT DISTURB GRAVE SITES.



-L- STA 11+75 TO STA 13+50 LT.
-L- STA 11+85 TO STA 13+50 RT.



-L- STA. 10+56 LT.

- DENOTES TEMPORARY FILL IN SURFACE WATERS
- DENOTES FILL IN WETLANDS
- DENOTES EXCAVATION IN WETLANDS
- DENOTES MECHANIZED CLEARING

FOR -L- PROFILE SEE SHEET NO.5

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

Ramey Kemp & Associates, Inc.
Transportation Consulting Engineers

4928-A Windy Hill Drive Raleigh, North Carolina 27609
(919) 872-5465 Fax (919) 878-5465

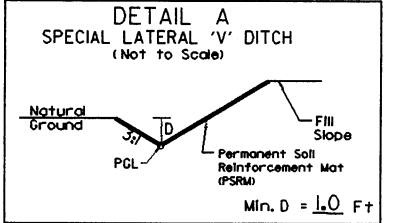
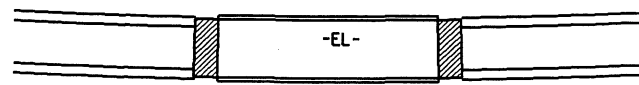
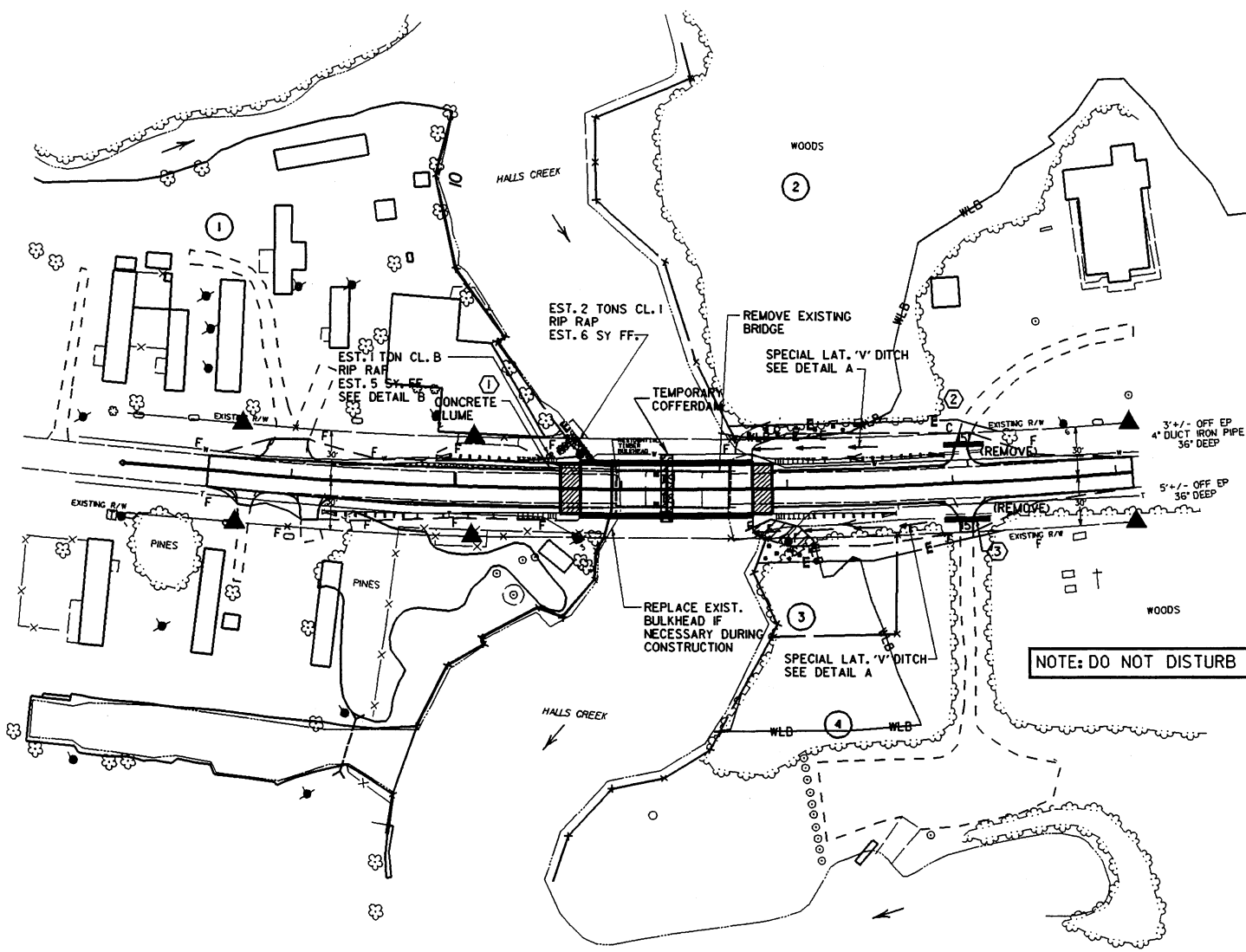
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10/26/98

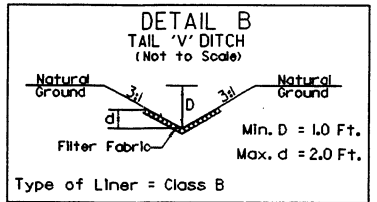
REVISIONS

ENGLISH

PROJECT REFERENCE NO. B-4222		SHEET NO. 4
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	



-L- STA 11+75 TO STA 13+50 LT.
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FOR -L- PROFILE SEE SHEET NO.5

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

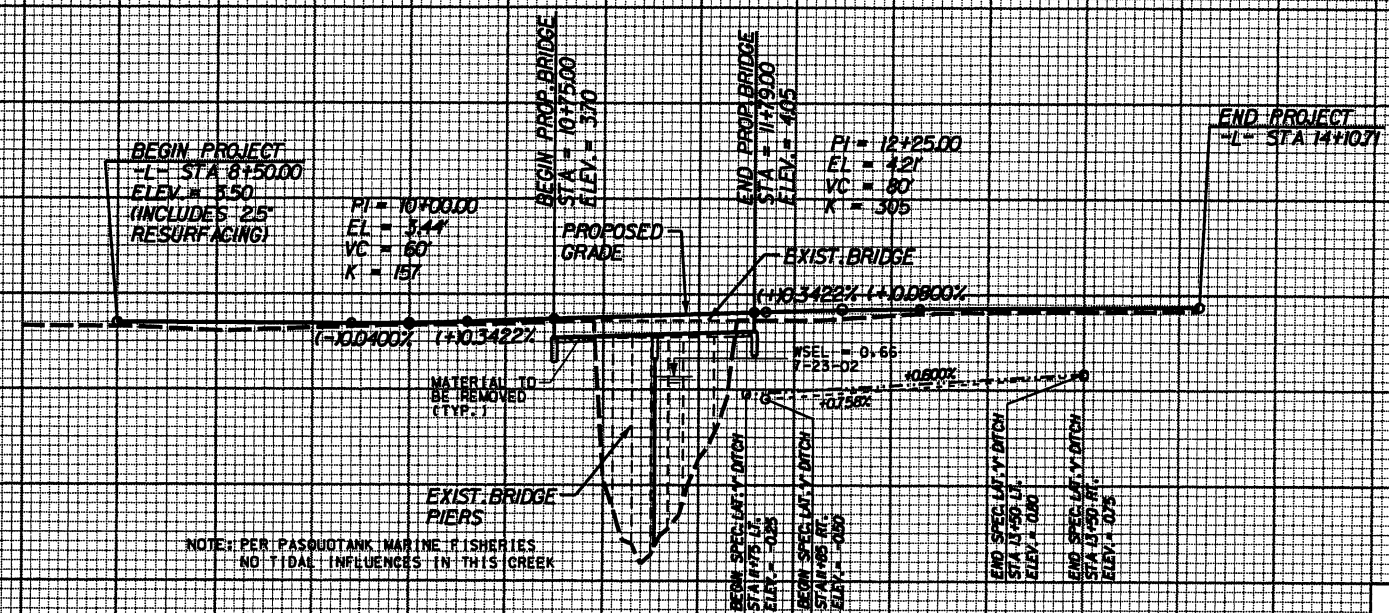
Ramey Kemp & Associates, Inc.
Transportation Consulting Engineers

4528-A Windy Hill Drive Raleigh, North Carolina 27609
(919) 872-505 Fax (919) 878-546

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 10/26/98 10:51 AM

B.M. #10 ELEV. = 3.65
RR SPIKE IN BASE OF
POWER POLE
38.40' LT. OF -BL- STA. 23+46.50

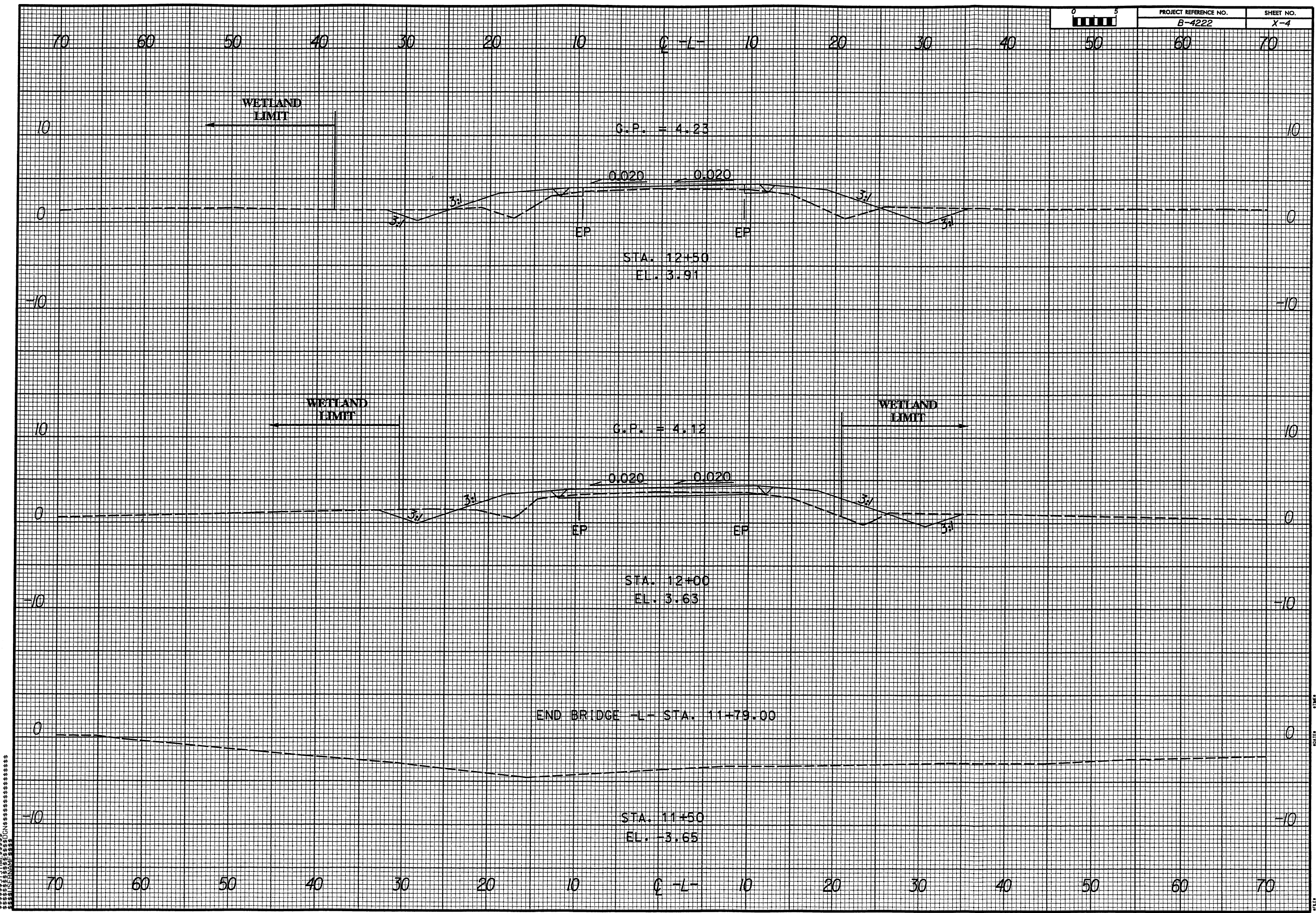
B.M. #11 ELEV. = 3.34
RR SPIKE IN BASE OF
18' MAPLE
25.20' RT. OF -BL- STA. 28+73.10
37.48' RT. OF -L- STA. 12+95.00



STRUCTURE HYDRAULIC DATA		
DESIGN DISCHARGE	=	N/A
DESIGN FREQUENCY	=	25 YRS
DESIGN HW ELEVATION	=	N/A
BASE DISCHARGE	=	N/A
BASE FREQUENCY	=	100 YRS
BASE HW ELEVATION	=	5.9 FT
OVERTOPPING DISCHARGE	=	N/A
OVERTOPPING FREQUENCY	=	< 10 YR.
OVERTOPPING ELEVATION	=	2.6 FT

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

5A 037



 SYSTEMS

Project No. 8.2110401 (B-4222)
Property Owner List
For
Each Site

Parcel No.	Name	Address
(1)	Robert C. Collie	P.O. Box 1625 Elizabeth City, N.C. 27909
(2)	Nixonton Ruritan Club	694 Body Rd. Elizabeth City, N.C. 27909
(3)	Mary Pritchard	104 Marian Avenue Elizabeth City, N.C. 27909
(4)	N.C. Wildlife Commision	1720 Mail Service Center Raleigh, N.C. 27699-1720

N.C. DEPT. OF TRANSPORTATION
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SHEET 6 OF 7

9/29/03

