

DEPARTMENT OF THE ARMY
Wilmington District, Corps of Engineers
Post Office Box 1890
Wilmington, North Carolina 28402-1890

Action ID No. 2002-0-0048

September 8, 2004

PUBLIC NOTICE

THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT), C/O DR. GREGORY J. THORPE, PHD, MANAGER, PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH, 1548 MAIL SERVICE CENTER, RALEIGH, NORTH CAROLINA, 27699-1548 HAS APPLIED FOR A DEPARTMENT OF THE ARMY (DA) PERMIT PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT TO DISCHARGE DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES, INCLUDING JURISDICTIONAL WETLANDS FOR THE WIDENING OF EXISTING NC 87 TO A FOUR-LANE, MEDIAN DIVIDED, FACILITY FROM NC 131 TO OLD NC 41 (SR 1191) IN BLADEN COUNTY, NORTH CAROLINA. STATE PROJECT 6.439001T, TIP NO. R-2562 C&D, NCDOT DIVISION 6.

The following description of the work is taken from data provided by the applicant and from observations made during site visits by representatives of the Corps of Engineers.

History:

The social, economic, and environmental impacts associated with potential build alternatives for R-2562 have been described in a June 1993 North Carolina Department of Transportation (NCDOT) State Environmental Assessment (SEA). A State Finding of No Significant Impact (SFONSI) determination was prepared for this project and approved March 28, 1995. The purpose of the proposed project is to provide improved safety and capacity on the NC 87 corridor.

The NCDOT SEA and SFONSI are available for review at the Wilmington Regulatory Field Office of the Wilmington District U.S. Army Corps of Engineers, 69 Darlington Avenue, Wilmington, North Carolina, or at the North Carolina Department of Transportation, Project Development and Environmental Analysis Branch, Transportation Building, 1 South Wilmington Street, Raleigh, North Carolina.

Project Description:

The work now being considered for authorization is the discharge of dredged or fill material into 4.58 acres of jurisdictional wetlands and 1,293 linear feet of jurisdictional stream channel associated with the construction of the NC 87 road widening project from the Elizabethtown Bypass in Bladen County to 0.8 miles southeast of I-95 in Cumberland County. The NC 87 road widening project will involve the construction of four-lane divided facility with a 46-foot wide grass median by adding two lanes to one side of the existing two-lane roadway. Through the towns of Dublin and Tar Heel, NC 87 will be widened to a five-lane curb and gutter section roadway. The intersection at NC 87 and NC 41 will be revised as part of this road improvement project. The proposed highway improvement project is approximately 28 miles in length.

The project is located in the Cape Fear and Lumber River Basins (Hydrologic Unit 03030005 and 03040203, respectively). Waters of the United States, including wetlands will be impacted by the proposed project. The streams that may be impacted by the proposed project are Huckleberry Swamp, Black Swamp, Reedy Meadow Swamp and unnamed tributaries to the Cape Fear River and Bakers Creek. There are twelve proposed wetland crossings and eleven proposed stream crossings associated with the proposed project (see Table 1). Wetland types potentially impacted by the proposed project are 0.01 acres of emergent wetlands, 2.70 acres of scrub/shrub wetlands and 1.87 forested wetlands as shown in Table 1.

Table 1. Impacts to Aquatic Features from Proposed Project

Section	Site	Feature					
		River Basin	Non-riverine Wetland Impacts (Acres)	Riverine Wetland Impacts (Acres)	Cowardin Wetland Designation	Stream Impacts (Feet)	DWQ Stream Class
C	1	Lumber		0.003	PEM1	32	C-Sw
	2	Cape Fear		0.01	PEM1		
	3	Cape Fear	0.01		PFO3	210	C
	4	Cape Fear				272	C
	5	Cape Fear				223	C
	6	Lumber	0.53		PFO1	217	C-Sw
	7	Lumber	1.50	1.18	PSS1		
D	1	Cape Fear	0.02		PSS6		C
	2	Cape Fear		1.0	PFO1/4	189	C
	3	Cape Fear				103	C
	4	Cape Fear	0.07		PFO4		

	5	Cape Fear	0.18		PFO4		
	6	Cape Fear	0.08		PFO1		
	8	Cape Fear				34	C
Total			2.39	2.193		1,293	

Note: Areas and lengths are based on Preliminary Design

Construction of the proposed project will permanently impact 4.58 acres of jurisdiction wetlands and 1,293 linear feet or 0.14 acres of stream channel. The NCDOT is proposing to use a combination of onsite mitigation (0.27 acres of wetlands and 189 linear feet of perennial stream channel) and the North Carolina Ecosystem Enhancement Program (EEP) (4.31 acres of wetlands and 440 linear feet of perennial stream channel) to provide the necessary compensatory mitigation for the unavoidable wetland and perennial stream impacts associated with this project.

The State of North Carolina will review this public notice to determine the need for the applicant to obtain any required State authorizations. No Department of the Army (DA) permit will be issued until the coordinated State viewpoint on the proposal has been received and reviewed by this agency, nor will a Department of the Army permit be issued until the North Carolina Division of Water Quality has determined the applicability of a Water Quality Certification as required by PL 92-500.

This application is being considered pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344). Any person may request, in writing within the comment period specified in the notice, that a public hearing be held to consider this application. Requests for public hearing shall state, with particularity, the reasons for holding a public hearing.

The District Engineer has consulted the latest published version of the National Register of Historic Places (NRHP) for the presence or absence of registered properties, or properties listed as being eligible for inclusion therein. The Robeson House (Walnut Grove Plantation), Purdie Methodist Church and the Purdie Place, are registered properties and are within the proposed highway project area. One additional property, the W.H. White House is identified on the historic property study list. All of these properties may be effected by the proposed project. There are no known archaeological sites within the proposed highway project area. Consultation of the National Register and review of the above referenced NEPA documents and supplied correspondence from NCDOT constitutes the extent of cultural resource investigations by the District Engineer, and he is otherwise unaware of the presence of any other resources.

NCDOT has conducted surveys along the proposed project corridors to identify suitable, or critical habitat for species listed as Federally endangered or threatened pursuant to the Endangered Species Act of 1973. Based on information provided by NCDOT, the Corps of Engineers has determined that the proposed permit action would have no effect on any of the listed species known to occur within Bladen County. These species are the American alligator,

Alligator mississippiensis; Red-cockaded woodpecker, *Picoides borealis*; Shortnose sturgeon, *Acipenser brevirostrum*; American chaffseed, *Schwalbea americana*; Pondberry, *Lindera melissifolia*; and Rough-leaved Loosestrife, *Lysimachia asperulaefolia*. The U.S. Fish and Wildlife Service, in a letter dated February 17, 1999, and the North Carolina Division of Marine Fisheries, in email communication on March 3, 2004, concurred with the NCDOT biological conclusions for this highway project. Re-surveys were conducted by NCDOT on June 2, 2004 to update previous surveys and to ensure that no protected species were present that would be impacted by the project. The District Engineer, based on available information, is not aware that the proposed activity will affect any other species not listed above, or their critical habitat, designated as endangered or threatened pursuant to the Endangered Species Act of 1973.

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts that the proposed activity may have on the public interest requires a careful weighing of all those factors that become relevant in each particular case. The benefits that reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so the conditions under which it will be allowed to occur, are therefore determined by the outcome of the general balancing process. That decision should reflect the national concern for both protection and utilization of important resources. All factors that may be relevant to the proposal must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards and flood plain values (in accordance with Executive Order 11988), land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the placement of dredged or fill materials in waters of the United States, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria, a permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Generally, the decision whether to issue this Department of the Army (DA) permit will not be made until the North Carolina Division of Water Quality (NCDWQ) issues, denies, or waives State certification required by Section 401 of the Clean Water Act. The NCDWQ considers whether or not the proposed activity will comply with Sections 301, 302, 306, and 307 of the Clean Water Act. The application and this public notice for the Department of the Army (DA) permit serves as application to the NCDWQ for certification.

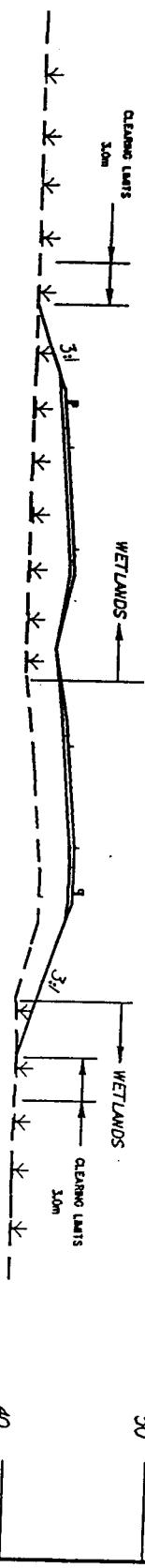
Additional information regarding the Clean Water Act certification may be reviewed at the offices of the Environmental Operations Section, North Carolina Division of Environmental Management (NCDEM), Salisbury Street, Archdale Building, Raleigh, North Carolina. Copies of such materials will be furnished to any person requesting copies upon payment of reproduction costs.

All persons desiring to make comments regarding the application for Clean Water Act certification should do so in writing delivered to the North Carolina Division of Water Quality, (NCDWQ), 1650 Mail Service Road, Raleigh, North Carolina 27699-1650, Attention: Mr. John Dorney.

Written comments pertinent to the proposed work, as outlined above, will be received in this office, Attention: Mr. Richard K. Spencer, until 4:30 p.m., September 22, 2004.

-L- REV.

TYPICAL SECTION FROM 177+80 to 179+20
(Side Slopes through Wetlands are 3:1 Max)



X-SECTION

5m 0 10m
HORIZONTAL SCALE

SITE 7

5m 0 10m
VERTICAL SCALE

SHEET 16 OF 21

N. C. DEPT. OF TRANSPORTATION

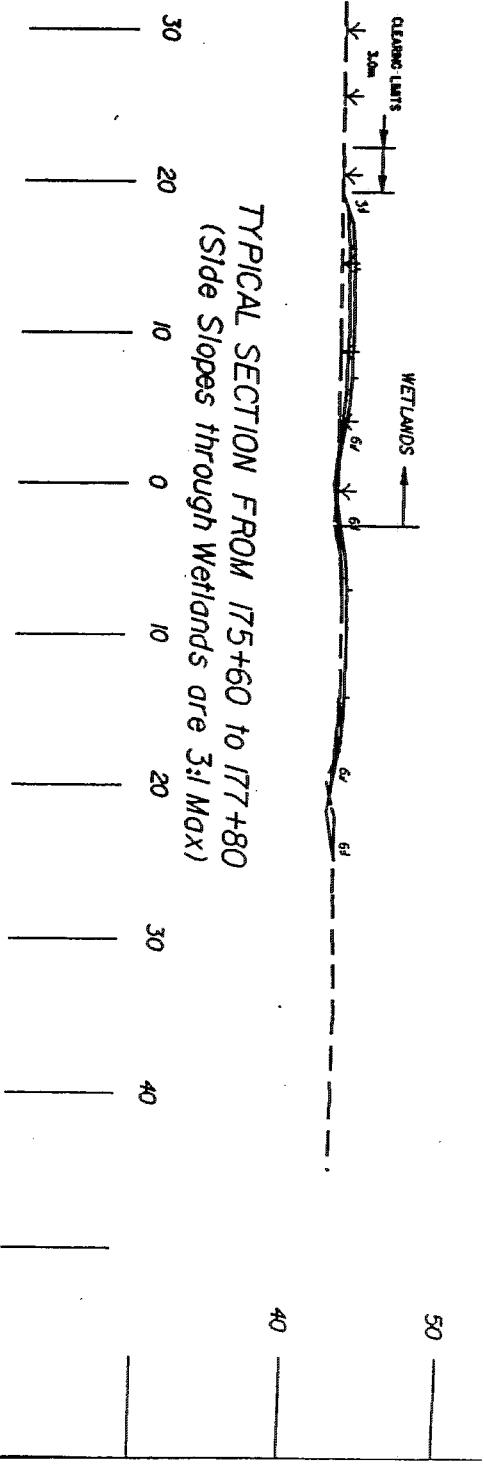
DIVISION OF HIGHWAYS

BLADEN COUNTY

PROJECT: 34467.1.1 (R-2562C)

NC 87 FROM NC 151 TO SR 1191

-L - REV.



X-SECTION

5m
0
10m
HORIZONTAL SCALE

5m
0
10m
VERTICAL SCALE

SITE 7

N. C. DEPT. OF TRANSPORTATION

DIVISION OF HIGHWAYS

BLADEN COUNTY

PROJECT: 34467.11 (R-2562C)

NC 87 FROM NC 151 TO SR 1191

N.C.D.O.T.
DIVISION OF HIGHWAYS
BLADEN COUNTY

NC 87 FROM NC 131 TO SR 1191

PROJECT: 34467.1.1 (R-2562C)

SITE 7
VIEW

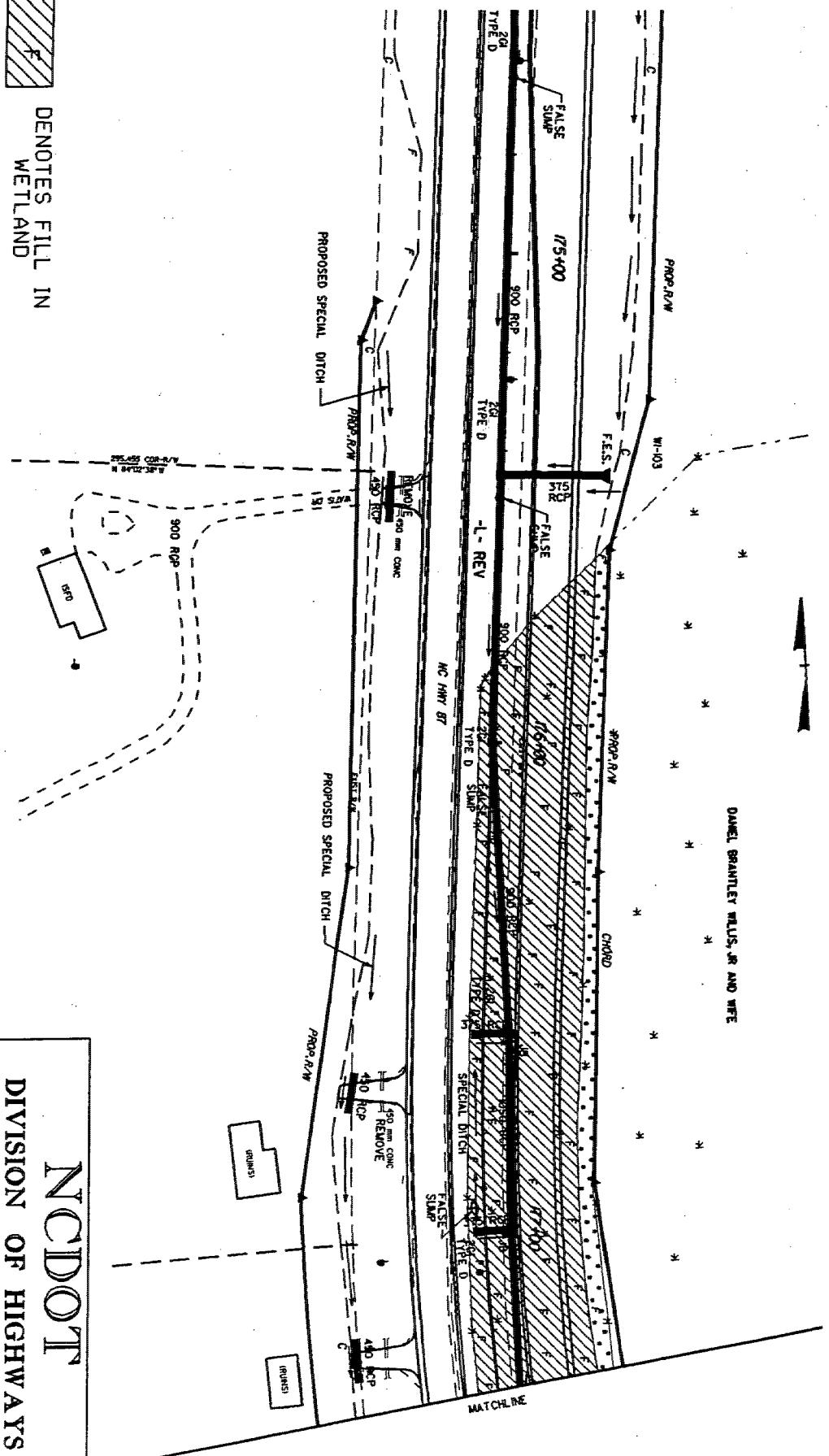
DENOTES FILL IN
WETLAND

**DE NOTES MECHANIZED
CLEARING**

GENIES FILL IN
SURFACE WATER

SHEET 14 OF 21

DANIEL BRANTLEY MUS, JR AND WIFE

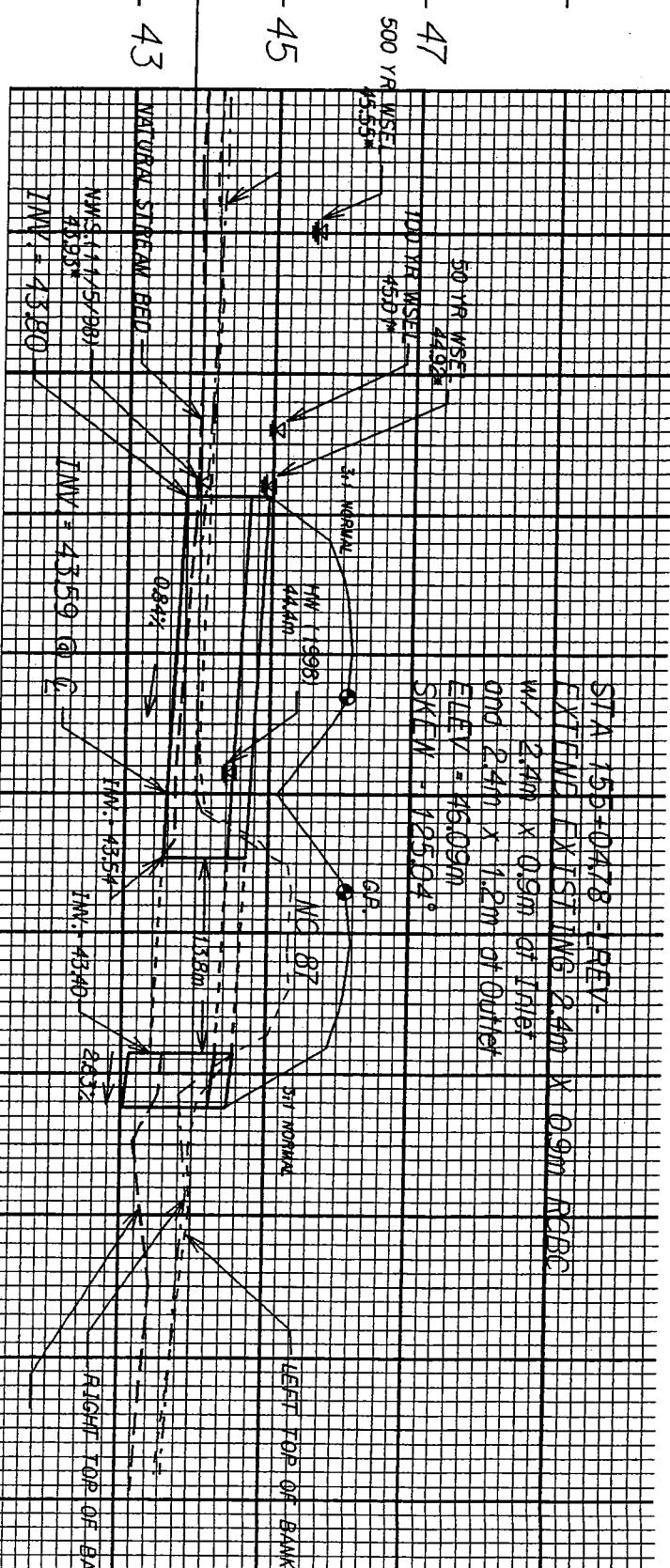


NCIDOT
DIVISION OF HIGHWAYS
BLADEN COUNTY

PROJECT: 34467.1.1 (R-2562C)

DENOTES FILL IN
WETLAND

SITE
▼



BOX CULVERT PROFILE

N. C. DEPT. OF TRANSPORTATION

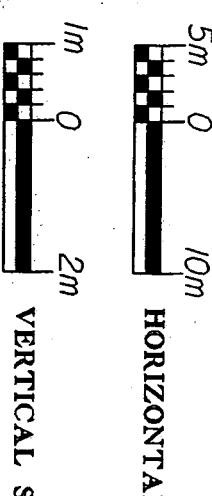
DIVISION OF HIGHWAYS

BLADEN COUNTY

PROJECT: 34467.1.1 (R-2562C)

NC 87 FROM NC 131 TO SR 1191

SHEET 12 OF 21



STA 55+0478 NATURAL GROUND

EXTEND ROCK
2.4m x 0.9m @ INLET
4.2m x 1.2m @ OUTLET

(NOT TO SCALE)

INV. 43.58
INCHES OUTLET INverts
Buried 0.5m in

V0 = 0.31m/s (1.02 ft/sec)
0.0 = 0.036 cms (4.80 cfs)

V0 = 0.49 m/s (1.61 ft/sec)
0.0 = 0.373 cms (5.2 cfs)

INLET CHANNEL

CLASS IMPRINT @ OUTLET

EST. 4 TONS W/F

MEZ C. ALLEN

PIPE ROW

Block Swamp

REMOVE HM

REMOVED

SPECIAL DITCH

10m
20m
SCALE

PLAN VIEW

SITE 6



DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

DENOTES FILL IN SURFACE WATER

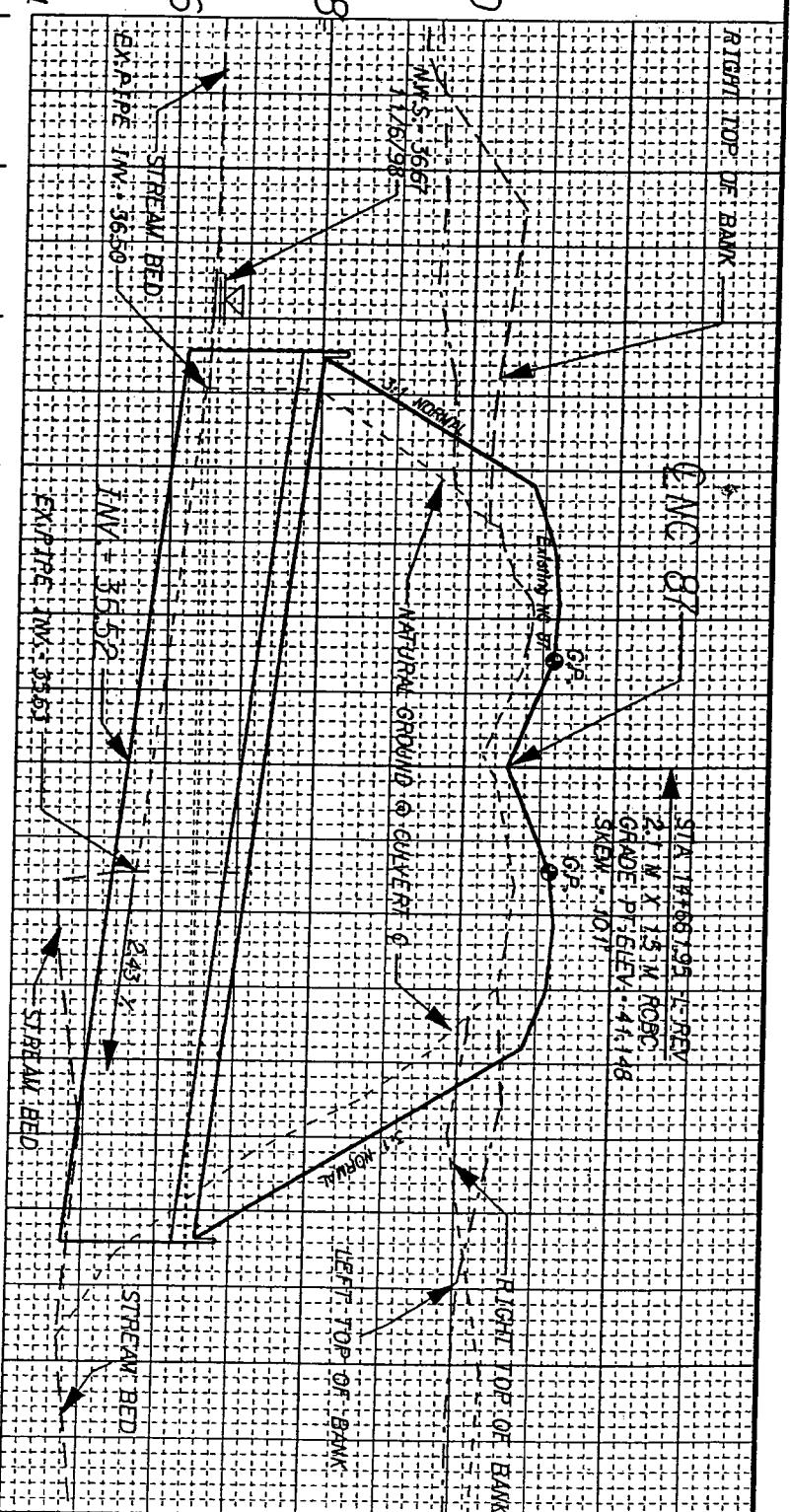
NC DOT
DIVISION OF HIGHWAYS

BLADEN COUNTY

PROJECT: 34467.1.1 (R-2562C)

NC 87 FROM NC 131 TO SR 1191

SHEET 11 OF 21



BOX CULVERT PROFILE

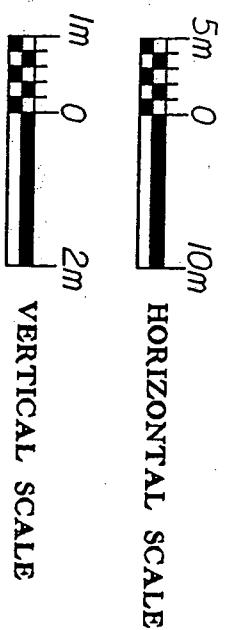
N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

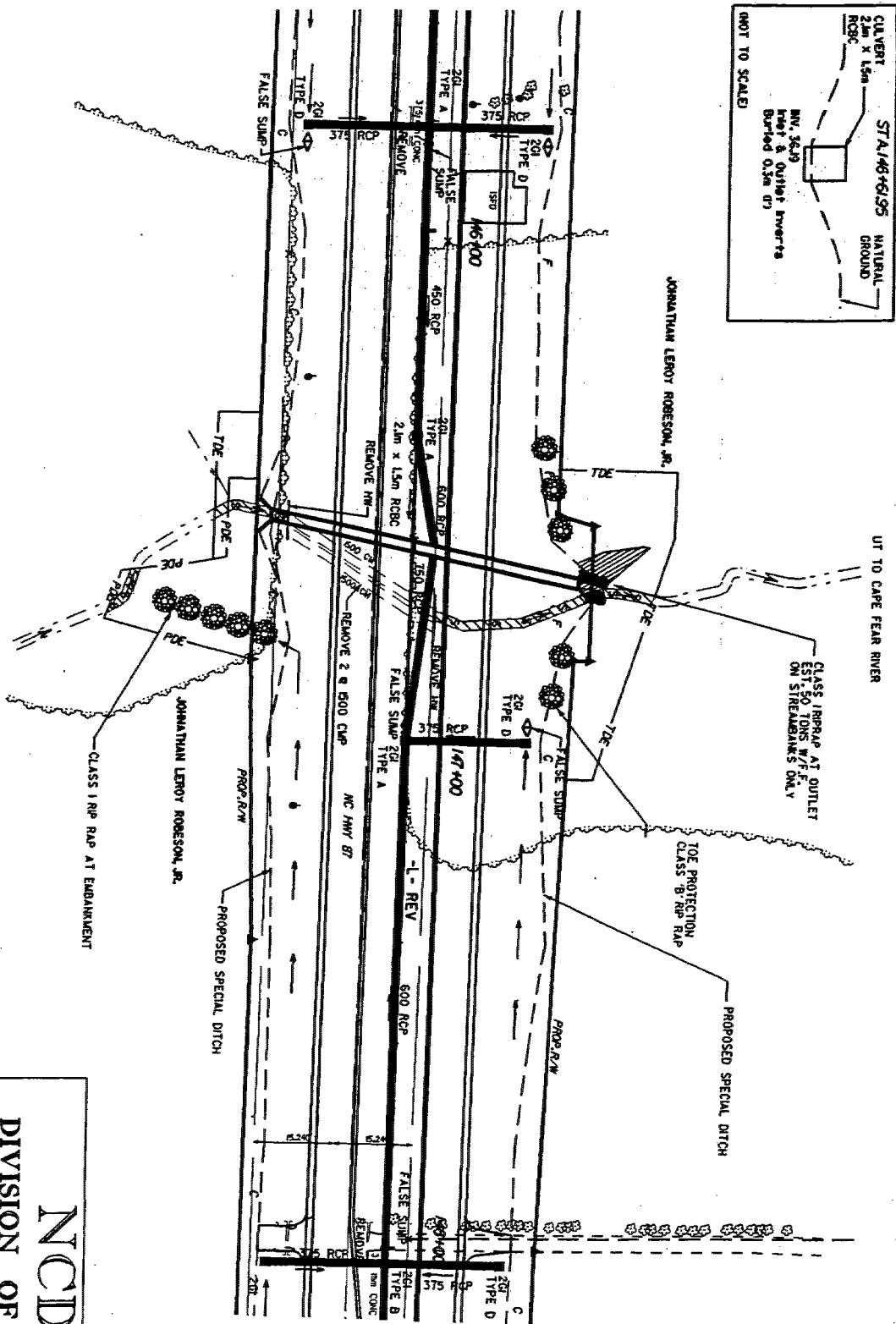
BLADEN COUNTY

PROJECT: 344671.L (R-2562C)

NC 87 FROM NC 151 TO SR 1191

SHEET 1C OF 26





DENOTES FILL IN
SURFACE WATER

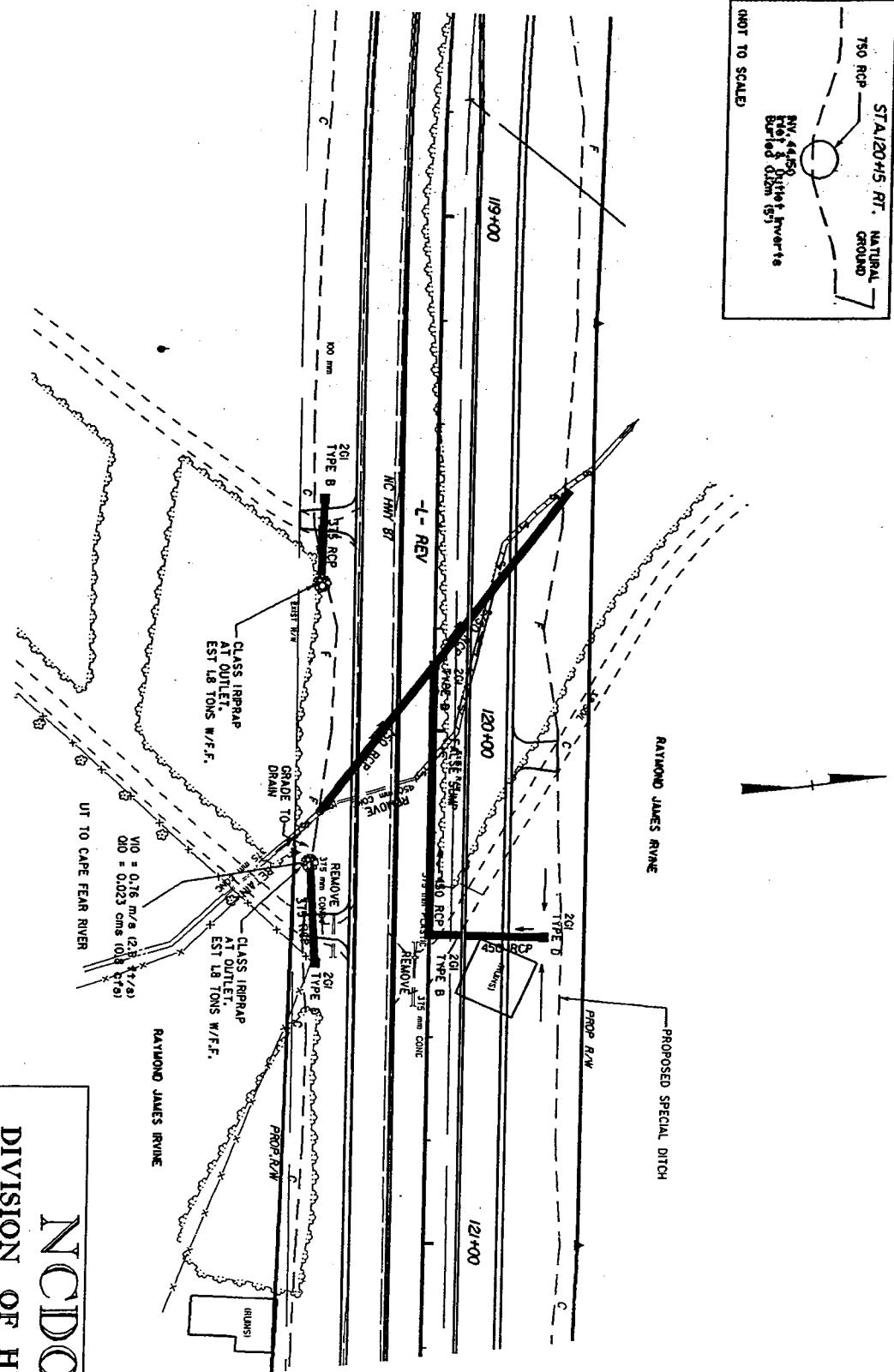
10m 0 20
SCALE

PLAN VIEW

SHEET 9 OF 34

NC 87 FROM NC 131 TO SR 1191

**N.C.D.O.T.
DIVISION OF HIGHWAYS
BLADEN COUNTY**

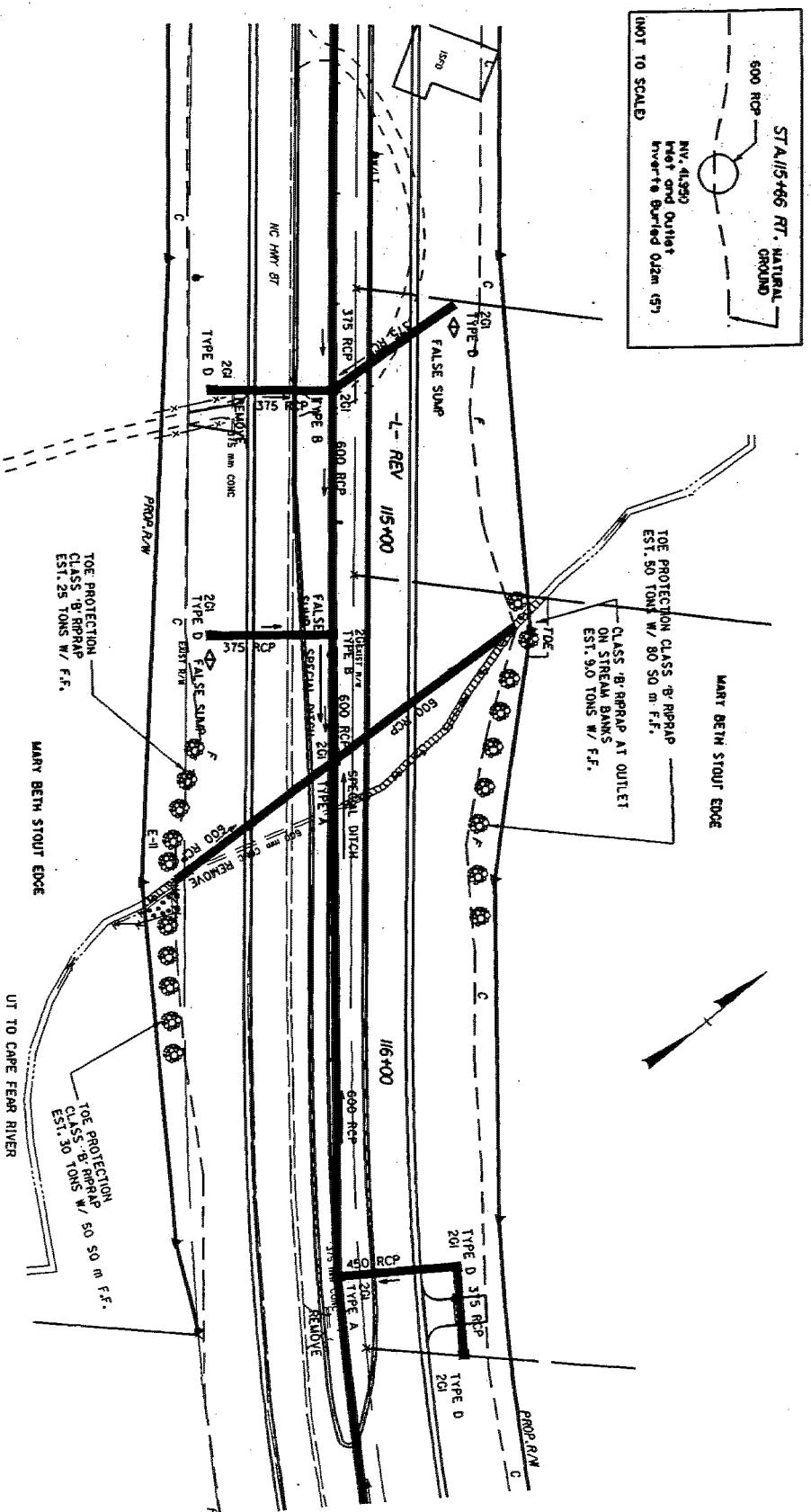


SITE VIEW

SHEET OF

NC 87 FROM NC 131 TO SR 1191

NCIDOT
DIVISION OF HIGHWAYS
BLADEN COUNTY



DENOTES FILL IN
SURFACE WATER

DENOTES FILL IN
WETLAND

DENOTES MECHANIZED
CLEARING

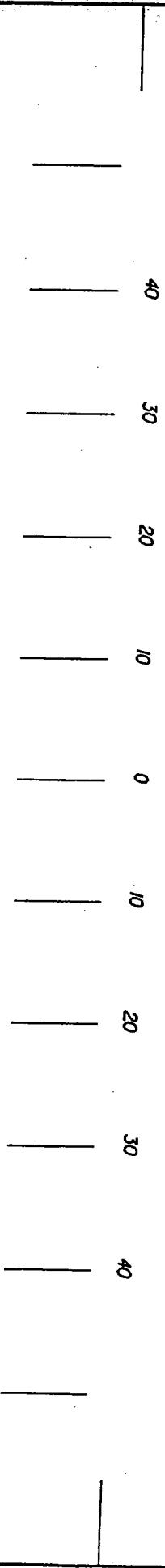
AN VIEW SITE 5

NCIDOT
DIVISION OF HIGHWAYS
BLADEN COUNTY
PROJECT: 34467.1.1 (R-2562C)
NC 87 FROM NC 131 TO SR 1191

-L- REV.



TYPICAL SECTION FROM 108+80 to 109+20
(4:1 max side slopes, eliminate need for G/R & wider shoulder)



X-SECTION

5m 0 10m
HORIZONTAL SCALE

SITE 2

5m 0 10m
VERTICAL SCALE

N. C. DEPT. OF TRANSPORTATION

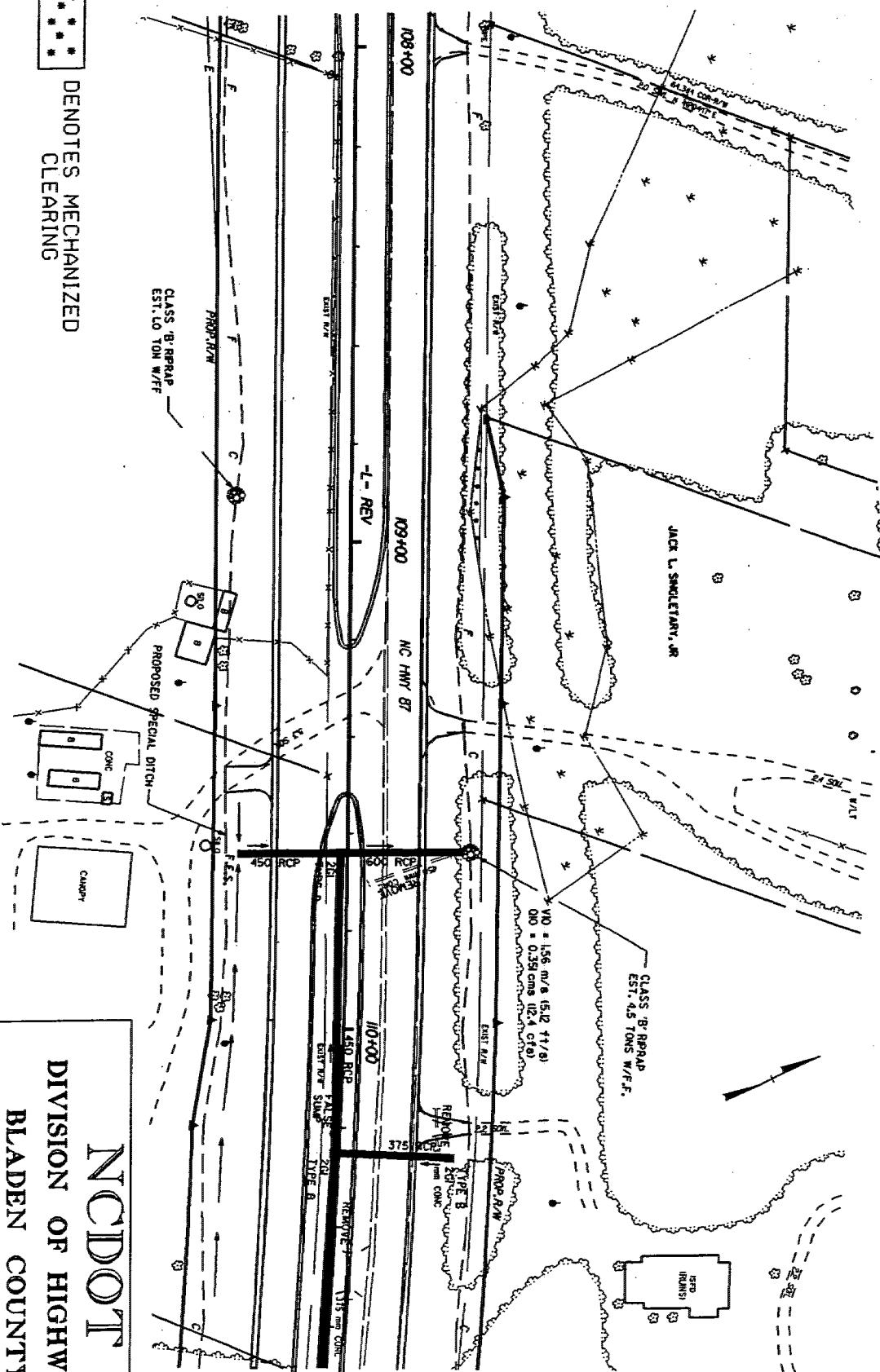
DIVISION OF HIGHWAYS

BLADEN COUNTY

PROJECT: 54467.11 (R-2562C)

NC 87 FROM NC 131 TO SR 1191

SHEET 6 OF 27



NC DOT
DIVISION OF HIGHWAYS

AN VIEW SITE 2

SHEET 5 OF 21

PROJECT: 34467.11 (R-2562C)

PLAN VIEW

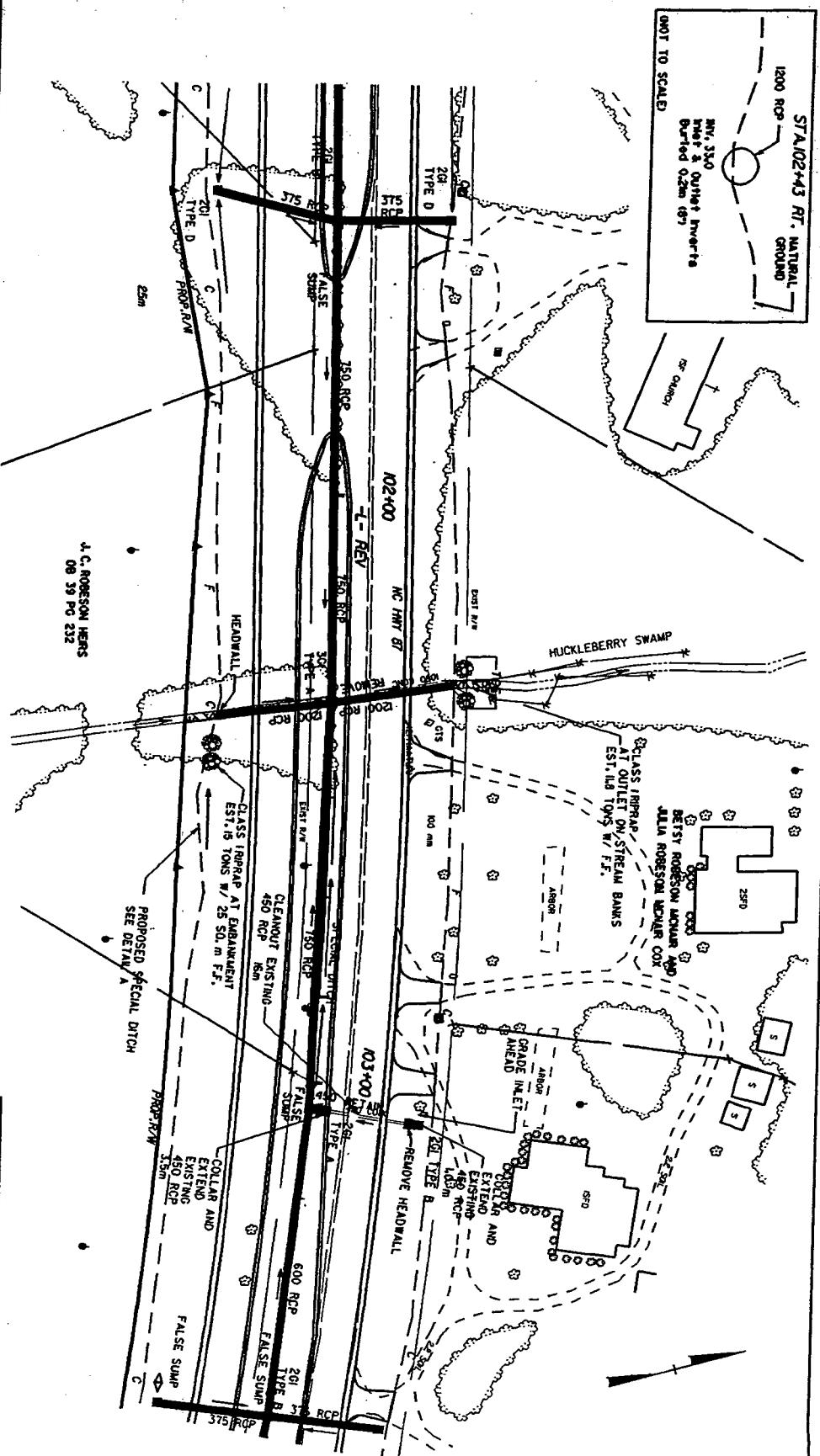
NC 87 FROM NC 131 TO SR 1191

N C I D O T
DIVISION OF HIGHWAYS
BLADEN COUNTY

SCALE

FILL IN
SURFACE WATER

MECHANIZED
CLEARING



— WLB — WETLAND BOUNDARY



WETLAND

— PDE — PERM. DRAINAGE EASEMENT

— PDE — TEMP. DRAINAGE EASEMENT

— PDE — WATER SURFACE

DENOTES FILL IN WETLANDS

S S DENOTES IMPACTED SURFACE WATERS

E E DENOTES EXCAVATION IN WETLANDS

... ... DENOTES MECHANIZED CLEARING

← → FLOW DIRECTION

— WE — EDGE OF WATER

— C — PROP. LIMIT OF CUT

— F — PROP. LIMIT OF FILL

→ PROP. RIGHT OF WAY

XXXX+XXX XXX
XX,XXX PROPERTY LINE



PROPOSED PIPE CULVERT
(DASHED LINES DENOTE EXISTING STRUCTURES)

○ SINGLE TREE

—○—○—○— WOODS LINE

■ DRAINAGE INLET

● RIP RAP

LEGEND

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
BLADEN COUNTY
PROJECT: 6439001T (R-2562C)
NC 87 FROM NC 131
TO SR 1191
SHEET 3 OF 28

BEGIN PROJECT

END PROJECT

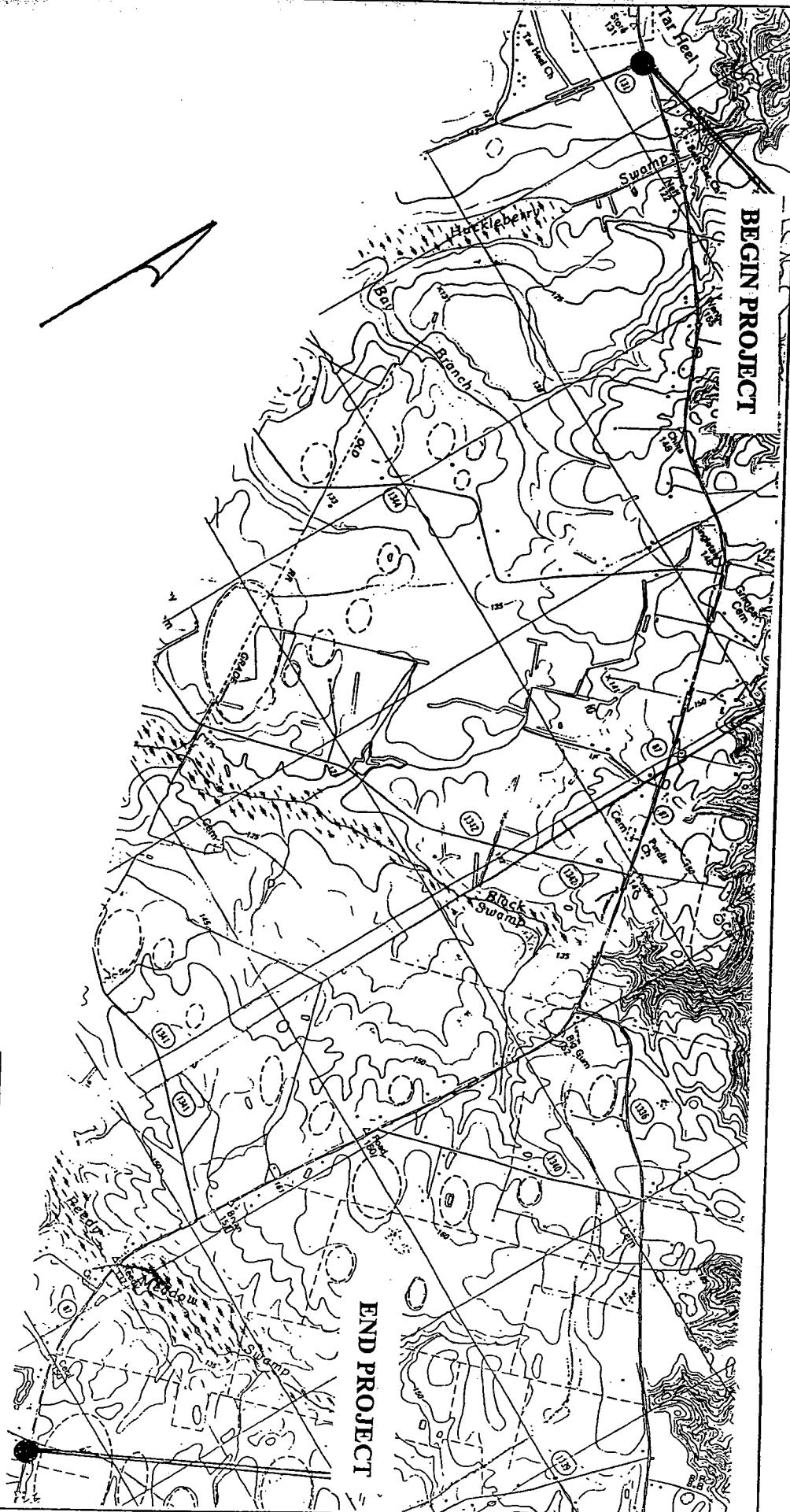
NC DOT
DIVISION OF HIGHWAYS
BLADEN COUNTY

PROJECT: 34467.1.1 (R-2562C)

NC 87 FROM NC 131 TO SR 1191

SHEET 2 OF 2

VICINITY MAP



SITE MAP

END STATE PROJECT 6.439001T
STA. 190+00.000 -L- REV.

BEGIN STATE PROJECT 6.439001T

STA. 96+62.220 -L-



① DENOTES SITE NUMBER

SHEET 1 OF 21

NC 87 FROM NC 131

TO SR 1191

PROJECT: 6.439001T (R-2562C)

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

50

-L- REV

PROPOSED GRADE

PI = 178+65.000
EL = 45.3/4 m
VC = 150 m
g1% = +1.7093%
g2% = -1.0438%

50

45

45

3 @ 21.3m PSG BRIDGE

50

NATURAL GROUND

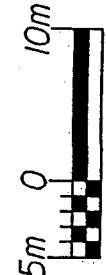
EXISTING 2@2.4mx1.8m RCBC
TO BE REMOVED

178+40

178+80

179+20

PROFILE



HORIZONTAL SCALE



VERTICAL SCALE

SITE 7

N. C. DEPT. OF TRANSPORTATION

DIVISION OF HIGHWAYS

BLADEN COUNTY

PROJECT: 34467.1.1 (R-2562C)

NC 87 FROM NC 131 TO SR 1191

SHEET 7 OF 21

TEMP. WORK BRIDGE

(APPROXIMATE WIDTH = 7.3m)

50

PROPOSED GRADE

45

TEMP. WORK BRIDGE

40

45

50

NATURAL GROUND

MWS=40.6m

35

EXISTING NC 87

178+40 178+80

179+20

PROFILE

SITE 7

10m HORIZONTAL SCALE

5m VERTICAL SCALE

5m 0

2.5m 0

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

PROJECT: 34467.1.1 (R-2562C)
NC 87 FROM NC 131 TO SR 1191

SHEET 17 OF 24

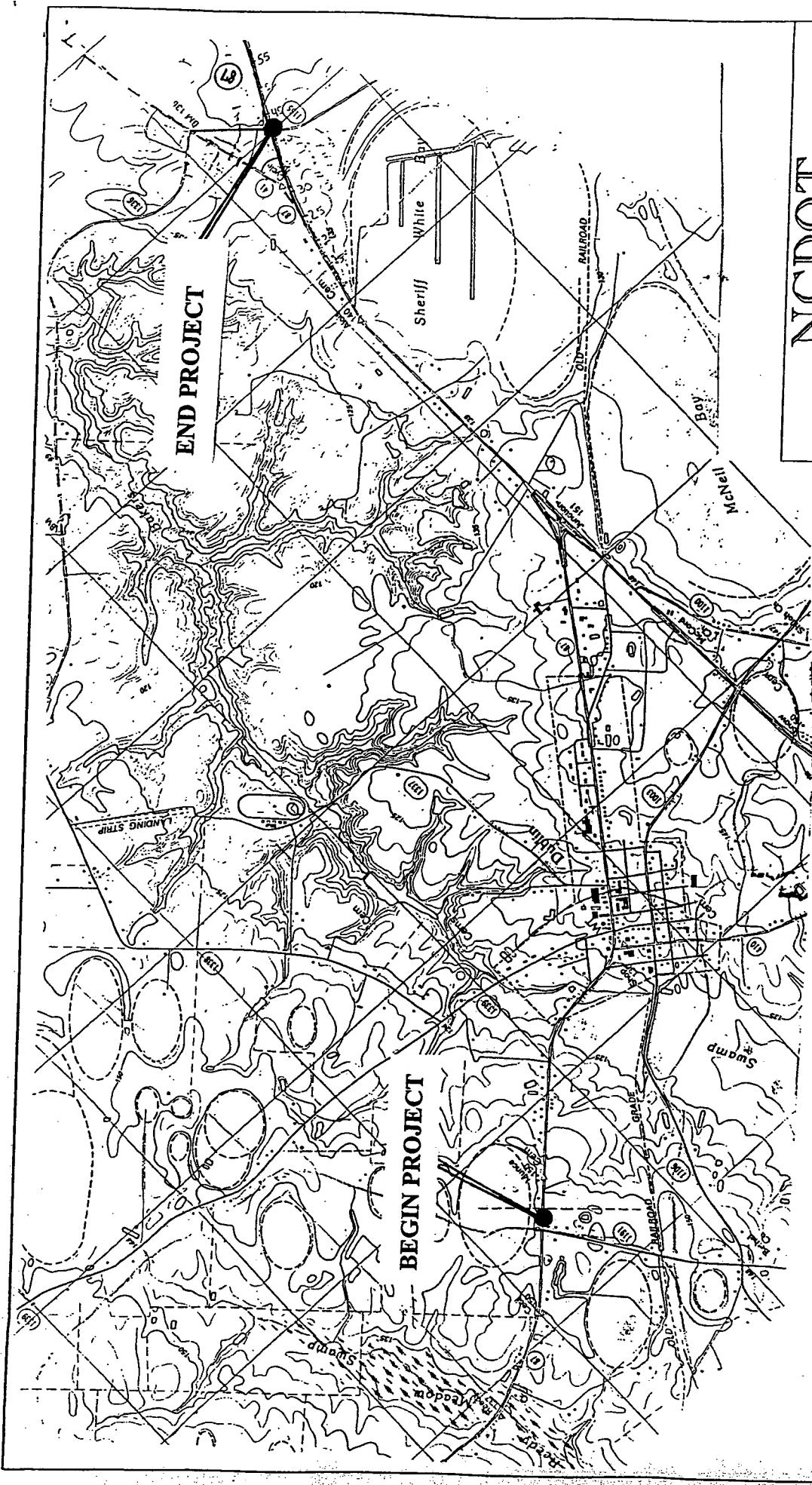
NCDOT
DIVISION OF HIGHWAYS
BLADEN COUNTY

PROJECT: 6439001T (R-2562D)
NC 87 FROM SR 1191 TO
NC 41 / NC 87 BUSINESS
SHEET 3 OF 26

VICINITY MAP

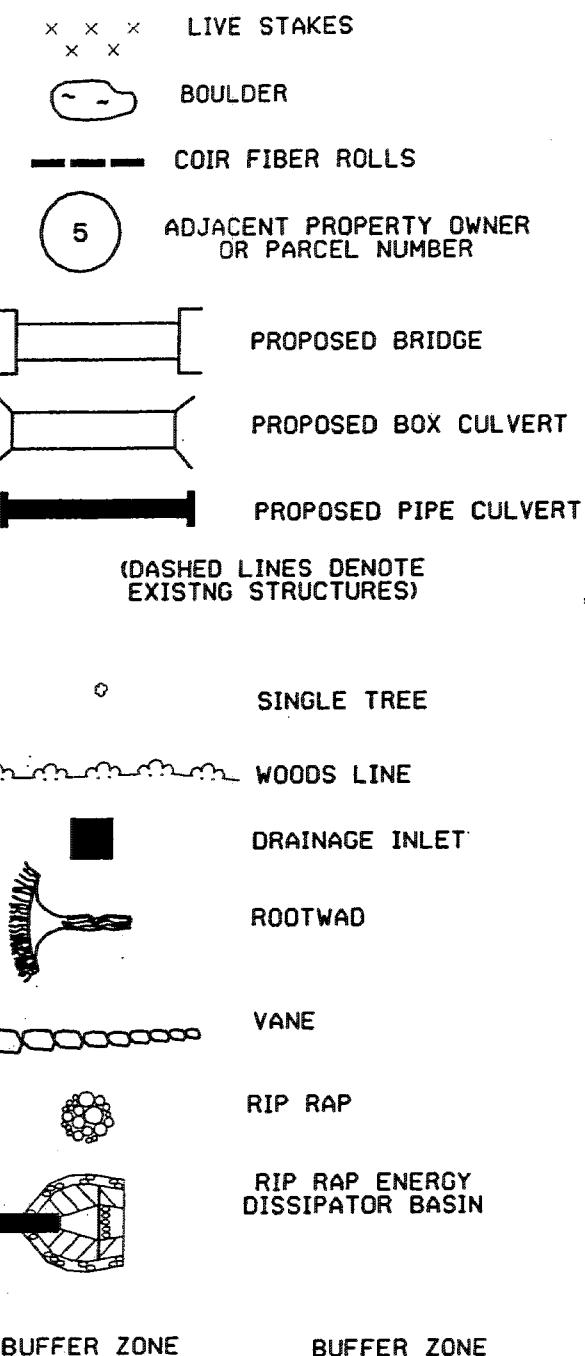
BEGIN PROJECT

END PROJECT



LEGEND

—WLB—	WETLAND BOUNDARY
	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
—E—	CONSTRUCTION EASEMENT



N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

BLADEN COUNTY

PROJECT: 6.439001T (R-2562D)

NC 87 FROM SR 1191 TO
NC41// NC 87 BUS

BLADEN COUNTY
PROJECT: 6439001T (R-2562D)
NC 87 FROM SR 1191 TO
NC 41 / NC 87 BUSINESS

DIVISION OF HIGHWAYS

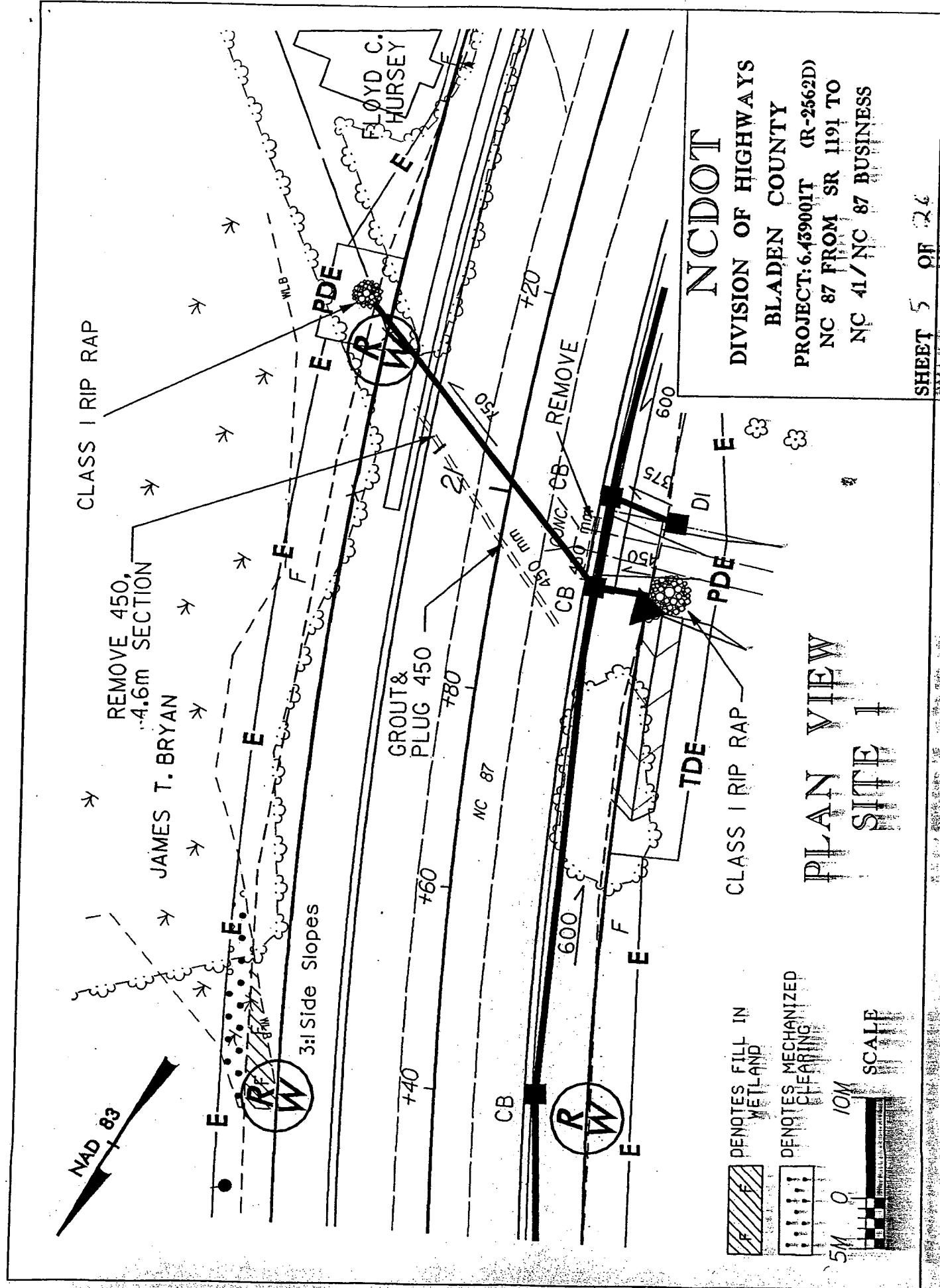
BLADEN COUNTY
PROJECT: 6-439001T (R-2562D)
NC 87 FROM SR 1191 TO
NC 41 / NC 87 BUSINESS

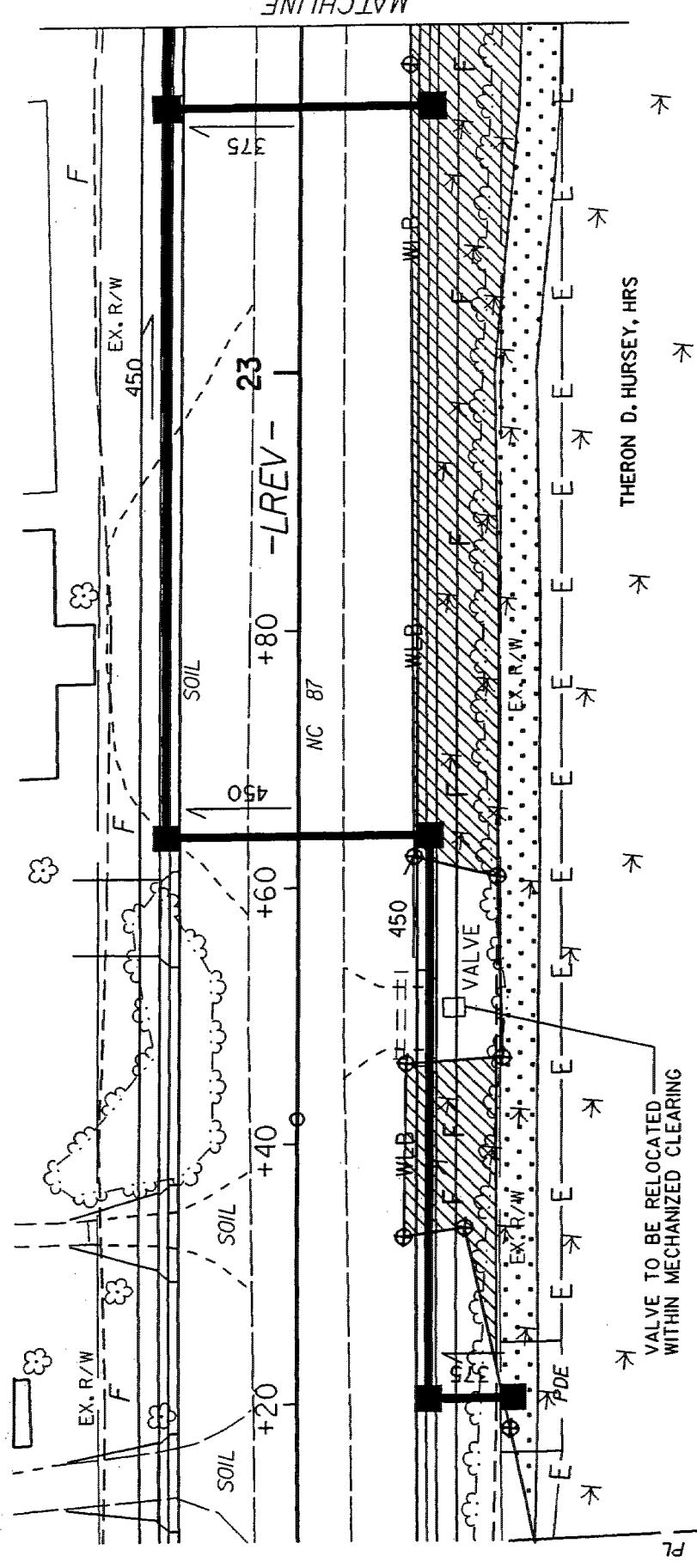
PLAN VIEW SITE 1

DENOTES FILL IN
WETLAND

DENOTES MECHANIZED
CLEARING

10M





NC DOT

DIVISION OF HIGHWAYS
BLADEN COUNTY

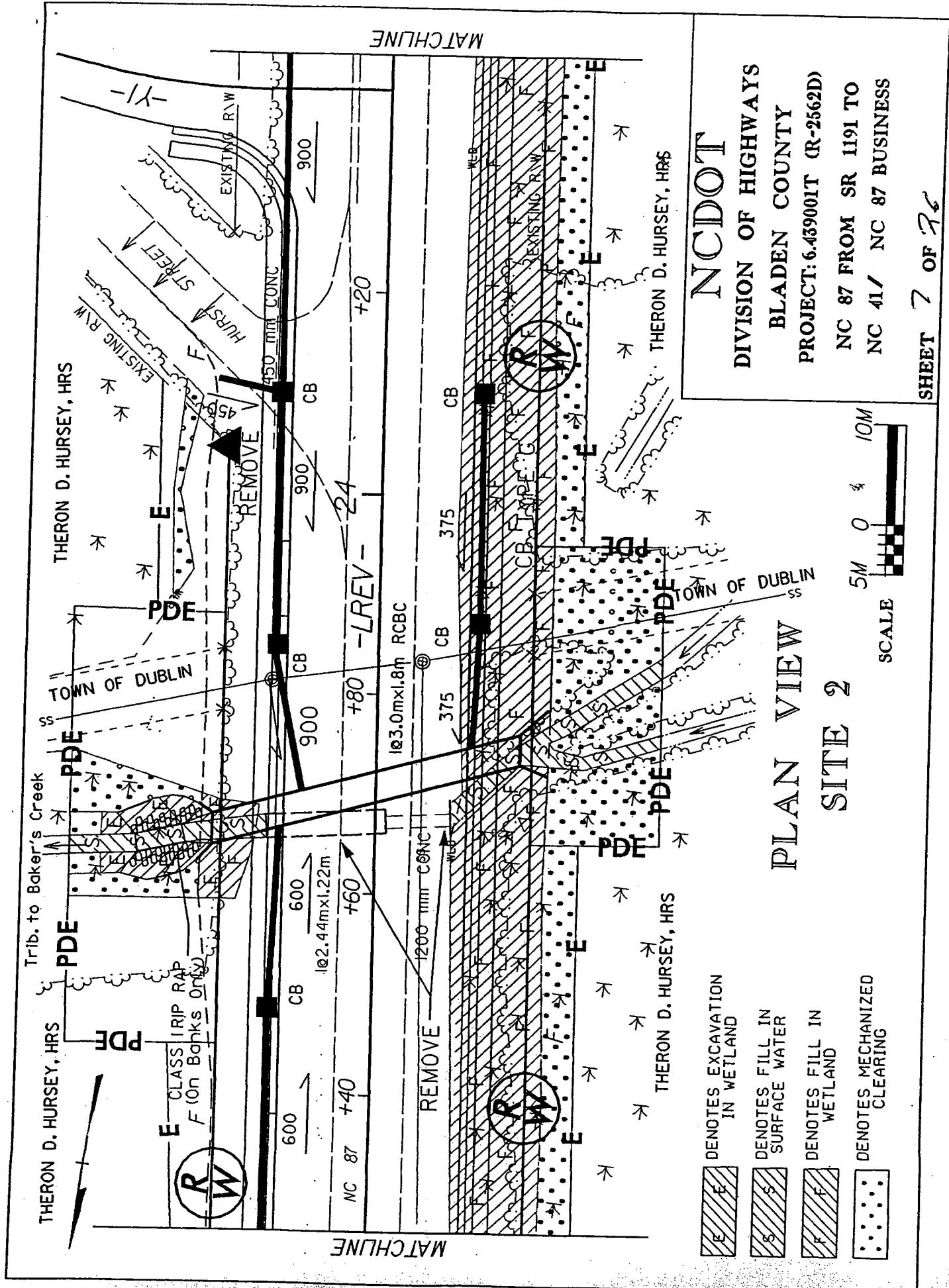
PROJECT: 6439001T (R-2562D)
NC 87 FROM SR 1191 TO
NC 41 / NC 87 BUSINESS

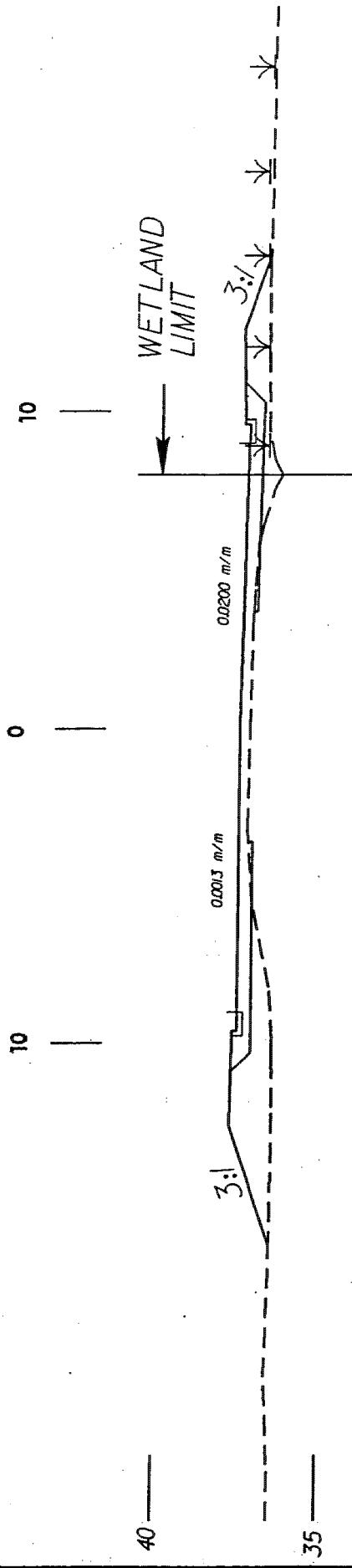
SHEET 6 OF 26

PLAN VIEW
SITE 2

DENOTES FILL IN
WETLAND
 DENOTES MECHANIZED
CLEARING

5M 0 10M
SCALE



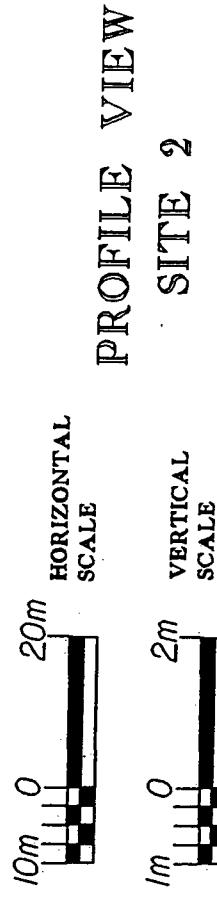
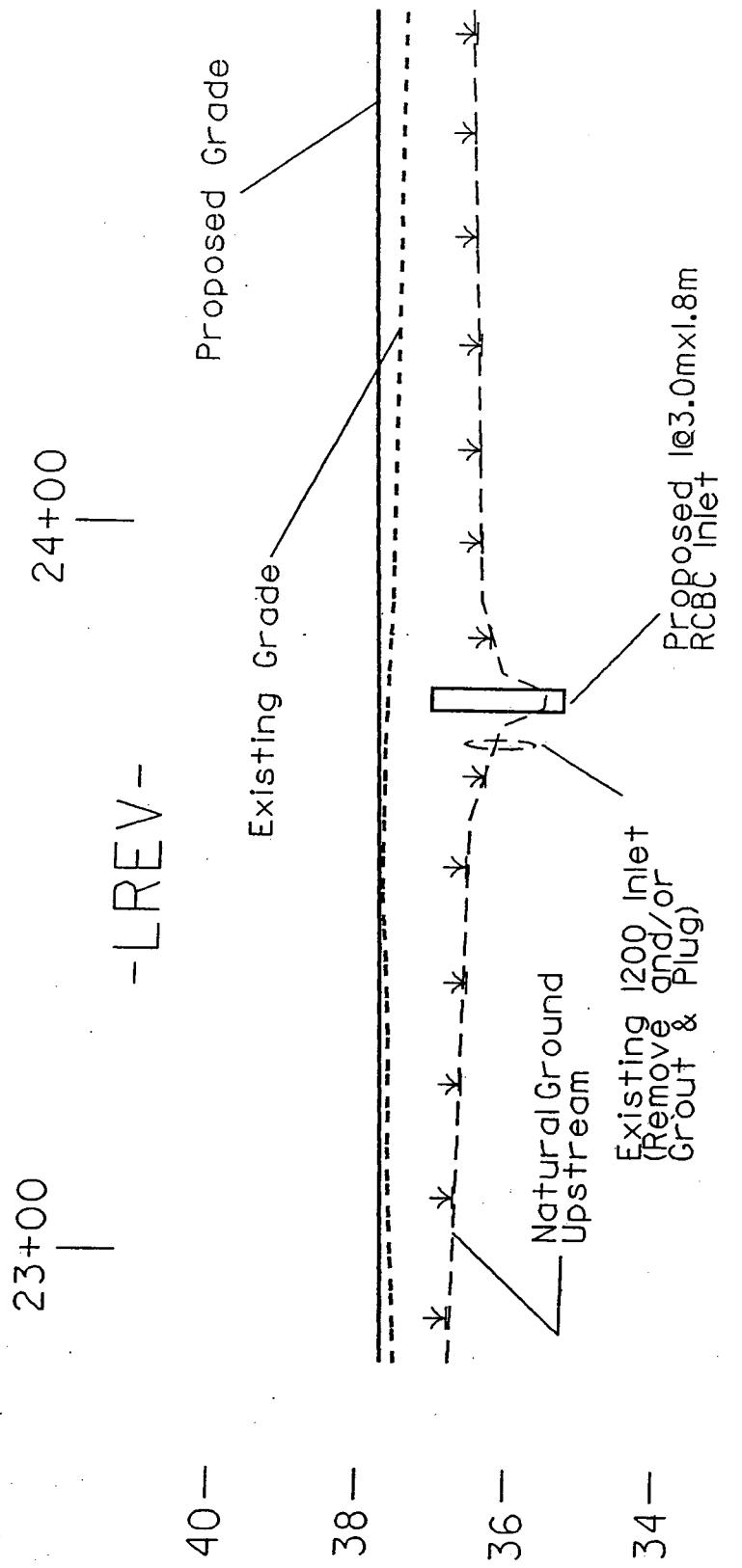


TYPICAL FROM 22+20 TO 25+40 -LREV- (RT)

NCDOT
DIVISION OF HIGHWAYS
BLADEN COUNTY
PROJECT: 6439001T (R-562D)
NC 87 FROM SR 1191 TO
NC 41 // NC 87 BUSINESS

X-SECTION

SHEET 8 OF 86

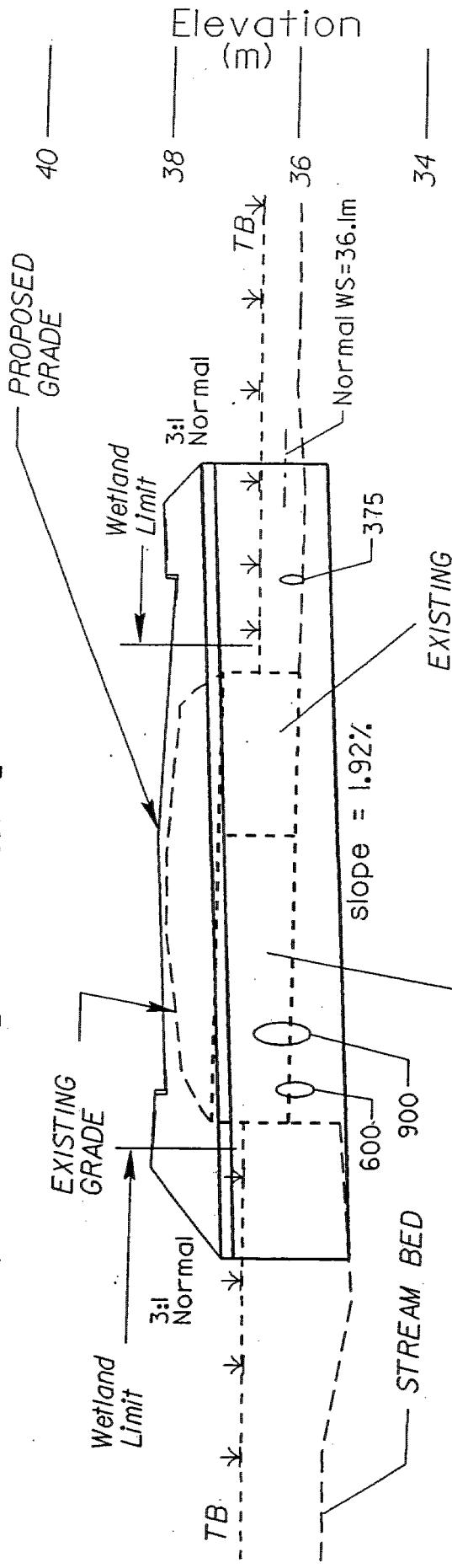


NC DOT
DIVISION OF HIGHWAYS
BLADEN COUNTY
PROJECT: 6.439001T (R-2562D)
NC 87 FROM SR 1191 TO
NC 41 / NC 87 BUSINESS

SHEET 9 OF 26'

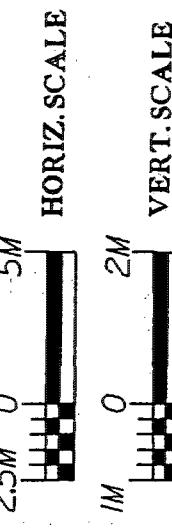
10
0
-10

l@3.0m x 1.8m RCBC
Q S+ σ 23+70.7 -L-



SECTION VIEW

SITE 2



N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
BLADEN COUNTY
PROJECT: 6439001T (R-2562D)
NC 87 FROM SR 1191 TO
NC 41// NC 87 BUSINESS

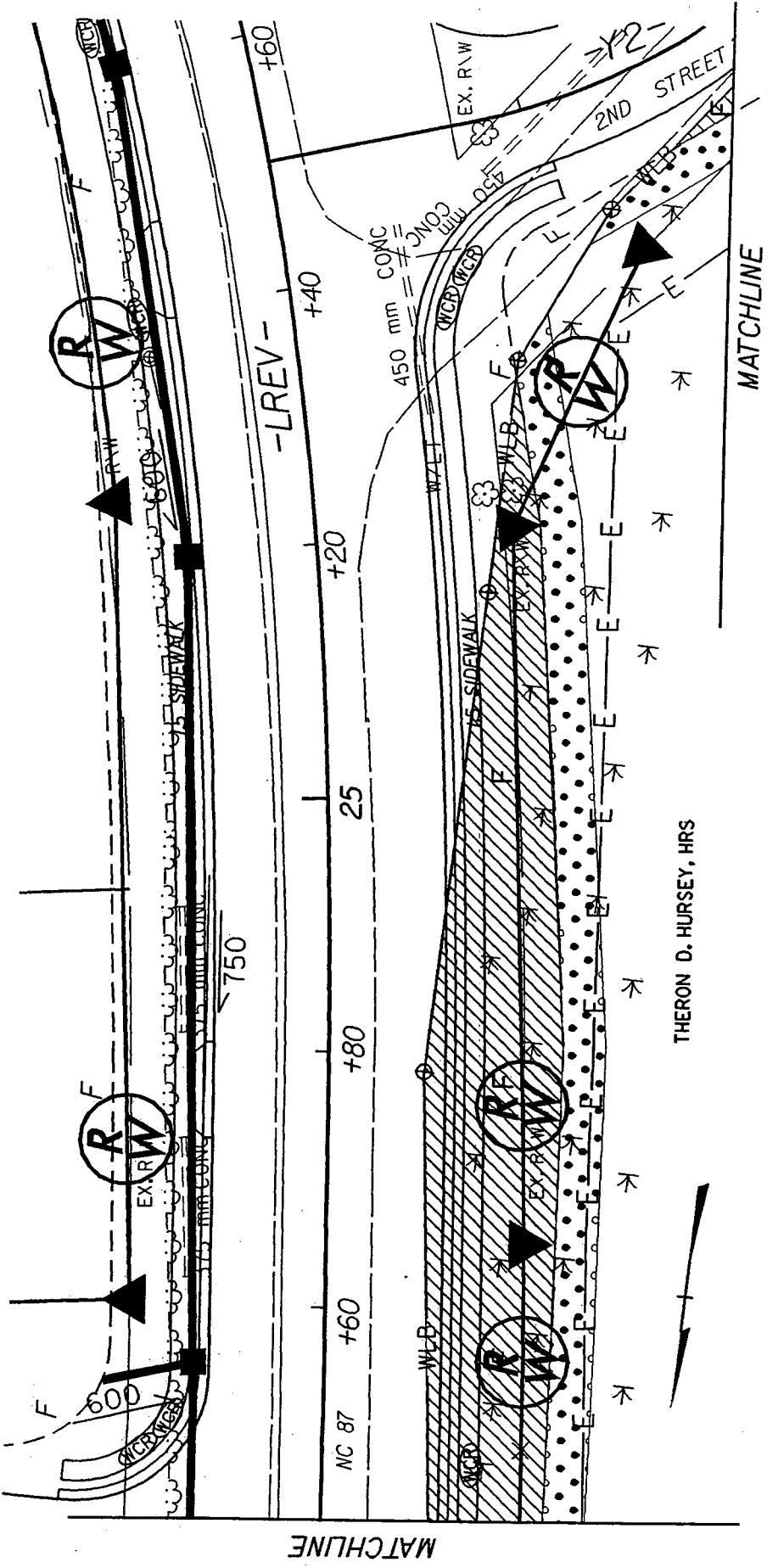
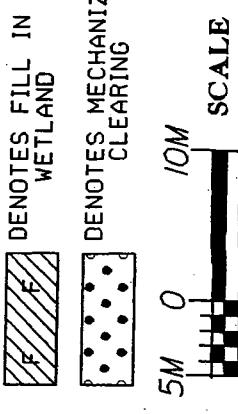
SHEET 6 OF 26

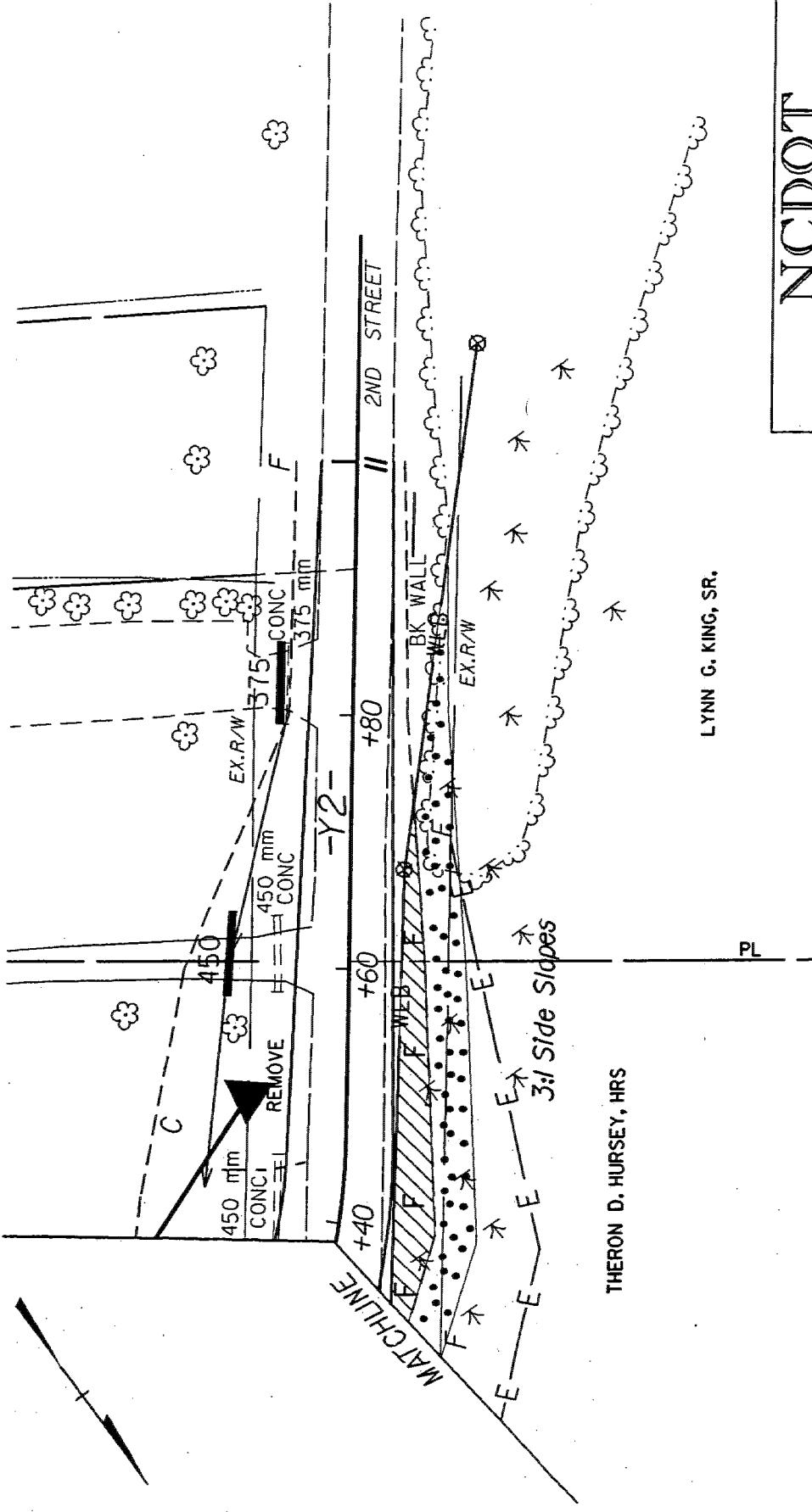
NC DOT
DIVISION OF HIGHWAYS
BLADEN COUNTY
PROJECT: 6439001T (R-2562D)

NC 87 FROM SR 1191 TO
NC 41// NC 87 BUSINESS

SHEET 11 OF 26

PLAN VIEW
SITE 2





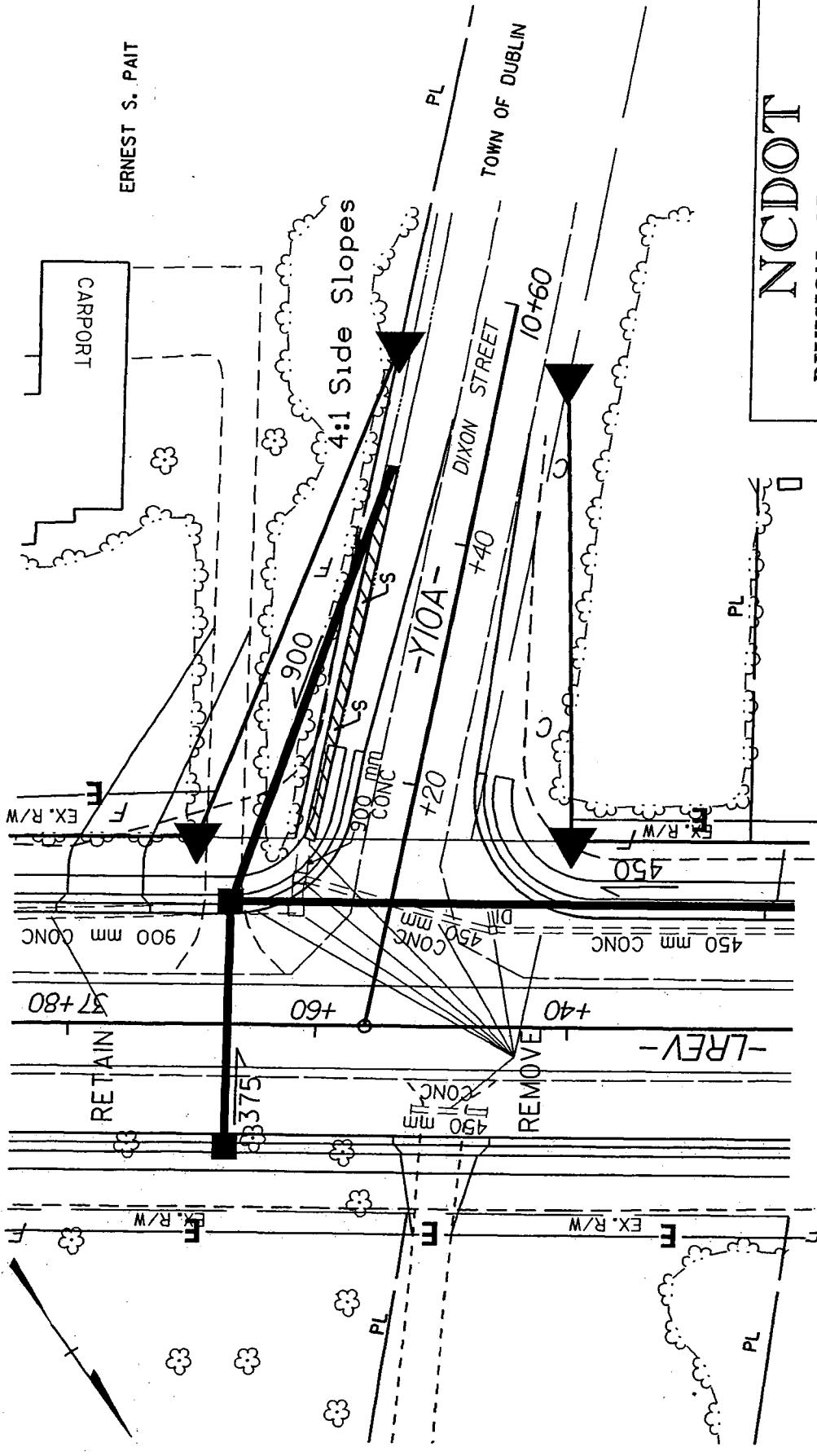
NCDOT
 DIVISION OF HIGHWAYS
 BLADEN COUNTY
 PROJECT: 6439001T (R-2562D)
 NC 87 FROM SR 1191 TO
 NC 41 / NC 87 BUSINESS
 SHEET / 2 OF 26

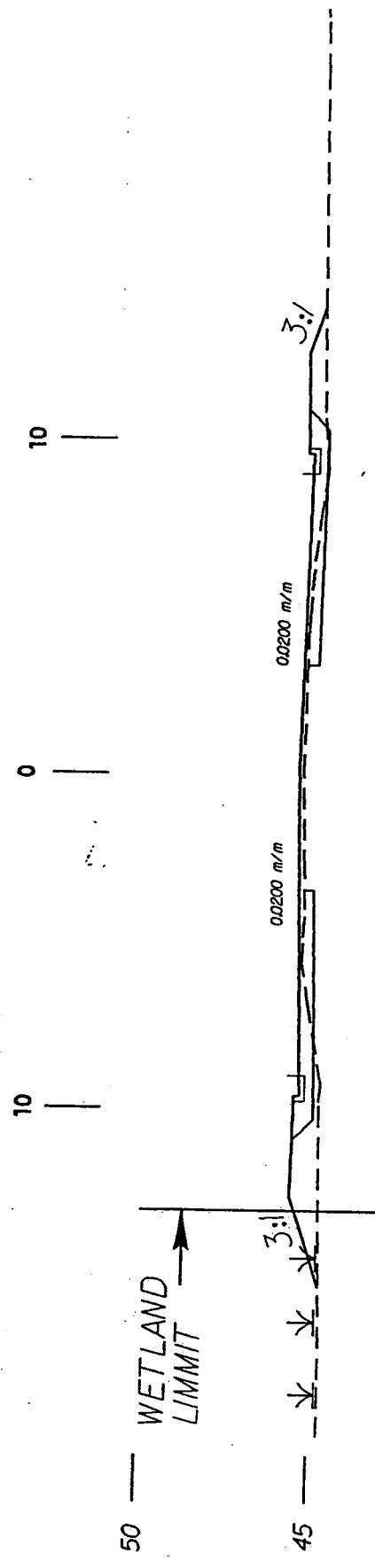
PLAN VIEW
 SITE 2

NCDOT
DIVISION OF HIGHWAYS
BLADEN COUNTY
PROJECT: 6.439001T (R-2562D)
NC 87 FROM SR 1191 TO
NC 41/NC 87 BUSINESS

SHEET 13 OF 26

PLAN VIEW
SITE 3





40 ————— TYPICAL FROM 42+00 TO 42+70 -REV- (LT)

NCDOT
DIVISION OF HIGHWAYS
BLADEN COUNTY
PROJECT: 6439001T (R-562D)
NC 87 FROM SR 1191 TO
NC 41 // NC 87 BUSINESS

X-SECTION

SHEET 15 OF 26

LOIS T. ALEXANDER, HEIRS

CLASS I RIP RAP
EST. 10 TONS W/ F.F.

FLORA T. TOWNSEND, HEIRS

EX. R/W
WETLAND

750
+40
+60
+80
44
-LREV-

NC 87

750
+20
+40
44
-LREV-

NC 87

750
+40
44
-LREV-

450 mm
CONC
450 mm
CB TYPE G

450 mm
F
EX. R/W
E
PDE

NCDOT

DIVISION OF HIGHWAYS
BLADEN COUNTY

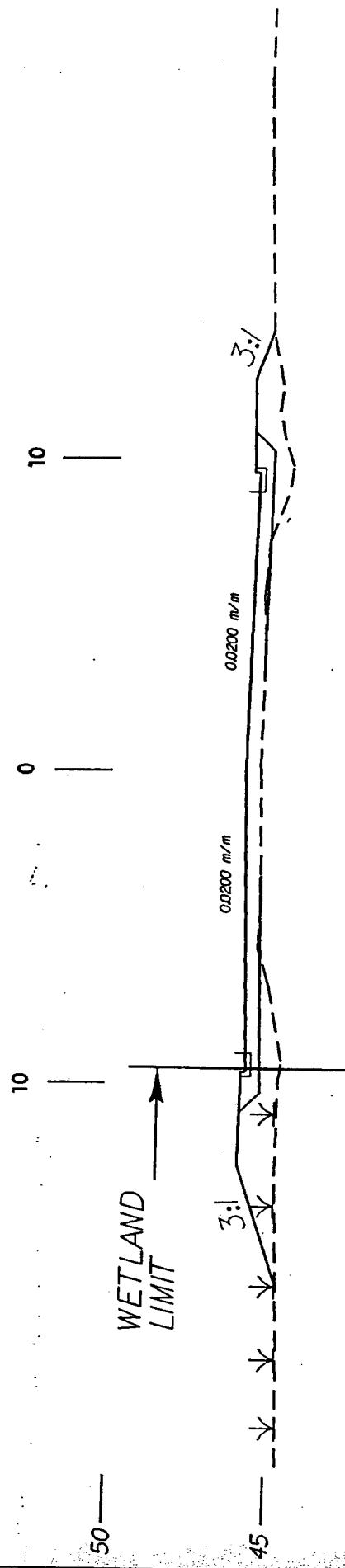
PROJECT: 6439001T (R-2562D)
NC 87 FROM SR 1191 TO
NC 41 // NC 87 BUSINESS
SHEET 6 OF 26

DENOTES MECHANIZED PLAN VIEW
CLEARING

DENOTES FILL IN
WETLAND

0 10M
SCALE

5M
0 10M
SCALE



40 —————

45 —————

50 —————

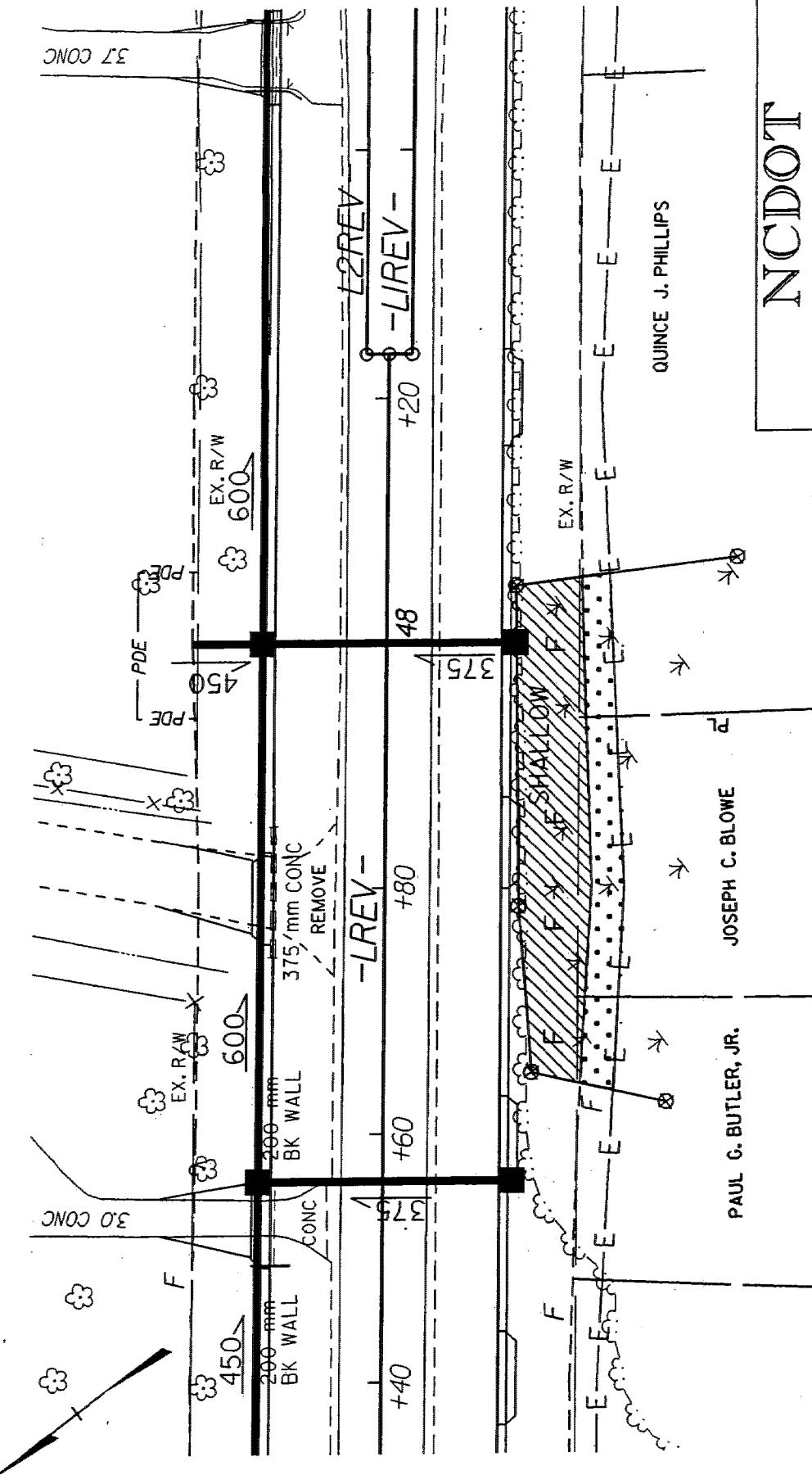
0 —————

10 —————

TYPICAL FROM 43+50 TO 44+20 -LREV - (LT)

X-SECTION

NCDOT
DIVISION OF HIGHWAYS
BLADEN COUNTY
PROJECT: 6.439001T (R-562D)
NC 87 FROM SR 1191 TO
NC 41 / NC 87 BUSINESS

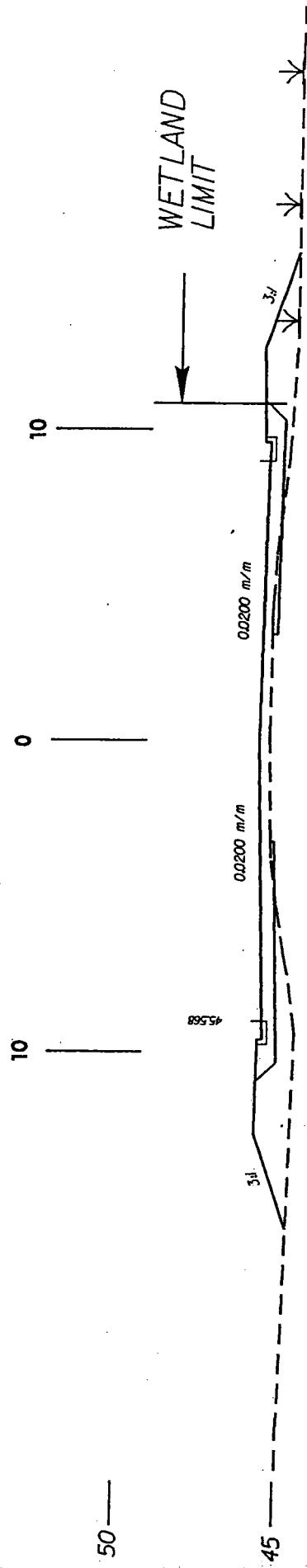


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BLADEN COUNTY
PROJECT: 6439001T (R-2562D)
NC 87 FROM SR 1191 TO
NC 41 / NC 87 BUSINESS
SHEET 18 OF 26

PLAN VIEW
SITE 6

40—

TYPICAL FROM 47+70 TO 48+00 -LREV- (RT)



X-SECTION

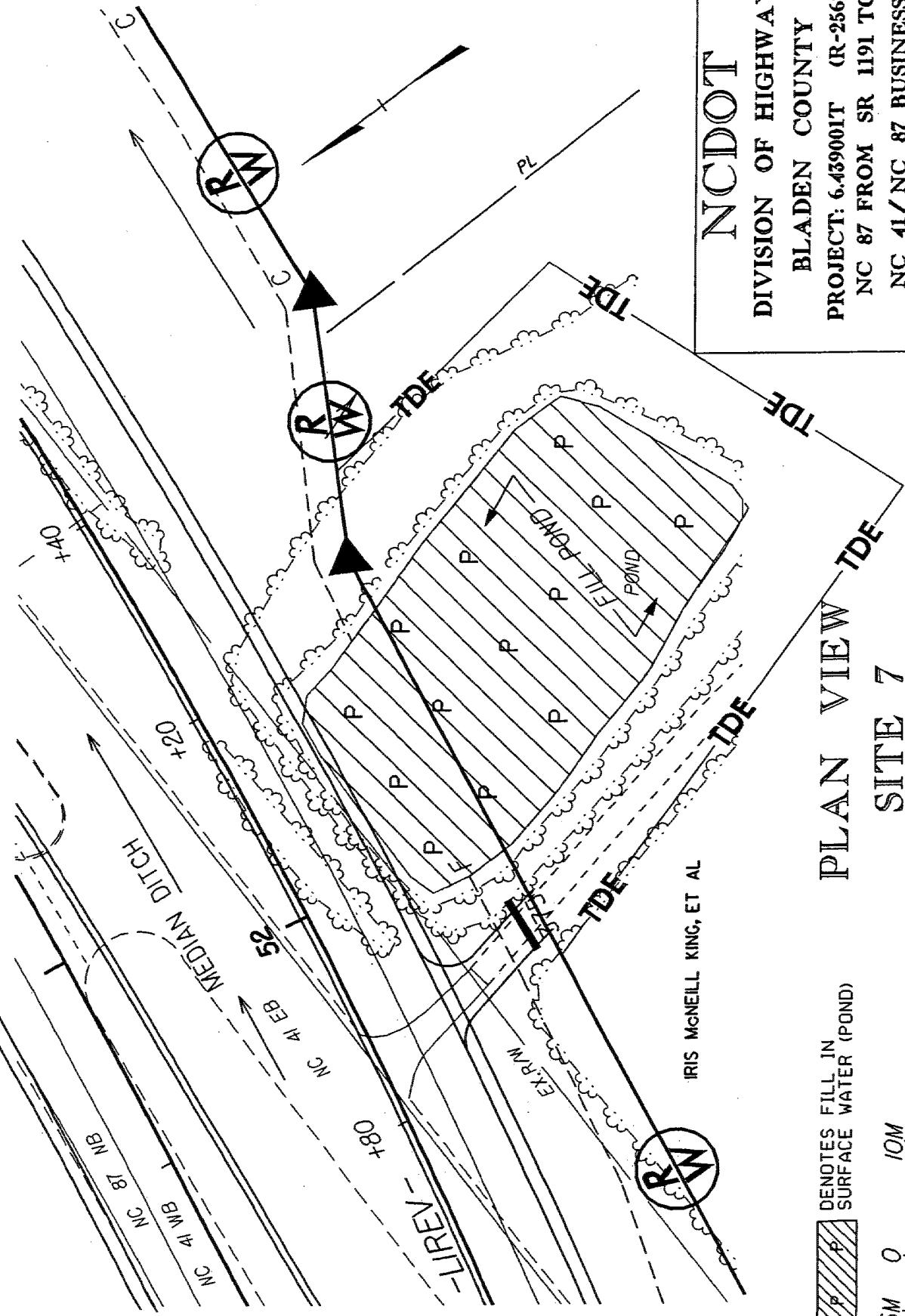
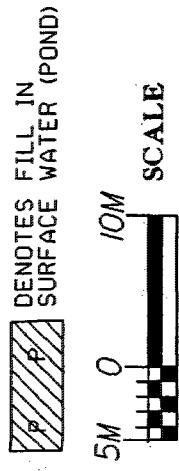
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BLADEN COUNTY
PROJECT: 6439001T (R-562D)
NC 87 FROM SR 1191 TO
NC 41 // NC 87 BUSINESS
SHEET 19 OF 26

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DIVISION OF HIGHWAYS
BLADEN COUNTY
PROJECT: 6.439001T (R-2562D)
NC 87 FROM SR 1191 TO
NC 41 / NC 87 BUSINESS

SHEET 26 OF 26

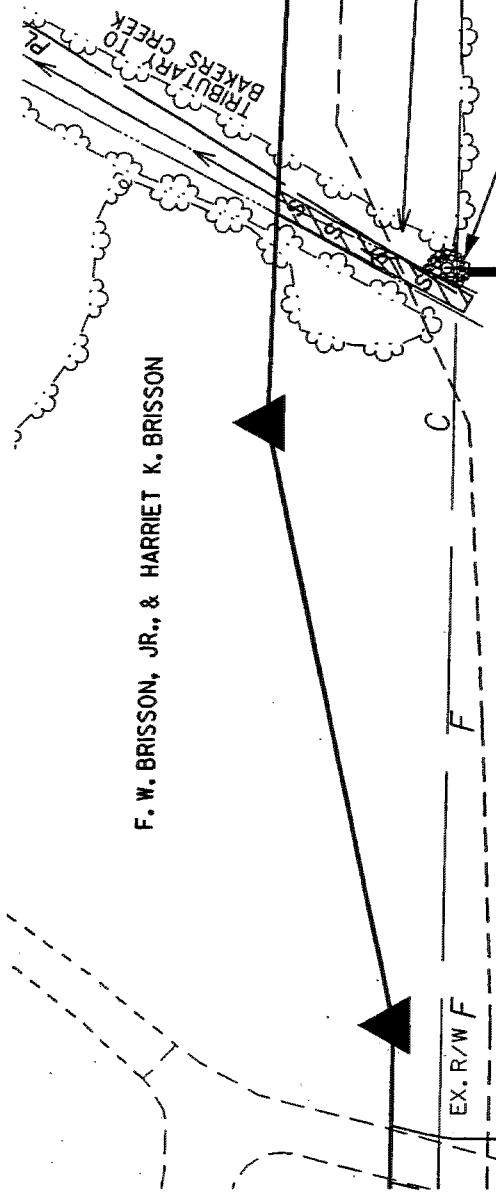
PLAN VIEW TDE
SITE 7

IRIS MCNEILL KING, ET AL

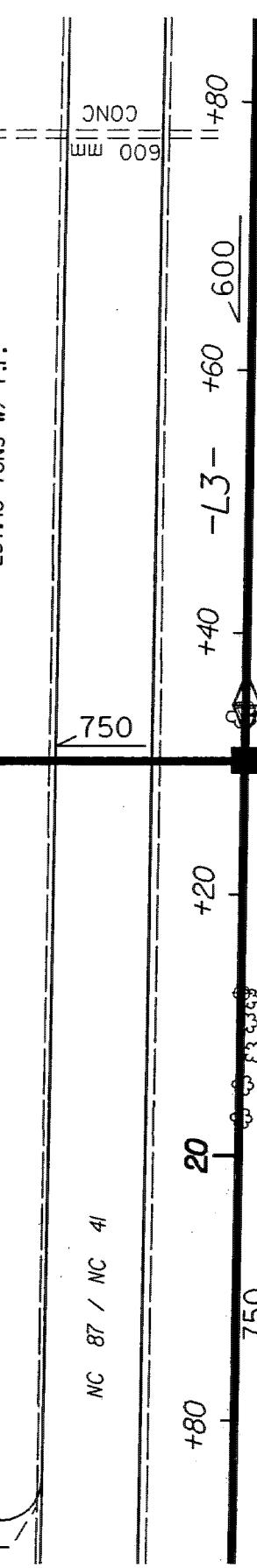


F. W. BRISSON, JR., & HARRIET K. BRISSON

WADE A. TAYLOR, JR.



CLASS I RIP RAP
EST. 10 TONS W/ F.F.



PLAN VIEW
SITE 8

NC DOT

DIVISION OF HIGHWAYS

BLADEN COUNTY

PROJECT: 6439001T (R-2562D)

NC 87 FROM SR 1191 TO

NC 41 / NC 87 BUSINESS

SHEET 22 OF 26



