STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

September 22, 2003

MEMORANDUM TO: Mr. W. F. Rosser, P.E.
Division 8 Engineer

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

SUBJECT: Moore and Lee Counties, US 1 from South of SR 1853 (Camp Easter Road) North of Lakeview to SR 1180 (Wildlife Road) South of Sanford; State Work Order Number 8.T560302; T.I.P. Number R-210

Attached are the U. S. Army Corps of Engineers modified Individual Permit and the modified Division of Water Quality 401 for the construction of the above referenced project. All environmental permits have been received for the construction of this project.

PSH/eah

Attachment

cc: Ms. Debbie Barbour, 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. Art King, Division 8 Environmental Officer

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

TELEPHONE: 919-715-1500
FAX: 919-715-1501

WEBSITE: WWW.NCDOT.ORG

LOCATION:
TRANSPORTATION BUILDING
1 SOUTH WILMINGTON STREET
RALEIGH NC

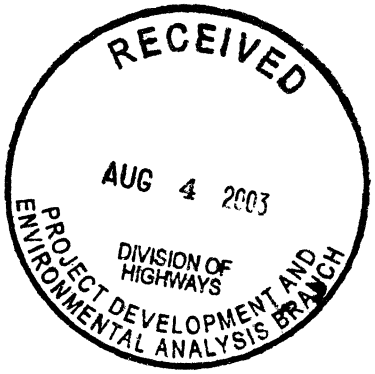
DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1890
WILMINGTON. NORTH CAROLINA 28402-1890

REPLY TO
ATTENTION OF:

July 31, 2003

Regulatory Division

Subject: Action ID No. 199300570, TIP No. R-210, US 1, Moore/Lee Counties, North Carolina.



Dr. Gregory J. Thorpe, Ph.D.
Environmental Management Director
Project Development & Environmental Analysis
1548 Mail Service Center
Raleigh, N.C. 27699-1548

Dear Dr. Thorpe:

I am responding to your request dated July 11, 2003 for a modification to the existing Department of the Army (DA) permit issued for the above referenced project. The Wilmington District office received this request on July 16, 2003.

You have requested that a temporary single span bridge crossing of Little River at Site 1, Section A, be authorized to connect both sides of the currently authorized work bridge from approximate centerline station 25+65 to station 25+95. The single span bridge connection will be approximately 30-feet long and constructed of steel beam pile bents and framing with 12-inch by 12-inch timber mat surface, as shown on the enclosed drawings. Since no fill or dredged material will be discharged into waters of the United States for the construction of this bridge connection, DA authorization is not required for this activity.

In addition, you have requested authorization to use temporary timber work mats at Site 1, Section A, in lieu of the temporary bridged work pads as originally authorized for the construction work spurs. The request is being made due to insufficient clearance between the currently authorized bridged work pads and the proposed bridge superstructure to allow for removal of the temporary structural members after completion of bridge construction. The proposed revision would involve the replacement of the elevated temporary bridged work pads with temporary two-layered 24-foot by 5-foot timber crane work mats placed on Type 2 filter fabric as shown on the enclosed drawings. This activity would require DA authorization pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344).

As stated in your request, a field investigation was conducted by Engineering Consulting Services, Ltd. to determine the compressibility of the wetland soils found at the project site. The results of this study indicated that the soils would be able to accommodate the expected bearing load generated from the construction equipment without any appreciable compression. Therefore, the impacts to the wetlands as a result of the proposed modification would be temporary. Furthermore, this revision would reduce the required construction time from 420

days to 180 days.

You have also requested authorization to construct a temporary timber mat haul road and bridge at Site 21, Section A, to facilitate construction of the permanent bridge crossing of Cranes Creek and to facilitate the hauling of approximately 230, 000 cubic yards of earthen material across Cranes Creek. The proposed modification, referred to as Phase 1, would involve the construction of a timber mat haul road placed on Type 2 filter fabric with Type 2 fabric side curtains and a single span steel bridge with Type 2 fabric side curtains and handrail, as shown on the enclosed drawings, resulting in a temporary impact of an additional 0.07 acre of wetlands. Furthermore, Phase 2 would involve the placement of the currently authorized timber work mats for the construction of the permanent bridge crossing Cranes Creek. You have requested a modification of the configuration and footprint of the temporary work mats in Phase 2, as shown on the enclosed drawings, reducing the temporary impacts to wetlands by 0.06 acre. Both of the modifications (Phase 1 and 2) together would result in a net increase in temporary wetlands impact of 0.01 acre at site 21. The temporary haul road and reconfiguration of the temporary timber work mats at centerline station 80 + 75 would require DA authorization pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344).

You have requested a modification of the configuration and footprint of the temporary work mats at Site 10, Section A. The request is being made due to changes in federal regulations governing designed loading capacity of cranes performing work on bridges over railroads. This has resulted in the need for a larger crane having to be employed on-site to meet current requirements of federal regulations. The proposed modification would involve the widening of the temporary work pads by approximately 10 feet and the shortening of the work spurs by 20 feet resulting in an increase of 0.02 acre of temporary wetland impact. The proposed modification also includes the lengthening of the temporary 36-inch CMP that will convey an unnamed tributary of Little Crane Creek under the temporary work mats, by 50 linear feet for a total temporary stream channel impact of 83 linear feet. These activities would require DA authorization pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344).

You have requested authorization to construct five preformed scour holes (PSH) at the outlet of some of road storm drains to reduce discharge velocities. These activities would require DA authorization pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344). The proposed modification would involve the construction of five PSH, totaling 0.01 acres, at centerline stations 51+00 (Site 10), 51+50 (Site 10), 61+50 (Site 15), 76+60 (Site 19) and 78+60 (Site 21), in Section A. All proposed PSH are located within the mechanized cleared zone of the roadway and will not result in additional wetland impacts.

Finally, you have requested authorization to redesign a storm drain to eliminate the direct discharge into the stream channel at Site 16, Section A. The proposed modification would reroute the storm drain discharge path to a grassed swale instead of the stream channel. Since no fill or dredged material will be discharged into waters of the United States for the construction of the storm drain, DA authorization is not required for this activity

Based on this information, I have determined that the proposals described above are not contrary to the public interest and therefore, the DA permit is hereby modified to include authorization for each modification listed above that require DA authorization and as shown on the revised permit drawing (enclosed), with the following special condition:

1. That all temporary material shall be removed in its entirety from the wetland upon completion of the bridge construction and that all disturbed areas shall be stabilized and replanted with native species immediately after removal. The timber mats shall be assembled and disassembled in place and placed or removed by lifting and not dragged into position. The timber mats shall not be assembled, disassembled, placed or removed during over bank floodwater events when the mats are inundated and disturbed sediment can enter the waterway.
2. The temporary bridge crossing over Little River at Site 1 shall not be used by heavy equipment to transport earthen or any other type of fill material across Little River. This condition does not apply when the material is required and used for the construction of the permanent bridge over Little River.
3. Every measure shall be taken to prevent the discharge of any material from earth moving equipment crossing the temporary bridge at Cranes Creek. Earth moving equipment crossing Cranes Creek shall be continually monitored for spillage and no material shall be allowed to enter Cranes Creek from or adjacent to the bridge crossing. If a spill should occur, all use of the crossing by equipment shall cease and the Corps of Engineers shall be notified immediately. The Corps of Engineers will determine, after notification, what corrective measures shall be taken by the NCDOT. This may include the discontinued use and removal of the temporary crossing.
4. Measures shall be taken to prevent any fuel and oil spills during routine servicing of the crane equipment. If a spill should occur, immediate steps shall be taken to contain and remediate the spill.
5. A modified Water Quality Certification shall be obtained from NCDENR-DWQ.
6. All other terms and conditions of your Department of the Army permit shall remain in effect.

Should you have any questions, please contact Mr. Richard Spencer, Wilmington Field Office, Regulatory Division, at telephone (910) 251-4172.

Sincerely,

for Charles R. Alexander, Jr.
Colonel, U.S. Army
District Engineer

Enclosures

Copies Furnished (with enclosures):

Mr. David Cox
North Carolina Wildlife Resources Commission
512 N. Salisbury Street
Raleigh, North Carolina 27604-1188

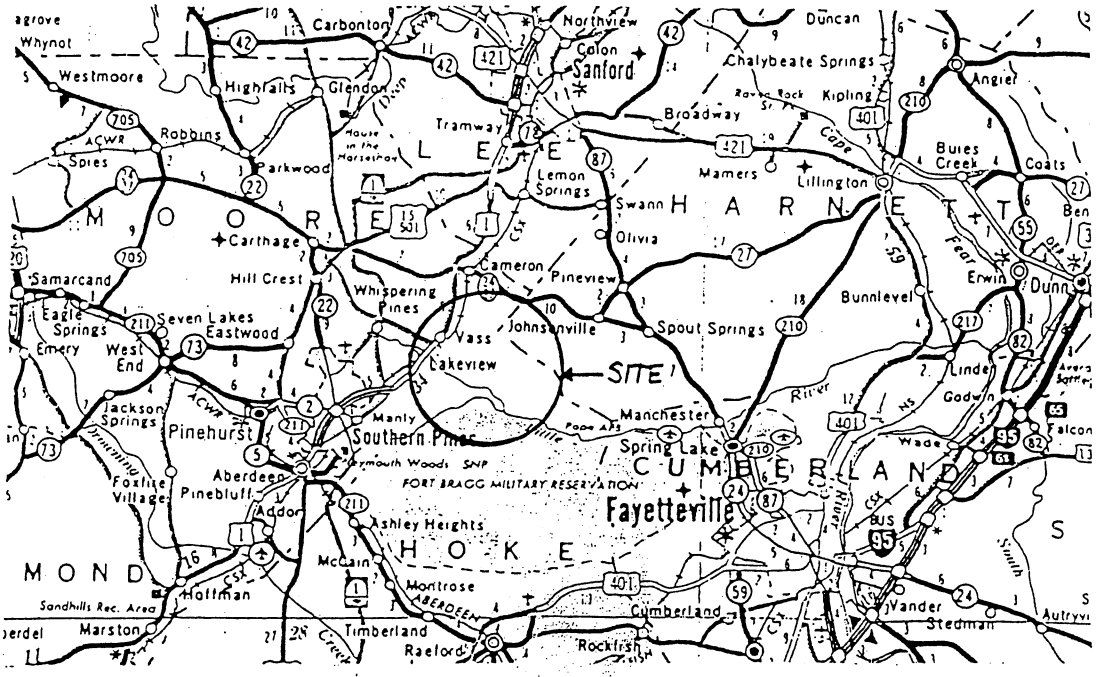
Mr. John Hennessy
NCDENR-DWQ
Wetlands Section
1621 Mail Service Center
Raleigh, NC 27699-1621

Mr. Howard Hall
U.S. Fish and Wildlife Service
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Mr. Chris Militcher
United States Environmental Protection Agency
Raleigh Office
Office of Environmental Assessment
310 New Bern Avenue, Room 206
Raleigh, NC 27601

Mr. Art King
Division Environmental Officer, Division 8
North Carolina Department of Transportation
P.O. Box 1067
Aberdeen, North Carolina 28315

Mr. James J. Rerko, PWS
Division Environmental Officer
North Carolina Department of Transportation
Division 6
P.O. Box 1150
Fayetteville, North Carolina 28302-1150



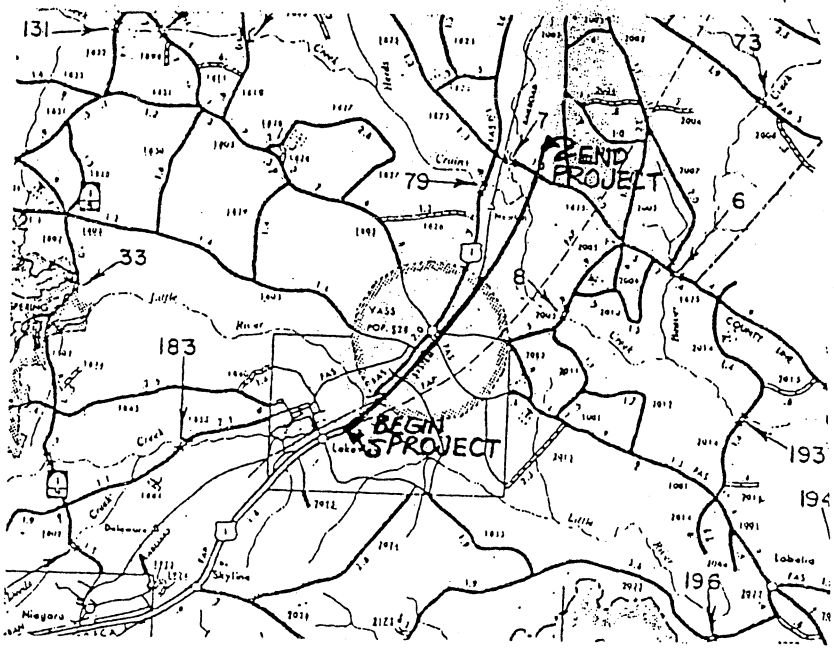
VICINITY MAP

Scale of Miles

0 5 10 20 30

0 10 20 30 40 48

Scale of Kilometers



1 0 1 2 3 4 MILES

SCALE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

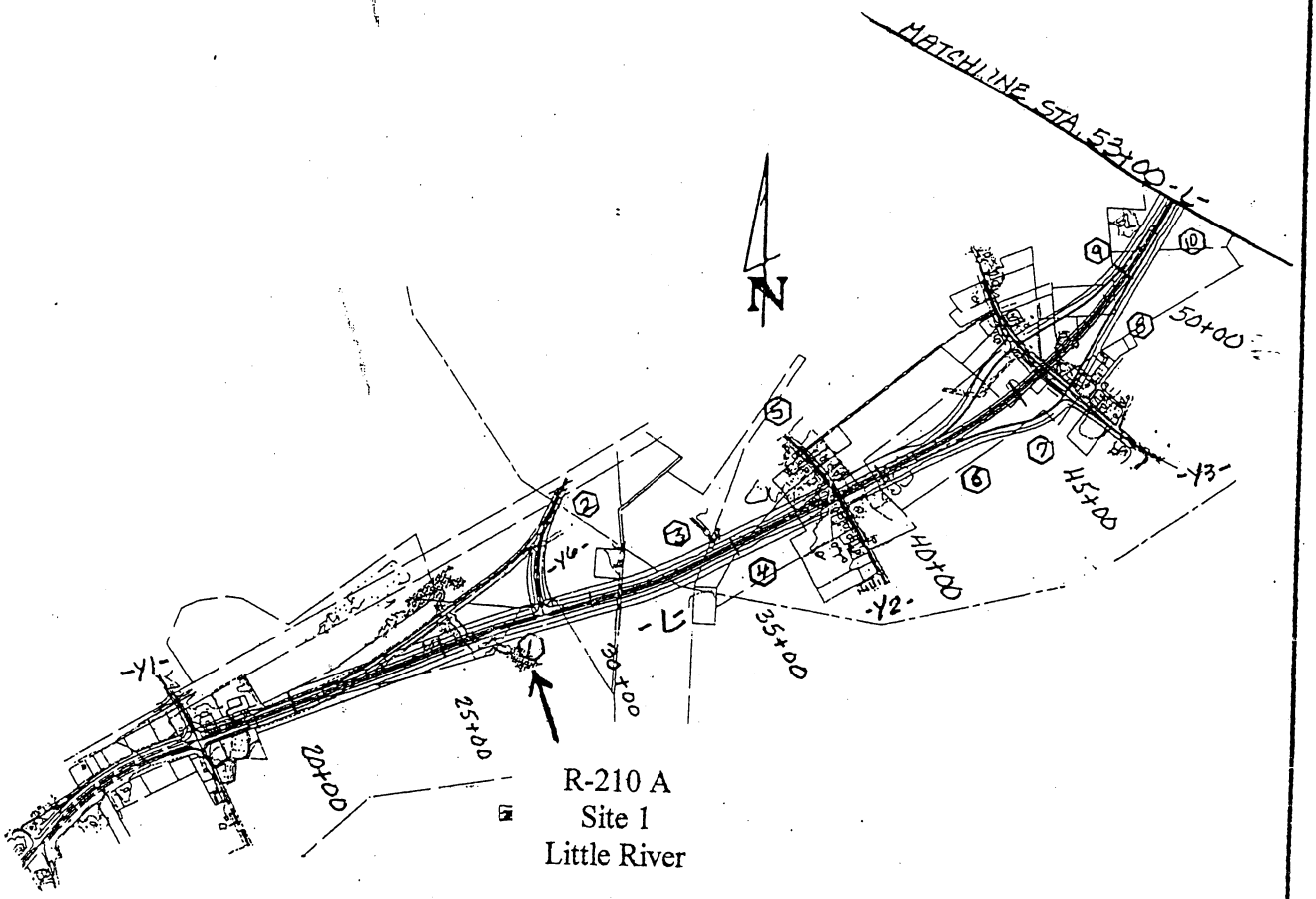
MOORE COUNTY

8.T560302 R-210A

PROPOSED GRADING, PAVING, DRAINAGE, FENCING

SHEET 1 OF 5

NOVEMEBER 1997



SITE MAP

SCALE

0 500 1000M

1:25,000

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

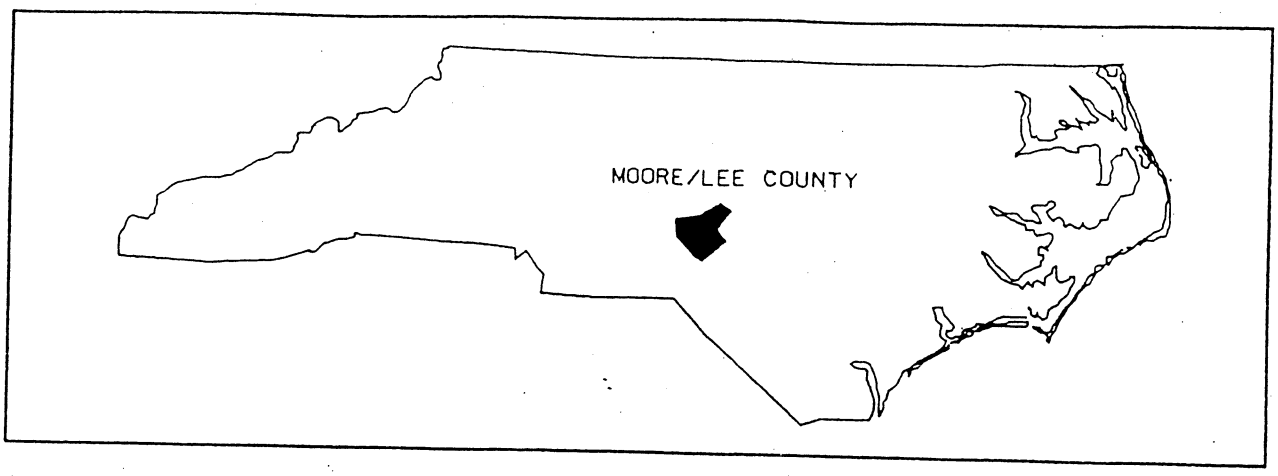
MOORE COUNTY

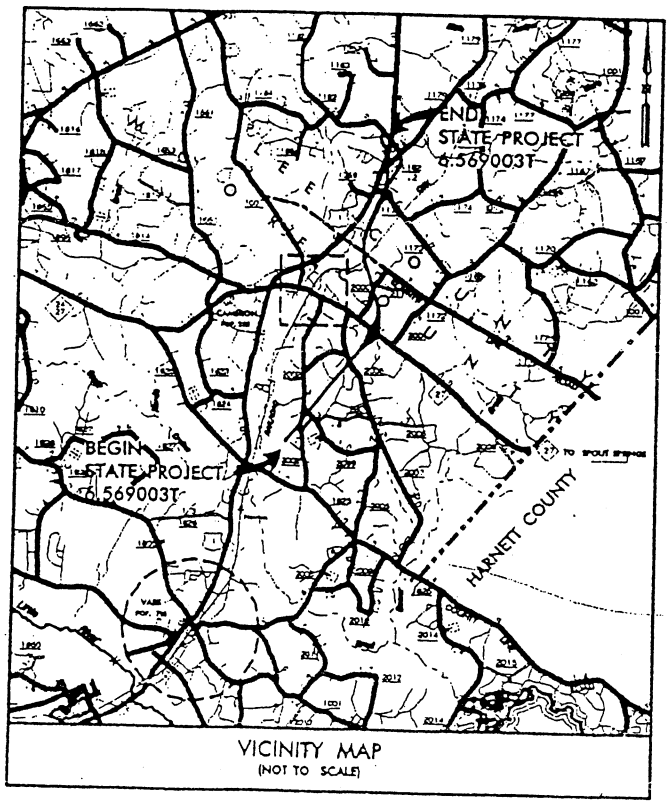
OF SR 1825.

SCALE AS SHOWN

SHEET 2 OF 5

NOVEMEBER 1997

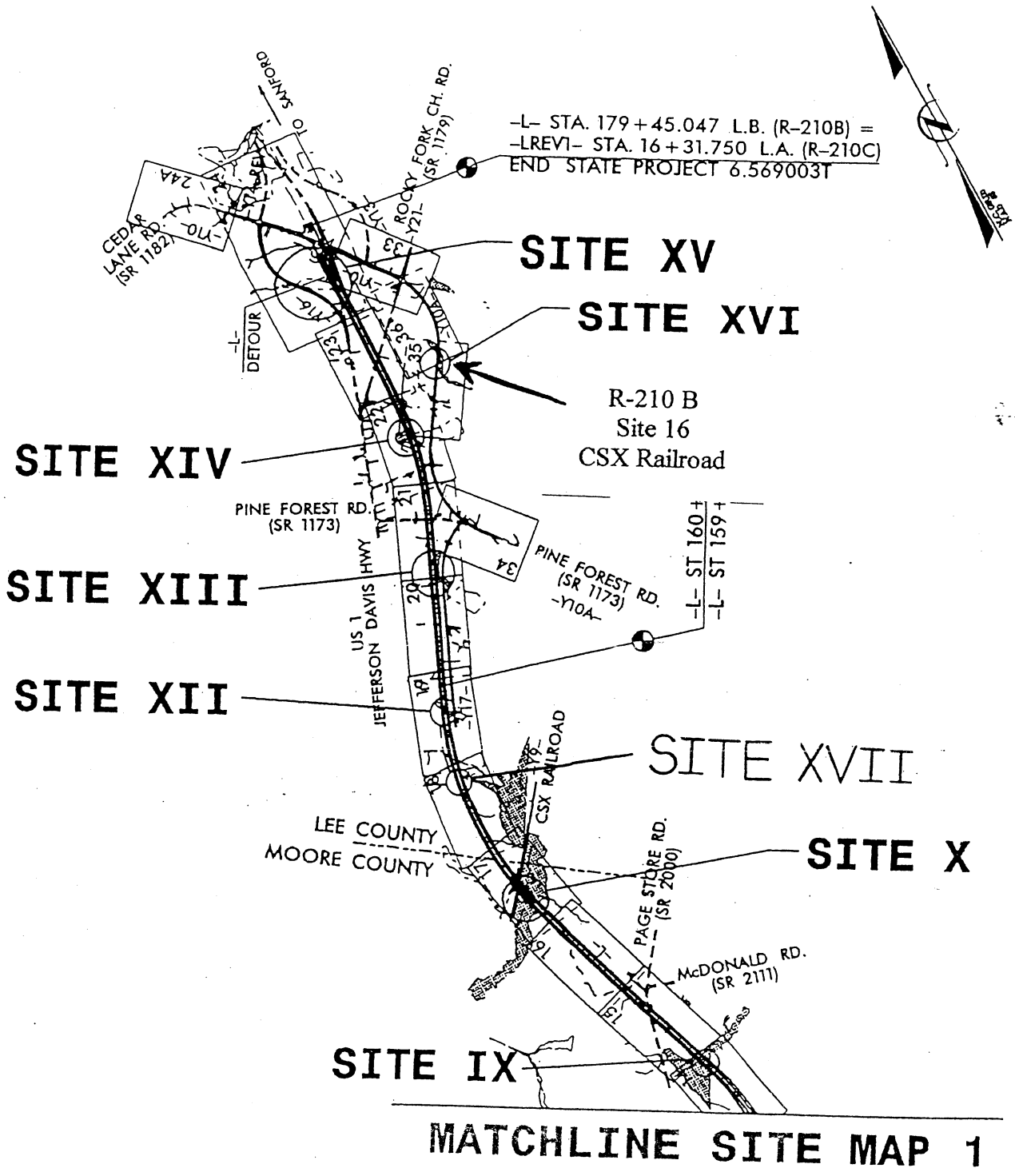




VICINITY MAP
(NOT TO SCALE)

VICINITY MAPS

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
MOORE/LEE COUNTY
PROJECT: 6.569003T (R-210B)
US 1 FROM NORTH OF SR 1825
TO NORTH OF SR 1182

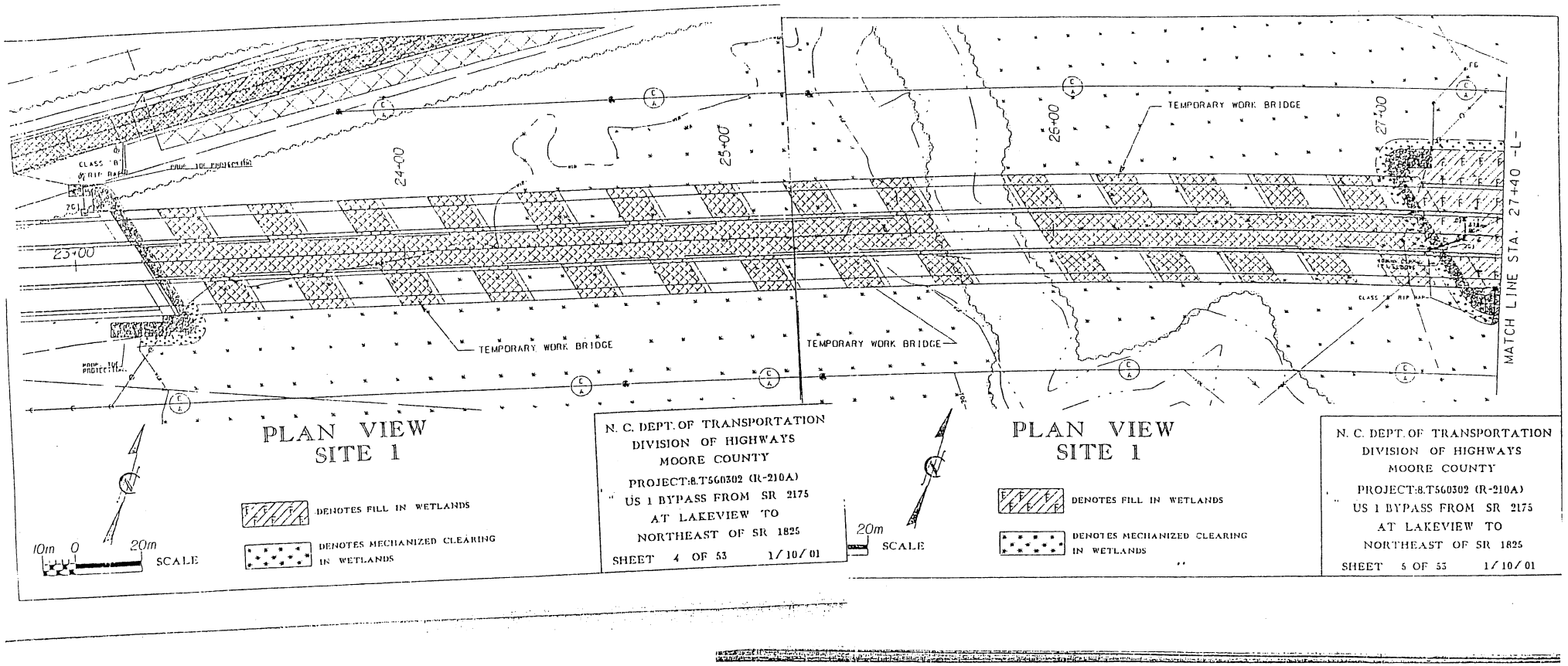


SITE MAP 2

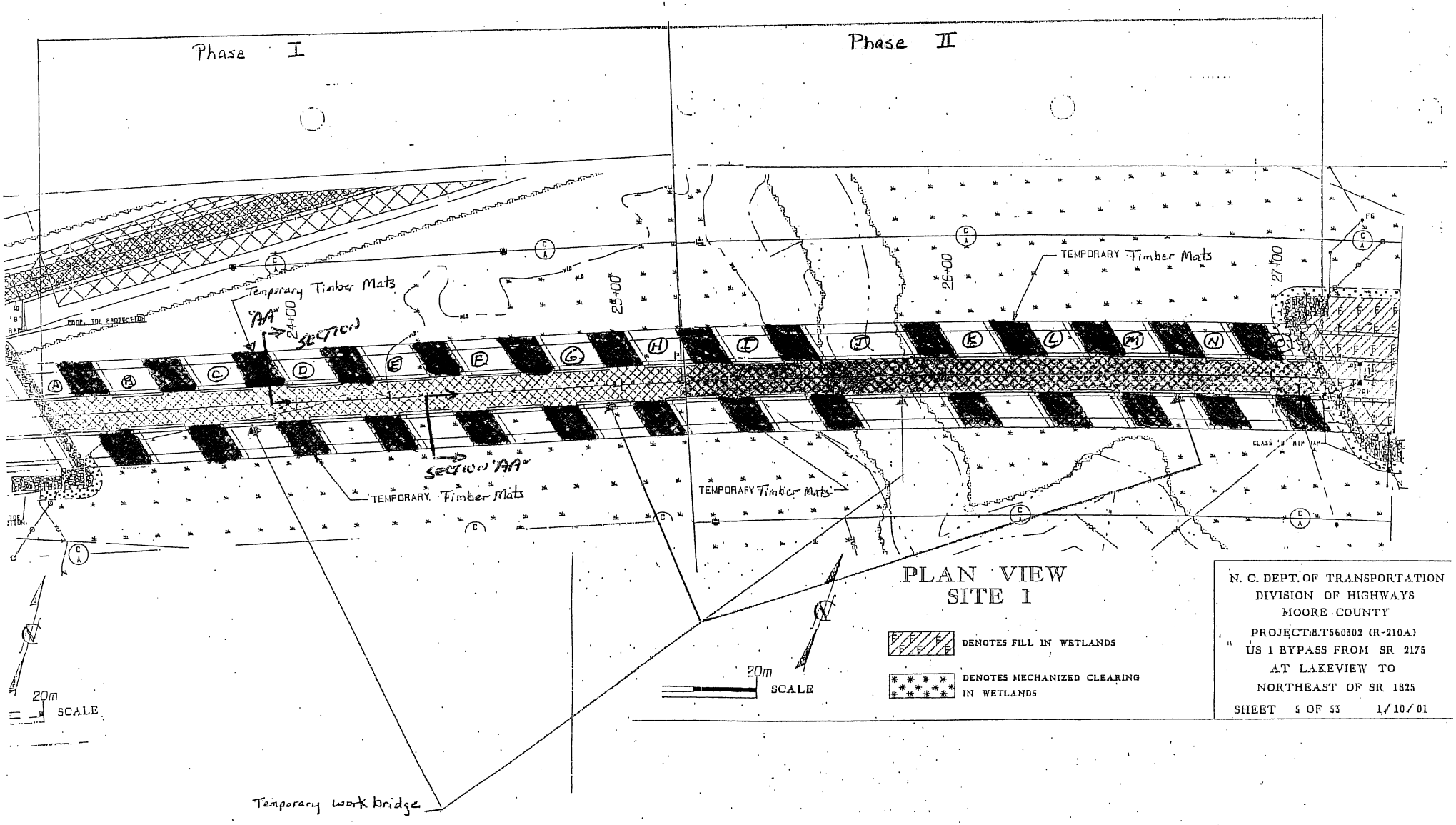
N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
MOORE / LEE COUNTY
PROJECT: 6.569003T (R-210B)

US 1 FROM NORTH OF SR 1825
TO NORTH OF SR 1182

SHEET 5 OF 5 8/2/99

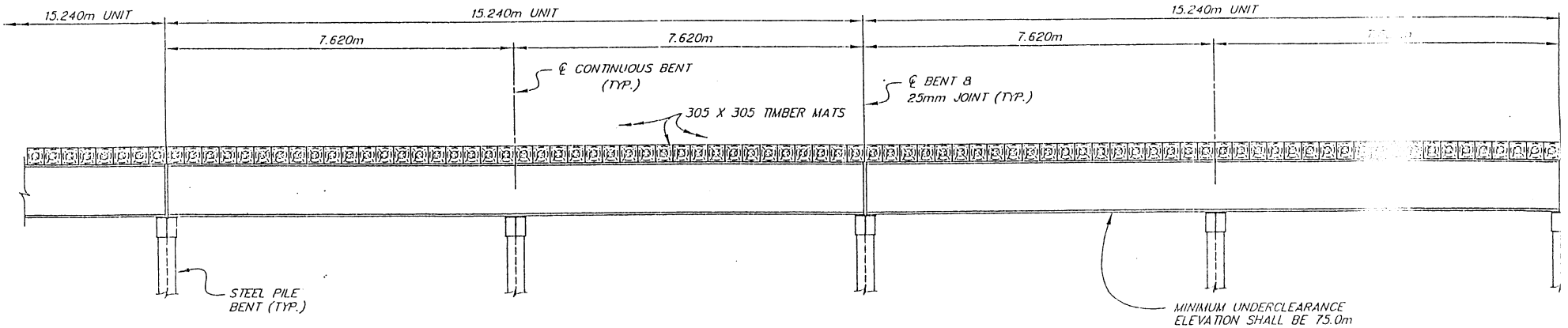


ORIGINAL PERMIT DRAWINGS
SITE No I "Little River"

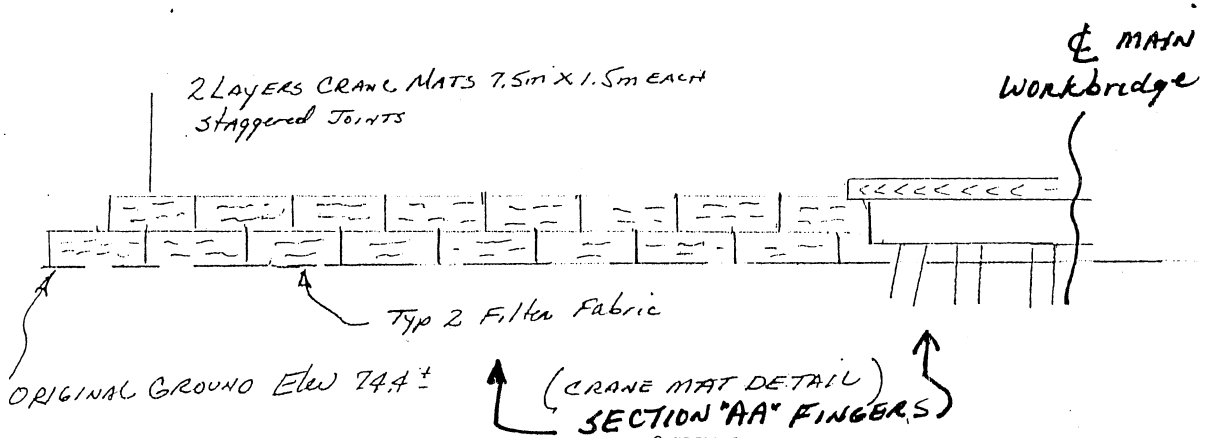


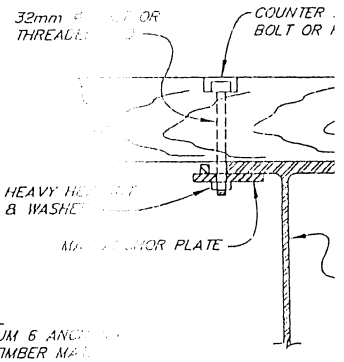
S.T. WOOTEN CORPORATION
PROJECT 6.569006T ETC
Lee-Moore Co.

PERMIT SITE No 1

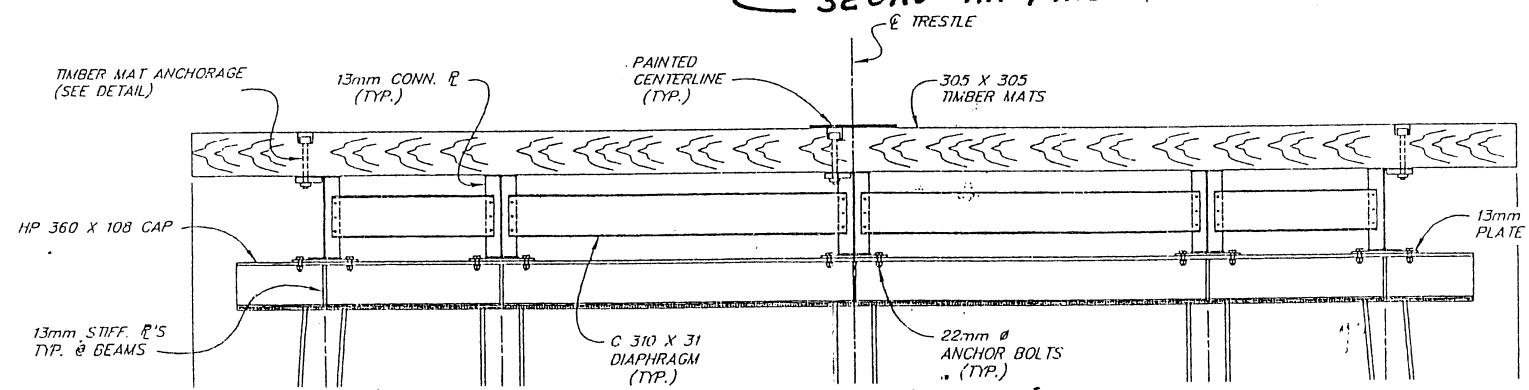


PARTIAL ELEVATION – TRESTLE





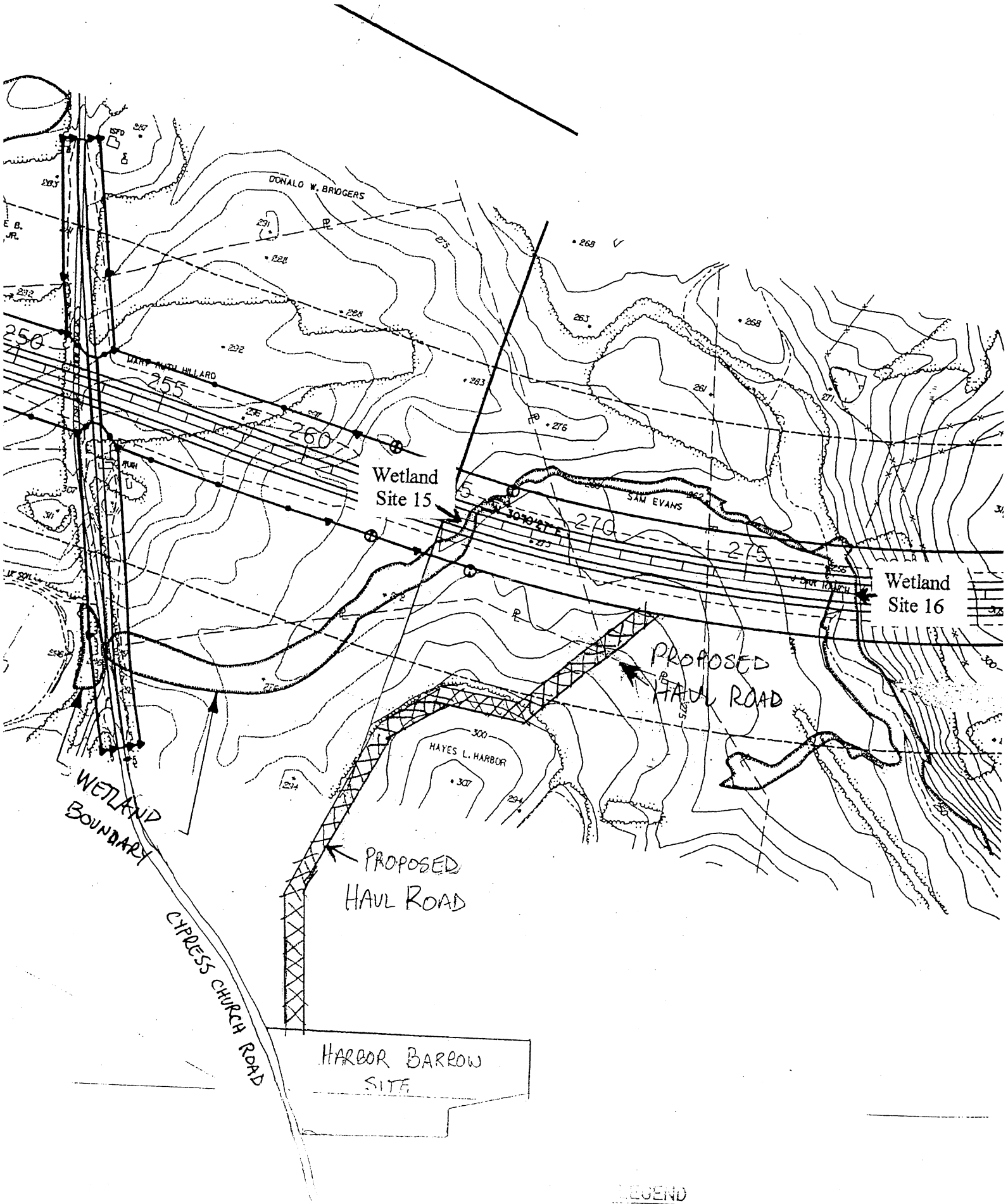
NOTE:
MINIMUM 6 ANC
PER TIMBER MA



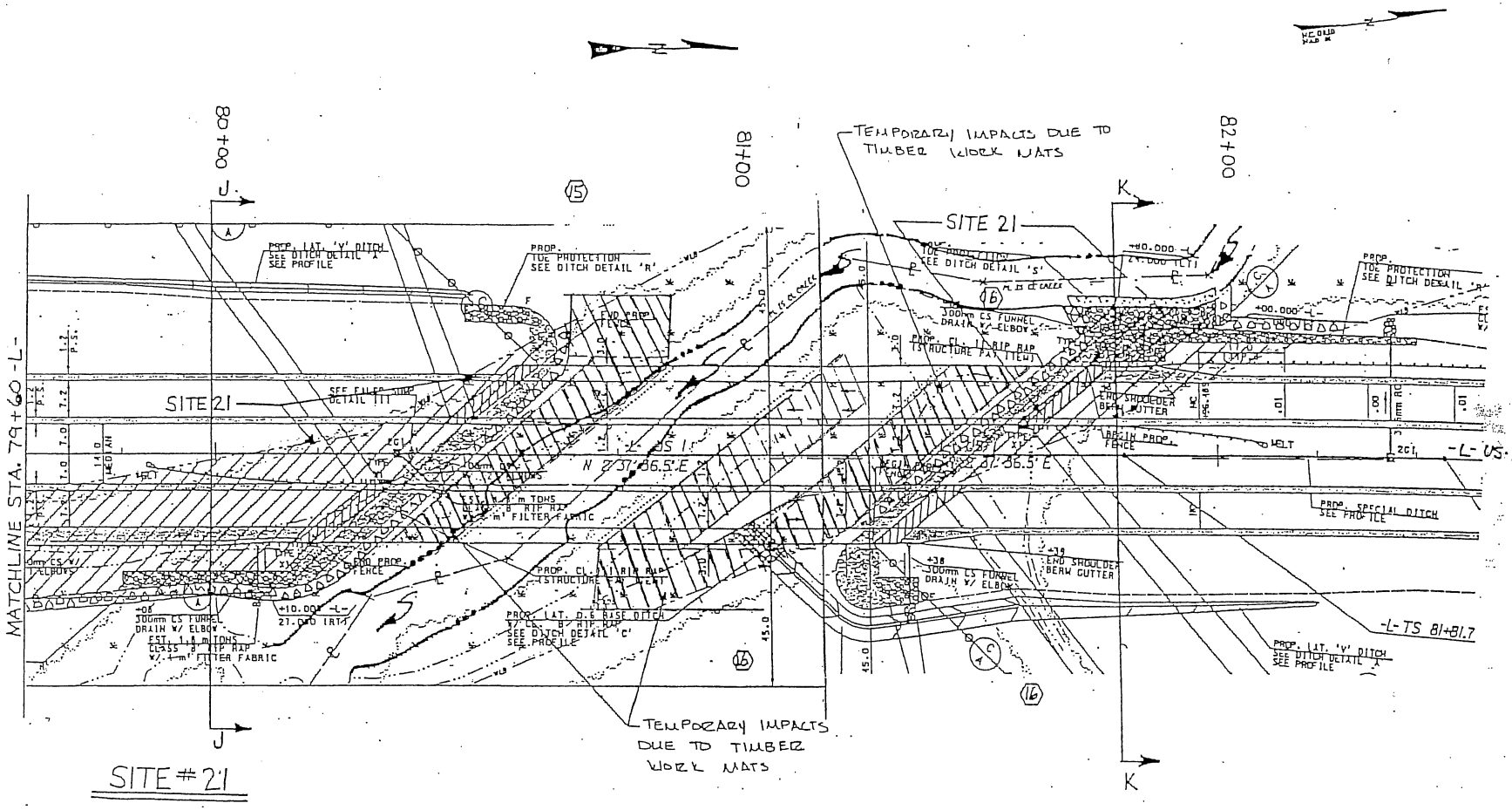
CROSS SECTION

TIMBER MAT ANCH

S. T. Wo... Corporation
PROJECT ...8900GT Etc.
Lee-M... Co.
DRAWIN... 2 – 2


DONALD W. BRIDGERS
MARY ANN HILLARD
SAM EVANS
Wetland Site 15
Wetland Site 16
PROPOSED HAUL ROAD
PROPOSED HAUL ROAD
HAYES L. HARBOR
WETLAND BOUNDARY
CYPRESS CHURCH ROAD
HARBOR BARROW SITE
250
255
260
270
275
LEGEND
WETLAND BOUNDARY

C1



ORIGINAL AREA = 0.224ha

SCALE

20m 10 0 20m

DENOTES FILL IN WETLAND

DENOTES EXCAVATION IN WETLANDS

DENOTES TEMP. IMPACT IN WETLAND DUE TO MECHANICAL CLEARING BEYOND CONSTRUCTION LIMITS

TEMP. IMPACT DUE TO TIMBER MATS = 0.2 ha AT SITE 21

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MOORE COUNTY

B-T560302 R-210A

PROPOSED GRADING, PAVING, DRAINAGE, FENCING CULVERTS, STRUCTURES, SIGNING, PAVEMENT MARKINGS, AND SIGNALS ON PROPOSED U.S. 1 BYPASS FROM SR 2175 AT LAKEVIEW TO NORTHEAST OF SR 1825.

SCALE AS SHOWN

SHEET 42 OF 58 NOVEMEBER 1997

REV. 01/10/01

SCALE

10 0 20m

DENOTES FILL IN WETLAND

DENOTES TEMP. IMPACT IN WETLAND DUE TO MECHANICAL CLEARING AND CONSTRUCTION LIMITS

DENOTES FILL IN SURFACE WATER

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MOORE COUNTY

B-T560302 R-210A

PROPOSED GRADING, PAVING, DRAINAGE, FENCING CULVERTS, STRUCTURES, SIGNING, PAVEMENT MARKINGS, AND SIGNALS ON PROPOSED U.S. 1 BYPASS FROM SR 2175 AT LAKEVIEW TO NORTHEAST OF SR 1825.

SCALE AS SHOWN

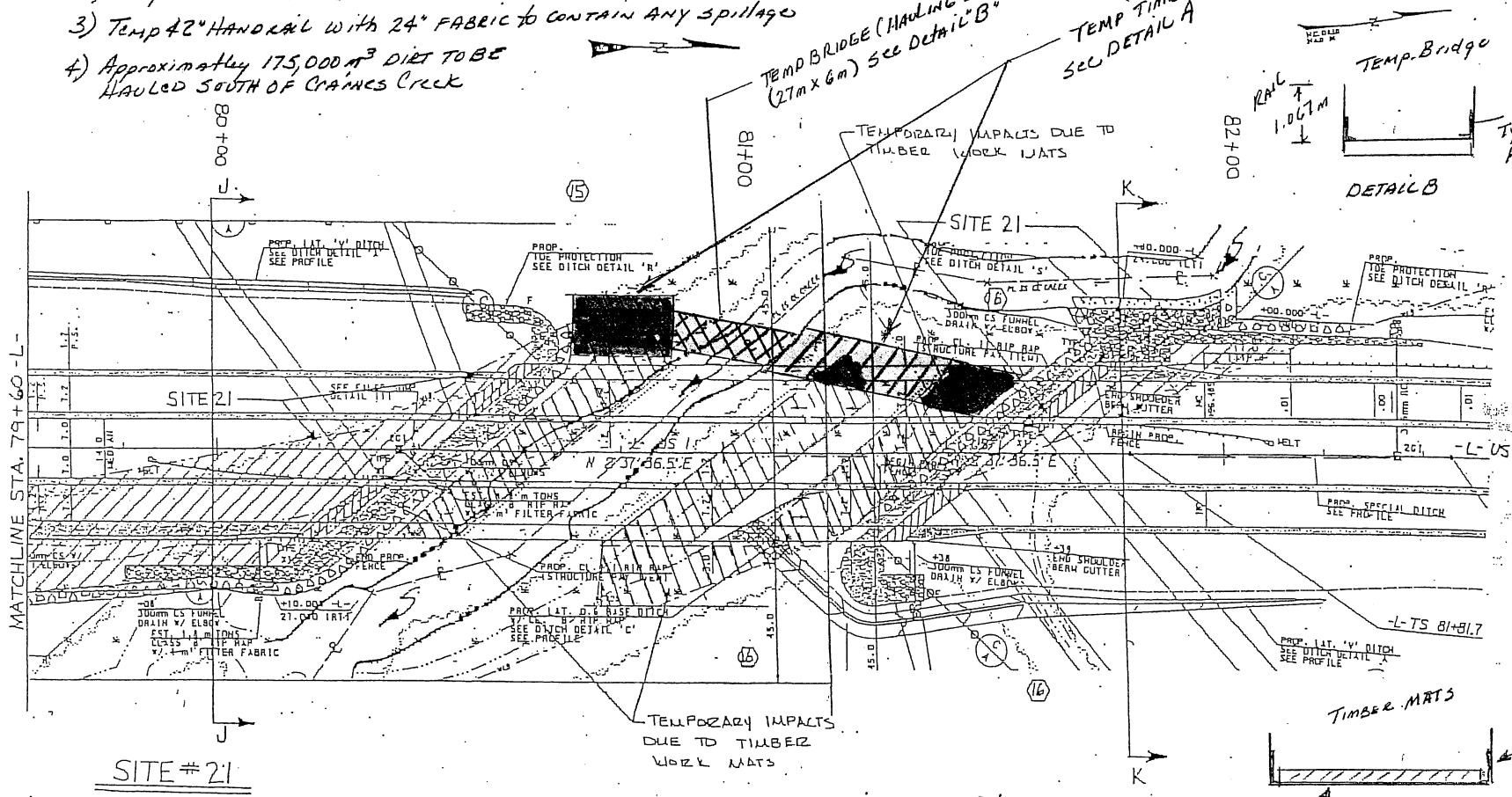
SHEET 42 OF 58 NOVEMEBER 1997

REV. 01/10/01

D1

ORIGINAL PERMIT
S.T. WOOTEN CORPORATION
DRAWING NO 1

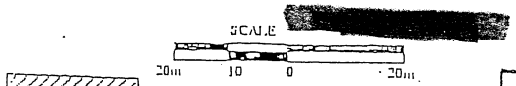
Notes: 1) Filter Fabric Type 2 Placed Beneath Mats on Temp Haul Rd. (See Attachment for Physical...
2) Temp Silt Fence Adjacent to each side of Timber Mats
3) Temp 42" Handrail with 24" Fabric to contain any spillage
4) Approximately 175,000 m³ DIRT TO BE HAULED SOUTH OF Caines Creek



SITE #21

Temp Impact Temp Haul Rd & Bridge = 0.029 ha
PHASE I CONSTRUCTION

Temp Impact in Original Permit



TEMP. IMPACT DUE TO TIMBER WORK MATS = 0.2 ha AT SITE 21

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MOORE COUNTY

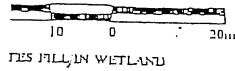
B-T560302 R-210A

PROPOSED GRADING, PAVING, DRAINAGE, FENCING CULVERTS, STRUCTURES, SIGNING, PAVEMENT MARKINGS, AND SIGNALS ON PROPOSED U.S. 1 BYPASS FROM SR 2175 AT LAKEVIEW TO NORTHEAST OF SR 1835.

SCALE AS SHOWN

SHEET 42 OF 58 NOVEMEBER 1997

REV. 01/10/01



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MOORE COUNTY

B-T560302 R-210A

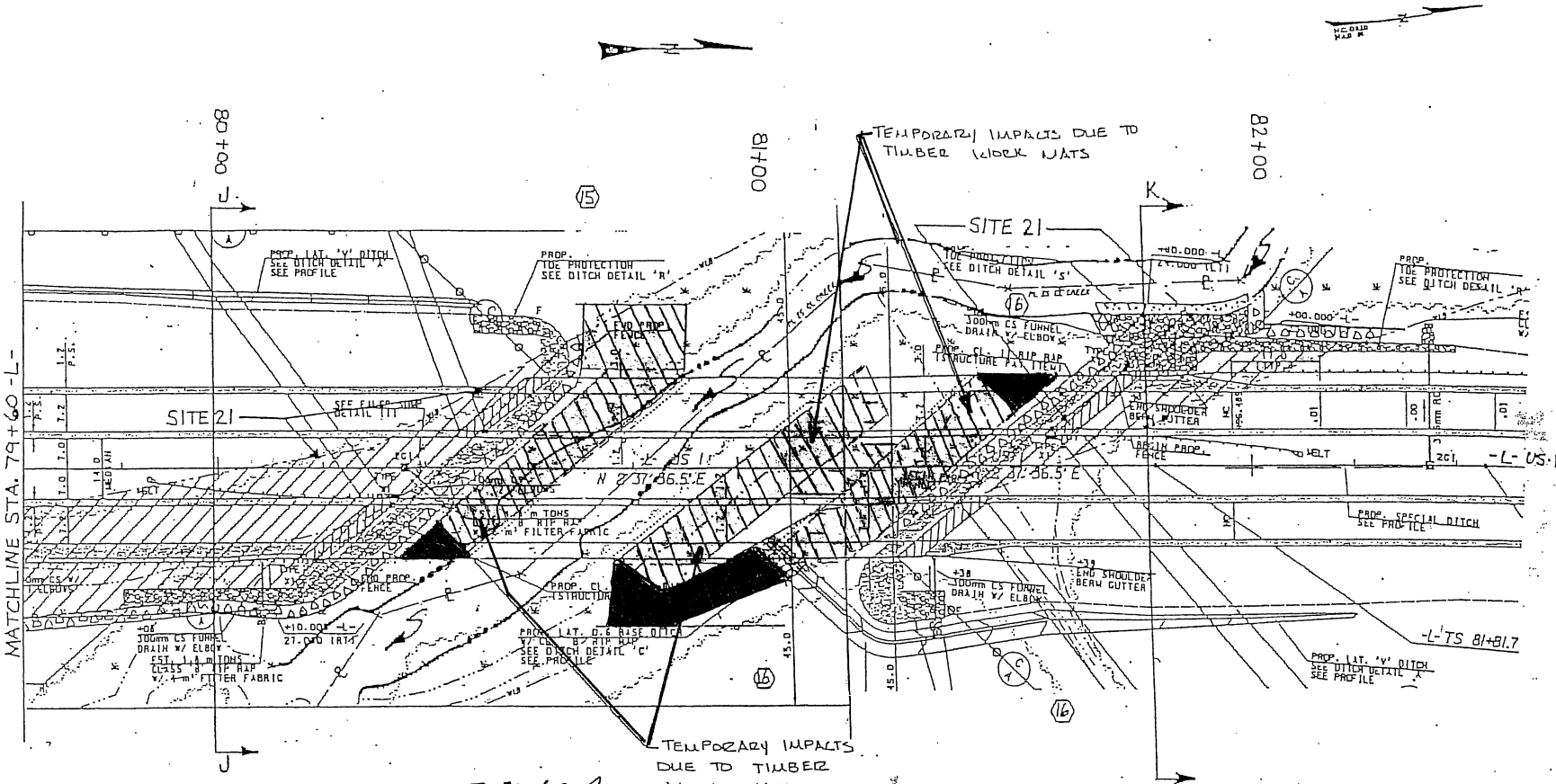
PROPOSED GRADING, PAVING, DRAINAGE, FENCING CULVERTS, STRUCTURES, SIGNING, PAVEMENT MARKINGS, AND SIGNALS ON PROPOSED U.S. 1 BYPASS FROM SR 2175 AT LAKEVIEW TO NORTHEAST OF SR 1835.

SCALE AS SHOWN

SHEET 42 OF 58 NOVEMEBER 1997

REV. 01/10/01

PHASE I TEMP. HAUL Rd
S.T. WOOTEN CORPORATION
SHEET No 2



SITE #21

PHASE II Bridge Const

Proposed AREA FOR Bridge Const
TEMP IMACT Temp MATS = 0.200 ha

AREA NOT TO BE USED = 0.024 ha

SCALE
20m 10 0 20m

DENOTES FILL IN WETLAND

DENOTES EXCAVATION IN WETLANDS

DENOTES TEMP. IMPACT IN WETLAND DUE TO MECHANICAL CLEARING BEYOND CONSTRUCTION LIMITS

TEMP. IMPACT DUE TO TIMBER WORK MATS = 0.2 ha AT SITE 21

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MOORE COUNTY

B-T560302 R-210A

PROPOSED GRADING, PAVING, DRAINAGE, FENCING CULVERTS, STRUCTURES, SIGNING, PAVEMENT MARKINGS, AND SIGNALS ON PROPOSED U.S. 1 BYPASS FROM SR 2175 AT LAKEVIEW TO NORTHEAST OF SR 1825.

SCALE AS SHOWN

SHEET 42 OF 58 NOVEMEBER 1997

REV. 01/10/01

SCALE
10 0 20m

FES FILL IN WETLAND

FES TEMP. IMPACT IN WETLAND O MECHANICAL CLEARING ND CONSTRUCTION LIMITS

FES FILL IN SURFACE WATER

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MOORE COUNTY

B-T560302 R-210A

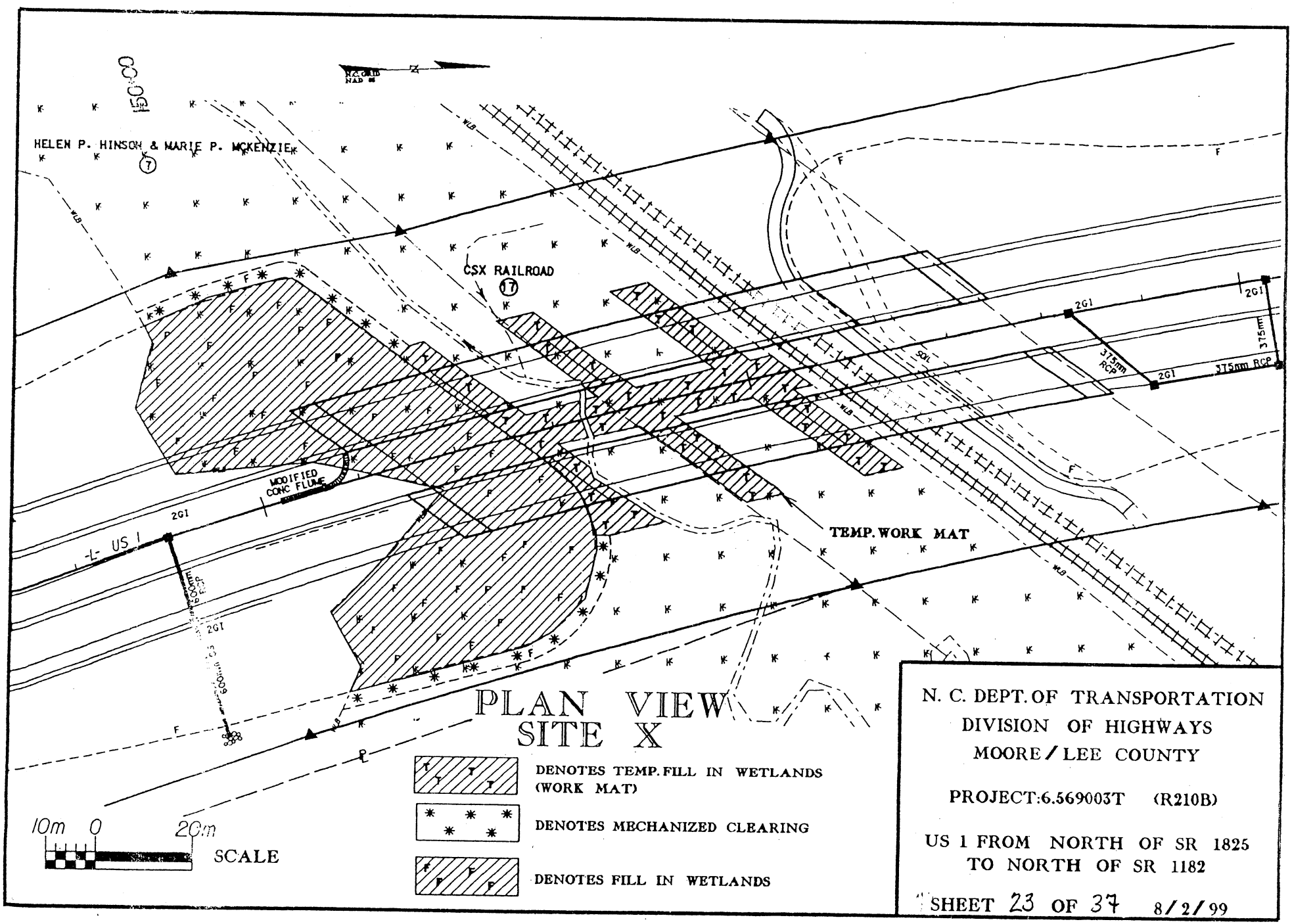
PROPOSED GRADING, PAVING, DRAINAGE, FENCING CULVERTS, STRUCTURES, SIGNING, PAVEMENT MARKINGS, AND SIGNALS ON PROPOSED U.S. 1 BYPASS FROM SR 2175 AT LAKEVIEW TO NORTHEAST OF SR 1825.

SCALE AS SHOWN

SHEET 43 OF 58 NOVEMEBER 1997

REV. 01/10/01

PHASE II Bridge Construction
S.T. WOOTEN CORPORATION
DRAWING No 3



PLAN VIEW
SITE X

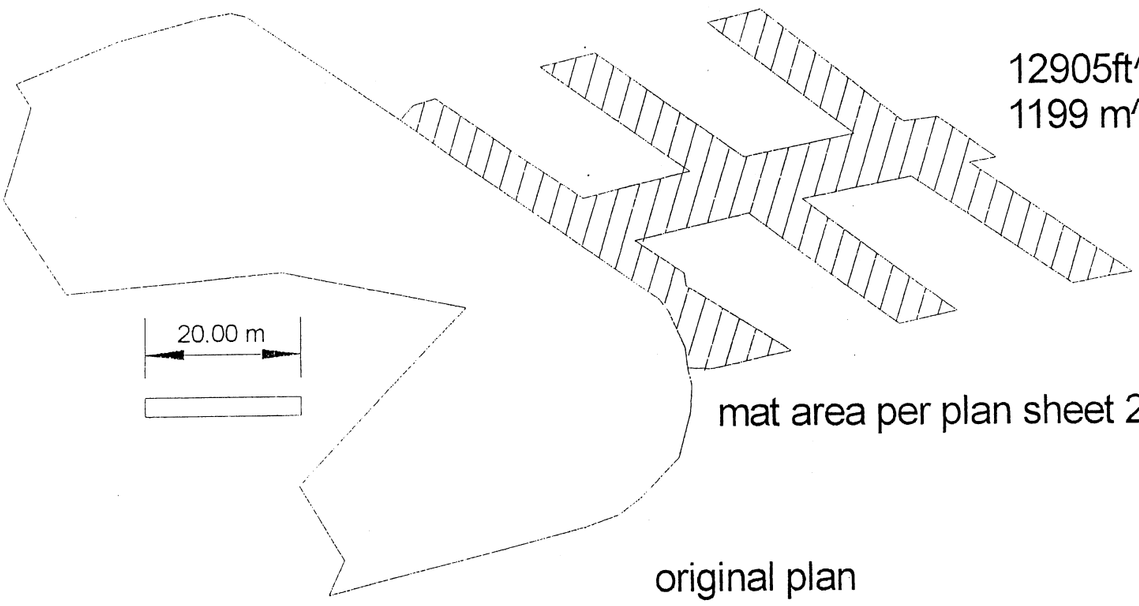
N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
MOORE / LEE COUNTY

PROJECT:6.569003T (R210B)

US 1 FROM NORTH OF SR 1825
TO NORTH OF SR 1182

SHEET 23 OF 37 8/2/99

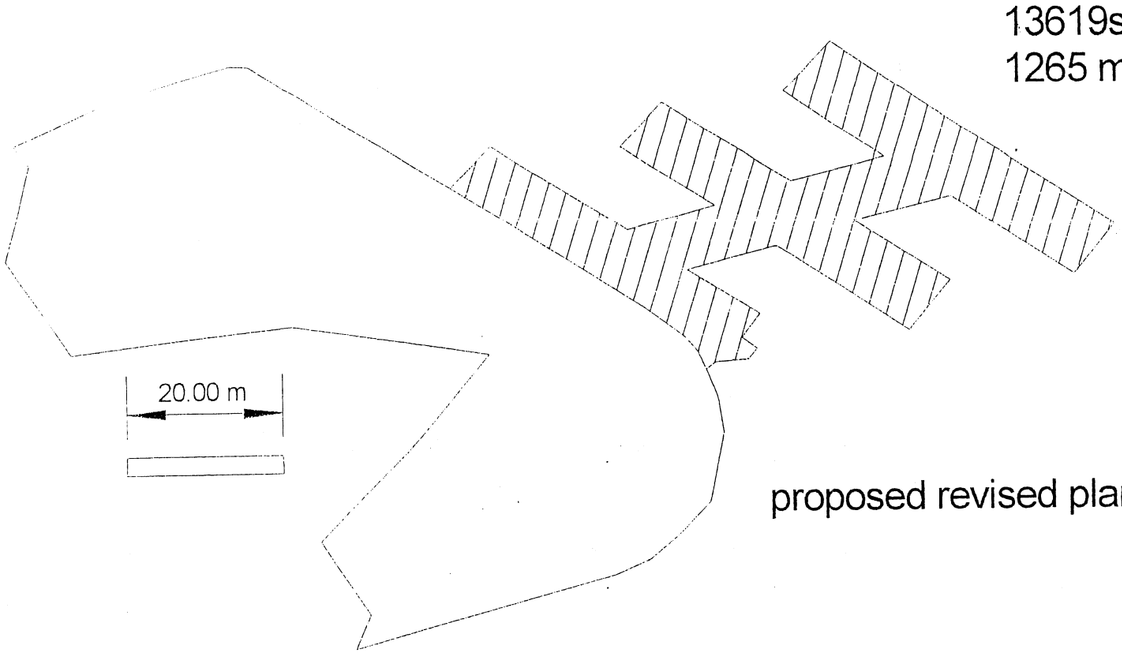
E1



12905ft^2
1199 m^2

mat area per plan sheet 23 of 37

original plan



13619sf
1265 m^2

proposed revised plan

listed mat area for plan and proposed details are
calculated areas taken from plan sheets 23 of 37
digitized and scaled to scale listed on plan sheet

63

SANFORD CONTRACTORS, INC.
BRIDGE DIVISION
628 ROCKY FORK CHURCH ROAD
SANFORD, NC 27330
(919) 775-7882 TELE
(919) 775-3406 FAX

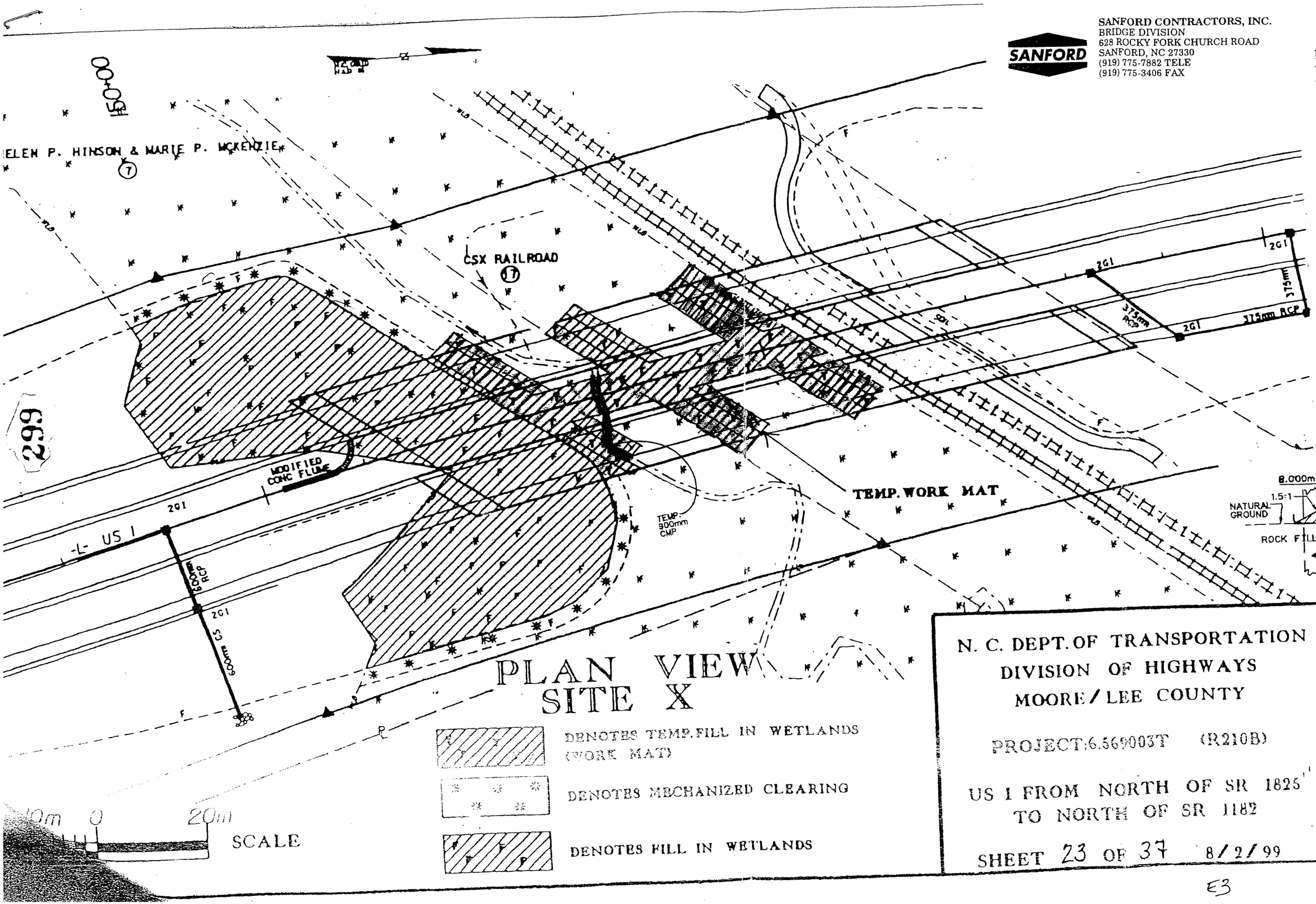
Note:
Temporary work pads have been modified slightly to accommodate actual field needs and conditions.

When the 900mm temp. pipe is removed the channel will be restored to original contour using native material and stabilized with sod, mattin or seeding/mulching or as directed by the Engineer.

Type II fabric will be placed under the rock work pads as shown.

Work platforms will be removed in their entirety. Native vegetation will be planted or allowed to return naturally.

Other erosion control items will be as directed.



PLAN VIEW
SITE X

DENOTES TEMP. FILL IN WETLANDS (WORK MAT)

DENOTES MECHANIZED CLEARING

DENOTES FILL IN WETLANDS

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
MOORE / LEE COUNTY

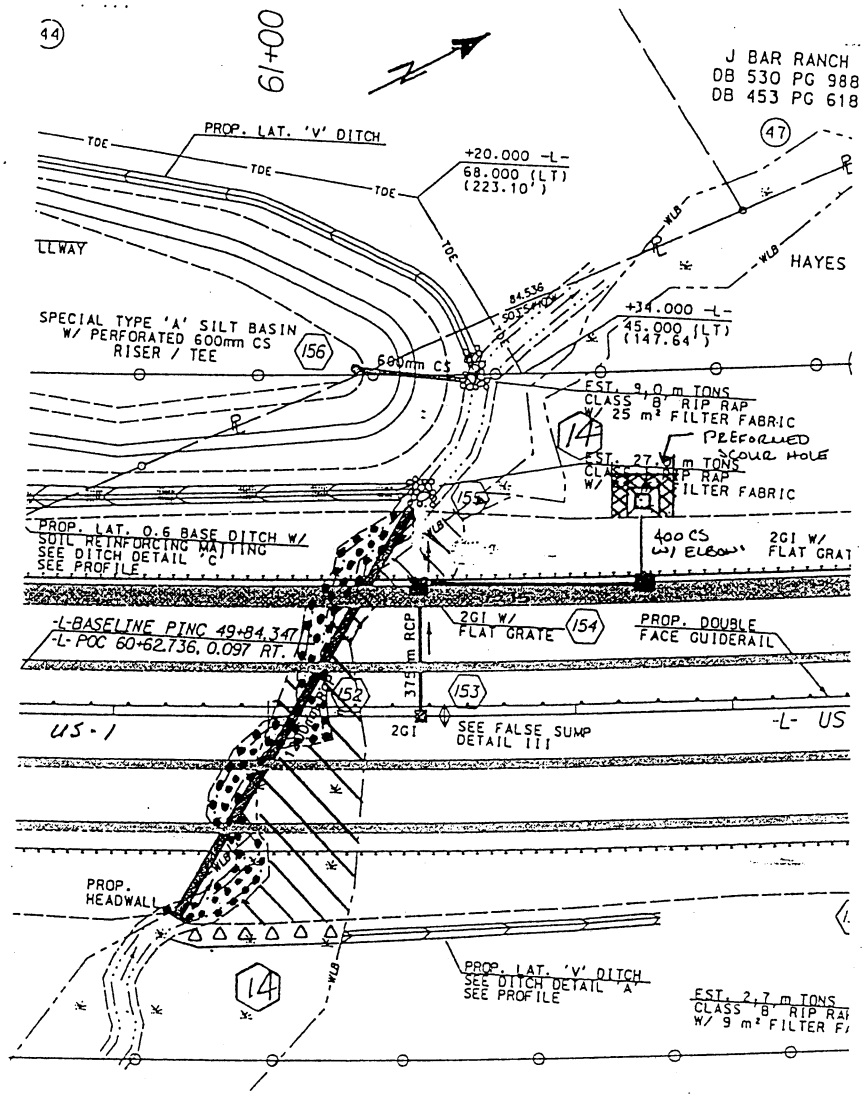
PROJECT: 6.569003T (R210B)

US 1 FROM NORTH OF SR 1825 TO NORTH OF SR 1182

SHEET 23 OF 37 8/2/99

Wetland impact:
66ms increase
Stream impact:
8m increase

E3



HORIZONTAL SCALE

0 10 20 40m

SITE No. 15

DENOTES FILL IN WETLAND.

DENOTES FILL IN SURFACE WATER.

DENOTES TEMP. IMPACT IN WETLAND DUE TO MECHANICAL CLEARING BEYOND CONSTRUCTION LIMITS.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

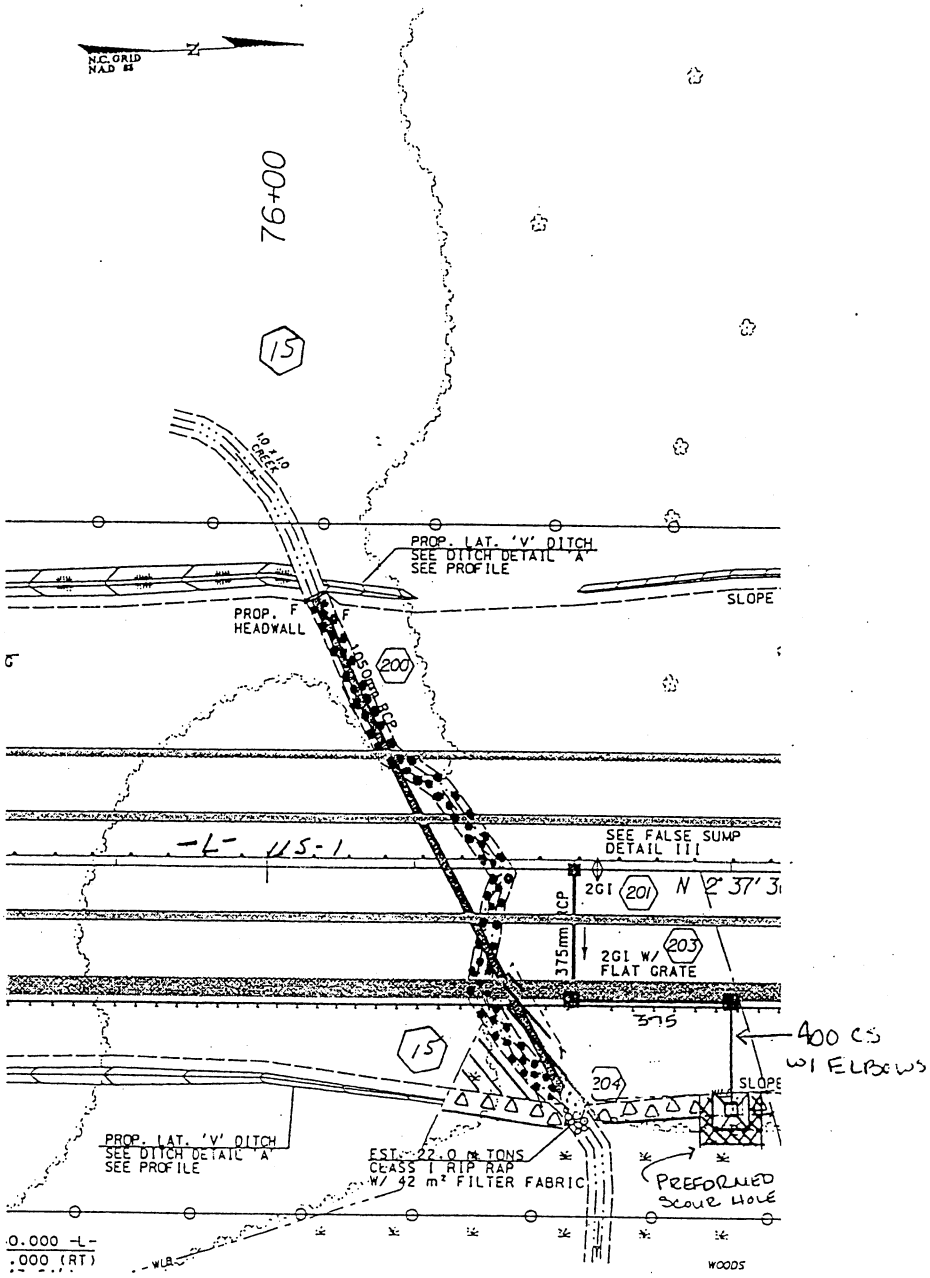
MOORE COUNTY

8.T560302 R-210A

SCALE AS SHOWN

SHEET 31 OF 58

NOVEMEBER 1997
REV 04/15/03



HORIZONTAL SCALE

0 10 20 40m

SITE 19

DENOTES FILL IN WETLAND.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

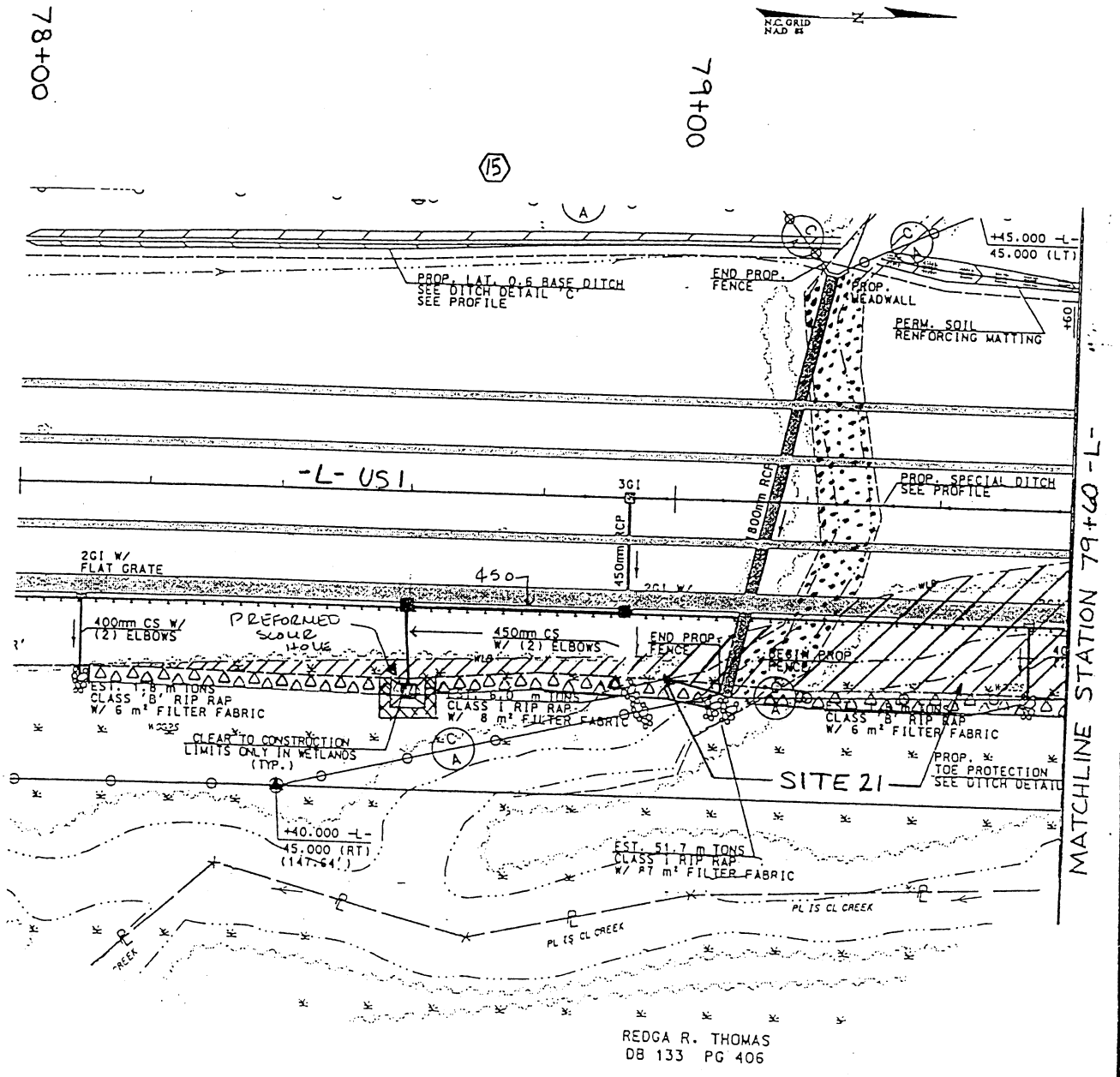
MOORE COUNTY

OF SR 1825.

SCALE AS SHOWN

SHEET 39 OF 58

NOVEMEBER 1997
REV 04/15/03



SITE #21

SCALE

20m 10 0 20m

DENOTES FILL IN WETLAND

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

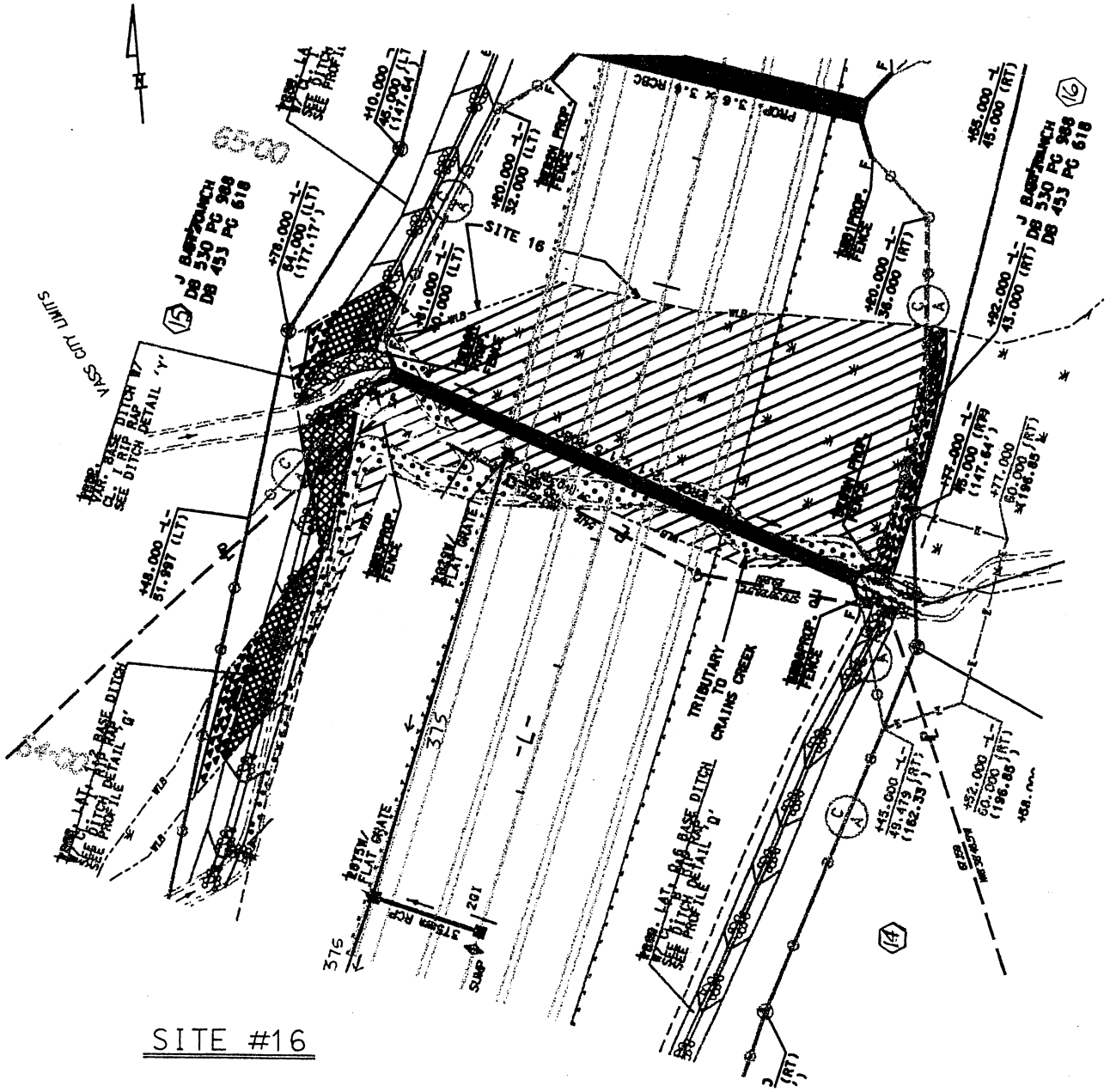
MOORE COUNTY

SCALE AS SHOWN

SHEET 41 OF 58

NOVEMEBER 1997

REV 04/15103



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MOORE COUNTY

S.T560302

PROPOSED GRADING, PAVING, DRAINAGE, FENCING, CULVERTS, STRUCTURES, SIGNING, PAVEMENT MARKINGS, AND SIGNALS ON PROPOSED U.S. 1 BYPASS FROM SR 2175 AT LAKEVIEW TO NORTHEAST OF SR 1825

SCALE AS SHOWN

SHEET 32 OF 58

REV 04/15/03

Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E., Director
Division of Water Quality
Coleen H. Sullins, Deputy Director
Division of Water Quality

September 2, 2003

Dr. Gregory Thorpe, Ph.D., Director
NCDOT Project Development & Environmental Analysis Branch
1548 Mail Service Center
Raleigh, NC, 27699-1548

Dear Dr. Thorpe:

Re: MODIFICATION to Water Quality Certification Pursuant to §401 of the Federal Clean Water Act
US 1 from north of Lakeview to south of Sanford (Vass Bypass), Moore/Lee Counties
TIP Project No. R-210
DWQ Project No. 010404

Attached hereto is a copy of the MODIFICATION to Certification No. 3344 issued to The North Carolina Department of Transportation dated September 2, 2003.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Alan W. Klimek, P.E.

Attachments

cc: Richard Spencer, USACE Wilmington Field Office
Coleen Sullins, NCDWQ
Ken Averitte, NCDWQ Fayetteville Regional Office
Mr. Gary Jordan, USFWS
Mr. Christopher Militscher, USEPA
Mr. David Cox, NCWRC
Mr. Bill Rosser, Division 8 Engineer
Mr. Art King, Division 8 Environmental Officer
Mr. B.W. Harrington, Roadside Environmental Field Operations Engineer
Public Hearing Attendees
Central Files
File Copy

NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H, Section .0500. This Certification authorizes the NCDOT to incur the following permanent impacts: 41.5 acres of jurisdictional wetlands through permanent fill, excavation, and mechanized clearing; 14.50 acres of surface waters (anthropogenically-created ponds) fill; and 4,880 linear feet of stream channels in Moore and Lee Counties, as described in the Application dated 19 February 2001, and additional information dated 12 February 2002 and 15 March 2002.

The Modification to this Certification allows for the addition of 50 linear feet of temporary stream impacts and 0.05 acres of temporary wetland impacts as described in the Modification Request dated July 11, 2003.

The project shall be constructed pursuant to the Application dated February 19, 2001 and the Modification Request dated July 11, 2003 filed to construct improvements to US 1 from north of Lakeview to south of Sanford (Vass Bypass, TIP Project No. R-210).

The Application and the Modification Request provides adequate assurance that the discharge of fill material into the waters of the state with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your application. Should your project change, you are required to notify the DWQ *in writing*, and you may be required to 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 this project incurs additional wetland or stream impacts, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion Control, Non-discharge and Water Supply watershed regulations. This Certification shall expire three (3) years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding Corps of Engineers Permit, whichever is sooner.

Conditions of Certification:

I. New Modifications of the Certification issued on July 19, 2002.

1. *Section R-210A, Site 1*
   - NCDOT and/or its authorized agents shall be allowed to place a temporary span across the Little River. Construction and removal of shall be in accordance with the sequence as described in the Modification Request and as depicted on page B2.
   - NCDOT and/or its authorized agents shall be allowed to use temporary work mats for each of the work spurs. Placement and removal of the temporary work mats shall be in accordance with the process described in the Modification Request.

2. *Section R-210A Site 16 (Harbour Borrow Site)*

- NCDOT and/or its authorized agents shall be allowed to construct a temporary haul road to access the Harbour Borrow Site as depicted in drawing C1 in Appendix C of the Modification Request. NCDWQ understands that this will result in 0.02 acres of temporary wetland impacts.

3. *Section R-210A, Site 21*
   - NCDOT and/or its authorized agents shall be allowed to construct a temporary haul road (consisting of timber mats) and temporary bridge to facilitate construction of the permanent bridge crossing of Cranes Creek as described on pages D2 (Phase I of the construction sequence) and D3 (Phase II of the construction sequence) of the Modification Request. NCDWQ understands that this will result in 0.01 acres of temporary wetland impacts.

4. *Section R-210B, Site 10*
   - NCDWQ understands that due to a change in federal regulations concerning construction in railroad corridors, the work pads will need to be reconfigured as depicted on drawing page E2 of the Modification Request. NCDWQ understands that this will result in a net increase of 0.02 acres of temporary wetland impacts and an increase of 50 linear feet of temporary stream impacts for a total temporary impact of 83 linear feet as depicted on page E3 of the Modification Request.

5. NCDOT and/or its authorized agents shall restore the above-referenced impact sites as described in the Appendices of the Modification Request.

6. NCDOT has requested authorization to construct five preformed scour holes (PSH) at the outlet of several road storm drains to reduce stormwater discharges to non-erosive velocities as described in the Modification Request. NCDOT and/or its authorized agents shall be allowed to construct these PSH, an activity necessary to comply with Condition number 4 of the Certification issued on July 19, 2002. The PSH that are proposed, are located in the mechanized clearing zone of the roadway. Therefore additional wetland impacts will not occur due to the installation of these structures.

7. NCDOT has requested authorization to re-design a storm drain to eliminate the direct discharge into the stream channel at R-210A, Site 16. NCDOT and/or its authorized agents shall be allowed to eliminate the direct discharge in accordance with the Modification Request, an activity necessary to comply with Condition number 4 of the Certification issued on July 19, 2002. The installation of the structure shall not involve discharging fill or dredged material into waters of the State.

8. An additional condition of this Modification is that DOT must provide DWQ (the Wetlands/401 Unit) a complete copy of the construction plans for the entire corridor of the project known as the Vass Bypass (R-210A and R-210 B&C). These plans must be provided within 30 days of receipt of this Modification.

II. Conditions of Certification issued on July 19, 2002

The following Conditions listed in the Water Quality Certification No. 3344 issued on July 19, 2002 still apply:

1. NCDOT must follow the appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of *the North Carolina Sediment and Erosion Control Planning and Design Manual* or *the North Carolina Surface Mining Manual*, whichever is more appropriate (available from the Division of Land Resources (DLR) in the DENR Regional or Central Offices) and shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standard (50 NTUs in all fresh water streams and rivers not designated as trout waters; 25 NTUs in all lakes and reservoirs, and all saltwater classes; and 10 NTUs in trout waters);

2. NCDOT shall use *Best Management Practices for the Protection of Surface Waters* (NCDOT March 1997), specifically using all applicable preventive and control measures during the design, construction and maintenance of this project. These measures shall be implemented prior to any ground-disturbing activities to minimize impacts to downstream aquatic resources.

3. During the construction of the project, the applicant shall strictly adhere to North Carolina regulations entitled, *Design Standards in Sensitive Watersheds* [15A NCAC 4B .0124(a)-(d)], within the entire project corridor.

4. Storm water shall be directed to buffer areas or retention basins and shall not be routed directly into streams. Existing vegetated buffers shall not be mowed in order to utilize it for storm water diffuse flow.

5. Temporary or permanent herbaceous vegetation shall be planted on all bare soil *within 10 days* of ground-disturbing activities (due to the presence of High Quality Waters) to provide long term erosion control.

6. NCDOT shall adhere to the requirements for High Quality Waters [15A NCAC 2B .0224].

7. Hazardous Spill Catch Basins shall be required for *all stream crossings*. The final designs for the Hazardous Spill Catch Basins shall be submitted to the North Carolina Division of Water Quality 401 Wetlands Unit prior to beginning construction in the Water Supply watershed. As-built drawings for the basins shall be submitted to the North Carolina Division of Water Quality 401 Wetlands Units no later than 30 days after the construction is completed.

8. The bridge(s) required for this project shall be designed according to *Best Management Practices for the Protection of Surface Waters* (NCDOT March 1997). Specifically, the bridge decking shall not discharge storm water directly into the receiving water.

9. Prior to any construction activities, the NCDOT shall submit a maintenance plan for all storm water management facilities and hazardous spill catch basins associated with the project.

10. The NCDOT shall be required to implement the maintenance plan for the life of this road. Sediment and erosion control devices shall not be placed in wetlands or waters to the maximum extent practicable. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored after the Division of Land Resources has released the project.

11. Any bridge demolition work required by this project shall adhere to NCDOT's *Best Management Practices for Bridge Demolition and Removal.*

12. Live or fresh concrete shall not come into contact with waters of the state until the concrete has hardened.

13. There shall be no excavation from or waste disposal into jurisdictional wetlands or waters associated with this permit without appropriate modification of this Certification. If this occurs, compensatory mitigation will be required since it is a direct impact from road construction activities.

14. Placement of culverts and other structures in waters, streams, and wetlands shall be placed below the elevation of the streambed to allow low flow passage of water and aquatic life unless it can be shown

to DWQ that providing passage would be impractical. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or stream beds or banks, adjacent to or upstream and down stream of the above structures. The Applicant is required to provide evidence that the equilibrium shall be maintained if requested in writing by DWQ.

15. NCDOT shall mitigate for the loss of two water supply wells for the Town of Cameron by constructing a municipal supply well or wells capable of yielding a minimum of 70 gallons per minute (gpm). The Utility Relocation Agreement was entered with the Town of Cameron on October 26, 1998.

16. *Mitigation*: Compensatory mitigation shall be the same as that approved by the US Army Corps of Engineers as long as the mitigation required equals a ratio of 1:1 restoration or creation of lost wetland acres as described in 15A NCAC 2H.0506 (h)(6). A report must be submitted to the NC Division of Water Quality that describes the final approved wetland and stream mitigation for this project within two (2) months of the issuance of the 404 permit issued by the Army Corps of Engineers.

    a. Wetland impacts of 41.5 acres include riverine wetlands. NCDOT will mitigate these impacts by providing the following:
        - 4.8 acres of on-site restoration (1:1 ratio) in the floodplain of the Little River as described in Appendix C of the Application.
          The monitoring plan shall be followed and reports shall be submitted to this Office after the first year and every other year afterwards for a total of five (5) years.

        - 8.4 acres of on-site preservation as described in Appendix C of the Application.

        - Sandhills Area Land Trust (SALT) Mitigation Site (a 327-acre site in Moore County) being offered in total to offset the remainder of wetland impacts (36.8 acres) associated with the project. This site includes a maximum of 49 acres of wetland restoration.

          NCDOT shall place groundwater gauges on the site such that they will accurately measure the drainage effect of the existing ditches at the SALT site. Before the additional monitoring and re-modeling of the groundwater table of the SALT Site occurs, NCDOT shall meet with DWQ personnel to agree upon the details of additional studies. If the resulting hydrological modeling demonstrates that less than 36.8 acres can actually be restored, NCDOT shall obtain wetland mitigation through in-lieu payments to Wetlands Restoration Program (WRP).

    b. Stream impacts total 4,880 linear feet in the Cape Fear River Basin (Hydrologic Unit 03030004). NCDOT proposes to provide compensatory mitigation at a 2:1 ratio except where on-site mitigation will be provided. The on-site mitigation sites will be mitigated at a 1:1 ratio as detailed in Table 4, Appendix A of the February 19, 2001 Application. Compensatory mitigation consists of the following:
        - 1,154 linear feet of on-site stream relocation/restoration, with 50-foot buffers, using *natural channel design*. The natural channel design specifications shall be calculated from field measurements of an unimpacted section of stream (reference reach). The plans must include reference reach data including a sketch map, the range of values (pattern data), and all calculations (including the determination of bankfull). The channel design should include a floodplain terrace at stream bankfull.

The stream relocation shall be built and maintained according to approved plans before any mitigation credit is given. If this Office determines that the stream restoration or associated riparian area has become unstable, the stream shall be repaired or stabilized using only natural channel design techniques if possible. Additionally, the vegetation in the riparian shall be maintained and/or replaced according to the approved plans. Rip-rap and other hard structures may *only* be used if required by the Division of Land Resources or a Delegated Local Program. Additionally, all repair designs must be submitted to and receive written approval from this Office before the repair work is performed.

Since the restored stream is proposed as compensatory mitigation for stream impacts, the restored portion and associated riparian area shall be preserved in perpetuity through a preservation easement or some other legally binding mechanism or agreement. The above easement or other legally binding mechanism or agreement must be in place before any mitigation credit shall be given. Additionally, the stream physical and biological monitoring plan shall be followed and reports shall be submitted to this Office after the first year and every other year afterwards for a total of five (5) years.

- The remaining 8,068 linear feet of stream mitigation shall be provided via in-lieu payments to Wetlands Restoration Program as agreed on April 1, 1999.

In accordance with 15A NCAC 2R.0500, this contribution will satisfy our compensatory mitigation requirements under 15A NCAC 2H.0506(h). Until plans are received and approved for the stream relocation using natural channel design, wetland or stream fill shall not occur.

17. Upon completion of the project, the NCDOT and/or its authorized agents 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 along with as-built drawings and photographs.

18. The Applicant shall require its contractors (and/or agents) to comply with all of the terms of this Certification, and shall provide each of its contractors (and/or agents) a copy of this Certification.

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal Permit.

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, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This certification and its conditions are final and binding unless you ask for a hearing.

This the 2nd day of September 2003

DIVISION OF WATER QUALITY

Alan W. Klimek, P.E.

WQC No. 3344

Certificate of Completion

DWQ Project No.: _____ **County:** _____

Applicant:

_____

Project Name:

_____

Date of Issuance of 401 Water Quality Certification:_____

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, 1650 Mail Service Center, Raleigh, NC, 27699-1650. 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, 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, 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, the approved plans and specifications, and other supporting materials.

Signature _____ Registration No. _____

Date _____