



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

September 27, 2004

MEMORANDUM TO: Mr. H. Allen Pope, P.E.  
Division 3 Engineer

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

SUBJECT: Onslow County, US 17 Widening from SR 1327/1410 North of  
Jacksonville to SR 1330/1439 South of Belgrade/Mayesville;  
Work Order Number 8.T190301; Federal Aid Project No. NHF-  
17(7); TIP Number R-2514A

Attached is the U. S. Army Corps of Engineers 404 Individual Permit and the Division of Water Quality 401 Water Quality Certification for the above referenced project. All environmental permits have been received for the construction of this project.

PSH/ma

Attachment

cc: Mr. Art McMillan, P.E.  
Mr. Omar Sultan  
Mr. Jay Bennett, P.E.  
Mr. David Chang, P.E.  
Mr. Randy Garris, P.E.  
Mr. Greg Perfetti, P.E.  
Mr. Njoroge Wainaina  
Mr. Mark Staley  
Mr. Mr. John F. Sullivan, III, FHWA  
Mr. Mason Herndon, Division 3 Environmental Officer

**PROJECT COMMITMENTS**  
**US 17**  
**WIDENING FROM SR 1327/1410 NORTH OF JACKSONVILLE**  
**TO SR 1330/ 1439 SOUTH OF BELGRADE/ MAYESVILLE**  
**ON SLOW COUNTY**  
**Federal Aid Project No. NHF-17(7)**  
**State Project Nos. 8.T190301**  
**TIP Project No. R-2514A**

Compliance is required with all conditions of Individual Permit No. 199503519 issued by the U.S. Army Corps of Engineers (USACOE). This includes the General Conditions listed on pages 1 and 2 of the permit, as well as all Special Conditions (4 pages), and amended condition found on the email dated 9/16/04. Compliance is also required with all conditions of 401 Water Quality Certification No. 3472 issued by the N.C. Division of Water Quality. In addition to these conditions, the following special commitments have been agreed to by the NCDOT.

Current status, changes, or additions to the project commitments as shown in the environmental documents for the project are printed in *italics*.

**CONDITIONS DEVELOPED THROUGH PROJECT DEVELOPMENT**

***PDEA, Design Services Unit***

The State Historic Preservation Office will be provided an opportunity to comment on the roadway design plans prior to right-of way acquisition.

Action- *SHPO reviewed the roadway design plans in April 2004*

***PDEA, Hydraulics Unit***

Prior to Construction, a wetland mitigation plan will be developed and coordinated with the appropriate environmental regulatory agencies.

Action- *Ecosystem Enhancement Program (EEP) will be used for mitigation*

***PDEA***

Prior to construction, the North Carolina plant conservation will be given the opportunity to survey the right-of-way for any State listed or other rare species.

Action- Correspondence to the North Carolina Plant conservation Program was sent on November 21, 2003 and March 15, 2004.

**CONDITIONS DEVELOPED THROUGH PERMITTING**

***PDEA***

Compensatory mitigation for the 32.18 acres of wetland impacts and 708 feet of jurisdictional stream impacts associated with his project shall be performed as described in the letter from the North Carolina Department of Transportation dated July 30, 2004 and as detailed in the following conditions:

Compensatory mitigation for the unavoidable impacts to 32.18 acres of wetland and 708 linear feet of jurisdictional stream associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated July 30, 2004 from William D. Gilmore, EEP Transition

Manager. The EEP will provide the compensatory mitigation in the Southern Outer Coastal Plain Eco-Region as follows:

Type	Amount	Location
Riverine Wetland Preservation (10:1)	30.90 acres	NE Cape Fear Wells Tract Site, Pender County
Non-Riverine Wetland Preservation (10:1)	290.90 acres	Wallace Deer Club Tract 1 and 2, Pender County
Stream Preservation (10:1)	2,675 feet	NC Cape Fear Wells Tract Site, Pender County
Stream Preservation (10:1)	2,340 feet	Wallace Deer Club Tract 1 and 2, Pender County
Stream Preservation (10:1)	2,065 feet	Hancock Timber, Onslow and Pender County

Pursuant to the EEP Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003, the EEP will provide a minimum of 10.06 acres of non-riverine wetland restoration, 2.39 acres of riverine wetland restoration, and 390 linear feet of restoration of warm water stream channel in the White Oak watershed (Hydrologic Cataloging Unit 03030001) and 19.03 acres of non-riverine wetland restoration, 0.701 acres of riverine wetland restoration, and 318 linear feet of restoration of warm water stream channel in the New River watershed (Hydrologic Cataloging Unit 03020106) by July 22, 2005 and half of the proposed preservation mitigation would be available at that time for mitigation for other project impacts. Construction within wetlands on the permitted highway project shall begin only after the EEP has provided written confirmation to the District Engineer that the EEP and not the NCDOT is responsible for providing the required mitigation, pursuant to Paragraph VI.B.7 of the MOA. The NCDOT shall, within 30 days of the issue date of this permit, certify that sufficient funds have been provided to EEP to complete the required mitigation, pursuant to Paragraph V. of the MOA.

***Division 3 Construction***

Two copies of the final construction drawings shall be furnished to NCDWQ prior to the Pre-construction meeting. Written verification shall be provided that the final construction drawings comply with the attached permit drawings contained in the application dated February 12, 2004 and the addendum dated April 12, 2004.

To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall ensure that all such areas comply with the preceding condition (16.) of this permit, and shall require and maintain documentation of the location and characteristics of all borrow and disposal sites associated with this project. This information will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with the preceding condition (16.). All information will be available to the Corps of Engineers upon request. NCDOT shall require its contractors to complete and execute reclamation plans for each waste and borrow site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps of Engineers within 30 days of the completion of the reclamation work. All jurisdictional wetland lines on borrow and waste sites shall be verified by the Corps of Engineers and shown on the approved reclamation plans.

Culvert inverts will be buried a minimum of one foot below the bed of the stream for culverts greater than 48 inches in diameter. For culverts 48 inches in diameter or smaller, they must be buried below the bed of the stream to a depth equal to or greater than 20 percent of diameter of the culvert.

***Division 3/ PDEA-O.N.E.***

A moratorium on all work in the waters Starkey’s Creek and its tributaries will be in effect from February 15 to September 30 of any year. These measurements must be based on natural thalweg depths.

***Division 3/ PDEA O.H.E***

If the permittee discovers any previously unknown historic or archeological remains while accomplishing the authorized work, he will immediately notify the Wilmington District Engineer who will initiate the required State/Federal coordination.

***Division 3 Construction/ Roadside Environmental***

This permit authorizes the clearing of an additional ten (10) feet beyond the slope stake limits in wetlands, as shown on the plans, to install the necessary sediment and erosion control measures.

Fewlner



DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS

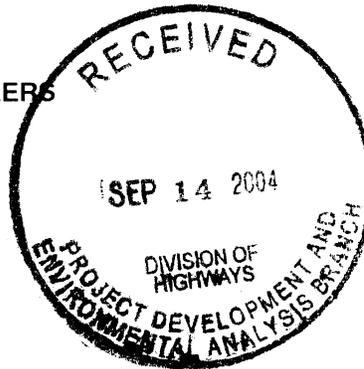
P.O. BOX 1890  
WILMINGTON, NORTH CAROLINA 28402-1890

September 10, 2004

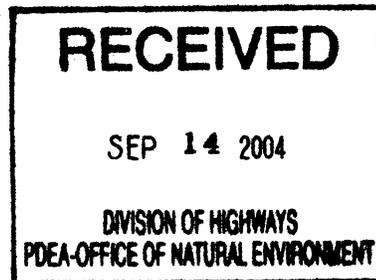
IN REPLY REFER TO

Regulatory Division

Action ID. 199503519, Tip No.; R-2514A



Dr. Gregory J. Thorpe, Ph.D.  
Environmental Management Director, PDEA  
N.C. Department of Transportation  
1548 Mail Service Center  
Raleigh, NC 27699-1548



Dear Dr. Thorpe:

In accordance with the written request of February 12, 2004 and April 21, 2004, and the ensuing administrative record, enclosed is a permit to authorize the discharge of dredged and fill material into waters of the United States, for construction of TIP Project No. R-2514A, US 17 widening from SR 1327/1410 North of Jacksonville to SR 1330/1439 South of Belgrade/Maysville, Onslow County, North Carolina.

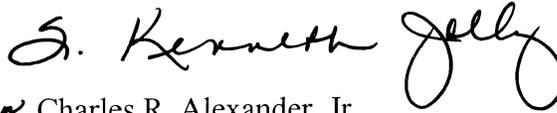
If any change in the authorized work is required because of unforeseen or altered conditions or for any other reason, the plans revised to show the change must be sent promptly to this office. Such action is necessary, as revised plans must be reviewed and the permit modified.

Carefully read your permit. The general and special conditions are important. Your failure to comply with these conditions could result in a violation of Federal law. Certain significant general conditions require that:

- a. You must complete construction before December 31, 2007.
- b. You must notify this office in advance as to when you intend to commence and complete work.
- c. You must allow representatives from this office to make periodic visits to your worksite as deemed necessary to assure compliance with permit plans and conditions.

Should you have questions, contact Mr. Dave Timpy of the Wilmington Field Office regulatory staff at telephone (910) 251-4634.

Sincerely,



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

Enclosures

Copy Furnished with enclosures:

Chief, Source Data Unit  
NOAA/National Ocean Service  
ATTN: Sharon Tear N/CS261  
1315 East-West Hwy., Rm 7316  
Silver Spring, MD 20910-3282

Copies Furnished with special conditions and plans:

Mr. Pete Benjamin, Field Supervisor  
U.S. Fish and Wildlife Service  
Fish and Wildlife Enhancement  
Post Office Box 33726  
Raleigh, North Carolina 27636-3726

Mr. Ron Sechler  
National Marine Fisheries  
Service, NOAA  
Pivers Island  
Beaufort, North Carolina 28516

Mr. David Rackley  
National Marine Fisheries  
Service, NOAA  
219 Fort Johnson Road  
Charleston, South Carolina 29412-9110

Mr. Ronald Mikulak, Chief  
Wetlands Section - Region IV  
Water Management Division  
U.S. Environmental Protection Agency  
Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, Georgia 30303

Mr. Doug Huggett  
Division of Coastal Management  
North Carolina Department of  
Environment and Natural Resources  
1638 Mail Service Center  
Raleigh, North Carolina 27699-1638

Mr. William D. Gilmore, P.E.  
EEP Transition Manager  
Ecosystem Enhancement Program  
1652 Mail Service Center  
Raleigh, NC 27699-1652

DEPARTMENT OF THE ARMY PERMIT

RECEIVED

NC Department of Transportation

Permittee \_\_\_\_\_

199503519

Permit No. \_\_\_\_\_

USAED, Wilmington

Issuing Office \_\_\_\_\_

SEP 08 2004

REGULATORY  
WILM. FLD. CFC.

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

Place fill material impacting a total of impacting a total of 32.18 acre of wetlands and 776 linear feet of perennial stream, for construction of the US 17 Widening project (T.I.P. Project No. R-2514A).

Project Location:

The proposed project is located on US 17 in Onslow County and extends 5.9 miles from the northern limit of the City of Jacksonville to the Onslow County line near the town of Belgrade. TIP Project No. R-2514A is one of four segments of the R-2514 project.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2007. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

- 4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
  - 5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
  - 6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.
- Special Conditions:
- See enclosed sheet.
1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
    - ( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
    - (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
    - ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
  2. Limits of this authorization.
    - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
    - b. This permit does not grant any property rights or exclusive privileges.
    - c. This permit does not authorize any injury to the property or rights of others.
    - d. This permit does not authorize interference with any existing or proposed Federal project.
  3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
    - a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
    - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
    - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
    - d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. **Reliance on Applicant's Data:** The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. **Reevaluation of Permit Decision.** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

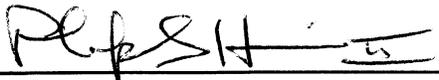
b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

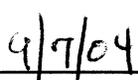
c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. **Extensions.** General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

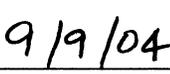
  
\_\_\_\_\_  
(PERMITTEE)

  
\_\_\_\_\_  
(DATE)

**NC DEPARTMENT OF TRANSPORTATION**

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

  
\_\_\_\_\_  
(DISTRICT ENGINEER)

  
\_\_\_\_\_  
(DATE)

**CHARLES R. ALEXANDER, JR. COLONEL**

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFEEE)

\_\_\_\_\_  
(DATE)

**SPECIAL CONDITIONS (Action ID. 199503519; NCDOT/TIP No. R-2514A)**

1. All work must be performed as shown on the attached plans, which are a part of this permit. Failure to institute and carry out the details of the following special conditions, below, will result in a directive to cease all ongoing and permitted work within waters and/or wetlands associated with the permitted project, or such other remedies and/or fines as the District Engineer or his authorized representatives may seek.
2. One copy of the final construction drawings shall be furnished to the District Engineer prior to the pre-construction meeting. Written verification shall be provided that the final construction drawings comply with the attached permit drawings. The permittee shall ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Any deviation in the construction design plans shall be brought to the attention of the Corps of Engineers, Mr. Dave Timpy, Wilmington Regulatory Field Office prior to any active construction in waters or wetlands.
3. The permittee shall schedule a preconstruction meeting between its representatives, the contractor's representatives, and the Corps of Engineers, Wilmington Regulatory Field Office NCDOT Regulatory Project Manager, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all of the terms and conditions contained within this Department of the Army Permit. The permittee shall notify the Corps of Engineers Project Manager a minimum of thirty (30) days in advance of the scheduled meeting in order to provide that individual with ample opportunity to schedule and participate in the required meeting.
4. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. Copies of this permit and any modifications authorized by the USACE shall be available for review at the construction site at all times. All violations, including non-compliance of these conditions, of the authorized permit shall be reported to the District Engineer within 24 hours of the violation.
5. The temporary placement or double handling of excavated or fill material or construction equipment and materials within waters and wetlands is not authorized.
6. All fill material must be adequately stabilized at the earliest practicable date to prevent erosion of fill material into adjacent waters or wetlands.
7. All fill material will be clean and free of any pollutants except in trace quantities.
8. The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and restore natural grades in those areas, prior to final inspection of the project.

9. This permit authorizes the clearing of an additional ten (10) feet beyond the slope stake limits in wetlands, as shown on the plans, to install the necessary sediment and erosion control measures.

10. The permittee shall take measures to prevent live or fresh concrete from coming into contact with any surface waters until the concrete has hardened.

11. The permittee will maintain the authorized work in good condition and in conformance with the terms and conditions of this permit. The permittee is not relieved of this requirement if he abandons the permitted activity without having it transferred to a third party.

12. No attempt will be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work. Use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.

13. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration of the structures or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable water, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

14. Compensatory mitigation for the 32.18 acres of wetland impacts and 708 feet of jurisdictional stream impacts associated with his project shall be performed as described in the letter from the North Carolina Department of Transportation dated March 8, 2004 (Revised July 30, 2004) and shall be provided by the North Carolina DENR Ecosystem Enhancement Program (EEP), as outlined in the letter dated July 30, 2004 from William D. Gilmore, EEP Transition Manager. The EEP will provide the compensatory mitigation in the Southern Outer Coastal Plain Eco-Region for the unavoidable impacts associated with TIP Project R-2514A as follows:

Type	Amount	Location
Riverine Wetland Preservation (10:1)	30.90 acres	NE Cape Fear Wells Tract Site, Pender County
Non-Riverine Wetland Preservation (10:1)	290.90 acres	Wallace Deer Club Tract 1 and 2, Pender County
Stream Preservation (10:1)	2,675 feet	NC Cape Fear Wells Tract Site, Pender County
Stream Preservation (10:1)	2,340 feet	Wallace Deer Club Tract 1 and 2, Pender County
Stream Preservation (10:1)	2,065 feet	Hancock Timber, Onslow and Pender County

Pursuant to the EEP Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003, the EEP will provide a minimum of 10.06 acres of non-riverine wetland restoration, 2.39 acres of riverine wetland

restoration, and 390 linear feet of restoration of warm water stream channel in the White Oak watershed (Hydrologic Cataloging Unit 03030001) and 19.03 acres of non-riverine wetland restoration, 0.701 acres of riverine wetland restoration, and 318 linear feet of restoration of warm water stream channel in the New River watershed (Hydrologic Cataloging Unit 03020106) by July 22, 2005 and half of the proposed preservation mitigation would be available at that time for mitigation for other project impacts. Construction within wetlands on the permitted highway project shall begin only after the EEP has provided written confirmation to the District Engineer that the EEP and not the NCDOT is responsible for providing the required mitigation, pursuant to Paragraph VI.B.7 of the MOA. The NCDOT shall, within 30 days of the issue date of this permit, certify that sufficient funds have been provided to EEP to complete the required mitigation, pursuant to Paragraph V. of the MOA.

15. The permittee shall use 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" to assure compliance with the appropriate turbidity water quality standard.

16. The permittee and its contractors and/or agents shall not excavate, fill, or perform mechanized landclearing at any time in the construction or maintenance of this project within waters and/or wetlands, or cause the degradation of waters and/or wetlands, except as authorized by this permit, or any modification to this permit. There shall be no excavation from, waste disposal into, or degradation of, jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit, including appropriate compensatory mitigation. This prohibition applies to all borrow and fill activities connected with this project.

17. To ensure that all borrow and waste activities occur on high ground and do not result in the loss or degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall ensure that all such areas comply with the preceding condition (16.) of this permit, and shall require and maintain documentation of the location and characteristics of all borrow and disposal sites associated with this project. This information will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with the preceding condition (16.). All information will be available to the Corps of Engineers upon request. NCDOT shall require its contractors to complete and execute reclamation plans for each waste and borrow site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps of Engineers within 30 days of the completion of the reclamation work. All jurisdictional wetland lines on borrow and waste sites shall be verified by the Corps of Engineers and shown on the approved reclamation plans.

18. If the permittee discovers any previously unknown historic or archeological remains while accomplishing the authorized work, he will immediately notify the Wilmington District Engineer who will initiate the required State/Federal coordination.

19. All culverts must be buried a minimum of 20 percent of the culvert diameter or at least one foot below the bed of the stream or wetland.

20. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

21. All conditions attached to the Section 401 Water Quality Certification for this project, issued September 1, 2004, are incorporated as conditions of this permit.

22. A moratorium on all work in the waters Starky's Creek and its tributaries will be in effect from February 15 to September 30 of any year.

**Subject: RE: R-2514A**

**Date:** Thu, 16 Sep 2004 14:20:40 -0500

**From:** "Timpy, David L SAW" <David.L.Timpy@saw02.usace.army.mil>

**To:** "Brett M. Feulner" <bmfeulner@dot.state.nc.us>

**CC:** 'Mason Herndon' <mherndon@dot.state.nc.us>, Elizabeth Lee Lusk <ellusk@dot.state.nc.us>, Bill Arrington <bill.arrington@ncmail.net>

Brett,

OK to proceed. Thanks for checking with CAMA.

Dave

-----Original Message-----

From: Brett M. Feulner [<mailto:bmfeulner@dot.state.nc.us>]

Sent: Thursday, September 16, 2004 3:16 PM

To: Timpy, David L SAW

Cc: 'Mason Herndon'; Elizabeth Lee Lusk; Bill Arrington

Subject: Re: R-2514A

Dave

I just spoke with Bill regarding the burial of the pipes on R-2514A. Bill said that DCM would have no objections to the pipes under 48" being buried 20% below the stream bed. Please acknowledge that you are ok with NCDOT proceeding with the revised condition 19 in your previous email.

Thanks

Brett

"Timpy, David L SAW" wrote:

>

>

> Brett/Mason,

>

> Special condition 19 currently states:

>

> "19. All culverts must be buried a minimum of 20 percent of  
> the culvert diameter or at least one foot below the bed of the  
> stream or wetland."

>

> Note the 401 WQC for this project (Condition #10) only  
> specifies that culverts be "buried below the elevation of the  
> stream bed" and CAMA's consistency determination did not

> condition culvert burial. However, since this project is in a  
> CAMA county and current CAMA permits (in AEC's) have required 1  
> ft burial of the invert, CAMA should be contacted regarding the  
> one foot burial requirement.

>  
>

> I agree with Mason that the 20% minimum diameter  
> applies to 48" culverts versus 60". This is also consistent  
> with Divison 3's comments on the draft conditions, prior to  
> permit issuance. Thus, special condition (19) should be  
> clarified follows:

>  
> "Culvert inverts will be buried a minimum of one foot below the  
> bed of the stream for culverts greater than 48 inches in  
> diameter. For culverts 48 inches in diameter or smaller, they  
> must be buried below the bed of the stream to a depth equal to  
> or greater than 20 percent of diameter of the culvert."

>

> Unfortunately, we'll may need a request to  
> officially modify our permit, pending CAMA's position on the 1  
> foot burial. Since this revision is minimal and possibly not  
> needed, I recommend that we add it to a future permit mod  
> request.

>

> I'm not sure where the 60 inches comes from. If there  
> is need for 60", we'll need to discuss this further.

>

> Dave

>

>

>

>

> -----Original Message-----

> From: Mason Herndon [<mailto:mherndon@dot.state.nc.us>]

> Sent: Thursday, September 16, 2004 8:23 AM

> To: Brett M. Feulner

> Cc: Dave Timpy; Elizabeth Lee Lusk

> Subject: Re: R-2514A

>

> Brett

>

> 48" is the cutoff. On nationwides the 404, condition states  
> that

> culverts greater than 48" will be buried a minimum of 1 ft  
> below

> the streambed and culverts 48" or smaller will be buried 20%.

> However, the 401 condition usually states that culverts 48" and

>

> larger will be buried a minimum of 1 ft and culverts less than  
> 48"

> will be buried 20%. So the two conditions have different  
> minimum  
> depths for 48" pipes (404 - 9.6" and 401 - 12"), to be  
> compliant we  
> bury 48" culverts one foot. CAMA pipe burial condition is  
> generally  
> reads the same as the 401 condition, except of course if it is  
> in an  
> CAMA AEC all pipes are buried 1 ft. Clear as mud?  
>  
> Any questions give me a call.  
>  
> Thanks  
> Mason  
>  
> "Brett M. Feulner" wrote:  
>  
>> Dave  
>> This email is a follow up to our phone call earlier this  
>> morning  
>> regarding condition 19 on the permit for R-2514A. Please  
> reply  
>> back that you agree that the condition should read  
>> "All culverts must be buried a minimum of 20% of the  
> culvert  
>> diameter or at least one foot below the stream bed or wetland  
> for  
>> culverts 60" or larger."  
>> Thanks  
>> Brett

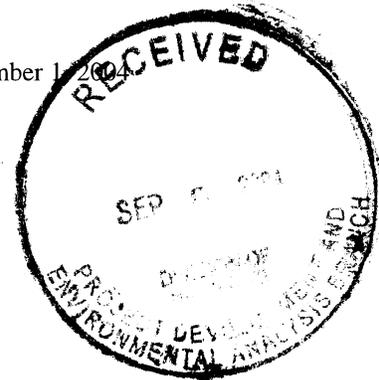


Michael F. Easley, Governor  
William G. Ross Jr., Secretary  
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E. Director  
Division of Water Quality

R-2514A Fewner

September 1, 2004



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

Dear Dr. Thorpe:

Re: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act,  
This certification authorizes the NCDOT to place fill material in 22.37 acres of jurisdictional wetlands, perform excavation in 3.88 acres of jurisdictional wetlands, perform mechanized clearing in 4.34 acres of jurisdictional wetlands, and drain 1.59 acres of jurisdictional wetlands. In addition, you are authorized to fill 776 linear feet of streams. The project shall be constructed pursuant to the application dated February 12, 2004, and the addendum dated April 12, 2004, to construct the widening of US 17 from SR 1327/1410 north of Jacksonville to SR 1330/1439 south of Belgrade in Onslow County.  
WQC Project No. 040198

Attached hereto is a copy of Certification No. 3472 issued to The North Carolina Department of Transportation dated September 1, 2004.

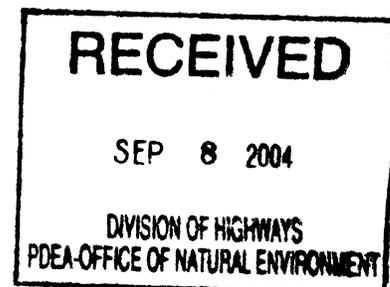
If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Alan W. Klimek, P.E.  
Director

Attachments

cc: Wilmington District Corps of Engineers  
Dave Timpy, Corps of Engineers Wilmington Field Office  
DWQ Washington Regional Office  
Cathy Brittingham, Division of Coastal Management  
Bill Gilmore, Ecosystem Enhancement Program  
File Copy



## APPROVAL OF 401 Water Quality Certification and ADDITIONAL CONDITIONS

**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, and 15 NCAC 2B .0259. This certification authorizes the NCDOT to place fill material in 22.37 acres of jurisdictional wetlands, perform excavation in 3.88 acres of jurisdictional wetlands, perform mechanized clearing in 4.34 acres of jurisdictional wetlands, and drain 1.59 acres of jurisdictional wetlands. In addition, you are authorized to fill 776 linear feet of streams. The project shall be constructed pursuant to the application dated February 12, 2004, and the addendum dated April 12, 2004, to construct the widening of US 17 from SR 1327/1410 north of Jacksonville to SR 1330/1439 south of Belgrade in Onslow County.

The application provides adequate assurance that the discharge of fill material into the waters of the White Oak River Basin in conjunction 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, as described in the Public Notice. Should your project change, you are required to notify the DWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, 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, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire three 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.

### Condition(s) of Certification:

1. Construction will be conducted in such a manner as to prevent a significant increase in turbidity outside the area of construction or construction-related discharge. Erosion and sediment control practices must 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.
  - a. The erosion and sediment control measures for the project must equal or exceed the proper design, installation, operation and maintenance outlined in the most recent version of the North Carolina Sediment and Erosion Control Planning and Design Manual. These devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
  - b. For borrow pit sites, the erosion and sediment control measures must equal or exceed the proper design, installation, operation and maintenance outlined in the most recent version of the North Carolina Surface Mining Manual. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
2. All sediment and erosion control measures 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;

3. If an environmental document is required, this Certification is not valid until a FONSI or ROD is issued by the State Clearinghouse. All water quality-related conditions of the FONSI or ROD shall become conditions of this Certification;
4. No live or fresh concrete shall come into contact with waters of the state until the concrete has hardened.
5. There shall be no excavation from or waste disposal into jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit. Should waste or borrow sites be located in wetlands or stream, compensatory mitigation will be required since it is a direct impact from road construction activities.
6. All channel relocations will be constructed in a dry work area, and stabilized before stream flows are diverted. Channel relocations will be completed and stabilized prior to diverting water into the new channel. Whenever possible, channel relocations shall be allowed to stabilize for an entire growing season. Vegetation used for bank stabilization shall be limited to native woody species, and should include establishment of a 30 foot wide wooded and an adjacent 20 foot wide vegetated buffer on both sides of the relocated channel to the maximum extent practical. A transitional phase incorporating coir fiber and seedling establishment is allowable. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested.
7. Upon completion of the project, the NCDOT shall complete and return the enclosed "Certification of Completion Form" to notify DWQ when all work included in the 401 Certification has been completed. The responsible party shall complete the attached form and return it to the 401/Wetlands Unit of the Division of Water Quality upon completion of the project.
8. Placement of culverts and other structures in waters, streams, and wetlands must 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 disequilibrium of wetlands or streambeds 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.
9. NCDOT shall provide documentation to the NC Division of Water Quality with 2 months of the issuance of this 401 Water Quality Certification that demonstrates acceptance of the riparian buffer mitigation by the NC Wetlands Restoration Program, or the NC Ecosystem Enhancement Program.
10. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.
11. All temporary fills in wetlands and surface waters shall be removed upon completion of the project. In addition, the post-construction removal of any temporary bridge structures or fill will need to return the project site to its preconstruction contours and elevations. The revegetation of the impacted areas with appropriate native species will be required.
12. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.
13. The dimension, pattern and profile of the stream above and below the crossing should not be modified by widening the stream channel or reducing the depth of the stream. Disturbed floodplains and streams should be restored to natural geomorphic conditions.

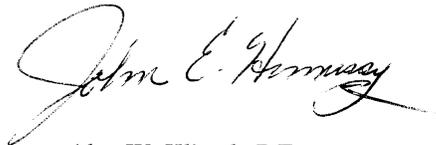
14. Any riprap used must not interfere with thalweg performance and aquatic life passage during low flow conditions.
15. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.
16. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
17. Two copies of the final construction drawings shall be furnished to NCDWQ prior to the pre-construction meeting. Written verification shall be provided that the final construction drawings comply with the attached permit drawings contained in the application dated February 12, 2004, and the addendum dated April 12, 2004.
18. All protected riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated with native woody species upon completion of the project construction. A post-construction as-built with the restoration activities included shall be submitted to the DWQ no later than 60 days after the project is closed out by the Department of Transportation.
19. The outside buffer, wetland or water boundary as well as along the construction corridor within these boundaries approved under this authorization shall be clearly marked by orange fabric fencing for the areas that have been approved to infringe within the buffer, wetland or water prior to any land disturbing activities.
20. NCDOT, and its authorized agents, shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State law and Federal law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H.0507(d). Before modifying the certification, DWQ shall notify NCDOT and the US Army Corps of Engineers, provide public notice in accordance with 15A NCAC 2H.0503 and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to NCDOT in writing, shall be provided to the United States Army Corps of Engineers for reference in any permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project.
21. A copy of this Water Quality Certification shall be posted on the construction site at all times. In addition, the Water Quality Certification (and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.
22. Culverts that are less than 48-inch in diameter should be buried to a depth equal to or greater than 20% of their size to allow for aquatic life passage. Culverts that are 48-inch in diameter or larger should be buried at least 12 inches below the stream bottom to allow natural stream bottom material to become established in the culvert following installation and to provide aquatic life passage during periods of low flow. These measurements must be based on natural thalweg depths.

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 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit.

If this Certification is unacceptable to you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification. This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, P.O. Box 27447, Raleigh, N.C. 27611-7447. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

This the 1<sup>st</sup> day of September 2004

DIVISION OF WATER QUALITY

A handwritten signature in black ink, appearing to read "Alan W. Klimek". The signature is fluid and cursive, written over a light blue horizontal line.

Alan W. Klimek, P.E.  
Director

WQC No. 3472

DWQ Project No.: \_\_\_\_\_ County: \_\_\_\_\_

Applicant: \_\_\_\_\_

Project Name: \_\_\_\_\_

Date of Issuance of 401 Water Quality Certification: \_\_\_\_\_

**Certificate of Completion**

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

**Applicant's Certification**

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Agent's Certification**

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

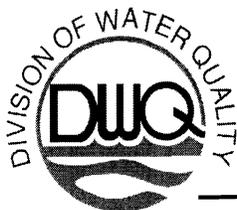
**Engineer's Certification**

\_\_\_\_\_ Partial \_\_\_\_\_ Final

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

Signature \_\_\_\_\_ Registration No. \_\_\_\_\_

Date \_\_\_\_\_



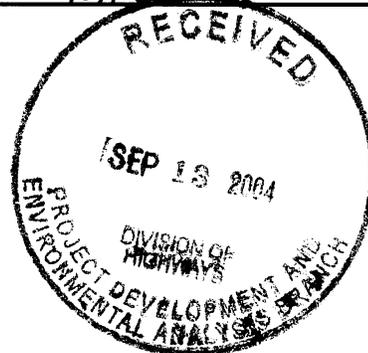
Michael F. Easley, Governor  
William G. Ross Jr., Secretary  
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E. Director  
Division of Water Quality

R.2514A-

B. Feulner

September 2, 2004



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

Dear Dr. Thorpe:

Re: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act.  
Widening of US 17 from SR 1327/1410 north of Jacksonville to SR 1330/1439 south of Belgrade in Onslow County.  
WQC Project No. 040198

Attached hereto is a copy of Certification No. 3472 issued to The North Carolina Department of Transportation dated September 2, 2004. This certification authorizes the NCDOT to place fill material in 22.37 acres of jurisdictional wetlands, perform excavation in 3.88 acres of jurisdictional wetlands, perform mechanized clearing in 4.34 acres of jurisdictional wetlands, and drain 1.59 acres of jurisdictional wetlands. In addition, you are authorized to fill 776 linear feet of streams. The project shall be constructed pursuant to the application dated February 12, 2004, and the addendum dated April 12, 2004, to construct the widening of US 17 from SR 1327/1410 north of Jacksonville to SR 1330/1439 south of Belgrade in Onslow County. This 401 Water Quality Certification replaces the original issued on September 1, 2004.

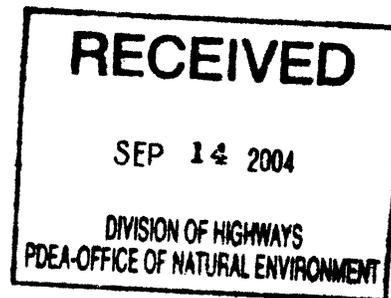
If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Alan W. Klimek, P.E.  
Director

Attachments

- cc: Wilmington District Corps of Engineers
- Dave Timpy, Corps of Engineers Wilmington Field Office
- DWQ Washington Regional Office
- Cathy Brittingham, Division of Coastal Management
- Bill Gilmore, Ecosystem Enhancement Program
- File Copy



## APPROVAL OF 401 Water Quality Certification and ADDITIONAL CONDITIONS

**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 place fill material in 22.37 acres of jurisdictional wetlands, perform excavation in 3.88 acres of jurisdictional wetlands, perform mechanized clearing in 4.34 acres of jurisdictional wetlands, and drain 1.59 acres of jurisdictional wetlands. In addition, you are authorized to fill 776 linear feet of streams. The project shall be constructed pursuant to the application dated February 12, 2004, and the addendum dated April 12, 2004, to construct the widening of US 17 from SR 1327/1410 north of Jacksonville to SR 1330/1439 south of Belgrade in Onslow County. This 401 Water Quality Certification replaces the original issued on September 1, 2004.

The application provides adequate assurance that the discharge of fill material into the waters of the White Oak River Basin in conjunction 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, as described in the Public Notice. Should your project change, you are required to notify the DWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, 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, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire three 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.

### Condition(s) of Certification:

1. Construction will be conducted in such a manner as to prevent a significant increase in turbidity outside the area of construction or construction-related discharge. Erosion and sediment control practices must 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.
  - a. The erosion and sediment control measures for the project must equal or exceed the proper design, installation, operation and maintenance outlined in the most recent version of the North Carolina Sediment and Erosion Control Planning and Design Manual. These devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
  - b. For borrow pit sites, the erosion and sediment control measures must equal or exceed the proper design, installation, operation and maintenance outlined in the most recent version of the North Carolina Surface Mining Manual. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
2. All sediment and erosion control measures 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;

3. If an environmental document is required, this Certification is not valid until a FONSI or ROD is issued by the State Clearinghouse. All water quality-related conditions of the FONSI or ROD shall become conditions of this Certification;
4. No live or fresh concrete shall come into contact with waters of the state until the concrete has hardened.
5. There shall be no excavation from or waste disposal into jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit. Should waste or borrow sites be located in wetlands or stream, compensatory mitigation will be required since it is a direct impact from road construction activities.
6. All channel relocations will be constructed in a dry work area, and stabilized before stream flows are diverted. Channel relocations will be completed and stabilized prior to diverting water into the new channel. Whenever possible, channel relocations shall be allowed to stabilize for an entire growing season. Vegetation used for bank stabilization shall be limited to native woody species, and should include establishment of a 30 foot wide wooded and an adjacent 20 foot wide vegetated buffer on both sides of the relocated channel to the maximum extent practical. A transitional phase incorporating coir fiber and seedling establishment is allowable. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested.
7. Compensatory mitigation for impacts to streams shall be done for 708 linear feet of streams in the White Oak River Basin at a replacement ratio of 1:1. We understand that the North Carolina Ecosystem Enhancement Program (EEP) has agreed to implement the mitigation for the project. Compensatory mitigation for 390 linear feet of streams shall be provided in the 8-digit HU 03030001, and compensatory mitigation for 318 linear feet of streams shall be provided in the 8-digit HU 03020106 shall be provided by the NC Ecological Enhancement Program (EEP). EEP has indicated in a letter dated July 30, 2003 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project. In accordance with 15A NCAC 2R.0500, this contribution will satisfy NC Division of Water Quality's compensatory mitigation requirements under 15A NCAC 2H.0506(h).
8. Compensatory mitigation for impacts to streams shall be done for 32.18 acres impacts to jurisdictional wetlands in the White Oak River Basin at a replacement ratio of 2:1. We understand that the North Carolina Ecosystem Enhancement Program (EEP) has agreed to implement the mitigation for the project. Compensatory mitigation for 24.90 acres of jurisdictional wetlands shall be provided in the 8-digit HU 03030001, and compensatory mitigation for 39.46 acres of jurisdictional wetlands in the 8-digit HU 03020106 shall be provided by the NC Ecological Enhancement Program (EEP). EEP has indicated in a letter dated July 30, 2003 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project. In accordance with 15A NCAC 2R.0500, this contribution will satisfy NC Division of Water Quality's compensatory mitigation requirements under 15A NCAC 2H.0506(h).
9. Upon completion of the project, the NCDOT shall complete and return the enclosed "Certification of Completion Form" to notify DWQ when all work included in the 401 Certification has been completed. The responsible party shall complete the attached form and return it to the 401/Wetlands Unit of the Division of Water Quality upon completion of the project.

10. Placement of culverts and other structures in waters, streams, and wetlands must 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 disequilibrium of wetlands or streambeds 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.
11. NCDOT shall provide documentation to the NC Division of Water Quality with 2 months of the issuance of this 401 Water Quality Certification that demonstrates acceptance of the riparian buffer mitigation by the NC Wetlands Restoration Program, or the NC Ecosystem Enhancement Program.
12. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.
13. All temporary fills in wetlands and surface waters shall be removed upon completion of the project. In addition, the post-construction removal of any temporary bridge structures or fill will need to return the project site to its preconstruction contours and elevations. The revegetation of the impacted areas with appropriate native species will be required.
14. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.
15. The dimension, pattern and profile of the stream above and below the crossing should not be modified by widening the stream channel or reducing the depth of the stream. Disturbed floodplains and streams should be restored to natural geomorphic conditions.
16. Any riprap used must not interfere with thalweg performance and aquatic life passage during low flow conditions.
17. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.
18. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
19. Two copies of the final construction drawings shall be furnished to NCDWQ prior to the pre-construction meeting. Written verification shall be provided that the final construction drawings comply with the attached permit drawings contained in the application dated February 12, 2004, and the addendum dated April 12, 2004.
20. All protected riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated with native woody species upon completion of the project construction. A post-construction as-built with the restoration activities included shall be submitted to the DWQ no later than 60 days after the project is closed out by the Department of Transportation.
21. The outside buffer, wetland or water boundary as well as along the construction corridor within these boundaries approved under this authorization shall be clearly marked by orange fabric fencing for the areas that have been approved to infringe within the buffer, wetland or water prior to any land disturbing activities.

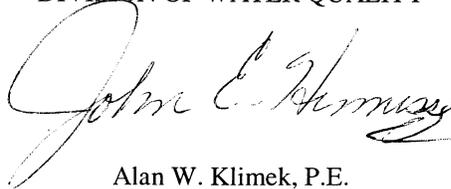
22. NCDOT, and its authorized agents, shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State law and Federal law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H.0507(d). Before modifying the certification, DWQ shall notify NCDOT and the US Army Corps of Engineers, provide public notice in accordance with 15A NCAC 2H.0503 and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to NCDOT in writing, shall be provided to the United States Army Corps of Engineers for reference in any permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project.
23. A copy of this Water Quality Certification shall be posted on the construction site at all times. In addition, the Water Quality Certification (and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.
24. Culverts that are less than 48-inch in diameter should be buried to a depth equal to or greater than 20% of their size to allow for aquatic life passage. Culverts that are 48-inch in diameter or larger should be buried at least 12 inches below the stream bottom to allow natural stream bottom material to become established in the culvert following installation and to provide aquatic life passage during periods of low flow. These measurements must be based on natural thalweg depths.

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 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit.

If this Certification is unacceptable to you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification. This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, P.O. Box 27447, Raleigh, N.C. 27611-7447. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

This the 2<sup>nd</sup> day of September 2004

DIVISION OF WATER QUALITY



Alan W. Klimek, P.E.  
Director

DWQ Project No.: \_\_\_\_\_

County: \_\_\_\_\_

Applicant: \_\_\_\_\_

Project Name: \_\_\_\_\_

Date of Issuance of 401 Water Quality Certification: \_\_\_\_\_

**Certificate of Completion**

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

**Applicant's Certification**

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Agent's Certification**

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Engineer's Certification**

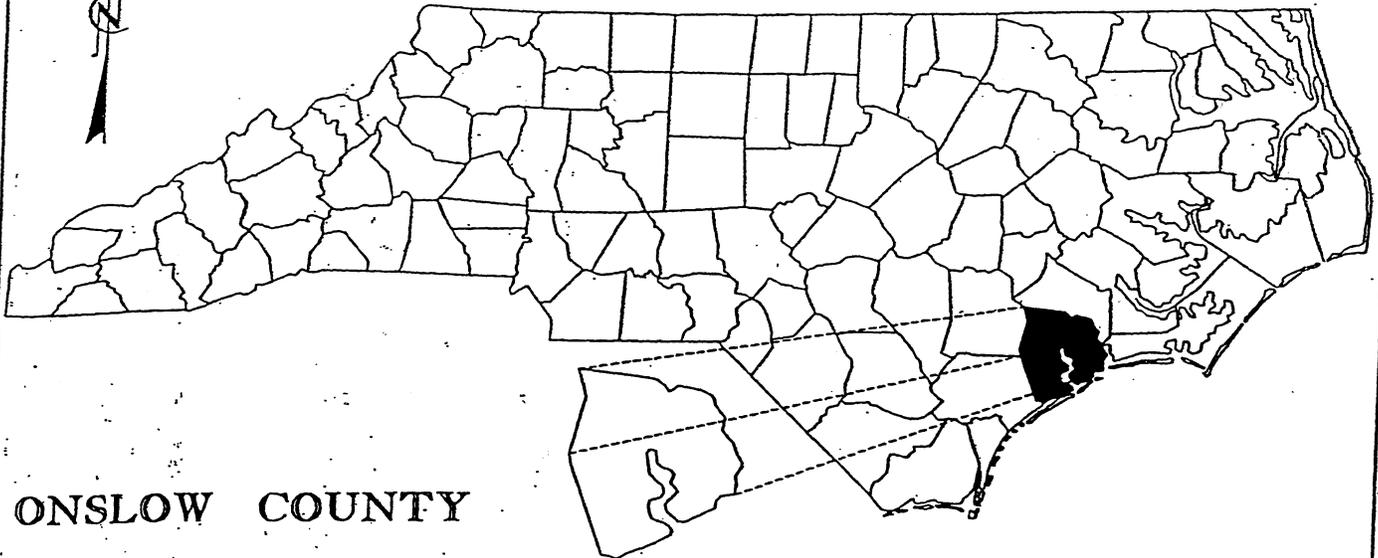
\_\_\_\_\_ Partial \_\_\_\_\_ Final

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

Signature \_\_\_\_\_ Registration No. \_\_\_\_\_

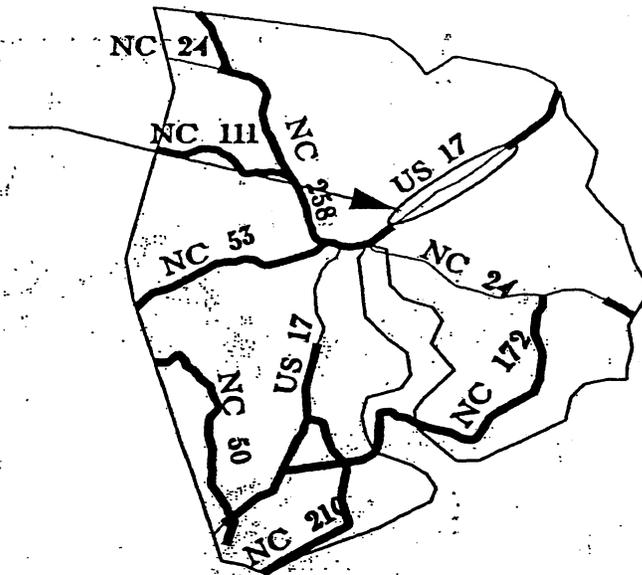
Date \_\_\_\_\_

# NORTH CAROLINA



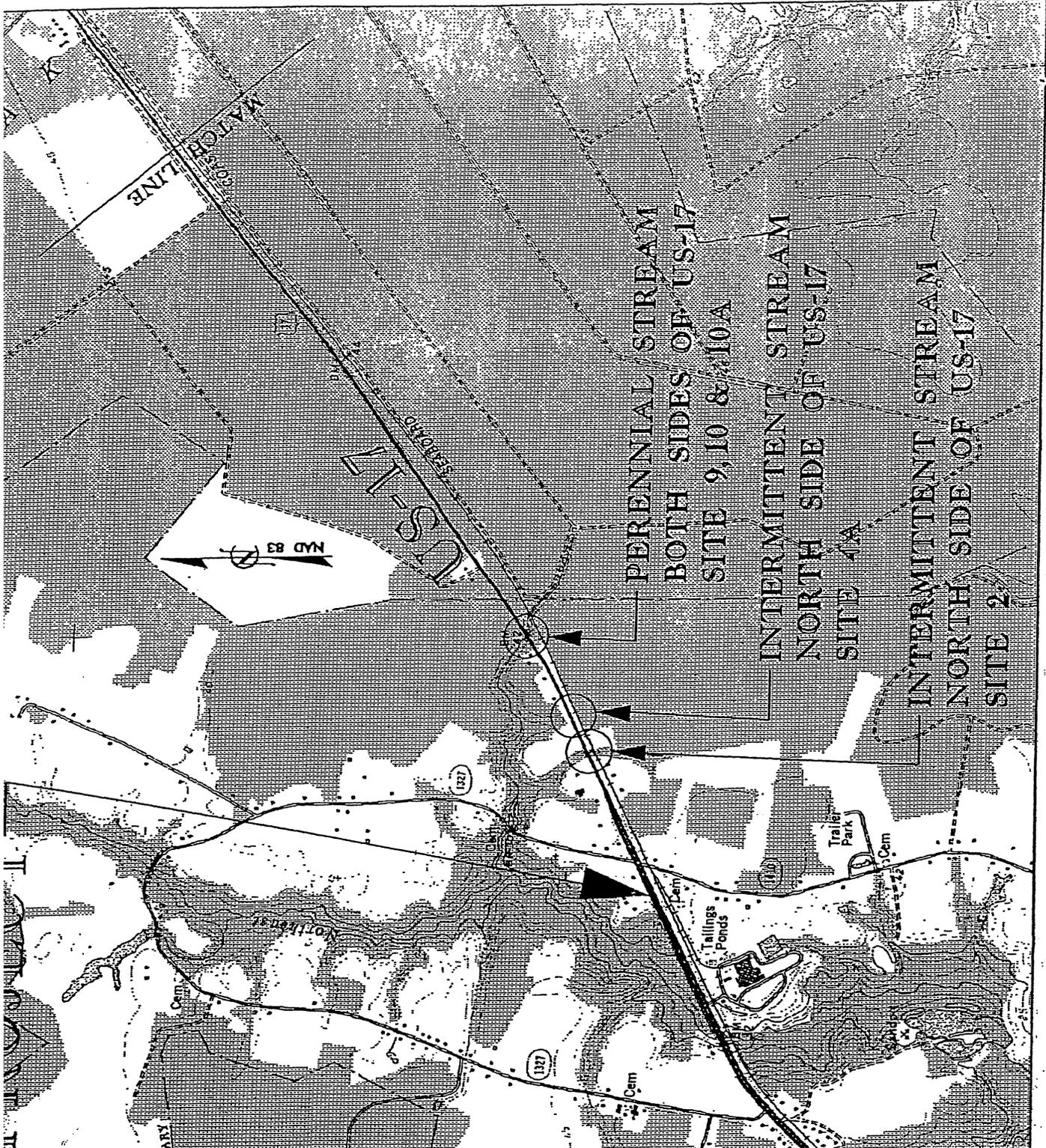
ONFLOW COUNTY

PROJECT SITE



## VICINITY MAP

**NCDOT**  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 PROJECT: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE  
 FROM SR 1327 / SR 1410  
 TO SR 1330 / SR 1439  
 SHEET 1 OF 81 DATE 7/14/03



R-2514A

PROPERTY BOUNDARY

PRIVATE

NC. DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 2 OF 81 DATE 1/16/04

# END PROJECT R-2514A

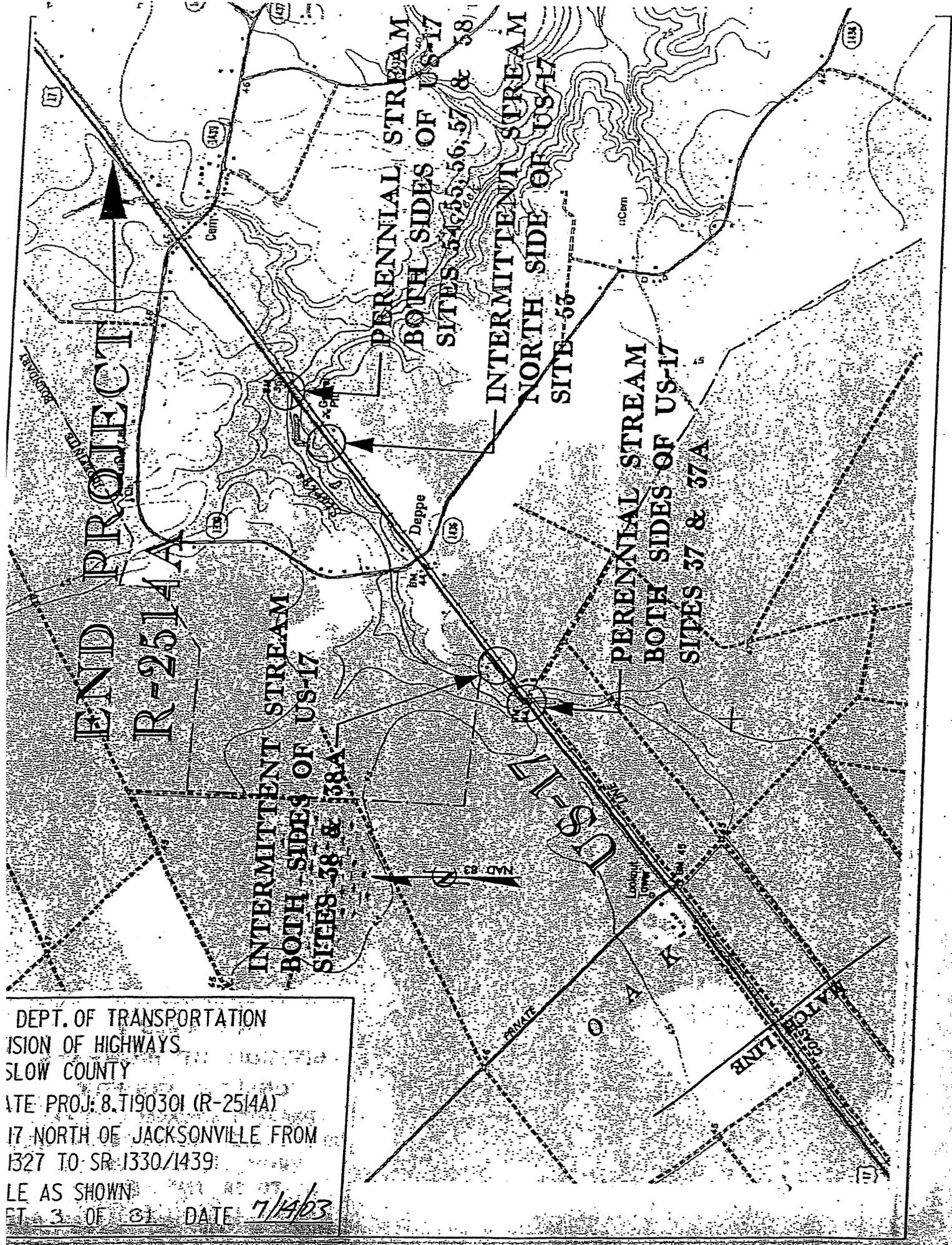
INTERMITTENT STREAM  
BOTH SIDES OF US-17  
SITES 38 & 38A

PERENNIAL STREAM  
BOTH SIDES OF US-17  
SITES 55, 56, 57 & 58

INTERMITTENT STREAM  
NORTH SIDE OF US-17  
SITE 55

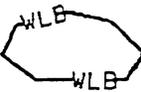
PERENNIAL STREAM  
BOTH SIDES OF US-17  
SITES 37 & 37A

DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
SLOW COUNTY  
STATE PROJ. 8.T190301 (R-2514A)  
US-17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
AS SHOWN  
SHEET 3 OF 31 DATE 7/14/63



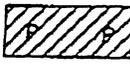
# WETLAND LEGEND

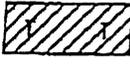
— WLB — WETLAND BOUNDARY

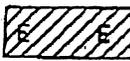
 WETLAND

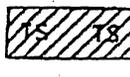
 DENOTES FILL IN WETLAND

 DENOTES FILL IN SURFACE WATER

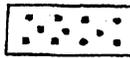
 DENOTES FILL IN SURFACE WATER (POND)

 DENOTES TEMPORARY FILL IN WETLAND

 DENOTES EXCAVATION IN WETLAND

 DENOTES TEMPORARY FILL IN SURFACE WATER

 DENOTES DRAINED WETLAND

 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

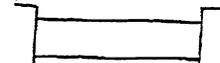
--- EPB --- EXIST. ENDANGERED PLANT BOUNDARY

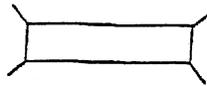
▽ WATER SURFACE

x x x x x x x x x x LIVE STAKES

 BOULDER

--- CORE FIBER ROLLS

 PROPOSED BRIDGE

 PROPOSED BOX CULVERT

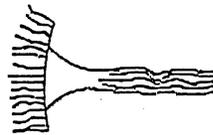
 PROPOSED PIPE CULVERT  
12'-48' PIPES  
54' PIPES & ABOVE

(DASHED LINES DENOTE EXISTING STRUCTURES)

 SINGLE TREE

WOODS LINE

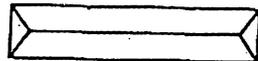
DRAINAGE INLET

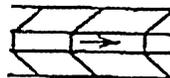
 ROOTWAD

 RIP RAP

5 ADJACENT PROPERTY OWNER OR PARCEL NUMBER IF AVAILABLE

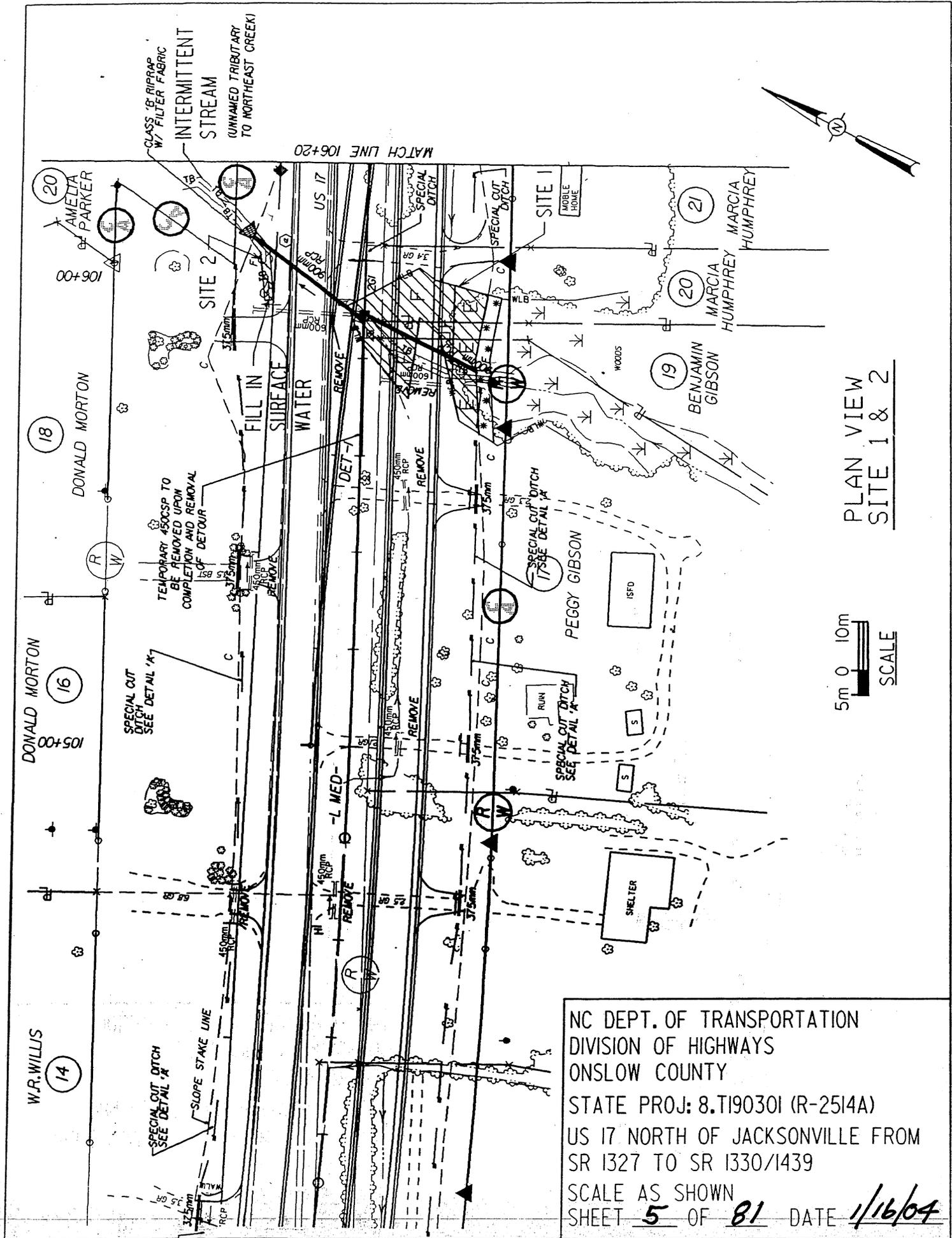
 PREFORMED SCOUR HOLE

 LEVEL SPREADER (LS)

 DITCH / GRASS SWALE

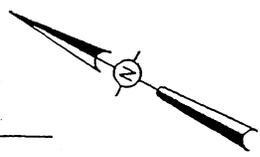
**NCDOT**  
DIVISION OF HIGHWAYS  
ONslow COUNTY  
PROJECT: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE  
FROM SR 1327 / SR 1410  
TO SR 1330 / SR 1439

SHEET 4 OF 81 DATE 7/14/03



CLASS 'B' RIPRAP  
W/ FILTER FABRIC  
INTERMITTENT  
STREAM  
(UNNAMED TRIBUTARY  
TO NORTHEAST CREEK)

MATCH LINE 106+20

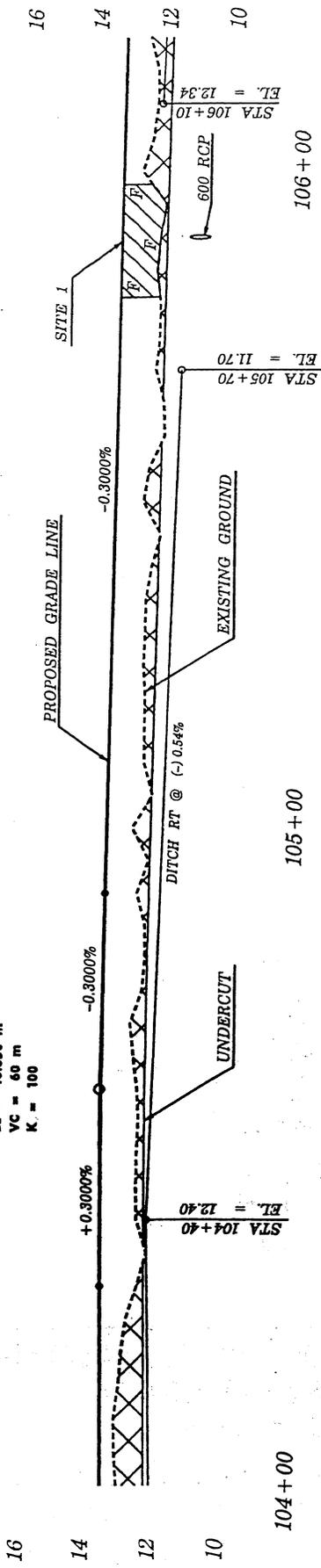


PLAN VIEW  
SITE 1 & 2

5m 0 10m  
SCALE

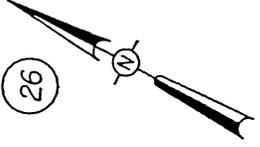
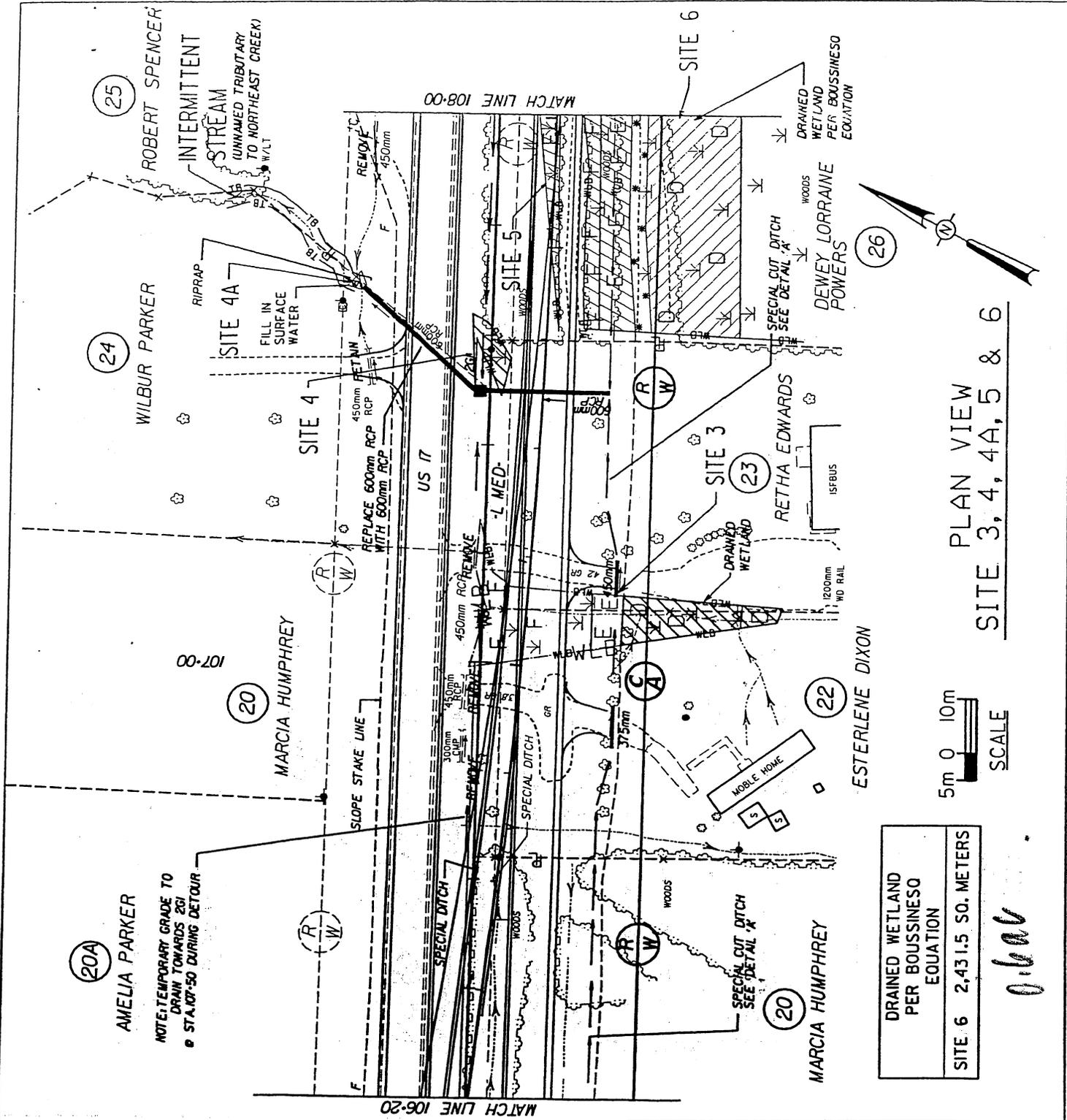
NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLow COUNTY  
STATE PROJ: 8.TI9030I (R-25I4A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 5 OF 81 DATE 1/16/04

PI = 104+60.000  
 EL = 13.850 m  
 VC = 60 m  
 K = 100



PROFILE VIEW  
 SITE 1

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.TI9030I (R-25I4A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 6 OF 81 DATE 7/14/03



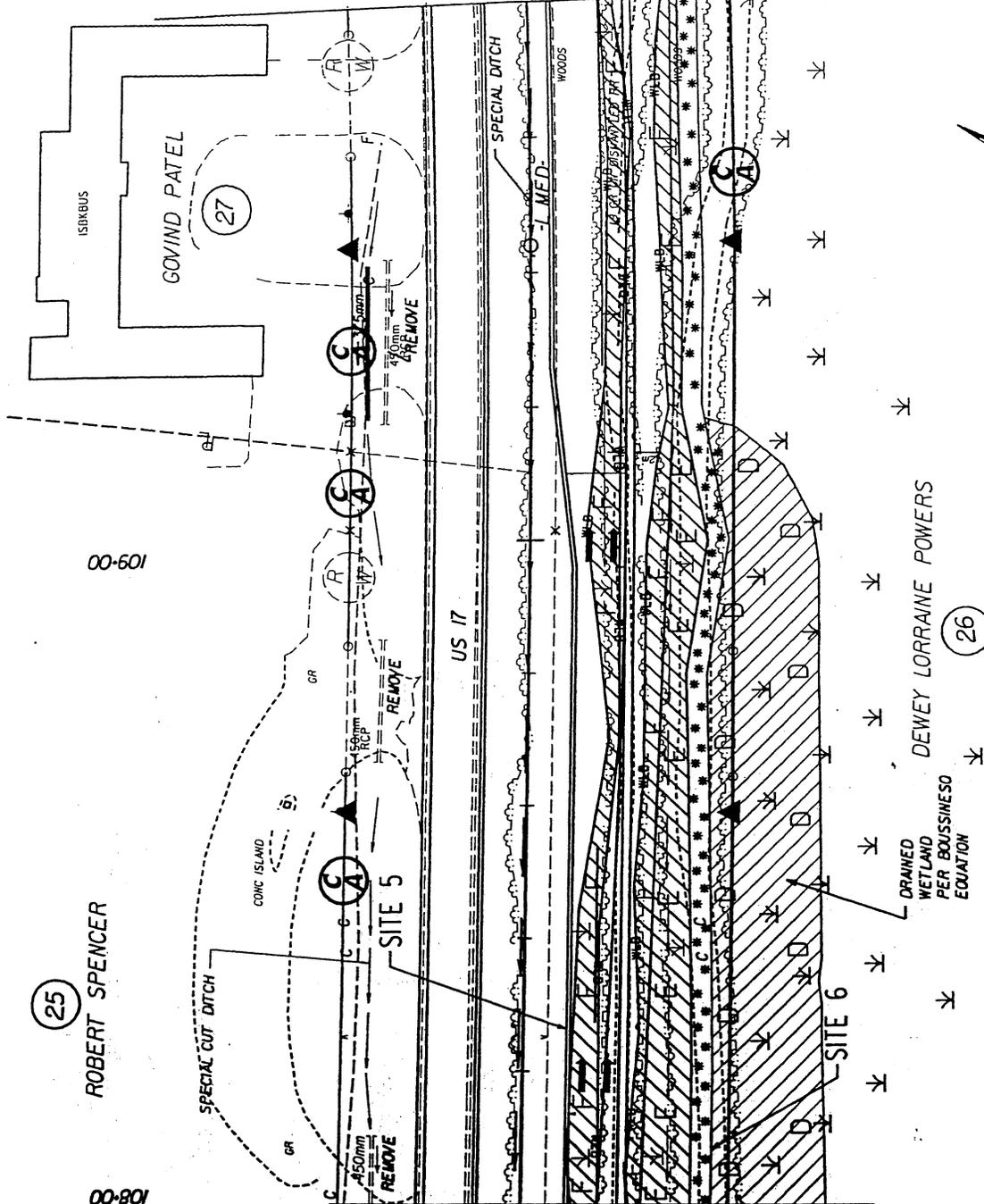
PLAN VIEW  
 SITE 3, 4, 4A, 5 & 6

DRAINED WETLAND PER BOUSSINESO EQUATION
SITE 6 2,431.5 SQ. METERS

0.606

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 7 OF 81 DATE 9/11/03

MATCH LINE 109-80



00-601

ROBERT SPENCER

(25)

108-00

MATCH LINE 108-00

US 17

SPECIAL DITCH

WOODS

L.M.F.D.

SPECIAL CUT DITCH

CONC ISLAND

GR

SITE 5

150mm REMOVE

150mm REMOVE

300mm REMOVE

300mm REMOVE

SITE 6

DRAINED WETLAND PER BOUSSINESQ EQUATION

DEWEY LORRAINE POWERS

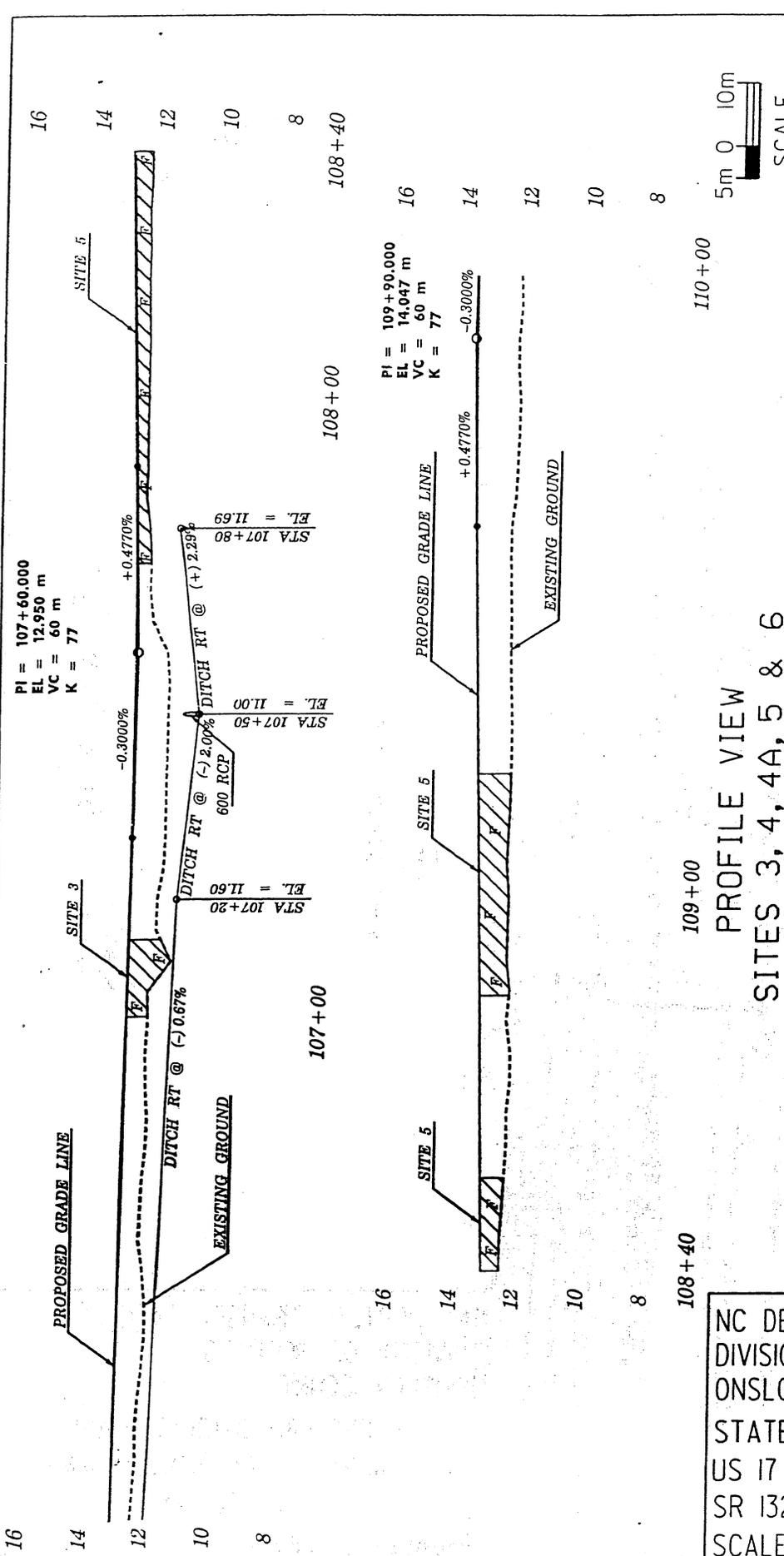
(26)

DRAINED WETLAND PER BOUSSINESQ EQUATION
SITE 6 2,431.5 SQ. METERS

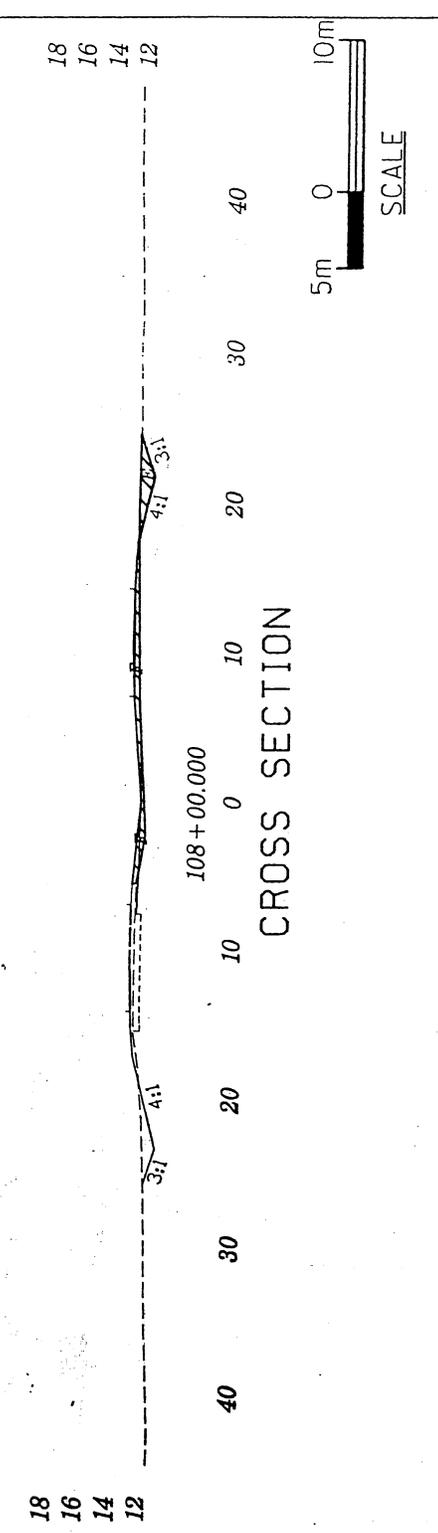


PLAN VIEW  
SITE 5 & 6

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 8 OF 81 DATE 9/13/63

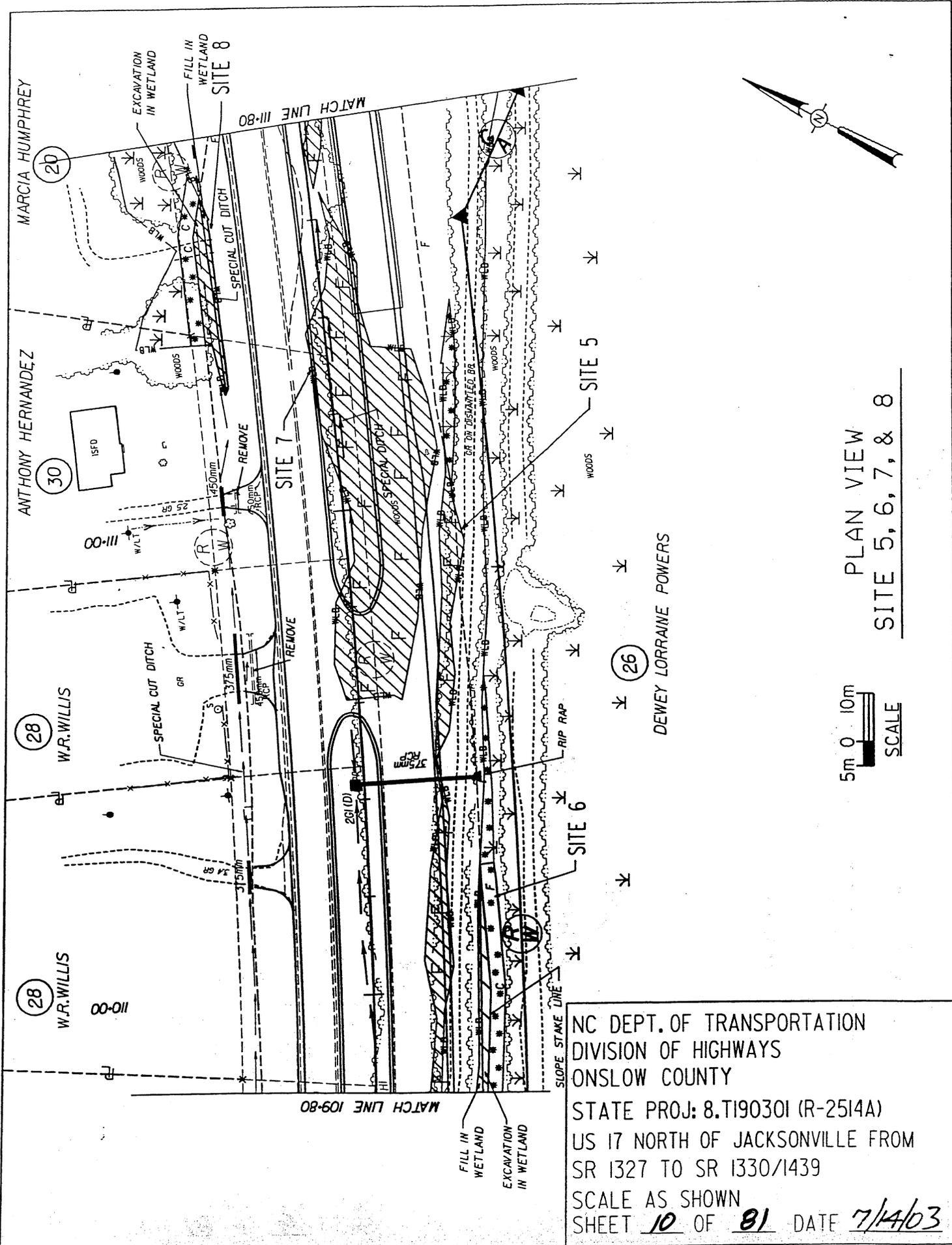


PROFILE VIEW  
SITES 3, 4, 4A, 5 & 6



CROSS SECTION

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLOW COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 9 OF 81 DATE 7/14/03



5m 0 10m  
SCALE

PLAN VIEW  
SITE 5, 6, 7, & 8

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY

STATE PROJ: 8.T19030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439

SCALE AS SHOWN  
 SHEET 10 OF 81 DATE 7/14/03

DEWEY LORRAINE POWERS

MARCIA HUMPHREY

ANTHONY HERNANDEZ

W.R. WILLIS

W.R. WILLIS

20

30

28

28



EXCAVATION IN WETLAND

WOODS

WOODS

WOODS

WOODS

FILL IN WETLAND

WETLAND

SITE 8

REMOVE

REMOVE

REMOVE

REMOVE

MATCH LINE III-80

MATCH LINE 109-80

SITE 7

SITE 6

SITE 5

SPECIAL CUT DITCH

SPECIAL CUT DITCH

SPECIAL CUT DITCH

FILL IN WETLAND

EXCAVATION IN WETLAND

SLOPE STAKE LINE

RIP RAP

RIP RAP

RIP RAP

RIP RAP

RIP RAP

RIP RAP

26

26

26

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26

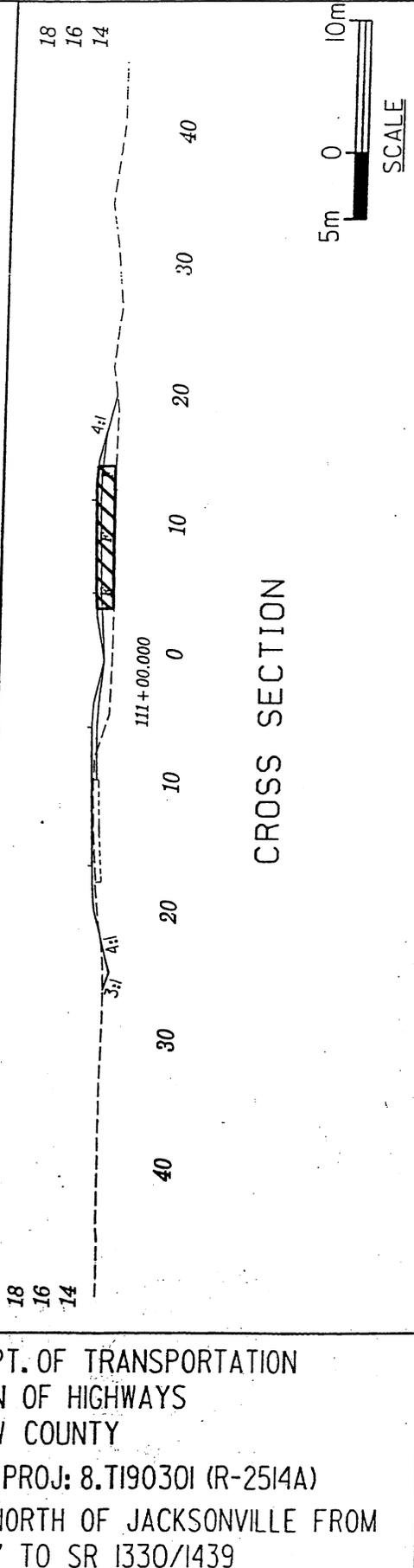
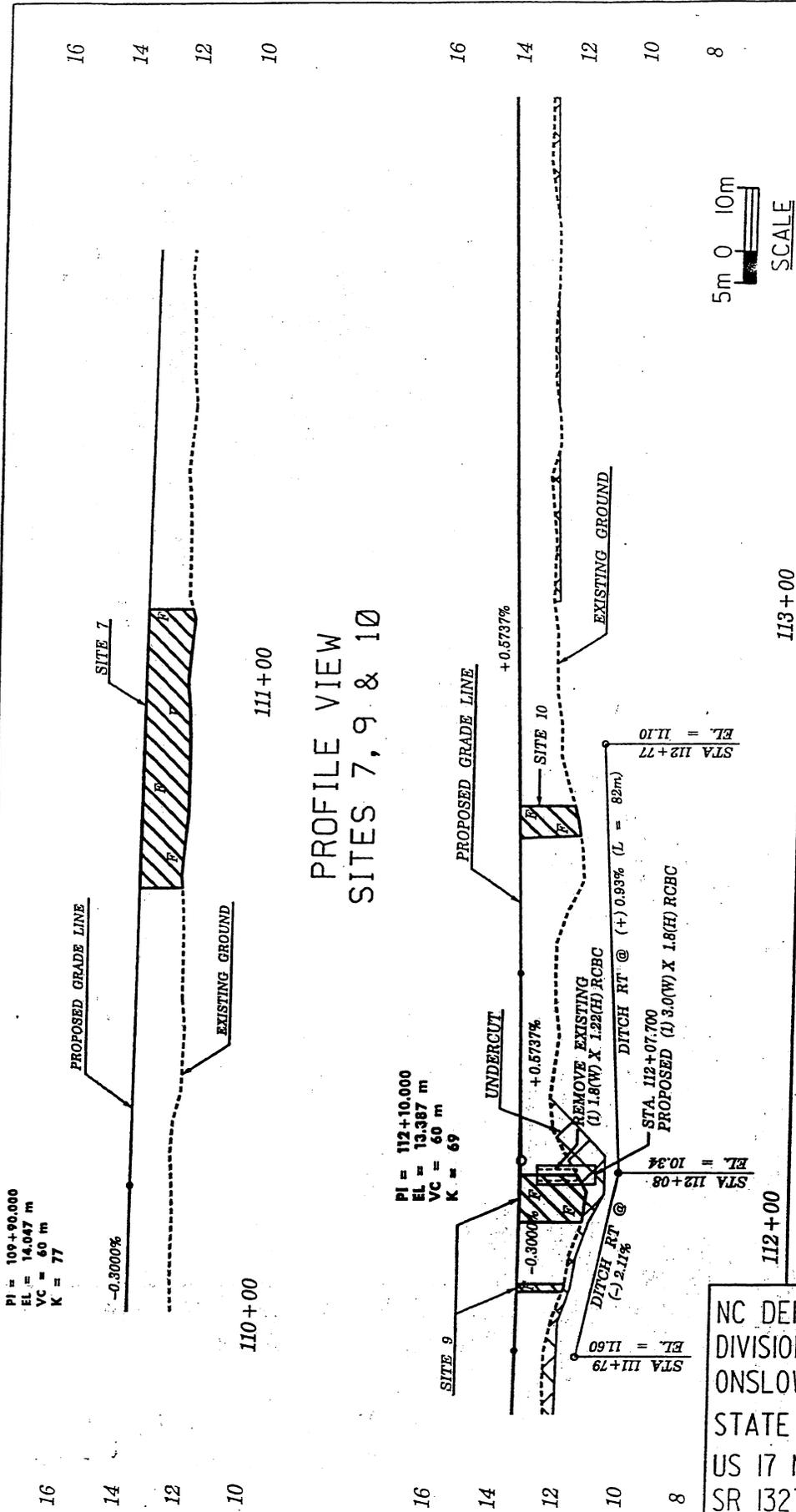
26

26

26

26

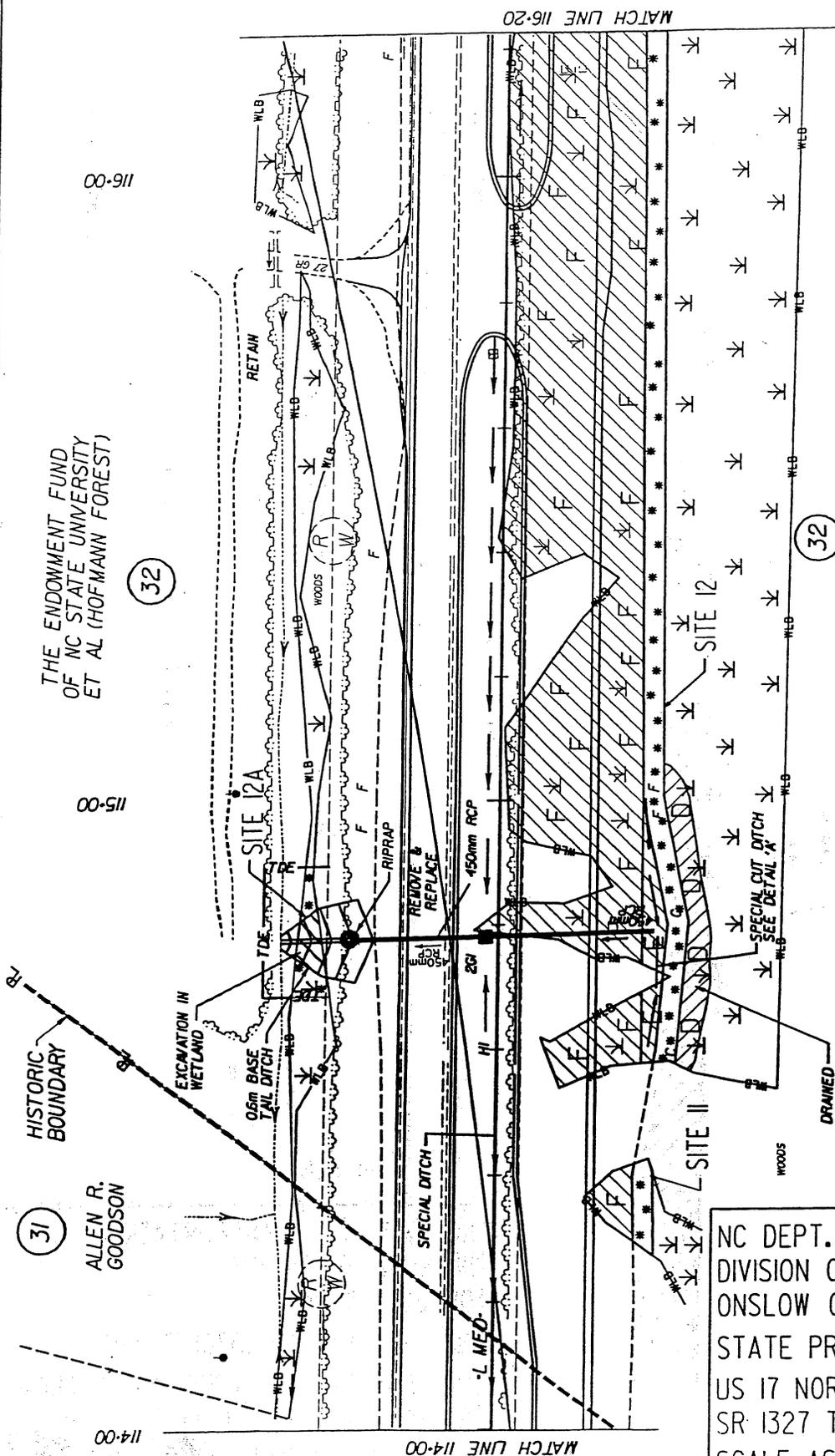




PROFILE VIEW  
SITES 7, 9 & 10

CROSS SECTION

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T19030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 12 OF 81 DATE 7/14/03



THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

32

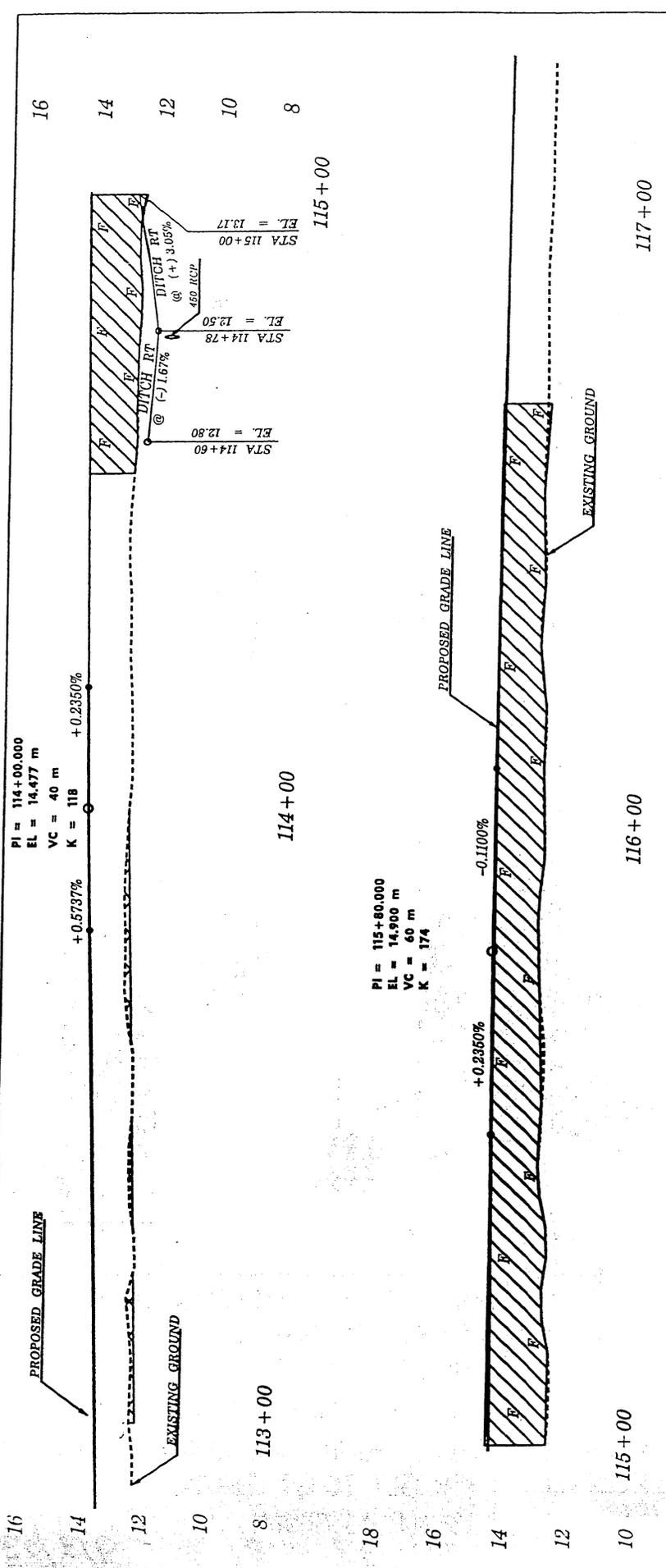
THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

5m 0 10m  
SCALE

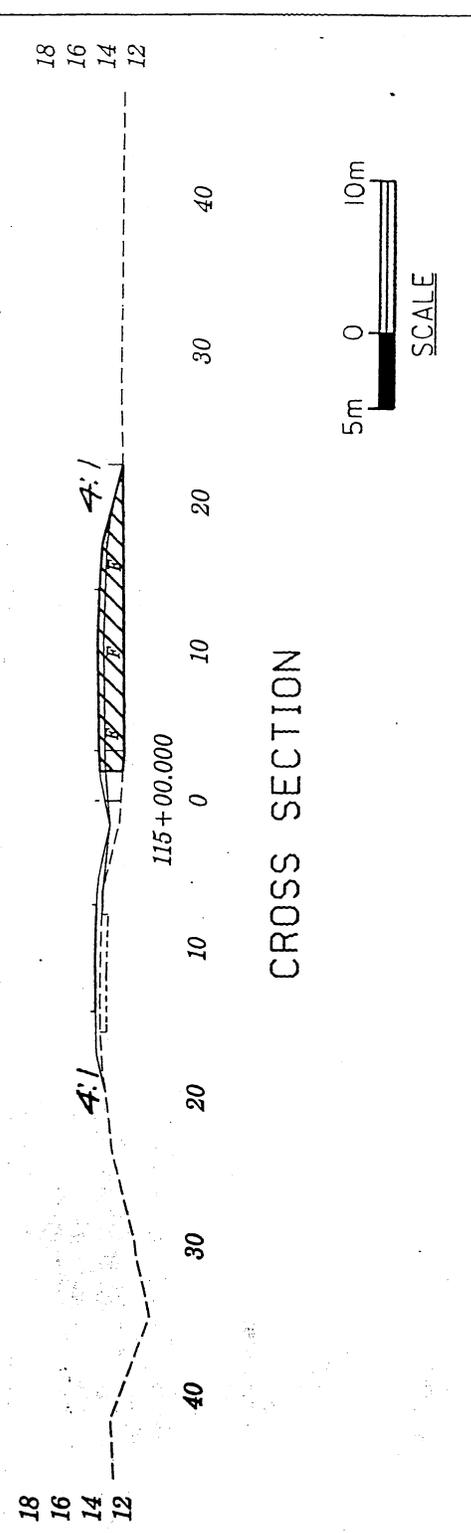
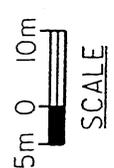
PLAN VIEW  
SITE 11, 12, & 12A

DRAINED WETLAND PER BOUSSINESQ EQUATION	171.6 SQ. METERS
SITE 12	171.6 SQ. METERS

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONslow COUNTY  
STATE PROJ: 8.T19030I (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 13 OF 81 DATE 9/3/03



PROFILE VIEW  
SITE 12



CROSS SECTION

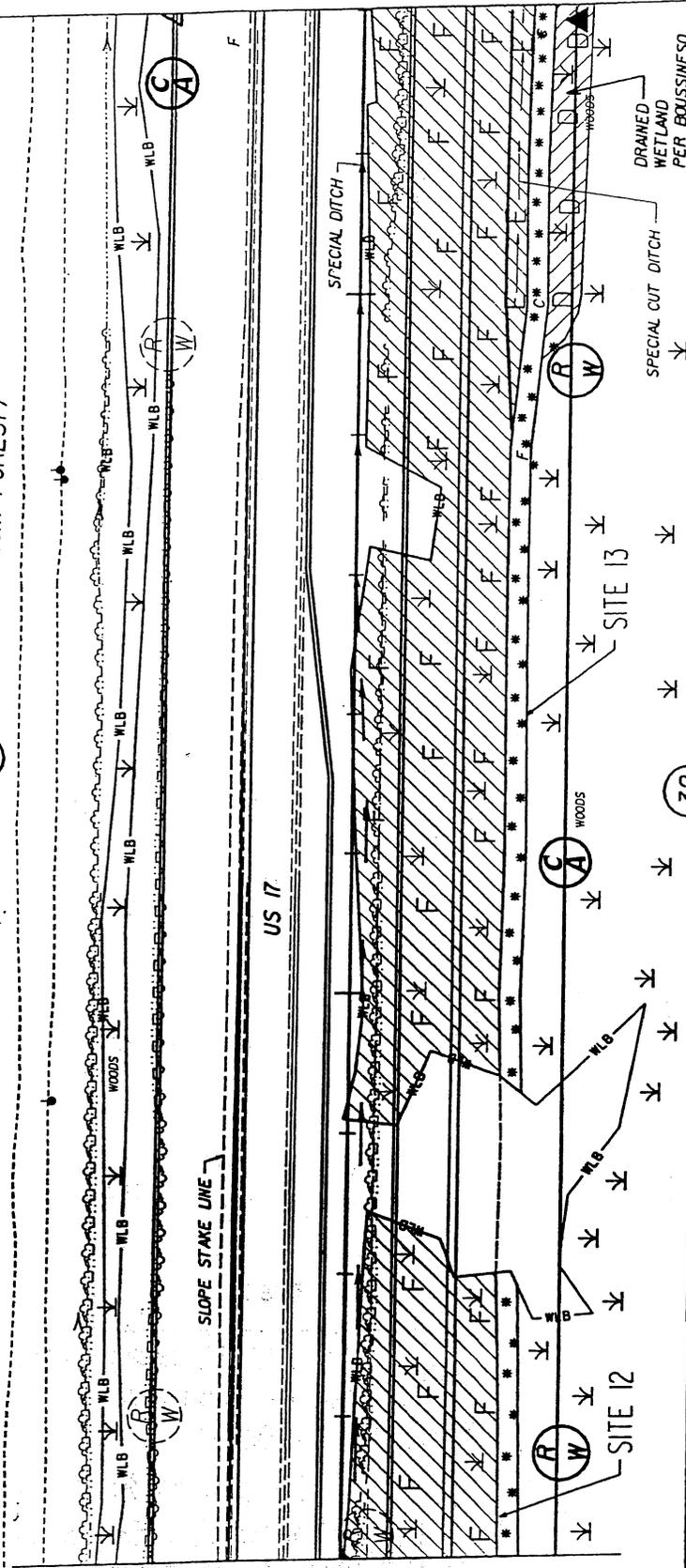
NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN    REV 8/19/03  
 SHEET 14 OF 81    DATE 7/14/03

17-00

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

32

118-00



THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

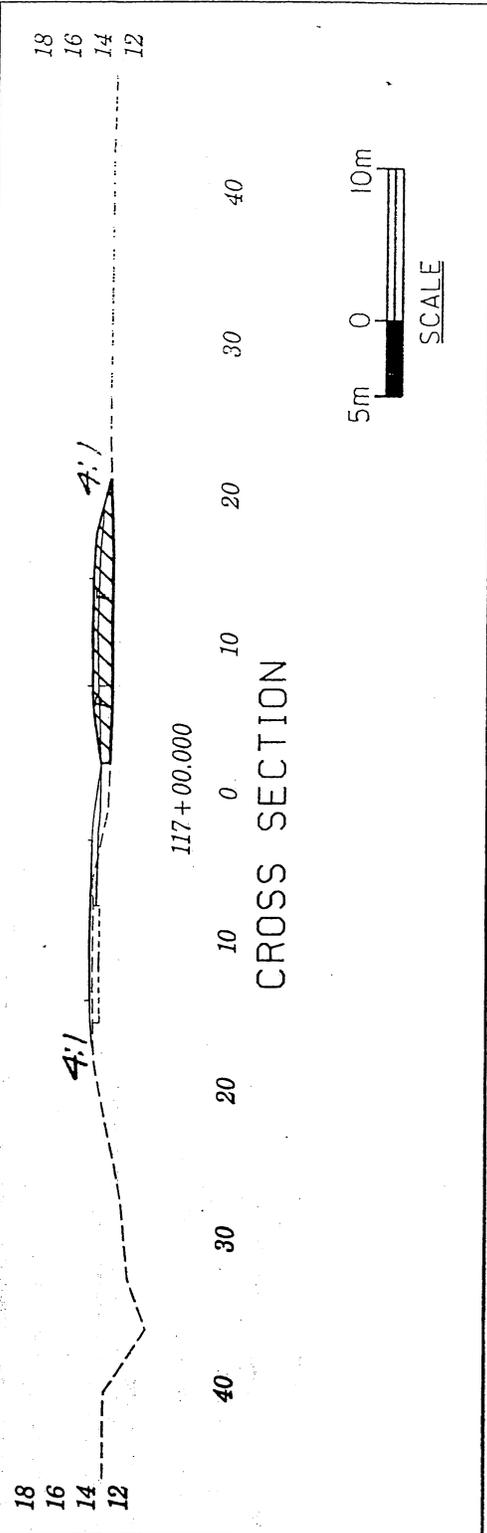
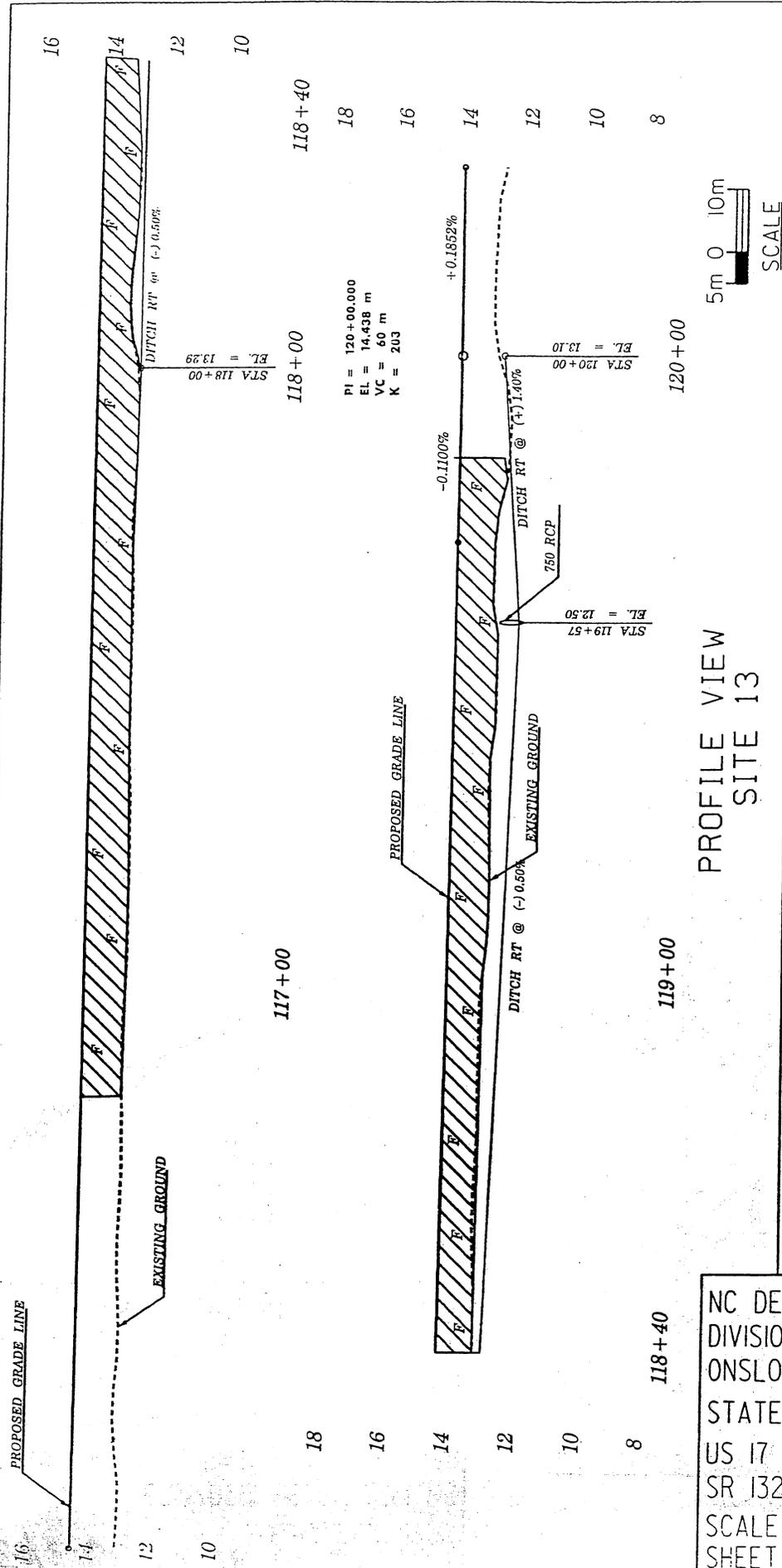
32

DRAINED WETLAND PER BOUSSINESQ EQUATION	SITE 13 884.7 SQ. METERS
---	--------------------------



PLAN VIEW  
SITE 12 & 13

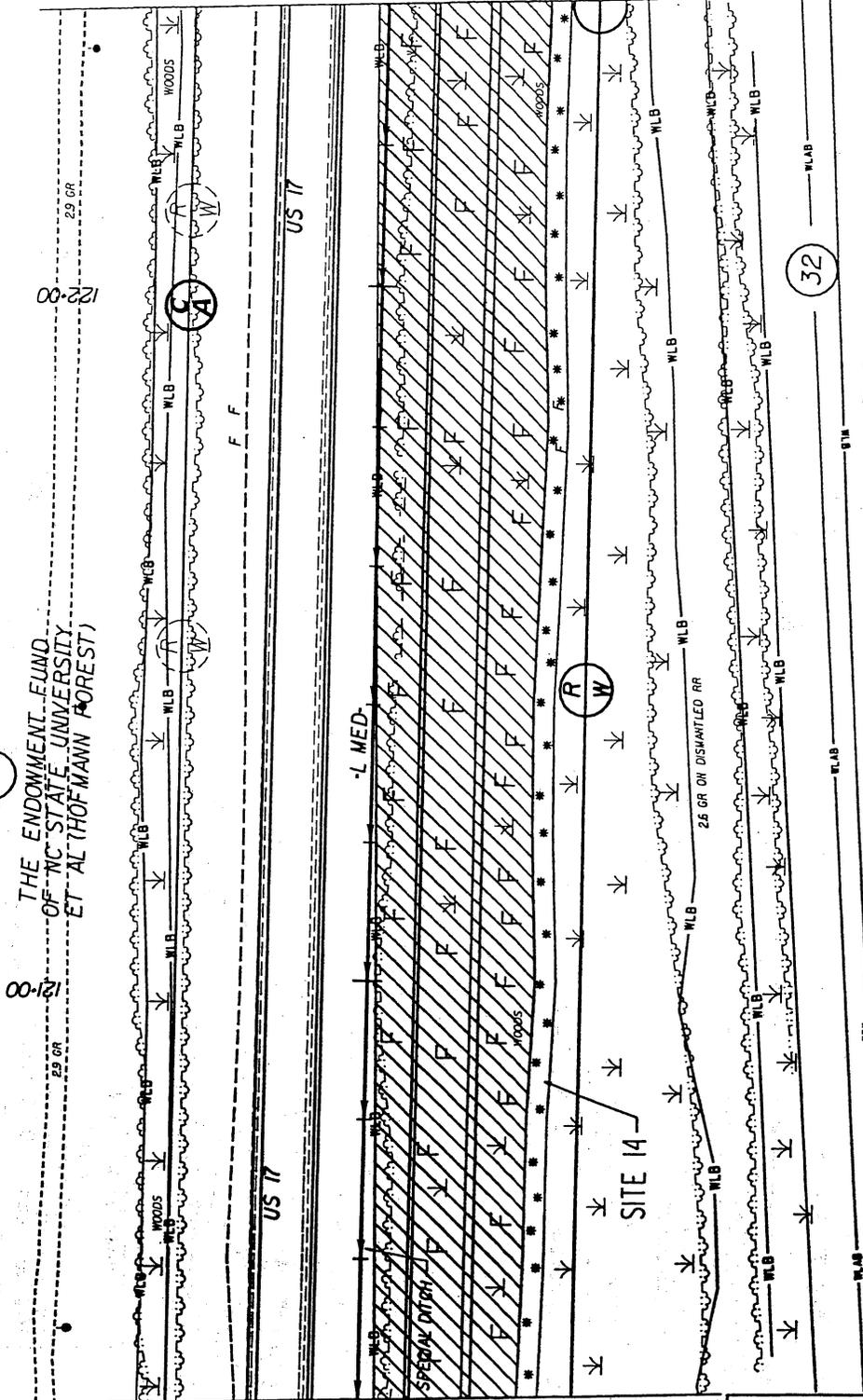
NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLow COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 15 OF 81 DATE 9/3/03



NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 16 OF 81  
 REV 8/19/03  
 DATE 7/14/03



MATCH LINE 122-40



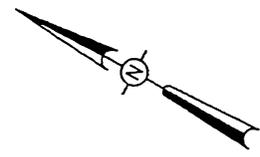
32

THE ENDOWMENT FUND OF NC STATE UNIVERSITY ET AL (HOFMANN FOREST)

21-00

122-80

THE ENDOWMENT FUND OF NC STATE UNIVERSITY ET AL (HOFMANN FOREST)



PLAN VIEW SITE 14

MATCH LINE 120-40

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T19030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 18 OF 81 DATE 7/14/03

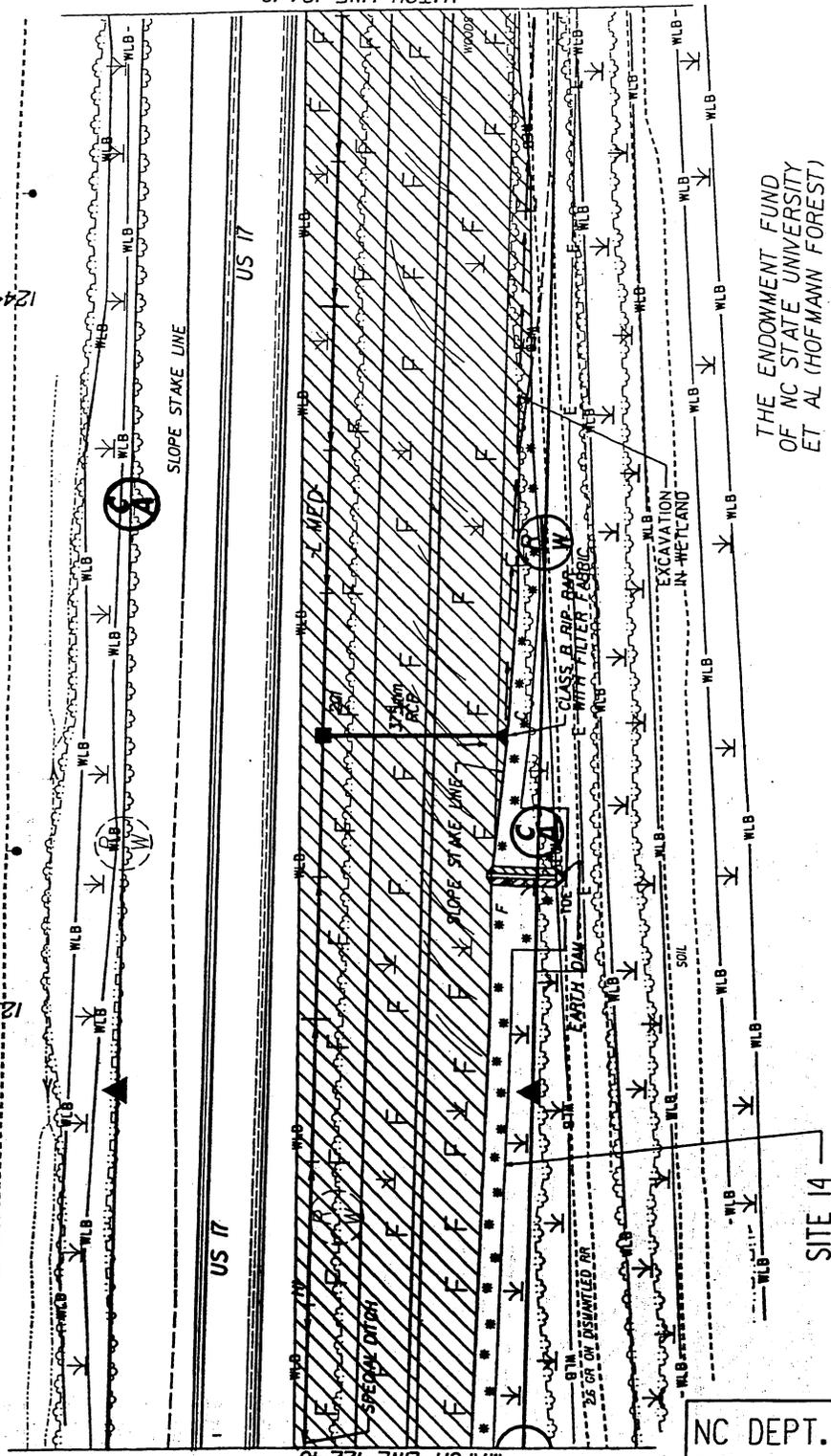
THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

32

123+00

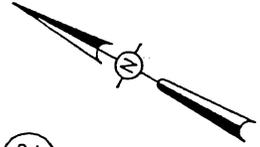
124+00

29 OR



THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

32



PLAN VIEW  
SITE 14

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLOW COUNTY  
STATE PROJ: 8.T19030I (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/I439  
SCALE AS SHOWN  
SHEET 19 OF 81 DATE 7/14/03

32

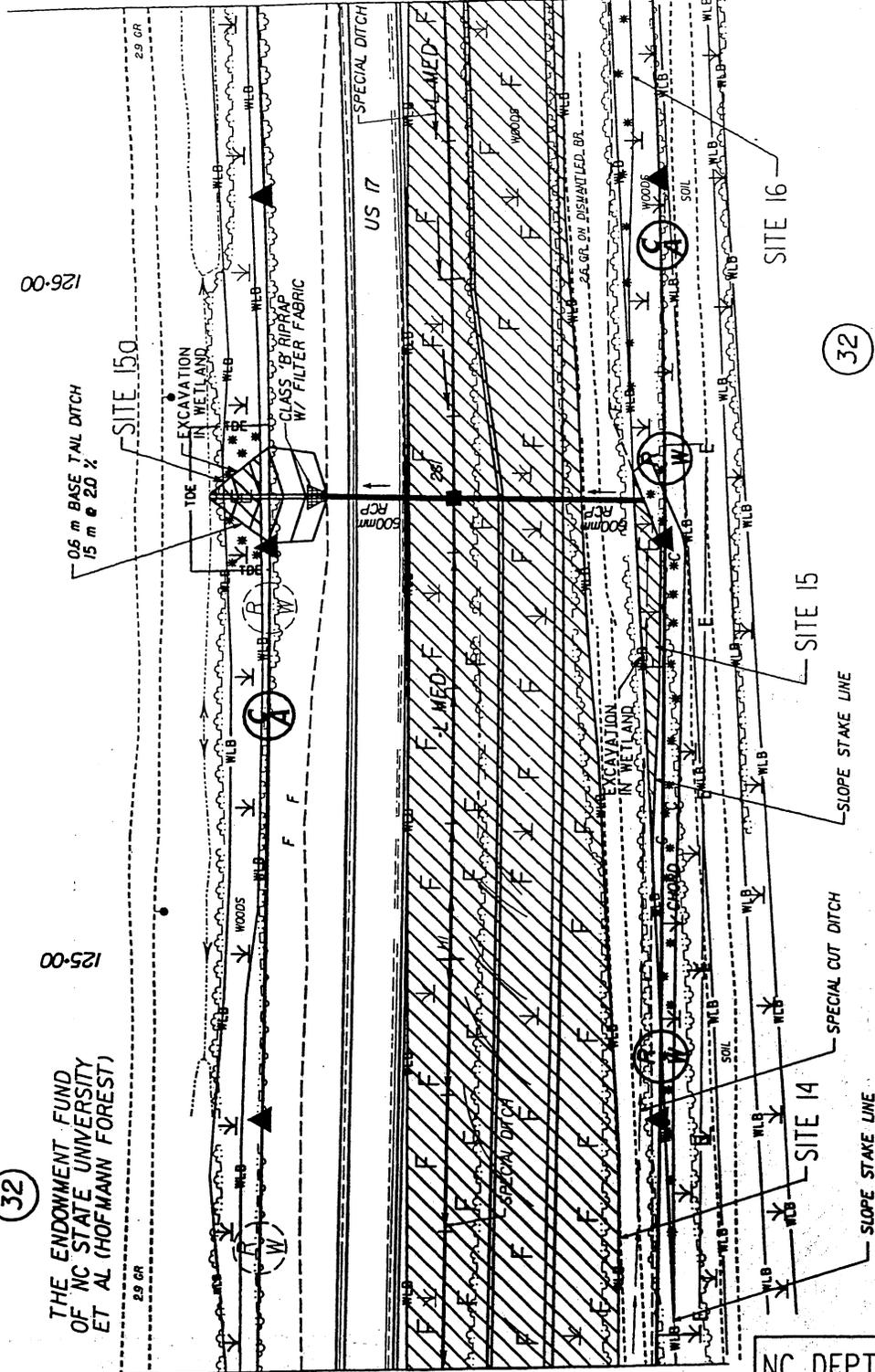
THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

125-00

126-00

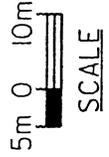
MATCH LINE 126-40

MATCH LINE 124-40



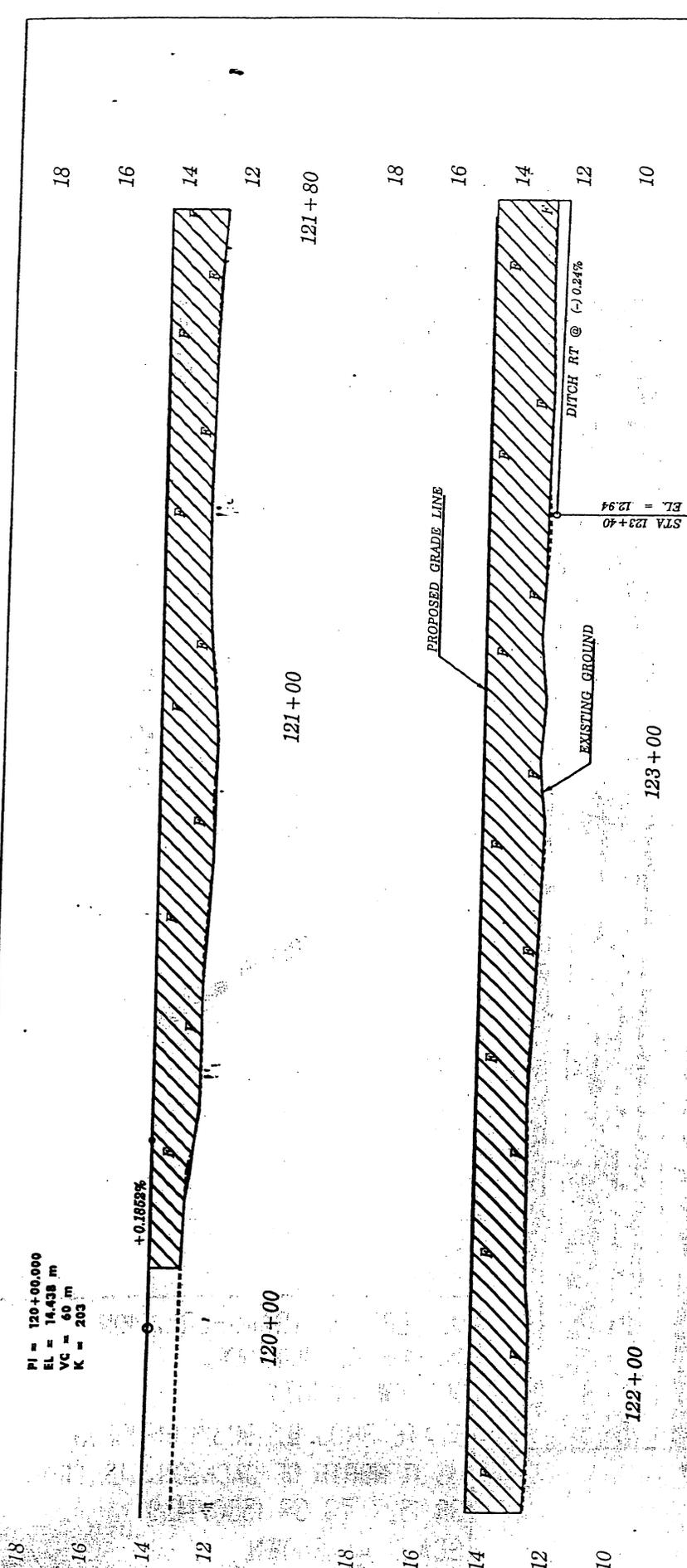
32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

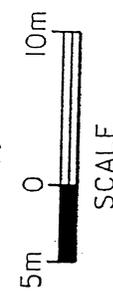
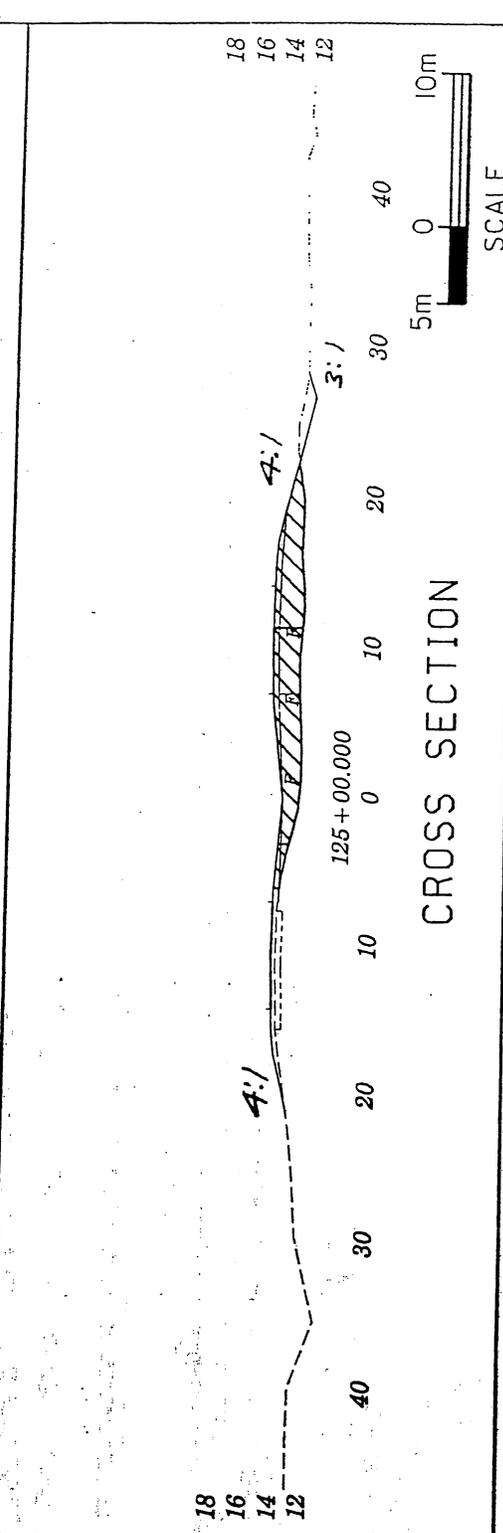
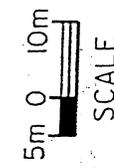


PLAN VIEW  
SITE 14, 15, 15A & 16

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLow COUNTY  
STATE PROJ: 8.T19030I (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 20 OF 81 DATE 7/14/03



PROFILE VIEW  
SITE 14

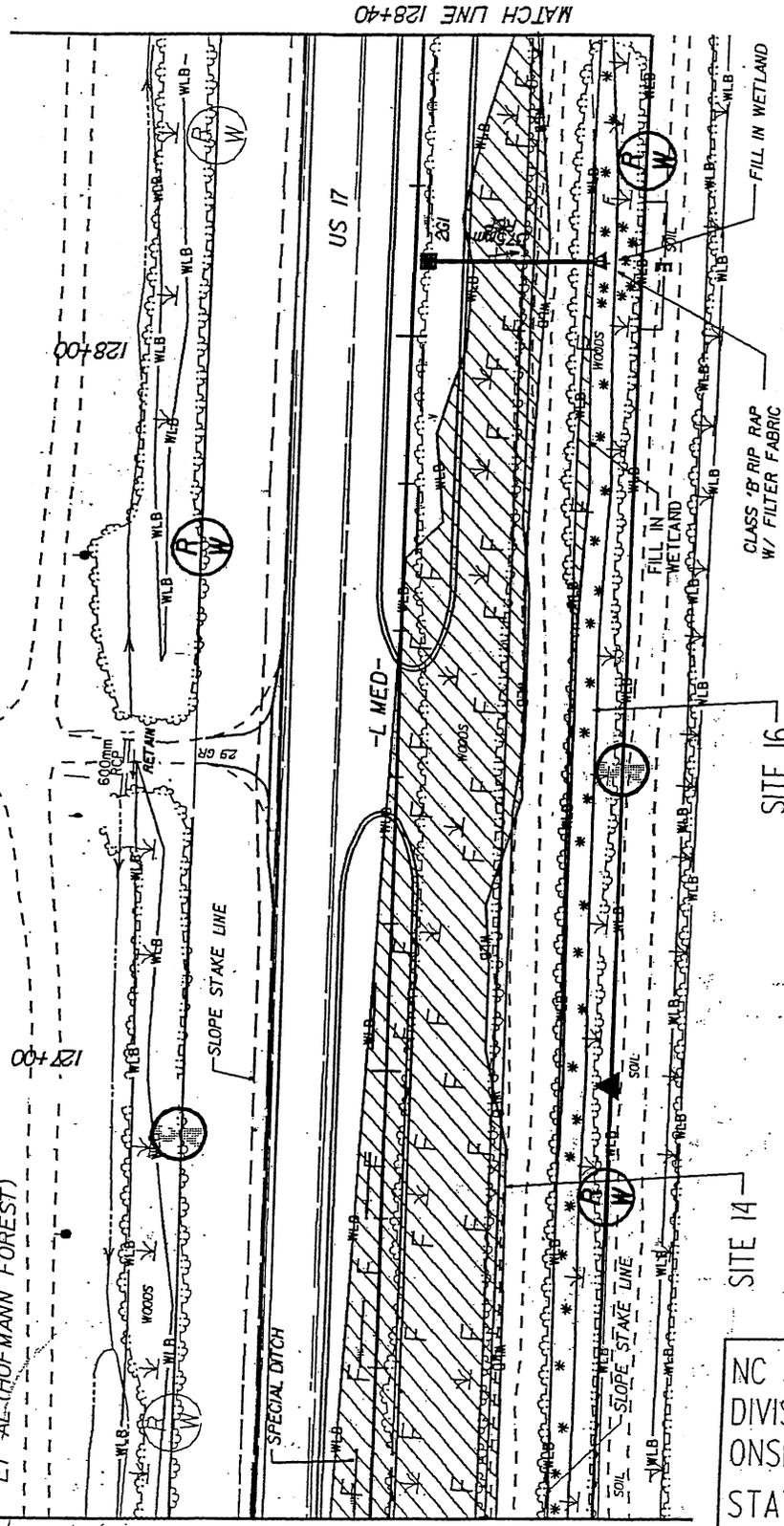


NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 21 OF 81 DATE 7/14/03

REV 8/19/03

32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)



THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

32



PLAN VIEW  
SITE 14 & 16

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONslow COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 22 OF 81 DATE 04/01/04



THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

32

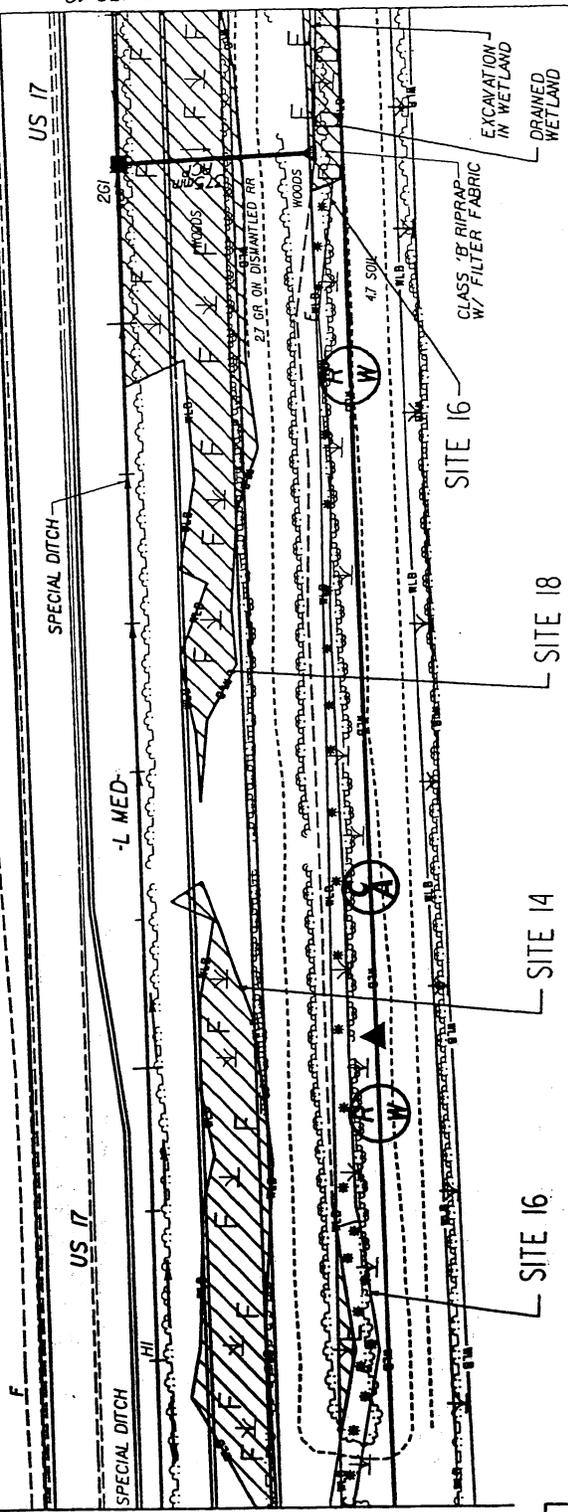
29 GR

129-00

130-00

MATCH LINE 128+40

MATCH LINE 130+40



SITE 16

SITE 14

SITE 18

SITE 16

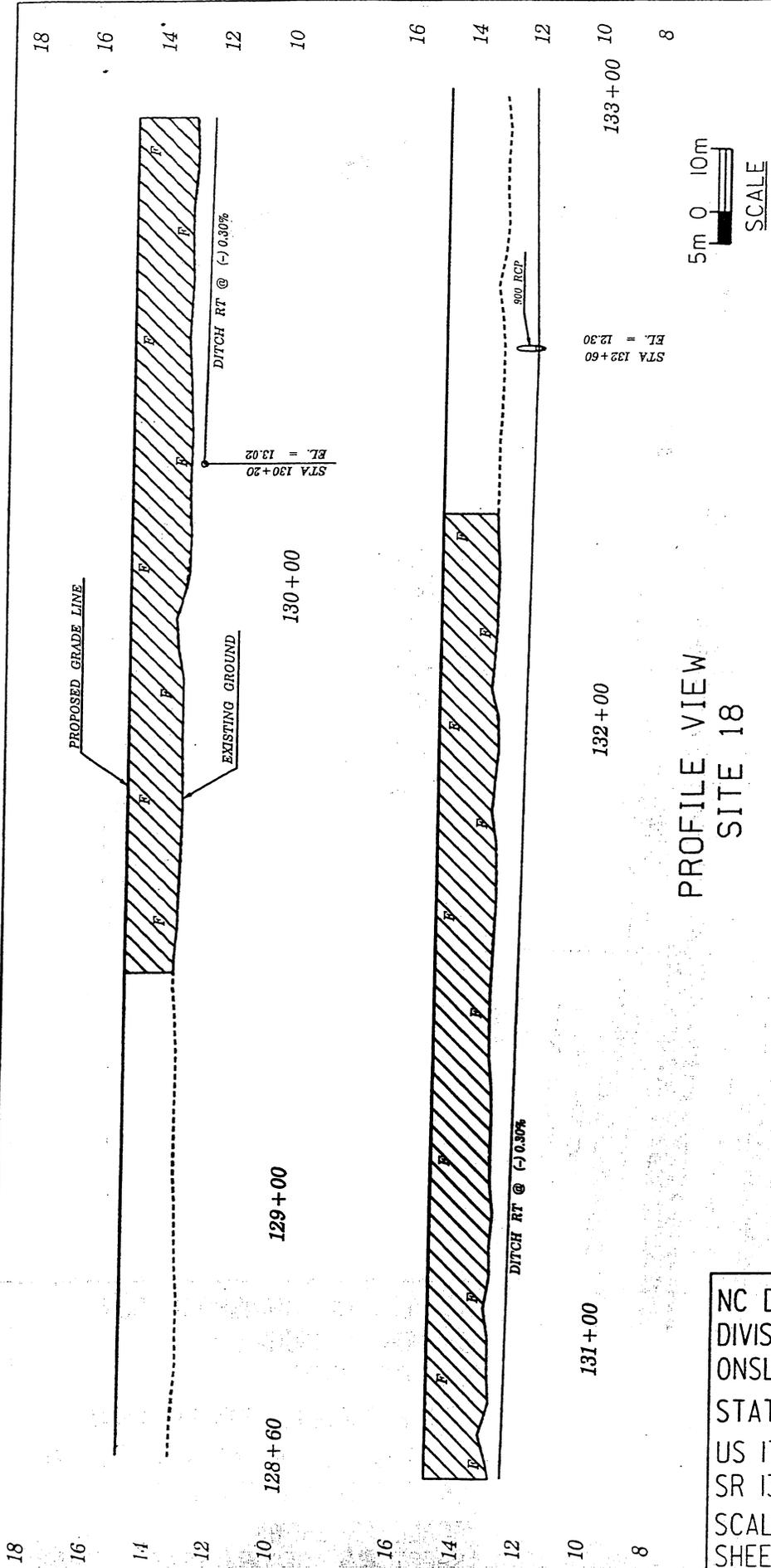
32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

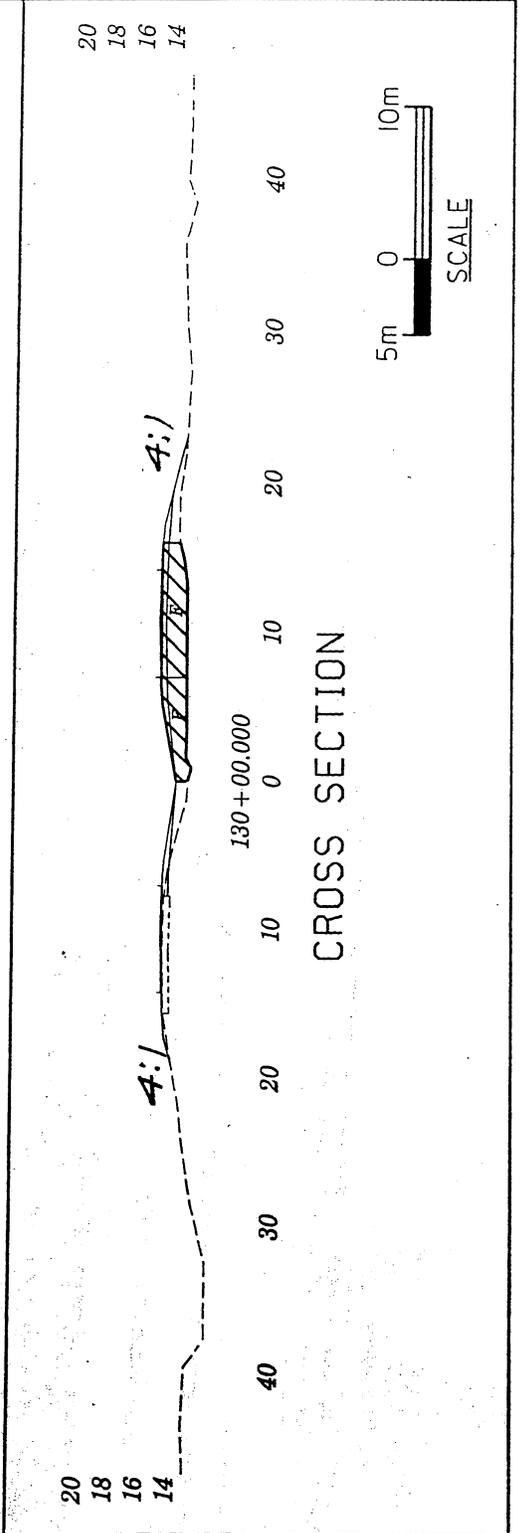


PLAN VIEW  
SITE 14, 16, & 18

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLow COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 29 OF 81 DATE 7/14/03

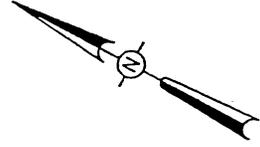
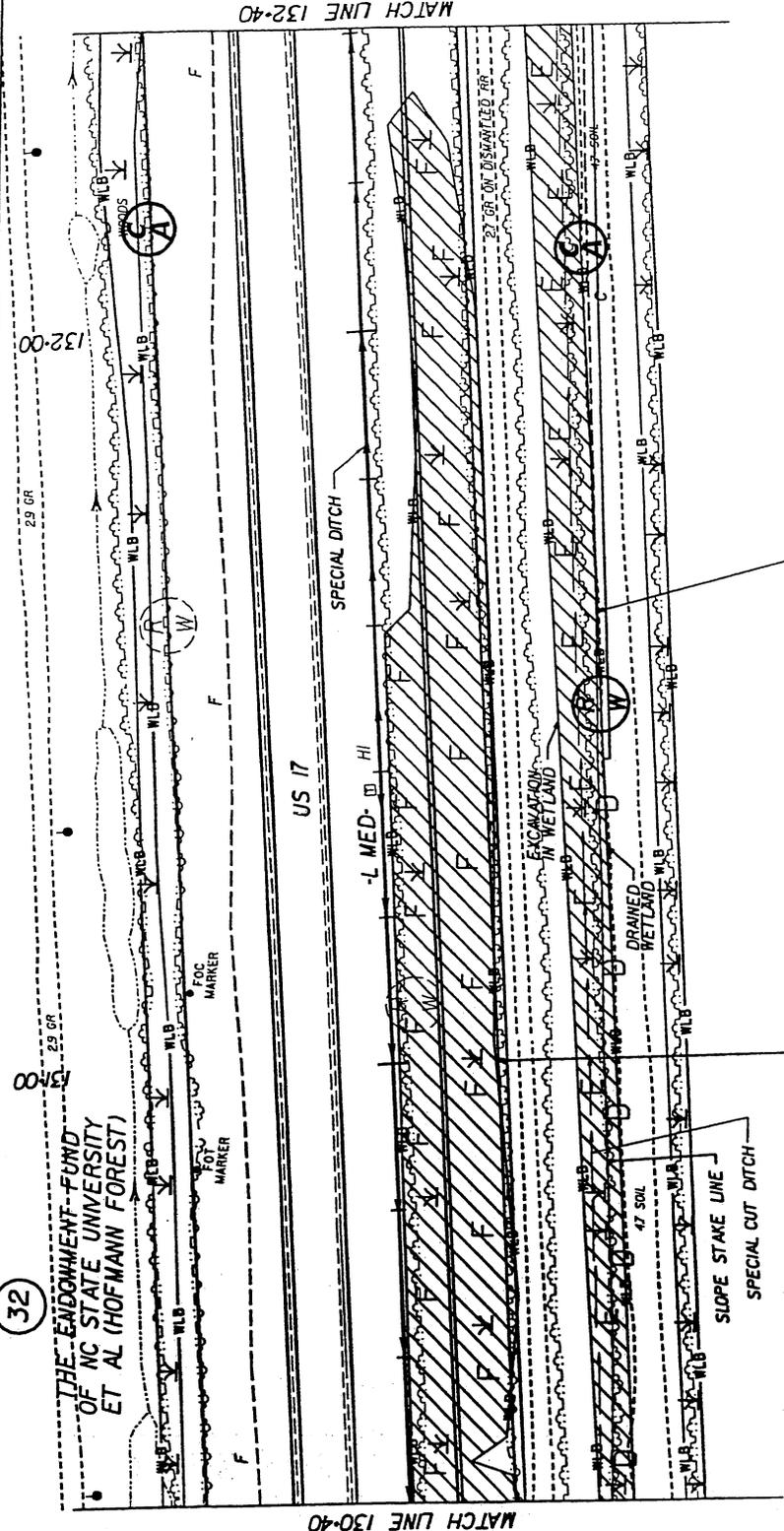


PROFILE VIEW  
SITE 18



CROSS SECTION

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONslow COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 25 OF 81 DATE 7/14/03  
REV 8/19/03



PLAN VIEW  
SITE 16 & 18

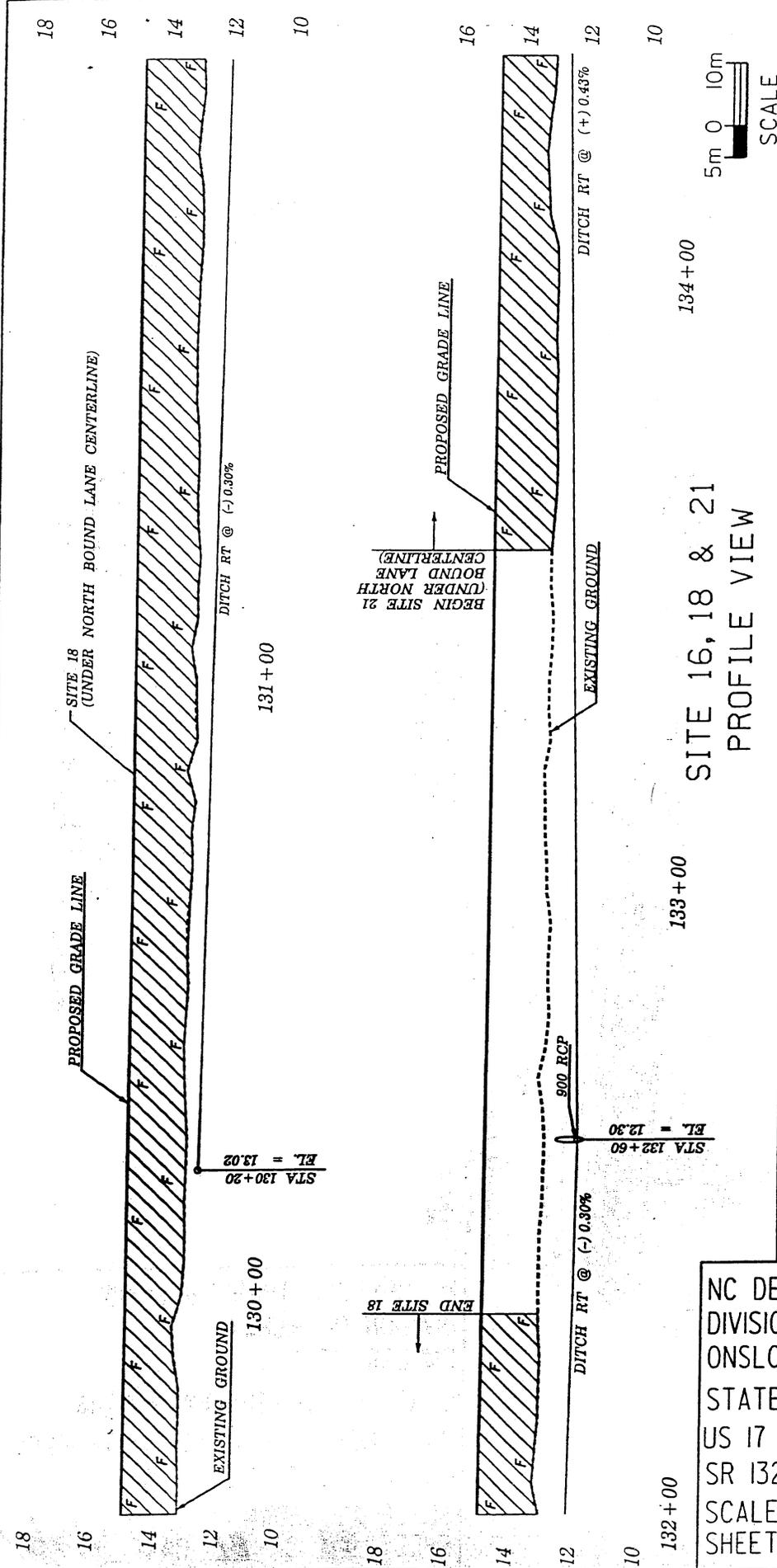
32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

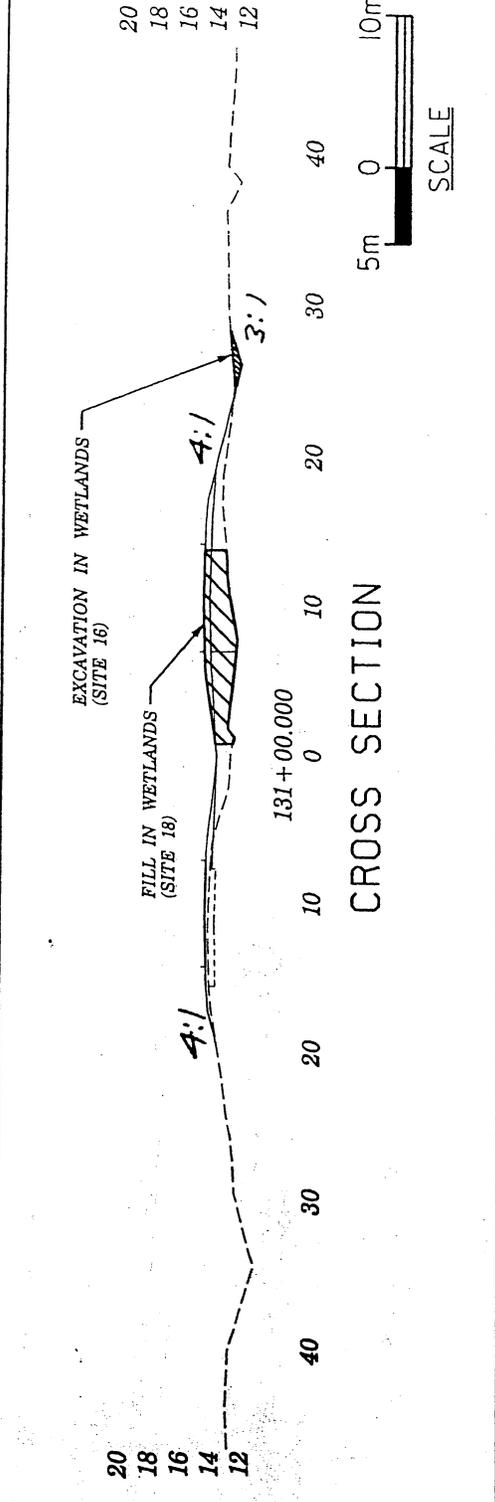
SITE 18

SITE 16

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONslow COUNTY  
STATE PROJ: 8.TI9030I (R-25I4A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/I439  
SCALE AS SHOWN  
SHEET 26 OF 81 DATE 7/14/03



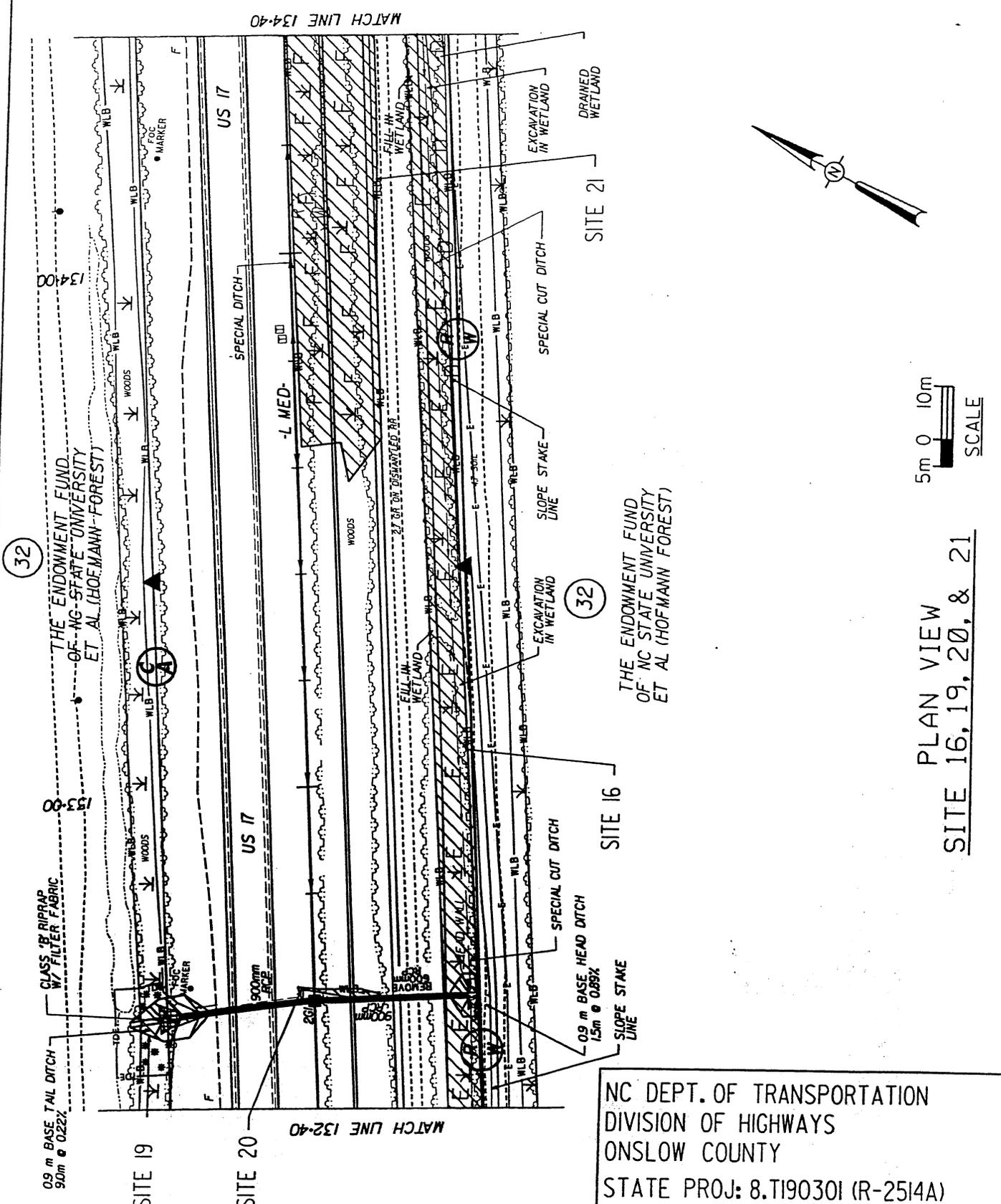
**SITE 16, 18 & 21  
PROFILE VIEW**



**CROSS SECTION**

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T19030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 27 OF 81 DATE 7/14/03

REV 8/19/03



NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 28 OF 81 DATE 7/14/03

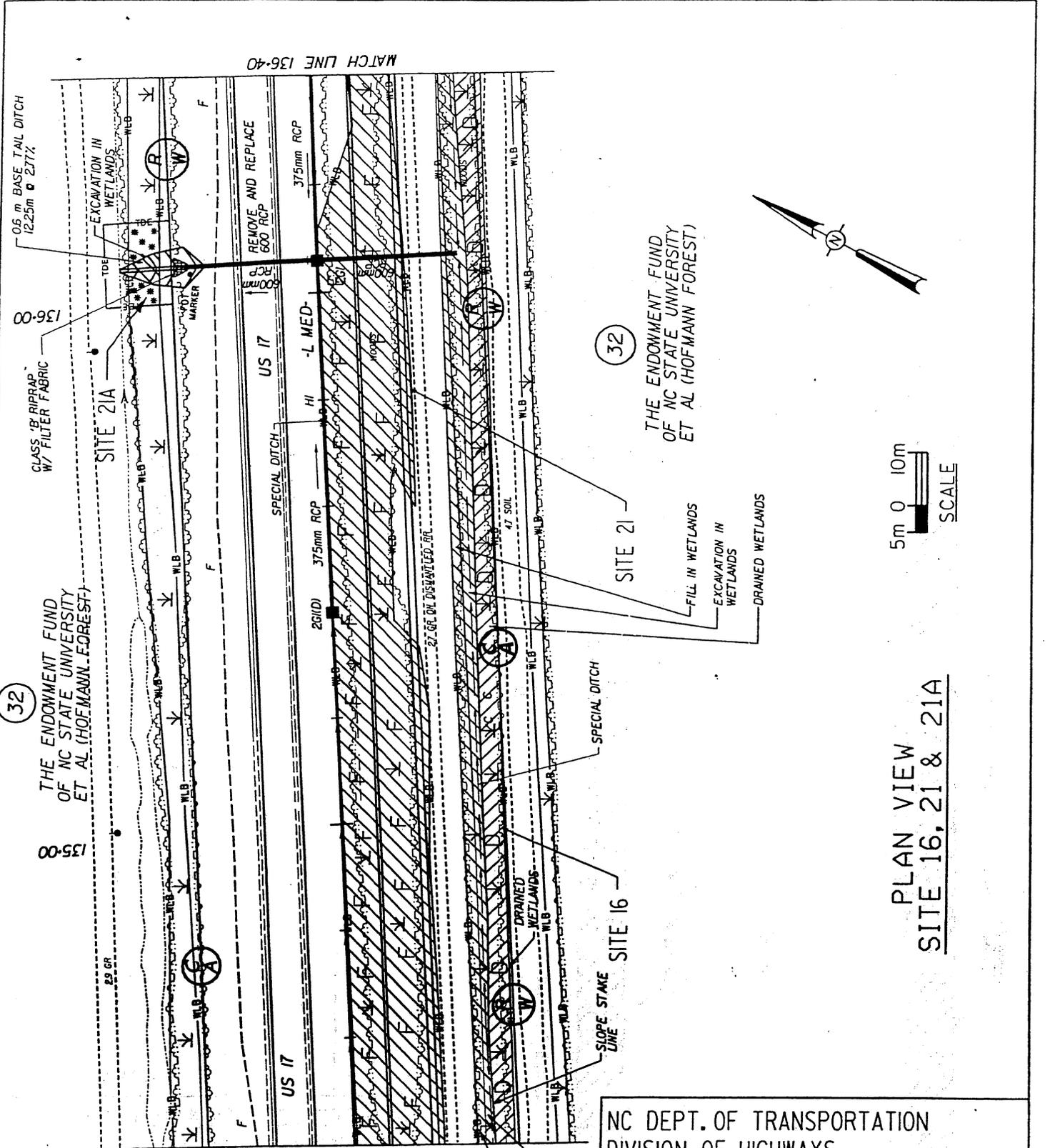
PLAN VIEW  
 SITE 16, 19, 20, & 21

THE ENDOWMENT FUND  
 OF NC STATE UNIVERSITY  
 ET AL (HOFMANN FOREST)

THE ENDOWMENT FUND  
 OF NC STATE UNIVERSITY  
 ET AL (HOFMANN FOREST)

32

32



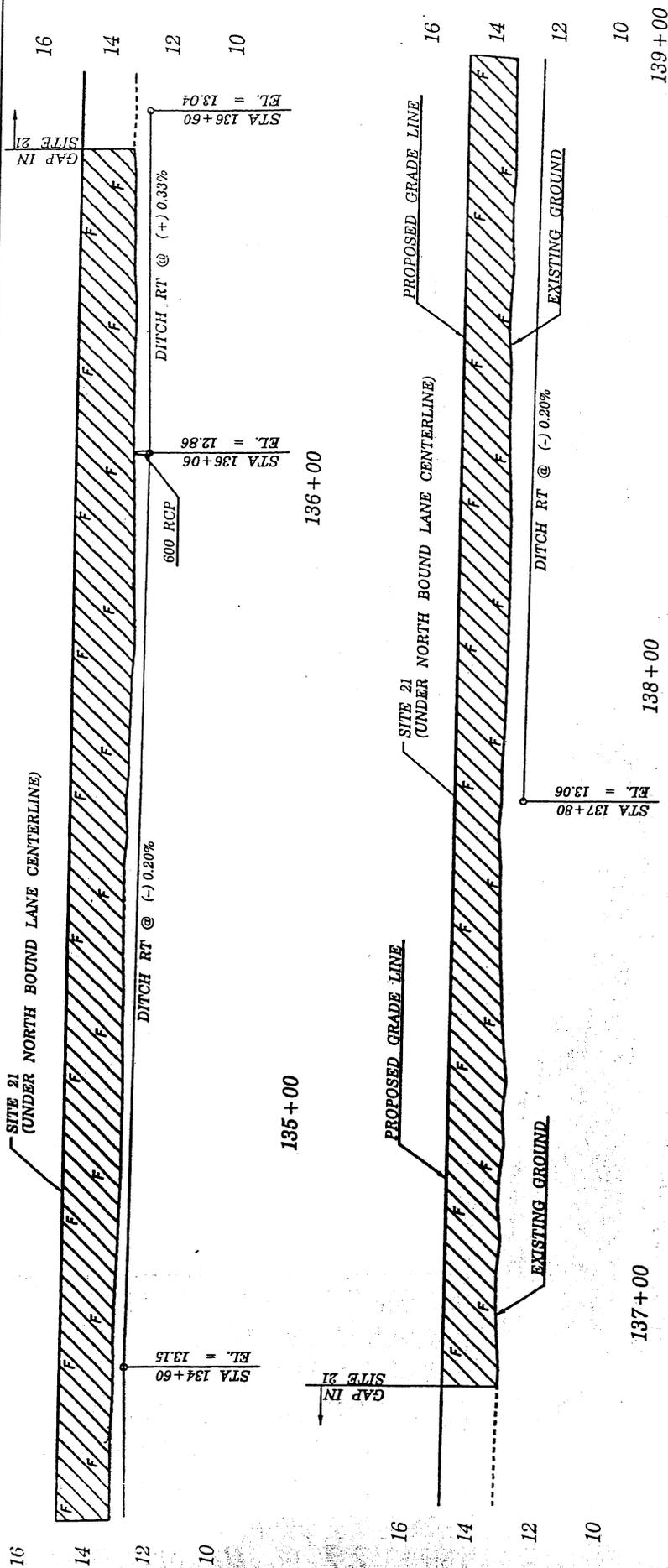
32  
 THE ENDOWMENT FUND  
 OF NC STATE UNIVERSITY  
 ET AL (HOFMANN FOREST)  
 135-00

32  
 THE ENDOWMENT FUND  
 OF NC STATE UNIVERSITY  
 ET AL (HOFMANN FOREST)

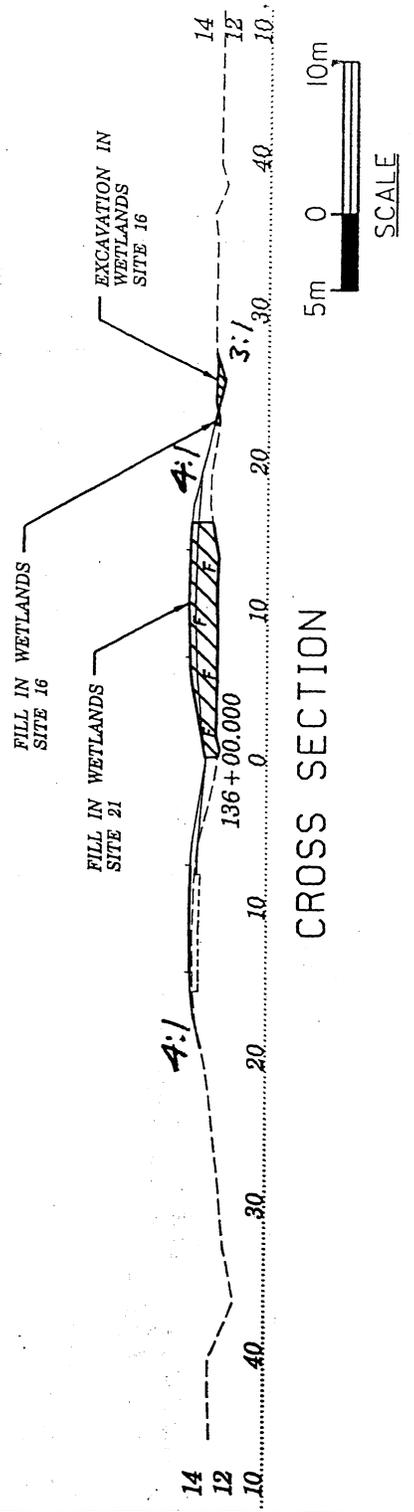


PLAN VIEW  
 SITE 16, 21 & 21A

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 29 OF 81 DATE 7/14/03



SITE 16 & 21  
PROFILE VIEW



CROSS SECTION

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 30 OF 81 DATE 7/14/03  
 REV 8/19/03

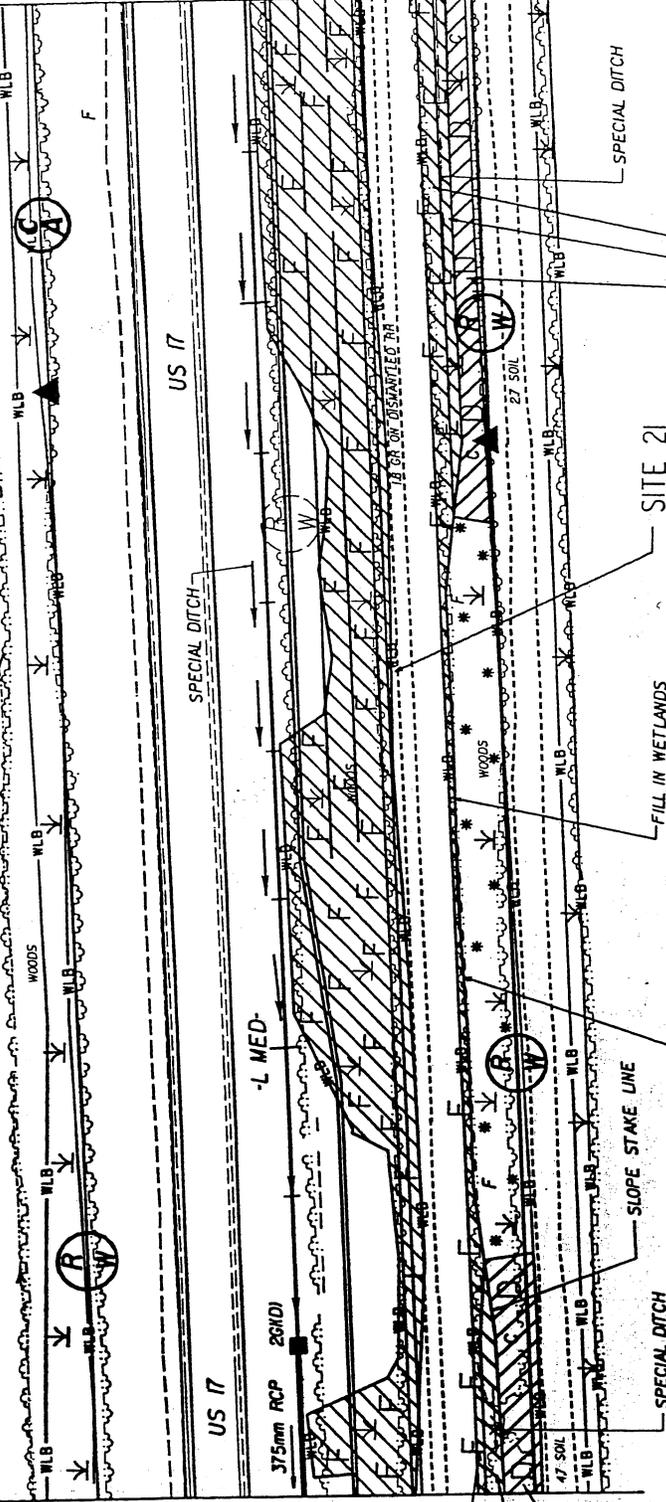
THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

32

SOIL

137+00

138+00



MATCH LINE 136+40

US 17

MATCH LINE 138+40

FILL IN WETLANDS  
EXCAVATION IN WETLANDS  
DRAINED WETLANDS

SPECIAL DITCH  
FILL IN WETLANDS  
EXCAVATION IN WETLANDS  
DRAINED WETLANDS

SITE 21

FILL IN WETLANDS

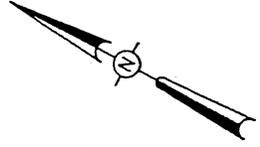
SLOPE STAKE LINE

SPECIAL DITCH

SITE 16

32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)



PLAN VIEW  
SITE 16 & 21

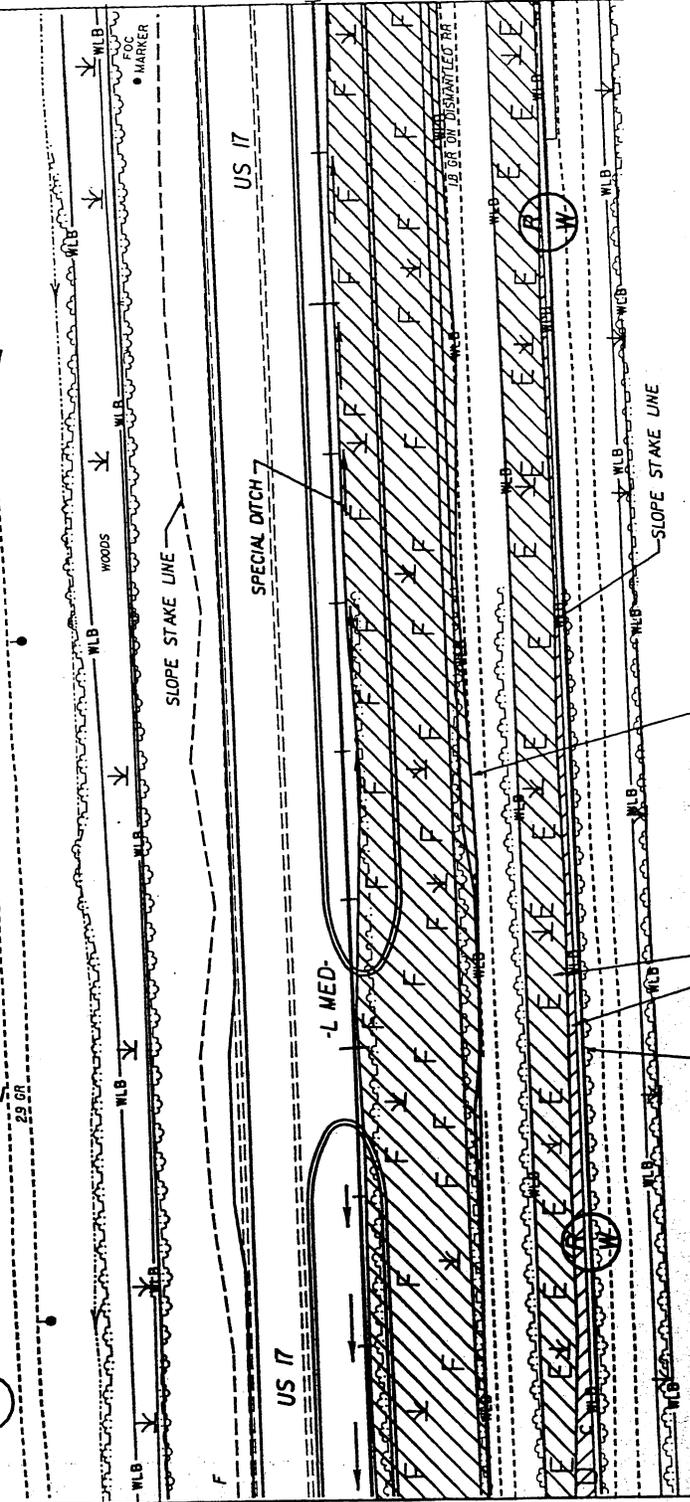
NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLOW COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 31 OF 81 DATE 7/14/03

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

32

140-00

139-00



SITE 21

SITE 16

32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)



PLAN VIEW  
SITE 16 & 21

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLOW COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 32 OF 81 DATE 7/14/03

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

0.6m BASE TAIL DITCH  
3.0m @ 0.30:1

CLASS 'B' RIPRAP  
W/ FILTER FABRIC

US 17

SPECIAL DITCH

MATCH LINE 140-40

MATCH LINE 142-40

261(D)

600mm RCP

PCI

TO BE RECONSTRUCTED

0.6 m BASE HEAD DITCH  
3.0m @ 0.30:1

SITE 16

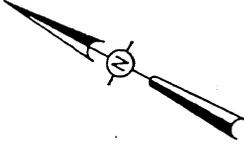
SITE 21

SPECIAL CUT DITCH

EXCAVATION IN  
WETLANDS  
-DRAINED WETLANDS

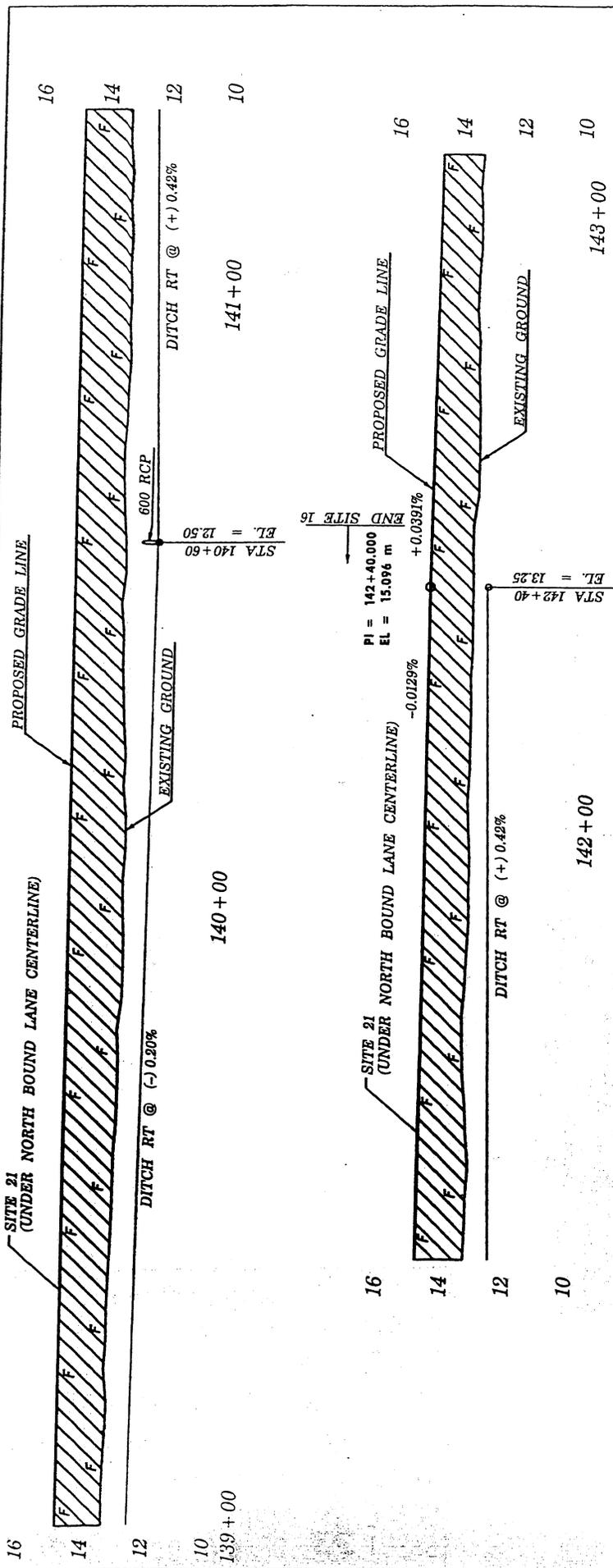
32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

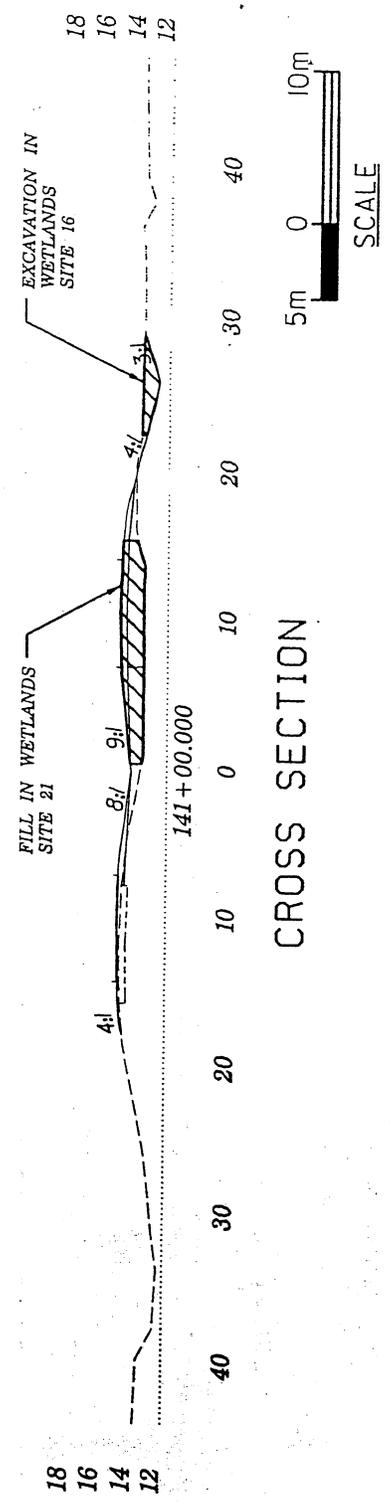
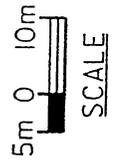


PLAN VIEW  
SITE 16, 21, & 21B

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONslow COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 33 OF 81 DATE 7/14/63

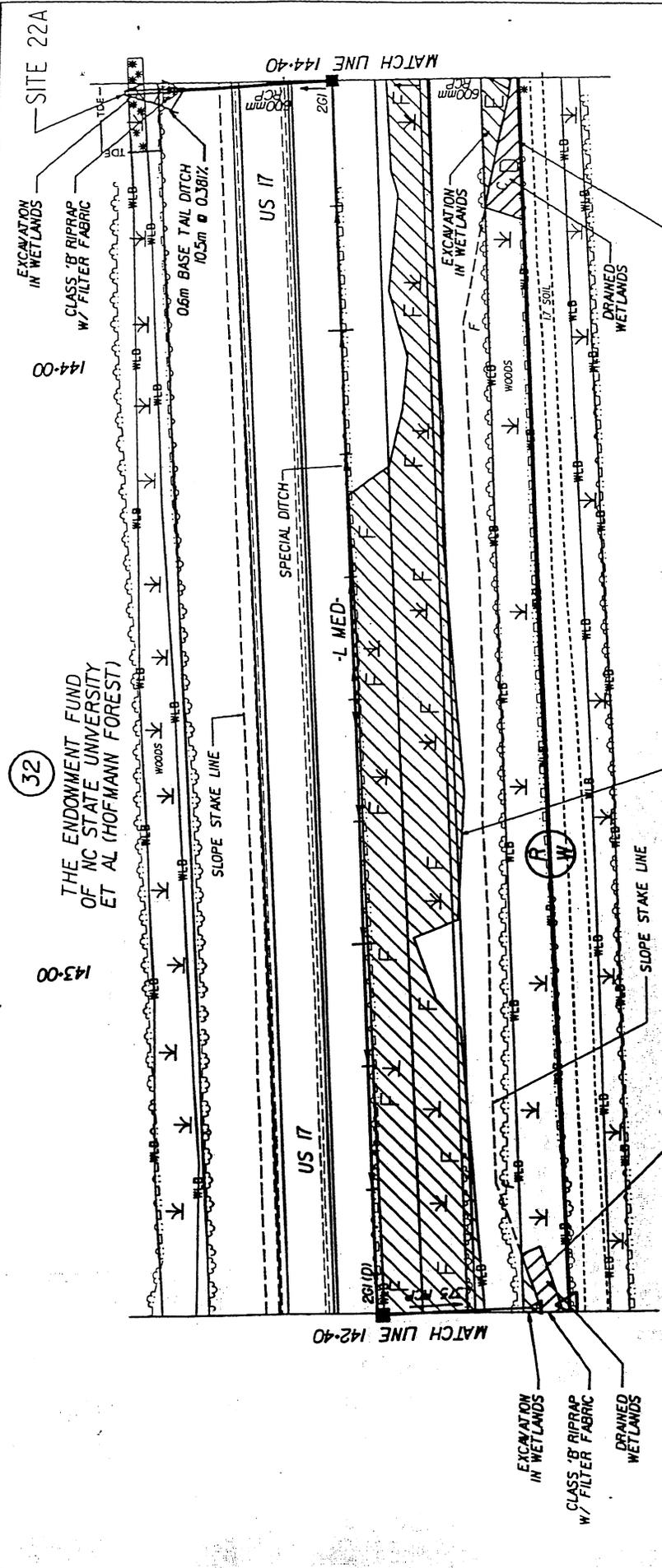


SITE 16 & 21  
PROFILE VIEW



CROSS SECTION

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 34 OF 81 DATE 7/14/03



32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

143+00

144+00

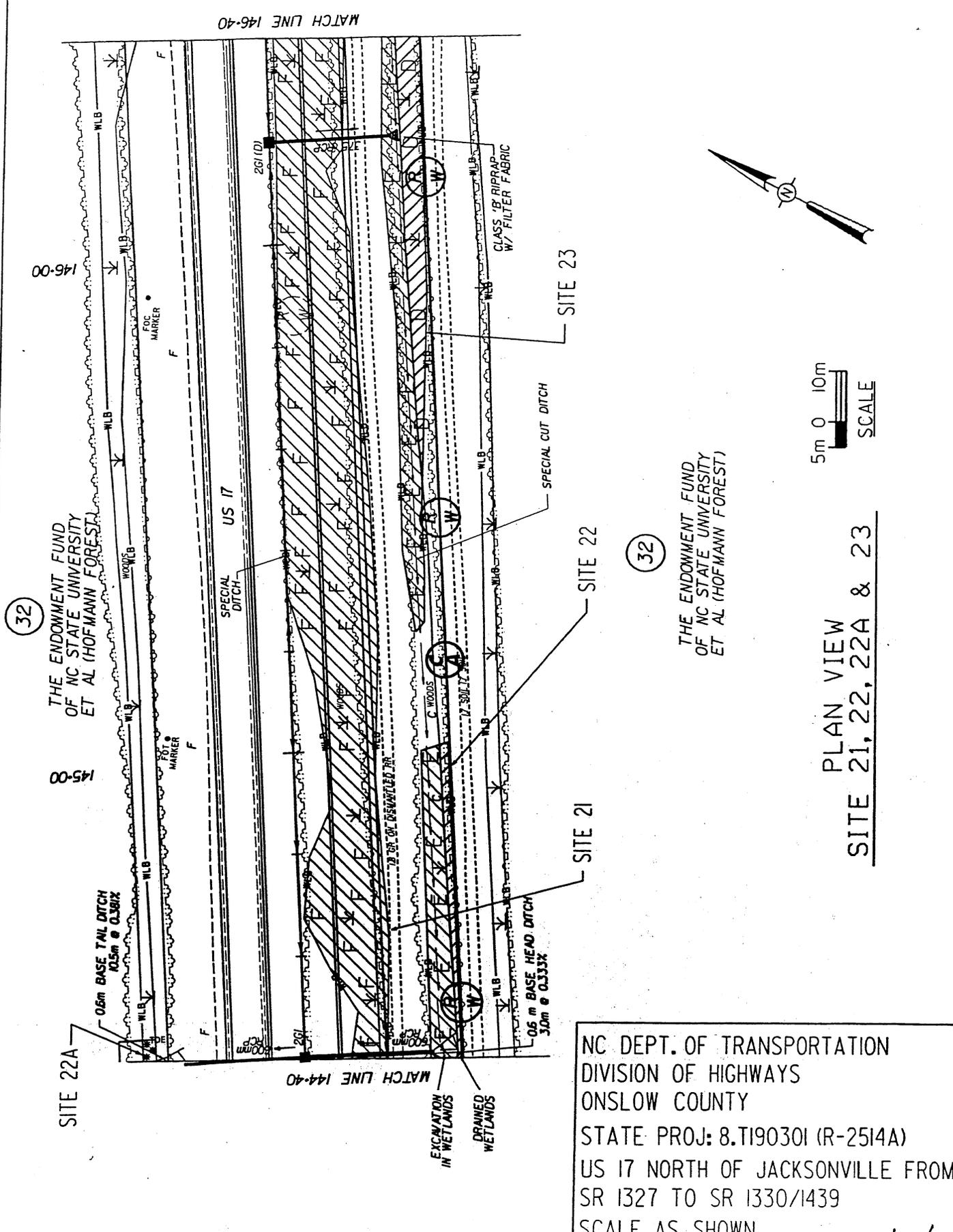
32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)



PLAN VIEW  
SITE 16, 21, 22 & 22A

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLow COUNTY  
STATE PROJ: 8.T19030I (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 35 OF 81 DATE 7/14/03



32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

145-00

146-00

MATCH LINE 146-40

US 17  
SPECIAL DITCH

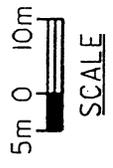
SITE 23

SITE 22

SITE 21

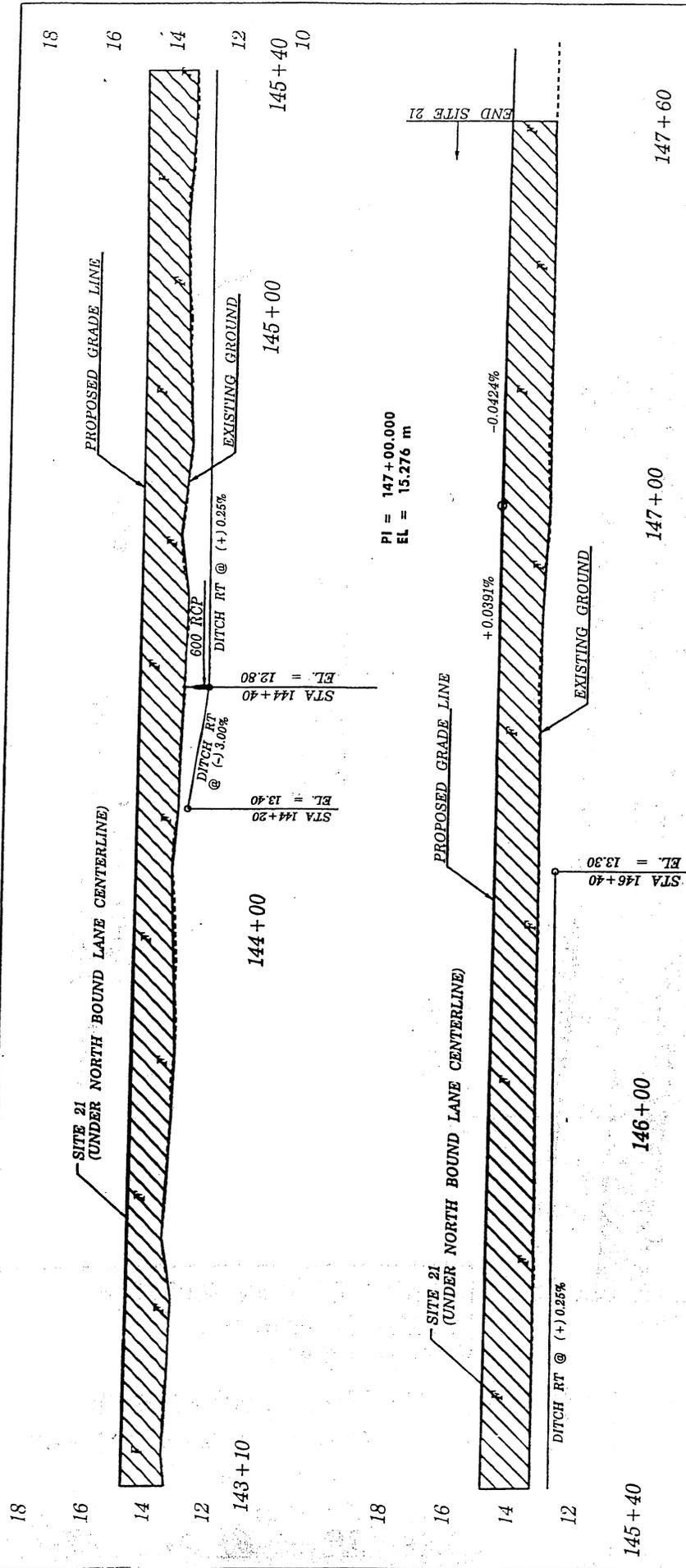
32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)



PLAN VIEW  
SITE 21, 22, 22A & 23

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONslow COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 36 OF 81 DATE 7/14/03



SITE 21  
PROFILE VIEW

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.TI9030I (R-25I4A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 37 OF 81 DATE 7/14/03





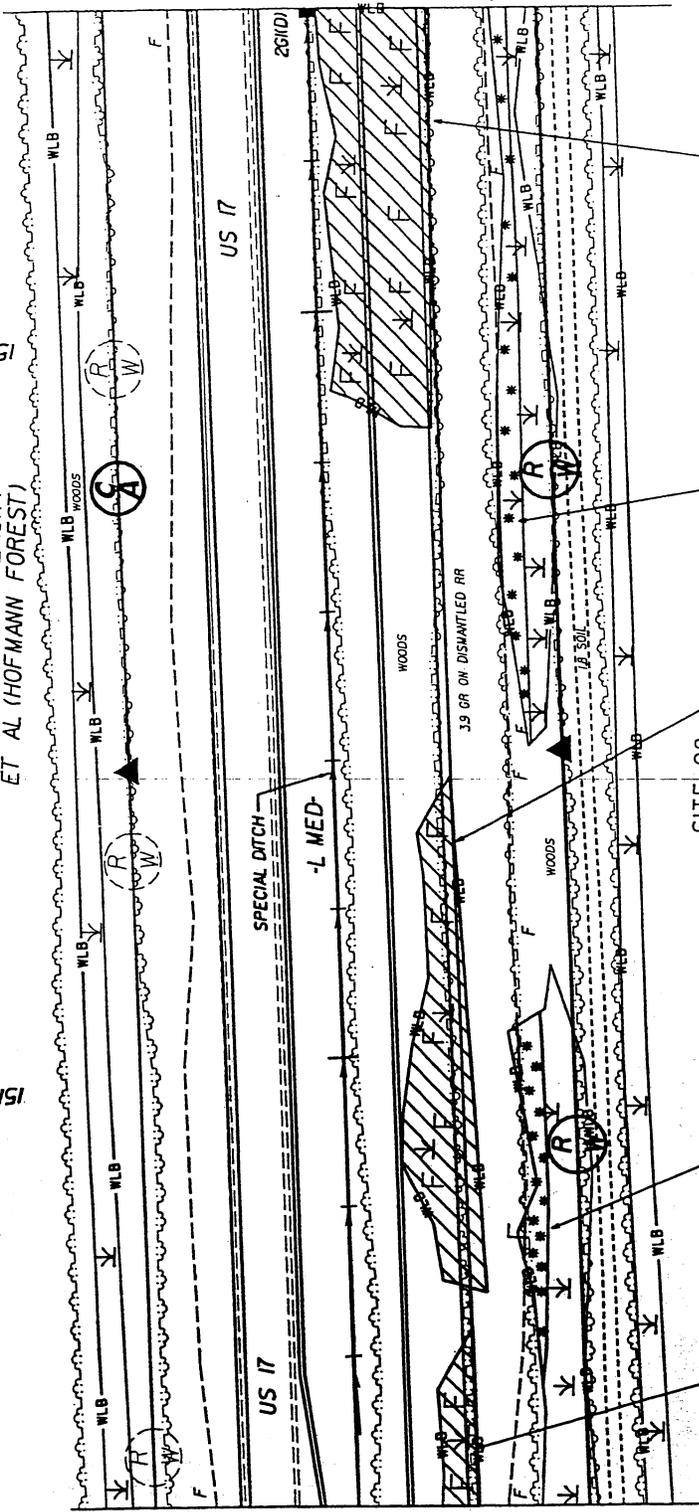
MATCH LINE 152-40

152-00

THE ENDOWMENT FUND OF NC STATE UNIVERSITY ET AL (HOFMANN FOREST)

32

151-00



MATCH LINE 150-40

SITE 30

SITE 29

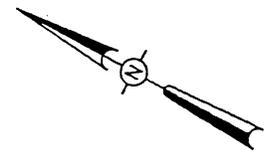
SITE 28

SITE 26

SITE 25

32

THE ENDOWMENT FUND OF NC STATE UNIVERSITY ET AL (HOFMANN FOREST)



PLAN VIEW  
 SITE 25, 26, 28, 29, & 30

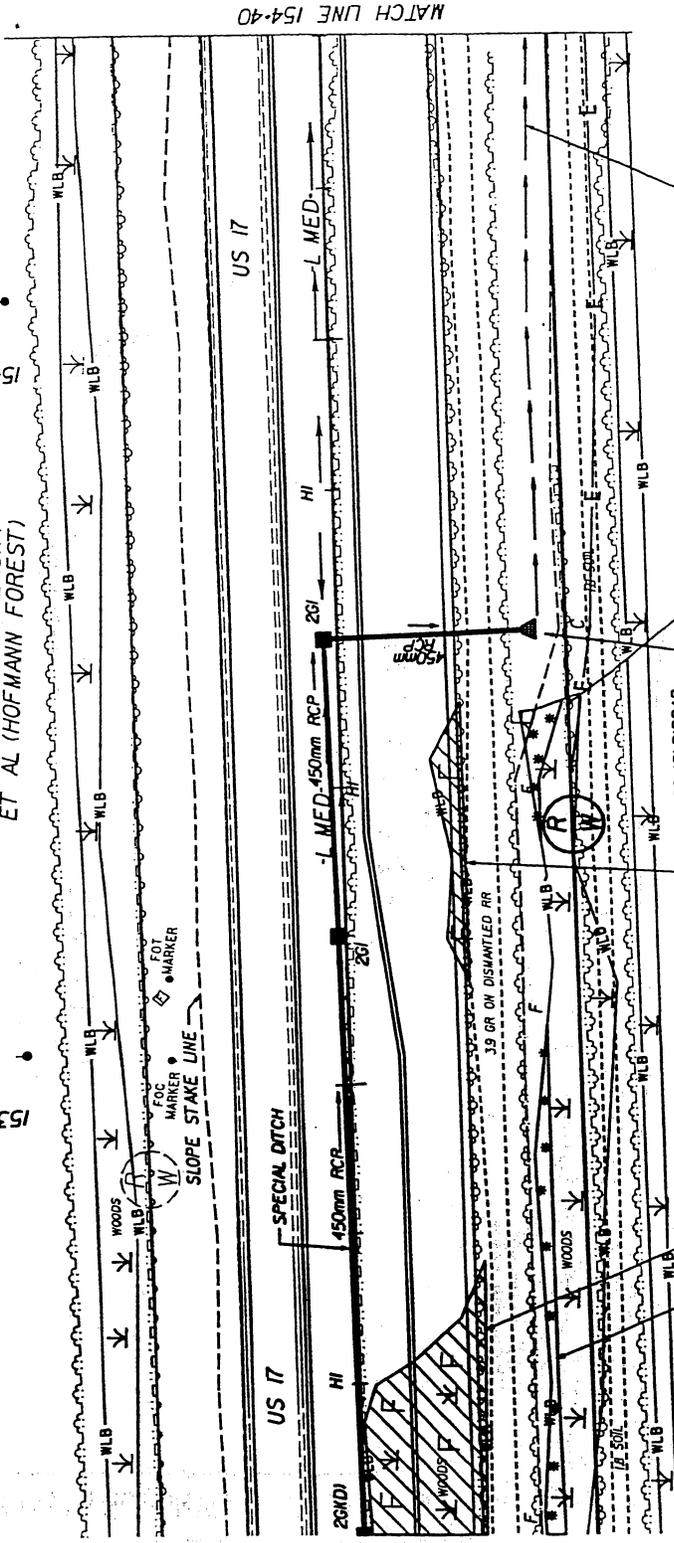
NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 40 OF 81 DATE 7/14/03

32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

153+00

154+00



MATCH LINE 154+40

US 17

MATCH LINE 152+40

SITE 32

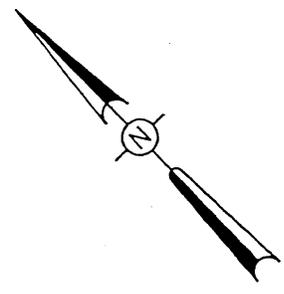
SITE 31

SITE 30

SITE 29

32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)



PLAN VIEW  
SITE 29, 30, 31, & 32

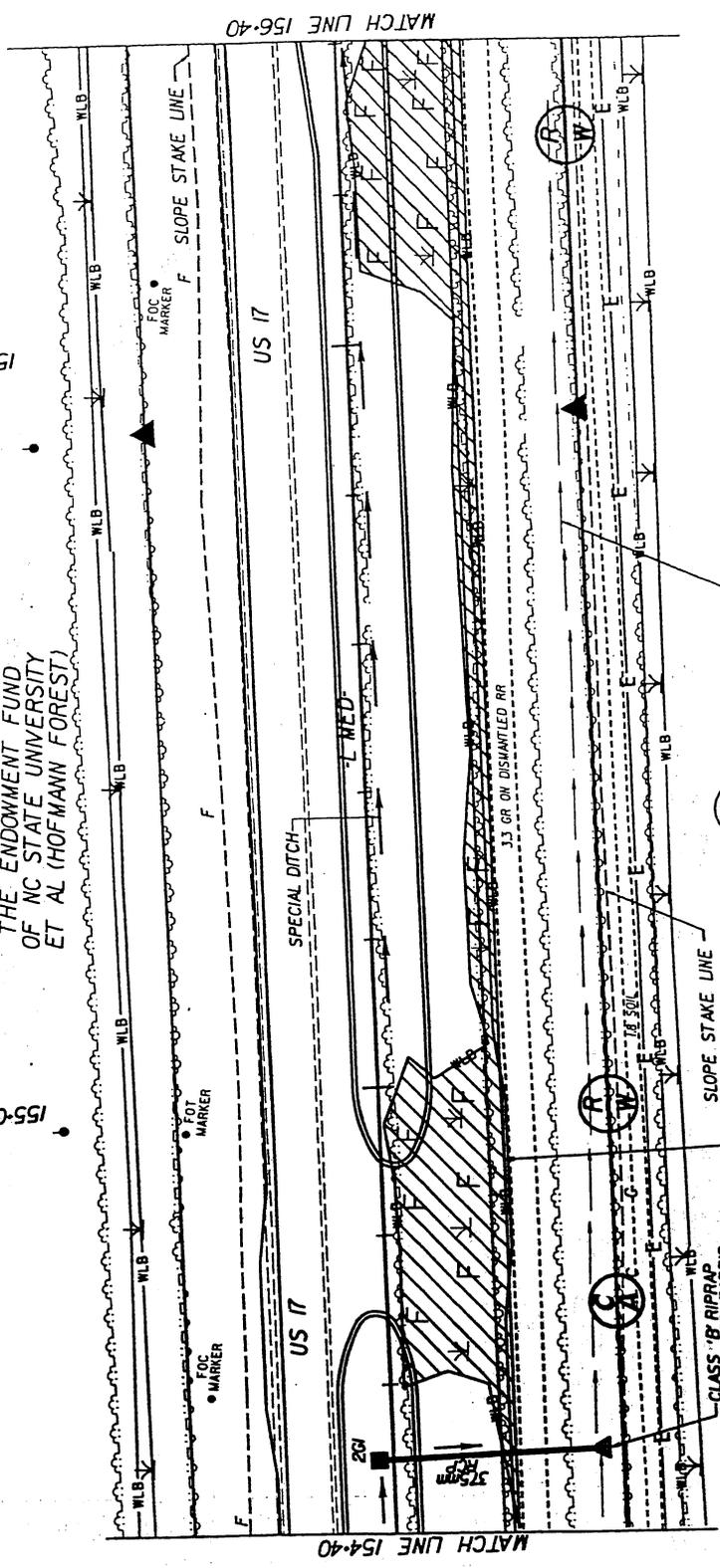
NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T19030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 41 OF 81 DATE 7/14/03

32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

156-00

155-00



32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

PLAN VIEW  
SITE 33



NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 42 OF 81 DATE 7/14/03

BEGIN SITE 33  
(NEAR RIGHT  
SLOPE STAKE  
LINE)

PI = 154+40.000  
EL = 15.197 m  
-0.0610%

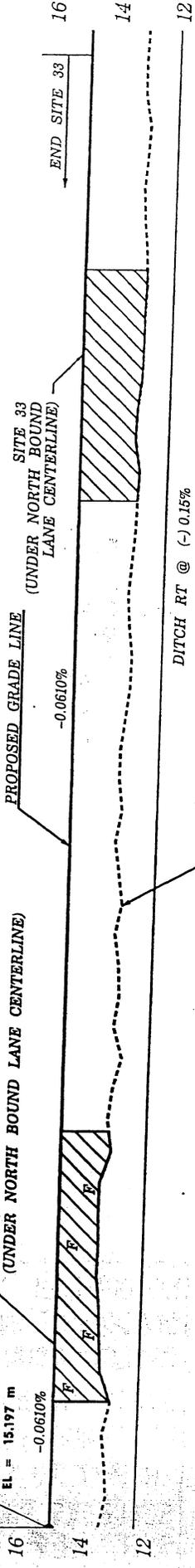
SITE 33  
(UNDER NORTH BOUND LANE CENTERLINE)

PROPOSED GRADE LINE

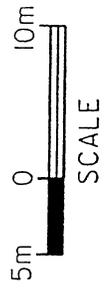
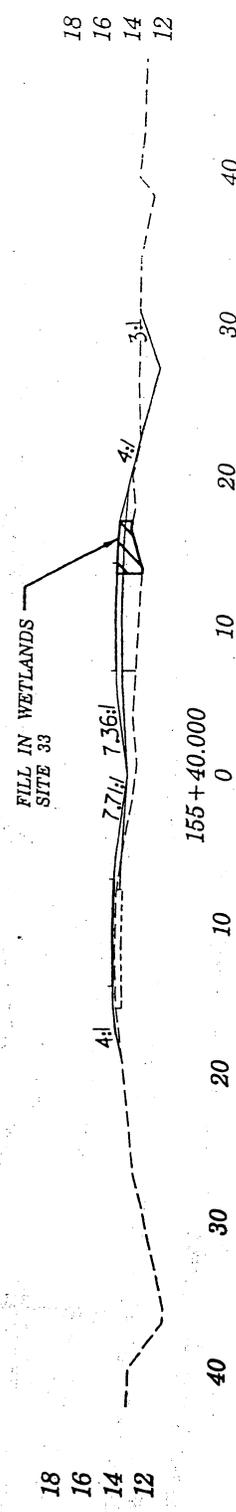
SITE 33  
(UNDER NORTH BOUND LANE CENTERLINE)

-0.0610%

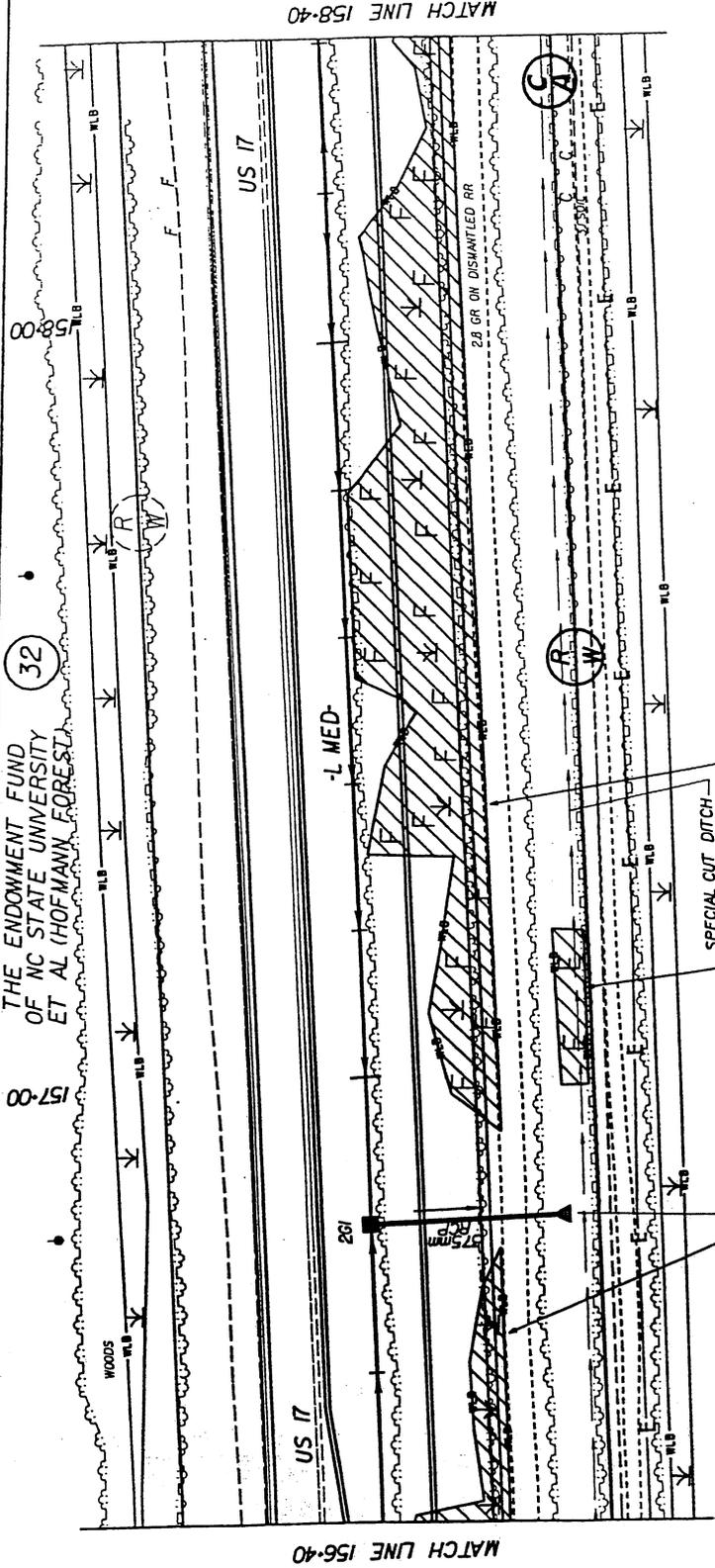
END SITE 33



SITE 33  
PROFILE VIEW



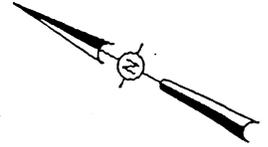
NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLow COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET **43** OF **81** DATE **7/14/03**



32  
 THE ENDOWMENT FUND  
 OF NC STATE UNIVERSITY  
 ET AL (HOFMANN FOREST)

32

THE ENDOWMENT FUND  
 OF NC STATE UNIVERSITY  
 ET AL (HOFMANN FOREST)



PLAN VIEW  
 SITE 33, 34, & 35

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 44 OF 81 DATE 7/14/03

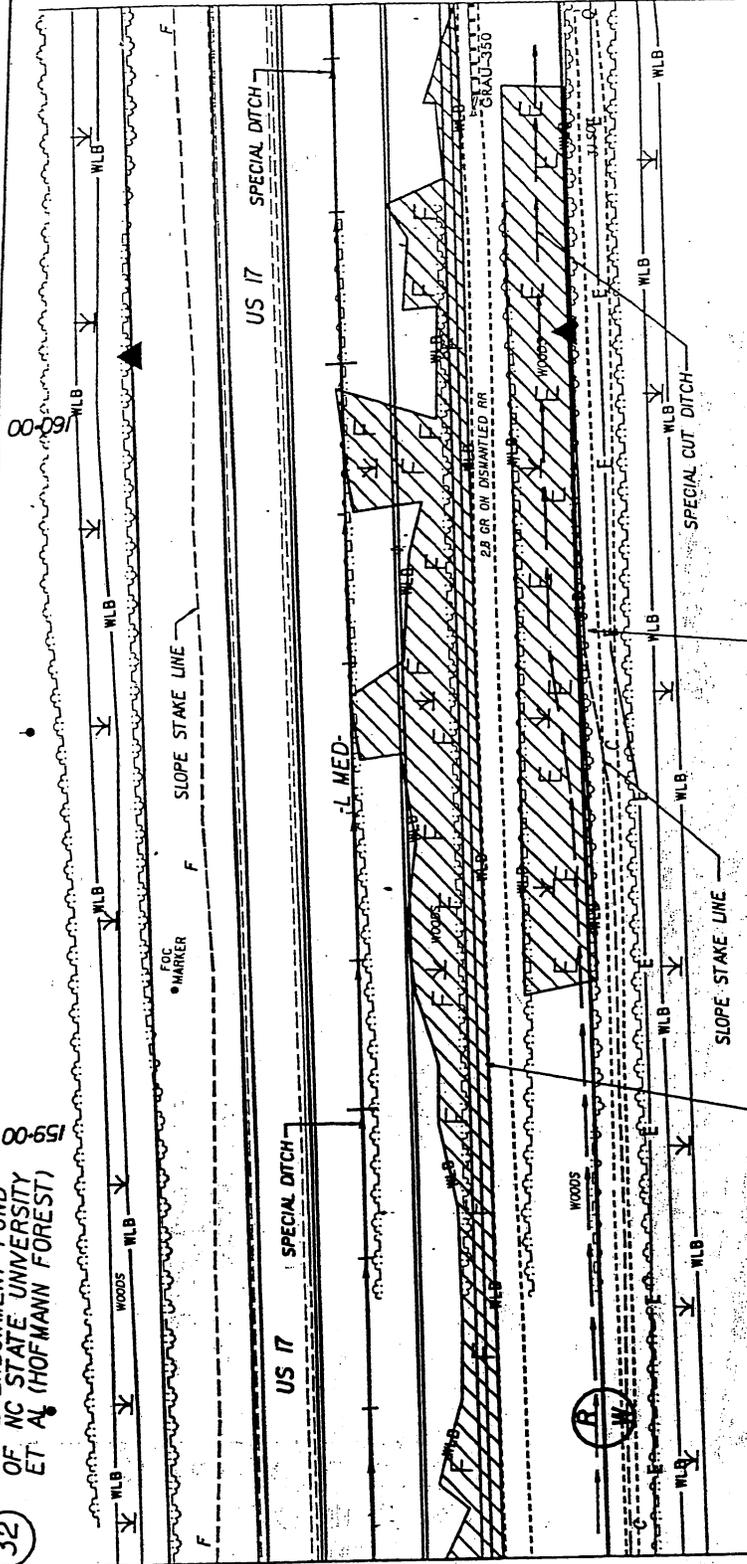
THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

158-00

32

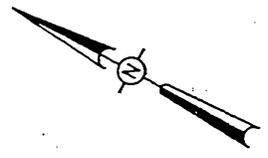
MATCH LINE 160-40

MATCH LINE 158-40



32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)



PLAN VIEW  
SITE 35 & 36

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T19030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 45 OF 81 DATE 7/14/03

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

32

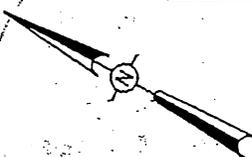
162+00

PERENNIAL  
STREAM

CLASS 'A' RIPRAP  
EST. 50 METRIC TONS  
FOR 8m W/ F.F.  
EACH BANK

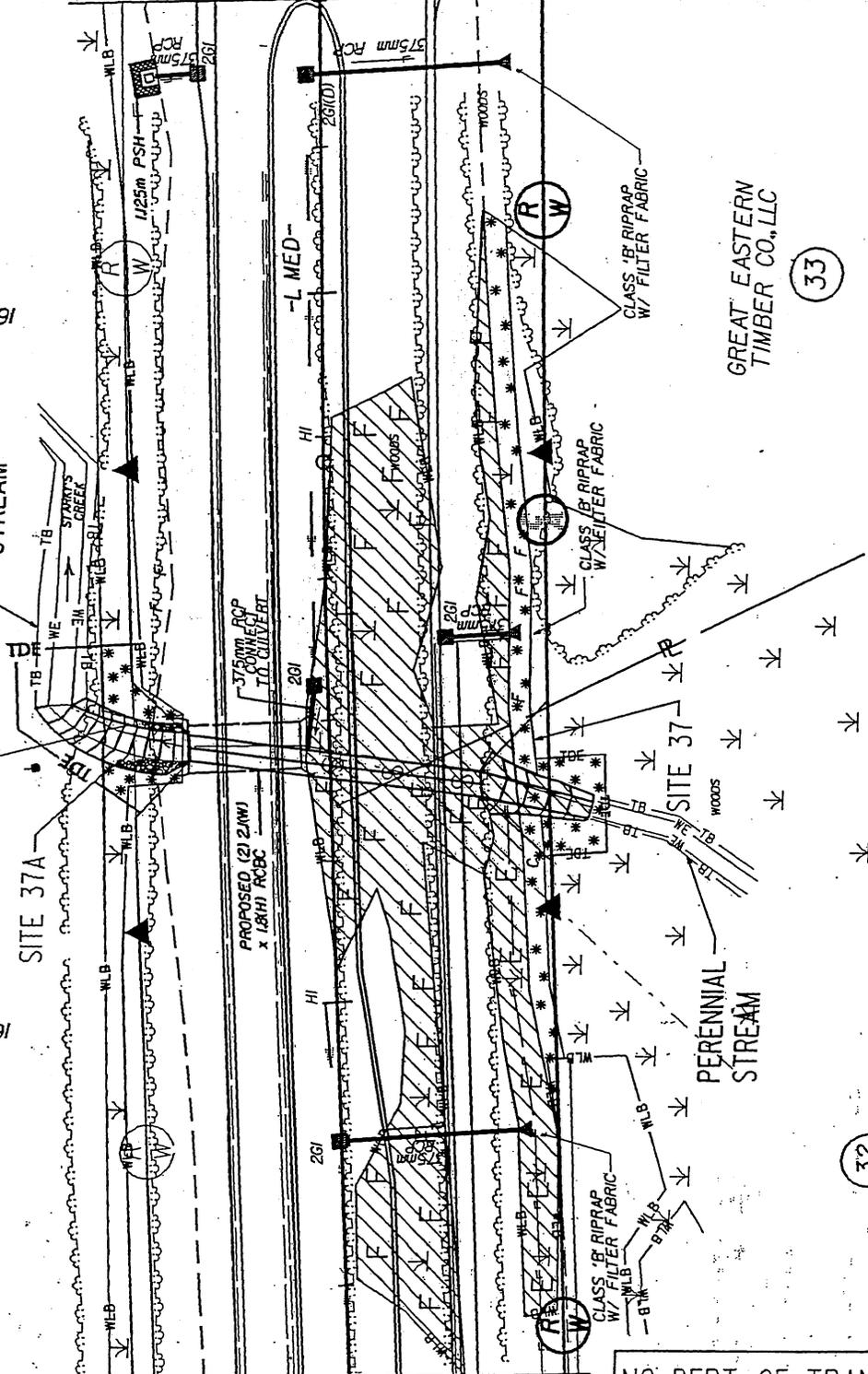
SITE 37A

161+00



MATCH LINE 162+40

MATCH LINE 150+40



GREAT EASTERN  
TIMBER CO., LLC

33

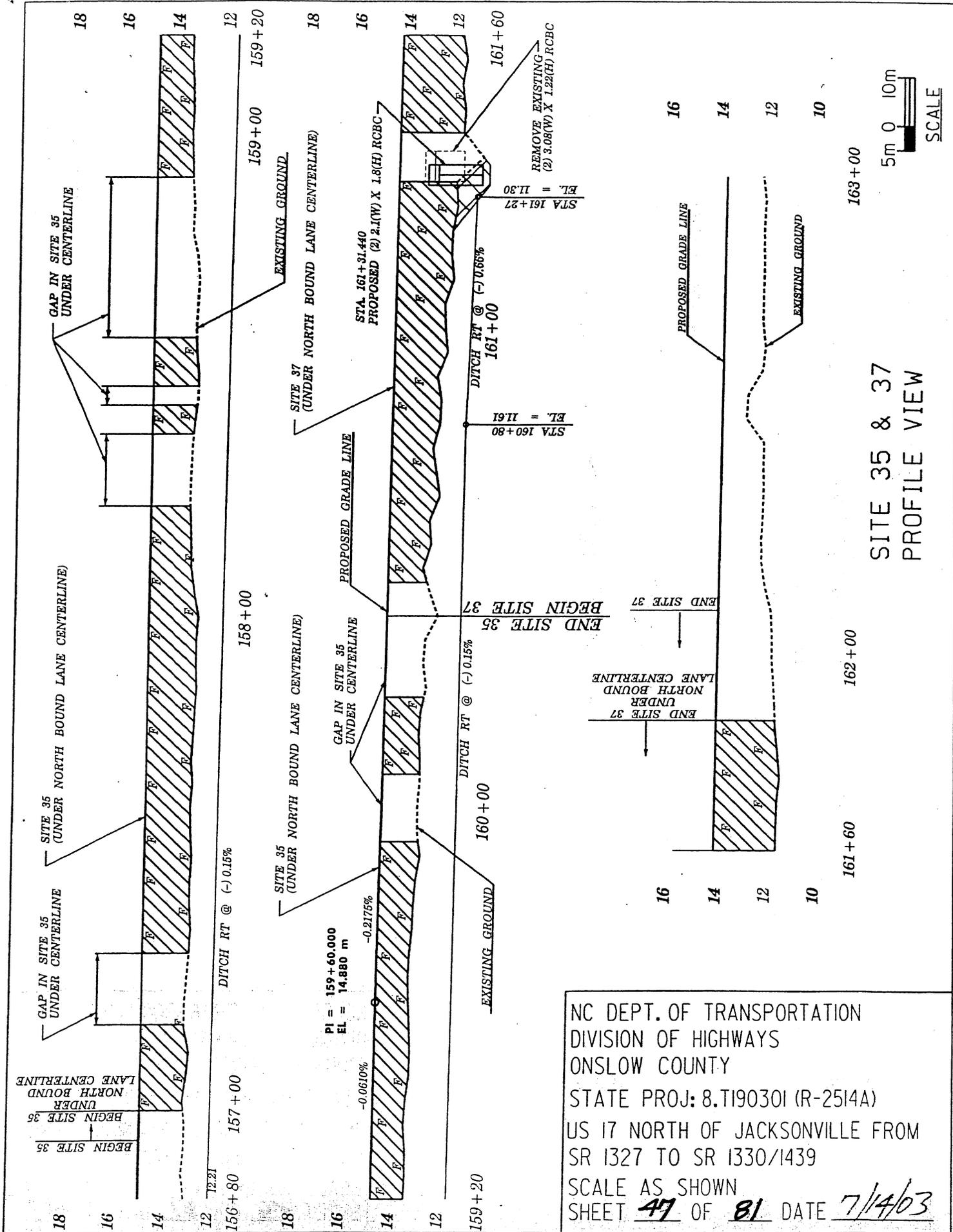


PLAN VIEW  
SITE 37 & 37A

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

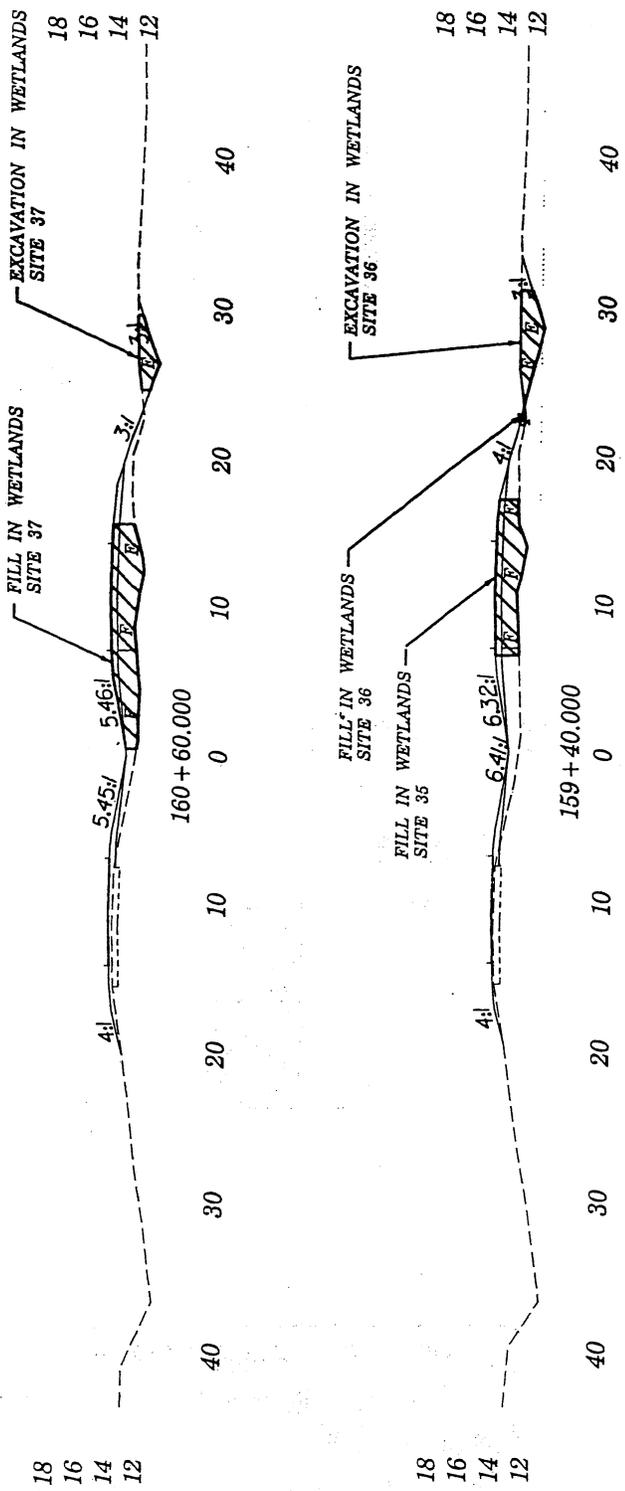
32

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSONG COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 46 OF 81 DATE 04/01/04

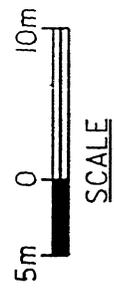


SITE 35 & 37  
PROFILE VIEW

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 47 OF 81 DATE 7/14/03



CROSS SECTION



NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 48 OF 81 DATE 7/14/03

32

THE ENDOWMENT FUND  
OF NC STATE UNIVERSITY  
ET AL (HOFMANN FOREST)

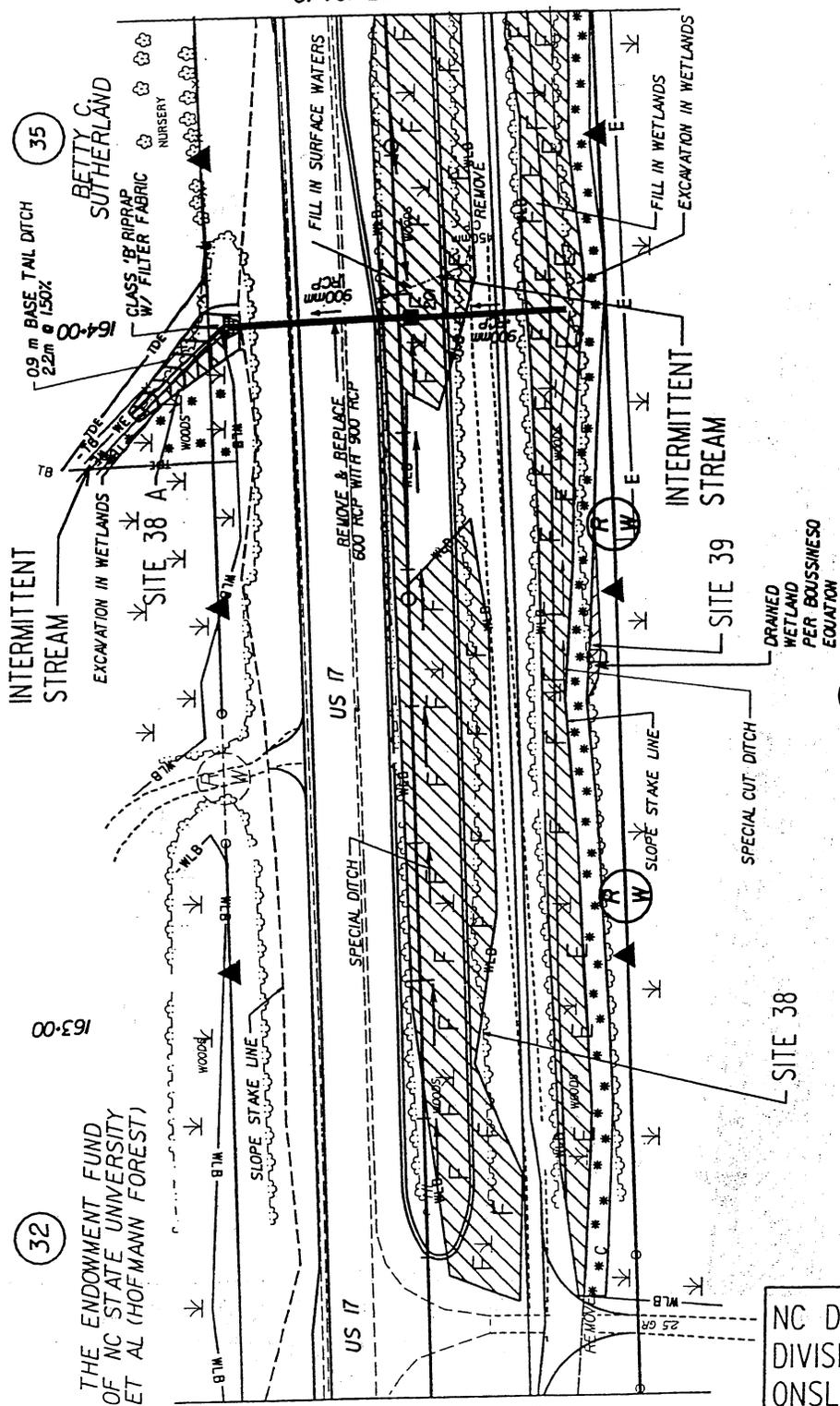
163-00

35

BETTY C  
SUTHERLAND  
NURSERY

MATCH LINE 164-40

MATCH LINE 162-40



33

GREAT EASTERN  
TIMBER CO., LLC

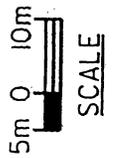
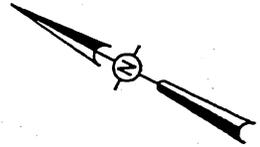
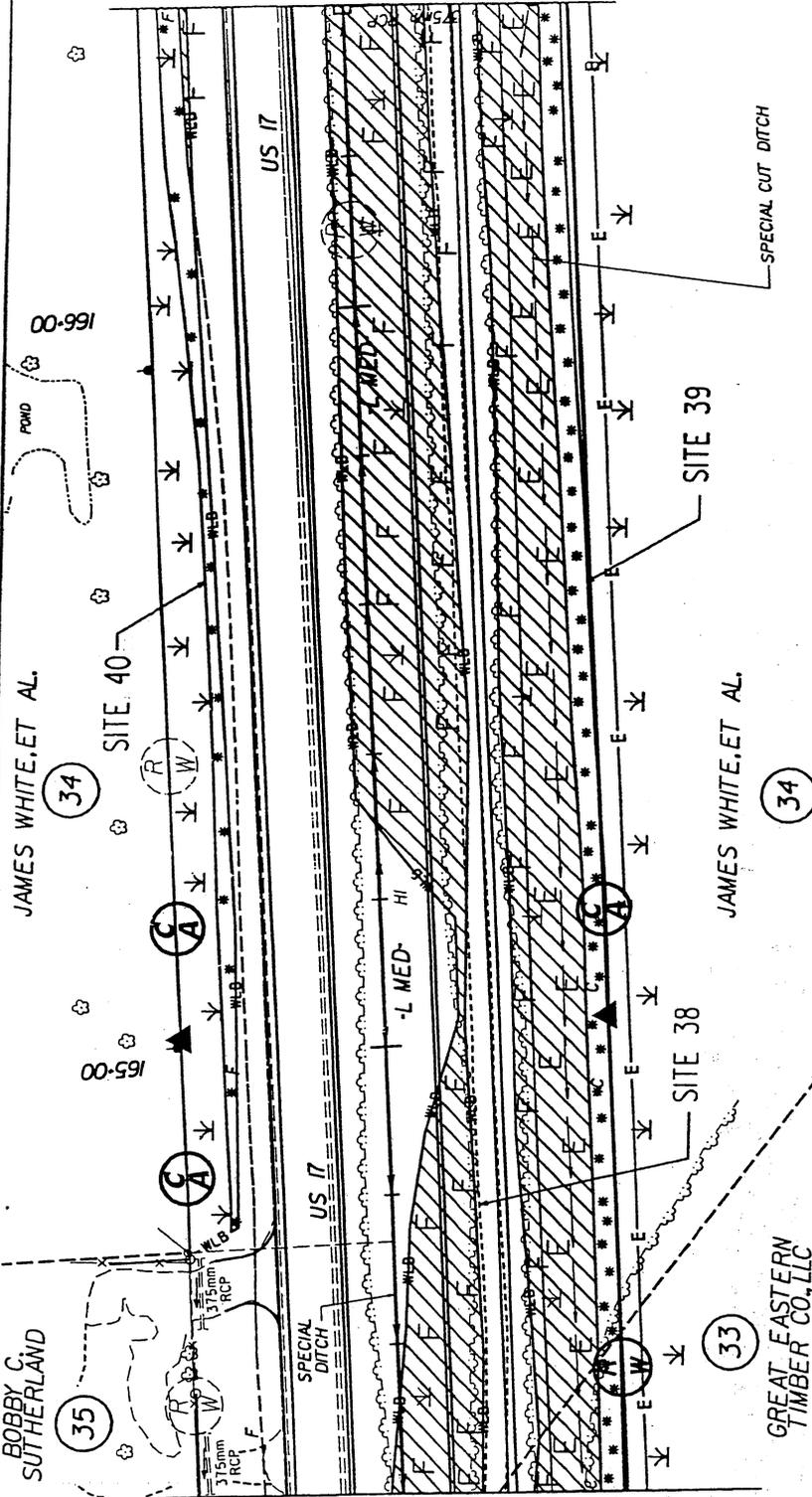
DRAINED WETLAND PER BOUSSINESQ EQUATION	
SITE 39	23.4 SQ. METERS

PLAN VIEW  
SITE 38, 38A & 39



NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLow COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 49 OF 81 DATE 9/03/03

MATCH LINE 166-40



SCALE

PLAN VIEW  
SITE 38, 39 & 40

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T19030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 50 OF 81 DATE 7/1/03

JAMES WHITE, ET AL.

SITE 40

165-00

BOBBY C. SUTHERLAND

SITE 35

US 17

US 17

SPECIAL DITCH

MATCH LINE 164-40

L MED

SPECIAL DITCH

SITE 38

SITE 39

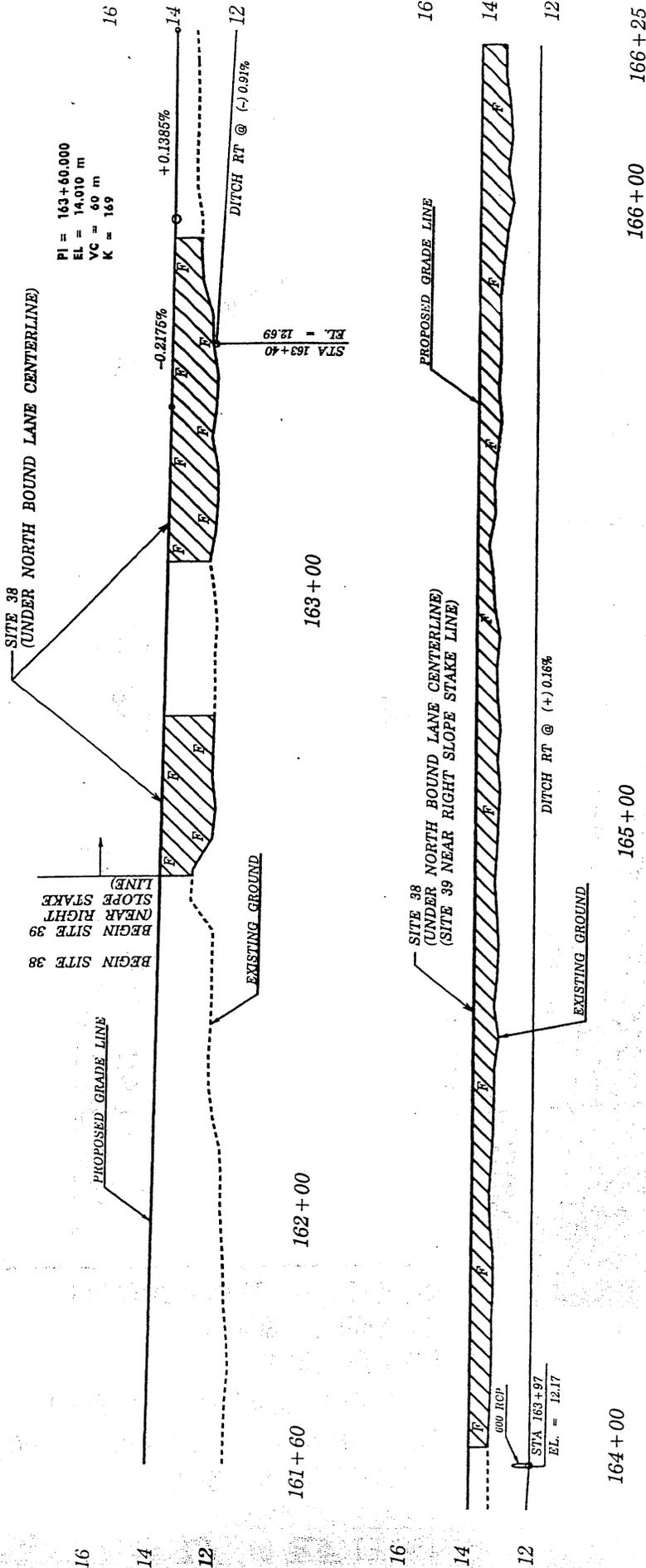
JAMES WHITE, ET AL.

GREAT EASTERN  
TIMBER CO., LLC

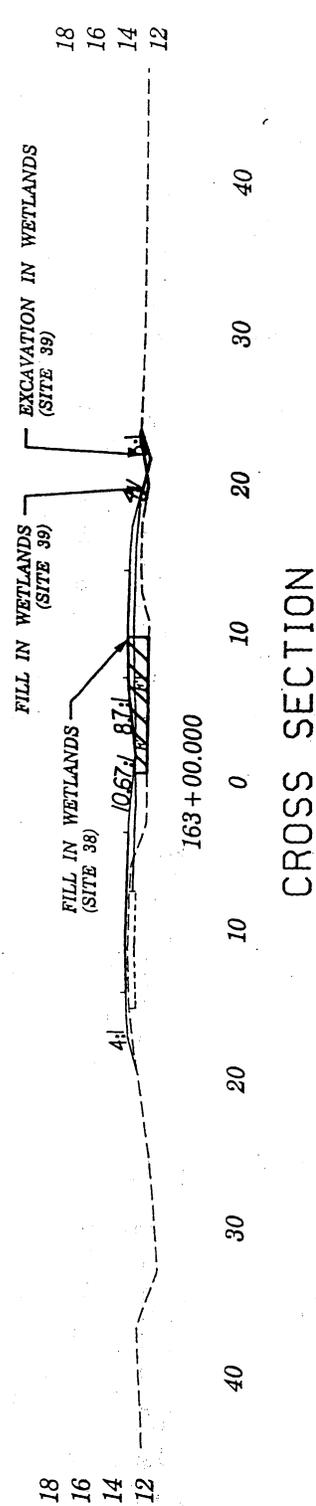
SPECIAL CUT DITCH

SITE 33

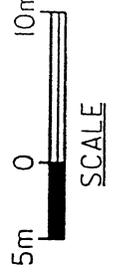
SITE 34



PROFILE VIEW  
SITE 38 & 39

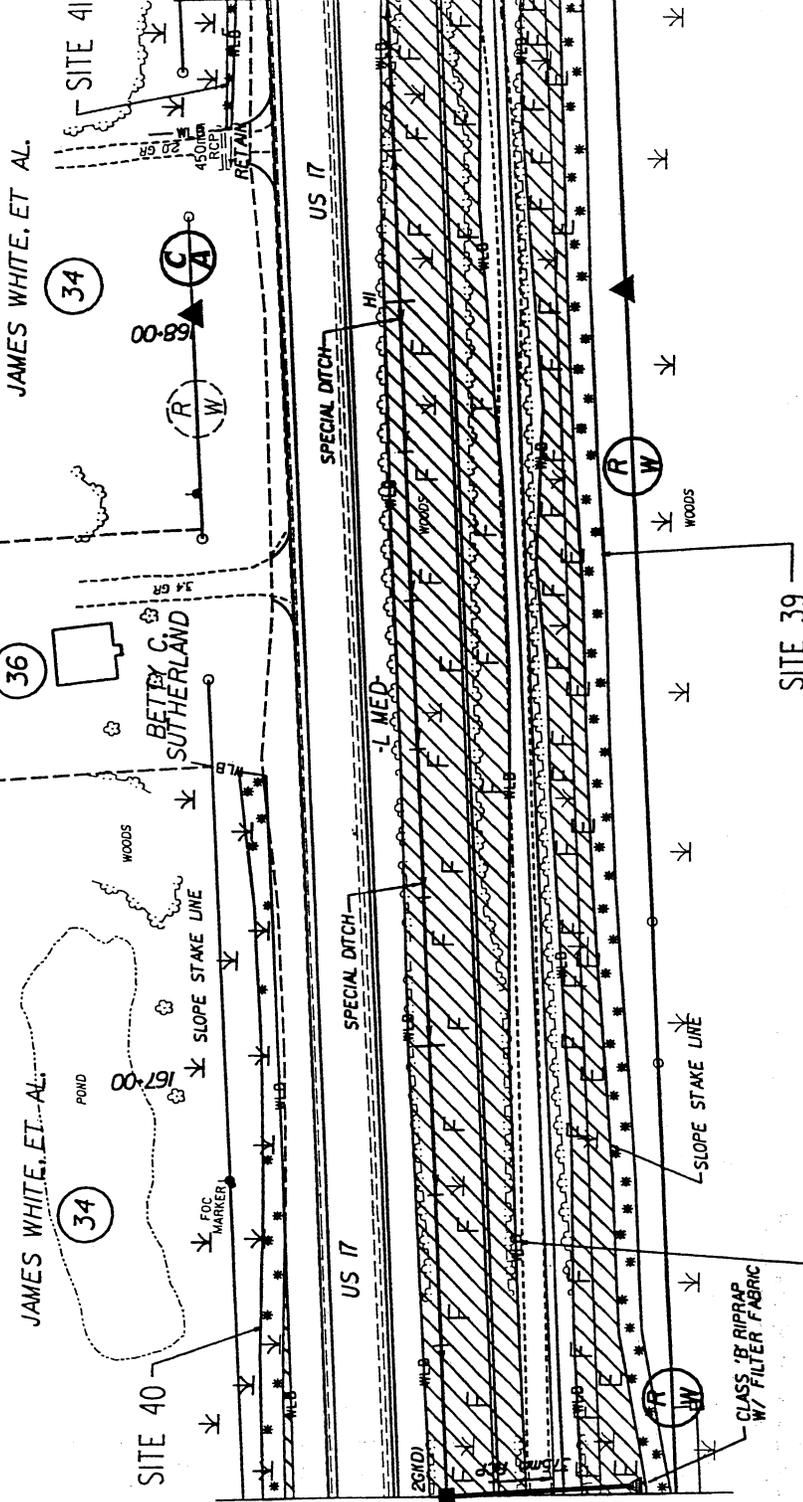


CROSS SECTION



NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T19030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 51 OF 81 DATE 7/14/03

MATCH LINE 168-40



JAMES WHITE, ET AL.

36

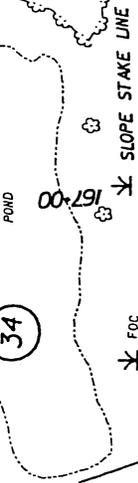
SITE 41

34



SITE 40

34



BETTY C. SUTHERLAND

US 17

SPECIAL DITCH

US 17

SPECIAL DITCH

L. MED.

MATCH LINE 166-40

20(KD)

WOODS

WOODS

CLASS. B. RIPRAP W/ FILTER FABRIC

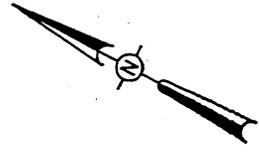
SLOPE STAKE LINE

SITE 38

SITE 39

JAMES WHITE, ET AL.

34



PLAN VIEW  
SITE 38, 39, 40 & 41

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T19030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 52 OF 81 DATE 7/14/03

18

16

14

12

168+55

168+00

167+00

166+25

18

16

14

12

168+55

169+00

STA 169+25  
EL = 12.48

170+00

PI = 167+60.000  
EL = 14.564 m  
VC = 60 m  
K = 184

SITE 38  
(UNDER NORTH BOUND LANE CENTERLINE)  
SITE 39 NEAR RIGHT SLOPE STAKE LINE  
+0.1385%

PROPOSED GRADE LINE

-0.1882%

EXISTING GROUND

END SITE 39

SITE 38  
(UNDER NORTH BOUND LANE CENTERLINE)  
SITE 39 NEAR RIGHT SLOPE STAKE LINE

PROPOSED GRADE LINE

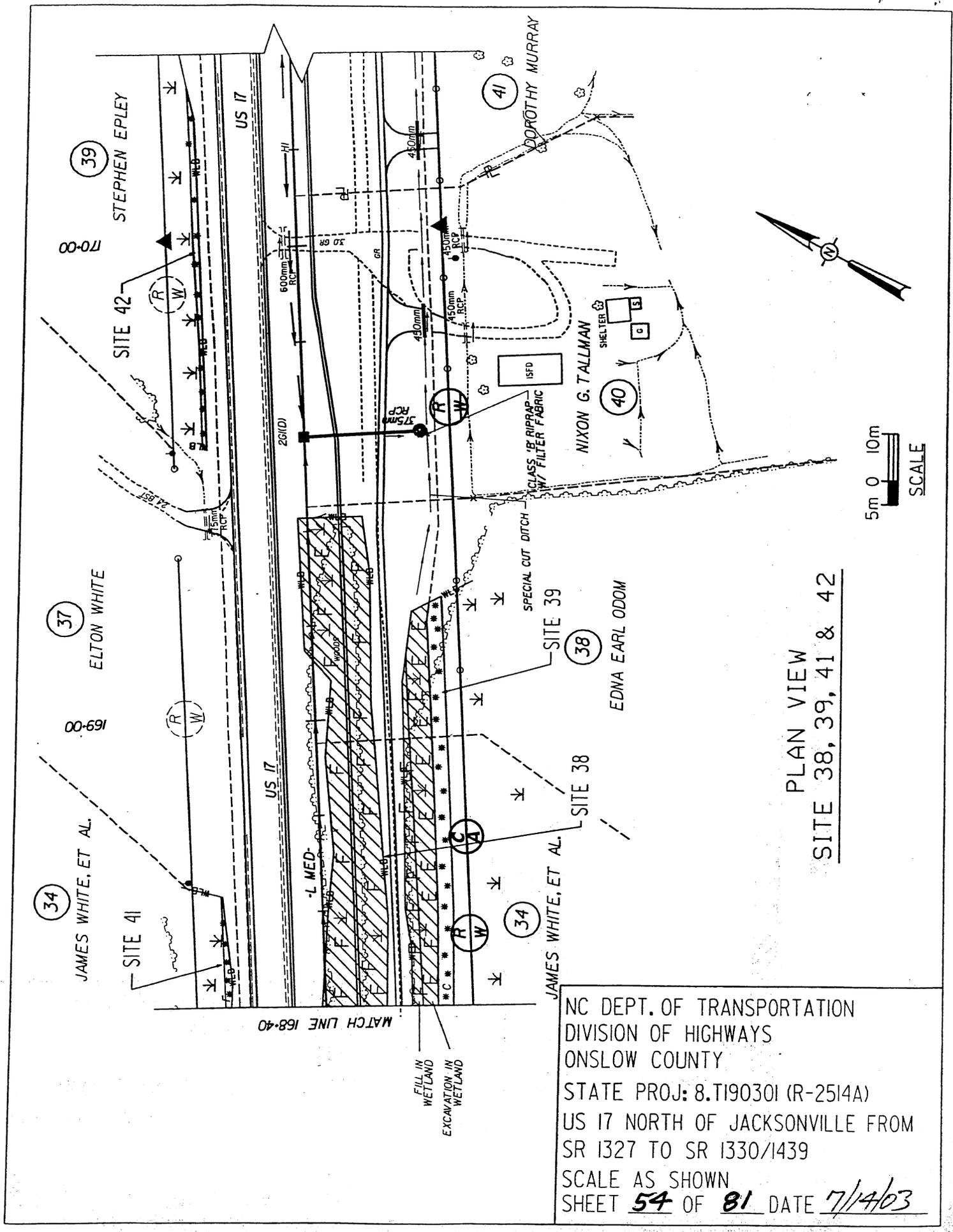
EXISTING GROUND

DITCH RT @ (-)0.20%



# PROFILE VIEW SITE 38 & 39

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONslow COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 53 OF 81 DATE 7/14/03



PLAN VIEW  
 SITE 38, 39, 41 & 42

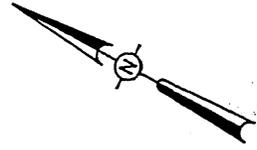
NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 54 OF 81 DATE 7/14/03

MATCH LINE 173-00

173-00

GRACE EUBANK HORTON

US 17



44

SITE 43



46

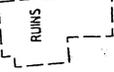
ALVIN WHITT



SCALE

172-00

SITE 44



GRACE EUBANK HORTON

45

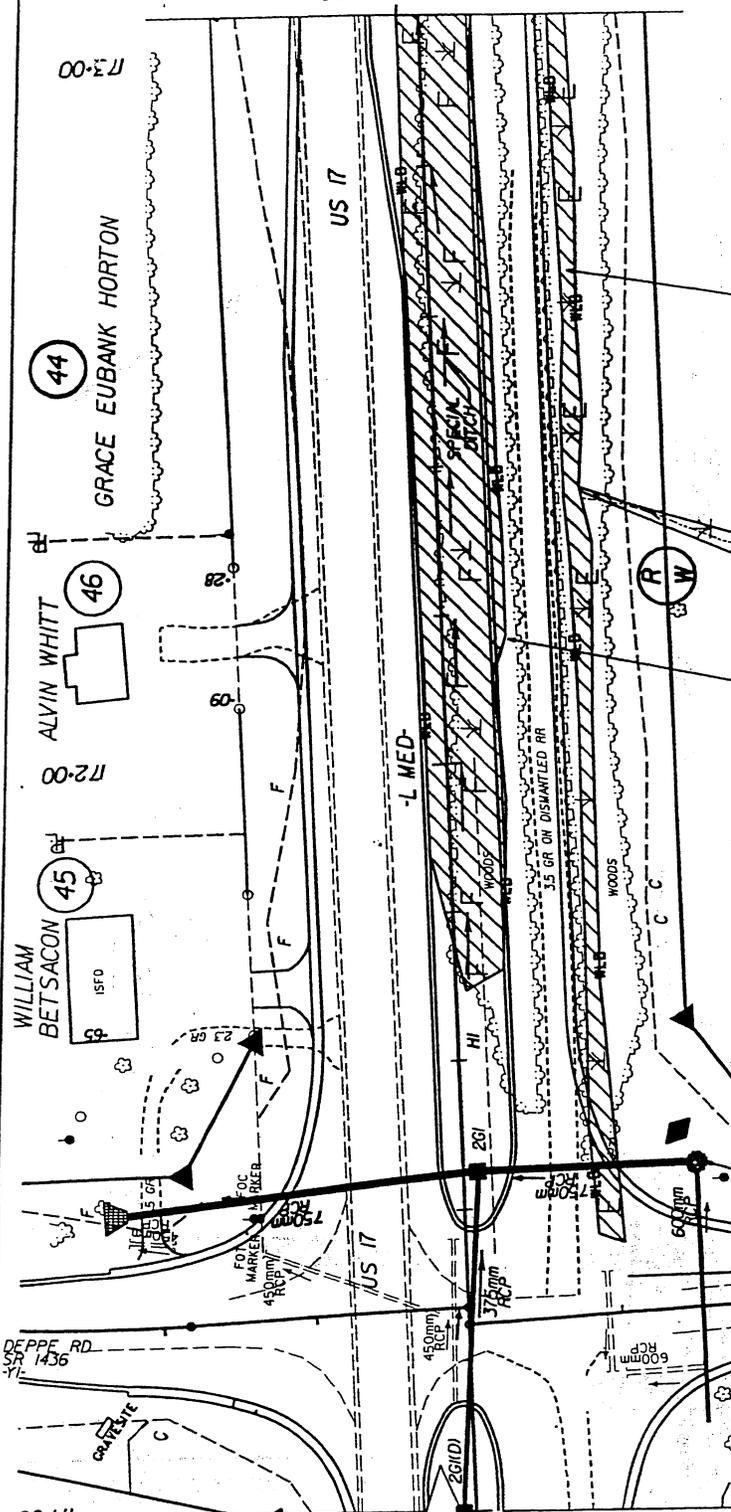
WILLIAM BETSACON

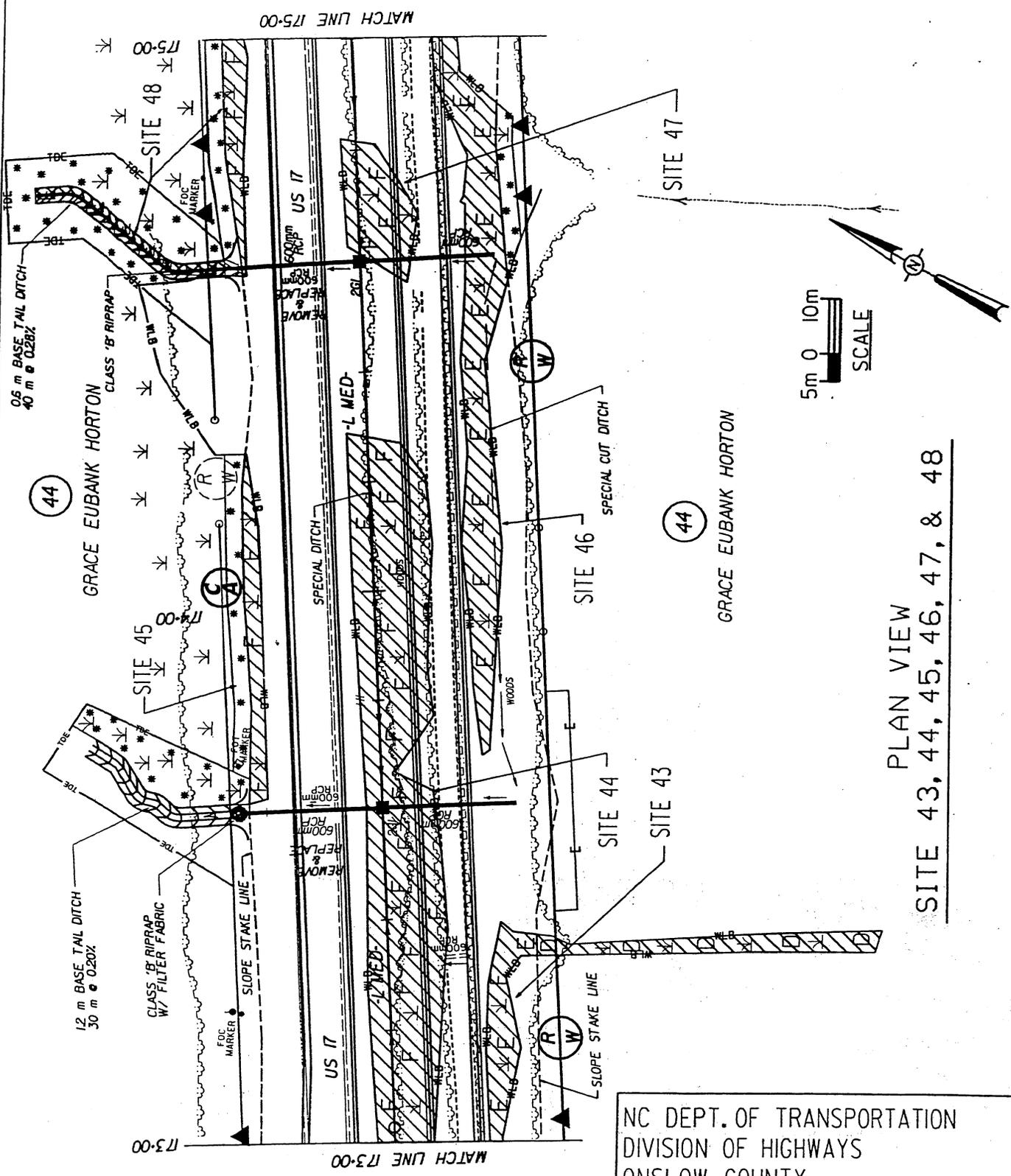
PLAN VIEW  
SITE 43 & 44

171-00

DEPPE RD SR 1436

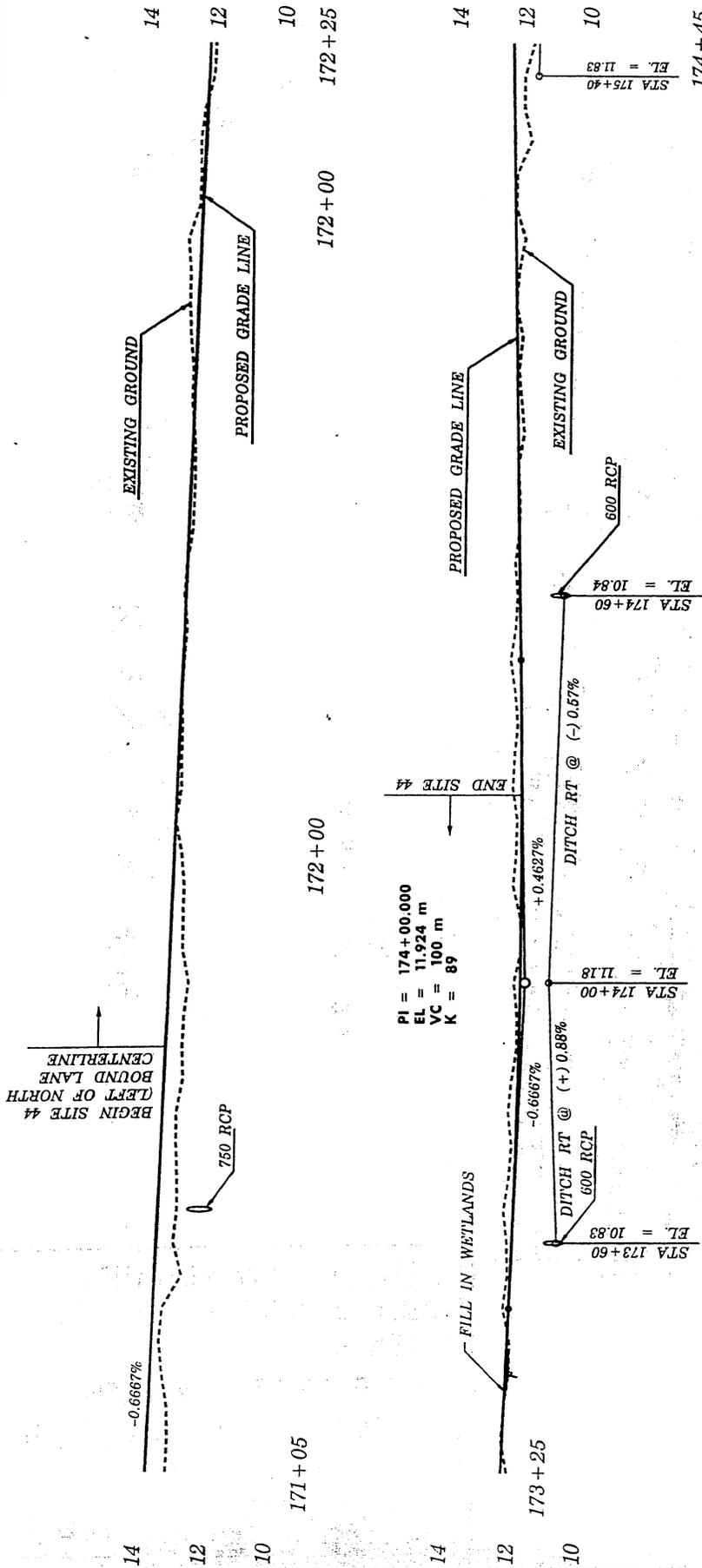
NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONslow COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 55 OF 81 DATE 7/14/03



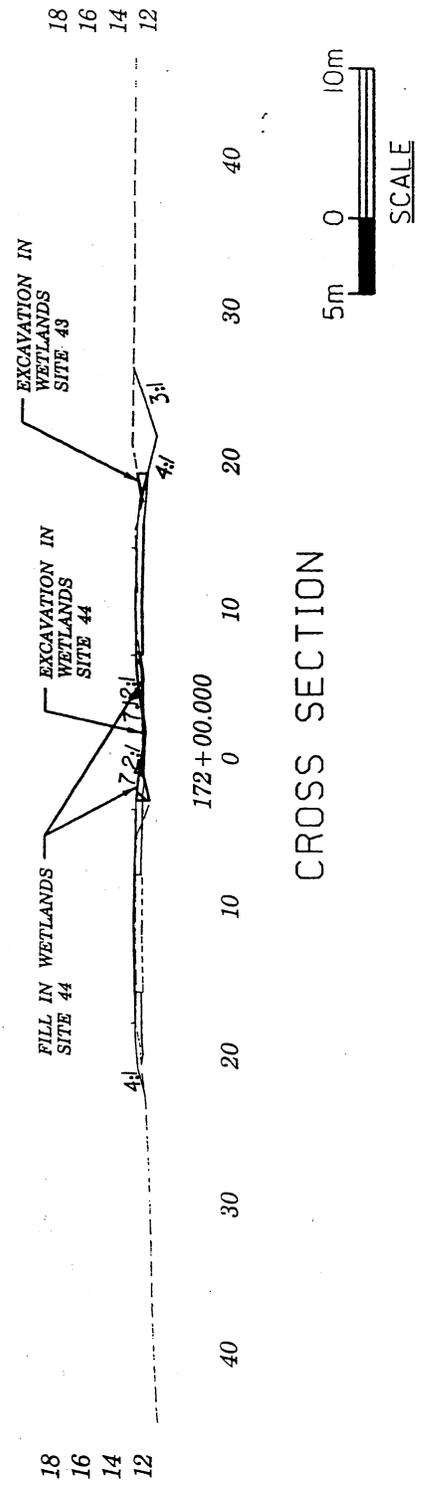


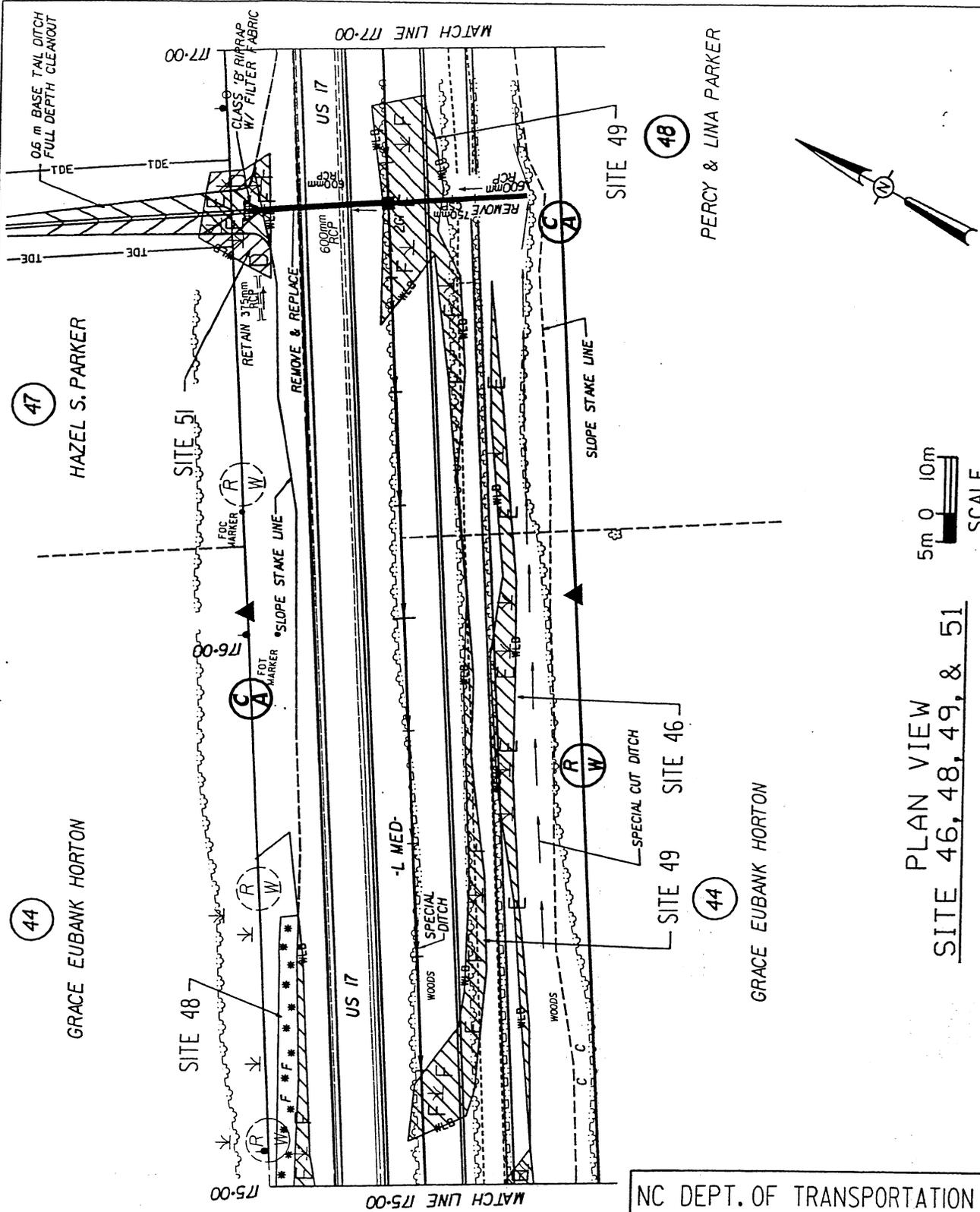
PLAN VIEW  
 SITE 43, 44, 45, 46, 47, & 48

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 56 OF 81 DATE 7/14/03

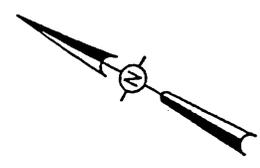


NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLow COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 57 OF 81 DATE 8/19/03

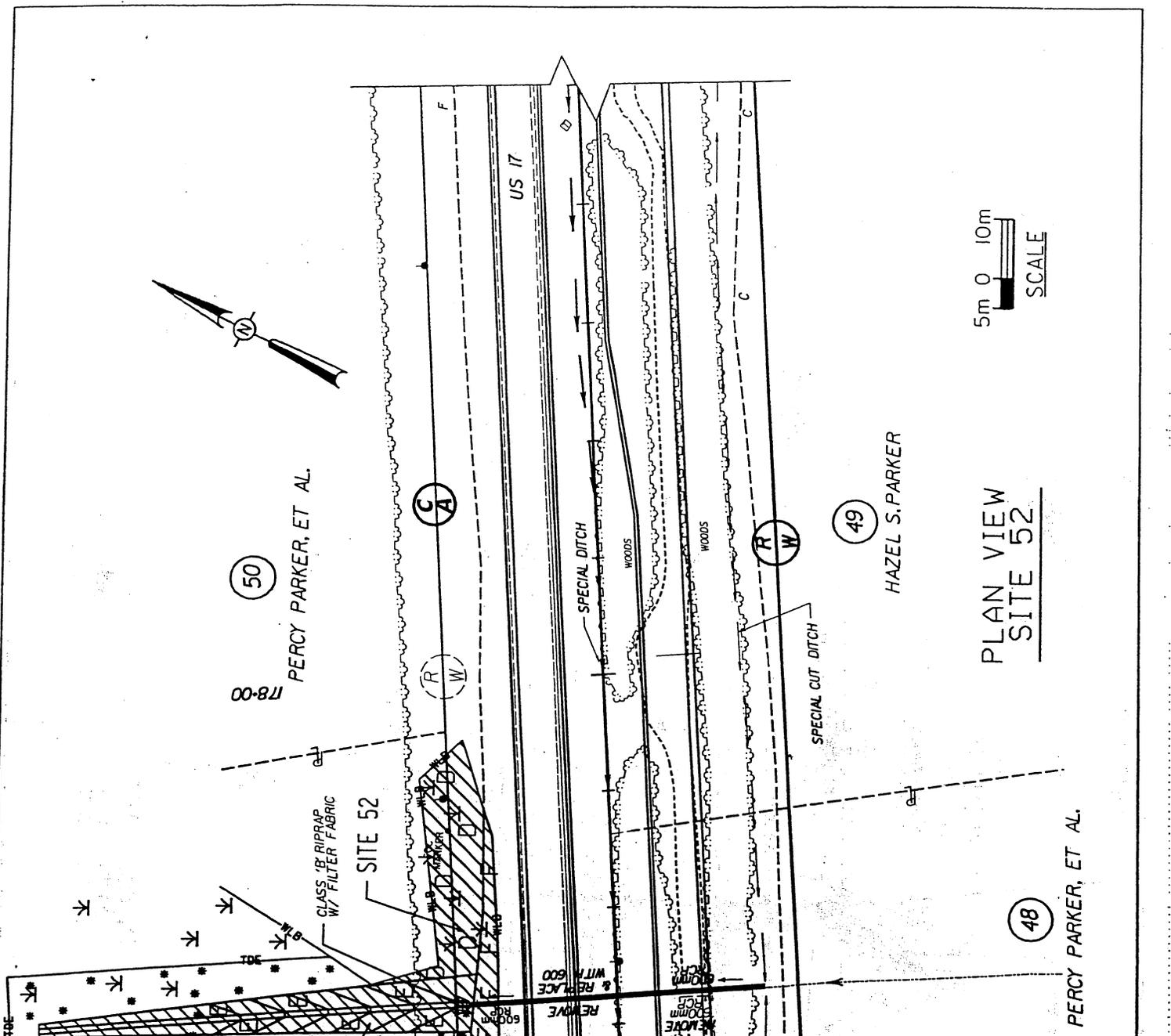




PLAN VIEW  
 SITE 46, 48, 49, & 51



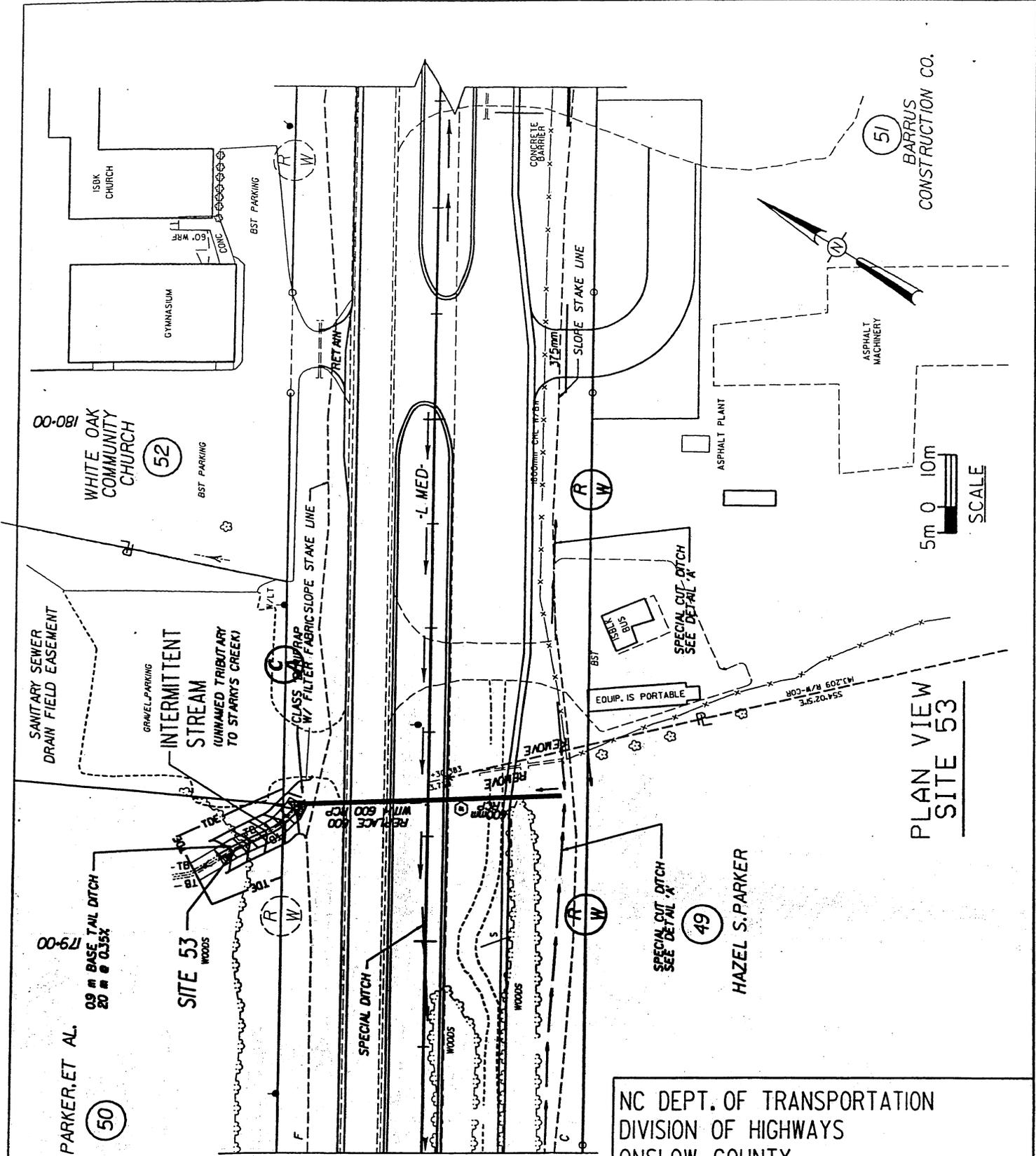
NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 58 OF 81 DATE 7/14/03



5m 0 10m  
SCALE

PLAN VIEW  
SITE 52

NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLOW COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 59 OF 81 DATE 7/14/03



NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.TI9030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 60 OF 81 DATE 7/14/03

PERCY PARKER, ET AL.

50

79-00  
 0.9 m BASE TAIL DITCH  
 20 m @ 0.35%

SITE 53

INTERMITTENT  
 STREAM  
 (UNNAMED TRIBUTARY  
 TO STARKY'S CREEK)

WHITE OAK  
 COMMUNITY  
 CHURCH

52

HAZEL S. PARKER

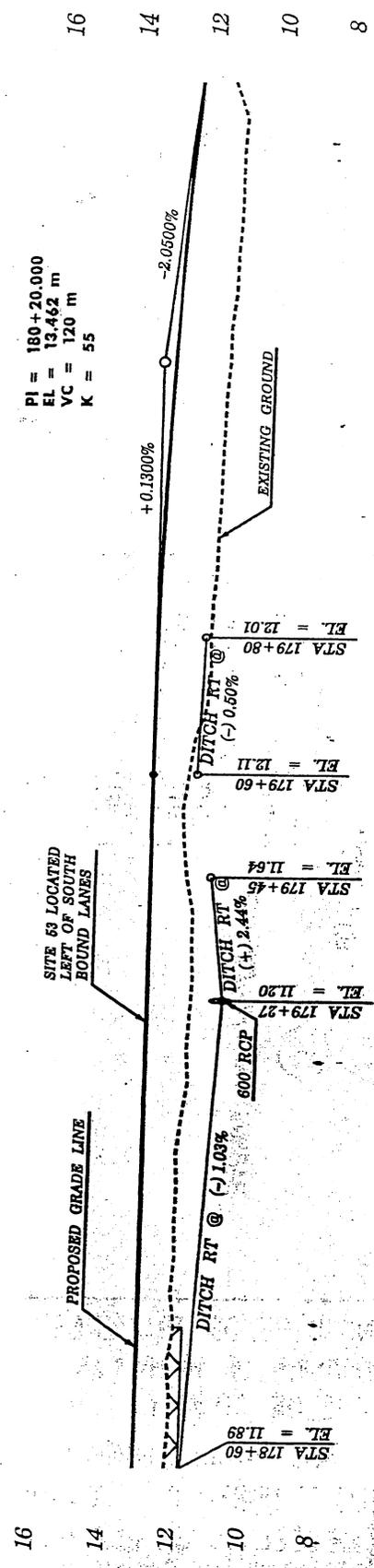
49

PLAN VIEW  
 SITE 53

5m 0 10m  
 SCALE

51  
 BARRUS  
 CONSTRUCTION CO.

MATCH LINE T8-60

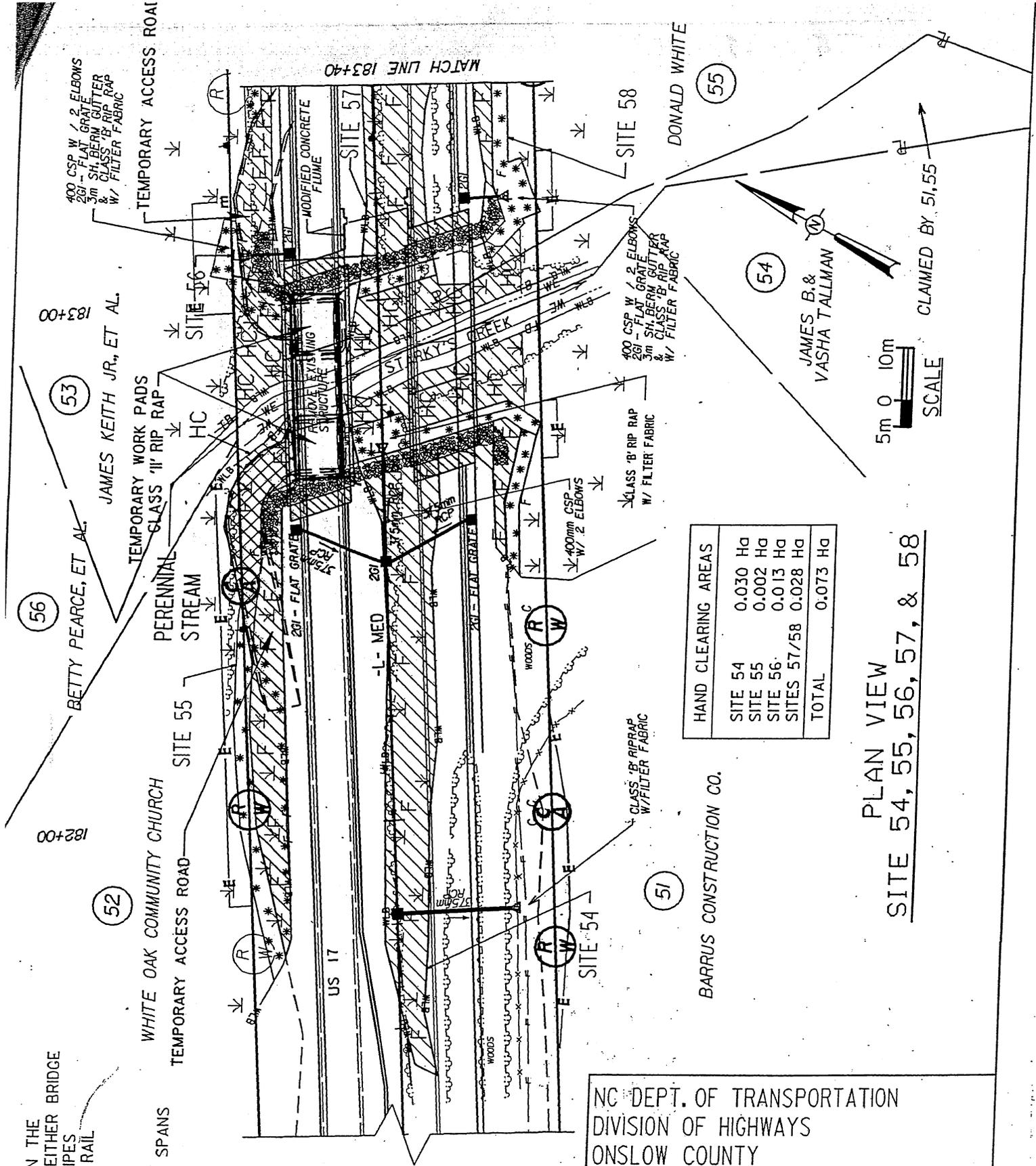


PROFILE VIEW  
SITE 53



NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.TI9030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 61 OF 81 DATE 7/14/03

DECK DRAINS:  
 NO DECK DRAINS IN THE  
 CENTER SPAN OF EITHER BRIDGE  
 USE 102mm DIA PIPES  
 THROUGH BARRIER RAIL  
 AT 1.8m CNTS  
 ON BOTH SIDES  
 OF EACH BRIDGE  
 ONLY ON THE END SPANS



182+00 (56) BETTY PEARCE, ET AL.

(53) JAMES KEITH JR., ET AL.

WHITE OAK COMMUNITY CHURCH  
 TEMPORARY ACCESS ROAD

MATCH LINE 183+40

US 17

DONALD WHITE (55)

JAMES B. & VASHA TALLMAN (54)

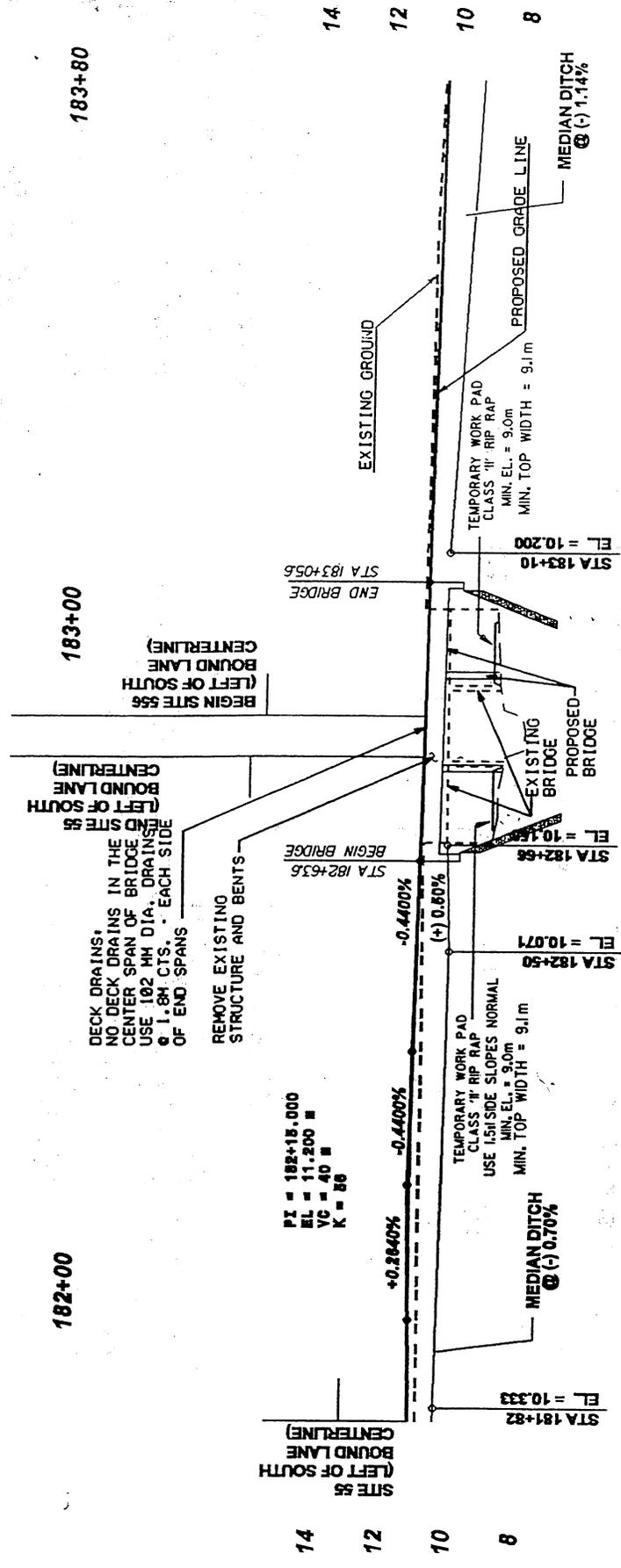
5m 0 10m SCALE  
 CLAIMED BY 51, 55

HAND CLEARING AREAS	
SITE 54	0.030 Hq
SITE 55	0.002 Hq
SITE 56	0.013 Hq
SITES 57/58	0.028 Hq
TOTAL	0.073 Hq

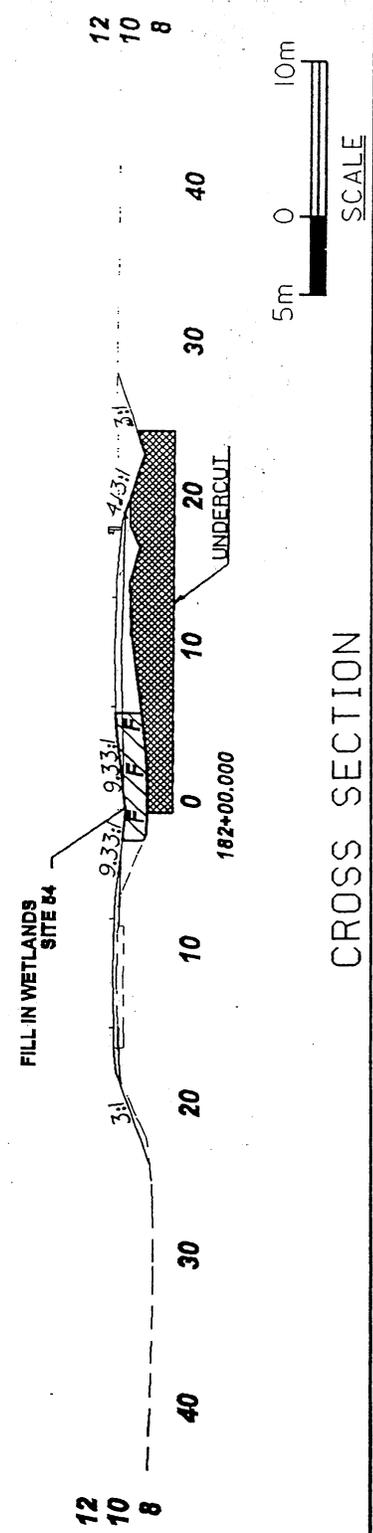
BARRUS CONSTRUCTION CO.

PLAN VIEW  
 SITE 54, 55, 56, 57, & 58

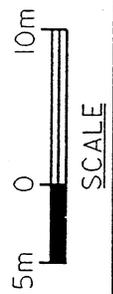
NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 62 OF 81 DATE 04/01/04



PROFILE VIEW ALONG -SBL- ROADWAY  
SITE 54, 55, & 56



CROSS SECTION



NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 63 OF 81 DATE 12/09/03

NOTE:  
USE 1.5:1 SIDE SLOPES  
FOR TEMPORARY  
WORK PADS

EXISTING  
BRIDGE

9.1m

TEMPORARY WORK PADS  
CLASS 'II' RIP RAP

TEMPORARY ACCESS ROAD  
TO WORK PADS  
CLASS 'II' RIP RAP  
USE 1.5:1 SIDE SLOPES

6.1m  
TOP WIDTH



30

20

10

0

10

20

30

40

PROFILE

TEMPORARY WORK PADS  
UNDER EXISTING BRIDGE AND  
TEMPORARY ACCESS ROAD TO  
WORK PADS

NCDOT

DIVISION OF HIGHWAYS

ONSLOW COUNTY

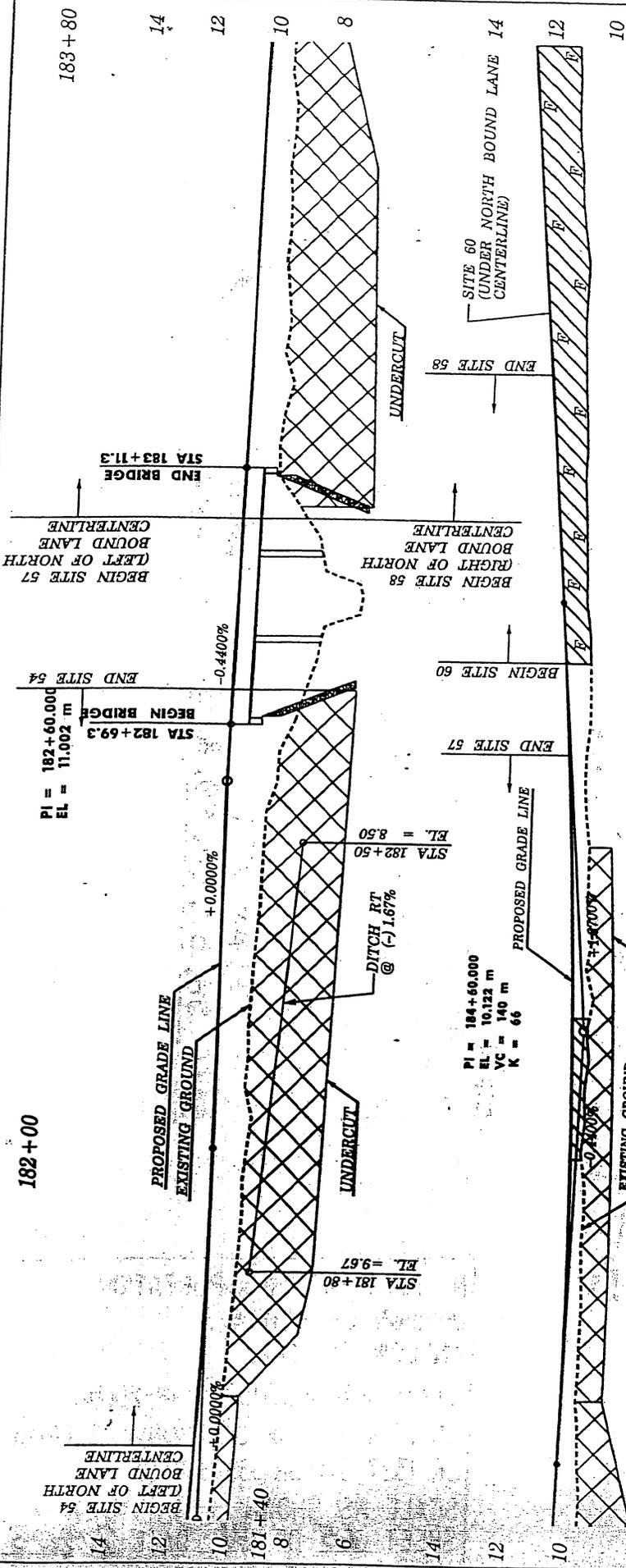
PROJECT: 8.T190301 (R-2514A)

US 17 NORTH OF JACKSONVILLE

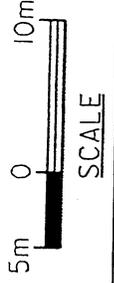
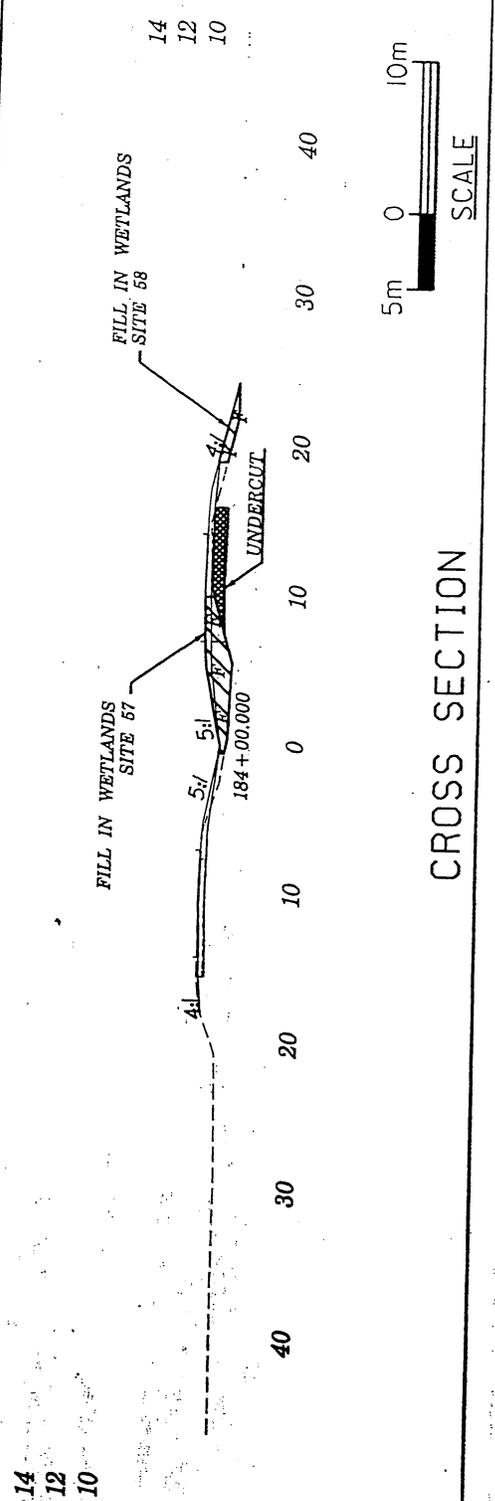
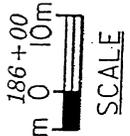
FROM SR 1327 TO SR 1330 / 1439

SHEET 63A OF 81

12 / 09 / 03



PROFILE VIEW ALONG -NBL- ROADWAY  
 185+00  
 SITE 54, 57, 58 & 60



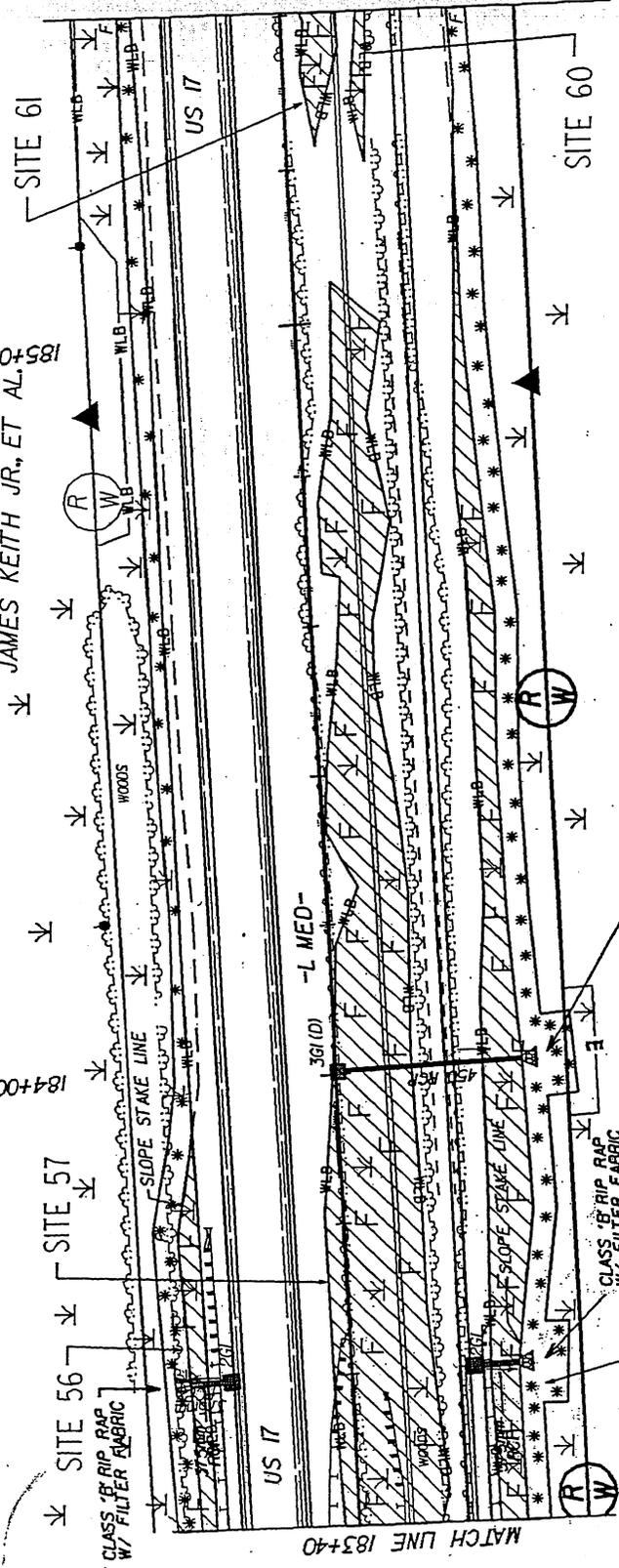
CROSS SECTION

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 64 OF 81 DATE 8/19/63

MATCH LINE 185+40

53

JAMES KEITH JR., ET AL. 185+00



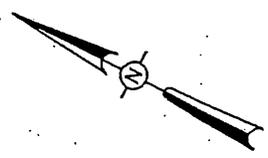
55

DONALD WHITE

SITE 58



PLAN VIEW  
 SITE 56, 57, 58, 60, & 61



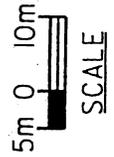
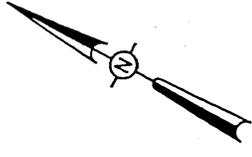
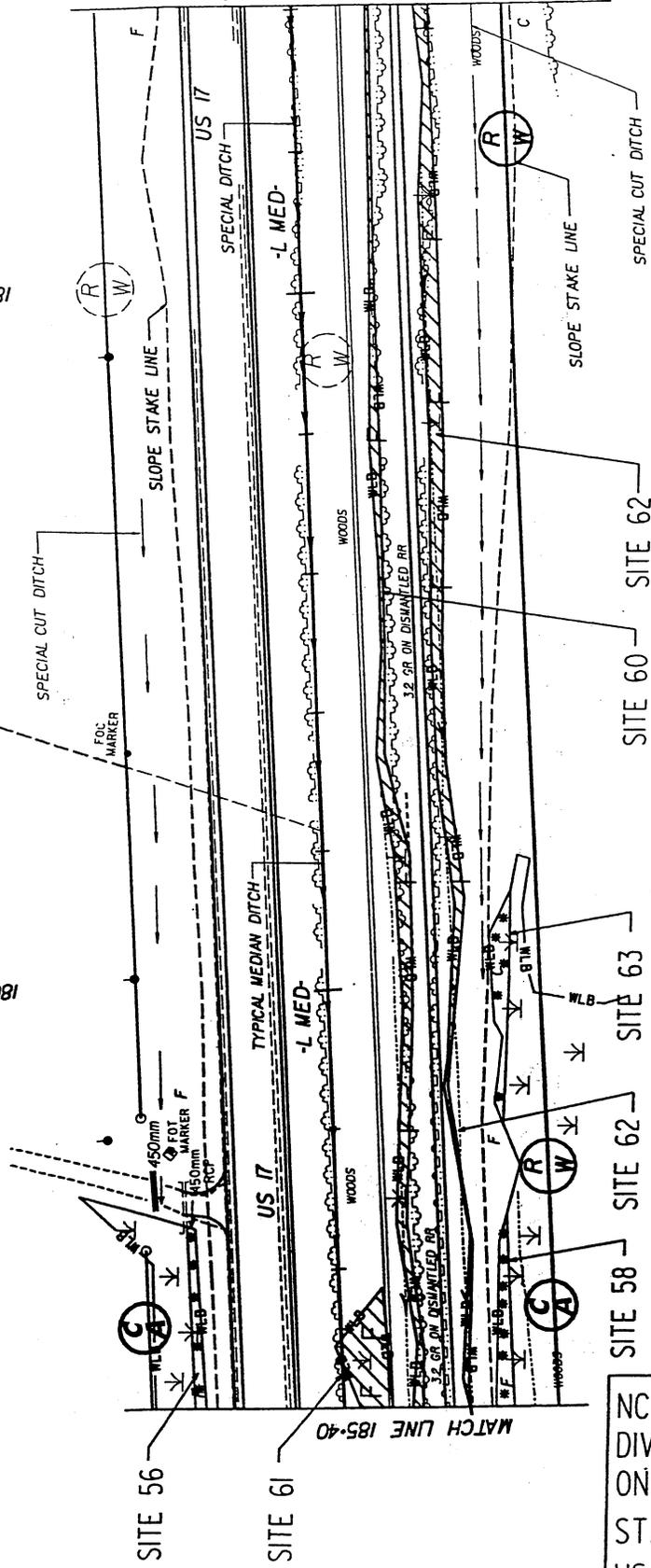
NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 65 OF 81 DATE 04/01/04

MATCH LINE 187-40

56  
BETTY PEARCE, ET AL.  
00-281

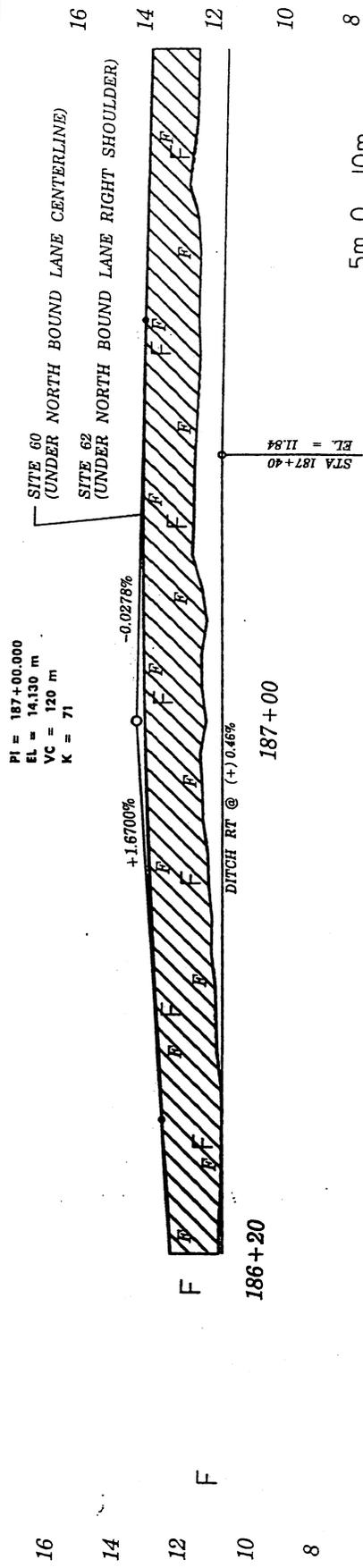
53  
JAMES KEITH JR., ET AL.  
00-981

55  
DONALD WHITE



PLAN VIEW  
 SITE 56, 58, 60, 61, 62 & 63

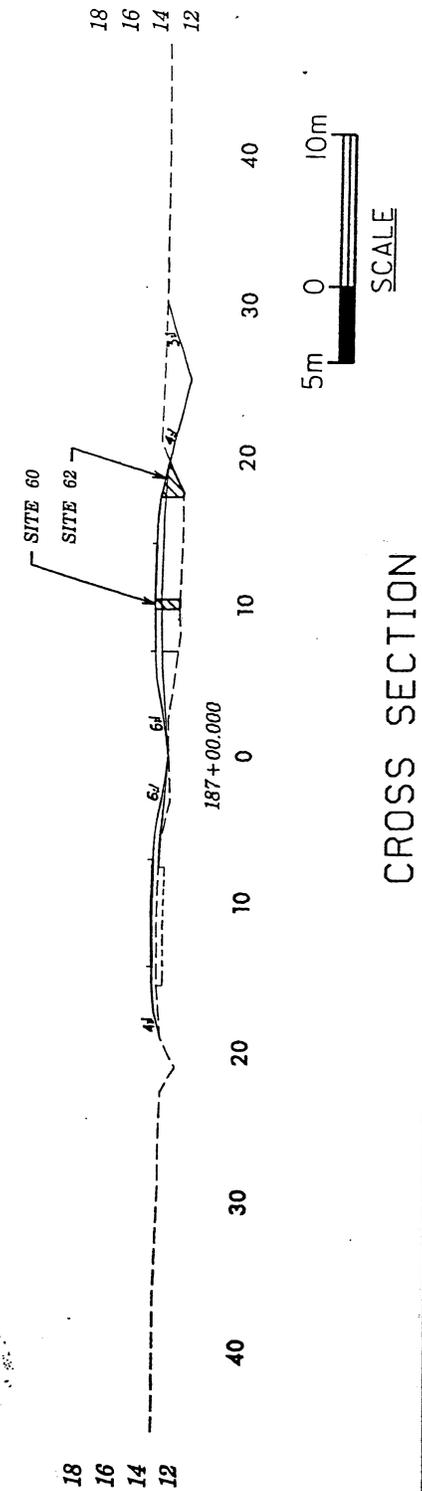
NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 66 OF 81 DATE 7/14/03



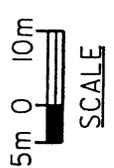
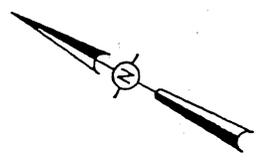
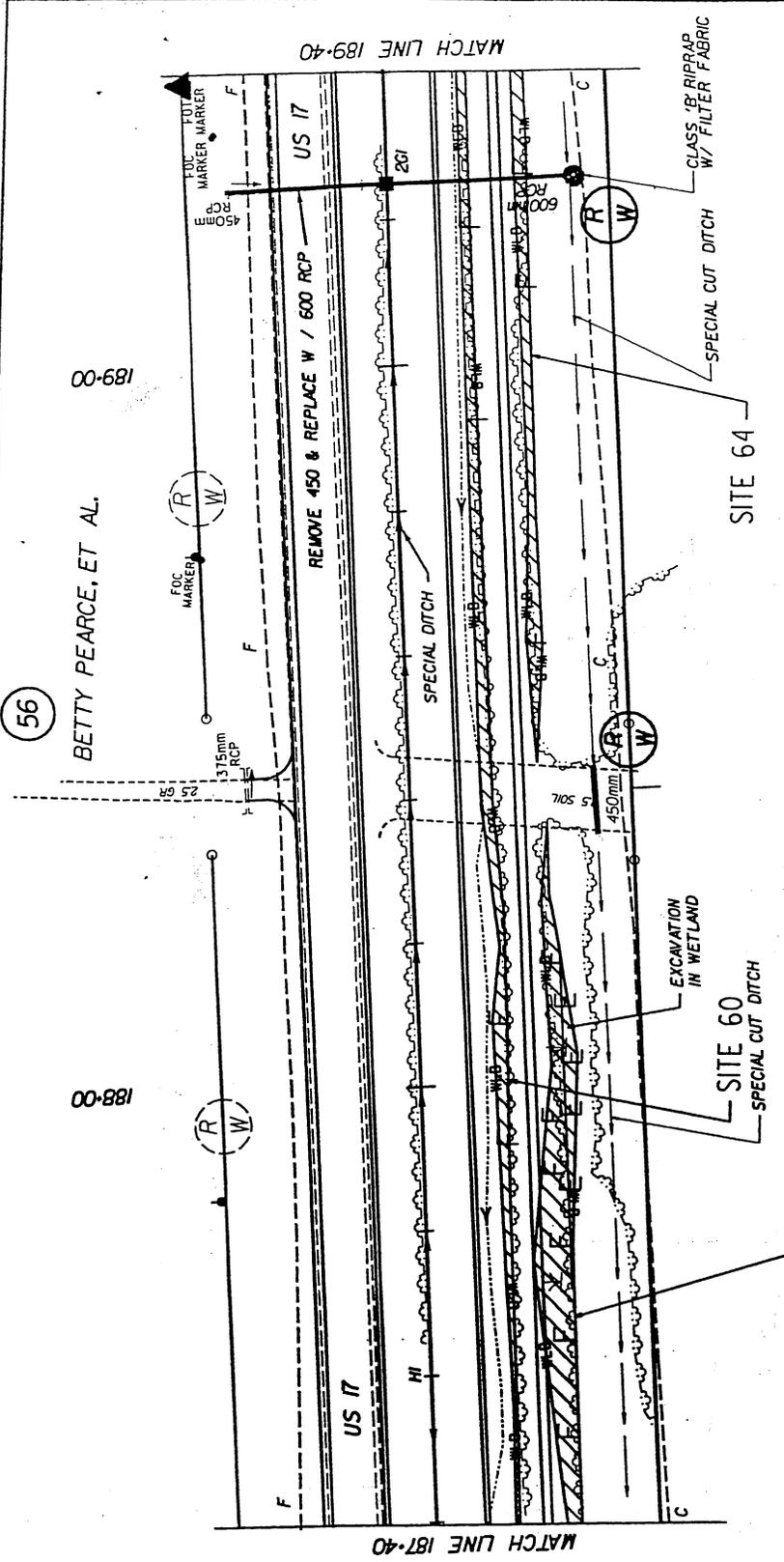
END SITE 62  
 BEGIN SITE 64

5m 0 10m  
 SCALE

PROFILE VIEW  
 SITE 60, 62 & 64

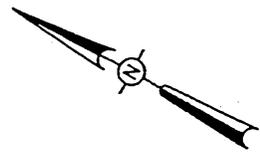
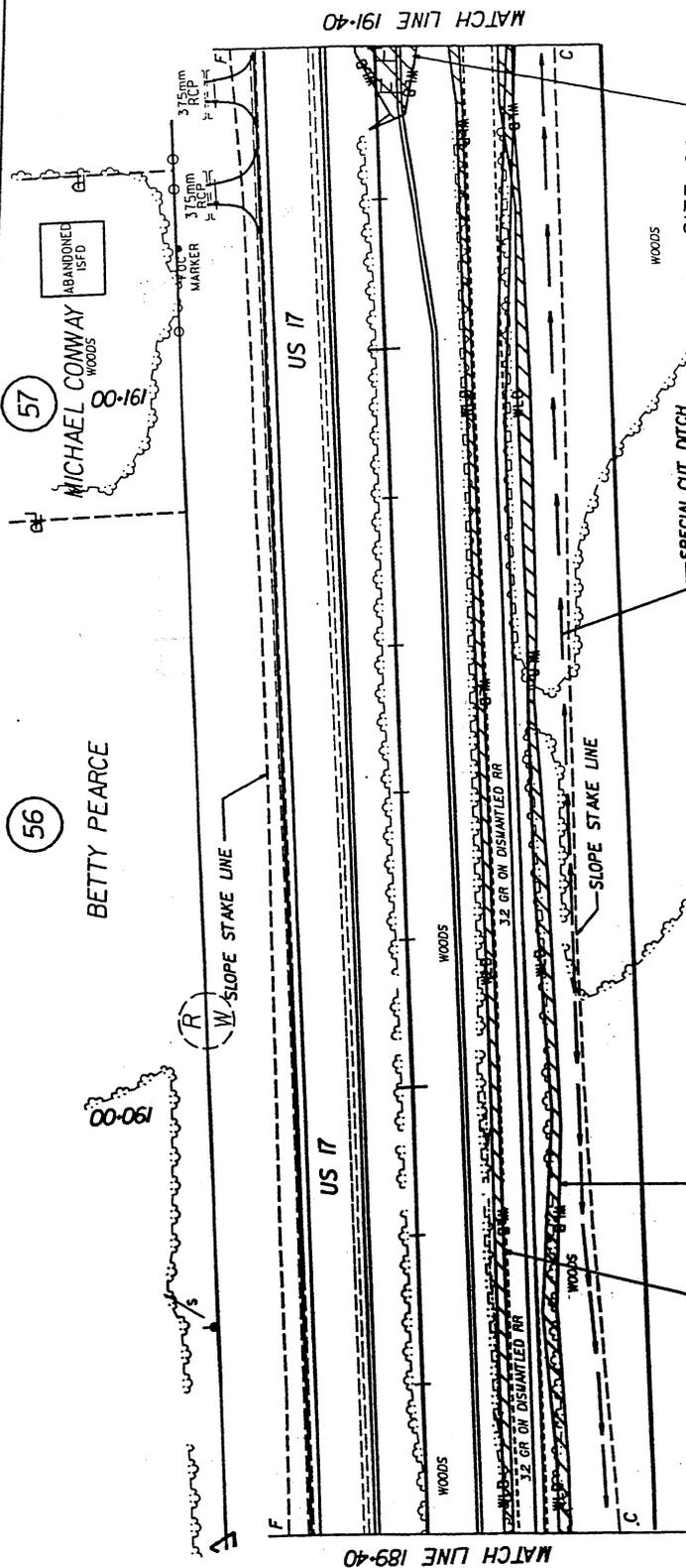


NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.TI9030I (R-25I4A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 67 OF 81 DATE 7/14/03



PLAN VIEW  
 SITE 60, 62, & 64  
 SCALE

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 68 OF 81 DATE 7/14/03



PLAN VIEW  
SITE 60 & 64

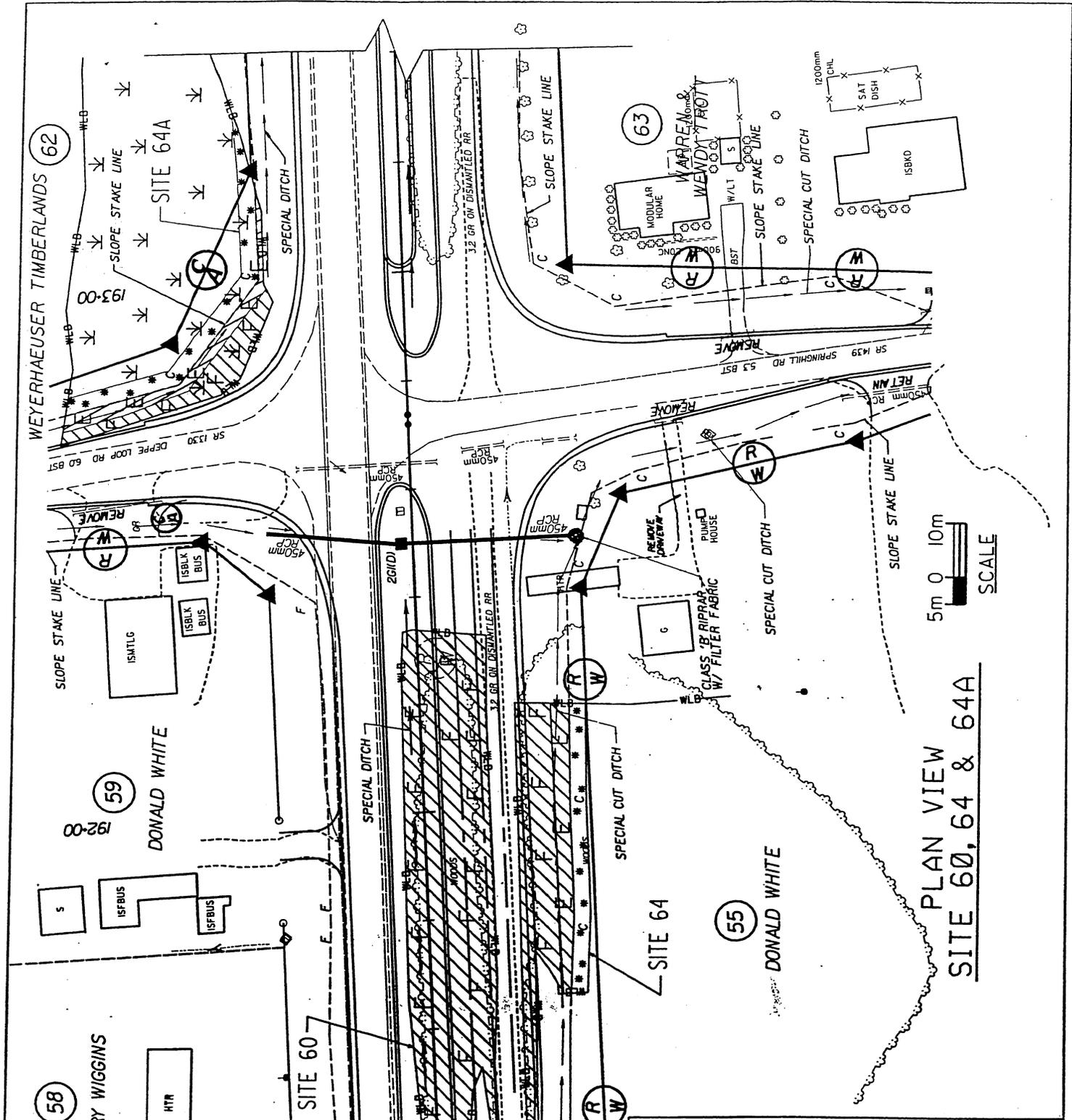
NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLOW COUNTY

STATE PROJ: 8.T190301 (R-2514A)

US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439

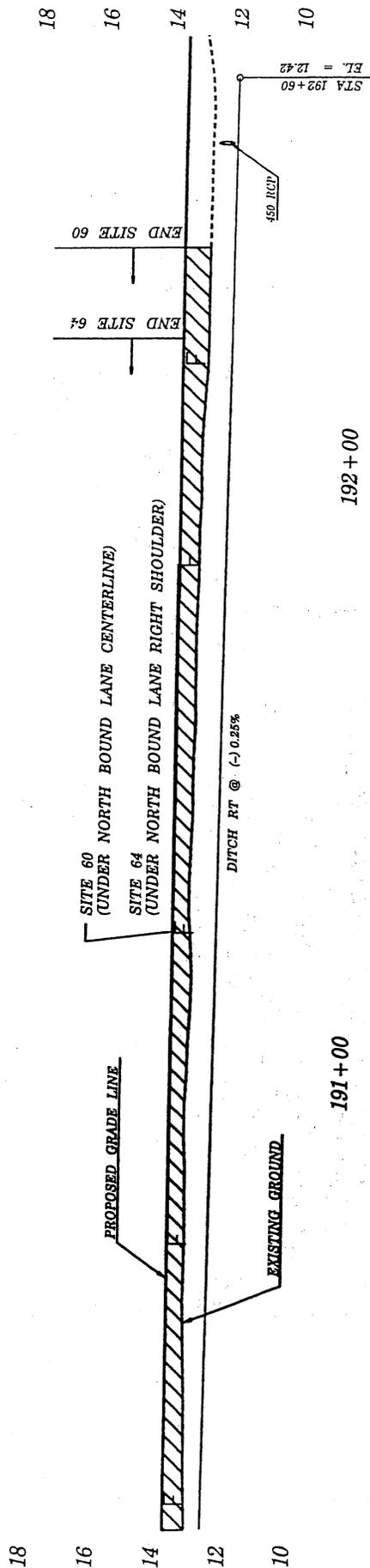
SCALE AS SHOWN

SHEET 69 OF 81 DATE 7/14/03



NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T19030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 70 OF 81 DATE 9/30/03

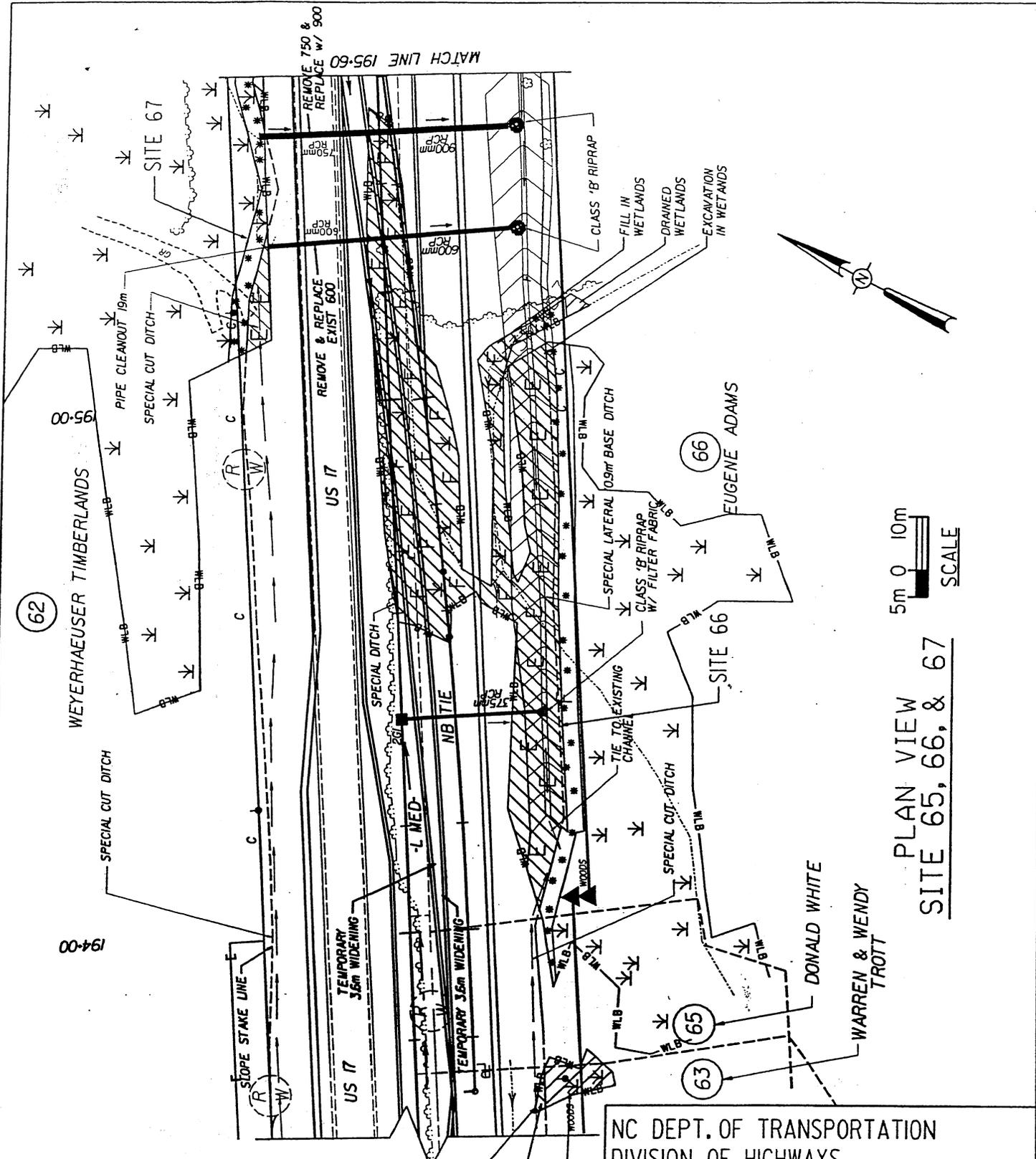
PLAN VIEW  
 SITE 60, 64 & 64A



PROFILE VIEW  
SITE 62 & 64



NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLOW COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 71 OF 81 DATE 7/14/03



PLAN VIEW  
SITE 65, 66, & 67

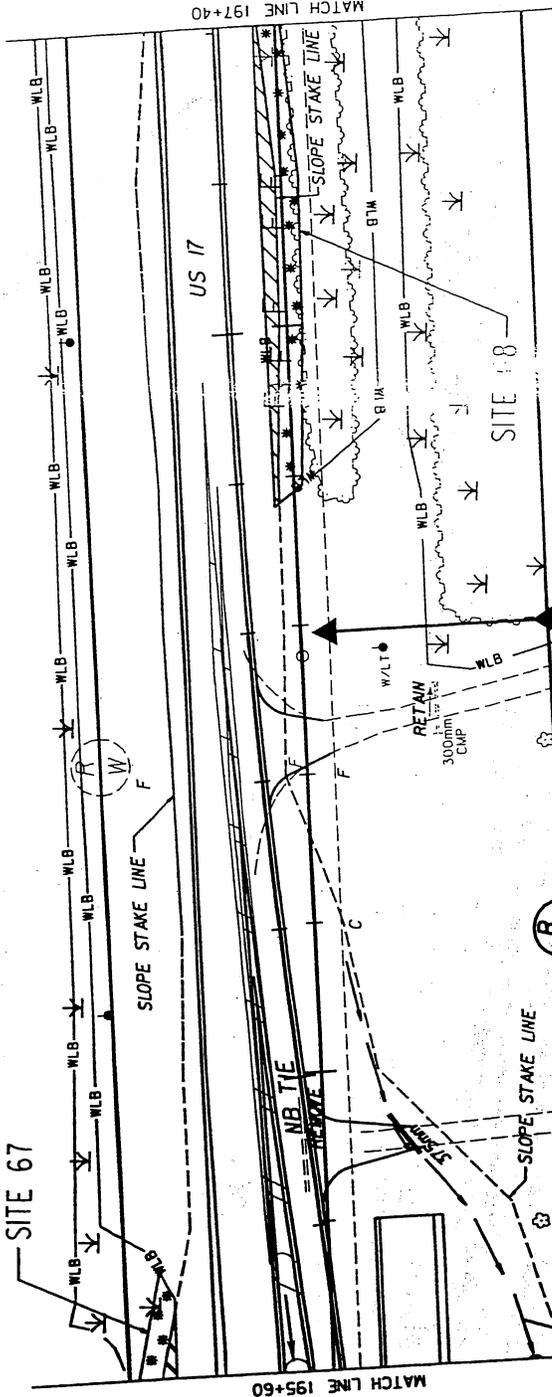
NC DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ONSLAW COUNTY  
STATE PROJ: 8.T190301 (R-2514A)  
US 17 NORTH OF JACKSONVILLE FROM  
SR 1327 TO SR 1330/1439  
SCALE AS SHOWN  
SHEET 72 OF 81 DATE 9/30/03



197-00

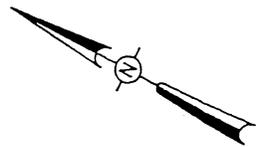
62

WEYERHAEUSER TIMBERLANDS



62

WEYERHAEUSER TIMBERLANDS



PLAN VIEW  
SITE 67 & 68

67

RONNIE ADAMS

66

EUGENE ADAMS

00-961

SITE 67

MATCH LINE 195+60

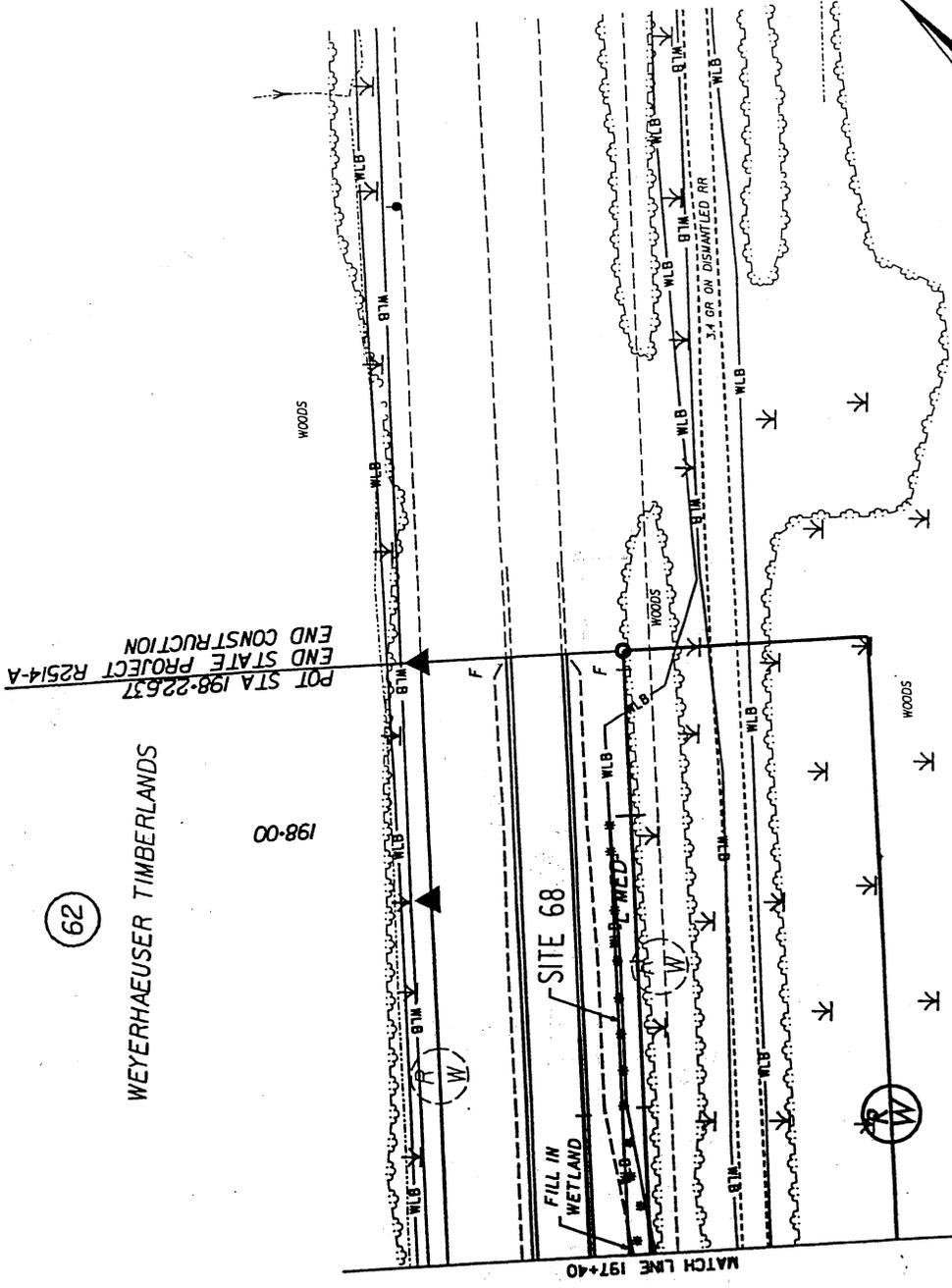
MATCH LINE 197+40

US 17

SITE 68

R W

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.T19030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 74 OF 81 DATE 8/19/03



(62)

WEYERHAEUSER TIMBERLANDS

198-00

SITE 68

(62)

WEYERHAEUSER TIMBERLANDS

NC DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 STATE PROJ: 8.TI9030I (R-2514A)  
 US 17 NORTH OF JACKSONVILLE FROM  
 SR 1327 TO SR 1330/1439  
 SCALE AS SHOWN  
 SHEET 75 OF 81 7/14/03

# PROPERTY OWNERS

## NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
17	PEGGY GIBSON	4206 NEW BERN HWY JACKSONVILLE, NC 28546
19	BENJAMIN GIBSON	4184 NEW BERN HWY JACKSONVILLE, NC 28546
20	MARCIA HUMPHREY	1698 KELLUM LOOP RD JACKSONVILLE, NC 28546
21	MARCIA HUMPHREY	1698 KELLUM LOOP RD JACKSONVILLE, NC 28546
22	ESTERLENE DIXON	1402 ADAM COURT JACKSONVILLE, NC 28546
23	RETHA EDWARDS	4260 NEW BERN HWY JACKSONVILLE, NC 28546
26	DEWEY L. POWERS	944 ETON DRIVE JACKSONVILLE, NC 28546
30	ANTHONY HERNANDEZ	4339 N. MARINE BLVD JACKSONVILLE, NC 28546
32	THE ENDOWMENT FUND OF NC STATE UNIV., ET AL (HOFFMANN FOREST)	JACKSONVILLE, NC 28540
33	GREAT EASTERN TIMBER CO., LLC	15 PIEDMONT CENTER SUITE 1250 ATLANTA, GA 30305
34	JAMES WHITE	2573 BELGRADE SWANSBORO RD MAYSVILLE, NC 28555
35	BETTY C. SUTHERLAND	5743 NEW BERN HWY MAYSVILLE, NC 28555
38	EDNA EARL ODOM	P.O. BOX 833 MAYSVILLE, NC 28555
44	GRACE E. HORTON	11 RUTH STREET JACKSONVILLE, NC 28540
47	HAZEL S. PARKER	2798 BELGRADE SWANSBORO RD MAYSVILLE, NC 28555
48	PERCY & LINA PARKER	2780 BELGRADE SWANSBORO ROAD MAYSVILLE, NC 28555
50	PERCY PARKER, ET. AL.	2780 BELGRADE SWANSBORO ROAD MAYSVILLE, NC 28555

**NCDOT**

**DIVISION OF HIGHWAYS**

**ONSLOW COUNTY**

**PROJECT: 8.T190301 (R-2514A)**

**US 17 NORTH OF JACKSONVILLE**

**FROM SR 1327 / SR 1410**

**TO SR 1330 / SR 1439**

**SHEET 76 OF 81 DATE 7/14/03**

# PROPERTY OWNERS

## NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
51	BARRUS CONSTRUCTION CO.	P.O. BOX 14000 LEXINGTON, KY 40512
52	WHITE OAK COMMUNITY CHURCH	6181 NEW BERN HWY MAYSVILLE, NC 28555
53	JAMES KEITH JR., ET. AL	56 DIXIE TRAIL JACKSONVILLE, NC 28546
55	DONALD WHITE	III SPRINGHILL RD MAYSVILLE, NC 28555
56	BETTY C. PEARCE	5310 LORD TENNYSON RD WILMINGTON, NC 28405
62	WEYERHAEUSER TIMBERLANDS	P.O. BOX 1391 NEW BERN, NC 28560
63	WARREN & WENDY TROTT	105 SPRINGHILL RD MAYSVILLE, NC 28555
65	DONALD WHITE	III SPRINGHILL RD MAYSVILLE, NC 28555
66	EUGENE ADAMS	6574 NEW BERN HWY MAYSVILLE, NC 28555

**NCDOT**

**DIVISION OF HIGHWAYS**

**ONSLOW COUNTY**

**PROJECT: 8.T190301 (R-2514A)**

**US 17 NORTH OF JACKSONVILLE**

**FROM SR 1327 / SR 1410**

**TO SR 1330 / SR 1439**

**SHEET 77 OF 81 DATE 7/14/03**

**WETLAND PERMIT IMPACT SUMMARY**

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS						SURFACE WATER IMPACTS			
			Fill In Wetlands (Hectares)	Temp. Fill In Wetlands (Hectares)	Excavation In Wetlands (Hectares)	Mechanized Clearing (Method III) (Hectares)	Drained Wetlands (Hectares)	Fill In SW (Natural) (Hectares)	Temp. Fill In SW (Hectares)	Existing Channel Impacted (Meters)	Natural Stream Design (Meters)	
1	105+66 - 105+99 RT	900 mm RCP	0.031		0.015	0.009	0.018	0.003		16		
2	106+01 - 106+04 LT	900 mm RCP										
3	106+98 - 107+26 RT											
4	107+48 - 107+63 CL		0.039		0.005		0.007	0.001		3		
4A	107+70 LT	600mm RCP	0.005				0.007					
5	107+60 - 111+40 RT		0.089									
6	107+61 - 110+64 RT		0.049		0.096	0.007	0.086					
7	110+58 - 111+65 RT		0.244				0.243					
8	111+26 - 111+73 LT		0.003		0.008	0.010						
8A	111+80 - 111+88 LT					0.002						
9	111+66 - 112+12 RT	2.1 x 2.1 RCBC	0.049									
10	112+10 - 112+77 RT	(same culvert as site 9)	0.023		0.006		0.022	0.013		96		
10A	112+08 LT	(same culvert as site 9)			0.001	0.021		0.000		2		
11	114+23 - 114+43 RT		0.005			0.004						
12	114+54 - 116+69 RT	450 RCP	0.344		0.010	0.064	0.017					
12A	114+60 - 114+90 LT	(same pipe as site 12)			0.003	0.004						
13	116+81 - 119+83 RT	760 RCP	0.521		0.070	0.083	0.088					
13A	119+48 - 119+66 LT	(same pipe as site 13)			0.003	0.005						
14	120+08 - 129+26 RT	600 RCP	1.930		0.024	0.122						
15	124+48 - 126+76 RT	(same pipe as site 14)			0.011	0.029						
15A	125+57 - 126+79 LT	(same pipe as site 14)			0.004	0.007						
16	125+80 - 142+50 RT		0.093		0.470	0.330	0.134					
17	Not Used											
<b>TOTALS:</b>			3.534	0	0.726	0.782	0.528	0.017	0	117	0	

Form Revised 3/22/01

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**NC DOT**  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 PROJECT 8 T190301 (R-2514A)  
 US 17 NORTH OF  
 JACKSONVILLE  
 TO SOUTH OF BELGRADE  
 SHEET **78** OF **81**  
 REV 04/12/04

**WETLAND PERMIT IMPACT SUMMARY**

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Fill In Wetlands (Hectares)	Temp. Fill In Wetlands (Hectares)	Excavation In Wetlands (Hectares)	Mechanized Clearing (Method III) (Hectares)	Drained Wetlands (Hectares)	Fill In SW (Natural) (Hectares)	Temp. Fill In SW (Hectares)	Existing Channel Impacted (Meters)	Natural Stream Design (Meters)	
18	129+35 - 132+32 RT	375 mm RCP	0.331									
19	132+47 - 132+64 LT	900 mm RCP										
20	132+60 - 132+63 CL		0.002		0.005	0.006						
21	133+56 - 147+60 RT		1.856		0.000	0.000						
21A	136+00 - 136+15 LT	600 mm RCP			0.002	0.006						
21B	140+64 - 140+69 LT	600 mm RCP			0.001	0.005						
22	144+20 - 145+00 RT	600 mm RCP			0.031	0.015						
22A	144+30 - 144+45 LT	600 mm RCP			0.001	0.003						
23	145+22 - 146+97 RT	375 mm RCP			0.041	0.007	0.040					
24	147+05 - 148+64 RT	600 mm RCP			0.028	0.016	0.015					
24A	148+20 - 148+35 LT	600 mm RCP			0.002	0.010	0.000					
25	149+06 - 150+63 RT	600 mm RCP	0.111		0.000	0.000						
26A	149+02 - 150+33 RT											
26	150+55 - 151+05 RT											
27	Not Used		0.001			0.016						
28	150+68 - 151+37 RT					0.011						
29	151+41 - 153+07 RT		0.042									
30	151+84 - 152+76 RT					0.031						
31	153+13 - 153+51 RT		0.110									
32	153+32 - 153+49 RT		0.009									
33	154+40 - 156+76 RT		0.000			0.003						
34	156+97 - 157+18 RT		0.155		0.008							
<b>TOTALS:</b>			2.616	0	0.119	0.131	0.055	0	0	0	0	

Form Revised 3/22/01

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**NCDDOT**  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 PROJECT 8.T190301 (R-2514A)  
 US 17 NORTH OF  
 JACKSONVILLE  
 TO SOUTH OF BELGRADE  
 SHEET 79 OF 81  
 9/30/03

**WETLAND PERMIT IMPACT SUMMARY**

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS						
			Fill In Wetlands (Hectares)	Temp. Fill In Wetlands (Hectares)	Excavation In Wetlands (Hectares)	Mechanized Clearing (Method III) (Hectares)	Drained Wetlands (Hectares)	Fill In SW (Natural) (Hectares)	Temp. Fill In SW (Hectares)	Existing Channel Impacted (Meters)	Natural Stream Design (Meters)		
35	156+92 - 160+40 RT		0.308										
36	159+14 - 160+35 RT				0.099								
37	160+40 - 162+10 RT		0.192		0.039		0.043			0.009			41
37A	161+38 LT	2 @ 2.1w x 1.8h RCBC (same culvert as site 37)	0.814				0.010						18
38	162+52 - 169+43 RT												
38A	163+77 - 163+96 RT									0.002			20 *
39	162+52 - 169+26 RT	600 mm RCP	0.156		0.003		0.017						
40	164+76 - 167+38 LT		0.004		0.274		0.204	0.002					20
41	168+24 - 168+64 LT						0.059						
42	169+59 - 170+34 LT						0.004						
43	170+35 - 173+39 RT						0.007						
44	171+69 - 174+29 CL		0.290		0.039		0.000	0.018					
45	173+58 - 174+25 LT	600 mm RCP	0.016										
46	173+70 - 176+59 RT						0.042						
47	174+56 - 174+82 CL		0.023		0.101		0.008						
48	174+56 - 176+48 LT		0.019										
49	175+08 - 176+91 RT	600 mm RCP	0.074		0.010		0.074						
50	Not Used												
51	176+61 - 176+83 LT		0.002										
52	177+07 - 177+88 LT	0.9m Base Tall Ditch	0.016		0.008			0.007					
53	179+13 - 179+30 LT	0.9m Base Tall Ditch			0.044		0.075	0.034					
54	181+51 - 182+79 CN	Bridge	0.117				0.022			0.001			20
TOTALS:			2.031	0	0.618	0.566	0.061	0.011	0	120	0		0

\* No Mitigation Required (Intermittent Stream In Site 38)

**NCDOT**

DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 PROJECT 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE  
 TO SOUTH OF BELGRADE

## WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS						SURFACE WATER IMPACTS			
			Fill In Wetlands (Hectares)	Temp. Fill In Wetlands (Hectares)	Excavation In Wetlands (Hectares)	Mechanized Clearing (Method III) (Hectares)	Drained Wetlands (Hectares)	Fill In SW (Natural) (Hectares)	Temp. Fill In SW (Hectares)	Existing Channel Impacted (Meters)	Natural Stream Design (Meters)	
55	181+70 - 182+70 LT		0.064	*		0.020						
56	182+97 - 185+66 LT	Bridge	0.040	*		0.054						
57	183+00 - 185+05 CN	Bridge	0.191			0.004						
58	183+07 - 185+67 RT		0.067			0.082						
59	Not Used											
60	185+20 - 192+33 RT		0.208									
61	185+23 - 185+57 CN		0.013									
62	185+40 - 188+36 RT		0.054		0.004							
63	185+80 - 186+13 RT											
64	188+44 - 192+19 RT	600 mm RCP	0.081		0.014	0.005						
64A	192+76 - 193+31 LT		0.015		0.011	0.016						
65	193+65 - 193+77 RT				0.001	0.020						
66	193+88 - 195+54 RT		0.126		0.071	0.036		0.008				
67	195+28 - 195+75 LT	600 mm & 900 mm RCP	0.002		0.006	0.017						
68	196+77 - 197+44 RT		0.009			0.025						
SHEET TOTALS:			0.871	0	0.108	0.278	0.008	0	0	0	0	
PROJECT TOTALS:			9.062	0	1.571	1.757	0.662	0.028	0	237	0	

\* SITE 55 - 0.064 ha INCLUDES 0.022 ha OF FILL FOR TEMPORARY ACCESS ROAD AND WORK PAD.  
 \* SITE 56 - 0.0398 ha INCLUDES 0.019 ha OF FILL FOR TEMPORARY ACCESS ROAD AND WORK PAD.

# NCDOT

DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 PROJECT 8: T190301 (R-2514A)  
 US 17 NORTH OF  
 JACKSONVILLE  
 TO SOUTH OF BELGRADE

**WETLAND PERMIT IMPACT SUMMARY**

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS						
			Fill In Wetlands (Acres)	Temp. Fill In Wetlands (Acres)	Excavation In Wetlands (Acres)	Mechanized Clearing (Method III) (Acres)	Drained Wetlands (Acres)	Fill In SW (Natural) (Acres)	Temp. Fill In SW (Acres)	Existing Channel Impacted (Feet)	Natural Stream Design (Feet)		
1	105+66 - 105+99 RT	36" RCP	0.076		0.038	0.022							
2	106+01 - 106+04 LT	36" RCP	0.096		0.014			0.041	0.008			52	
3	106+98 - 107+26 RT		0.011										
4	107+48 - 107+63 CL	24" RCP	0.244										
4A	107+70 LT		0.244						0.001			10	
5	107+60 - 111+40 RT		0.121		0.236	0.017							
6	107+61 - 110+64 RT		0.604			0.212		0.601					
7	110+58 - 111+65 RT		0.007		0.019	0.024							
8	111+26 - 111+73 LT					0.006							
8A	111+80 - 111+88 LT		0.122										
9	111+86 - 112+12 RT	7'-x 7' RCBC	0.057		0.014			0.054	0.031			315	
10	112+10 - 112+77 RT	(same culvert as site 9)			0.003	0.051			0.001			7	
10A	112+08 LT	(same culvert as site 9)	0.013			0.010							
11	114+23 - 114+43 RT	18" RCP	0.851		0.024	0.158		0.042					
12	114+54 - 116+69 RT	(same pipe as site 12)			0.008	0.010							
12A	114+60 - 114+90 LT	(same pipe as site 12)	1.288		0.172	0.204		0.219					
13	116+81 - 119+63 RT	30" RCP											
13A	119+48 - 119+66 LT	(same pipe as site 13)	4.768		0.008	0.012							
14	120+08 - 129+26 RT	24" RCP			0.080	0.301							
15	124+48 - 125+75 RT	(same pipe as site 14)			0.026	0.073							
15A	125+57 - 125+79 LT	(same pipe as site 14)	0.230		0.010	0.017							
16	125+80 - 142+50 RT				1.162	0.816		0.331					
17	Not Used												
TOTALS:			8.73	0	1.79	1.93		1.30	0.04	0		384	0

**NCDOT**

DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 PROJECT 8.T190301 (R-2514A)  
 US 17 NORTH OF JACKSONVILLE  
 TO SOUTH OF BELGRADE

SHEET **81A** OF **81** 4/12/04

**ENGLISH**

**WETLAND PERMIT IMPACT SUMMARY**

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Fill In Wetlands (Acres)	Temp. Fill In Wetlands (Acres)	Excavation In Wetlands (Acres)	Mechanized Clearing (Method III) (Acres)	Drained Wetlands (Acres)	Fill In SW (Natural) (Acres)	Temp. Fill In SW (Acres)	Existing Channel Impacted (Feet)	Natural Stream Design (Feet)	
18	129+35 - 132+32 RT	15" RCP	0.818									
19	132+47 - 132+64 LT	36" RCP										
20	132+60 - 132+63 CL		0.004		0.013	0.014						
21	133+56 - 147+60 RT		4.587									
21A	136+00 - 136+15 LT	24" RCP			0.006	0.015						
21B	140+54 - 140+69 LT	24" RCP			0.002	0.013						
22	144+20 - 145+00 RT	24" RCP			0.076	0.037						
22A	144+30 - 144+45 LT	24" RCP			0.001	0.008						
23	145+22 - 146+97 RT	15" RCP			0.101	0.019		0.098				
24	147+05 - 148+64 RT	24" RCP			0.069	0.040		0.037				
24A	148+20 - 148+35 LT	24" RCP			0.004	0.024						
25	149+06 - 150+63 RT		0.273									
25A	149+02 - 150+33 RT											
26	150+55 - 151+05 RT					0.040						
27	Not Used		0.002			0.027						
28	150+68 - 151+37 RT											
29	151+41 - 153+07 RT		0.103									
30	151+84 - 152+76 RT					0.077						
31	153+13 - 153+51 RT		0.271									
32	153+32 - 153+49 RT		0.022									
33	154+40 - 156+76 RT		0.001			0.008						
34	156+97 - 157+18 RT		0.383		0.021							
<b>TOTALS:</b>			6.46	0	0.29	0.32	0.14	0	0	0	0	0

**ENGLISH**

Form Revised 3/22/01

File:

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**NCDDOT**  
 DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 PROJECT 8.7190301 (R-2514A)  
 US 17 NORTH OF  
 JACKSONVILLE  
 TO SOUTH OF BELGRADE

SHEET 81B OF 81

4/1/04

**WETLAND PERMIT IMPACT SUMMARY**

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Fill In Wetlands (Acres)	Temp. Fill In Wetlands (Acres)	Excavation In Wetlands (Acres)	Mechanized Clearing (Method III) (Acres)	Drained Wetlands (Acres)	Fill In SW (Natural) (Acres)	Temp. Fill In SW (Acres)	Existing Channel Impacted (Feet)	Natural Stream Design (Feet)	
35	156+92 - 160+40 RT											
36	159+14 - 160+35 RT		0.760									
37	160+40 - 162+10 RT	2 @ 7' w x 6' h RCBC										
37A	161+38 LT	(same culvert as site 37)	0.475		0.245	0.107			0.021			
38	162+62 - 169+43 RT		2.012		0.097	0.025					135	
38A	163+77 - 163+96 RT										59	
39	162+62 - 169+26 RT				0.008	0.043			0.005	*	66	*
40	164+76 - 167+38 LT	24" RCP	0.387		0.677	0.503					66	
41	168+24 - 168+64 LT		0.011			0.147						
42	169+69 - 170+34 LT					0.010						
43	170+35 - 173+39 RT					0.017						
44	171+69 - 174+29 CL				0.097			0.045				
45	173+68 - 174+25 LT		0.716									
46	173+70 - 176+69 RT	24" RCP	0.038			0.105						
47	174+66 - 174+82 CL				0.250	0.020						
48	174+66 - 175+48 LT		0.057									
49	175+08 - 176+91 RT	24" RCP	0.047		0.026	0.183						
50	Not Used		0.183									
51	176+61 - 176+83 LT											
52	177+07 - 177+88 LT	3.0' Base Tail Ditch	0.006		0.019			0.018				
53	179+13 - 179+30 LT	3.0' Base Tail Ditch	0.039		0.108	0.186		0.083				
54	181+51 - 182+79 CN	Bridge	0.288			0.063			0.03		66	
<b>TOTALS:</b>			<b>6.02</b>	<b>0</b>	<b>1.53</b>	<b>1.40</b>	<b>0.15</b>	<b>0.03</b>	<b>0</b>	<b>392</b>	<b>0</b>	

\* No Mitigation Required (Intermittent Stream in Site 38)

**ENGLISH**

**NCDDOT**

DIVISION OF HIGHWAYS  
 ONSLOW COUNTY  
 PROJECT 8.T190301 (R-2514A)  
 US 17 NORTH OF  
 JACKSONVILLE  
 TO SOUTH OF BELGRADE

SHIBET 8/c OF 8/1

4/5/04

Form Revised 3/22/01

File:

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REPLY TO  
ATTENTION OF:

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

September 2, 2004

Regulatory Division

SUBJECT: 199503519, TIP R-2514A, US 17 Widening from SR 1327/1410 North of Jacksonville to SR 1330/1439 South of Belgrade/Maysville, Onslow County, North Carolina.

Dr. Gregory J. Thorpe, Ph.D.  
Environmental Management Director, PDEA  
N.C. Department of Transportation  
1548 Mail Service Center  
Raleigh, NC 27699-1548

Dear Dr. Thorpe:

In accordance with your written request of February 12, 2004 and April 21, 2004 and the resulting administrative record, enclosed are two copies of a Department of the Army permit to authorize the discharge of dredged and fill material into waters of the United States, for construction of TIP Project No. R-2514A, US 17 widening from SR 1327/1410 North of Jacksonville to SR 1330/1439 South of Belgrade/Maysville, Onslow County, North Carolina.

You should acknowledge that you accept the terms and conditions of the enclosed permit by signing and dating each copy in the spaces provided ("Permittee" on page 3). Your signature, as permittee, shows that, as consideration for the issuance of this permit, you voluntarily accept and agree to comply with all of the terms and conditions of this permit. All pages of both copies of the signed permit with drawings should then be returned to this office for final authorization. A self-addressed envelope is enclosed for your convenience.

In addition, I have enclosed a copy of the Notification of Administrative Appeal Process and Options and Request for Appeal. Please carefully read Section "B" of this form for information regarding the appeal process for proffered permits.

After the permit is authorized in this office, the original copy will be returned to you; the duplicate copy will be permanently retained in this office. Should you have questions, contact Mr. Dave Timpy of the Wilmington Field Office regulatory staff at telephone (910) 251-4634.

Sincerely,

A handwritten signature in black ink, appearing to read "E. David Franklin". The signature is written in a cursive style with a large, prominent initial "E".

E. David Franklin  
Chief, NCDOT Team

Enclosures

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND  
REQUEST FOR APPEAL**

Applicant: NCDOT/TIP R-2514A	File Number: 199503519	September 2, 2004
Attached is:		See Section below
X	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://www.usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

**A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT:** You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

Mr. Dave Timpy, Regulatory Project Manager  
U.S. Army Corps of Engineers, Wilmington District  
Wilmington Regulatory Field Office  
P.O. Box 1890  
Wilmington, North Carolina 28402

If you only have questions regarding the appeal process you may also contact:

Mr. Arthur Middleton, Administrative Appeal Review Officer  
CESAD-ET-CO-R  
U.S. Army Corps of Engineers, South Atlantic Division  
60 Forsyth Street, Room 9M15  
Atlanta, Georgia 30303-8801

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

\_\_\_\_\_  
Signature of appellant or agent.

Date:

Telephone number:

**DIVISION ENGINEER:**  
Commander  
U.S. Army Engineer Division, South Atlantic  
60 Forsyth Street, Room 9M15  
Atlanta, Georgia 30303-3490