



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

JAMES B. HUNT, JR.  
GOVERNOR

DIVISION OF HIGHWAYS  
P.O. BOX 25201, RALEIGH, N.C. 27611-5201

R. SAMUEL HUNT III  
SECRETARY

October 19, 1994

MEMORANDUM TO: Mr. F. D. Martin, P.E.  
Division 14 Engineer

FROM: B. J. O'Quinn, P.E.   
Assistant Branch Manager  
Planning and Environmental Branch

SUBJECT: Haywood County, Improvements to US 19 from  
Maggie Valley to Dellwood; State Project No.  
8.1941701; T.I.P. # R-2102

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

BJO/eah

Attachment

cc: Mr. G. T. Shearin, P.E.  
Mr. Kelly Barger, P.E.  
Mr. Don Morton, P.E.  
Mr. A. L. Hankins, P.E.  
Mr. Victor Barbour, P.E.  
Mr. John Smith, P.E.  
Mr. W. D. Johnson, P.E.  
Mr. N. L. Graf, FHWA  
Mr. H. Franklin Vick, P.E. (cover only)  
Mr. Gary Jessup (cover only)





**This notice of authorization must be  
conspicuously displayed at the site of work.**

United States Army Corps of Engineers

October 13, 19 94

A permit to place fill material in waters/wetlands of Core Creek, Mine  
Branch and other tributaries associated with widening of US  
Highway 19 between SR 1307 at Maggie Valley and SR. 1208 at  
at Dellwood in Haywood County, North Carolina

has been issued to NCDOT on Oct 13, 19 94

Address of Permittee Post Office Box 25201  
Raleigh, North Carolina 27611-5201

Permit Number

ACTION ID. 199102732

*Robert J. Sperberg*  
District Commander  
ROBERT J. SPERBERG, COL, EN



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

IN REPLY REFER TO

October 17, 1993

Regulatory Branch

Action ID. 199102732

North Carolina Department of Transportation  
Division of Highways  
ATTN: B.J. O'Quinn, P.E.  
Raleigh, North Carolina 27611-5201

Dear Mr. O'Quinn:

In accordance with the written request of August 14, 1992, and the ensuing administrative record, enclosed is a permit to discharge fill material into Pine Tree Cove Creek, Mine Branch, unnamed tributaries to Jonathan Cree, and adjacent wetlands in conjunction with the widening of a two mile segment of US Highway 19 between Dellwood and Maggie Valley in Haywood County, North Carolina (TIP No. R-2102).

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, 1997.
- 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.

The enclosed Notice of Authorization, ENG Form 4336, must be conspicuously displayed at your worksite.

Sincerely,

A handwritten signature in blue ink, appearing to read "James H. Bradley", is written over the typed name and title.

James H. Bradley  
Chief, Construction-Operations  
Division

Enclosures

Copy Furnished with enclosures:

NOAA, NOS, Coast & Geodetic Survey  
Mapping and Charting Branch  
Source Data Unit, N/Cg2211, Sta 7317  
1315, East-West Highway  
Silver Spring, Maryland 20910-3233

Copies Furnished with special conditions and plans:

Ms. L. K. (Mike) Gantt  
U.S. Fish and Wildlife Service  
Fish and Wildlife Enhancement  
Post Office Box 33726  
Raleigh, North Carolina 27636-3726

Mr. Larry Hardy  
National Marine Fisheries Service  
Pivers Island  
Beaufort, North Carolina 28516

Mr. Thomas Welborn, Chief  
U.S. Environmental Protection  
Agency - Region IV  
Wetlands Regulatory Unit  
345 Courtland Street, N.E.  
Atlanta, GA 30365

Mr. John Parker  
Division of Coastal Management  
North Carolina Department of  
Environment, Health and  
Natural Resources  
Post Office Box 27687  
Raleigh, North Carolina 27611-7687

DEPARTMENT OF THE ARMY PERMIT

RECEIVED

OCT 05 1994

REGULATORY BRANCH

Permittee NCDOT

Permit No. 199102732

Issuing Office CESAW-CO-E

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:

To widen the existing two lane section of US Highway 19 to a five lane highway with curb and gutter between SR 1307 at Maggie Valley and SR 1208 at Dellwood in Haywood County, North Carolina. The widening will occur primarily along the north side of the existing roadway. The total project length is 2.0 miles. Impacts to Pine Tree Cove Creek, Mine Branch, other unnamed tributaries to Jonathan Creek, and adjacent wetlands will occur at six locations along the alignment. A total of 1.18 acres of wetlands will be filled, 265 linear feet of channel changes will occur, and 446 linear feet of creek channels will be captured through box culvert installations. Approximately 60,000 cubic yards of fill material will be discharged below the plane of ordinary high water within the creek channels and within the wetland areas impacted. According to the enclosed plans.

Project Location:

Between Dellwood and Maggie Valley in Haywood County, North Carolina

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 1997. 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

**General Conditions:**

**Permit Conditions:**

**Further Information:**

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.

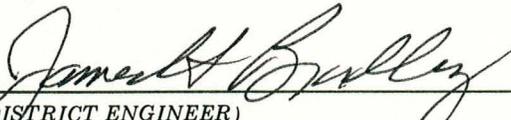
Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance 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.  
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

 10/05/94  
(PERMITTEE) (DATE)

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

 10/14/94  
(DISTRICT ENGINEER) (DATE)  
ROBERT J. SPERBERG, COLONEL, EN.

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.

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

#### SPECIAL CONDITIONS

1. All work authorized by this permit must be performed in strict compliance with the attached plans, which are a part of this permit.
2. The fill material will be clean and free of any pollutants except in trace quantities. Metal products, organic materials, or unsightly debris will not be used.
3. No in-stream work shall be undertaken in Pine Tree Cove Creek or Mine Branch between November 1 and April 15 in order to protect the egg and fry stages of trout during the spawning season.
4. Culverts in Pine Tree Cove Creek, Mine Branch, and the unnamed tributaries to Jonathan Creek shall be placed on the same gradient as the stream channel and buried 1-foot unless bedrock is encountered. This will provide for movement of aquatic organisms through the culverted sections.
5. The activity will be conducted in such a manner as to prevent a significant increase in turbidity outside the area of construction or construction-related discharge (increases such that the turbidity in the waterbody is 25 NTU's or less are not considered significant).
6. 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.
7. This Department of the Army permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.
8. If concrete is used, construction must be accomplished so that wet concrete does not contact stream water. This will prevent the chance of altering the stream's water chemistry and causing a fish kill.
9. Heavy equipment should not be operated in stream channels in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the streams.
10. Stringent erosion control measures should be installed before ground disturbing activities begin. These measures should be designed to anticipate heavy rainfall events in steep terrain. All measures should be regularly inspected and maintained as required.
11. Native trees and shrubs should be planted along the riparian fringe of all channel relocations. This will stabilize the banks, provide shading to the streams, and provide a travel corridor for wildlife.

12. Wetland mitigation requirement:

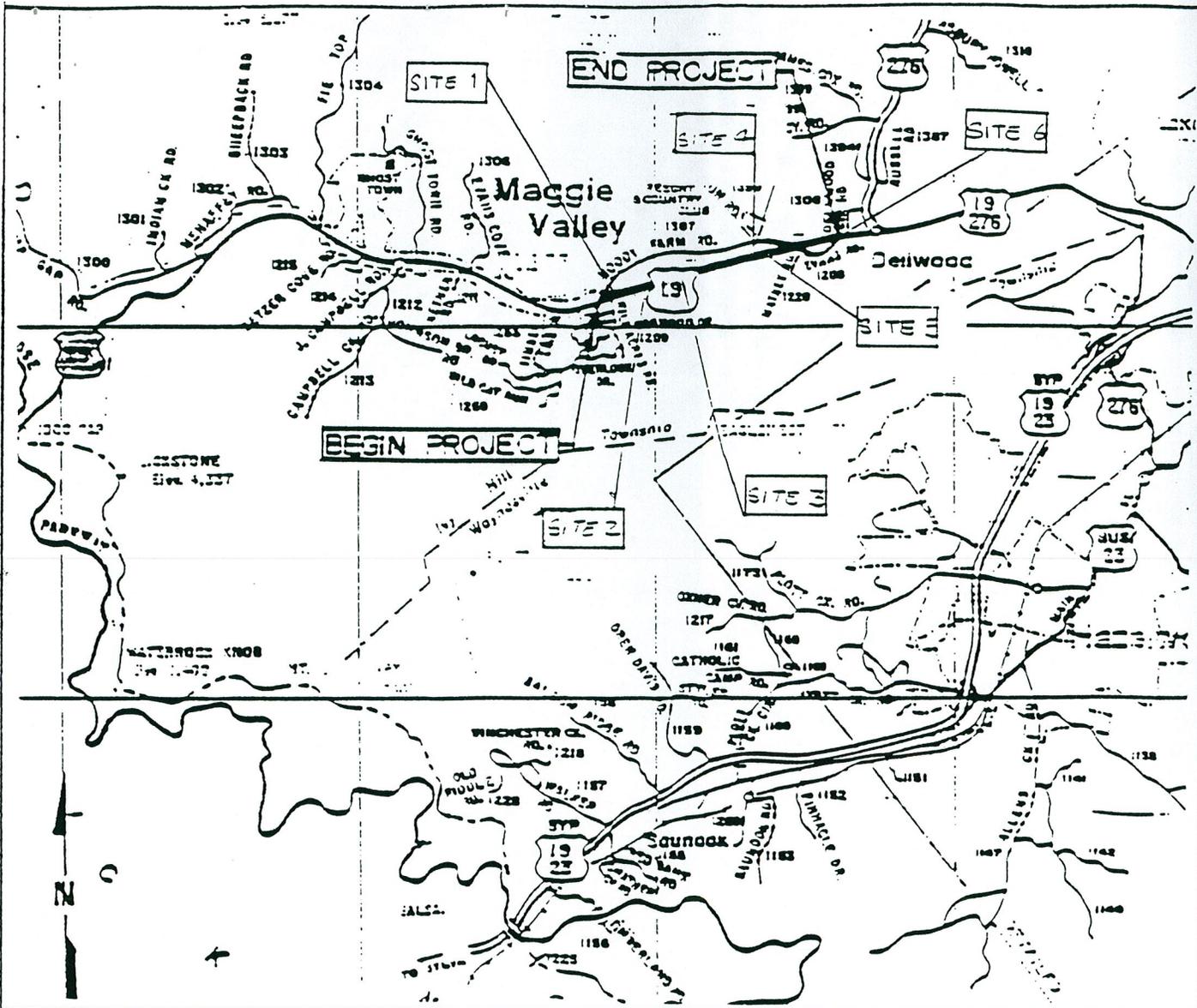
The Department of Transportation (DOT) is to prepare and implement a mitigation plan for the unavoidable 1.18 acre loss of wetlands associated with the authorized project. The plan must be approved by this office prior to implementation. The mitigation plan should be developed in keeping with the Corps of Engineers' 1987 manual for delineating wetlands. For planning purposes, it is necessary the mitigation site be inundated or saturated for a period no less than 12.5 % of the growing season in order to satisfy the hydrology requirements of the manual.

The mitigation ratios proposed by DOT in a project letter dated September 7, 1994 (see project file) are acceptable as is the proposed mitigation location at the Talula Creek mitigation bank (currently under development off State Highway 129 in Graham County). Additional special conditions regarding mitigation success criteria, monitoring requirements, and/or management strategies may be required depending on which mitigation option is pursued. The mitigation ratios proposed by DOT include the following:

Construction	3 acres constructed for each acre lost
Restoration	2 acres restored for each acre lost
Enhancement	4 acres enhanced for each acre lost
Preservation	10 acres preserved for each acre lost

The DOT should strive to mitigate wetland losses by selecting the construction or restoration options over enhancement and preservation. The overall mitigation objective should be to replace or restore wetlands in kind and therefore, with similar functional value.

The mitigation plan is to be completed within 180 days following the date this permit is issued. Wetland mitigation work should be completed within 1 year from the date the permit is issued.



VICINITY MAP

SCALE:



JONATHAN CREEK  
 HAYWOOD COUNTY, NC  
 NCDOT PRO. NO. 8.1941701  
 F.A. PRO. NO. F-22-1 (4)  
 SHEET 1 OF 22  
 DATE 7-1-91

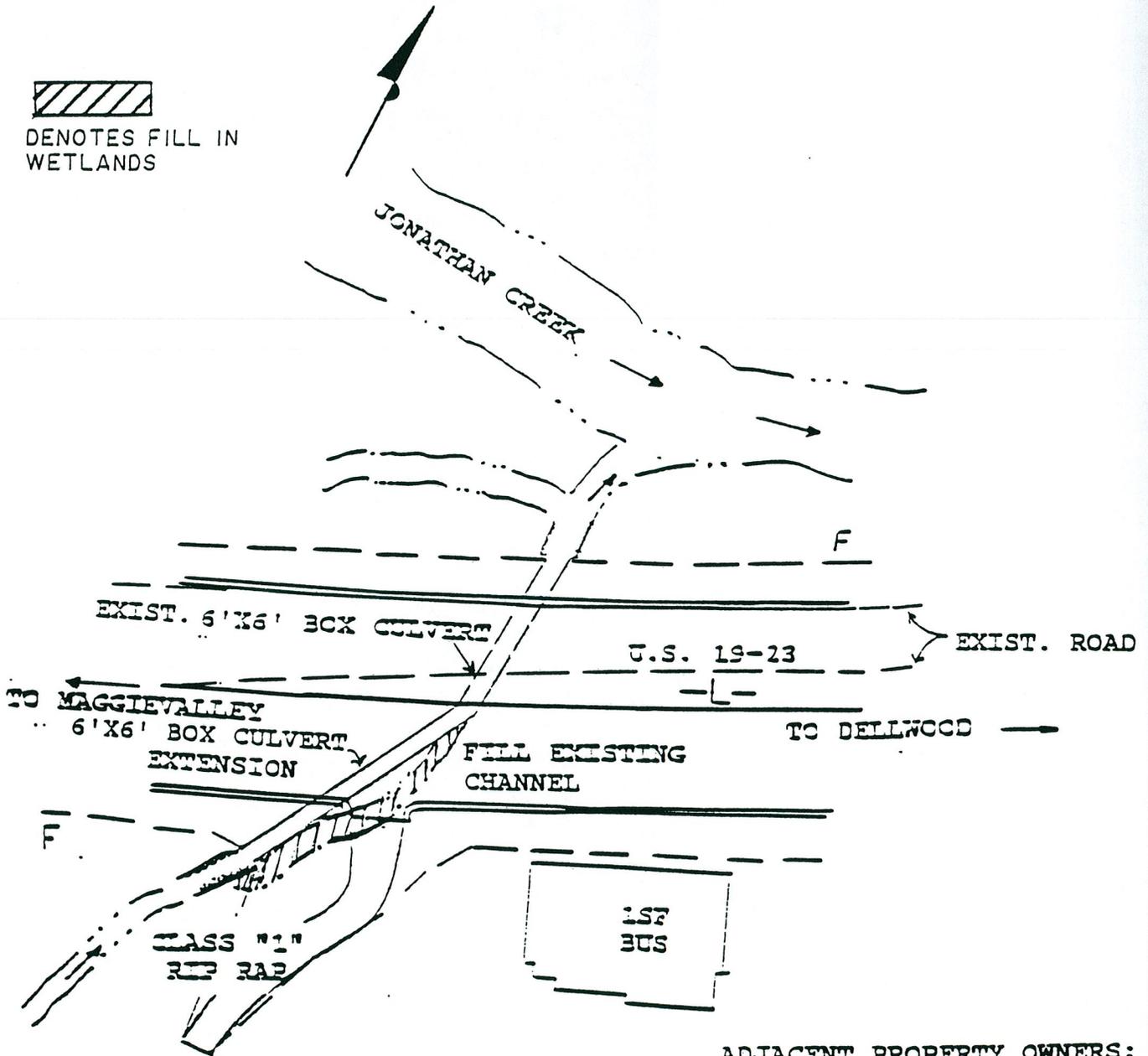
QUANTITIES SUMMARY

		AC <u>FILL IN WETLANDS</u>	CU YD <u>FILL BELOW OHW</u>	CU YD <u>TOTAL FILL</u>
TRIBUTARY 1	SITE 1	.01	103	1,103
TRIBUTARY 2	SITE 2	<.01	133	1,754
TRIBUTARY 3	SITE 3	<.01	2.5	5,165
* TRIBUTARY 4	SITE 4A	.28	0	911
	<u>SITE 4B</u>	<u>.33</u>	<u>100</u>	<u>2,075</u>
	TOTAL	.61	100	2,986
TRIBUTARY 5	SITE 5A	.52	0	29,262
	<u>SITE 5B</u>	<u>.02</u>	<u>210</u>	<u>1,681</u>
	TOTAL	.54	210	30,943
TRIBUTARY 6	SITE 6	0	0	18,606
<u>TOTAL PROJECT</u>		<u>1.18</u>	<u>548.5</u>	<u>60,557</u>

JONATHAN CREEK  
 HAYWOOD COUNTY, NC  
 NCDOT PRO. NO. 8.1941701  
 F.A. PRO. NO. F-22-1 (4)  
 SHEET 2 OF 22  
 DATE 7-1-91

DRAINAGE AREA=1.34 MI<sup>2</sup>  
 AVERAGE DAILY FLOW=3.4 CFS  
 AREA OF FILL IN WETLAND=.01 AC  
 TOTAL FILL=1,103 CU YD

  
 DENOTES FILL IN  
 WETLANDS



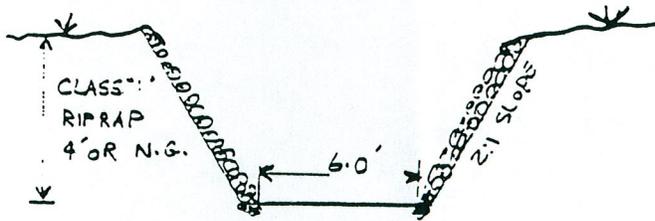
STA. 18+49.59  
 PLAN VIEW

ADJACENT PROPERTY OWNERS:  
 1- VERNON & DORIS MARTIN  
 2- MARTHA L. GARLAND  
 3- HENRY CAROLE SUAREZ

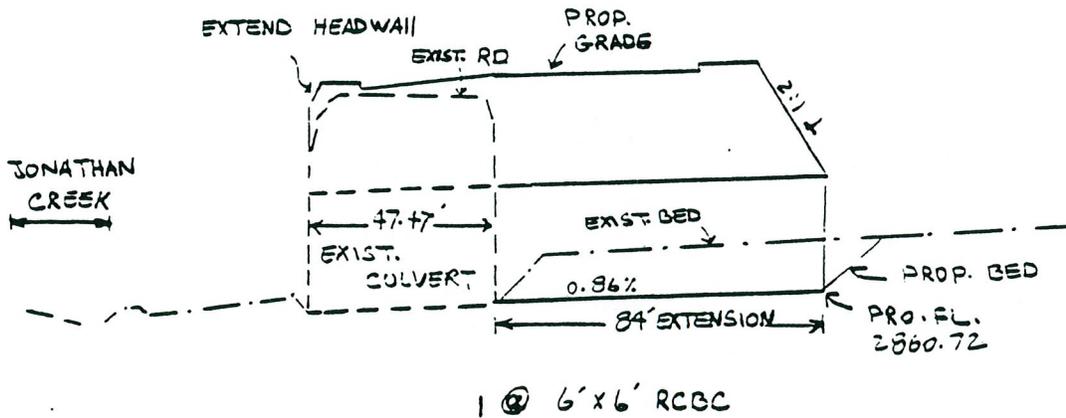
SCALE:



SITE #1  
 JONATHAN CREEK  
 ELYWOOD COUNTY, NC  
 NCDOT PRC. NC. 8.1941701  
 F.A. PRC. NC. F-22-1 (4)  
 SHEET 3 OF 22  
 DATE 7-1-91

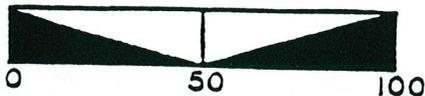


INLET CROSS SECTION  
DETAIL

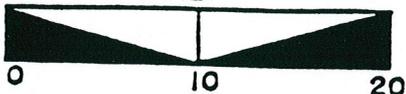


SCALE: H 1"=50', V 1"=10'  
CULVERT CENTERLINE  
SECTION VIEW

HORIZ. SCALE:



VERT. SCALE:



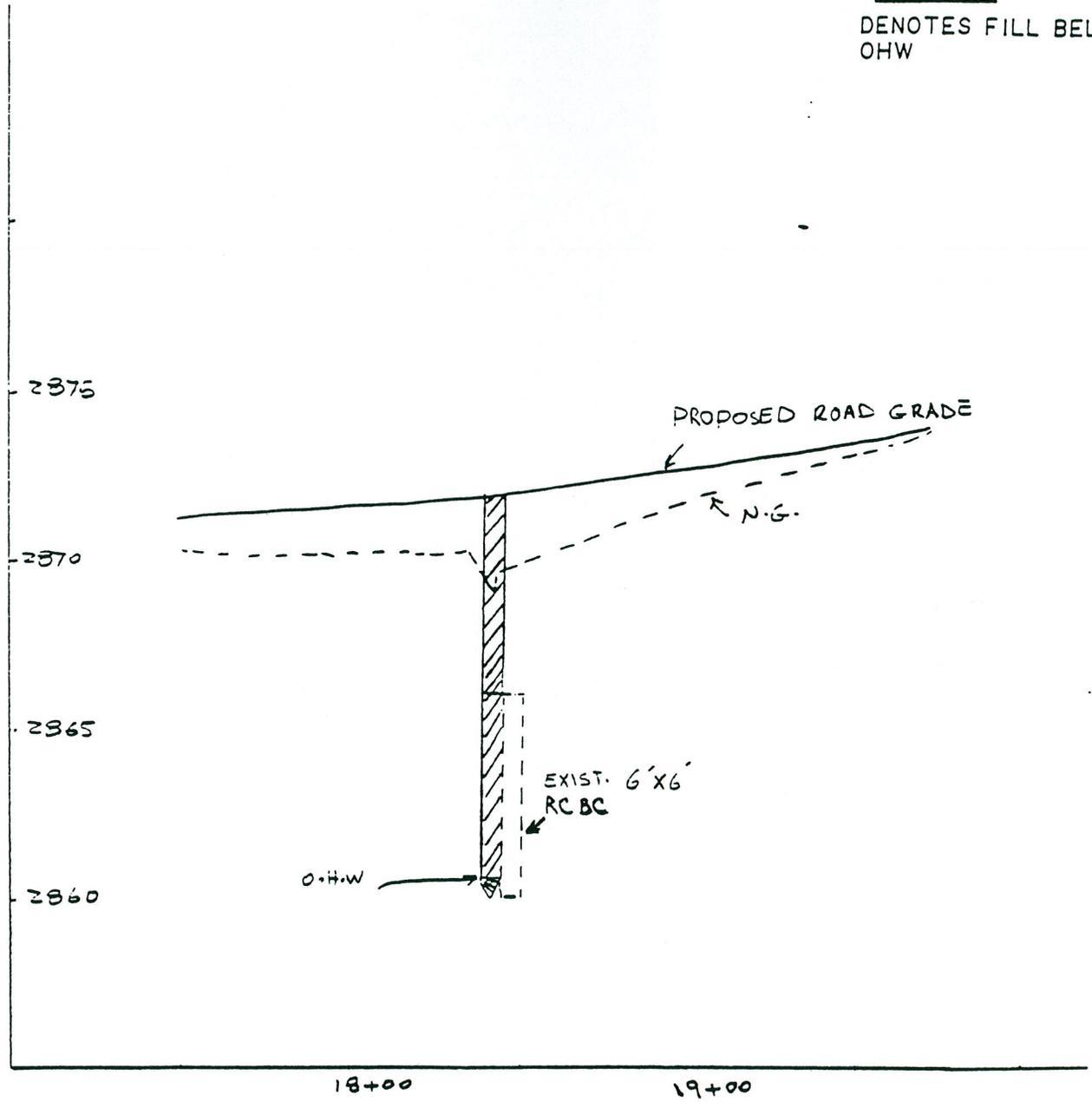
SITE #1  
 JONATHAN CREEK  
 HAYWOOD COUNTY, NC  
 NCDOT PRO. NO. 8.1941701  
 F.A. PRO. NO. F-22-1 (4)  
 SHEET 4 OF 22  
 DATE 7-1-91



DENOTES FILL IN WETLANDS



DENOTES FILL BELOW OHW



HORIZ. SCALE:



VERT. SCALE:

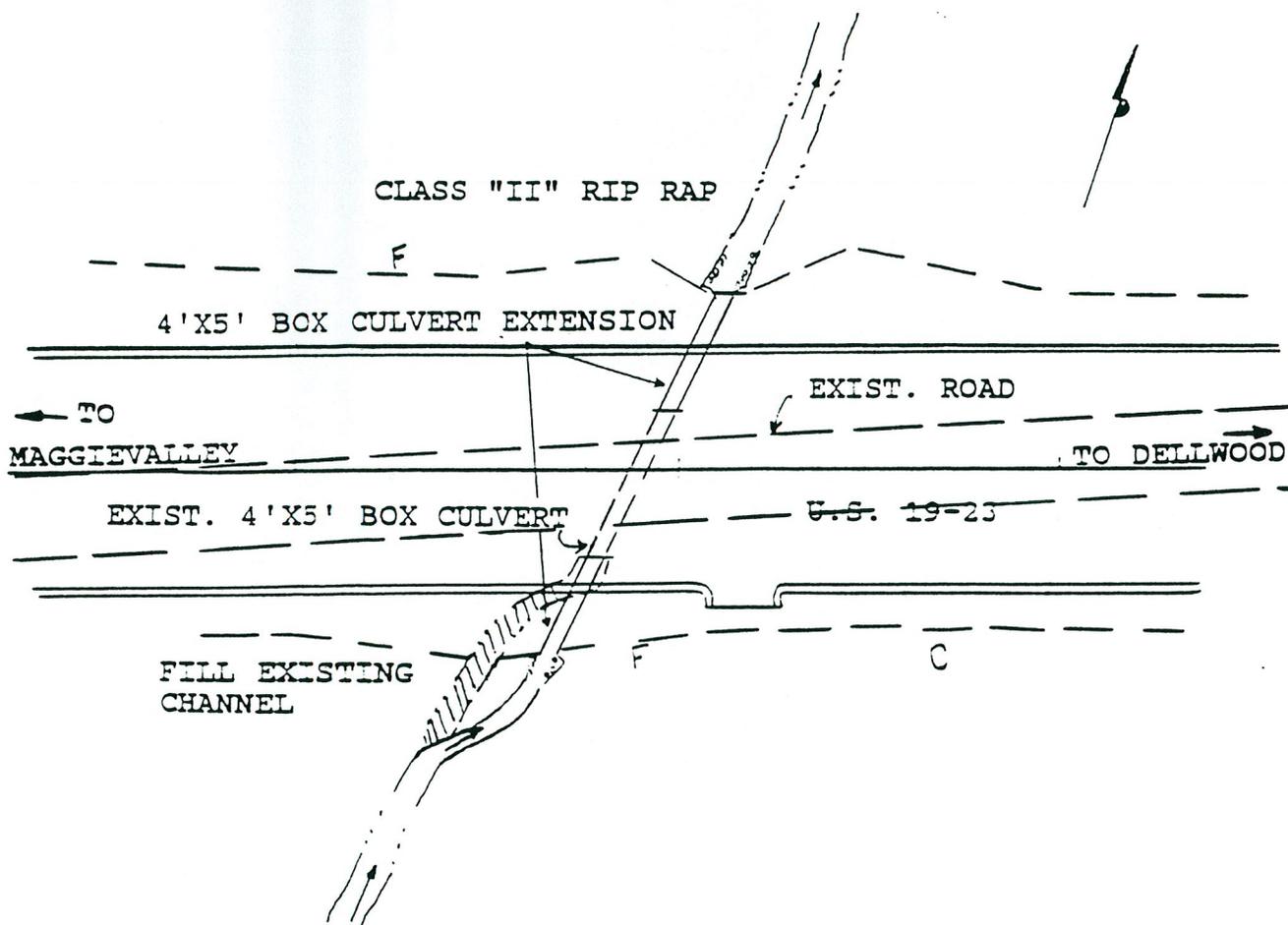


SITE #1  
 JONATHAN CREEK  
 HAYWOOD COUNTY, NC  
 NCDOT PRO. NO. 8.1941701  
 F.A. PRO. NO. F-22-1 (4)  
 SHEET 5 OF 22  
 DATE 7-1-91

DRAINAGE AREA=360 AC  
AVERAGE DAILY FLOW=2.8 CFS  
AREA OF FILL IN WETLAND=<0.01 AC  
TOTAL FILL=1,754 CU YD



DENOTES FILL IN WETLANDS



STA. 29+90.78

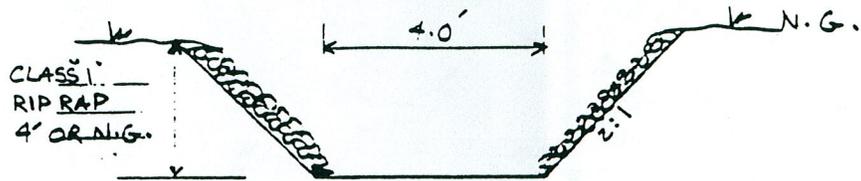
PLAN VIEW

ADJACENT PROPERTY OWNERS:  
1- GAYBO COMPANY

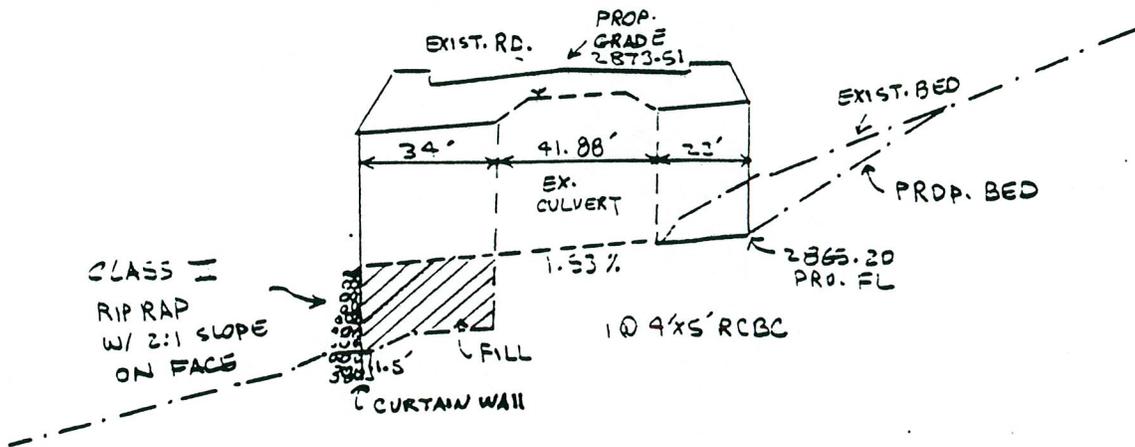
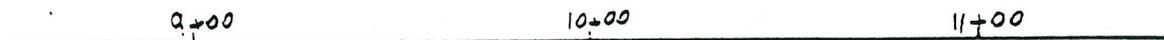
SCALE:



SITE #2  
JONATHAN CREEK  
HAYWOOD COUNTY, NC  
NCDOT PRO. NO. 8.1941701  
F.A. PRO. NO. F-22-1 (4)  
SHEET 6 OF 22  
DATE 7-1-91



INLET & OUTLET CROSS SECTION  
DETAIL



SCALE: H 1"=50', V 1"=10'  
CULVERT CENTERLINE  
SECTION VIEW

HORIZ. SCALE:



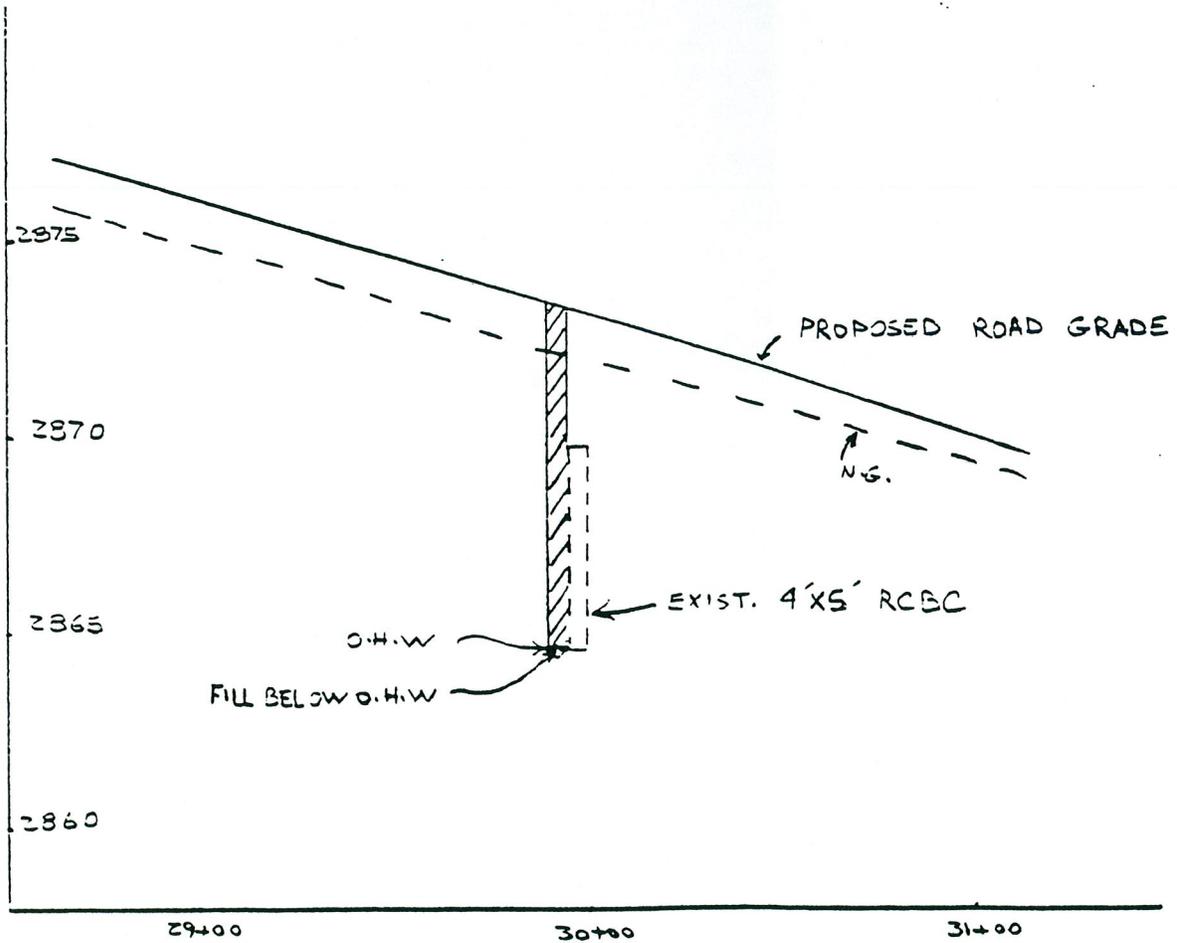
VERT. SCALE:



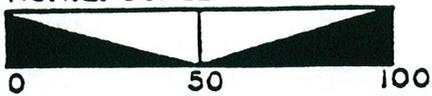
SITE #2  
JONATHAN CREEK  
HAYWOOD COUNTY, NC  
NCDOT PRO. NO. 8.1941701  
F.A. PRO. NO. F-22-1 (4)  
SHEET 7 OF 22  
DATE 7-1-91



DENOTES FILL IN  
WETLANDS



HORIZ. SCALE:



VERT. SCALE:

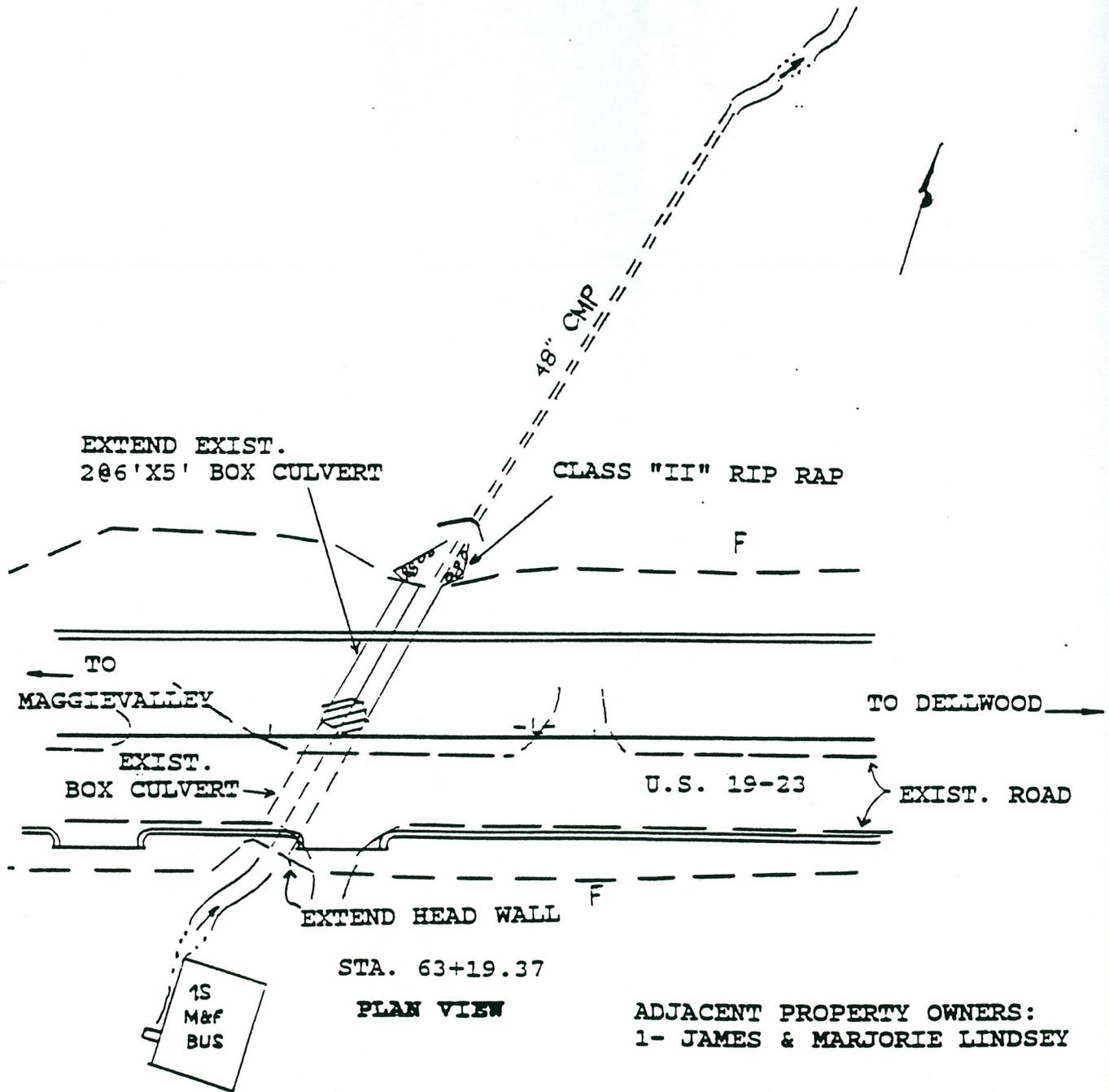


SITE #2  
JONATHAN CREEK  
HAYWOOD COUNTY, NC  
NCDOT PRO. NO. 8.1941701  
F.A. PRO. NO. F-22-1 (4)  
SHEET 8 OF 22  
DATE 7-1-91

DRAINAGE AREA=590 AC  
 AVERAGE DAILY FLOW= 11.3 CFS  
 AREA OF FILL IN WETLAND=<0.01 AC  
 TOTAL FILL=5,165 CU YD



. DENOTES FILL IN WETLAND

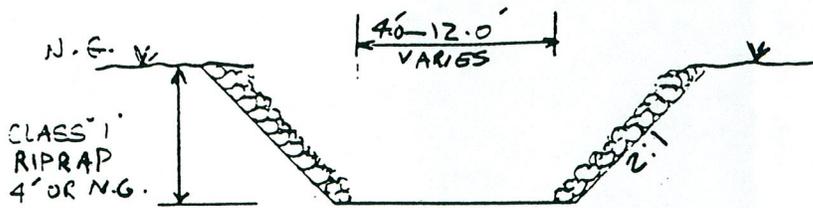


ADJACENT PROPERTY OWNERS:  
 1- JAMES & MARJORIE LINDSEY

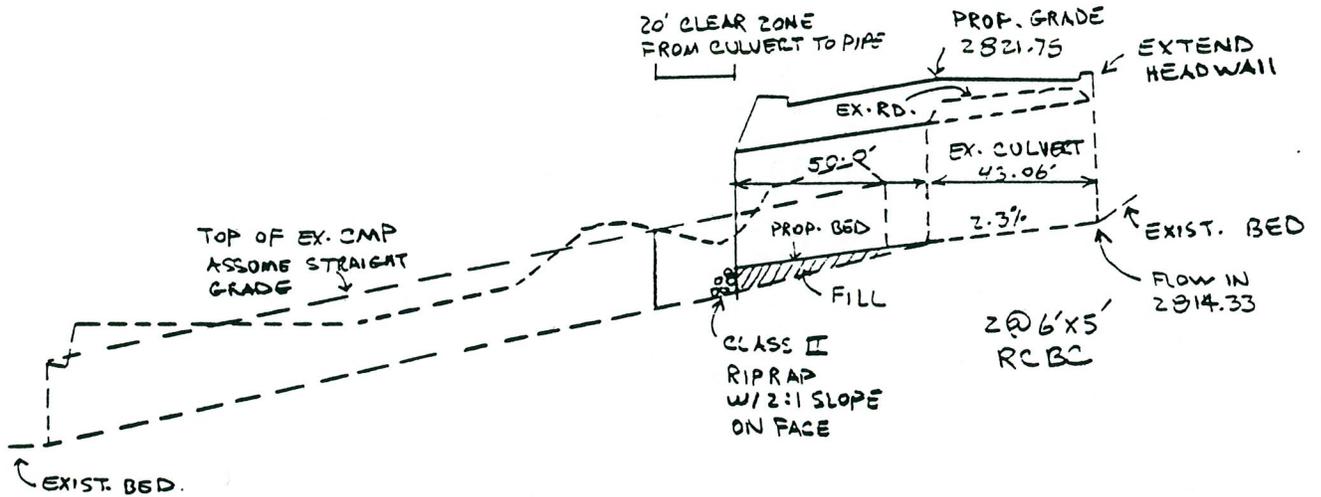
SCALE:



SITE #3  
 JONATHAN CREEK  
 HAYWOOD COUNTY, NC  
 NCDOT PRO. NO. 8.1941701  
 F.A. PRO. NO. F-22-1 (4)  
 SHEET 9 OF 22  
 DATE 7-1-91



OUTLET CROSS SECTION  
DETAIL

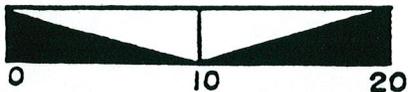


SCALE: H 1"=50', V 1"=10'  
CULVERT CENTERLINE  
SECTION VIEW

HORIZ. SCALE:



VERT. SCALE:



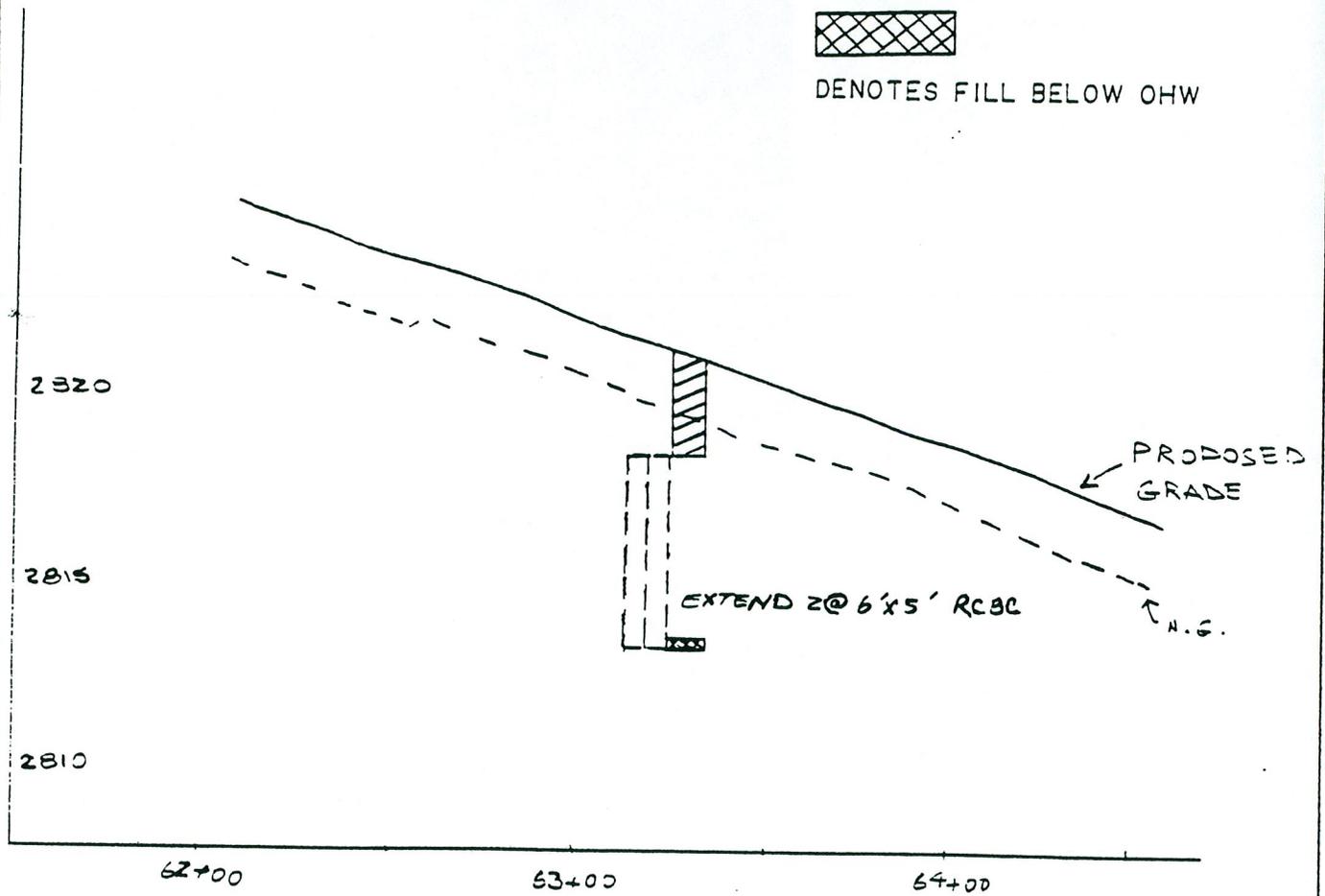
SITE #3  
JONATHAN CREEK  
HAYWOOD COUNTY, NC  
NCDOT PRO. NO. 8.1941701  
F.A. PRO. NO. F-22-1 (4)  
SHEET 10 OF 22  
DATE 7-1-91



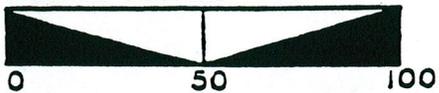
DENOTES FILL IN WETLAND



DENOTES FILL BELOW OHW



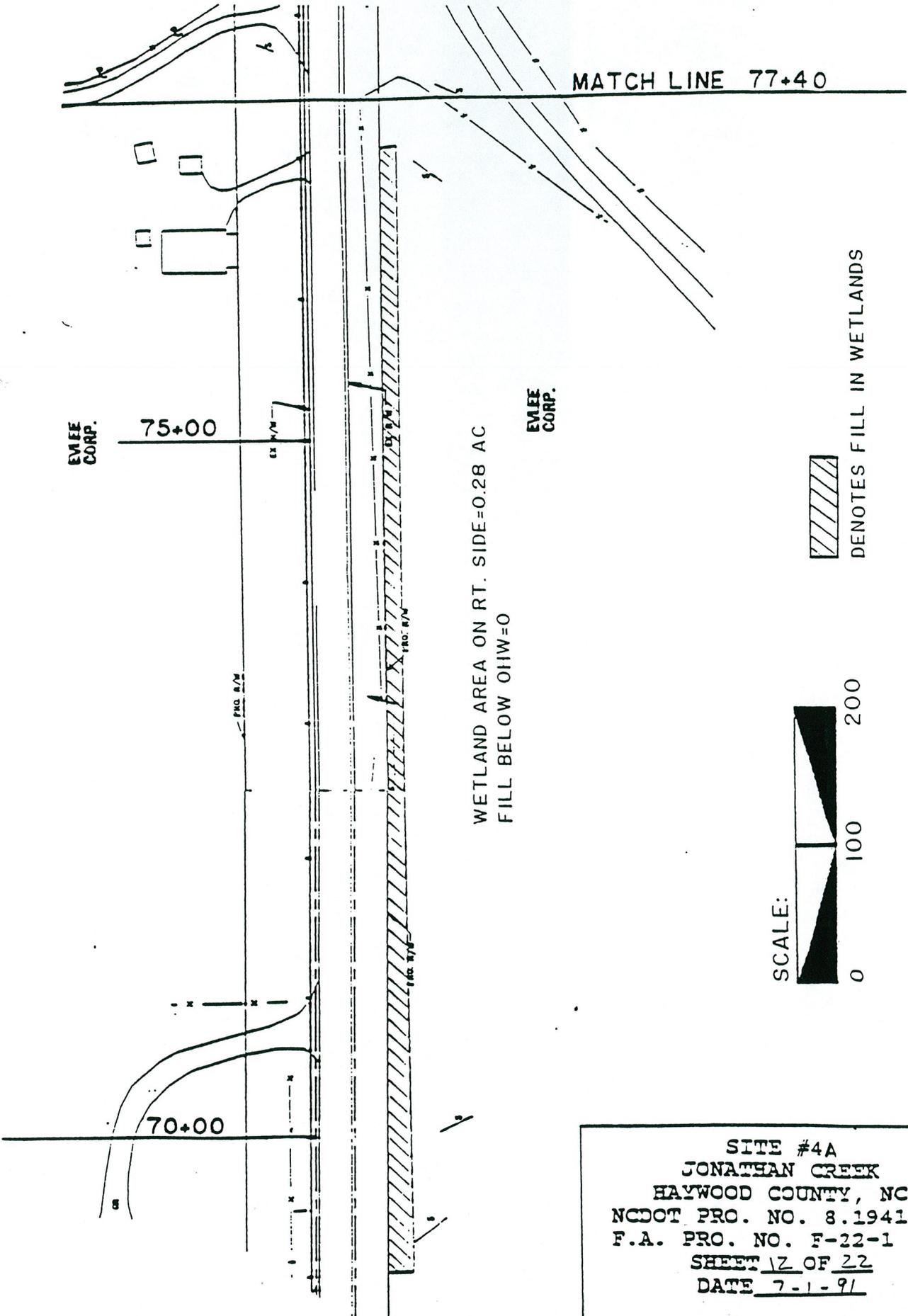
HORIZ. SCALE:



VERT. SCALE:



SITE #3  
 JONATHAN CREEK  
 HAYWOOD COUNTY, NC  
 NCDOT PRO. NO. 8.1941701  
 F.A. PRO. NO. F-22-1 (4)  
 SHEET 11 OF 22  
 DATE 7-1-01



EVLEE  
CORP.

75+00

EVLEE  
CORP.

WETLAND AREA ON RT. SIDE=0.28 AC  
FILL BELOW OHIW=0

MATCH LINE 77+40



DENOTES FILL IN WETLANDS

SCALE:



SITE #4A  
 JONATHAN CREEK  
 HAYWOOD COUNTY, NC  
 NCDOT PRO. NO. 8.1941701  
 F.A. PRO. NO. F-22-1 (4)  
 SHEET 12 OF 22  
 DATE 7-1-91

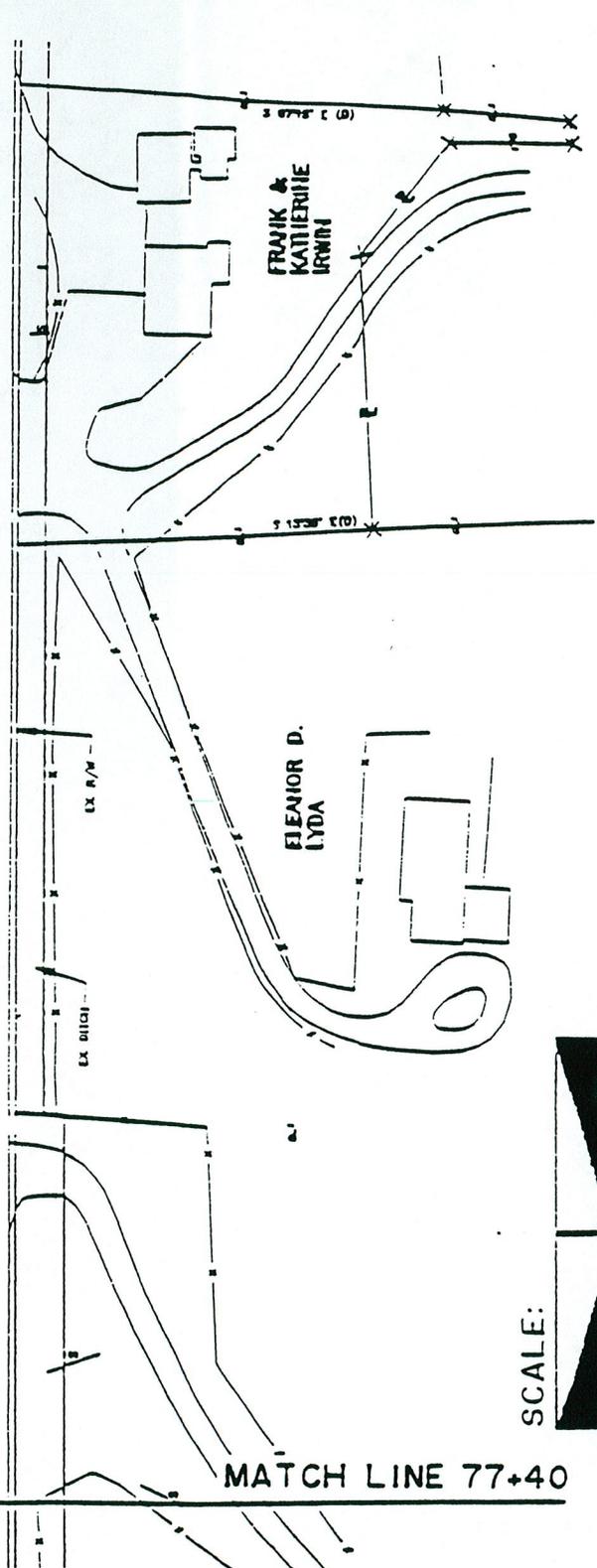
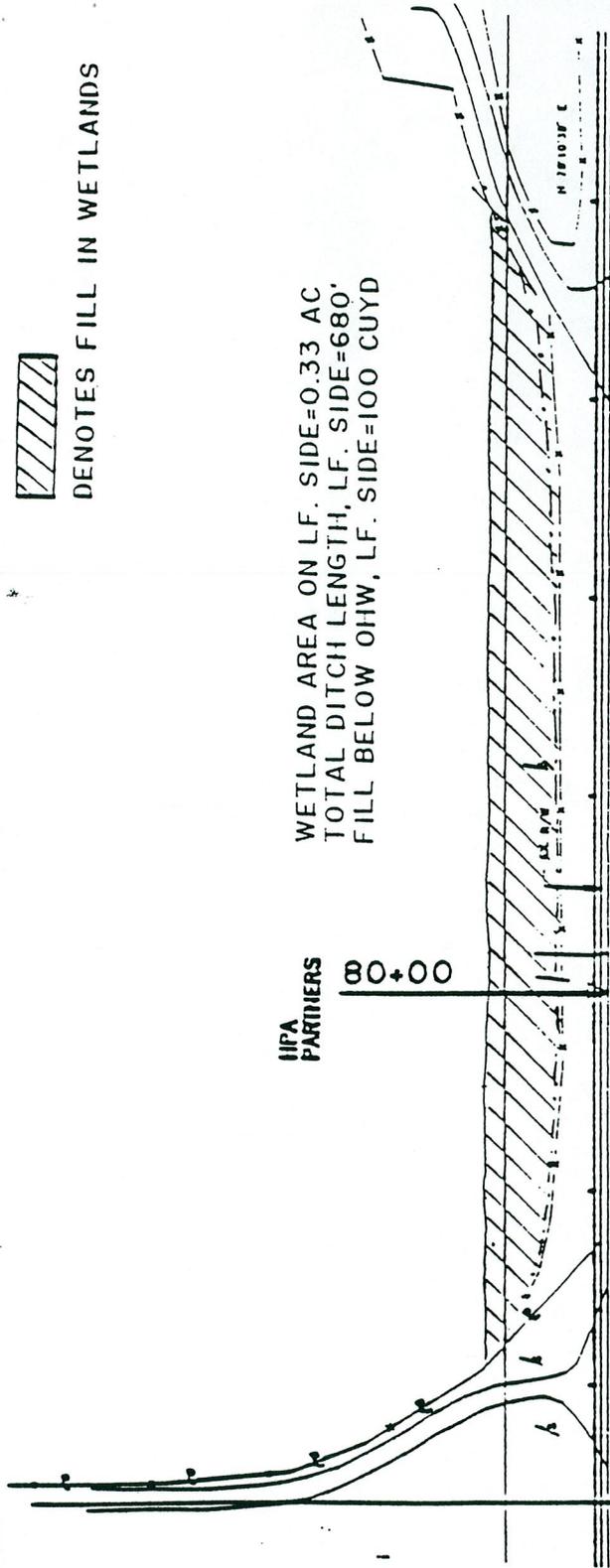


DENOTES FILL IN WETLANDS

WETLAND AREA ON LF. SIDE=0.33 AC  
TOTAL DITCH LENGTH, LF. SIDE=680'  
FILL BELOW OHW, LF. SIDE=100 CUYD

IIPA PARTNERS

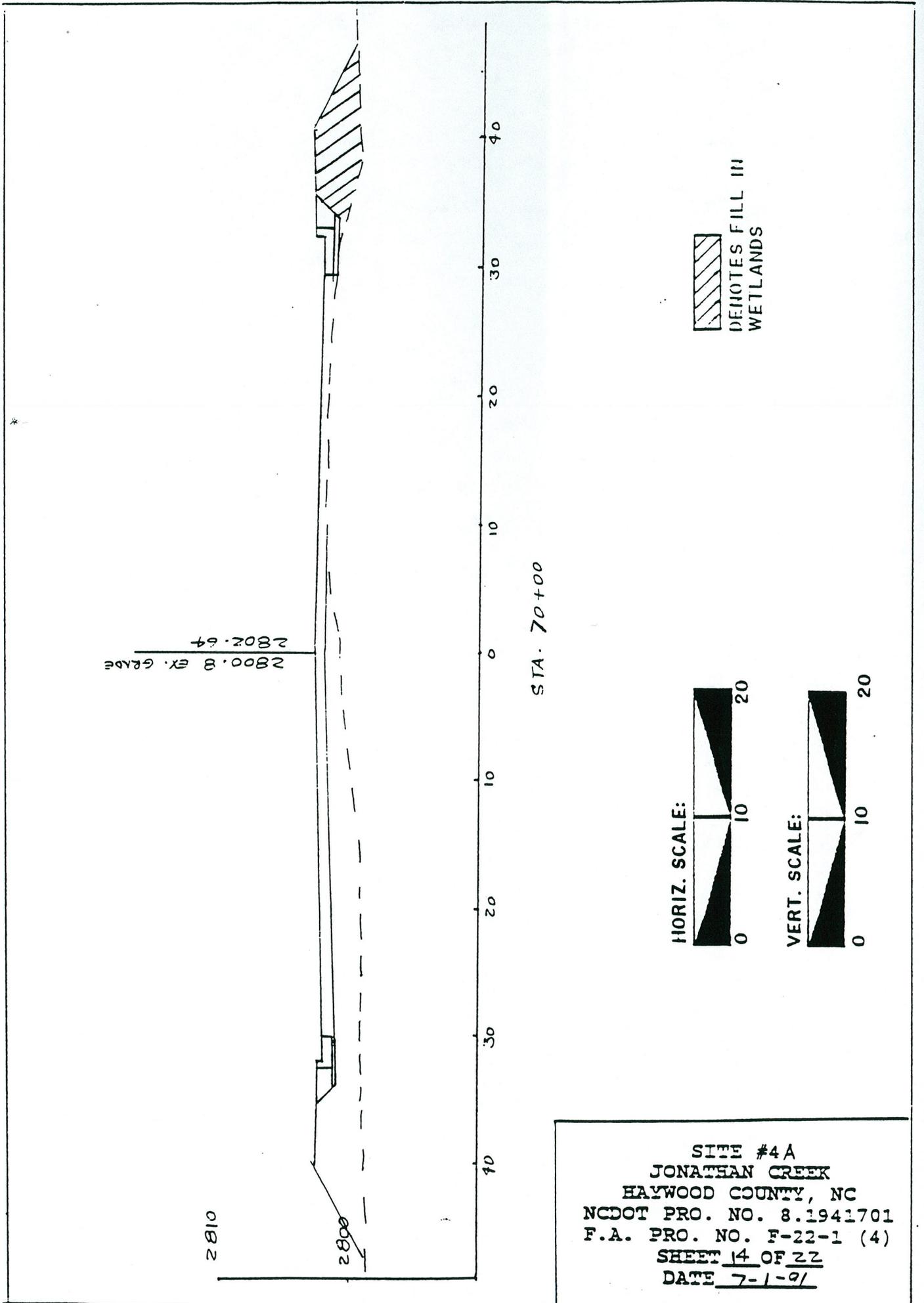
80+00



MATCH LINE 77+40



SITE #48  
JONATHAN CREEK  
HAYWOOD COUNTY, NC  
NCDOT PRO. NO. 8.1941701  
F.A. PRO. NO. F-22-1 (4)  
SHEET 13 OF 22  
DATE 7-1-91



2800.8 EX. GRADE  
2802.64

2810

2800

40 30 20 10 0 10 20 30 40

STA. 70+00



DENOTES FILL IN WETLANDS

HORIZ. SCALE:

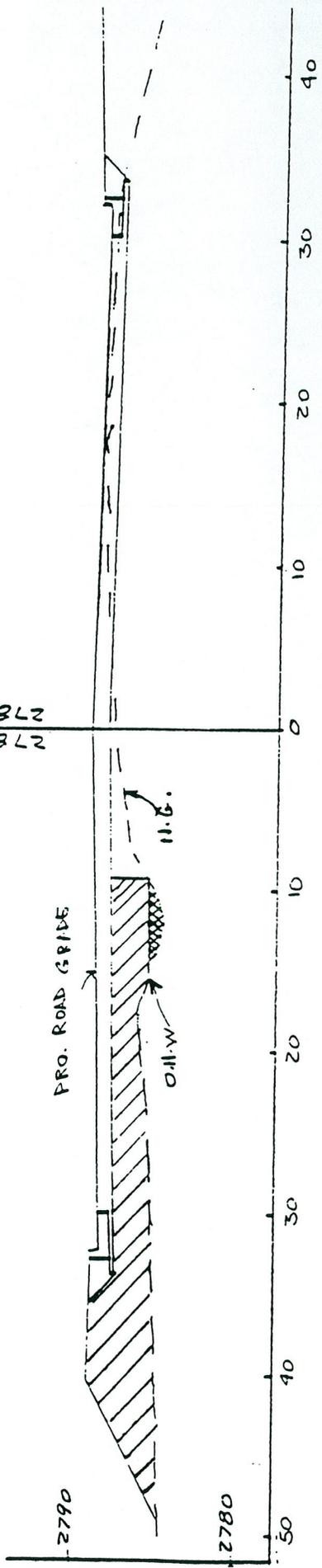


VERT. SCALE:



SITE #4A  
 JONATHAN CREEK  
 HAYWOOD COUNTY, NC  
 NCDOT PRO. NO. 8.1941701  
 F.A. PRO. NO. F-22-1 (4)  
 SHEET 14 OF 22  
 DATE 7-1-91

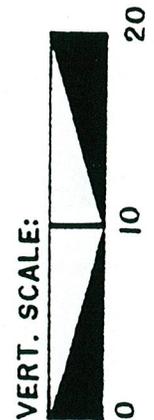
2789.06 PRO. ELEV.  
2787.7 EX. ELEV.



STA. 82+00

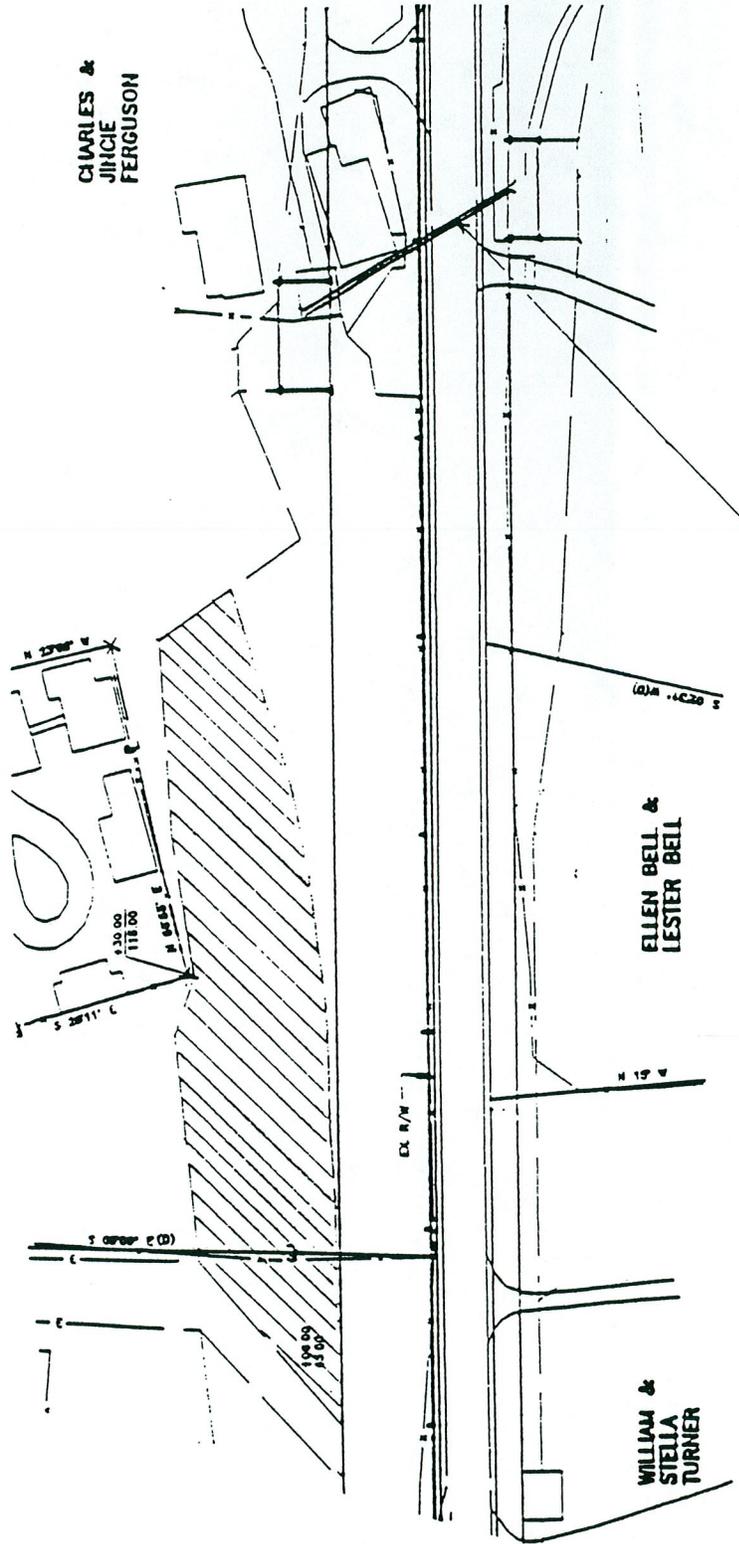
 DENOTES FILL IN WETLANDS

 DENOTES FILL BELOW OHW



SITE #4B  
 JONATHAN CREEK  
 HAYWOOD COUNTY, NC  
 NCDOT PRO. NO. 8.1941701  
 F.A. PRO. NO. F-22-1 (4)  
 SHEET 15 OF 22  
 DATE 7-1-91

WETLAND AREA=0.52 AC  
TOTAL FILL=29,262 CU YD



SEE SITE 5B

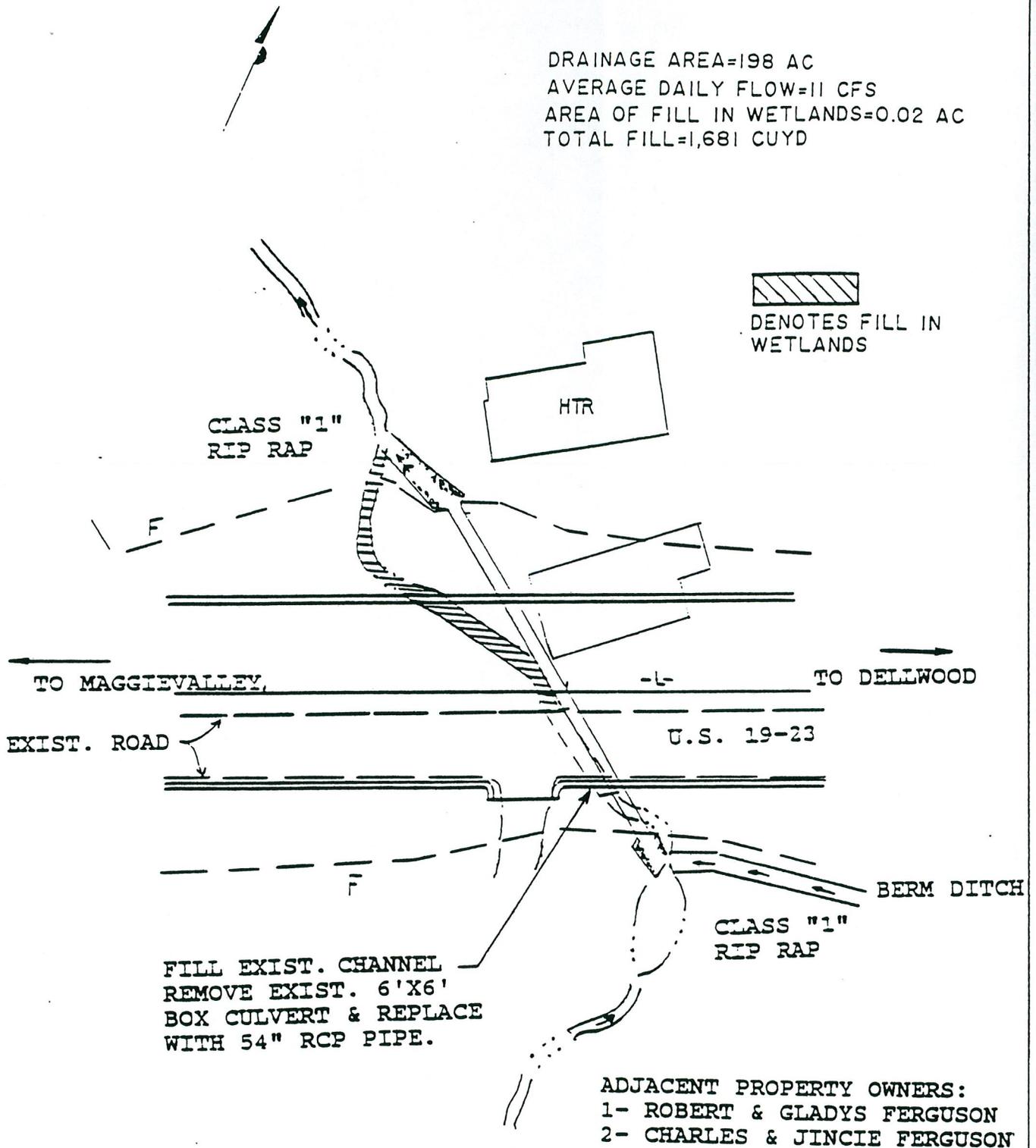
SCALE:



DENOTES FILL IN WETLANDS

SITE #5A  
JONATHAN CREEK  
HAYWOOD COUNTY, NC  
NCDOT PRO. NO. 8.1941701  
F.A. PRO. NO. F-22-1 (4)  
SHEET 16 OF 22  
DATE 7-1-91

DRAINAGE AREA=198 AC  
AVERAGE DAILY FLOW=11 CFS  
AREA OF FILL IN WETLANDS=0.02 AC  
TOTAL FILL=1,681 CU YD



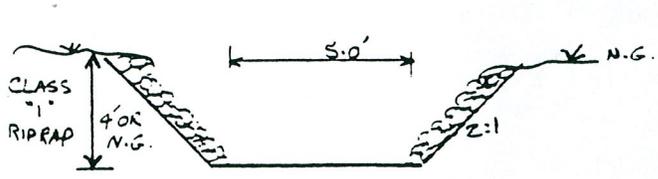
STA. 98+93.14

PLAN VIEW

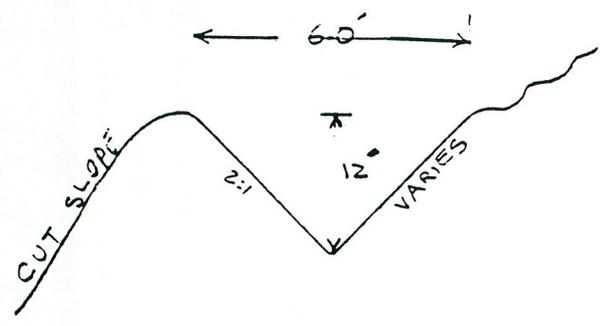
SCALE:



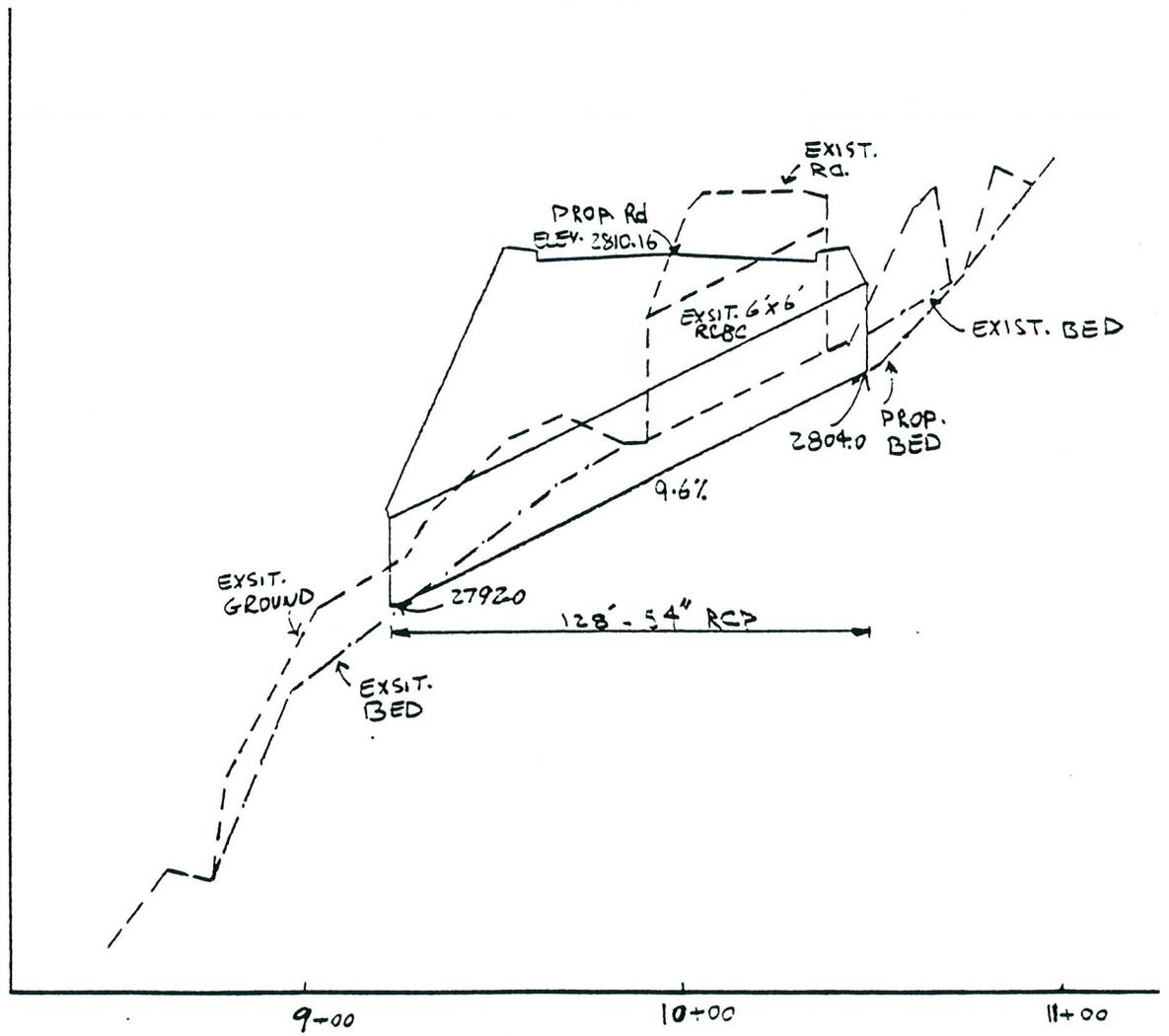
SITE #5E  
JONATHAN CREEK  
HAYWOOD COUNTY, NC  
NCDOT PRO. NO. 8.1941701  
F.A. PRO. NO. F-22-1 (4)  
SHEET 17 OF 22  
DATE 7-1-91



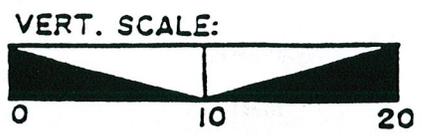
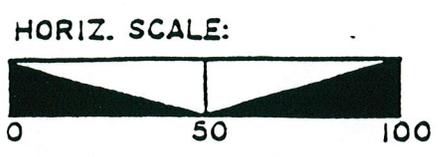
INLET & OUTLET CROSS SECTION  
DETAIL



BERM DITCH  
DETAIL



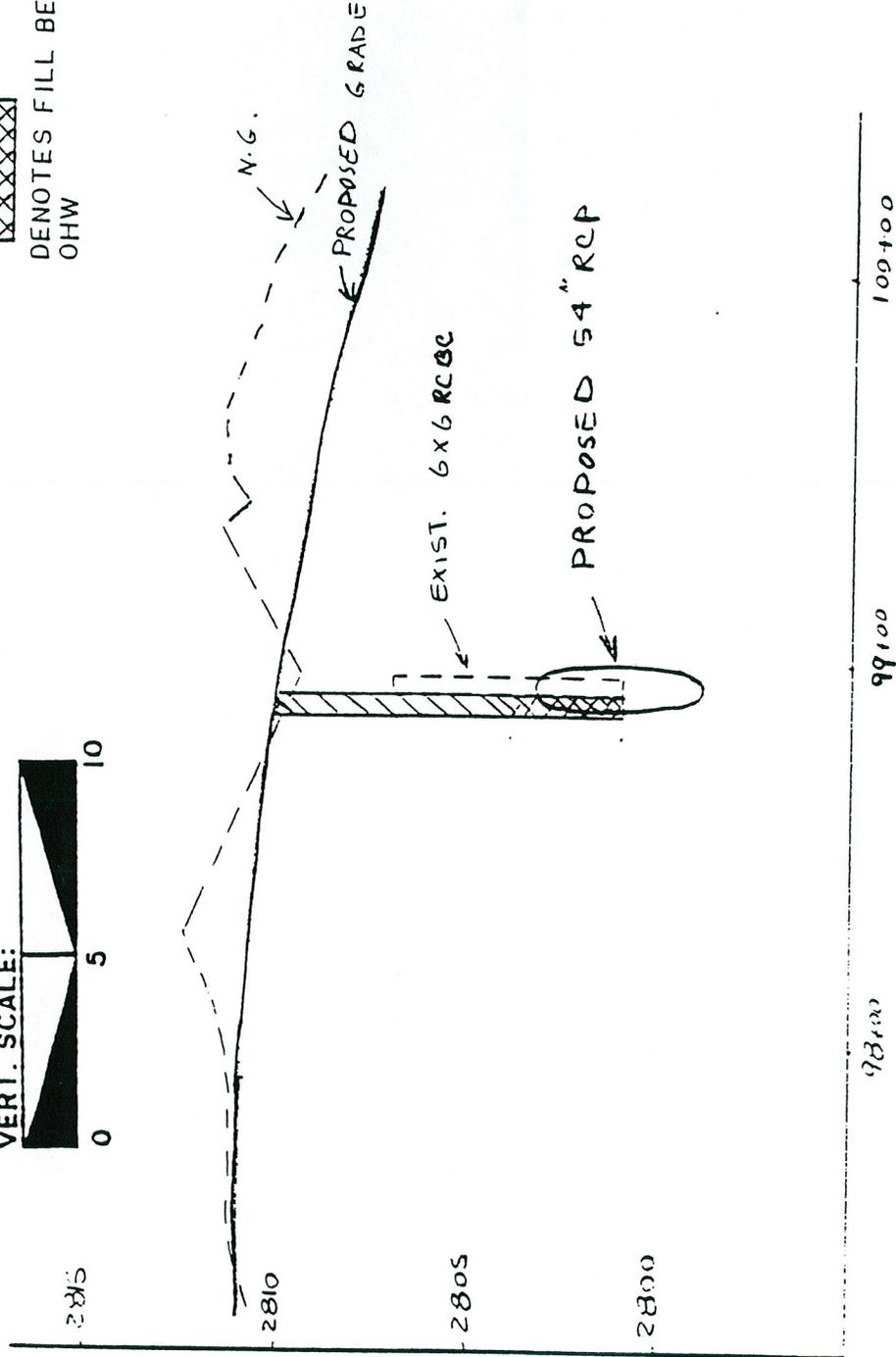
SCALE: H 1"=50', V 1"=10'  
CULVERT CENTERLINE  
SECTION VIEW



SITE #5B  
 JONATHAN CREEK  
 HAYWOOD COUNTY, NC  
 NCDOT PRO. NO. 8.1941701  
 F.A. PRO. NO. F-22-1 (4)  
 SHEET 18 OF 22  
 DATE 7-1-91

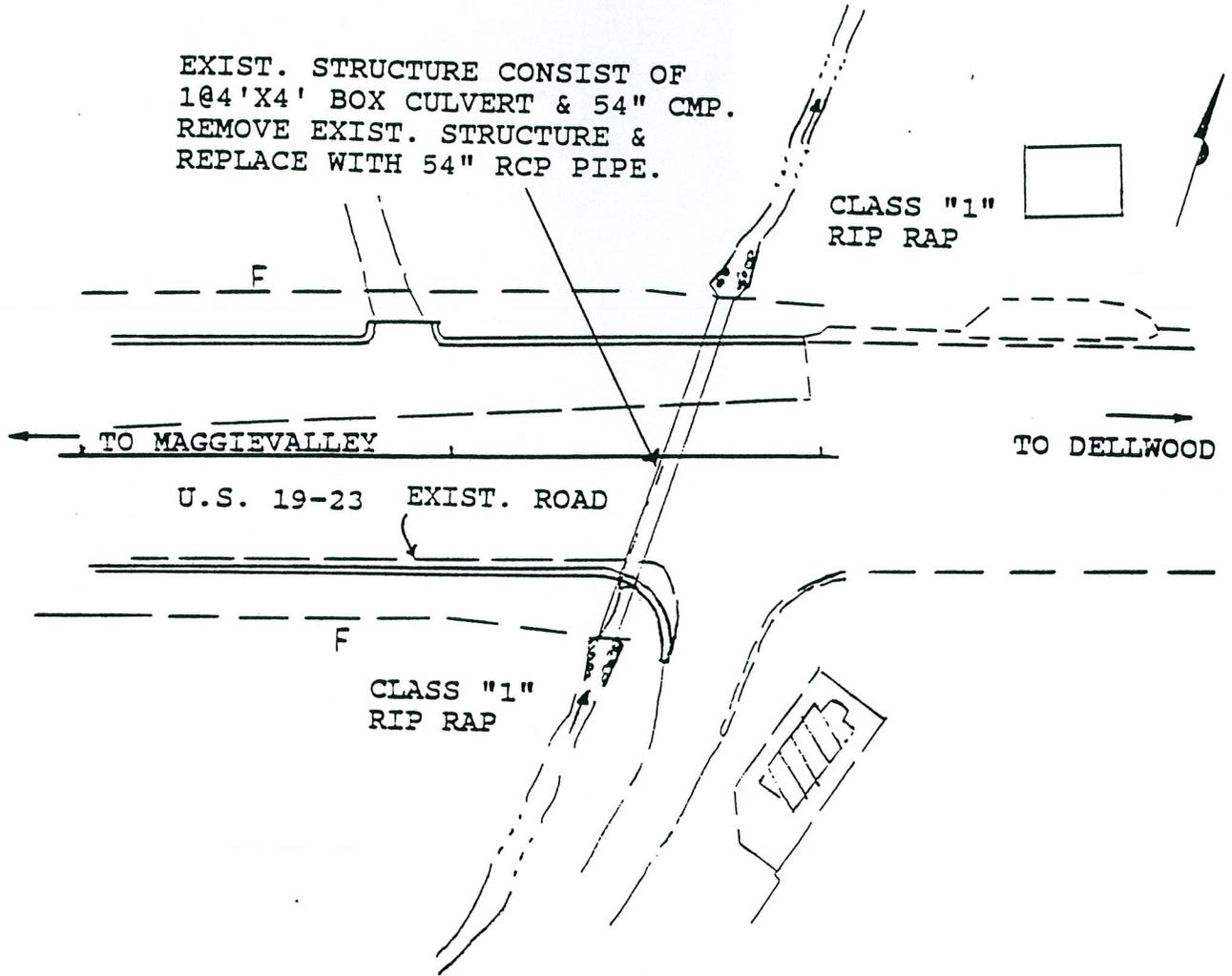
 DENOTES FILL IN WETLANDS

 DENOTES FILL BELOW OHW



SITE #5B  
JONATHAN CREEK  
HAYWOOD COUNTY, NC  
NCDOT PRO. NO. 8.1941701  
F.A. PRO. NO. F-22-1 (4)  
SHEET 19 OF 22  
DATE 7-1-91

DRAINAGE AREA=148 AC  
AVERAGE DAILY FLOW=3.4 CFS  
AREA OF FILL IN WETLANDS=0  
TOTAL FILL=18,606 CU YD



EXIST. STRUCTURE CONSIST OF  
1@4'X4' BOX CULVERT & 54" CMP.  
REMOVE EXIST. STRUCTURE &  
REPLACE WITH 54" RCP PIPE.

CLASS "1"  
RIP RAP

TO MAGGIE VALLEY

TO DELLWOOD

U.S. 19-23 EXIST. ROAD

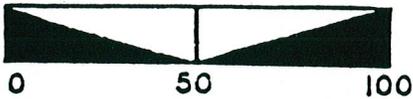
CLASS "1"  
RIP RAP

STA. 122+59.53

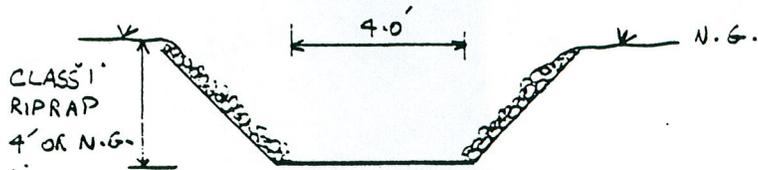
PLAN VIEW

ADJACENT PROPERTY OWNERS:  
1- NED CARVER  
2- JERRY MOODY  
3- JANE LEONE MERRITT

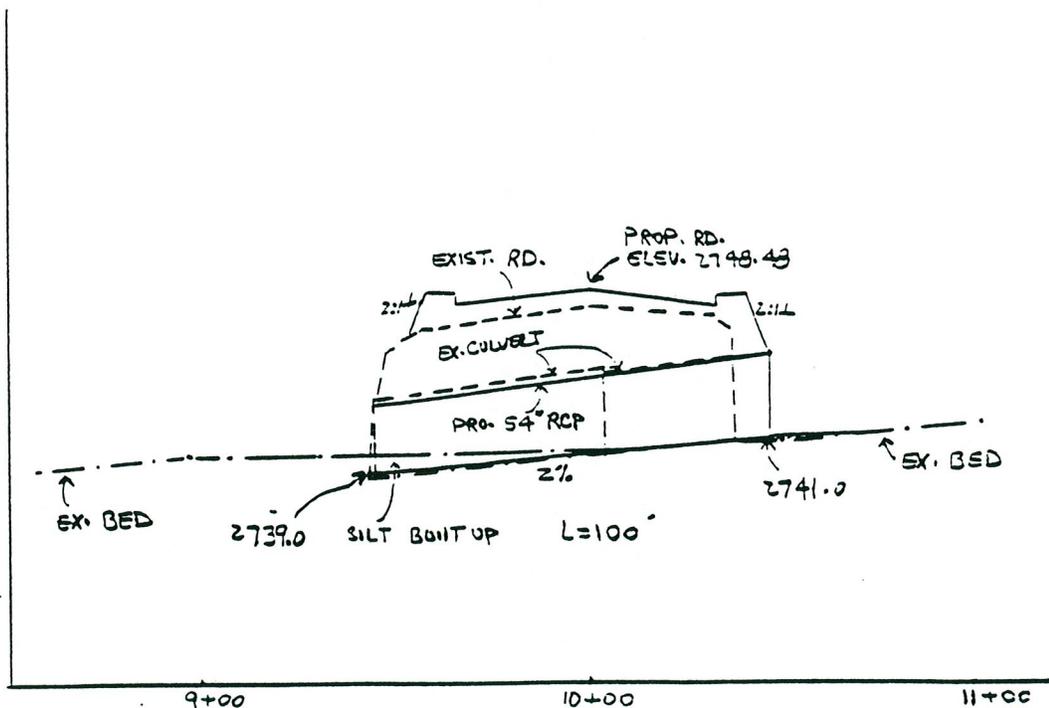
SCALE:



SITE #6  
JONATHAN CREEK  
HAYWOOD COUNTY, NC  
NCDOT PRO. NO. 8.1941701  
F.A. PRO. NO. F-22-1 (4)  
SHEET 20 OF 22  
DATE 7-1-91



INLET & OUTLET CROSS SECTION  
DETAIL

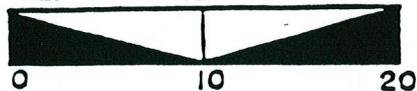


SCALE: H 1"=50', V 1"=10'  
CULVERT CENTERLINE  
SECTION VIEW

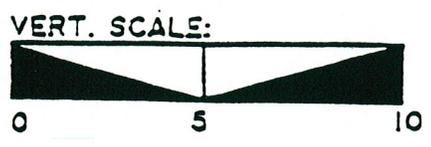
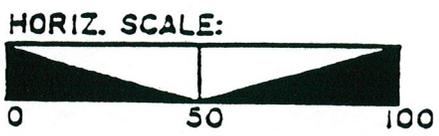
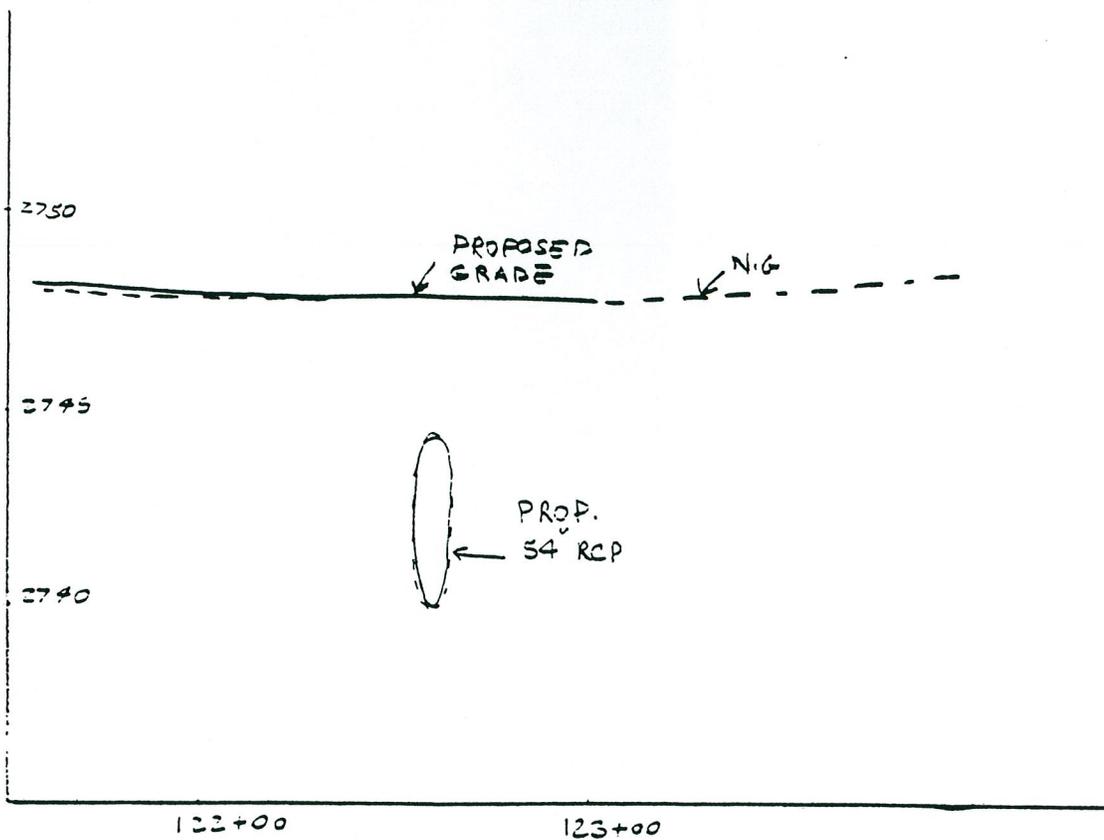
HORIZ. SCALE:



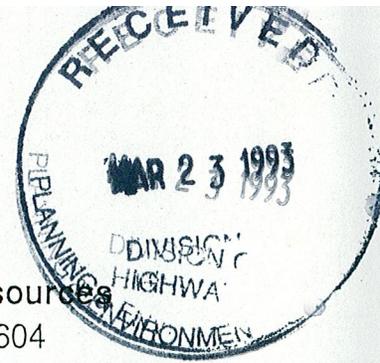
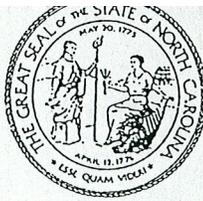
VERT. SCALE:



SITE #6  
JONATHAN CREEK  
HAYWOOD COUNTY, NC  
NCDOT PRO. NO. 8.1941701  
F.A. PRO. NO. F-22-1 (4)  
SHEET 21 OF 22  
DATE 7-1-91



SITE #6  
 JONATHAN CREEK  
 HAYWOOD COUNTY, NC  
 NCDOT PRO. NO. 8.1941701  
 F.A. PRO. NO. F-22-1 (4)  
 SHEET 22 OF 22  
 DATE 7-1-91



State of North Carolina  
Department of Environment, Health, and Natural Resources  
512 North Salisbury Street \* Raleigh, North Carolina 27604

James B. Hunt, Jr., Governor

Jonathan B. Howes, Secretary

Mr. Barney O'Quinn  
Planning and Environmental Branch  
North Carolina Dept. of Transportation  
P.O. 25201  
Raleigh, North Carolina 27611-5201

Dear Mr. O'Quinn:

Subject: Certification Pursuant to Section 401 of the Federal  
Clean Water Act,  
Proposed Highway Improvement, US 19  
Maggie Valley to Dellwood  
Project DEM # 92473, State Project No. 8.1941701, TIP #  
R-2102  
Haywood County

Attached hereto is a copy of Certification No. 2808 issued to N. C.  
Department of Transportation dated February 26, 1993.

For all future projects, DEM encourages the Department of Transportation  
to coordinate specific road alignments with the Division before land  
acquisition begins. This action may reduce conflicts between the Dept. of  
Transportation and Division of Environmental Management with regard to  
alternative alignments.

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

Sincerely,

A handwritten signature in black ink, appearing to read "A. Preston Howard, Jr.".

A. Preston Howard, Jr.  
Director, Division of Environmental  
Management

Attachments

cc: Wilmington District Corps of Engineers  
Corps of Engineers Asheville Regional Office  
Asheville DEM Regional Office  
Mr. John Dorney  
Mr. John Parker  
Central Files  
Secretary Jonathan Howes  
Secretary Sam Hunt  
David Foster

P.O. Box 27687, Raleigh, North Carolina 27611-7687 Telephone 919-733-4984 Fax # 919-733-0513

An Equal Opportunity Affirmative Action Employer

NORTH CAROLINA  
Haywood County

CERTIFICATION

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Environmental Management Regulations in 15 NCAC 2H, Section .0500 to N. C. Department of Transportation pursuant to an application filed on the 17th day of September, 1993 to fill 1.18 acres of wetlands and waters for road improvement of US 19 between Maggie Valley and Dellwood.

The Application provides adequate assurance that the discharge of fill material into the waters of Jonathan's Creek and adjacent wetlands in conjunction with the proposed road improvement in Haywood County 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 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.

Condition(s) of Certification:

1. That the activity be conducted in such a manner as to prevent significant increase in turbidity outside the area of construction or construction related discharge (increases such that the turbidity in the Stream is 25 NTU's or less are not considered significant).
2. Mitigation shall be carried out as agreed upon in the 404 Permit. DEM shall be copied on all reports regarding the progress of this mitigation.

Violations of any condition herein set forth shall result in revocation of this Certification.

This Certification shall become null and void unless the above conditions are made conditions of the Federal Permit.

DIVISION OF ENVIRONMENTAL MANAGEMENT



A. Preston Howard, Jr.  
Director

WQC# 2808  
us19.ltr