

Permit Class

Permit Number

**MODIFICATION/  
MINOR**

**65-92**

STATE OF NORTH CAROLINA  
Department of Environment, Health & Natural Resources  
and  
Coastal Resources Commission

# Permit

*NOM*  
*col*  
JUL 28 1993

Major Development in an Area of Environmental Concern  
pursuant to NCGS 113A-118

Excavation and/or filling pursuant to NCGS 113-229

Issued to **N.C. Dept. of Transportation, Div. of Highways, P.O. Box 25201, Raleigh, NC 27611**

authorizing development in New Hanover County at Smith Creek and Spring Branch at the SR1175 Crossings, in Wilmington as requested in the permittee's application ~~and~~ letter dated 7/1/93 including attached workplan drawings, 6, dated received 7/1/93.

This permit, issued on July 22, 1993, is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to a fine, imprisonment or civil action; or may cause the permit to be null and void.

- 1) This permit modification authorizes undercutting and backfilling a section of the detour at Spring Branch in a manner depicted in the attached drawings.
- 2) The temporary detour at Spring Branch must be restored to the original grade upon completion of the project. If necessary, wetland species must be planted to assist in the re-establishment of wetland cover in the affected area.
- 3) This modification must be attached to the original of permit No. 65-92 issued on 6/23/92 and both documents must be readily available on site when a Division representative inspects the project for compliance.
- 4) All conditions and stipulations of the original of permit No. 65-92 remain in force under this modification unless altered herein.

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date. An appeal requires resolution prior to work initiation or continuance, as the case may be.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.

Any maintenance work or project modification not covered hereunder requires further Departmental approval.

All work must cease when the permit expires on December 31, 1995

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.

Signed by the authority of the Secretary of DEHNR and the Chairman of the Coastal Resources Commission.

  
\_\_\_\_\_  
Roger N. Schechter, Director  
Division of Coastal Management

This permit and its conditions are hereby accepted.

\_\_\_\_\_  
Signature of Permittee

WILMINGTON REGIONAL OFFICE  
DIVISION OF COASTAL MANAGEMENT  
395-3900



**MEMORANDUM**

**TO:** John Parker

**FROM:** Bob Stroud

**SUBJECT:** Modification to Permit # 65-92 - NCDOT-DOH Smith Creek and Spring Branch,  
New Hanover County.

**DATE:** July 7, 1993

---

The attached request by the permittees will allow for the removal, for approximately 250', of approximately 516 cu yds of unsuitable material to highground disposal and the resulting site will be backfilled with suitable material. . This area has already been authorized for disturbance by the location of the temporary detour. Upon completion of the project the area will be restored and returned to the original wetland grade.

I have no objections to the requested action provided that we add condition 6) to the existing permit as follows:

The temporary detour at Spring Branch must be restored to the original grade upon completion of the project. If necessary, wetland species must be planted to assist in the re-establishment of wetland cover in the affected area.

If there are questions concerning the above, please advise.

cc: Preston Pate, DCM  
Ernie Jahnke, COE  
Ann Hines, LPO



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

JAMES B. HUNT, JR.  
GOVERNOR

DIVISION OF HIGHWAYS  
4511 Franklin Avenue  
Wilmington, NC 28403  
July 1, 1993

SAM HUNT  
SECRETARY

RECEIVED

JUL 1 1993

DIVISION OF  
COASTAL MANAGEMENT

Mr. Bob Stroud  
Division of Coastal Management  
126 Cardinal Drive Extension  
Wilmington, NC 28405

RE: Project 8.2250202  
TIP Nos B-2059 & B-2156  
FA No BRM-5850(3)  
County New Hanover

Improvement To SR 1175 (North Kerr Avenue) Bridges  
No. 1 and No. 2 Over Spring Branch and Smith Creek

SUBJECT: Revision and Modification To Permit #65-92

Dear Mr. Stroud:

On June 23, 1993, Permit No. 65-92 was issued, by the Department of Environment Health and Natural Resources and Coastal Resource Commission, to the NC Department of Transportation; for Smith Creek and Spring Branch, at the SR 1175 Crossing in Wilmington.

The Detour at Spring Branch will need to undercut approximately 2.5' below the average ground elevation, per the recommendation of the Geotechnical Department in Raleigh. This excavation is needed to maintain a minimum of 3.5' of fill below the subgrade of the detour, with the additional strength of fabric placed at the bottom of the undercut; this should give the roadbed enough strength to hold the traffic.

I have estimated that this additional excavation will involve .218 Acres of wetland, and approximately 516 CY of undercut to be removed and replaced with fill material. Attached is a Plan View Sheet, showing the location of the undercut; and five (5) Cross-Section Sheets, showing the depth and width of the undercut in reference to M.H.T. of 3.1' elevation.



Mr. Bob Stroud  
July 1, 1993  
Page 2

In reference to our previous discussion, to add Class I Rip-Rap on Smith Creek; I have reviewed the plans and have determined that this stone is not needed and a modification is not required.

Please review this modification and inform me of your findings.

Yours very truly,



H. Allen Pope, PE  
Resident Engineer

HAP/OTA/bsm

cc: D. J. Bowers, PE  
L. A. Sanderson, PE  
D. W. Boylston, PE  
Barney O'Quinn, PE  
K. C. Jones

RECEIVED

JUL 1 1993

DIVISION OF  
COASTAL MANAGEMENT

V = 30 MPH

-L- POT 10+00.00  
-Y- POT 10+00.00

TEMPORARY CONSTRUCTION EASEMENT  
PROVIDE 25' DIA. HOLE

(2)

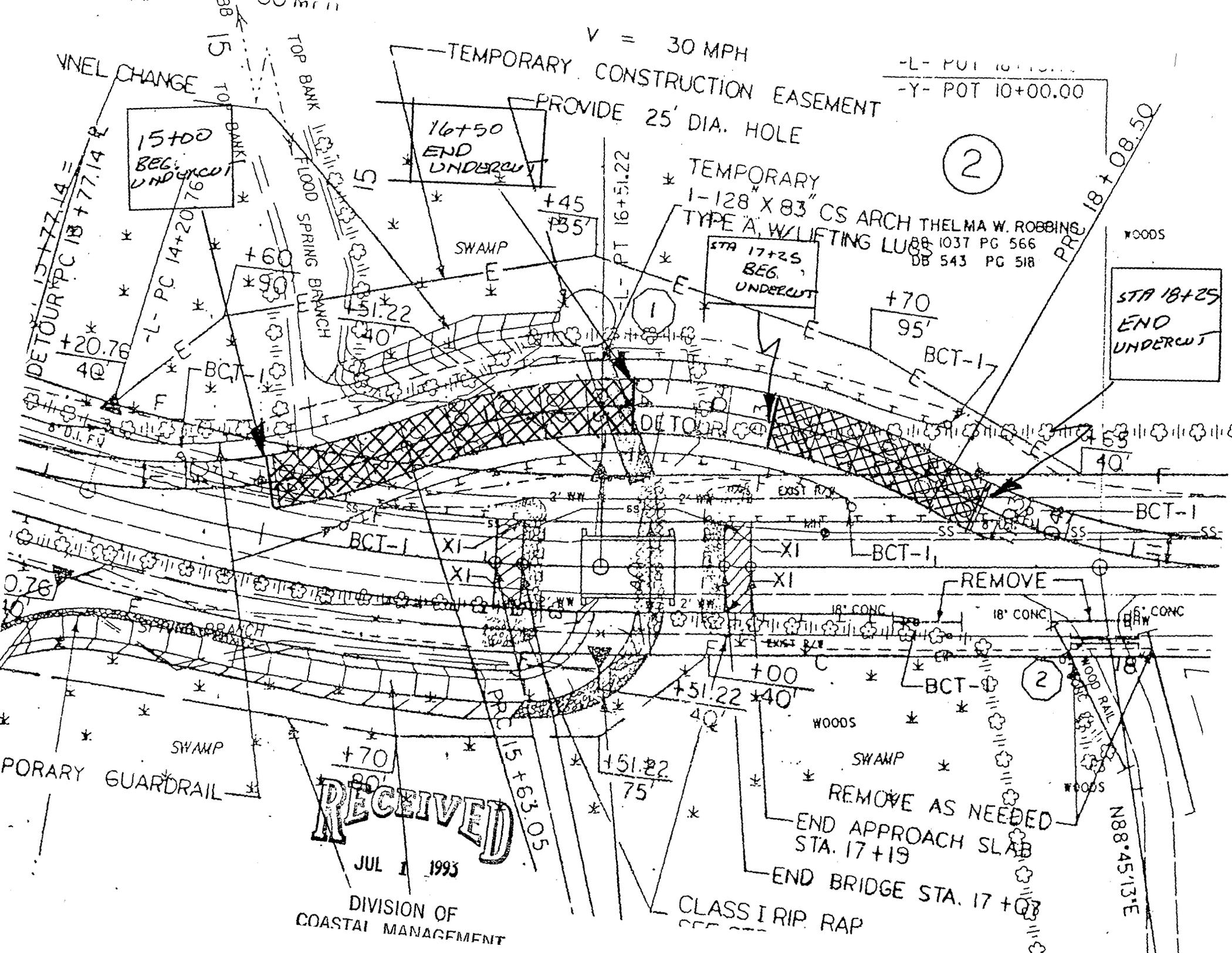
TEMPORARY  
1-128" X 83" CS ARCH THELMA W. ROBBING  
TYPE A, W/LIFTING LUGS  
DB 1037 PG 566  
DB 543 PG 518

STA 18+25  
END  
UNDERCUT

15+00  
BEG.  
UNDERCUT

16+50  
END  
UNDERCUT

STA 17+25  
BEG.  
UNDERCUT



RECEIVED

JUL 1 1993

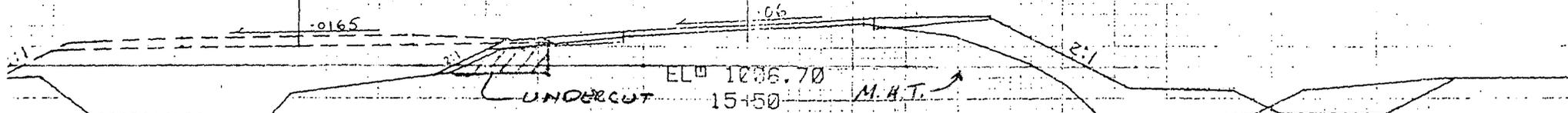
DIVISION OF  
COASTAL MANAGEMENT

REMOVE AS NEEDED  
END APPROACH SLAB  
STA. 17+19  
END BRIDGE STA. 17+00

CLASS I RIP RAP

N88°45'13"E

DETOUR  
STA. 15  
EL. 100



DETOUR -L- LT.  
C = 0 C = 16  
F = 783 F = 0  
REMOVE DETOUR  
C = 828  
F = 98

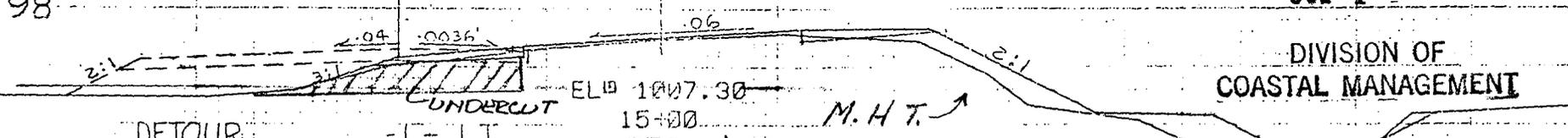
-L- RT. DDE = 1  
C = 4  
F = 319

**RECEIVED**

JUL 1 1993

DIVISION OF  
COASTAL MANAGEMENT

DETOUR  
STA. 15+01.4  
EL. 1006.77

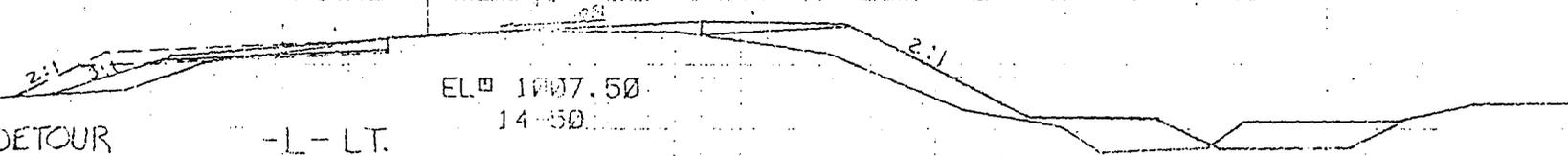


DETOUR -L- LT.  
C = 17 C = 0  
F = 198 F = 12  
REMOVE DETOUR  
C = 220  
F = 0

EL 1007.30  
15+00  
BEGEN  
UNDERCUT

-L- RT. DDE = 12  
C = 12  
F = 155

DETOUR  
STA. 14+0.17

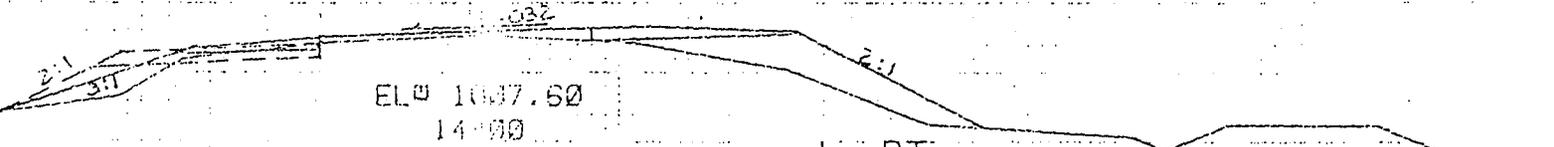


DETOUR -L- LT.  
C = 29 C = 0  
F = 75 F = 0  
REMOVE DETOUR  
C = 76  
F = 0

EL 1007.50  
14+50

-L- RT. DDE = 92  
C = 0  
F = 248

DETOUR  
STA. 14+0.98



REMOVE DETOUR DETOUR -L- LT.  
C = 0  
F = 0

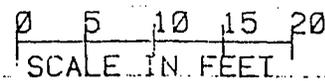
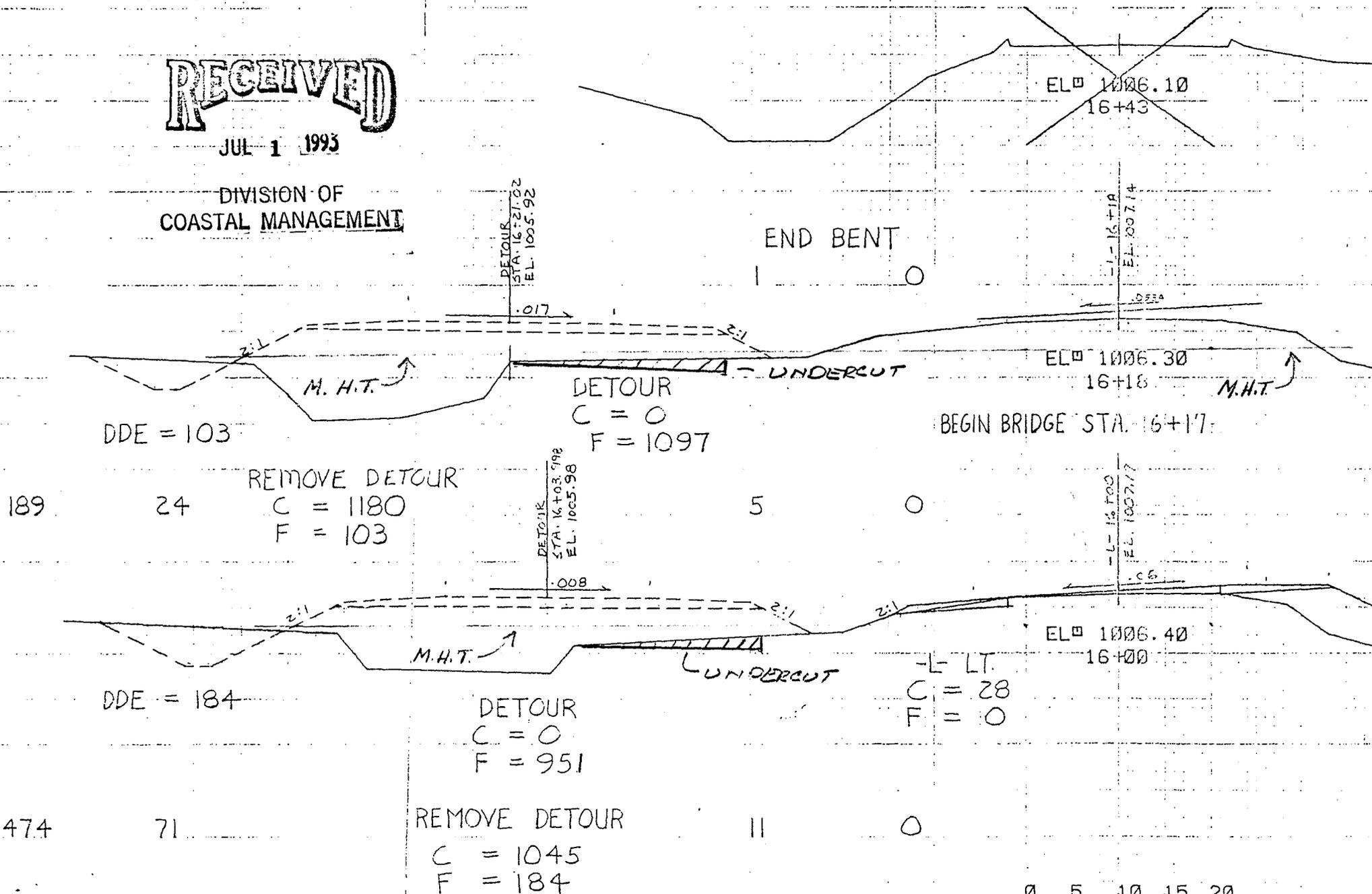
EL 1007.60  
14+00

-L- RT.  
C = 0

RECEIVED

JUL 1 1993

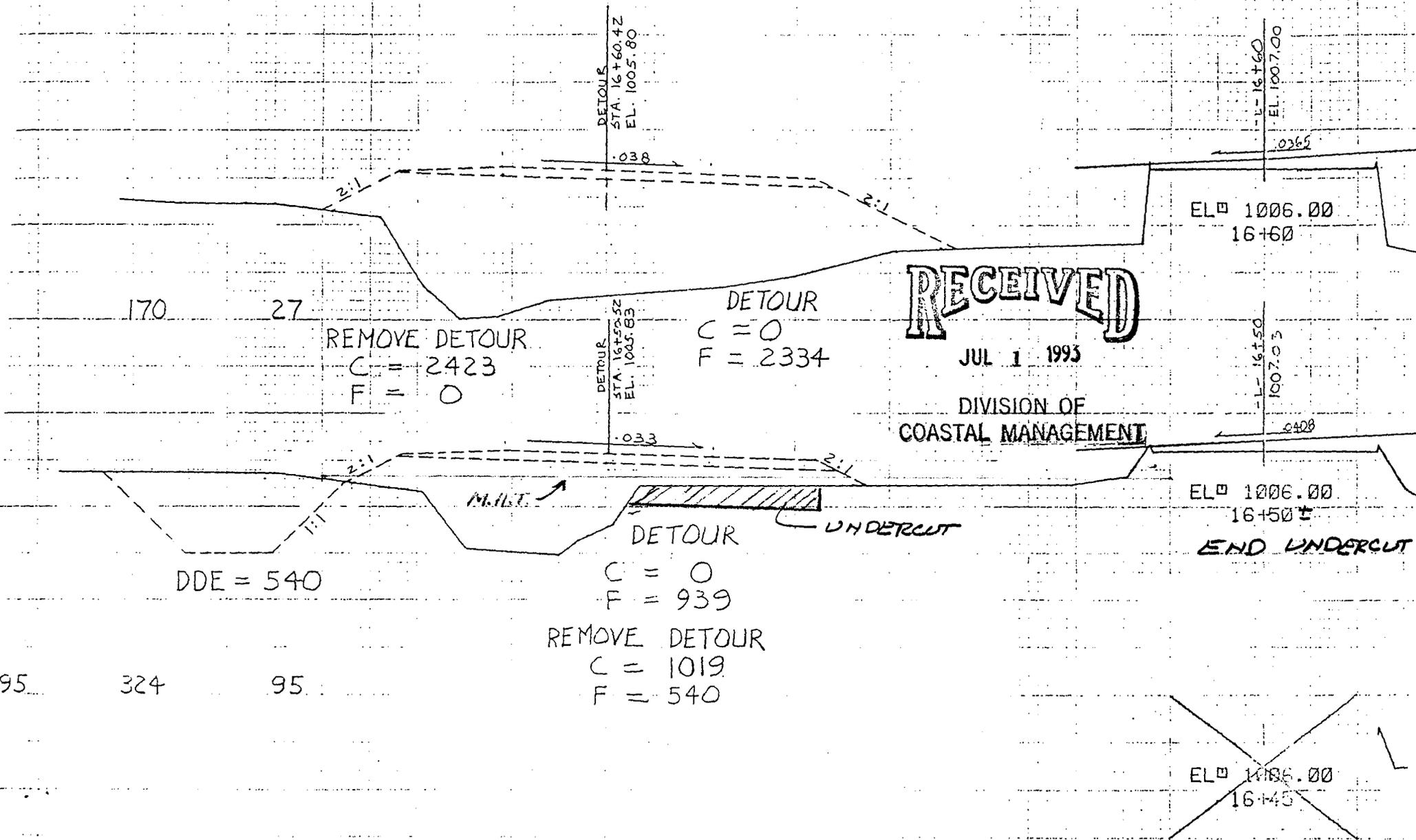
DIVISION OF  
COASTAL MANAGEMENT



L

JUR. REMOVE  
 DETOUR  
 EXCAVATION EMBANKMENT  
 DS. CU. YDS. CU. YDS.

-L- LEFT  
 EXCAVATION EMBANKMENT  
 CU. YDS. CU. YDS.



REMOVE DETOUR  
 C = 2423  
 F = 0

DETOUR  
 C = 0  
 F = 2334

**RECEIVED**  
 JUL 1 1993  
 DIVISION OF  
 COASTAL MANAGEMENT

DDE = 540

DETOUR  
 C = 0  
 F = 939  
 REMOVE DETOUR  
 C = 1019  
 F = 540

END UNDERCUT

~~EL. 1006.00  
 16+45~~





Permit Class

NEW

Permit Number

65-92

STATE OF NORTH CAROLINA  
Department of Environment, Health & Natural Resources  
and  
Coastal Resources Commission

**Permit**

for

Major Development in an Area of Environmental Concern  
pursuant to NCGS 113A-118

Excavation and/or filling pursuant to NCGS 113-229



Issued to N.C. Dept. of Transportation, Div. of Highways, P.O. Box 25201, Raleigh, NC 27611

authorizing development in New Hanover County at Smith Creek and Spring Branch at the SR1175 Crossings, in Wilmington as requested in the permittee's application dated 1/17/92 including attached work plan drawings, sheets 1-10 of 10 dated 10/91 and "Restoration Guidelines", no date.

This permit, issued on June 23, 1992, is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to a fine, imprisonment or civil action; or may cause the permit to be null and void.

- 1) Mitigation submitted in the application, including "Restoration Guidelines" will be carried out prior to expiration of this permit.
- 2) Sedimentation and erosion control measures will be carried out to the extent possible to preclude off site impacts during construction and upon completion and final stabilization of impacted areas.
- 3) Upon removal of the detour, return Spring Branch channel on the downstream side of the bridge to original depth, width and meander. This will restore some of the original physical fish habitat, most notably adequate water depth.
- 4) Place temporary culverts so that fish movement will not be impeded.

(See attached sheet for Additional Conditions)

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date. An appeal requires resolution prior to work initiation or continuance, as the case may be.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.

Any maintenance work or project modification not covered hereunder requires further Departmental approval.

All work must cease when the permit expires on

December 31, 1995

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.

Signed by the authority of the Secretary of DEHNR and the Chairman of the Coastal Resources Commission.

Roger N. Schechter, Director  
Division of Coastal Management

This permit and its conditions are hereby accepted.

\_\_\_\_\_  
Signature of Permittee

**ADDITIONAL CONDITIONS**

- 5) Conduct no excavation between April 1 and September 30, a period of peak biological reproduction and growth.

**NOTE:** The Division of Environmental Management authorized this project activity under General Water Quality Certification No. 2734.

**NOTE:** The Corps of Engineers approved the project under Nationwide Permit No. 23 as a "Categorical Exclusion".



Pending

DIVISION OF COASTAL MANAGEMENT  
127 Cardinal Drive Extension  
Wilmington, NC 28405  
(919) 395-3900

P3

Memorandum

To: John Parker

From: Haskell S. Rhett

Subject: Consistency Opinion/NC DOT--Bridge #1 (Spring Branch),  
Bridge #2 (Smith Creek)/New Hanover County

Date: May 26, 1992

---

Thank you for this opportunity to review the major permit application named above. My opinion on consistency is based on my review of the permit application, the field investigation report, and my understanding and interpretation of policies presented in the Wilmington-New Hanover County Land Use Plan Update.

The plan classification category for Spring Branch and Smith Creek is Conservation. The reason given for including the land adjacent to the creeks within in this category is that they are in the 100-year floodplain. The threat of flood makes these areas less suitable for intense development activity. Bridges are not generally thought to be inconsistent with the Conservation classification. {The overwhelming weight given in the plan to resources protection, and the general need to consider health, safety, and the public welfare, might, in some cases, cause public facilities (including roads and bridges) to be inconsistent.}

Plan policy promotes highway improvements. The public trust AEC, however, should be protected from development which will significantly damage or alter the natural function of these areas. The amount of wetlands fill seems significant. Mitigation plans seem a reasonable means by which to ameliorate the consequences.

North Kerr Avenue is a major north-south highway in New Hanover County. Traffic volume in 1985 was reported in the Land Use Plan to reach as high as 17,700 vehicles per day on certain portions of the road. Daily traffic counts can only have increased within the last 7 years. Threat of flood from major storm events should be an important consideration for this project.

The project seems consistent with the Wilmington-New Hanover County Land Use Plan Update adopted by the Coastal Resources Commission in January, 1987.

lcc: Jim Herstine

APPLICATION TRANSMITTAL/PROCESSING RECORD

83  
P9

A) Applicant: NC DOT-DOH S.R. 1175 County: New Hanover  
Bridge #1 Spring Branch, Bridge #2 Smith Creek

Location of Project: North Kerr Avenue on S.R. 1175

Date Application Received Complete by Field: January 29, 1992

Field Recommendation: Attached \_\_\_\_\_ To be Forwarded X

Field Representative: C. Robert Stroud, Jr. District Office: Wilmington

District Manager Approval: James W. Heintz

B) Date Application Received in Raleigh: \_\_\_\_\_ Fee Rec'd: \$ \_\_\_\_\_

Public Notice Rec'd: \_\_\_\_\_ End of Notice Date: \_\_\_\_\_

Adj. Rip. Prop Notices Rec'd: \_\_\_\_\_ Deed Rec'd: \_\_\_\_\_

Application Assigned to: \_\_\_\_\_ on \_\_\_\_\_

C) 75 Day Deadline: \_\_\_\_\_ 150 Day Deadline: \_\_\_\_\_

Mail Out Date: \_\_\_\_\_ State Due Date: \_\_\_\_\_

Federal Due Date: \_\_\_\_\_ Fed. Comments Rec'd on \_\_\_\_\_

Permit Final Action: Issue \_\_\_\_\_ Deny \_\_\_\_\_ Draft on \_\_\_\_\_

D)

AGENCY	DATE COMMENTS RETURNED	OBJECTIONS		NOTES
		YES	NO	
Coastal Management District Office				
Division of Comm. Assistance				
Land Quality Section				
Div. of Env. Management				
State Property Office				
Div. of Archives & History				
Div. of Env. Health				
Div. of Highways				
Wildlife Resources Commission				
Div. of Water Resources				
Div. of Marine Fisheries				

RECEIVED  
MAY 15 1992



State of North Carolina  
Department of Environment, Health, and Natural Resources  
Division of Coastal Management

James G. Martin, Governor  
William W. Cobey, Jr., Secretary

Roger N. Schecter  
Director

May 7, 1992

Mr. B. J. O'Quinn, P.E.  
Post Office Box 25201  
Raleigh, North Carolina 27611

Dear Mr. O'Quinn:

The Division of Coastal Management hereby acknowledges receipt of your application for state approval for the replacement of Bridge 1 and Bridge 2 on North Kerr Avenue (SR 1175), New Hanover County. It was received in this office on January 29, 1992. The document was inadvertently misplaced and consequently the review has been postponed until this time. The final date for action will be June 26, 1992. As you are aware the Corps of Engineers has determined this action to be a categorical exclusion. Our Raleigh office was notified of the delay and requested to notify you of the necessary extension. I have been in recent telephone communication with Gordon Cashin to inform him of the unfortunate circumstance of the lost application.

NOGS 113A-119(b) requires that Notice of an application be posted at the location of the proposed development. Enclosed you will find a "Notice of Permit Filing" postcard which must be posted at the site of your proposed project. You should post this card at a conspicuous point along your property where it can be observed from a public road. Some examples would be: nailing the notice card to a telephone pole or tree along the road right-of-way fronting your property, or at a point along the road right-of-way where a private road would lead one into your property. Failure to post this Notice could result in an incomplete application.

A field report has been prepared and is in the process of being circulated to the various state and federal review agencies for their comments. If additional information is required based on this review, the agencies may contact you directly.

Please contact me if you have any questions and notify me in writing if you wish to receive a copy of my field report and/or comments from reviewing agencies.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Robert Stroud, Jr.", written over a horizontal line.

C. Robert Stroud, Jr.  
Coastal Field Representative

CRS/tlh

cc: Jim Herstine, DCM      Ernie Jahnke, COE  
Preston Pate, DCM      Ann Hines, LPO

DIVISION OF COASTAL MANAGEMENT  
FIELD INVESTIGATION REPORT

1. Applicant's name NC DOT - DOH - Bridge #1 Spring Branch, Bridge #2 Smith Creek

2. Location of project site North Kerr Avenue on S.R. 1175 - adjacent and across Smith Creek - New Hanover County

PHOTO INDX: 1989: None 1984: None

STATE PLANE COORDINATES: X: 2335600 Y: 188600

3. Investigation type: Dredge & Fill \_\_\_\_\_ CAMA X

4. Investigative procedure: (A) Dates of site visit 5-7-92 5-8-92  
 (B) Was applicant present No No

5. Processing procedure: Application received \_\_\_\_\_ Office WIRO

6. Site description: (A) Local Land Use Plan Wilmington - New Hanover  
 Land Classification from IUP Conservation, transitional, community  
 Development constraints identified in IUP None for projects of this nature

(B) AEC(s) involved: Ocean Hazard \_\_\_\_\_ Estuarine Shoreline \_\_\_\_\_  
 Coastal Wetlands \_\_\_\_\_ Public Trust Waters X  
 Estuarine Waters \_\_\_\_\_ Other \_\_\_\_\_

(C) Water dependent: Yes \_\_\_\_\_ No \_\_\_\_\_ Other Both

(D) Intended use: Public X Private \_\_\_\_\_ Commercial \_\_\_\_\_

(E) Type of waste water treatment: Existing N/A  
 Planned N/A

(F) Type of structures: Existing Bridges and roadbed  
 Planned Bridges, new roadbed, temporary detour

(G) Estimated annual rate of erosion \_\_\_\_\_ Source \_\_\_\_\_

7. Habitat description:

	AREA		
	Dredged	Filled	Other
(A) Vegetated wetlands: <u>cypress-gum swamp</u>	<u>appx. 6,000 sf</u>	<u>0.7 ac</u>	
(B) Non-vegetated wetlands:			
(C) Other: <u>existing road bed</u>	<u>appx. 0.2 ac</u>		
(D) Total Area Disturbed:			

8. Project Summary The applicants propose to construct 2 new bridges with a temporary detour on one and a realignment on the other to straighten dangerous curve.

9. PROJECT DESCRIPTION

The project sites consist of the two existing bridge crossings on S.R. 1175 over two streams off the N.E. Cape Fear River. Site one (1) is identified as the Spring Branch crossing. Site two (2) is identified as the Smith Creek Crossing. Spring Branch is a tidal stream and is a tributary of Smith Creek. It is approximately 20' wide at this segment of the stream. The existing bridge is approximately 40' long x 26' wide. The travel way in this area is approximately 24' wide. The approaches on either side are approximately 45' wide. Spring Branch is classified as C SW and is considered to be Inland waters. The wetlands associated with Spring Branch are of the freshwater variety. Cypress, Pine, Black Gum, Green Ash and Alder are present along the downstream area along with herbaceous emergent species. On the upstream side of the road and bridge are found Black Gum, Tulip Poplar, Red Maple, Bald Cypress, Water Oak, and Pine. Smith Creek is a larger stream located approximately 1/4 mile north of Spring Branch. The creek is approximately 65' wide downstream of the existing bridge and approximately 40' wide under the existing bridge. This structure is approximately 80' long x 24' wide. The existing road bed is approximately 45' to 50' wide at the approaches. Smith Creek is also classified as C SW and is designated as Inland waters. The wetlands associated with the upstream side of Smith Creek are Green Ash, Black Gum, Bald Cypress, Alder, Red Maple, Water Oak and Tulip Poplar. There are also unidentified emergent herbaceous species present. These include two small colonies of narrow leafed cat-tail. There is the distinct possibility that anadromous fish use both streams during certain flow periods.

The applicants propose to remove the existing bridge at site 1 and replace it with a new structure comprised of three (3) 30' structures each 40' wide. In order to complete the work it will be necessary to construct a temporary detour. This detour will be placed over the existing channel of Spring Branch. The length of this feature will be approximately 390' and the maximum width will be approximately 60'. The natural channel will be directed to a created channel approximately 120' long x 20' wide (top width). This flow in this feature will be conveyed under the detour through 2 - 84" CSP to empty into the natural stream bed. The natural channel turns sharply to the south just east of the existing bridge and road bed. It follows down the bank of the existing fill approach for approximately 210'. This alignment threatens the existing bank. The applicants propose to reshape the bank creating a 10' shelf and relocate this channel to a 10' bottom width. This work will occur approximately 25' east of the existing toe of bank. On the southern approach, on the downstream side the banks will be filled for an additional 120' approximately 5' into the wetlands. On the north approach the

9. PROJECT DESCRIPTION - Continued:

downstream side will have approximately 500' of 8' wide fill placed into the wetlands. The upstream side will have approximately 463' of 8' wide fill. The difference in the length of fill on this side is a result of the presence of 2 existing driveways. Approximately 165' of 8' to 10' wide class "I" rip rap will be used to stabilize the new bridge approaches. The area under the detour and temporary channel will be restored upon completion of this phase of the project.

At site 2 the applicants are proposing to replace the existing bridge within a new alignment in order to remove the existing dangerous curve associated with the existing structure. The structure will consist of three (3) - 42' bridge spans each 40' wide. The southern approach will originate from high ground. The northern approach will be created partially by the placement of fill in wetlands. Approximately 360' of fill varying in width from 0' to 90' will be constructed on the downstream side of existing road bed. Approximately 230' of fill, up to 15' wide will be used in the upstream side wetlands. The total roadbed feature will average approximately 80' wide. The existing creek will be widened under the bridge site approximately 20' for a distance of approximately 120' in order to improve flow dynamics. Approximately 160' of Class "I" rip-rap varying in width from 10' to 40' will be utilized to stabilize the banks of the approaches adjacent to the bridge sites. Approximately 50' linear feet 15' side will be used in a curve of the bank downstream to prevent the scour of the new approach fill in that location. Approximately 280' of existing road bed averaging 30' wide will be removed to existing adjacent wetland elevation.

10. ANTICIPATED IMPACTS

Smith Creek represents a very real threat to public safety with the existing road alignment and poor existing bridge design. Spring Branch requires upgrading also. Approximately 0.7 acres of freshwater wetlands will be consumed by the proposed action at both sites. The Spring Branch bridge will involve a permanent loss of 0.3 acres and the Smith Creek site will result in a net loss of 0.2 acres even though the initial impact will involve 0.4 acres due to the necessary re-alignment in order to ensure a safe roadway. The proposed restoration at the Smith Creek site will result in approximately 0.2 acres of wetlands. Based on the 2:1 mitigation formula this 0.2 acres will account for only 0.1 acres of the 0.7 acres. The other 0.6 acres will be accounted for utilizing the Company Swamp Mitigation Bank. Based on current agreements all impacts less than 5 acres will be debited from the gum\cypress habitat credits remaining in the Company Swamp Bank. The applicants are also proposing restoration guidelines including the planting of hardwoods. (copy enclosed)

NC DOT - DOH  
Bridge #1 Spring Branch  
Bridge #2 Smith Creek  
Page four

---

10. ANTICIPATED IMPACTS - Continued:

This project as proposed (especially the Smith Creek portion) appears to have overriding public benefits which compensate for the wetland losses. The Corps (see attached letter) has designated this project as a categorical exclusion and has authorized the action.

Submitted by: C. Robert Stroud, Jr.      Date: May 7, 1992      Office: Wilmington

Please type or print. Carefully describe all anticipated development activities, including construction, excavation, filling, paving, land clearing, and stormwater control. If the requested information is not relevant to your project, write N/A (not applicable). Items 1-4 and 8-9 must be completed for all projects.

If you plan to build a marina, also complete and attach Form DCM-MP-2.

b. Is the proposed activity maintenance of an existing project, new work, or both?  
Both

c. Will the project be for community, private, or commercial use?  
Public

d. Describe the planned use of the project.  
Public transportation

### 1 APPLICANT

North Carolina Department of Transportation

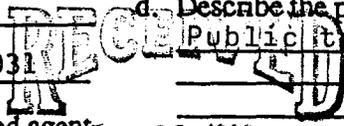
a. Name B. J. O'Quinn, PE

Address P. O. Box 25201

City Raleigh State NC

Zip 27611 Day phone (919) 733-2031

Landowner or  Authorized agent



JAN 29 1992

b. Project name (if any) N/A

c. If the applicant is not the landowner, also give the owner's name and address.  
See Permit

DIVISION OF COASTAL MANAGEMENT  
**4 LAND AND WATER CHARACTERISTICS**

a. Size of entire tract 0.4185 miles

b. Size of individual lot(s) NA

c. Elevation of tract above mean sea level or National Geodetic Vertical Datum  
Site 1: 6.1, Site 2: 8.1

d. Soil type(s) and texture(s) of tract  
Dorovan, Seagate

e. Vegetation on tract Cypress-gum swamp

f. Man-made features now on tract SR 1175

g. What is the CAMA Land Use Plan Classification of the site? (Consult the local land use plan.)

Conservation  Transitional  
 Developed  Community  
 Rural  Other

h. How is the tract zoned by local government?  
Consistent w/ CAMA land use plan.

i. How are adjacent waters classified?  
C. S. W.

j. Has a professional archaeological survey been carried out for the tract? No If so, by whom?  
State Historic Preservation Office indicated that none is needed.

### 2 LOCATION OF PROPOSED PROJECT

a. Street address or secondary road number  
North Kerr Avenue, SR 1175

b. City, town, community, or landmark  
Wilmington

c. County New Hanover

d. Is proposed work within city limits or planning jurisdiction? Yes

e. Name of body of water nearest project  
Smith Creek and Spring Branch,  
(N.E. Cape Fear River)

### 3 DESCRIPTION AND PLANNED USE OF PROPOSED PROJECT

a. Describe all development activities you propose (for example, building a home, motel, marina, bulkhead, or pier). Replace Bridge over Spring Branch, Realign roadway over Smith Creek with new bridge.

## 5 UPLAND DEVELOPMENT

Complete this section if the project includes any land development.

- a. Type and number of buildings, facilities, or structures proposed NA
- b. Number of lots or parcels NA
- c. Density (Give the number of residential units and the units per acre.) NA
- d. Size of area to be graded or disturbed
- e. If the proposed project will disturb more than one acre of land, the Division of Land Resources must receive an erosion and sedimentation control plan at least 30 days before land disturbing activity begins. If applicable, has a sedimentation and erosion control plan been submitted to the Division of Land Resources? NA
- f. Give the percentage of the tract within 75 feet of mean high water to be covered by impermeable surfaces, such as pavement, buildings, rooftops. 85% (No net increase)
- g. List the materials, such as marl, paver stone, asphalt, or concrete, to be used for paved surfaces. Concrete and asphalt
- h. If applicable, has a stormwater management plan been submitted to the Division of Environmental Management? NA
- i. Describe proposed sewage disposal and/or waste water treatment facilities. NA
- j. Have these facilities received state or local approval? NA
- k. Describe existing treatment facilities. NA
- l. Describe location and type of discharges to waters of the state (for example, surface runoff, sanitary wastewater, industrial/commercial effluent, "wash down"). Surface runoff

- m. Water supply source NA
- n. If the project is oceanfront development, describe the steps that will be taken to maintain established public beach accessways or provide new access. NA
- o. If the project is on the oceanfront, what will be the elevation above mean sea level of the first habitable floor? NA

RECEIVED  
DIVISION OF  
LAND RESOURCES  
JAN 29 1992  
DIVISION OF  
COASTAL MANAGEMENT

## 6 EXCAVATION AND FILL INFORMATION

- a. Describe below the purpose of proposed excavation or fill activities (excluding bulkheads, which are covered in Section 7).

- Access channel (MLW) or (NWL)
- Boat basin
- Other (break-water, pier, boat ramp, rock jetty)
- Fill placed in wetland or below MHW Total = 0.7 acres
- Upland fill areas

	Length	Width	Depth
Access channel (MLW) or (NWL)			
Boat basin			
Other (break-water, pier, boat ramp, rock jetty)			
Fill placed in wetland or below MHW	1400'	60'	
Upland fill areas	2200'	60'	

- b. Amount of material to be excavated from below water level in cubic yards 250
- c. Type of material Silt, sand
- d. Does the area to be excavated include marshland, swamps, or other wetlands? Yes
- e. High ground excavation, in cubic yards NA

- f. Dimensions of spoil disposal area \_\_\_\_\_
- g. Location of spoil disposal area Upland waste site
- h. Do you claim title to the disposal area? \_\_\_\_\_  
If not, attach a letter granting permission from the owner.
- i. Will a disposal area be available for future maintenance? NA  
If so, where? NA

- c. Shoreline erosion during preceding 12 months, in feet NA
- d. Type of bulkhead material NA
- e. Amount of fill, in cubic yards, to be placed below mean high water NA
- f. Type of fill material NA



**8 ADDITIONAL INFORMATION**

- j. Does the disposal area include any marshland, swamps, or water areas? NO

In addition to the completed application form, the following items must be submitted:

- k. Will the fill material be placed below mean high water? Yes
- l. Amount of fill in cubic yards 1100
- m. Type of fill material Granular
- n. Source of fill material Suitable borrow
- o. Will fill material be placed on marsh or other wetlands? Yes

A copy of the deed (with state application only) or other instrument under which the applicant claims title to the affected property. If the applicant is not claiming to be the owner of said property, then forward a copy of the deed or other instrument under which the owner claims title, plus written permission from the owner to carry out the project.

- p. Dimensions of the wetland to be filled 0.7 acres along 1400' of roadway
- q. How will excavated or fill material be kept on site and erosion controlled?  
Standard NCDOT erosion and sedimentation control measures.

An accurate work plat (including plan view and cross sectional drawings) drawn to scale in black ink on an 8 1/2 x 11 white paper. (Refer to Coastal Resources Commission Rule 7J.0203 for a detailed description.)

- r. What type of construction equipment will be used (for example, dragline, backhoe, or hydraulic dredge)? Backhoe, dragline bulldozer
- s. Will wetlands be crossed in transporting equipment to project site? No. If yes, explain steps that will be taken to lessen environmental impacts.

Please note that original drawings are preferred and only high quality copies will be accepted. Blue-line prints or other larger plats are acceptable only if 18 high quality copies are provided by applicant. (Contact the U.S. Army Corps of Engineers regarding that agency's use of larger drawings.) A site or location map is a part of plat requirements and it must be sufficiently detailed to guide agency personnel unfamiliar with the area to the site. Include county road (SR) numbers, landmarks, and the like.

A stormwater management plan, if applicable, that may have been developed in consultation with the Division of Environmental Management.

A list of the names and complete addresses of the adjacent waterfront (riparian) landowners. These individuals have 30 days in which to submit comments on the proposed project to the Division of Coastal Management and should be advised by the applicant of that opportunity.

**7 SHORELINE STABILIZATION**

- a. Length of bulkhead or riprap NA
- b. Average distance waterward of mean high water or normal water level NA

Name See attached list  
Address \_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

A list of previous state or federal permits issued for work on the project tract. Include permit numbers, permittee, and issuing dates.  
\_\_\_\_\_  
\_\_\_\_\_

A check for \$100 made payable to the Department of Natural Resources and Community Development to cover the costs of processing the application.

A signed AEC hazard notice for projects in oceanfront and inlet areas.

A statement on the use of public funds. If the project involves the expenditure of public funds, attach a statement documenting compliance with the North Carolina Environmental Policy Act (N.C.G.S. 113A-1 to 10).

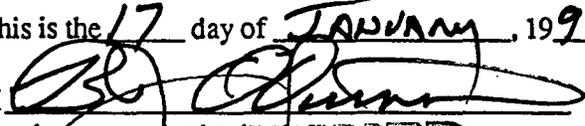
## 9 CERTIFICATION AND PERMISSION TO ENTER ON LAND

Any permit issued in response to this application will allow only the development described in the application. The project will be subject to conditions and restrictions contained in the permit.

I certify that to the best of my knowledge, the proposed activity complies with the State of North Carolina's approved Coastal Management Program and will be conducted in a manner consistent with such program.

I further certify that I am authorized to grant, and do in fact, grant permission to representatives of state and federal review agencies to enter on the aforementioned lands in connection with evaluating information related to this permit application and follow-up monitoring of project.

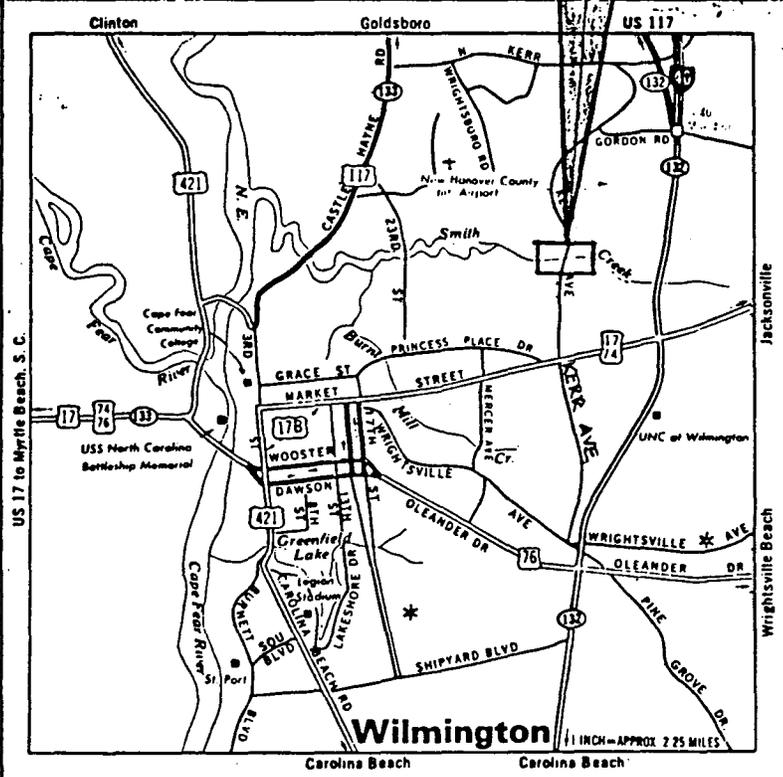
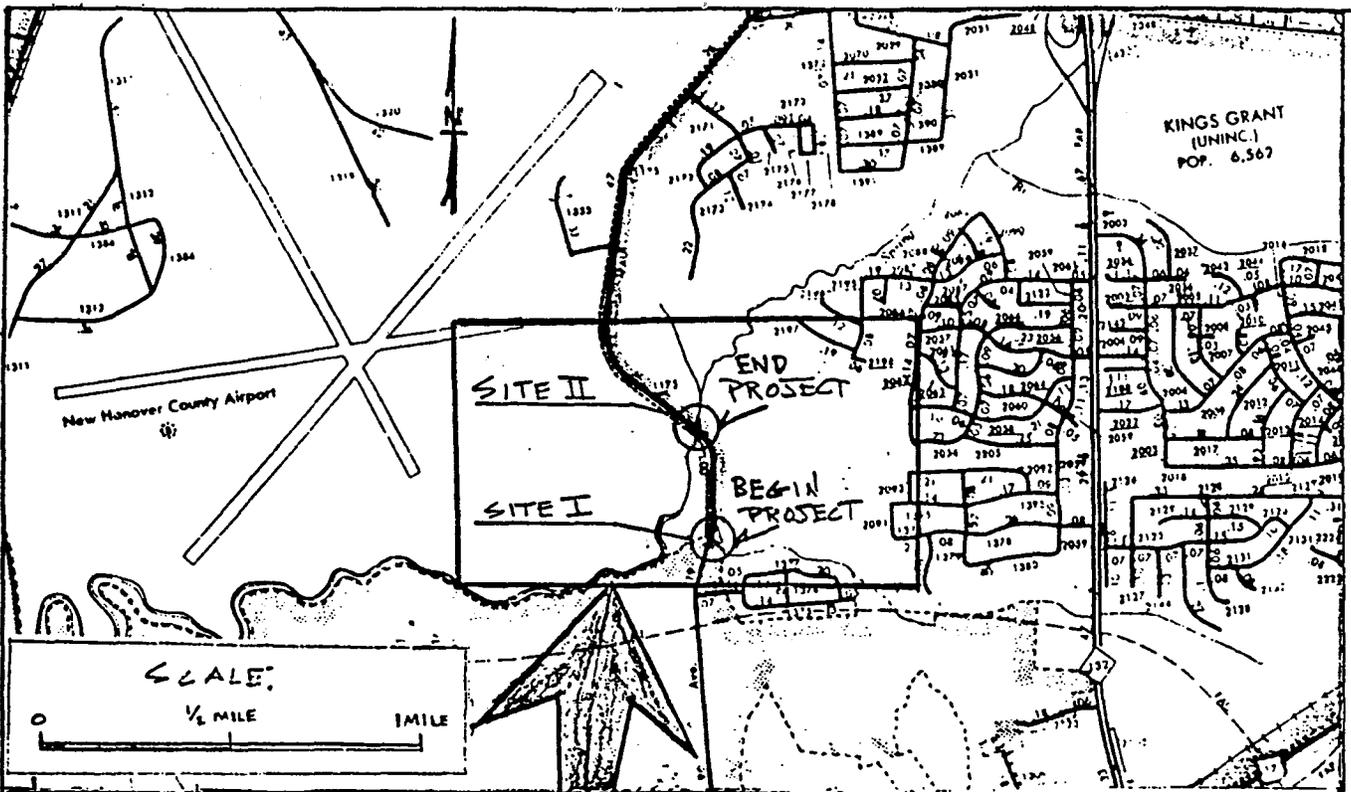
This is the 17 day of JANUARY, 1992

X   
Landowner or authorized agent

**RECEIVED**

JAN 29 1992

DIVISION OF  
COASTAL MANAGEMENT



**NEW HANOVER COUNTY**  
 NORTH CAROLINA  
ISSUED BY THE  
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
BRANCH OF HIGHWAYS - PLANNING AND DESIGN BRANCH  
IN COOPERATION WITH THE  
 U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

**RECEIVED**

JAN 29 1992

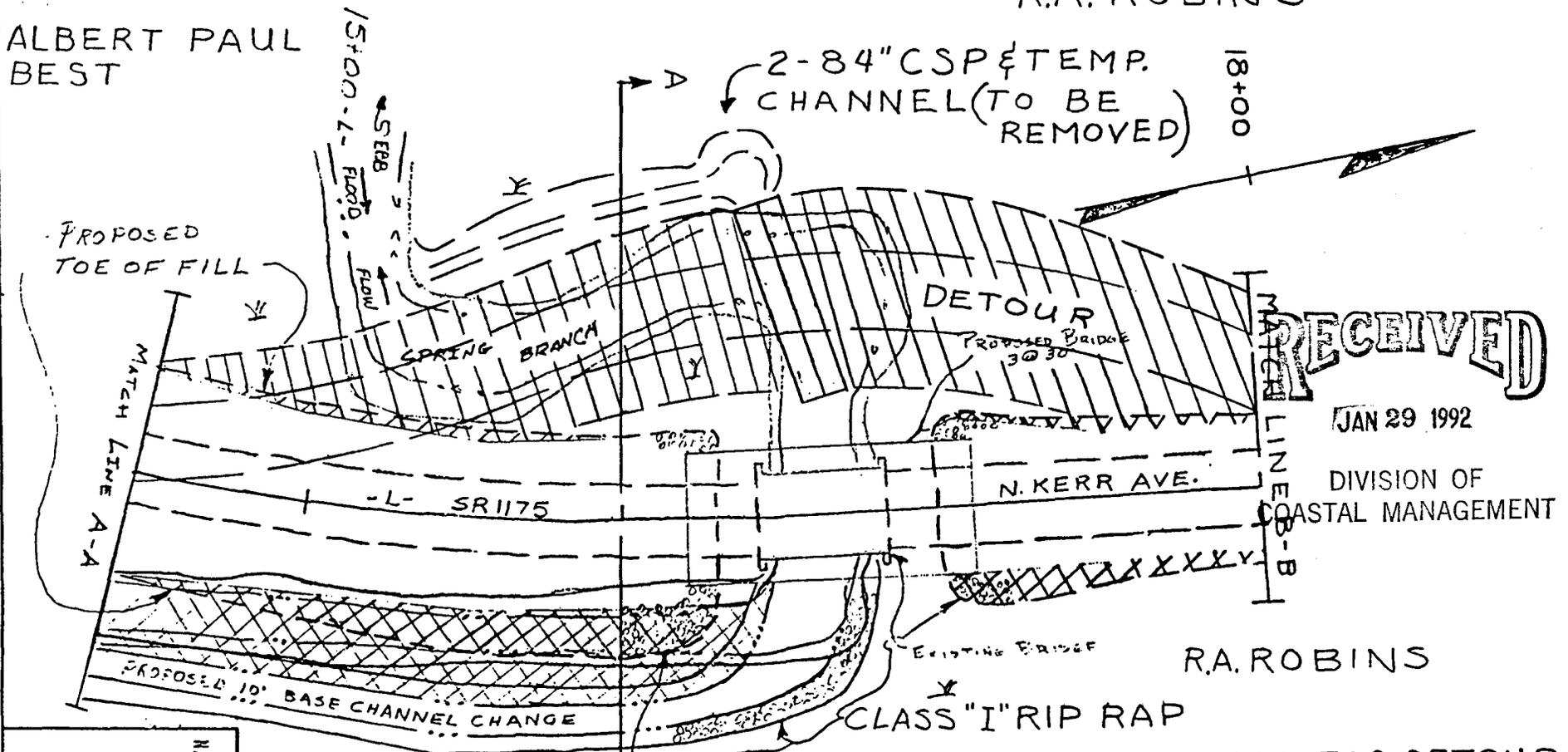
DIVISION OF  
COASTAL MANAGEMENT

N. C. DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 NEW HANOVER COUNTY  
 PROJECT 6.503228 (B-2059 & B-2156)  
 NORTH KERR AVENUE (SR 1175)  
 BRIDGES OVER SPRING BRANCH & SMITH CREEK  
 OCTOBER 1991 SHEET 1 OF 10

VICINITY MAP

ALBERT PAUL  
BEST

R.A. ROBINS

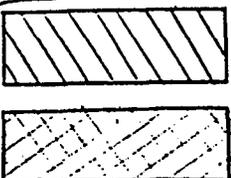


**RECEIVED**

JAN 29 1992

DIVISION OF  
COASTAL MANAGEMENT

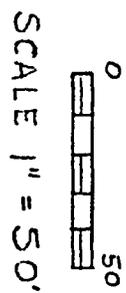
R.A. ROBINS



TEMPORARY FILL FOR DETOUR  
(TO BE REMOVED)

- DENOTES FILL IN WETLANDS &  
FILL BELOW MEAN HIGH TIDE (M.H.T.)  
AREA = 0.3 ACRE  
VOLUME = 300 C.Y.  
TOTAL FILL VOLUME = 4700 C.Y.

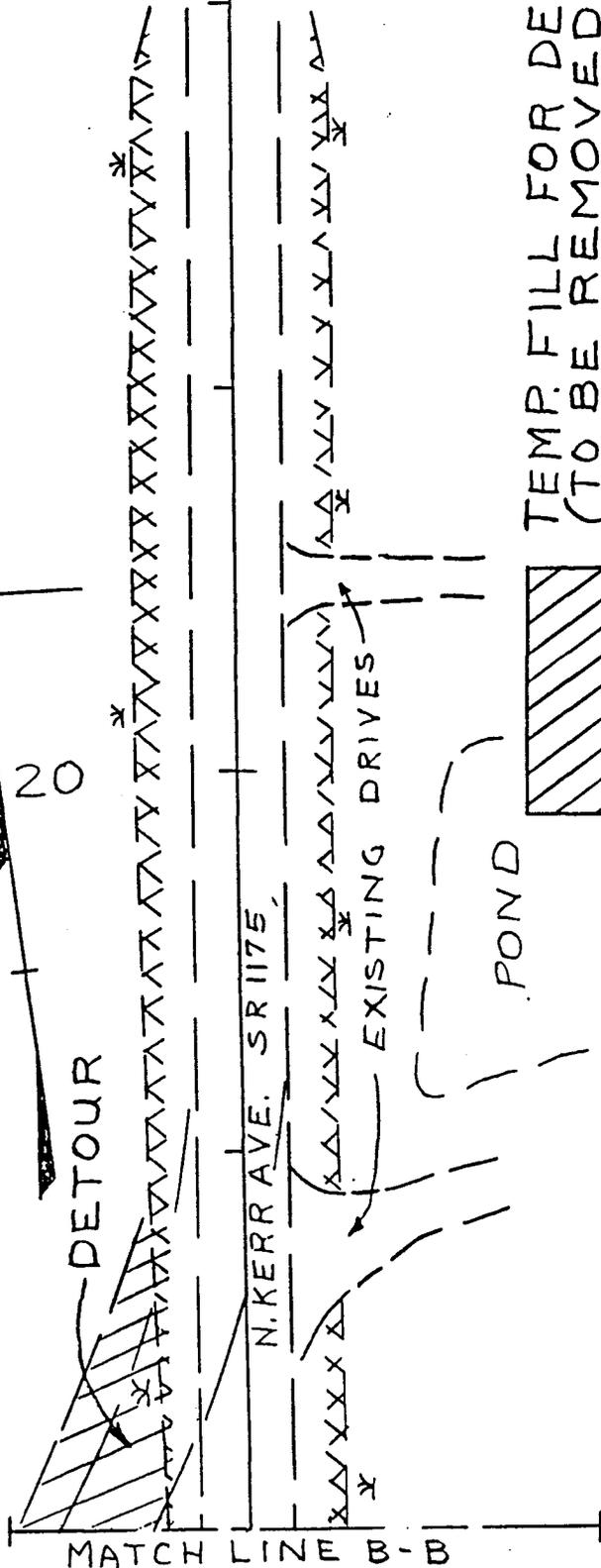
SITE 1



N.C. DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 NEW HANOVER COUNTY  
 PROJECT 6.503228 (B-2059)  
 NORTH KERR AVENUE (SR 1175)  
 BRIDGE OVER SPRING BRANCH  
 OCTOBER 1991 SHEET 2 OF 10.

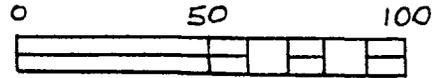
BOBBY LEE FOWLER  
CONSTRUCTION CO.

R.A. ROBINS



TEMP. FILL FOR DETOUR  
(TO BE REMOVED)

DENOTES FILL IN  
WETLANDS AND FILL  
BELOW M.H.T.



RECEIVED

JAN 29 1992

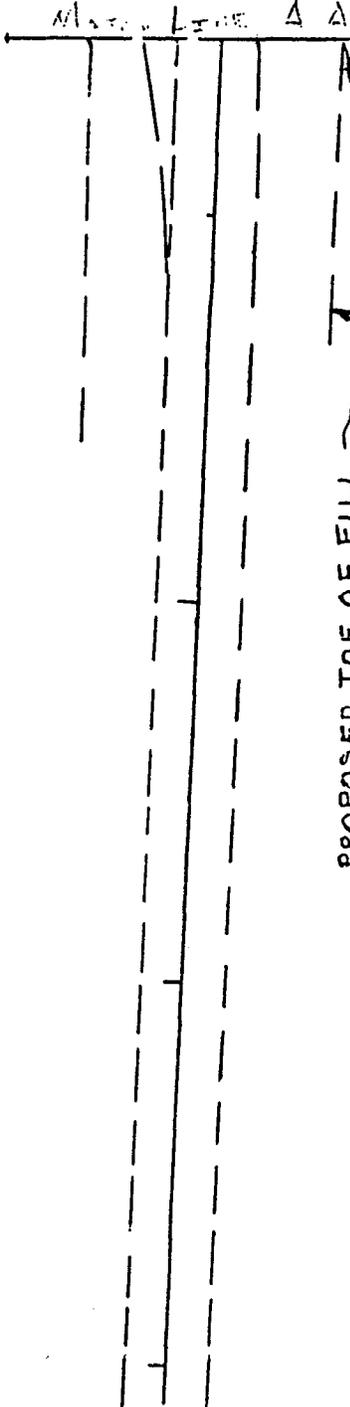
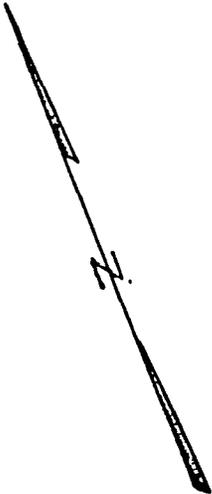
DIVISION OF  
COASTAL MANAGEMENT

SITE I

N.C. DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 NEW HANOVER COUNTY  
 PROJECT 6.503228 (B-2059)  
 NORTH KERR AVENUE (SR 1175)  
 BRIDGE OVER SPRING BRANCH  
 OCTOBER 1991 SHEET 3 OF 10

# SITE I

14+50-L-



PROPOSED CHANNEL CHANGE

PROPOSED TOE OF FILL

R.A. ROBINS

RECEIVED

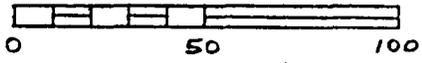
JAN 29 1992

DIVISION OF COASTAL MANAGEMENT

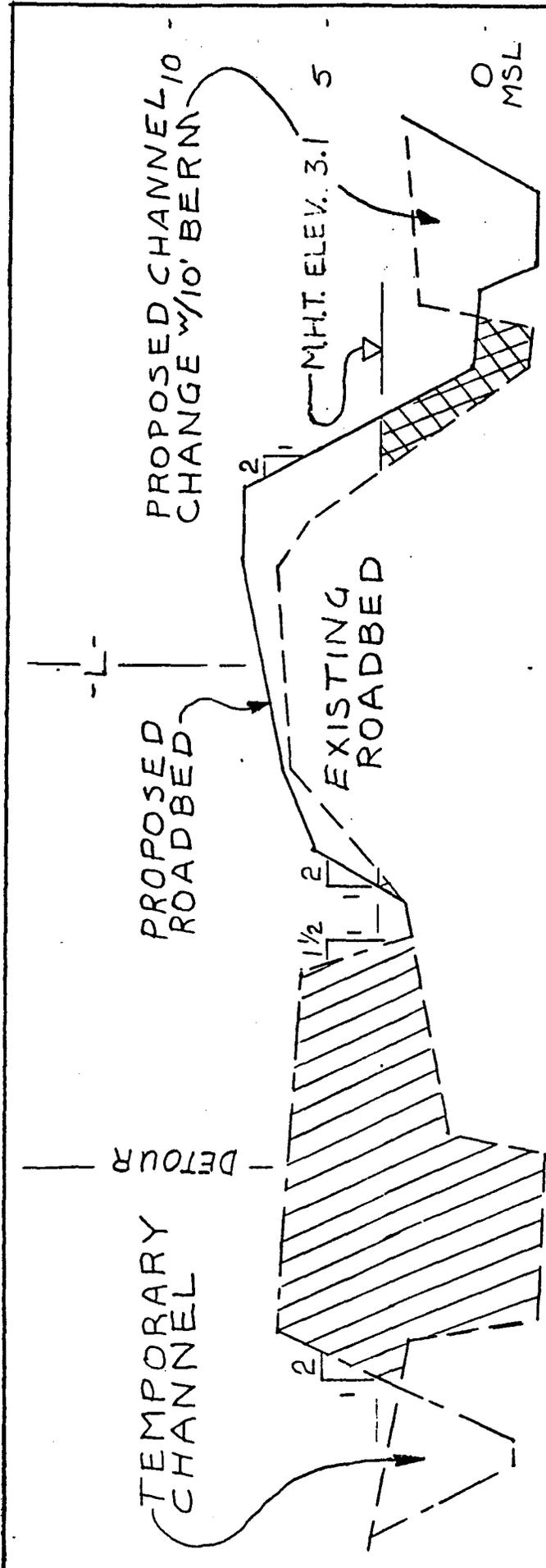
DENOTES FILL IN WETLANDS & FILL BELOW M.H.T.



SCALE 1" = 50'



N. C. DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
NEW HANOVER COUNTY  
PROJECT 6.503228 (B-2059)  
NORTH KERR AVENUE (SR 1175)  
BRIDGE OVER SPRING BRANCH  
OCTOBER 1991 SHEET 4 OF 10



SECTION A-A

- 5

 DENOTES FILL IN WETLANDS  
 & FILL BELOW O.H.W. (HIGH TIDE W.S.)

 TEMPORARY FILL FOR **REMOVED**  
 (TO BE REMOVED) **REMOVED**

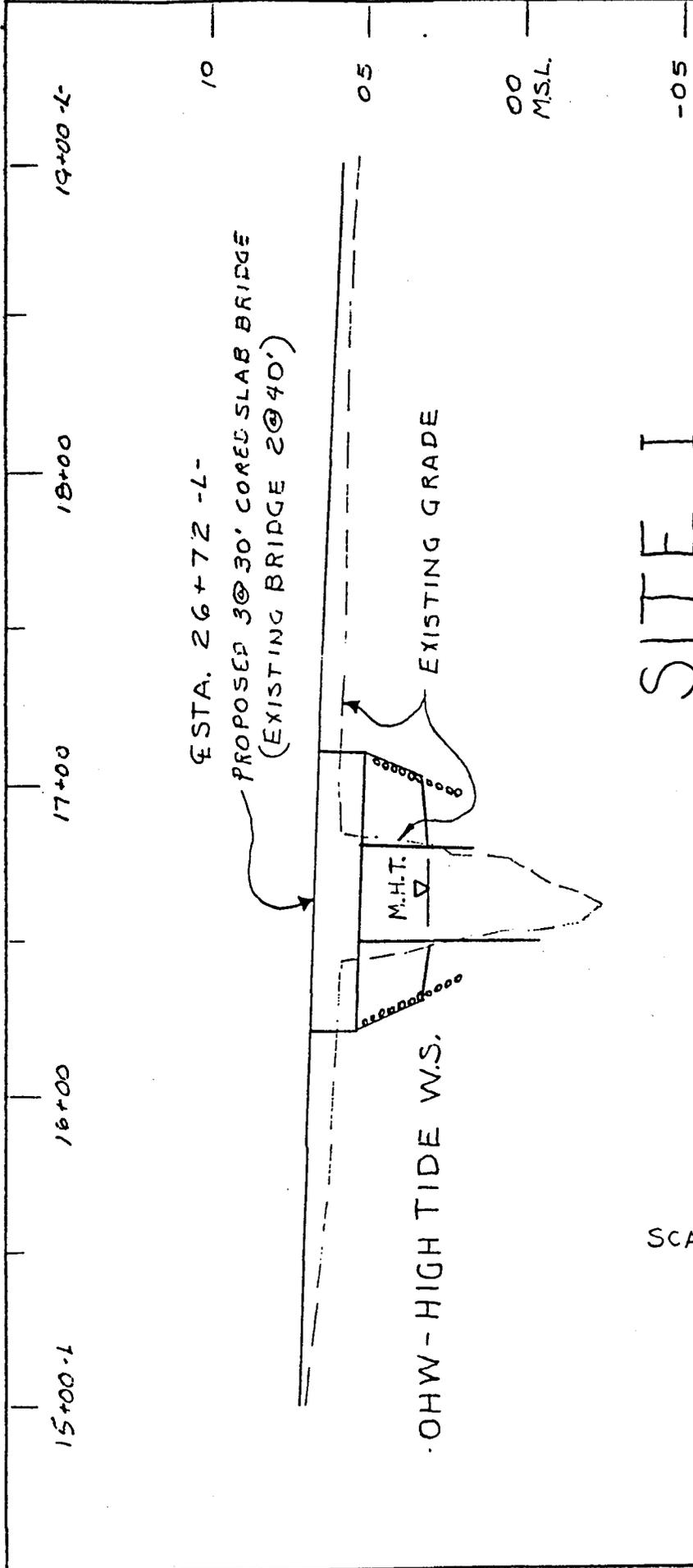
JAN 29 1992

DIVISION OF  
COASTAL MANAGEMENT

SITE I

SCALE: 1" = 20' HORIZ.  
1" = 5' VERT.

N.C. DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 NEW HANOVER COUNTY  
 PROJECT 6.503228 (8-2059)  
 NORTH KERR AVENUE (SR 1175)  
 BRIDGE OVER SPRING BRANCH  
 OCTOBER 1991 SHEET 5 OF 10



STA. 26+72 -L-  
 PROPOSED 3@30' CORED SLAB BRIDGE  
 (EXISTING BRIDGE 2@40')

EXISTING GRADE

M.H.T.

OHW - HIGH TIDE W.S.

SITE I

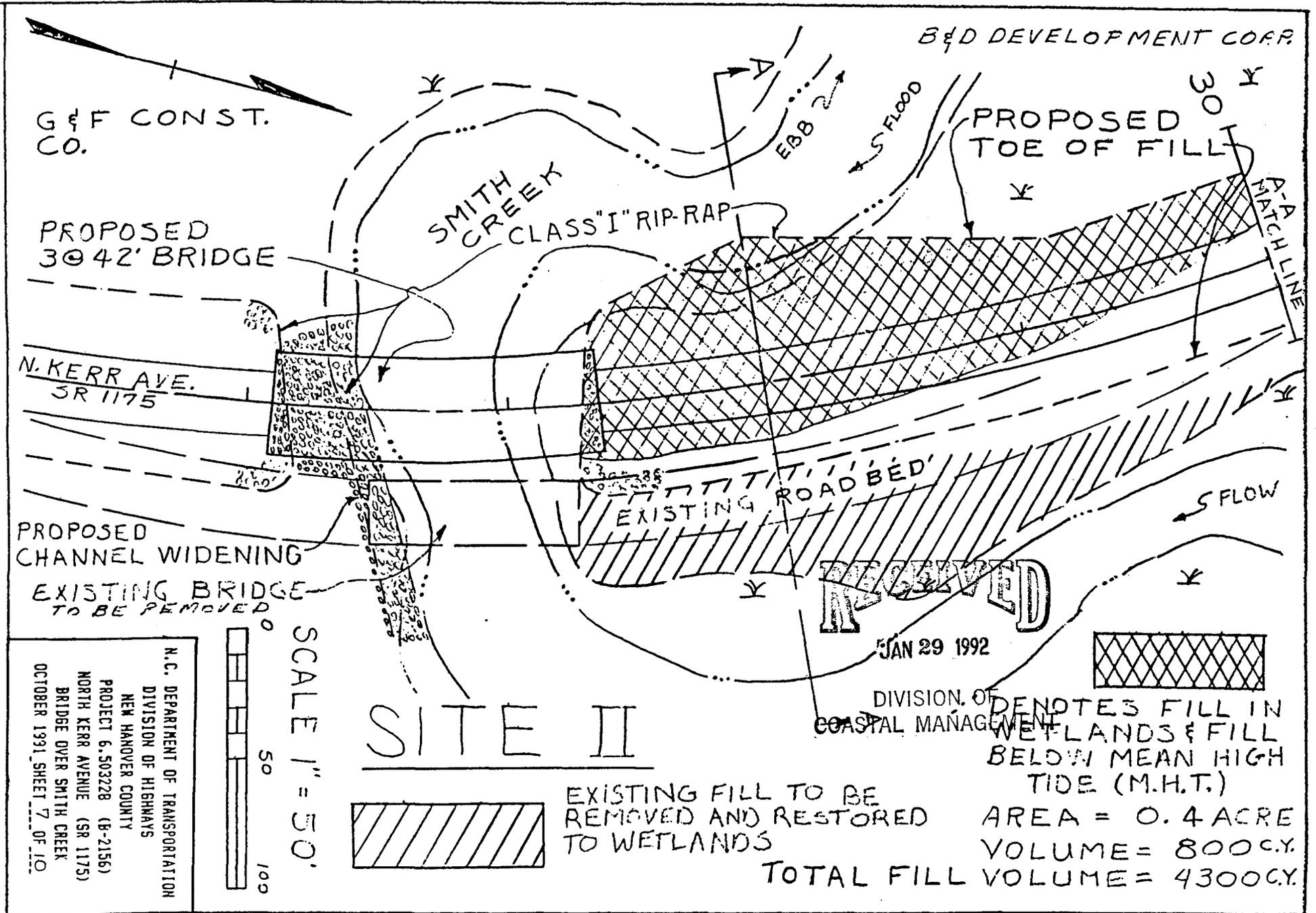
SCALE: 1" = 50' HORIZ.  
 1" = 5' VERT.

N.C. DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 NEW HANOVER COUNTY  
 PROJECT 6.503228 (B-2059)  
 NORTH KERR AVENUE (SR 1175)  
 BRIDGE OVER SPRING BRANCH  
 OCTOBER 1991 SHEET 6 OF 10

RECEIVED

JAN 29 1992

DIVISION OF  
 COASTAL MANAGEMENT



G & F CONST. CO.

PROPOSED 3042' BRIDGE

N. KERR AVE. SR 1175

PROPOSED CHANNEL WIDENING  
EXISTING BRIDGE TO BE REMOVED

SMITH CREEK CLASS "I" RIP-RAP

EXISTING ROAD BED

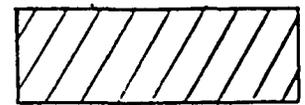
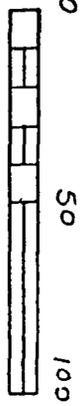
B&D DEVELOPMENT CORP.

PROPOSED TOE OF FILL

A-A MATCH LINE

# SITE II

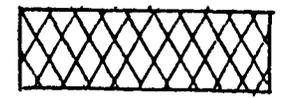
SCALE 1" = 50'



EXISTING FILL TO BE REMOVED AND RESTORED TO WETLANDS

RECEIVED  
JAN 29 1992

DIVISION OF COASTAL MANAGEMENT



DENOTES FILL IN WETLANDS & FILL BELOW MEAN HIGH TIDE (M.H.T.)

AREA = 0.4 ACRE  
VOLUME = 800 C.Y.  
TOTAL FILL VOLUME = 4300 C.Y.

N.C. DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
NEW HANOVER COUNTY  
PROJECT 6.503228 (R-2156)  
NORTH KERR AVENUE (SR 1175)  
BRIDGE OVER SMITH CREEK  
OCTOBER 1991 SHEET 7 OF 10

CITY OF  
WILMINGTON  
PUMP STATION

B&D DEVELOPMENT  
CORP.

N. KERR AVENUE SR 1175

J. LANSING SMITH

SMITH CREEK

MATCH LINE A-A

30+00

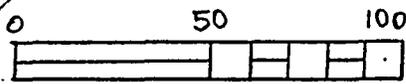
DENOTES  
FILL IN  
WETLANDS  
& FILL BELOW  
M.H.T.

SITE II

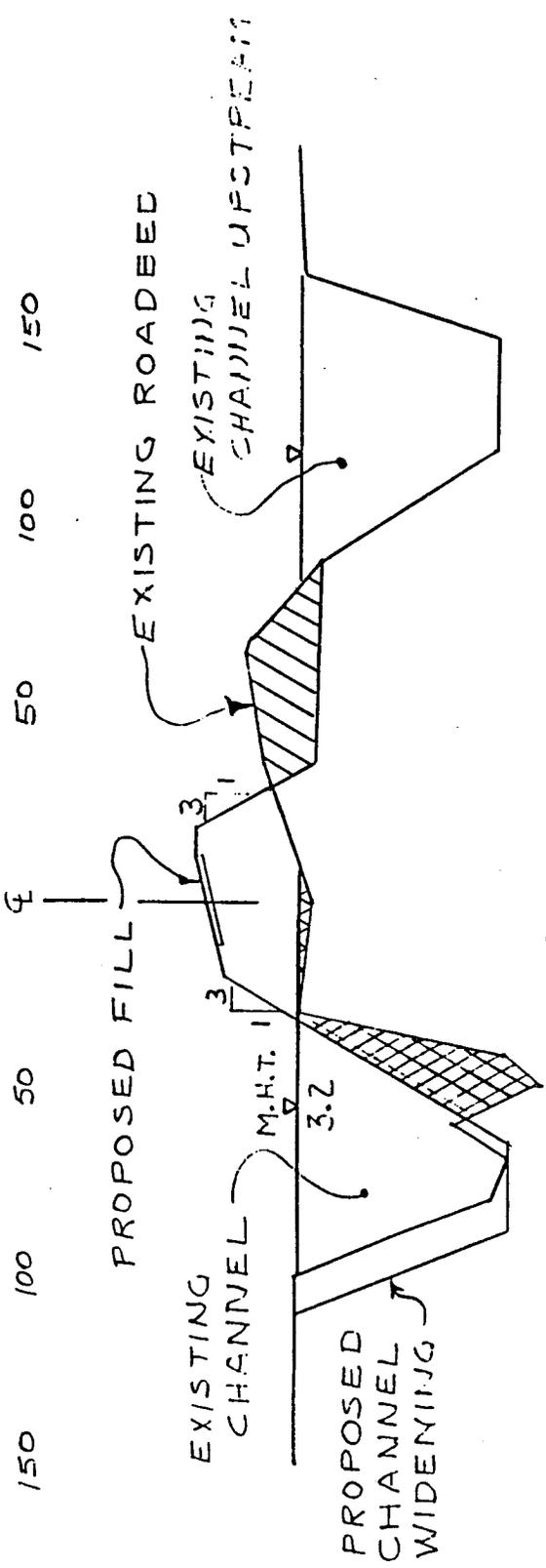
RECEIVED

JAN 29 1992

DIVISION OF  
COASTAL MANAGEMENT



N.C. DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
NEW HANOVER COUNTY  
PROJECT 6.503228 (B-2156)  
NORTH KERR AVENUE (SR 1175)  
BRIDGE OVER SMITH CREEK  
OCTOBER 1991 SHEET 8 OF 10

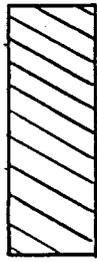


SECTION A-A

DENOTES FILL IN WETLANDS & FILL BELOW M.H.T.



EXISTING FILL TO BE REMOVED AND RESTORED TO WETLANDS



SITE II

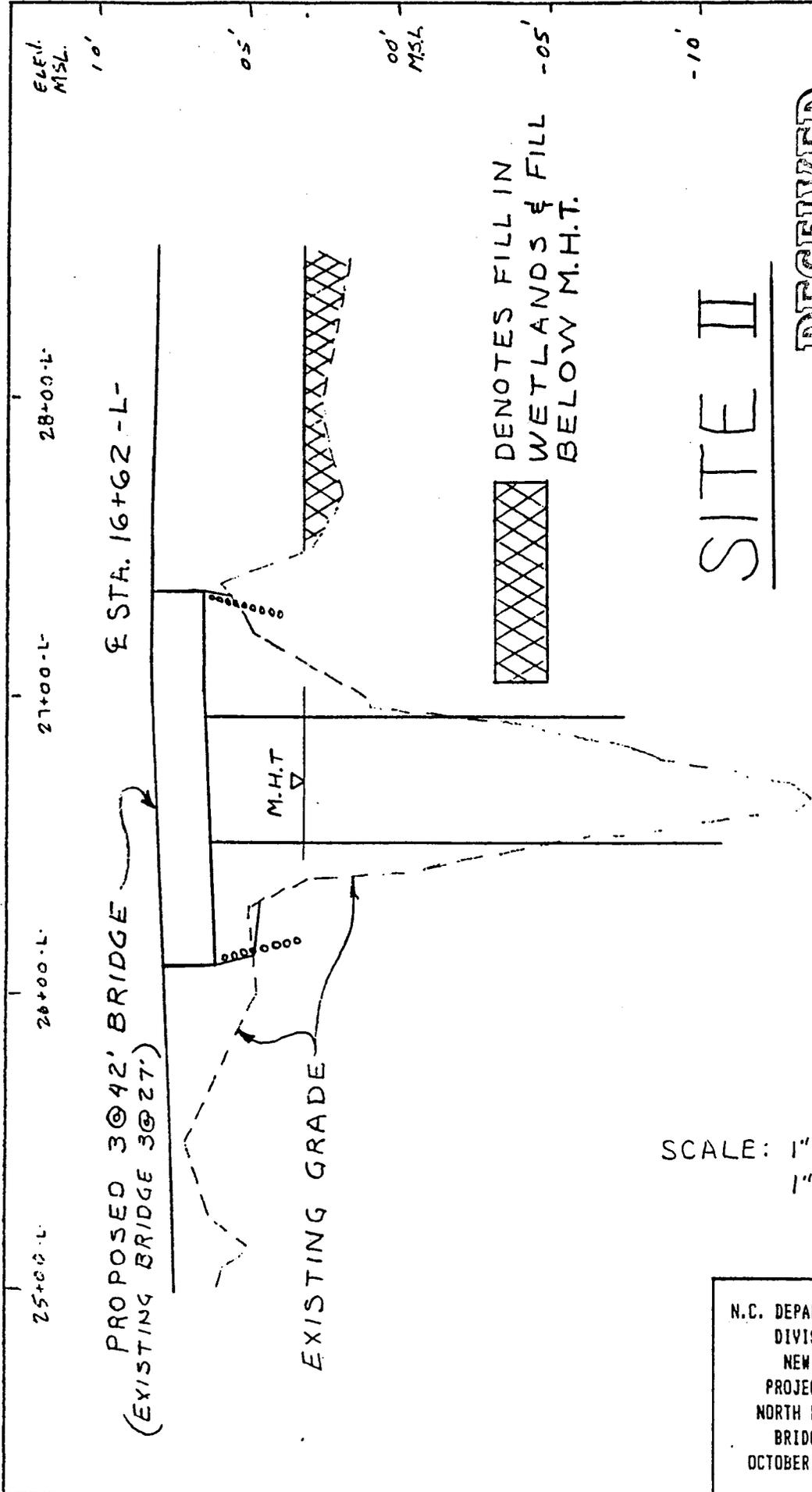
SCALE 1" = 50' HORIZ.  
1" = 10' VERT.

**RECEIVED**

JAN 29 1992

DIVISION OF COASTAL MANAGEMENT

N.C. DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
NEW HANOVER COUNTY  
PROJECT 6.50322B (B-2156)  
NORTH KERR AVENUE (SR 1175)  
BRIDGE OVER SMITH CREEK  
OCTOBER 1991 SHEET 9 OF 10



**RECEIVED**

JAN 29 1992

DIVISION OF  
COASTAL MANAGEMENT

SITE II

SCALE: 1" = 50' HORIZ.  
1" = 5' VERT.

N.C. DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
NEW HANOVER COUNTY  
PROJECT 6.503228 (8-2156)  
NORTH KERR AVENUE (SR 1175)  
BRIDGE OVER SMITH CREEK  
OCTOBER 1991 SHEET 10 OF 10

RECEIVED

JAN 29 1992

DIVISION OF  
COASTAL MANAGEMENT

Restoration Guidelines

New Hanover County, Bridge #1 over Spring Branch and Bridge #2 over Smith Creek on North Kerr Avenue.

- I. Monitoring Timeframe  
Mitigation sites will be inspected at the following times.
  - A. Prior to planting.
  - B. At completion of planting.
  - C. Three (3) years following completion ( or after 3rd full growing season).
- II. Data to be obtained at Specific Inspection Times
  - A. Prior to planting.
    1. Check for proper elevation and grade, get permitting agency approval on the elevation.
    2. Check for proper plant species and for acceptable plant quality.

Bald cypress (Taxodium distichum)  
Black gum (Nyssa sylvatica)  
Water Oak (Quercus nigra)
    3. Check for proper planting methods.
    4. Check for proper plant spacing (8' O.C.).
    5. Check for proper species composition.

35% Bald cypress  
35% Black gum  
30% Water Oak
  - B. At completion of planting, check for conformity with plans as well as quality of planting.
  - C. Three (3) years following completion (or after 3rd full growing season).
    1. Estimate survival rate (optional - collect survival data if it can be determined).
    2. Measure height of plants.
    3. Take photographs.

4. Estimate percent population.
  - a. Plant species
  - b. Overall (natural succession)

III. Evaluation and Recourse Action.

- A. Acceptable survival rate of a minimum of 32 stems per 0.10 acre.
- B. Three (3) year data evaluation.
  1. Below acceptable survival rate (recourse options).
    - a. Replant (Supplemental or complete).
    - b. Minor regrading.
    - c. Reevaluate feasibility.
  2. Acceptable survival rate - no action.

**RECEIVED**

JAN 29 1992

DIVISION OF  
COASTAL MANAGEMENT

SUMMARY

STATE PROJECT NUMBER 6.503228

SITE	DRAINAGE AREA SQ. MI.	AVERAGE DAILY FLOW CFS	TOTAL FILL CY	FILL BELOW M.H.T. CY	AREA OF FILL IN WETLANDS ACRES	AREA OF EXISTING FILL TO BE REMOVED AND RESTORED T WETLANDS ACRES
I	3.1	4.7	4700	300	0.3	-
II	19.0	30.0	4300	800	0.4	0.2
		TOTALS	9000	1100	0.7	0.2

**RECEIVED**

JAN 29 1992

DIVISION OF  
COASTAL MANAGEMENT