



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

March 2, 2007

U. S. Army Corps of Engineers
Regulatory Field Office
Post Office Box 1000
Washington, NC 27889-1000

ATTENTION: Mr. Bill Biddlecome
NCDOT Coordinator

Dear Sir:

Subject: **Modification Request for Nationwide Permit 23 and Neuse Riparian Buffer Authorization** for the Replacement of Bridge No. 43 over Rainbow Creek on SR 1438; Greene County; TIP Project B-4127; Federal Aid Project No. BRZ-1438(5); State Project No.8.2180401; WBS 33480.1.1.

Reference: USACE Nationwide Permit 23 dated November 28, 2006, Action ID 2006-41550-140. NCDWQ Water Quality Certification and Neuse Riparian Buffer Authorization dated January 16, 2007, WQC No. 20061695.

The purpose of this letter is to request modifications to the Clean Water Act (CWA) Section 404 Permit issued by the USACE and the Neuse Riparian Buffer Authorization issued by the NCDWQ. This project is due to let on May 15, 2007. The North Carolina Department of Transportation (NCDOT) is proposing the following modifications:

- Add a sidewalk to the proposed project and impact an additional 0.03 acre of riverine wetland.
- Prevent additional loss of bank by adding 0.01 acre of riprap to the horseshoe bend of Rainbow Creek.
- Impact an area of 960 square feet in Buffer Zone 2 for directional bore for the Town of Hookerton waterline.
- Put up a new utility pole for the Town of Hookerton electric line in Buffer Zone 2.

Revised permit drawings and roadway plans are included with this request. An Ecosystem Enhancement Program (EEP) acceptance letter dated February 13, 2007 for the additional amount of impacts is also enclosed.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
1548 MAIL SERVICE CENTER
RALEIGH NC 27699-1548

TELEPHONE: 919-733-3141
FAX: 919-733-9794

WEBSITE: WWW.NCDOT.ORG

LOCATION:
TRANSPORTATION BUILDING
1 SOUTH WILMINGTON STREET
RALEIGH NC

Regulatory Approvals

The NCDOT respectfully requests that the referenced 404 USACE Permit and 401 Water Quality Certification be modified to reflect the revision to the project's plan sheets as outlined in this letter. We are providing five copies of this application to the North Carolina Department of Environment and Natural Resources, Division of Water Quality for their review.

Enclosed are copies of the revised plan sheets depicting the proposed modifications and the EEP acceptance letter.

A copy of this modification request will be posted on the NCDOT website at: <http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html>.

If you have any questions or need additional information, please contact Chris Underwood at (919) 715-1451.

Sincerely,



Gregory J. Thorpe, Ph.D., Environmental Management Director
Project Development and Environmental Analysis

W/attachment:

- Mr. John Hennessy, NCDWQ (5 copies)
- Mr. Travis Wilson, NCWRC
- Mr. Gary Jordan, USFWS
- Mr. Ron Sechler, NMFS
- Mr. Michael Street, NCDMF
- Dr. David Chang, P.E., Hydraulics
- Mr. Greg Perfetti, P.E., Structure Design
- Mr. Mark Staley, Roadside Environmental
- Mr. C. E. Lassiter, PE, Division 2 Engineer
- Mr. Jay Johnson, Division 2 Environmental Officer

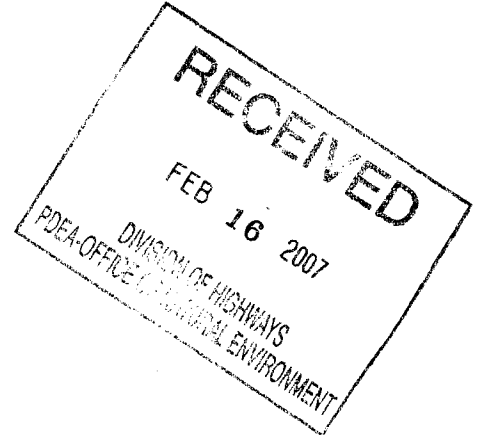
W/o attachment

- Mr. Scott McLendon, USACE, Wilmington
- Mr. Jay Bennett, P.E., Roadway Design
- Mr. Majed Alghandour, P. E., Programming and TIP
- Mr. Art McMillan, P.E., Highway Design
- Ms. Beth Harmon, EEP
- Mr. Todd Jones, NCDOT External Audit Branch
- Mr. John Williams, P.E., Planning Engineer



February 13, 2007

Mr. Gregory J. Thorpe, Ph.D.
Environmental Management Director
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548



Dear Dr. Thorpe:

Subject: EEP Mitigation Acceptance Letter:

B-4127, Replace Bridge Number 43 over Rainbow Creek on SR
1438, Greene County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory riparian wetland mitigation for the subject project. Based on the information supplied by you in a letter dated February 12, 2007, the impacts are located in CU 03020203 of the Neuse River Basin in the Northern Inner Coastal Plain (NICP) Eco-Region, and are as follows:

Riparian Wetlands: 0.284 acre

This mitigation acceptance letter replaces the mitigation acceptance letter issued on September 11, 2006. EEP commits to implementing sufficient compensatory wetland mitigation to offset the impacts associated with this project by the end of the MOA Year in which this project is permitted, in accordance with Section X of the Memorandum of Agreement between the North Carolina Department of Environment and Natural Resources, the North Carolina Department of Transportation, and the U. S. Army Corps of Engineers, signed on July 22, 2003. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

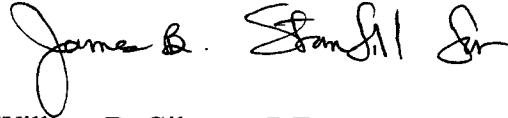
Restoring... Enhancing... Protecting Our State



North Carolina Ecosystem Enhancement Program, 1652 Mail Service Center, Raleigh, NC 27699-1652 / 919-715-0476 / www.nceep.net

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

A handwritten signature in black ink, appearing to read "James B. Stanfill Sr." with a large, stylized initial "J" and "S".

William D. Gilmore, P.E.
EEP Director

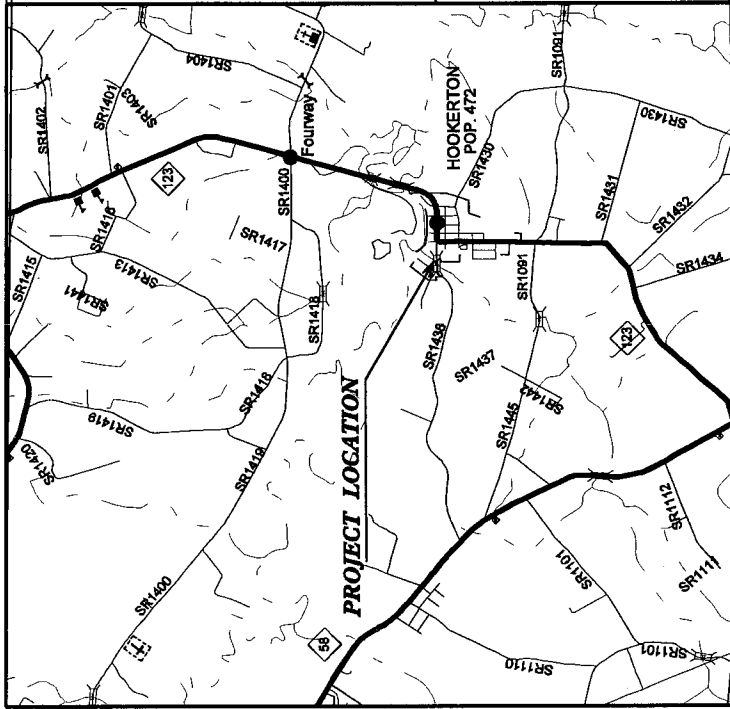
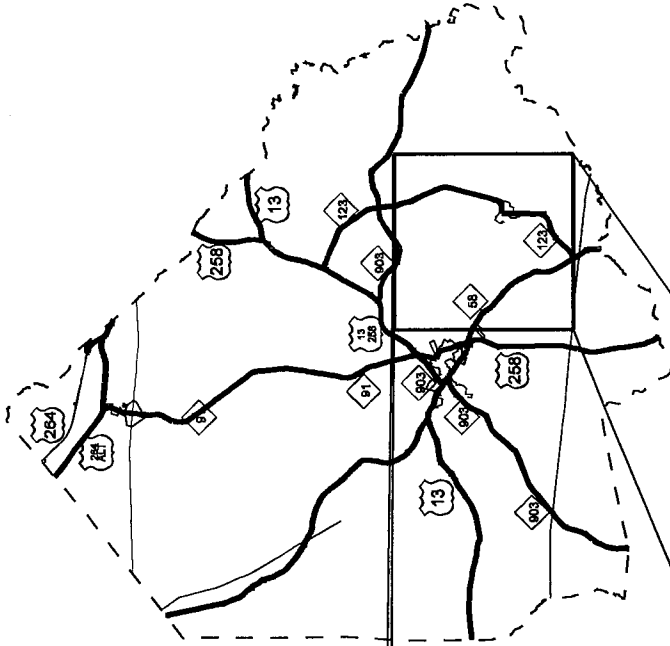
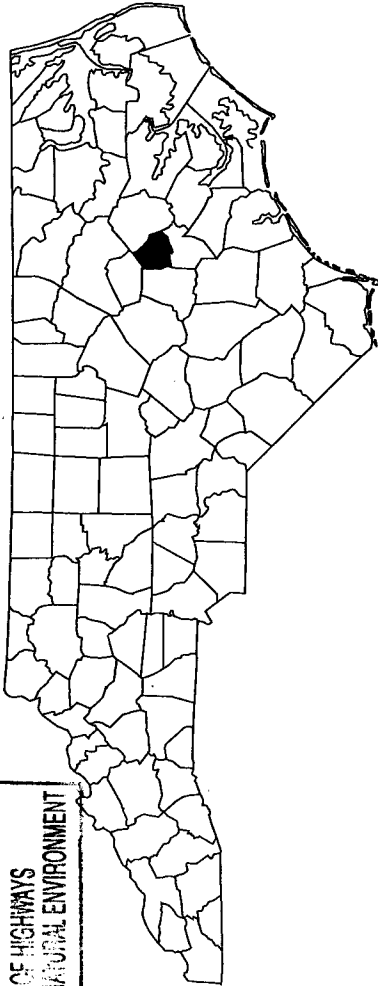
cc: Mr. Bill Biddlecome, USACE-Washington
Mr. John Hennessy, Division of Water Quality, Wetlands/401 Unit
File: B-4127 Revised

RECEIVED

FEB 28 2007

Handwritten initials

DIVISION OF HIGHWAYS
PDEA-OFFICE OF NATURAL ENVIRONMENT

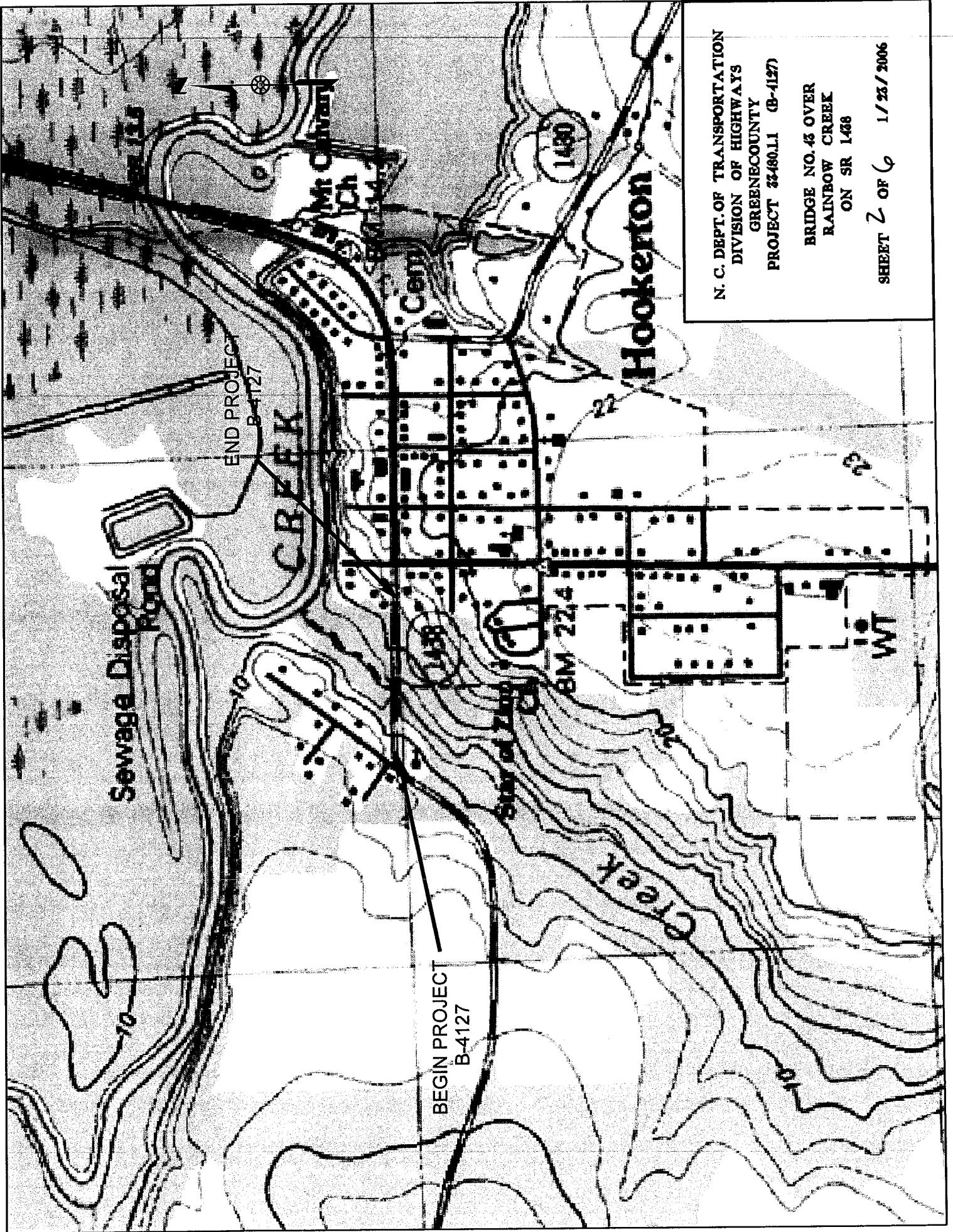


N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
GREENECOUNTY
PROJECT 33480.1.1 (B-4127)

BRIDGE NO. 43 OVER
RAINBOW CREEK
ON SR 1438

SHEET 1 OF 6 1/23/2006

Wetland Permit



N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
GREENECOUNTY
PROJECT 33480.11 (B-4127)

BRIDGE NO. 43 OVER
RAINBOW CREEK
ON SR 1438

SHEET 2 OF 6 1/23/2006

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS						SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Natural Stream Design (ft)		
1	-L- 13+72.5	BRIDGE, 4 SPAN (2@47.5' & 2@42.5') 21' CORED SLAB	0.100			0.184			0.006	0.007			
TOTALS:			0.100			0.184			0.006	0.007			

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

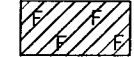
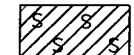
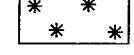
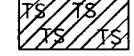
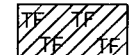
 GREENE COUNTY
 WBS - 33480.1.1 (B-4127)
 BRIDGE NO. 43 OVER RAINBOW CREEK
 SHEET **3 of 6** 2/19/2007

8/17/99

-EY-
PI Sta 11+32.7
 $\Delta = 38' 40" 57.6'$ (LT)
 $D = 28' 51" 12.9'$
 $L = 134.07'$
 $T = 69.70'$
 $R = 198.57'$

NAD 8395

WETLAND PERMIT


-  FILL IN WETLAND
-  PERMANENT SURFACE WATER IMPACT
-  MECHANIZED CLEARING
-  TEMPORARY SURFACE WATER IMPACT
-  TEMPORARY FILL IN WETLAND

NUMBER	OWNER	DEED BOOK	DEED PAGE	MAP BOOK	MAP PAGE
1	TRUSTEES of FAITH HOPE TEMPLE HOLINESS	150	152	7	31
2 & 2Z	JASPER BARFIELD, JR., et ux	450	403		
3	SARA STOCKS	503	623		
4 & 4Z	GREENE COUNTY	440	271		
6 & 6Z	CLARA PATRICK HEIRS	53	406		
7	J. WALTER BURTON HEIRS	68	206		
8	JUANITA SUGGS	NA	NA		
9	FIRST NATION BANK	DEED NOT FOUND			
10	LILLIE CONNER	461	108	68	201
11					
12	LILLIE CONNER	461	369	68	201
13	SHERRY B. McLAWHORN	482	142		
14	GEORGE LAWS	461	689	68	201
15	SHERRY B. McLAWHORN	482	142		
16	ED CONNER et ux	150	36		
17	DAVID CONNER	436	438		
18	CYNTHIA A. HARPER	540	757		


PROJECT REFERENCE NO. B-4127 SHEET NO. 4

RW SHEET NO.

ROADWAY DESIGN ENGINEER

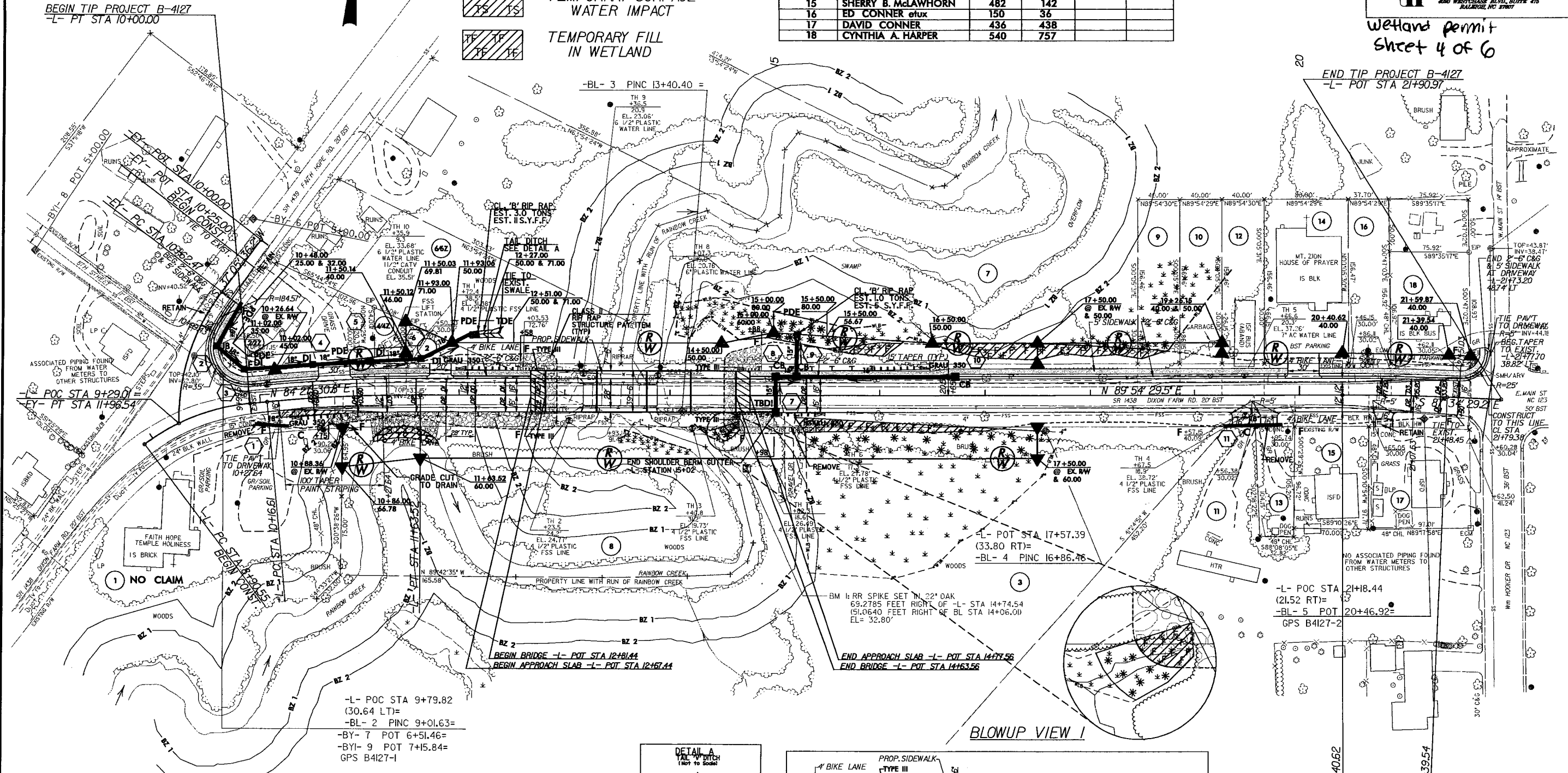


HYDRAULICS ENGINEER



PLANS PREPARED BY:
FLORENCE & HUTCHINSON, INC.
CONSULTING ENGINEERS
4000 WINDYCHASE BLVD., SUITE 470
RALEIGH, NC 27607

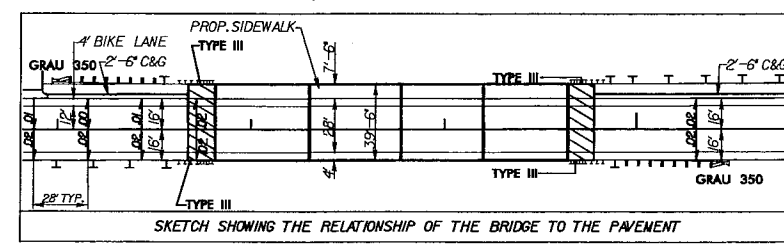
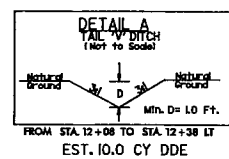
Wetland Permit Sheet 4 of 6



DESIGN DATA

ADT 2007 = 2000
ADT 2027 = 3300
DHY = 10 %
D = 60 %
T = 4 %
V = 40 MPH
FUNC CLASS = LOCAL
* T1ST 2% + DUAL 2%

-L-
PI Sta 9+46.71 PI Sta 10+90.12 PI Sta 20+90.09
 $\Delta = 3' 38' 50.6'$ (RT) $\Delta = 5' 26' 58.7'$ (RT) $\Delta = 2' 31' 01.4'$ (RT)
 $D = 28' 54' 55.3'$ $D = 3' 42' 40.1'$ $D = 2' 32' 40.1'$
 $L = 109.45'$ $L = 146.91'$ $L = 98.92'$
 $T = 56.16'$ $T = 73.51'$ $T = 49.47'$
 $R = 198.15'$ $R = 1,544.59'$ $R = 2,251.77'$



BLOWUP VIEW I

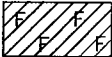

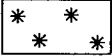
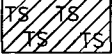

SEE SHEET 5 FOR -L- PROFILE
SEE SHEETS S-1 thru S- FOR STRUCTURE PLANS

8/17/99

-EY-
PI Sta 11+32.7
Δ = 38° 40' 57.6" (LT)
D = 28° 51' 12.9"
L = 134.07'
T = 69.70'
R = 198.51'

NAD 8395

WETLAND PERMIT


-  FILL IN WETLAND
-  PERMANENT SURFACE WATER IMPACT
-  MECHANIZED CLEARING
-  TEMPORARY SURFACE WATER IMPACT
-  TEMPORARY FILL IN WETLAND

NUMBER	OWNER	DEED BOOK	DEED PAGE	MAP BOOK	MAP PAGE
1	TRUSTEES of FAITH HOPE TEMPLE HOLINESS	150	152	7	31
2 & 2Z	JASPER BARFIELD, JR., et ux	450	403		
3	SARA STOCKS	503	623		
4 & 4Z	GREENE COUNTY	440	271		
6 & 6Z	CLARA PATRICK HEIRS	53	406		
7	J. WALTER BURTON HEIRS	68	206		
8	JUANITA SUGGS	N/A	N/A		
9	FIRST NATION BANK	DEED NOT FOUND			
10	LILLIE CONNER	461	108	68	201
11					
12	LILLIE CONNER	461	369	68	201
13	SHERRY B. McLAWHORN	482	142		
14	GEORGE LAWS	461	689	68	201
15	SHERRY B. McLAWHORN	482	142		
16	ED CONNER et ux	150	36		
17	DAVID CONNER	436	438		
18	CYNTHIA A. HARPER	540	757		


PROJECT REFERENCE NO. **B-4127** SHEET NO. **4**

RW SHEET NO.

ROADWAY DESIGN ENGINEER

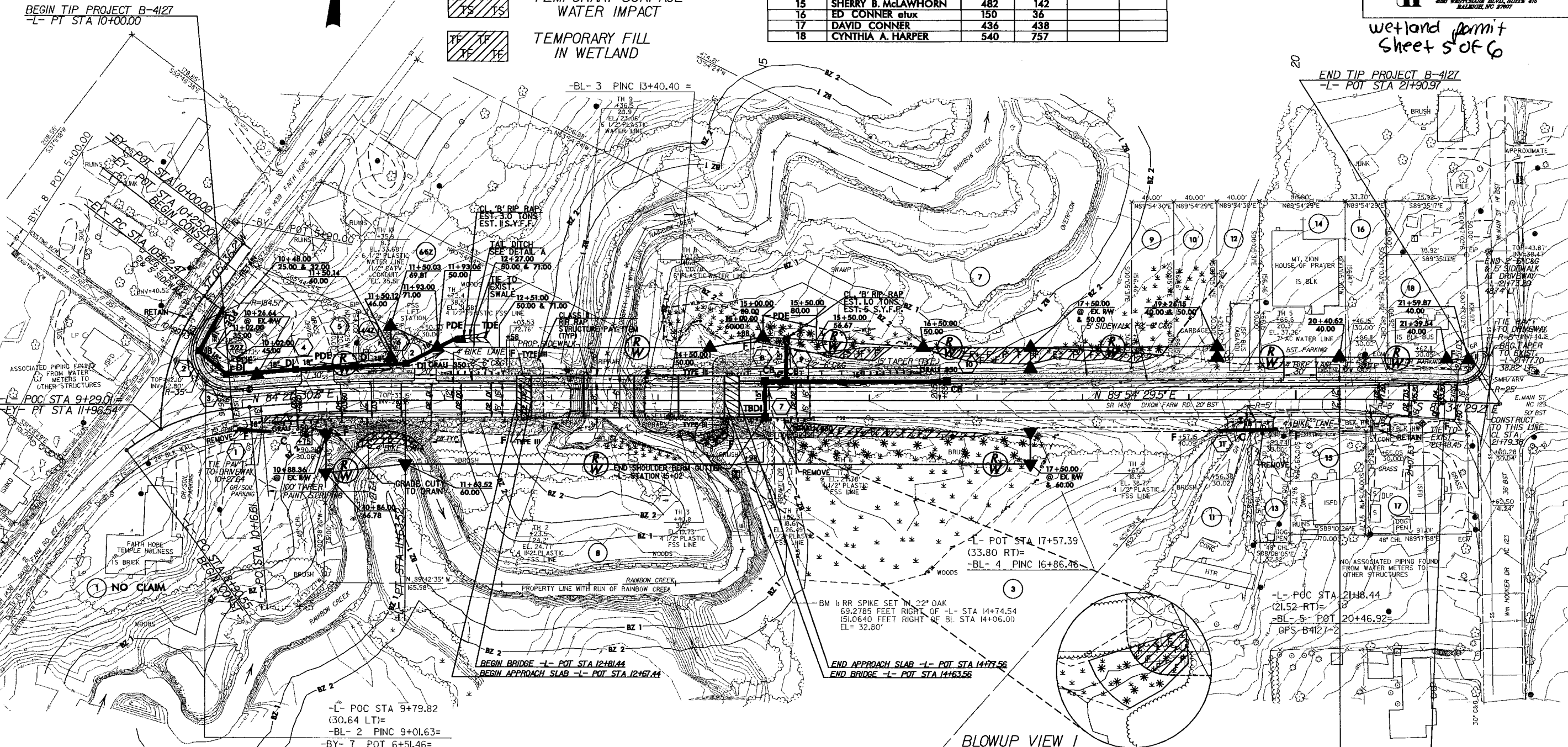


HYDRAULICS ENGINEER



PLANS PREPARED BY:
FLORENCE & HUTCHISON, INC.
CONSULTING ENGINEERS
400 WESTCHASE BLVD, SUITE 475
RALEIGH, NC 27607

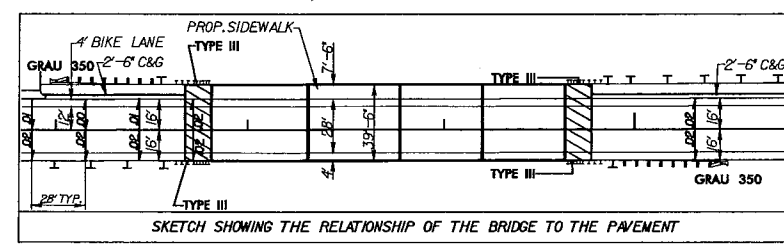
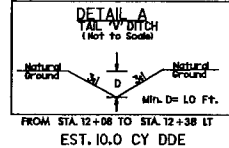
wetland permit
Sheet 5 of 6



DESIGN DATA

ADT 2007 = 2000
ADT 2027 = 3300
DHY = 10 %
D = 60 %
T = 4 %
V = 40 MPH
FUNC CLASS = LOCAL
* TST 2% + DUAL 2%

PI Sta	Δ	D	L	T	R
9+46.71	31° 38' 50.6" (RT)	28° 54' 55.3"	109.45'	56.16'	198.15'
10+90.12	5° 26' 58.7" (RT)	3° 42' 34.0"	146.91'	73.51'	1,544.59'
20+90.09	2° 31' 01.4" (RT)	2° 32' 40.1"	98.92'	49.47'	2,251.77'



SEE SHEET 5 FOR -L- PROFILE
SEE SHEETS S-1 thru S- FOR STRUCTURE PLANS

5/28/99

WETLAND PERMIT

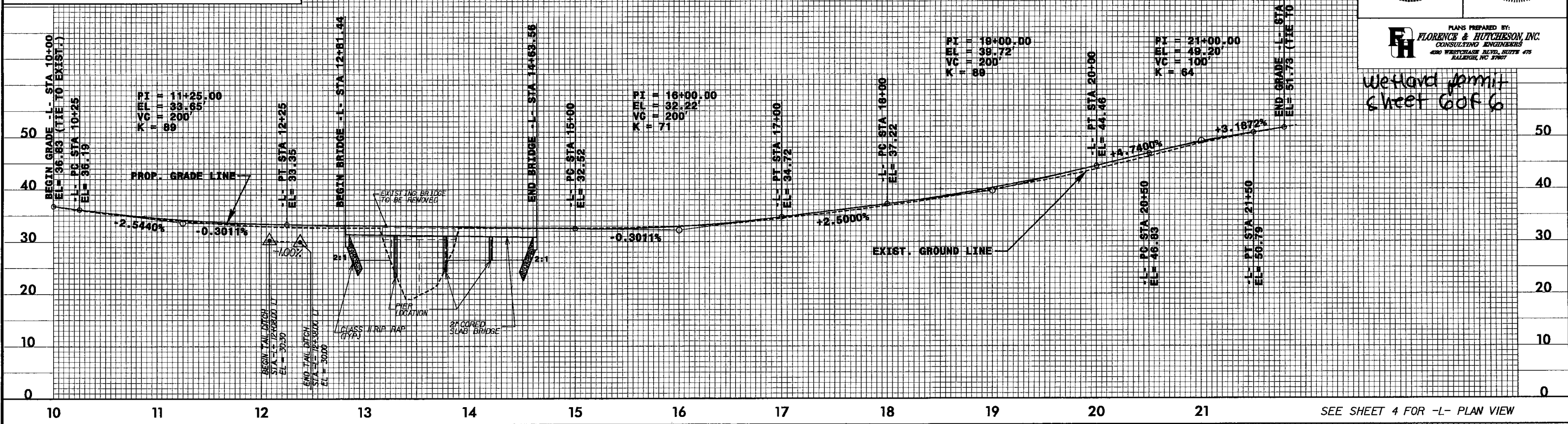
BM 1: RR SPIKE SET IN 22" OAK
69.2785 FEET RIGHT OF -L- STA 14+74.54
(51.0640 FEET RIGHT OF BL STA 14+06.01)
EL= 32.80'

-L-

PROJECT REFERENCE NO. B-4127	SHEET NO. 5
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 17306 CLAUDETTE H.K. MOSE	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 21656 ROPER S. WEADON

PLANS PREPARED BY:
 FLORENCE & HUTCHERSON, INC.
 CONSULTING ENGINEERS
 400 WESTCHASE BLVD., SUITE 475
 RALEIGH, NC 27607

Wetland permit
Sheet 6 of 6



BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 1420 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 33.2 FT
BASE DISCHARGE	= 2600 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 34.9 FT
OVERTOPPING DISCHARGE	= 1060 CFS
OVERTOPPING FREQUENCY	= 10 YRS
OVERTOPPING ELEVATION	= 32.5 FT

SEE SHEET 4 FOR -L- PLAN VIEW

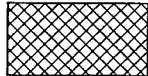


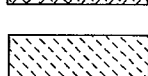
FILENAME: \$FILE\$
 \$\$\$\$\$\$SYTIME\$\$\$\$\$\$
 \$\$\$\$\$\$DATE\$\$\$\$\$\$
 \$\$\$\$\$\$DRAWN\$\$\$\$\$\$

B-17/99

-EY-
PI Sta 11+32.77
Δ = 38° 40' 57.6" (LT)
D = 28° 51' 12.9"
L = 134.07'
T = 69.70'
R = 198.57'

NAD 8395

BUFFER PERMIT

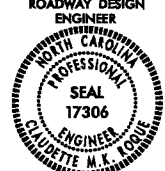
-  MITIGABLE IMPACTS ZONE 1
-  MITIGABLE IMPACTS ZONE 2
-  ALLOWABLE IMPACTS ZONE 1
-  ALLOWABLE IMPACTS ZONE 2

NUMBER	OWNER	DEED BOOK	DEED PAGE	MAP BOOK	MAP PAGE
1	TRUSTEES of FAITH HOPE TEMPLE HOLINESS	150	152	7	31
2 & 2Z	JASPER BARFIELD, JR., et ux	450	403		
3	SARA STOCKS	503	623		
4 & 4Z	GREENE COUNTY	440	271		
6 & 6Z	CLARA PATRICK HEIRS	53	406		
7	J. WALTER BURTON HEIRS	68	206		
8	JUANITA SUGGS	N/A	N/A		
9	FIRST NATION BANK	DEED NOT FOUND			
10	LILLIE CONNER	461	108	68	201
11					
12	LILLIE CONNER	461	369	68	201
13	SHERRY B. McLAWHORN	482	142		
14	GEORGE LAWS	461	689	68	201
15	SHERRY B. McLAWHORN	482	142		
16	ED CONNER et ux	150	36		
17	DAVID CONNER	436	438		
18	CYNTHIA A. HARPER	540	757		

PROJECT REFERENCE NO. B-4127 SHEET NO. 4

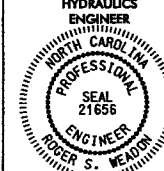
RW SHEET NO.

ROADWAY DESIGN ENGINEER



PROFESSIONAL ENGINEER
SEAL 17306
CHARLOTTE M.F. CODE

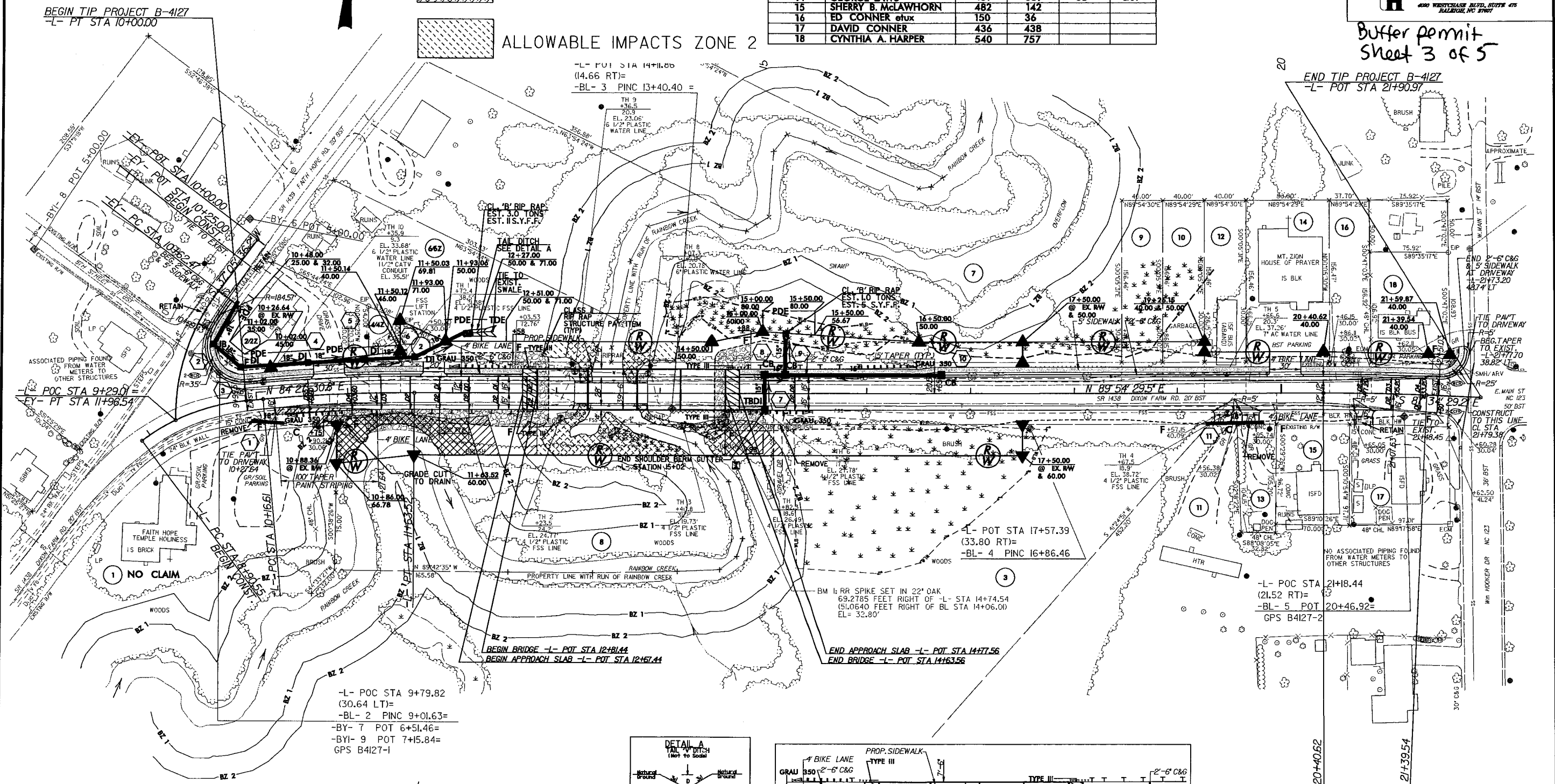
HYDRAULICS ENGINEER



PROFESSIONAL ENGINEER
SEAL 21656
NORTH CAROLINA
ROGER S. WEADON

PLANS PREPARED BY:
FLORENCE & HUTCHERSON INC.
CONSULTING ENGINEERS
400 W. WYCKHASE BLVD., SUITE 475
RALEIGH, NC 27607

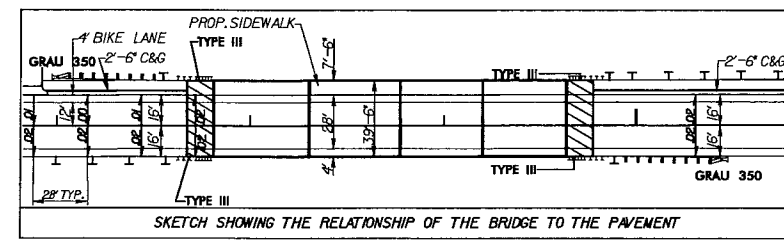
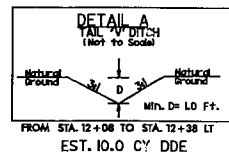
Buffer permit
Sheet 3 of 5



DESIGN DATA

ADT 2007 = 2000
ADT 2027 = 3300
DHV = 10 %
D = 60 %
T = 4 %
V = 40 MPH
FUNC CLASS = LOCAL
* TTST 2% + DUAL 2%

PI Sta 9+46.71 Δ = 31° 38' 50.6" (RT) D = 28° 54' 55.3" L = 109.45' T = 56.16' R = 198.15'	PI Sta 10+90.12 Δ = 5° 26' 58.7" (RT) D = 3° 42' 34.0" L = 146.91' T = 73.51' R = 1,544.59'	PI Sta 20+90.09 Δ = 2° 31' 01.4" (RT) D = 2° 32' 40.1" L = 98.92' T = 49.47' R = 2,251.77'
---	--	---



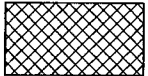



SEE SHEET 5 FOR -L- PROFILE
SEE SHEETS S-1 thru S- FOR STRUCTURE PLANS

B.17/9/9C

-EY-
PI Sta 11+32.17
Δ = 38° 40' 57.6" (LT)
D = 28' 51" 12.9"
L = 134.07'
T = 69.70'
R = 198.57'

NAD 8395

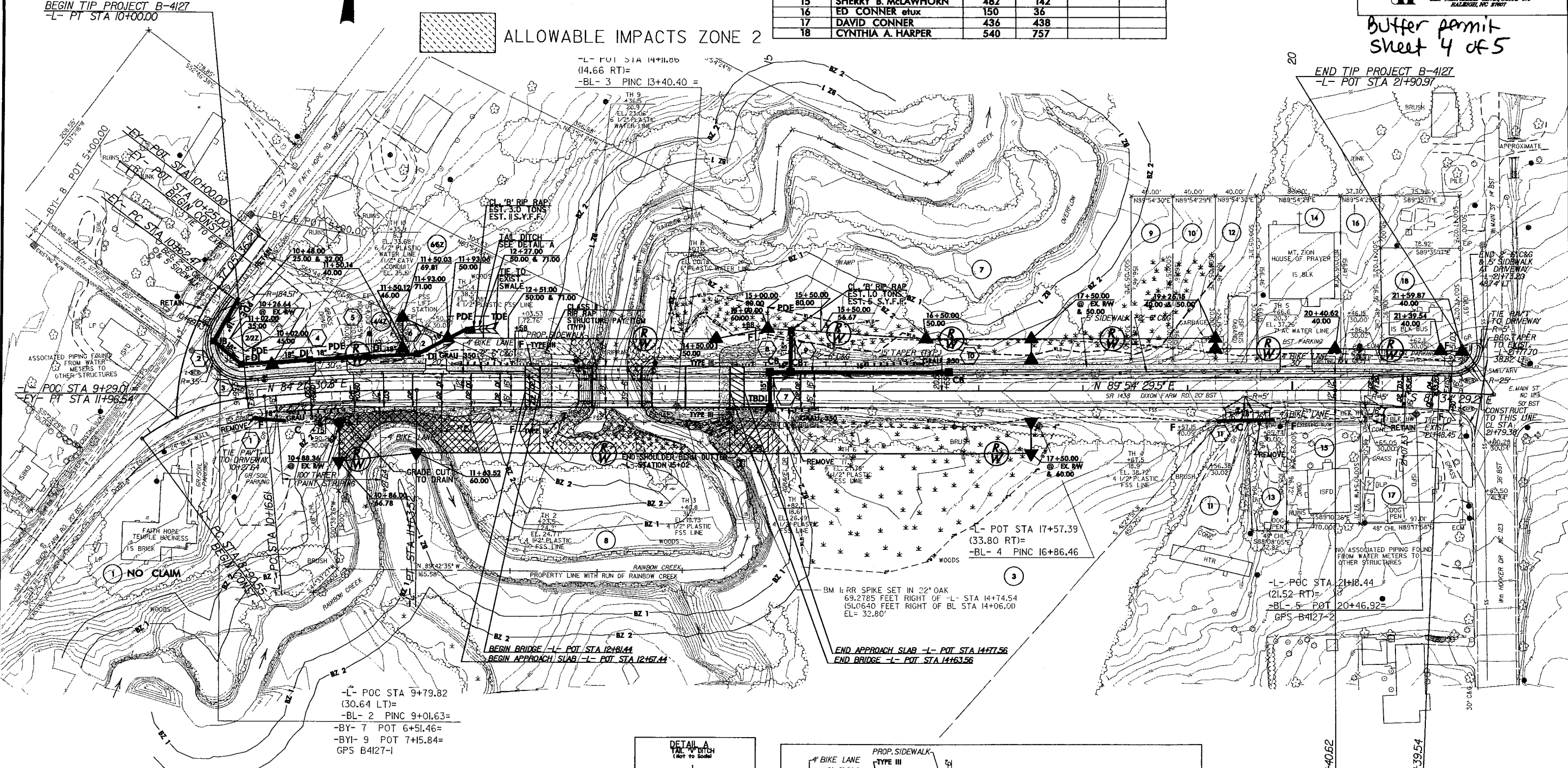
BUFFER PERMIT

-  MITIGABLE IMPACTS ZONE 1
-  MITIGABLE IMPACTS ZONE 2
-  ALLOWABLE IMPACTS ZONE 1
-  ALLOWABLE IMPACTS ZONE 2

NUMBER	OWNER	DEED BOOK	DEED PAGE	MAP BOOK	MAP PAGE
1	TRUSTEES of FAITH HOPE TEMPLE HOLINESS	150	152	7	31
2 & 2Z	JASPER BARFIELD, JR., et ux	450	403		
3	SARA STOCKS	503	623		
4 & 4Z	GREENE COUNTY	440	271		
6 & 6Z	CLARA PATRICK HEIRS	53	406		
7	J. WALTER BURTON HEIRS	68	206		
8	JUANITA SUGGS	NA	NA		
9	FIRST NATION BANK	DEED NOT FOUND			
10	LILLIE CONNER	461	108	68	201
11					
12	LILLIE CONNER	461	369	68	201
13	SHERRY B. McLAWHORN	482	142		
14	GEORGE LAWS	461	689	68	201
15	SHERRY B. McLAWHORN	482	142		
16	ED CONNER et ux	150	36		
17	DAVID CONNER	436	438		
18	CYNTHIA A. HARPER	540	757		

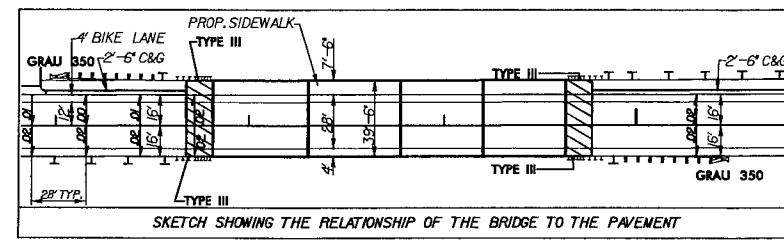
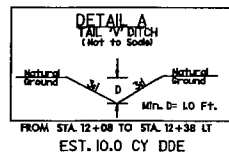
PROJECT REFERENCE NO. B-4127	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 17306 CLAUDETTE M.F. COLE	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 21656 ROGER S. MEADOW
PLANS PREPARED BY: FH FLORENCE & HUTCHERSON, INC. CONSULTING ENGINEERS 400 W. WYCKHASE BLVD., SUITE 470 RALEIGH, NC 27607	

Buffer permit
sheet 4 of 5



DESIGN DATA
ADT 2007 = 2000
ADT 2027 = 3300
DHV = 10 %
D = 60 %
T = 4 % *
V = 40 MPH
FUNC CLASS = LOCAL
* TST 2% + DUAL 2%

PI Sta 9+46.71 Δ = 31° 38' 50.6" (RT) D = 28° 54' 55.3" L = 109.45' T = 56.18' R = 198.15'	PI Sta 10+90.12 Δ = 5° 26' 58.7" (RT) D = 3° 42' 34.0" L = 146.91' T = 73.51' R = 1,544.59'	PI Sta 20+90.09 Δ = 2° 31' 01.4" (RT) D = 2° 32' 40.1" L = 98.92' T = 49.47' R = 2,251.77'
---	--	---



SEE SHEET 5 FOR -L- PROFILE
SEE SHEETS S-1 thru S- FOR STRUCTURE PLANS

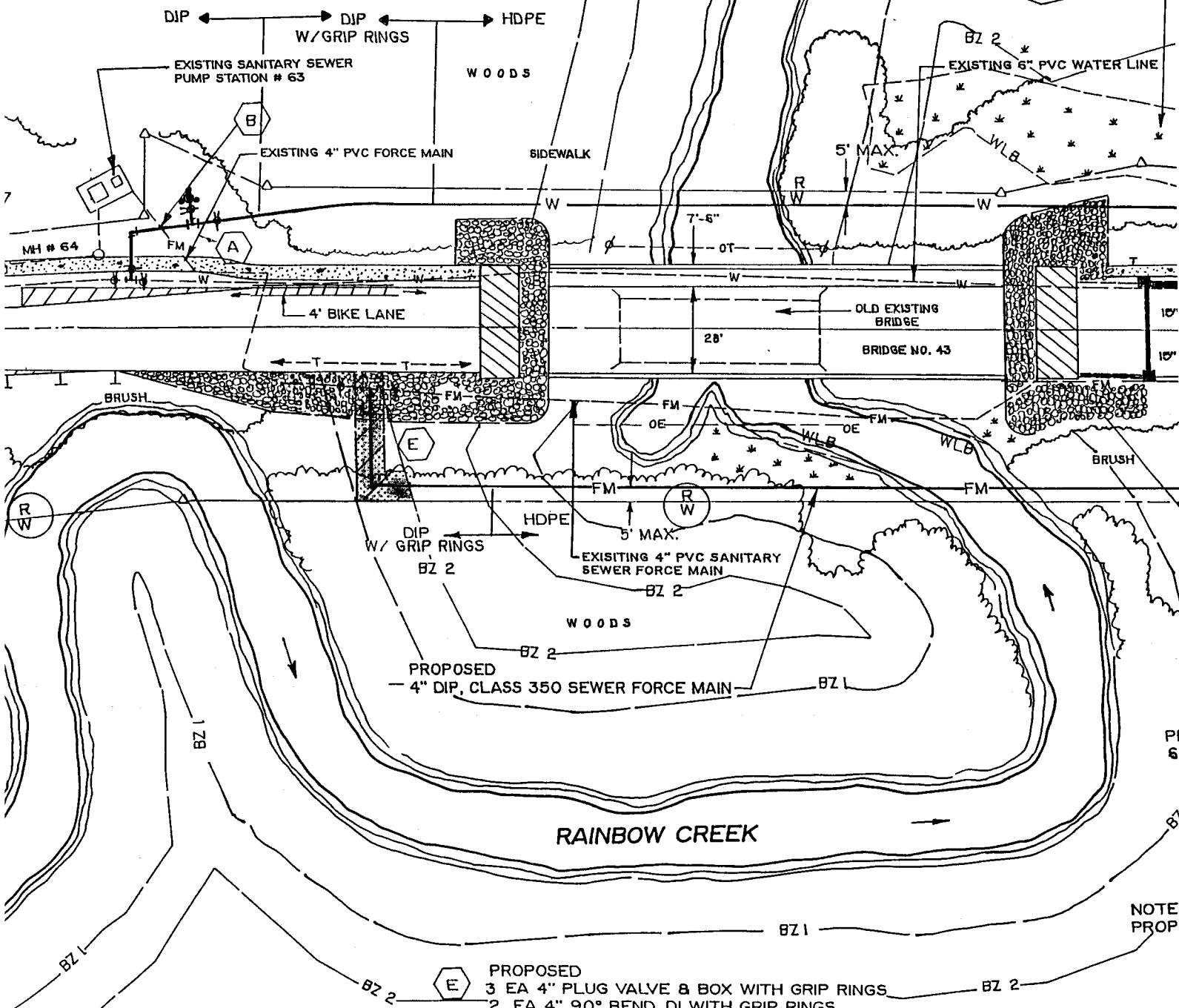
Utility Map Showing Directional Bore Area

VCSR 1439
FAITH HOPE ROAD

(B) PROPOSED
20 LF 4" DIP, CLASS 350 SEWER FORCE MAIN REPLACEMENT

(A) PROPOSED
5 EA 6" GATE VALVE & BOX WITH GRIP RINGS
1 EA 6" 90° BEND, DI WITH GRIP RINGS
2 EA 6" X 6" TEE, DI WITH GRIP RINGS
1 EA FIRE HYDRANT, 4 1/2"
65± LF 6" DIP, CLASS 350 WATER LINE

NOTE:
PROPOSED TIE-IN TO EXISTING 6" PVC WATER LINE



(E) PROPOSED
3 EA 4" PLUG VALVE & BOX WITH GRIP RINGS
2 EA 4" 90° BEND, DI WITH GRIP RINGS

NOTE: PROPI

