



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

November 30, 2012

U.S. Army Corps of Engineers  
Regulatory Field Office  
69 Darlington Avenue  
Wilmington, North Carolina 28403

Attention: Mr. Ronnie Smith  
NCDOT Coordinator

Dear Sir:

Subject: **Revised application for Section 404 Nationwide Permits (NWP) 23, 33 & 12, and Section 401 Water Quality Certification** for the replacement of Bridges No. 116 & 117 over Hog Swamp on SR 2262 (Bethesda Church Road) in Robeson; TIP Project B-4619; Federal Aid Project No. BRZ-2262 (1).

Please find enclosed revised PCN pages, permit drawings and utility drawings for the above referenced project and replace those from our original application dated October 17, 2012. The revised drawings reflect minimization measures resulting from coordination that has taken place since then. In particular, these drawings depict the use of a temporary work bridge instead of a temporary work pad for constructing Bridge No. 116 and shifting utility relocations to the north side of the project.

Proposed permanent impacts to riparian wetlands from bridge construction are 0.02 acre of fill, and 0.02 acre of excavation. The temporary work bridge needed to construct Bridge No. 116 will involve less than 0.01 acre of temporary fill in wetlands. Utility relocations will require less than 0.01 acre of fill in wetlands. Traffic will be detoured off-site during construction.

This project calls for a letting date of July 16, 2013 and a review date of May 28, 2013; however, the let date may advance as additional funding becomes available.

### **Regulatory Approvals**

Section 404 Permit: All aspects of this project are being processed by the Federal Highway Administration as a "Categorical Exclusion" in accordance with 23 CFR 771.115(b). The NCDOT requests that the project be authorized by NWP 23 for bridge construction and NWP 33 for the temporary work pad. We are no longer requesting Section 404 approval of NWP 12.

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

TELEPHONE: 919-707-6100  
FAX: 919-212-5785

WEBSITE: [WWW.NCDOT.ORG](http://WWW.NCDOT.ORG)

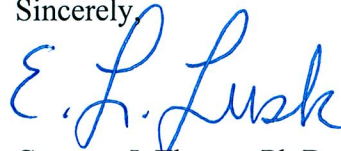
**LOCATION:**  
1020 BIRCH RIDGE DRIVE  
RALEIGH NC 27610-4328

Section 401 Permit: We anticipate 401 General Certification numbers 3891, 3893 and 3884 will apply to this project. NCDOT is requesting written concurrence from the North Carolina Department of Environmental and Natural Resources, Division of Water Quality. We are providing five copies of this revised application to the NCDWQ for their approval.

A copy of this revised permit application and its distribution list 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 Gordon Cashin at (919) 707-6107.

Sincerely,



for

Gregory J. Thorpe, Ph.D., Manager  
Project Development and Environmental Analysis Unit

cc

NCDOT Permit Application Standard Distribution List.

**C. Proposed Impacts Inventory****1. Impacts Summary**

1a. Which sections were completed below for your project (check all that apply):

- ☒ Wetlands                      ☐ Streams - tributaries                      ☐ Buffers  
☒ Open Waters                      ☐ Pond Construction

**2. Wetland Impacts**

If there are wetland impacts proposed on the site, then complete this question for each wetland area impacted.

2a. Wetland impact number – Permanent (P) or Temporary (T)	2b. Type of impact	2c. Type of wetland (if known)	2d. Forested	2e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	2f. Area of impact (acres)
Site 1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	fill	riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.02
Site 1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	excavation	riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.01
Site 2 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	fill	riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	<0.01
Site 2 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	excavation	riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.01
Site 2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
Site 6 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
2g. Total wetland impacts					0.04 Perm.

2h. Comments: There will be 0.11 ac of hand clearing due to bridge construction & 0.57 ac due to utility relocation. Due to rounding, site impacts do not match those on the impact summary sheet, however, total impacts are the same. Additionally, there will be 0.02 ac of temporary fill in wetlands in the hand clearing areas for the installation of erosion control measures, including temporary silt fence and/or special sediment control fence.

**3. Stream Impacts**

If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.

3a. Stream impact number – Permanent (P) or Temporary (T)	3b. Type of impact	3c. Stream name	3d. Perennial (PER) or intermittent (INT)?	3e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	3f. Average stream width (feet)	3g. Impact length (linear feet)
Site 1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 5 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
3h. Total stream and tributary impacts						0.0 Perm 0.0 Temp

revised 11/30/12

3i. Comments:									
<b>4. Open Water Impacts</b> If there are proposed impacts to lakes, ponds, estuaries, tributaries, sounds, the Atlantic Ocean, or any other open water of the U.S. then individually list all open water impacts below.									
4a. Open water impact number – Permanent (P) or Temporary (T)	4b. Name of waterbody (if applicable)	4c. Type of impact			4d. Waterbody type		4e. Area of impact (acres)		
O1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Gum Swamp	Permanent					<0.01		
O2 <input type="checkbox"/> P <input type="checkbox"/> T									
O3 <input type="checkbox"/> P <input type="checkbox"/> T									
O4 <input type="checkbox"/> P <input type="checkbox"/> T									
<b>4f. Total open water impacts</b>							<0.01 Permanent		
4g. Comments: There will be <0.01 ac of permanent fill due to bents at both sites. Additionally there will be >0.01 ac of temporary fill at site 2 due to bents for the temporary workbridge.									
<b>5. Pond or Lake Construction</b> If pond or lake construction proposed, then complete the chart below.									
5a. Pond ID number	5b. Proposed use or purpose of pond	5c. Wetland Impacts (acres)			5d. Stream Impacts (feet)			5e. Upland (acres)	
		Flooded	Filled	Excavated	Flooded	Filled	Excavated	Flooded	
P1									
P2									
<b>5f. Total</b>									
5g. Comments:									
5h. Is a dam high hazard permit required?				<input type="checkbox"/> Yes <input type="checkbox"/> No      If yes, permit ID no:					
5i. Expected pond surface area (acres):									
5j. Size of pond watershed (acres):									
5k. Method of construction:									

revised 11/30/12



<b>D. Impact Justification and Mitigation</b>		
<b>1. Avoidance and Minimization</b>		
1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project. The proposed bridges are longer than the existing bridge; the proposed bridges will be at approximately the same grade as the existing structures; an off site detour will be used. Slopes of 2.4:1 or 3:1 will be constructed in wetlands. Utilities will be relocated on the north side of the project. A temporary workbridge will be used instead of a temporary workpad.		
1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. Sub regional tier design guidelines for bridge projects were used to develop this project. Best management practices include replacement of bridges along existing alignment, minimization of fill slopes and use of hand clearing as opposed to mechanized clearing.		
<b>2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State</b>		
2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, explain: Due to the minimal amount of impacts, compensatory mitigation is not proposed.	
2b. If yes, mitigation is required by (check all that apply):	<input type="checkbox"/> DWQ <input type="checkbox"/> Corps	
2c. If yes, which mitigation option will be used for this project?	<input type="checkbox"/> Mitigation bank <input type="checkbox"/> Payment to in-lieu fee program <input type="checkbox"/> Permittee Responsible Mitigation	
<b>3. Complete if Using a Mitigation Bank</b>		
3a. Name of Mitigation Bank: not applicable		
3b. Credits Purchased (attach receipt and letter)	Type	Quantity
3c. Comments:		
<b>4. Complete if Making a Payment to In-lieu Fee Program</b>		
4a. Approval letter from in-lieu fee program is attached.	<input type="checkbox"/> Yes	
4b. Stream mitigation requested:	linear feet	
4c. If using stream mitigation, stream temperature:	<input type="checkbox"/> warm <input type="checkbox"/> cool <input type="checkbox"/> cold	
4d. Buffer mitigation requested (DWQ only):	square feet	
4e. Riparian wetland mitigation requested:	acres	
4f. Non-riparian wetland mitigation requested:	acres	
4g. Coastal (tidal) wetland mitigation requested:	acres	
4h. Comments:		
<b>5. Complete if Using a Permittee Responsible Mitigation Plan</b>		
5a. If using a permittee responsible mitigation plan, provide a description of the proposed mitigation plan.		

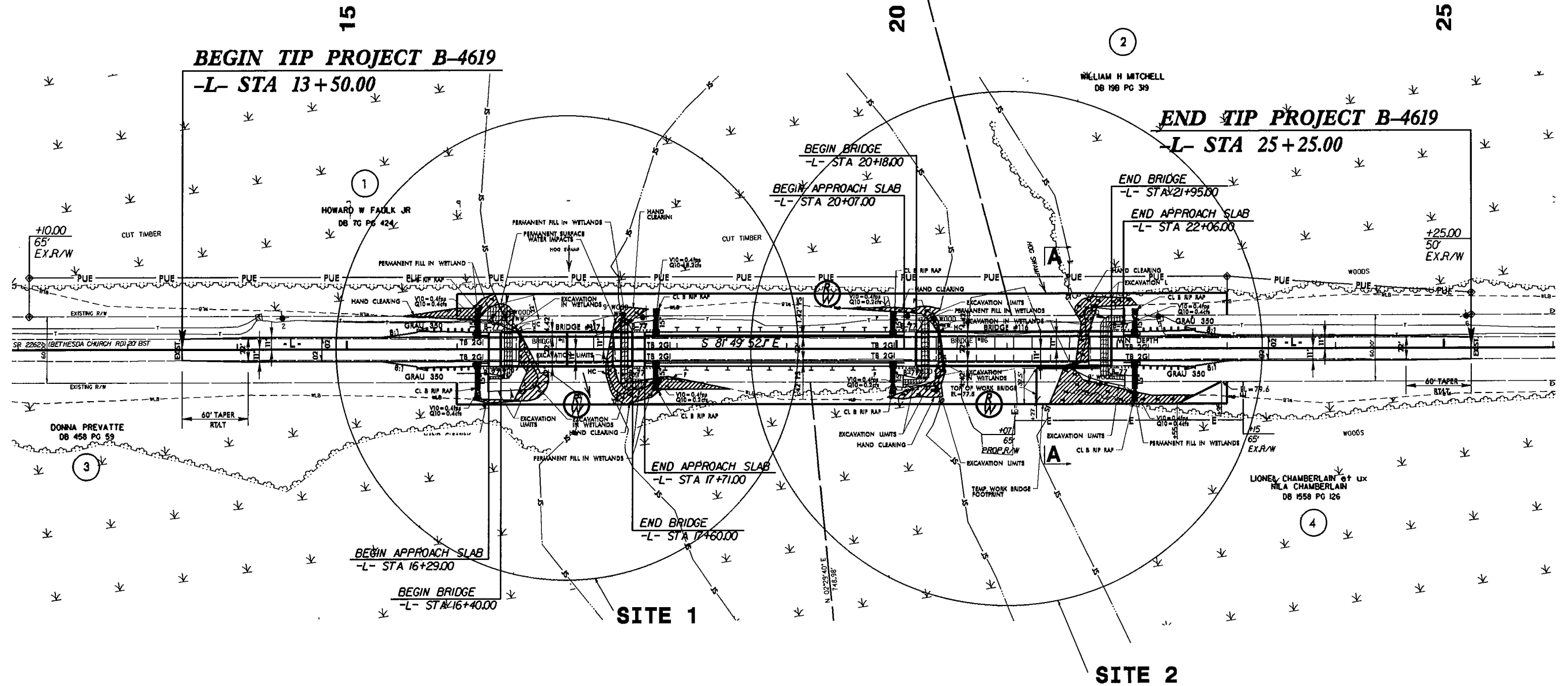
revised 11/30/12

5/14/99

PROJECT REFERENCE NO.		SHEET NO.	
B-4619		4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER		
<table border="1"><tr><td>PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION</td></tr></table>			PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

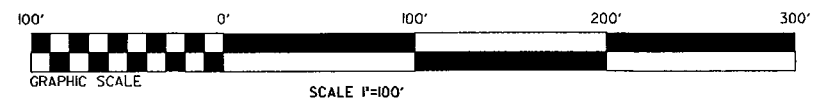
NAD 83/95

REVISIONS  
11-16-12 RIGHT OF WAY REVISION: 390 FEET OF PERMANENT UTILITY EASEMENT HAS BEEN ADDED ON PARCEL NUMBER 1 AND 225 FEET OF PERMANENT UTILITY EASEMENT HAS BEEN ADDED ON PARCEL NUMBER 2. RCB



DECK DRAINAGE:  
INSTALL 4" DIA DECK DRAINS ON 3' CENTERS  
FROM -L- STA 16+44 TO 16+50 RT. & LT.  
FROM -L- STA 17+50 TO 17+56 RT. & LT.  
FROM -L- STA 20+22 TO 20+28 RT. & LT.  
FROM -L- STA 21+85 TO 21+91 RT. & LT.

- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES HAND CLEARING



Permit Drawing  
Sheet 2 of 13  
Revised 11-27-12

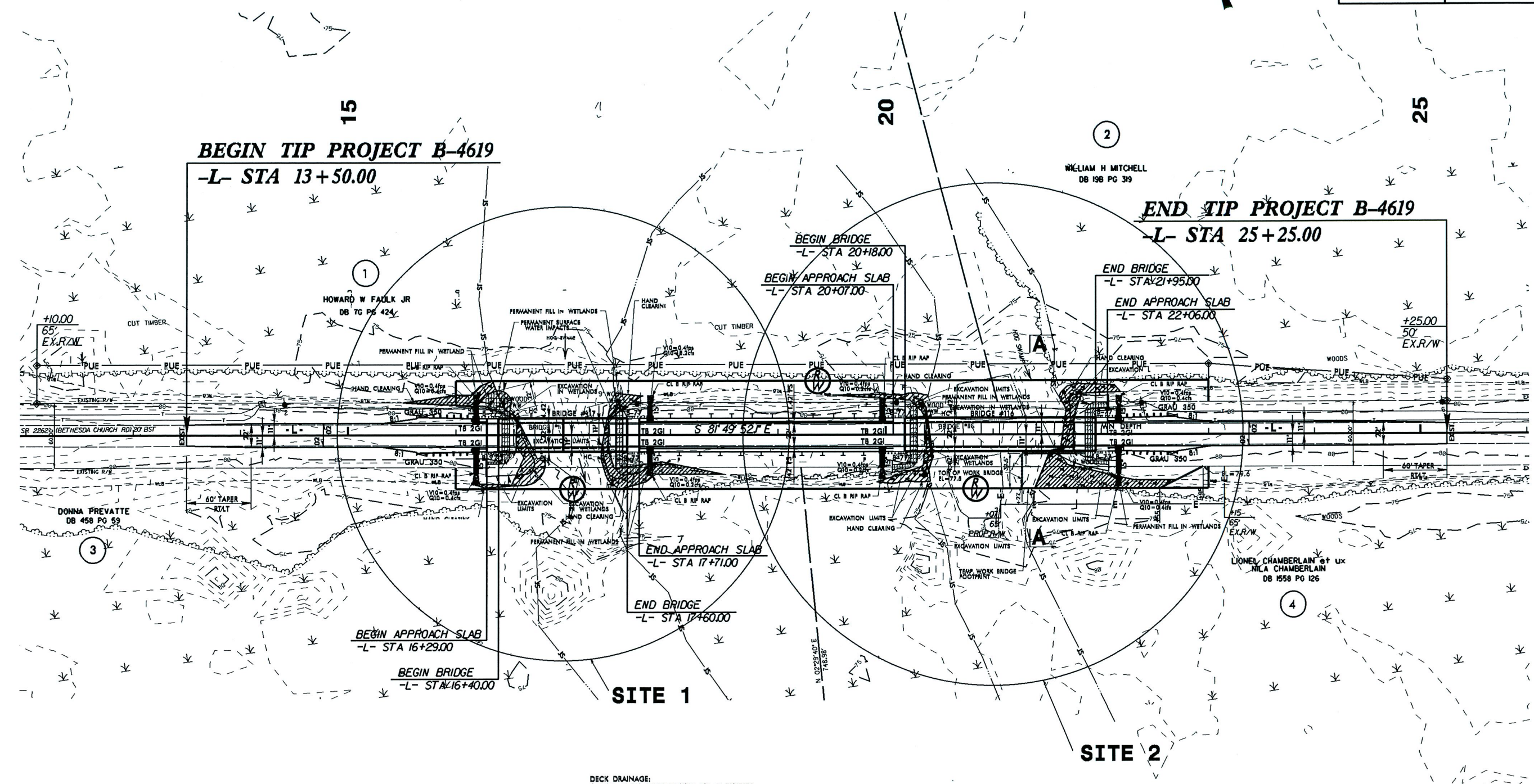
PROJECT REFERENCE NO.	SHEET NO.
B-4619	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

REVISIONS

11-16-12 RIGHT OF WAY REVISION: 350 FEET OF PERMANENT UTILITY EASEMENT HAS BEEN ADDED ON PARCEL NUMBER 1, AND 225 FEET OF PERMANENT UTILITY EASEMENT HAS BEEN ADDED ON PARCEL NUMBER 2. RCB

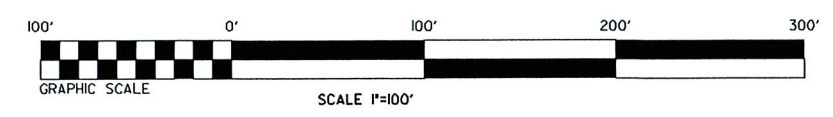
5/14/98

- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES HAND CLEARING

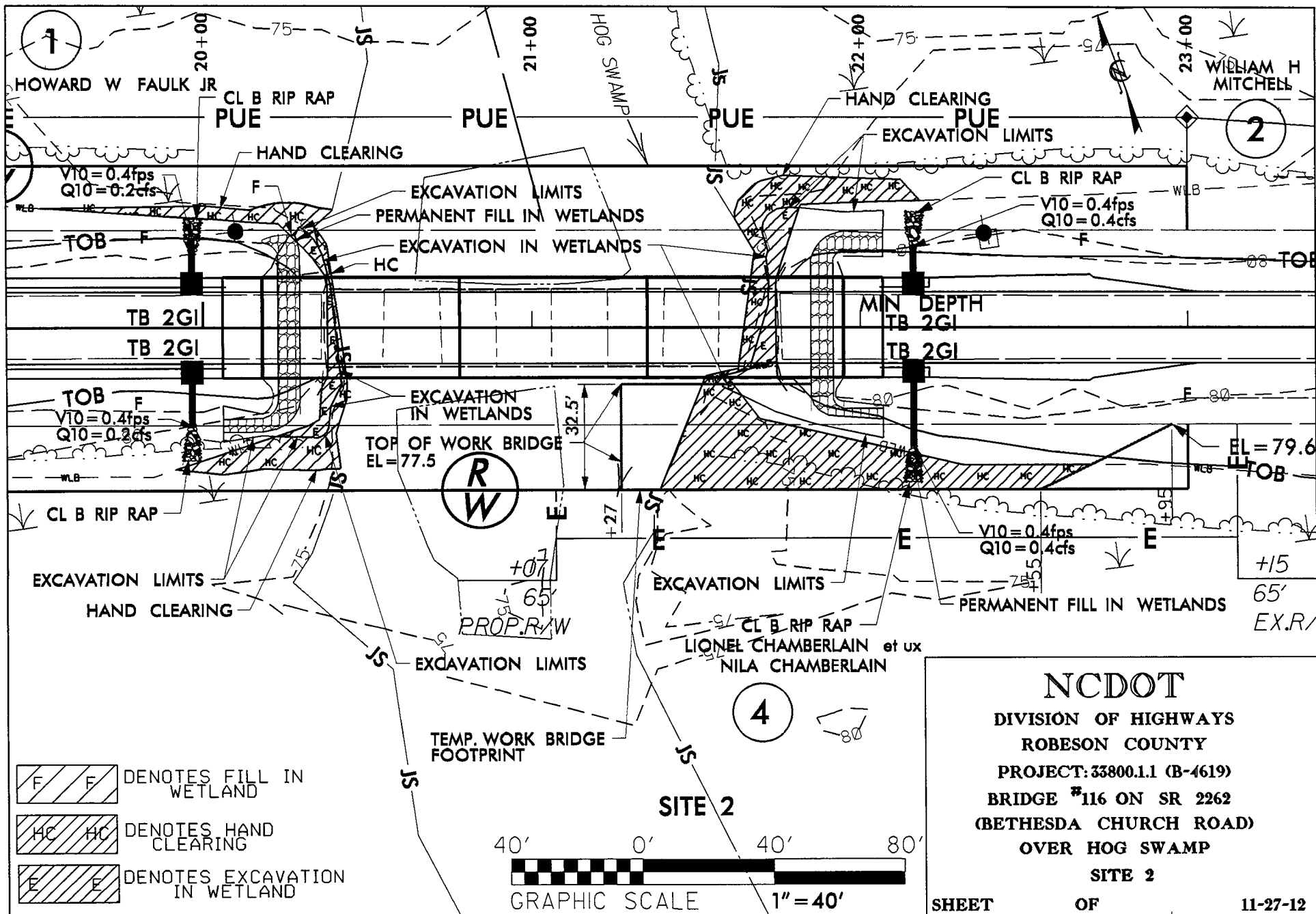


DECK DRAINAGE:  
INSTALL 4" DIA. DECK DRAINS ON 3' CENTERS  
FROM -L- STA 16+44 TO 16+50 RT. & LT.  
FROM -L- STA 17+50 TO 17+56 RT. & LT.  
FROM -L- STA 20+22 TO 20+28 RT. & LT.  
FROM -L- STA 21+85 TO 21+91 RT. & LT.

Permit Drawing  
Sheet 3 of 13  
Revised 11-27-12



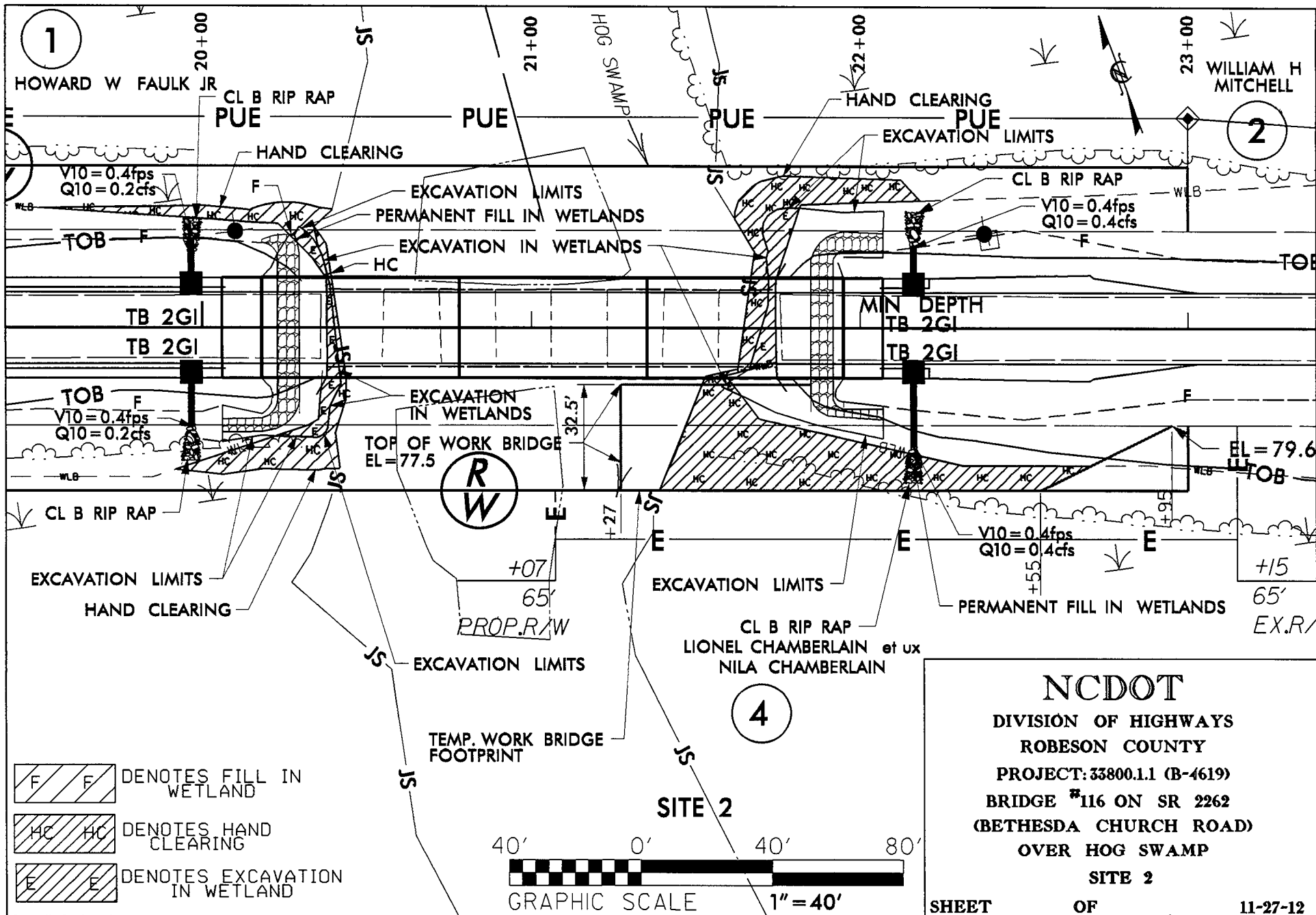




**NCDOT**  
 DIVISION OF HIGHWAYS  
 ROBESON COUNTY  
 PROJECT: 33800.1.1 (B-4619)  
 BRIDGE #116 ON SR 2262  
 (BETHSDA CHURCH ROAD)  
 OVER HOG SWAMP  
 SITE 2

SHEET OF 11-27-12

Permit Drawing  
 Sheet 5 of 13  
 Revised 11-27-13





5/28/99

PROJECT REFERENCE NO.		SHEET NO.	
B-4619		5	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

BRIDGE HYDRAULIC DATA #17

DESIGN DISCHARGE	= 1700	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 78.5	FT
BASE DISCHARGE	= 2544	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 79.2	FT
OVERTOPPING DISCHARGE	= 6700	CFS
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING ELEVATION	= 81.1	FT

DATE OF SURVEY = 10/27/08

W.S. ELEVATION AT DATE OF SURVEY = 75.5 FT

PI = 15+00.00  
EL = 81.25'  
VC = 160'  
K = 165

BRIDGE HYDRAULIC DATA #16

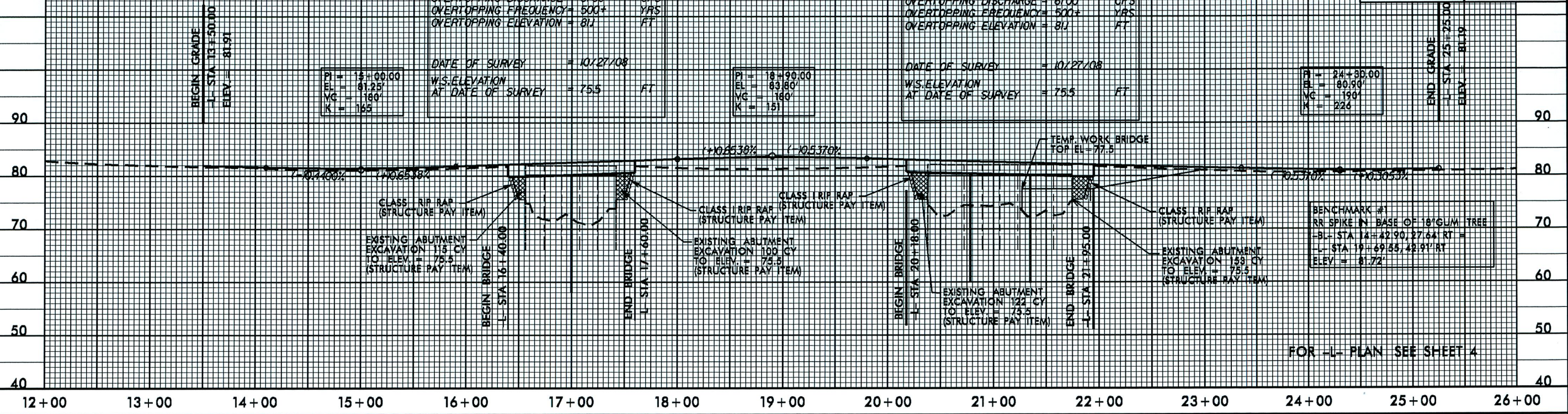
DESIGN DISCHARGE	= 1700	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 78.5	FT
BASE DISCHARGE	= 2544	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 79.2	FT
OVERTOPPING DISCHARGE	= 6700	CFS
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING ELEVATION	= 81.1	FT

DATE OF SURVEY = 10/27/08

W.S. ELEVATION AT DATE OF SURVEY = 75.5 FT

PI = 18+90.00  
EL = 83.80'  
VC = 160'  
K = 151

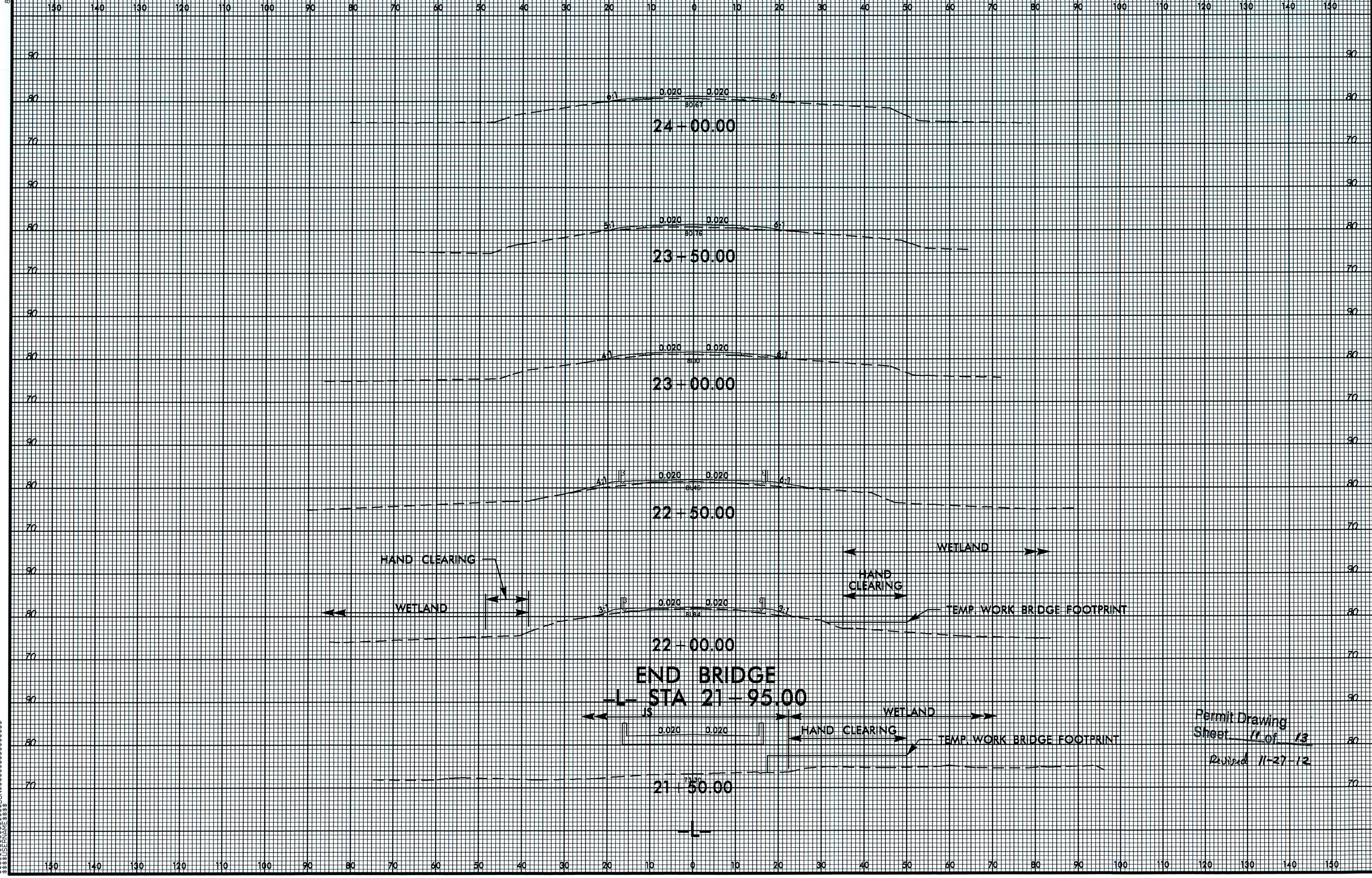
PI = 24+30.00  
EL = 80.90'  
VC = 190'  
K = 226



Permit Drawing  
Sheet 8 of 13  
Revised 11-27-12



8/23/99



Permit Drawing  
Sheet 11 of 13  
Revised 11-27-12



WETLAND PERMIT IMPACT SUMMARY												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	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)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	16+35 LT	BRG 117	0.01				0.01					
1	16+50 LT	BRG 117						<0.01				
1	16+60 RT/LT/CNTR	BRG 117			0.01		0.01					
1	17+50 LT	BRG 117	<0.01				<0.01	<0.01				
1	17+50 RT	BRG 117	0.01		<0.01		0.02					
2	20+00 LT	BRG 116					0.01					
2	20+20 LT	BRG 116	<0.01									
2	20+40 RT/LT/CNTR	BRG 116			<0.01		<0.01					
2	21+60 RT	BRG 116			<0.01							
2	21+70 RT/LT/CNTR	BRG 116			0.01		0.06					
2	22+16 RT	Rip Rap pad	<0.01									
TOTALS:			0.02	0.00	0.02		0.11	<0.01	0.00	0	0	

**SITE 1: 8-14x73 HP Steel Piles used for the interior bent. Total Permanent Surface water impact < 0.01 ac**  
**SITE 2: 8-14x73 HP Steel Piles used for each interior bent. Total Permanent Surface water impact < 0.01 ac**

**SITE 2 Temporary Work Bridge Impacts:**  
**Temporary Surface Water Impacts < 0.01 ac (4-12x74 HP Steel Piles)**  
**Temporary Fill in Wetlands Impacts < 0.01 ac (10-12x74 HP Steel Piles)**

ROBESON COUNTY  
WBS - 33800.1.1 (B-4619)

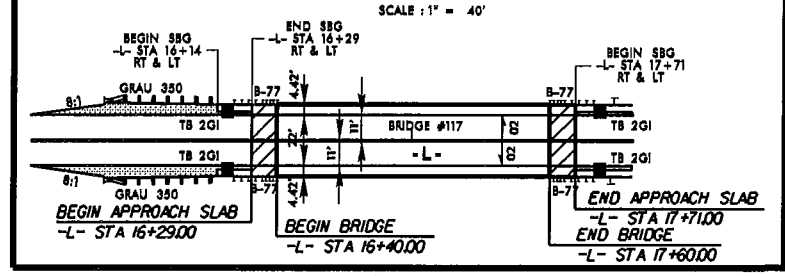
11/27/2012

Permit Drawing  
Sheet 13 of 13  
Revised 11-27-12



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\\fies\Red\U\NEU\Permits\B4619\NEU\_rdy\_psh\_4\_copyV2.dgn  
11/27/12

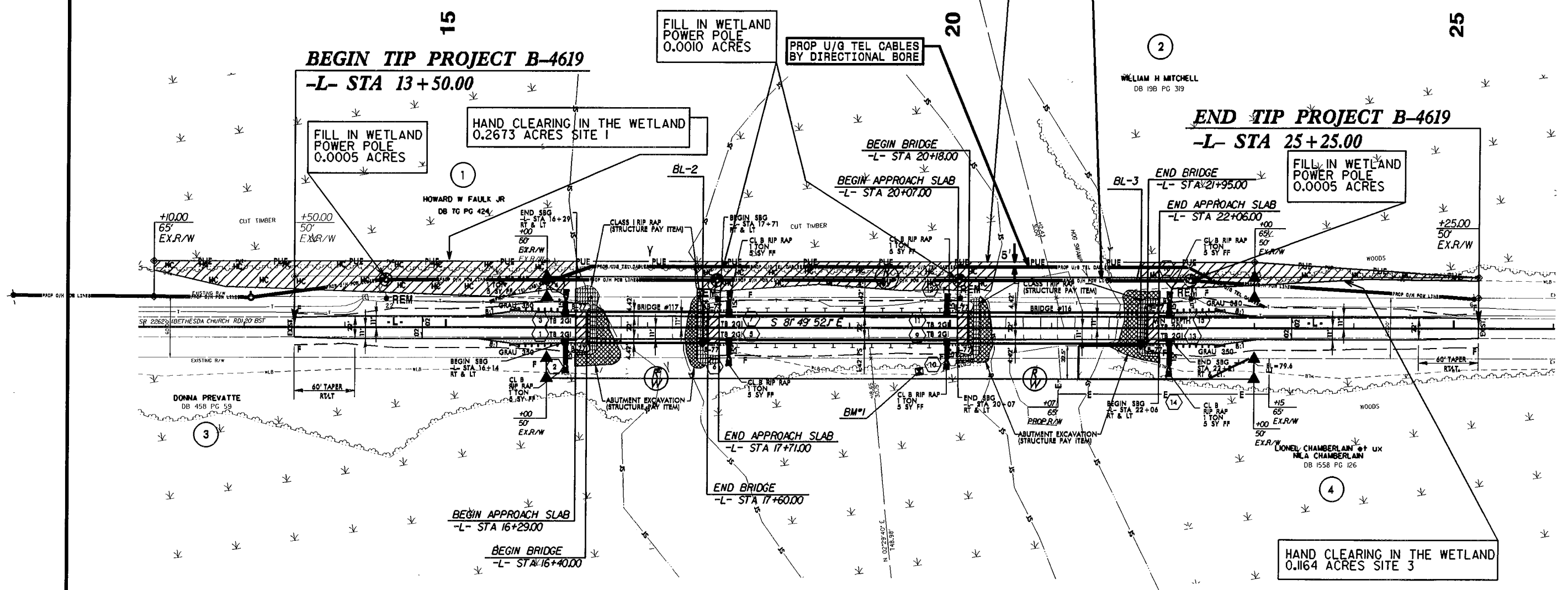
SKETCH OF BRIDGE IN  
RELATIONSHIP TO PAVEMENT



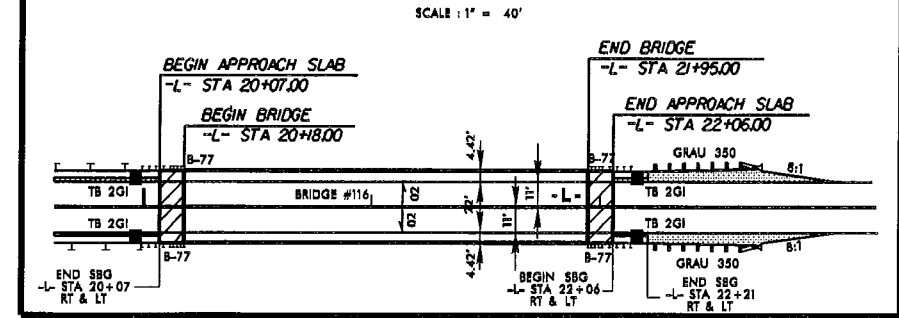
NEU PERMIT DRAWING (Nov 14, 2012)

B-4619 BRIDGES NO. 116 AND 117 ON SR 2262  
(BETHESDA CHURCH RD) OVER HOG SWAMP

PROJECT REFERENCE NO.	SHEET NO.
B-4619	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



SKETCH OF BRIDGE IN  
RELATIONSHIP TO PAVEMENT



HC HC DENOTES HAND  
CLEARING

PAVED SHOULDER

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

Utility Permit Drawing  
Sheet 2 of 4  
Revised 11-27-12

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)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-L-12+10 TO 16+34	Aerial Power line	< 0.01				0.27					
2	-L-17+46 TO 20+47	Aerial Power line	< 0.01				0.18					
3	-L-21+88 TO 25+25	Aerial Power line	< 0.01				0.12					
TOTALS:			< 0.01	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00

Note : 4.00 sq. ft. (Each) = 0.0001 ac (Each) permanent impact in the wetlands from pole installation.  
 Total = 20.00 sq. ft.  
 = 0.0005 ac  
 = < 0.01 ac

NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ROBESON COUNTY  
 TIP PROJECT (B-4619)

11/14/2012