



PAT McCRORY
Governor

NICHOLAS J. TENNYSON
Secretary

December 4, 2015

Mr. Tom Steffens
NCDOT Coordinator
Washington Regulatory Field Office
U. S. Army Corps of Engineers
2407 W 5th Street
Washington, NC 27889-1000

Mr. Stephen Lane
NCDOT Coordinator
N.C. Dept. of Environmental Quality
Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557

Dear Sirs:

Subject: Revised permit application for Section 10 and Section 404 Nationwide Permits (NWP) 23 and 12, Section 401 Water Quality Certification, Tar-Pamlico Riparian Buffer Authorization and CAMA General Permit for the replacement of Bridge No. 55 over Pantego Creek on US 264 in Pantego, Beaufort County; TIP B-5300; Federal Aid Project No. BRST-0264(53);

Reference: Permit Application dated November 3, 2015

The NCDOT submitted a permit application to your agencies for this project on November 3, but subsequently found problems with the permit drawings. Please see enclosed copies of the revised: permit drawings, buffer drawings, and utility drawings for the project.

This project calls for a letting date of March 15, 2016 and a review date of January 26, 2016. The Department requests permit issuance as soon as possible to keep the project on schedule.

A copy of this revised permit application and its distribution list will be posted on the NCDOT Website at <https://connect.ncdot.gov/resources/Environmental/Pages/default.aspx>, under Quick Links > Permit Applications. A copy of the PCE is also available at the above website address under Quick Links > Environmental Documents. Thank you for your assistance with this project. If you have any questions or need additional information, please contact Gordon Cashin at (919) 707-6107.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Hancock", written over a horizontal line.

for Richard W. Hancock, P.E., Manager
Project Development and Environmental Analysis Unit

cc NCDOT Permit Application Standard Distribution List.

The logo for "Nothing Compares", featuring a stylized blue and black graphic of a mountain range or hills to the left of the text "Nothing Compares" in a serif font, with a small trademark symbol.

APPLICATION for Major Development Permit

(last revised 12/27/06)



North Carolina DIVISION OF COASTAL MANAGEMENT

1. Primary Applicant/ Landowner Information			
Business Name North Carolina Department Of Transportation (Ncdot)		Project Name (if applicable) B-5300	
Applicant 1: First Name Richard	MI W	Last Name Hancock	
Applicant 2: First Name	MI	Last Name	
<i>If additional applicants, please attach an additional page(s) with names listed.</i>			
Mailing Address 1598 Mail Service Center		PO Box	State NC
City Raleigh	State NC	ZIP 27699- 1598	FAX No. 919 - 250 - 4108
Country USA	Phone No. 919 - 707 - 6107 ext.	FAX No. 919 - 250 - 4108	
Street Address (if different from above)	City	State	ZIP -
Email gcashin@ncdot.gov			

2. Agent/Contractor Information			
Business Name			
Agent/ Contractor 1: First Name	MI	Last Name	
Agent/ Contractor 2: First Name	MI	Last Name	
Mailing Address	PO Box	City	State
ZIP	Phone No. 1 - - ext.	Phone No. 2 - - ext.	
FAX No.	Contractor #		
Street Address (if different from above)	City	State	ZIP -
Email			

<Form continues on back>

3. Project Location			
County (can be multiple) Beaufort	Street Address Bridge B-5300 on US 264	State Rd. # US 264	
Subdivision Name	City Pantego	State NC	Zip -
Phone No. - - ext.	Lot No.(s) (if many, attach additional page with list) , , , ,		
a. In which NC river basin is the project located? Tar-Pamlico	b. Name of body of water nearest to proposed project Pantego Creek		
c. Is the water body identified in (b) above, natural or manmade? <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Manmade <input type="checkbox"/> Unknown	d. Name the closest major water body to the proposed project site. Pungo River		
e. Is proposed work within city limits or planning jurisdiction? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	f. If applicable, list the planning jurisdiction or city limit the proposed work falls within.		

4. Site Description	
a. Total length of shoreline on the tract (ft.) 160 LF	b. Size of entire tract (sq.ft.) 21,780.00 sq. ft.
c. Size of individual lot(s) (If many lot sizes, please attach additional page with a list)	d. Approximate elevation of tract above NHW (normal high water) or NWL (normal water level) +/- 3' <input checked="" type="checkbox"/> NHW or <input type="checkbox"/> NWL
e. Vegetation on tract Brushy/woody vegetation on the over banks.	
f. Man-made features and uses now on tract Existing US 264	
g. Identify and describe the existing land uses <u>adjacent</u> to the proposed project site. Northeast, northwest and southwest quadrants have local business, southeast quadrant has woods and brushes.	
h. How does local government zone the tract? N/A	i. Is the proposed project consistent with the applicable zoning? (Attach zoning compliance certificate, if applicable) <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
j. Is the proposed activity part of an urban waterfront redevelopment proposal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
k. Has a professional archaeological assessment been done for the tract? If yes, attach a copy. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA If yes, by whom?	
l. Is the proposed project located in a National Registered Historic District or does it involve a National Register listed or eligible property? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	

<Form continues on next page>

m. (i) Are there wetlands on the site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(ii) Are there coastal wetlands on the site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
(iii) If yes to either (i) or (ii) above, has a delineation been conducted? <i>(Attach documentation, if available)</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
n. Describe existing wastewater treatment facilities. N/A	
o. Describe existing drinking water supply source. N/A	
p. Describe existing storm water management or treatment systems. N/A	

5. Activities and Impacts

a. Will the project be for commercial, public, or private use?	<input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Public/Government <input type="checkbox"/> Private/Community
b. Give a brief description of purpose, use, and daily operations of the project when complete. The existing six span 75' bridge is being replaced with a proposed 95' double span cored slab structure. The bridge will be crowned with 2.5% cross-slope, with 12' travel lanes and 2'-3" shoulders and 5'-6" sidewalks, 28'-6" Clear Width and 42' (OTO Width). Existing drainage patterns are being maintained. Runoff is being discharged as far away from the stream as practicable. No deck drains required. Drainage inlets have been added to capture flow coming off the pavement.	
c. Describe the proposed construction methodology, types of construction equipment to be used during construction, the number of each type of equipment and where it is to be stored. The proposed bridge will be composed of pre-cast cored slab segments which will be delivered to the site by truck and will be placed by crane. No barges will be used.	
d. List all development activities you propose. Replace bridge and grade roadway approaches and shoulders.	
e. Are the proposed activities maintenance of an existing project, new work, or both?	Both
f. What is the approximate total disturbed land area resulting from the proposed project?	0.5 <input type="checkbox"/> Sq.Ft or <input checked="" type="checkbox"/> Acres
g. Will the proposed project encroach on any public easement, public accessway or other area that the public has established use of?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
h. Describe location and type of existing and proposed discharges to waters of the state. The proposed inlets will collect water from the roadway and discharge into Pantego Creek.	
i. Will wastewater or stormwater be discharged into a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
If yes, will this discharged water be of the same salinity as the receiving water?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
j. Is there any mitigation proposed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
If yes, attach a mitigation proposal.	

<Form continues on back>

6. Additional Information

In addition to this completed application form, (MP-1) the following items below, if applicable, must be submitted in order for the application package to be complete. Items (a) – (f) are always applicable to any major development application. Please consult the application instruction booklet on how to properly prepare the required items below.

- a. A project narrative.
- b. An accurate, dated work plat (including plan view and cross-sectional drawings) drawn to scale. Please give the present status of the proposed project. Is any portion already complete? If previously authorized work, clearly indicate on maps, plats, drawings to distinguish between work completed and proposed.
- c. A site or location map that is sufficiently detailed to guide agency personnel unfamiliar with the area to the site.
- d. A copy of the deed (with state application only) or other instrument under which the applicant claims title to the affected properties.
- e. The appropriate application fee. Check or money order made payable to DENR.

f. A list of the names and complete addresses of the adjacent waterfront (riparian) landowners and signed return receipts as proof that such owners have received a copy of the application and plats by certified mail. Such landowners must be advised that they have 30 days in which to submit comments on the proposed project to the Division of Coastal Management.

Name see attached letters	Phone No.
Address	
Name	Phone No.
Address	
Name	Phone No.
Address	

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

h. Signed consultant or agent authorization form, if applicable.

i. Wetland delineation, if necessary.

j. A signed AEC hazard notice for projects in oceanfront and inlet areas. (Must be signed by property owner)

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

7. Certification and Permission to Enter on Land

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

I 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 the project.

I further certify that the information provided in this application is truthful to the best of my knowledge.

Date 12-3-2015

Print Name RICHARD W. HANCOCK
for

Signature 

Please indicate application attachments pertaining to your proposed project.

- DCM MP-2 Excavation and Fill Information
- DCM MP-3 Upland Development
- DCM MP-4 Structures Information
- DCM MP-5 Bridges and Culverts

BRIDGES and CULVERTS

Attach this form to Joint Application for CAMA Major Permit, Form DCM MP-1. Be sure to complete all other sections of the Joint Application that relate to this proposed project. Please include all supplemental information.

1. BRIDGES *This section not applicable*

a. Is the proposed bridge:
 Commercial Public/Government Private/Community

b. Water body to be crossed by bridge:
Pantego Creek

c. Type of bridge (construction material):
Concrete Cored Slab

d. Water depth at the proposed crossing at NLW or NWL:
+/- 10' at NLW

e. (i) Will proposed bridge replace an existing bridge? Yes No
If yes,
(ii) Length of existing bridge: 75
(iii) Width of existing bridge: 28.4
(iv) Navigation clearance underneath existing bridge: 13'
(v) Will all, or a part of, the existing bridge be removed?
(Explain) Existing bridge will be completely removed.

f. (i) Will proposed bridge replace an existing culvert? Yes No
If yes,
(ii) Length of existing culvert: _____
(iii) Width of existing culvert: _____
(iv) Height of the top of the existing culvert above the NHW or NWL: _____
(v) Will all, or a part of, the existing culvert be removed?
(Explain)

g. Length of proposed bridge: 95'

h. Width of proposed bridge: 42'

i. Will the proposed bridge affect existing water flow? Yes No
If yes, explain:

j. Will the proposed bridge affect navigation by reducing or increasing the existing navigable opening? Yes No
If yes, explain:

k. Navigation clearance underneath proposed bridge: 13'

l. Have you contacted the U.S. Coast Guard concerning their approval? Yes No
If yes, explain: Advance Approval requested September 10, 2015

m. Will the proposed bridge cross wetlands containing no navigable waters? Yes No
If yes, explain:

n. Height of proposed bridge above wetlands: NA

2. CULVERTS *This section not applicable*

a. Number of culverts proposed: _____

b. Water body in which the culvert is to be placed:

< Form continues on back >

c. Type of culvert (construction material):

d. (i) Will proposed culvert replace an existing bridge? Yes No

If yes,

(ii) Length of existing bridge: _____

(iii) Width of existing bridge: _____

(iv) Navigation clearance underneath existing bridge: _____

(v) Will all, or a part of, the existing bridge be removed? (Explain)

e. (i) Will proposed culvert replace an existing culvert? Yes No

If yes,

(ii) Length of existing culvert(s): _____

(iii) Width of existing culvert(s): _____

(iv) Height of the top of the existing culvert above the NHW or NWL: _____

(v) Will all, or a part of, the existing culvert be removed? (Explain)

f. Length of proposed culvert: _____

g. Width of proposed culvert: _____

h. Height of the top of the proposed culvert above the NHW or NWL.

i. Depth of culvert to be buried below existing bottom contour.

j. Will the proposed culvert affect navigation by reducing or increasing the existing navigable opening? Yes No

If yes, explain:

k. Will the proposed culvert affect existing water flow? Yes No

If yes, explain:

3. EXCAVATION and FILL This section not applicable

a. (i) Will the placement of the proposed bridge or culvert require any excavation below the NHW or NWL? Yes No

If yes,

(ii) Avg. length of area to be excavated: Less than 4'

(iii) Avg. width of area to be excavated: Less 4'

(iv) Avg. depth of area to be excavated: _____

(v) Amount of material to be excavated in cubic yards: _____

b. (i) Will the placement of the proposed bridge or culvert require any excavation within coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.

CW _____ SAV _____ SB _____

WL _____ None

(ii) Describe the purpose of the excavation in these areas:

c. (i) Will the placement of the proposed bridge or culvert require any high-ground excavation? Yes No

If yes,

(ii) Avg. length of area to be excavated: 43.7 ft

(iii) Avg. width of area to be excavated: 42 ft

(iv) Avg. depth of area to be excavated: 2.5 ft

(v) Amount of material to be excavated in cubic yards: 170 cy

d. If the placement of the bridge or culvert involves any excavation, please complete the following:

(i) Location of the spoil disposal area: Roadway embankment and offsite if needed

(ii) Dimensions of the spoil disposal area: varies depending on volume of spoil.

(iii) Do you claim title to the disposal area? Yes No (If no, attach a letter granting permission from the owner.)

(iv) Will the disposal area be available for future maintenance? Yes No

(v) Does the disposal area include any coastal wetlands/marsh (CW), submerged aquatic vegetation (SAVs), other wetlands (WL), or shell bottom (SB)?

CW SAV WL SB None

If any boxes are checked, give dimensions if different from (ii) above.

(vi) Does the disposal area include any area below the NHW or NWL? ? Yes No

If yes, give dimensions if different from (ii) above.

e. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d above) to be placed below NHW or NWL? Yes No

If yes,

(ii) Avg. length of area to be filled: _____

(iii) Avg. width of area to be filled: _____

(iv) Purpose of fill:

f. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d above) to be placed within coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.

CW _____ SAV _____ SB _____

WL _____ None

(ii) Describe the purpose of the excavation in these areas:

The sideslope of the approach roadway will encroach in to the existing wetlands. Approximately 612 SF of fill in wetlands.

g. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d above) to be placed on high-ground? Yes No

If yes,

(ii) Avg. length of area to be filled: 450 ft

(iii) Avg. width of area to be filled: 50 ft

(iv) Purpose of fill: Roadway grade to be adjusted to match the new bridge.

4. GENERAL

a. Will the proposed project require the relocation of any existing utility lines? Yes No

If yes, explain: See attached utility narrative

b. Will the proposed project require the construction of any temporary detour structures? Yes No

If yes, explain:

If this portion of the proposed project has already received approval from local authorities, please attach a copy of the approval or certification.

< Form continues on back >

Form DCM MP-5 (Bridges and Culverts, Page 4 of 4)

c. Will the proposed project require any work channels?
 Yes No

If yes, complete Form DCM-MP-2.

d. How will excavated or fill material be kept on site and erosion controlled?

Temporary Silt Fence will be used as needed to provide erosion control for excavated material that is kept onsite.

e. What type of construction equipment will be used (for example, dragline, backhoe, or hydraulic dredge)?

Typical roadway construction equipments such as Backhoe, Crane, Dump Truck.

f. Will wetlands be crossed in transporting equipment to project site?
 Yes No

If yes, explain steps that will be taken to avoid or minimize environmental impacts.

g. Will the placement of the proposed bridge or culvert require any shoreline stabilization?
 Yes No

If yes, complete form MP-2, Section 3 for Shoreline Stabilization only.

12-3-2015

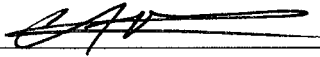
Date

B-5300

Project Name

for RICHARD W. HANCOCK

Applicant Name



Applicant Signature



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS



(Version 2.02; Released April 2015)

WBS Element: 46000.1.1 TIP No.: B-5300 County(ies): Beaufort Page 1 of 1

General Project Information

WBS Element:	46000.1.1	TIP Number:	B-5300	Project Type:	Bridge Replacement	Date:	9/23/2015
NCDOT Contact:	Paul Jordan		Contractor / Designer:	Shirshant Sharma			
Address:	NCDOT Hydraulics Unit 1590 Mail Service Center Raleigh, NC - 27699-1590		Address:	2801 Yorkmont Road, Suite 100			
	Phone:	919-707-6700		Phone:	707-357-5511		
	Email:	pajordan@ncdot.gov		Email:	shirshant.sharma@amecfw.com		
City/Town:	Pantego		County(ies):	Beaufort			
River Basin(s):	Tar-Pamlico		CAMA County?	Yes			
Wetlands within Project Limits?	No						

Project Description

Project Length (lin. miles or feet):	500 ft	Surrounding Land Use:	Rural
Project Built-Upon Area (ac.)		Existing Site	
0.5 ac.		0.4 ac.	
Typical Cross Section Description:	(Approach) 2 - 12' lanes with Curb and Gutter (Bridge) 2 - 12' lane with 2.25' shoulders and 5.5' sidewalks		(Approach) 2 - 12' lanes with 2' shoulders LT, 5' shoulder RT (Bridge) 2 - 13' lanes with 5' Sidewalk
Annual Avg Daily Traffic (veh/hr/day):	Design/Future: 390	Year: 2014	Existing: 530 Year: 2007

General Project Narrative:
(Description of Minimization of Water Quality Impacts)

The existing six span 75' bridge is being replaced with a proposed 95' double span cored slab structure. The bridge will be crowned with 2.5% cross-slope, with 12' travel lanes and 2'-3" shoulders and 5'-6" sidewalks, 28'-6" Clear Width and 42' (OTO Width). Existing drainage patterns are being maintained. Runoff is being discharged as far away from the stream as practicable. No deck drains required. Drainage inlets have been added to minimize flow from the roadway onto the bridge deck.

Waterbody Information

Surface Water Body (1):	Pantego Creek		NCDWR Stream Index No.:	29-34-34-(1), 29-34-34-(2)			
NCDWR Surface Water Classification for Water Body	Primary Classification:	Class C		Class SC			
	Supplemental Classification:	Swamp Waters (Sw)		(NSW)			
Other Stream Classification:	None						
Impairments:	None						
Aquatic T&E Species?	No	Comments:					
NRTR Stream ID:				Buffer Rules in Effect:	Tar-Pamlico		
Project Includes Bridge Spanning Water Body?	Yes	Deck Drains Discharge Over Buffer?	No	Dissipator Pads Provided in Buffer?		N/A	
Deck Drains Discharge Over Water Body?	No	(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)			
(If yes, provide justification in the General Project Narrative)							

Revised 12/4/2015

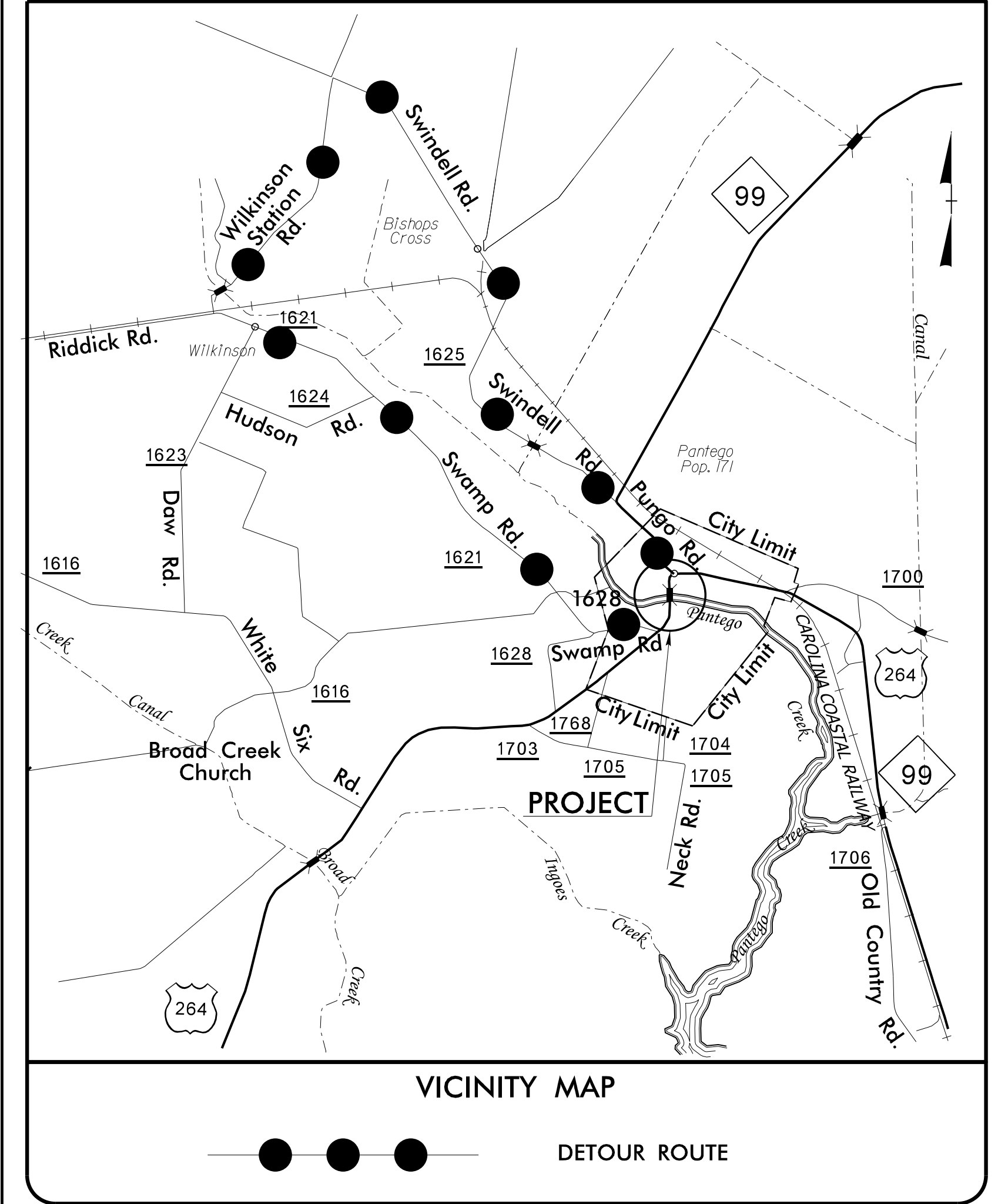
Revised 12/4/2015

09/08/2015
 SYSTEMS
 DGN
 USERNAME

TIP PROJECT: B-5300

CONTRACT:

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
BEAUFORT COUNTY

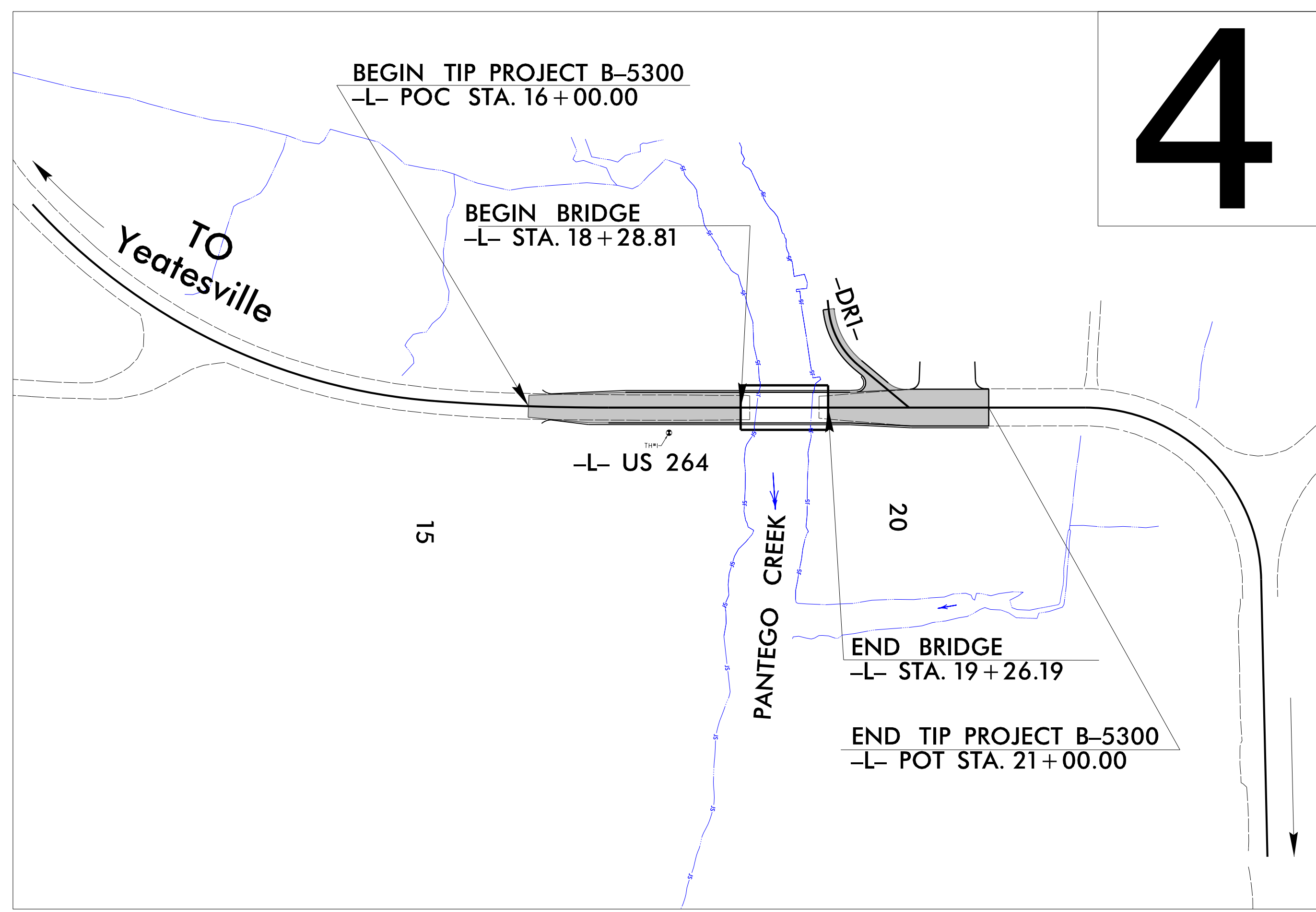
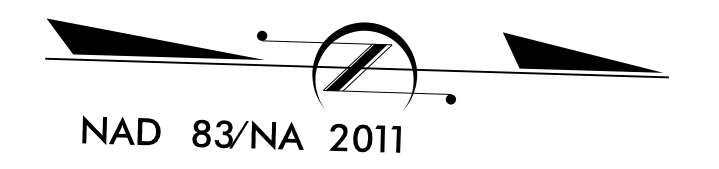
LOCATION: REPLACE BRIDGE NO. 55 OVER PANTEGO CREEK ON US 264

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE

WETLAND AND SURFACE WATER IMPACTS PERMIT

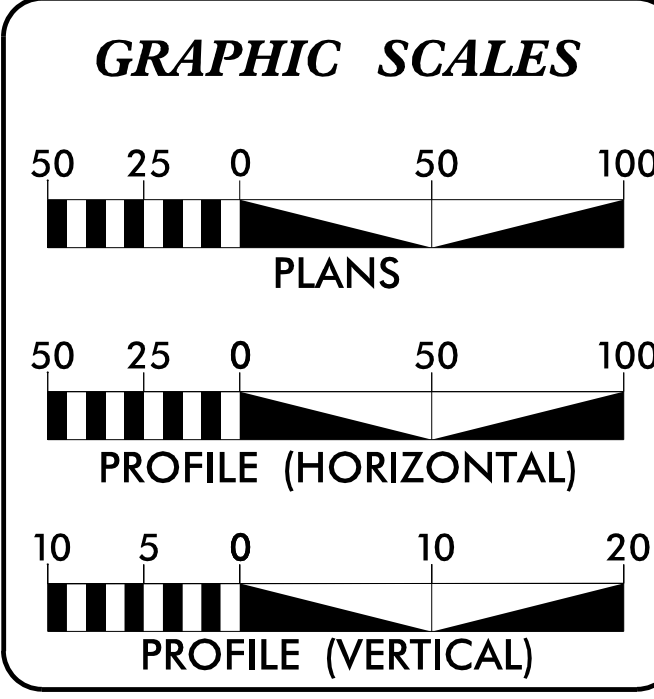
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5300	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
46000.1.1	BRSTP-0264(53)	P.E.	
46000.2.2		R/W	
		CONST	

PERMIT DRAWING
SHEET 1 OF 6



THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION




DESIGN DATA

ADT 2017 =	4474
ADT 2037 =	7170
K =	10 %
D =	60 %
T =	14 % *
V =	30 MPH
* TTST =	8% DUAL = 6%
FUNC CLASS =	ARTERIAL
SUBREGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-5300 =	0.077 MILES
LENGTH STRUCTURE TIP PROJECT B-5300 =	0.018 MILES
TOTAL LENGTH TIP PROJECT B-5300 =	0.095 MILES


 Prepared in the Office of:
 AMEC Foster Wheeler Environment & Infrastructure, Inc.
 4021 Stirrup Creek Drive, Suite 100
 Durham, North Carolina 27703
 NC Engineering F-1253 NC Geology C-247
 (919) 381-9900

2012 STANDARD SPECIFICATIONS

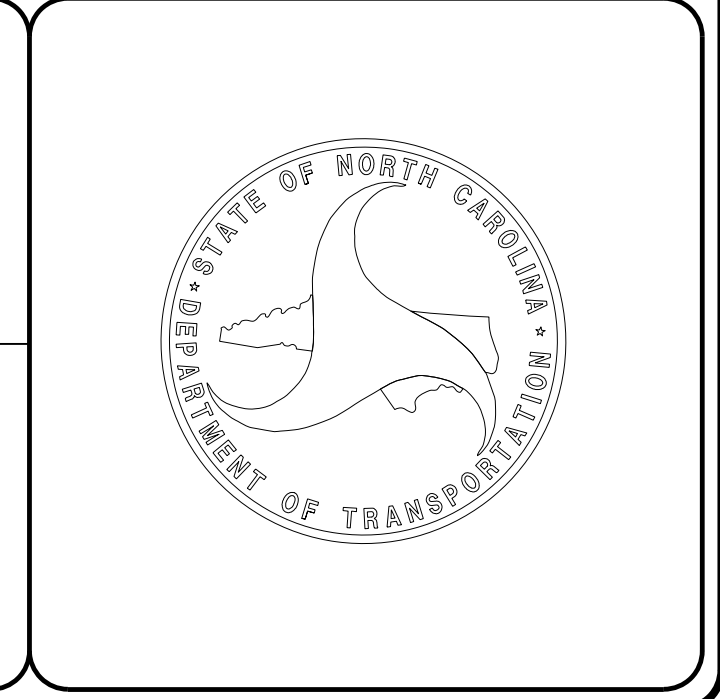
RIGHT OF WAY DATE: MARCH 20, 2015	W. S. HOOD, PE PROJECT ENGINEER
LETTING DATE: MARCH 15, 2016	BRAD TRIPP, PE PROJECT DESIGN ENGINEER
	GARY LOVERING, PE PROJECT ENGINEER NCDOT ROADWAY DESIGN

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

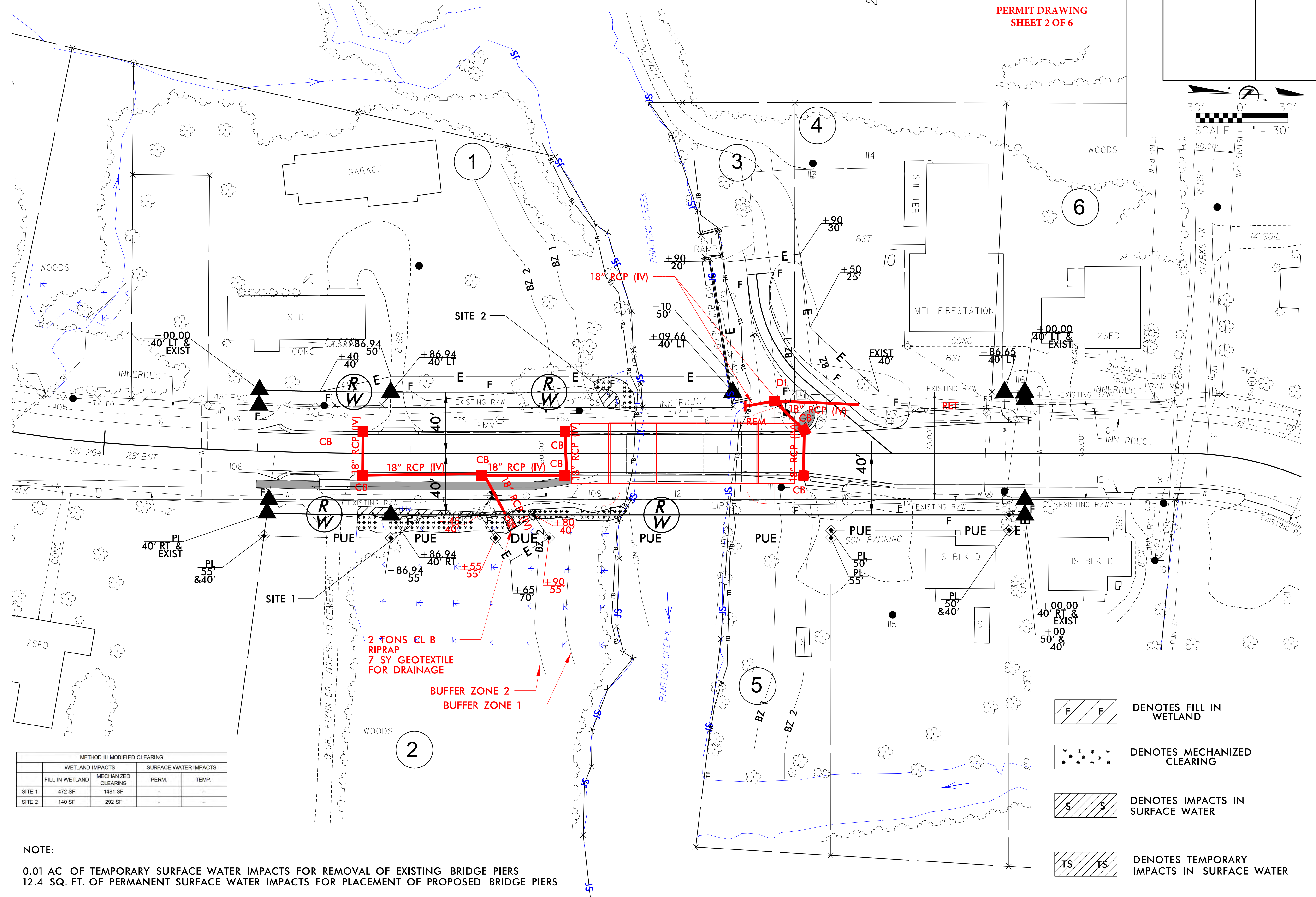
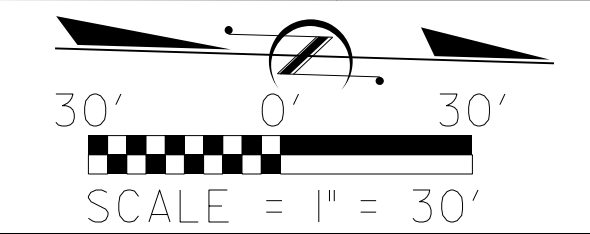
ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



WETLAND AND SURFACE WATER IMPACTS PERMIT

PROJECT REFERENCE NO. <i>B-5300</i>	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



	METHOD III MODIFIED CLEARING		SURFACE WATER IMPACTS	
	WETLAND IMPACTS	MECHANIZED CLEARING	PERM.	TEMP.
SITE 1	472 SF	1481 SF	-	-
SITE 2	140 SF	292 SF	-	-

NOTE:
 0.01 AC OF TEMPORARY SURFACE WATER IMPACTS FOR REMOVAL OF EXISTING BRIDGE PIERS
 12.4 SQ. FT. OF PERMANENT SURFACE WATER IMPACTS FOR PLACEMENT OF PROPOSED BRIDGE PIERS

- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER

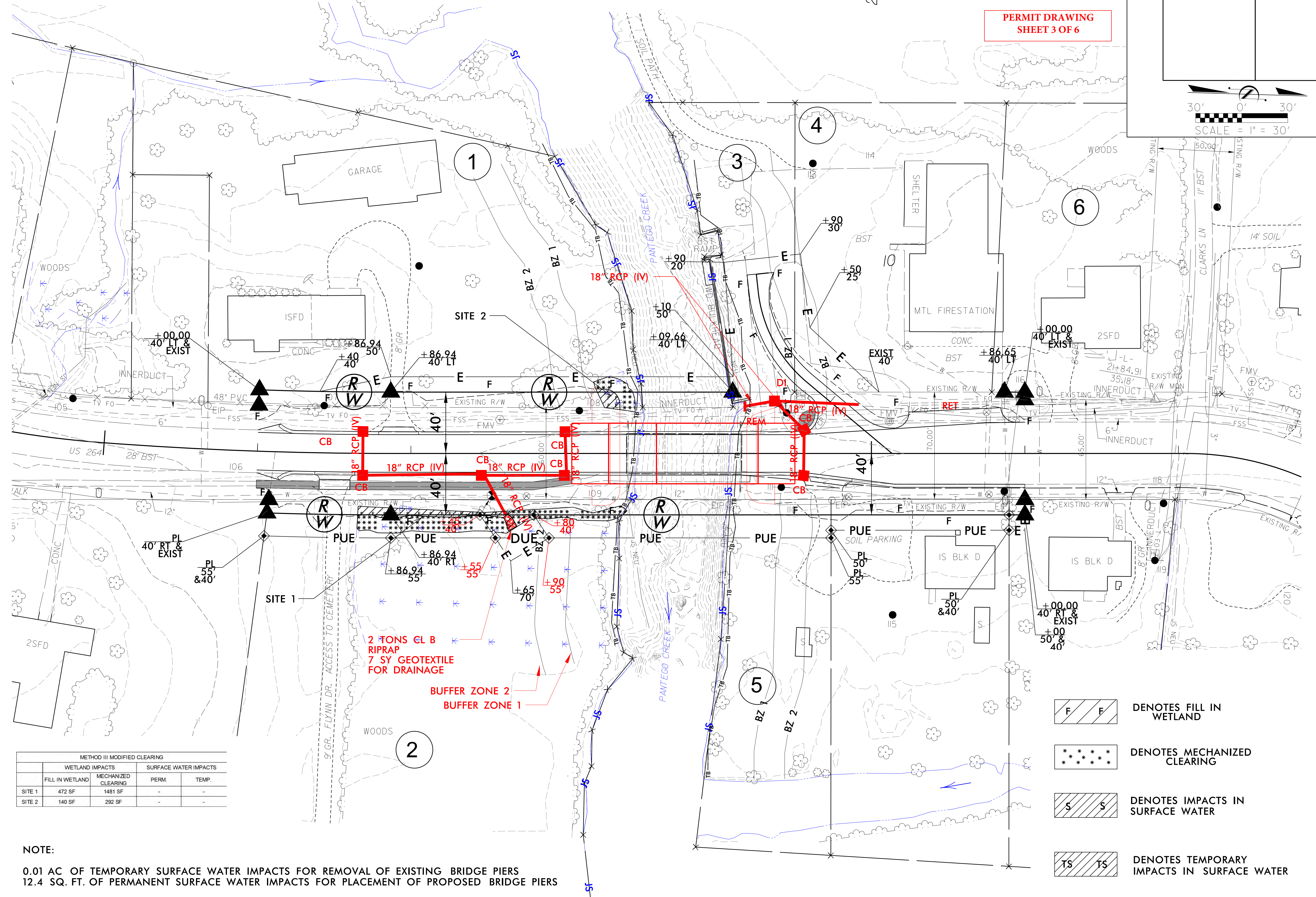
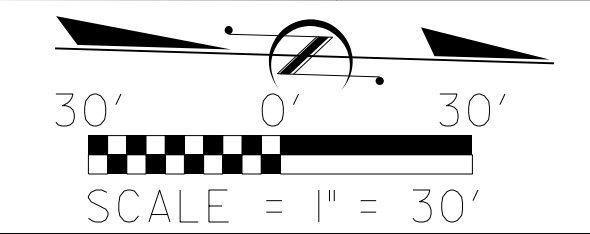
Revised 12/4/2015

REVISIONS

12/4/2015
 R:\Drawings\B-5300\wt_psh.dgn
 shurabatt

WETLAND AND SURFACE WATER IMPACTS PERMIT

PROJECT REFERENCE NO. <i>B-5300</i>	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



	METHOD III MODIFIED CLEARING			
	WETLAND IMPACTS		SURFACE WATER IMPACTS	
	FILL IN WETLAND	MECHANIZED CLEARING	PERM.	TEMP.
SITE 1	472 SF	1481 SF	-	-
SITE 2	140 SF	292 SF	-	-

NOTE:
 0.01 AC OF TEMPORARY SURFACE WATER IMPACTS FOR REMOVAL OF EXISTING BRIDGE PIERS
 12.4 SQ. FT. OF PERMANENT SURFACE WATER IMPACTS FOR PLACEMENT OF PROPOSED BRIDGE PIERS

- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER

Revised 12/4/2015

REVISIONS

12/4/2015
 R:\Drawings\B-5300.kt.psh.dgn
 shurabshurab

Revised 12/4/2015

5/28/99

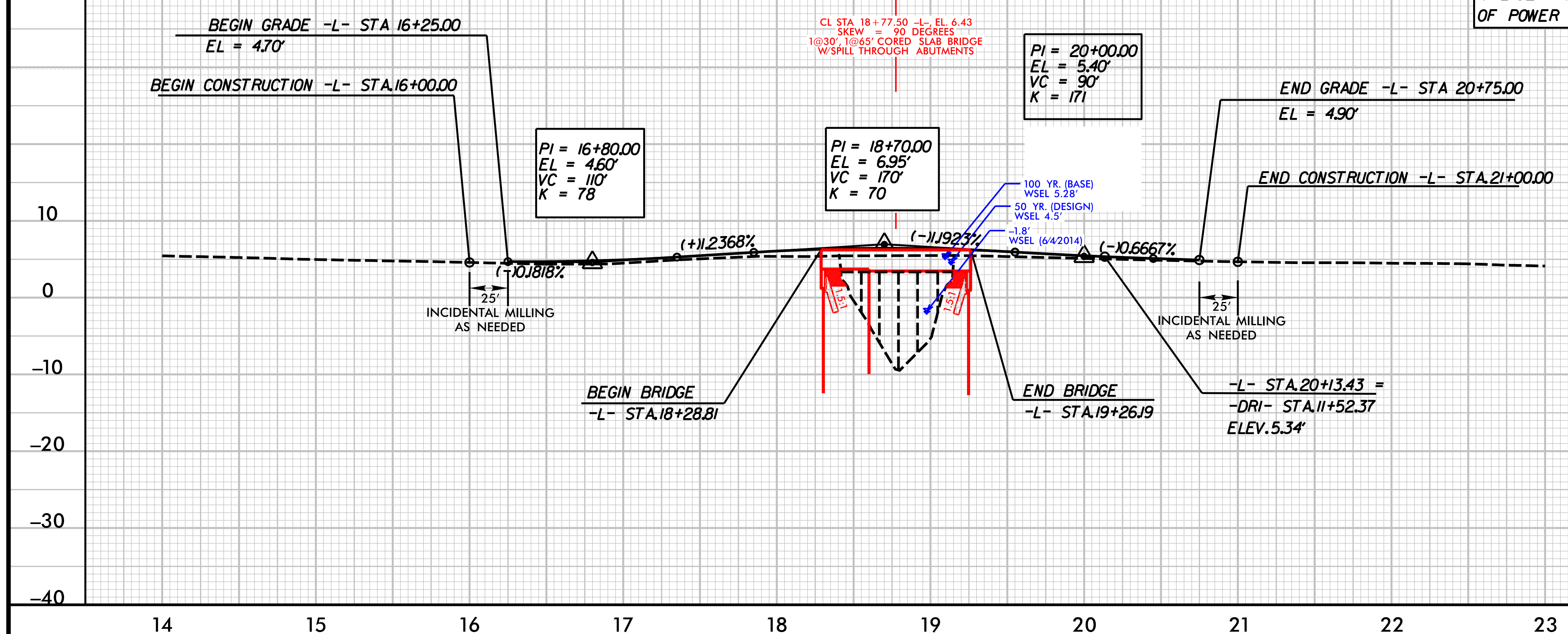


AMEC Environment & Infrastructure, Inc.
4021 Stirrup Creek Drive, Suite 100
Durham, North Carolina 27703
NC Engineering F-1253 NC Geology C-247
(919) 381-9900

PROJECT REFERENCE NO. B-5300	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

-L-

BM-1, -BL- 30+32
15' LT. ELEV. = 3.9'
NAIL SET IN BASE
OF POWER POLE



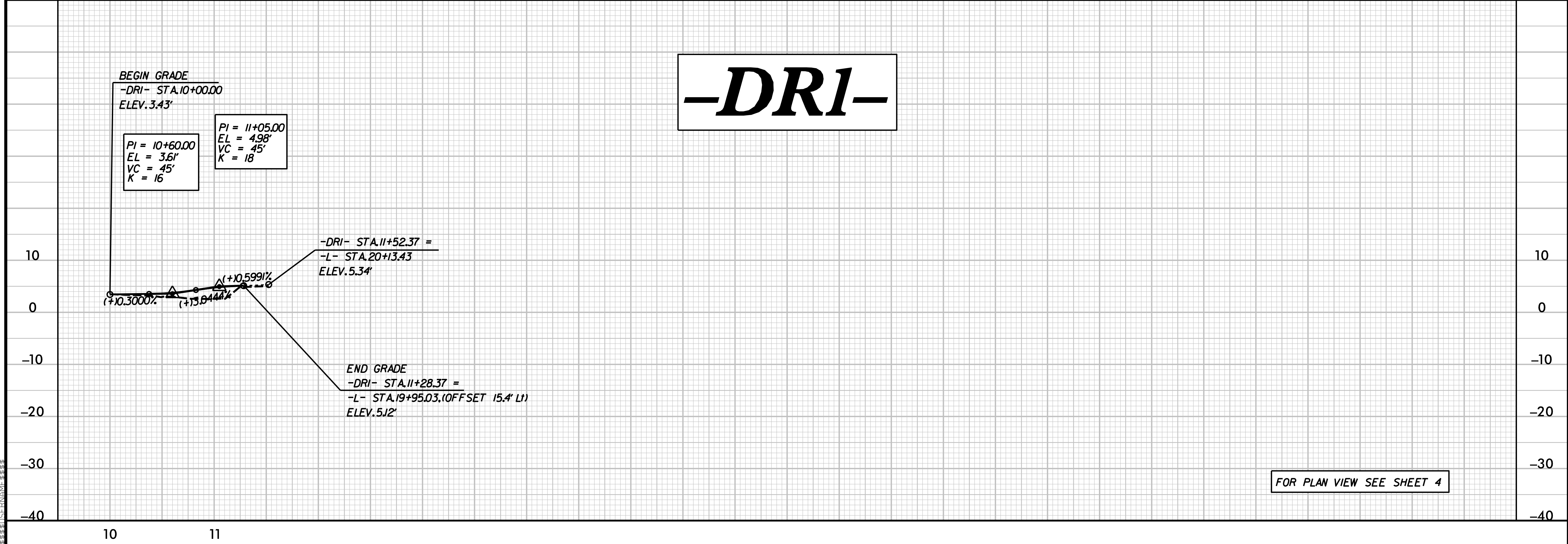
BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	2,389 cfs
DESIGN FREQUENCY	50 yr
DESIGN HW ELEVATION	4.5 ft
BASE DISCHARGE	3,050 cfs
BASE FREQUENCY	100 yr
BASE HW ELEVATION	5.28 ft
OVERTOPPING DISCHARGE	2,389 cfs
OVERTOPPING FREQUENCY	50 yr
OVERTOPPING ELEVATION	4.5 ft
DATE OF SURVEY	6/4/2014
W.S.ELEVATION AT DATE OF SURVEY	-1.8 ft

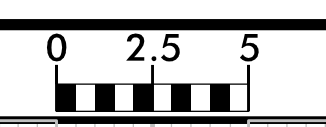
PERMIT DRAWING
SHEET 4 OF 6

FOR PLAN VIEW SEE SHEET 4

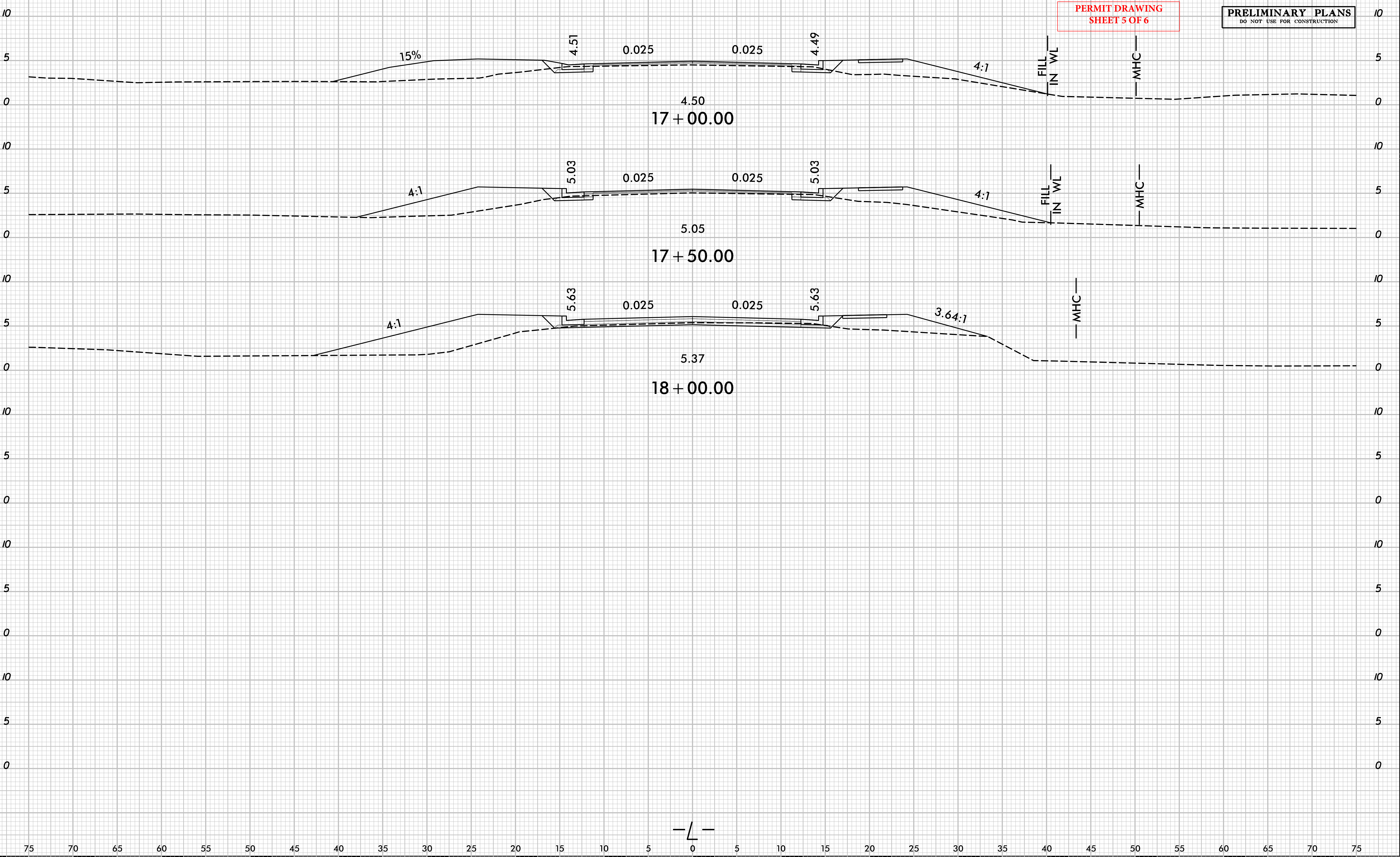
-DRI-



FOR PLAN VIEW SEE SHEET 4



75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



PERMIT DRAWING
SHEET 5 OF 6

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

17 + 00.00

17 + 50.00

18 + 00.00

—L—

Revised 12/4/2015

\$\$\$\$\$\$
 \$\$\$SYTIME\$\$\$\$\$\$
 \$\$\$CORRECTIONS\$\$\$\$\$\$
 \$\$\$DATE\$\$\$\$\$\$
 \$\$\$BY\$\$\$\$\$\$
 \$\$\$CHECKED BY\$\$\$\$\$\$
 \$\$\$DATE\$\$\$\$\$\$
 \$\$\$BY\$\$\$\$\$\$
 \$\$\$CHECKED BY\$\$\$\$\$\$
 \$\$\$DATE\$\$\$\$\$\$

Revised 12/4/2015

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- 17+30 - 18+00' RT	Road Embankment	0.01			0.03						
2	-L- 17+80 - 18+30' LT	Road Embankment	0.01			0.01						
	-L- 19+28 - 13+26'	Existing Bridge Piers						0.01				
	-L- 19+28 - 13+26'	Proposed Bridge Piers						0.01				
TOTALS*:			0.02	0.00	0.00	0.04	0.00	0.01	0.01	0.00	0.00	0.00

NOTES:
 0.01 AC OF TEMPORARY SURFACE WATER IMPACTS FOR REMOVAL OF EXISTING PIERS AND CAUSEWAY
 12.4 SQ. FT. OF PERMANENT SURFACE WATER IMPACTS FOR PLACEMENT OF PROPOSED BRIDGE PIERS.
 SITE 1 - 472 SF OF FILL IN WETLANDS, 1481 SF OF MECHANIZED CLEARING
 SITE 2 - 140 SF OF FILL IN WETLANDS, 292 SF OF MECHANIZED CLEARING

**PERMIT DRAWING
SHEET 6 OF 6**

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 12/4/2015
 BEAUFORT COUNTY
 BRIDGE NO 55 ON US 264
 OVER PANTEGO CREEK
 SHEET 1 OF 1

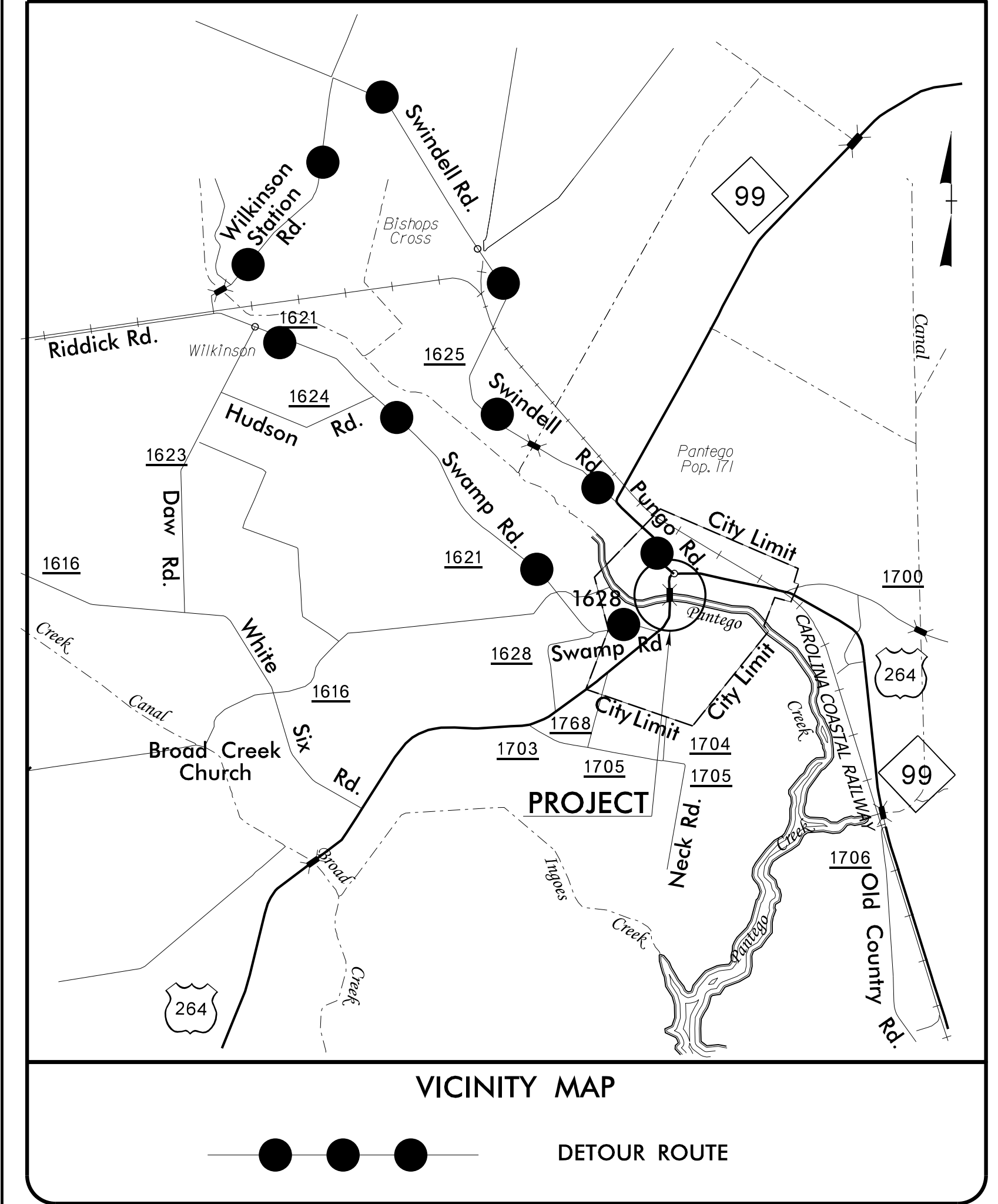
Revised 12/4/2015

09/08/15

TIP PROJECT: B-5300

CONTRACT:

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols



VICINITY MAP
● ● ● DETOUR ROUTE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
BEAUFORT COUNTY

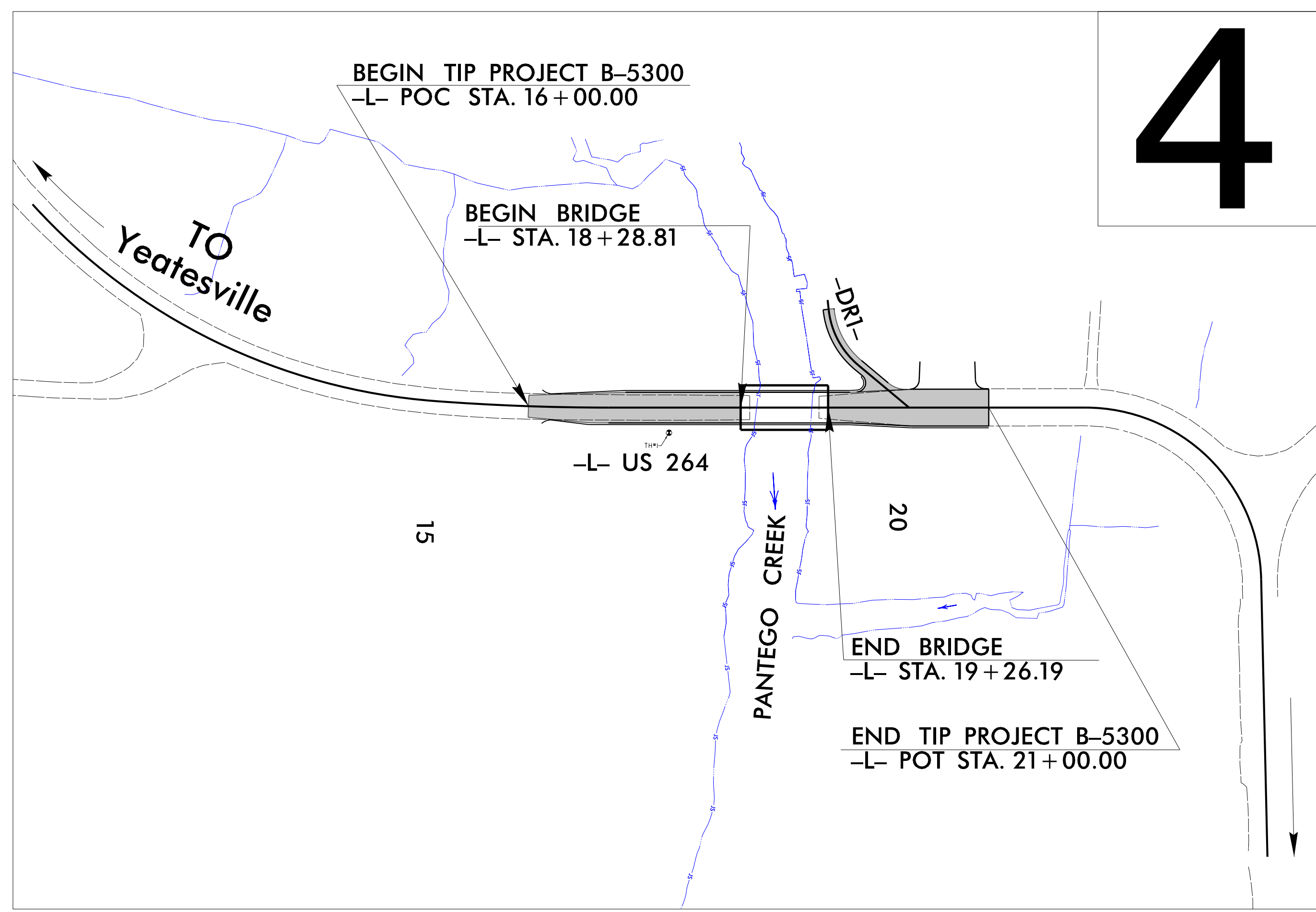
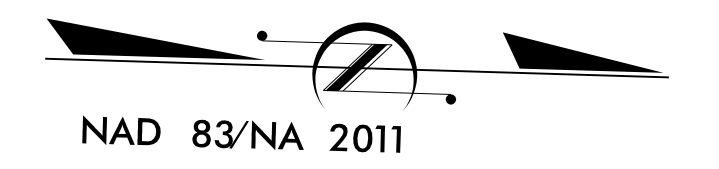
LOCATION: REPLACE BRIDGE NO. 55 OVER PANTEGO CREEK ON US 264

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE

BUFFER IMPACTS PERMITS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5300	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
46000.1.1	BRSTP-0264(53)	P.E.	
46000.2.2		R/W	
		CONST	

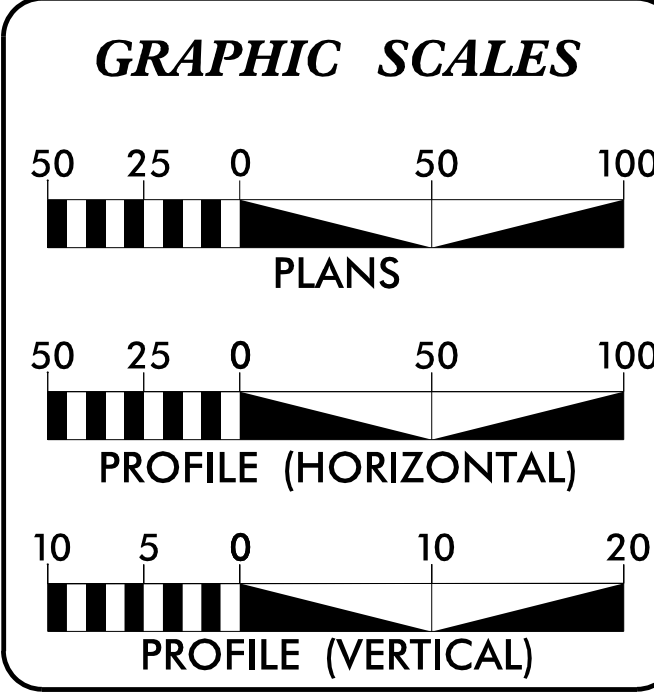
**BUFFER DRAWING
SHEET 1 OF 5**



4

THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



DESIGN DATA

ADT 2017 =	4474
ADT 2037 =	7170
K =	10 %
D =	60 %
T =	14 % *
V =	30 MPH
* TTST =	8% DUAL = 6%
FUNC CLASS =	ARTERIAL
SUBREGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-5300 =	0.077 MILES
LENGTH STRUCTURE TIP PROJECT B-5300 =	0.018 MILES
TOTAL LENGTH TIP PROJECT B-5300 =	0.095 MILES

Prepared in the Office of:
AMEC Foster Wheeler Environment & Infrastructure, Inc.
4021 Stirrup Creek Drive, Suite 100
Durham, North Carolina 27703
NC Engineering F-1253 NC Geology C-247
(919) 381-9900

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MARCH 20, 2015

LETTING DATE:
MARCH 15, 2016

W. S. HOOD, PE
PROJECT ENGINEER

BRAD TRIPP, PE
PROJECT DESIGN ENGINEER

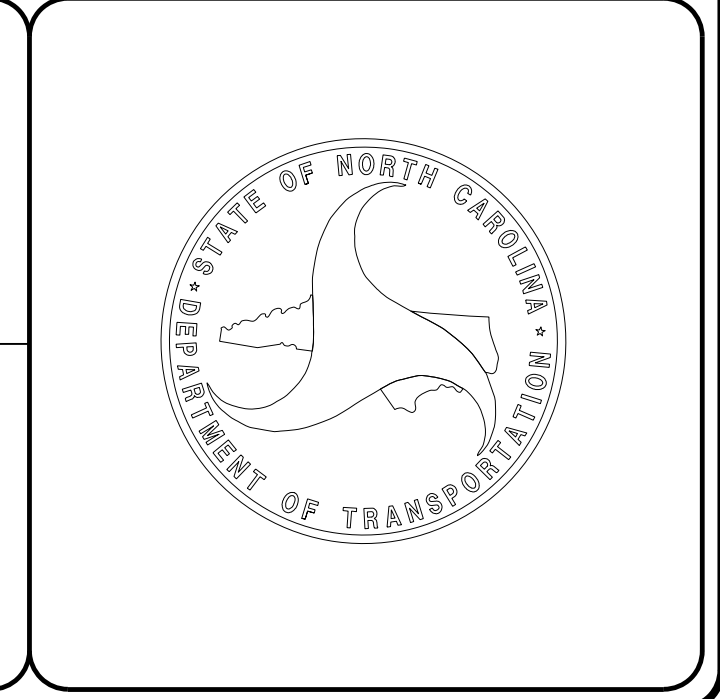
GARY LOVERING, PE
PROJECT ENGINEER
NCDOT ROADWAY DESIGN

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



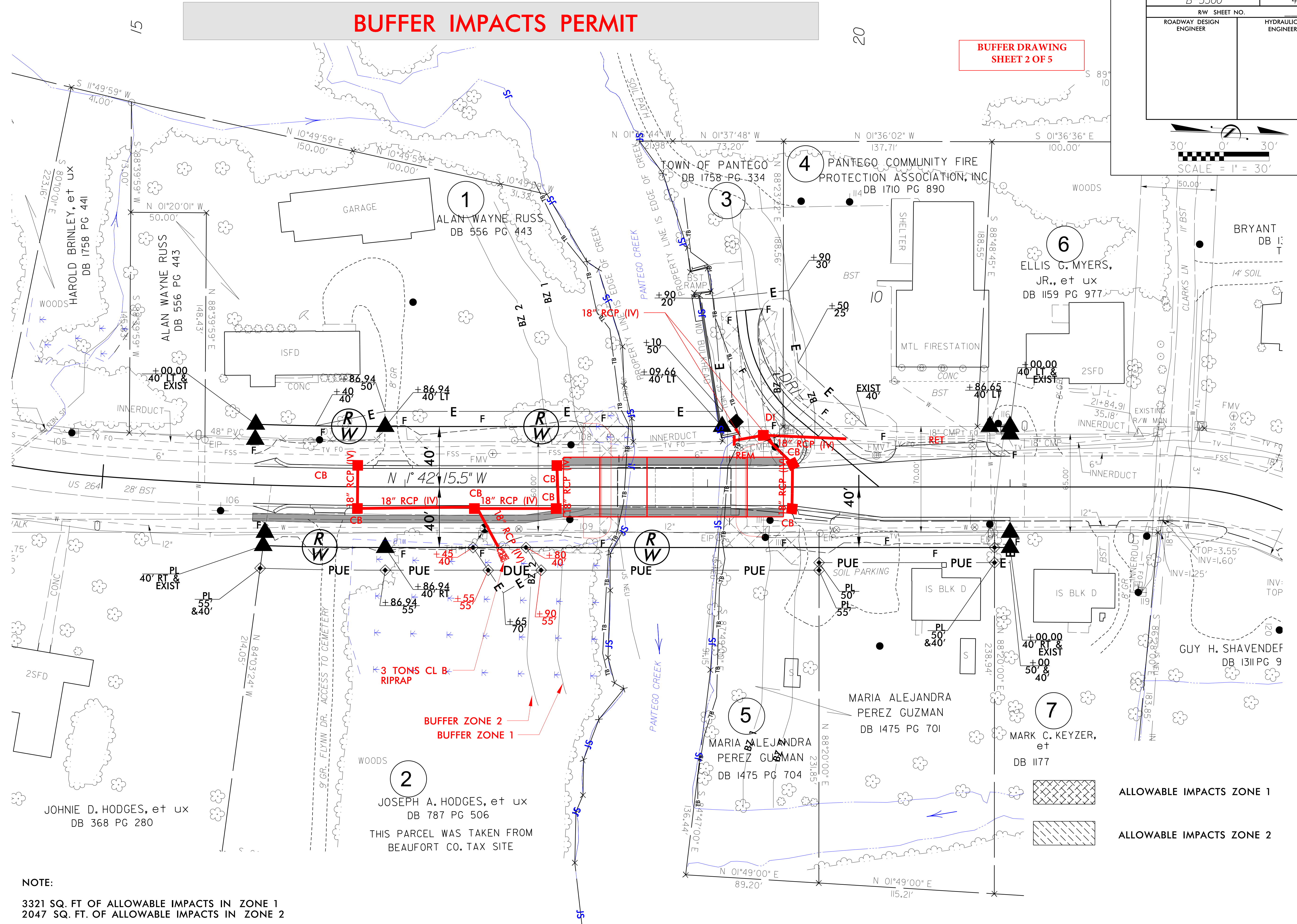
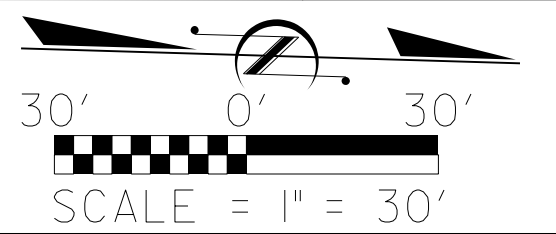
\$\$\$\$\$ SYSTEM \$\$\$\$\$\$
\$\$\$\$\$ DGN \$\$\$\$\$\$
\$\$\$\$\$ USERNAME \$\$\$\$\$\$

Revised 12/4/2015

BUFFER IMPACTS PERMIT



BUFFER DRAWING
SHEET 2 OF 5

PROJECT REFERENCE NO. B-5300	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS

NOTE:
 3321 SQ. FT. OF ALLOWABLE IMPACTS IN ZONE 1
 2047 SQ. FT. OF ALLOWABLE IMPACTS IN ZONE 2

 ALLOWABLE IMPACTS ZONE 1
 ALLOWABLE IMPACTS ZONE 2

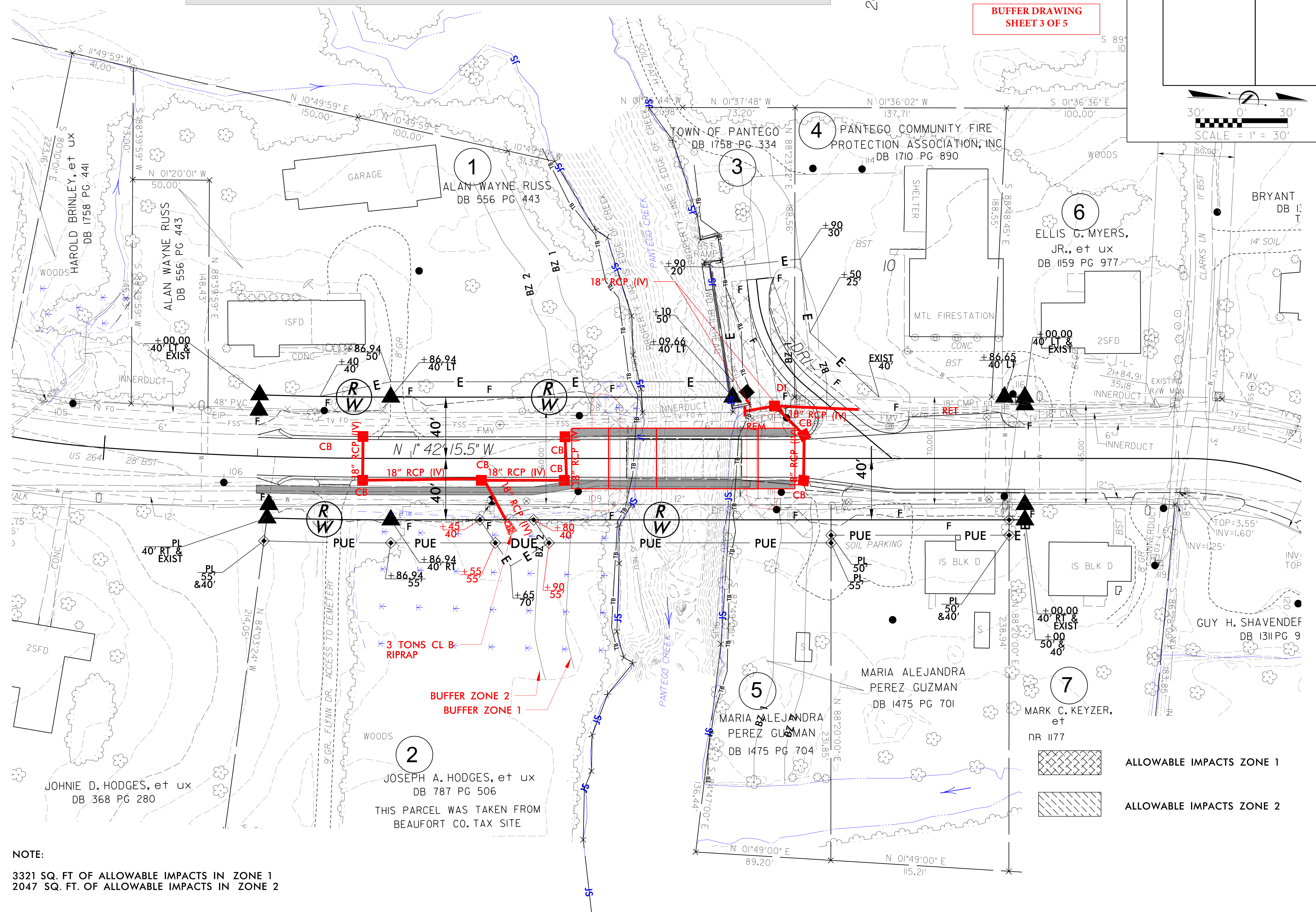
1/17/2015
R:\Drawings\B-5300_buf_psh.dgn
shurabatt

Revised 12/4/2015

BUFFER IMPACTS PERMIT

PROJECT REFERENCE NO. B-5300	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SCALE = 1" = 30'



NOTE:
3321 SQ. FT. OF ALLOWABLE IMPACTS IN ZONE 1
2047 SQ. FT. OF ALLOWABLE IMPACTS IN ZONE 2

REVISIONS

1/17/2015
R:\Drawings\B-5300_buf_psh1.dgn
shurbutt

Revised 12/4/2015

5/28/99

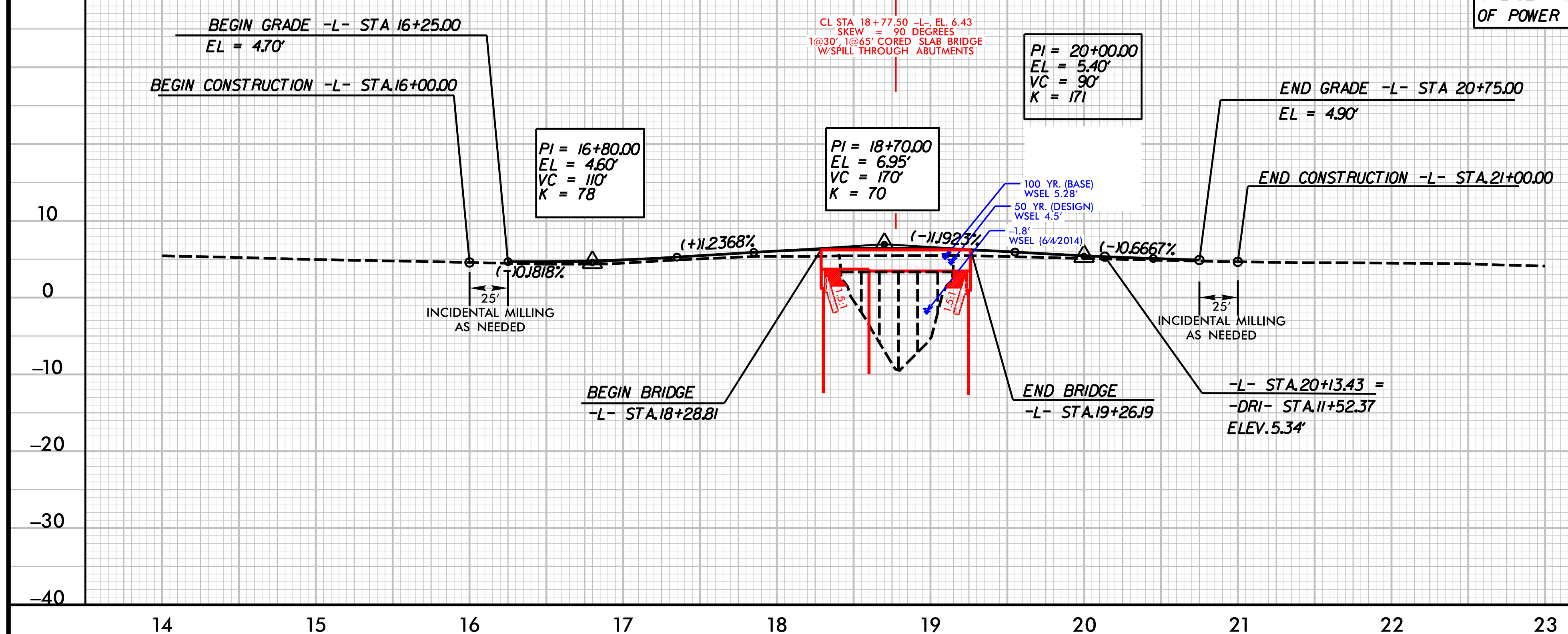


AMEC Environment & Infrastructure, Inc.
4021 Stirrup Creek Drive, Suite 100
Durham, North Carolina 27703
NC Engineering F-1253 NC Geology C-247
(919) 381-9900

PROJECT REFERENCE NO. B-5300	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

-L-

BM-1, -BL- 30+32
15' LT. ELEV. = 3.9'
NAIL SET IN BASE
OF POWER POLE



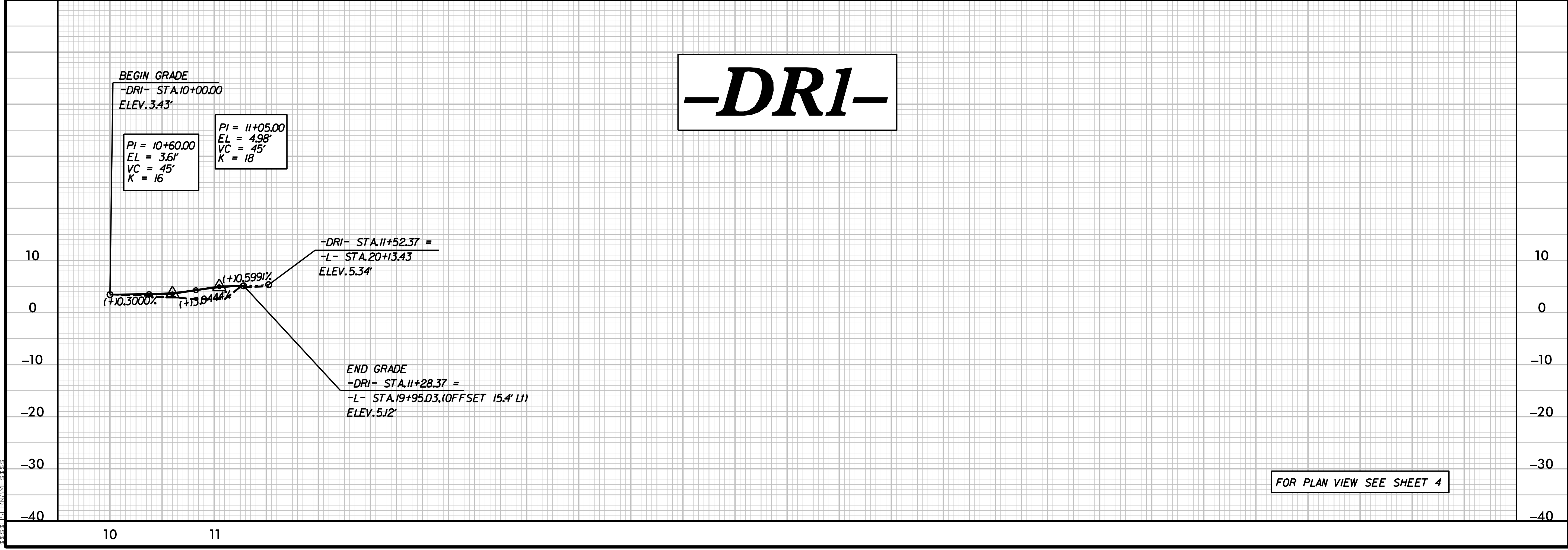
BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	2,389 cfs
DESIGN FREQUENCY	50 yr
DESIGN HW ELEVATION	4.5 ft
BASE DISCHARGE	3,050 cfs
BASE FREQUENCY	100 yr
BASE HW ELEVATION	5.28 ft
OVERTOPPING DISCHARGE	2,389 cfs
OVERTOPPING FREQUENCY	50 yr
OVERTOPPING ELEVATION	4.5 ft
DATE OF SURVEY	6/4/2014
W.S.ELEVATION	-1.8 ft
AT DATE OF SURVEY	

BUFFER DRAWING
SHEET 4 OF 5

FOR PLAN VIEW SEE SHEET 4

-DRI-



FOR PLAN VIEW SEE SHEET 4

Revised 12/4/2015

BUFFER IMPACTS SUMMARY

			IMPACT									BUFFER REPLACEMENT	
SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	TYPE			ALLOWABLE			MITIGABLE			ZONE 1 (ft ²)	ZONE 2 (ft ²)
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)		
1	Bridge	-L- 19+28 - 13+26'		X		3321.0	2047.0						
TOTAL:						2014.0	2047.0	0.0	0.0	0.0	0.0		

NOTE:
 3321 SQ FT of allowable impacts in zone 1
 2047 SQ FT of allowable impacts in zone 2

**BUFFER DRAWING
SHEET 5 OF 5**

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS

42268
 BEAUFORT COUNTY
 BRIDGE NO 55 ON US 264
 OVER PANTEGO CREEK
 9/24/2015
 SHEET 1 OF 1

09/26/09

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

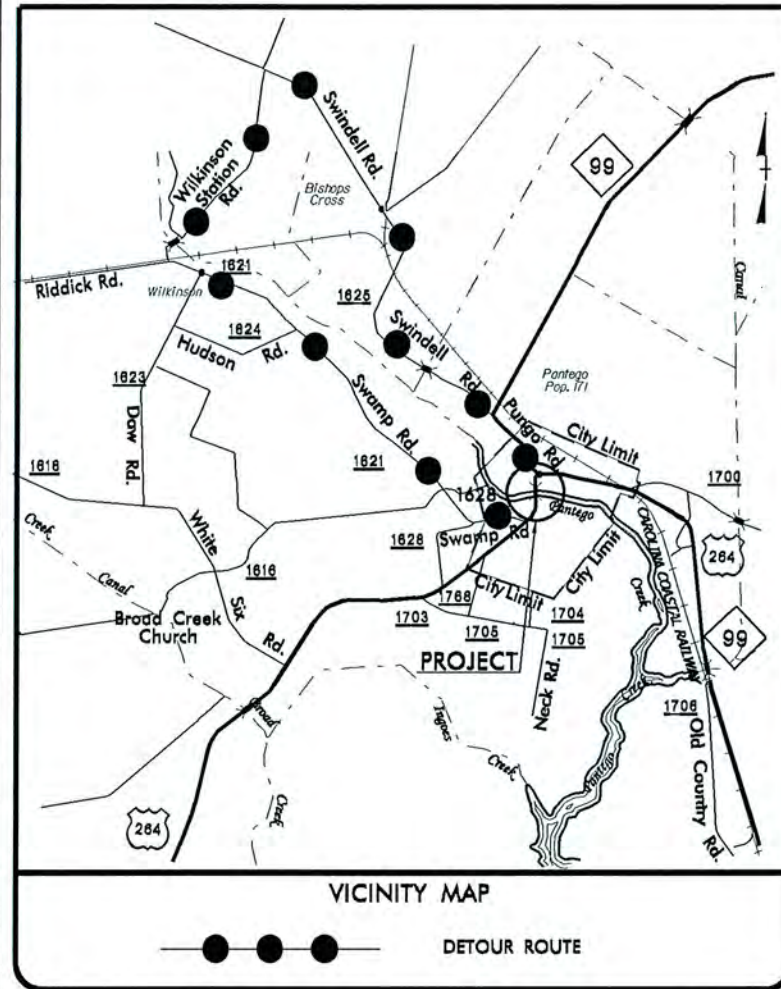
**NWS PERMIT DRAWING PLANS
BEAUFORT COUNTY**

LOCATION: REPLACE BRIDGE NO. 55 OVER PANTEGO CREEK ON US 264

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5300	NWS-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
46000.1.1	BRSTP-0264(53)	P.E.	
46000.2.FS1	BRSTP-0264(53)	RW	

TIP PROJECT: B-5300

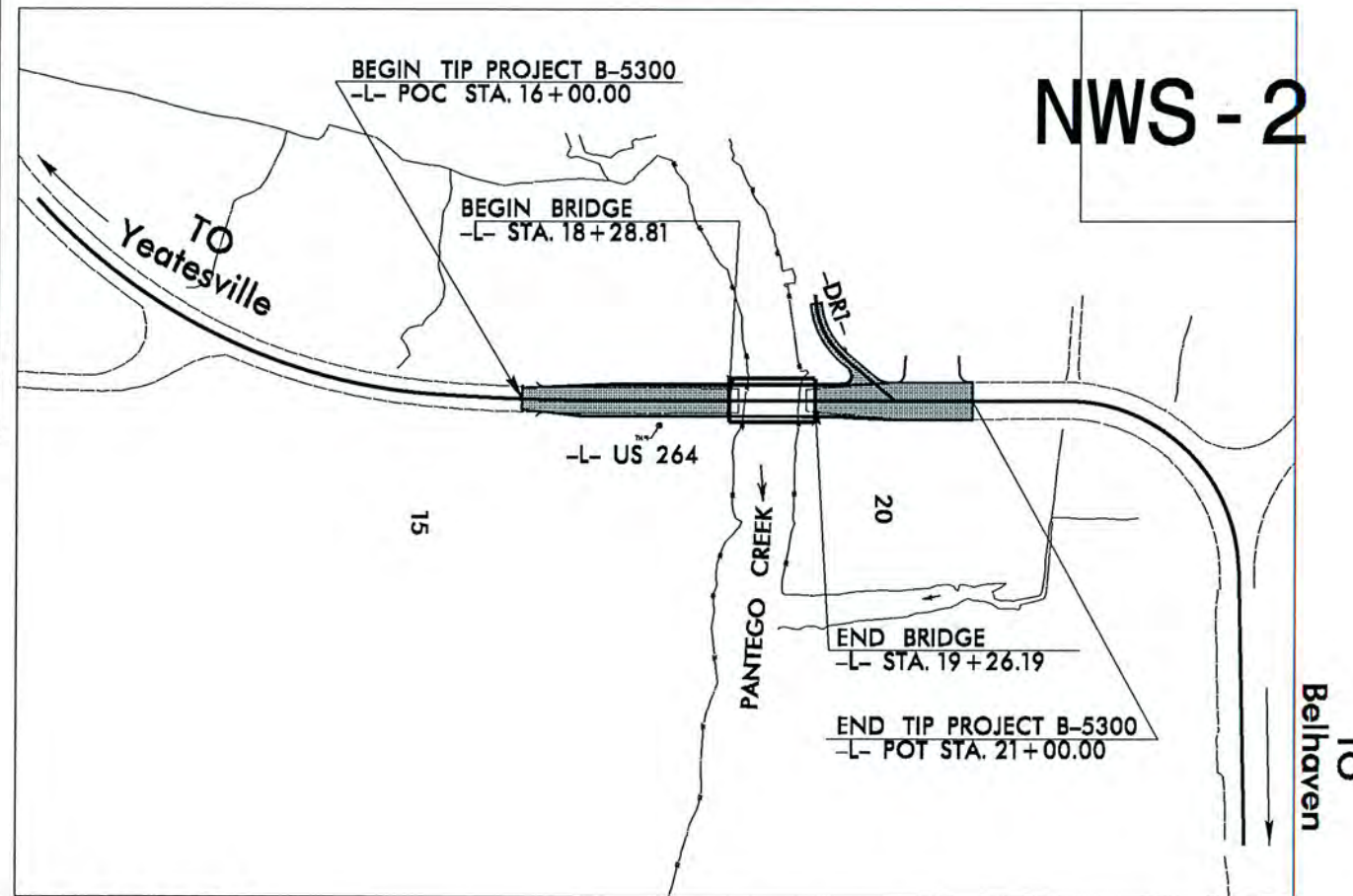


VICINITY MAP

● ● ● ● DETOUR ROUTE

**Revised
11/25/15**

THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.
THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARY OF PANTEGO.



NWS - 2

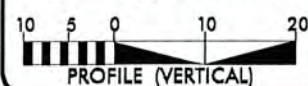
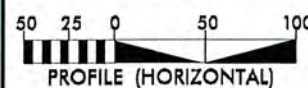


Utility Permit Drawing
Sheet 1 of 6

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONTRACT:

GRAPHIC SCALES



DESIGN DATA

ADT 2017 = 4474
 ADT 2037 = 7170
 K = 10 %
 D = 60 %
 T = 14 % *
 V = 30 MPH
 * TTST = 8% DUAL = 6%
 FUNC CLASS = ARTERIAL
 SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-5300 = 0.077 MILES
 LENGTH STRUCTURE TIP PROJECT B-5300 = 0.018 MILES
 TOTAL LENGTH TIP PROJECT B-5300 = 0.095 MILES



Prepared in the Office of:
 AMEC Environment & Infrastructure, Inc.
 4021 Stroup Creek Drive, Suite 100
 Durham, North Carolina 27703
 NC Engineering F-1253 NC Geology C-247
 (919) 381-9900

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MARCH 20, 2015

LETTING DATE:
MARCH 21, 2017

W. S. HOOD, PE
PROJECT ENGINEER

BRAD TRIPP, PE
PROJECT DESIGN ENGINEER

GARY LOVERING, PE
PROJECT ENGINEER
NCDOT ROADWAY DESIGN

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN
ENGINEER

SIGNATURE: _____ P.E.



24-NOV-2015 14:59
R:\Utilities\Engineer\Permit Plans and Narrative\First Submittal\B-5300_Rdy_tsh.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$

WATER LINES OWNED BY BEAUFORT COUNTY
SEWER LINES OWNED BY TOWN OF BELHAVEN



PREPARED IN THE OFFICE OF:
THE WOOTEN COMPANY
135 North Eagle Avenue, Raleigh, NC 27605-9153
919.882.1111 Fax 919.882.1156
License No. 1-031

PROJECT REFERENCE NO.	B-5300	SHEET NO.	NWS-2
DESIGNED BY:	JRG	DRAWN BY:	TK
CHECKED BY:	JRG	APPROVED BY:	MDS
REVISIONS:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		SEAL 37878 ENGINEER JAMES R. GREGG	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		UTILITY CONSTRUCTION PLANS ONLY	

VERTICAL SCALE: 5' = 1" (0, 5, 10)
HORIZONTAL SCALE: 25' = 1" (0, 25, 50)

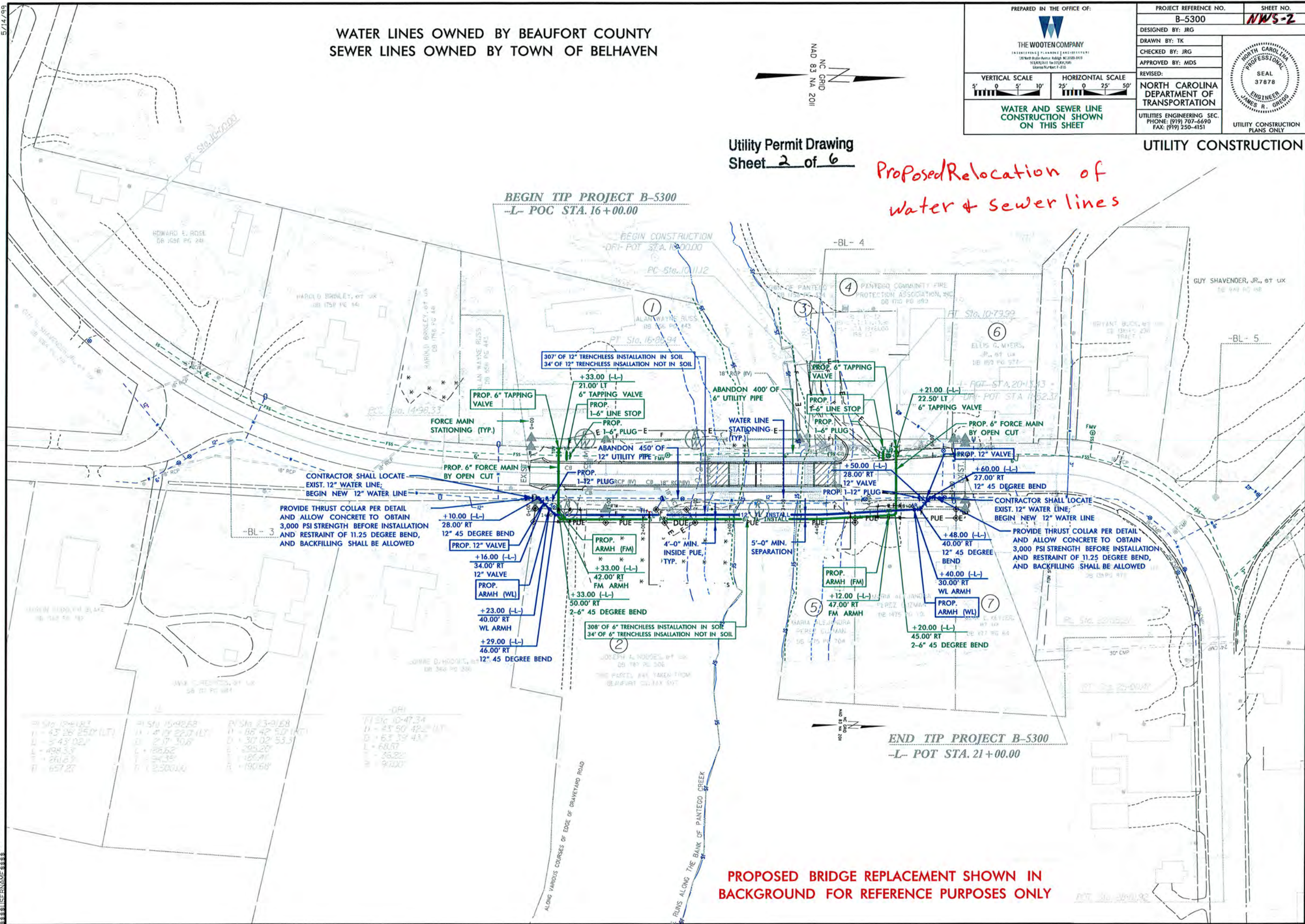
WATER AND SEWER LINE CONSTRUCTION SHOWN ON THIS SHEET

Utility Permit Drawing
Sheet 2 of 6

Proposed Relocation of
water & sewer lines

BEGIN TIP PROJECT B-5300
-L- POC STA. 16+00.00

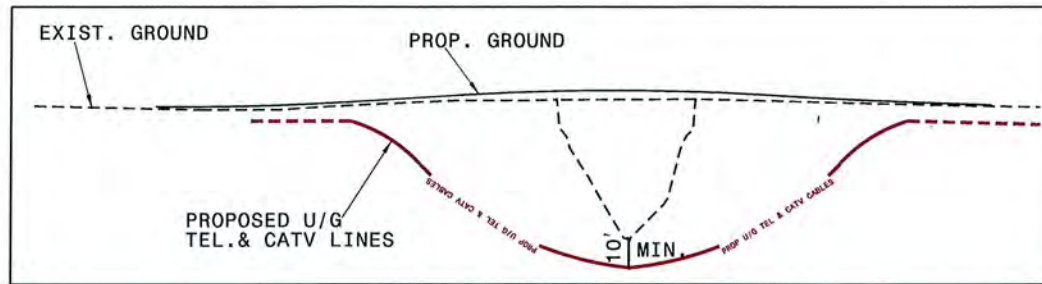
END TIP PROJECT B-5300
-L- POT STA. 21+00.00



5/14/99
UTILITY CONSTRUCTION PLANS ONLY

8/17/99

TYPICAL INSTALLATION OF PROP. U/G TELEPHONE & CATV LINES UNDER PANTEGO CREEK SUB GRADE



AMEC Environment & Infrastructure, Inc.
4021 Stirrup Creek Drive, Suite 100
Durham, North Carolina 27703
NC Engineering F-1253 NC Geology C-247
(919) 381-9900

PROJECT REFERENCE NO. B-5300	SHEET NO. MWS-2A
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

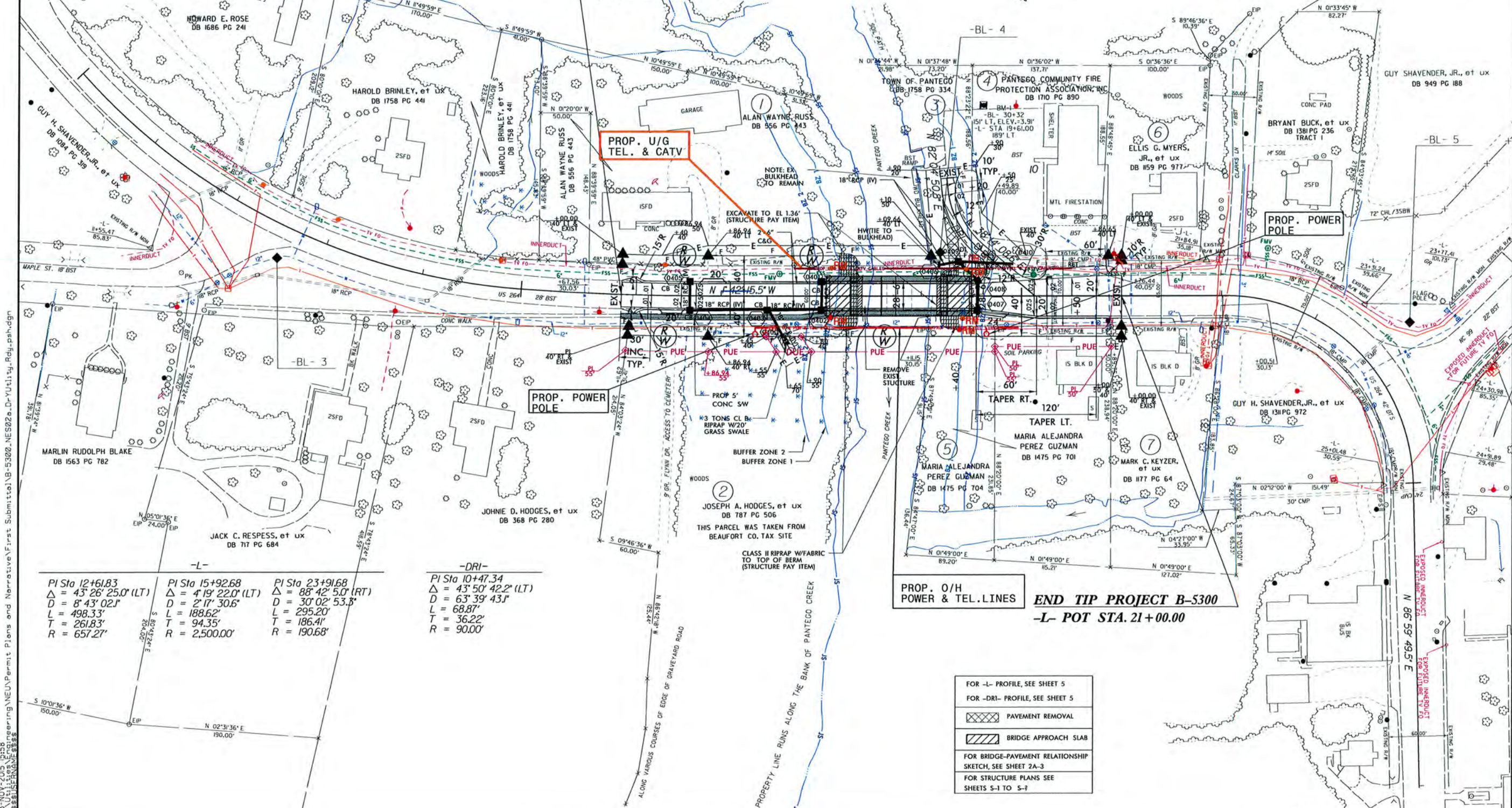
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NAD 83/NA 2011

Proposed RELOCATION OF POWER, TEL. AND CATV LINES

Utility Permit Drawing
Sheet 3 of 6

BEGIN TIP PROJECT B-5300
-L- POC STA. 16+00.00



PI Sta 12+61.83 Δ = 43° 26' 25.0" (LT) D = 8' 43' 02.1" L = 498.33' T = 261.83' R = 657.27'	PI Sta 15+92.68 Δ = 4° 19' 22.0" (LT) D = 2' 17' 30.6" L = 188.62' T = 94.35' R = 2,500.00'	PI Sta 23+91.68 Δ = 88° 42' 5.0" (RT) D = 30' 02' 53.3" L = 295.20' T = 186.41' R = 190.68'
--	--	--

-DRI-
PI Sta 10+47.34 Δ = 43° 50' 42.2" (LT) D = 63' 39' 43.1" L = 68.87' T = 36.22' R = 90.00'

PROP. O/H POWER & TEL. LINES
END TIP PROJECT B-5300
-L- POT STA. 21+00.00

FOR -L- PROFILE, SEE SHEET 5
FOR -DRI- PROFILE, SEE SHEET 5
PAVEMENT REMOVAL
BRIDGE APPROACH SLAB
FOR BRIDGE-PAVEMENT RELATIONSHIP SKETCH, SEE SHEET 2A-3
FOR STRUCTURE PLANS SEE SHEETS S-1 TO S-7

23-NOV-2005 15:58
Submitting NEU\Permit Plans and Narrative\B-5300_NES02.Dr-Yutiltu_Rdy_psh.dgn

8/17/99



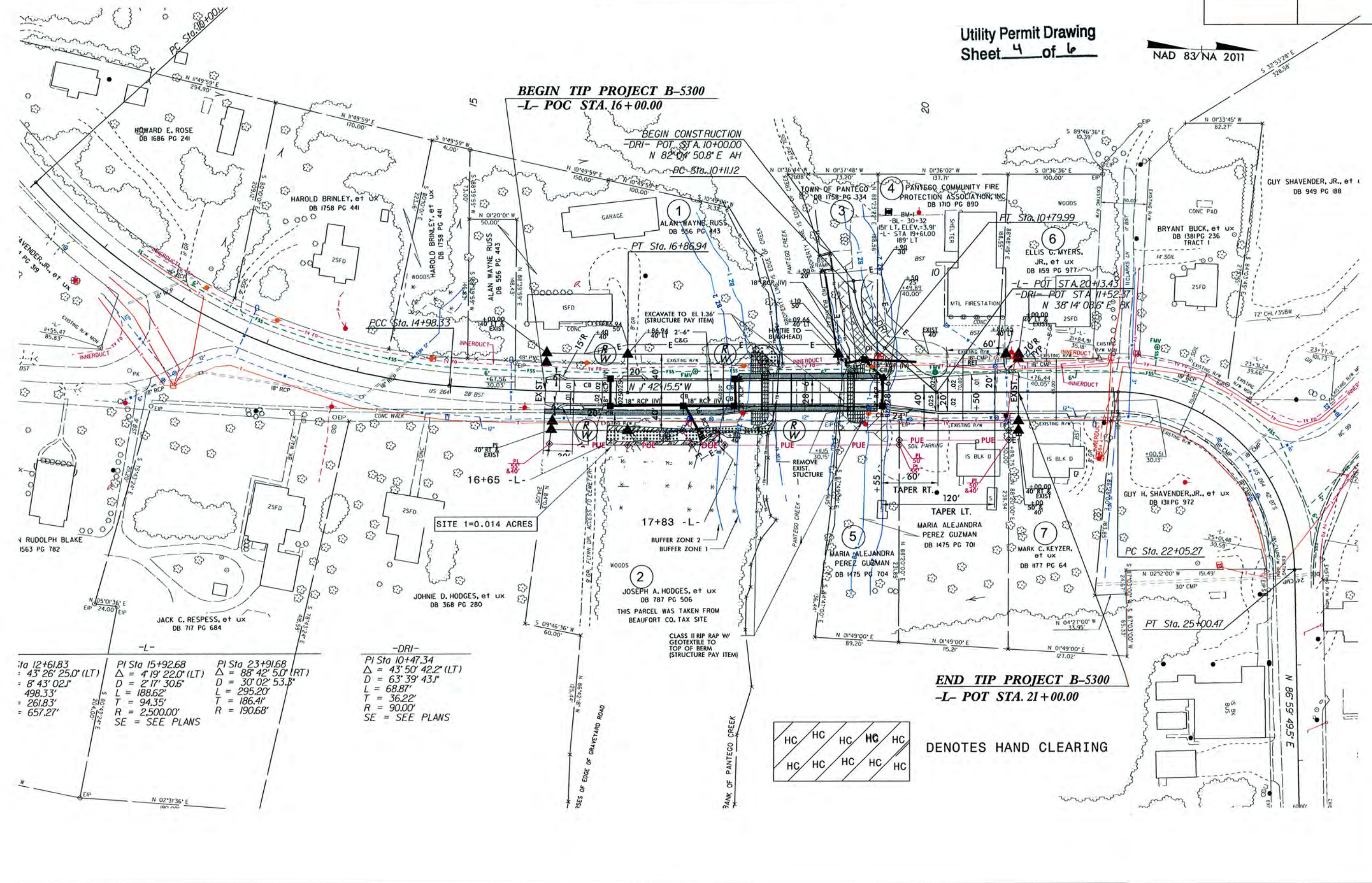
AMEC Environment & Infrastructure, Inc.
4021 Shilpp Creek Drive, Suite 100
Durham, North Carolina 27703
NC Engineering F-1253 NC Geology C-247
(919) 381-9900

PROJECT REFERENCE NO. B-5300	SHEET NO. NWS-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

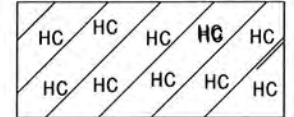
WETLAND IMPACT

Utility Permit Drawing
Sheet 4 of 6

NAD 83/NA 2011



-L-	-DRI-
PI Sta 12+61.83 Δ = 43° 26' 25.0" (LT) D = 8' 43' 02.1" L = 498.33' T = 261.83' R = 657.27'	PI Sta 15+92.68 Δ = 4° 19' 22.0" (LT) D = 2' 17' 30.6" L = 188.62' T = 94.35' R = 2,500.00' SE = SEE PLANS
PI Sta 23+91.68 Δ = 88° 42' 5.0" (RT) D = 30' 02" 53.3" L = 295.20' T = 186.41' R = 190.68'	PI Sta 10+47.34 Δ = 43° 50' 42.2" (LT) D = 63' 39' 43.1" L = 68.87' T = 36.22' R = 90.00' SE = SEE PLANS




HC HC HC HC HC
HC HC HC HC HC
DENOTES HAND CLEARING

C:\Users\jg\Documents\Projects\B-5300\NWS-2B\Impact\Wetland\wland.psh.dgn

5/28/99

WATER LINES OWNED BY BEAUFORT COUNTY SEWER LINES OWNED BY TOWN OF BELHAVEN

PREPARED IN THE OFFICE OF:



PROJECT REFERENCE NO. B-5300 SHEET NO. **W/S-20**

DESIGNED BY: JRG
DRAWN BY: TK
CHECKED BY: JRG
APPROVED BY: MDS
REVISOR:

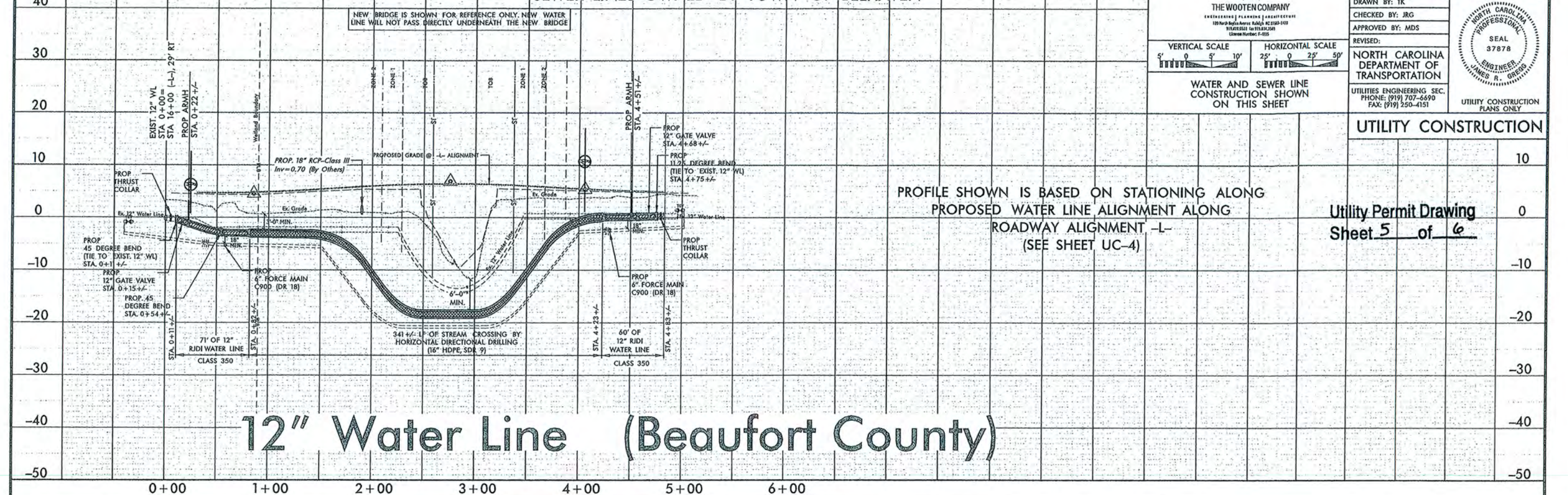
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 37878
JAMES R. GREGG

VERTICAL SCALE: 1" = 10'
HORIZONTAL SCALE: 1" = 50'

WATER AND SEWER LINE CONSTRUCTION SHOWN ON THIS SHEET

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151

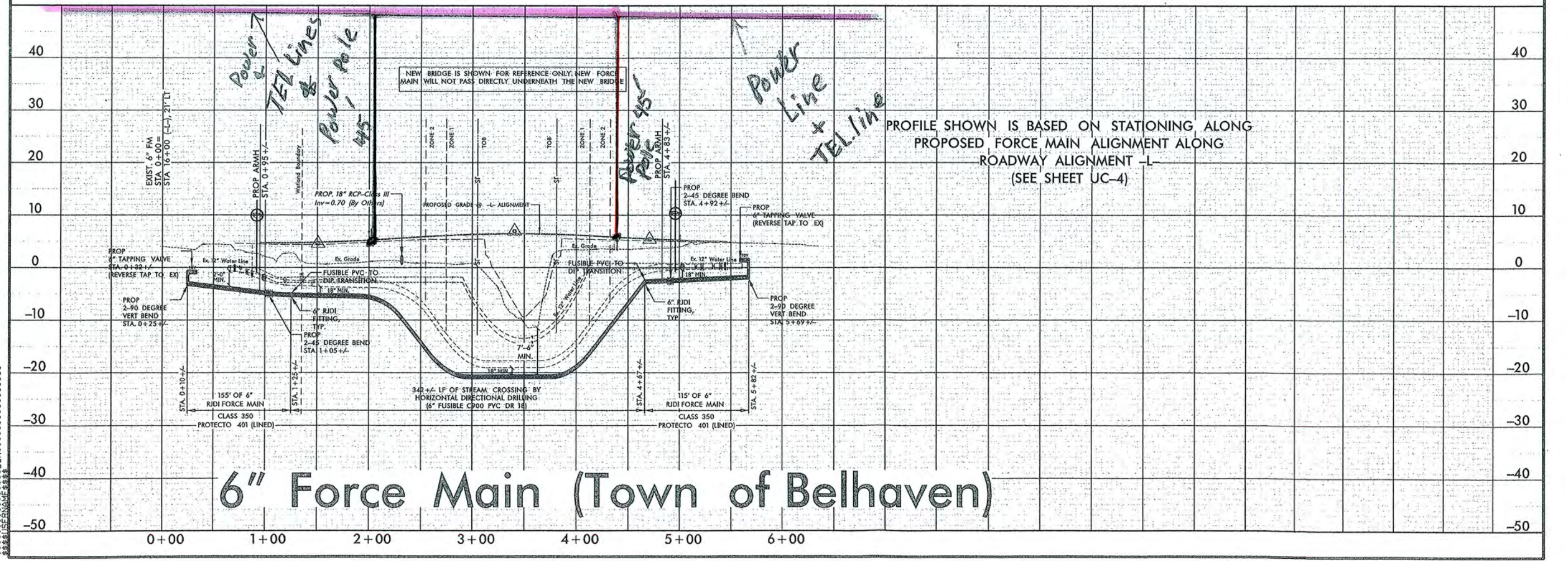
UTILITY CONSTRUCTION PLANS ONLY



PROFILE SHOWN IS BASED ON STATIONING ALONG PROPOSED WATER LINE ALIGNMENT ALONG ROADWAY ALIGNMENT -L- (SEE SHEET UC-4)

Utility Permit Drawing Sheet 5 of 6

12" Water Line (Beaufort County)



PROFILE SHOWN IS BASED ON STATIONING ALONG PROPOSED FORCE MAIN ALIGNMENT ALONG ROADWAY ALIGNMENT -L- (SEE SHEET UC-4)

6" Force Main (Town of Belhaven)

*****SYSTEM TIME*****
*****DATE*****
*****PAGE*****

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	16+65 to 17+83-L-	AERIAL POWER LINE					0.01					
TOTALS:							0.00	0.01	0.00	0.00	0.00	0.00

Utility Permit Drawing
Sheet 6 of 6

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
Beaufort County
TIP PROJECT (B-5300)

Rev. 11/25/2015

ATN Revised 3/31/05

09/08/15

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

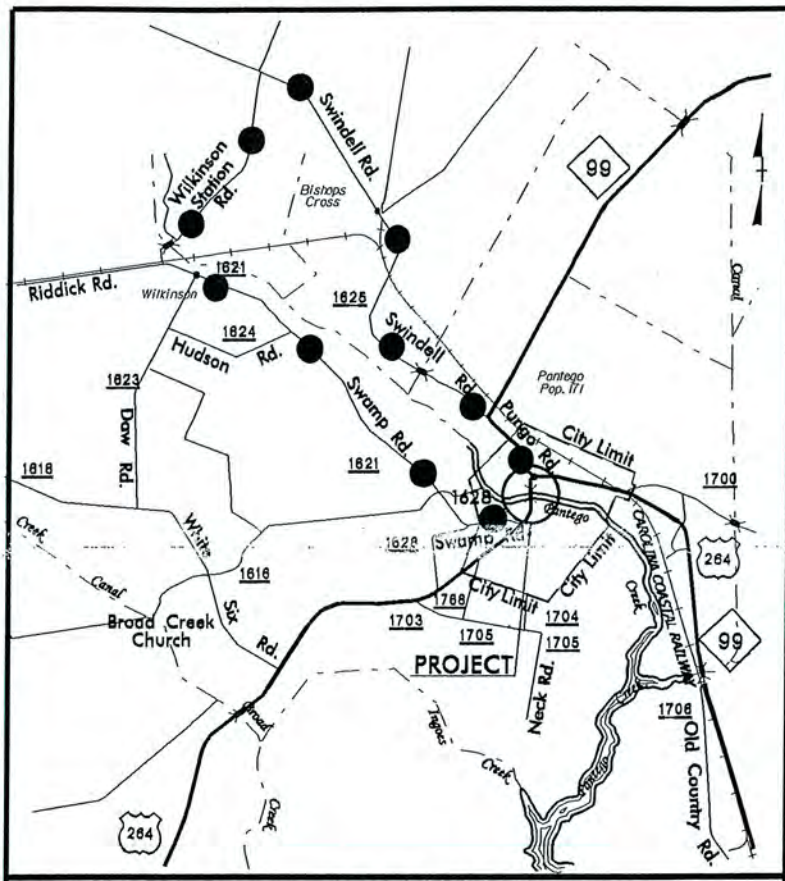
**NWS PERMIT DRAWING PLANS
BEAUFORT COUNTY**

LOCATION: REPLACE BRIDGE NO. 55 OVER PANTEGO CREEK ON US 264

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE

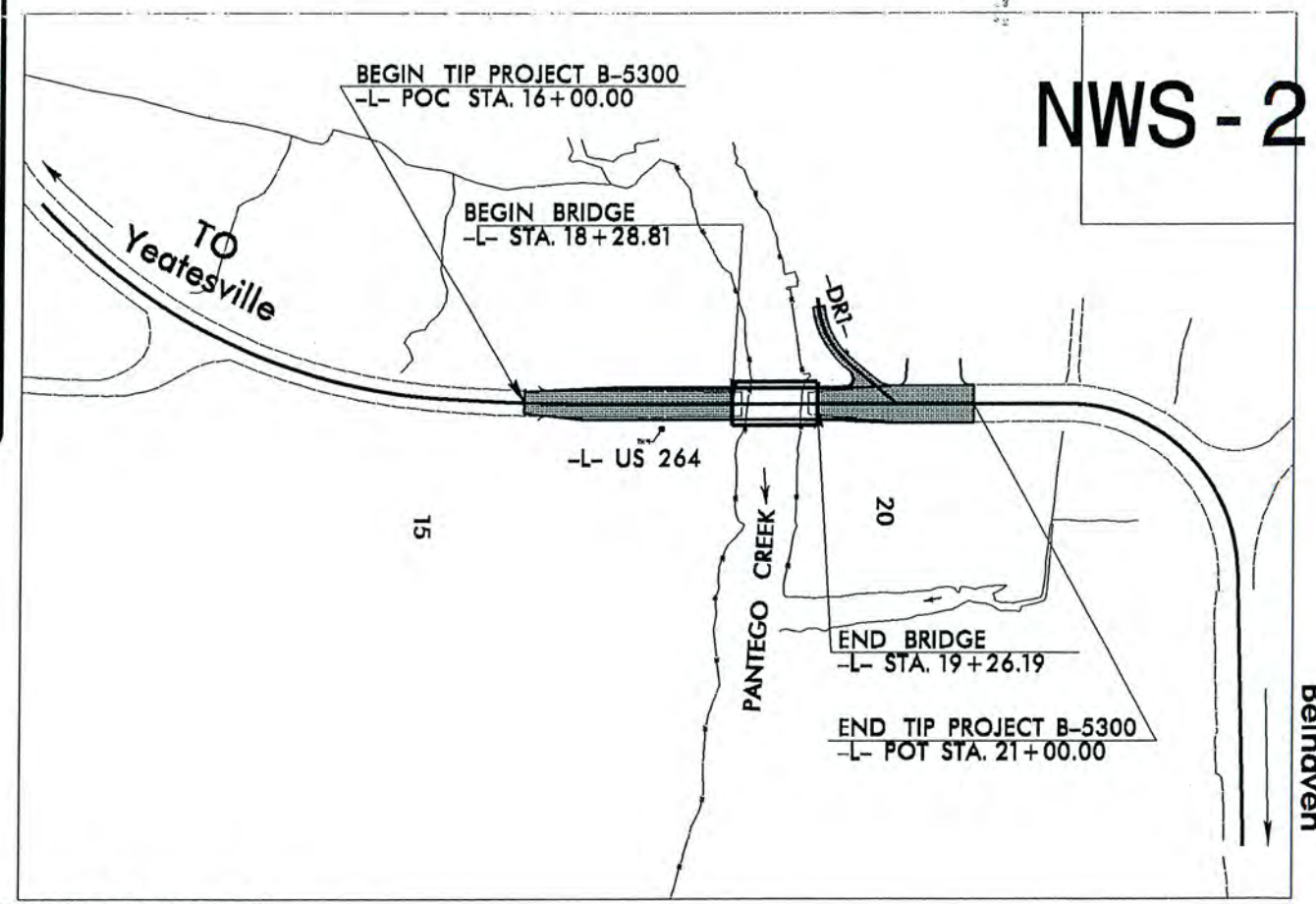
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5300	NWS-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
46000.1.1	BRSTP-0264(53)	P.E.	
46000.2.FS1	BRSTP-0264(53)	R/W	

TIP PROJECT: B-5300



VICINITY MAP
●●● DETOUR ROUTE

**Revised
11/25/15**



NWS - 2

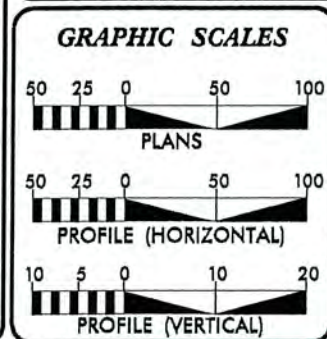


Buffer Drawing
Sheet 1 of 3

THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.
THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARY OF PANTEGO.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONTRACT:



DESIGN DATA

ADT 2017 =	4474
ADT 2037 =	7170
K =	10 %
D =	60 %
T =	14 % *
V =	30 MPH
* TTST =	8% DUAL = 6%
FUNC CLASS =	ARTERIAL
SUBREGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-5300 =	0.077 MILES
LENGTH STRUCTURE TIP PROJECT B-5300 =	0.018 MILES
TOTAL LENGTH TIP PROJECT B-5300 =	0.095 MILES

Prepared in the Office of:
amec AMEC Environment & Infrastructure, Inc.
4021 Stirrup Creek Drive Suite 100
Durham, North Carolina 27703
NC Engineering F-1253 NC Geology C-247
(919) 381-9900

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MARCH 20, 2015

LETTING DATE:
MARCH 21, 2017

W. S. HOOD, PE
PROJECT ENGINEER

BRAD TRIPP, PE
PROJECT DESIGN ENGINEER

GARY LOVERING, PE
PROJECT ENGINEER
NCDOT ROADWAY DESIGN

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



24-NOV-2015 14:59 R:\Utilities\Engineering\NEU\Permit Plans and Narrative\First Submittal\B-5300_Rdy_tsh.dgn \$\$\$USERNAME\$\$\$

8/17/99

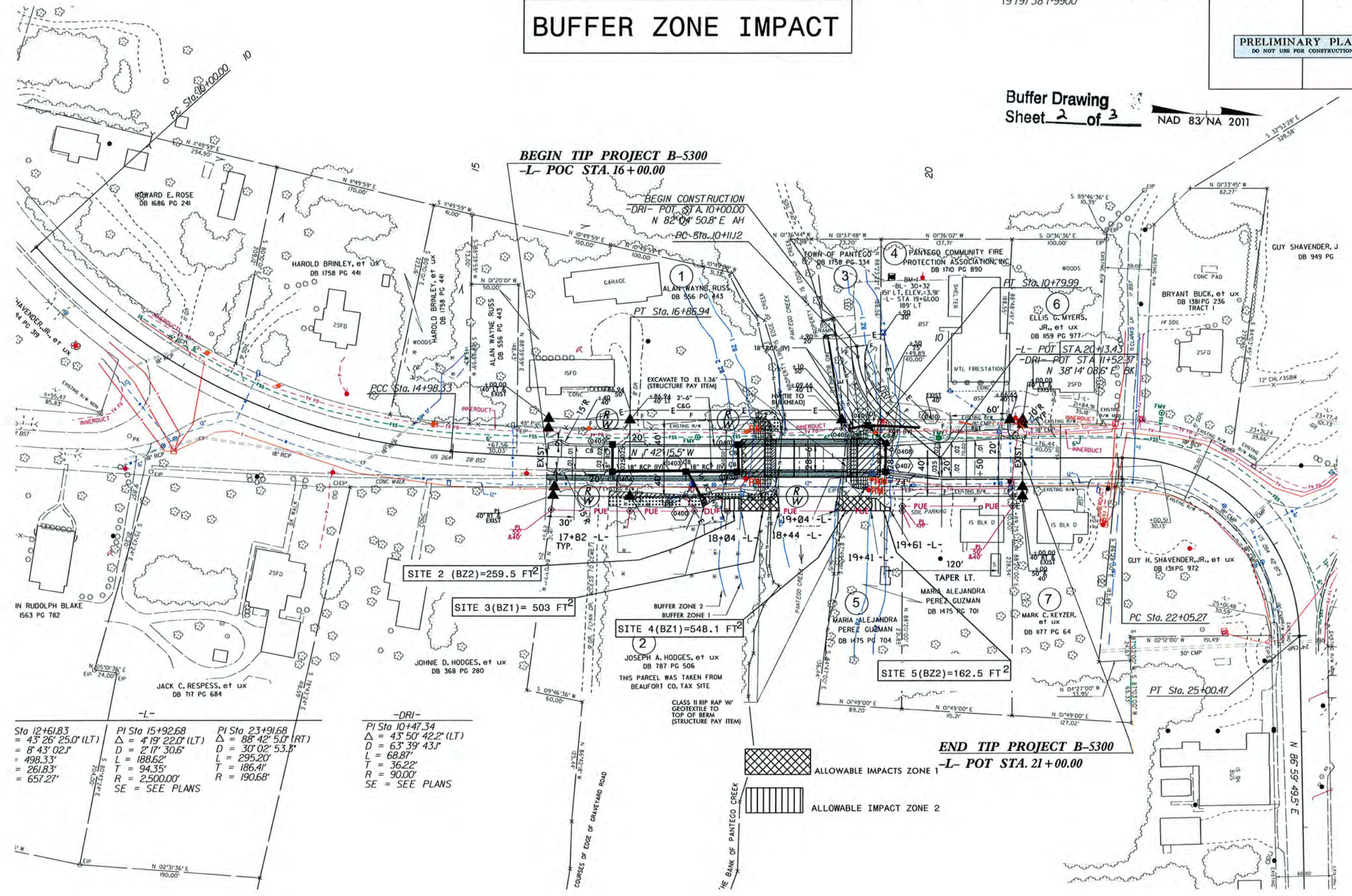


AMEC Environment & Infrastructure, Inc.
4021 Stirrup Creek Drive, Suite 100
Durham, North Carolina 27703
NC Engineering F-1253 NC Geology C-247
(919) 381-9900

PROJECT REFERENCE NO. B-5300	SHEET NO. MWS-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

BUFFER ZONE IMPACT

Buffer Drawing
Sheet 2 of 3
NAD 83/NA 2011



-L-

Sta 12+61.83 = 43' 26" 25.0' (LT) = 8' 43' 02.1" = 498.33' = 261.83' = 657.27'	PI Sta 15+92.68 Δ = 4' 19' 22.0" (LT) D = 2' 17' 30.6" L = 188.62' T = 94.35' R = 2,500.00' SE = SEE PLANS	PI Sta 23+91.68 Δ = 88' 42' 5.0" (RT) D = 30' 02' 53.3" L = 295.20' T = 186.41' R = 190.68'
---	--	--

-DRI-

PI Sta 10+47.34 Δ = 43' 50' 42.2" (LT) D = 63' 39' 43.1" L = 68.87' T = 36.22' R = 90.00' SE = SEE PLANS
--

25 NOV-2015 08:47
C:\Users\jeh\OneDrive\Engineering\NEU\Permit\B-5300\NES02C.Rdy_Impact.BZ_pah.dgn

BUFFER IMPACTS SUMMARY

SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	IMPACT									BUFFER REPLACEMENT	
			TYPE			ALLOWABLE			MITIGABLE			ZONE 1 (ft ²)	ZONE 2 (ft ²)
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)		
2	Power Line	17+82to 18+04-L-					259.5						
3	Power Line	18+04 to 18+44 -L-				503.0							
4	Power Line	19+04 to 19+41 -L-				548.1							
5	Power Line	19+41 to 19+61 -L-					162.5						
TOTALS:						1051.1	422.0						

Buffer Drawing
Sheet 3 of 3

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

BEAUFORT COUNTY
PROJECT: B-5300
Rev. 11/25/2015

SHEET 1 OF 1