



IN REPLY REFER TO

DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS

Washington Regulatory Field Office  
2407 West 5<sup>th</sup> Street  
Washington, North Carolina 27889

January 20, 2016

Regulatory Division

Action ID No. 2008-00528  
Mr. Richard W. Hancock, P.E., Manager  
Project Development and Environmental Analysis Unit  
1598 Mail Service Center  
Raleigh, North Carolina 27699-1598

Dear Mr. Hancock:

Reference the Department of the Army (DA) individual permit (IP) issued to you on May 22, 2015, to impact approximately 46.86 acres of Department of the Army (DA) jurisdictional wetlands and 4281 linear feet of surface waters associated with 16 miles of highway improvements near or within the US Highway 17 corridor within Onslow, Jones and Craven Counties, North Carolina.

This office received permit modification dated December 11, 2015 affecting Section B, Permit Site numbers 10 and 12 respectively of the above referenced project. The modification request is detailed as follows:

1). Site 10- Structures 2 and 3:

This permit modification requests temporary access between structures 2 & 3 at Sta. 147+95+00 -L-, be modified as depicted in the submitted plan sheet. The proposed design removes the fingers at bent 1 of the proposed permanent bridge and extends the work trestle over Higgins Branch connecting the two sides. The additional area requested will have a trestle with a maximum width of 30 ft and a minimum low steel elevation as the proposed permanent bridge. The environmental impact area for this location will decrease in size. The impacted area breakdown is as follows using 30 inch diameter steel pile at 35 ft bent spacing:

- Impact disturbed by trestle columns in non-permitted area: 44.18 sqft
- Total area disturbed by trestle columns: 132.5 sqft (27 columns)
- Temporary impacts due to temporary bridge bents in wetlands on Site 10 is <0.01 acre (435.6 sqft)

2). Site 12- Structures 4 and 5:

This permit modification requests temporary access between structures 4 & 5 at Sta. 173+54.46 -L-, as depicted in the submitted plan sheets. The modified design will remove part of the fingers at bent 2 of the permanent bridge and extend the work trestle over White Oak River connecting the two sides. The additional area requested will have a trestle with a maximum width of 30 ft and a minimum low steel elevation as the proposed permanent bridge and the existing US 17 bridge located downstream. The environmental impact area for this location will decrease in size. The impacted area breakdown is as follows using 30 inch diameter steel pile at 35 ft bent spacing:

- Impact disturbed by trestle columns in non-permitted area: 44 .18 sq.ft.
- Total area disturbed by trestle columns: 500.69 sq.ft. (102 columns)

- Temporary impacts due to temporary bridge bents in wetlands on Site 12 is <0.03 acre (1306.8 sq.ft.).

These modification requests were discussed and coordinated with the appropriate State and Federal agencies at several on-site meetings and the coordination revealed no objections to this modification request. The proposed modifications for R-2514 B as detailed above are hereby modified in accordance with the specific work activities described and depicted on the plan sheets, drawings and descriptions submitted with the permit modification request package (Permit Drawing Sheet Site 10 and Site 12 noted with the date December 09, 2015)

It is understood that all conditions of the original permit and applicable modifications remain valid. In addition, the permittee will comply with the additional special permit conditions as follows:

- a.) All work authorized by this permit modification must be performed in strict compliance with the submitted work plans, which are part of this permit. Any modification to the permit plans must be approved by US Army Corps of Engineers (Corps) prior to implementation.
- b.) The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit, and any authorized modifications. A copy of this permit, and any authorized modifications, including all conditions, shall be available at the project site during construction and maintenance of this project.

Questions regarding this correspondence may be directed to Tom Steffens, NCDOT Coordinator/Regulatory Project Manager at the Washington Regulatory Field Office, telephone (910) 251-4615.

Sincerely,

STEFFENS.THOMAS.ANCRUM.1284706273  
2016.01.20 12:53:49 -05'00'

Tom Steffens  
Regulatory Project Manager  
Washington Regulatory Field Office

E-Copies:

Brad McMannen/NCDOT  
Ed Eatmon/NCDOT  
Gordon Cashin/NCDOT  
Jay Johnson/NCDOT  
Chris Rivenbark/NCDOT  
Garcy Ward/NCDWR  
Stephen Lane/NCDCM



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald van der Vaart  
Secretary

North Carolina Division of Water Resources  
Transportation Permitting Unit

In-Field Minor 401 Water Quality Certification, Buffer Certification and Isolated Water Permit  
Modification

Project Name/ TIP Project No.: R-2514 B Date: 1-27-16

DOT Division: 2 County: Cnslow DWR Project No. / Permit Type: 20141109 v.3 / IP

DOT Staff: Jay Johnson DWR Staff: Garcy Ward

ACE Staff: Tom Steffens DWR Regional Office: Washington

Modification Description:

The project involves removing the temporary access fingers and extending the work trestles over Higgins Branch and the White Oak R. at sites 10 and 12 respectively. This will reduce the amount of temporary impacts due to bridge berms at both locations. There will be no changes to permanent impacts or temporary impacts that were included in the Impact Summary sheet.

Modification Sketch:

See attached

This in-field modification is required for the following reason(s):

- The information contained in the application or presented in support thereof is incorrect in the following manner:

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- Conditions under which the original certification was issued have changed in the following manner:

Changes to the temporary work platforms / work trestle  
at Sites 10 and 12.

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This in-field modification is valid only if issued by an authorized agent of the Division of Water Resources, Transportation Permitting Unit <sup>1</sup>.

This in-field modification authorizes the NCDOT to

extend the temporary work trestle across Higgins Br and the  
White Oak R

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in Jones Onslow County. The project shall be constructed as described in the Modification Description and Sketch on Page 1 of this document dated 1-27-16 to improve/construct the section of US 17 that extends from at Sites 10 and 12 to \_\_\_\_\_. The approved design is that described in the Modification Description and Modification Sketch on Page 1 of this document dated 1-27-16. Any further changes to the original Water Quality Certification dated 3-2-15 may require a formal written modification request.

The description of the proposed action provides adequate assurance that the proposed action in the White Oak River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Section 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth. Should your project change, you are required to notify the DWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all conditions. For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state, or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Modification Approval shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Conditions(s) of Modification Approval:

1. As-built drawings of the proposed action shall be submitted to the NC DWR Transportation Permitting Unit within 30 days of completion of the action.
2. All the authorized action activities and conditions of the certification associated with the original Water Quality Certification dated 3-2-15 and all other corresponding modification still apply except where superseded by this certification.

3. Additional Conditions:

A copy of this modification shall be kept on site and with  
the project engineer.

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Failure to construct the proposed action as described in the Modification Description and Sketch on Page 1 of this document and/or violations of any condition herein set forth may result in revocation of this modification approval and may result in criminal and/or civil penalties. This modification approval shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. If the Corps of Engineers requires a formal written modification to the 404 permit for the proposed action, the NC DWR must require a formal written modification to the 401 WQC, and therefore, this in-field modification is invalid. If additional (**wetland, stream, buffer**) impacts for this project (now or in the future) exceed (**one acre, 150 linear feet, or one-third of an acre/150 linear feet, respectively**), or if mitigation is required above and beyond the current mitigation requirement for this project, this in-field modification is invalid and a formal written modification is required.

This in-field modification is effective upon the date the last party signs this document. This in-field modification is made upon mutual agreement between DOT and DWR as indicated by the signatures below and is, therefore, not subject to appeal by either party. Appeals by third parties must be made within sixty (60) days of notification pursuant to the contested case provisions of the Administrative Procedure Act, NC Gen. Stat. §150B-23 et seq.

DWR Staff Signature: Gary Ward

Date: 1-27-16

DOT Staff Signature: Jay B. Johnson

Date: 1/27/16

USACE Staff Signature: [Signature]

Date: 01/27/16

<sup>1</sup> – An authorized agent of the Transportation Permitting Unit is defined as DWR staff that are DOT-funded and review and issue 401 Water Quality Certification for DOT projects. These staff include Central Office and Regional Office personnel.



Coastal Management  
ENVIRONMENTAL QUALITY

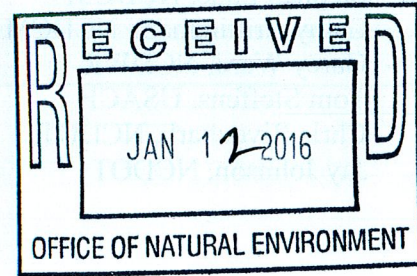
PAT MCCRORY  
Governor

DONALD R. VAN DER VAART  
Secretary

BRAXTON DAVIS  
Director

January 8, 2016

Mr. Richard W. Hancock, P.E., Manager  
Project Development and Environmental Analysis Unit  
N.C. Dept. of Transportation  
1598 Mail Service Center  
Raleigh, NC 27699-1598



RE: Refinement of CAMA Major Development Permit No. 43-15 (TIP No. R-2514B, C, and D),  
Improvements to US 17 in Onslow and Craven County.

Dear Mr. Hancock:

This letter is in response to your request letter, dated December 9, 2015 which included two (2) revised drawings dated December 9, 2015. The request indicates that the contractor proposes to modify the temporary work trestle design at Permit Sites 10 and 12 of the B-section. At Site 10, the main work trestle would be extended over Higgins Branch connecting the two sides, while two previously authorized work trestle fingers would be eliminated. At Site 12, the main work trestle would be extended over the White Oak River, while a portion of the work trestle fingers would be eliminated. The request indicates the extended work trestles would be constructed at a minimum elevation equal to or greater than the elevation of the permanent bridges in their respective locations and that the revised work trestle designs would not result in any additional impacts to wetlands or waters of the State.

Please be advised that through this **Letter of Refinement** the N.C. Division of Coastal Management (DCM) conveys its determination that the proposed revisions are consistent with the existing State's rules and regulations and are in keeping with the original purpose and intent of CAMA Major Permit No. 43-15. This letter shall be attached to the original of CAMA Major Permit No. 43-15 and copies of both documents shall be readily available on site when a DCM representative inspects the project for compliance. All conditions and stipulations of the active permit remain in force unless altered herein. This approval does not eliminate the need to obtain any additional permits, approval or authorizations that may be required.

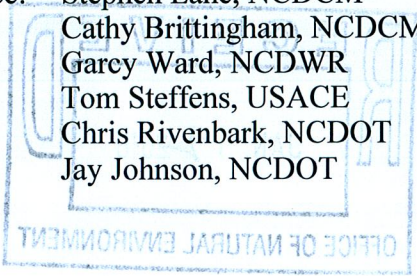
Please contact Stephen Lane at (252) 808-2808 ext. 208 or Cathy Brittingham at (919) 707-9149 if you have any questions or concerns.

Sincerely,

Doug Huggett  
Major Permits Coordinator

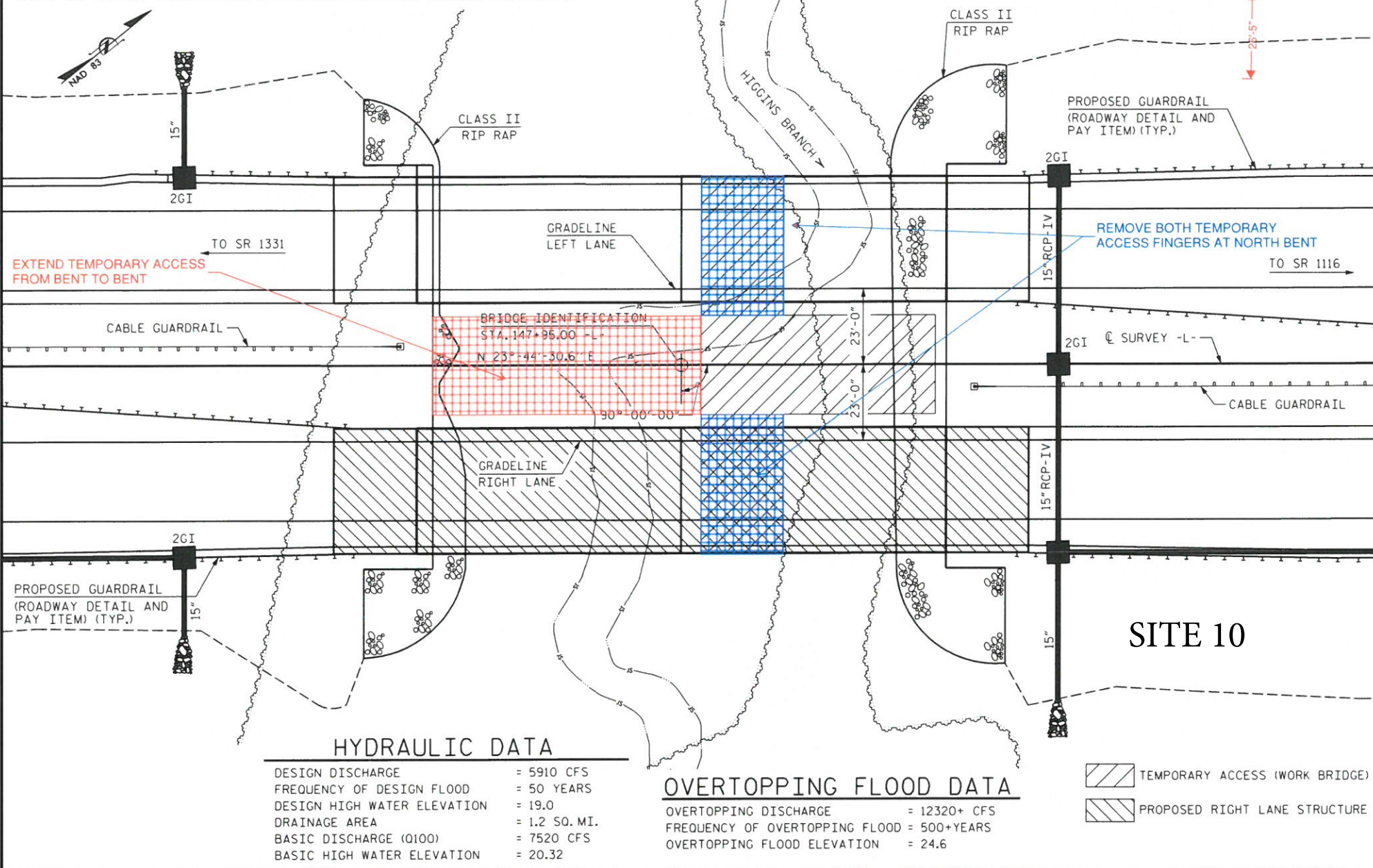


cc: Stephen Lane, NCDCM  
Cathy Brittingham, NCDCM  
Garcy Ward, NCDWR  
Tom Steffens, USACE  
Chris Rivenbark, NCDOT  
Jay Johnson, NCDOT



BM #53 - RR SPIKE IN 18" GUM. 221' RT. OF -L- STA. 145+10.00, ELEV. 20.01

NOTE: FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS.



**NOTES :**

- ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.
- THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
- THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.
- FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.
- FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.
- PRESTRESSED CONCRETE DECK PANELS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.
- REMOVABLE FORMS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.
- THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18-EVALUATING SCOUR AT BRIDGES."
- NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS OTHERWISE CALLED FOR ON THE PLANS OR APPROVED BY THE ENGINEER.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.
- ALL FALSEWORK AND FORMS FOR THE CAST-IN-PLACE DECK SLAB CONTINUOUS UNIT SHALL REMAIN IN PLACE UNTIL THE ENTIRE UNIT IS CAST AND CURED.
- FOR CONSTRUCTION, MAINTENANCE AND REMOVABLE OF TEMPORARY ACCESS STATION 147+95.00 -L-, SEE PROJECT SPECIAL PROVISIONS.
- FOR PLACING LOAD ON STRUCTURE MEMBERS, SEE PROJECT SPECIAL PROVISIONS.
- FOR STEEL REINFORCED ELASTOMERIC BEARINGS, SEE PROJECT SPECIAL PROVISIONS.

G:\CKE Projects\CKE\_R2514B Onslow Jones Co\Structures\Site 2\R-2514B\_SD\_02.GD03.dgn  
1/27/2015 8:35:00 AM CKE\_R2514B\_PDF\_full.plt:cfgr R2514B\_str.tbl

**HYDRAULIC DATA**

DESIGN DISCHARGE	= 5910 CFS
FREQUENCY OF DESIGN FLOOD	= 50 YEARS
DESIGN HIGH WATER ELEVATION	= 19.0
DRAINAGE AREA	= 1.2 SQ. MI.
BASIC DISCHARGE (Q100)	= 7520 CFS
BASIC HIGH WATER ELEVATION	= 20.32

**OVERTOPPING FLOOD DATA**

OVERTOPPING DISCHARGE	= 12320+ CFS
FREQUENCY OF OVERTOPPING FLOOD	= 500+ YEARS
OVERTOPPING FLOOD ELEVATION	= 24.6

- TEMPORARY ACCESS (WORK BRIDGE)
- PROPOSED RIGHT LANE STRUCTURE

**LOCATION SKETCH**

**TOTAL BILL OF MATERIAL**

	PDA TESTING	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	45" PRESTRESSED CONCRETE GIRDERS		PP 14 X 0.50 GALVANIZED STEEL PILES		PP 16 X 0.50 GALVANIZED STEEL PILES		STEEL PILE POINTS	PIPE PILE PLATES	PILE REDRIVES	CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0") THICK	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	
							NO.	LIN. FT.	NO.	LIN. FT.	NO.	LIN. FT.								NO.
SUPERSTRUCTURE	EACH	SO. FT.	SO. FT.	CU. YDS.	LUMP SUM	LBS.	8	629								316.7				LUMP SUM
END BENT 1				31.6		5549			6	120				6	3		73	81		
BENT 1				18.2		4103					5	200	5		3					
END BENT 2				31.6		5549			6	120				6	3		189	210		
TOTAL	2	6531	7245	81.4	LUMP SUM	15201	8	629	12	240	5	200	5	12	9	316.7	262	291		LUMP SUM

PROJECT NO. R-2514B  
ONSLow COUNTY  
 STATION: 147+95.00 -L-

SHEET 3 OF 3



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING**  
 BRIDGE OVER HIGGINS BRANCH  
 ON PROPOSED US 17 BYPASS  
 BETWEEN SR 1331 AND SR 1116  
 (LEFT LANE)

DRAWN BY : J. MYA DATE : 11/13  
 CHECKED BY : R. DECOLA DATE : 05/14  
 DESIGN ENGINEER OF RECORD : R. DECOLA DATE : 10/14

The LOUIS BERGER GROUP, Inc.  
 1001 Wade Avenue, Suite 400  
 Raleigh, NC 27605-3322  
 NC COA No. F-0840

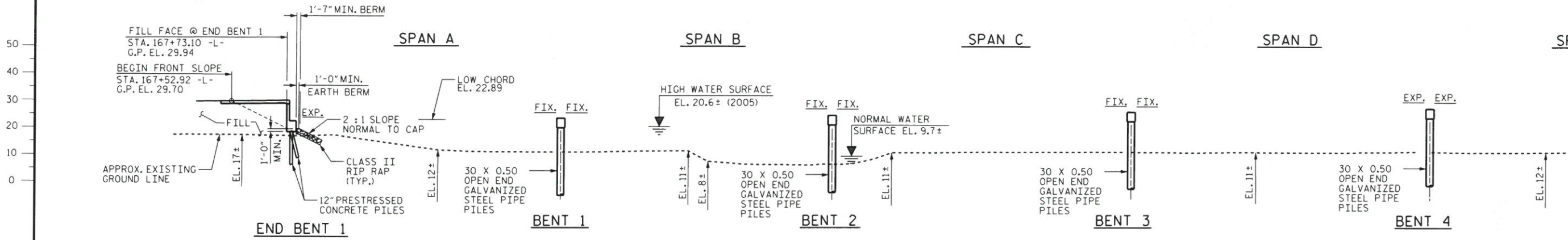
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-3
1			3			TOTAL SHEETS 34
2			4			



-0.4258% +1.1827%  
 168+00 169+00 170+00 171+00 172+00

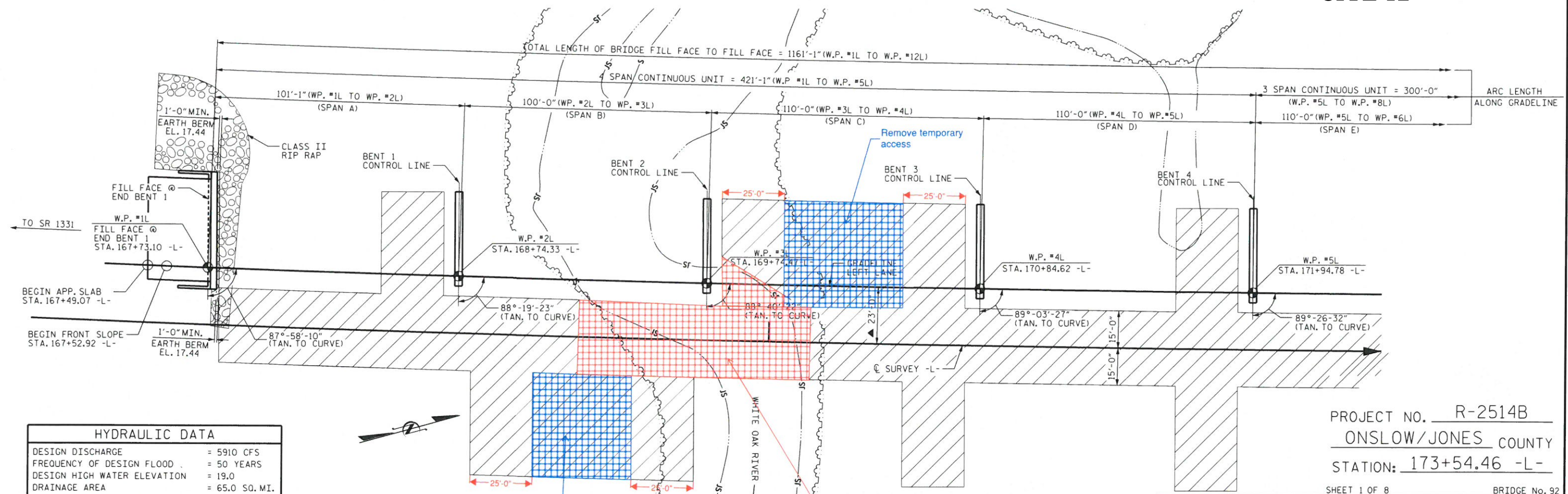
PI = 162+85.00 -L-  
 EL = 24.17  
 VC = 295'

**GRADE DATA**



**SECTION ALONG LEFT LANE GRADE LINE**  
 SECTIONS THROUGH BENTS AND END BENTS ARE AT RIGHT ANGLES

**SITE 12**



HYDRAULIC DATA	
DESIGN DISCHARGE	= 5910 CFS
FREQUENCY OF DESIGN FLOOD	= 50 YEARS
DESIGN HIGH WATER ELEVATION	= 19.0
DRAINAGE AREA	= 65.0 SQ. MI.
BASIC DISCHARGE (Q100)	= 7520 CFS
BASIC HIGH WATER ELEVATION	= 20.32

OVERTOPPING FLOOD DATA	
OVERTOPPING DISCHARGE	= 12320+ CFS
FREQUENCY OF OVERTOPPING FLOOD	= 500+ YEARS
OVERTOPPING FLOOD ELEVATION	= 24.6 *

\* OVERTOPPING ELEVATION REPRESENTS GRADE POINT @ STA. 162+15.59 -L-

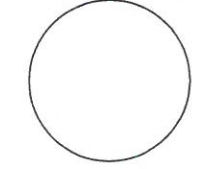
**HORIZONTAL CURVE DATA**

P.I. STA. = 179+99.89  
 $\Delta = 21^\circ-13'-15.0''$  (I.T.)  
 $D = 0^\circ-20'-57.3''$   
 $L = 6,075.98'$   
 $T = 3,073.20'$   
 $R = 16,405.00'$

**PLAN**

FOR CLARITY, PILES ARE NOT SHOWN IN PLAN VIEW  
 ▲ RADIAL DIMENSION  
 ALL BENTS AND END BENTS ARE PARALLEL.  
 [Hatched Area] TEMPORARY ACCESS (WORK BRIDGE)

I HEREBY CERTIFY THESE PLANS ARE THE AS-BUILT PLANS



PROJECT NO. R-2514B  
ONSLOW/JONES COUNTY  
 STATION: 173+54.46 -L-  
 SHEET 1 OF 8 BRIDGE No. 92

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING**  
 FOR BRIDGE  
 ON PROPOSED US 17 BYPASS  
 OVER WHITE OAK RIVER  
 BETWEEN SR 1331 AND SR 1116  
 (LEFT LANE)

REVISIONS				SHEET NO.
NO.	BY:	DATE:	NO.	DATE:
1			3	
2			4	

TOTAL SHEETS: 75

G:\Projects\CKE\_R2514B Onslow Jones Co\Structures\Site 4\N-2514B\_SD\_04\_CD\_01.dgn  
 2/3/2015 6:16:50 PM CKE\_R2514B\_PDF\_fullplot.ctb R2514B\_str.rbl