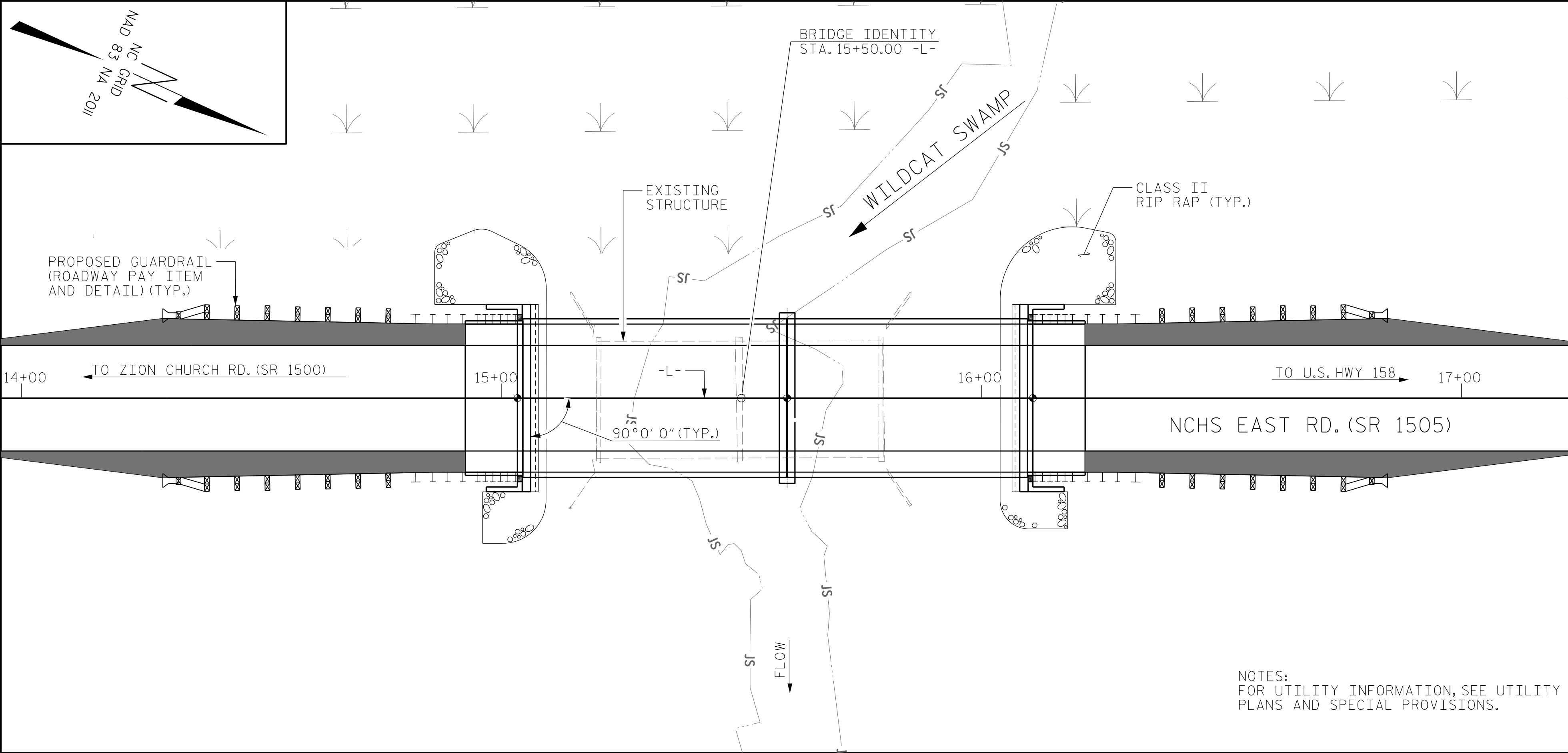


BM#1: BENCH TIE NAIL IN 14" OAK, -L- STA. 14+24.40, 30.8' LT; EL. 93.18'



LOCATION SKETCH

GENERAL NOTES

ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

THIS BRIDGE IS IN SEISMIC ZONE 1.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18 - EVALUATING SCOUR AT BRIDGES".

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE "STANDARD NOTES" SHEET.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET S-1 SHALL BE EXCAVATED FOR A DISTANCE OF 30 FEET EACH SIDE OF CENTERLINE ROADWAY AS DIRECTED BY THE ENGINEER, THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION. SEE SECTION 412 OF THE STANDARD SPECIFICATIONS.

THE EXISTING STRUCTURE CONSISTING OF TWO 30'-0" SPANS, WITH A CLEAR ROADWAY WIDTH OF 24'-2", HAVING A CONCRETE DECK ON PRESTRESSED CONCRETE BEAMS AND CAP BEAMS ON TIMBER PILES SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED FOR LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE DETERIORATE DURING CONSTRUCTION OF THE PROPOSED BRIDGE, A LOAD LIMIT MAY BE POSTED AND MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

THE SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. SINCE THIS INFORMATION IS SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR, THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THE EXISTING BRIDGE SUBSTRUCTURE SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED IN A MANNER THAT PREVENTS DEBRIS FROM FALLING INTO THE WATER. THE CONTRACTOR SHALL SUBMIT DEMOLITION PLANS FOR REVIEW, AND REMOVE THE BRIDGE IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS. EXISTING AND REMNANT PILES SHALL BE REMOVED BY PULLING THE PILES OUT OF THE GROUND COMPLETELY, IF POSSIBLE. ALTERNATIVELY, EXISTING AND REMNANT PILES SHALL BE REMOVED/CUT OFF 1.0FT BELOW THE MUDLINE.

FOR INTERIOR BENT 1, ONLY PARTIAL GALVANIZING OF THE PILES IS REQUIRED. SEE INTERIOR BENT SHEET(S) FOR REQUIRED GALVANIZED LENGTHS. PAYMENT FOR PARTIALLY GALVANIZED PILES WILL BE MADE UNDER THE CONTRACT UNIT PRICE FOR GALVANIZED STEEL PILES.

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.

ASPHALT WEARING SURFACE IS INCLUDED IN ROADWAY QUANTITY ON ROADWAY PLANS.

FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

FOR FIBER OPTIC CONDUIT SYSTEM, SEE SPECIAL PROVISIONS.

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

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	ASBESTOS ASSESMENT	PDA TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES	PILE DRIVING EQUIPMENT SETUP FOR HP 14 X 73 GALVANIZED STEEL PILES	HP 12 X 53 STEEL PILES		HP 14 X 73 GALVANIZED STEEL PILES		PILE REDRIVES
	LUMP SUM	LUMP SUM	EA.	LUMP SUM	CU. YDS.	LUMP SUM	LBS.	EA.	EA.	No.	LIN. FT.	No.	LIN. FT.	EA.
SUPERSTRUCTURE														
END BENT No. 1					21.6		2636	7		7	490			4
BENT No. 1					10.7		2136		8			8	720	4
END BENT No. 2					21.6		2636	7		7	525			4
TOTAL	LUMP SUM	LUMP SUM	1	LUMP SUM	53.9	LUMP SUM	7408	14	8	14	1015	8	720	12

HYDRAULIC DATA

DESIGN DISCHARGE	600 CFS
FREQUENCY OF DESIGN FLOOD	25 YRS.
DESIGN HIGH WATER ELEVATION	91.9'
DRAINAGE AREA	4.3 SQ.MI.
BASE DISCHARGE (Q100)	1077 CFS
BASE HIGH WATER ELEVATION	93.1'

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	3000 CFS
FREQUENCY OF OVERTOPPING FLOOD	500+ YRS.
OVERTOPPING FLOOD ELEVATION	95.8'
SAG STA.	21+27 -L-

TOTAL BILL OF MATERIAL CONT.

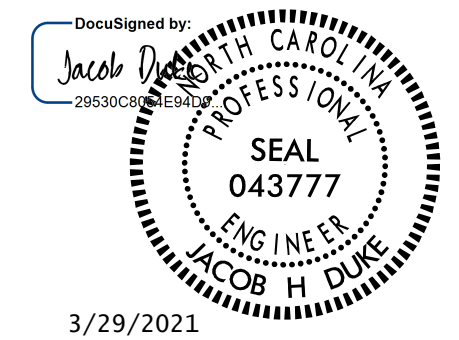
	VERTICAL CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0") THICK	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLAB	FIBER OPTIC CONDUIT SYSTEM	
	LIN. FT.	TONS.	SQ. YDS.	LUMP SUM	No.	LIN. FT.	LIN. FT.
SUPERSTRUCTURE	210.5			LUMP SUM	22	1155	206
END BENT No. 1		117	130				
BENT No. 1							
END BENT No. 2		123	137				
TOTAL	210.5	240	267	LUMP SUM	22	1155	206

FOUNDATION NOTES:

- FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
- PILES AT END BENT No. 1 AND END BENT No. 2 ARE DESIGNED FOR FACTORED RESISTANCE OF 71 TONS AND 67 TONS PER PILE, RESPECTIVELY.
- DRIVE PILES AT END BENT No. 1 AND END BENT No. 2 TO A REQUIRED DRIVING RESISTANCE OF 120 TONS AND 115 TONS PER PILE, RESPECTIVELY.
- PILES AT BENT No. 1 ARE DESIGNED FOR FACTORED RESISTANCE OF 118 TONS PER PILE.
- DRIVE PILES AT BENT No. 1 TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR SCOUR.
- INSTALL PILES AT BENT No. 1 TO A TIP ELEVATION NO HIGHER THAN 55 FT.
- THE SCOUR CRITICAL ELEVATION FOR BENT No. 1 IS ELEVATION 80 FT. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.
- TESTING PILES WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING MAY BE REQUIRED. THE ENGINEER WILL DETERMINE THE NEED FOR PDA TESTING. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PROJECT NO. 17BP.1.R.90
NORTHAMPTON COUNTY
STATION: 15+50.00 -L-

SHEET 2 OF 2



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			18

DRAWN BY : FIDEL L. FLORES DATE : 12/2019
CHECKED BY : DIEGO A. AGUIRRE DATE : 12/2019
DESIGN ENGINEER OF RECORD: JACOB H. DUKE DATE : 12/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED