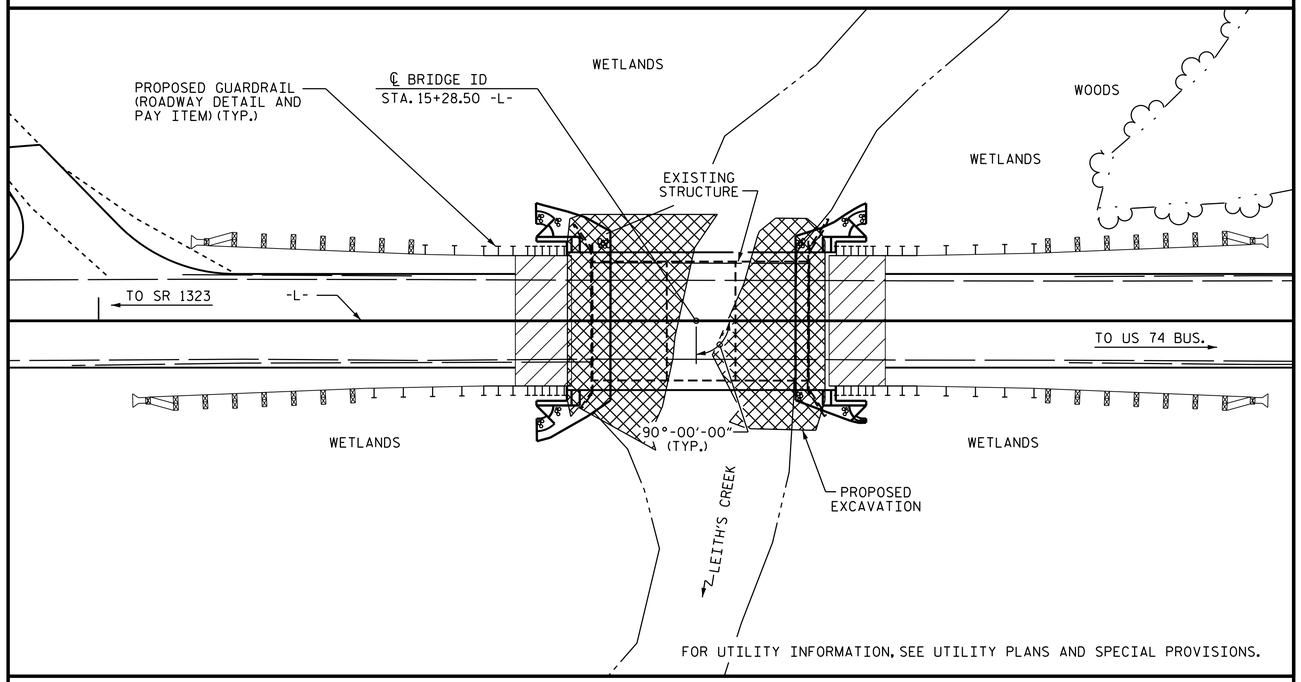
B.M. #1: NAIL SET IN 20" DBL PINE, N 22° 58' 39" W, 282.60', STA. 18+14.00 -BL-, EL. 198.78



LOCATION SKETCH

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 2.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK & FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

INASMUCH AS THE PAINT SYSTEM ON THE EXISTING STRUCTURAL STEEL CONTAINS LEAD, THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLE 107-1 OF THE STANDARD SPECIFICATIONS. ANY COSTS RESULTING FROM COMPLIANCE WITH APPLICABLE STATE OR FEDERAL REGULATIONS PERTAINING TO HANDLING OF MATERIALS CONTAINING LEAD BASED PAINT SHALL BE INCLUDED IN THE BID PRICE FOR "REMOVAL OF EXISTING STRUCTURE AT STATION 13+56.00-L-".

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET S-1 SHALL BE EXCAVATED FOR A DISTANCE OF 25 FT. 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.

THE EXISTING STRUCTURE CONSISTING OF 1 SPAN @ 44'-6", WITH A TIMBER DECK AND A CLEAR ROADWAY WIDTH OF 19'-1" WITH AN 1" ASPHALT WEARING SURFACE ON STEEL I-BEAMS, ON TIMBER CAPS AND PILES, ONE WHICH IS ENCASED IN CONCRETE AND TIMBER BULKHEADS, LOCATED AT THE PROPOSED STRUCTURE, SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT.

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 SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL REMOVE THE BRIDGE AND SUBMIT PLANS FOR DEMOLITION IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS. THE EXISTING END BENTS SHALL BE REMOVED DOWN TO EL. 514.30 WITH THE REMAINING PORTION LEFT IN PLACE FOR BANK STABILIZATION.

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

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

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

AT THE CONTRACTOR'S OPTION, PRESTRESSED CONCRETE END BENT AND BENT CAPS MAY BE SUBSTITUTED IN PLACE OF THE CAST-IN-PLACE CAPS. THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER TO RECEIVE REVISED PLANS AND DETAILS FROM THE STRUCTURE MANAGEMENT UNIT. THE REDESIGN AND ANY ADDITIONAL MATERIALS NEEDED WILL BE AT NO ADDITIONAL COST TO THE CONTRACTOR.

FOR EROSION CONTROL MEASURES AND CONSTRUCTION SEQUENCE, SEE EROSION CONTROL PLANS.

FOR CALCIUM NITRITE CORROSION INHIBITOR, SEE SPECIAL PROVISIONS.

HYDRAULIC DATA

DESIGN DISCHARGE	315 C.F.S.
FREQUENCY OF DESIGN DISCHARGE	2 YRS
DESIGN HIGH WATER ELEVATION	186.80
DRAINAGE AREA	12.7 SQ. MI.
BASE DISCHARGE(Q100)	1,720 C.F.S.
BASE HIGH WATER ELEVATION	189.48

OVERTOPPING DATA

OVERTOPPING DISCHARGE	460 C.F.S.
FREQUENCY OF OVERTOPPING	2+ YRS.
OVERTOPPING ELEVATION	187.60

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	PDA TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	HP 12X53 STEEL PILES		PILE REDRIVES	VERTICAL CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0" X 1'-9" PRESTRESSED CONCRETE CORRED SLABS		ASBESTOS ASSESSMENT
	LUMP SUM	EACH	LUMP SUM	CU. YDS.	LUMP SUM	LBS.	NO.	LIN.FT.	EACH	LIN.FT.	TONS	SQ. YDS.	LUMP SUM	NO.	LIN.FT.	LUMP SUM
SUPERSTRUCTURE										110.00				10	550.00	
END BENT NO. 1				13.0		1,965	5	350	5		90	100				
END BENT NO. 2				13.0		1,965	5	350	5		90	100				
TOTAL	LUMP SUM	2	LUMP SUM	26.0	LUMP SUM	3,930	10	700	10	110.00	180	200	LUMP SUM	10	550.00	LUMP SUM

PROJECT NO. B-5746

SCOTLAND COUNTY

STATION: 15+28.50 -L-

SHEET 3 OF 3

NORTH CAROLINA PROFESSIONAL SEAL 29048 ENGINEER RAMAN P. PATEL

DocuSigned by: Raman Patel 60F537B5DA1F4FD... 8/30/2016

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING FOR BRIDGE OVER LEITH'S CREEK ON SR 1645 BETWEEN SR 1323 AND US 74 BUS.

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			14

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : D.A. DAVENPORT DATE : 5/10/16
CHECKED BY : M.K. BEARD DATE : 8/15/16
DESIGN ENGINEER OF RECORD: R.P. PATEL DATE : 8/29/16

30-AUG-2016 08:31
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ksedal