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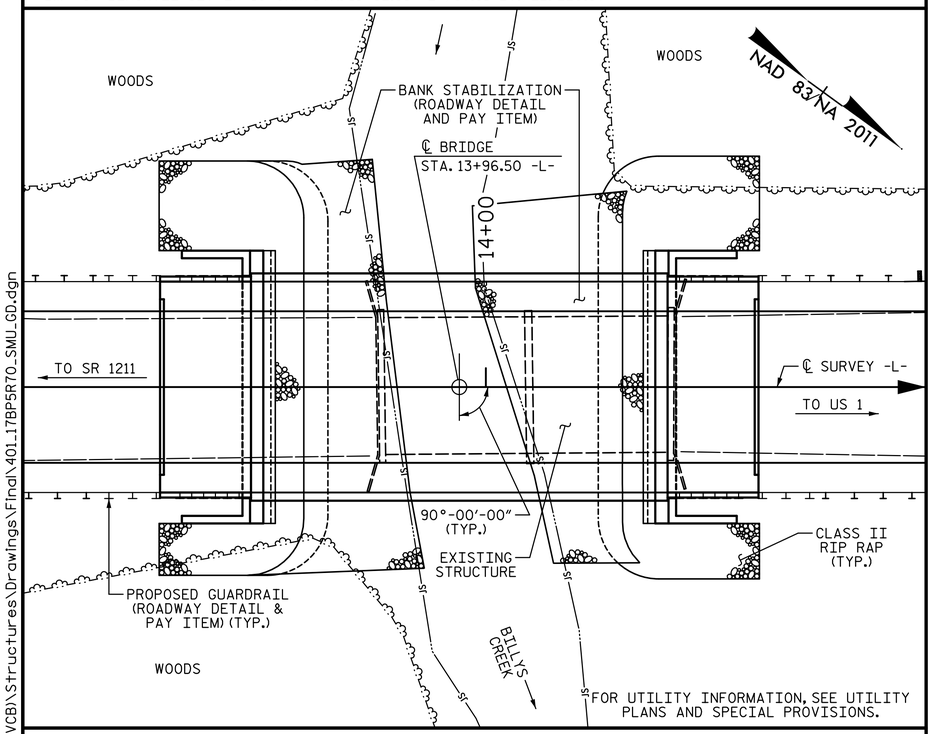
BM #8 BENCHTIE SET IN 16" OAK, STA. 13+82.83 -L-, 97.91' LT., EL. 220.97



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 1.

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

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

THE BRIDGE SHALL BE REMOVED WITH CONTAINMENT MEASURES IN PLACE TO PREVENT COMPONENTS OF THE BRIDGE DECK FROM DROPPING INTO THE STREAM. THE ASPHALT WEARING SURFACE SHALL BE REMOVED FIRST FOLLOWED BY REMOVAL OF THE RAILS, DECKING, GIRDERS AND FINALLY THE END BENT ABUTMENTS AND THE INTERIOR BENT CAP AND PILES. THE CONTRACTOR SHALL SUBMIT DEMOLITION PLANS AND CONTAINMENT MEASURES FOR REVIEW AND REMOVE THE BRIDGE IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

REMOVE EXISTING END BENTS IN ENTIRETY. INTERIOR TIMBER PILES SHALL BE COMPLETELY REMOVED OR BROKEN ONE FOOT BELOW THE MUD LINE.

NO DECK DRAINS ARE ALLOWED ON THE BRIDGE.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET S-1 SHALL BE EXCAVATED FOR A DISTANCE OF 30 FT. LEFT AND 25 FT. RIGHT 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 CONSISTS OF 2 CONTINUOUS SPANS @ 20'-3". THE SUPERSTRUCTURE CONSISTS OF TIMBER DECK ON CONTINUOUS STEEL I-BEAMS AND HAS A CLEAR ROADWAY WIDTH OF 19'-2". THE END BENTS AND INTERIOR BENT CONSIST OF TIMBER CAPS ON TIMBER PILES. THE EXISTING STRUCTURE, WHICH IS LOCATED AT THE SITE OF THE PROPOSED STRUCTURE, 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, THE LOAD LIMIT 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.

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

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.

AT THE CONTRACTOR'S OPTION, PRESTRESSED CONCRETE END 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 STRUCTURES MANAGEMENT UNIT. THE REDESIGN AND ANY ADDITIONAL MATERIALS NEEDED WILL BE AT NO ADDITIONAL COST TO THE CONTRACTOR.

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+96.50 -L-."

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	ASBESTOS ASSESSMENT	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES	HP 12 X 53 STEEL PILES		VERTICAL CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLABS	
	LS	LS	LS	CY	LS	LB	EA	NO.	LF	LF	TON	SY	LS	NO.	LF
SUPERSTRUCTURE					LS					110.25			LS	10	550.00
END BENT 1			LS	20.0		2,449	5	5	100		105	120			
END BENT 2			LS	20.0		2,449	5	5	100		95	105			
TOTAL	LS	LS	LS	40.0	LS	4,898	10	10	200	110.25	200	225	LS	10	550.00

FOUNDATION NOTES:

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

OBSERVE A 1 MONTH WAITING PERIOD AFTER CONSTRUCTING THE EMBANKMENT, END BENT, AND REINFORCED BRIDGE APPROACH FILL, IF APPLICABLE BEFORE BEGINNING APPROACH SLAB CONSTRUCTION AT END BENT 1. FOR BRIDGE WAITING PERIODS, SEE ROADWAY PLANS AND SECTION 235 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 85 TONS PER PILE.

DRIVE PILES AT END BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 145 TONS PER PILE.

PILES AT END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 85 TONS PER PILE.

DRIVE PILES AT END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 145 TONS PER PILE.

PROJECT NO. 17BP.5.R.70
FRANKLIN COUNTY
STATION: 13+96.50 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON SR 1210 (MONTGOMERY RD) OVER BILLYS CREEK BETWEEN SR 1211 AND US 1

27'-10" CLEAR ROADWAY - 90° SKEW

PLANS PREPARED BY:
SIMPSON ENGINEERS & ASSOCIATES
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(919) 852-0598 (Fax)
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LICENSURE NO. C-2521

NORTH CAROLINA PROFESSIONAL SEAL 11268 ENGINEER BETSY S. COX
7/9/2021

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			15

DRAWN BY: S.D. COOPER DATE: 6-21
CHECKED BY: B.S. COX DATE: 6-21
DESIGN ENGINEER OF RECORD: B.S. COX DATE: 6-21

7/8/2021 2:05:31 PM G:\Projects\2016\Division 5 (Mott Macdonald)\17BP5R70 Franklin #28 (90 21CS VCB)\Structures\Drawings\Final\401_17BP5R70_SMU_GD.dgn