

TOTAL BILL OF MATERIAL

	CONST. MAINT. & REMOVAL OF TEMP. ACCESS	REMOVAL OF EXISTING STRUCTURE	PILE EXCAVATION IN SOIL	PILE EXCAVATION NOT IN SOIL	3'-0" Ø DRILLED PIERS IN SOIL	3'-0" Ø DRILLED PIERS NOT IN SOIL	PERMANENT STEEL CASING FOR 3'-0" Ø DRILLED PIER	SID INSPECTIONS	CSL TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	HP 12 X 53 STEEL PILES	STEEL PILE POINTS	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLABS	3'-0" X 2'-0" PRESTRESSED CONCRETE CORED SLABS	42" OREGON RAIL	1'-9" X 10 1/2" CONCRETE CURB				
	LUMP SUM	LUMP SUM	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EA.	EA.	LUMP SUM	CU. YDS.	LUMP SUM	LBS.	LBS.	NO.	LIN. FT.	EA.	TON	SQ. YD.	LUMP SUM	NO.	LIN. FT.	NO.	LIN. FT.	LIN. FT.	LIN. FT.	
SUPERSTRUCTURE																					24	840	12	840	264.6	279.6	
END BENT 1			51	19							23.7		2,900		7	90		77	85								
BENT 1					16.5	26	18.5				19.0		9,118	1,145													
BENT 2					22.5	30	29.2				20.1		9,969	1,411													
END BENT 2											23.7		2,900		7	140	7	212	235								
TOTAL	LUMP SUM	LUMP SUM	51	19	39	56	47.7	2	2	LUMP SUM	86.5	LUMP SUM	24,887	2,556	14	230	7	289	320	LUMP SUM	24	840	12	840	264.6	279.6	

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.

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

THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS. PAYMENT FOR THE SAMPLES OF REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

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 14+70.50 -L-".

THE EXISTING STRUCTURE CONSISTING OF 3 SPANS: 1 @ 26'-6", 1 @ 39'-8", 1 @ 26'-3" WITH A CLEAR ROADWAY WIDTH OF 19'-0" WITH 3" AWS AND TIMBER DECK ON I-BEAMS SHALL BE REMOVED. SUBSTRUCTURE, ABUTMENTS AND INTERIOR BENTS ALL CONSISTING OF MASS CONCRETE AND LOCATED AT THE PROPOSED STRUCTURE SHALL BE REMOVED IN ACCORDANCE WITH ARTICLE 402-2 OF STANDARD SPECIFICATION. THE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT.

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 STANDARD SPECIFICATIONS.

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.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET S-1 SHALL BE EXCAVATED FOR A DISTANCE OF 33 FT. LEFT SIDE AND 45 FT. RIGHT SIDE OF CENTERLINE ROADWAY AT END BENT 1 AND 40 FT. EACH SIDE OF CENTERLINE ROADWAY AT END BENT 2 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 SPECIFICATION.

AT THE CONTRACTOR'S OPTION, AND UPON REMOVAL OF THE CAUSEWAY, THE CLASS II RIP RAP USED IN THE CAUSEWAY MAY BE PLACED AS RIP RAP SLOPE PROTECTION. SEE SPECIAL PROVISIONS FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY ACCESS AT STATION 14+70.50 -L-

FOR 42" OREGON RAIL, SEE SPECIAL PROVISIONS.

FOR 1'-9" X 10 1/2" CONCRETE CURB, SEE THE OREGON RAIL SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

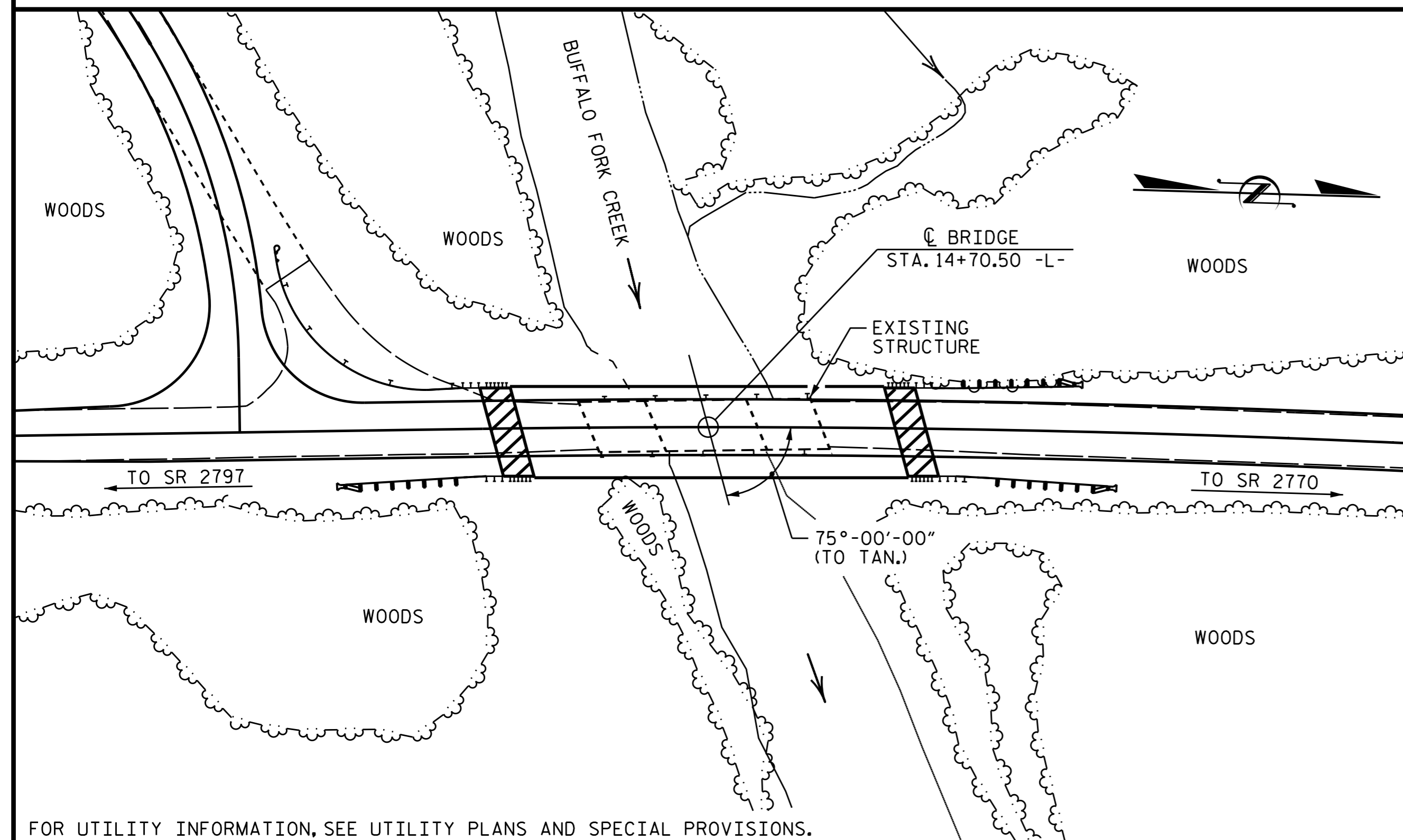
FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

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

BM #2: RR SPIKE IN 20" SWEET GUM, -L- STA. 14+64.16, 102.63' LEFT, ELEV. 637.90'



FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS.

LOCATION SKETCH

HYDRAULIC DATA

DESIGN DISCHARGE	= 6450 CFS
FREQUENCY OF DESIGN FLOOD	= 2 YR.
DESIGN HIGH WATER ELEVATION	= 641.7
DRAINAGE AREA	= 97.4 SQ.MI.
BASE DISCHARGE (Q100)	= 18,089 CFS
BASE HIGH WATER ELEVATION	= 649.16

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	> 6,490 CFS
FREQUENCY OF OVERTOPPING FLOOD	> 2 YR.
OVERTOPPING FLOOD ELEVATION	> 641.8

PROJECT NO. B-4959
GUILFORD COUNTY
 STATION: 14+70.50 -L-

SHEET 3 OF 3



DocuSigned by: *T.H. Fang* 9/3/2015
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STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 BRIDGE OVER BUFFALO
 FORK CREEK ON SR 2719
 BETWEEN SR 2770 AND SR 2797

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			25

DRAWN BY : C. YOKELEY DATE : 3/4/14
 CHECKED BY : T. H. FANG DATE : 6/15/15