



BILL OF MATERIAL												
	REMOVAL OF EXISTING STRUCTURE AT STA. 20+64.00 -L-	ASBESTOS ASSESSMENT	4'-0"DIA. DRILLED PIERS IN SOIL	4'-0"DIA. DRILLED PIERS NOT IN SOIL	SID INSPECTIONS	CSL TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL
	LUMP SUM	LUMP SUM	LIN.FT.	LIN.FT.	EA.	EA.	LUMP SUM	SQ.FT.	SQ. FT.	CU. YD.	LUMP SUM	LBS.
SUPERSTRUCTURE								21,466.5	24,217			
END BENT 1										181.4		20,392
BENT 1			133.9	79.5						204.0		45 , 891
BENT 2			174.1	85.5						193.9		45,431
END BENT 2										192.8		20,570
TOTAL	LUMP SUM	LUMP SUM	308.0	165.0	1	6	LUMP SUM	21,466.5	24,217	772.1	LUMP SUM	132,284

BILL OF MATERIAL (CONTINUED)												
	SPIRAL COLUMN REINFORCING STEEL	PILE DRIVING EQUIPMENT SETUP FOR HP12X53 STEEL PILES		P 12X53 EEL PILES	2 BAR METAL RAIL	1'-2" X 3'-4 ¹ / ₄ " CONCRETE PARAPET	RIP RAP CLASS II (2'-0" THICK)		ELASTOMERIC BEARINGS	STRIP SEAL EXPANSION JOINTS	36′	PRESTRESSED CONCRETE FLORIDA I-BEAMS
	LBS.	EA.	NO.	LIN.FT.	LIN.FT.	LIN.FT.	TONS	SQ. YDS.	LUMP SUM	LUMP SUM	NO.	LIN.FT.
SUPERSTRUCTURE					359.4	391 . 8					36	2,176.3
END BENT 1		17	17	410			395	445				
BENT 1	8,204											
BENT 2	8,396											
END BENT 2		17	17	340			270	300				
TOTAL	16,600	34	34	750	359.4	391.8	665	745	LUMP SUM	LUMP SUM	36	2,176.3

	SAMPLE BAR REPLACMENT							
SIZE	LENGTH							
#3	6′-2″							
#4	7′-4″							
#5	8′-6″							
#6	9′-8″							
#7	10′-10″							
#8	12'-0"							
#9	13'-2"							
#10	14'-6"							
#11	15′-10″							

NOTE: SAMPLE BAR REPLACEMENT LENGTHS BASED ON 30"(SAMPLE LENGTH) PLUS TWO SPLICE LENGTHS AND fy = 60ksi.

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 LOCATED IN SEISMIC ZONE 1.

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

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

THE EXISTING NB AND SB STRUCTURES CONSISTING OF (2) 57'-4" AND (1) 57'-2" SPANS AND (3) 57'-6" SPANS, RESPECTIVELY, WITH REINFORCED CONCRETE (RC) GIRDERS AND CLEAR ROADWAY WIDTHS OF 28.1' (NB) AND 25.8' (SB) SUPPORTED BY RC END BENT CAPS ON TIMBER PILES AND RC POST AND WEB INTERIOR BENTS SHALL BE REMOVED. THE EXISTING BRIDGES ARE PRESENTLY NOT POSTED FOR LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGES 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.

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL 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.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON THE GENERAL DRAWING SHALL BE EXCAVATED FOR A DISTANCE FROM THE CENTERLINE OF ROADWAY OF 48'± (LEFT) AND 83'± (RIGHT) AT END BENT 1 AND 87'± (LEFT) AND 72'± (RIGHT) AT END BENT 2, TO EL.599.0, 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 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.

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

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 SAMPLE BARS SHOULD COME FROM STEEL ACTUALLY USED IN THE PROJECT AND THE SAMPLE BARS SHOULD BE REPLACED BY SPLICED BARS AS SPECIFIED IN THE SAMPLE BAR REPLACEMENT CHART. PAYMENT FOR THE SAMPLE BARS AND REPLACEMENT REINFORCEMENT STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

REMOVABLE FORMS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.

NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS OTHERWISE CALLED FOR IN THE PLANS OF APPROVED BY THE ENGINEER.

FOR LIMITS OF TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE TRAFFIC CONTROL PLANS, FOR PAY ITEM OF TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE ROADWAY PLANS.

THE CLASS AA CONCRETE IN THE BRIDGE DECK SHALL CONTAIN FLY ASH OR GROUND GRANULATED BLAST FURNACE SLAG AT THE SUBSTITUTION RATE SPECIFIED IN ARTICLE 1024-1 AND IN ACCORDANCE WITH ARTICLES 1024-5 AND 1024-6 OF THE STANDARD SPECIFICATIONS. NO PAYMENT WILL BE MADE FOR THE SUBSTITUTION AS IT IS CONSIDERED INCIDENTAL TO THE COST OF THE REINFORCED CONCRETE DECK SLAB.

FOR 36"PRESTRESSED CONCRETE FLORIDA I-BEAMS, SEE SPECIAL PROVISIONS.

PROJECT NO. B-5808

CABARRUS COUNTY

STATION: 20+64.00 -L-



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

LOCATION SKETCH,
TOTAL BILL OF
MATERIAL AND
GENERAL NOTES

		SHEET NO.				
NO.	BY:	DATE:	NO.	BY:	DATE:	S-4
1			8			TOTAL SHEETS
2			4			65