

BM: #2 STATION 10+81.47-BL- , 50.28 FEET RIGHT, ELEV. 86.79, DATUM NGVD29

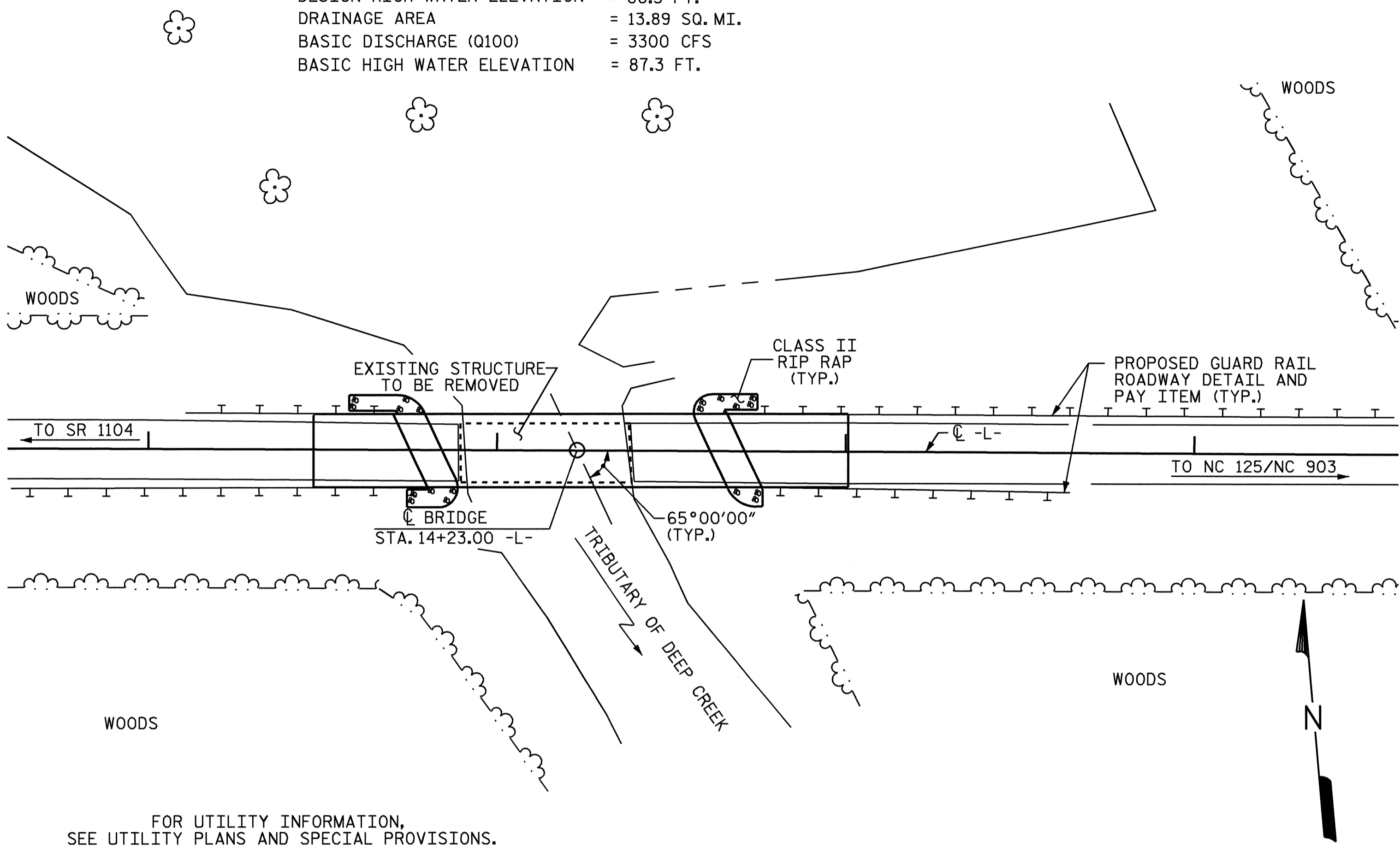
NOTES

HYDRAULIC DATA

DESIGN DISCHARGE = 1890 CFS
 FREQUENCY OF DESIGN FLOOD = 25 YRS.
 DESIGN HIGH WATER ELEVATION = 86.3 FT.
 DRAINAGE AREA = 13.89 SQ. MI.
 BASIC DISCHARGE (Q100) = 3300 CFS
 BASIC HIGH WATER ELEVATION = 87.3 FT.

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE = 1890 CFS
 FREQUENCY OF OVERTOPPING FLOOD = 25 YRS.
 OVERTOPPING FLOOD ELEVATION = 86.3 FT.



LOCATION SKETCH

ASSUMED LIVE LOAD = HS25 OR ALTERNATE LOADING.
 THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES FOR SEISMIC PERFORMANCE CATEGORY A.
 THIS BRIDGE HAS BEEN DESIGNED BY THE STRENGTH DESIGN METHOD AS SPECIFIED IN AASHTO STANDARD SPECIFICATIONS.
 FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.
 FOR EROSION CONTROL MEASURES SEE EROSION CONTROL PLANS.
 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 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 EXISTING STRUCTURE CONSISTING OF 3 SIMPLE SPANS, 2 @ 17'-9", 1 @ 16'-9", OF TIMBER FLOOR ON TIMBER JOISTS ON BY TIMBER CAPS WITH TIMBER PILES WITH A CLEAR ROADWAY WIDTH OF 21'-1" AND LOCATED AT THE PROPOSED SITE, SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE FURTHER DETERIORATE THIS LOAD LIMITATION MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.
 THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 30 FT. LEFT AND 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. FOR UNCLASSIFIED STRUCTURE EXCAVATION, SEE SPECIAL PROVISIONS.
 ASPHALT WEARING SURFACE IS INCLUDED IN ROADWAY QUANTITY ON ROADWAY PLANS.
 ALL BAR SUPPORTS USED IN THE BARRIER RAIL AND BENT CAPS AND ALL INCIDENTAL REINFORCING STEEL SHALL BE EPOXY COATED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
 PILES FOR END BENT NO. 1 AND END BENT NO. 2 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 50 TONS EACH.
 PILES FOR BENT NO. 1 AND BENT NO. 2 SHALL BE DRIVEN TO AN ELEVATION NO HIGHER THAN EL. 56.00 AND SATISFY THE BEARING CAPACITY OF 50 TONS EACH.

WHEN DRIVING PILES, THE MAXIMUM BLOW COUNT SHALL NOT BE EXCEEDED.
 THE SCOUR CRITICAL ELEVATION FOR BENT NO. 1 AND BENT NO. 2 IS EL. 68.000 THE SCOUR CRITICAL ELEVATION IS FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.
 THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH HEC 18, "EVALUATING SCOUR AT BRIDGES", NOVEMBER, 1995.
 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.
 FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
 FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
 TOP-DOWN CONSTRUCTION METHODS ARE REQUIRED FOR THE CONSTRUCTION OF THIS STRUCTURE. THE USE OF TEMPORARY CAUSEWAYS OR A WORK BRIDGE WILL NOT BE PERMITTED.
 THE CONSTRUCTION OF SUPERSTRUCTURE WILL CONSIST OF SUPPLYING AND ERECTING PRESTRESSED CONCRETE CORED SLABS, ELASTOMERIC BEARINGS, AND CONSTRUCTING CONCRETE BARRIER RAIL AND BRIDGE APPROACH SLABS.
 THE CONSTRUCTION OF SUBSTRUCTURE WILL CONSIST OF SUPPLYING AND PLACING ALL REINFORCING STEEL AND CONCRETE NECESSARY TO CONSTRUCT ALL END BENTS AND BENTS.
 THE STEEL PILES AT BENT NO. 1 AND NO. 2 SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 1076 OF THE STANDARD SPECIFICATIONS. FOR GALVANIZING STEEL PILES, SEE SPECIAL PROVISIONS.
 FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.
 FOR CONSTRUCTION OF SUPERSTRUCTURE, SEE SPECIAL PROVISIONS.
 FOR CONSTRUCTION OF SUBSTRUCTURE, SEE SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL

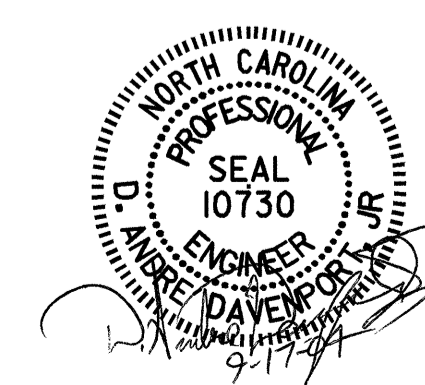
	REMOVAL OF EXISTING STRUCTURE	UNCLASSIFIED STRUCTURE EXCAVATION	HP 12 X 53 STEEL PILES		GALVANIZING STEEL PILES	PLAIN RIP RAP CLASS II (2'-0" THICK)	CONSTRUCTION OF SUBSTRUCTURE	CONSTRUCTION OF SUPERSTRUCTURE
			NO.	LIN. FT.				
	LUMP SUM	LUMP SUM			LUMP SUM	TONS	LUMP SUM	LUMP SUM
SUPERSTRUCTURE								
END BENT NO. 1			6	540		149		
BENT NO. 1			8	520	LUMP SUM			
BENT NO. 2			8	640	LUMP SUM			
END BENT NO. 2			6	540		141		
TOTAL	LUMP SUM	LUMP SUM	28	2240	LUMP SUM	290	LUMP SUM	LUMP SUM

PROJECT NO. B-4134
HALIFAX COUNTY
 STATION: 14+23.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING
 FOR BRIDGE ON SR 1105
 OVER TRIBUTARY OF DEEP CREEK
 BETWEEN SR 1104 & NC125/NC 903



DRAWN BY : H. T. BARBOUR DATE : 1-27-04
 CHECKED BY : D. A. DAVENPORT DATE : 5-04

REVISIONS					SHEET NO. S-3
NO.	BY:	DATE:	NO.	DATE:	
1			3		TOTAL SHEETS 23
2			4		