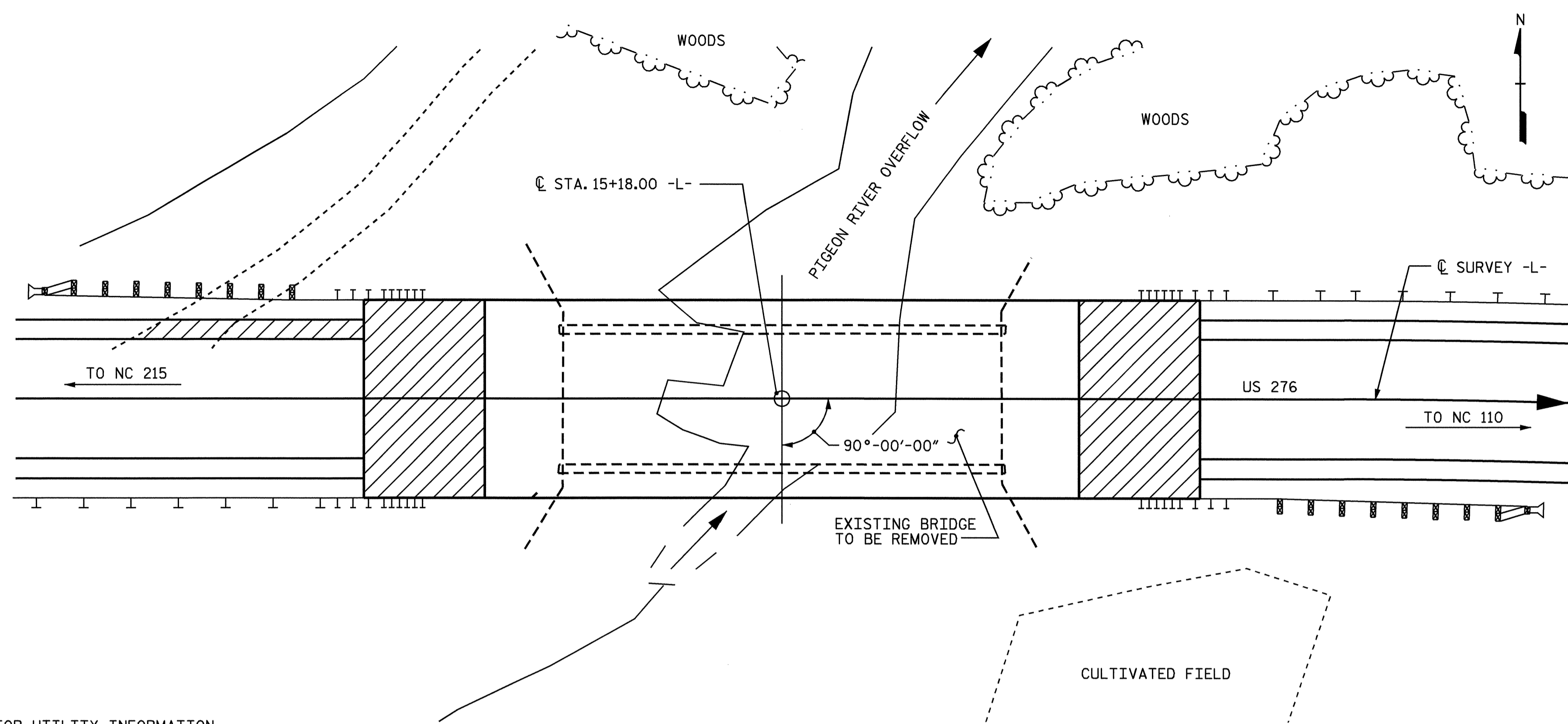


BENCH MARK #4 = NCGS MONUMENT 'NBA5' ON EAST ABUTMENT OF BRIDGE OVER WEST FORK PIGEON RIVER 15.40' RIGHT OF -L- STA. 21+97.12, ELEV. 2665.85 NGVD 29



FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS.

LOCATION SKETCH

NOTES:

ASSUMED LIVE LOAD = HS 20 OR ALTERNATE LOADING.

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

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

THIS BRIDGE HAS BEEN DESIGNED BY THE STRENGTH DESIGN METHOD AS SPECIFIED IN AASHTO STANDARD SPECIFICATIONS.

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 ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 26.0 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. FOR UNCLASSIFIED STRUCTURE EXCAVATION, SEE SPECIAL PROVISIONS.

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 LOCATED AT THE PROPOSED BRIDGE SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT.

THE EXISTING BRIDGE CONSISTS OF:
 SUPERSTRUCTURE:
 REINFORCED CONCRETE DECK ON STEEL I BEAMS WITH 4 SPANS AT 22'-3" AND A CLEAR ROADWAY WIDTH OF 25'-9".
 SUBSTRUCTURE:
 END BENTS AND BENTS ARE TIMBER CAPS ON TIMBER PILES.

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

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.'

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES FOR SEISMIC PERFORMANCE CATEGORY B.

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 SPICED 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.

PILES AT END BENT NO. 1 AND END BENT NO. 2 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 50 TONS EACH.

PILES AT BENT NO. 1 AND BENT NO. 2 SHALL BE DRIVEN TO AN ELEVATION NO HIGHER THAN 2627 FEET AND SATISFY THE BEARING CAPACITY OF 65 TONS EACH.

STEEL PILE POINTS ARE REQUIRED AT BENT NO. 1 AND BENT NO. 2. SEE SPECIAL PROVISIONS FOR STEEL PILE POINTS.

FOR GALVANIZING STEEL PILES, SEE SPECIAL PROVISIONS.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH HEC 18, 'EVALUATING SCOUR AT BRIDGES' NOVEMBER, 1995.

THE SCOUR CRITICAL ELEVATION FOR BENT NO. 1 AND BENT NO. 2 IS 2644 FT. THE SCOUR CRITICAL ELEVATIONS ARE FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

WHEN DRIVING PILES, THE MAXIMUM BLOW COUNT SHALL NOT BE EXCEEDED.

PILES FOR BENT NO. 2 RIGHT MAY ENCOUNTER WEATHERED ROCK LEDGE.

FOR CONSTRUCTION OF SUPERSTRUCTURE, SEE SPECIAL PROVISIONS.

FOR CONSTRUCTION OF SUBSTRUCTURE, SEE SPECIAL PROVISIONS.

HYDRAULIC DATA

DESIGN DISCHARGE = N/A
 FREQUENCY OF DESIGN FLOOD = 50 YR.
 DESIGN HIGH WATER ELEVATION = 2663.0
 DRAINAGE AREA = 59.0 SQ. MI.
 BASIC DISCHARGE (Q100) = N/A
 BASIC HIGH WATER ELEVATION = 2664.8

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE = N/A
 FREQUENCY OF OVERTOPPING FLOOD = 100 YR. +
 OVERTOPPING FLOOD ELEVATION = 2666.7

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	UNCLASSIFIED STRUCTURE EXCAVATION	HP 12 X 53 STEEL PILES		HP 14 X 73 STEEL PILES		STEEL PILE POINTS	GALVANIZING STEEL PILES	PLAIN RIP RAP CLASS II (2'-0" THICK)	CONSTRUCTION OF SUPERSTRUCTURE	CONSTRUCTION OF SUBSTRUCTURE
			NO.	LIN.FT.	NO.	LIN.FT.					
	LUMP SUM	LUMP SUM								LUMP SUM	LUMP SUM
SUPERSTRUCTURE										LUMP SUM	
SUBSTRUCTURE											LUMP SUM
END BENT NO. 1			7	245					175		
BENT NO. 1					6	270	6	LUMP SUM			
BENT NO. 2					6	240	6	LUMP SUM			
END BENT NO. 2			7	245					180		
TOTAL	LUMP SUM	LUMP SUM	14	490	12	510	12	LUMP SUM	355	LUMP SUM	LUMP SUM

PROJECT NO. B-3470
HAYWOOD COUNTY
 STATION: 15+18.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 276
 OVER PIGEON RIVER OVERFLOW
 BETWEEN NC 215 AND NC 110



DRAWN BY : P.C. BREWER DATE : 7/9/03
 CHECKED BY : B.S. COX DATE : 8/12/03

REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS: 22