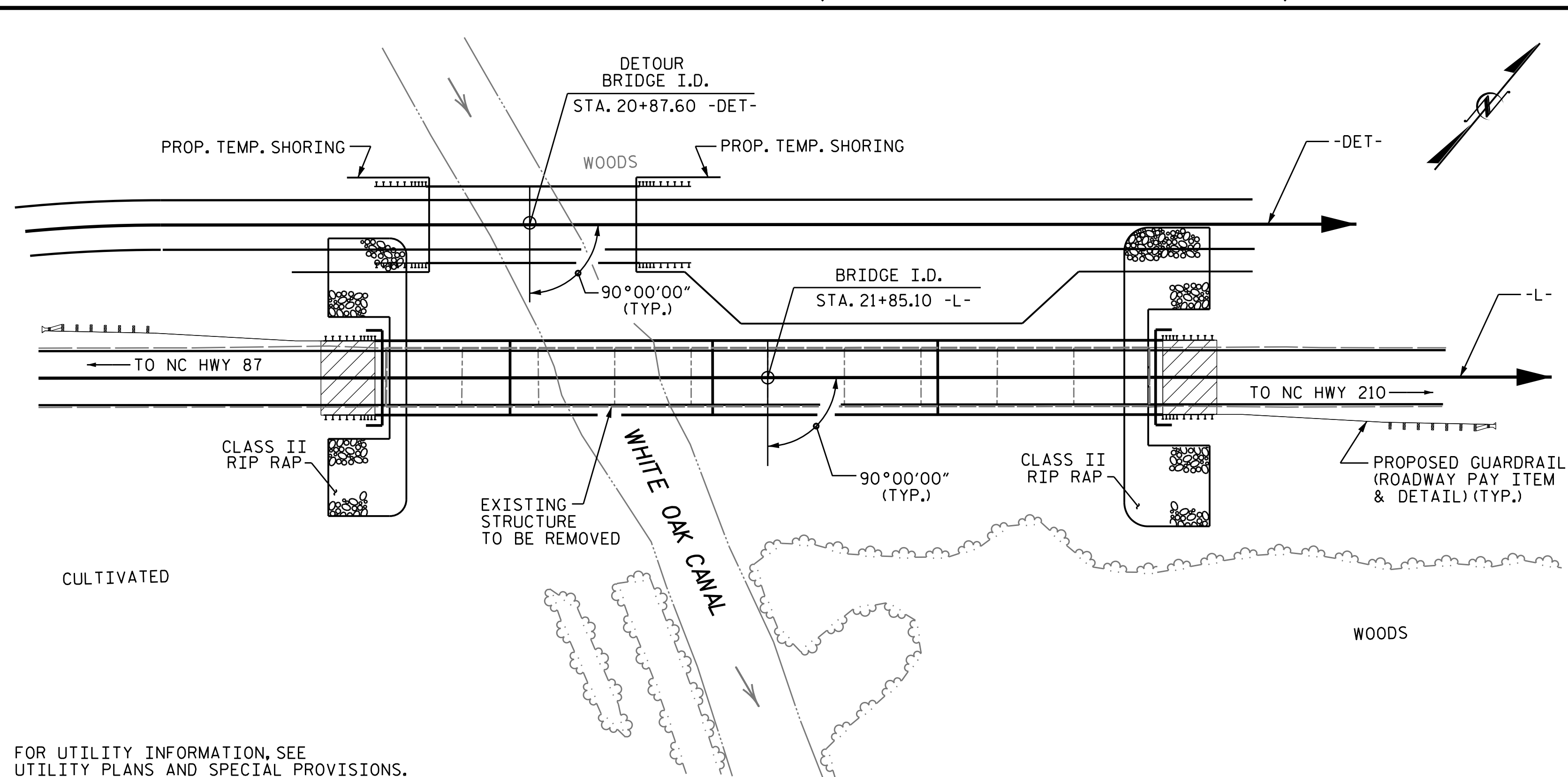


**TOTAL BILL OF MATERIAL**

	REMOVAL OF EXISTING STRUCTURE AT STA. 21+85.10 -L-	CONSTRUCTION, MAINTENANCE, AND REMOVAL OF TEMPORARY STRUCTURE AT STA. 20+87.60 -DET-	ASBESTOS ASSESSMENT	PDA TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	54" PRESTRESSED CONCRETE GIRDERS		PILE DRIVING EQUIPMENT SETUP FOR 20" PRESTRESSED CONCRETE PILES	PILE DRIVING EQUIPMENT SETUP FOR HP 12 x 53 STEEL PILES	20" PRESTRESSED CONCRETE PILES		HP 12 x 53 STEEL PILES	PILE REDRIVES	CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	
	LUMP SUM	LUMP SUM	LUMP SUM	EACH	LUMP SUM	SO. FT.	SO. FT.	CU. YDS.	LUMP SUM	LBS.	NO.	LIN. FT.	EACH	EACH	LIN. FT.	NO.	LIN. FT.	NO.	EACH	LIN. FT.	TONS	SO. YDS.	LUMP SUM
SUPERSTRUCTURE					LUMP SUM	12,297	10,929		LUMP SUM		16	1384.67							697.67			LUMP SUM	
END BENT 1								26.9		4596				6			390	6			231	256	
BENT 1								13.5		2076			5		300	5							
BENT 2								17.5		2418			5		275	5							
BENT 3								17.5		2418			5		275	5							
END BENT 2								26.9		5008				7			420	7	4		292	324	
TOTAL	LUMP SUM	LUMP SUM	LUMP SUM	2	LUMP SUM	12,297	10,929	102.3	LUMP SUM	16,516	16	1384.67	15	13	850	15	810	13	16	697.67	523	580	LUMP SUM

BENCH MARK: B.M.#1 R/R SPIKE IN BASE OF 18" PINE, 95.4' RIGHT OF STA. 16+00.71 -L-, ELEV. 18.15



**LOCATION SKETCH**

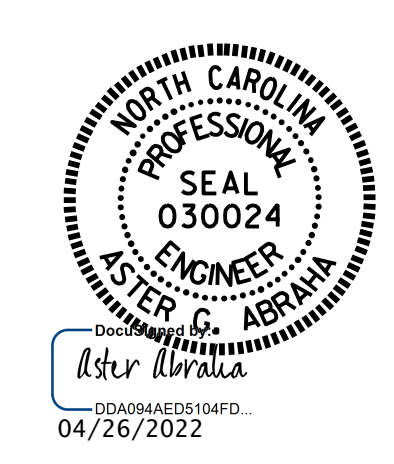
**NOTES:**

- 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 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.
- PRESTRESSED CONCRETE DECK PANELS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.
- 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 ON THE PLANS OR APPROVED BY THE ENGINEER.
- FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.
- THE EXISTING STRUCTURE CONSISTING OF 10 SPANS @ 34.0 FT. WITH A CLEAR ROADWAY WIDTH OF 26.0 FT. WITH RC FLOOR AND RC DECK GIRDERS ON RC END BENT AND BENT ON PRECAST RC PILES, AND LOCATED AT PROPOSED STRUCTURE SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY NOT POSTED FOR LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE 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.
- FOR LIMITS OF TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE TRAFFIC CONTROL PLANS. FOR PAY ITEM FOR TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE ROADWAY PALNS.
- THE CONTRACTOR WILL BE REQUIRED TO CONSTRUCT, MAINTAIN AND AFTERWARDS REMOVE A TEMPORARY STRUCTURE AT STA. 20+87.60 -DET- FOR USE DURING CONSTRUCTION OF THE PROPOSED STRUCTURE. FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY STRUCTURE, SEE SPECIAL PROVISIONS.
- TEMPORARY FILL SHALL NOT BLOCK MORE THAN 50 PERCENT OF THE CHANNEL AT ANY TIME.
- THE SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. 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.
- 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 SHEET 1 OF 3 SHALL BE EXCAVATED FOR A DISTANCE OF 40' LEFT AND 45' RIGHT OF CENTERLINE ROADWAY AT END BENT #1, AND 50' LEFT AND 45' RIGHT OF CENTERLINE ROADWAY AT END BENT #2, OR AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION.
- THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18-EVALUATING SCOUR AT BRIDGES."
- THE DESIGN SCOUR ELEVATIONS ARE 5.5', 3.7', AND 5.5', FOR BENT 1 THROUGH 3.
- FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

HYDRAULIC DATA		OVERTOPPING FLOOD DATA	
DESIGN DISCHARGE	= 950 CFS	OVERTOPPING DISCHARGE	= 17000 CFS
FREQUENCY OF DESIGN FLOOD	= 50 YRS.	FREQUENCY OF OVERTOPPING FLOOD	= 500+ YRS.
DESIGN HIGH WATER ELEVATION	= 12.8 FT.	OVERTOPPING FLOOD ELEVATION	= 20.2 FT.
DRAINAGE AREA	= 6.5 SQ. MI.		
BASE DISCHARGE (Q100)	= 1200 CFS		
BASE HIGH WATER ELEVATION	= 13.7 FT.		

PROJECT NO. B-5694  
BLADEN COUNTY  
 STATION: 21+85.10 -L-

SHEET 4 OF 4



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**GENERAL DRAWING**  
 BRIDGE OVER WHITE OAK CANAL  
 ON NC HWY 11 BETWEEN  
 NC HWY 87 & NC HWY 210

DRAWN BY : M.M. AHMED DATE : JUNE 2019  
 CHECKED BY : S. WANCE DATE : JUNE 2019  
 DESIGN ENGINEER OF RECORD: M.M. AHMED DATE : JUNE 2019

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-4
1			3			TOTAL SHEETS
2			4			37