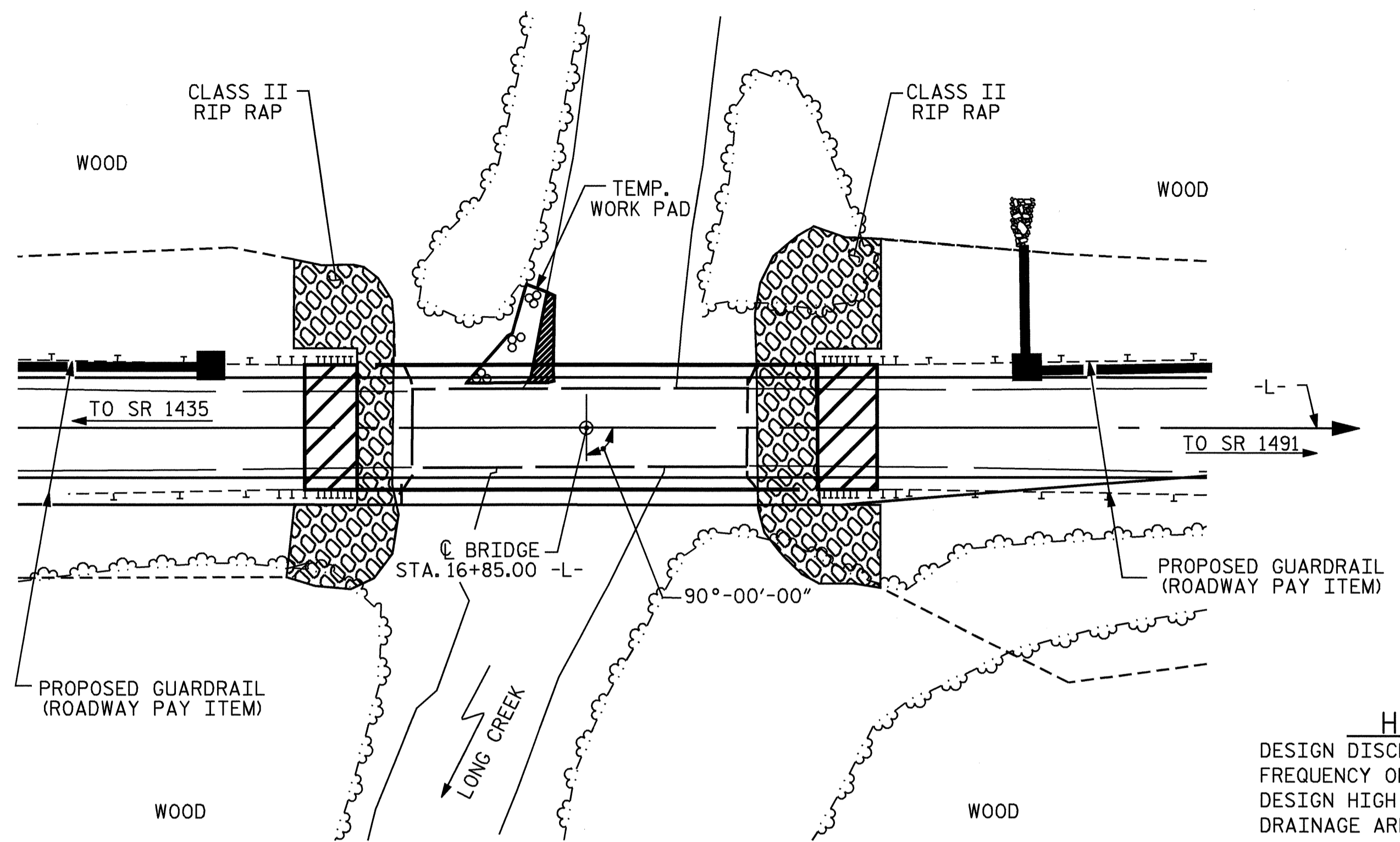


BM# 2 RR SPIKE IN BASE OF TREE -L- STA 16+65.29, 138.40' RT. ELEV. 484.85'



FOR UTILITY INFORMATION,
 SEE UTILITY PLANS AND
 SPECIAL PROVISIONS.

HYDRAULIC DATA

DESIGN DISCHARGE = 4160 cfs
 FREQUENCY OF DESIGN FLOOD = 50 yrs.
 DESIGN HIGH WATER ELEVATION = EL. 488.09
 DRAINAGE AREA = 20.9 sq. mi.
 BASIC DISCHARGE (Q100) = 4765 cfs
 BASIC HIGH WATER ELEVATION = EL. 488.60

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE = 6735 cfs
 FREQUENCY OF OVERTOPPING FLOOD = 500 yrs.
 OVERTOPPING FLOOD ELEVATION = EL. 489.72

LOCATION SKETCH

CONSTRUCTION SEQUENCE OF SUPERSTRUCTURE

- ALL DETAILS AND MATERIAL SPECIFICATIONS ARE ON THE PLANS, IN THE STANDARD SPECIFICATIONS, OR IN THE PROJECT SPECIAL PROVISIONS.
 THE CONTRACTOR MAY SUBMIT AN ALTERNATE CONSTRUCTION SEQUENCE OF SUPERSTRUCTURE TO THE ENGINEER FOR REVIEW AND APPROVAL.
 CONSTRUCT THE SUPERSTRUCTURE IN THE FOLLOWING SEQUENCE:
1. PLACE ALL DECK GIRDERS ATOP ELASTOMERIC BEARINGS. TEMPORARY BRACING MAY BE REQUIRED DURING GIRDER ERECTION.
 2. DIAPHRAGMS MAY BE INSTALLED WHILE PLACING GIRDERS. DO NOT TIGHTEN BOLTS IN DIAPHRAGM CONNECTIONS.
 3. ADJUST GIRDERS VERTICALLY SO THERE IS NO VERTICAL DIFFERENCE BETWEEN TOP FLANGE EMBEDDED ANGLES IN ADJACENT GIRDERS.
 4. INSTALL DIAPHRAGMS IF NOT PREVIOUSLY INSTALLED. TIGHTEN ALL BOLTS AS PER STANDARD SPECIFICATIONS.
 5. WELD ALL TOP FLANGE CONNECTOR PLATES AS SHOWN ON THE PLANS.
 6. VERTICAL ADJUSTMENT DEVICE(S) MAY BE RELEASED.
 7. POUR GROUT IN SHEAR KEYS, TOP FLANGE CONNECTOR PLATE BLOCKOUTS, AND CONCRETE INSERTS.
 8. CAST INTEGRAL ABUTMENT WALLS (POUR #2) OF END BENT #1 AND END BENT #2.
 9. CAST PARAPET AND ATTACH METALRAIL.

TOTAL BILL OF MATERIAL

	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP. ACCESS	REMOVAL OF EXISTING STRUCTURE	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	STRUCTURAL STEEL (APPROX.)	HP 12 x 53 STEEL PILES		STEEL PILE POINTS	ONE BAR METAL RAIL	1'-0" X 2'-1" CONCRETE PARAPET	PLAIN RIP RAP CLASS II (2'-0" THICK)	FILTER FABRIC FOR DRAINAGE	ELASTOMERIC BEARINGS	TYPE III PRESTRESSED CONCRETE DECK GIRDERS	
								NO.	LIN. FT.							NO.	LIN. FT.
SUPERSTRUCTURE							4200				199.67	214.67			LUMP SUM	5	536.67
END BENT No. 1				38.4		4368		9	90	9			292	324			
END BENT No. 2				38.5		4368		9	180				370	412			
TOTAL	LUMP SUM	LUMP SUM	LUMP SUM	76.9	LUMP SUM	8736	4200	18	270	9	199.67	214.67	662	736	LUMP SUM	5	536.67

DRAWN BY : J. G. KHARVA DATE : 03/03/05
 CHECKED BY : W.A. DAVIS DATE : 03/09/05

NOTES

- ASSUMED LIVE LOAD (SUPERSTRUCTURE) = HL-93.
 ASSUMED LIVE LOAD (SUBSTRUCTURE) = 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 (SUPERSTRUCTURE ONLY) HAS BEEN DESIGNED BY THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS - 3RD EDITION.
- THIS BRIDGE (SUBSTRUCTURE ONLY) HAS BEEN DESIGNED BY THE STRENGTH DESIGN METHOD AS SPECIFIED IN AASHTO STANDARD SPECIFICATIONS.
- THE EXISTING STRUCTURE CONSISTING OF TIMBER DECK ON A STEEL FLOOR BEAM SYSTEM WITH TIMBER END BENTS AND TIMBER BENTS ON CONCRETE SILLS WITH 4 SPANS AT 20.0 FT. AND WITH A CLEAR ROADWAY WIDTH OF 19.0 FT. SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT.
- 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 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.
- 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 AT STATION 16+85.00 -L-.'
- THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO 16TH EDITION STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES FOR SEISMIC PERFORMANCE CATEGORY A.
- 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 BAR USED THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLES, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS.
- THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH HEC 18, 'EVALUATING SCOUR AT BRIDGES', NOVEMBER, 1995.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 25 FT. EACH SIDE OF CENTERLINE ROADWAY AS DIRECTED BY THE ENGINEER. THE ESTIMATED QUANTITY IS LESS THAN 500 CUBIC YARDS. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION. FOR UNCLASSIFIED STRUCTURE EXCAVATION, SEE SPECIAL PROVISIONS.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- 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 16+85.00 -L-.
- FOR TYPE III PRESTRESSED CONCRETE DECK GIRDERS, SEE SPECIAL PROVISIONS.
- THE TYPE III PRESTRESSED CONCRETE DECK GIRDER SHALL CONTAIN CALCIUM NITRITE CORROSION INHIBITOR, SEE SPECIAL PROVISIONS FOR CALCIUM NITRITE CORROSION INHIBITOR.
- THE TYPE III PRESTRESSED CONCRETE GIRDER SHALL CONTAIN AT LEAST ONE POZZOLAN IN THE AMOUNT SPECIFIED IN ARTICLE 1024-1 (A) OF THE STANDARD SPECIFICATION.

PROJECT NO. B-3700
STANLY COUNTY
 STATION: 16+85.00 -L-

SHEET 3 OF 3



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**GENERAL DRAWING
 FOR BRIDGE OVER
 LONG CREEK ON
 SR 1214 BETWEEN
 SR 1435 AND SR 1491**

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

TOTAL SHEETS 22