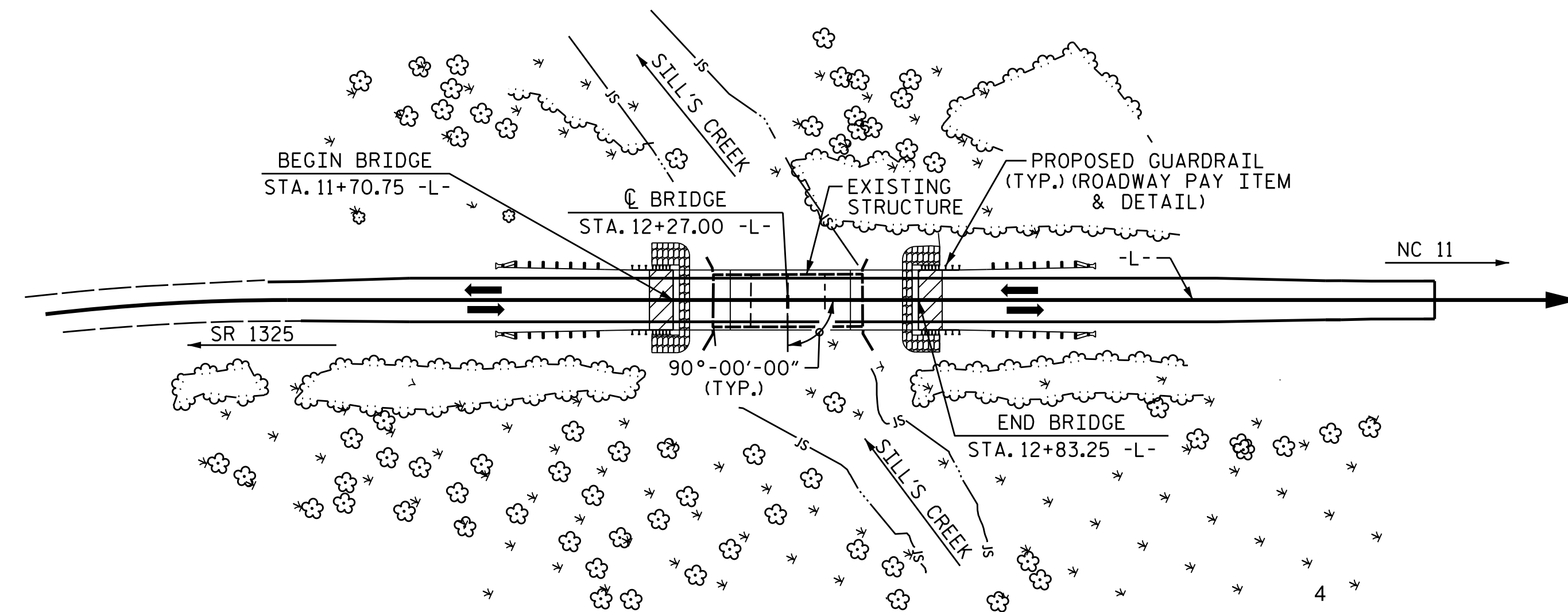


**TOTAL BILL OF MATERIAL**

	REMOVAL OF EXISTING STRUCTURE	PDA TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES	PILE DRIVING EQUIPMENT SETUP FOR HP 14 X 73 GALVANIZED STEEL PILES	HP 12 X 53 STEEL PILES	HP 14 X 73 GALVANIZED STEEL PILES	STEEL PILE POINTS	PILE REDRIVES	TWO BAR METAL RAIL	1'-2" X 2'-8 3/4" CONCRETE PARAPET	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLAB	ASBESTOS ASSESSMENT				
	LUMP SUM	EACH	LUMP SUM	CU. YDS.	LUMP SUM	LBS.	EACH	EACH	NO.	LIN. FT.	NO.	LIN. FT.	EACH	EACH	LIN. FT.	LIN. FT.	TONS	SO. YDS.	LUMP SUM	NO.	LIN. FT.	LUMP SUM	
SUPERSTRUCTURE															205.5	220.0				LUMP SUM	30	1100	
END BENT 1				13.0		1965	5		5	175			3				90	100					
BENT 1				9.8		1932		7			7	315	7	4									
BENT 2				9.8		1932		7			7	385	4										
END BENT 2				13.0		1965	5		5	200			3				105	115					
TOTAL	LUMP SUM	1	LUMP SUM	45.6	LUMP SUM	7794	10	14	10	375	14	700	7	14	205.5	220.0	195	215	LUMP SUM	30	1100	LUMP SUM	

BM #1 - RR SPIKE SET IN BASE OF 15" OAK, -L- STA. 13+58.00, 31' RT., ELEV. 48.73'



FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS.

**LOCATION SKETCH**

**HYDRAULIC DATA**

DESIGN DISCHARGE = 950 CFS  
 FREQUENCY OF DESIGN DISCHARGE = <10 YRS.  
 DESIGN HIGH WATER ELEVATION = 47.6 FT.  
 DRAINAGE AREA = 11.5 SQ. MI.  
 BASE DISCHARGE (Q100) = 2438 CFS  
 BASE HIGH WATER ELEVATION = 49.53 FT.

**OVERTOPPING FLOOD DATA**

OVERTOPPING DISCHARGE = 950 CFS  
 FREQUENCY OF OVERTOPPING FLOOD = <10 YRS.  
 OVERTOPPING FLOOD ELEVATION = 47.6 FT.  
 OVERTOPPING OCCURS @ STA. 9+47.00 -L-  
 OVERTOPPING ELEVATION REPRESENTS SAG ELEV.

**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.

THIS BRIDGE SHALL BE CONSTRUCTED USING TOP-DOWN CONSTRUCTION METHODS. THE USE OF A TEMPORARY CAUSEWAY OR WORK BRIDGE IS NOT PERMITTED.

NO CRANE SHALL BE PLACED NOR OPERATED ON SPAN B.

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.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 25 FEET 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. SEE SECTION 412 OF THE STANDARD SPECIFICATIONS.

THE EXISTING STRUCTURE CONSISTING OF 4 SPANS 1 @ 17'-9", 1 @ 17'-2", 1 @ 16'-9", AND 1 @ 17'-10" WITH A TIMBER DECK ON TIMBER JOISTS AND A CLEAR ROADWAY WIDTH OF 24.167 WITH AN ASPHALT WEARING SURFACE ON END BENTS & INTERIOR BENTS CONSISTING OF TIMBER CAPS ON ON TIMBER PILES SHALL BE REMOVED, EXCEPT THAT THE PORTIONS OF THE END BENTS BELOW ELEVATION 45.5 SHALL REMAIN. THE EXISTING PILES FROM A PREVIOUS BRIDGE SHALL ALSO BE REMOVED AND INCLUDED WITH THE LUMP SUM PAY ITEM FOR "REMOVAL OF EXISTING STRUCTURE."

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.

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.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18-EVALUATING SCOUR AT BRIDGES."

FOR INTERIOR BENTS 1 AND 2, ONLY PARTIAL GALVANIZING OF THE PILES IS REQUIRED. SEE INTERIOR BENT SHEETS FOR REQUIRED GALVANIZED LENGTHS. PAYMENT FOR PARTIALLY GALVANIZED PILES WILL BE MADE UNDER THE CONTRACT UNIT PRICE FOR GALVANIZED STEEL PILES.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

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

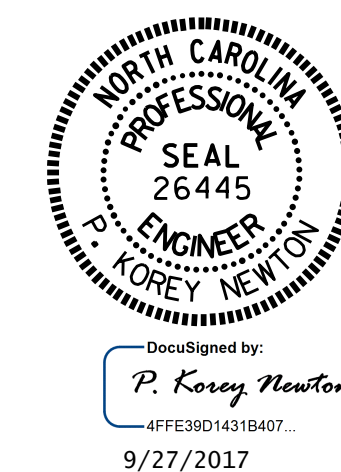
FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.

THE CONTRACTOR HAS THE OPTION TO PROVIDE PRECAST PRESTRESSED CONCRETE BENT CAPS IN ACCORDANCE WITH THE INCLUDED PLANS. FOR OPTIONAL PRECAST PRESTRESSED CONCRETE BENT CAPS, SEE SPECIAL PROVISIONS.

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT COFFERDAMS HAVE BEEN PERMITTED FOR THIS PROJECT. IF THE CONTRACTOR ELECTS TO USE COFFERDAMS ON THIS PROJECT, THE COFFERDAMS MUST BE IN ACCORDANCE WITH THE ENVIRONMENTAL PERMITS, AND THE COST OF THE COFFERDAMS WILL BE INCIDENTAL TO THE CONSTRUCTION OF THE SUBSTRUCTURE. SEE THE ENVIRONMENTAL PERMIT DRAWINGS FOR THE LIMITS OF COFFERDAMS.

PROJECT NO. B-5304  
PENDER COUNTY  
 STATION: 12+27.00 -L-

SHEET 3 OF 3



DocuSigned by:  
 P. Corey Newton  
 4FF39D14318A07  
 9/27/2017

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING**  
 BRIDGE OVER SILL'S CREEK  
 ON SR 1324 BETWEEN  
 SR 1325 AND NC-11

DRAWN BY : G. KOUCHEKI DATE : 9/16  
 CHECKED BY : J. D. HAWK DATE : 8/10/17  
 DESIGN ENGINEER OF RECORD: P. K. NEWTON DATE : 8/11/17

DOCUMENT NOT CONSIDERED  
 FINAL UNLESS ALL  
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			25