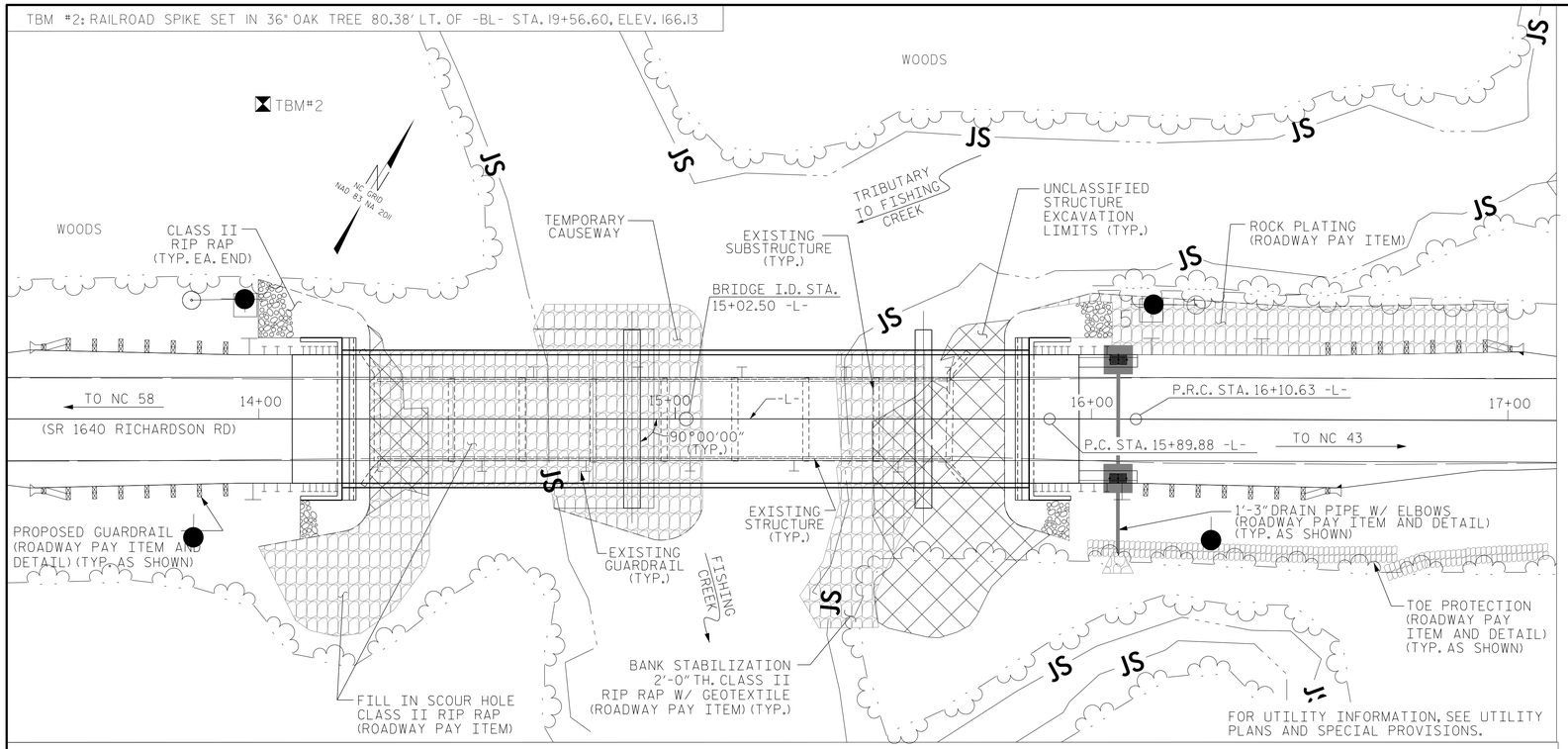

LOCATION SKETCH

GENERAL NOTES:

1. ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING
2. THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
3. THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1
4. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18 - EVALUATING SCOUR AT BRIDGES."
5. 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 DIFFERENCE BETWEEN THE EXISTING BRIDGE SUBSTRUCTURE SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.
6. 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.
7. FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.
8. FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
9. FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
10. FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
11. FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.
12. FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.
13. ASPHALT WEARING SURFACE IS INCLUDED IN ROADWAY QUANTITY ON ROADWAY PLANS.
14. THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 25'± FT LEFT SIDE AND 55'± RIGHT 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
15. THE EXISTING STRUCTURE #920077 CONSISTING OF EIGHT (8) TIMBER JOISTS SPANS @ 17'-6", 17'-6", 17'-0", 17'-0", 17'-0", 17'-0", 17'-0", 17'-3" & 17'-3" (137'-6" TOTAL LENGTH), 19'-2" CLEAR ROADWAY WIDTH AND TIMBER DECK WITH AN ASPHALT WEARING SURFACE ON TIMBER END BENTS & BENTS WITH TIMBER PILES ENCASED WITH CONCRETE NEAR THE WATER LINE AND LOCATED AT THE PROPOSED STRUCTURE SHALL BE REMOVED IN THEIR ENTIRETY. THE EXISTING BRIDGE IS PRESENTLY POSTED FOR A 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.
16. FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.
17. NO HEAVY EQUIPMENT WILL BE PLACED IN FISHING CREEK.
18. BEST MANAGEMENT PRACTICES FOR BRIDGE DEMOLITION AND REMOVAL WILL BE IMPLEMENTED DURING THE REMOVAL OF THE EXISTING BRIDGE.

TOTAL BILL OF MATERIAL

	CONSTRUCTION MAINTENANCE & REMOVAL OF TEMPORARY ACCESS	REMOVAL OF EXISTING STRUCTURE	ASBESTOS ASSESSMENT	4'-0" DIA. DRILLED PIERS NOT IN SOIL	4'-0" DIA. DRILLED PIERS IN SOIL	PERMANENT STEEL CASING FOR 4'-0" Ø DRILLED PIER	SID INSPECTIONS	SPT TESTING	CSL TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	PILE DRIVING EQUIPMENT SETUP FOR HP 12X53 STEEL PILES	PILE DRIVING EQUIPMENT SETUP FOR HP 14X73 GALVANIZED STEEL PILES	HP 12X53 STEEL PILES		HP 14X73 GALVANIZED STEEL PILES		VERTICAL CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0" THICK)	ELASTOMERIC BEARINGS	GEOTEXTILE FOR DRAINAGE	3'-0" × 2'-0" PRESTRESSED CORED SLABS	
	LUMP SUM	LUMP SUM	LUMP SUM	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	LUMP SUM	CY	LUMP SUM	LBS	LBS	EACH	EACH	No.	LF	No.	LF	LF	TON	SY	LUMP SUM	No.	LF
SUPERSTRUCTURE												LUMP SUM									330.5			LUMP SUM	33	1815.00
END BENT No. 1										LUMP SUM	21.8		2,636		7		7	175				77	85			
BENT No. 1				25	85.1	92.1	1	1	1		24.3		13,778	4,107												
BENT No. 2											10.7		2,136			8			8	240						
END BENT No. 2										LUMP SUM	21.8		2,636		7		7	175				68	75			
TOTAL	LUMP SUM	LUMP SUM	LUMP SUM	25	85.1	92.1	1	1	1	LUMP SUM	78.6	LUMP SUM	21,186	4,107	14	8	14	350	8	240	330.5	145	160	LUMP SUM	33	1815.00

GENERAL NOTES (CONTINUED):

19. THE BRIDGE WILL BE REMOVED FROM THE TOP DOWN, FIRST REMOVING THE ASPHALT WITH CONTAINMENT MEASURES IN PLACE TO PREVENT COMPONENTS OF THE BRIDGE DECK FROM DROPPING INTO THE STREAM. THE METHOD OF CONTAINMENT WILL BE PROPOSED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THIS WILL BE FOLLOWED BY REMOVAL OF THE DECKING, GIRDERS, ETC., AND FINALLY THE WOODEN PILES. AN ATTEMPT WILL BE MADE TO COMPLETELY REMOVE THE EXISTING AND HISTORIC TIMBER PILES ALONG THE WATER'S EDGE (WITH CONCRETE ENCASEMENTS WHERE APPLICABLE) BEHIND AN IMPERVIOUS DIKE (THAT IS INCIDENTAL TO THE WORK). AN ATTEMPT WILL ALSO BE MADE TO COMPLETELY REMOVE THE INTERIOR EXISTING AND HISTORIC TIMBER PILES. IF THE REMOVAL OF THE TIMBER PILES CANNOT BE ACCOMPLISHED WITH MINIMAL SUBSTRATE DISTURBANCE, THE PILES WILL BE PINCHED OFF ONE FOOT BELOW THE MUD LINE OR CUT FLUSH WITH EXISTING MUD LINE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL NOT BE ALLOWED TO DRAG REMOVED TIMBER PILES ON OR ACROSS THE STREAM BED.
20. DECK DRAINS WILL NOT BE ALLOWED TO DISCHARGE DIRECTLY INTO THE STREAM.
21. 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 15+02.50 -L-.
22. FOR REMOVAL OF EXISTING STRUCTURE AT STATION 15+02.50 -L-, SEE SPECIAL PROVISIONS.

HYDRAULIC DATA

DESIGN DISCHARGE	9700 CFS
FREQUENCY OF DESIGN FLOOD	25 YR.
DESIGN HIGHWATER ELEV.	169.8 FT.
DRAINAGE AREA	118 SQ. MI.
BASE DISCHARGE (Q100)	15053 C.F.S
BASE HIGHWATER ELEV.	172.0 FT

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	8040 CFS
FREQUENCY OF OVERTOPPING FLOOD	10+ YR.
OVERTOPPING FLOOD ELEV.	*169.4 FT.

* OVERTOPPING AT SAG ±296 FT. PAST END OF PROJECT

DocuSigned by: David Ruggles C46276BDF412422... 7/17/2018

NORTH CAROLINA PROFESSIONAL SEAL 11725 ENGINEER DAVID R. RUGGLES

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STEWART

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PROJECT NO. 17BP.5.R.77
WARREN COUNTY
STATION: 15+02.50 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
BRIDGE OVER FISHING CREEK ON SR 1640 (RICHARDSON RD) BETWEEN NC 58 AND NC 43

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			22

DRAWN BY: E. PHELPS DATE: 2/18
CHECKED BY: J. LOFTUS DATE: 2/18
DESIGN ENGINEER OF RECORD: J. LOFTUS DATE: 2/18

WARREN 77
7/17/2018
...\400.003.920077_SMU_LS03.dgn
USER:default