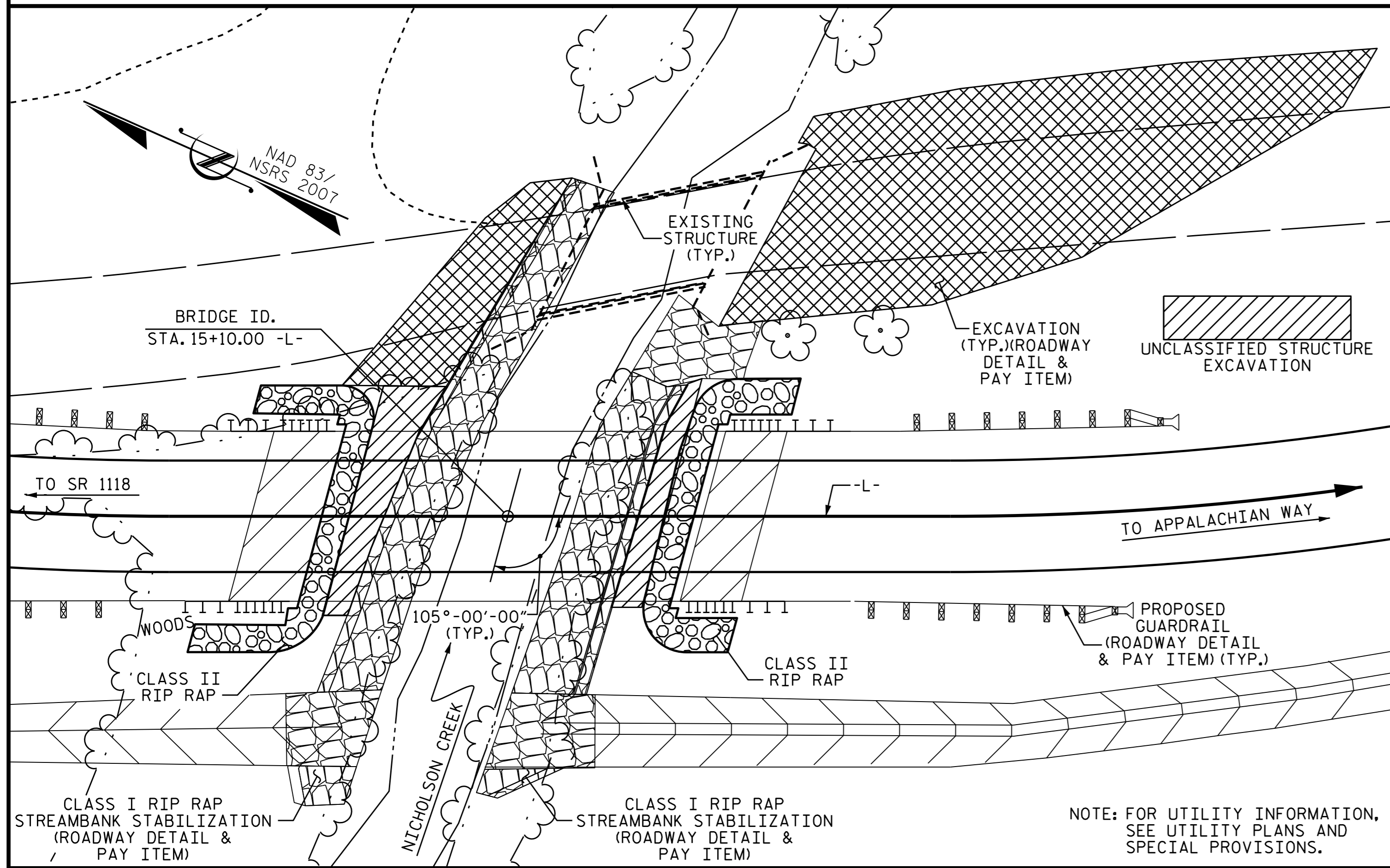


BM #1: 8" SPIKE SET IN BASE OF 15" Ø OAK TREE STA. 13+12.00-L-, 10' (RT), EL. 2113.19



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.

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 SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS. PAYMENT FOR THE SAMPLES OF REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

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."

THE MATERIAL SHOWN IN THE HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 20 FT. RIGHT AND 25 FT. LEFT 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.

AFTER SERVING AS A TEMPORARY STRUCTURE THE EXISTING STRUCTURE CONSISTING OF 1 SPAN @ 31'-0" WITH 2 1/4" ASPHALT WEARING SURFACE ON 3" X 4" TIMBERS ON 8 LINES OF 18" I-BEAMS AT 2'-3 1/2" CTS. AND A CLEAR ROADWAY WIDTH OF 17.0 FT., ON TIMBER CAP AND TIMBER PILES AT THE END BENTS LOCATED DOWNSTREAM FROM THE EXISTING STRUCTURE SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED FOR LOAD LIMIT, SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE DETERIORATE DURING CONSTRUCTION OF THE PROPOSED BRIDGE, THE POSTED LIMIT MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

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 SUBMIT DEMOLITION PLANS FOR REVIEW AND REMOVE THE BRIDGE 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 EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

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

TOTAL BILL OF MATERIAL

|                | REMOVAL OF EXISTING STRUCTURE | UNCLASSIFIED STRUCTURE EXCAVATION | CLASS A CONCRETE | BRIDGE APPROACH SLABS | REINFORCING STEEL | HP 12 X 53 STEEL PILES |          | STEEL PILE POINTS | PREDRILLING FOR PILES | TWO BAR METAL RAIL | 1'-2" X 2'-9 1/2" CONCRETE PARAPET | RIP RAP CLASS II | GEOTEXTILE FOR DRAINAGE | ELASTOMERIC BEARINGS | 3'-0" X 2'-0" PRESTRESSED CONCRETE CORED SLABS |          |
|----------------|-------------------------------|-----------------------------------|------------------|-----------------------|-------------------|------------------------|----------|-------------------|-----------------------|--------------------|------------------------------------|------------------|-------------------------|----------------------|--|----------|
|                |                               |                                   |                  |                       |                   | NO.                    | LIN. FT. |                   |                       |                    |                                    |                  |                         |                      | NO.  | LIN. FT. |
|                | LUMP SUM                      | LUMP SUM                          | CU. YDS.         | LUMP SUM              | LBS.              |                        |          | EA.               | LIN. FT.              | LIN. FT.           | LIN. FT.                           | TONS             | SQUARE YARDS            | LUMP SUM             |  |          |
| SUPERSTRUCTURE |                               |                                   |                  | LUMP SUM              |                   |                        |          |                   |                       | 123.88             | 140.00                             |                  |                         | LUMP SUM             | 11   | 770.00   |
| END BENT NO. 1 |                               | LUMP SUM                          | 14.7             |                       | 2182              | 7                      | 210      | 7                 | 78                    |                    |                                    | 80               | 48                      |                      |  |          |
| END BENT NO. 2 |                               | LUMP SUM                          | 14.7             |                       | 2182              | 7                      | 230      |                   |                       |                    |                                    | 80               | 48                      |                      |  |          |
| TOTAL          | LUMP SUM                      | LUMP SUM                          | 29.4             | LUMP SUM              | 4364              | 14                     | 440      | 7                 | 78                    | 123.88             | 140.00                             | 160              | 96                      | LUMP SUM             | 11   | 770.00   |

HYDRAULIC DATA

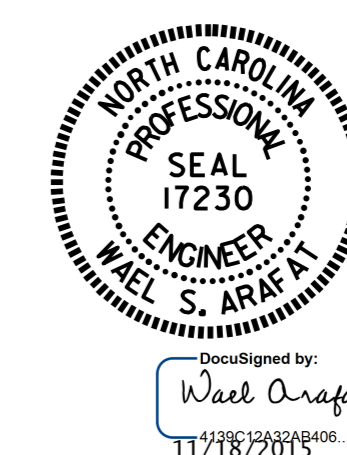
DESIGN DISCHARGE..... 1200 CFS  
 FREQUENCY OF DESIGN FLOOD..... 2 YEARS  
 DESIGN HIGH WATER ELEVATION.... 2110.40  
 DRAINAGE AREA..... 5.1 SQ. MI.  
 BASE DISCHARGE(Q100)..... 4180 CFS  
 BASE HIGH WATER ELEVATION..... 2112.08

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE..... 1900 CFS  
 FREQUENCY OF OVERTOPPING FLOOD... 5 YR.  
 OVERTOPPING FLOOD ELEVATION..... 2110.30  
 (@ STA. 07+23-L-)

PROJECT NO. B-4822  
 TRANSYLVANIA COUNTY  
 STATION: 15+10.00 -L-

SHEET 3 OF 3



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

GENERAL DRAWING  
 FOR BRIDGE OVER  
 NICHOLSON CREEK ON  
 SR 1119 BETWEEN SR 1118  
 AND APPALACHIAN WAY

DRAWN BY : H. T. BARBOUR DATE : 4-10-15  
 CHECKED BY : V. X. NGUYEN DATE : 5-15  
 DESIGN ENGINEER OF RECORD: A.M. LEE DATE : 8-7-15

| REVISIONS |     |       |     |     |       | SHEET NO.<br>S-3   |
|-----------|-----|-------|-----|-----|-------|--------------------|
| NO.       | BY: | DATE: | NO. | BY: | DATE: |                    |
| 1         |     |       | 3   |     |       | TOTAL SHEETS<br>18 |
| 2         |     |       | 4   |     |       |                    |