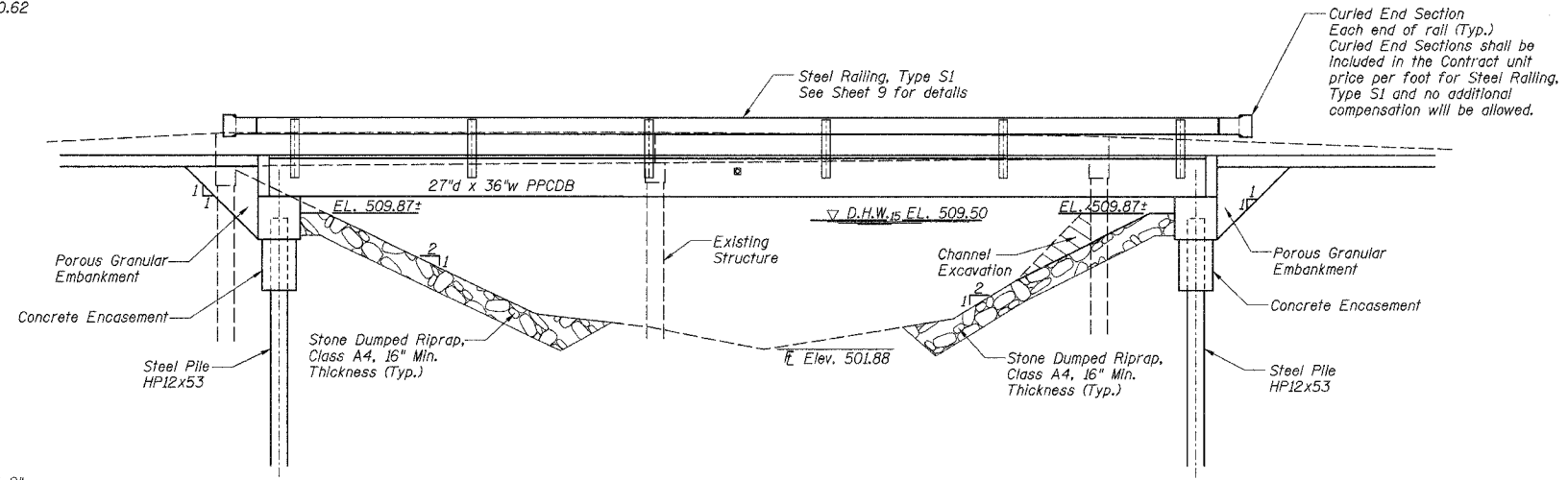


TBM 12/23/05 "B" - RR Spike set in power pole, 34.6' Lt., Sta. B+94.82 - Elev. 510.75
 TBM 12/23/05 "C" - RR Spike set in power pole, 38.6' Lt., Sta. 11+66.95 - Elev. 510.62

Existing Structure No. 026-3205: Two span bridge with precast concrete bridge slabs on closed timber abutments and pier. 52'L x 22.3'W.

| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------------|----------------|----------|---------------------|-----------|
| TR 442 | 05-08121-00-BR | FAYETTE | 10 | 7 |
| FED. ROAD DIST. NO. 7 | | ILLINOIS | FEDERAL AID PROJECT | |
| CONTRACT NO. 95489 | | | | |

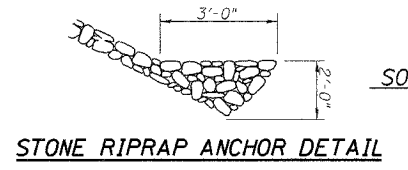


BILL OF MATERIALS (BRIDGE ONLY)

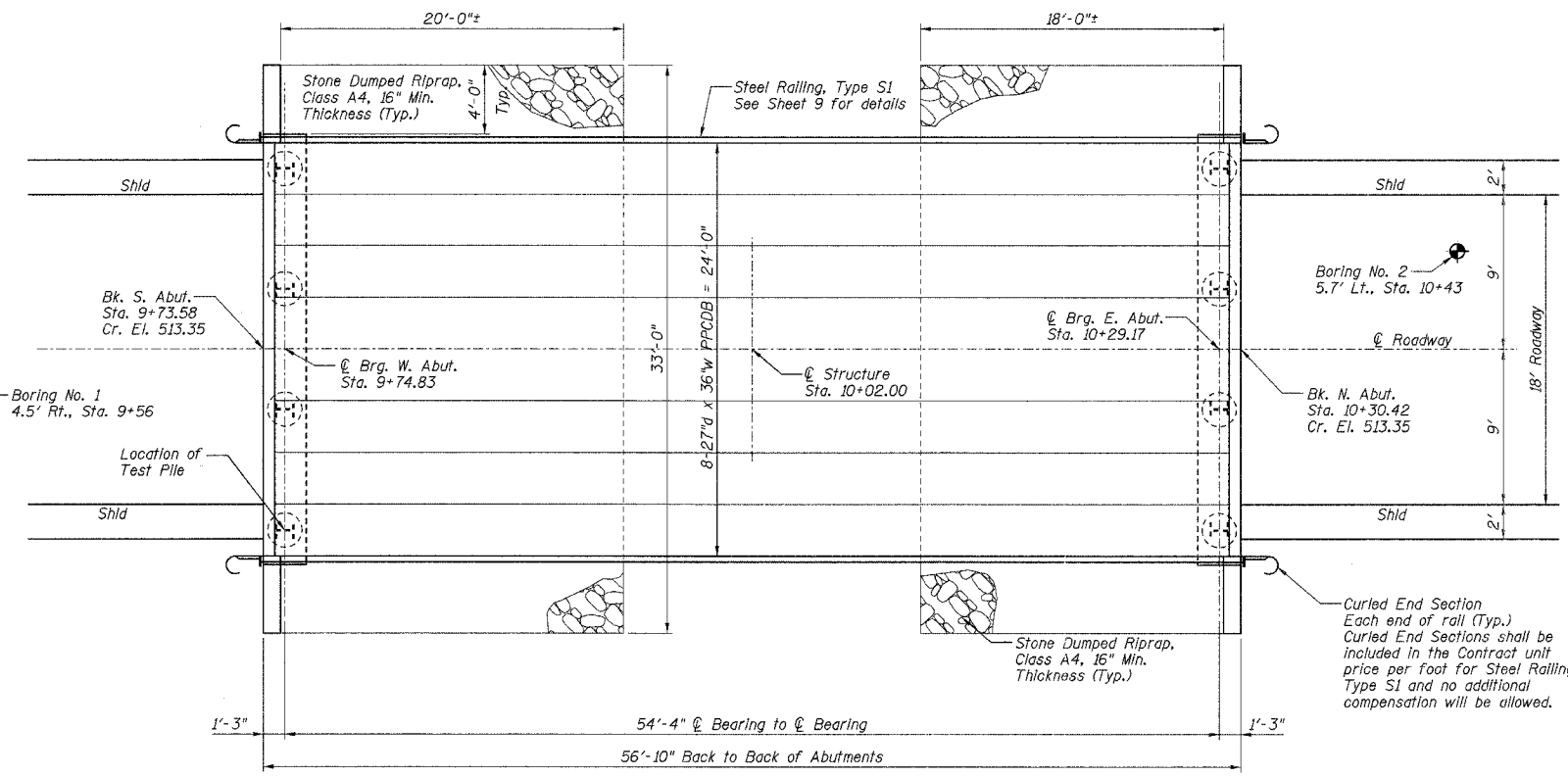
| ITEM | UNIT | SUB | SUPER | TOTAL |
|---|-------|------|-------|-------|
| CHANNEL EXCAVATION | CU YD | 10 | - | 10 |
| POROUS GRANULAR EMBANKMENT | TON | 36 | - | 36 |
| STONE DUMPED RIPRAP, CLASS A4 | TON | 120 | - | 120 |
| REMOVAL OF EXISTING STRUCTURES | EACH | - | - | 1 |
| CONCRETE STRUCTURES | CU YD | 17.2 | - | 17.2 |
| PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH) | SO FT | - | 1336 | 1336 |
| REINFORCEMENT BARS | POUND | 2660 | - | 2660 |
| STEEL RAILING, TYPE S1 | FOOT | - | 114 | 114 |
| FURNISHING STEEL PILES HP12X53 | FOOT | 315 | - | 315 |
| DRIVING PILES | FOOT | 315 | - | 315 |
| TEST PILE STEEL HP12X53 | EACH | 1 | - | 1 |
| CONCRETE ENCASEMENT | CU YD | 2.8 | - | 2.8 |
| NAME PLATES | EACH | 1 | - | 1 |

GENERAL NOTES

See Section 502 of the Standard Specifications for Structure Excavation.
 Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
 Channel excavation shall be excavated as shown within the limits of the proposed bridge, then tapered to the existing channel at the ROW line. If the Engineer deems the material satisfactory, it may be used to construct the roadway embankment.
 See Specifications for Soil Borings.
 Do not scale these drawings.
 The Contractor shall drive one (1) Steel HP12x53 Test Pile in a permanent location at the South Abutment as directed by the Engineer before ordering the remainder of the piles.
 The Contractor is advised that some upper level layers of stiff soils may be encountered prior to the location of anticipated refusal. See the Soil Borings for further information.
 In addition to all other requirements of Section 512 of the Standard Specifications, splices for Steel H-piles shall develop the full capacity of the steel's cross sectional area of the pile for tension, shear and bending forces. One approved method of achieving this requirement is full penetration butt welding of the entire cross section. Other types of splices meeting the full capacity requirement may be allowed subject to the approval of the Engineer. Any proposal by the Contractor to use an alternate splice method must include adequate documentation demonstrating that the full tension, shear and bending capacities will be met. Appropriate welder qualifications will be required for the positions and processes used in splicing all piles. Nondestructive testing of completed welds will be limited to visual inspection.
 The abutment bearing seat surfaces for the precast prestressed concrete deck beams shall be adjusted by shimming to assure firm and even bearing. As required, 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.



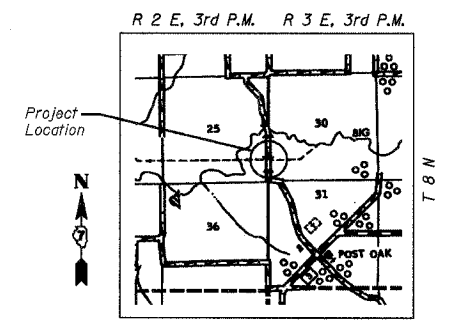
ELEVATION



TRIBUTARY TO BIG CREEK
 BUILT 200 BY
 FAYETTE COUNTY
 PROJECT NO. BROS-051(75)
 SECTION 05-08121-00-BR
 LOADING HS-20
 STRUCTURE NO. 026-3434

NAME PLATE

(See State Standard 515001 for details)



LOCATION SKETCH

I certify that to the best of my information, knowledge, and belief, this bridge is structurally adequate for the design loading shown on plans. The design is an economical one for the structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges.



GARY L. HAHN
 81-4853
 LICENSED
 STRUCTURAL
 ENGINEER
 CENTRALIA, ILLINOIS
 ILLINOIS LICENSED STRUCTURAL
 ENGINEER NO. 81-4853
 EXPIRES NOV. 30, 2006

WATERWAY DATA

| Drainage Area = 96.7 Sq. Mi. | | Low Grade Elev. 507.9 @ Sta. 17+30+ | | | | | | | |
|------------------------------|----------|-------------------------------------|-----------------------|----------------|-------------------|------------------|----------------------|---------------------|--------|
| Flood Yr. | Q C.F.S. | Opening Sq. Ft. Exist. | Opening Sq. Ft. Prop. | Natural H.W.E. | Head - Ft. Exist. | Head - Ft. Prop. | Headwater El. Exist. | Headwater El. Prop. | |
| Design | 15 | 7954 | 236 | 244 | 509.50 | Neg. | Neg. | 590.50 | 509.50 |
| Base | 100 | 12514 | 249 | 259 | 510.90 | Neg. | Neg. | 510.90 | 510.90 |

DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi

PRECAST PRESTRESSED UNITS
 $f'_c = 5,000$ psi
 $f'_s = 270,000$ psi (1/2" strands)
 $f'_{sl} = 189,000$ psi (1/2" strands)

DESIGN SPECIFICATIONS

AASHTO - 2002 17th Edition

LOADING HS 20-44

Allow 25#/sq. ft. for future wearing surface.

GRADE ON STRUCTURE

0.00%

08/14/2006