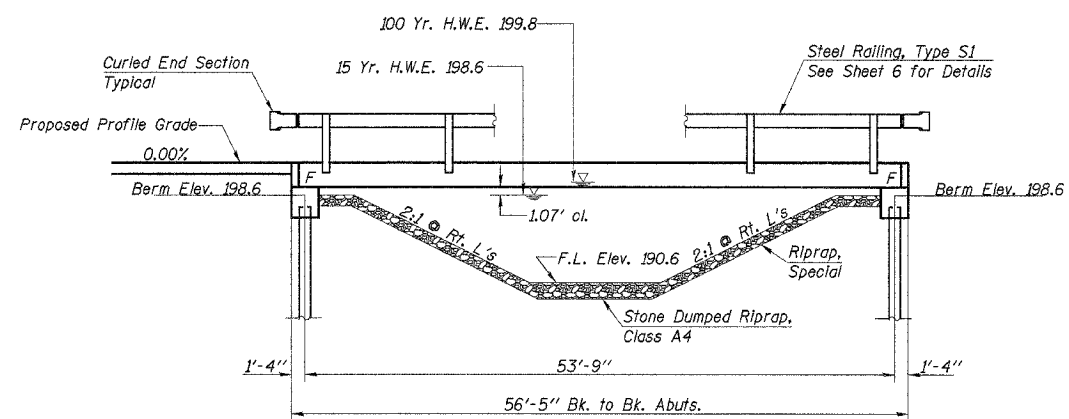
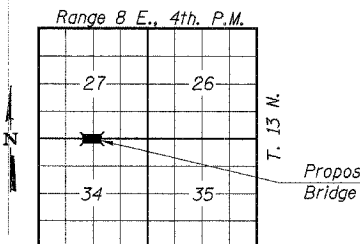


| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|----------------|----------|--------------|-----------|
| C.H. 8 | 05-00085-00-BR | MARSHALL | 13 | 4 |

ILLINOIS PROJ. NO. BR05-123(2.1)
CONTRACT NO. 89397



ELEVATION



LOCATION PLAN

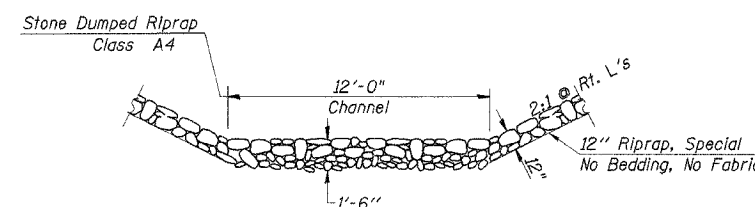
GENERAL NOTES

See Proposal Booklet for Boring data.

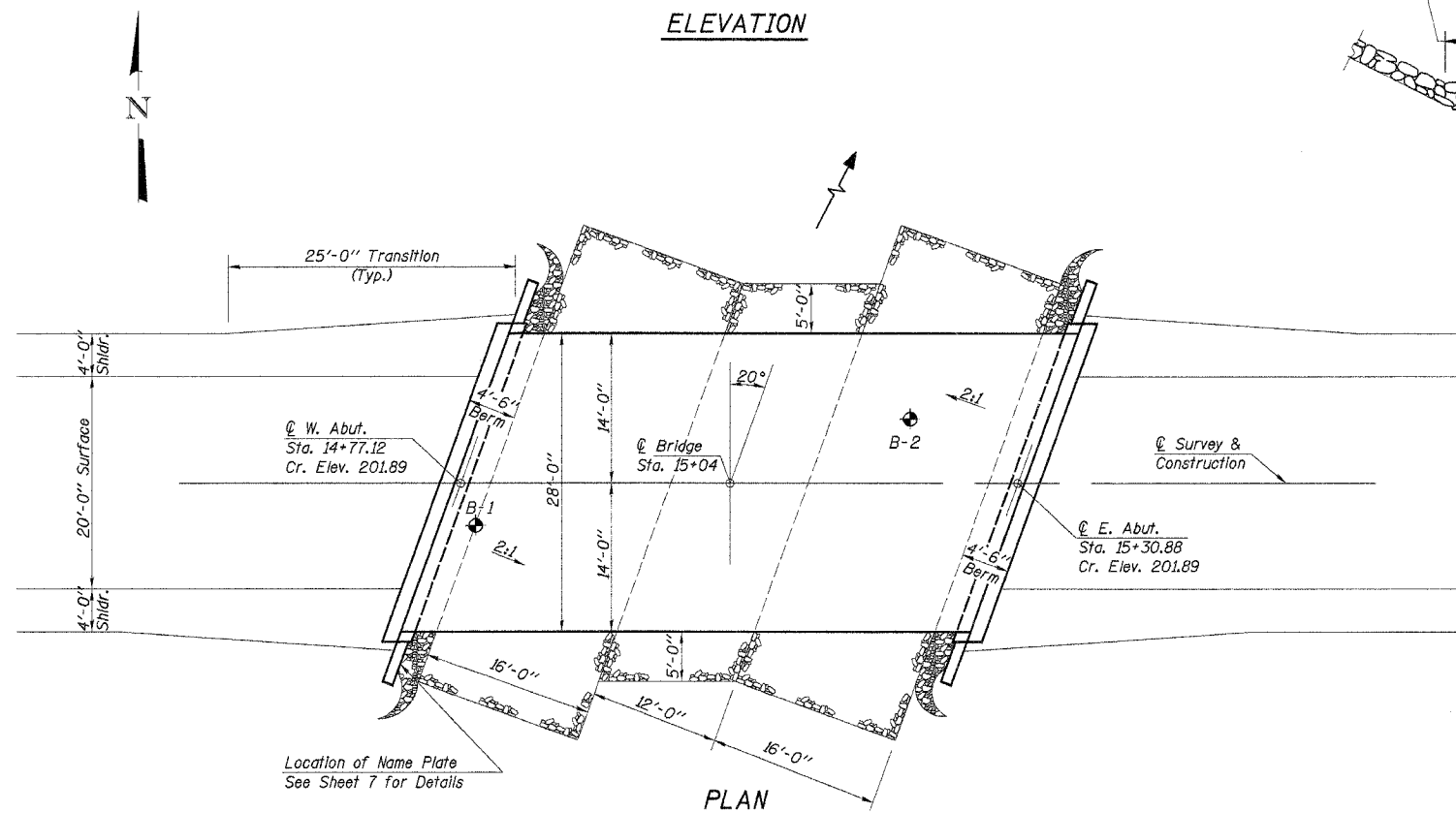
Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

The Contractor shall drive one metal shell test pile in a permanent location at the West abutment and the East abutment as directed by the Engineer, before ordering the remainder of piles.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.



RIPRAP PLACEMENT



PLAN

BUILT 200_ BY
MARSHALL COUNTY
SEC. 05-00085-00-BR
COUNTY ROUTE 8
F.A. PROJ. BR05-123(2.1)
STR. NO. 062-3133
LOADING HS20

LETTERING FOR NAME PLATE

See Std. 515001

TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL |
|---|---------|-------|------|-------|
| Precast Prestressed Concrete Deck Beams (21" Depth) | Sq. Ft. | 1540 | | 1540 |
| Concrete Structures | Cu. Yd. | | 20.0 | 20.0 |
| Reinforcement Bars | Pound | | 2410 | 2410 |
| Steel Railing, Type S1 | Foot | 110 | | 110 |
| Name Plates | Each | | 1 | 1 |
| Metal Pile Shells 12" | Foot | | 440 | 440 |
| Test Pile Metal Shells | Each | | 2 | 2 |
| Riprap, Special | Ton | | 112 | 112 |
| Stone Dumped Riprap, Class A4 | Ton | | 45 | 45 |
| Blk. Conc. Surf. Crse., Mix "C", N50 | Ton | 20 | | 20 |
| Waterproofing Membrane System | Sq. Yd. | 172 | | 172 |
| Portland Cement Mortar Fairing Course | Foot | 165 | | 165 |

DESIGN STRESSES

$f'_c = 5,000$ p.s.i. (Prestressed Beams)
 $f'_{bi} = 4,000$ p.s.i. (Prestressed Beams)
 $f'_c = 1,400$ p.s.i. (Concrete)
 $f'_s = 270,000$ p.s.i. (Prestressed Strands)
 $f'_{si} = 201,960$ p.s.i. (Prestressed Strands)
 $f'_s = 24,000$ p.s.i. (Reinf. Bars -- Field Units)
 $f'_y = 60,000$ p.s.i. (Reinf. Bars -- Field Units)
 $n = 9$ (Concrete)
 LOADING HS20-44
 Design Specifications: 2002 AASHTO
 25# / Sq. Ft. included in dead load for future wearing surface.

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

Fred J. Stone, Jr. (1-30-06)
ILLINOIS STRUCTURAL NO. 2934 (Expires 11/30/06)



WATERWAY INFORMATION

| | |
|---------------------------|--------------|
| Drainage Area | 0.67 Sq. Mi. |
| Existing Opening (15 Yr.) | 145 Sq. Ft. |
| Required Opening (15 Yr.) | 247 Sq. Ft. |
| Proposed Opening (15 Yr.) | 247 Sq. Ft. |
| Design Discharge (15 Yr.) | 477 C.F.S. |
| Created Head (15 Yr.) | 0.0 Ft. |
| 100 Year Discharge | 802 C.F.S. |
| 100 Yr. Created Head | 0.2 Ft. |

| | |
|----------|-----------|
| DESIGNED | SFM |
| CHECKED | FJS |
| DRAWN | SAP & JPS |
| CHECKED | SFM |

GENERAL PLAN & ELEVATION

COUNTY HIGHWAY 8
SECTION 05-00085-00-BR
MARSHALL COUNTY
STATION 15+04

4440 ASH GROVE
SPRINGFIELD, IL 62711
(217) 793-8600
oastone@amvid.com

OZYURT AND STONE, INC.
CONSULTING ENGINEERS

JOB NO.: 0413
FILE: GPE.DGN
DATE: 01/31/06