

B.M.: Mag Nail on Top of 42" CMP
Sta. 19+32, 19' Rt.
Elev. 617.51

Chiseled "□" on S.W. Wing Wall of Bridge
Sta. 19+85, 8' Lt.
Elev. 621.01

Existing Structure:

Single span pony truss with concrete deck on concrete closed abutments. The structure is ±27'-6" back to back of abutments, ±14'-0" out to out of deck and is not skewed. Str. No. 038-5028

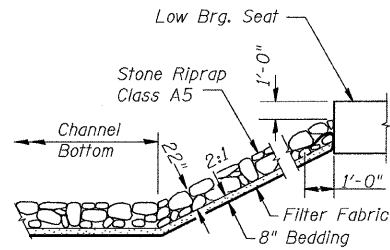
Salvage: None

Road to be closed to traffic during construction.

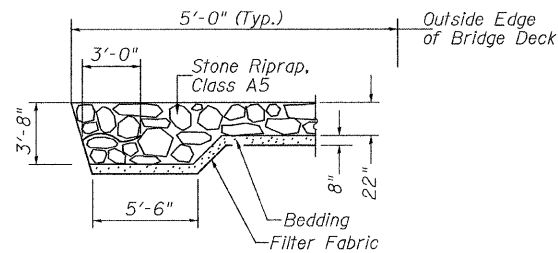
DRAINAGE DITCH BUILT 201 BY PAPINEAU ROAD DISTRICT IROQUOIS COUNTY SEC. 08-21119-00-BR T.R. 212 STATION 20+00.00 F.A. PROJ. BROS-0075(147) STR. NO. 038-5040 LOADING HL-93

NAME PLATE

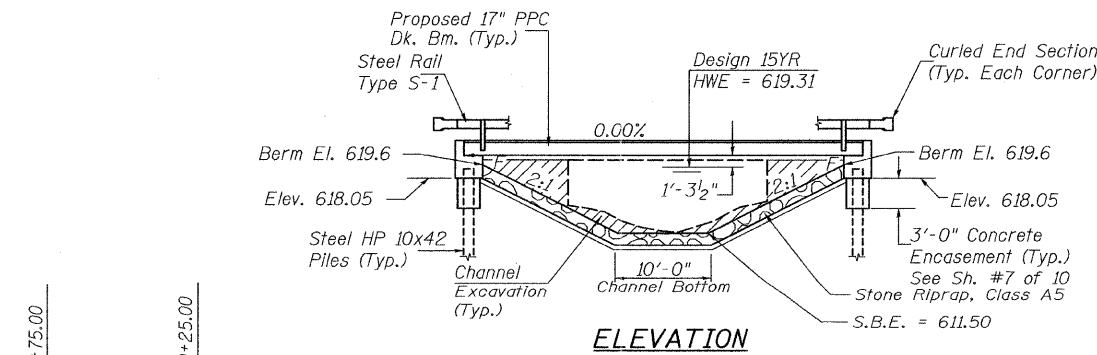
Locate Name Plate at S.E. Wingwall Corner of Bridge (See Std. 515001)



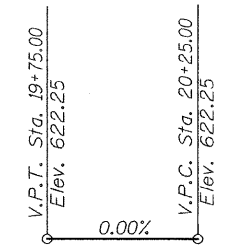
STONE RIPRAP DETAIL



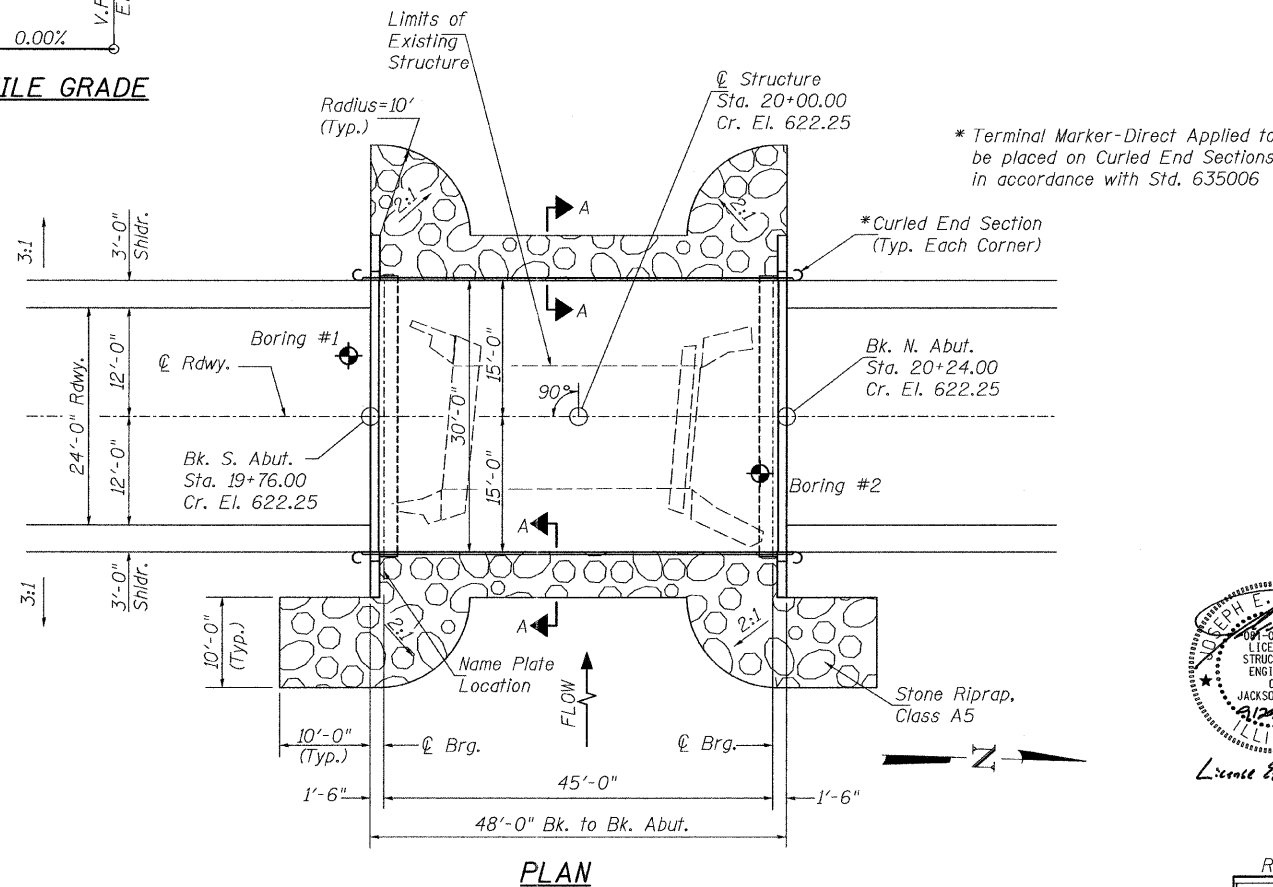
SECTION A-A



ELEVATION



PROFILE GRADE



PLAN

DESIGN SCOUR TABLE

| Location | S. Abut. | N. Abut. |
|------------------------|----------|----------|
| Design Scour Elevation | 618.05 | 618.05 |

WATERWAY INFORMATION

| Drainage Area = 4.68 Sq. Mi. | | Low Grade Elev. = 620.83 @ Sta. 22+50.00 | | | | | | | |
|------------------------------|-----------|--|-----------------|-------|-------------|------------|--------|---------------|--------|
| Flood | Freq. Yr. | Q C.F.S. | Opening Sq. Ft. | | Nat. H.W.E. | Head - Ft. | | Headwater El. | |
| Design | 15 | 425 | Exist. | Prop. | Exist. | Prop. | Exist. | Prop. | Exist. |
| Design | 15 | 425 | 124 | 200 | 619.31 | 0.06 | 0.00 | 619.37 | 619.31 |
| Base | 100 | 677 | 138 | 224 | 619.91 | 0.17 | 0.06 | 620.08 | 619.97 |

DESIGN SPECIFICATIONS

2007 AASHTO (LRFD) & Interims

DESIGN STRESSES

(FIELD UNITS) f'c = 3,500 p.s.i. fy = 60,000 p.s.i. (Rein.)
(PRECAST PRESTRESSED UNITS) f'c = 6,000 p.s.i. f'ci = 5,000 p.s.i. f's = 270,000 p.s.i. (1/2" Strands) f'si = 201,960 p.s.i. (1/2" Strands)

LOADING HL-93

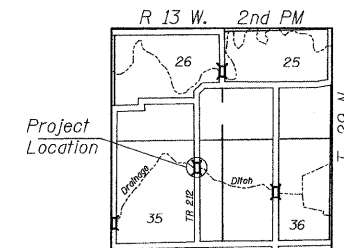
Allow 50#/sq. ft. for future wearing surface.



License Expires 11/30/2012

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 Specification for Highway Bridges. This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

[Signature] 9/29/2011
Illinois Structural No. 6440
Expires 11/30/2012



LOCATION SKETCH

GENERAL PLAN & ELEVATION

IROQUOIS COUNTY

SECTION 08-21119-00-BR

T.R. 212 OVER DRAINAGE DITCH

| SHEET NO. 1 10 SHEETS | ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------|-----------|----------------|--------------------------------|--------------|-----------|
| | TR 212 | 08-21119-00-BR | IROQUOIS | 24 | 7 |
| S.N. 038-5040 | | | CONTRACT NO. 87501 | | |
| FED. ROAD DIST. NO. 7 | | ILLINOIS | FED. AID PROJECT BRS-0075(147) | | |

GENERAL NOTES

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at the substructures specified or approved by the Engineer before ordering the remainder of the piles. For Soil Boring Logs, See Sheets 8-10 of 10.

A Corrosion Inhibitor shall be used in the concrete for Precast Prestressed Concrete Deck Beams according to Article 1020.05(b)(12) of the Standard Specifications.

Reinforcement Bars shall conform to the requirements of ASTM A706 Grade 60. Reinforcement Bars designated (E) shall be epoxy coated.

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

Excavation behind existing abutment walls shall be done before removing existing Superstructure.

The existing structural steel coating may contain lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL |
|---|-------|-------|-------|-------|
| Channel Excavation | CU YD | — | 180 | 180 |
| Stone Riprap, Class A5 | TON | — | 325 | 325 |
| Filter Fabric | SQ YD | — | 270 | 270 |
| ① Removal of Existing Structures | EACH | — | — | 1 |
| Structure Excavation | CU YD | — | 65 | 65 |
| Concrete Structures | CU YD | — | 23.4 | 23.4 |
| ① Precast Prestressed Concrete Deck Beams (17" Depth) | SQ FT | 1,385 | — | 1,385 |
| Reinforcement Bars | POUND | — | 2,720 | 2,720 |
| ① Steel Railing, Type S1 | FOOT | 96 | — | 96 |
| Furnishing Steel Piles HP10x42 | FOOT | — | 216 | 216 |
| ① Driving Piles | FOOT | — | 216 | 216 |
| ① Test Pile Steel HP10x42 | EACH | — | 1 | 1 |
| Concrete Encasement | CU YD | — | 3.5 | 3.5 |
| Name Plates | EACH | — | 1 | 1 |

① See Special Provisions

| | |
|----------|--------|
| DESIGNED | N.P.H. |
| CHECKED | J.E.H. |
| DRAWN | N.P.H. |
| CHECKED | J.E.H. |