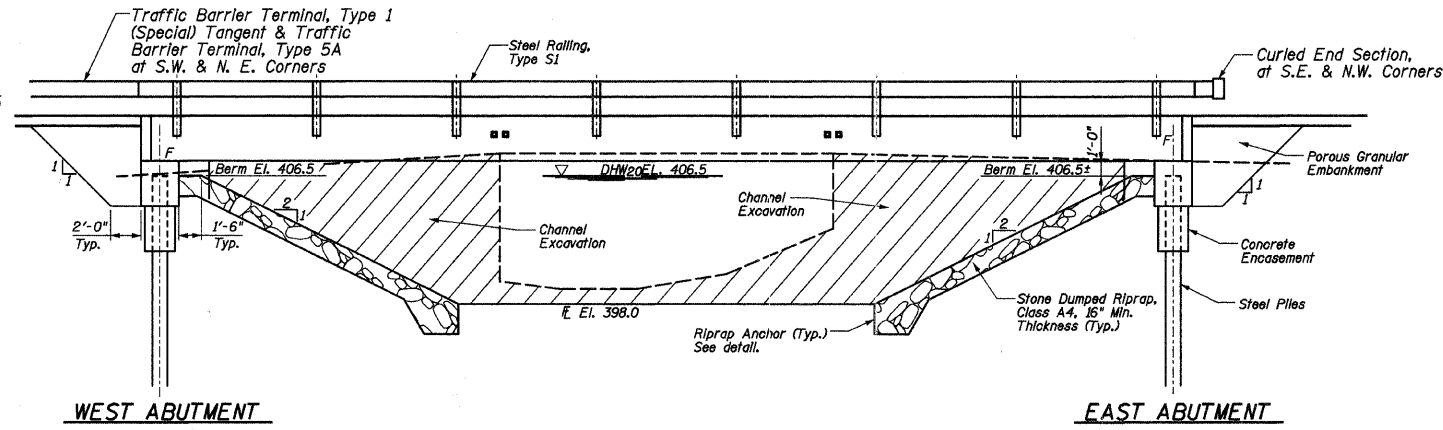
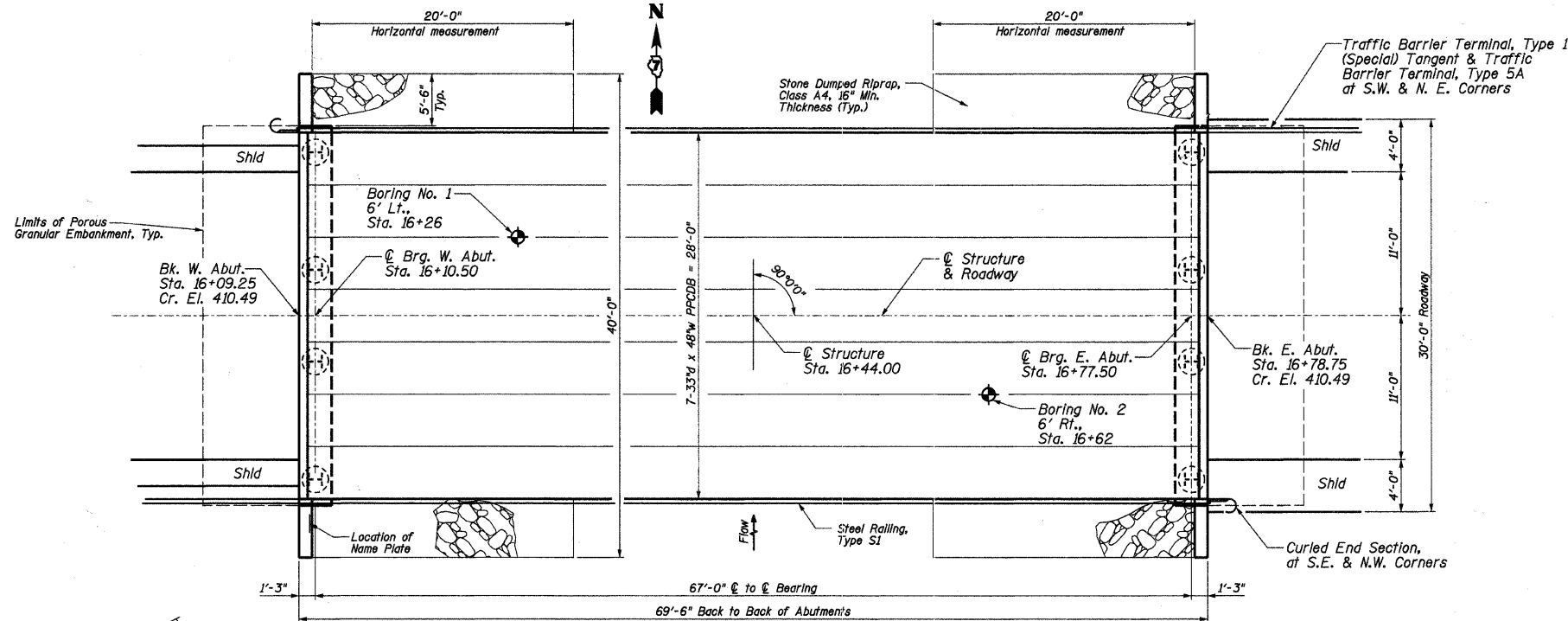


BM 1 - PK nail in corner fence post,
48' Lt. of Sta. 11+00 - Elev. 412.18

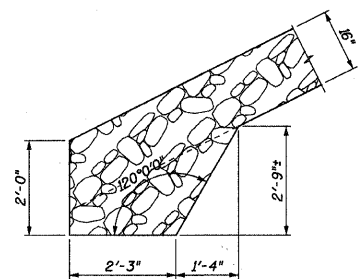
BM 2 - PK nail in fence post,
22.8' Lt. of Sta. 18+23 - Elev. 407.85



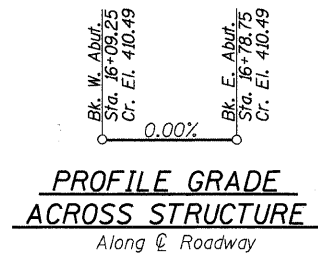
ELEVATION



PLAN



RIPRAP ANCHOR DETAIL



PROFILE GRADE
ACROSS STRUCTURE
Along \odot Roadway

WATERWAY DATA
(By Connor & Connor, Inc.)

Drainage Area = 4.985 Sq. Mi.

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Prop.	Natural H.W.E.	Head - Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Design	20	1543	134	354	406.5	0.5	0.4	407.5	406.9
Base	100	2380	134	381	407.0	0.5	0.9	407.5	407.9

PRECAST PRESTRESSED UNITS

$f'_c = 6,000$ psi
 $f'_t = 5,000$ psi
 $f_{pu} = 270,000$ psi ($\frac{1}{2}$ " ϕ low lax. strands)
 $f_{pbt} = 201,960$ psi ($\frac{1}{2}$ " ϕ low lax. strands)
 $f_y = 60,000$ psi (reinforcement)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
 Soil Site Classification = D
 $S_{D1} = 0.277$ $S_{D5} = 0.668$

LOADING HL-93

50#/sq. ft. included in dead load for future wearing surface.

DESIGN SPECIFICATIONS

2007 (4th Ed.) AASHTO LFRD Bridge Design Specifications, with 2008 & 2009 Interims.

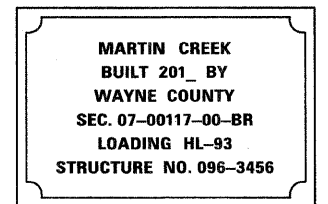
DESIGN STRESSES

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

I certify that to the best of 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.



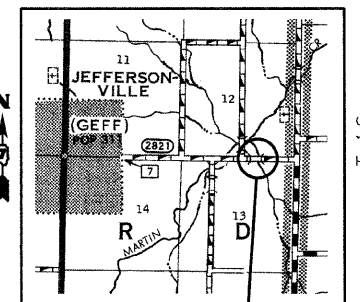
Gary L. Hahn
 Gary L. Hahn
 12-14-2011
 Date of Signing
 11-30-2012
 Date of License Expiration



NAME PLATE

(See State Standard 515001 for details)

R. 7 E., 3rd P.M.



Project Location

LOCATION SKETCH

Existing Structure: Single span bridge with concrete deck on steel stringers supported on closed concrete abutments. To be removed. No salvage. 22'L. x 20'W.

BILL OF MATERIALS (BRIDGE ONLY)

ITEM	UNIT	TOTAL
Channel Excavation	Cu Yd	490
Porous Granular Embankment	Ton	100
Stone Dumped Riprap, Class A4	Ton	160
Removal of Existing Structures	Each	1
Concrete Structures	Cu Yd	25.0
Concrete Encasement	Cu Yd	2.8
PPCDB (33" Depth)	Sq Ft	1909
Reinforcement Bars	Pound	4100
Steel Railing, Type S1	Foot	139
Furnishing Steel Piles HP12x53	Foot	369
Driving Piles	Foot	369
Test Pile Steel HP12x53	Each	1
Pile Shoes	Each	8
Name Plates	Each	1
Terminal Marker - Direct Applied	Each	4

GENERAL NOTES

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.

The Contractor is hereby advised that very stiff soils will be encountered prior to the location of anticipated nominal required bearing. See the soil borings for further information.

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

Reinforcement bars shall conform to the requirements of A.S.T.M. A 706 Grade 60 (IL. Modified).

See Specifications for Soil Borings.

Do not scale these drawings.

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, $\frac{1}{8}$ " fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

RHUTASEL and ASSOCIATES, INC.
 CONSULTING ENGINEERS • LAND SURVEYORS
 CENTRALIA, ILLINOIS FREEBURG, ILLINOIS
 ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

DESIGNED - BLT	REVISED -
CHECKED - GLH	REVISED -
DRAWN - JN	REVISED -
CHECKED - 12/14/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 096-3456

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2821	07-00117-00-BR	WAYNE	11	6
CONTRACT NO. 95671				
RAAI JOB NO. 52111 ILLINOIS FED. AID PROJECT				