

B.M.: RR Spike in Power Pole
Sta. 15+69, 17' Lt.
Elev. 654.14

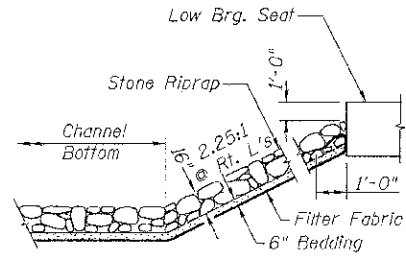
RR Spike in Power Pole
Sta. 23+87, 25' Rt.
Elev. 673.46

Existing Structure:

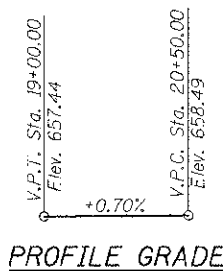
Three span bridge with a steel truss with timber deck main span on steel column piers. The approach spans consist of timber deck on steel stringer superstructure on concrete cap on timber pile with timber lagging closed abutments. The structure is +75' back to back of abutments, +14'-2" out to out of deck, and is not skewed. Str. No. 005-3406

Salvage: Structural Steel, Deck Planking

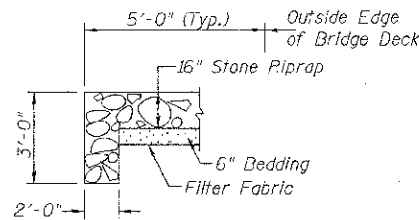
Road to be closed to traffic during construction.



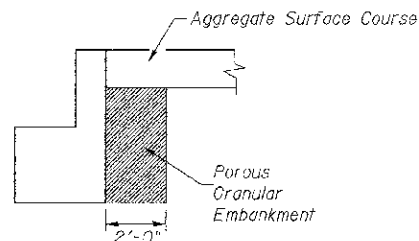
STONE RIPRAP DETAIL



PROFILE GRADE



SECTION A-A



SECTION B-B

DESIGN SCOUR TABLE

Location	W. Abut	Pier 1	Pier 2	E. Abut
Design Scour Elevation	653.44	640.21	640.32	654.18

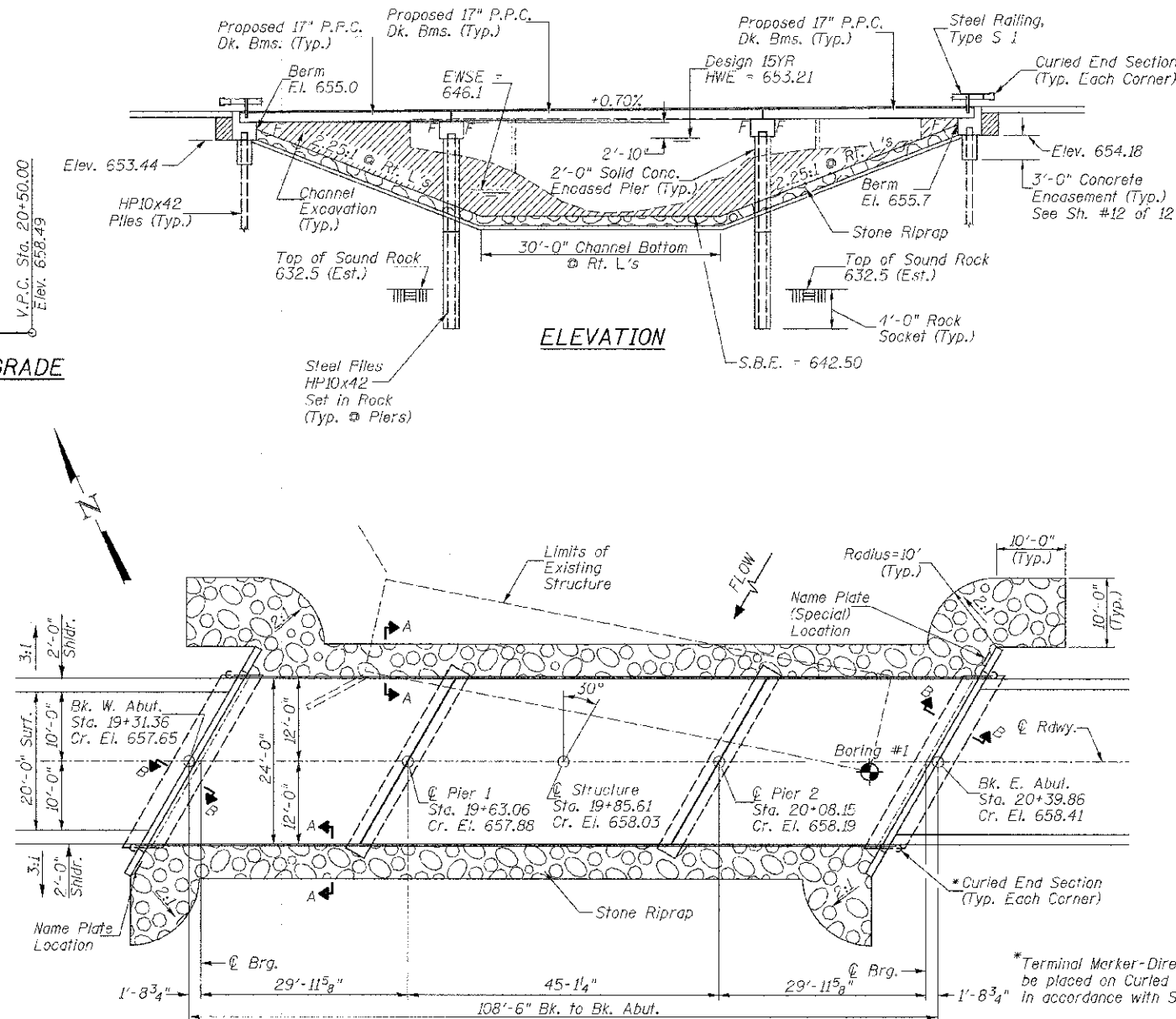
WATERWAY INFORMATION

Drainage Area = 6.24 Sq. Mi.		Low Grade Elev. = 653.42 @ Sta. 16+00.00						
Flood	Yr.	Q	C.F.S.	Opening Sq. Ft.	Nat. H.W.E.	Prop. H.W.E.	Head - Ft.	Headwater El.
Design	15	1,454	319	544	653.21	0.05	0.04	653.26
Base	100	2,330	452	686	655.04	0.00	0.00	655.04

OVER-THE-ROAD AREA

Freq. Yr.	Existing	Proposed
15	0	0
100	365	273

DESIGNED	C.T.M.
CHECKED	S.T.M./J.E.H.
DRAWN	C.T.M.
CHECKED	S.T.M./J.E.H.



PLAN

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications

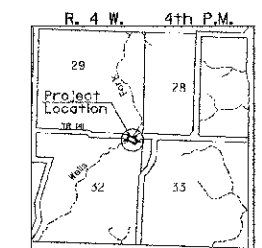
DESIGN STRESSES

(FIELD UNITS) $f'_c = 3,500$ p.s.i. $f_y = 60,000$ 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.



LOCATION SKETCH

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 Special Provisions.
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.
The top surface of the beams shall be finished according to the IDOJ Manual for Fabrication of Precast Prestressed Concrete Products.
The existing structural steel coating may contain lead. The contractor should take appropriate precautions to deal with the presence of lead on this project.
Excavation behind the existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
Each Pier Stem shall be constructed in single continuous concrete pour.

**WELLS FORK
BUILT 201 BY
LEE ROAD DISTRICT
BROWN COUNTY
SEC. 10-04118-00-BR
T.R. 141 STATION 19+85.61
F.A. PROJ. BROS-0009(221)
STR. NO. 005-3407 LOADING HL-93**

**EMMETT AND ALMEDA MCNEFF
AND FAMILY
KNOWN AS "GOOSE HOLLER"**

NAME PLATE

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

NAME PLATE (SPECIAL)

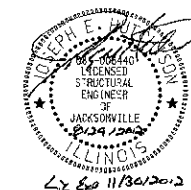
Locate Name Plate at N.E. Wingwall
Corner of Bridge (See Std. 515001)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUB.	TOTAL
Channel Excavation	CU YD	---	600	600
Stone Riprap, Class B4 (Special)	TON	---	365	365
Filter Fabric	SQ YD	---	470	470
Removal of Existing Structures	EACH	---	---	1
Structure Excavation	CU YD	---	60	60
Cofferdam Excavation	CU YD	---	70	70
Concrete Structures	CU YD	---	100.9	100.9
Precast Prestressed Concrete Deck Beams (17" Depth)	SQ FT	2,548	---	2,548
Reinforcement Bars	POUND	---	8,550	8,550
Steel Railing, Type S1	FOOT	217	---	217
Furnishing Steel Piles HP10x42	FOOT	---	405	405
Driving Piles	FOOT	---	135	135
Test Pile Steel HP10x42	EACH	---	2	2
Setting Piles in Rock	EACH	---	10	10
Concrete Encasement	CU YD	---	11.6	11.6
Name Plates	EACH	---	1	1
Name Plates (Special)	EACH	---	1	1
Porous Granular Embankment	CU YD	---	13.5	13.5
Cofferdam (Type 1) (Location-1) (Pier #1)	EACH	---	1	1
Cofferdam (Type 1) (Location-2) (Pier #2)	EACH	---	1	1
Terminal Marker - Direct Applied	EACH	4	---	4

See Special Provisions

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.



8/29/2012
Illinois Structural No. 6440
Expires 11/30/2012

**GENERAL PLAN & ELEVATION
BROWN COUNTY
SECTION 10-04118-00-BR
T.R. 141 OVER WELLS FORK**

SHEET NO. 1	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12 SHEETS	TR 141	10-04118-00-BR	BROWN	24	7
S.N. 005-3407			CONTRACT NO. 93588		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BROS-0009(221)		