

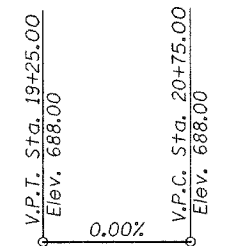
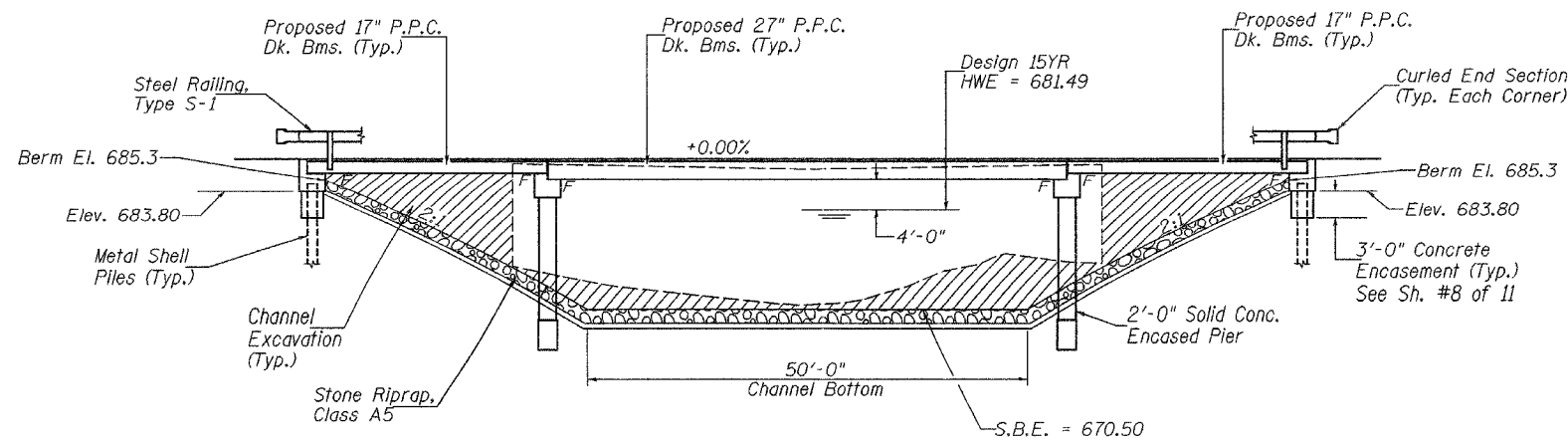
B.M.: RR Spike in Power Pole
Sta. 16+84, 28' Lt.
Elev. 689.16

RR Spike in Power Pole
Sta. 24+43, 27' Lt.
Elev. 688.79

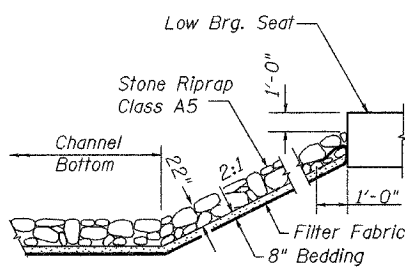
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
TR 434	*	IROQUOIS	23	7
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT BROS-075(131)	
			CONTRACT #87356	

Existing Structure:
Single span Pratt Pony truss with timber plank deck on concrete masonry abutments. The structure is ±70' back to back of abutments, ±14' out to out of deck and is not skewed.
Str. No. 038-5536

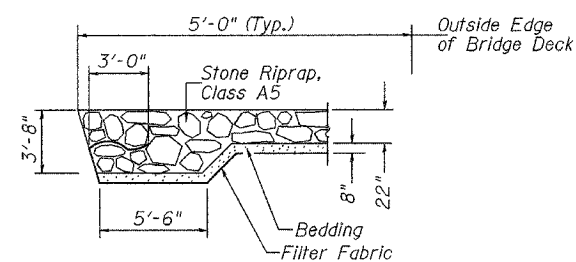
Salvage: None
Road to be closed to traffic during construction.



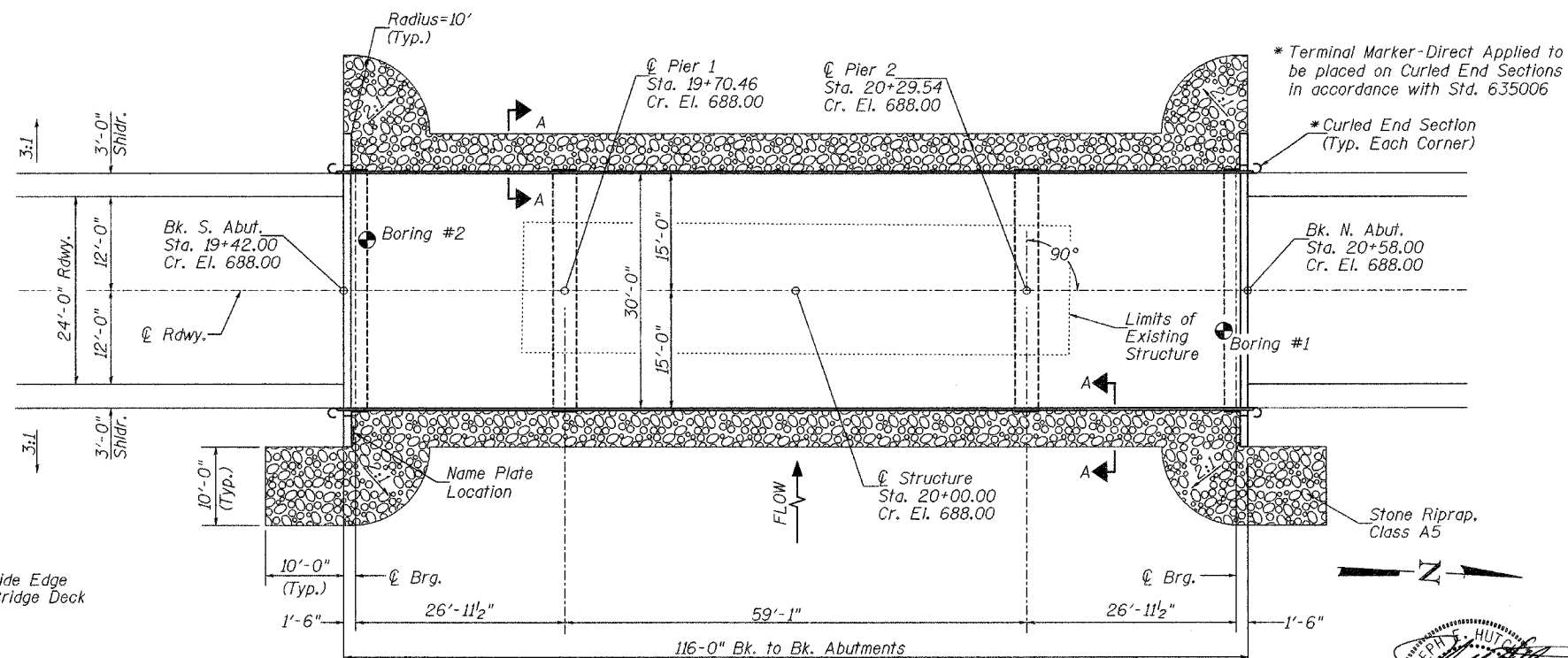
PROFILE GRADE



STONE RIPRAP DETAIL



SECTION A-A



PLAN

Drainage Area = 30.4 Sq. Mi. Low Grade Elev. = 686.02 @ Sta. 17+43.66

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Design	15	2,311	557	760	681.49	0.15	0.03	681.64	681.52
Base	100	3,553	608	829	682.25	0.35	0.11	682.60	682.36

Construction of this project complies with IDNR, Office of Water Resources Statewide Permit No. 2

DESIGN SPECIFICATIONS

2002 AASHTO & Interims

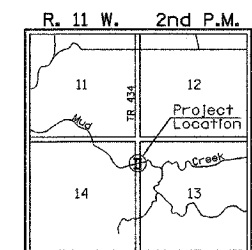
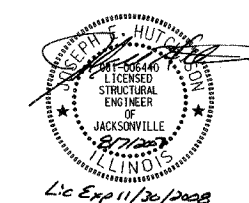
DESIGN STRESSES

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

(PRECAST PRESTRESSED UNITS) $f'_c = 5,000$ p.s.i. $f'_{ci} = 4,000$ p.s.i. $f'_s = 270,000$ p.s.i. ($\frac{1}{2}$ " Strands) $f'_{si} = 201,960$ p.s.i. ($\frac{1}{2}$ " Strands)

LOADING HS20-44

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 Sheets 9-11 of 11.
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 (IL Modified). See Special Provisions.
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.

MUD CREEK
BUILT 200_ BY
STOCKLAND ROAD DISTRICT
IROQUOIS COUNTY
SEC. 06-26102-01-BR
T.R. 434 STATION 20+00.00
F.A. PROJ. BROS-075(131)
STR. NO. 038-5563 LOADING HS20-44

NAME PLATE

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

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	CU YD		725	725
Stone Riprap, Class A5	TON		705	705
Filter Fabric	SQ YD		680	680
① Removal of Existing Structures	EACH		1	1
Structure Excavation	CU YD		70	70
Concrete Structures	CU YD		98.1	98.1
Precast Prestressed Concrete Deck Beams (17" Depth)	SQ FT	1,650		1,650
Precast Prestressed Concrete Deck Beams (27" Depth)	SQ FT	1,770		1,770
① Reinforcement Bars	POUND		8,940	8,940
Steel Railing, Type S1	FOOT	232		232
Furnishing Metal Shell Piles 12"	FOOT		678	678
Driving Piles	FOOT		678	678
Test Pile Metal Shells	EACH		2	2
Pile Shoes	EACH		22	22
Concrete Encasement	CU YD		7.8	7.8
Name Plates	EACH		1	1
① Underwater Structure Excavation Protection-Location 1 (Pier #1)	EACH		1	1
① Underwater Structure Excavation Protection-Location 2 (Pier #2)	EACH		1	1

① 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.

Gregory S. Hult
Illinois Structural No. 6440
Expires 11/30/2008

GENERAL PLAN & ELEVATION

T.R. 434 OVER MUD CREEK

SECTION 06-26102-01-BR

IROQUOIS COUNTY

STR. NO. 038-5563

STATION 20+00.00