

TOTAL SHEET NO. ROUTE NO. SECTION COUNTY C.H. 8 06-00098 -01-BR IROQUOIS 18 ROAD DIST. ILLINOIS

CONTRACT NO. 87447 Sheet 1 of 9

GENERAL NOTES

See proposal & sheets 8 & 9 of 9 for Boring data.

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60.

The Contractor shall drive one Steel HP10x42 test pile in a permanent location at the South Abutment and at Pier #2 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

Protective Coat shall also be applied to deck fascias, exposed portions of the wings, and ends of pier and abutment caps.

All exposed portions of abutments, wingwalls, and plers shall receive a rubbed finish in accordance with Article 503.15(b) of the Standard Specifications. Cost to be included in the cost of Concrete Superstructure and Concrete Structures.

> PRAIRIE CREEK BUILT 20__ BY IROQUOIS COUNTY SEC. 06-00098-01-BR F.A.S. RT. 319 STR. NO. 038-4011 LOADING HL-93

LETTERING FOR NAME PLATE

See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Superstructure	Cu. Yd.	95.4		95.4
Concrete Structures	Cu. Yd.		33.2	33.2
Reinforcement Bars, Epoxy Coated	Pound	23,860	6,010	29,870
Steel Railing, Type SM (Special)	Foot	136		136
Name Plates	Each		1	1
Furnishing Steel Piles HP10x42	Foot		752	752
Driving Piles	Foot		752	752
Test Pile Steel HP10x42	Each		2	2
Stone Riprap, Class A5	Ton		267	267
Stone Dumped Riprap, Class A5	Ton		50	50
Filter Fabric	Sq. Yd.		265	265
Porous Granular Embankment	Ton		62	62
Structure Excavation	Cu. Yd.		17	17
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1
Concrete Encasement	Cu. Yd.		20.0	20.0
Bridge Deck Grooving	Sg. Yd.	211		211
Protective Coat	Sq. Yd.	247	9	256

WATERWAY INFORMATION

Construction

Sta. 5+13.88 Elev. 664.70

22:1

Sta. 5+35.63

Elev. 664.70

Name Plate Location See Sheet 5 of 9.

±2:1

B-2

DESIGNED -CHECKED CHECKED - A.R.K. & A.L.S.

SEISMIC DATA Seismic Performance Zone (SPZ) = 1 Design Spectral Acceleration at 1.0 sec. $(S_{D1}) = 0.115$ g Design Spectral Acceleration at 0.2 sec. (Sps) = 0.184 g Soil Site Class = D

22' H.M.A.

Drainage Area 4.01 Sa. Mi. Existing Opening (20 Yr.). 230 Sq. Ft. Required Opening (20 Yr.). 355 Sq. Ft. 355 Sq. Ft. Proposed Opening (20 Yr.). 422 C.F.S. Design Discharge (20 Yr.) Created Head (20 Yr.) 0.0 Ft. 100 Year Discharge 631 C.F.S. 100 Yr. Created Head 0.0 Ft.

DESIGN STRESSES

ℚ Bridge

PLAN

Sta. 5+46.50

Sta. 5+79.13

Elev. 664.70

15'-0"

A

15:1

⊈ Pier 2

Sta. 5+57.38

Elev. 664.70

 $f'_c = 3,500 \text{ p.s.i.}$ (Concrete) fy = 60,000 p.s.i. (Reinf. Bars) LOADING HL93 Design Specifications: 2007 AASHTO LRFD & Interims 50#/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 LRFD Bridge Design Specifications'".

John a. Morris ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/10)



GENERAL PLAN & ELEVATION COUNTY HIGHWAY 8 SECTION 06-00098-01-BR IROQUOIS COUNTY STATION 5+46.50

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