

Bench Mark: Chiseled square on Pier #1, Sta. 557+41, right of C. Elev. 497.43

Existing Structure: Structure Number 085-0016 was built in 1928 as S.B.I. Rte. 101, Section 120B over the Lamoine River. The superstructure was replaced in 1977 with PPC deck beams under Section 120BR. The substructure was also widened during the 1977 construction and Piers 2 and 3 were added. A 5" reinforced concrete wearing surface was constructed over the deck beams in 1998 under Section (120BR)1, along with expansion joint replacement and riprap placement around the piers. In 2006, two deck beams were replaced in span 4 under Section (120BR)1-1. In 2008, three deck beams were replaced in span 3 and twelve deck beams were braced using steel wide flange beams under Section (120BR)1-2. The existing structure is an eleven span PPC deck beam bridge on closed concrete abutments and concrete piers on footings. The existing structure shall be removed and replaced.

Traffic to be maintained utilizing stage construction.

Existing structural steel to remain property of IDOT. Contact Buddy Foster at (217) 782-7416 to arrange a pick-up time.

APPROVED
For Structural Adequacy Only

Ralph E. Anderson (TSO)
Engineer of Bridges & Structures

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LOADING HL-93

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

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications
4th Edition with 2008 & 2009 Interims

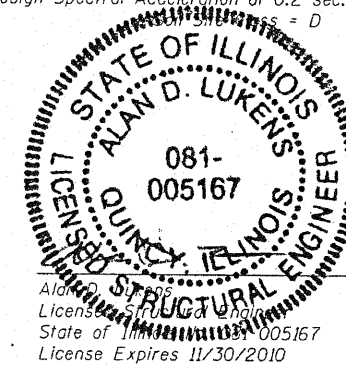
DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50W)

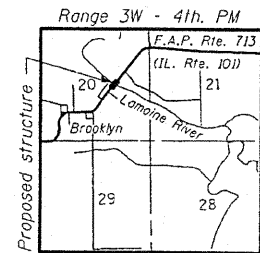
SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.117g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.183g
= D



10-19-10
Date

GENERAL PLAN & ELEVATION
IL 101 OVER LAMOINE RIVER
FAP ROUTE 713 SECTION 120B-3
SCHUYLER COUNTY
STATION 559+38.00
S.N. 085-0514



LOCATION SKETCH

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
45 SHEETS	713	120B-3	SCHUYLER	75	21
CONTRACT NO. 72A03					
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

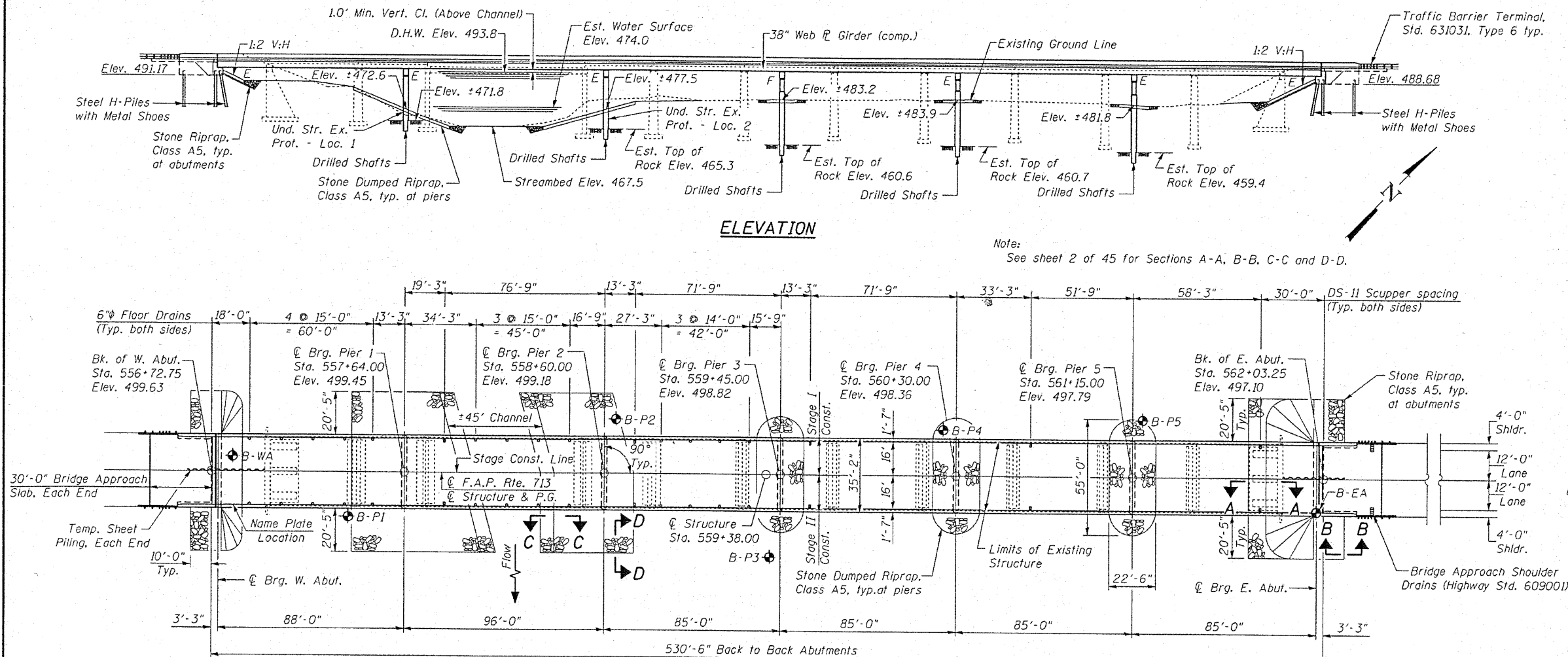
Revised 10/18/10

ADL

Klingner & Associates P.C.

ELEVATION

Note:
See sheet 2 of 45 for Sections A-A, B-B, C-C and D-D.



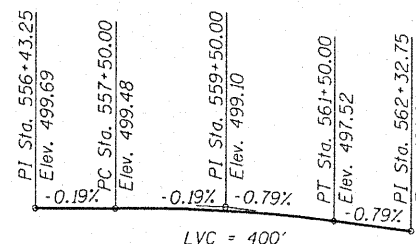
PLAN

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	E. Abut.
	491.2	471.8	468.1	474.2	475.0	473.3	488.7

WATERWAY INFORMATION

Drainage Area = 995.4 Sq. Mi.		Low Grade Elev. 495.4 @ Sta. 569+49							
Flood	Freq. Yr.	O C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	24,900	4,607	5,340	492.3	3.0	4.1	495.4	496.4
Design	50	38,400	5,252	5,788	493.8	6.3	6.4	500.1	500.2
Base	100	44,500	5,514	6,097	494.4	6.2	6.4	500.6	500.8
Overtopping	-	-	12 yr.	13 yr.	-	-	-	-	-
Max. Calc.	500	59,100	6,012	6,097	495.6	5.9	6.5	501.6	502.1



PROFILE GRADE
(along roadway)

DESIGNED RJP
CHECKED ADL
DRAWN RJP
CHECKED ADL

KLINGNER & ASSOCIATES, P.C.
Engineers • Architects • Surveyors
56 N. W. 2nd Street, Suite 200, P.O. Box 222,300
Ft. Lauderdale, FL 33301-2300
Tel: (954) 572-1100
Fax: (954) 572-1100
Internet: www.klingner.com

STATE OF ILLINOIS DESIGN FIRM • 1842738