

B.M. - 1 Chisled square in top of North wingwall  
 13' RI Sta 18+41 Elev. 158.95  
 Existing Structure - is a RC slab deck bridge  
 on closed concrete abutments, wingwalls,  
 and handrails 1-span @ 25'11"  
 Salvage - None

ROUTE NUMBER	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1281	09-00648-00-BR	LASALLE	12	10

**GENERAL NOTES**

The cross sections and dimensions shown for precast units are a representation only. The span of precast units shall not be less than 28 feet and provide an opening of 185 sf below the elevation of 150.67. Cast-in-place dimensions shall be as shown unless otherwise directed by the Engineer.

Shop drawings for all precast unit fabrication and field installation, including headwalls, wingwalls, and wingwall anchors shall be submitted to the County Engineer in accordance with article 505.03 and approved prior to fabrication of precast units.

Precast Wingwalls, Wingwall Anchors, and Headwalls, shall be considered incidental to the unit price bid for the item "Three Sided Pre-Cast Concrete Structures".

The Pre-Cast 3 Sided Bridge Unit shall provide a min. width of 54'. The foundation design and reinforcement layout may change slightly to suit the precast units provided by the Contractor. Any changes in the Concrete or Reinforcement quantities shall be considered incidental. The proposed foundation design if altered, shall be certified, signed and sealed by an Illinois Licensed Structural Engineer.

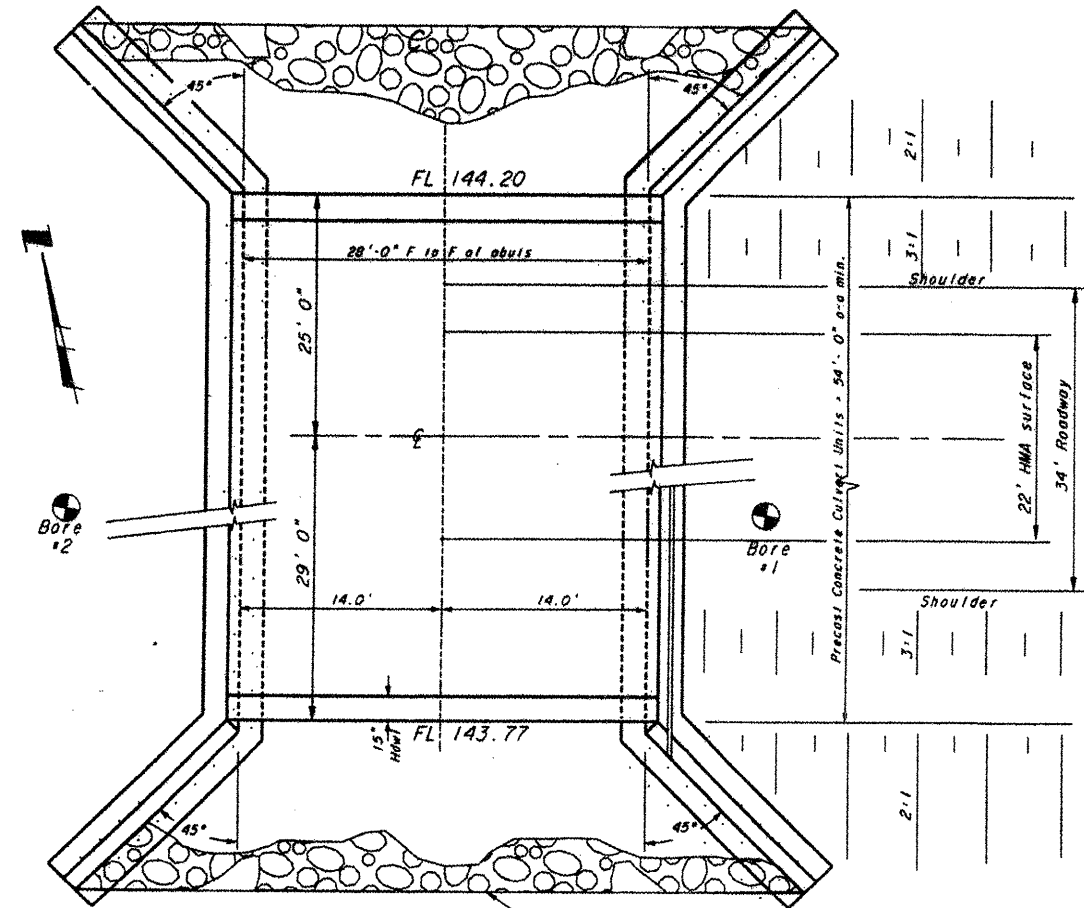
The footing design is based on the following reaction applied at 2'-6" above the bottom of the footing.

Bridge Footing  
 RV=15.8 K @ 0 and 2.1 K @ 4' at E wall  
 RH=1.3 K @ 0 and 0.5 K @ 4'

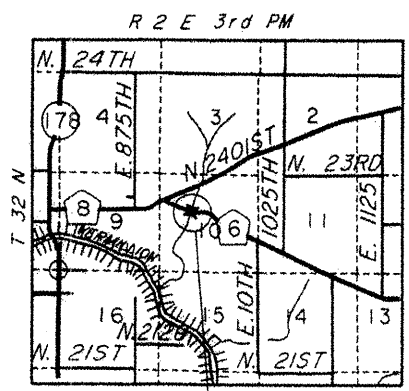
Wingwall Footing  
 RV=10.9 K @ 0 and 1' behind the wall  
 RH=3.0 K @ 0

The layout of the Stone Dumped Rip Rap may vary to suit conditions in the field as directed by the Engineer.  
 See Sheet 11 for boring logs.

CONTRACT NO. 87567  
 JOB NO. C-93-064-08



Limits of Stone Rip Rap CL A5 40' L<sub>1</sub> & R<sub>1</sub> placed in stream bed and slopes 24" thick



**BILL OF MATERIAL**

Item	Unit	Super	Sub.		Total
			Piers	Abut.	
Removal of Existing Structures	Each				1
Name Plates	Each				1
Stone Dumped Rip Rap CL A5	Tons			220	220
Porous Granular Embankment	Tons			1300	1300
3 Sided Prec. Conc. Structure	Ft			54	54
Filter Fabric For Rip Rap	SY			285	285
Concrete Structures	Cu.Yds			56	56
Reinforcement Bars	Pounds			2890	2890

**WATERWAY INFORMATION**

Drainage Area = 2.18 Low Grade Elev. = 159.29 @ Sta. 18+20

Flood	Freq. Yr.	Q C.F.S.	Opening S.F. Exist.	Prop.	Nat. H.W.E. Exist.	Prop.	Head - Ft. Exist.	Prop.	Headwater Ft. Exist.	Prop.
Design	30	914	164	185	150.67	0.24	0.19	150.91	150.86	
Base	100	1213	183	208	151.51	0.40	0.41	151.91	151.92	
Overlapping										
Max. Calc.	500	1892								

**DESIGN SPECIFICATIONS**

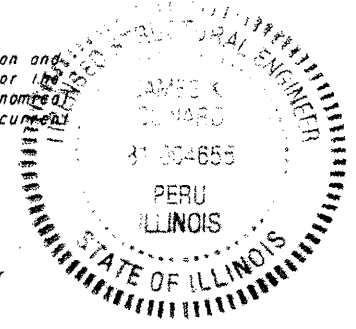
2002 AASHTO.  
 HS20-44 Loading. Load Factor Design.  
 Substructure Footings  
 f<sub>c</sub> = 3500 psi  
 f<sub>y</sub> = 60,000 psi  
 Max Allowable Soil Pressure = 8 ksi

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design load shown on the plans. The design is an economical one for the style of structure and complies with the current "AASHTO Standard Specifications for Highway Bridges".

*Lawrence J. Kinzer* 5/13/08  
 Date

These plans were prepared by me or by a full-time member of my staff working under my personal supervision

*Lawrence J. Kinzer* 5/15/08  
 Date  
 Lawrence J. Kinzer  
 La Salle County Engineer  
 I.R.P.E. No. 62-40162  
 Exp. Date 11-30-09



STATION 18+37  
 SEC. 09-00648-00-BR BUILT 200.  
 LASALLE COUNTY  
 LOADING HS20  
 STR. NO. 050-3592

**LETTERING FOR NAME PLATE**  
 Locate Name Plate at the Southwest  
 Corner of Structure (See Sid 515001-0.3)

