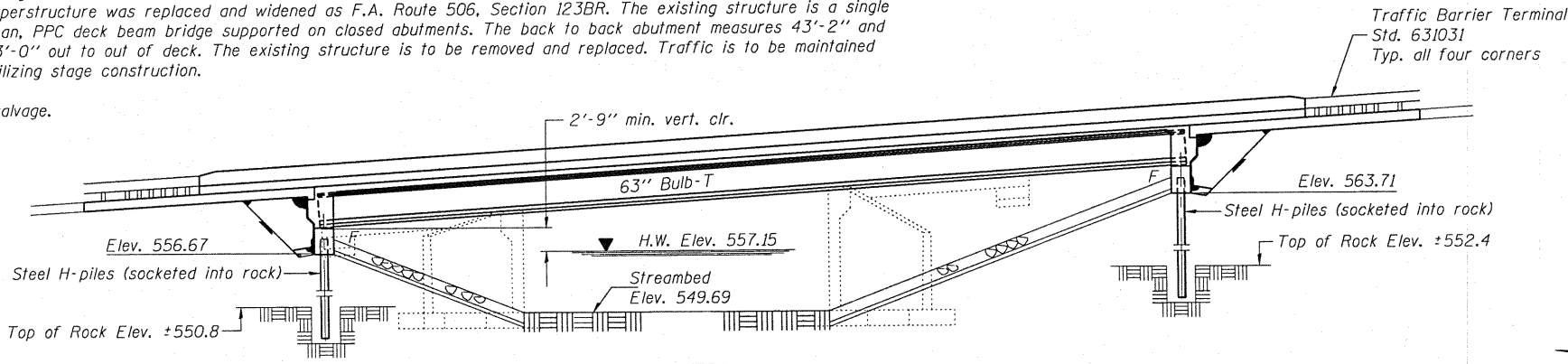


Bench Mark: BM#133, chiseled square on headwall at south end west headwall box culvert north of RR crossing  
Sta. 35+75, 17.7' Rt. Elevation 559.677

Existing Structure: S.N. 034-0031, originally built in 1930 as S.B.I. 96, Section 123A. In 1983, the channel beam superstructure was replaced and widened as F.A. Route 506, Section 123BR. The existing structure is a single span, PPC deck beam bridge supported on closed abutments. The back to back abutment measures 43'-2" and 33'-0" out to out of deck. The existing structure is to be removed and replaced. Traffic is to be maintained utilizing stage construction.

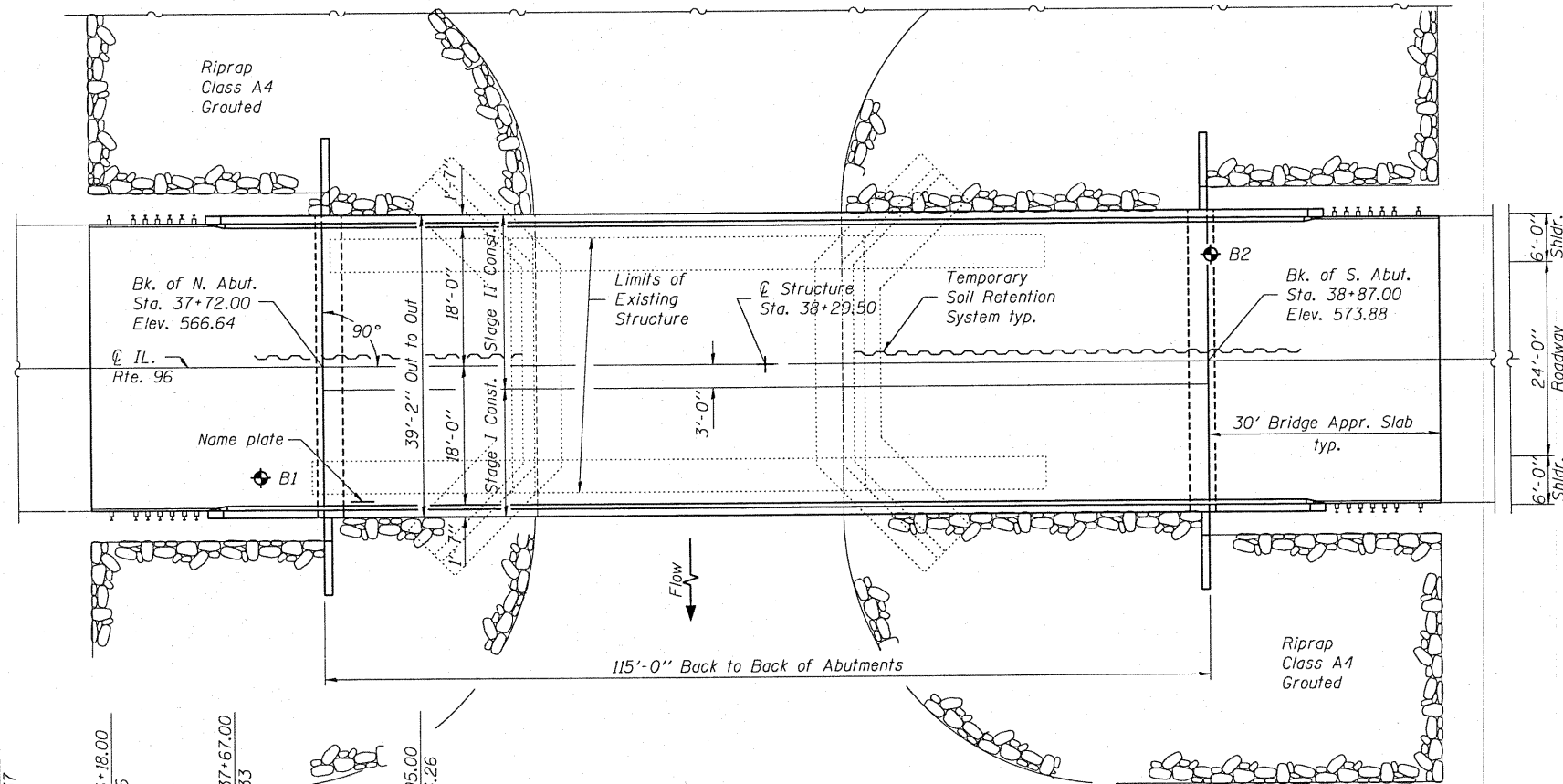
No salvage.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

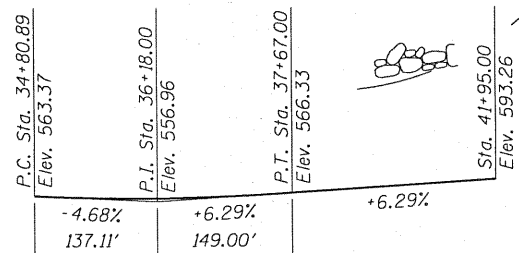


ELEVATION

Note: See Roadway Plans for limits of additional riprap.

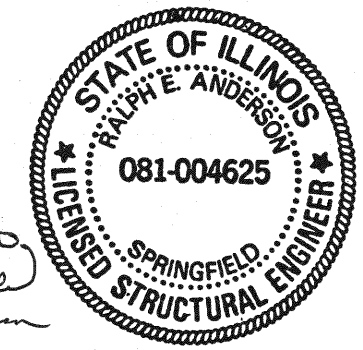


PLAN



PROFILE GRADE  
(along  $\phi$  Roadway)

DESIGNED *Fosella* November 24, 2010  
CHECKED *Stephan*  
DRAWN *h.t. duong*  
CHECKED *FT/SMR*  
EXAMINED *Thomas*  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGE DESIGN  
ENGINEER OF BRIDGE AND STRUCTURES



EXPIRES 11-30-2012

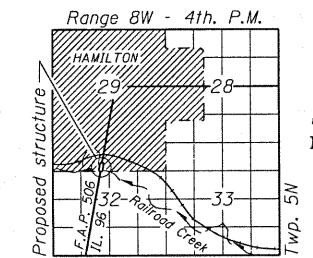
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (feet)	N. Abutment	S. Abutment
	556.67	563.71

WATERWAY INFORMATION

Drainage Area = 7.52 sq. mi. Exist. Low Grade Elev. 560.87 @ Sta. 36+00

Flood	Freq. Yr.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.		
		Exist.	Prop.		Exist.	Prop.	Exist.	Prop.	
Design	10	1977	221	331	555.92	0.92	0.45	556.84	556.37
Base	50	3106	274	417	557.15	1.90	0.72	559.05	557.87
Overtopping	100	3593	294	450	557.59	2.46	0.86	560.05	558.45
Max. Calc.	500	4769	336	523	558.55	3.69	1.29	562.24	559.84



LOCATION SKETCH

INDEX OF SHEETS

- 1 General Plan & Elevation
- 2 General Data
- 3 Stage Construction Details
- 4 Temporary Concrete Barrier
- 5-7 Top of Slab Elevations
- 8 Top of North Approach Slab Elevations
- 9 Top of South Approach Slab Elevations
- 10 Superstructure
- 11 Superstructure Details
- 12 Diaphragm Details
- 13-14 Bridge Approach Slab Details
- 15 Framing Plan
- 16-17 Beam Details
- 18 North Abutment
- 19 South Abutment
- 20 Bar Splicer Assembly Details
- 21 HP Pile Details
- 22 Concrete Parapet Slipforming Option
- 23 Boring Logs

DESIGN STRESSES

**FIELD UNITS**  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)

**PRECAST PRESTRESSED UNITS**  
 $f'_c = 7,000$  psi  
 $f'_{ci} = 6,000$  psi  
 $f'_s = 270,000$  psi ( $\frac{1}{2}$ "  $\phi$  low lax. strands)  
 $f_{si} = 201,960$  psi ( $\frac{1}{2}$ "  $\phi$  low lax. strands)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1  
Bedrock Acceleration Coefficient (A) = 0.04g  
Site Coefficient (S) = 1.0

LOADING HL-93

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

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications, 4th. Edition

STATION 38+29.50  
BUILT 20 BY  
STATE OF ILLINOIS  
F.A.P. RTE. 506 SEC. 123B-1  
LOADING HL93  
STRUCTURE NO. 034-0522

NAME PLATE  
See Std. 515001

GENERAL PLAN & ELEVATION  
IL. ROUTE 96 OVER RAILROAD CREEK  
F.A.P. ROUTE 506 - SECTION 123B-1  
HANCOCK COUNTY  
STATION 38+29.50  
STRUCTURE NO. 034-0522

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23 SHEETS	506	123B-1	HANCOCK	70	35
					CONTRACT NO. 72992
ILLINOIS FED. AID PROJECT					