

Benchmark: Chiseled square on NE wingwall of bridge, S.N. 094-0004, Sta. 1178+74.67, 19.1' Lt., Elev. 663.60.

Existing Structure: S.N. 094-0004 was built in 1924 as S.B.I. Rte. 3, Section 28B, at Sta. 1179+70. The original structure was a single span 150' steel truss on closed concrete abutments. The superstructure was reconstructed in 1971 as S.B.I. Rte. 3, Section 28BR. The original closed abutments were widened, a new pier was constructed, and the superstructure was replaced and widened using two spans of P.P.C. deck beams. The existing structure is 33'-0" wide and 155'-0" bk. to bk. abutments. Structure is to be removed and replaced with a 3-span composite W33 steel beam bridge on open abutments. One lane traffic is to be maintained using stage construction.

No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

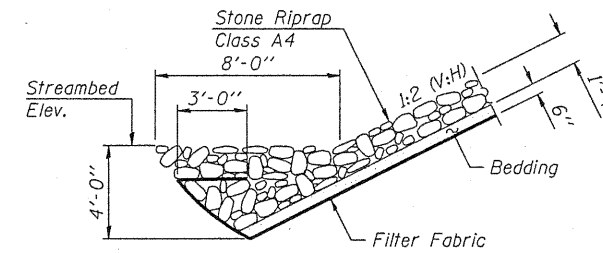
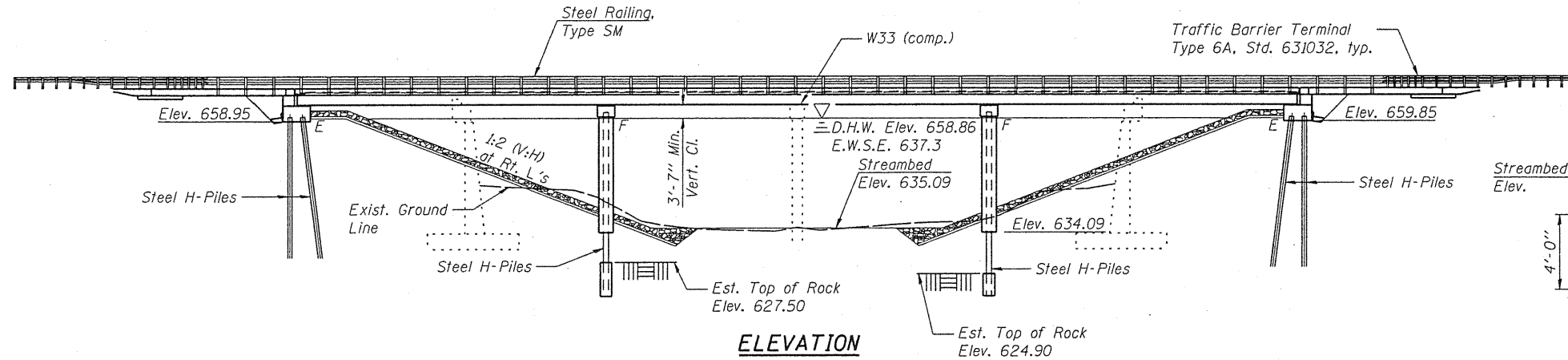
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	Pier 1	Pier 2	S. Abut.
	658.9	623.6	622.9	659.8

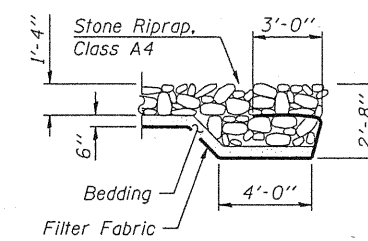
WATERWAY INFORMATION

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Head - Ft.		Headwater E.L.		
			Exist./Wier	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	
Ten-Year	10	5863	1727	1623	654.36	1.31	0.24	655.7	654.6
Design	50	10253	2245	2213	658.86	1.34	0.29	660.2	659.2
Base	100	12537	2468	2492	660.80	1.36	0.32	662.2	661.1
Overtopping	500	18894	2662/145		665.44	0.95		666.4	
Max. Calc.	500	18894		2721	665.44		0.69	666.1	

10-Year Velocity through Existing Structure = 3.4 fps
10-Year Velocity through Proposed Structure = 4.1 fps



SECTION A-A



SECTION B-B

STATION 1179+70
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 310 SEC. (28B)BR-1
LOADING HL-93
STRUCTURE NO. 094-0051

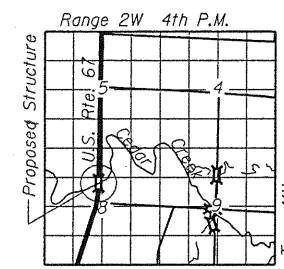
NAME PLATE
See Std. 515001



APPROVED
For Structural Adequacy Only

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

Bryan Swanson
Date Signed: 10-25-10
Exp. Date: 11-30-10



LOCATION SKETCH

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3. Staging Details
4. Temporary Concrete Barrier
- 5-7. Top of Slab Elevations
8. Top of Approach Slab Elevations
9. Superstructure
10. Superstructure Details
- 11-12. Bridge Approach Slab Details
13. Steel Railing, Type SM
14. Preformed Joint Strip Seal
15. Structural Steel
16. Structural Steel Details
17. Bearing Details
- 18-19. North Abutment
- 20-21. South Abutment
22. Pier 1
23. Pier 2
24. HP Pile Details
25. Bar Splicer Assembly Details
- 26-27. Soil Borings

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications
with 2008 and 2009 Interims

LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS

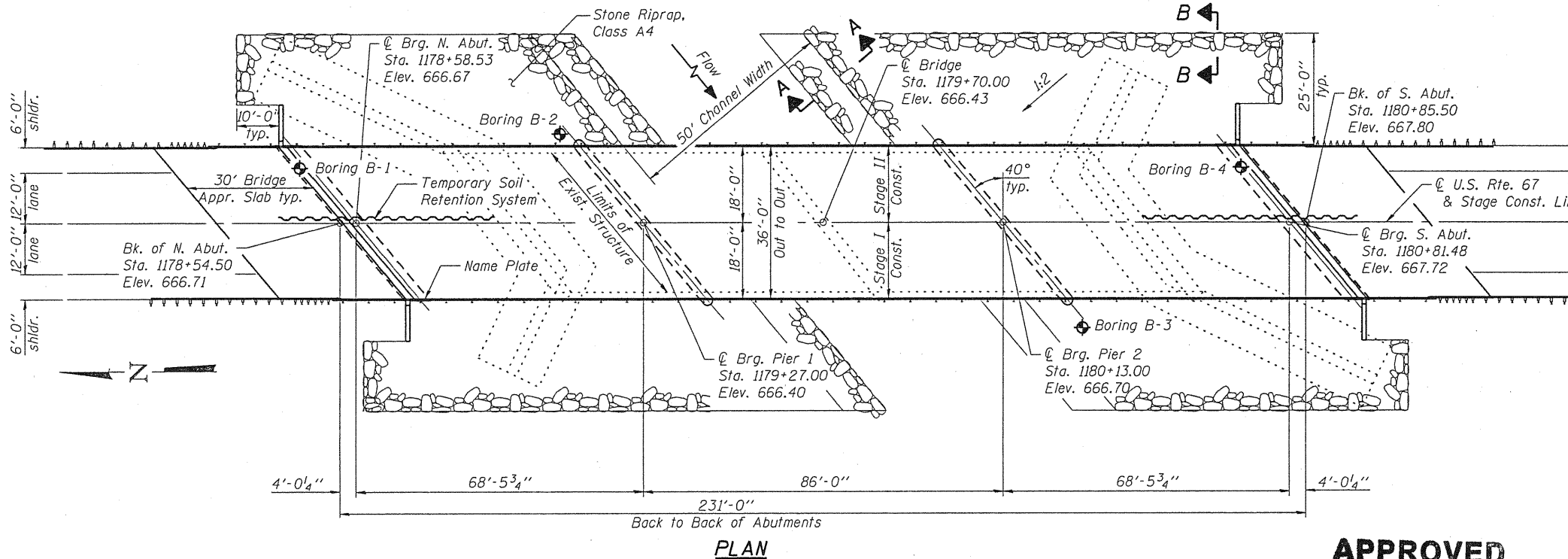
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50) - primary
fy = 36,000 psi (M270 Grade 36)

SEISMIC DATA

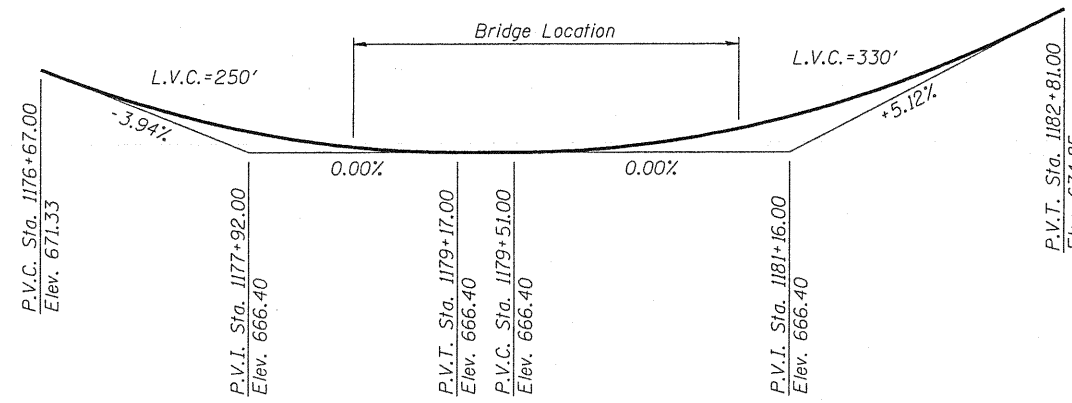
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.069g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.107g
Soil Site Class = C

GENERAL PLAN AND ELEVATION
U.S. RTE. 67 OVER CEDAR CREEK
F.A.P. RTE. 310 SEC. (28B)BR-1
WARREN COUNTY
STATION 1179+70.00
STRUCTURE NO. 094-0051

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
27 SHEETS	310	(28B)BR-1	WARREN	71	25
CONTRACT NO. 68661					
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



PLAN



PROFILE GRADE
(along & Roadway)



DESIGNED - BAS
CHECKED - KEF
DRAWN - SGM
CHECKED - BAS