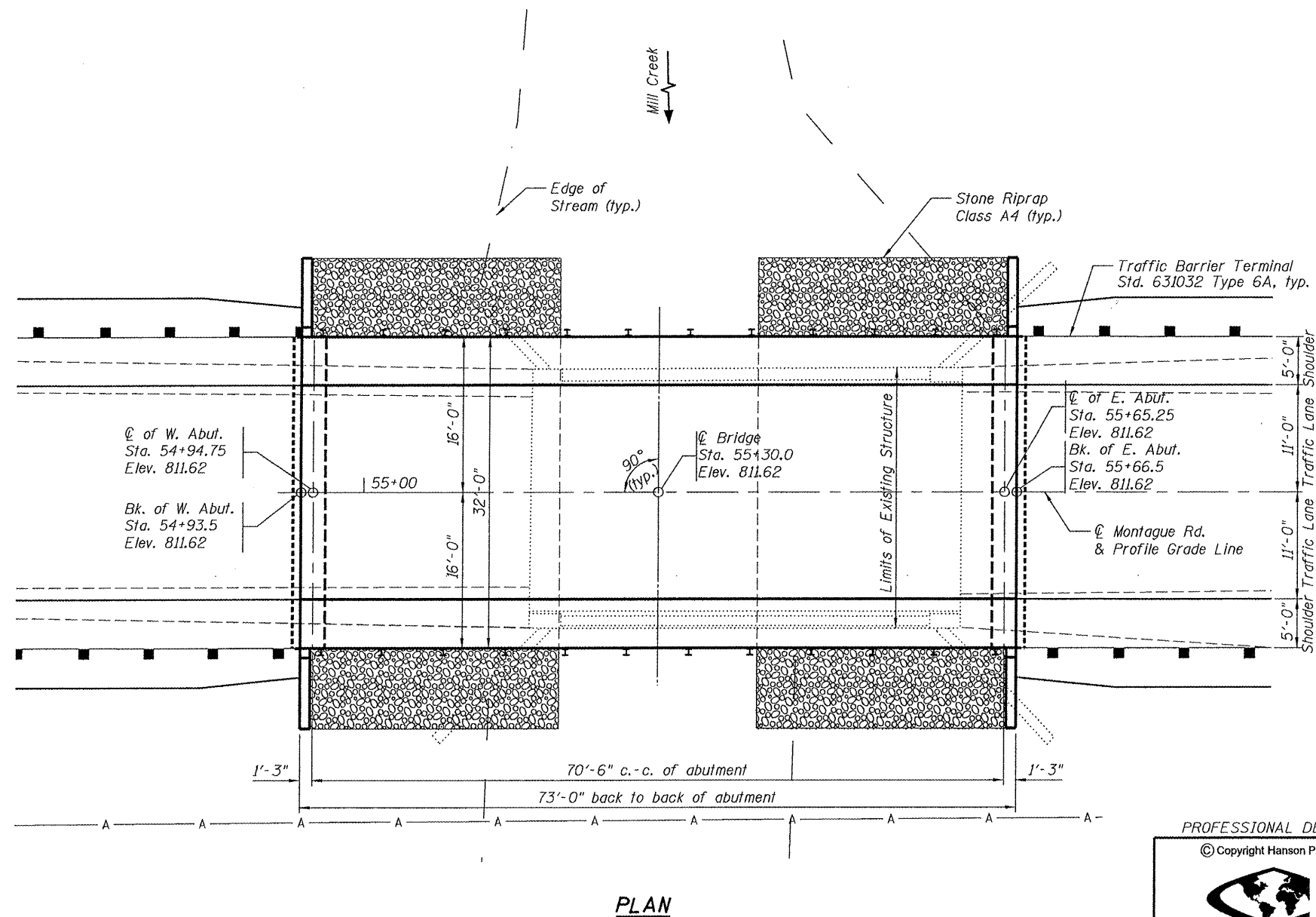
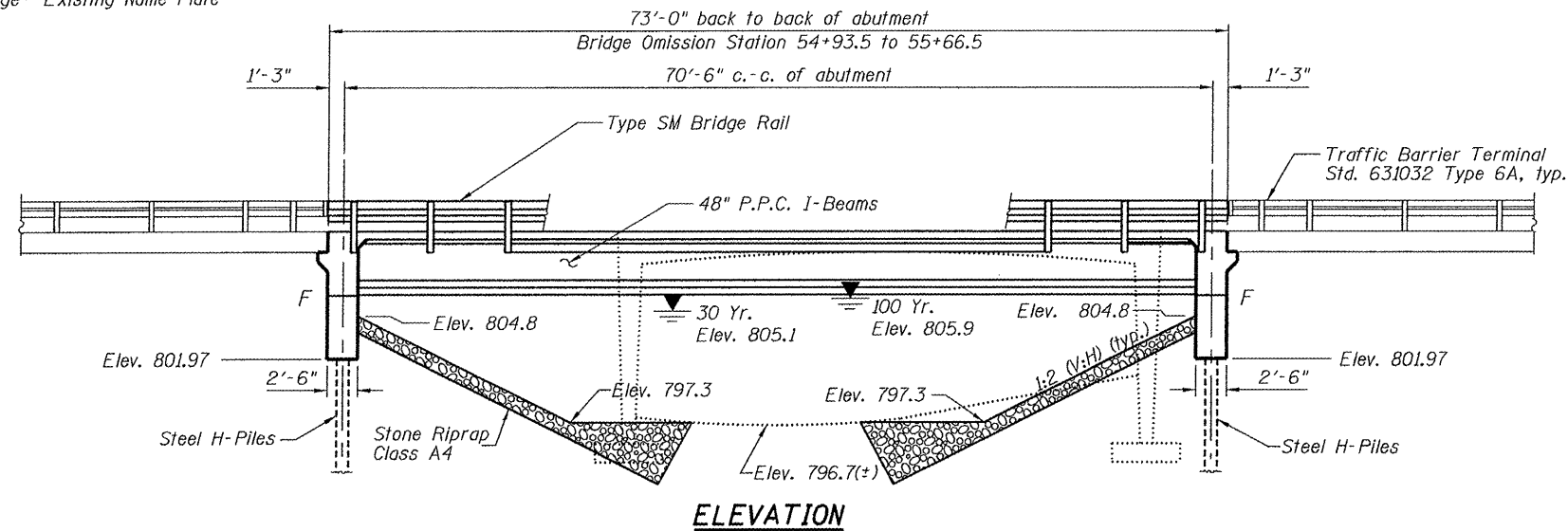


B.M.- Benchmark spike located in Power Pole Southeast of bridge. Sta. 55+91.66, 31.5' Rt., Elev. 806.05

Existing Structure - Structure No. 101-3006. Existing structure was constructed in 1936 and consists of a three-sided, rigid frame concrete slab with closed concrete abutments. The bridge width is 27'-6" out-to-out of deck. The bridge length is 44'-0" back to back of abutments. The abutments and wing wall footings are supported by timber piles.

Salvage- Existing Name Plate



DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications - 5th edition

LOADING HL-93

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

DESIGN STRESSES

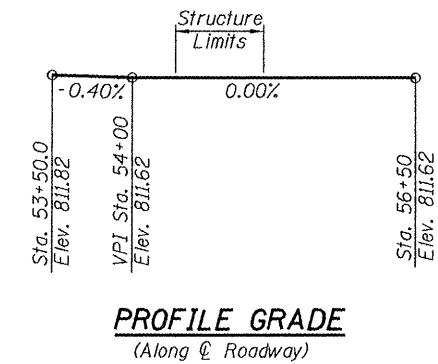
FIELD UNITS
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (Reinforcement)

PRECAST PRESTRESSED UNITS
f'c = 6,000 p.s.i.
f'ci = 5,000 p.s.i.
fpu = 270,000 p.s.i. (1/2" φ low relax. strands)
fbpt = 201,960 p.s.i. (1/2" φ low relax. strands)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec (SD1) = 0.056
Design Spectral Acceleration at 0.2 sec (SDs) = 0.099
Soil Site Class = C

85552



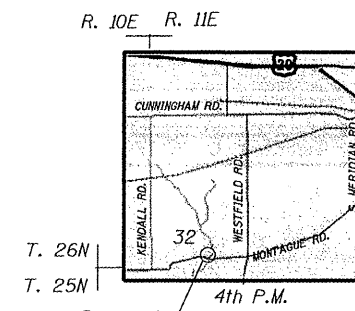
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	E. Abut.
	801.97	801.97

WATERWAY INFORMATION

Drainage Area = 5.2 Sq. Mi. Low Grade Elev. = ±811.62

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	30	1690	284.4	342.8	805.1	0.13	0.11	805.2	805.2	
Base	100	2700	336.0	408.5	805.9	0.57	0.29	806.5	806.2	



INDEX OF SHEETS

1. General Plan and Elevation
2. General Notes, Bridge Bill of Materials and Riprap Details
3. Top of Bridge Slab Elevations
4. Superstructure
5. Integral Abutment Diaphragm Details
6. Framing Plan
- 7-8. PPC I-Beam & Details
9. Steel Railing, Type SM
10. Abutments
11. Steel H-Pile Details
- 12-13. Boring Logs

STUART M. KEMP
081-004897
12/16/11
11/30/12

"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 Standard Specifications for Highway Bridges."

**GENERAL PLAN & ELEVATION
STRUCTURE NUMBER 101-3102**

PROFESSIONAL DESIGN FIRM LICENSE #184-001084		SHEET NO. 1		TOTAL SHEETS		SHEET NO.	
© Copyright Hanson Professional Services Inc. 2011		13 SHEETS		24		9	
		DATE: 12/16/11		CONTRACT NO. 85552			
F.A.S. RTE. 0052		SECTION 03-00324-00-BR		COUNTY Winnebago		FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT	

12/16/2011
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 LAYOUT: SNK 7/25/11
 DRAWN: JOM 12/16/11
 REVIEWED: SNK 12/16/11