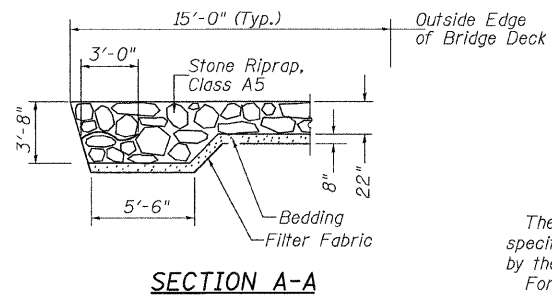
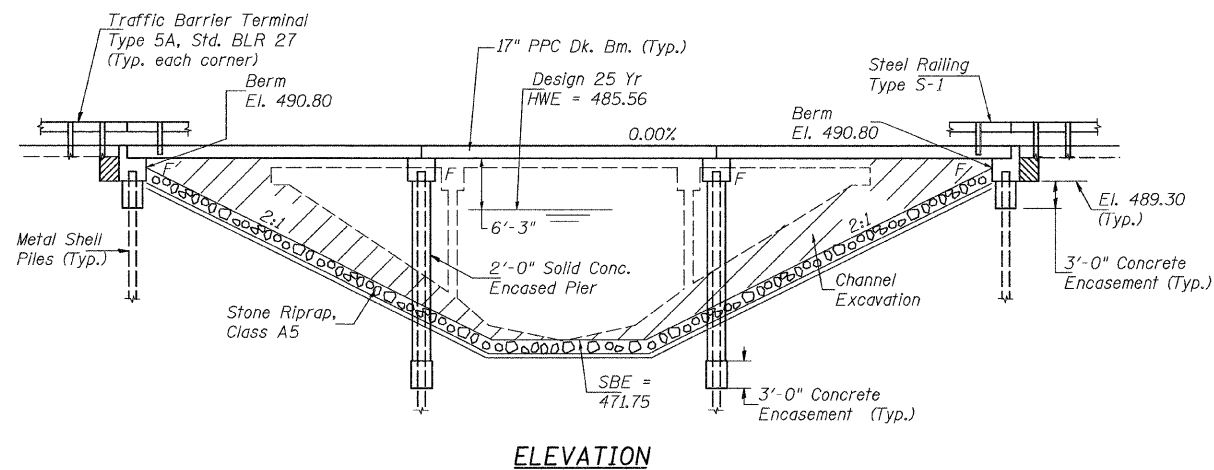
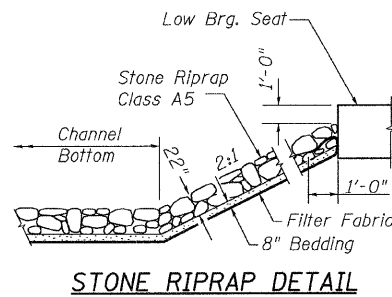


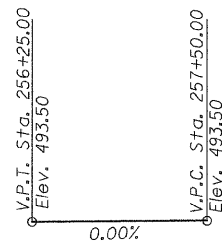
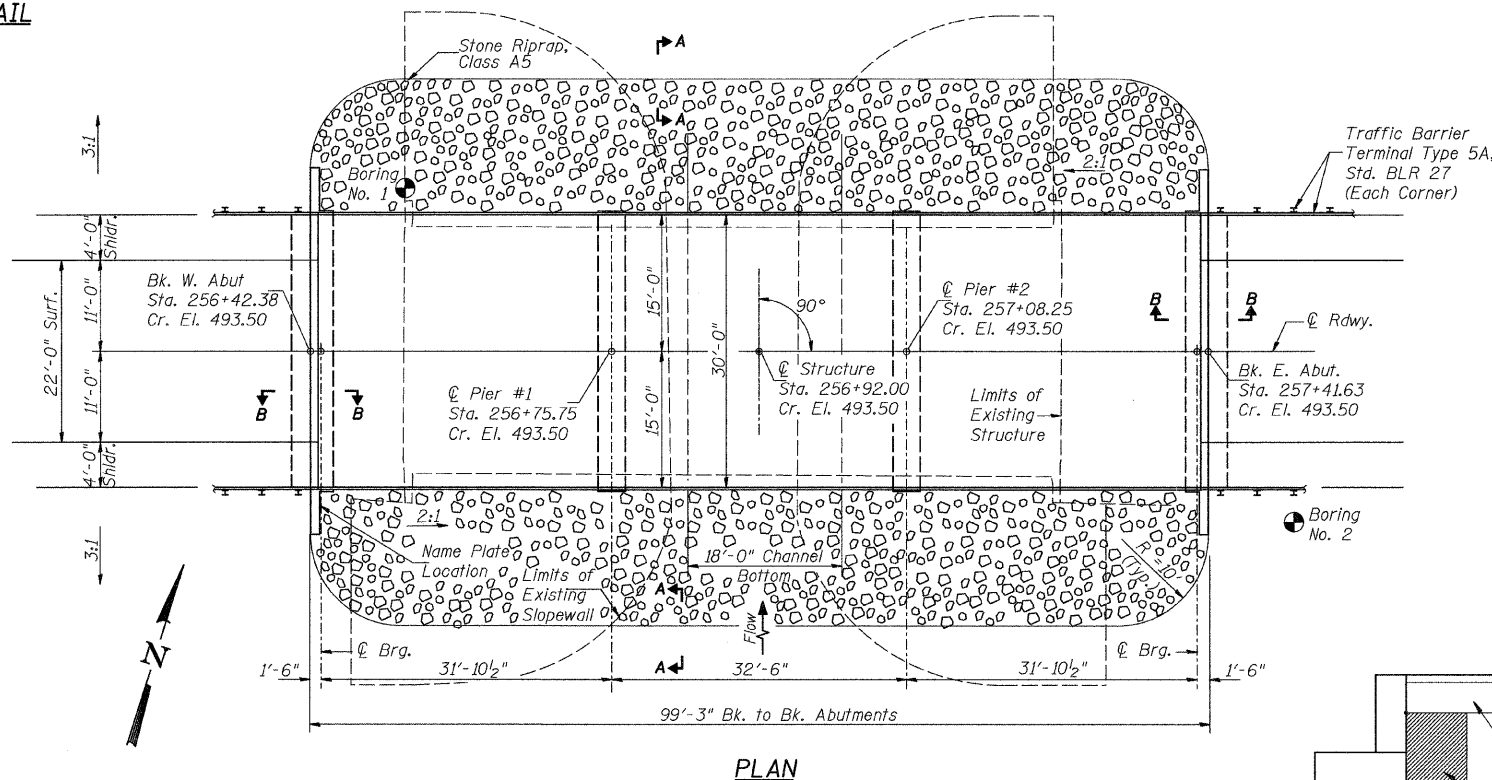
B.M.  
R.R. Spike in Power Pole  
±40' Rt., Sta. 252+87  
Elev. 491.00

**EXISTING STRUCTURE:**  
Three Span W-Beam Structure with Conc. Deck on Conc. Pier Caps with Timber Piling and Conc. Pile Bent Abutments, ±72'-8" Bk. to Bk., and 27'-10" O. to O. Deck, 0° Skew, with 6" Conc. Slope wall on Embankment Cones, Str. No. 009-3002  
Salvage: Steel Wide Flange Beams  
Road to be closed to traffic during construction.



**MILLER CREEK  
BUILT 201 BY  
CASS COUNTY  
SEC. 00-00063-00-BR  
CH 12 STATION 256+92.00  
F.A. PROJ. BRS-575(306)  
STR. NO. 009-3003 LOADING HS20-44**

**NAME PLATE**  
Locate Name Plate at S.W. Wingwall  
Corner of Bridge (See Std. 515001)



**PROFILE GRADE**

**DESIGN SPECIFICATIONS**  
2002 AASHTO & Interims

**DESIGN STRESSES**

(FIELD UNITS) (PRECAST PRESTRESSED UNITS)  
f'c = 3,500 p.s.i. f'c = 6,000 p.s.i.  
fy = 60,000 p.s.i. (Rein.) f'ci = 5,000 p.s.i.  
f's = 270,000 p.s.i. (1/2" ∅ Strands)  
f'si = 201,960 p.s.i. (1/2" ∅ Strands)

**LOADING HS20-44**

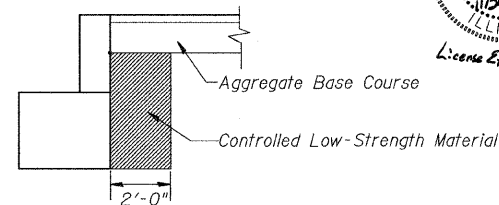
Allow 75#/sq. ft. future wearing surface.

DESIGNED	C.T.M.
CHECKED	J.E.H.
DRAWN	C.T.M.
CHECKED	J.E.H.

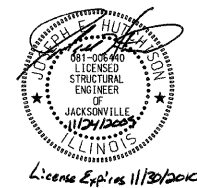
**WATERWAY INFORMATION**

Drainage Area = 5.15 Sq. Mi. Low Grade Elev. = 489.43 @ Sta. 262+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. ft.		Nat. H.W.E. ft.	Head - ft.		Headwater Elev. - ft.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	25	1,775	368	590	485.56	0.17	0.04	485.73	485.60
Base	100	2,510	498	770	488.01	0.18	0.08	488.19	488.09

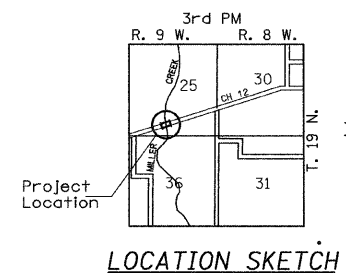


**SECTION B-B**



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 Specification for Highway Bridges.  
This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

*[Signature]*  
Illinois Structural No. 6440  
Expires 11/30/2010



**LOCATION SKETCH**

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
① Removal of Existing Structures	EACH	—	—	1
Structure Excavation	CU YD	—	95	95
① Controlled Low-Strength Material	CU YD	—	14.2	14.2
Concrete Structures	CU YD	—	116.5	116.5
① Reinforcement Bars	POUND	—	10,170	10,170
① Precast Prestressed Concrete Deck Beams (17" Depth)	SQ FT	2,918	—	2,918
Steel Railing, Type S-1	FOOT	199	—	199
Name Plates	EACH	—	—	1
Channel Excavation	CU YD	—	740	740
Stone Riprap, Class A5	TON	—	765	765
① Filter Fabric	SQ YD	—	755	755
Furnishing Metal Shell Piles 12"x0.25"	FOOT	—	1,281	1,281
① Driving Piles	FOOT	—	1,281	1,281
① Test Pile Metal Shells	EACH	—	2	2
Concrete Encasement	CU YD	—	8.1	8.1
① Underwater Structure Excavation Protection, Location 1 (Pier #1)	EACH	—	1	1
① Underwater Structure Excavation Protection, Location 2 (Pier #2)	EACH	—	1	1
① Slope wall Removal	SQ YD	—	660	660

① See Special Provisions

**GENERAL PLAN & ELEVATION  
COUNTY HIGHWAY 12  
OVER MILLER CREEK  
SECTION 00-00063-00-BR  
CASS COUNTY  
STATION 256+92.00  
STR. NO. 009-3003**