

Bench Mark: Chiseled "□" On slope wall top, west side of southbound IL 116 Bridge, on south side of bridge elev 483.21.

Existing Structure: S.N. 090-0065, built in 1953, is a three span continuous cast-in-place, tee beam bridge. The span lengths are 46'-1", and 60'-0", 46'-1". The length from back of abutments is 158'. The roadway is 32'-8" wide. It is supported by solid piers and modified semi-integral abutments.

Structure to be closed and removed during replacement. Traffic to be maintained using adjacent southbound structure. No salvage.

STATION 317+85.15  
BUILT 20XX BY  
STATE OF ILLINOIS  
F.A.P. 673 SEC. 102B-1  
LOADING HL 93  
STR. NO. 090-0179

NAME PLATE  
See Std. 515001



Sheets: S01, S02, S03, S04, S05, S06, S07, S08, S09, S10, S13, S14, S15, S16, S17, S19, S20, S21, S22.

*Orwin P. Youngquist*  
Expires: 11/30/2012  
10-09-12

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**LOADING HL 93**

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

**DESIGN SPECIFICATIONS**

2010 AASHTO LRFD Bridge Design Specifications

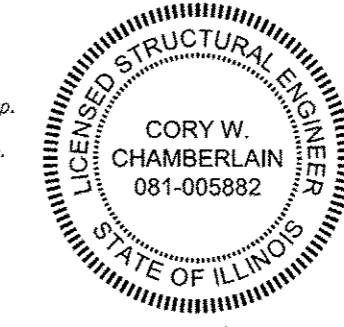
**DESIGN STRESSES**

**FIELD UNITS**

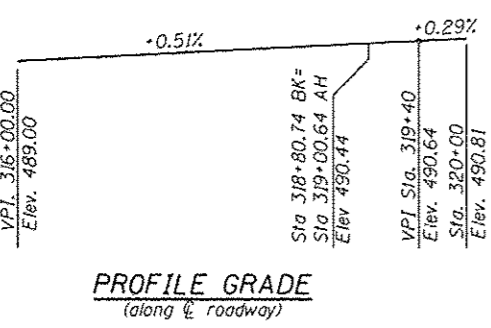
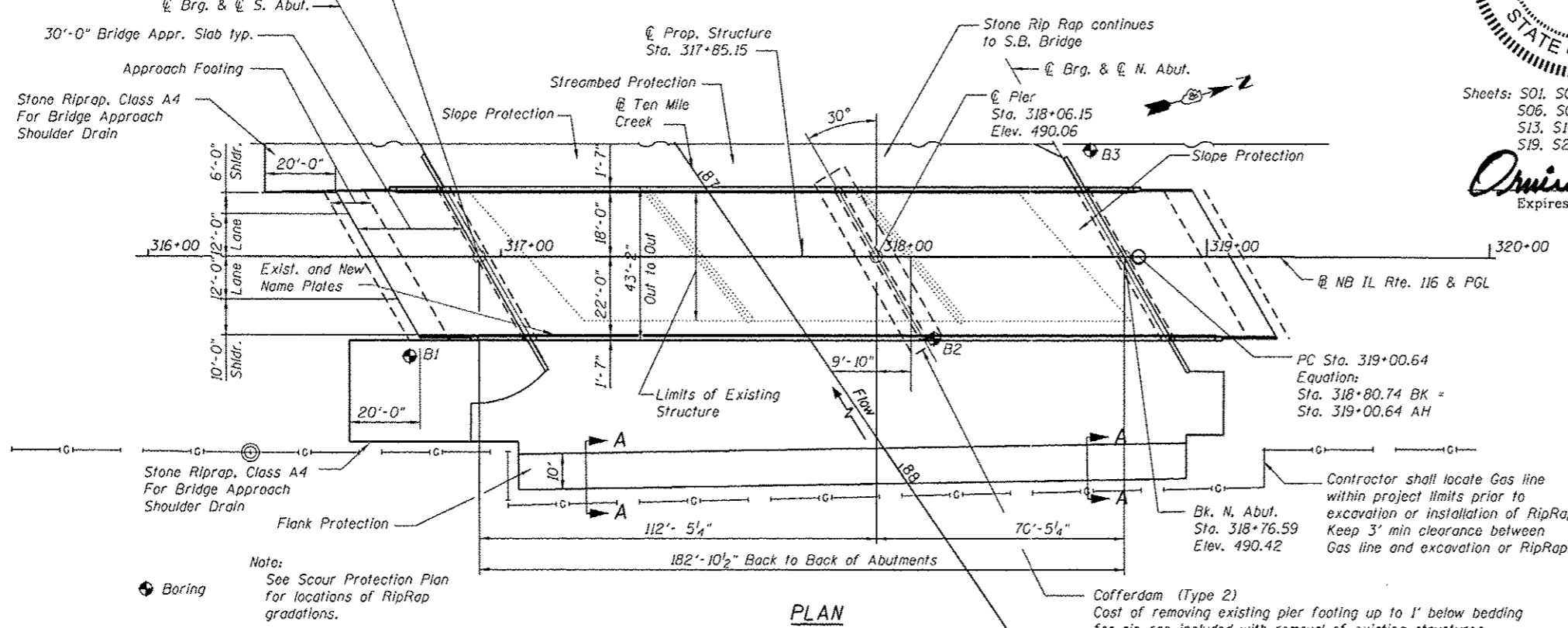
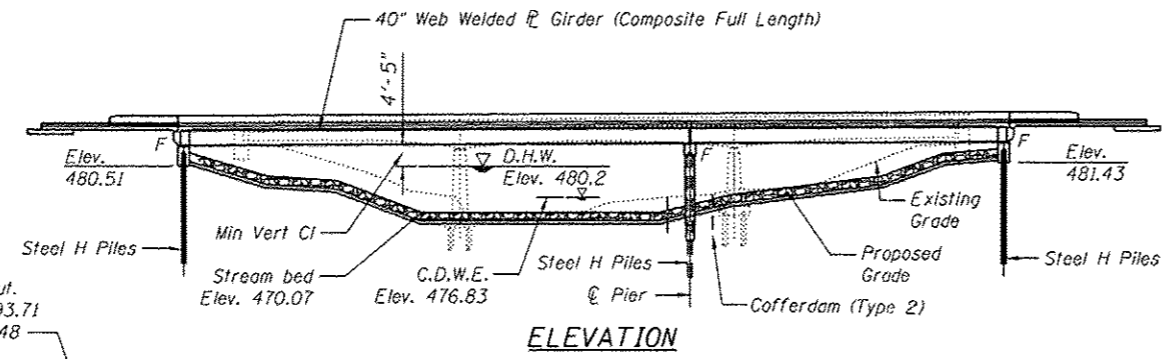
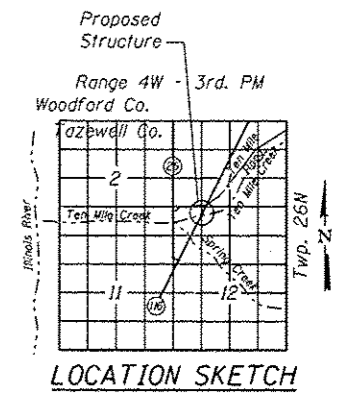
$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (M270 Grade 50W)

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 2  
Design Spectral Acceleration at 1.0 sec. (Sd1) = 0.163g  
Design Spectral Acceleration at 0.2 sec. (Sds) = 0.275g  
Soil Site Class = E



Expires: 11/30/2012  
10-4-12



**WATERWAY INFORMATION**

Drainage Area = 12.95 Sq. Mi. Low Grade Elev. 486.89 @ Sta. 309+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater E.I.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
10	2840	386	612	478.7	0.8	0.0	479.5	478.7	
Design	50	4810	511	789	480.2	1.4	0.0	481.6	480.2
Base	100	5730	570	871	480.8	1.9	0.3	482.8	481.1
Overtopping	N/A								
Max. Calc.	500	8040	591	900	481.1	3.8	1.3	484.9	482.4

**DESIGN SCOUR ELEVATION TABLE**

Design Scour Elevation (ft.)	S. Abut.	Pier	N. Abut.
	480.51	458.4	481.43

**APPROVED**  
For Structural Adequacy Only  
*[Signature]*  
Engineer of Bridges & Structures

**GENERAL PLAN & ELEVATION**  
**ILLINOIS ROUTE 116 (N.B.) OVER TEN MILE CREEK**  
**F.A.P. 673 (ILL 116) - SECTION (102B-1) BR**  
**TAZEWELL COUNTY**  
**STATION 317+85.15**  
**STRUCTURE NO. 090-0179**

	USER NAME = cwn	DESIGNED = OY	REVISED =	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL PLAN AND ELEVATION</b> <b>STRUCTURE NO. 090-0179</b> SHEET NO. S01 OF S22 SHEETS	F.A.P. RTE. = 673	SECTION = (102B-1) BR	COUNTY = TAZEWELL	TOTAL SHEETS = 89	SHEET NO. = 44
	FILE NAME = D:\68671-001-CP&E.dgn	CHECKED = DB	REVISED =			CONTRACT NO. 68671				
	PLDT SCALE = 48.00 / in.	DRAWN = CM	REVISED =							
	PLDT DATE = 10/4/2012	CHECKED = JB	REVISED =							