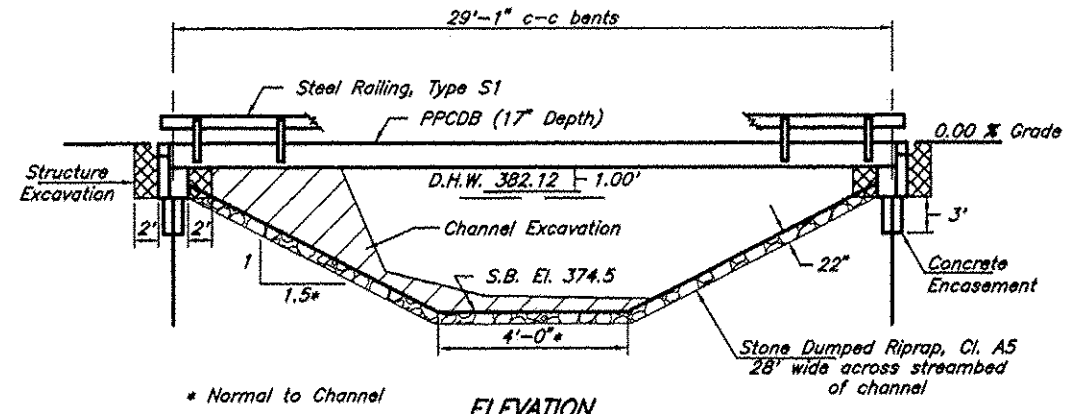


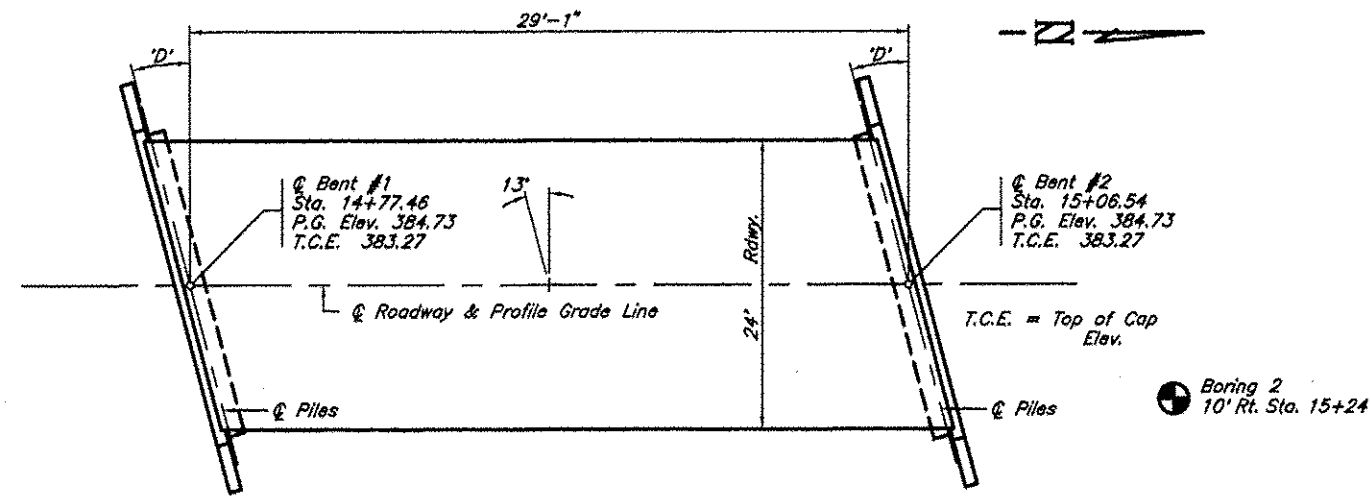
B.M. - Point mark on N end of SE wing  
 10' Rt. Station 14+85  
 Assumed Elev. 385.00

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 164	10-06119-00-BR	SALINE	13	3
PROJECT NO. BROS-165(36)		CONTRACT NO. 99489		



Existing Structure - Cast in place concrete deck on steel stringers with closed concrete abutments. 18.1' wide x 30.5' long

\* Normal to Channel  
**ELEVATION**



**PLAN**  
 Skew Angle "D" = 13° Right Forward

**GENERAL NOTES**

- Steel H piles shall meet AASHTO M270 Grade 50 specifications.
- See special provisions for boring logs.
- A Corrosion inhibitor, as covered in the Standard Specifications, shall be used in the precast prestressed concrete deck beams.

**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Channel Excavation	Cu. Yds.			57	57
Stone Dumped Riprap, Cl. A5	Tons			125	125
Removal of Existing Structures	Each				1
Structure Excavation	Cu. Yds.			36	36
Concrete Structures	Cu. Yds.			21.8	21.8
Concrete Encasement	Cu. Yds.			2.7	2.7
P.P. Conc. Dk. Bm. 17" Dp.	Sq. Ft.	720			720
Reinforcement Bars	Pound			2640	2640
Steel Railing, Type S1	Foot	62			62
Furnishing Steel Piles HP10X42	Foot			160	160
Driving Piles	Foot			160	160
Name Plates	Each			1	1

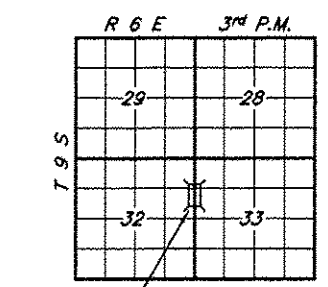
**PILE DATA (2-ABUTS.)**

Type & Size : HP10X42  
 Nominal Required Bearing : 171 kips  
 Factored Resistance Available : 94 kips  
 Estimated Length : 20 Feet  
 Number Required : 8

BRIER CREEK  
 SEC. 10-06119-00-BR BUILT 20  
 HARRISBURG TOWNSHIP  
 SALINE COUNTY  
 LOADING HL-93  
 STR. NO. 083-3241

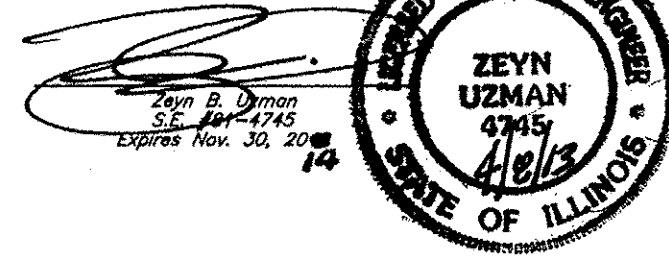
**LETTERING FOR NAME PLATE**

Locate Name Plate at southeast Corner of Bridge (See Sheet 10)



**LOCATION SKETCH**

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 type of structure and complies with the requirements of the current LRFD Specifications.



**DESIGN SPECIFICATIONS**

2007 AASHTO LRFD Bridge Design Specifications and all applicable interims.

**LOADING HL-93**

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

**SEISMIC DATA**

Soil Site Class = D  
 Design Spectral Acceleration at 0.2 sec. (S<sub>0.2</sub>) = 0.807  
 Design Spectral Acceleration at 1.0 sec. (S<sub>0.1</sub>) = 0.341  
 Seismic Performance Zone (SPZ) = 3

**WATERWAY INFORMATION**

Flood		Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.	Head-Ft.		Headwater El.	
Design	Base	100	1150	Exist.	Prop.	382.12	Exist.	Prop.	Exist.	Prop.
		±110	1178	111.8	117.5	382.12	0.31	0.09	382.43	382.21
		500		143.6	143.6	383.58	1.09	0.92	384.67	384.50
				143.6		383.64		1.09		384.73

Note: Deck elevation used for overtopping to allow for future raising of the approaches

GENERAL PLAN & ELEVATION  
 TOWNSHIP ROUTE 164 (BUTLER ROAD)  
 BRIER CREEK  
 SECTION 10-06119-00-BR  
 SALINE COUNTY  
 STRUCTURE NO. 083-3241