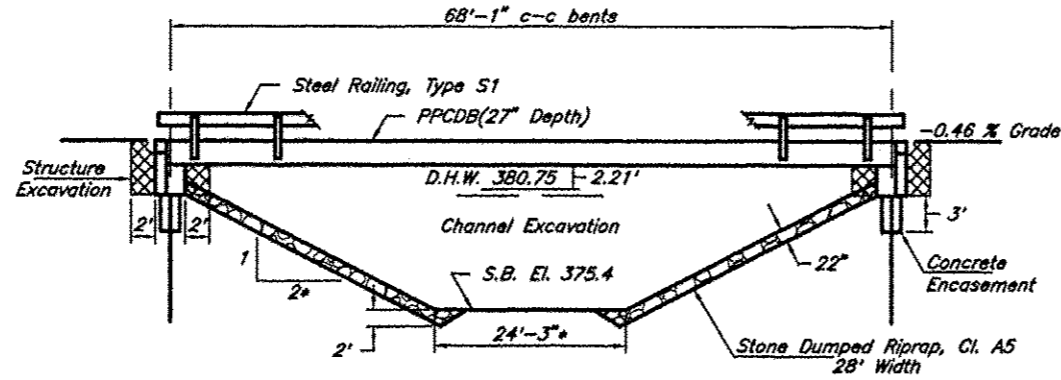


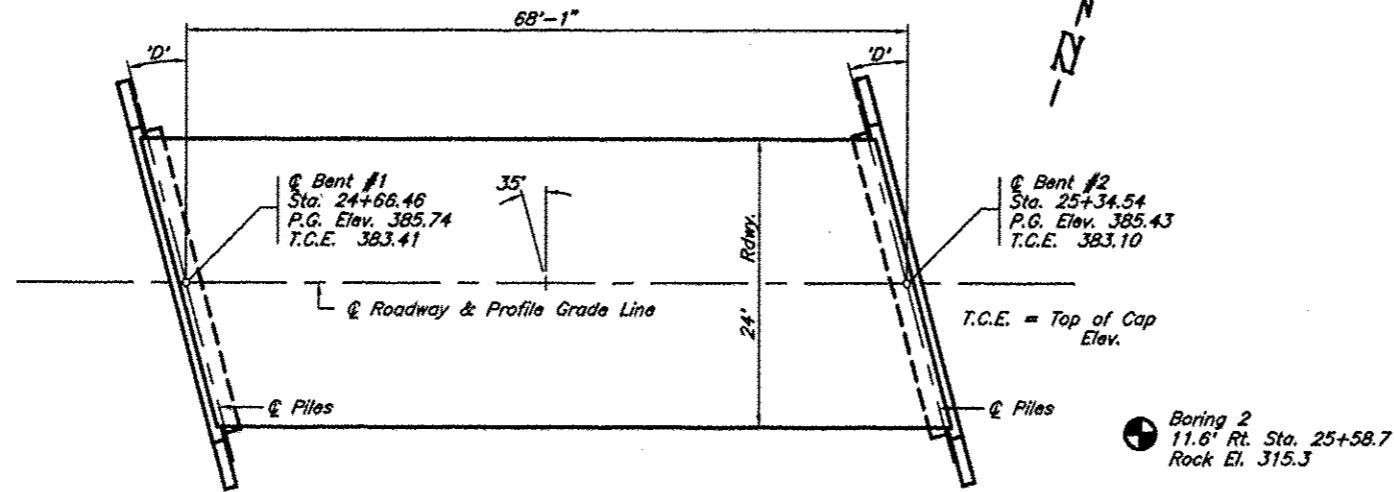
B.M. - Dbl. nail in Power Pole
 06' Lt. Sta. 26+82
 Elev. 383.00

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 3	10-01163-00-BR	ALEXANDER	12	3
PROJECT NO. BROS-0003(125) CONTRACT NO. 99521				



Existing Structure - Three span precast reinforced concrete deck beams on concrete caps with timber piling, 26.4' W x 78.0' L.

* Normal to Channel
ELEVATION



Boring 1
 10.2' Lt. Sta. 24+21.6
 Rock El. 310.9

Boring 2
 11.6' Rt. Sta. 25+58.7
 Rock El. 315.3

PLAN
 Skew Angle "D" = 35° 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.			66	66
Stone Dumped Riprap, Class A5	Tons			182	182
Removal of Existing Structures	Each				1
Structure Excavation	Cu. Yds.			92	92
Concrete Structures	Cu. Yds.			23.0	23.0
Concrete Encasement	Cu. Yds.			2.7	2.7
P.P. Conc. Dk. Bm. 27" Dp.	Sq. Ft.	1,634			1,634
Reinforcement Bars	Pound			2,766	2,766
Steel Railing, Type S1	Foot	140			140
Furnishing Steel Piles HP10X57	Foot			576	576
Driving Piles	Foot			576	576
Name Plates	Each			1	1

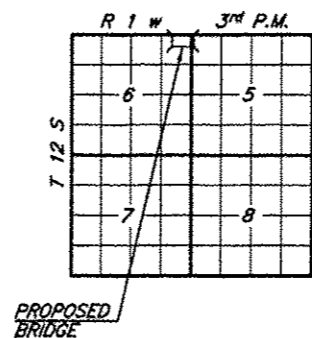
PILE DATA (2-ABUTS.)

Type & Size : HP10X57
 Nominal Required Bearing : 307 kips
 Factored Resistance Available : 169 kips
 Estimated Length : 74 Feet Bent #1, 70 Feet Bent #2
 Number Required : 8

STATION 25+00.5
 TRIBUTARY TO COOPER CREEK
 SEC. 10-01163-00-BR BUILT 20
 COUNTY UNIT ROAD DISTRICT
 ALEXANDER COUNTY
 LOADING HL-93
 STR. NO. 002-3111

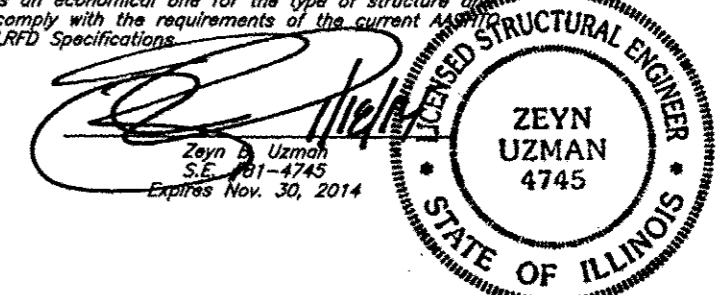
LETTERING FOR NAME PLATE

Locate Name Plate at southwest Corner of Bridge (See Sheet 8)



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 AASHTO 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 = E
 Design Spectral Acceleration at 0.2 sec. (S_{0.2}) = 1.214
 Design Spectral Acceleration at 1.0 sec. (S₁) = 0.909
 Seismic Performance Zone (SPZ) = 4

WATERWAY INFORMATION

Drainage Area = 2.49 Sq. Mi.		Low Grade Elev. = 385.43		At Sta. 25+34.54			
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist. Prop.	Natural H.W.E.	Head-Ft. Exist. Prop.	Headwater El. Exist. Prop.	
Design	20	1,710	167.2 188.0	380.75	1.55 0.07	382.30 380.82	
Base	100	2,500	218.2 238.8	381.81	3.29 0.74	385.10 382.55	
Overtopping	± 400	3,270		241.5		2.92	385.43
Max. Calc.	500						

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

GENERAL PLAN & ELEVATION
 TOWNSHIP ROUTE 3 (COUNTY LINE ROAD)
 TRIBUTARY TO COOPER CREEK
 SECTION 10-01163-00-BR
 ALEXANDER COUNTY
 STRUCTURE NO. 002-3111