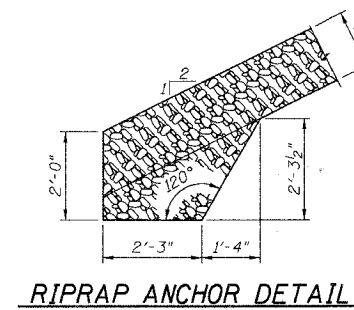
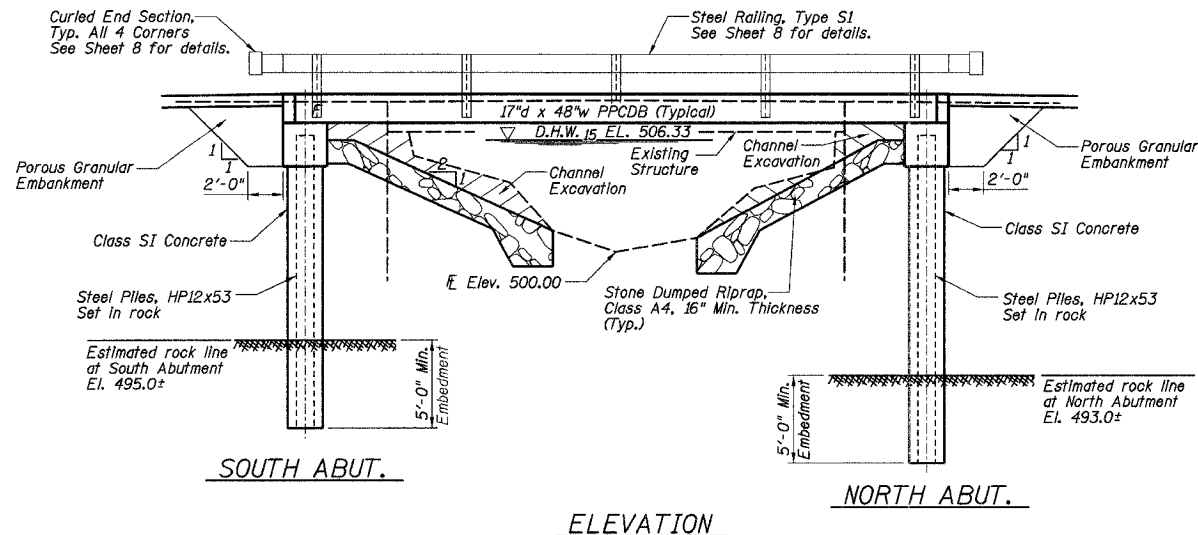


BM 1 - RR spike in tree  
54' Lt., Sta. 48+72.7 - Elev. 508.65

BM 2 - RR spike in tree  
43' Lt., Sta. 51+05.2 - Elev. 508.44

Existing Structure: Single span bridge with concrete deck and steel stringers on concrete abutments. 26' long x 17' wide. To be removed. See Special Provisions.

ROUTE	SECTION	COUNTY	TOTAL SHEET NO.
TR 373	05-12115-00-BR	CLAY	9 6
FED. ROAD DIST. NO. 7	ILLINOIS	FEDERAL AID PROJECT	
CONTRACT NO. 95536			



ITEM	UNIT	SUB	SUPER	TOTAL
CHANNEL EXCAVATION	CU YD	30	-	30
POROUS GRANULAR EMBANKMENT	TON	46	-	46
STONE DUMPED RIPRAP, CLASS A4	TON	82	-	82
REMOVAL OF EXISTING STRUCTURES	EACH	-	-	1
CONCRETE STRUCTURES	CU YD	15.6	-	15.6
PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ. FT.	-	876	876
REINFORCEMENT BARS	POUND	2740	-	2740
STEEL RAILING, TYPE S1	FOOT	-	74	74
FURNISHING STEEL PILES HP 12x53	FOOT	152	-	152
NAME PLATES	EACH	1	-	1
TERMINAL MARKER - DIRECT APPLIED	EACH	-	4	4
SETTING PILES IN ROCK	EACH	8	-	8

**GENERAL NOTES**

See Section 502 of the Standard Specifications for Structural Excavation.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

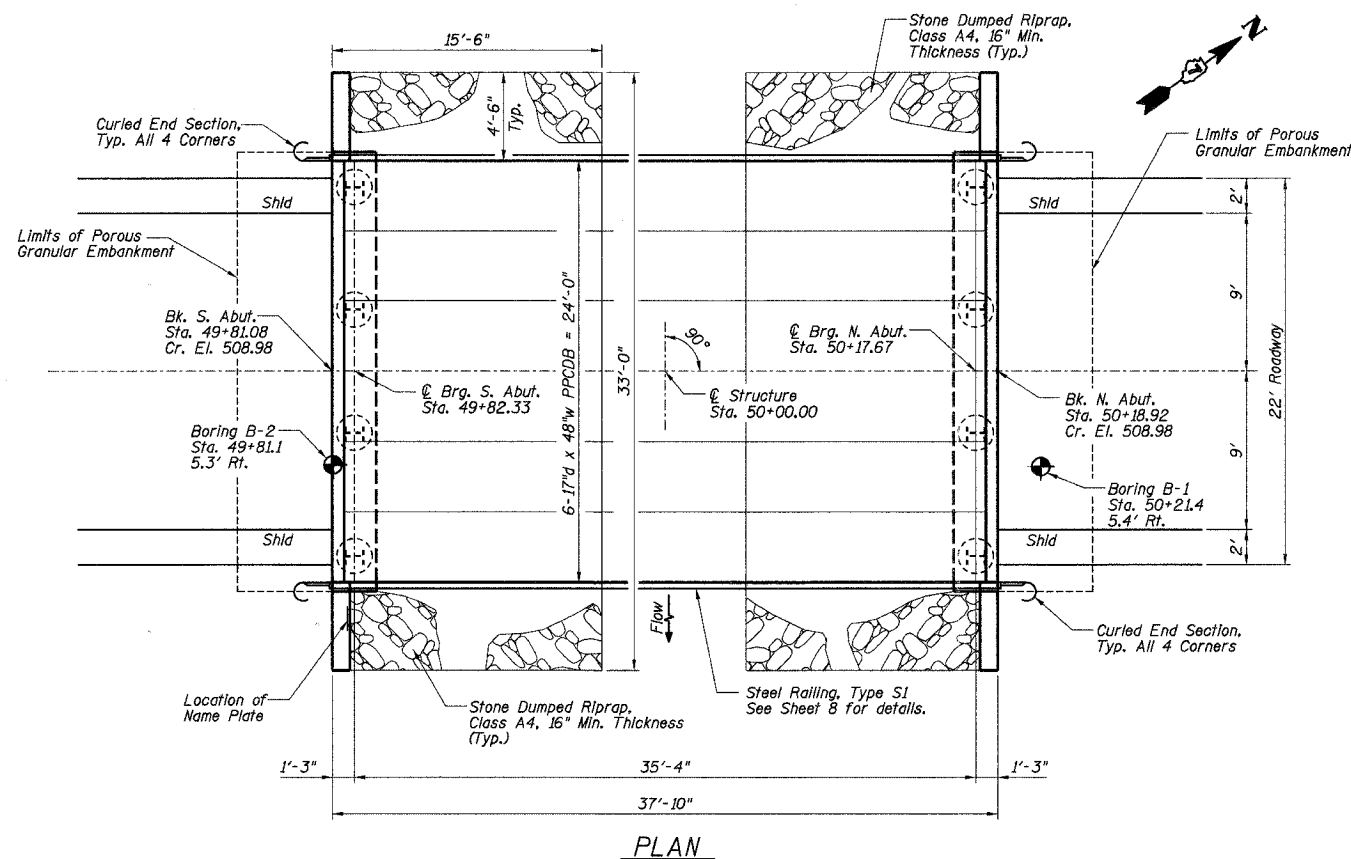
Channel excavation shall be excavated as shown within the limits of the proposed bridge, then tapered to the existing channel at the ROW line. If the Engineer deems the material satisfactory, it may be used to construct the roadway embankment.

See Specifications for Soil Borings.

Do not scale these drawings.

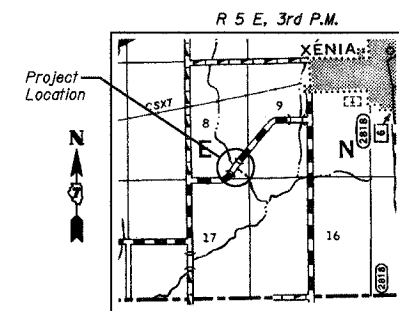
The Steel H-piles shall be according to AASHTO M270 Grade 50.

The abutment bearing seat surfaces for the precast prestressed concrete deck beams shall be adjusted by shimming to assure firm and even bearing. As required, 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.



**NICKOLSEN CREEK  
BUILT 200\_ BY  
CLAY COUNTY  
SEC. 05-12115-00-BR  
PROJECT NO. BROS-025(59)  
STRUCTURE NO. 013-3232  
LOADING HS-20**

**NAME PLATE**  
(See State Standard 515001 for details)



**LOCATION SKETCH**

**WATERWAY DATA**

Drainage Area = 1.13 Sq. Mi. Low Grade Elev. 507.72 @ Sta. 50+00

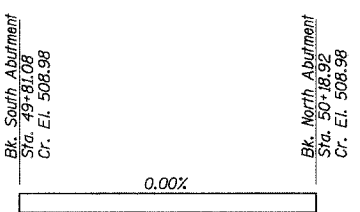
Flood Yr.	Freq.	Q C.F.S.	Opening Sq. Ft. Exist. Prop.	Natural H.W.E. Exist. Prop.	Head - Ft. Exist. Prop.	Headwater El. Exist. Prop.
Design	15	585	90 106	506.33 0.11 0.06	506.44 506.39	
Base	100	974	101 137	507.29 1.04 0.76	508.31 508.05	
Max. Calc.	500	1349	101 139	507.65 1.76 1.88	509.41 509.53	

**DESIGN STRESSES**

**FIELD UNITS**  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi  
**PRECAST PRESTRESSED UNITS**  
 $f'_c = 5,000$  psi  
 $f'_{ci} = 4,200$  psi  
 $f'_s = 270,000$  psi (2/3% strands)  
 $f'_{si} = 189,000$  psi (1/2% strands)

**DESIGN SPECIFICATIONS**

AASHTO - 2002 17th Edition  
**LOADING HS 20-44**  
 Allow 25#/sq. ft. for future wearing surface.



GARY L. HAHN  
 81-4853  
 LICENSED STRUCTURAL ENGINEER  
 CENTRALIA, ILLINOIS  
 ILLINOIS LICENSED STRUCTURAL ENGINEER NO. 81-4853  
 EXPIRES NOV. 30, 2008

**GENERAL PLAN AND ELEVATION  
PROPOSED BRIDGE OVER  
NICKOLSEN CREEK  
TR 373  
SECTION 05-12115-00-BR  
CLAY COUNTY, ILLINOIS**

10/25/2007