

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DATE	BY	NO.	REVISED	BY	SHEET NO.
1/18	10620	Carroll	46	18	19 SHEETS

BM #27 Route 24, Bridge over Plum River, chiseled "2" on East Parapet of North Concrete Abut. Elev. 597.74. Existing Structure @ Sta. 55+09. Built as SB100 Rte. Sec. 106-B in 1930. Existing Bridge No. 008-0018. Old bridge to be Removed by Contractor after new structure and Approaches are completed. No Salvage. Existing Bridge is 140'-0" x 23'-4" Steel Truss with RC. slab and R.C. Closed Abutments.

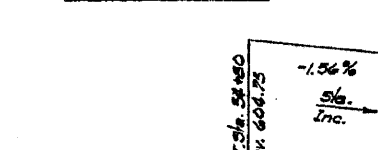
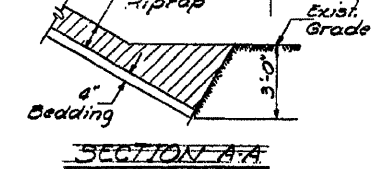
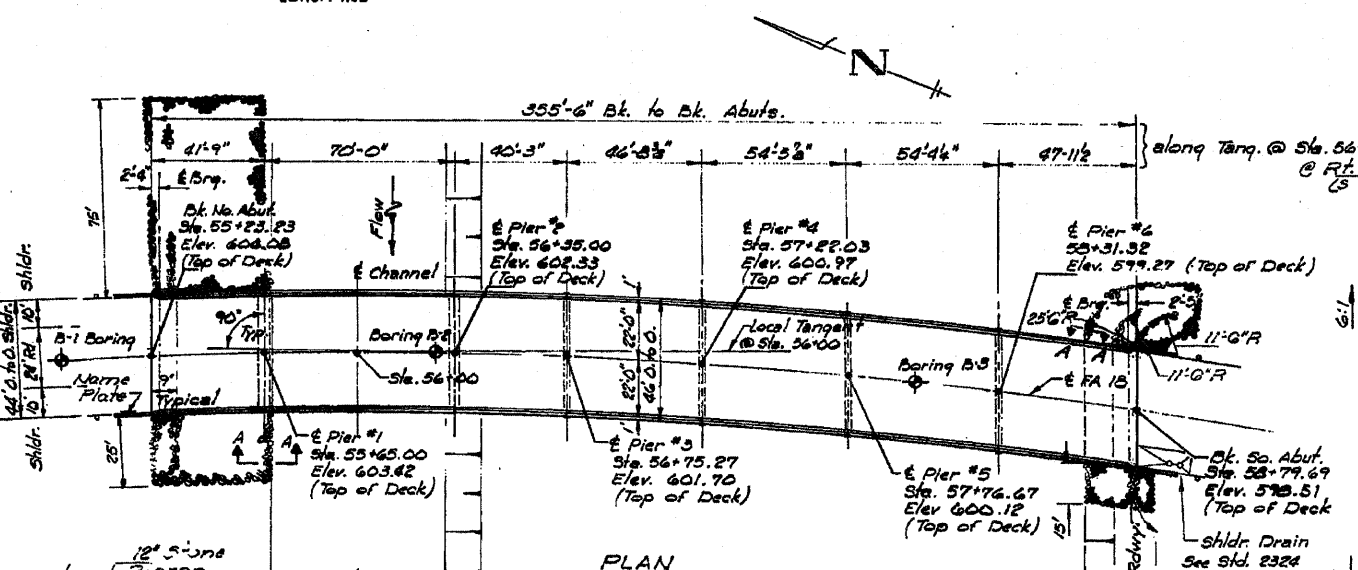
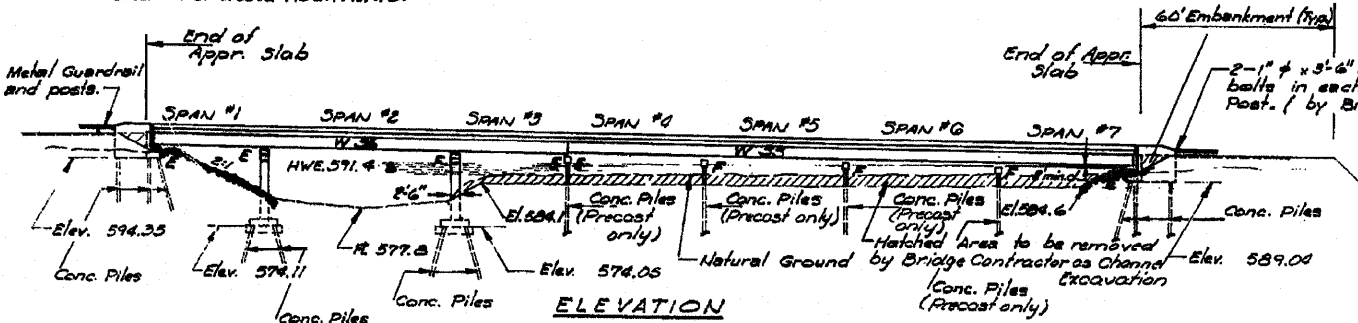
This portion of embankment backfill by Bridge Contractor after abutment is in place (Typ.)

GENERAL NOTES

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.  
Bearing seat surface shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustments shall be made either by grinding the surface or by shimming the bearing. Type 6 inch adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.  
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone II. These components are all the splice plate material and the wide flange beams.  
The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.  
Seal Coat designed for a maximum High Water elevation of 588.0.

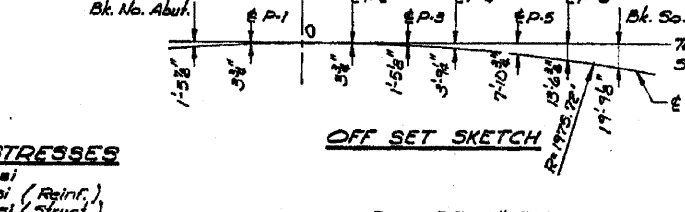
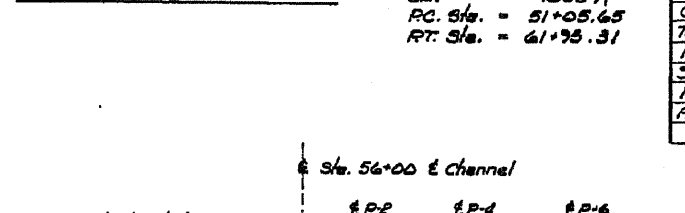
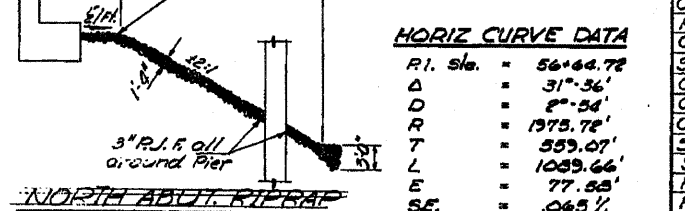
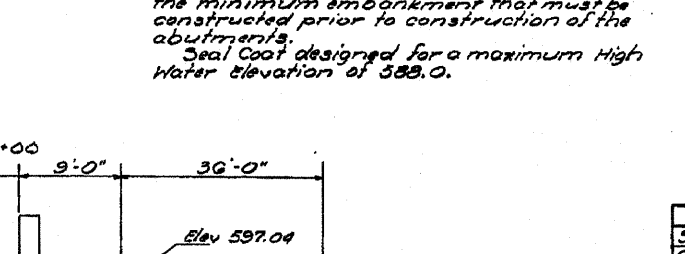
See Proposal for Boring Data.  
Fasteners shall be high strength bolts. Bolts 3/4" open holes unless otherwise shown.  
Calculated weight of Structural Steel = 367,200 Lbs.  
The basic lead silico chromate paint system shall be used for shop & field painting of Structural Steel.  
Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.  
Anchor bolts shall be set before bolting diaphragms over supports.

Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.  
The contractor shall drive 3 concrete test piles in permanent locations (see sheets #18, #14 & #16) as directed by the Engineer before ordering the remainder of piles.  
Reinforcement Bars (including epoxy coated bars) shall conform to the requirements of AASHTO M-31 or M-53 Grade 60 deformed bars.



DESIGNED R. F. ROPKEY  
EXAMINED [Signature]

**FOR INFORMATION ONLY**



HORIZ CURVE DATA

R1. Sta.	= 56+44.78
Δ	= 31°-36'
D	= 8°-54'
R	= 1975.78'
T	= 559.07'
L	= 1089.66'
E	= 77.88'
SE	= .065 1/2
PC. Sta.	= 51+05.65
PT. Sta.	= 61+95.31

DESIGN STRESSES

$f_c$	= 1,400 psi
$f_y$	= 60,000 psi (Reinf.)
$f_s$	= 20,000 psi (Struct.)

LOADING HS 20-44  
Allow 25"/ft for future W. S.  
Design Specifications: 1973  
AASHTO 1974, 1975, 1976 Interim Specification.  
\*\* Epoxy Coated Reinf. Bars shall be used in the top layer of the slab.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPP.	SUB.	TOTAL
Structure Excavation	Cu. Yds.	165	165	165
Channel Excavation	Cu. Yds.		612.9	612.9
Protective Coat	Sq. Yds.	1987		1987
Class X Concrete	Cu. Yds.	498.1	332.6	830.7
Seal Coat Concrete	Cu. Yds.		77.9	77.9
Cofferdam Excavation	Cu. Yds.		249	249
Cofferdam (Pier #1)	Ea.		1	1
Cofferdam (Pier #2)	Ea.		1	1
Structural Steel	L. S.			L.S.
Stud Shear Connectors	Ea.	1134		1134
Reinforcement Bars	Lbs.	49,150	23,750	72,900
Reinf. Bars Epoxy Coated	Lbs.	75,420		75,420
Concrete Piles	Lin. Ft.		5647	5647
Test Piles (Concrete)	Ea.		3	3
Name Plates	Ea.		1	1
Stone Riprap	Sq. Yds.		1119	1119
Neoprene Expansion Jt(s)	Lin. Ft.	135		135
Removal Exist. Structure	Each			1

STATION 56+00.0  
BUILT 19 BY  
STATE OF ILLINOIS  
F.A. RT. 10 SEC. 106 BR  
F.A. PROJECT BR-F-18(80)  
LOADING HS 20  
STR. NO. \*

NAME PLATE  
See Sht. 2113  
\*Structure Number to be supplied by District.  
GENERAL PLAN & ELEVATION  
F.A. Rte. 10 Over PLUM RIVER  
F.A. Rte. 10 SECTION 106 BR  
CARROLL COUNTY  
STATION 56+00.0

FILE NAME =	USER NAME = 1rnkdj	DESIGNED -	REVISED -	STATE OF ILLINOIS	General Plan & Elevation	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D:\BRV\bridge Painting\Contract\PAINTING\64F89\PLANeng.dgn		DRAWN -	REVISED -	DEPARTMENT OF TRANSPORTATION	Structure No. 008-0028	02	Bridge Painting 2010-	Various	18	5
PLOT SCALE = 50.0000" / IN.		CHECKED -	REVISED -							
PLOT DATE = Wed Jan 20 08:26:19 2010		DATE -	REVISED -							
					SCALE: _____	SHEET NO. _____	OF _____ SHEETS	STA. _____	TO STA. _____	ILLINOIS FED. AID PROJECT