

BENCHMARK: Chisled "D" on Northeast Wingwall of Existing Structure. Elev. 608.37

WATERWAY INFORMATION

Drainage Area - 4.0 Sq. Mi. Low Grade El. 609.00 @ Sta. 125+71.00									
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Vel. Ft./Sec.	Head - Ft.		Headwater El.	
			Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
Design	50	1938	202	490	599.50	.99	.13	600.49	599.63
Base	100	2239	217	532	600.20	1.28	.17	601.48	600.37
Max. Calc.	500	2957	251	634	601.80	1.78	.19	603.58	601.99

FOR INFORMATIONAL PURPOSES ONLY

GENERAL NOTES:

- See Proposal for Boring Data.
- Layout of Stone Riprap Slope Wall may be varied in the field to suit ground conditions as directed by the Engineer.
- The Contractor shall drive one (1) Steel HP 12x53 test pile in a permanent location at the North Abutment and one (1) Steel HP 12x53 test pile in a permanent location at Pier No. 1 as directed by the Engineer before ordering the remainder of piles.
- The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners and the top edge of keys shall be rounded or chamfered a minimum of 1/8".
- Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
- Reinforcement Bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-53, Grade 60, unless noted otherwise.
- Expansion Guards shall be fabricated and erected in accordance with Article 503.07 (c) of the Standard Specifications. Cost Incidental.
- A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions shall be used in the concrete for precast prestressed concrete deck beams.

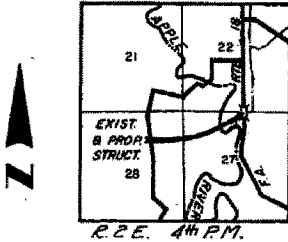
PROJECT NO.	64D87	TOTAL SHEETS	13
SHEET NO.	13	DATE	11/8

SHEET 1 OF 7

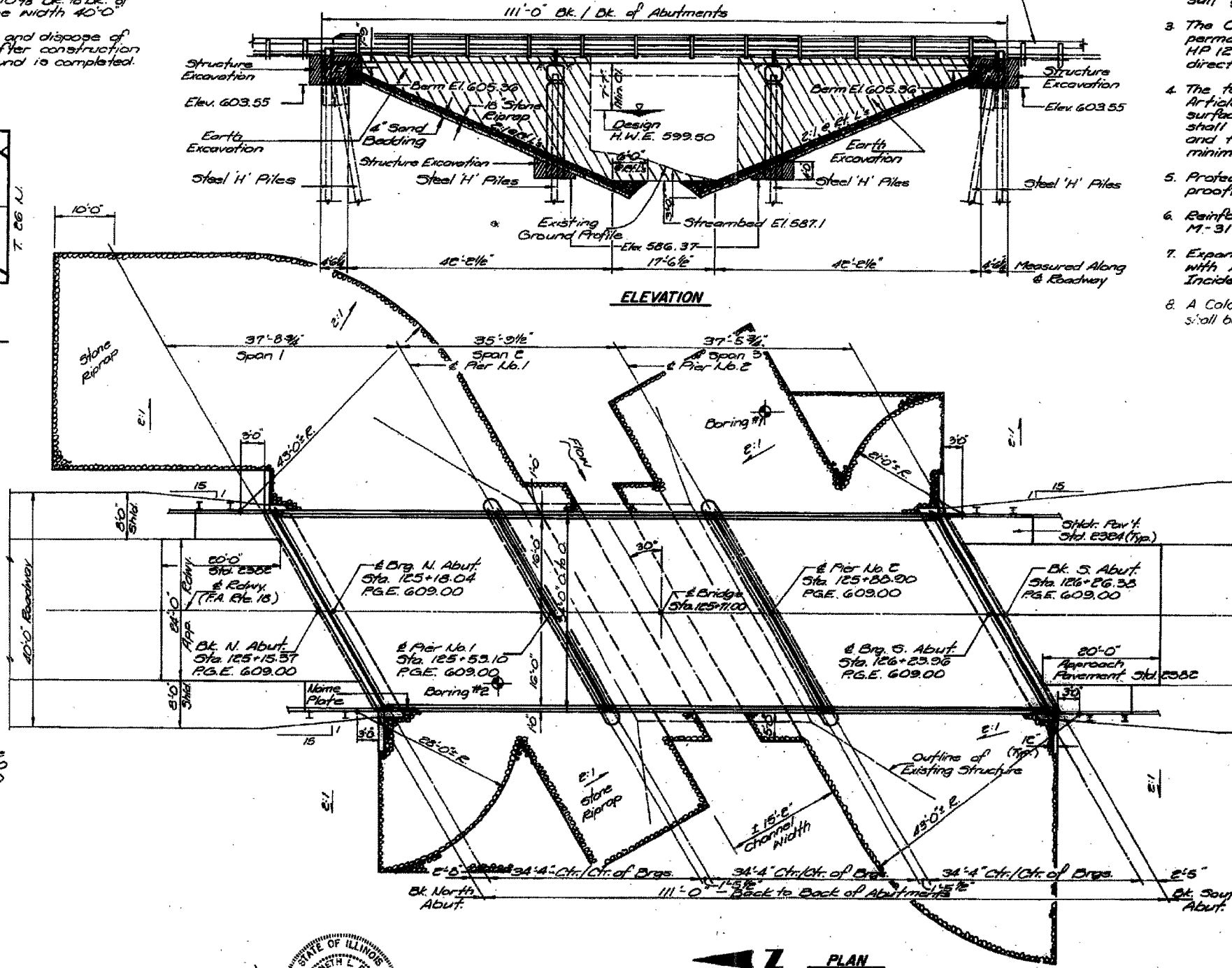
EXISTING STRUCTURE:

Structure No. 043-0029; built as S.B.I. Etc. 80, Section 104 B in 1920 at Station 125+71, consists of a one span reinforced concrete slab bridge on closed reinforced concrete abutments. Existing bridge length 28'-10 1/2" Bk. to Bk. of Abut. and existing bridge width 40'-0" Face to Face of rail. Contractor shall remove and dispose of the Existing Structure after construction of the temporary runaround is completed. No Salvage.

*Backwater from Apple River
H.W.E. @ Sta. 125+71.00
G.O. 604.7
G.O. 608.1
G.O. 610.3



LOCATION SKETCH

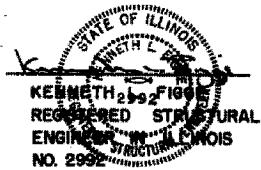


ROADWAY DATA

FA. Rte. 18 (Ill. Rte. 84)
Class: Major Highway
D.V.: 465 (2000)
A.D.T.: 2100 (1980), 3100 (2000)
Design Speed: 70 M.P.H.

PROFILE GRADE
(Top of Class I)

DESIGNED:	V.S.N.
CHECKED:	K.L.F.
DRAWN:	R.A.W.
CHECKED:	K.L.F.



APPROVED
FOR RECORD
KENNETH J. PIGEON
REGISTERED STRUCTURAL ENGINEER
NO. 2992

PLAN

DESIGN STRESSES
PRECAST PRESTRESSED UNITS CAST IN PLACE CONCRETE
f_c = 5,000 p.s.i. f_c = 3,500 p.s.i.
f_{ti} = 4,000 p.s.i. f_y = 60,000 p.s.i. (Comp.)
f_s = 270,000 p.s.i. (1/2" Strands) n = 9
f_s = 189,000 p.s.i. (1/4" Strands)

LOADING HS 20-44
Design Specifications: 1977 A.A.S.H.T.O.; 1973, 1979; 1980 Interim Specifications (Allow 25 p.s.f. for future wearing surface)

STATION 125 + 71
BUILT 1920 BY
STATE OF ILLINOIS
FA. 18 SEG 104-BR
PROJECT 64-D(117)
LOADING HS 20
*STR. NO. _____

NAME PLATE
(See Std. 2113)
*Structure Number to be supplied by District.

TOTAL BILL OF MATERIAL

Item	Unit	Super.	Sub.	Total
Structure Excavation	C.Y.	—	—	209
Bit Conc. Surf. Crs. Mix. D Class I	Ton	47	—	47
Removal of Exist. Structure	Each	—	—	1
Stone Riprap	C.Y.	—	10.47	10.47
Class X Concrete	C.Y.	13.2	211.1	224.3
Prec. Press. Conc. Dt. Bms. 17" Depth	S.F.	3635	—	3635
Steel Reinforcing - Type T 1	L.F.	215	—	215
Reinforcement Bars	Lbs.	270	12350	12620
Steel Piles - HP 12x53	L.F.	—	981	981
Test Piles, Steel HP 12x53	Each	—	2	2
Name Plate	Each	—	—	1
Polymer Concrete Mortar For Crs.	L.F.	1070	—	1070
Waterproofing Membrane System	S.Y.	356	—	356
Protective Coat	S.Y.	36	—	36
Preformed Joint Seal (4")	L.F.	40	—	40

Note: Quantity of Earth Excavation within structure limits included with Roadway Quantities.

GENERAL PLAN & ELEVATION

FA. 18 OVER TRUSSWAY TO APPLE RIVER
SECTION 104-BR
JO DAVISS COUNTY
STATION 125+71.00

K. M. S. E. NO. 1891 / 0028