

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
F.A. 22	48B-1	KNOX	13	5	7 SHEETS

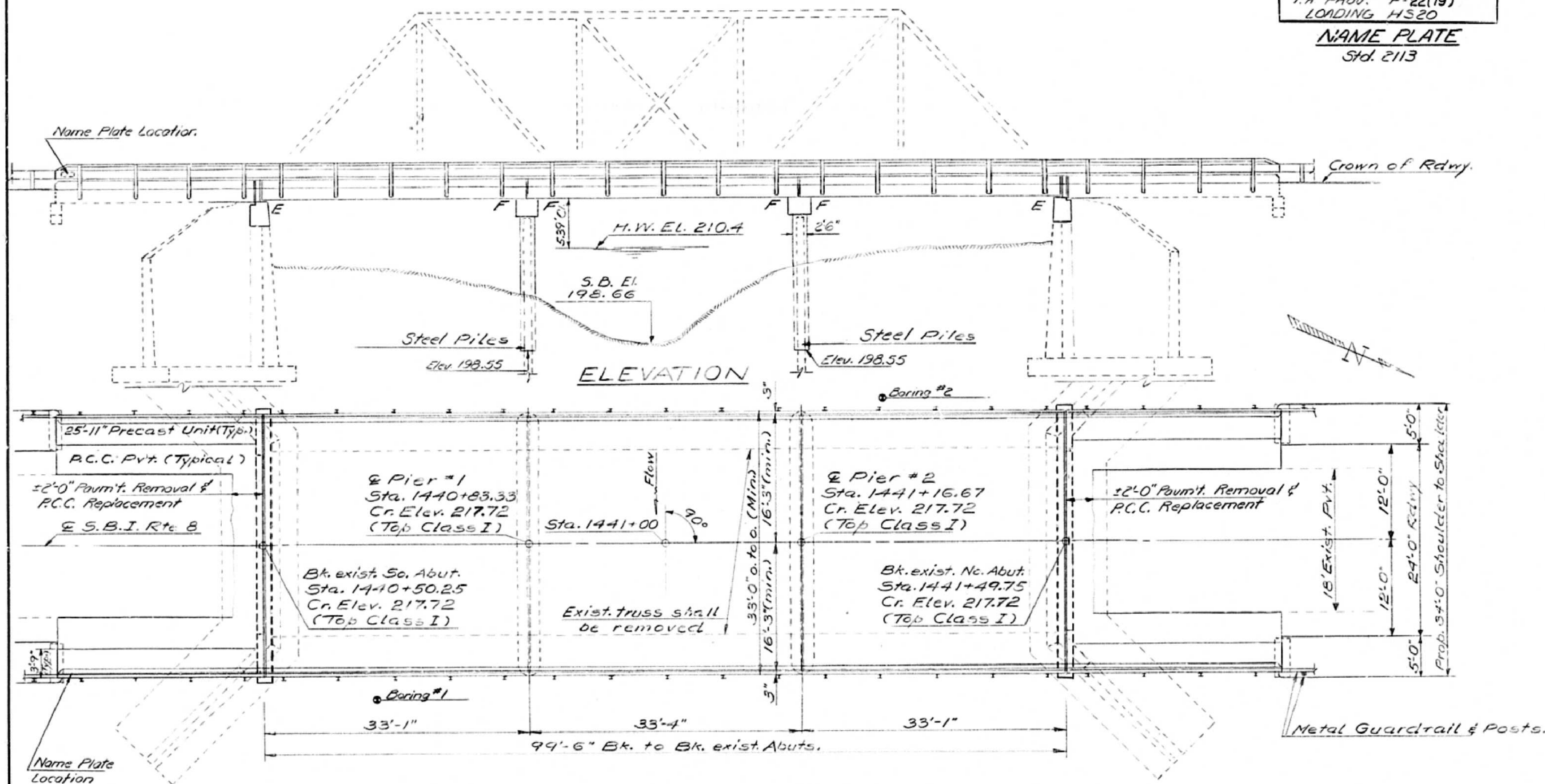
GENERAL NOTES

All reinforcement bars shall be lapped 2d diameters unless otherwise shown.  
The Contractor shall drive one steel HP36x36 test pile in a permanent location at Pier 1 as directed by the Engineer before ordering the remainder of piles.  
All structural steel shall be shop painted with two coats of basic lead silico chromate paint.  
It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.  
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.  
Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.  
Expansion Bolts shall consist of self drilling expansion anchors and 3/4" x 12" hooked bolts.  
Shoulder transition to wingwall shall be shaped with broken concrete. Cost incidental.  
Limits of Waterproofing Membrane System shall be three feet no inches beyond end of deck beams and out to out of deck.  
For borings see proposal.

STATION 1441+00.00  
BUILT 19 BY  
STATE OF ILLINOIS  
F.A. RT. 22 SEC. 48B-1  
FA PROJ. F-22(19)  
LOADING HS20

NAME PLATE  
Std. 2113

B.M. : Top of Northeast corner south wing wall Elev. 217.37.  
Existing structure : Built as SBI Rte. 8, Sec. 47 B & C sta. 1441+00 in 1925. The contractor shall remove the existing superstructure and replace with a new wider superstructure. Widen the existing substructure and provide two new piers. Structure No. 048-0018. Traffic shall be detoured. No Salvage.



TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bituminous Concrete Surface Course, Class I	Ton	36		36
Portland Cement Concrete Pavement (10")	Sq. Yd.	43		43
Pavement Fabric	Sq. Yd.	43		43
Concrete Removal	Cu. Yd.		16	16
Steel Piles HP36x36	Lin. Ft.		342	342
Class X Concrete	Cu. Yd.	12.4	100.2	112.6
Precast Concrete Bridge Slab	Sq. Ft.	389		389
Precast Prestressed Concrete Deck Beams (19")	Sq. Ft.	3292		3292
Steel Railing, Type 1	Lin. Ft.	308		308
Reinforcement Bars	Pound	600	11,620	12,220
Pavement Removal & P.C.C. Replacement, Type 2 (10")	Sq. Yd.	8		8
Removal of Existing Superstructures	Each	1		1
* Waterproofing Membrane System	Sq. Yd.	368		368
Name Plates	Each	1		1
* Preformed Joint Sealer (2")	Lin. Ft.	66		66
* Structure Excavation	Cu. Yd.		90	90
Protective Coat	Sq. Yd.	32		32
* Structural Steel	Pound	4350		4350
Portland Cement Mortar Fairing Course	Lin. Ft.	998		998
Expansion Bolts 3/4"	Each	68		68
Test Pile (Steel HP36x36)			1	1

\* See Special Provisions

PLAN

WATERWAY INFORMATION

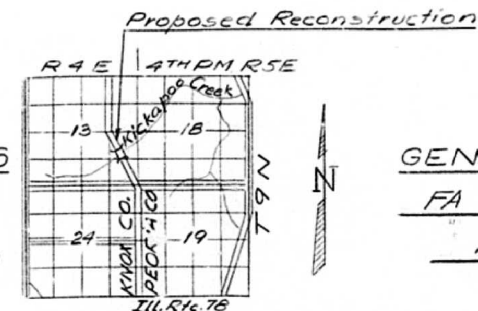
Drainage area 17.8 Sq. Miles  
Present opening 560 a ft.  
Required opening 560 a ft.  
Proposed opening (50 yr. fl. freq) 560 a ft.  
H.W. El. = 210.4 ft.

Q(50) = 4200 cfs.

PRECAST UNITS FIELD UNITS PRECAST PRESTRESSED UNITS

f'c = 4,500 psi f'c = 1,400 psi (Sub.) f'c = 5,000 psi  
f'c = 1,800 psi f's = 20,000 psi (Reint.) f'ci = 4,000 psi  
f's = 20,000 psi f's = 20,000 psi (Struct.) f's = 270,000 psi (7 Strands)  
n = 8 n = 10 f'si = 185,700 psi (16 Strands)

Loading HS20-44  
Allow 25#/Sq. Ft for future W.3.



LOCATION SKETCH

GENERAL PLAN & ELEVATION  
FA RTE. 9 OVER KICKAPOO CREEK  
FA RTE. 9 SECTION 48B-1  
PROJECT F-22 (19)  
KNOX COUNTY  
STA. 1441 + 00.00

DESIGNED	John A. Meunier
CHECKED	Joe Sutherland
DRAWN	Joe Sutherland
CHECKED	J.A.M.

EXAMINED	MARCH 4 1925
PASSED	
APPROVED	



FILE NAME: p:\planning\m\DOT\Documents\1001 Offices\District 4\Projects\04\_68758\CADD\Drawings\CADDsheets\1178 Structural - IDOT Copies\for info only\jgdn

CHASTAIN & ASSOCIATES LLC  
CONSULTING ENGINEERS  
184-001397

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FOR INFORMATION ONLY

SHEET NO. 23 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	48(B-1BR)CRJ	KNOX	94	51
CONTRACT NO. 68758				

ILLINOIS FED. AID PROJECT