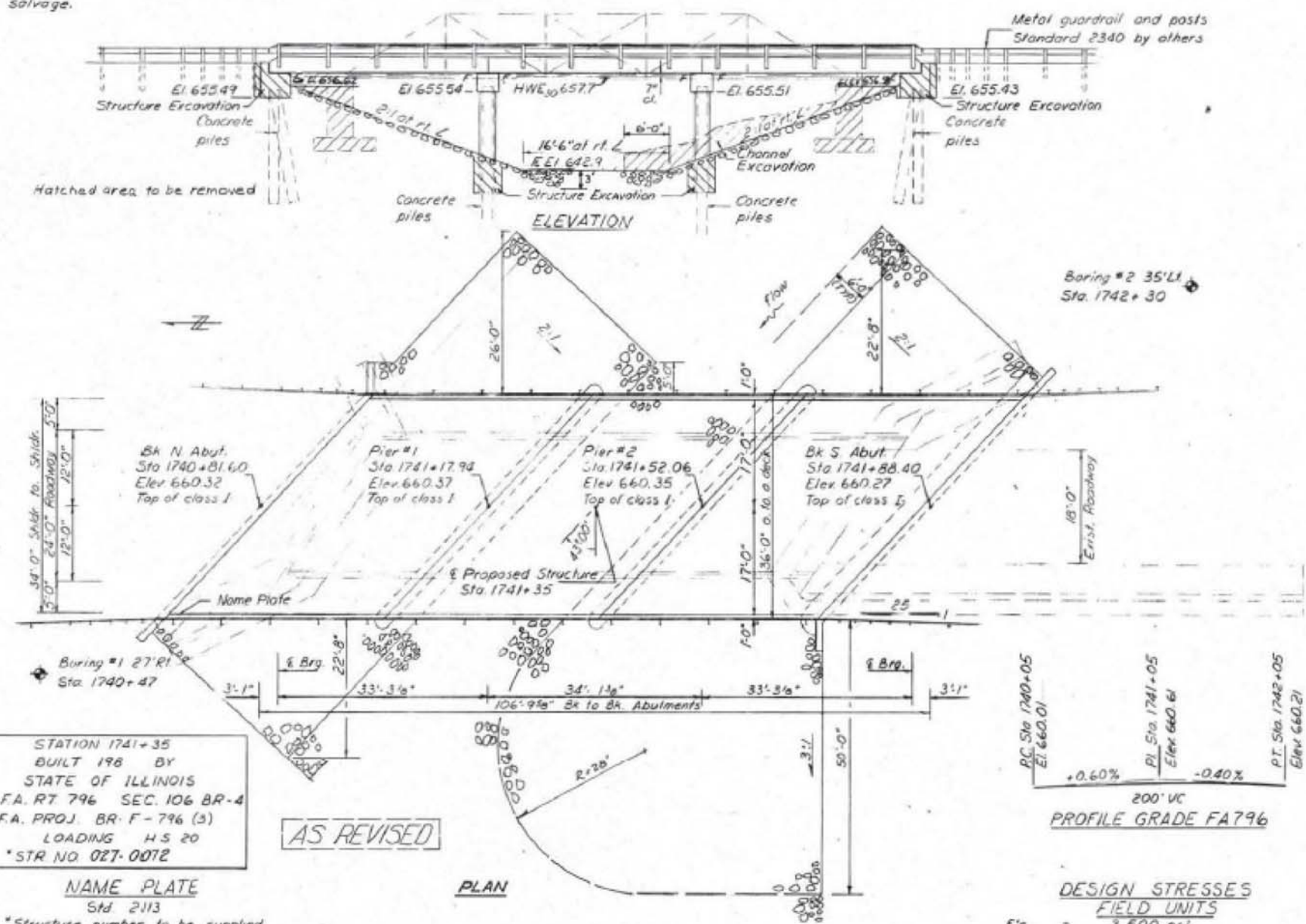


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
796	106 BR-4	FORD	59	30A	30

BM #1a on NE Wingwall Elev. 659.87
Existing Structure at Sta. 1741+35 built in 1927 as
SBI 115 Sec. 106-C (Superstructure), Sec. 106-B (Substructure),
Existing 80' span steel pony truss superstructure with 22'-0"
roadway and RC closed abutments to be removed and replaced
with a three span 17" PPC deck beam, pile bent piers and
open abutment structure.
Existing Bridge No. 027-0038
Traffic will be detoured.
No salvage.

- General Notes
- See Proposal for Boring Data.
 - Layout of slope walls may be varied in the field to suit ground conditions as directed by the Engineer.
 - The contractor shall drive two concrete test piles in a permanent location, one at the North Abutment and one at Pier 2 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.
 - Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
 - Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.



FOR INFORMATION ONLY

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Structure Excavation	Cu Yd.	-	171	171
Protective Coat	Sq Yd.	38	-	38
Removal of Existing Structures	Each	1	-	1
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	3672	-	3672
Class X Concrete	Cu Yd.	13.8	152.8	166.6
Reinforcement Bars	Pound	1440	13360	15000
Concrete Piles	Lin. Ft.	-	1248	1248
Test Piles (Concrete)	Each	-	2	2
Waterproofing Membrane System	Sq. Yd.	386	-	386
Name Plates	Each	1	-	1
Stone Rip-Rap	Sq. Yd.	-	970	970
Bit Con. SC Mix D. C. I.	Yon	44	-	44
Steel Railing, Type I	Lin. Ft.	201	-	201
Portland Cement Mortar Faring Course	Lin. Ft.	816	-	816
Neoprene Expansion Jt. E	Lin. Ft.	99	-	99

STATION 1741+35
BUILT 1927 BY
STATE OF ILLINOIS
F.A. RT. 796 SEC. 106 BR-4
F.A. PROJ. BR. F-796 (3)
LOADING H.S. 20
*STR. NO. 027-0072

NAME PLATE
Std. 2113
*Structure number to be supplied
by District.

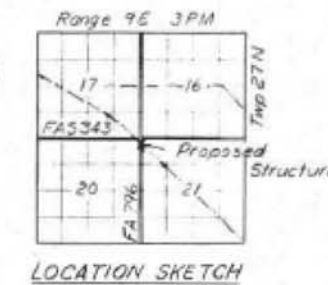
DESIGNED	D.A.S.
CHECKED	
DRAWN	D.A.S.
CHECKED	

WATERWAY INFORMATION

Drainage Area = 36.5 sq. mi. Low Grade Elev. = 659 at Sta.

Flood Yr.	Q cfs	Opening Sq. Ft.	lar	Head Ft.	Headwater El.
Design	30	2690	523 635	657.7	657.3 657.7
Base	100	3490	523 664	658.0	658.1 658.0
Overlapping					
Max. Chk.	500				

DESIGN STRESSES
FIELD UNITS
F_c = 3,500 psi
F_y = 60,000 psi
PRECAST PRESTRESSED UNITS
F_c = 5,000 psi
F_{ci} = 4,000 psi
F_s = 270,000 psi (1/2" strands)
F_{si} = 189,000 psi (1/2" strands)
LOADING HS 20-44
Allow 25 PSF for future wearing surface
Design Specification: 1977 AASHTO, 1978, 1979
Interim specifications as applicable.



David A. Schmelig
III Structural Engineer No. 81-3213

STATE OF ILLINOIS
DAVID A. SCHMELIG
III STRUCTURAL ENGINEER
No. 81-3213

GENERAL PLAN & ELEVATION
FA Route 796 over the North Fork Vermilion River
FA Route 796 Sec. 106 BR-4
Ford County
Sta. 1741+35