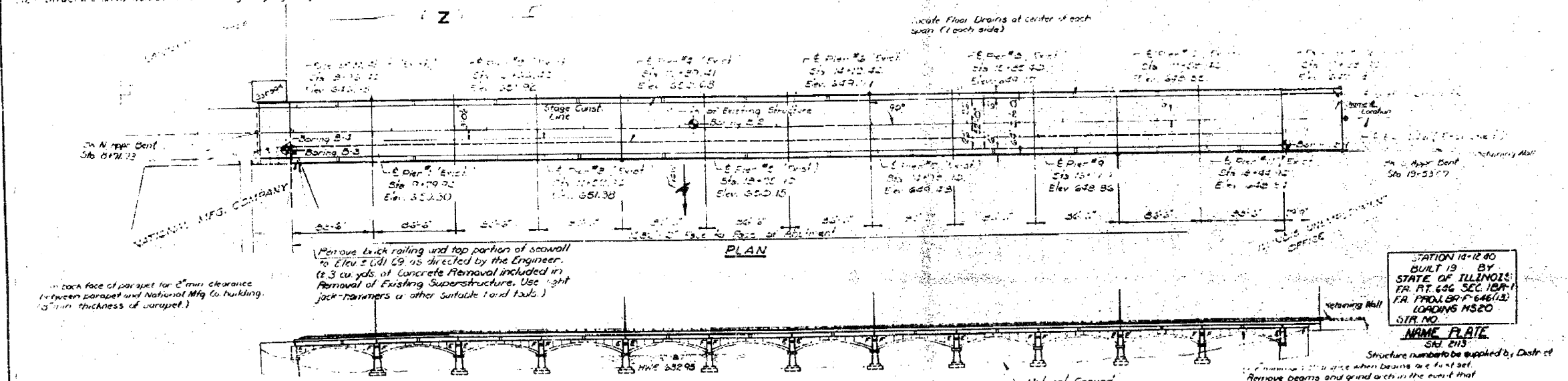


# FOR INFORMATION ONLY

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET NO. 1A  
26 SHEETS

Removal of the existing storm sewers and foundations for adjacent structures...  
The walls of the North Abutment and of the North Approach Pier will be required...  
In the storm sewers, a 4' x 4' manhole will be determined...  
In the areas of adjacent footings, a clearing should be maintained...  
Try to drive the piles there.



**GENERAL NOTES**

1. All structural steel shall be shop primed with two coats of basic lead zinc chromate paint.

2. Expansion joints which are cast in the precast unit shall be fabricated and erected in accordance with Article 503.07(c) of the Standard Specifications and are included in quantity of structural steel.

3. The contractor shall drive 3 steel HP10x40 test piles one each at each pier location at each approach pier as directed by the Engineer before driving the remainder of piles.

4. Class II white corrosion inhibitor is covered in the Standard Specifications shall be used in the concrete for precast prestressed concrete deck beams and Class II concrete for piers.

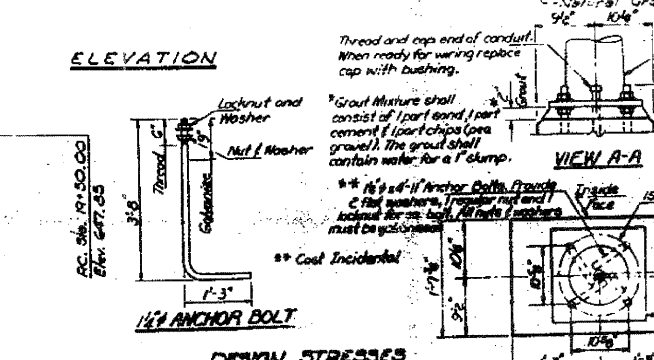
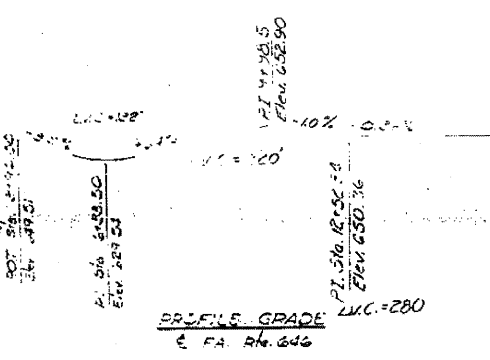
5. The top surface of the beams shall be finished in accordance with Article 503.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.

6. Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

7. Expansion bolts shall consist of self-drilling expansion anchors and 1/2" x 10" round bolts.

8. Reinforcement bars shall conform to the requirements of ASTM A 615 or M53 Grade 60.

9. All dimensions and details relative to existing structure have been taken from existing plans and are subject to minimal construction variations. It shall be the contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.



**DESIGN STRESSES**

**PRECAST PRESTRESSED UNITS**

$f_c = 6,000 \text{ psi}$   
 $f_s = 870,000 \text{ psi (1/2 Strands)}$   
 $f_{st} = 139,000 \text{ psi (1/2 Strands)}$

**FIELD UNITS**

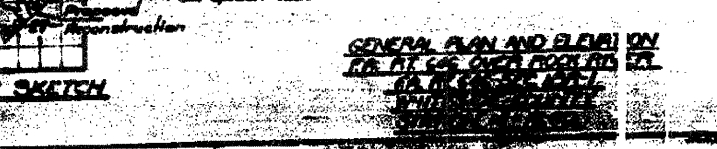
$f_c = 3,500 \text{ psi}$   
 $f_s = 60,000 \text{ psi}$   
 $f_{st} = 10,000 \text{ psi (Structural Steel)}$

**LOADING HS 20-44**

Allow 20' in. A above wearing surface.  
 Design Specifications: 1977 AASHTO and  
 1988 AASHTO interim Specifications.

**TOTAL BILL OF MATERIAL**

Item	Unit	Quantity	Total
Bituminous Concrete Surface Course, Class I	Ton	88.5	32.2
Removal of Existing Superstructure	Cu Yd	1	50
Concrete Removal	Cu Yd	310	124
Expansion Bolts 1/2"	Each	154	24
Floor Drain Specials	Each	20	24
Protective Coat	Sq. Yd.	2025	1
Class II Concrete	Cu Yd	637.6	2342.2
Collarforms	Each	1	1
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	161,900	16,900
Aluminum Railings, Type 1	Ln. Ft.	2113	273
Reinforcement Bars	Pound	88,930	85,970
Steel Piles HP 10x40	Ln. Ft.	628	205
Steel Piles HP 12x34	Ln. Ft.	122	122
Test Pile Steel HP 10x40	Each	1	1
Name Plates	Each	1	1
Structural Steel	Pound	7620	1650
Structural Excavation	Sq. Yd.	273	273
Waterproofing Membrane System	Sq. Yd.	2236	2236
Preformed Joint Sealer (2 1/2")	Ln. Ft.	131	131
Membrane Expansion Joints (2 1/2")	Ln. Ft.	321	321
Temporary Bridge Rail	Ln. Ft.	1067	1067
Portland Cement Mortar Fining Course	Sq. Ft.	18628	18628
Collarform Excavation	Sq. Ft.	273	273
Transfer of Concrete Structures	Sq. Ft.	833	833



**DESIGNED** Carl Krull  
**CHECKED** D. J. Ryan, Jr.  
**DRAWN**  
**CHECKED** J. R. J.

**EXAMINED** Carl E. Hennrich  
**PASSED**  
**APPROVED**

Revised 5/5/81/168