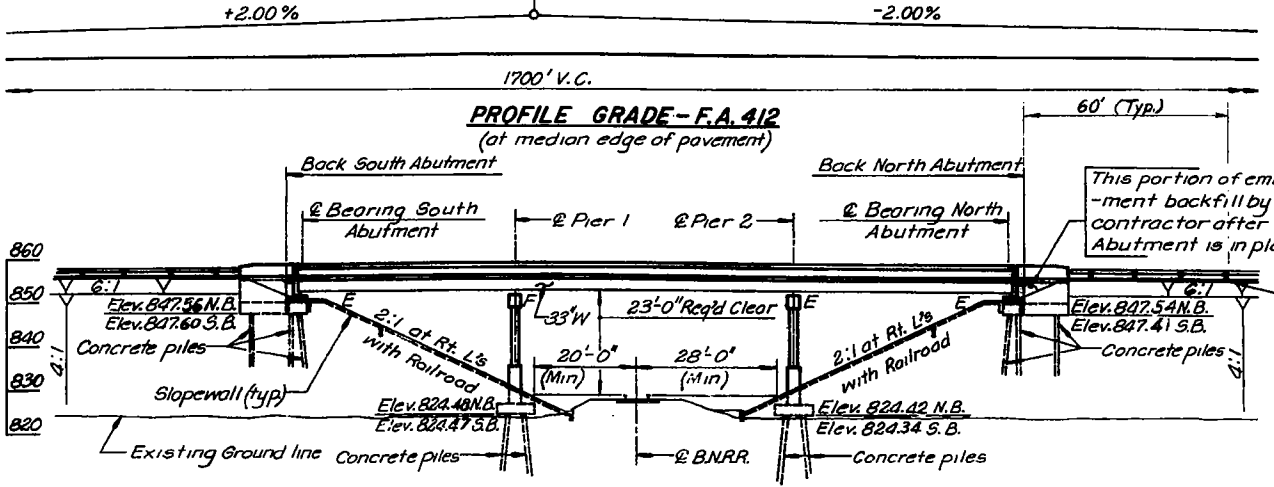


BENCHMARK: Benchmark No. 23 is railroad spike in telephone pole 69 feet right of Station 1175+68. Elevation 827.12.  
 R.V.I. Sta. 1175+25.00 Elev. 864.36

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	103-2VB	LEE	203	60
SIA. 4047		TO SIA. 4070		
FED. ROAD DIST. NO. 7		ILLINOIS		PROJECT



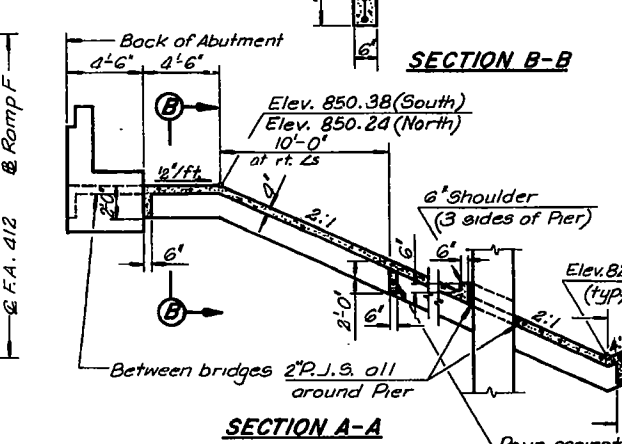
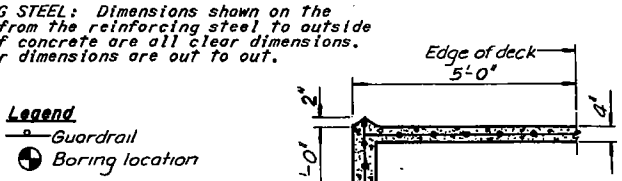
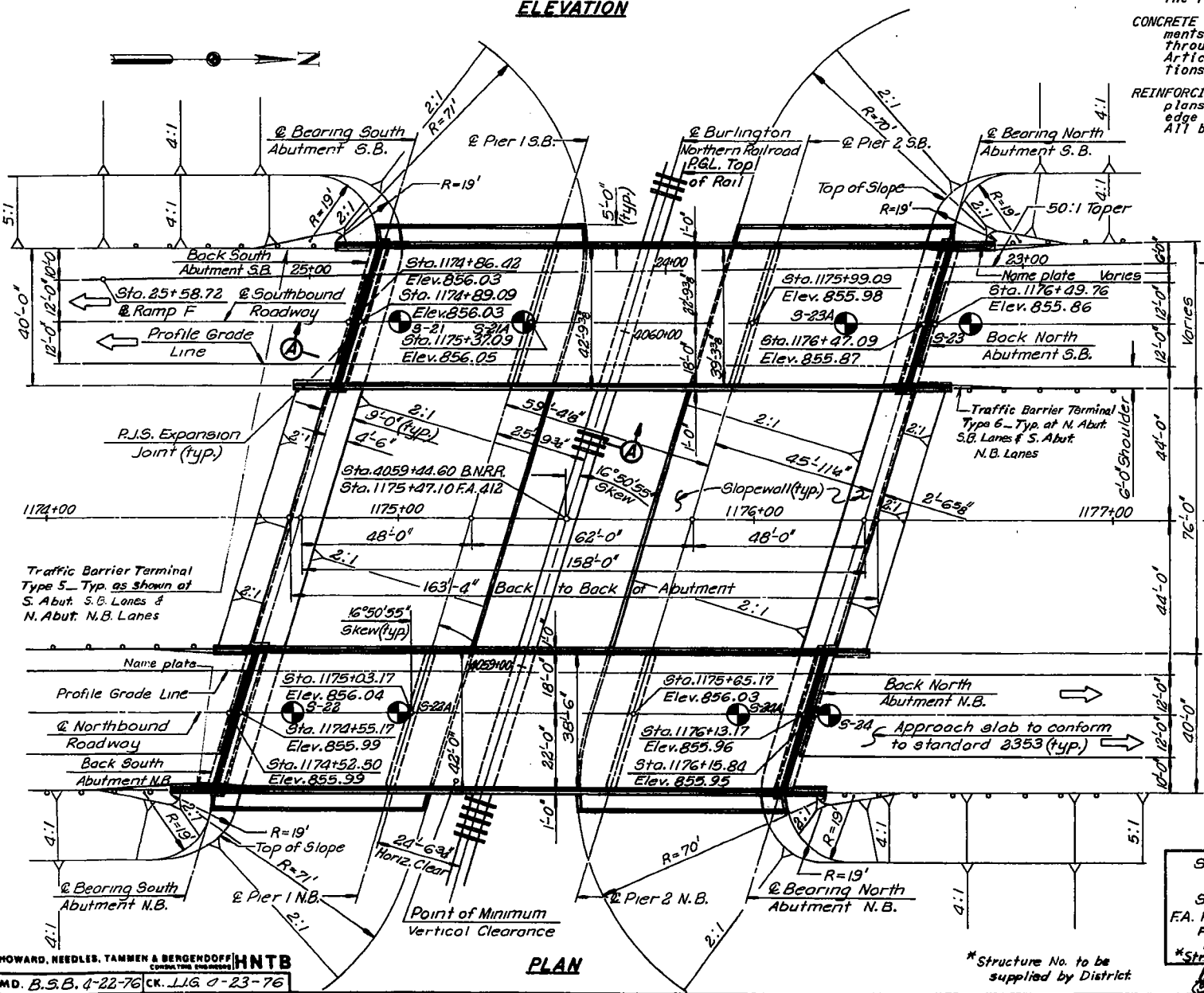
DESIGN SPECIFICATIONS: American Association of State Highway and Transportation Officials Standard Specifications for Highway Bridges, 1973 with 1974 & 1975 Interim Specifications.  
 DESIGN LOADING: A.A.S.H.T.O. HS20-44 (25 pounds per square foot for future wearing surface on bridge deck).  
 UNIT STRESSES:  
 Substructure  $f_c = 1400$  PSI  
 Deck Slab  $f_c = 3500$  PSI  
 Reinforcing Steel (SUB.)  $f_s = 24,000$  PSI  
 Structural Steel M183,  $f_s = 20,000$  PSI

**GENERAL NOTES**

**PAINTING:** The basic lead silico chromate paint system shall be used for shop and field painting of Structural Steel except where otherwise noted.  
**FIELD WELDING:** Field welding of construction accessories will not be permitted to the bottom flange of beams 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.  
**FIELD CONNECTIONS:** Fasteners shall be high strength bolts. Bolts 1/2" diameter, open holes 3/4" diameter, unless otherwise noted.  
**STRUCTURAL STEEL:** Structural steel for beams, bearings, beam splice plates, beam splice fill plates, all diaphragms, gusset plates, expansion joint angles, and attached bars shall conform to A.A.S.H.T.O. designation M183. Diaphragms shall be normal to the profile grade line. The main load carrying member components subject to the Supplemental Requirements for Notch Toughness Zone 2 are the tension flanges, webs and all splice plates of the steel girders. Calculated weight of structural steel = 312,100 Pounds.  
**ANCHOR BOLTS:** Anchor bolts shall be set before bolting diaphragms over supports.  
**UTILITIES:** The information concerning type and location of underground utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for making his own determinations as to the type and location of underground utilities as may be necessary to avoid damage thereto.  
**BEARING SURFACES:** Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8" inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/2" 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.  
 All contact surfaces at joints for the diaphragms shall be free of paint or lacquer.  
**SLOPE WALL:** Slope wall shall be reinforced with welded wire fabric 6"x8"-W4.0 x W4.0 weighing 38 pounds per 100 square feet.

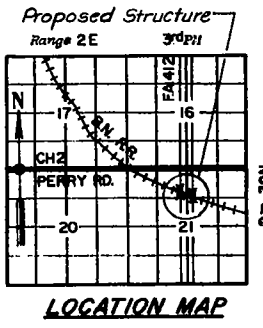
EMBAKMENT: The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.  
 TEST PILING: The Contractor shall drive eight concrete test piles in a permanent location, one at each abutment and each pier as directed by the Engineer, before ordering the remainder of the piles.  
 CONCRETE PILING: Concrete piles at all abutments shall be driven in holes precored through the embankment in accordance with Article 513.09(c) of the Standard Specifications.  
 REINFORCING STEEL: Dimensions shown on the plans from the reinforcing steel to outside edge of concrete are all clear dimensions. All bar dimensions are out to out.

All reinforcement bars shall conform to AASHTO M 31 gr. 60 or M 53 gr. 60.



TOTAL BILL OF MATERIALS				
ITEM	UNITS	Substructure	Superstructure	TOTAL
Stud Shear Connectors	Each	0	4,932	4,932
Protective Coat	Sq. Yd.	0	1691	1691
Class X Concrete	Cu. Yd.	492	391	883
Preformed Joint Seal (2 1/2")	Lin. Ft.	0	89	89
Preformed Joint Seal (4")	Lin. Ft.	0	89	89
Reinforcement Bars	Pound	61,160	40,160	101,320
Structural Steel	Lump Sum	0	0.30	0.30
Test Piles, Concrete	Each	8	0	8
Concrete Piles	Lin. Ft.	5,534	0	5,534
Slopewall (4")	Sq. Yd.	2,533	0	2,533
Name Plates	Each	0	2	2
Floor Drains	Each	0	44	44
Reinforcement Bars (Epoxy Coated)	Pound	0	64,200	64,200

Notes:  
 Deck drains are spaced to clear railroad Signal Devices and lines by 10' minimum.  
 Railroad Milepost 77 is at Sta. 4065+56.6 Back = Sta. 4065+60.0 Ahead.  
 Existing south railroad ditch drains thru structure @ Sta. 1167+00. Existing north railroad ditch drains thru structure @ Sta. 1179+02.



STATION 1175+47.10  
 BUILT 19 BY  
 STATE OF ILLINOIS  
 F.A. RT. 412 SEC. 103-2VB  
 F.A. PROJ. PD-412-4(36)  
 LOADING HS 20  
 \*Structure No. to be supplied by District

I hereby certify that this plan and specification was prepared by me or under my direct personal supervision and that I am a duly registered Structural Engineer under the laws of the State of Illinois.  
 Signed: Leslie J. Fossen, S.E.  
 Date: 11/15/82  
 Illinois Reg. No. 81-3703



APPROVED  
 FOR STRUCTURAL ADEQUACY ONLY  
 GENERAL PLAN AND ELEVATION  
 F.A. 412 SECTION 103-2VB  
 F.A. 412 OVER B.N.R.R.  
 LEE COUNTY  
 STATION 1175+47.10  
 DEPARTMENT OF TRANSPORTATION