

Bench Mark: Chiseled in N.E. corner of conc. water trough  
45' E. of Sta. 220+00 Elev. 667.05  
No Existing Structure

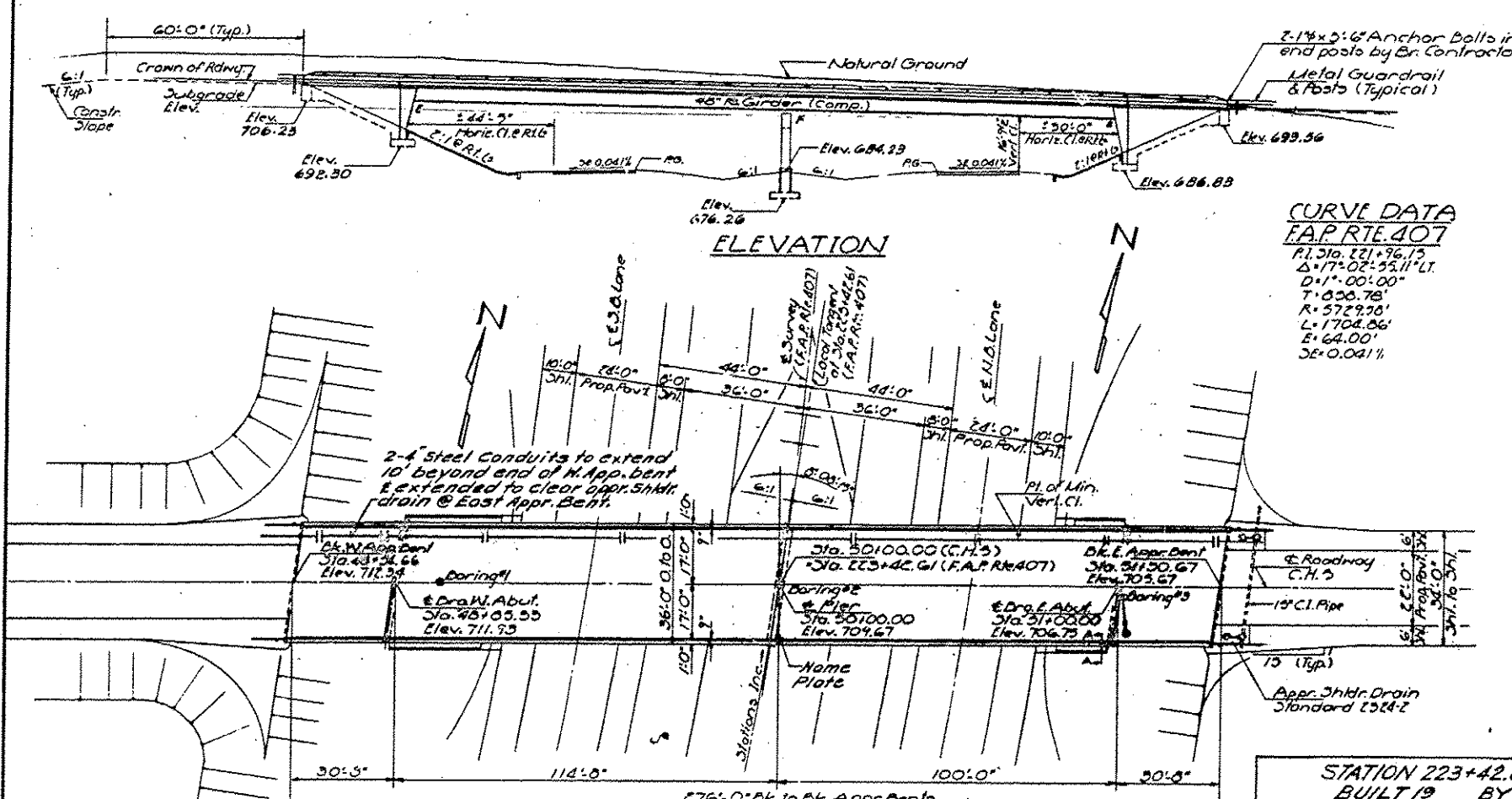
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

001-0046

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
407	5HB-2	Adams	58	19
11 SHEETS				

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.  
Fasteners shall be high strength bolts. Bolts 7/8"; open holes 15/16" unless otherwise noted.  
Calculated Weight of Structural Steel = 260,380 Lbs.  
Field Welding of Construction accessories will not be permitted to the bottom flange of beams or girders 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.  
Anchor bolts shall be set before bolting diaphragms over supports.  
Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 58# per 100 sq. ft.  
The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.  
The concrete rail section above the mandatory construction joint of the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Nonrail concrete.  
Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.  
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" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. (Pier only)  
The Basic Lead Silico Chromate paint system shall be used for shop and field painting of structural steel.  
The main load carrying members of steel bridges subjected to tensile stresses shall conform to the supplemental requirements for Notch Toughness.  
See proposal for Boring Log.



CURVE DATA  
F.A.P. RTE. 407  
P.I. Sta. 221+96.15  
Δ = 17° 02' 55.11" LT.  
D = 1° 00' 00"  
T = 556.78'  
R = 5729.96'  
L = 1704.86'  
E = 64.00'  
SE = 0.041%

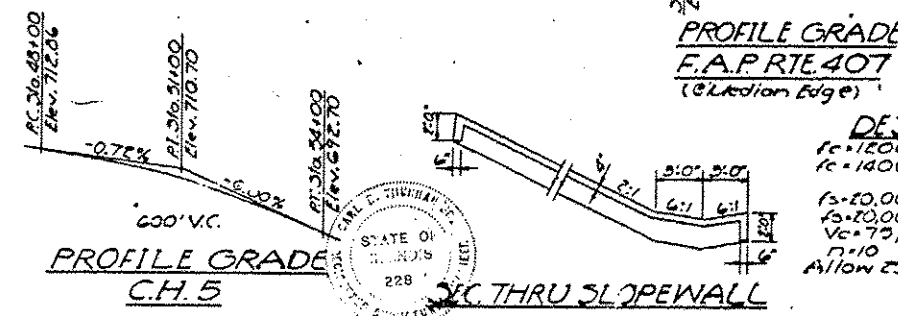
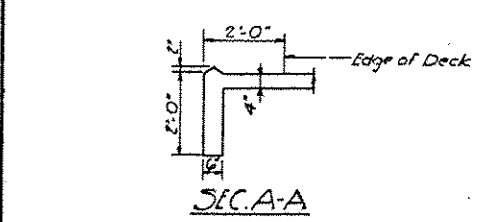
TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bit. Conc. Surf. C.I. I	Tons	82		82
Structure Excavation	Cu. Yds.		492	492
Protective Coat	Sq. Yds.	206		206
Class X Concrete	Cu. Yds.	868.8	267.4	1136.2
Structural Steel	L.S.	L.S.		L.S.
* Waterproofing Membrane Sys.	Sq. Yds.	993		993
Stud Shear Connectors	Ea.	2025		2025
Aluminum Rolling	Lin. Ft.	546		546
Reinforcement Bars	Lbs.	81140	30460	111600
Name Plates	Ea.		1	1
Slope Wall (4")	Sq. Yds.		329	329
Preformed Jt. Sealer (4")	Lin. Ft.	73		73
Sand Backfill	Cu. Yds.		361	361

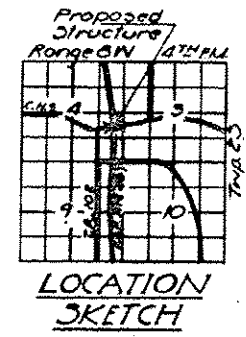
\* See Special Provisions

STATION 223+42.61  
BUILT BY  
STATE OF ILLINOIS  
F.A.P. RT. 407 SEC. 1-5HB-2  
FA. PROJECT EBRF-407(B)  
LOADING HS 20

NAME PLATE  
(See Std. 2/113)



DESIGN STRESSES  
fc = 11000 psi - Deck Slab  
fc = 14000 psi - Curb, Parapet  
Sub. Appr. Slab  
fs = 10,000 psi - Reinf.  
fs = 10,000 psi - Struct.  
Vc = 75 psi - Footings  
n = 10  
Allow 25# psf for Full Wearing Surf.



LOCATION SKETCH

001-0046  
GENERAL PLAN & ELEVATION  
PROJECT EBRF-407(B)  
C.H.5 OVER F.A.P. RTE. 407  
F.A.P. ROUTE 407  
SECTION 1-5HB-2  
ADAMS COUNTY  
STATION 223+42.61 (F.A.P. RTE. 407)  
STATION 50+00.00 (C.H.5)

FOR INFORMATION ONLY

DESIGNED: *Frank Keller*  
CHECKED: *Summit Dwyer*  
DRAWN: *Leon Hearen*  
DATE: MARCH 12 2013