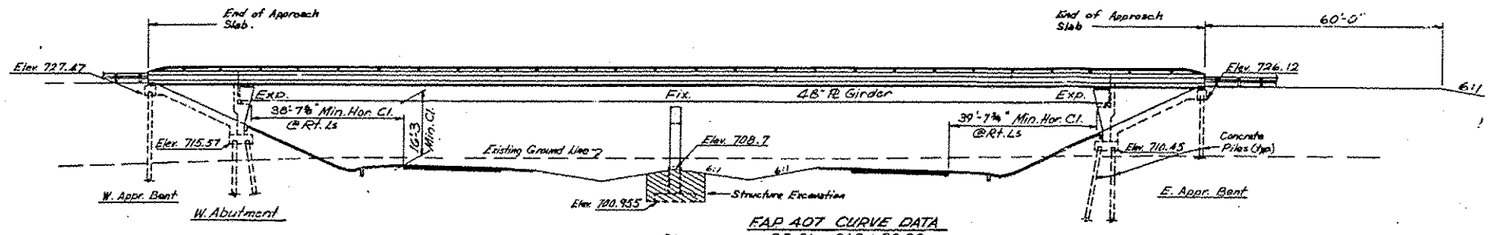
Bench Mark #21 R.R. Spike in S.E. Side of corner fense post, 125' Lt. Sta. 256+00 Elev. 714.29.

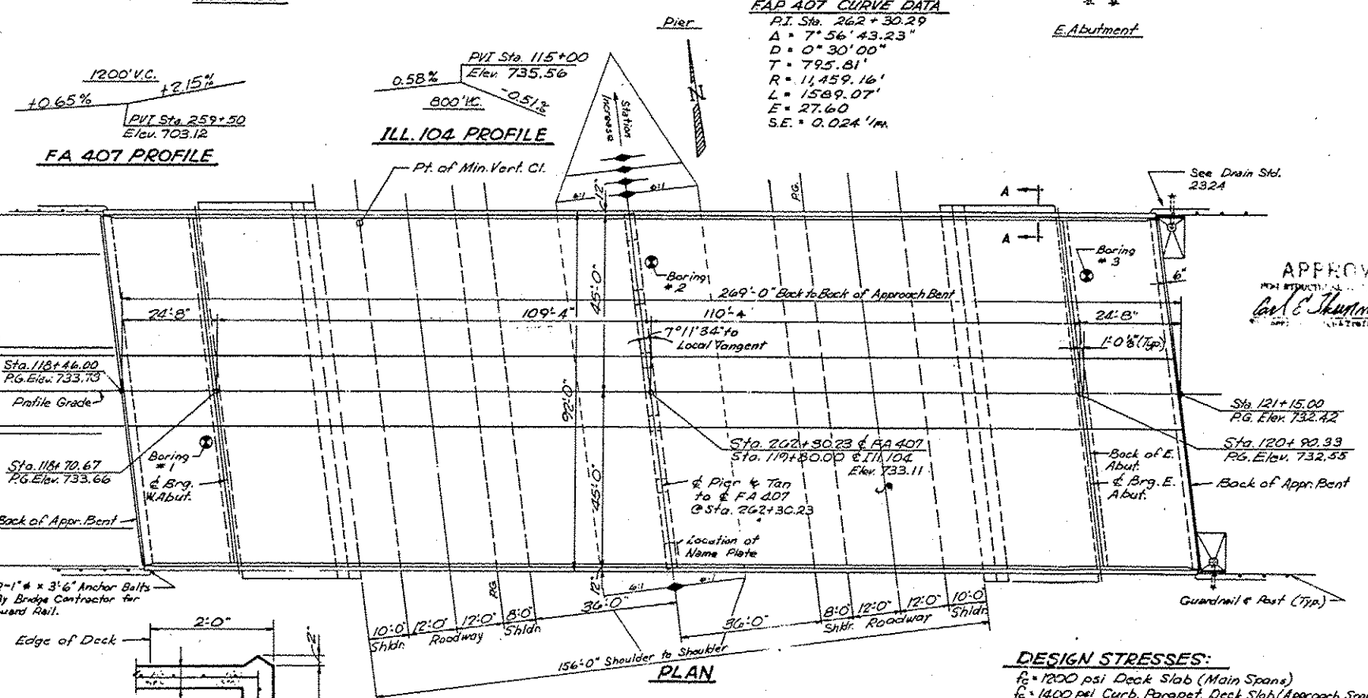
No Existing Structure.

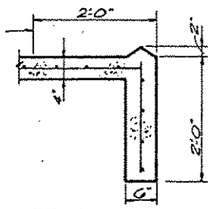
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FA 407	I-5HB -3	ADAMS	151	58
FED ROAD DIST NO 7	ILLINOIS	PROJECT		

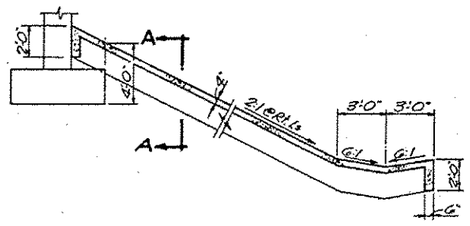
SHEET NO. 1 12 SHEETS







SECTION A-A



SECTION THRU SLOPEWALL

FAP 407 CURVE DATA

P.I. Sta. 262+30.29
Δ = 7°56'43.23"
D = 0°30'00"
T = 795.81'
R = 11,459.16'
L = 1589.07'
E = 27.60
S.E. = 0.024 '/ft.

DESIGN STRESSES:

f_c = 1200 psi Deck Slab (Main Spans)
f_c = 1400 psi Curb, Parapet, Deck Slab (Approach Spans) & Substructure
V_c = 75 psi (Ftgs.)
n = 10
f_s = 20,000 psi Reinf.
f_s = 20,000 psi to 27,000 psi. (M183 & M223) Struct.
Allowable & Deflection = 1/1440 or 1/1200
Design Specifications 1973 AASHTO (as applicable)
Add 25# per sq. ft. for future wearing surface.

LOADING ~ HS20-44

GENERAL NOTES

ALL REINFORCEMENT BARS SHALL BE LAPPED 24 DIAMETERS UNLESS OTHERWISE SHOWN.

FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS 7/8" ϕ, OPEN HOLES 15/16" ϕ, UNLESS OTHERWISE NOTED.

THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ARE THE FLANGES AS DESIGNATED IN THE ELEVATION VIEW ALONG WITH THE WEBS AND ALL SPLICE PLATES OF THE STEEL GIRDERS.

ALL STRUCTURAL STEEL IS M183 EXCEPT AS NOTED ON GIRDER ELEVATIONS.

CALCULATED WEIGHT OF STRUCTURAL STEEL: (M183) 618,187 Lbs.
(M223) 80,268 Lbs.

THE BASIC LEAD SILICO CHROMATE PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF STRUCTURAL STEEL.

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 DIAPHRAMS OVER SUPPORTS.

SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC 6" X 6" MESH, WEIGHING 58# PER 100 SQ. FT.

THE CONTRACTOR SHALL DRIVE ONE CONCRETE TEST PILE IN A PERMANENT LOCATION AT EACH ABUTMENT AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES.

CONCRETE PILES AT APPROACH BENTS SHALL BE DRIVEN IN HOLES PRECORED THROUGH THE EMBANKMENT IN ACCORDANCE WITH ARTICLE 513.09(C) OF THE STANDARD SPECIFICATIONS.

THE CONCRETE RAIL SECTION ABOVE THE MANDATORY CONSTRUCTION JOINT AT THE TOP OF THE SLAB SHALL BE CONSTRUCTED OF CLASS X CONCRETE, EXCEPT THE AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF HANDRAIL 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 1/8" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS.

SEE THE SPECIAL PROVISIONS FOR BORING LOGS.

APPROVED
FOR STRUCTURAL DESIGN ONLY
Carl E. Shuffman Jr.
Chief Structural Engineer

STATION 262+30.23
BUILT 197 BY
STATE OF ILLINOIS
F.A. RTE. 407 SEC. I-5HB3
F.A. PROJ. EBRF-407-1(9)
LOADING HS20

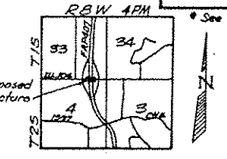
NAME PLATE
See Std. 2113

TOTAL BILL OF MATERIALS

Item	Unit	Super.	Sub.	Total
Structure Excavation	Cu. Yd.	—	320	320
Class 'X' Concrete	Cu. Yd.	936.1	619.2	1555.3
Structural Steel	Lump Sum	1	—	1
Reinforcement Bars	Lbs.	201,407	77,120	278,527
Concrete Piles	Lin. Ft.	—	3,941	3,941
Test Piles, Concrete	each	—	2	2
Slopewall, (4")	Sq. Yd.	—	725	725
Bituminous Surface, Class I	Tons	175	—	175
*Waterproofing Membrane Sys.	Sq. Yd.	2115	—	2115
Aluminum Railing	Lin. Ft.	531.7	—	531.7
Preformed Joint Sealer (4")	Lin. Ft.	186	—	186
Stud Shear Connectors, 3/4"	each		—	5292
Protective Coat	Sq. Yd.	773	—	773
Sand Backfill	Cu. Yd.	—	645	645
Name Plate	each		1	1

* See Special Provisions (Mixture D)

DESIGNED	CDC
CHECKED	HMW
DRAWN	CDC
CHECKED	HMW



LOCATION SKETCH

001-0047

GENERAL PLAN & ELEVATION
ILL. RTE. 104 OVER F.A. RTE. 407
F.A. RTE. 407 ~ SEC. I-5HB3
ADAMS COUNTY
STATION 262+30.23

PLANS PREPARED BY AMERICAN ENGINEERING CO.

FOR INFORMATION ONLY

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

001-0047 EXISTING PLANS

SCALE: ____ SHEET ___ OF ___ SHEETS STA. ____ TO STA. ____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 PAINTING 2013-1	ADAMS/PIKE	16	8
		CONTRACT NO. 72G07		
	ILLINOIS	FED. AID PROJECT		