ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 408	1-3HB	ADAMS	153	59
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

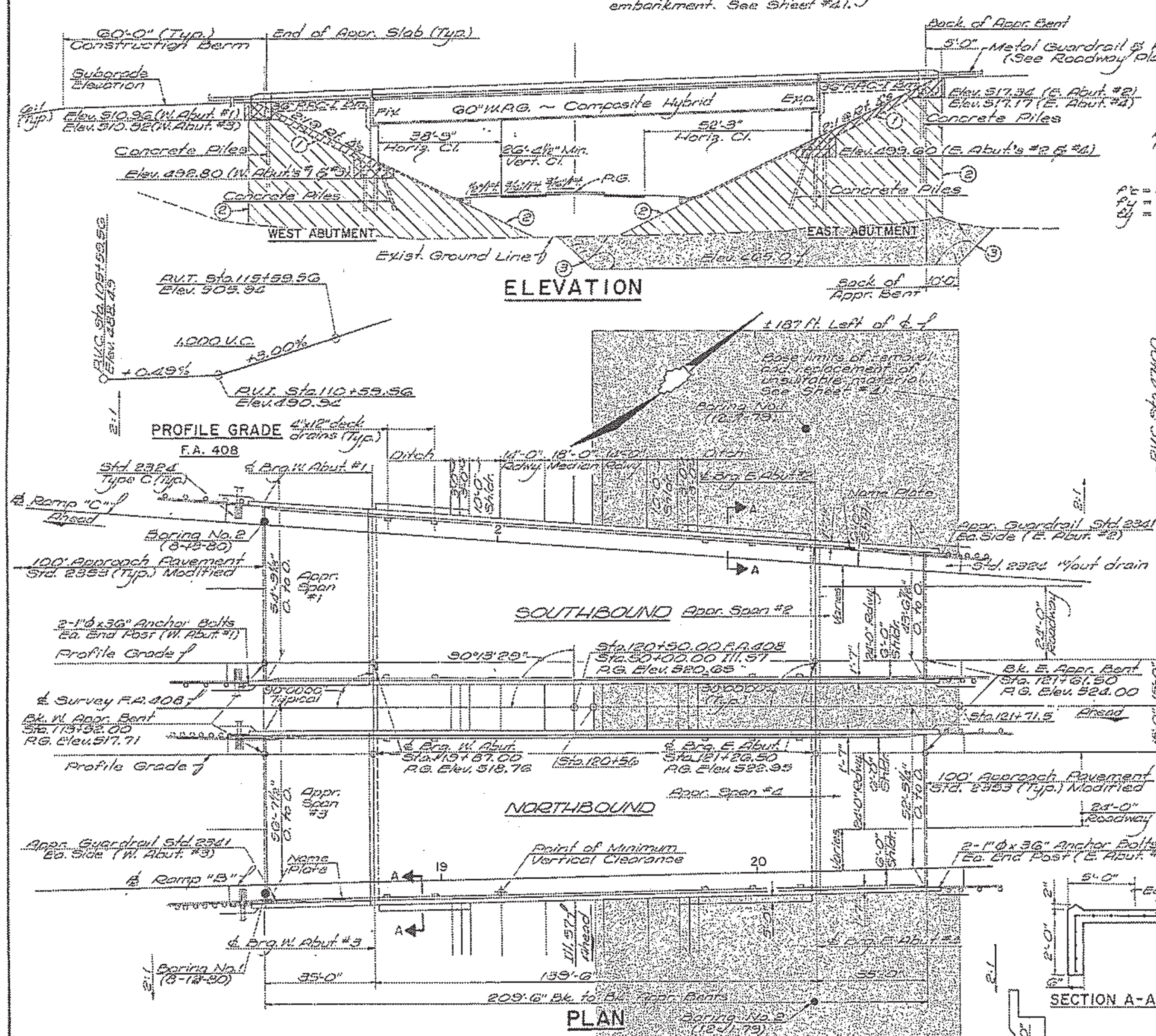
SHEET NO. 1
SHEETS 29

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

B.M. No.17 - R.R. Spike in Power Pole on East Side of Ill.57 560.55' Rt. of Sta.122+46.66 Elev.484.85

No Existing Structure.

(1) Structure Excavation
(2) Limits of Earth Embankment
(3) Limits of removal of unsuitable material and replacement with porous granular embankment. See Sheet #41.



DESIGN LOADING HS20-44

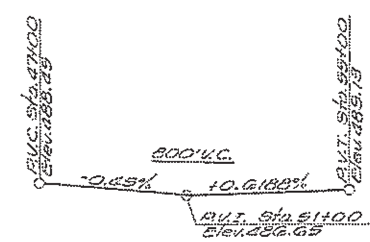
Allow 25# p.s.f. for future Wearing Surface
Design Specifications 1977 AASHTO; 1978, 1979 and 1980 Interim Specifications.

DESIGN STRESSES – LOAD FACTOR DESIGN

$f'c$ = 3,500 p.s.i. Concrete
fy = 60,000 p.s.i. Reinforcement
fy = 36,000 p.s.i. M183 & 50,000 p.s.i. M223 Grade 50 Structural Steel (Hybrid Girder Design)

PRECAST PRESTRESSED STRESSES

$f'c$ = 5,000 p.s.i.
$f'ci$ = 4,000 p.s.i.
$f's$ = 270,000 p.s.i.
fsi = 189,000 p.s.i. (½"ø Strands)



PROFILE GRADE
ILL. RTE. 57

GENERAL NOTES

THE CONTRACTOR SHALL DRIVE THREE (3) CONCRETE TEST PILES IN PERMANENT LOCATIONS. ONE EACH AT APPR. BENT # 3, ABUT. # 1 AND ABUT. #4 AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE PILES.

THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2. THESE COMPONENTS ARE THE TENSION FLANGES, WEBS AND ALL WEB AND TENSION FLANGE SPLICE PLATE MATERIAL OF THE STEEL GIRDERS.

THE EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM EMBANKMENT THAT MUST BE CONSTRUCTED PRIOR TO THE CONSTRUCTION OF THE ABUTMENTS.

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 THE GIRDERS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

ANCHOR BOLTS SHALL BE SET BEFORE BOLTING CROSS FRAMES OVER SUPPORTS.

FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS 3/4" ø, OPEN HOLES 13/16" ø, UNLESS OTHERWISE NOTED.

CALCULATED WEIGHT OF STRUCTURAL STEEL, M183= 250972 Pounds
M223 (GRADE 50)= 261152 Pounds

SEE PROPOSAL FOR BORING DATA.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 OR M-53 GRADE 60.

THE SLOPE WALLS SHALL BE REINFORCED WITH WELDED WIRE FABRIC, 6"x6" - W4.0 x W4.0, WEIGHING 58 LBS. PER 100 SQ. FT.

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

(stippled) Indicates Porous Granular Embankment
(hatched) Indicates Earth Embankment

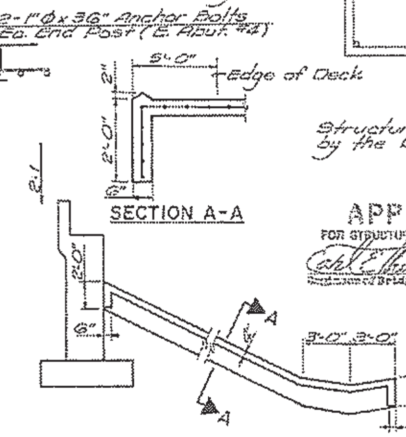
TOTAL BILL OF MATERIALS

ITEM	UNIT	SUPER.	SUBSTR.	TOTAL
CLASS "X" CONCRETE	CU. YD.	660.0	581.0	1,241.0
REINFORCEMENT BARS	LBS.	86,430	55,200	141,330
REINFORCEMENT BARS (EPOXY-COATED)	LBS.	94,730	——	94,730
STRUCTURAL STEEL	LUMP SUM	1	——	1
STRUCTURE EXCAVATION	CU. YD.	——	1,002	1,002
CONCRETE PILES	LIN. FT.	——	7,308	7,308
TEST PILES, CONCRETE	EACH	——	3	3
P.P.C. - I BEAMS, 36"	LIN. FT.	624	——	624
NEOPRENE EXPANSION JOINT, (2")	LIN. FT.	203	——	203
NAME PLATES	EACH	2	——	2
SLOPEWALL (4")	SQ. YD.	——	1,112	1,112
STUD SHEAR CONNECTORS	EACH	3,654	——	3,654
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	14	——	14
PROTECTIVE COAT	SQ. YD.	2,613	——	2,613
FLOOR DRAINS	EACH	20	——	20
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU. YD.	——	14,550	14,550
POROUS GRANULAR EMBANKMENT *	CU. YD.	——	12,550	14,550

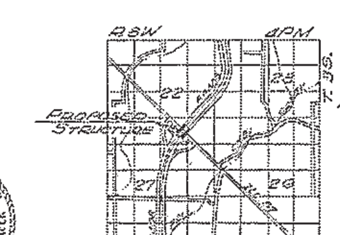
*FOR INFORMATION ONLY. Additional Details of Removal, Replacement and Construction Phasing are shown on Detail Sheet No. 41.

STATION 120+50.00
BUILT 19 BY
STATE OF ILLINOIS
F.A. RTE. 408 SEC. 1-3HB
F.A. PROJ. EBF 408-1(57)
LOADING HS20
STR. NO.

NAME PLATE
(SEE STD. 2113)
Structure No. to be furnished by the District.



APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Engineer of Bridges & Traffic Structures



LOCATION SKETCH

GENERAL PLAN & ELEVATION
F.A. RTE. 408 Over Ill. 57
F.A. RTE. 408 SEC. 1-3HB
ADAMS COUNTY
STA. 120+50.00 F.A. 408

PLANS PREPARED BY AMERICAN ENGINEERING CO.

DESIGNED	MVM
CHECKED	RBY
DRAWN	RBY
CHECKED	MVM

FILE NAME =	USER NAME = kadirmo	DESIGNED -	REVISED -
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Default	PLOT DATE = Aug-19-2014 01:25:09PM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXSITING SN: 001-006465
FOR INFORMATION ONLY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BDGE PAINTING 2015	ADAMS	30	23
		CONTRACT NO. 72H36		
		ILLINOIS FED. AID PROJECT		