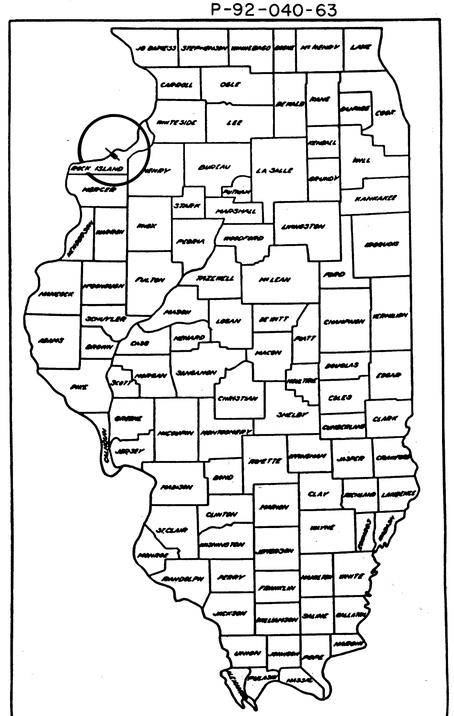
9J-H

FEDERAL-AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1B	SCOTT, IA. ROCK ISLAND, ILL	67	1
FED. ROAD DIV. NO. 7	ILLINOIS	PROJECT I-280-8(51)0		

P-92-040-63



STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID INTERSTATE HIGHWAY

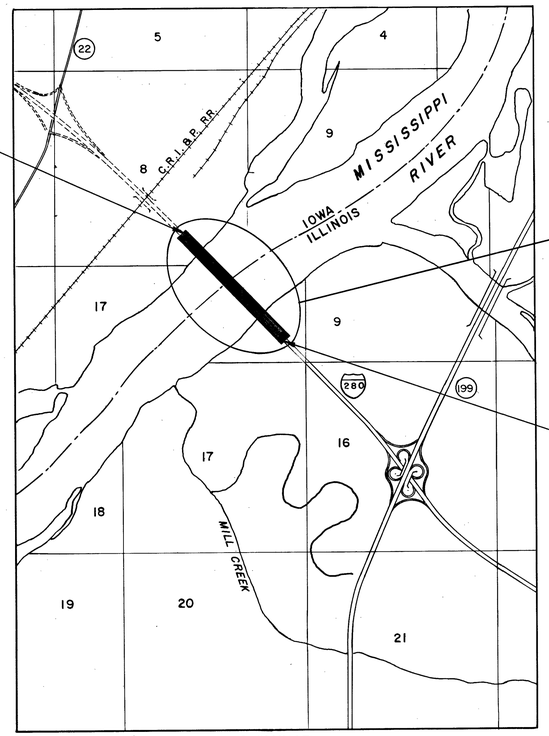
F.A.I. ROUTE 280 SECTION 81-1B

F.A. PROJECT I-280-8 (51) 0

SCOTT COUNTY, IOWA

ROCK ISLAND COUNTY, ILLINOIS

C-92-003-69



LAYOUT
SCALE 1" = 2000'

SECTION 81-1B

INCLUDES THE CONSTRUCTION OF THE SUBSTRUCTURE FOR A STEEL TIED ARCH BRIDGE (570' SPAN) WITH WELDED GIRDER APPROACH SPANS (7 AT 100', 3 AT 150', 3 AT 200', 3 AT 200', 3 AT 150' AND 8 AT 100') ON R.C. PIERS AND STUB ABUTMENTS ON PILES, CARRYING F.A.I. RT. 280 OVER THE MISSISSIPPI RIVER BETWEEN STATIONS 11+11.38 AND 53+04.38.

PROJECT I-280-8(51)0
ENDS STA. 53+04.38

INDEX OF SHEETS

As Revised
9-25-70

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Bureau of Bridge & Traffic Structures

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

SUBMITTED 9-15 19 69 — D.E. Summers, DISTRICT ENGINEER
EXAMINED 11/12 19 69 — O. Wan Ousdal, ENGINEER OF ROAD PLANS AND CONTRACTS
PASSED 11/12 19 69 — M.E. Baumann, ENGINEER OF DESIGN
APPROVED 11/12 19 69 — Robert A. Peterman, CHIEF HIGHWAY ENGINEER
APPROVED 11/13 19 69 — Wm. F. Callemi, DIRECTOR

DEPARTMENT OF TRANSPORTATION
BUREAU OF PUBLIC ROADS
APPROVED
DIVISION ENGINEER — DATE

CONTRACT NO. 26446

LENGTH OF PROJECT - SECTION 81-1B = 4193 FT. = 0.794 MILES

William G. Horn

DE LEUW, CATHER & CO. - CHICAGO

SCOTT, IA. COUNTY SECTION 81-1B F. A. I. ROUTE 280
ROCK ISLAND, ILL.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	2
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

GENERAL NOTES:

DESIGN LOADING:

HS 20-44 AND ALTERNATE.

DESIGN SPECIFICATIONS:

AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 9TH EDITION, DATED 1965 AND THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES.

CONSTRUCTION SPECIFICATIONS:

STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF ILLINOIS, DEPARTMENT OF PUBLIC WORKS AND BUILDINGS, DIVISION OF HIGHWAYS, ADOPTED AUGUST 1, 1968.

DESIGN STRESSES:

Concrete:

f'_c = 3,500 P.S.I. ULTIMATE STRENGTH IN 14 DAYS
f_c = 1,400 P.S.I. CONCRETE WITHOUT EARTH PRESSURE
f_c = 1,000 P.S.I. CONCRETE WITH EARTH PRESSURE
v = 75 P.S.I. MAXIMUM SHEAR IN FOOTING
n = 10

Reinforcement Steel:

f_s = 20,000 P.S.I.

Structural Steel:

f_s = 20,000 P.S.I. (A36)

ALL CONCRETE SHALL BE CLASS "X".

STRUCTURAL STEEL PLATES WHICH PROTECT PIER NOSE SHALL CONFORM TO SPECIFICATIONS FOR STRUCTURAL STEEL A.S.T.M. DESIGNATION: A588 AND ALL FASTENERS SHALL CONFORM TO A.S.T.M. DESIGNATION: A36.

ALL REINFORCING BARS SHALL BE LAPPED 24" DIAMETER UNLESS OTHERWISE SHOWN.

SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC 6" x 6" MESH, WEIGHING 58 POUNDS PER 100 SQUARE FEET.

LAYOUT OF SLOPE WALLS MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.

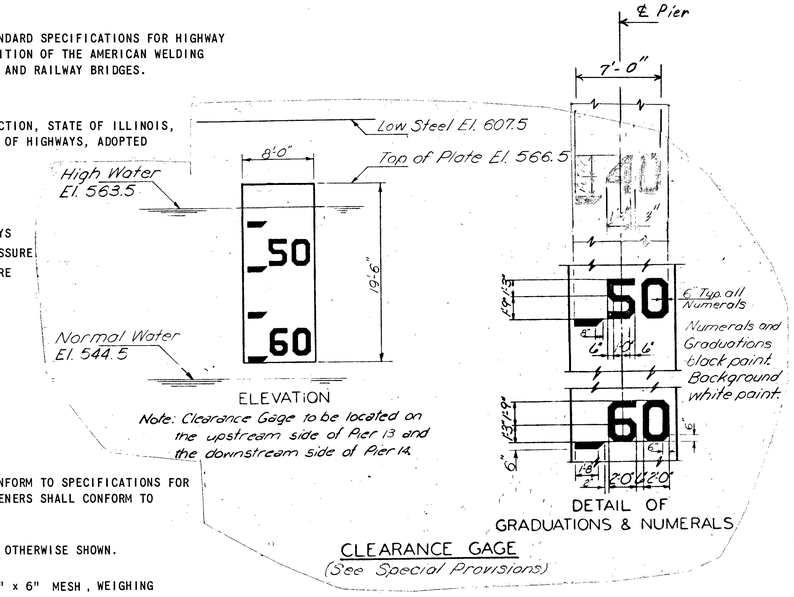
CLASS "A" EXCAVATION FOR STRUCTURES INCLUDES EXCAVATION FOR SLOPE WALL.

2" PREMOULDED EXPANSION JOINT SHALL BE PLACED BETWEEN SLOPE WALL AND PIERS.

ANCHOR BOLTS FOR BEARINGS, RAILINGS AND OTHER MISCELLANEOUS DETAILS ARE SHOWN FOR INFORMATION ONLY AND SHALL NOT BE INCLUDED IN THIS CONTRACT. THE CONTRACTOR SHALL SPACE REINFORCEMENT BARS TO CLEAR FUTURE ANCHOR BOLTS AS SHOWN.

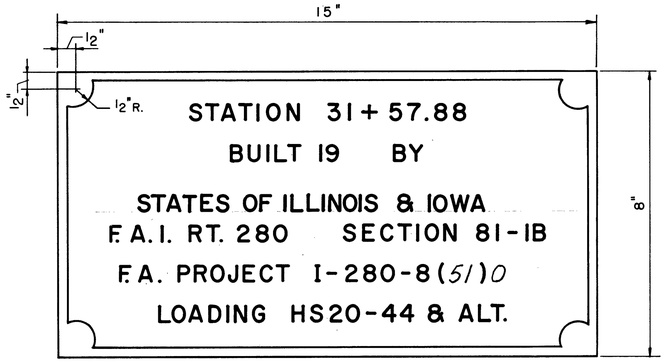
THE CONTRACTOR SHALL DRIVE ONE STEEL TEST PILE (10BP42), IN A PERMANENT LOCATION AS DIRECTED BY THE ENGINEER, AT EACH ABUTMENT AND AT EACH OF THE FOLLOWING PIERS, BEFORE ORDERING THE REMAINDER OF THE PILES: PIERS 5, 6, 7, 8, 21, 22, 23, 24, 25, 26 AND 27.

ONE (1) SIGN CONFORMING TO STANDARD 2153-7 SHALL BE ERECTED AS DIRECTED BY THE ENGINEER.



SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	QUANTITY
201005	TREE REMOVAL ACRES.	ACRE	5.9
209002	POROUS GRANULAR EMBANKMENT	CU. YD.	270
502001	CLASS "A" EXCAVATION FOR STRUCTURES	CU. YD.	4,703
502002	CLASS "B" EXCAVATION FOR STRUCTURES	CU. YD.	1,624
502004	ROCK EXCAVATION FOR STRUCTURES	CU. YD.	11,008
502003	Cofferdam Excavation	Cu. Yds.	18,827
502014	COFFERDAM (PIER 9)	EACH	1
502015	COFFERDAM (PIER 10)	EACH	1
502016	COFFERDAM (PIER 11)	EACH	1
502017	COFFERDAM (PIER 12)	EACH	1
502018	COFFERDAM (PIER 13)	EACH	1
502019	COFFERDAM (PIER 14)	EACH	1
502020	COFFERDAM (PIER 15)	EACH	1
502021	COFFERDAM (PIER 16)	EACH	1
502022	COFFERDAM (PIER 17)	EACH	1
502023	COFFERDAM (PIER 18)	EACH	1
502024	COFFERDAM (PIER 19)	EACH	1
502025	COFFERDAM (PIER 20)	EACH	1
X03917	CONCRETE SEAL	SQ. YD.	3,976
504003	CLASS "X" CONCRETE	CU. YD.	31,668
507001	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	20,240
512001	REINFORCEMENT BARS	POUND	2,440,440
513005	FURNISHING CREOSOTED PILES, 20.1 TO 38 FEET	LIN.FT.	420
513006	FURNISHING CREOSOTED PILES OVER 38 FEET	LIN.FT.	540
513022	DRIVING TIMBER PILES	LIN.FT.	960
513013	FURNISHING STEEL PILE (10BP42)	LIN.FT.	24,921
513033	TEST PILES STEEL (10BP42)	EACH	13
513026	DRIVING STEEL PILES	LIN.FT.	24,921
513042	CLASS "X" CONCRETE ENCASEMENT	CU. YD.	24.0
514001	NAME PLATE	EACH	2
618003	SLOPE WALL (6")	SQ. YD.	5,835
646001	ENGINEER'S FIELD OFFICE, TYPE A	EACH	1
646003	ENGINEER'S FIELD LABORATORY	EACH	1
X03316	Core Borings	Lin.Ft.	540



LETTERING FOR NAME PLATES

FOR DETAILS SEE STANDARD NO. 2113-1
SCALE: 1/2" = 1"

Revised 8-17-70

GENERAL NOTES, SUMMARY OF QUANTITIES AND NAME PLATES

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID, J. Y. HUANG
DRAWN BY H. de PERCZEL, M. VADKERTY
CHECKED J. Y. HUANG
IN CHARGE J.Y. HUANG
APPROVED W. G. HORN

Rev. Cl. B Exc. from 20,451 to 1,624 cu.yds., Added Cofferdam Exc. 18,827 cuyds., Deleted Bridge Seat Sealant Lump Sum-1 10-16-69 S.F.M. Added Numeral 40 to Clearance Guage 8-17-70 S.F.M.

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	3
FED. ROAD DIST. NO.	FED. AID PROJECT I-280			

CLEARING AND GRUBBING

STA. 11 + 11.38 TO IOWA SHORELINE — 3.2 ACRES

NOTE:
CONVERSION FACTOR:
ADD 0.505 FEET TO ILLINOIS ELEVATIONS (5TH. GENERAL ADJUSTMENT) TO OBTAIN IOWA ELEVATIONS (4TH. GENERAL ADJUSTMENT).

ALL ELEVATIONS SHOWN ARE 5TH. GENERAL ADJUSTMENT.
CONTOUR INTERVAL ~ 1 FOOT.

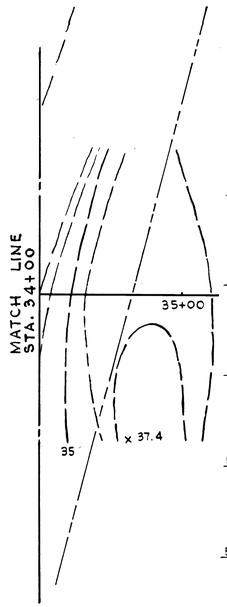
EXISTING CHANNEL LIMITS AS DETERMINED BY CORPS OF ENGRS.
PROPOSED CHANNEL LIMITS AS ESTABLISHED BY CORPS OF ENGRS.
B#1 BORING LOCATION
CONTOUR ELEVATION 540'
ALL ELEVATIONS SHOWN ARE 5TH GENERAL ADJUSTMENT

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. E. ASSMUS
DRAWN BY W. B. LEROY
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

SITE PLAN
IOWA APPROACH

F.A.I. ROUTE 280, SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 7 + 00.00 TO STA. 34 + 00.00
SCALE: AS NOTED DATE:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	4
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



BORING NO. 9

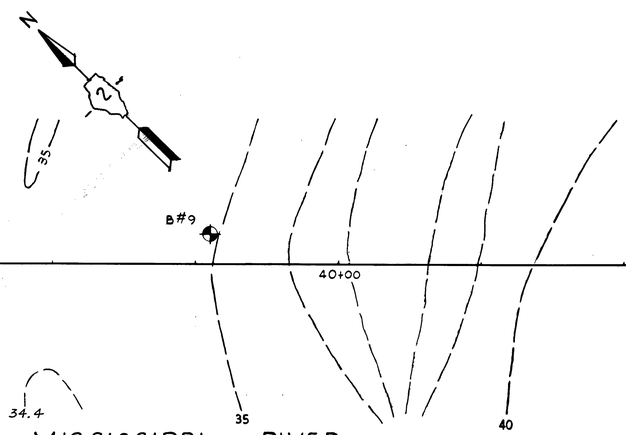
545.8' 0'

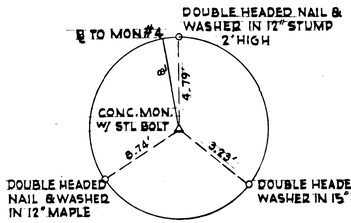
WATER SURFACE			0' 6"
WATER			11' 6"
LOOSE GRAY COARSE SAND & GRAVEL LIMESTONE FRAGMENTS NOTED	3 5 15		14' 0"
VERY STIFF BLUE SILTY CLAY, TRACE SAND	3 5 7 4 7 12	STIFF	19' 0"
MEDIUM GRAY MEDIUM-COARSE SAND & GRAVEL, SOME STONE FRAGMENTS, TRACE CLAY	8 20 15		21' 6"
SEAMS SILT & FINE TO MEDIUM SAND	3 5 15 1 1		25' 6"
DENSE GRAY & BROWN COARSE SAND & FINE-LARGE GRAVEL	21 72 23 44		28' 3"
VERY HARD GRAY SHALE	30 61 99/1 99/4 68 61	LOST 24/8 28/3 12/3	30' 0" 32' 0" 32' 1" 34' 0" 35' 4" 36' 6"

BORING NO. 10

551.2' 0'

LOOSE BROWN FINE SAND	2 2 2		3' 0"
LOOSE BROWN & GRAY ORGANIC SILT, SOME SAND	3 4 3 4 5	WL 1 & 24	8' 0"
VERY LOOSE BROWN & GRAY ORGANIC SILT	2 1 1		10' 6"
LOOSE GRAY FINE-COARSE SAND, TRACE FINE GRAVEL	3 4 3		13' 6"
MEDIUM GRAY FINE-COARSE SAND, TRACE FINE GRAVEL	6 6 6		16' 6"
DENSE GRAY FINE-COARSE SAND & FINE-MEDIUM GRAVEL, TRACE SILT	11 18 23		18' 6"
MEDIUM GRAY FINE-COARSE CLAYEY SAND & FINE-MEDIUM GRAVEL	8 10 13		21' 0"
STIFF GRAY SILTY CLAY LOAM	4 6 7 4 7 12		25' 6"
DENSE BROWN FINE-MEDIUM AND & FINE-MEDIUM GRAVEL	11 16 17		29' 0"
VERY DENSE BROWN FINE-MEDIUM SAND & FINE-MEDIUM GRAVEL	9 24 51 54 44 17		33' 6"
VERY HARD BLACK & GRAY SHALE	12 25 100 36 100 100		40' 0"



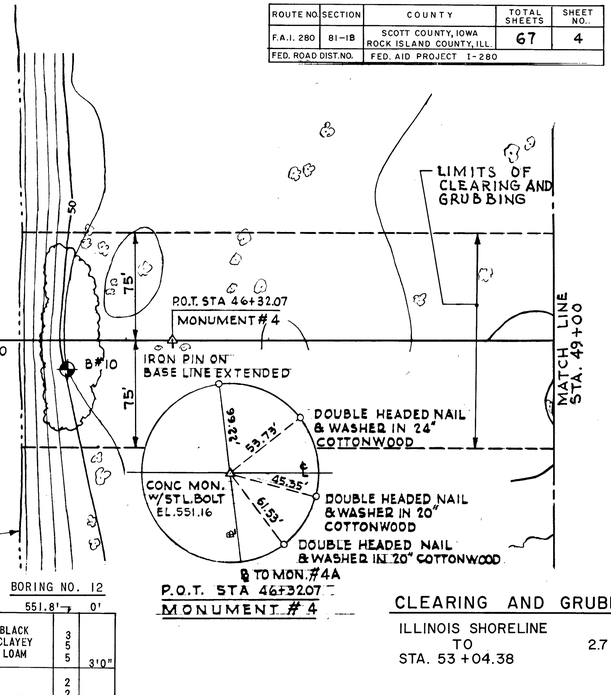


NOTE:

CONVERSION FACTOR:

ADD 0.505 FEET TO ILLINOIS ELEVATIONS (5TH GENERAL ADJUSTMENT) TO OBTAIN IOWA ELEVATIONS (4TH GENERAL ADJUSTMENT).

ALL ELEVATIONS SHOWN ARE 5TH GENERAL ADJUSTMENT CONTOUR INTERVAL--1 FOOT.



P.O.T. STA 46+32.07
MONUMENT #4

BORING NO. 11

552.6' 0'

DARK BROWN CLAY LOAM	3 3 4 2 5 5		5' 6"
SOFT BROWN CLAYEY SILT, TRACE SAND	2 2 2	WL 1 & 24	7' 6"
LOOSE BROWN COARSE SAND & FINE TO MEDIUM GRAVEL	5 5 7 4 3 4		13' 0"
MEDIUM BROWN COARSE SAND & FINE-LARGE GRAVEL, BOULDERS NOTED	17 11 16		17' 0"
VERY STIFF DARK BROWN & GRAY SILT, SOME ORGANIC MATTER	7 11 16 6 7 11 4 7 13 4 6 8 4 7 7 6 7		32' 0"
(BOULDER)	60		
MEDIUM BROWN & GRAY COARSE SAND & FINE MEDIUM GRAVEL, SOME BOULDERS	10 15 16 14 10 12		38' 0"
VERY HARD BLACK SHALE	25 61 61 99 88	24/12	48' 0"

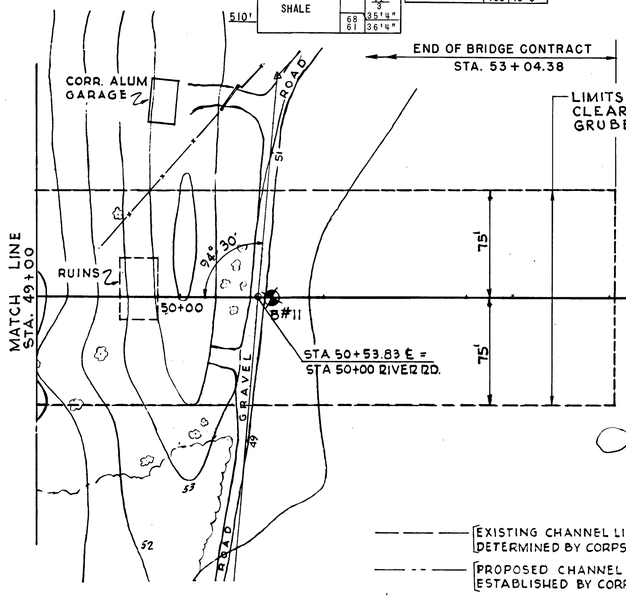
BORING NO. 12

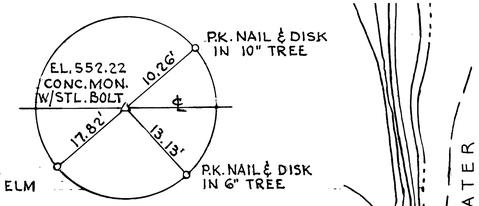
551.8' 0'

BLACK CLAYEY LOAM	3 5 5		3' 0"
SOFT BROWN SANDY CLAYEY SILT	2 2 2 2 2 2 2 2 1	WL 24 WL 1	10' 3"
MEDIUM BROWN COARSE SAND & FINE TO MEDIUM GRAVEL, BOULDERS NOTED	3 8 14 10 12 15 11 13 14 8 9 8 9 7 8		23' 0"
STIFF GREEN CLAYEY SILT WITH SEAMS SAND & PEAT	5 6 8		26' 0"
DENSE GRAY MEDIUM-COARSE SAND, SOME FINE-MEDIUM GRAVEL	9 17 19 22 30 30 18		32' 0"
VERY DENSE GRAY & BROWN COARSE SAND & FINE-MEDIUM GRAVEL	88 88 30		34' 6"
MEDIUM BROWN MEDIUM SAND	10		35' 6"
VERY HARD GRAY SHALE	13 36 63 56 99 99/4		42' 0"

CLEARING AND GRUBBING

ILLINOIS SHORELINE TO STA. 53+04.38 — 2.7 ACRES





P.O.T. STA 58+04.01
MONUMENT #5

STATE OF ILLINOIS

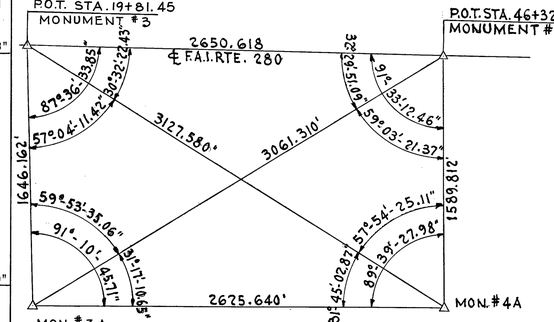
——— EXISTING CHANNEL LIMITS AS DETERMINED BY CORPS OF ENGRS.

– – – PROPOSED CHANNEL LIMITS AS ESTABLISHED BY CORPS OF ENGRS.

B#1 BORING LOCATION

40 CONTOUR ELEVATION 540'

ALL ELEVATIONS SHOWN ARE 5TH GENERAL ADJUSTMENT



TRIANGULATION DATA

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY W.E. ASSMUS
DRAWN BY W.B. LEROY
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

SITE PLAN
ILLINOIS APPROACH

F.A.I. ROUTE 280 SECTION 81-1B

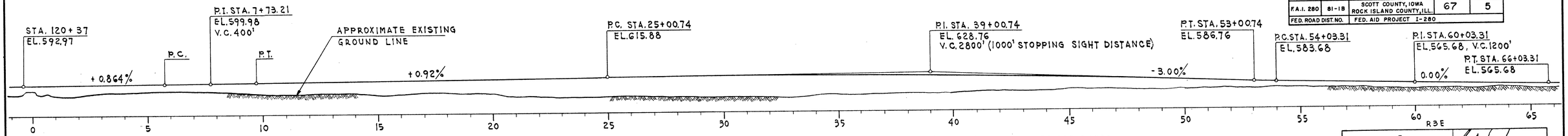
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.

STA. 34+00.00 TO STA. 60+00.00

SCALE: AS NOTED DATE:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	5
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

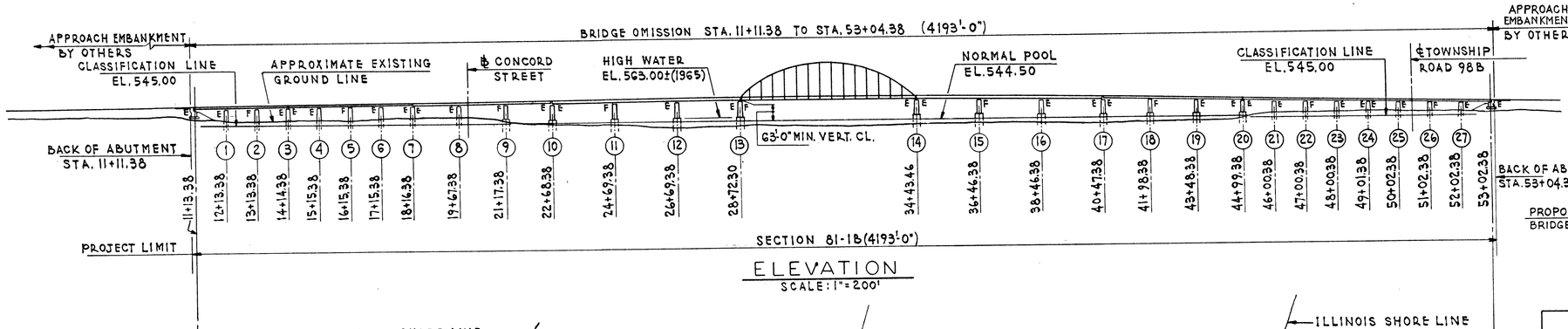


PROFILE GRADE

SCALE: 1"=200'

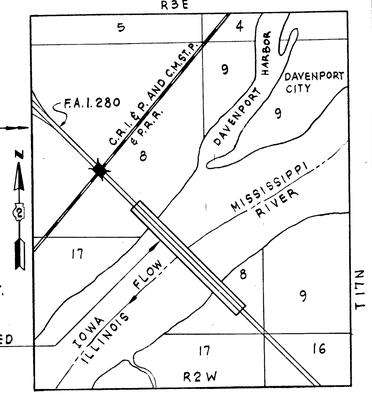
NOTE: ALL ELEVATIONS REFERRED TO ARE BASED UPON 5TH GENERAL ADJUSTMENT-ILLINOIS.

EQUATION
IOWA STA. 119+98.38 =
ILLINOIS STA. 0+00

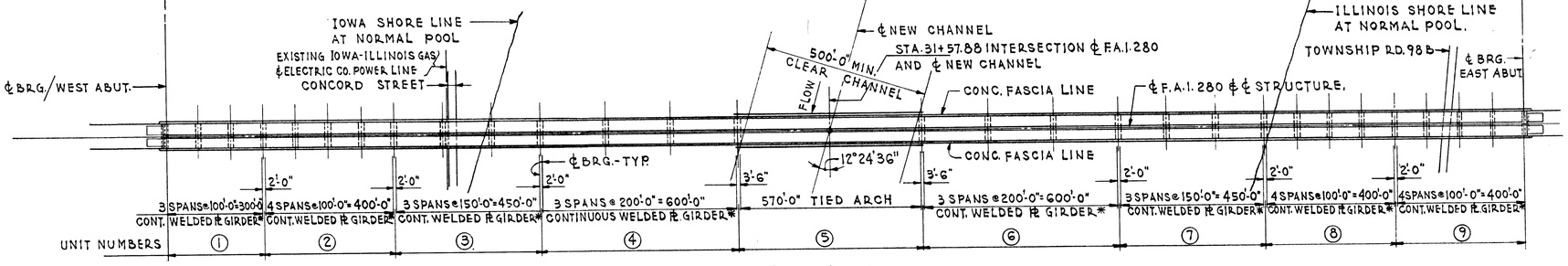


ELEVATION

SCALE: 1"=200'



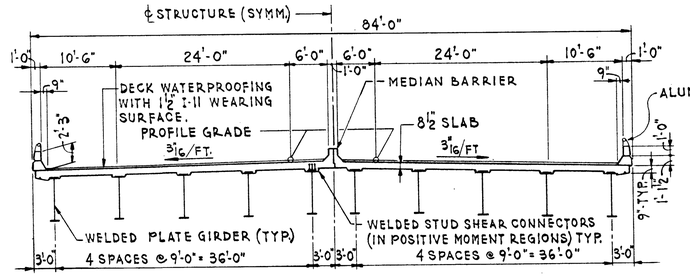
LOCATION PLAN



PLAN

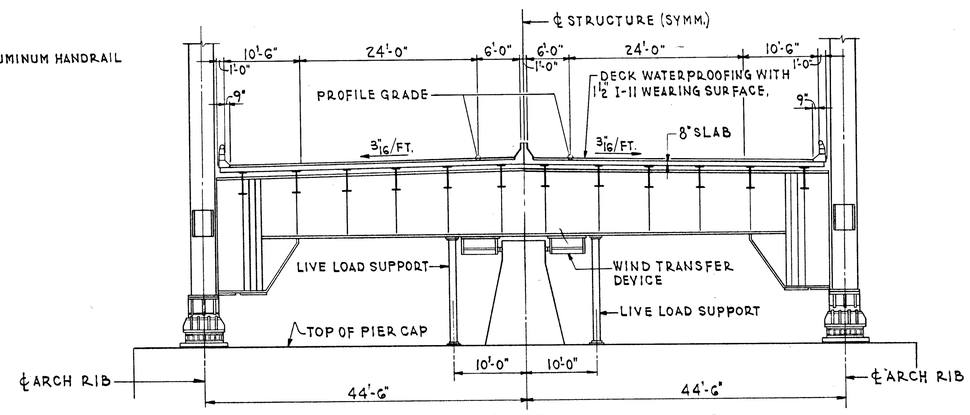
SCALE: 1"=200'

*INDICATES CONTINUOUS COMPOSITE CONSTRUCTION.



TYPICAL CROSS SECTION - APPROACH SPANS

SCALE: 1"=10'



TYPICAL CROSS SECTION-ARCH SPAN

SHOWING AT END FLOOR BEAM

SCALE: 1"=10'

WATERWAY INFORMATION

WATERWAY OPENING REQUIRED	26,000	SQ.FT.
WATERWAY OPENING PROVIDED	26,240	SQ.FT.
50 YEAR FREQUENCY DISCHARGE	293,000	CU.F.S.
50 YEAR HIGH WATER ELEVATION	562.5	
DRAINAGE AREA	99,200	SQ.MI.
MILES FROM MOUTH	1,560	MI.

QUANTITIES

ITEM	UNIT	QUANTITY
TREE REMOVAL ACRES	ACRE	~~5.9~~ 6.7
POROUS GRANULAR EMBANKMENT	CU. YD.	~~270~~ 225
CLASS "A" EXCAVATION FOR STRUCTURES	CU. YD.	~~6,783~~ 6,783
CLASS "B" EXCAVATION FOR STRUCTURES	CU. YD.	~~1,682~~ 1,680
ROCK EXCAVATION FOR STRUCTURES	CU. YD.	~~11,008~~ 13,126
CORE BORINGS	LIN.FT.	~~540~~ 842
COFFERDAM (PIER 9)	EACH	1
COFFERDAM (PIER 10)	EACH	1
COFFERDAM (PIER 11)	EACH	1
COFFERDAM (PIER 12)	EACH	1
COFFERDAM (PIER 13)	EACH	1
COFFERDAM (PIER 14)	EACH	1
COFFERDAM (PIER 15)	EACH	1
COFFERDAM (PIER 16)	EACH	1
COFFERDAM (PIER 17)	EACH	1
COFFERDAM (PIER 18)	EACH	1
COFFERDAM (PIER 19)	EACH	1
COFFERDAM (PIER 20)	EACH	1
CONCRETE SEAL	SQ. YD.	~~3,976~~ 3,973
CLASS "X" CONCRETE	CU. YD.	~~31,668~~ 31,136.5
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	20,240
REINFORCEMENT BARS	POUND	~~2,440,840~~ 2,775,647
FURNISHING CREOSOTED PILES, 20.1 TO 38 FEET	LIN.FT.	420
FURNISHING CREOSOTED PILES, OVER 38 FEET	LIN.FT.	~~540~~ 595.3
DRIVING TIMBER PILES	LIN.FT.	~~960~~ 765
FURNISHING STEEL PILE (10BP42)	LIN.FT.	~~24,921~~ 23,476
TEST PILES STEEL (10BP42)	EACH	~~15~~ 12
DRIVING STEEL PILES (10BP42)	LIN.FT.	~~24,921~~ 22,044
CLASS "X" CONCRETE ENCASEMENT	CU. YD.	24.0
NAME PLATE	EACH	2
SLOPE WALL (6")	SQ. YD.	~~5,835~~ 3,835
ENGINEER'S FIELD OFFICE, TYPE A	EACH	1
ENGINEER'S FIELD LABORATORY	EACH	1
Cofferdam Excavation	Cu.Yds.	~~18,827~~ 15,227
FILL CONC UNDER PIER 18	-11-	362

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.G.HORN
DRAWN BY A.BUROKAS
CHECKED
IN CHARGE
APPROVED W.G.HORN

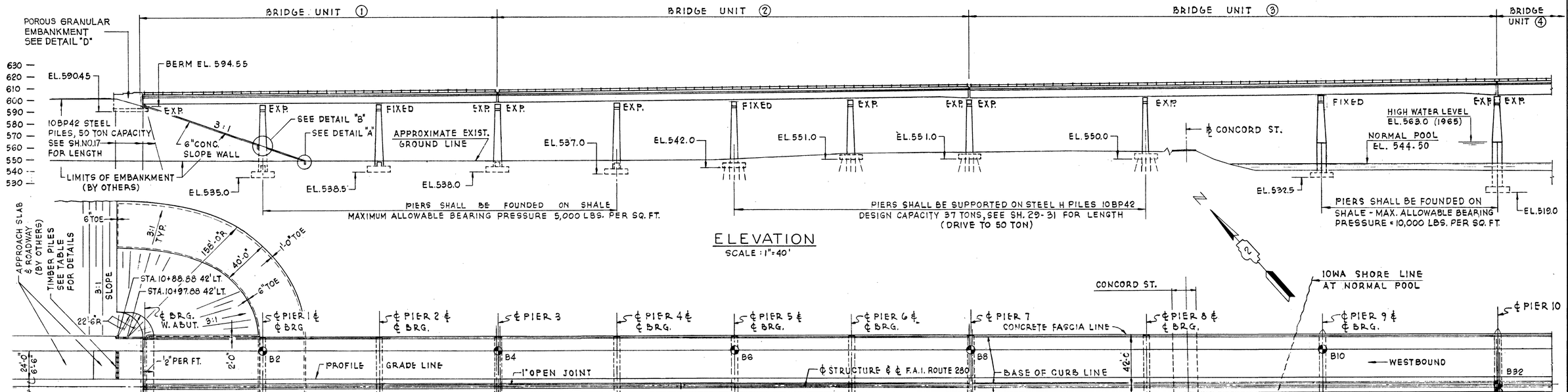
GENERAL PLAN AND ELEVATION

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: JULY 21, 1969

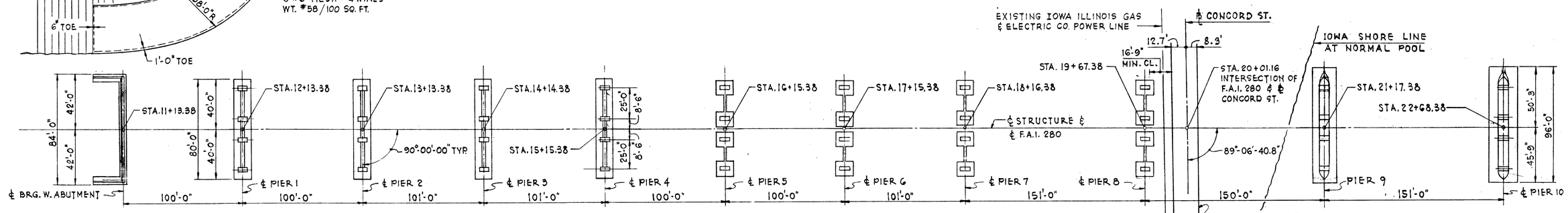
Rev. Cl. B. Exc. from 20,451 to 1624 cu.yds., Added Cofferdam Exc. 18,827 cu.yds., Deleted Bridge Seat Sealant Lump Sum 1 10-16-69 S.F.M.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	6
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

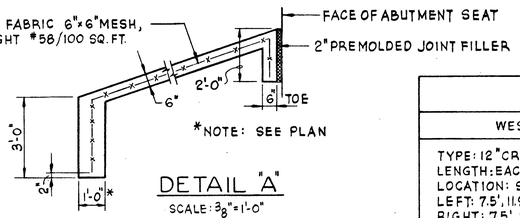


ELEVATION
SCALE: 1"=40'

PLAN
SCALE: 1"=40'



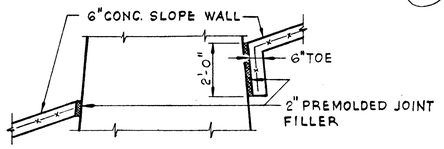
FOOTING PLAN
SCALE: 1"=40'



DETAIL "A"
SCALE: 3/8"=1'-0"
EAST ABUTMENT SHOWN
(WEST ABUTMENT OPPOSITE HAND)

APPROACH PILE DATA

WEST ABUTMENT	EAST ABUTMENT
TYPE: 12"CREOSOTE TIMBER PILE LENGTH: EACH : 45' LOCATION: STA. 10+91.38 LEFT: 7.5', 11.9', 16.3', 20.7', 25.1', & 29.5' RIGHT: 7.5', 11.9', 16.3', 20.7', 25.1', & 29.5' CUT OFF EL. 599.8	TYPE: 12"CREOSOTE TIMBER PILE LENGTH: 35' EACH LOCATIONS: STA. 53+24.36 @ LEFT: 7.5', 11.9', 16.3', 20.7', 25.1', & 29.5' RIGHT: 7.5', 11.9', 16.3', 20.7', 25.1', & 29.5' CUT-OFF EL. 583.3



DETAIL B
SCALE: 3/8"=1'-0"

LEGEND

● DENOTES BORING LOG

GENERAL PLAN, ELEVATION & GROUND PLAN BRIDGE UNITS 1, 2 & 3

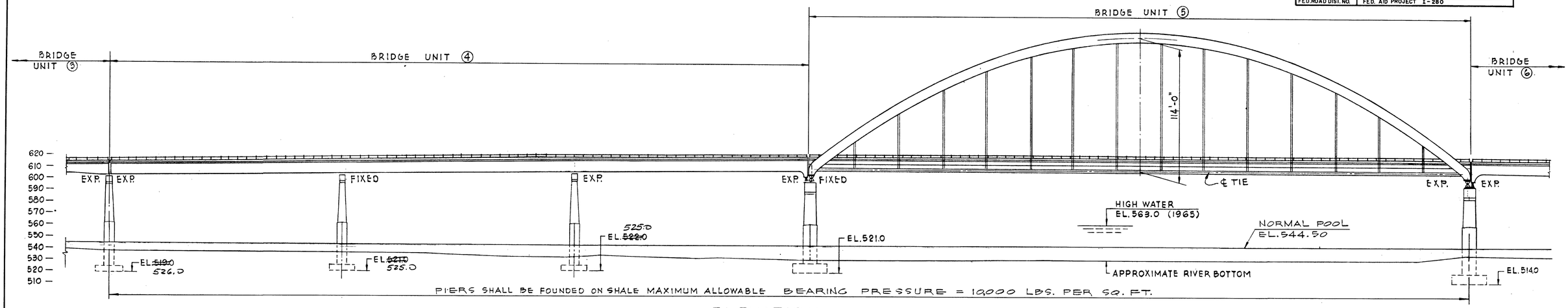
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 13.38 TO STA. 22 + 68.38

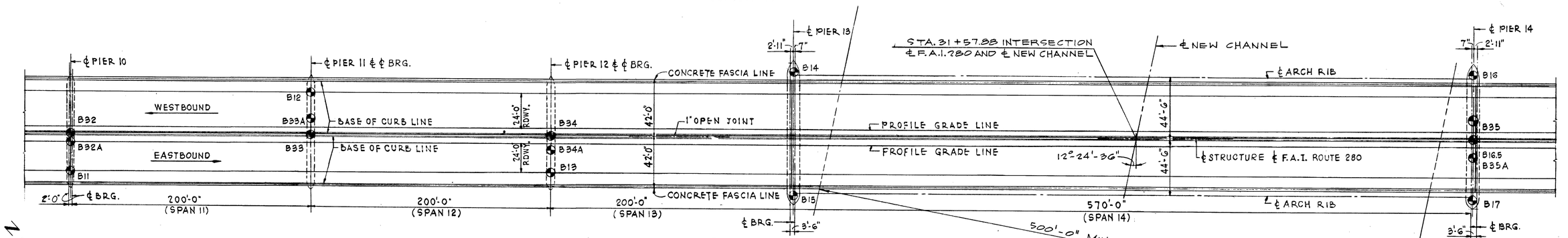
SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.G. HORN
DRAWN BY A. BUROKAS
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W.G. HORN

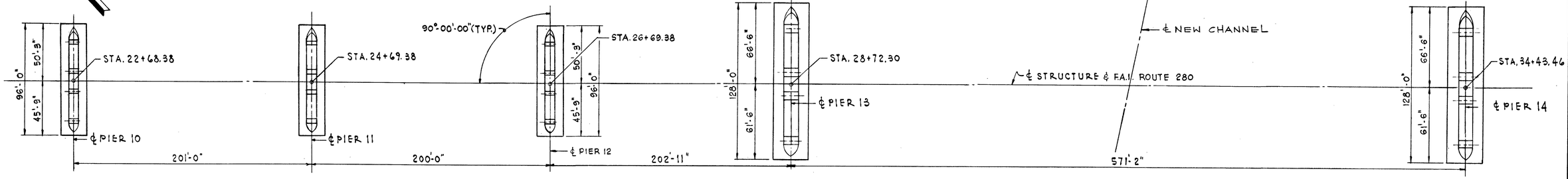
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	7
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



ELEVATION
SCALE: 1"= 40'



PLAN
SCALE: 1" = 40'



FOOTING PLAN
SCALE: 1"= 40'

LEGEND

⊕ DENOTES BORING LOG

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. G. HORN
DRAWN BY A. BUROKAS
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

GENERAL PLAN, ELEVATION & GROUND PLAN BRIDGE UNITS 4 & 5

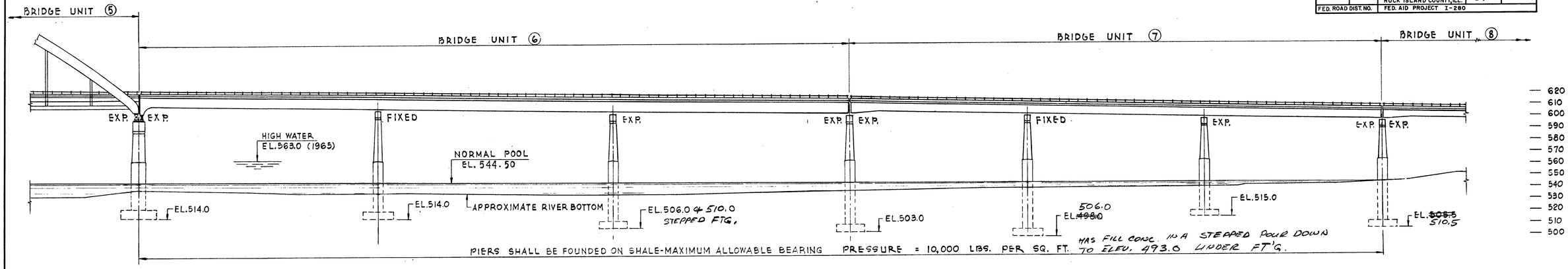
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.

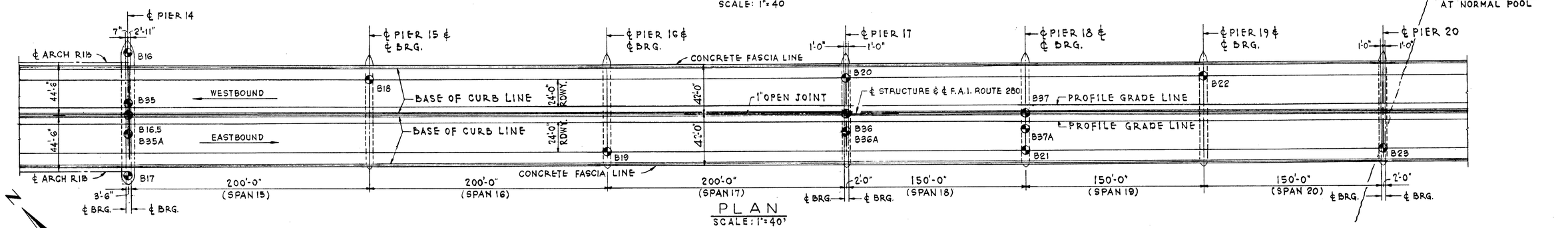
STA. 22+68.38 TO STA. 34+43.46

SCALE: AS NOTED DATE: JULY 21, 1969

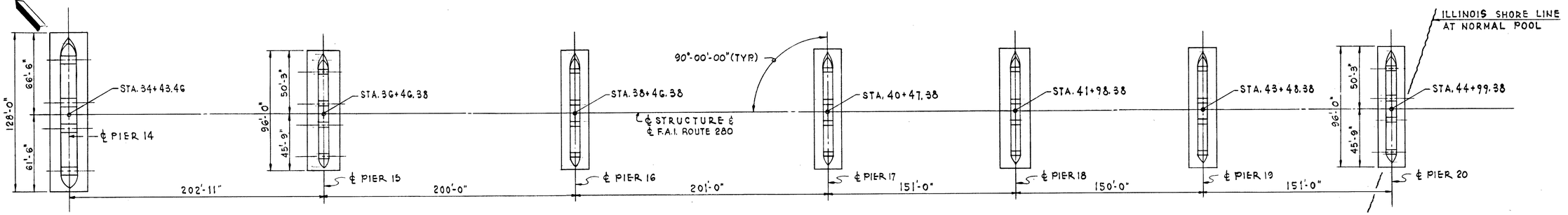
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	8
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



ELEVATION
SCALE: 1"=40



PLAN
SCALE: 1"=40'



FOOTING PLAN
SCALE: 1"=40'

LEGEND

● DENOTES BORING LOG

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. G. HORN
DRAWN BY A. BUROKAS
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

GENERAL PLAN, ELEVATION & GROUND PLAN
BRIDGE UNITS 6 & 7

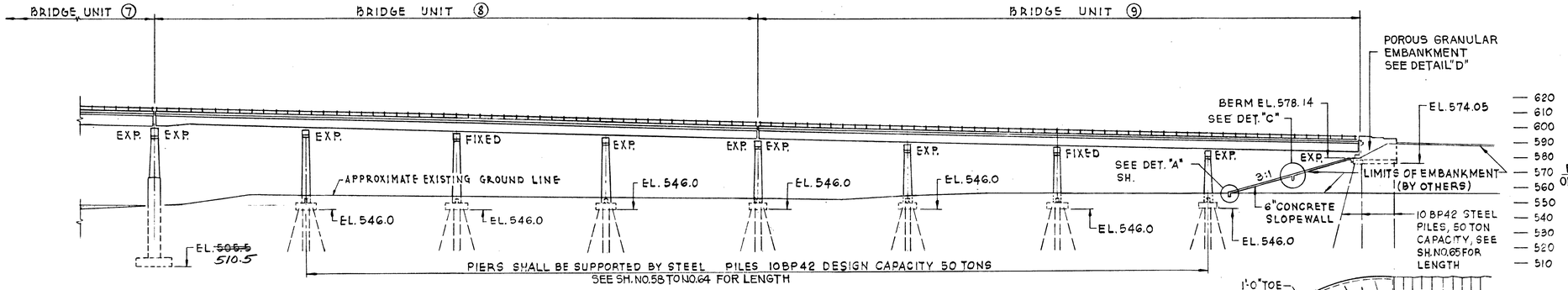
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.

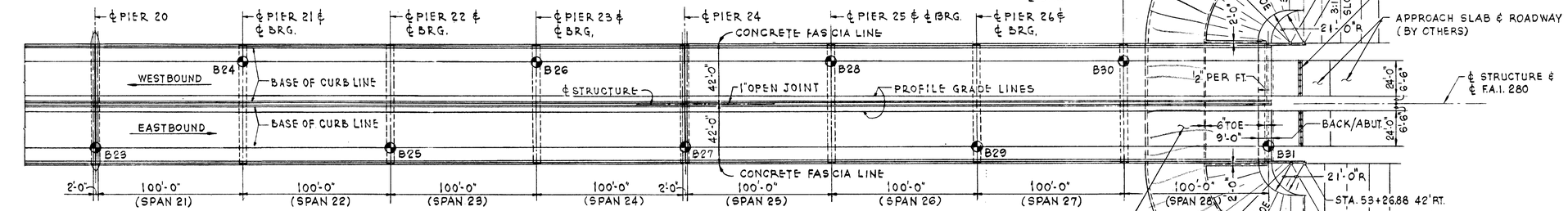
STA. 34+43.46 TO STA. 44+99.38

SCALE: AS NOTED DATE: JULY 21, 1969

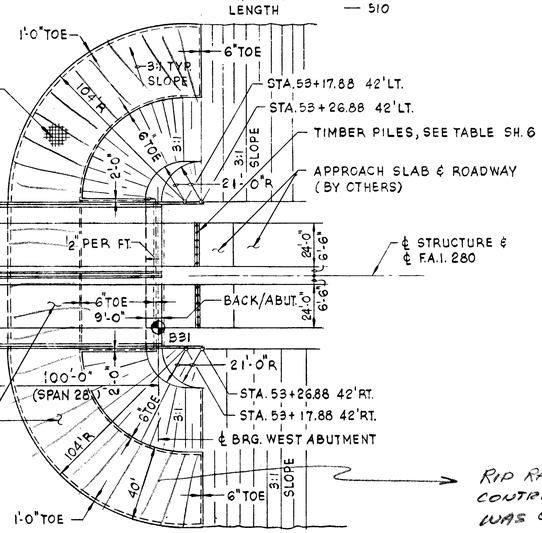
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	9
FED.ROAD DIST.NO.		FED. AID PROJECT I-280		



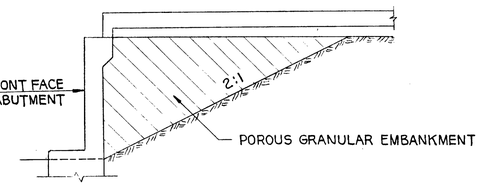
ELEVATION
SCALE: 1" = 40'



PLAN
SCALE: 1" = 40'

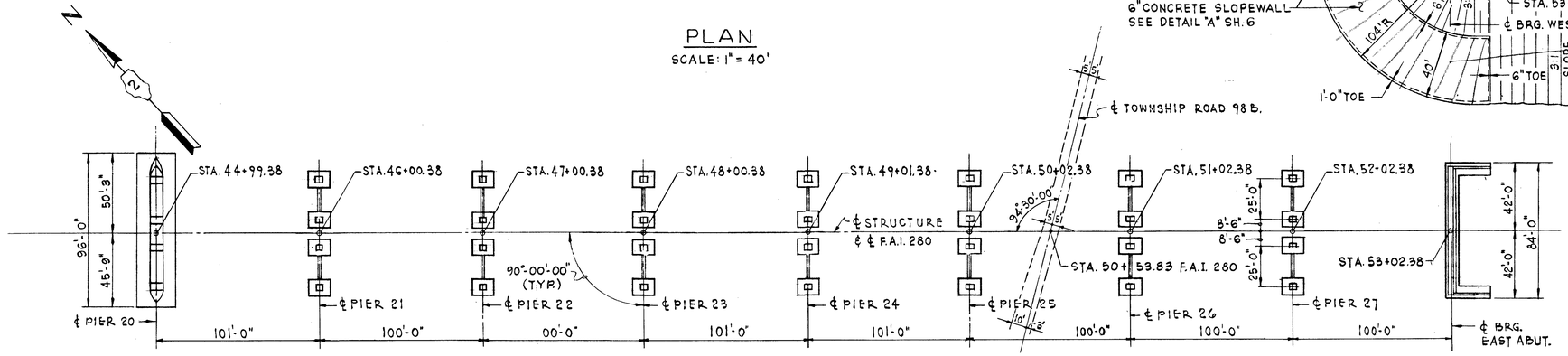


RIP RAP WAS PUT IN UNDER GRADING CONTRACT, THEREFORE SLOPE WALL WAS OMITTED

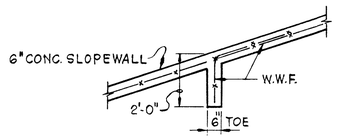


DETAIL D
SCALE: 1/4" = 1'-0"

EAST ABUTMENT SHOWN
WEST ABUTMENT OPPOSITE HAND



FOOTING PLAN
SCALE: 1" = 40'



DETAIL C
SCALE: 3/8" = 1'-0"

LEGEND

DENOTES BORING LOG

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
SLOPEWALL (6")	SQ. YD.	5835
FURNISHING CREOSOTED PILES 20.1 FEET TO 38 FEET	LIN. FT.	420
FURNISHING CREOSOTED PILES OVER 38 FEET	LIN. FT.	540
DRIVING TIMBER PILES	LIN. FT.	960
POROUS GRANULAR EMBANKMENT	CU. YD.	270

QUANTITIES SHOWN ABOVE ARE FOR EAST ℄ WEST ABUTMENTS.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. G. HORN
DRAWN BY A. BUROKAS
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

GENERAL PLAN, ELEVATION & GROUND PLAN
BRIDGE UNITS 8 & 9

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER

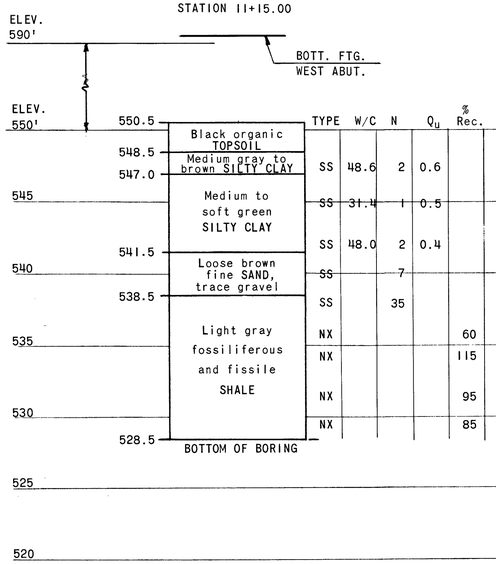
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 44+99.38 TO STA. 53+02.38

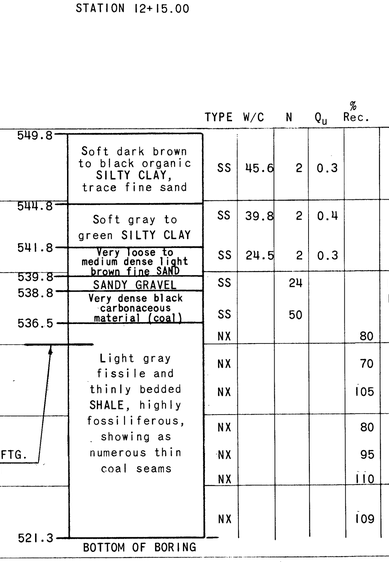
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	10
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

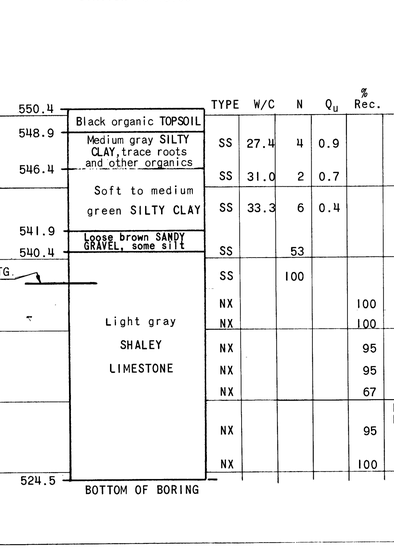
TEST BORING NO. 1 STATION 11+15.00



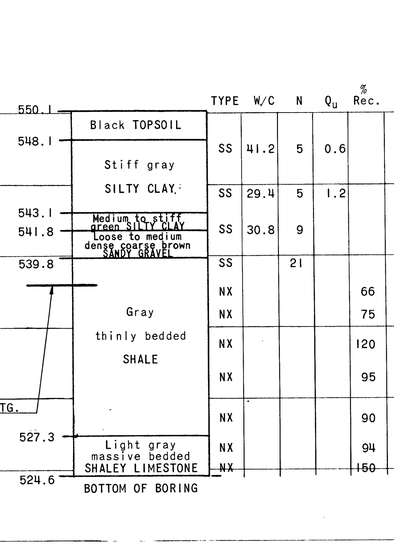
TEST BORING NO. 2 STATION 12+15.00



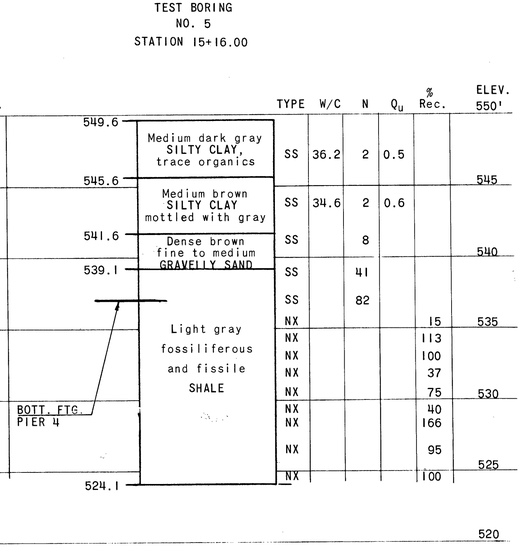
TEST BORING NO. 3 STATION 13+15.00



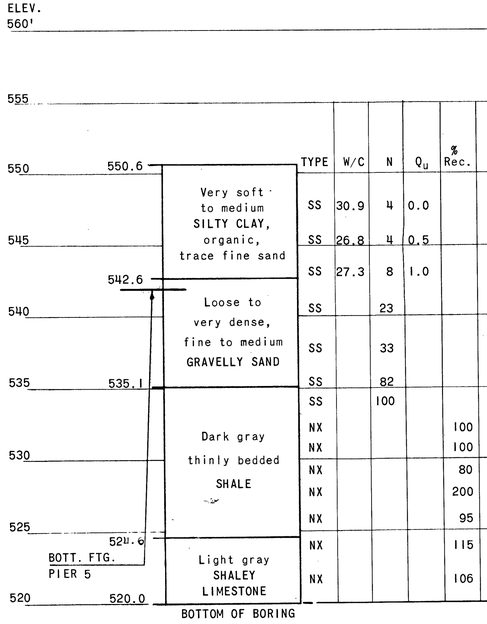
TEST BORING NO. 4 STATION 14+15.00



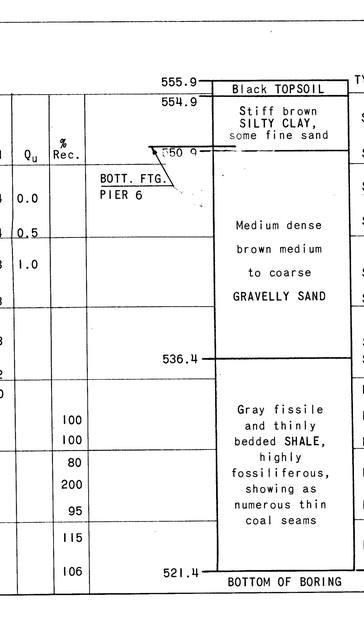
TEST BORING NO. 5 STATION 15+16.00



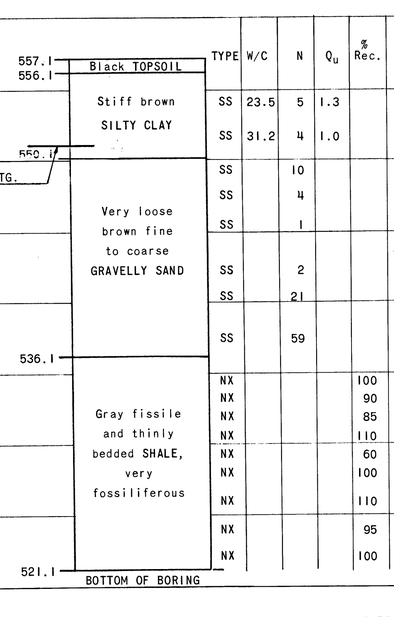
TEST BORING NO. 6 STATION 16+16.50



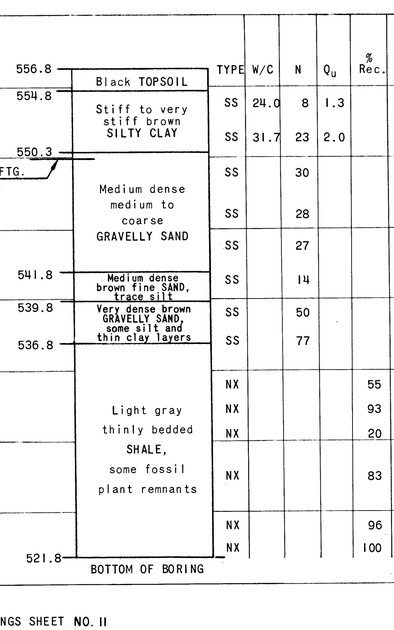
TEST BORING NO. 7 STATION 17+16.25



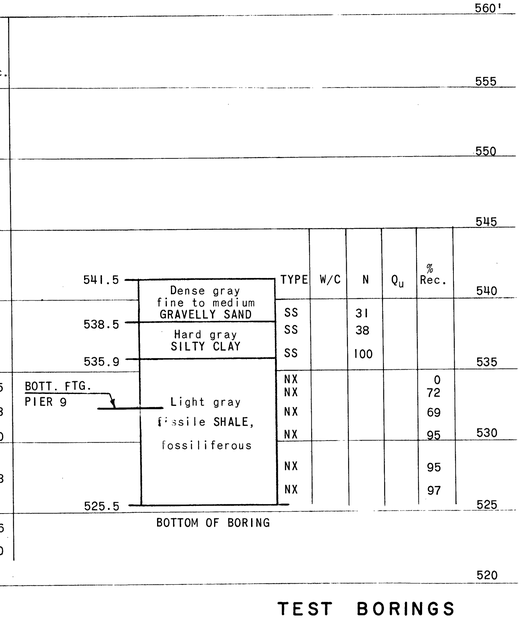
TEST BORING NO. 8 STATION 18+17.25



TEST BORING NO. 9 STATION 19+68.00



TEST BORING NO. 10 STATION 21+18.00



NOTE: FOR BORING LOG NOTES, SEE TEST BORINGS SHEET NO. 11

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY —
DRAWN BY H. DE PERCZEL
CHECKED G. C. WAY
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

TEST BORINGS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	11
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

TEST BORING
NO. 32
STATION 22+68.00

ELEV.		TYPE	W/C	N	Q_u	% Rec.
540'						
	537.0					
535						
		SS		100		
530						
	527.5					
	527.0	NX				55
525	525.5					
		NX				100
	523.0					
	521.2					
520	520.4	NX				87
BOTT. FTG. PIER 10	518.7					
	517.9					
515		NX				98
	514.3					
510		NX				76
	508.3					
505		NX				100
	503.4				1.3	
	502.1	NX			2.6	99.8
500						
	497.7					
	496.7	NX				67
495						
		NX			4.5	53
	491.7					
490		NX			85	
485		NX			100	
	483.4					
		NX			96	
480	480.5					
		NX			100	
475						
	474.2					
470						

RIVER ALLUVIUM

Weathered CLAYEY SHALE

Soft to medium gray, weathered SHALE

Medium, few soft seams, gray SHALE

Medium stiff to stiff, gray, weathered SHALE

Soft, gray CLAY

Medium stiff to stiff, gray, weathered SHALE

Stiff to very stiff, gr ; UNDERCLAY on ... hard limestone

Medium hard, gray SILTY SHALE

Soft to medium, gray SHALE

Medium, some soft seams, gray SHALE

Stiff, gray, interbedded CLAY and SILTY SAND

Medium to hard, few thin soft seams, gray, interbedded SILTY SHALE and SHALY SANDSTONE, few limestone seams

Soft, black SHALY COAL

Soft to medium, gray UNDERCLAY, lime nodules at top

Medium, gray CLAYEY SHALE

Medium, gray, interbedded CLAYEY, SILTY, and SANDY SHALE

Hard, light gray LIMESTONE (Devonian)

BOTTOM OF BORING

TEST BORING
NO. 32A
STATION 22+68.00

ELEV.		TYPE	W/C	N	Q_u	% Rec.
540'						
	537.0					
535						
530						
	527.8					
		W				
525						
		6X				100
520	520.4	6X				80
BOTT. FTG. PIER 10						
	515.3	6X				100
515						
		6X				75
510						
		6X				98
		6X				95
505						
	501.8	6X				100
	500.8					
	497.3	6X				85
495	495.8					
	495.2					
	494.1	6X				100
490	489.8					

RIVER ALLUVIUM

Soft to medium soft, some very soft seams gray SHALE. Some thin coaly streaks

Medium soft light gray SILTY CLAYSTONE (unclayey) grades to sandy clayey siltstone

Medium, few soft seams, gray SHALE, slightly harder with depth

Medium hard, gray SANDY SHALE

Medium, hard to hard, gray SHALEY SANDSTONE, few limy streaks

Hard, gray CONGLOMERATE

Gray limy SILTSTONE

SHALE & CONGLOMERATE

Soft and hard black SHALEY COAL, some pyrite

Medium, some soft seams. Gray SHALE, few coaly streaks

BOTTOM OF BORING

TEST BORING
NO. 11
STATION 22+69.75

ELEV.		TYPE	W/C	N	Q_u	% Rec.
540'						
	537.6					
	535.6					
		SS	19	25	3.3	
	532.9	SS		63	3.9	
		SS		100	6.2	
		NX				100
		NX				100
		NX				100
	523.3	NX				100

Medium dense coarse GRAVEL trace coarse sand

Very stiff SILTY CLAY with pebbles mottled with brown

Light gray fissile SHALE, very fossiliferous, showing as recurring thin coal seams

BOTTOM OF BORING

TEST BORING
NO. 12
STATION 24+69.50

ELEV.		TYPE	W/C	N	Q_u	% Rec.
540'						
	536.3					
	534.3	SS	10.6	100	2.9	
		SS		59		
	529.3	SS		51	5.8	
		NX				75
		NX				100
		NX				95
		NX				95
	519.3	NX				100

Dense medium to coarse SANDY GRAVEL

Very stiff green SILTY CLAY with pebbles mottled with brown

Gray thinly bedded and fissile SHALE

BOTTOM OF BORING

TEST BORING
NO. 33A
STATION 24+69.38

ELEV.		TYPE	W/C	N	Q_u	% Rec.
540'						
	536.7					
	527.1					
		W				
	523.4	6X				90
	522.1	6X				93
BOTT. FTG. PIER 11						
		6X				98
	513.1	6X				100
	511.1					
	510.6					
	510.0	6X				64
	507.1					
	504.2					

RIVER ALLUVIUM

Medium, few soft seams gray SHALE weathered at top

Soft to medium, gray SHALE

Medium hard, gray SHALE

SHALE

Hard, gray limy SILTSTONE

Medium, gray SHALE

Medium hard to hard, gray SILTY SHALE becoming sandy downward

No recovery (Shale)

BOTTOM OF BORING

TEST BORING
NO. 33
STATION 24+69.38

ELEV.		TYPE	W/C	N	Q_u	% Rec.
540'						
	537.0					
535						
	530.0	SS		58	4.5	
	528.5	NX				100
525					4.5	100
	524.2	NX				
		NX				100
520						
BOTT. FTG. PIER 11		NX				100
	517.0					
		NX				95
515		NX				81
		NX				100
510						
	508.8	NX				90
	506.0					
505		NX				100
	503.0					
	501.6	NX				94
500						
	499.3					
	498.2	NX				100
495						
		NX				100
490		NX				100
	485.4					
485						
	483.9	NX				100
	481.4					
480		NX				100
	478.5					
475						

Overburden soil (River alluvium)

Stiff to hard, gray weathered CLAYEY SHALE

Medium soft, gray, CLAY SHALE

Soft, gray CLAY SHALE

Soft to medium soft, gray SHALE

Medium, soft, gray SHALE, few sandy seams

Medium soft to medium hard, gray SANDY SILTSTONE

Medium hard, black-gray SILTY SANDSTONE

Medium soft to hard, gray SANDY and LIMY CONGLOMERATE

Soft, black COALY SHALE, some pyrite

Medium soft to medium hard, gray SHALE

Medium hard to hard, dark gray SILTY SHALE

Soft, gray SHALE

Hard, gray LIMESTONE

BOTTOM OF BORING

TEST BORING NOTES:

CLASSIFICATION BY VISUAL INSPECTION

W/C - WATER CONTENT

N VALUES INDICATE NUMBER OF BLOWS REQUIRED TO DRIVE A 2" O.D. SAMPLING SPOON ONE FOOT, USING A 140 LB. WEIGHT FALLING FREE FOR 30 INCHES

Q_u VALUES BY UNCONFINED COMPRESSION TESTS IN THE FIELD TONS/ft² OR POCKET PENETROMETER READING

% Rec. VALUES INDICATE PERCENT CORE RECOVERY FOR SHALE

SS SPLIT BARREL SAMPLER

NX 2 1/8" DIAMETER CORE BARREL

6X 5 7/8" DIAMETER CORE BARREL

FOR LOCATION OF BORINGS SEE GENERAL PLAN SHEET NO. 6, 7, 8 AND 9

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY —
DRAWN BY H. DE PERCZEL
CHECKED G. C. WAY
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

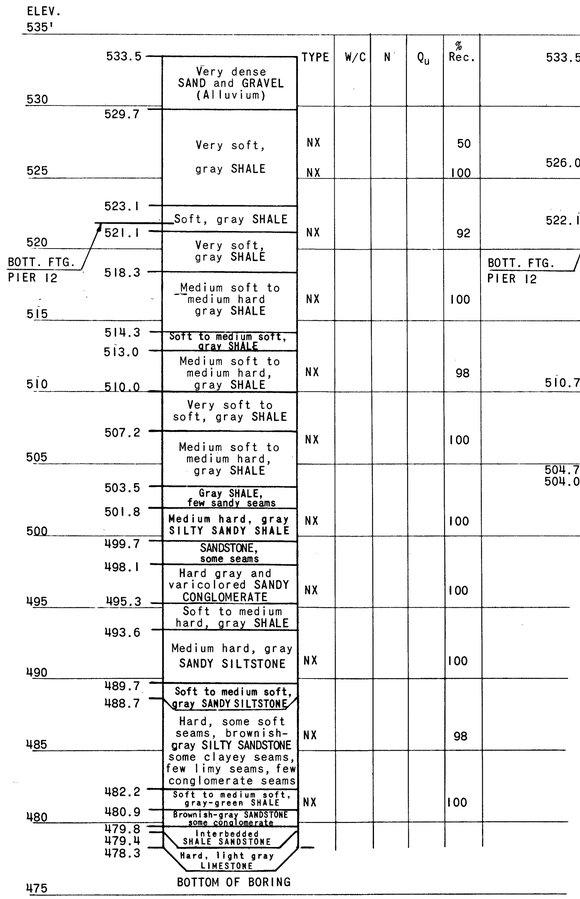
TEST BORINGS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

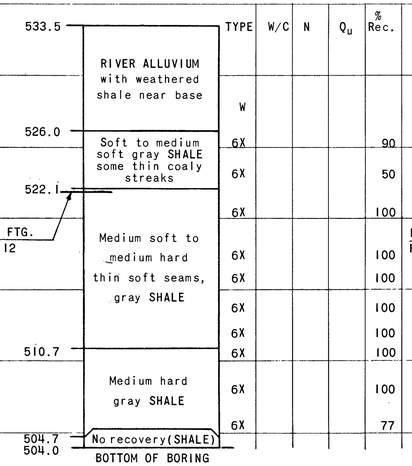
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	12
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

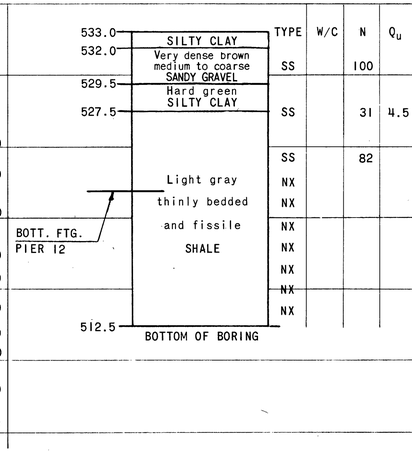
TEST BORING
NO. 34
STATION 26+69.38



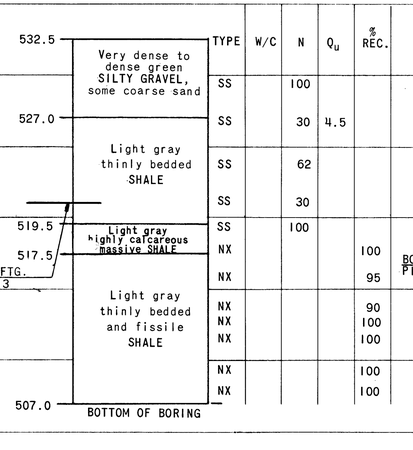
TEST BORING
NO. 34A
STATION 26+69.38



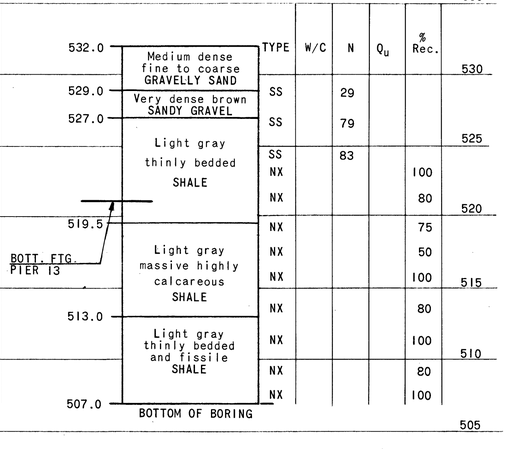
TEST BORING
NO. 13
STATION 26+69.50



TEST BORING
NO. 14
STATION 28+71.75



TEST BORING
NO. 15
STATION 28+71.75



NOTE:
FOR BORING LOG NOTES SEE TEST BORINGS SHEET NO. 11

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY —
DRAWN BY H. DE PERCZEL
CHECKED G. C. WAY
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

TEST BORINGS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	13
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

TEST BORING
NO. 16
STATION 34+41.25

Elev.	Description	TYPE	W/C	N	Q_u	% Rec.
535.6	Medium dense brown fine to medium SANDY GRAVEL	SS		16		
530.1	Medium dense gray CLAYEY SILT	SS	24.6	23		
528.9	Very dense multicolored fine to coarse pebble conglomerate	SS	20.3	100		
526.1	Very stiff to hard gray SILTY CLAY, trace organics	SS	22.8	15		
522.1	Hard green SILTY CLAY with pebbles	SS		27		
520.4		SS		46		
		NX				0
		NX				95
515		NX				10
BOTT. FTG. PIER 14	Dark gray highly fissile SHALE	NX				40
		NX				120
510		NX				60
		NX				100
505		NX				77
		NX				120
501.2		NX				100
500	BOTTOM OF BORING					

TEST BORING
NO. 16.5
STATION 34+41.25

Elev.	Description	TYPE	W/C	N	Q_u	% Rec.
536.8	Dense to very dense brown SANDY GRAVEL, trace calcareous shell remnants	SS		24		
		SS		55		
530.1		SS		95		
	Very dense multicolored fine to coarse pebble conglomerate					
525.3	Very dense green CLAYEY SAND	SS	21.9	100		
520.8		SS		66	3.5	
BOTT. FTG. PIER 14	Dark gray thinly bedded SHALE	SS		60		
		NX				100
		NX				100
		NX				105
		NX				116
		NX				105
		NX				115
		NX				105
		NX				80
499.8		NX				120
	BOTTOM OF BORING					

TEST BORING
NO. 35
STATION 34+43

Elev.	Description	TYPE	W/C	N	Q_u	% Rec.
532.8	River ALLUVIUM (sand and gravel)					
523.1	Gray, decomposed SHALE					
518.1	Soft to medium soft, dark gray SHALE	NX			4.5	100
BOTT. FTG. PIER 14		NX				32
508.6	Medium soft to medium hard, dark gray SHALE	NX				76
500.6	Very soft to medium hard, black SANDY SILTSTONE and COALY SHALE with pyrite seam	NX				88
499.8		NX				100
	Medium soft to medium hard, grey SHALE few thin coaly seams	NX				
		NX				
		NX				
		NX				
480.5	Medium soft to medium hard, dark-grey-green SHALE, some sandy seams	NX				100
478.4	Hard, light gray LIMESTONE few small pockets of green clay near top	NX				100
470.8	BOTTOM OF BORING					

TEST BORING
NO. 35A
STATION 34+33

Elev.	Description	TYPE	W/C	N	Q_u	% Rec.
532.8	River ALLUVIUM					
528.4	Hard cemented SAND and GRAVEL (conglomerate)	W				
519.4	Very soft, few soft seams. Dark gray weathered SHALE	6X				59
		6X				77
BOTT. FTG. PIER 14		6X				88
512.7	Soft to medium soft, dark gray SHALE	6X				100
503.7	Medium soft to very soft, dark gray SHALE	6X				98
501.5	Soft to medium, dark gray UNDERCLAY	6X				95
498.5	Medium soft, gray SHALE with thin coal seams	6X				100
497.5	Medium soft to medium hard gray SILTY CLAYSTONE					
495.8	BOTTOM OF BORING					

TEST BORING
NO. 17
STATION 34+41.25

Elev.	Description	TYPE	W/C	N	Q_u	% Rec.
536.2	Medium dense medium to coarse SANDY GRAVEL	SS		36		
529.2		SS		22		
526.2	Very dense multi-colored fine to coarse pebble conglomerate	SS	31.9	100		
522.4	Brown SANDY GRAVEL					
520.9	Gray-green SILTY CLAY with pebbles					
		NX				100
		NX				90
BOTT. FTG. PIER 14	Light gray thinly bedded fossiliferous SHALE	NX				24
		NX				65
		NX				93
		NX				80
		NX				40
		NX				112
500.9		NX				95
	BOTTOM OF BORING					

TEST BORING
NO. 18
STATION 36+43.50

Elev.	Description	TYPE	W/C	N	Q_u	% Rec.
534.8	Loose to very dense brown fine SAND	SS		5		
531.8		SS		66		
	Very dense brown medium to coarse GRAVELLY SAND	SS		100		
526.8		SS		100		
	Very dense brown SANDY GRAVEL	SS		100		
520.8		SS	4.5	100		
518.4	Very dense green SILTY SAND	SS	4.5	86		
514.8	Light gray fossiliferous SHALE	NX				100
BOTT. FTG. PIER 15		NX				95
	Dark gray thinly bedded SHALE	NX				100
		NX				90
		NX				95
503.3		NX				120
	BOTTOM OF BORING					

NOTE:
FOR BORING LOG NOTES SEE TEST BORING SHEET NO. 11

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY —
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APPROVED W. G. HORN

TEST BORINGS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	14
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

TEST BORING
NO. 19
STATION 38+43.50

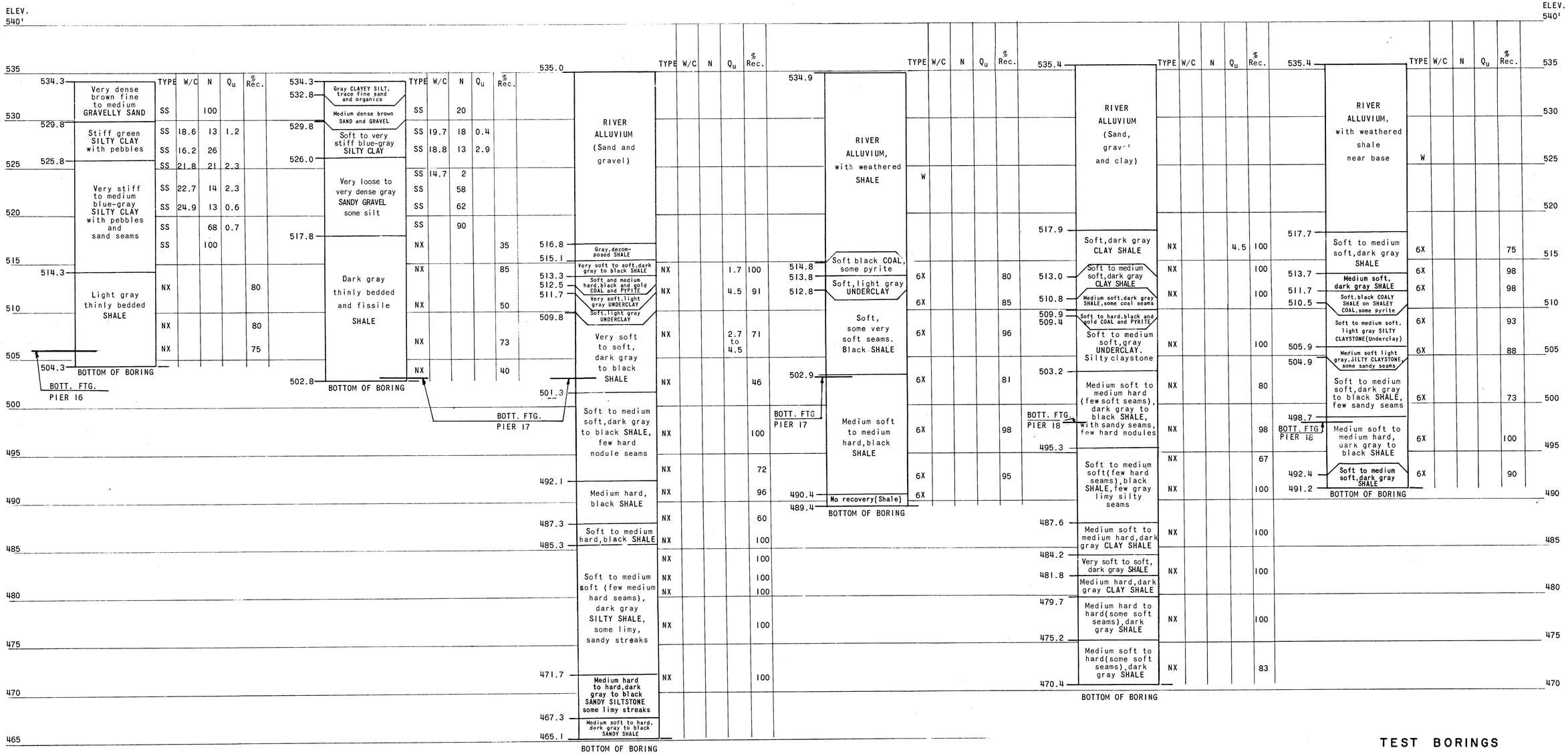
TEST BORING
NO. 20
STATION 40+44.25

TEST BORING
NO. 36
STATION 40+47.00

TEST BORING
NO. 36A
STATION 40+47.00

TEST BORING
NO. 37
STATION 41+98.00

TEST BORING
NO. 37A
STATION 41+98.00



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NOTE:
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TEST BORINGS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	15
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

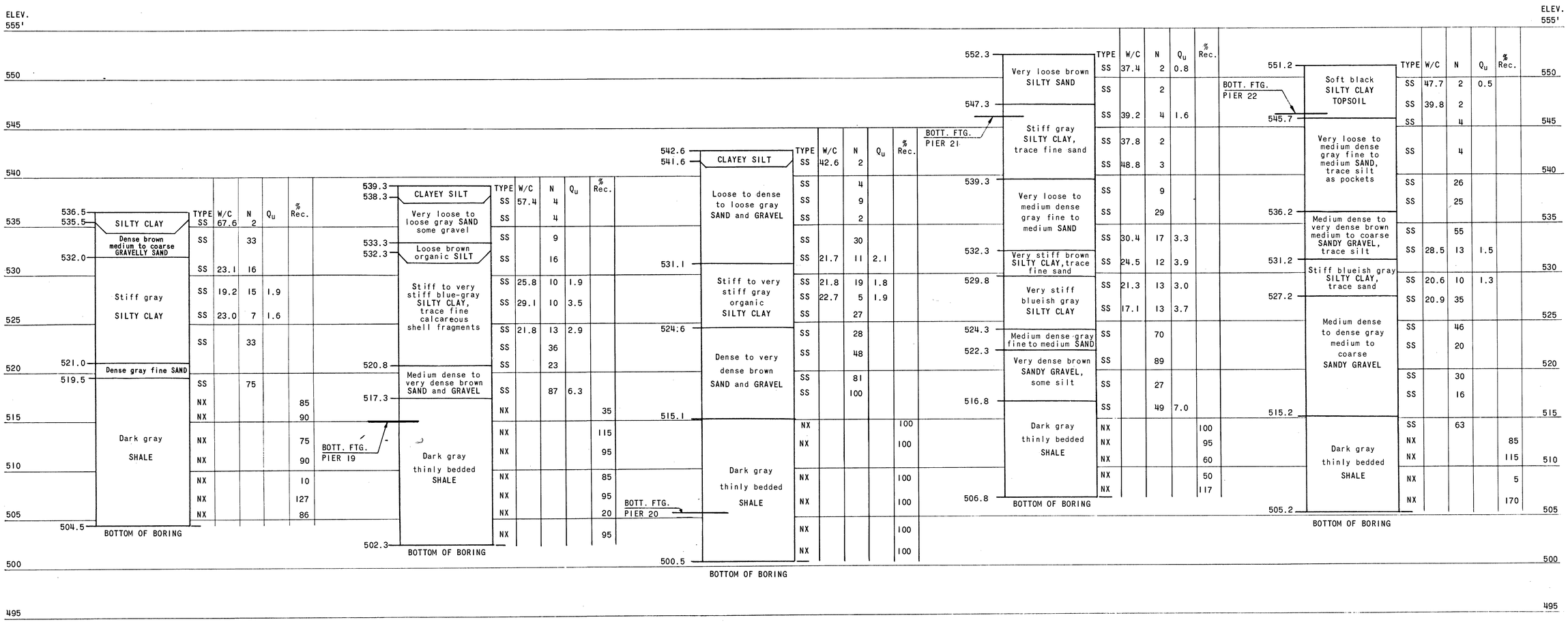
TEST BORING
NO. 21
STATION 41+95.00

TEST BORING
NO. 22
STATION 43+45.00

TEST BORING
NO. 23
STATION 44+95.75

TEST BORING
NO. 24
STATION 45+96.50

TEST BORING
NO. 25
STATION 46+96.50



	TYPE	W/C	N	Q_u	% Rec.
536.5 / 535.5 SILTY CLAY	SS	67.6	2		
Dense brown medium to coarse GRAVELLY SAND	SS		33		
532.0	SS	23.1	16		
Stiff gray SILTY CLAY	SS	19.2	15	1.9	
	SS	23.0	7	1.6	
	SS		33		
521.0 Dense gray fine SAND					
519.5	SS		75		
	NX				85
	NX				90
Dark gray SHALE	NX				75
	NX				90
	NX				10
	NX				127
	NX				86
504.5 BOTTOM OF BORING					

	TYPE	W/C	N	Q_u	% Rec.
539.3 / 538.3 CLAYEY SILT	SS	57.4	4		
Very loose to loose gray SAND some gravel	SS		4		
533.3 / 532.3 Loose brown organic SILT	SS		9		
	SS		16		
Stiff to very stiff blue-gray SILTY CLAY, trace fine calcareous shell fragments	SS	25.8	10	1.9	
	SS	29.1	10	3.5	
	SS	21.8	13	2.9	
	SS		36		
	SS		23		
520.8 Medium dense to very dense brown SAND and GRAVEL	SS		87	6.3	
517.3	NX				35
BOTT. FTG. PIER 19 Dark gray thinly bedded SHALE	NX				115
	NX				95
	NX				85
	NX				95
	NX				20
	NX				95
502.3 BOTTOM OF BORING					

	TYPE	W/C	N	Q_u	% Rec.
542.6 / 541.6 CLAYEY SILT	SS	42.6	2		
Loose to dense to loose gray SAND and GRAVEL	SS		4		
	SS		9		
	SS		2		
531.1	SS		30		
Stiff to very stiff gray organic SILTY CLAY	SS	21.7	11	2.1	
	SS	21.8	19	1.8	
	SS	22.7	5	1.9	
	SS		27		
524.6	SS		28		
Dense to very dense brown SAND and GRAVEL	SS		48		
	SS		81		
	SS		100		
515.1	NX				100
Dark gray thinly bedded SHALE	NX				100
BOTT. FTG. PIER 20	NX				100
	NX				100
500.5 BOTTOM OF BORING	NX				100
	NX				100

	TYPE	W/C	N	Q_u	% Rec.
552.3 Very loose brown SILTY SAND	SS	37.4	2	0.8	
547.3	SS		2		
Stiff gray SILTY CLAY, trace fine sand	SS	39.2	4	1.6	
BOTT. FTG. PIER 21	SS	37.8	2		
	SS	48.8	3		
539.3	SS		4		
Very loose to medium dense gray fine to medium SAND	SS		9		
	SS		29		
	SS	30.4	17	3.3	
532.3 Very stiff brown SILTY CLAY, trace fine sand	SS	24.5	12	3.9	
529.8	SS	21.3	13	3.0	
Very stiff blueish gray SILTY CLAY	SS	17.1	13	3.7	
524.3	SS		70		
Medium dense gray fine to medium SAND					
522.3	SS		89		
Very dense brown SANDY GRAVEL, some silt	SS		27		
	SS		49	7.0	
516.8	NX				100
Dark gray thinly bedded SHALE	NX				100
	NX				60
	NX				50
	NX				117
506.8 BOTTOM OF BORING					

	TYPE	W/C	N	Q_u	% Rec.
551.2 Soft black SILTY CLAY TOPSOIL	SS	47.7	2	0.5	
	SS	39.8	2		
545.7	SS		4		
Very loose to medium dense gray fine to medium SAND, trace silt as pockets	SS		4		
	SS		26		
	SS		25		
536.2 Medium dense to very dense brown medium to coarse SANDY GRAVEL, trace silt	SS		55		
	SS	28.5	13	1.5	
531.2 Stiff blueish gray SILTY CLAY, trace sand	SS	20.6	10	1.3	
	SS	20.9	35		
527.2	SS		46		
Medium dense to dense gray medium to coarse SANDY GRAVEL	SS		20		
	SS		30		
	SS		16		
515.2	SS		63		
Dark gray thinly bedded SHALE	NX				85
	NX				115
	NX				5
	NX				170
505.2 BOTTOM OF BORING					

NOTE:
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DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY —
DRAWN BY H. DE PERCZEL
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TEST BORINGS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	16
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

TEST BORING NO. 26
STATION 47+96.50

ELEV.		TYPE	W/C	N	Q_u	% Rec.
555'						
551.3	Soft black SILTY CLAY, trace organics	SS	42.6	2	0.5	
BOTT. FTG. PIER 23						
546.3	Very loose black SILTY SAND, trace clay	SS	45.0	3		
545						
544.3	Very loose to loose brown medium SAND	SS	35.7	3		
		SS		11		
540 540.3	Loose to very dense brown medium to coarse GRAVELLY SAND	SS		24		
		SS		14		
535		SS		52		
531.3		SS		13		
530	Stiff blue-gray SILTY CLAY	SS	22.8	10	1.0	
		SS	21.2	13	1.0	
525						
523.3		SS	31.3	32		
	Very dense to medium dense brown medium to coarse SANDY GRAVEL	SS		61		
520						
		SS		83		
515		SS		23		
514.8		SS		100		
	Light gray thinly bedded SHALE	NX			0	
510		NX			70	
		NX			260	
		NX			100	
505		NX			80	
504.8	BOTTOM OF BORING					
500						

TEST BORING NO. 27
STATION 48+97.25

ELEV.		TYPE	W/C	N	Q_u	% Rec.
551.4	Soft black SILTY CLAY, organic	SS			4	
546.5		SS	33.0	0.4	4	
BOTT. FTG. PIER 24	Very soft brown SILTY CLAY, trace to little fine sand					
541.4		SS	29.5	0.1	3	
		SS	26.3		26	
	Medium dense brown to gray medium to coarse GRAVELLY SAND	SS			16	
		SS			17	
535.0		SS			100	
531.4		SS			12	
	Blue-gray SILTY CLAY	SS	37.4		14	
526.4		SS	25.7		60	
	Very dense to medium dense brown to gray medium to coarse SANDY GRAVEL, trace silt and clay in pockets	SS			35	
		SS			75	
		SS			50	
		SS			16	
		SS			62	
513.6		NX				30
	Dark gray to black thinly bedded SHALE	NX				115
		NX				70
		NX				0
		NX				78
503.6	BOTTOM OF BORING					

TEST BORING NO. 28
STATION 49+97.25

ELEV.		TYPE	W/C	N	Q_u	% Rec.
555.0	Stiff black TOPSOIL					
551.0		SS	31.6	5		
BOTT. FTG. PIER 25	Stiff to very soft brown SILTY CLAY, trace sand	SS	26.7	6	1.7	
		SS	25.5	5	1.8	
543.0		SS	24.6	3	0.2	
	Medium dense to dense brown medium to coarse GRAVELLY SAND	SS		14		
		SS		11		
		SS		18		
535.0		SS		50		
	Stiff gray SILTY CLAY	SS		8	1.9	
		SS	24.4	8	0.8	
527.0		SS	23.7	11	1.0	
	Very stiff blueish-gray SILTY CLAY	SS	25.1	12	2.7	
523.0		SS	38.5	11	3.7	
	Very stiff brown SILTY CLAY, trace of organic material	SS	33.2	78	2.3	
519.5		SS		51		
	Dense brown medium to coarse SANDY GRAVEL	SS	15.7	32		
514.3		NX				80
	Dark gray thinly bedded SHALE	NX				120
		NX				80
		NX				30
504.3	BOTTOM OF BORING					

TEST BORING NO. 29
STATION 50+97.25

ELEV.		TYPE	W/C	N	Q_u	% Rec.
552.2	Stiff black TOPSOIL					
549.2		SS	20.8	4		
BOTT. FTG. PIER 26	Medium brown SILTY CLAY	SS	25.9	7	0.6	
544.2		SS	31.2	6	0.6	
	Loose to medium dense brown fine to coarse SANDY GRAVEL	SS		6		
		SS		9		
		SS		26		
532.2		SS		17		
	Very stiff to medium blue-gray SILTY CLAY	SS	32.0	17	0.6	
		SS	33.3	21	2.3	
		SS	23.3	9	1.9	
		SS	35.6	10	1.2	
		SS	31.4	14	2.3	
519.7	Medium dense to dense brown fine to coarse GRAVELLY SAND, little silt and clay	SS	32.2	42	0.5	
515.2		SS		28		
513.7	Dark gray to black WEATHERED SHALE	SS		36		
	Dark gray very fissile SHALE	NX				95
		NX				25
		NX				170
		NX				104
505.7	BOTTOM OF BORING					

TEST BORING NO. 30
STATION 51+97.25

ELEV.		TYPE	W/C	N	Q_u	% Rec.
551.7	Medium black TOPSOIL					
547.7		SS	22.5	4	0.7	
BOTT. FTG. PIER 27	Stiff brown SILTY CLAY	SS	25.1	9	1.6	
543.7		SS	13.9	9		
	Medium dense to very dense brown fine to coarse GRAVELLY SAND	SS		13		
		SS		14		
		SS		100		
534.2		SS	31.6	11		
	Medium dense brown CLAYEY SILT	SS	35.0	16		
529.7		SS	26.2	14	1.8	
	Stiff to very stiff gray SILTY CLAY, few fine calcareous shell remnants	SS	25.0	11	2.7	
523.7		SS	23.9	18		
	Medium dense gray fine to medium SAND	SS		11		
519.7		SS		53		
	Dense to very dense brown fine to coarse SANDY GRAVEL	SS		31		
		SS		90		
513.2		NX				120
	Dark gray thinly bedded SHALE	NX				100
		NX				100
		NX				300
		NX				100
503.7	BOTTOM OF BORING					

TEST BORING NO. 31
STATION 52+98.00

ELEV. 575'

BOTT. FTG. EAST ABUT.

ELEV. 555'

ELEV.		TYPE	W/C	N	Q_u	% Rec.
551.2	Medium black TOPSOIL					
547.7		SS	32.1	5	0.7	
	Stiff brown SILTY CLAY	SS	27.2	11	1.8	
544.7		SS		7		
	Loose to dense brown fine to coarse GRAVELLY SAND	SS		10		
		SS		13		
		SS		34		
534.2		SS	25.7	16	2.7	
	Stiff to soft brown CLAYEY SILT, trace fine sand	SS	27.9	11	0.4	
530.2		SS	26.3	13	1.2	
	Stiff blue-gray SILTY CLAY trace fine calcareous shell remnants	SS	21.4	12	1.6	
		SS	26.7	13	1.2	
521.7		SS		31		
	Dense to very dense brown fine to coarse SANDY GRAVEL	SS		78		
		SS		72	4.5	
514.2		NX				85
	Dark gray thinly bedded SHALE	NX				65
		NX				140
		NX				100
504.2	BOTTOM OF BORING					

NOTE:
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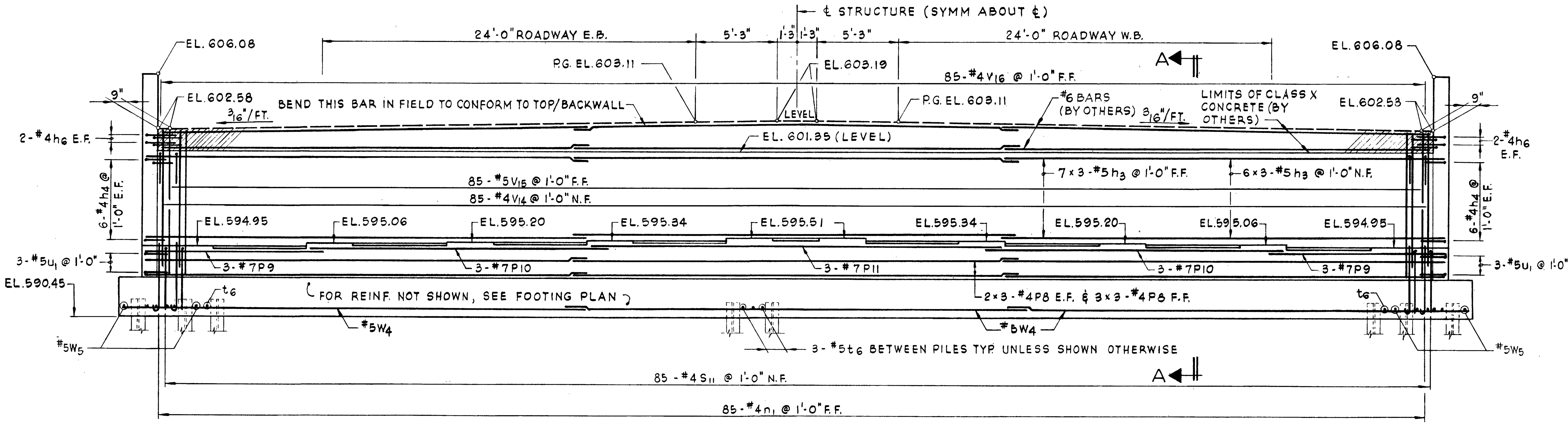
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY —
DRAWN BY H. DE PERCZEL
CHECKED G. C. WAY
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

TEST BORINGS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	17
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



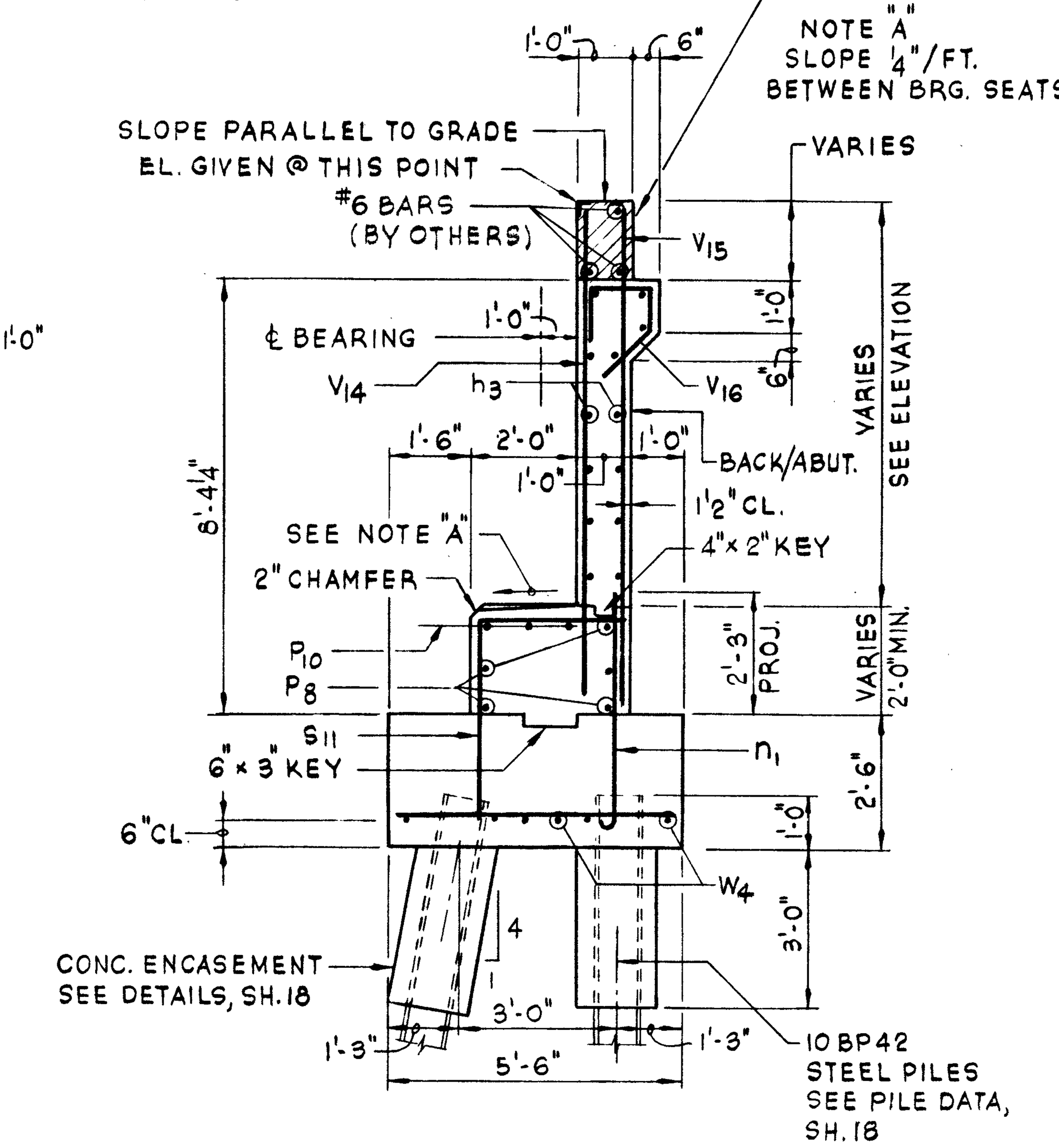
ABBREVIATIONS

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE

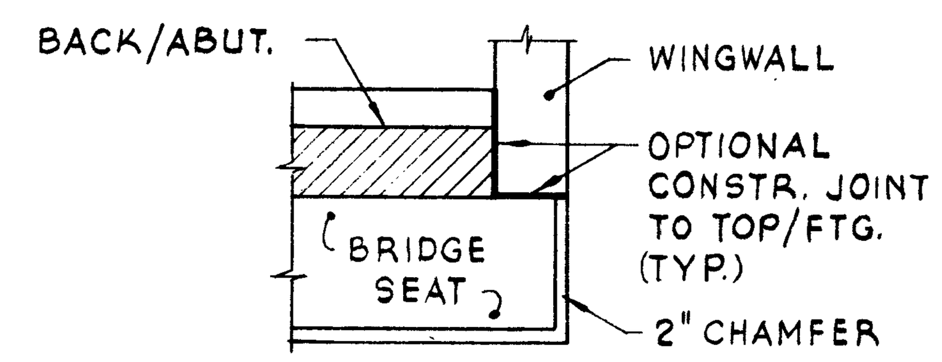
ELEVATION
SCALE: 1/4" = 1'-0"

KEY TO BAR INDICATION

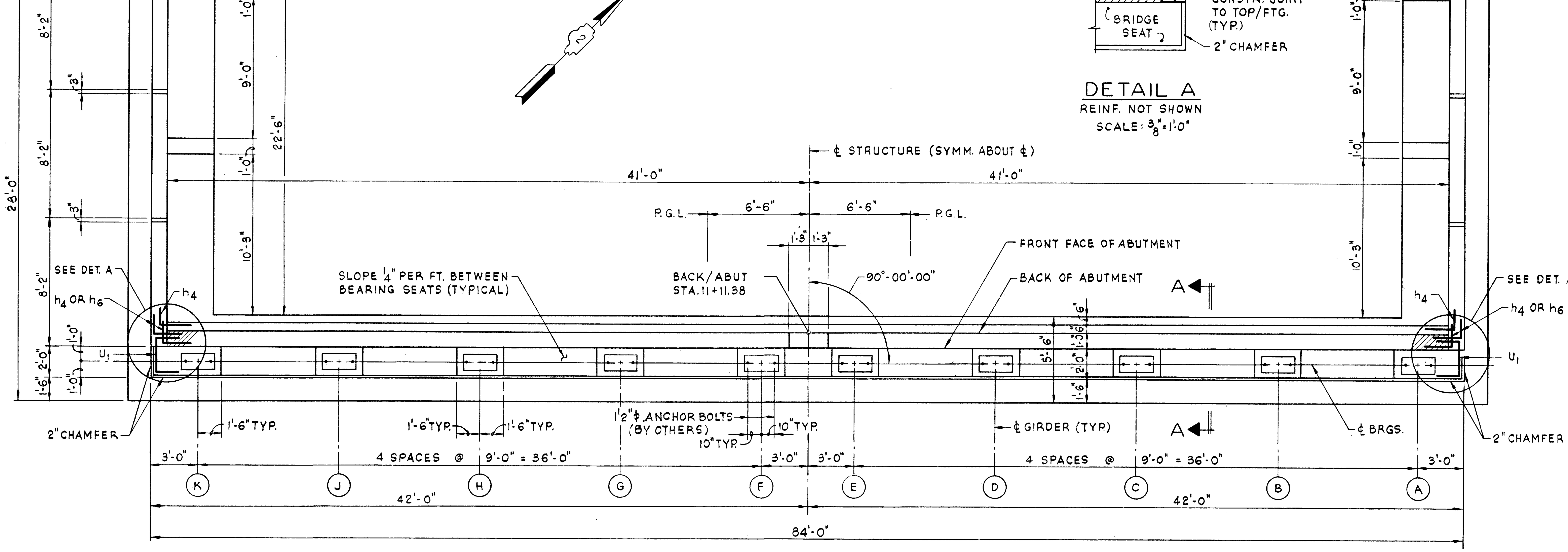
4×2-#5 INDICATES 4 LINES OF #5 BARS WITH 2 LENGTHS PER LINE.



SECTION A-A
SCALE: 3/8" = 1'-0"



DETAIL A
REINF. NOT SHOWN
SCALE: 3/8" = 1'-0"



PLAN
SCALE: 1/4" = 1'-0"

NOTES:

SPACE REINFORCEMENT IN CAP TO MISS ANCHOR BOLTS, WHICH SHALL BE FURNISHED AND SET BY OTHERS.
ALL EDGES TO HAVE STANDARD 3/4" CHAMFER EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH ABUTMENT SEAT.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP 24 DIA. UNLESS OTHERWISE NOTED.
WORK THIS SHEET WITH SH. 18

BILL OF MATERIAL

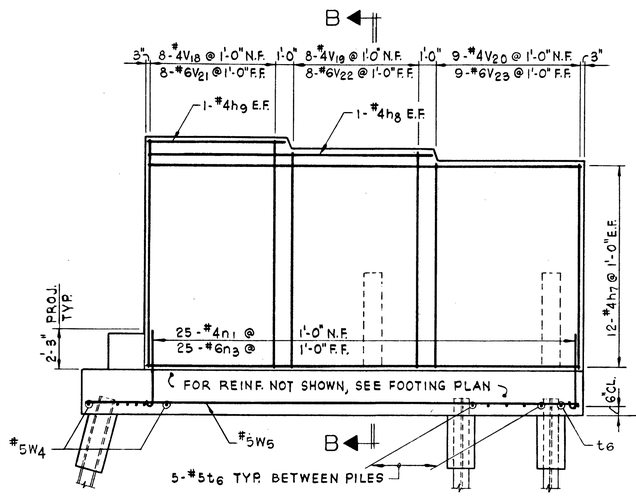
ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU. YD.	192
CLASS X CONCRETE	CU. YD.	133.8
CLASS X CONCRETE ENCASEMENT	CU. YD	12.0
REINFORCEMENT BARS	POUND	9000
FURNISH STEEL PILES (10 BP 42)	LIN. FT.	2820
TEST PILE STEEL (10 BP 42)	EACH	1
DRIVING STEEL PILES	LIN. FT.	2820
NAME PLATE	EACH	1

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.Y. HUANG, W.Y. HUO
DRAWN BY J.N. LESLIE
CHECKED W.Y. Huo
IN CHARGE J.Y. HUANG
APPROVED W.G. HORN

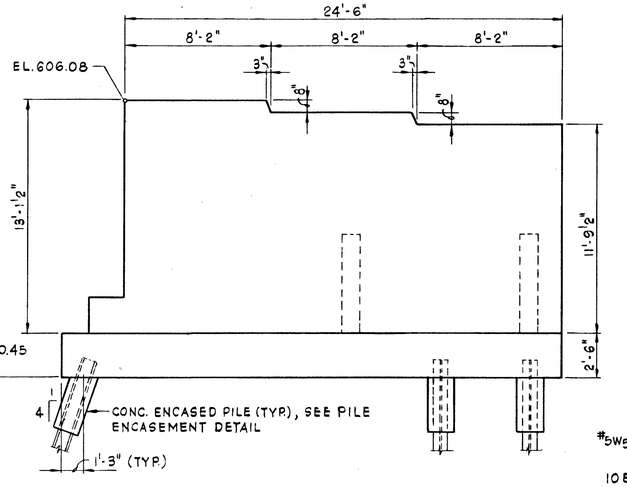
WEST ABUTMENT PLAN & ELEVATION

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	18
FED. ROAD DIST. NO.	FED. AID PROJECT I-280			



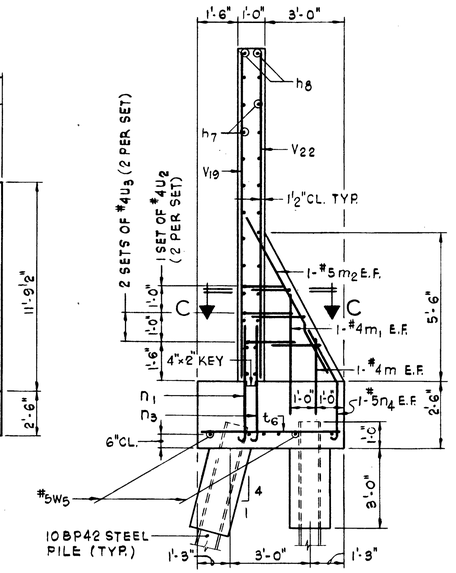
REINFORCEMENT



DIMENSIONS

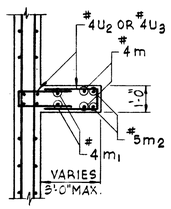
WINGWALL DETAILS

SCALE: 1/4"=1'-0"



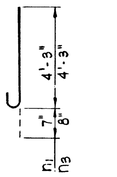
SECTION B-B

SCALE: 3/8"=1'-0"



SECTION C-C

SCALE: 3/8"=1'-0"



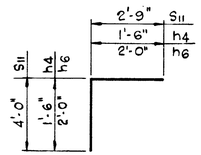
BARS n1 & n3

BAR LIST

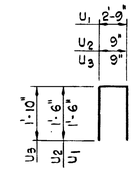
ABUTMENT & WINGWALLS

BAR	NO.	SIZE	LENGTH	SHAPE
h3	39	5	28'-6"	—
h4	24	4	3'-0"	⌐
h6	8	4	4'-0"	⌐
h7	48	4	24'-3"	—
h8	4	4	15'-10"	—
h9	4	4	7'-8"	—
m	8	4	2'-10"	—
m1	8	4	4'-6"	—
m2	8	5	6'-6"	—
n1	135	4	4'-10"	⊂
n3	50	6	4'-11"	⊂
n4	8	5	4'-8"	⊂
P8	15	4	28'-6"	—
P9	6	7	12'-6"	—
P10	6	7	19'-10"	—
P11	3	7	26'-6"	—
s11	85	4	6'-9"	⌐
t6	135	5	5'-0"	—
U1	6	5	5'-9"	⊓
U2	8	4	3'-9"	⊓
U3	16	4	4'-5"	⊓
V14	85	4	8'-10"	—
V15	85	5	9'-2"	—
V16	85	4	4'-4"	⊓
V18	16	4	12'-9"	—
V19	16	4	12'-0"	—
V20	18	4	11'-6"	—
V21	16	6	12'-9"	—
V22	16	6	12'-0"	—
V23	18	6	11'-6"	—
W4	18	5	29'-8"	—
W5	12	5	27'-6"	—

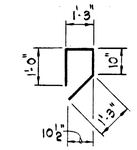
NOTE:
WORK THIS SHEET WITH SH. 17



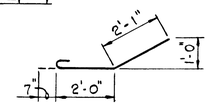
BARS h4, h6 & s11



BARS U1, U2 & U3



BAR V16



BAR n4

PILE ENCASEMENT DETAIL

(TYP. @ EACH ABUTMENT PILE)
SCALE: ½"= 1'-0"

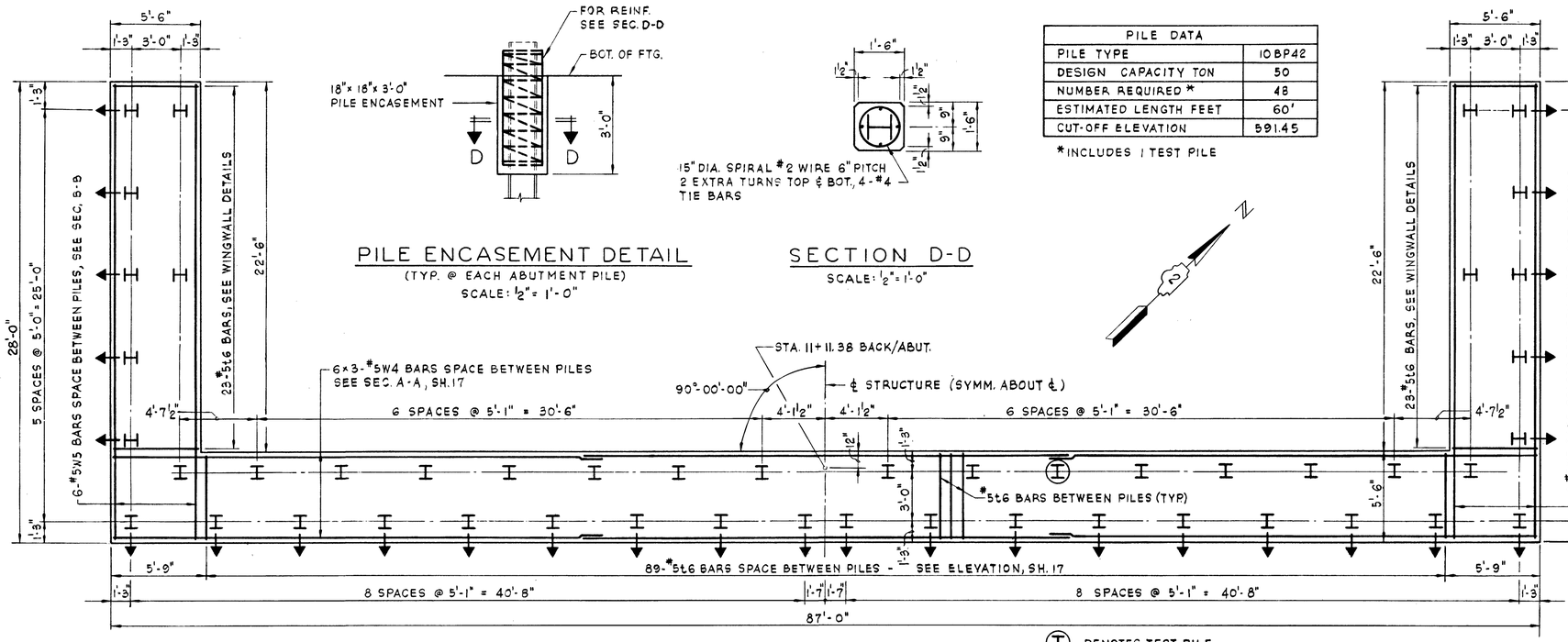
15" DIA. SPIRAL #2 WIRE 6" PITCH
2 EXTRA TURNS TOP & BOT., 4-#4 TIE BARS

PILE DATA	
PILE TYPE	10BP42
DESIGN CAPACITY TON	50
NUMBER REQUIRED *	48
ESTIMATED LENGTH FEET	60'
CUT-OFF ELEVATION	591.45

*INCLUDES 1 TEST PILE

SECTION D-D

SCALE: ½"= 1'-0"



FOOTING PLAN

SCALE: 1/4"=1'-0"

KEY TO BAR INDICATION

6x3-#5 INDICATES 6 LINES OF #5 BARS WITH 3 LENGTHS PER LINE

Ⓣ DENOTES TEST PILE

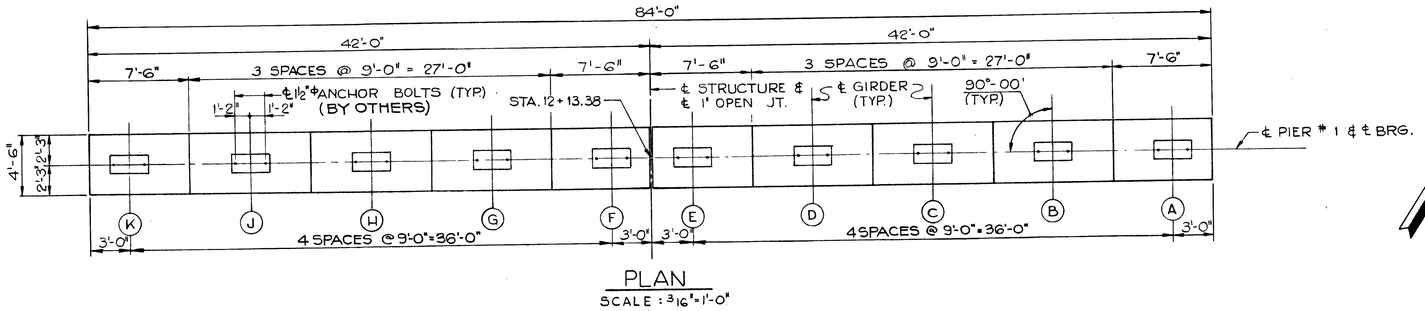
DENOTES BATTERED PILE

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.Y. HUANG, W.Y. HUO
DRAWN BY J.N. LESLIE
CHECKED W. Y. Huo
IN CHARGE J.Y. HUANG
APPROVED W.G. HORN

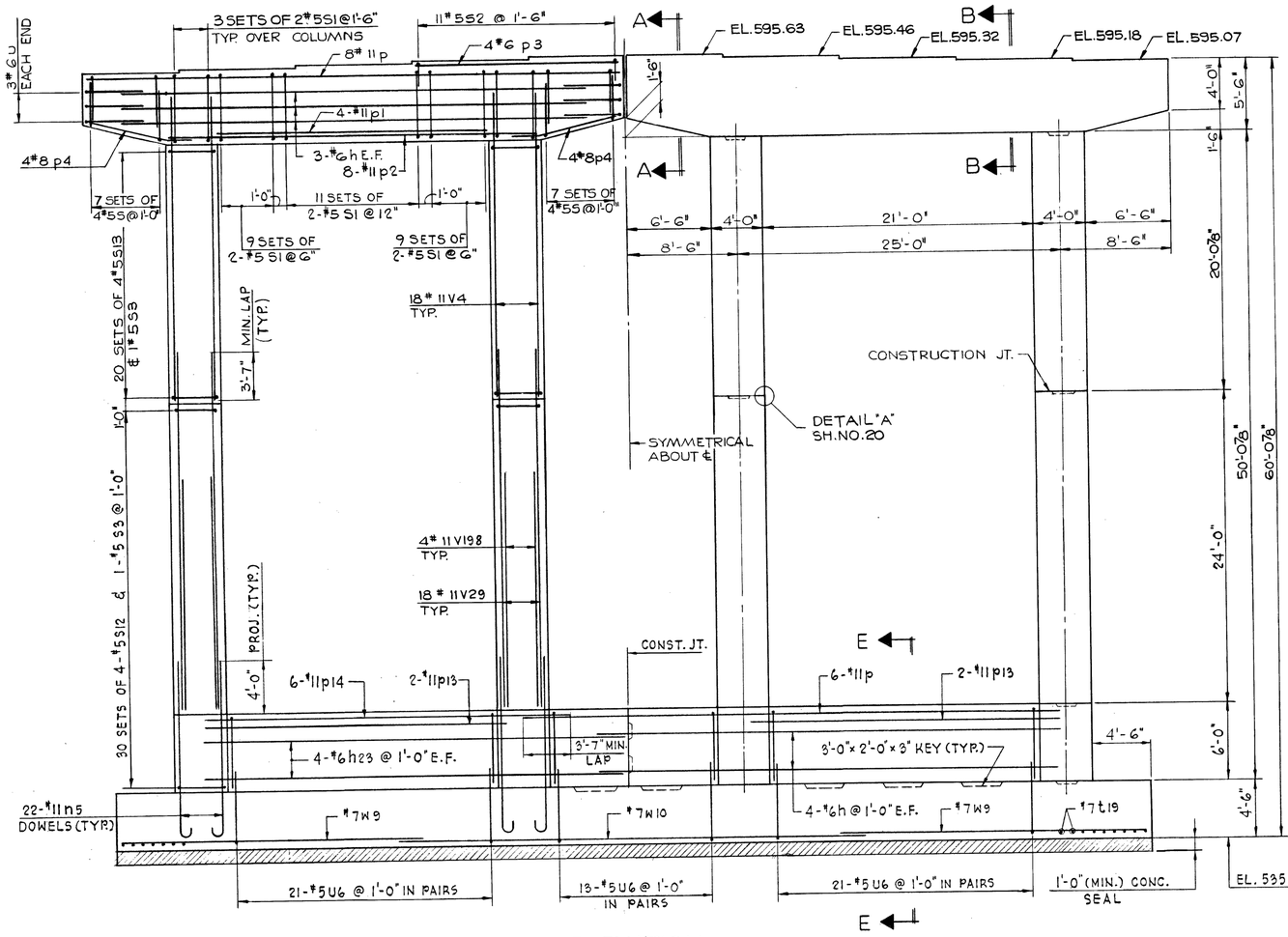
WEST ABUTMENT
FOOTING & WINGWALL DETAILS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

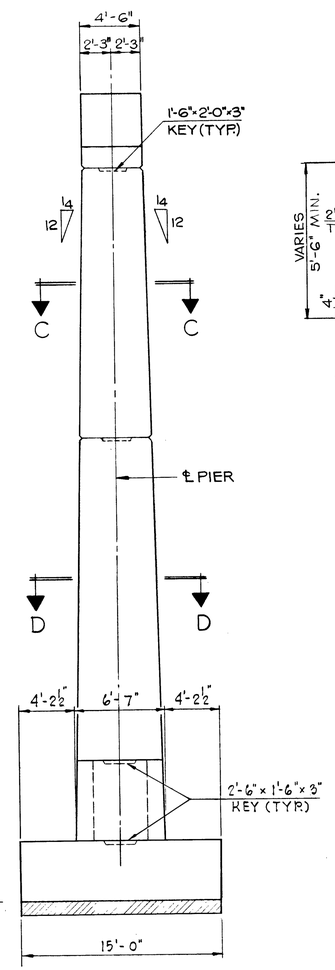
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	19
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



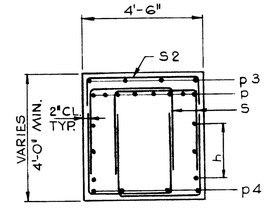
PLAN
SCALE : 3/16"=1'-0"



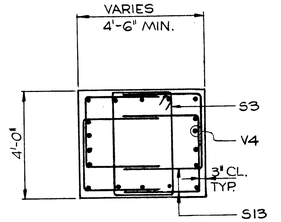
ELEVATION
SCALE : 3/16"=1'-0"



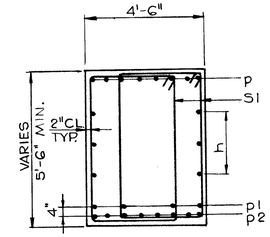
END ELEVATION
SCALE : 3/16"=1'-0"



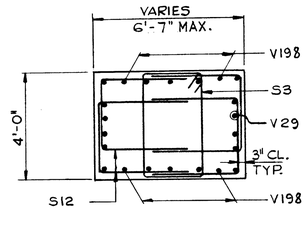
SECTION A-A
SCALE : 3/8"= 1'-0"



SECTION C-C
SCALE : 3/8"= 1'-0"



SECTION B-B
SCALE : 3/8"= 1'-0"



SECTION D-D
SCALE : 3/8"= 1'-0"

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU. YD.	284
CLASS B EXCAVATION FOR STRUCTURE	CU. YD.	503
ROCK EXCAV FOR STR.	CU. YD.	112
CLASS X CONCRETE	CU. YD.	491.2
REINFORCEMENT BARS	POUND	62070
CONCRETE SEAL	SQ. YD.	133.4

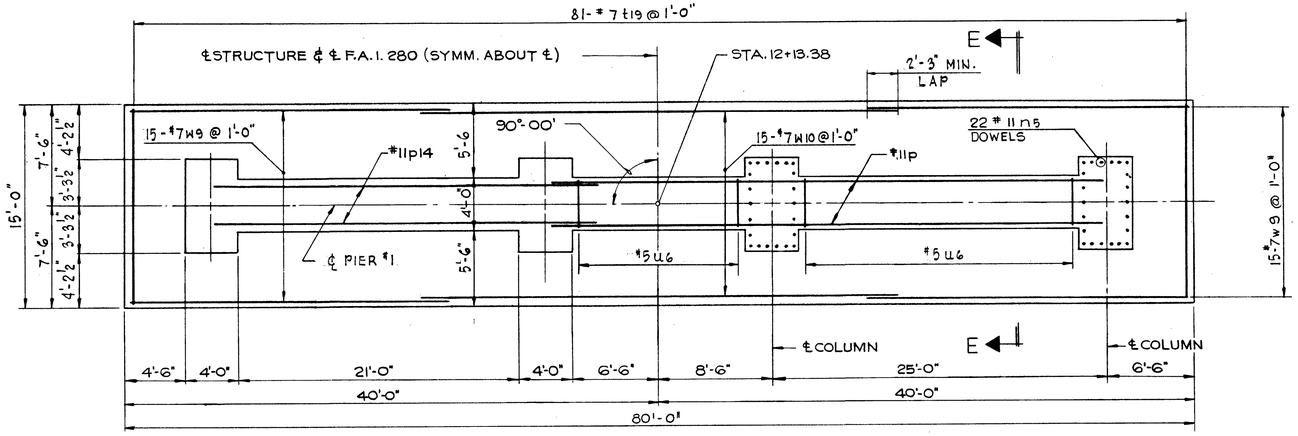
NOTES :
SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED & SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.
MAX. BEARING PRESSURE ON SHALE 6.06 KIPS/SQ.FT. FOR A.A.S.H.O. GROUP III LOADING AT 125%.
WORK THIS SHEET WITH SH. NO. 20.

PIER 1
PLAN & ELEVATIONS

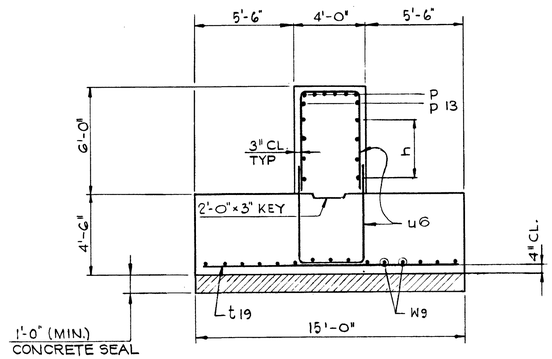
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY S. MUELLER
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

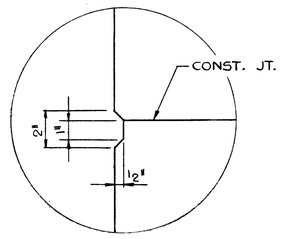
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	20
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



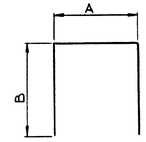
FOOTING PLAN
SCALE : 3/16" = 1'-0"



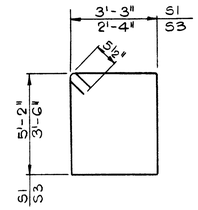
SECTION E-E
SCALE : 1/4" = 1'-0"

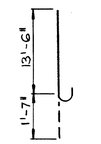


DETAIL A
SCALE : 1 1/4" = 1"

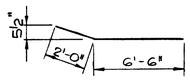


BAR	A	B
S	3'-3"	3'-3"
S2	4'-2"	1'-6"
S12	3'-0"	3'-10"
S13	3'-0"	3'-2"
U	4'-1"	4'-6"
U6	3'-6"	5'-9"





BAR n 5



BAR p4

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	20	6	36'-0"	—
h23	8	6	32'-6"	—
n5	88	11	15'-1"	⊂
p	22	11	41'-6"	—
p1	8	11	21'-0"	—
p2	16	11	29'-0"	—
p3	8	6	16'-0"	—
p4	16	8	8'-6"	⟋
p14	6	11	29'-6"	—
p13	4	11	24'-6"	—
S	112	5	9'-9"	□
S1	140	5	17'-9"	◪
S2	22	5	7'-2"	⌐
S3	200	5	12'-7"	◪
S12	480	5	10'-8"	⌐
S13	320	5	9'-4"	⌐
t19	81	7	14'-6"	—
U	12	6	13'-1"	⊔
U6	110	5	15'-0"	⊔
V4	72	11	24'-0"	—
V198	16	11	18'-0"	—
V29	72	11	28'-0"	—
W9	30	7	24'-0"	—
W10	15	7	36'-0"	—

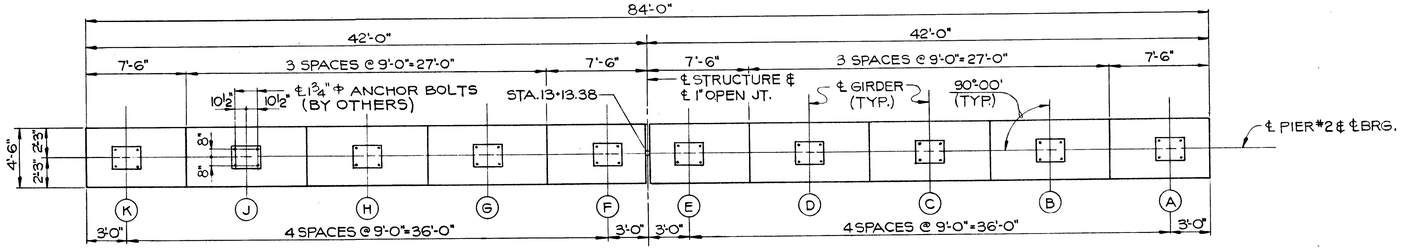
NOTE: WORK THIS SHEET WITH SHEET NO. 19

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY S. MUELLER
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W.G. HORN

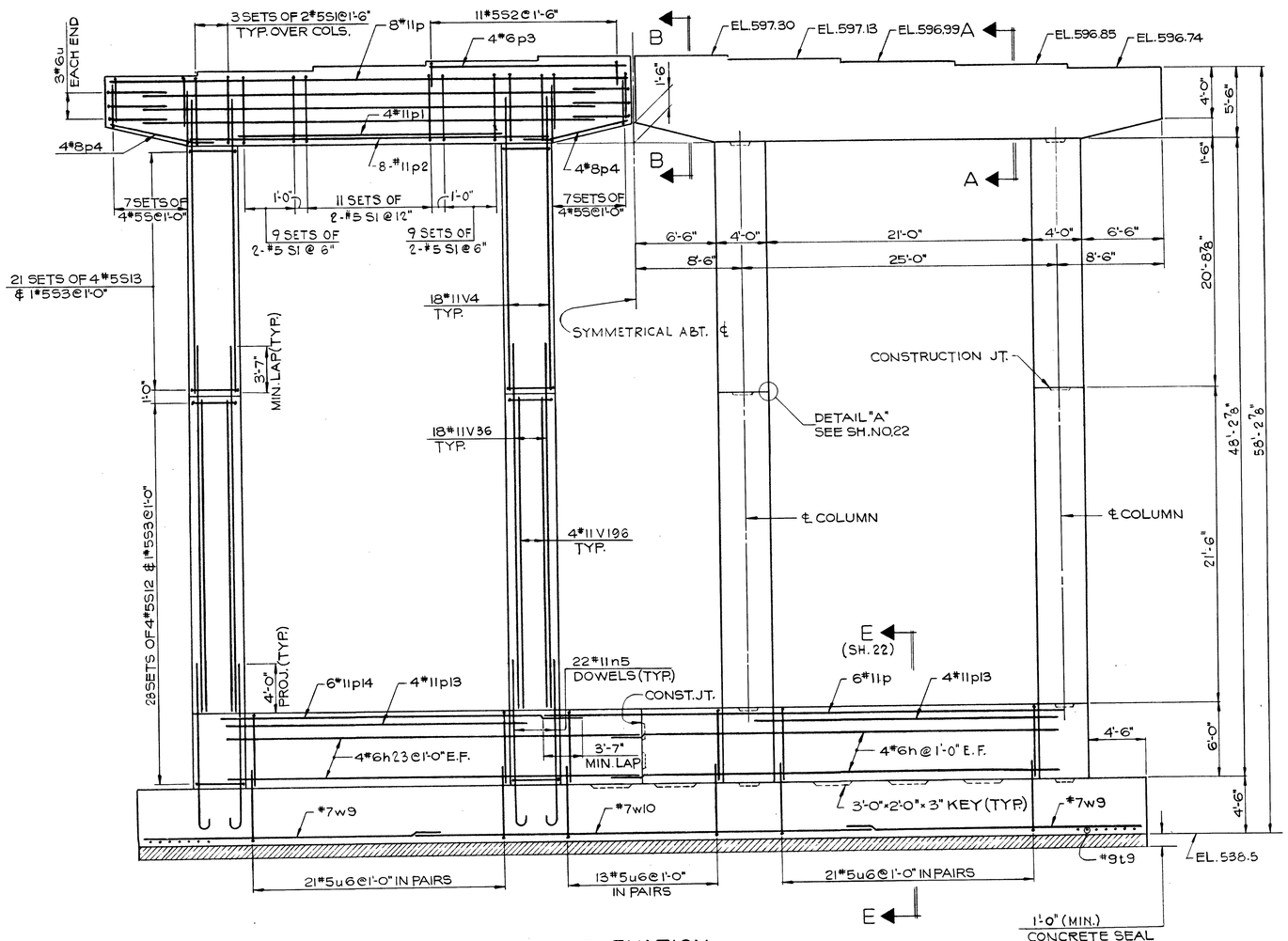
PIER 1
FOOTING

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

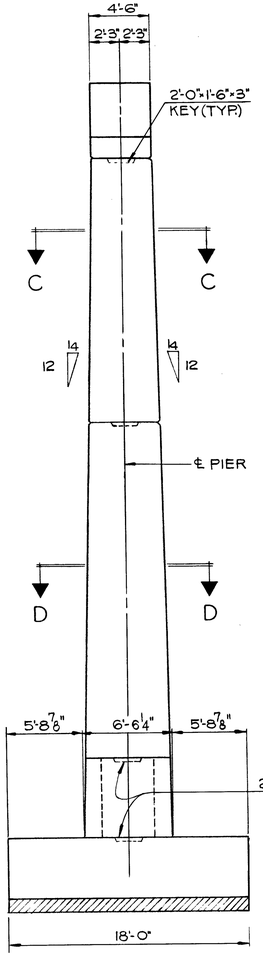
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	21
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



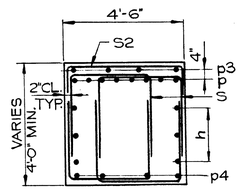
PLAN
SCALE: 3/16"=1'-0"



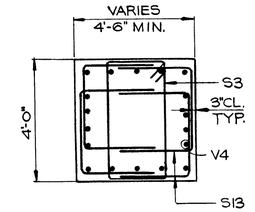
ELEVATION
SCALE: 3/16"=1'-0"



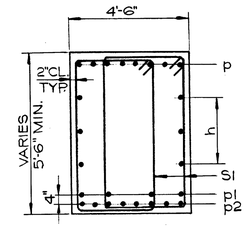
END ELEVATION
SCALE: 3/16"=1'-0"



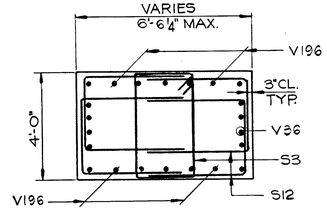
SECTION B-B
SCALE: 3/8"=1'-0"



SECTION C-C
SCALE: 3/8"=1'-0"



SECTION A-A
SCALE: 3/8"=1'-0"



SECTION D-D
SCALE: 3/8"=1'-0"

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU.YD.	369
CLASS B EXCAVATION FOR STRUCTURE	CU.YD.	314
ROCK EXCAV For Str.	CU.YD.	155
CLASS X CONCRETE	CU.YD.	524.0
REINFORCEMENT BARS	POUND	66,250
CONCRETE SEAL	SQ.YD.	160.0

NOTES:

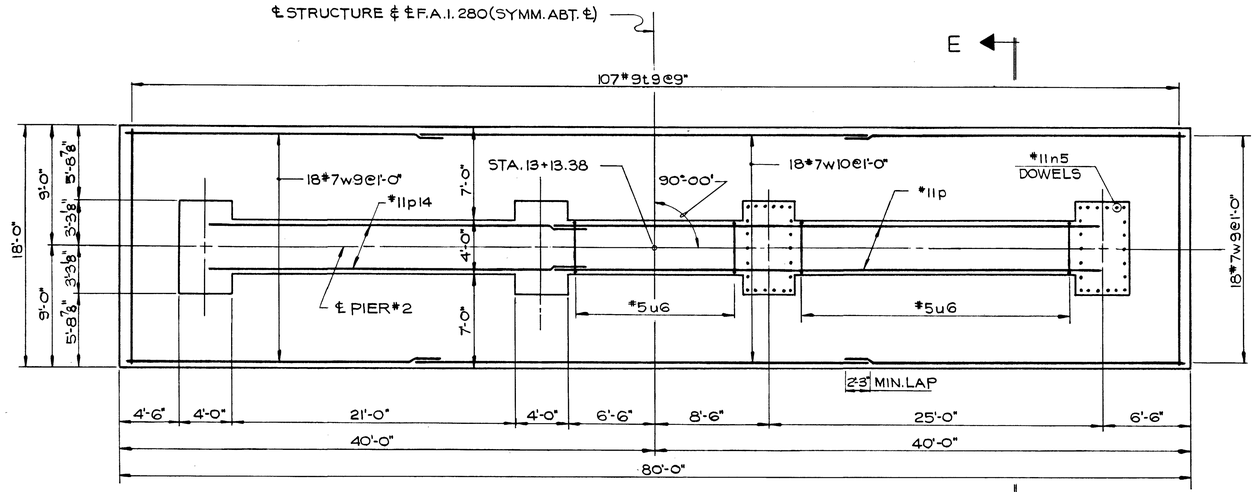
SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED & SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.
MAX. BEARING PRESSURE ON SHALE 5.8 KIPS/SQ.FT. FOR A.A.S.H.O. GROUP II LOADING @ 125%
WORK THIS SHEET WITH SHEET NO. 22.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED [illegible]
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

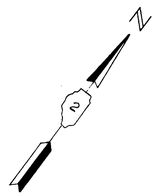
PIER 2
PLAN & ELEVATIONS

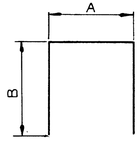
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	22
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

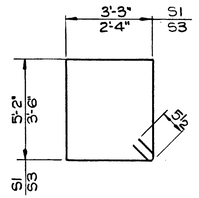


FOOTING PLAN
SCALE: 3/16" = 1'-0"



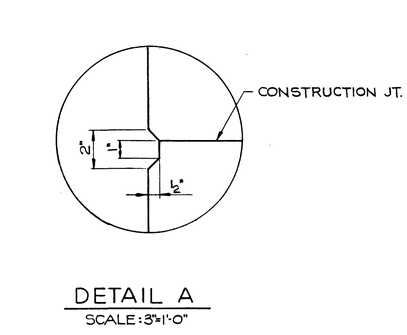


BAR	A	B
S	3'-3"	3'-3"
S2	4'-2"	1'-6"
S12	3'-0"	3'-10"
S13	3'-0"	3'-2"
u	4'-0"	4'-6"
u6	3'-6"	5'-9"



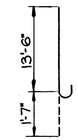
BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	20	6	36'-0"	
h23	8	6	32'-6"	
n5	88	11	15'-1"	
p	22	11	41'-6"	
p1	8	11	21'-0"	
p2	16	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p13	8	11	24'-6"	
p14	6	11	29'-6"	
S	112	5	9'-9"	
S1	140	5	17'-9"	
S2	22	5	7'-2"	
S3	196	5	12'-7"	
S12	448	5	10'-8"	
S13	336	5	9'-4"	
t9	107	9	17'-6"	
u	12	6	13'-1"	
u6	110	5	15'-0"	
V4	72	11	24'-0"	
V36	72	11	26'-0"	
V196	16	11	21'-3"	
w9	36	7	24'-0"	
w10	18	7	36'-0"	

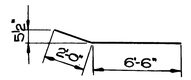


SECTION E-E
SCALE: 1/4" = 1'-0"

DETAIL A
SCALE: 3" = 1'-0"



BAR n5



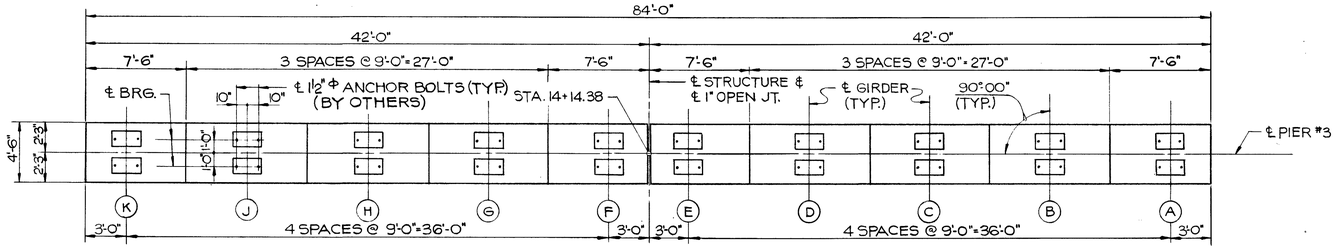
BAR p4

NOTE: WORK THIS SHEET WITH SHEET NO. 21.

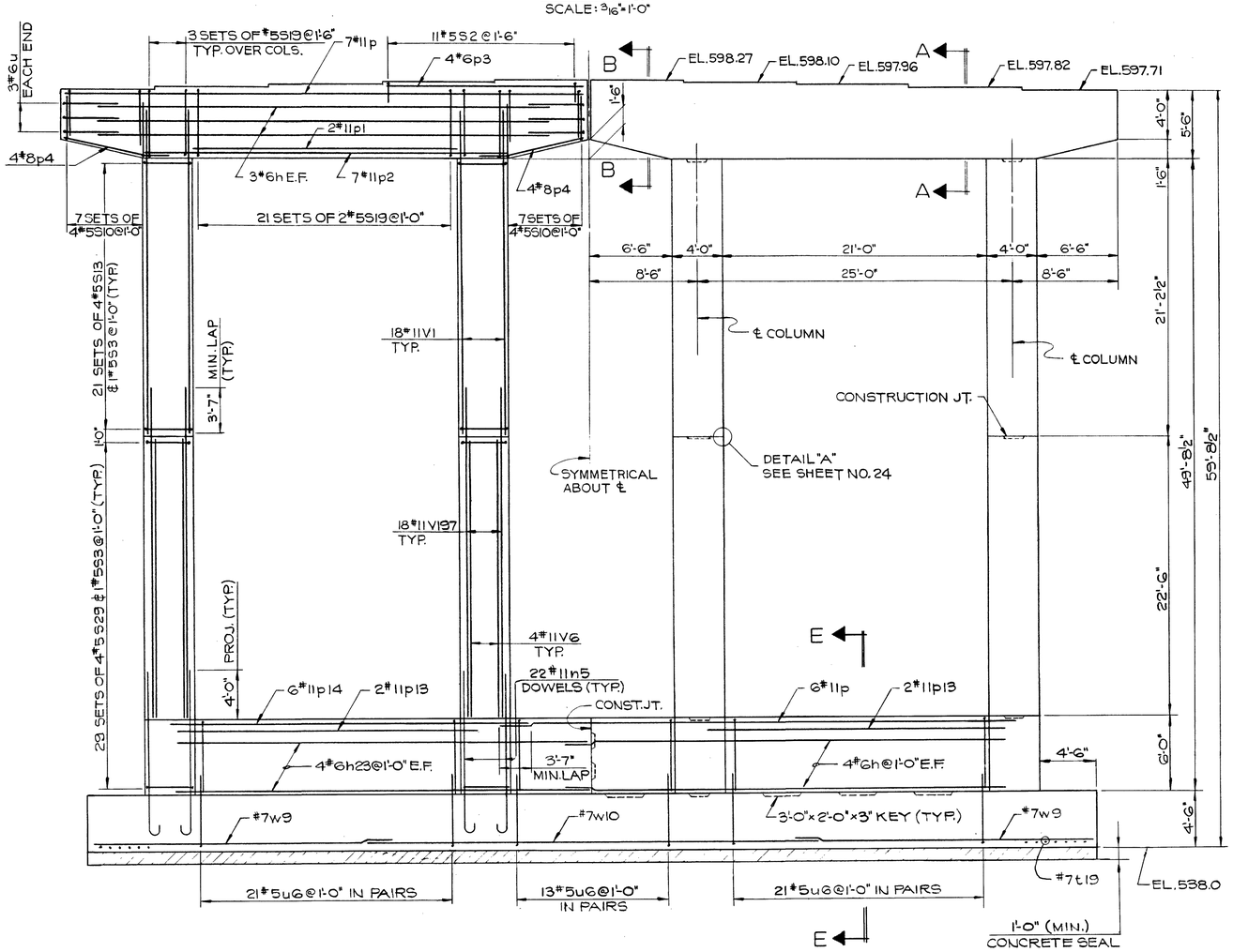
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

PIER 2
FOOTING
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1968

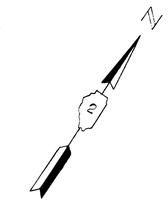
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	23
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

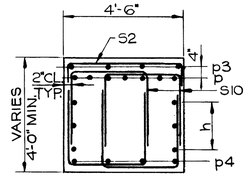


PLAN
SCALE: 3/16"=1'-0"

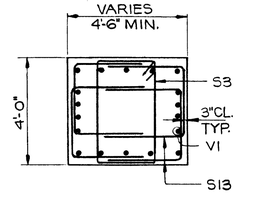


ELEVATION
SCALE: 3/16"=1'-0"

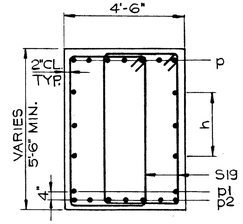




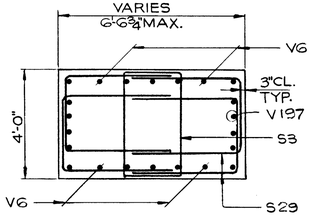
SECTION B-B
SCALE: 3/8"=1'-0"



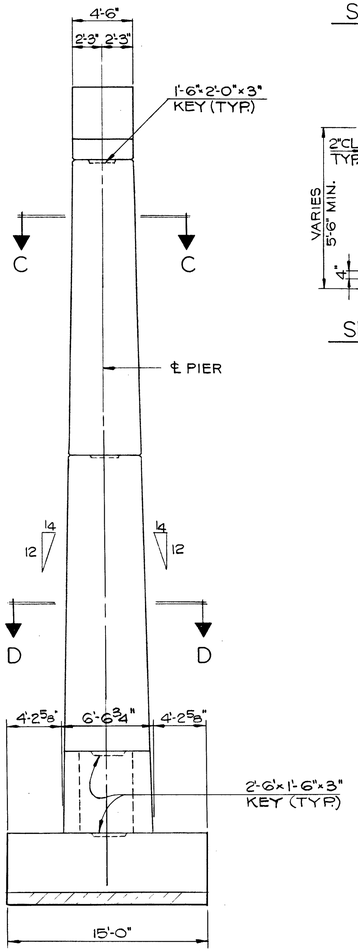
SECTION C-C
SCALE: 3/8"=1'-0"



SECTION A-A
SCALE: 3/8"=1'-0"



SECTION D-D
SCALE: 3/8"=1'-0"



END ELEVATION
SCALE: 3/16"=1'-0"

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU.YD.	301
CLASS B EXCAVATION FOR STRUCTURE	CU.YD.	307
ROCK EXCAV For Str.	CU.YD.	125
CLASS X CONCRETE	CU.YD.	489.8
REINFORCEMENT BARS	POUND	61360
CONCRETE SEAL	SQ.YD.	133.3

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED ℄ SET BY OTHERS.

ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.

POUR STEPS MONOLITHICALLY WITH CAP.

ALL BAR DIMENSIONS ARE OUT TO OUT.

MIN. BAR LAP-24 DIA. UNLESS OTHERWISE NOTED.

MAX. BEARING PRESSURE ON SHALE 5.03 KIPS/SQ.FT. FOR A.A.S.H.O. GROUP III LOADING AT 125%.

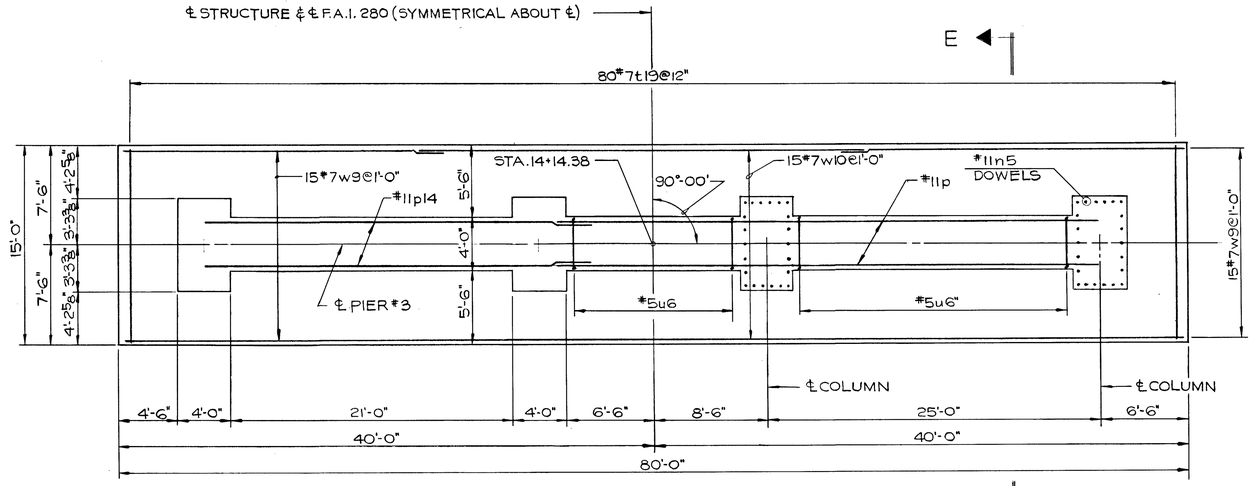
WORK THIS SHEET WITH SHEET NO. 24.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

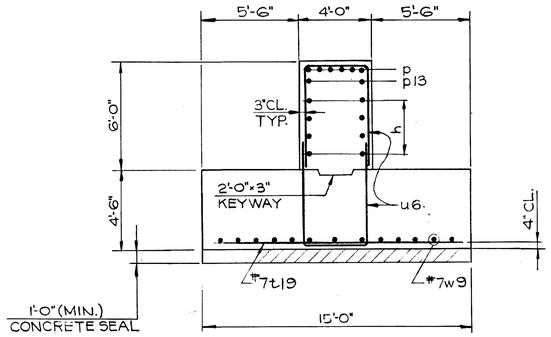
PIER 3
PLAN & ELEVATIONS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

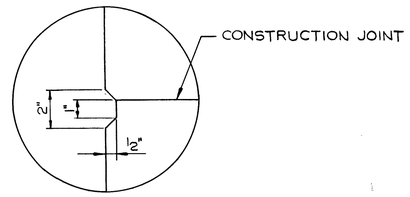
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	24
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



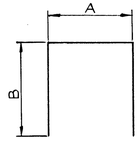
FOOTING PLAN
SCALE: 3/16"=1'-0"



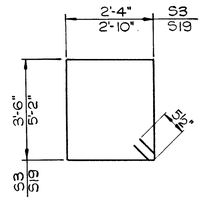
SECTION E-E
SCALE: 1/4"=1'-0"

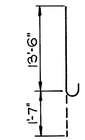


DETAIL A
SCALE: 3"=1'-0"

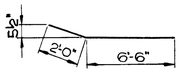


BAR	A	B
S2	4'-2"	1'-6"
S13	3'-0"	3'-2"
S10	2'-10"	3'-3"
S29	3'-0"	3'-9"
u	4'-1"	4'-6"
u6	3'-6"	5'-9"





BAR n5



BAR p4

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	20	6	36'-0"	
h23	8	6	32'-6"	
n5	88	11	15'-1"	
p	20	11	41'-6"	
p1	4	11	21'-0"	
p2	14	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p13	4	11	24'-6"	
p14	6	11	29'-6"	
S3	200	5	12'-7"	
S13	336	5	9'-4"	
S10	112	5	9'-4"	
S19	108	5	16'-11"	
S29	464	5	10'-6"	
S2	22	5	7'-2"	
t19	80	7	14'-6"	
u	12	6	13'-1"	
u6	110	5	15'-0"	
V1	72	11	25'-0"	
V197	72	11	26'-6"	
V6	16	11	22'-0"	
w9	30	7	24'-0"	
w10	15	7	36'-0"	

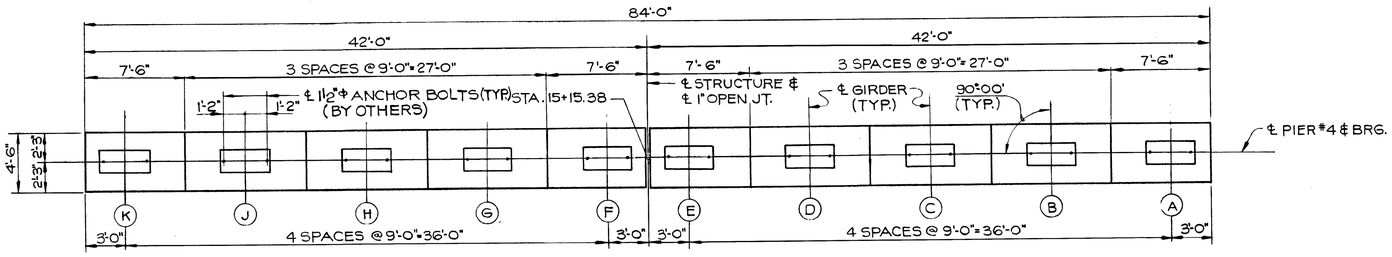
NOTE: WORK THIS SHEET WITH SHEET NO. 23.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

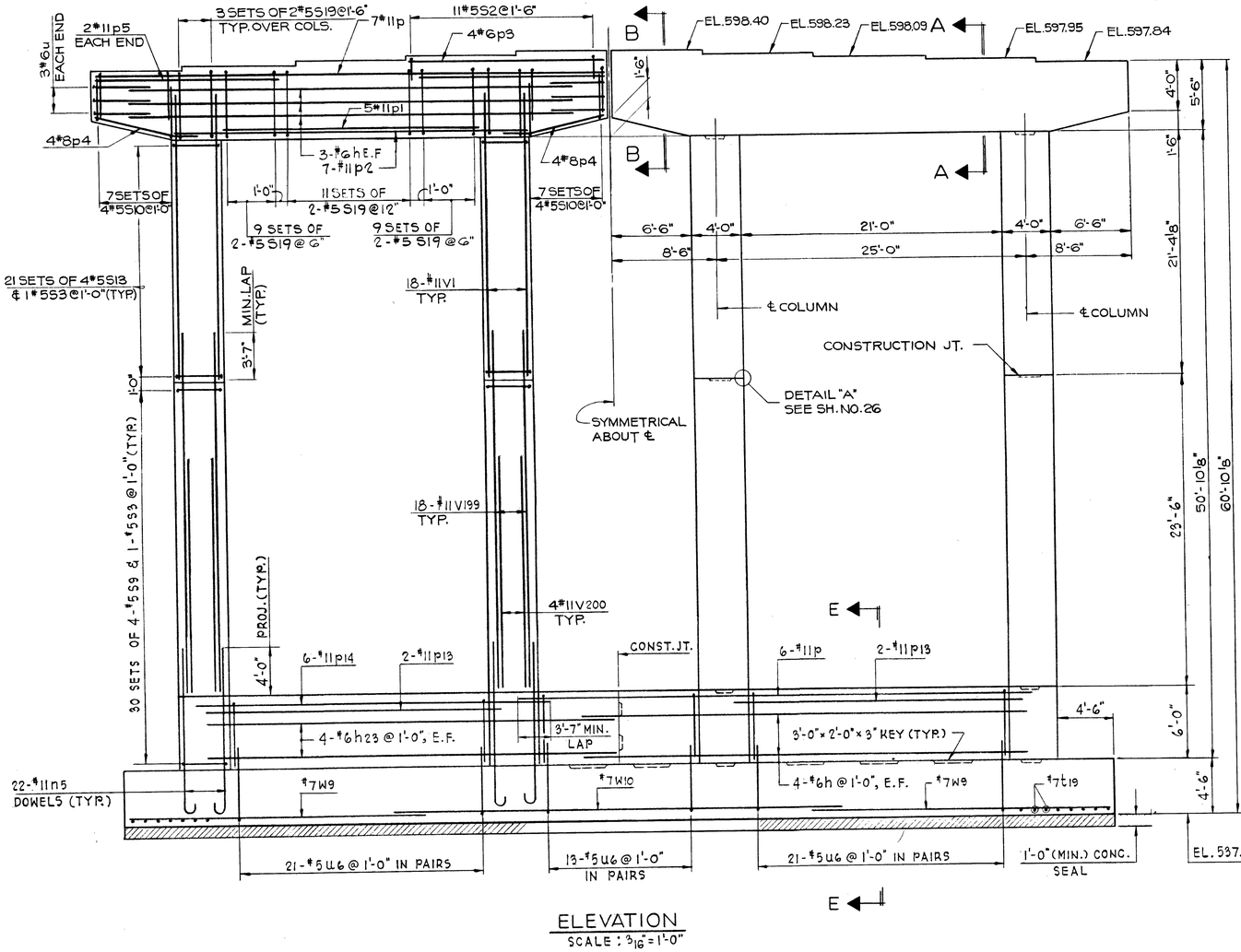
PIER 3
FOOTING

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

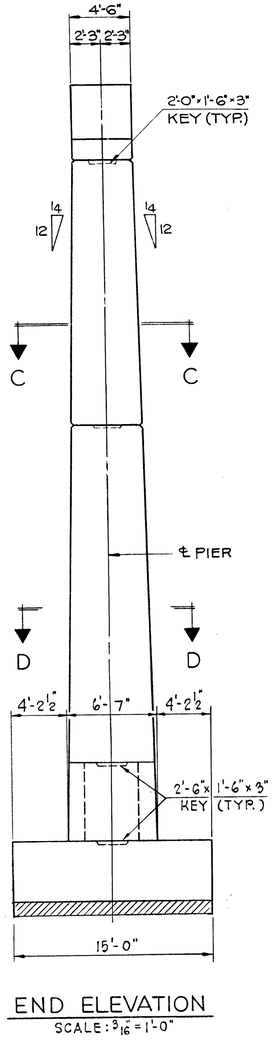
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	25
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



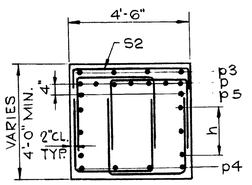
PLAN
SCALE: 3/16"=1'-0"



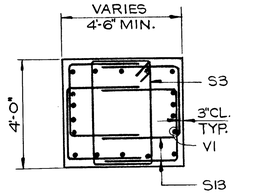
ELEVATION
SCALE: 3/16"=1'-0"



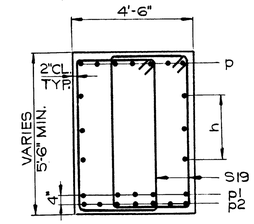
END ELEVATION
SCALE: 3/16"=1'-0"



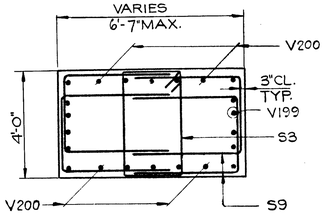
SECTION B-B
SCALE: 3/8"=1'-0"



SECTION C-C
SCALE: 3/8"=1'-0"



SECTION A-A
SCALE: 3/8"=1'-0"



SECTION D-D
SCALE: 3/8"=1'-0"

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU.YD.	272
CLASS B EXCAVATION FOR STRUCTURE	CU.YD.	350
ROCK EXCAV For Str.	CU.YD.	138
CLASS X CONCRETE	CU.YD.	494.3
REINFORCEMENT BARS	POUND	62,430
CONCRETE SEAL	SQ.YD.	133.3

NOTES:

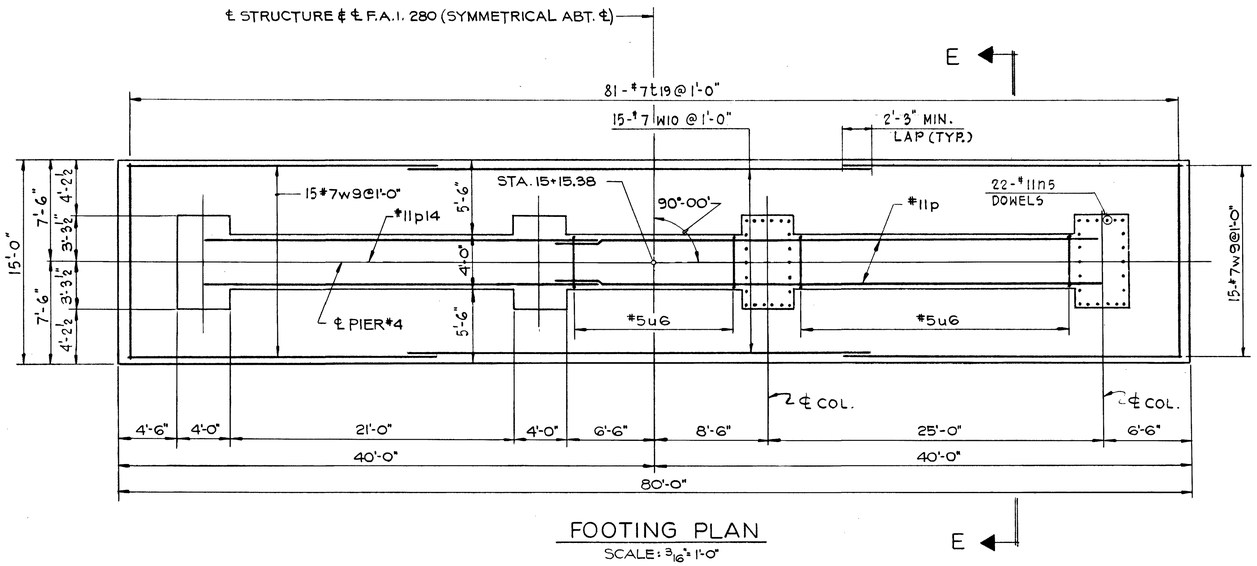
SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED & SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.
MAX. BEARING PRESSURE ON SHALE 5.69 KIPS/SQ.FT. FOR A.A.S.H.O. GROUP III LOADING AT 125%.
WORK THIS SHEET WITH SHEET NO. 26.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

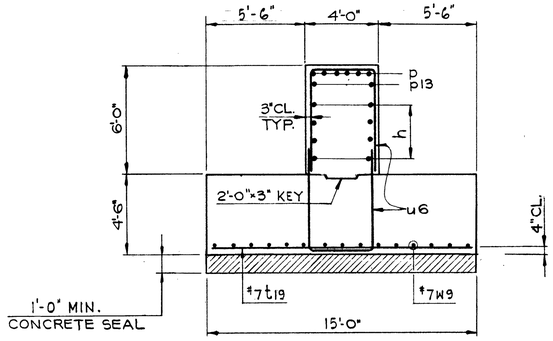
PIER 4
PLAN & ELEVATIONS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

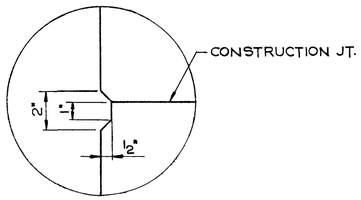
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	26
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



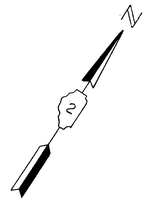
FOOTING PLAN
SCALE: 3/16" = 1'-0"

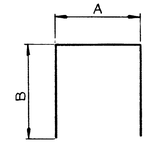


SECTION E-E
SCALE: 1/4" = 1'-0"

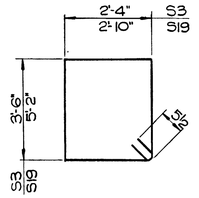


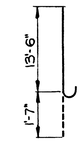
DETAIL A
SCALE: 3" = 1'-0"



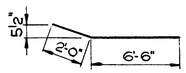


BAR	A	B
S2	4'-2"	1'-6"
S13	3'-0"	3'-2"
S10	2'-10"	3'-3"
S9	3'-0"	4'-0"
u	4'-1"	4'-6"
u6	3'-6"	5'-9"





BAR n5



BAR p4

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	20	6	36'-0"	
h23	8	6	32'-6"	
n5	88	11	15'-1"	
p	20	11	41'-6"	
p1	10	11	21'-0"	
p2	14	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p5	8	11	15'-0"	
p13	4	11	24'-6"	
p14	6	11	29'-6"	
S2	22	5	7'-2"	
S3	204	5	12'-7"	
S13	336	5	9'-4"	
S10	112	5	9'-4"	
S19	140	5	16'-11"	
S9	480	5	11'-0"	
t19	81	7	14'-6"	
u	12	6	13'-1"	
u6	110	5	15'-0"	
V199	72	11	27'-6"	
V1	72	11	25'-0"	
V200	16	11	16'-0"	
w9	30	7	24'-0"	
w10	15	7	36'-0"	

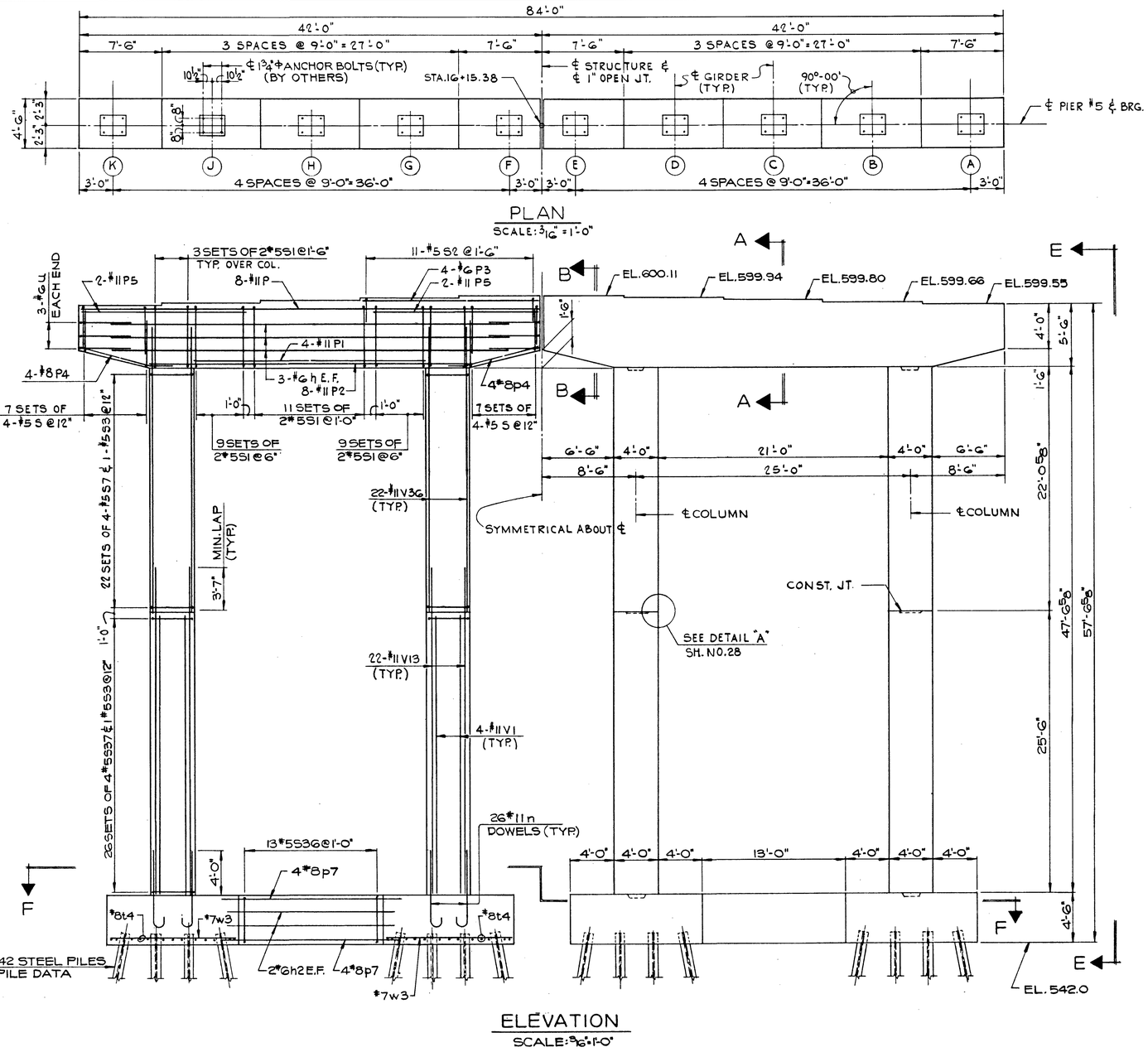
NOTE: WORK THIS SHEET WITH SHEET NO. 25

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

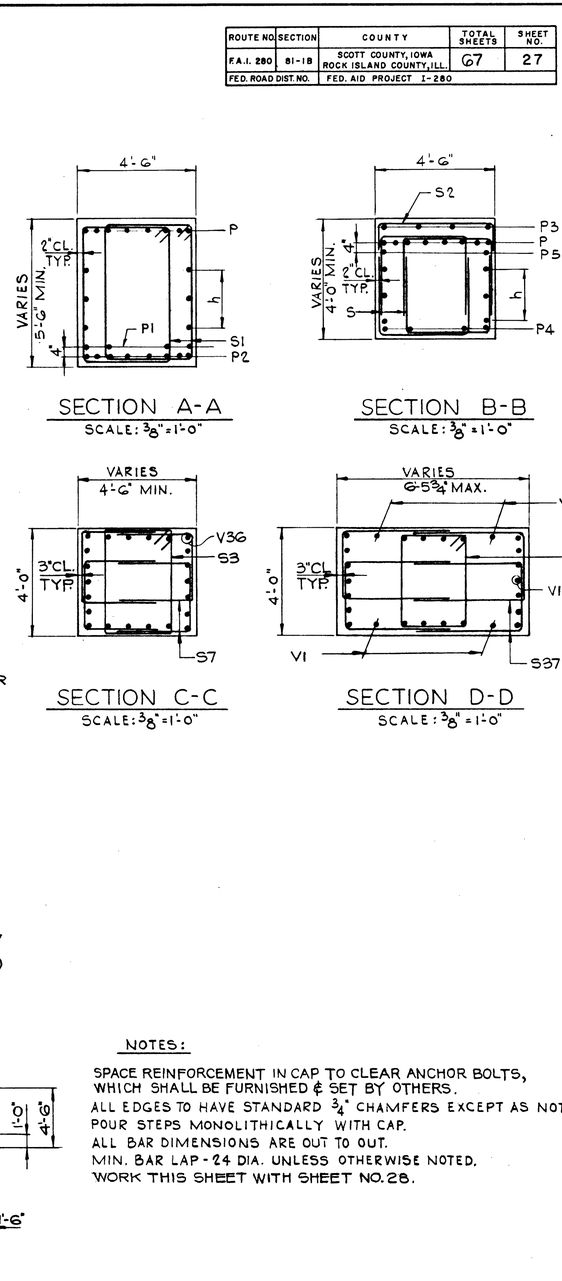
PIER 4
FOOTING

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	27
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



ELEVATION
SCALE: 3/16" = 1'-0"

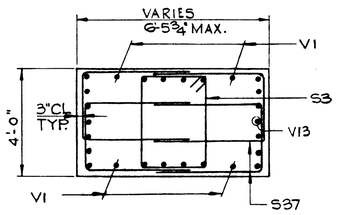


SECTION E-E
SCALE: 3/16" = 1'-0"

SECTION A-A
SCALE: ⅜" = 1'-0"

SECTION B-B
SCALE: ⅜" = 1'-0"

SECTION C-C
SCALE: ⅜" = 1'-0"



SECTION D-D
SCALE: ⅜" = 1'-0"

NOTES:

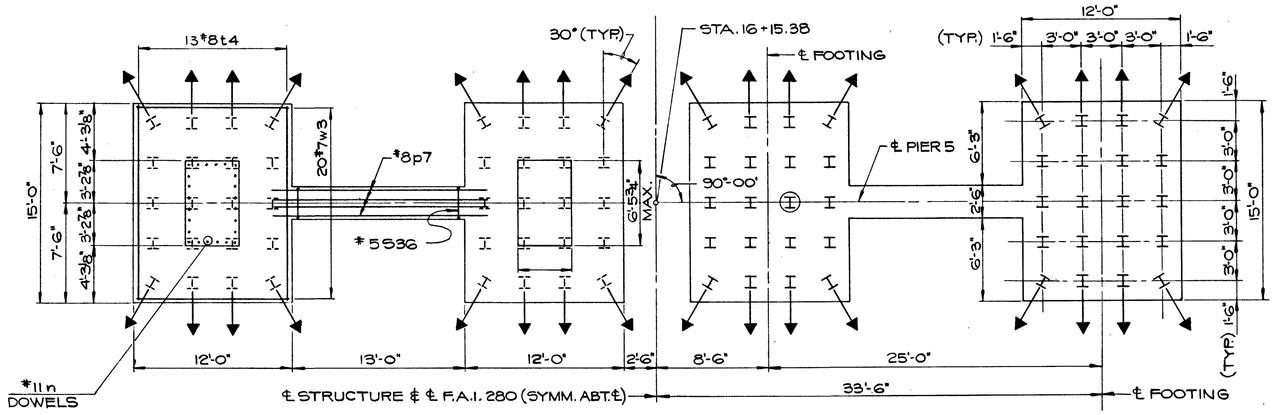
SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED ℄ SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.
WORK THIS SHEET WITH SHEET NO. 28.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY S. MUELLER
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

PIER 5
PLAN & ELEVATIONS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	28
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



SECTION F-F
SCALE: 3/16" = 1'-0"

Ⓘ DENOTES TEST PILE

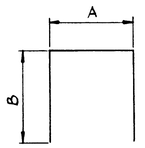
DENOTES BATTERED PILE

BILL OF MATERIAL

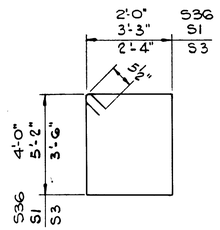
ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU.YD.	281.0
CLASS X CONCRETE	CU.YD.	363.0
REINFORCEMENT BARS	POUND	60,980
FURNISH STEEL PILES 10 BP42	LIN.FT.	1185
TEST PILE STEEL 10 BP42	EACH	1
DRIVING STEEL PILES	LIN.FT.	1185
CLASS B EXCAVATION FOR STRUCTURE	CU.YD.	150.0

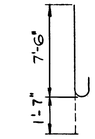
PILE DATA	
PILE TYPE	10BP42
Drive To , TON	50
NUMBER REQUIRED*	80
ESTIMATED LENGTH, FEET	15
CUT OFF ELEVATION	543.0

* INCLUDING 1 TEST PILE

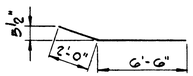


BAR	A	B
S	3'-3"	3'-3"
S2	4'-2"	1'-6"
S7	2'-6"	3'-0"
S37	2'-6"	3'-9"
u	4'-1"	4'-6"





BAR n



BAR p4

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	12	6	36'-0"	——
h2	8	6	16'-0"	——
n	104	11	9'-1"	⌒
P	16	11	41'-6"	——
P1	8	11	21'-0"	——
P2	16	11	29'-0"	——
P3	8	6	16'-0"	——
P4	16	8	8'-6"	⟋
P5	8	11	15'-0"	——
P7	16	8	17'-0"	——
S	112	5	9'-9"	□
S1	140	5	17'-9"	⌐
S2	22	5	7'-2"	□
S3	192	5	12'-7"	⌐
S7	352	5	8'-6"	□
S37	416	5	10'-0"	□
S36	26	5	13'-0"	⌐
t4	52	8	14'-6"	——
u	12	6	13'-1"	□
V1	16	11	25'-0"	——
V13	88	11	29'-3"	——
V36	88	11	26'-0"	——
w3	80	7	11'-6"	——

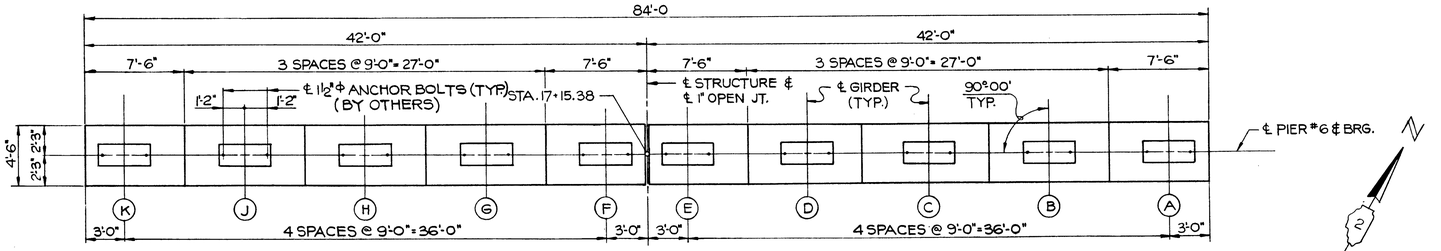
NOTE: WORK THIS SHEET WITH SHEET NO. 27.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY S. MUELLER
CHECKED
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

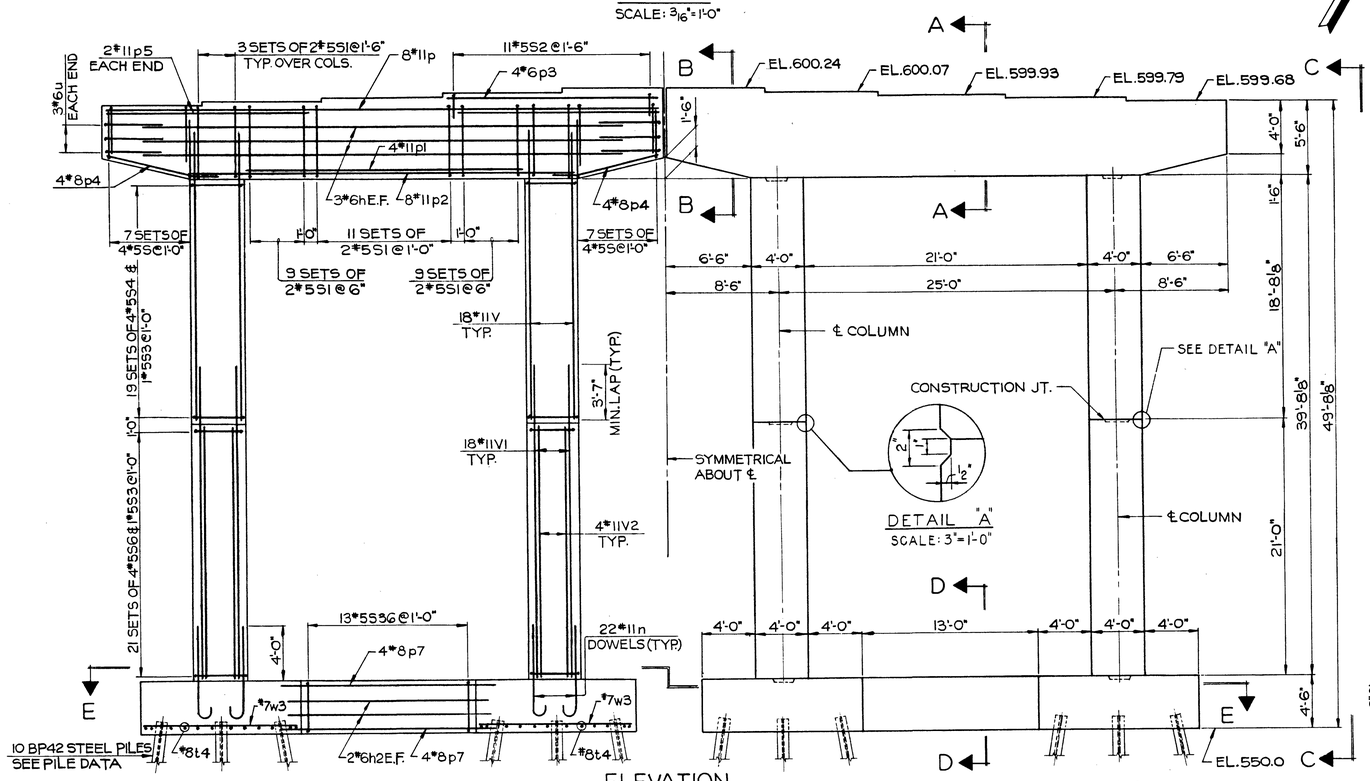
PIER 5
FOOTING

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

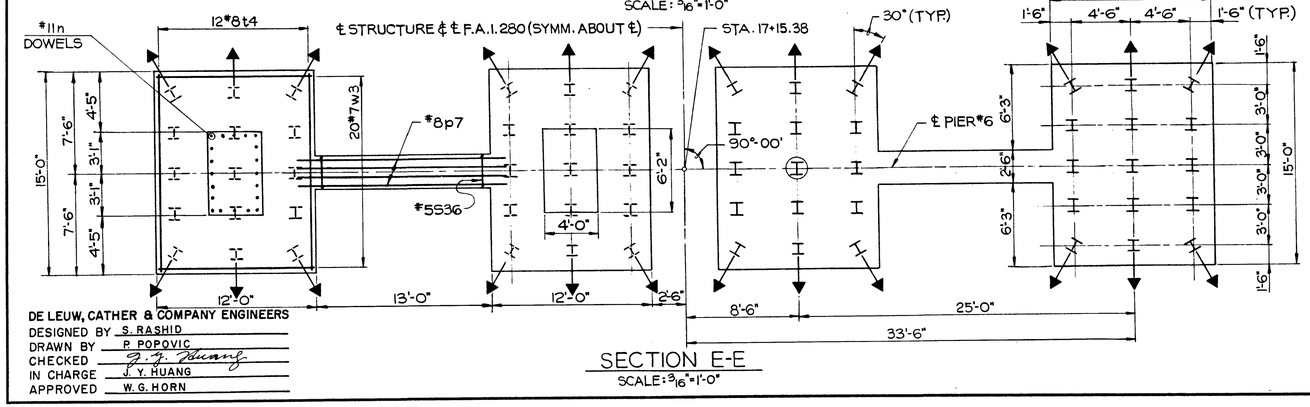
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	29
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



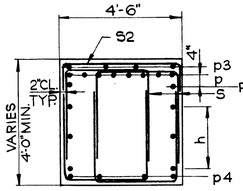
PLAN
SCALE: 3/16" = 1'-0"



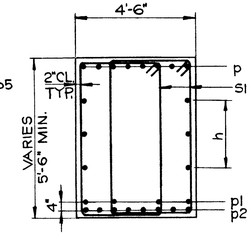
ELEVATION
SCALE: 3/16" = 1'-0"



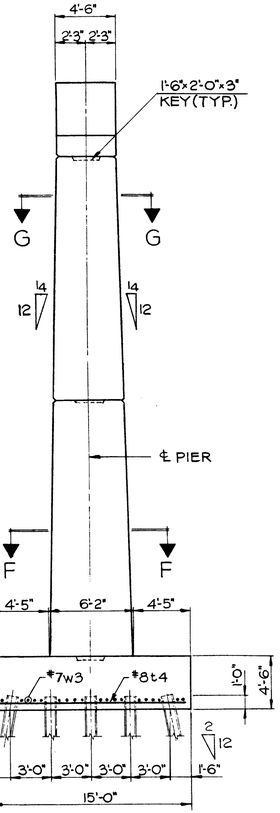
SECTION E-E
SCALE: 3/16" = 1'-0"



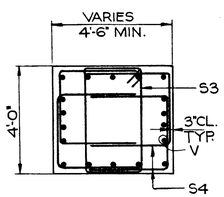
SECTION B-B
SCALE: 3/8" = 1'-0"



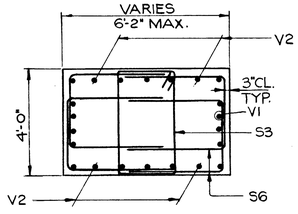
SECTION A-A
SCALE: 3/8" = 1'-0"



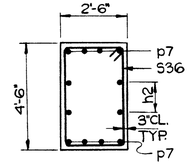
SECTION C-C
SCALE: 3/16" = 1'-0"



SECTION G-G
SCALE: 3/8" = 1'-0"

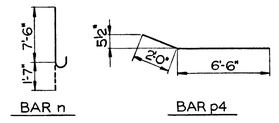


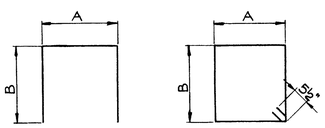
SECTION F-F
SCALE: 3/8" = 1'-0"



SECTION D-D
SCALE: 3/8" = 1'-0"

BAR LIST				
BAR	NO.	SIZE	LENGTH	SHAPE
h	12	6	36'-0"	
h2	8	6	16'-0"	
n	88	11	9'-1"	
p5	8	11	15'-0"	
p	16	11	41'-6"	
p1	8	11	21'-0"	
p2	16	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p7	16	8	17'-0"	
S	112	5	9'-9"	
S1	140	5	17'-9"	
S2	22	5	7'-2"	
S3	160	5	12'-7"	
S4	304	5	9'-0"	
S36	26	5	13'-0"	
S6	336	5	10'-0"	
t4	48	8	14'-6"	
u	12	6	13'-1"	
V	72	11	23'-0"	
V1	72	11	25'-0"	
V2	16	11	20'-9"	
w3	80	7	11'-6"	





BAR	A	B
S	3'-3"	3'-3"
S2	4'-2"	1'-6"
S4	3'-0"	3'-0"
S6	3'-0"	3'-6"
u	4'-1"	4'-6"

BAR	A	B
S1	3'-3"	5'-2"
S3	2'-4"	3'-6"
S36	2'-0"	4'-0"

PILE DATA	
PILE TYPE	10 BP 42
** DESIGN CAPACITY, TON	37
NUMBER REQUIRED *	60
ESTIMATED LENGTH, FEET	21
CUT OFF ELEVATION	551.0

* INCLUDING 1 TEST PILE
** DRIVE TO 50 TON

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU.YD.	296
CLASS X CONCRETE	CU.YD.	333.9
REINFORCEMENT BARS	POUND	50670
FURNISH STEEL PILES 10 BP 42	LIN.FT.	1,239
TEST PILE STEEL 10 BP 42	EACH	1
DRIVING STEEL PILES	LIN.FT.	1,239

Ⓣ DENOTES TEST PILE
I DENOTES BATTERED PILE

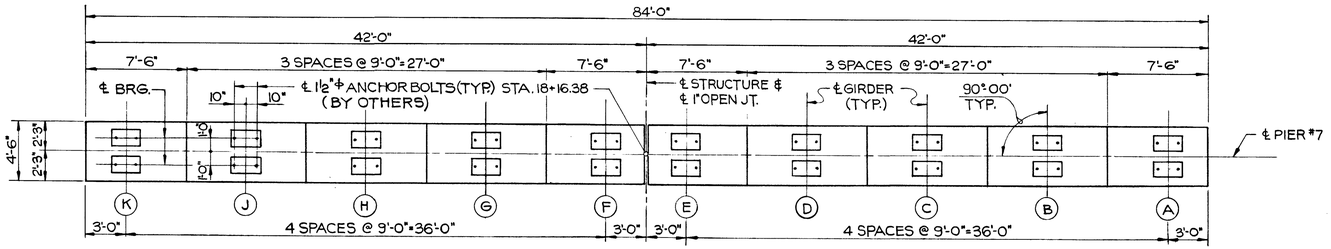
NOTES:
SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED ℄ SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

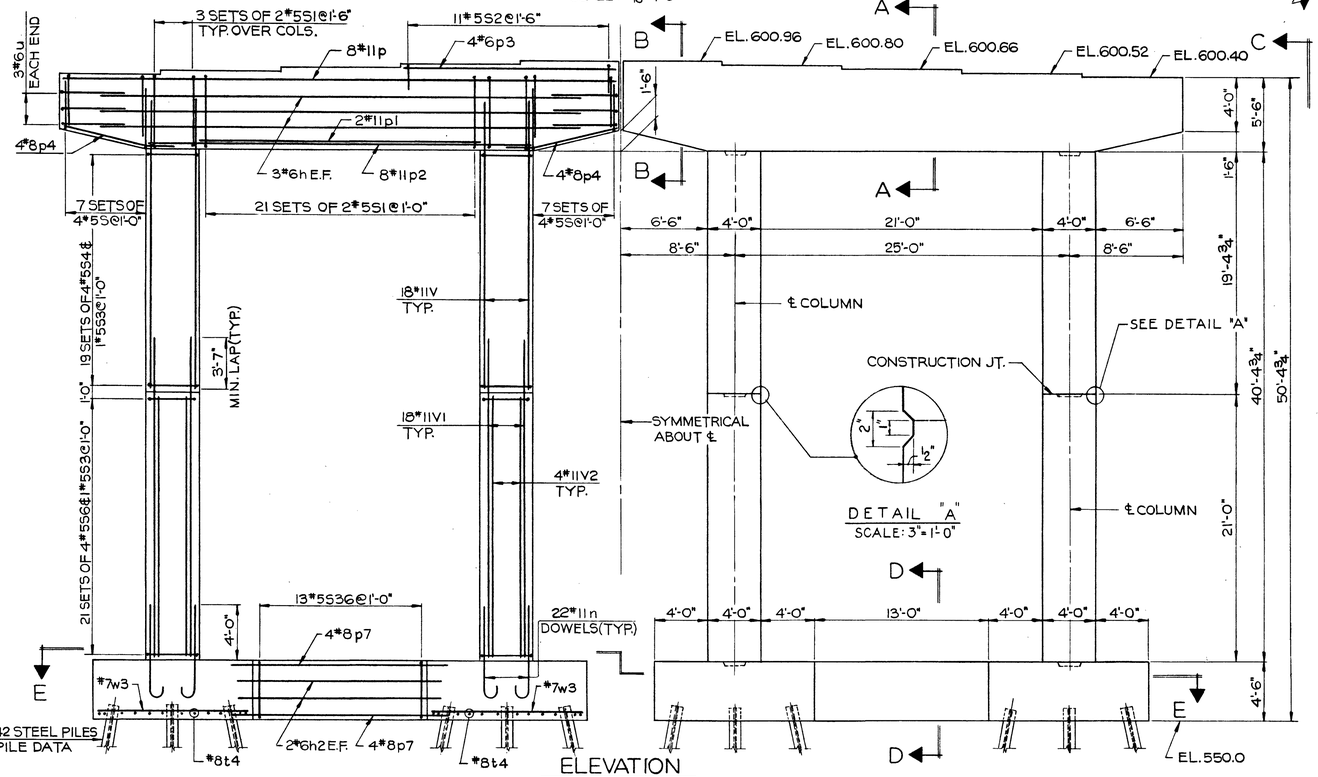
PIER 6

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

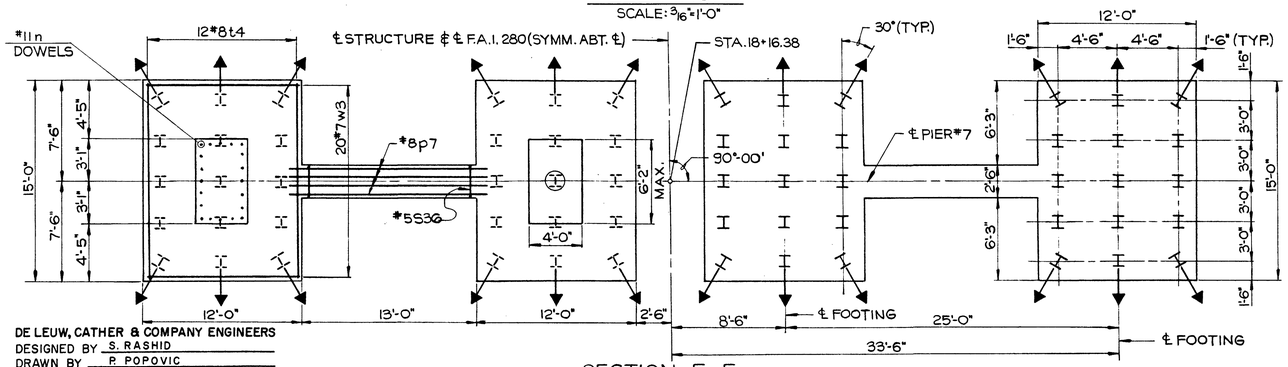
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	30
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



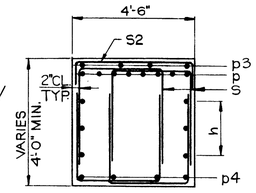
PLAN
SCALE: $\frac{3}{16}$"=1'-0"



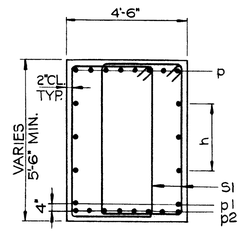
ELEVATION
SCALE: $\frac{3}{16}$"=1'-0"



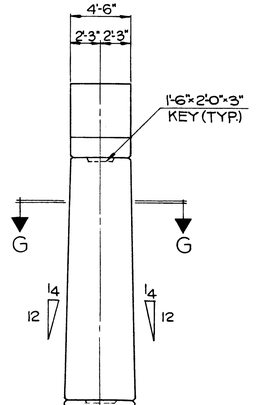
SECTION E-E
SCALE: $\frac{3}{16}$"=1'-0"



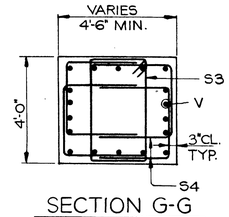
SECTION B-B
SCALE: $\frac{3}{8}$"=1'-0"



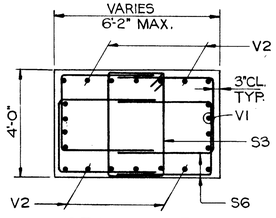
SECTION A-A
SCALE: $\frac{3}{8}$"=1'-0"



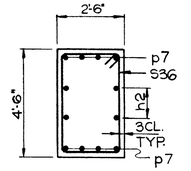
SECTION C-C
SCALE: $\frac{3}{8}$"=1'-0"



SECTION G-G
SCALE: $\frac{3}{8}$"=1'-0"



SECTION F-F
SCALE: $\frac{3}{8}$"=1'-0"



SECTION D-D
SCALE: $\frac{3}{8}$"=1'-0"

PILE DATA	
PILE TYPE	10 BP 42
** DESIGN CAPACITY, TON	37
NUMBER REQUIRED *	60
ESTIMATED LENGTH, FEET	21
CUT OFF ELEVATION	551.0

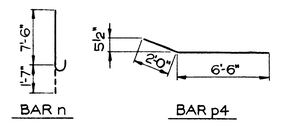
* INCLUDING 1 TEST PILE
** DRIVE TO 50 TON

Ⓣ DENOTES TEST PILE
I DENOTES BATTERED PILE

NOTES:
SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED & SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP-24 DIA. UNLESS OTHERWISE NOTED.

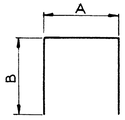
BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	12	6	36'-0"	
h2	8	6	16'-0"	
n	88	11	9'-1"	
p	16	11	41'-6"	
p1	4	11	21'-0"	
p2	16	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p7	16	8	17'-0"	
S	112	5	9'-9"	
S1	108	5	17'-9"	
S2	22	5	7'-2"	
S3	160	5	12'-7"	
S3b	26	5	13'-0"	
S6	336	5	10'-0"	
S4	304	5	9'-0"	
t4	48	8	14'-6"	
u	12	6	13'-1"	
V	72	11	23'-0"	
V1	72	11	25'-0"	
V2	16	11	20'-9"	
w3	80	7	11'-6"	

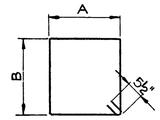


BAR n

BAR p4



BAR	A	B
S	3'-3"	3'-3"
S2	4'-2"	1'-6"
S6	3'-0"	3'-6"
S4	3'-0"	3'-0"
u	4'-1"	4'-6"



BAR	A	B
S1	3'-3"	5'-2"
S3	2'-4"	3'-6"
S3b	2'-0"	4'-0"

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU.YD.	356
CLASS X CONCRETE	CU.YD.	336.0
REINFORCEMENT BARS	POUND	48980
FURNISH STEEL PILES 10 BP42	LIN.FT.	1,239
TEST PILE STEEL 10 BP42	EACH	1
DRIVING STEEL PILE	LIN.FT.	1,239

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

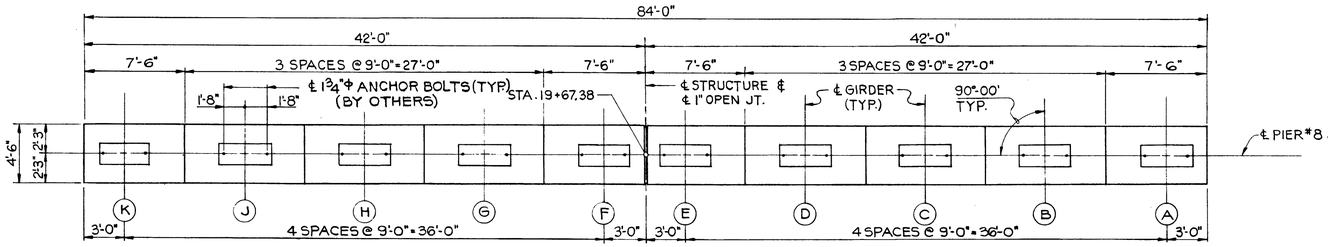
PIER 7

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

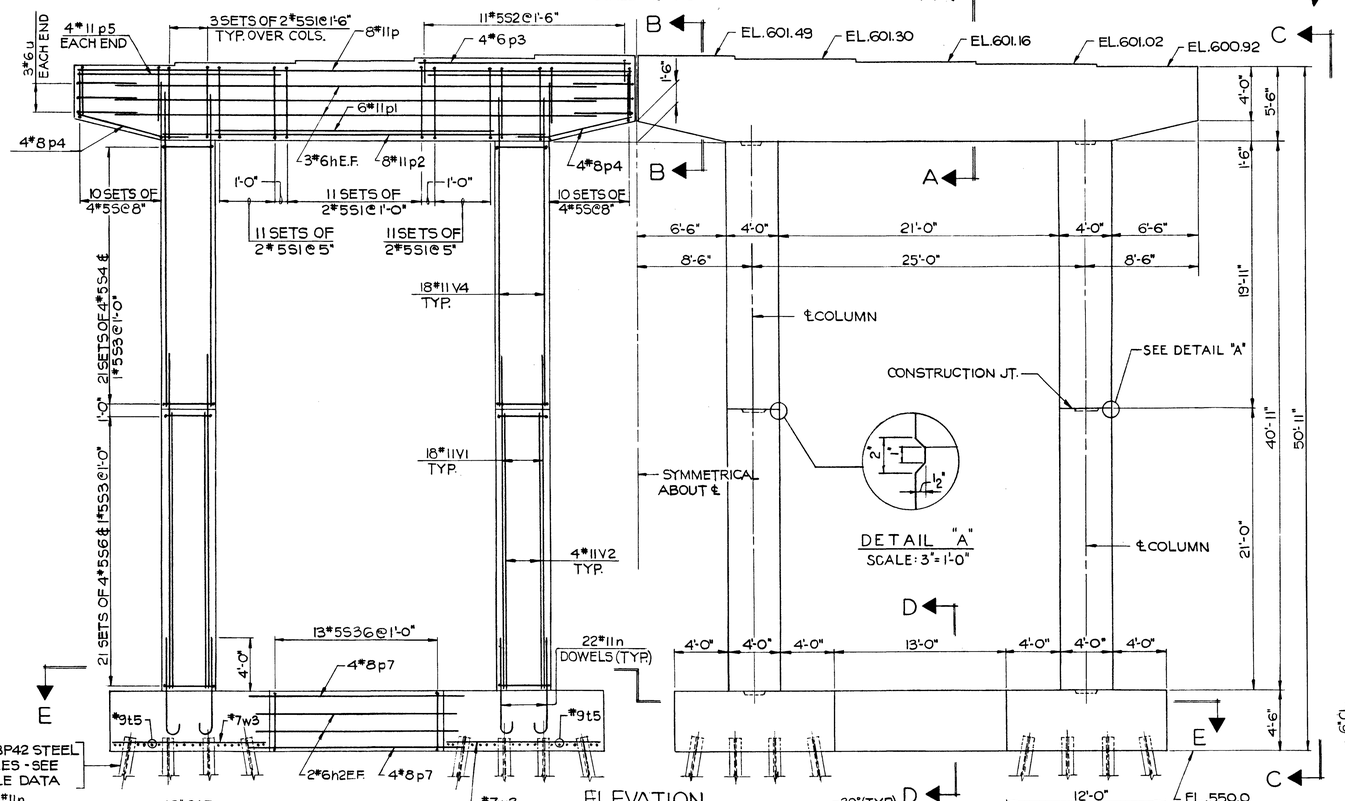
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	31
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	12	6	36'-0"	
h2	8	6	16'-0"	
n	88	11	9'-1"	
p	16	11	41'-6"	
p1	12	11	21'-0"	
p2	16	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p5	16	11	15'-0"	
p7	16	8	17'-0"	
S	160	5	9'-9"	
S1	156	5	17'-9"	
S2	22	5	7'-2"	
S3	168	5	12'-7"	
S4	336	5	9'-0"	
S36	26	5	13'-0"	
S6	336	5	10'-0"	
t5	64	9	16'-6"	
u	12	6	13'-1"	
V4	72	11	24'-0"	
V1	72	11	25'-0"	
V2	16	11	20'-9"	
w3	80	7	11'-6"	

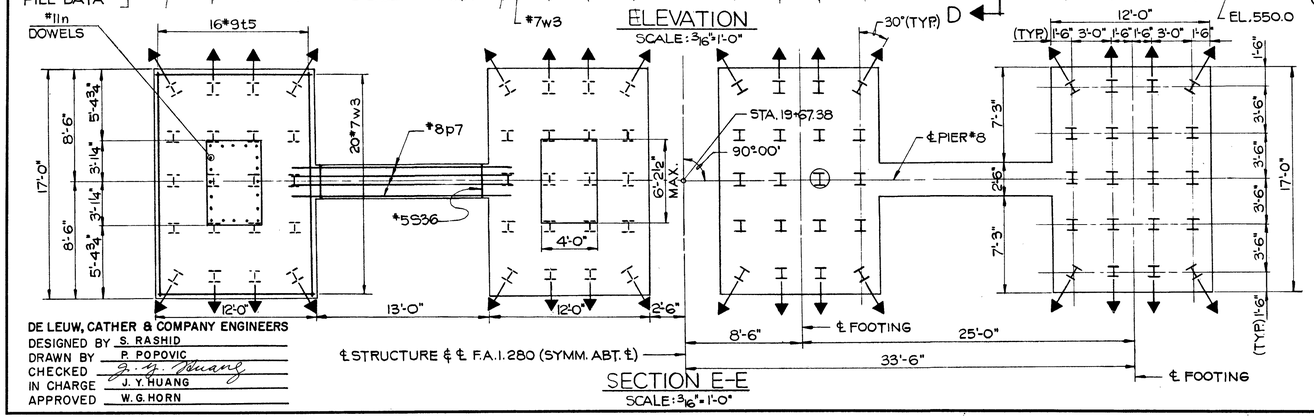


PLAN
SCALE: 3/16" = 1'-0"

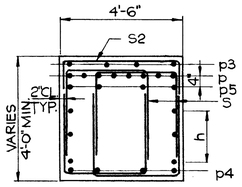


DETAIL "A"
SCALE: 3" = 1'-0"

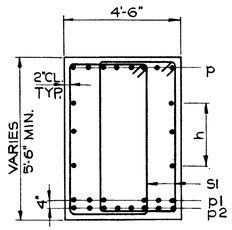
ELEVATION
SCALE: 3/16" = 1'-0"



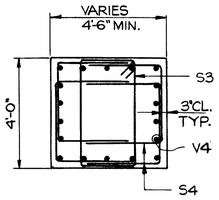
SECTION E-E
SCALE: 3/16" = 1'-0"



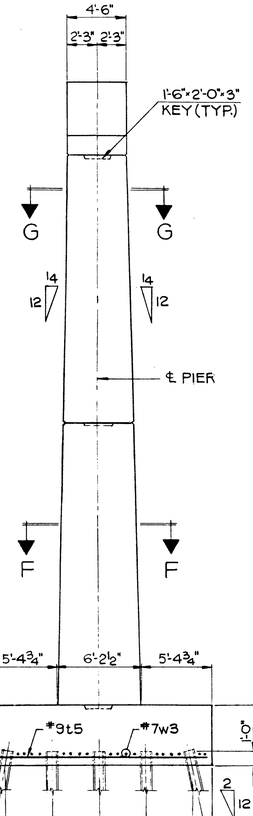
SECTION B-B
SCALE: 3/8" = 1'-0"



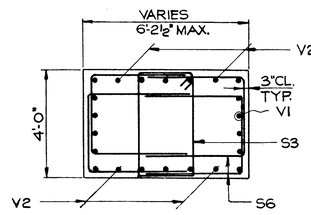
SECTION A-A
SCALE: 3/8" = 1'-0"



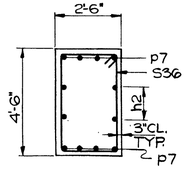
SECTION G-G
SCALE: 3/8" = 1'-0"



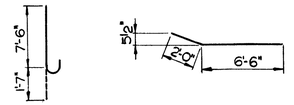
SECTION C-C
SCALE: 3/16" = 1'-0"



SECTION F-F
SCALE: 3/8" = 1'-0"



SECTION D-D
SCALE: 3/8" = 1'-0"



BAR	A	B
S	3'-3"	3'-3"
S2	4'-2"	1'-6"
S4	3'-0"	3'-0"
S6	3'-0"	3'-6"
u	4'-1"	4'-6"

BAR	A	B
S1	3'-3"	5'-2"
S3	2'-4"	3'-6"
S36	2'-0"	4'-0"

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU.YD.	373
CLASS X CONCRETE	CU.YD.	354.4
REINFORCEMENT BARS	POUND	55060
FURNISH STEEL PILES 10 BP42	LIN.FT.	1659
TEST PILE STEEL 10 BP42	EACH	1
DRIVING STEEL PILES	LIN.FT.	1659

PILE DATA	
PILE TYPE	10 BP42
** DESIGN CAPACITY, TON	37
NUMBER REQUIRED*	80
ESTIMATED LENGTH, FEET	21
CUT OFF ELEVATION	551.0

* INCLUDING 1 TEST PILE
** DRIVE TO 50 TONS

Ⓣ DENOTES TEST PILE
I DENOTES BATTERED PILE

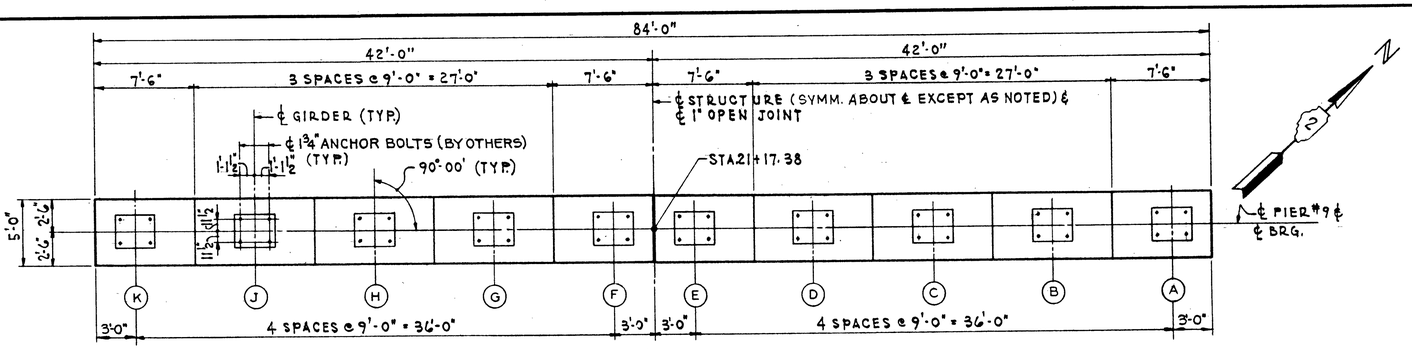
NOTES:
SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED & SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED J. Y. HUANG
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

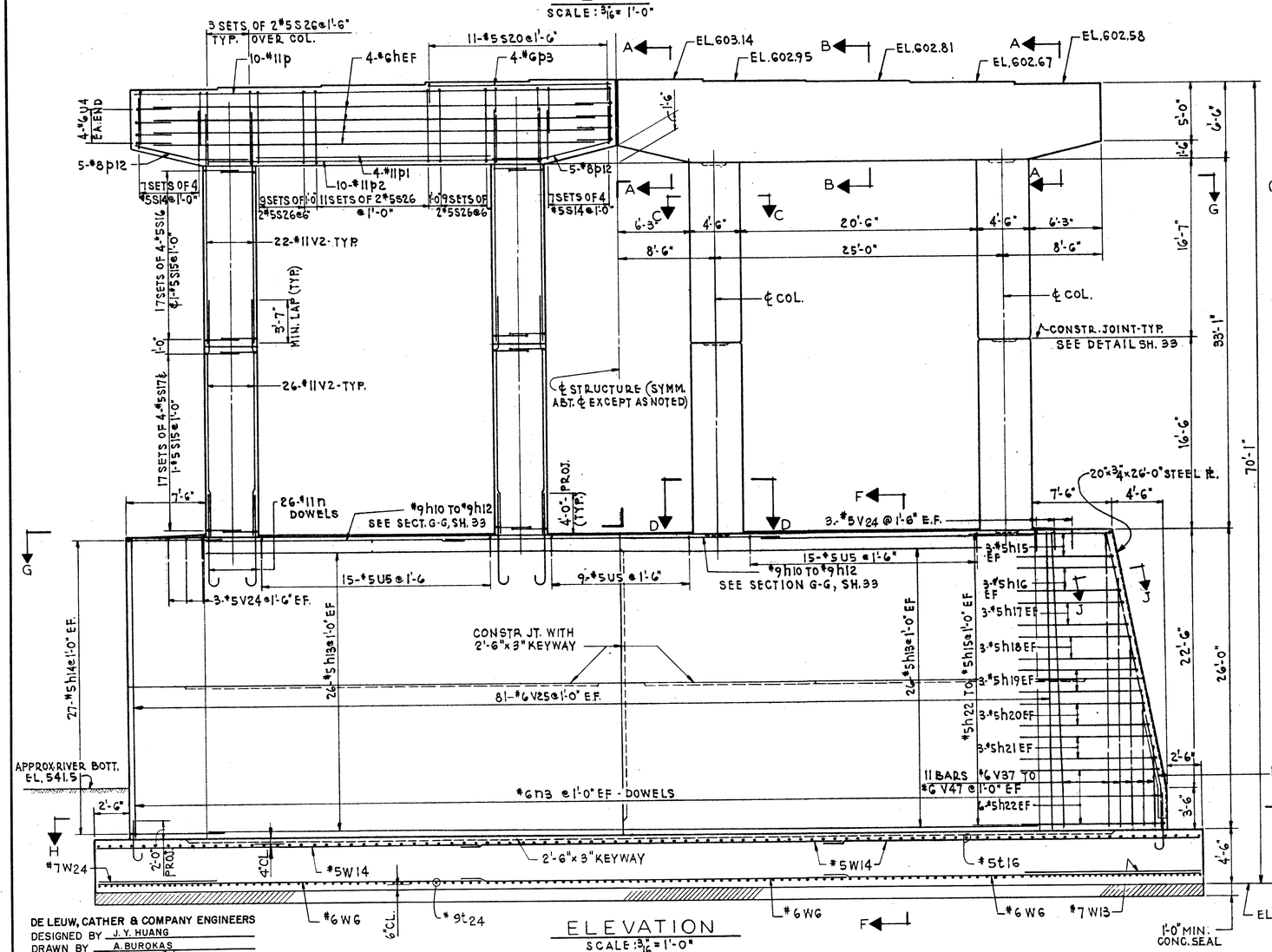
PIER 8

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

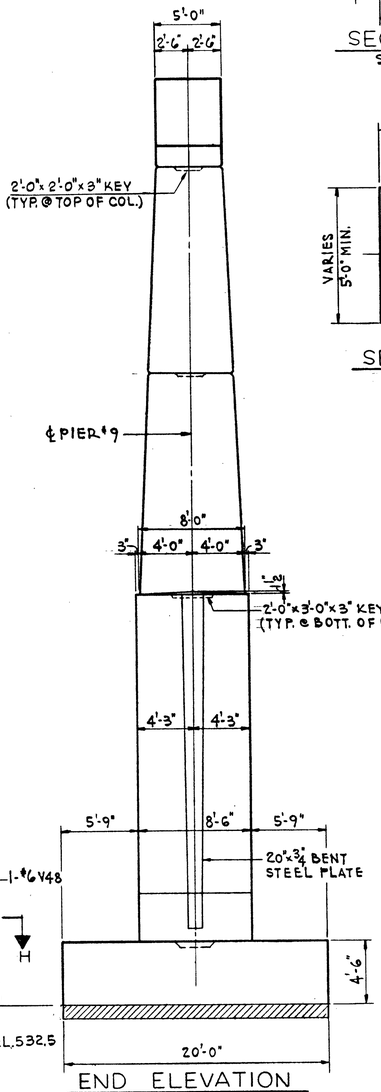
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	32
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



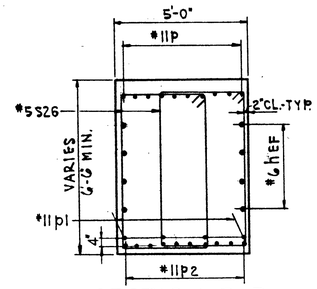
PLAN
SCALE: 3/16" = 1'-0"



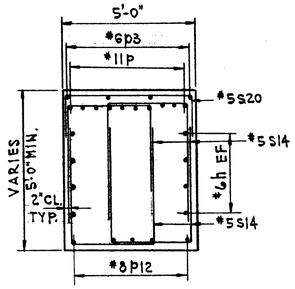
ELEVATION
SCALE: 3/16" = 1'-0"



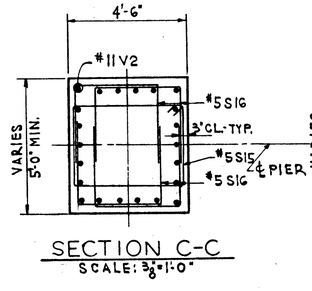
END ELEVATION
SCALE: 3/16" = 1'-0"



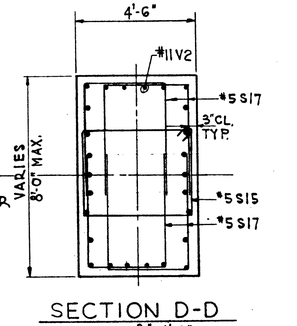
SECTION B-B
SCALE: 3/8" = 1'-0"



SECTION A-A
SCALE: 3/8" = 1'-0"



SECTION C-C
SCALE: 3/8" = 1'-0"



SECTION D-D
SCALE: 3/8" = 1'-0"

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED AND SET BY OTHERS.

ALL EDGES TO HAVE STANDARD ¾" CHAMFER EXCEPT AS NOTED.

POUR STEPS MONOLITHICALLY WITH CAP.

ALL BAR DIMENSIONS ARE OUT TO OUT.

MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

MAXIMUM BEARING PRESSURE ON SHALE 9.76 KIPS/SQ. FT. FOR AASHO. GROUP IX LOADING @ 150%

WORK THIS SHEET WITH SH. 33

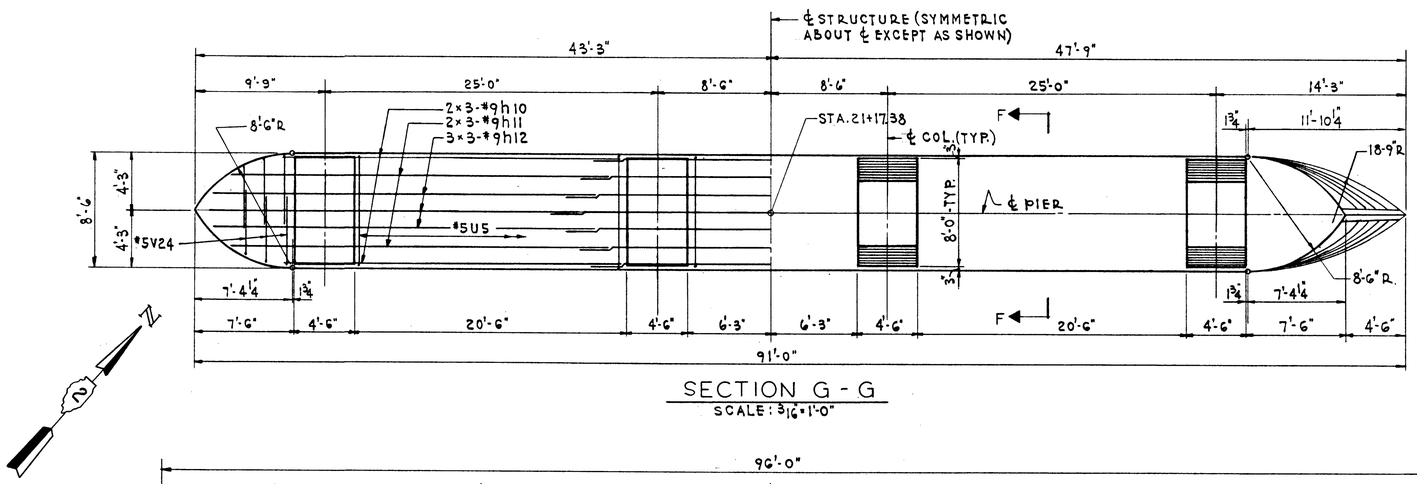
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Cofferdam Excavation	CU. YD.	498
ROCK EXCAVATION FOR STRUCTURE	CU. YD.	314
CLASS "X" CONCRETE	CU. YD.	1251.2
REINFORCEMENT BARS	POUND	83,890
STRUCTURAL STEEL	POUND	1640
CONCRETE SEAL	SQ. YD.	214
COFFERDAM	EACH	1

PIER 9
PLAN & ELEVATIONS

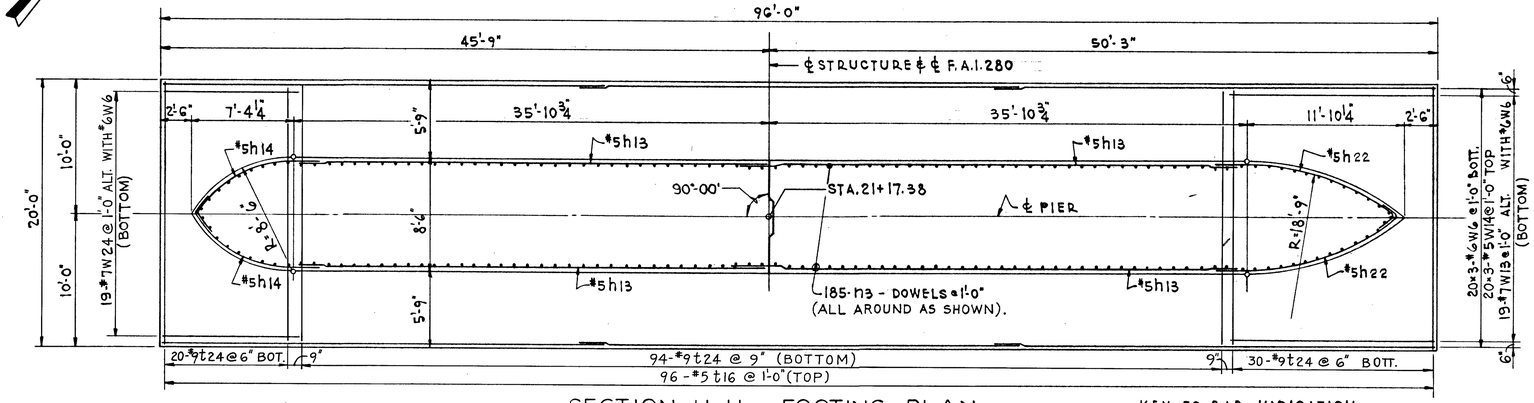
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J. Y. HUANG
DRAWN BY A. BUROKAS
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN



SECTION G - G

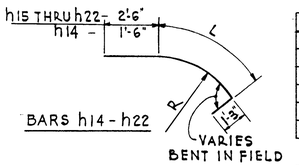
SCALE: 3/16"=1'-0"



SECTION H-H - FOOTING PLAN

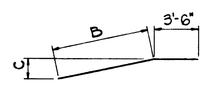
SCALE: 3/16"=1'-0"

KEY TO BAR INDICATION.
20×3-#6 INDICATES 20 LINES OF #6 BARS WITH 3 LENGTHS PER LINE.



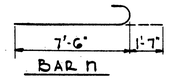
BARS h14 - h22

BAR	R	L	BAR	R	L
h14	8'-3	8'-6"	h20	14-7½	11'-4"
h15	8'-4⅝	8'-8"	h21	16'-5⅝	11'-10"
h16	9'-5⅛	9'-2"	h22	18'-6"	12'-8"
h17	10'-7⅛	9'-9"			
h18	11'-10¼	10'-3"			
h19	13'-2⅜	10'-10"			

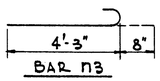


BARS V37-V48

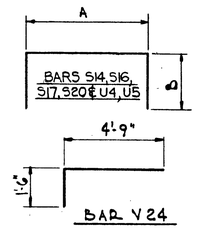
BAR	B	C	BAR	B	C
V37	22'-3"	1½"	V44	21'-0"	2'-0"
V38	22'-3"	3"	V45	15'-0"	1'-6"
V39	22'-3"	5½"	V46	9'-0	1'-0"
V40	22'-3"	9"	V47	3'-9"	3"
V41	22'-3	1'-1"	V48	22'-9"	4'-6"
V42	22'-3	1'-6"			
V43	22'-3"	2'-0"			



BAR n

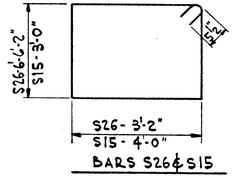


BAR n3

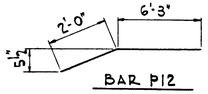


BAR V24

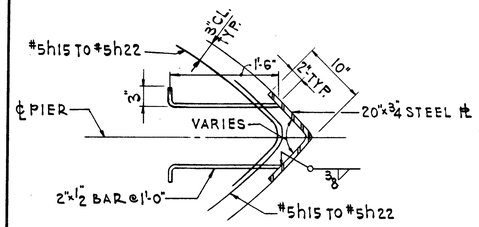
BAR	A	B
S20	4'-8"	1'-6"
S14	3'-2"	4'-4"
S16	3'-3"	3'-9"
S17	3'-3	4'-6"
U4	4'-8"	4'-6"
U5	8'-0"	1'-6"



BARS S26 & S15

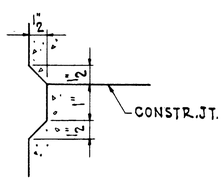


BAR P12



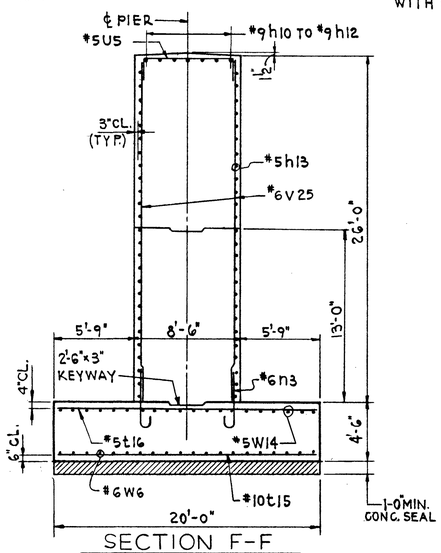
SECTION J-J

SCALE: 1"=1'-0"



CONSTR. JT. DETAIL

SCALE: 6"=1'-0"



SECTION F-F

SCALE: 3/16"=1'-0"

NOTE:
WORK THIS SHEET WITH SH. 32

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	33
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

BAR LIST

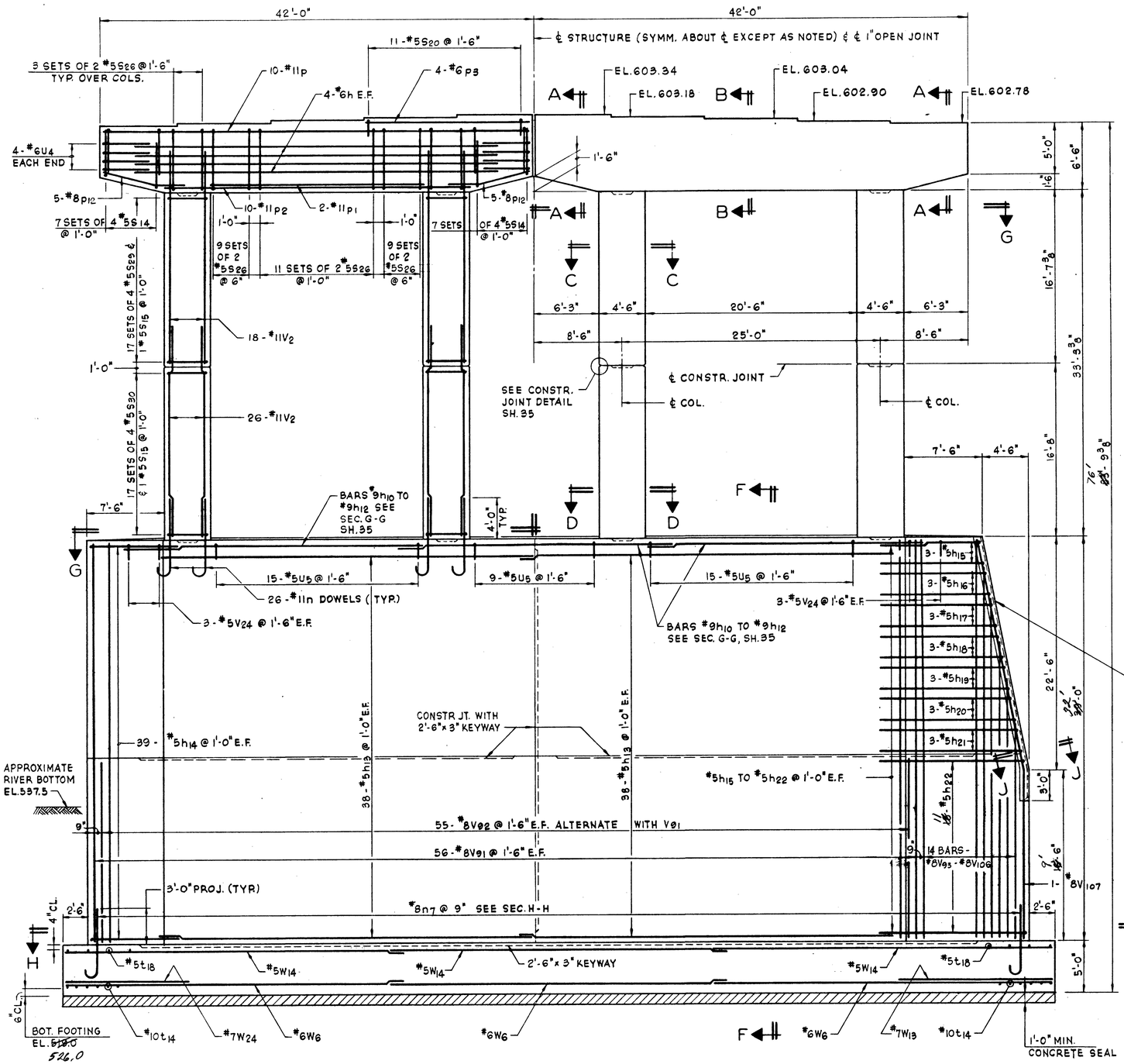
BAR	NO.	SIZE	LENGTH	SHAPE
h	16	#6	36'-0"	
h10	6	#9	26'-6"	
h11	6	#9	29'-0"	
h12	9	#9	30'-6"	
h13	104	#5	36'-0"	
h14	54	#5	11'-3"	
h15	6	#5	12'-5	
h16	6	#5	12'-11"	
h17	6	#5	13'-6"	
h18	6	#5	14'-0"	
h19	6	#5	14'-7"	
h20	6	#5	15'-1"	
h21	6	#5	15'-7"	
h22	12	#5	16'-5"	
n	104	#11	9'-1"	
n3	185	#6	4'-11"	
P	20	#11	41'-6"	
P1	8	#11	21'-0"	
P2	20	#11	29'-0"	
P3	8	#6	16'-0"	
P12	20	#8	8'-3"	
S20	22	#5	7'-8"	
S26	140	#5	19'-7"	
S14	112	#5	11'-4"	
S15	136	#5	14'-11"	
S16	272	#5	10'-9"	
S17	272	#5	12'-3"	
t16	96	#5	19'-6"	
t24	144	#9	19'-6"	
U4	16	#6	13'-8"	
U5	39	#5	11'-0"	
V2	192	#11	20'-9"	
V24	12	#5	6'-3"	
V25	162	#6	25'-9"	
V37	2	#6	25'-9"	
V38	2	#6	25'-9"	
V39	2	#6	25'-9"	
V40	2	#6	25'-9"	
V41	2	#6	25'-9"	
V42	2	#6	25'-9"	
V43	2	#6	25'-9"	
V44	2	#6	24'-6"	
V45	2	#6	18'-6"	
V46	2	#6	12'-6"	
V47	2	#6	7'-3"	
V48	1	#6	26'-3"	
W24	19	#7	10'-0"	
W6	60	#6	33'-0"	
W7	19	#6	10'-0"	
W8	19	#6	15'-0"	
W13	19	#7	15'-0"	
W14	60	#5	32'-9"	

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J. Y. HUANG
DRAWN BY A. BUROKAS
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

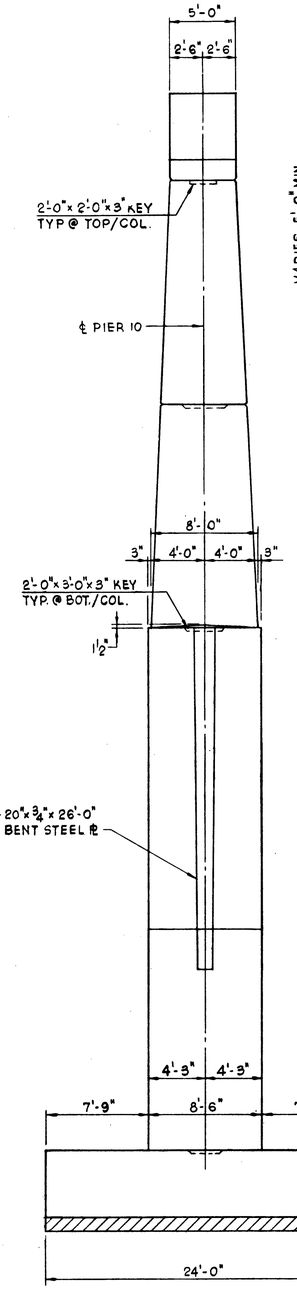
PIER 9
WALL & FOOTING

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

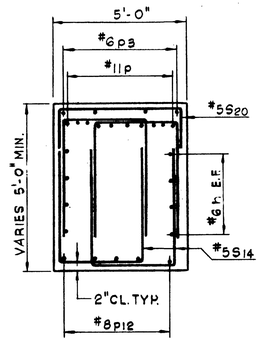
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	34
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



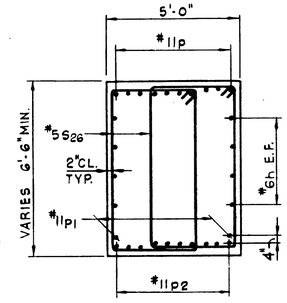
ELEVATION
SCALE: 3/16" = 1'-0"



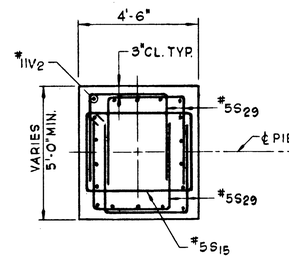
END ELEVATION
SCALE: 3/16" = 1'-0"



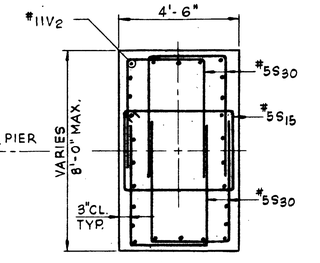
SECTION A-A
SCALE: 3/8" = 1'-0"



SECTION B-B
SCALE: 3/8" = 1'-0"



SECTION C-C
SCALE: 3/8" = 1'-0"



SECTION D-D
SCALE: 3/8" = 1'-0"

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED AND SET BY OTHERS.
ALL EDGES TO HAVE STANDARD 3/4" CHAMFER EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP 24 DIA. UNLESS OTHERWISE NOTED.
MAX. BEARING PRESSURE ON SHALE 10.66 KIPS/SQ. FT., FOR A.A.S.H.O. GROUP IX LOADING @ 150%.
WORK THIS SHEET WITH SH. 35.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Cofferdam Excavation	CU. YD.	954
ROCK EXCAVATION FOR STRUCTURE	CU. YD.	~~837~~ 340
CLASS "X" CONCRETE	CU. YD.	~~1707.1~~ 1519.5
REINFORCEMENT BARS	POUND	~~105,570~~ 101,740
STRUCTURAL STEEL	POUND	1640
CONCRETE SEAL	SQ. YD.	256
COFFERDAM	EACH	1

(Revised 5-17-71)

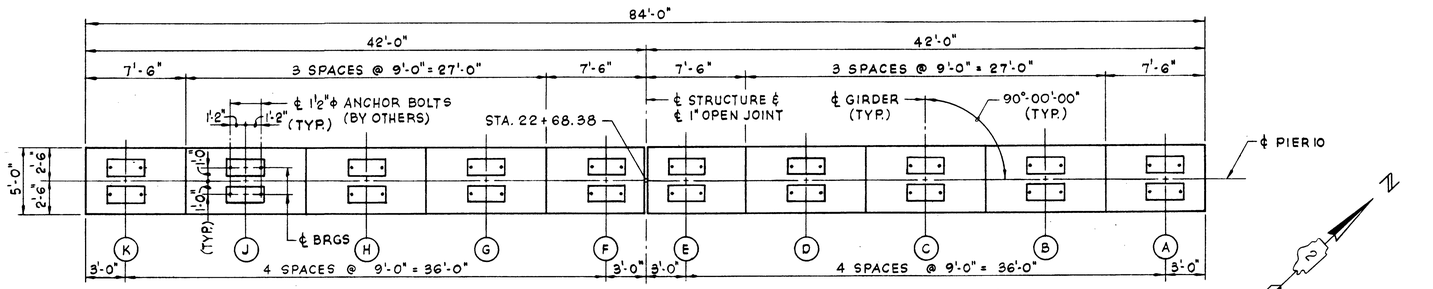
PIER 10 ELEVATIONS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY J. N. LESLIE
CHECKED S. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

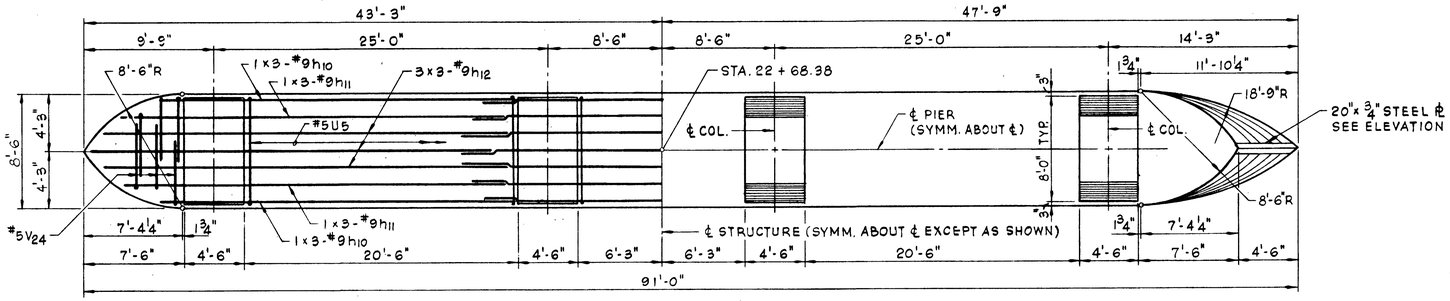
(Rev. 5-17-71) Rock Excav. from 837 to 340 cu yds, Class X Conc. from 1707.1 to 1519.5 Cu. yds., Reinf. from 105,570 to 101,740 lbs. S.F.M

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	35
FED. ROAD DIST. NO.	FED. AID PROJECT I-280			



PLAN

SCALE: $\frac{3}{16}$"=1'-0"

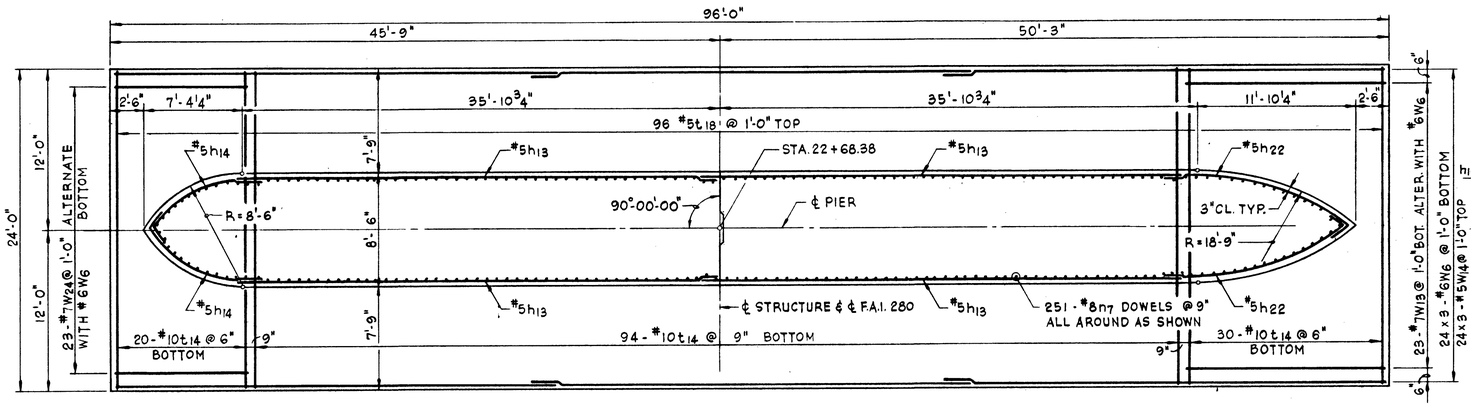


SECTION G-G

SCALE: $\frac{3}{16}$"=1'-0"

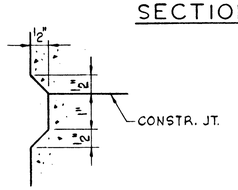
KEY TO BAR INDICATION

24 x 3 - #6 INDICATES 24 LINES OF #6 BARS WITH 3 LENGTHS PER LINE.



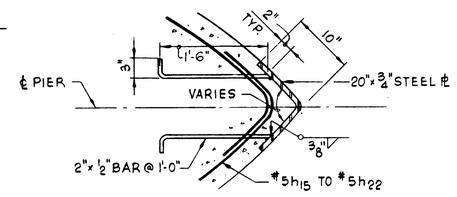
SECTION H-H - FOOTING PLAN

SCALE: $\frac{3}{16}$"=1'-0"



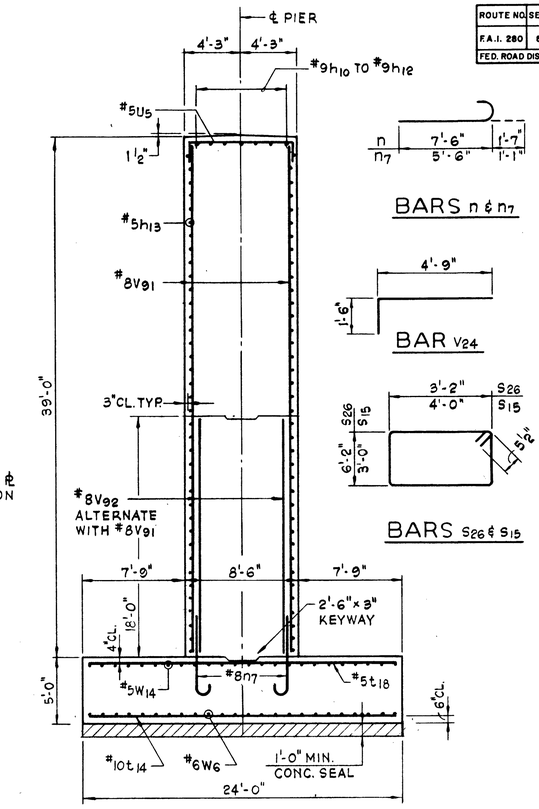
CONSTR. JT. DETAIL

SCALE: 6" = 1'-0"



SECTION J-J

SCALE: 1" = 1'-0"



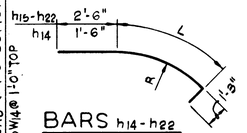
SECTION F-F

SCALE: $\frac{3}{16}$"=1'-0"

BARS n & n7

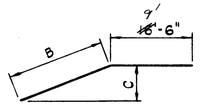
BAR V24

BARS S26 & S15



BARS h14 - h22

BAR	R	L	BAR	R	L
h14	8'-3"	8'-6"	h19	13'-2⅝"	10'-10"
h15	8'-4⅛"	8'-8"	h20	14'-7½"	11'-4"
h16	9'-5⅛"	9'-2"	h21	16'-1⅝"	11'-10"
h17	10'-7⅞"	9'-9"	h22	18'-6"	12'-8"
h18	11'-10¼"	10'-3"			



BARS V93 - V107

BAR	B	C	BAR	B	C
V93	22'-3"	1½"	V101	22'-3"	2'-0"
V94	22'-3"	5"	V102	21'-0"	2'-4"
V95	22'-3"	4"	V103	16'-6"	1'-9"
V96	22'-3"	6"	V104	12'-0"	1'-6"
V97	22'-3"	8½"	V105	7'-6"	1'-1"
V98	22'-3"	1'-0"	V106	3'-0"	7"
V99	22'-3"	1'-3"	V107	22'-9"	4'-6"
V100	22'-3"	1'-8"			

BARS S20 S14, S29 S30, U4 & U5

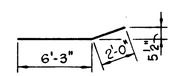
BAR	A	B
S20	4'-8"	1'-6"
S14	3'-2"	4'-4"
S29	3'-0"	3'-9"
S30	3'-0"	4'-6"
U4	4'-8"	4'-6"
U5	8'-0"	1'-6"

NOTES

WORK THIS SHEET WITH SH. 34

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	16	6	36'-0"	
h10	6	9	28'-6"	
h11	6	9	29'-0"	
h12	9	9	30'-6"	
h13	5	5	36'-0"	
h14	5	5	11'-3"	
h15	6	5	12'-5"	
h16	6	5	12'-11"	
h17	6	5	13'-6"	
h18	6	5	14'-0"	
h19	6	5	14'-7"	
h20	6	5	15'-1"	
h21	6	5	15'-7"	
h22	5	5	16'-5"	
n	104	11	9'-1"	
n7	251	8	6'-7"	
P	20	11	41'-6"	
P1	4	11	21'-0"	
P2	20	11	29'-0"	
P3	8	6	16'-0"	
P12	20	8	8'-3"	
S20	22	5	7'-8"	
S26	140	5	19'-7"	
S14	112	5	11'-10"	
S15	136	5	14'-11"	
S29	272	5	10'-6"	
S30	272	5	12'-0"	
t14	144	10	23'-6"	
t18	96	5	23'-6"	
U4	16	6	13'-8"	
U5	39	5	11'-0"	
V2	176	11	20'-9"	
V24	12	5	6'-3"	
V91	112	8	31'-9"	
V92	110	8	18'-0"	
V93	2	8	31'-9"	
V94	2	8	31'-9"	
V95	2	8	31'-9"	
V96	2	8	31'-9"	
V97	2	8	31'-9"	
V98	2	8	31'-9"	
V99	2	8	31'-9"	
V100	2	8	31'-9"	
V101	2	8	31'-9"	
V102	2	8	31'-6"	
V103	2	8	26'-0"	
V104	2	8	21'-6"	
V105	2	8	17'-4"	
V106	2	8	12'-6"	
V107	1	8	22'-5"	
W6	72	6	33'-0"	
W13	23	7	15'-0"	
W14	72	5	32'-9"	
W24	23	7	10'-0"	



BAR P12

REVISED 5-17-71

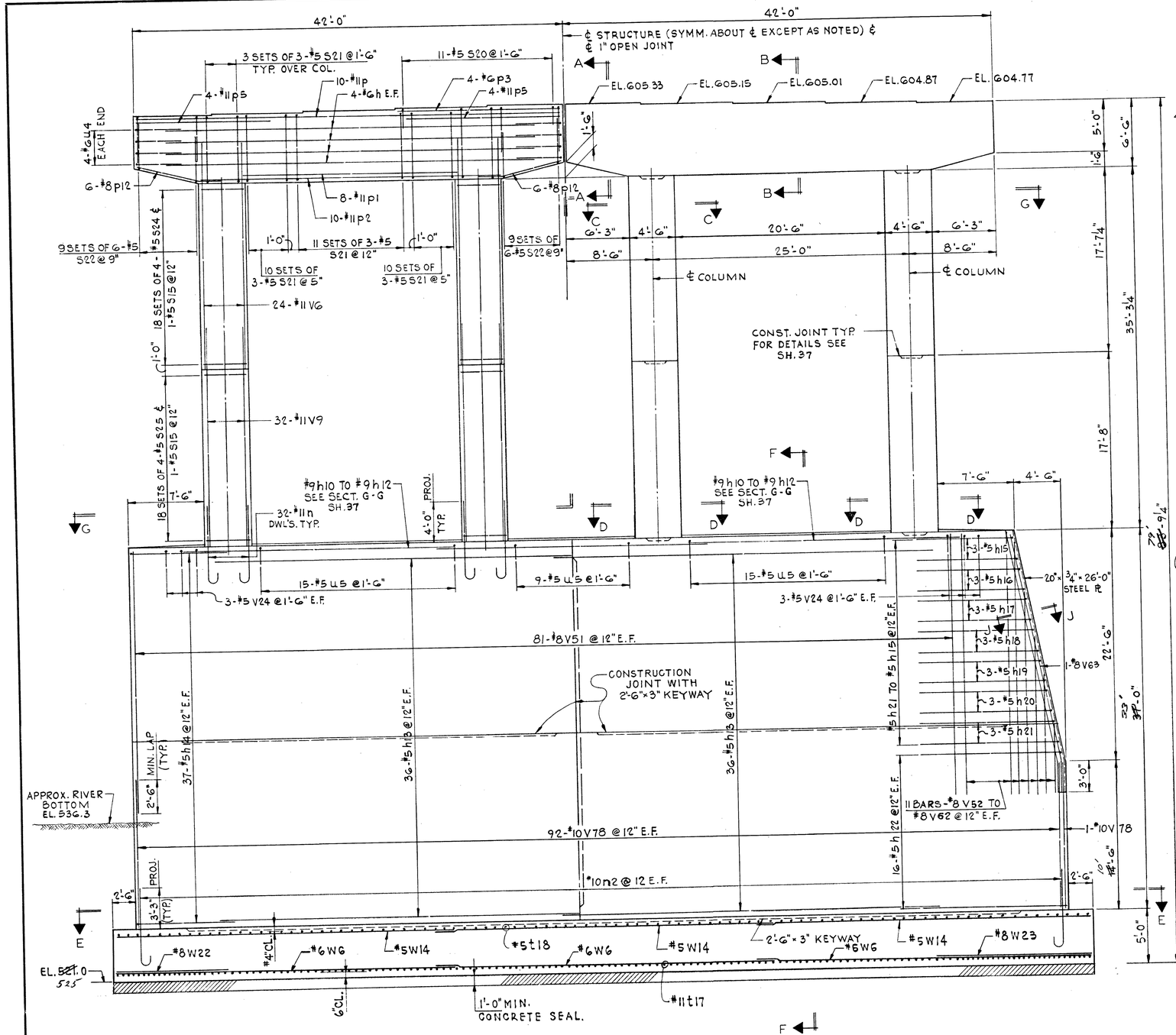
PIER 10
CAP, WALL & FOOTING

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

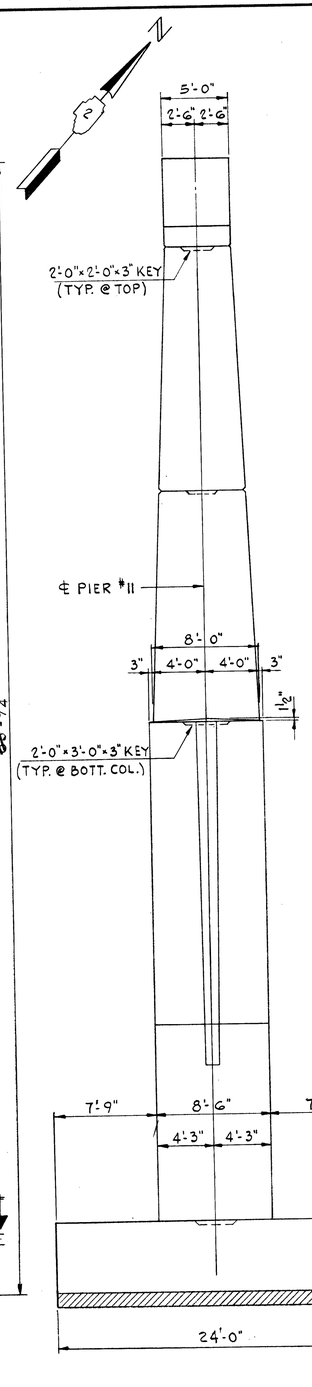
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY J. N. LESLIE
CHECKED S. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

[REV. 5-17-71 S.F.M.]

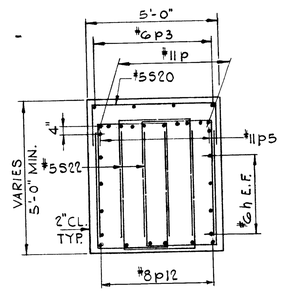
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	36
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



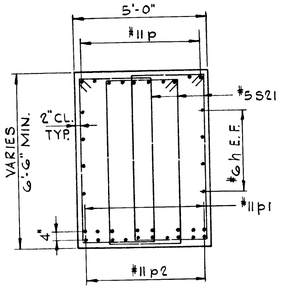
ELEVATION
SCALE: 3/16" = 1'-0"



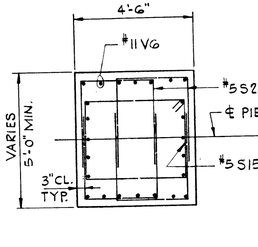
END ELEVATION
SCALE: 3/16" = 1'-0"



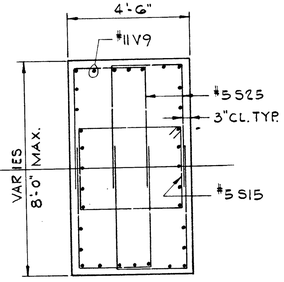
SECTION A-A
SCALE: 3/8" = 1'-0"



SECTION B-B
SCALE: 3/8" = 1'-0"



SECTION C-C
SCALE: 3/8" = 1'-0"



SECTION D-D
SCALE: 3/8" = 1'-0"

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED & SET BY OTHERS.

ALL EDGES TO HAVE STANDARD 3/4" CHAMFER EXCEPT AS NOTED.

POUR STEPS MONOLITHICALLY WITH CAP.

ALL BAR DIMENSIONS ARE OUT TO OUT.

MIN. BAR LAP-24 DIA. UNLESS OTHERWISE NOTED.

MAX. BEARING PRESSURE ON SHALE 11.99 KIPS/SQ. FT. FOR A.A.S.H.O. GROUP IX @ 150%

WORK THIS SHEET WITH SH. 37

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Cofferdam Excavation	CU. YD.	726
ROCK EXCAVATION FOR STRUCTURE	CU. YD.	~~794~~ 453
CLASS "X" CONCRETE	CU. YD.	~~1662.0~~ 1554.8
REINFORCEMENT BARS	POUND	126,190
STRUCTURAL STEEL	POUND	1,640
CONCRETE SEAL	SQ. YD.	256
COFFERDAM	EACH	1

REVISED 6-4-71

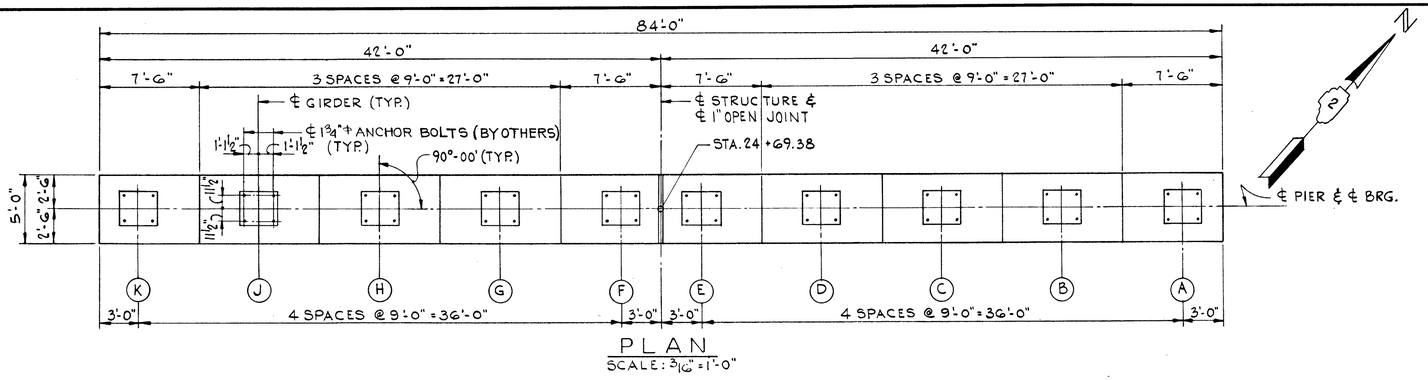
PIER II ELEVATIONS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

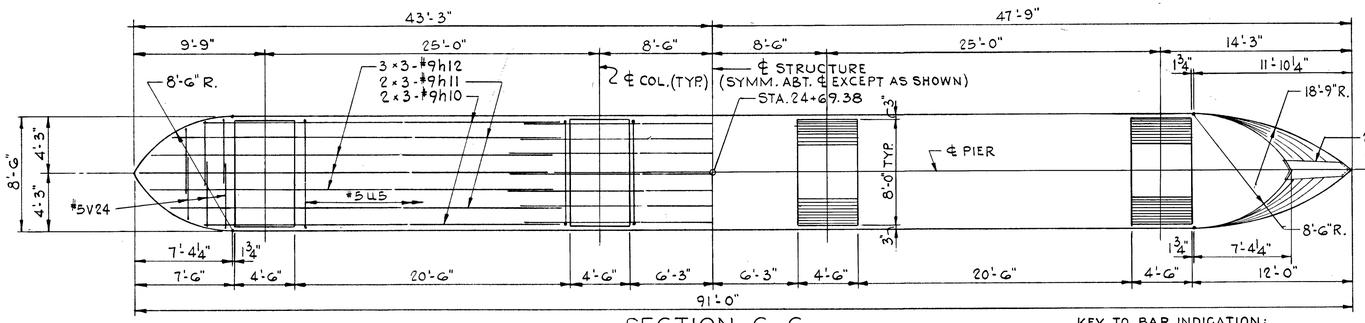
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY S. MUELLER
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

Rev. 6-4-71 Rock Excav. from 794 to 453 Cu. yds, Class X from 1662.0 to 1554.8 Cu yds S.M.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	37
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

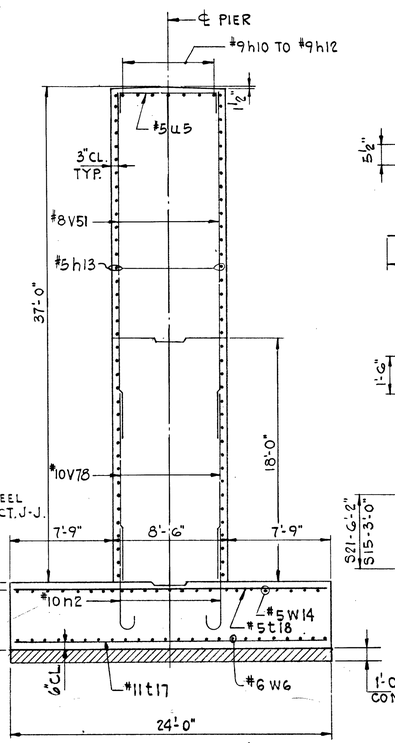


PLAN
SCALE: 3/16" = 1'-0"



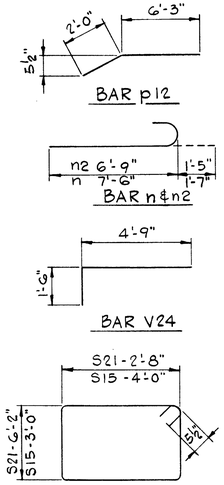
SECTION G-G
SCALE: 3/16" = 1'-0"

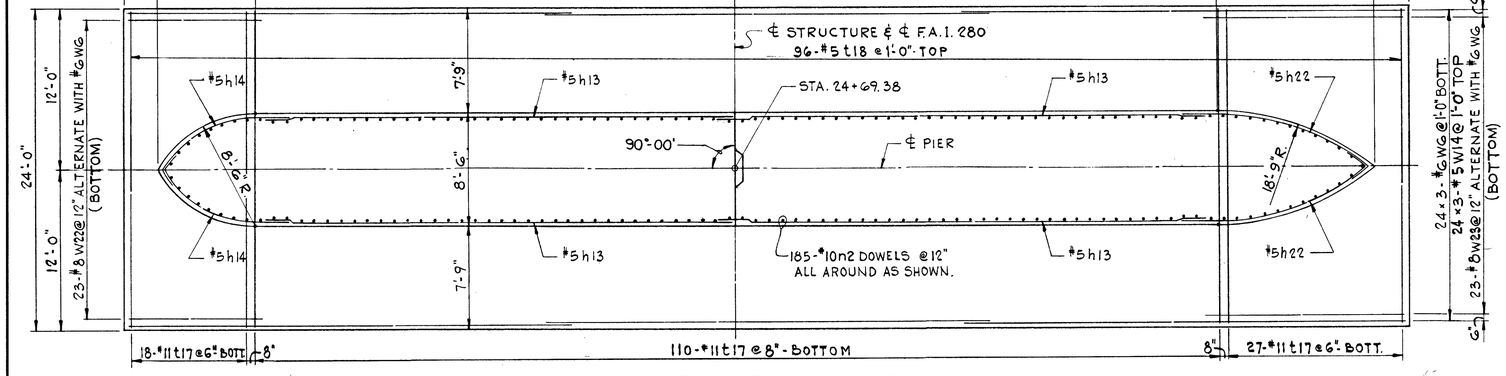
KEY TO BAR INDICATION:
26 x 3 | - #6 INDICATES 26 LINES OF #6 BARS WITH 3 BARS PER LINE.



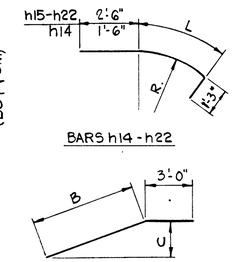
SECTION F-F
SCALE: 3/16" = 1'-0"

1'-0" MIN. CONCRETE SEAL.





SECTION E-E-FOOTING PLAN
SCALE: 3/16" = 1'-0"

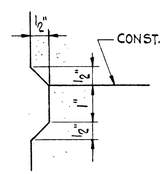


BAR	R	L	BAR	R	L
h14	8'-3"	8'-6"	h19	13'-2⅝"	10'-10"
h15	8'-4⅛"	8'-8"	h20	14'-7½"	11'-4"
h16	9'-5⅛"	9'-2"	h21	16'-1⅝"	11'-0"
h17	10'-7⅛"	9'-9"	h22	18'-6"	12'-8"
h18	11'-10¼"	10'-3"			

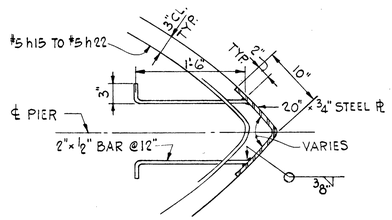
BAR	B	C	BAR	B	C
V79	22'-3"	1½"	V86	21'-0"	2'-0"
V80	22'-3"	3"	V87	15'-0"	1'-6"
V81	22'-3"	5½"	V88	9'-0"	1'-0"
V82	22'-3"	9"	V89	3'-9"	3"
V83	22'-3"	1'-1"	V90	22'-9"	4'-6"
V84	22'-3"	1'-6"			
V85	22'-3"	2'-0"			

BAR	A	B
S20	4'-8	1'-6"
S22	2'-8"	4'-4"
S24	2'-8"	3'-9"
S25	2'-8	4'-6"
U4	4'-8"	4'-6"
U5	8'-0"	1'-6"

NOTE:
WORK THIS SHEET WITH SH. 36



CONST. JT. DETAIL
SCALE: 6" = 1'-0"



SECTION J-J
SCALE: 1" = 1'-0"

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	16	#6	36'-0"	
h10	6	#9	26'-6"	
h11	6	#9	29'-0"	
h12	9	#9	30'-6"	
h13	144	#5	36'-0"	
h14	74	#5	11'-3"	
h15	6	#5	12'-5"	
h16	6	#5	12'-11"	
h17	6	#5	13'-6"	
h18	6	#5	14'-0"	
h19	6	#5	14'-7"	
h20	6	#5	15'-1"	
h21	6	#5	15'-7"	
h22	32	#5	16'-5"	
n2	185	#10	8'-2"	
n	128	#11	9'-1"	
p	20	#11	41'-6"	
p1	16	#11	21'-0"	
p2	20	#11	29'-0"	
p3	8	#6	16'-0"	
p5	16	#11	15'-0"	
p12	24	#8	8'-3"	
S20	22	#5	7'-8"	
S21	222	#5	18'-7"	
S22	216	#5	11'-4"	
S15	144	#5	14'-11"	
S24	288	#5	10'-2"	
S25	288	#5	11'-8"	
t18	96	#5	23'-6"	
t17	155	#11	23'-6"	
u4	16	#6	13'-8"	
u5	39	#5	11'-0"	
V24	12	#5	6'-3"	
V6	96	#11	22'-0"	
V9	128	#11	21'-6"	
V78	185	#10	14'-3"	
V52	2	#8	25'-3"	
V53	2	#8	25'-3"	
V54	2	#8	25'-3"	
V55	2	#8	25'-3"	
V56	2	#8	25'-3"	
V57	2	#8	25'-3	
V58	2	#8	25'-3"	
V59	2	#8	24'-0"	
V60	2	#8	18'-0"	
V61	2	#8	12'-0"	
V62	2	#8	6'-9"	
V63	1	#8	25'-9	
V51	162	#8	25'-6"	
W6	72	#6	33'-0"	
W22	23	#8	10'-0"	
W23	23	#8	13'-0"	
W14	72	#5	32'-9"	

REVISED 6-4-71

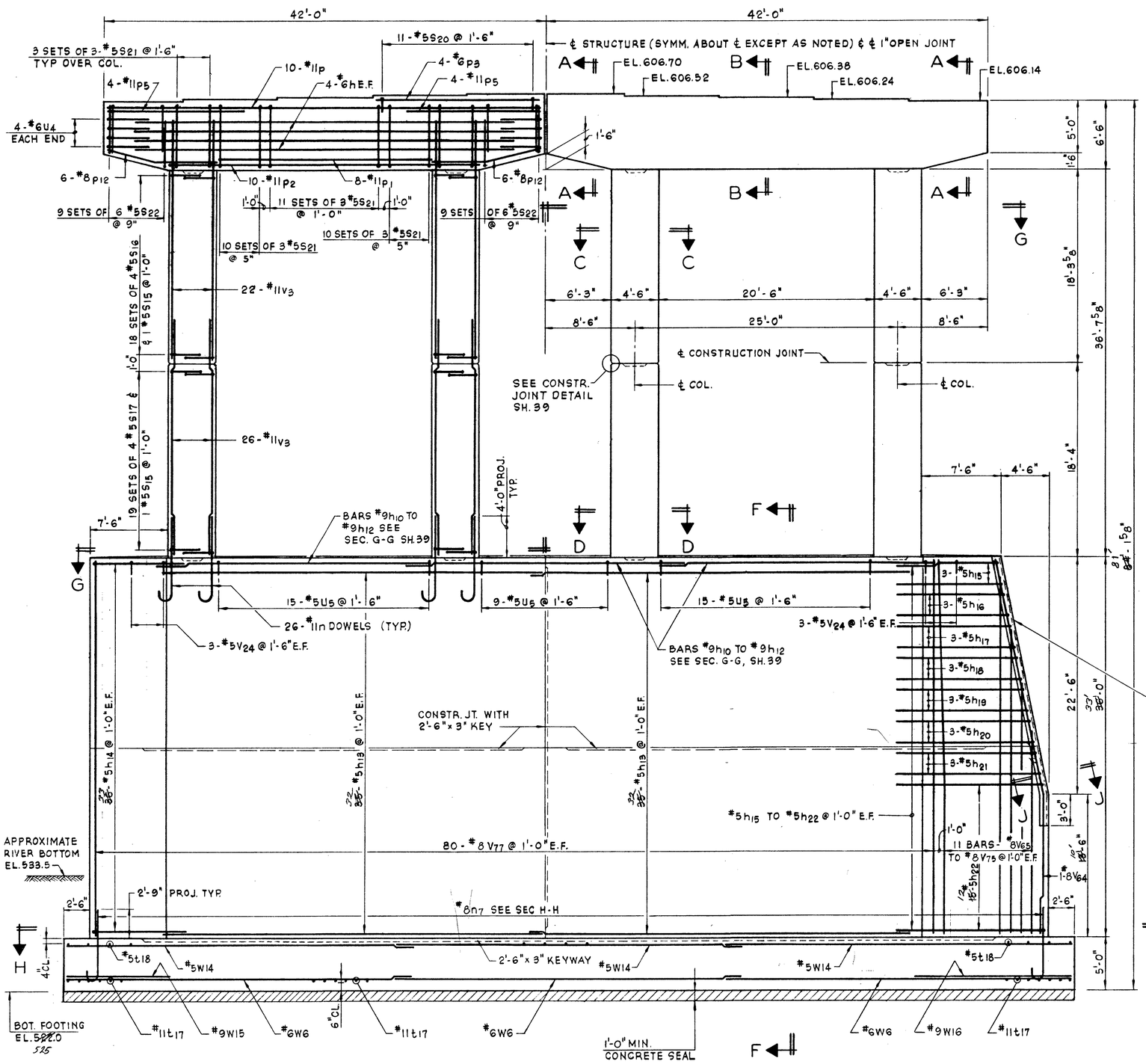
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY S. MUELLER
CHECKED S.-G. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

REV. 6-4-71 S.M.

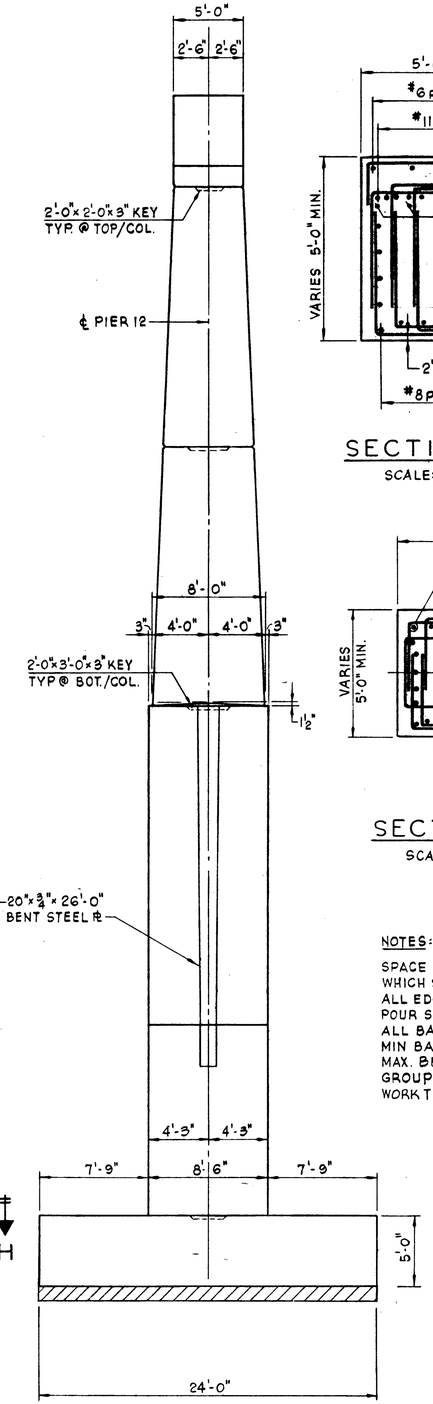
PIER 11
CAP, WALL & FOOTING

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

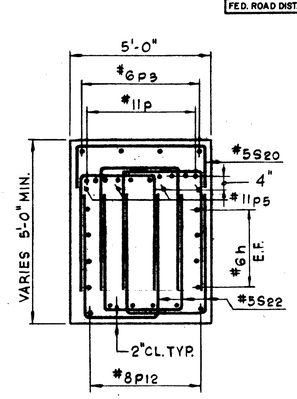
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	38
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



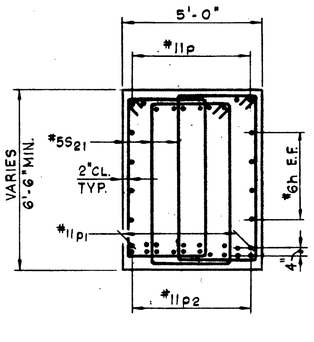
ELEVATION
SCALE: 3/16" = 1'-0"



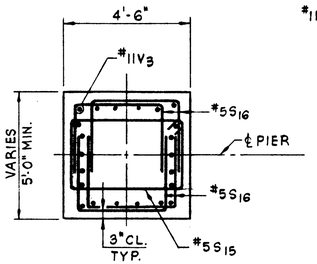
END ELEVATION
SCALE: 3/16" = 1'-0"



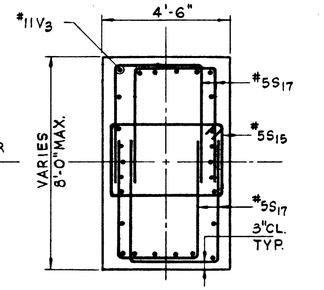
SECTION A-A
SCALE: 3/8" = 1'-0"



SECTION B-B
SCALE: 3/8" = 1'-0"



SECTION C-C
SCALE: 3/8" = 1'-0"



SECTION D-D
SCALE: 3/8" = 1'-0"

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED AND SET BY OTHERS.
ALL EDGES TO HAVE STANDARD 3/4" CHAMFER EXCEPT AS NOTED.
POUR STEPS MONOLITHCALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN BAR LAP 24 DIA. UNLESS OTHERWISE NOTED.
MAX. BEARING PRESSURE ON SHALE 11.58 KIPS/SQ. FT., FOR A.A.S.H.O. GROUP IX LOADING @ 150%
WORK THIS SHEET WITH SH. 39

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Cofferdam Excavation	CU. YD.	571
ROCK EXCAVATION FOR STRUCTURE	CU. YD.	~~556~~ 300
CLASS "X" CONCRETE	CU. YD.	~~1641.1~~ 1560.7
REINFORCEMENT BARS	POUND	~~114,360~~ 112,270
STRUCTURAL STEEL	POUND	1640
CONCRETE SEAL	SQ. YD.	256
COFFERDAM	EACH	1

(Revised 5-18-71)

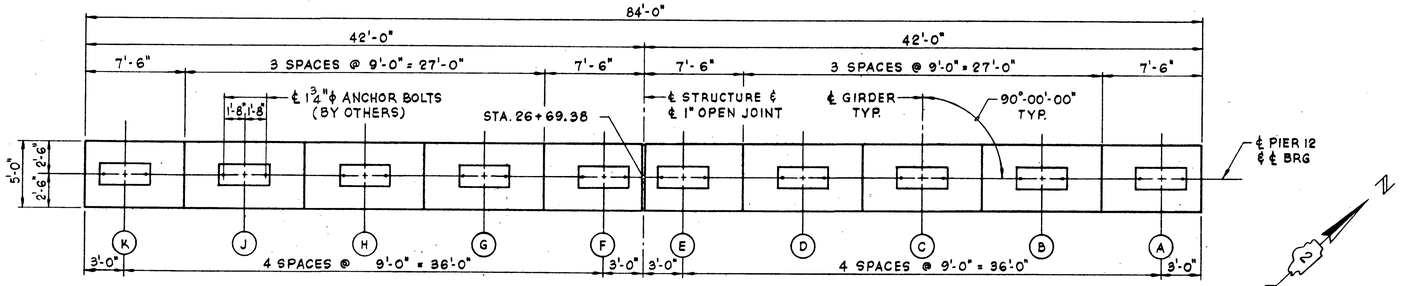
PIER 12
ELEVATIONS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J. Y. HUANG
DRAWN BY J. N. LESLIE
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

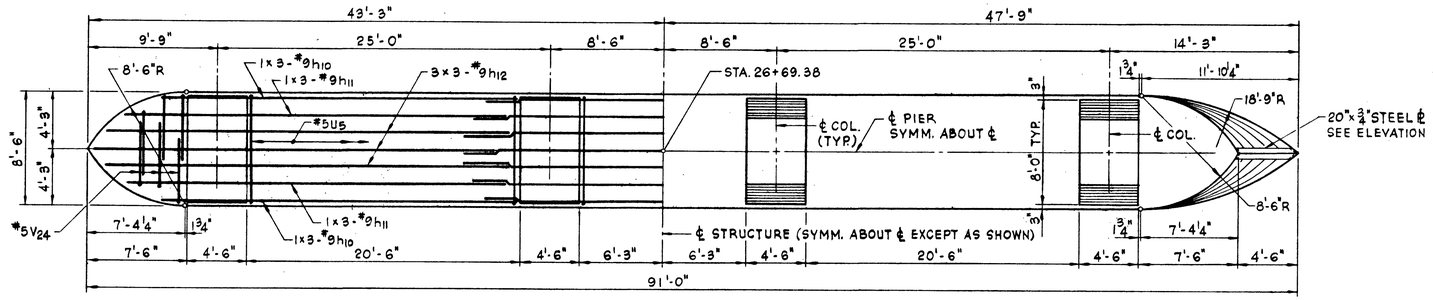
(Rev. 5-18-71) Rock Exc. from 556 to 300 Cu. yds., Class X Conc. from 1641.1 to 1560 Cu. yds., Reinf. from 114,360 to 112,270 lbs. S.F.M.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	39
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



PLAN

SCALE: 3/16" = 1'-0"

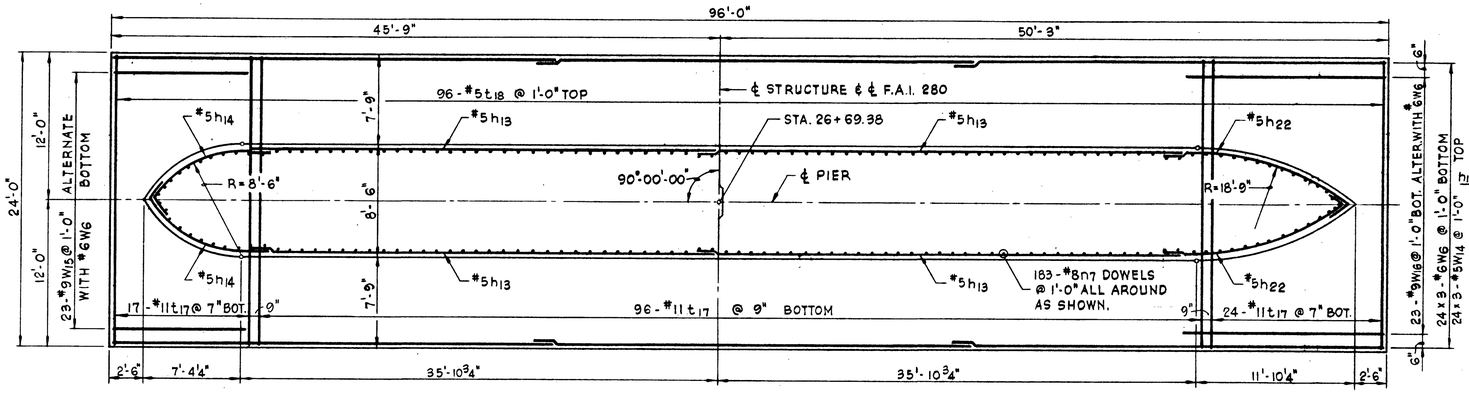


SECTION G-G

SCALE: 3/16" = 1'-0"

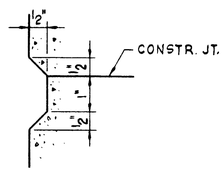
KEY TO BAR INDICATION

24x3-#6 INDICATES 24 LINES OF #6 BARS WITH 3 LENGTHS PER LINE.



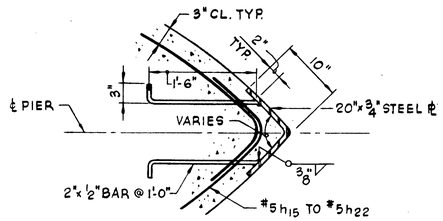
SECTION H-H - FOOTING PLAN

SCALE: 3/16" = 1'-0"



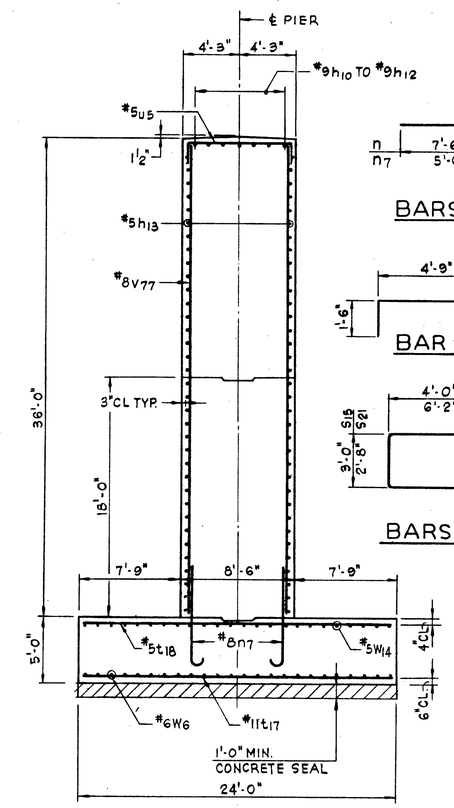
CONSTR. JT. DETAIL

SCALE: 6" = 1'-0"



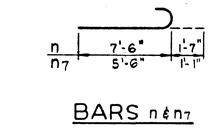
SECTION J-J

SCALE: 1" = 1'-0"

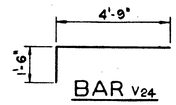


SECTION F-F

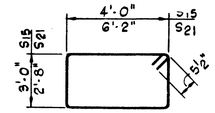
SCALE: 3/16" = 1'-0"



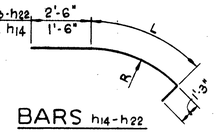
BARS n & n7



BAR V24

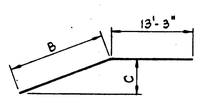


BARS S15 & S21



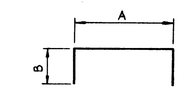
BARS h14-h22

BAR	R	L	BAR	R	L
h14	8'-3"	8'-6"	h19	13'-2 3/8"	10'-10"
h15	8'-4 1/8"	8'-8"	h20	14'-7 1/2"	11'-4"
h16	9'-5 1/8"	9'-2"	h21	16'-1 3/8"	11'-10"
h17	10'-7 1/8"	9'-9"	h22	18'-6"	12'-8"
h18	11'-10 1/4"	10'-3"			



BARS V64-V75

BAR	B	C	BAR	B	C
V64	22'-9"	4'-6"	V71	22'-3"	2'-0"
V65	22'-3"	1'-2"	V72	21'-0"	2'-0"
V66	22'-3"	3"	V73	15'-0"	1'-6"
V67	22'-3"	5 1/2"	V74	9'-0"	1'-0"
V68	22'-3"	9"	V75	3'-9"	3"
V69	22'-3"	1'-1"			
V70	22'-3"	1'-6"			

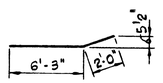


BARS S20, S16, S17 S22, U4 & U5

BAR	A	B
S20	4'-8"	1'-6"
S16	3'-3"	3'-9"
S17	3'-3"	4'-6"
S22	2'-8"	4'-4"
U4	4'-8"	4'-6"
U5	8'-0"	1'-6"

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	16	6	36'-0"	
h10	6	9	26'-6"	
h11	6	9	29'-0"	
h12	9	9	30'-6"	
h13	~~12~~ 13	5	36'-0"	
h14	~~66~~ 72	5	11'-3"	
h15	6	5	12'-5"	
h16	6	5	12'-11"	
h17	6	5	13'-6"	
h18	6	5	14'-0"	
h19	6	5	14'-7"	
h20	6	5	15'-1"	
h21	6	5	15'-7"	
h22	~~24~~ 26	5	16'-5"	
n	104	11	9'-1"	
n7	183	8	6'-7"	
P	20	11	41'-6"	
P1	16	11	21'-0"	
P2	20	11	29'-0"	
P3	8	6	16'-0"	
P12	24	8	8'-3"	
P5	16	11	15'-0"	
S20	22	5	7'-8"	
S15	148	5	14'-11"	
S16	288	5	10'-9"	
S17	304	5	12'-3"	
S22	216	5	11'-4"	
S21	282	5	16'-7"	
t17	137	11	23'-6"	
t18	96	5	23'-6"	
U4	16	6	13'-8"	
U5	39	5	11'-0"	
V3	192	11	22'-6"	
V64	1	8	~~32~~ 33'-0"	
V65	2	8	~~32~~ 33'-6"	
V66	2	8	~~32~~ 33'-6"	
V67	2	8	~~32~~ 33'-6"	
V68	2	8	~~32~~ 33'-6"	
V69	2	8	~~32~~ 33'-6"	
V70	2	8	~~32~~ 33'-6"	
V71	2	8	~~32~~ 33'-6"	
V72	2	8	~~31~~ 34'-3"	
V73	2	8	~~15~~ 23'-3"	
V74	2	8	~~14~~ 21'-3"	
V75	2	8	~~14~~ 17'-0"	
V77	160	8	~~22~~ 23'-9"	
V24	12	5	6'-3"	
W6	72	6	33'-0"	
W14	72	5	32'-9"	
W15	23	9	10'-0"	
W16	23	9	15'-0"	



BAR P12

REVISED 5-18-71

NOTES

WORK THIS SHEET WITH SH. 38

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY J. Y. HUANG
DRAWN BY J. N. LESLIE
CHECKED G. G. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

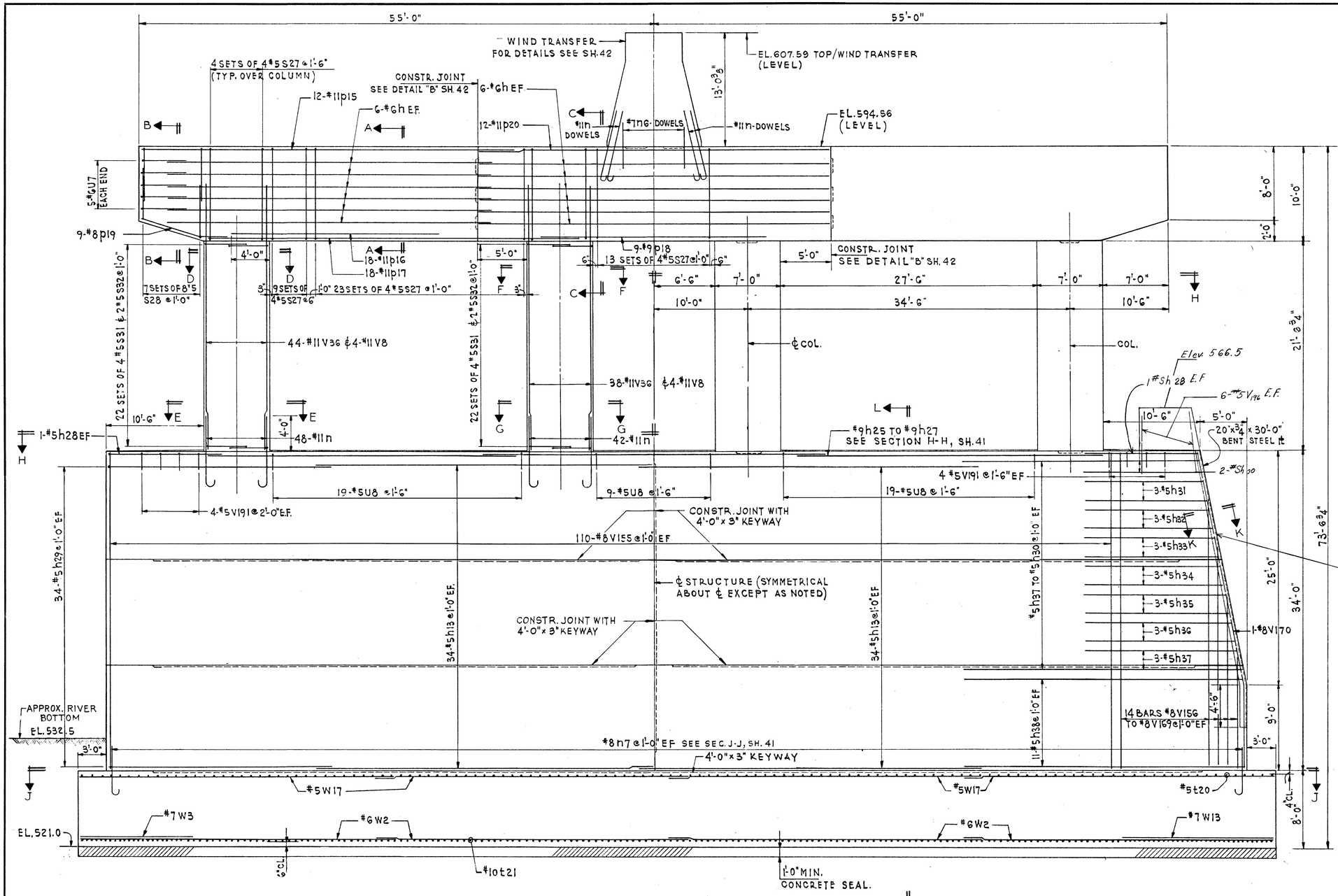
Rev. 5-18-71 S.F.M.

PIER 12
CAP, WALL & FOOTING

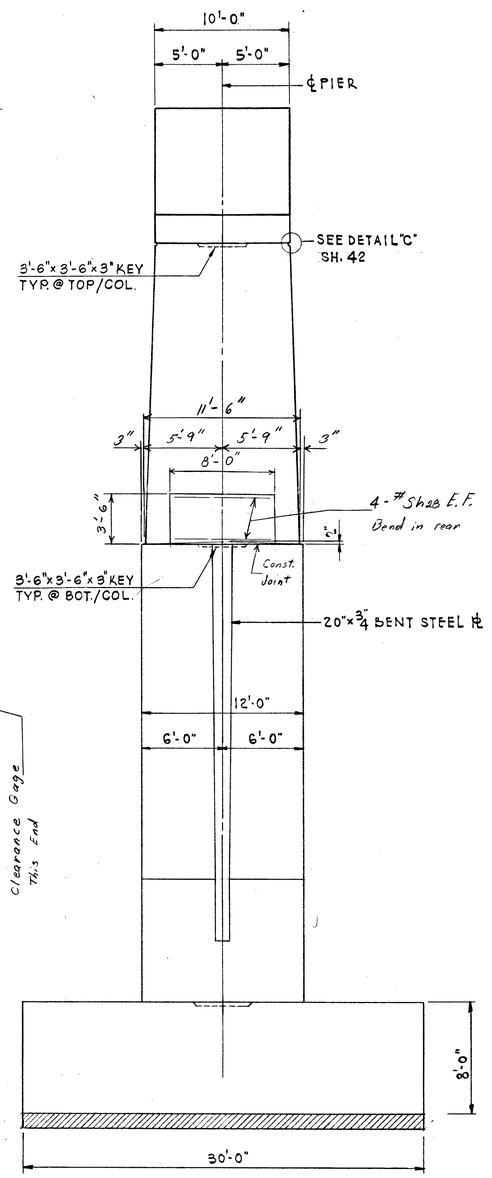
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	40
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



ELEVATION
SCALE: 3/16 = 1'-0"



END ELEVATION
SCALE: 3/16 = 1'-0"

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR, ALL ANCHOR BOLTS WHICH SHALL BE FURNISHED AND SET BY OTHERS.

ALL EDGES TO HAVE STANDARD ¾ CHAMFERS EXCEPT AS NOTED.

MINIMUM BAR LAP 24 DIA. UNLESS OTHERWISE NOTED.

MAXIMUM BEARING PRESSURE ON SHALE 12.89 KIPS PER SQ. FT. FOR A.A.S.H.O. GROUP IX LOADING @ 150%

WORK THIS SHEET WITH SH. 41 & SH. 42

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Cofferdam Excavation	CU. YD.	873
ROCK EXCAVATION for Structure	CU. YD.	997
CLASS "X" CONCRETE	CU. YD.	~~3500.3~~ 3503.4
REINFORCEMENT BARS	POUND	169,520
STRUCTURAL STEEL	POUND	1920
CONCRETE SEAL	SQ. YD.	427
COFFERDAM	EACH	1

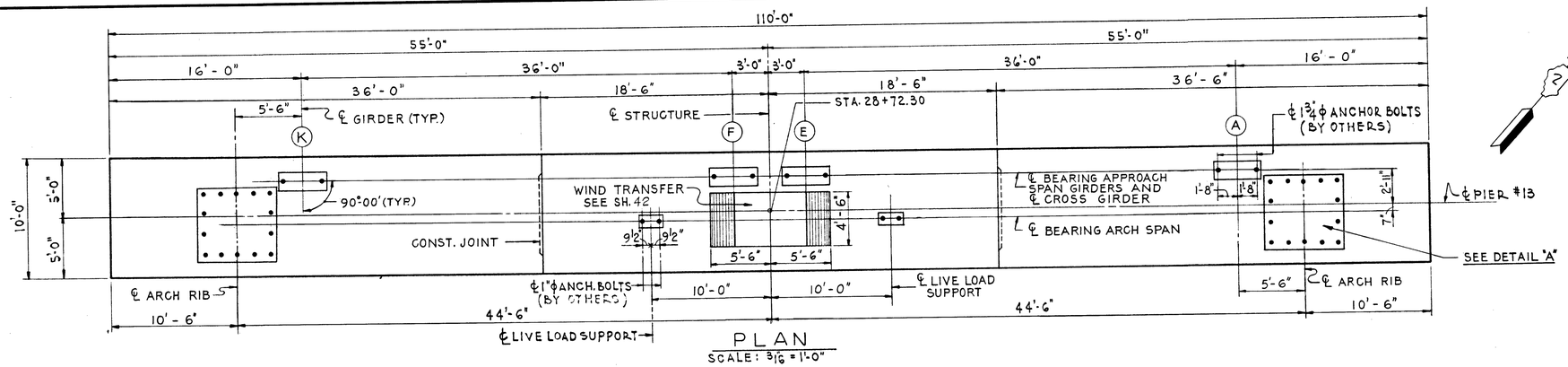
Revised 8-17-70

PIER 13
ELEVATIONS
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

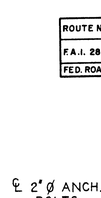
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J. Y. HUANG
DRAWN BY A. BUROKAS
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

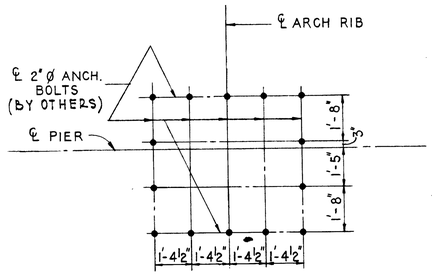
Rev. 6-16-70 Class X from 3500.3 to 3503.4 Cu. yds., Reinf. from 169,520 to 169,760 lbs. S.M.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	41
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

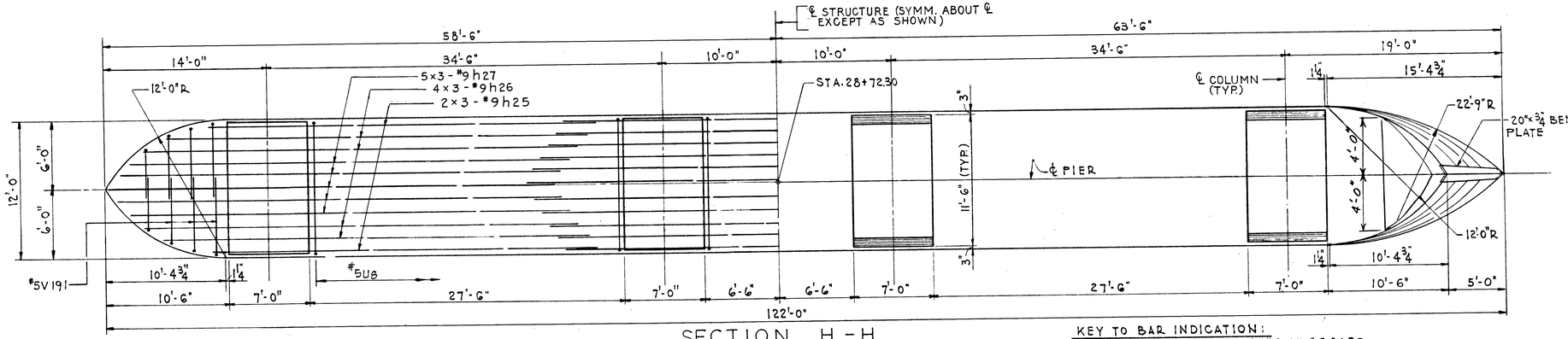


PLAN
SCALE: 3/16 = 1'-0"



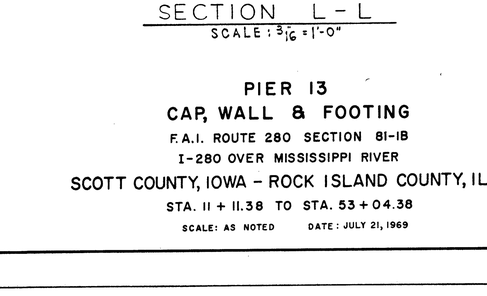


DETAIL "A"
SCALE: 3/8" = 1'-0"

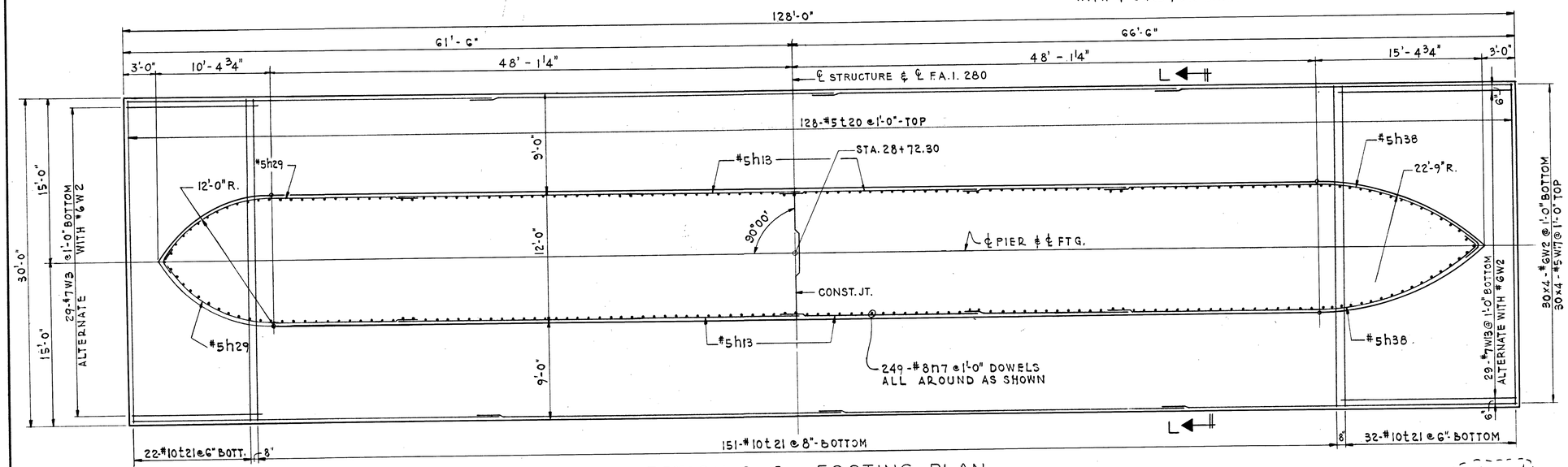


SECTION H-H
SCALE: 3/16 = 1'-0"

KEY TO BAR INDICATION:
30x4-#6 INDICATES 30 LINES OF #6 BARS WITH 4 BARS PER LINE.



SECTION L-L
SCALE: 3/16 = 1'-0"



SECTION J-J - FOOTING PLAN
SCALE: 3/16 = 1'-0"

NOTE:
WORK THIS SHEET WITH SH. 40 & SH. 42

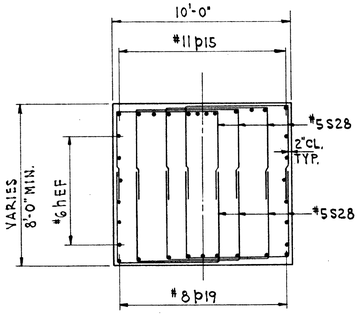
Revised 8-17-70

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.Y. HUANG
DRAWN BY A. BUROKAS
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

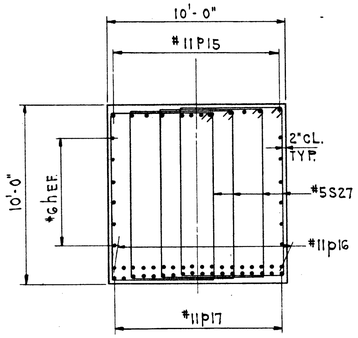
PIER 13
CAP, WALL & FOOTING

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

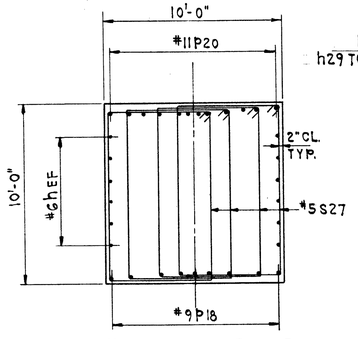
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	42
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



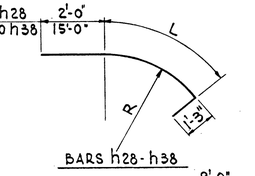
SECTION B - B
SCALE: 1/4 = 1'-0"



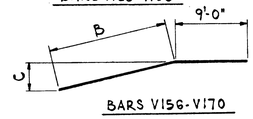
SECTION A - A
SCALE: 1/4 = 1'-0"



SECTION C - C
SCALE: 1/4 = 1'-0"



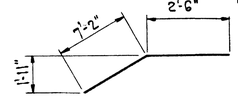
BARS h28 - h38



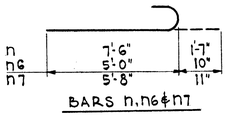
BARS V156-V170

BAR	R	L	BAR	R	L
h29	11'-9"	12'-3"	h34	16'-5 7/8"	14'-5"
h30	11'-10"	12'-4"	h35	17'-9 3/4"	14'-11"
h31	12'-11"	12'-10"	h36	19'-1"	15'-6"
h32	14'-0 1/2"	13'-4"	h37	20'-7 3/8"	16'-3"
h33	15'-3"	13'-10"	h38	22'-6"	16'-8"
			h28	11'-9"	12'-3"

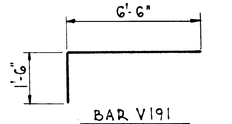
BAR	B	C	BAR	B	C
V156	24'-9"	1 1/2"	V163	24'-9"	1'-10"
V157	24'-9"	3"	V164	24'-9"	2'-2"
V158	24'-9"	5"	V165	24'-9"	2'-7"
V159	24'-9"	7"	V166	23'-9"	2'-9"
V160	24'-9"	10"	V167	18'-0"	2'-2"
V161	24'-9"	1'-1"	V168	13'-6"	1'-6"
V162	24'-9"	1'-5"	V169	7'-0"	9"
			V170	25'-3"	4'-11"



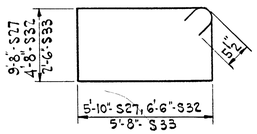
BAR P19



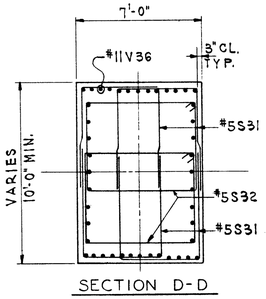
BARS n, n6 & n7



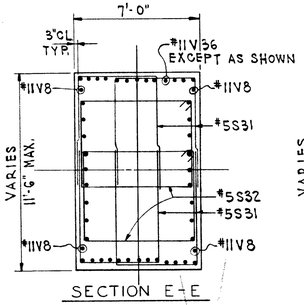
BAR V191



BARS S27, S32 & S33

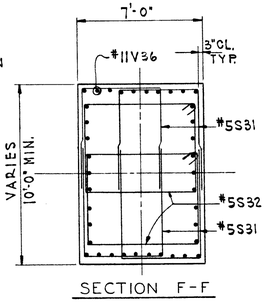


SECTION D-D

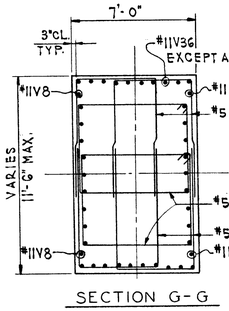


SECTION E-E

EXTERIOR COLUMN
SCALE: 1/4 = 1'-0"



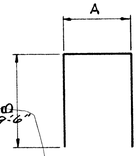
SECTION F-F



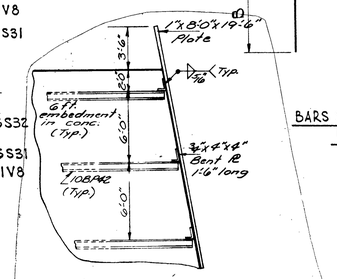
SECTION G-G

INTERIOR COLUMN
SCALE: 1/4 = 1'-0"

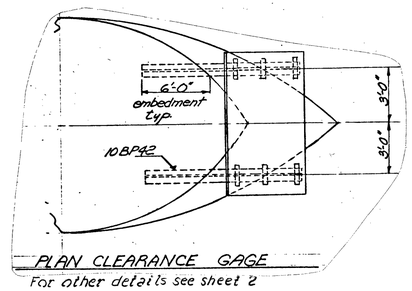
BAR	A	B
S28	5'-10"	5'-6"
S31	4'-6"	6'-3"
S34	2'-6"	5'-6"
S35	2'-6"	6'-3"
U7	9'-7"	4'-9"
U8	11'-5"	1'-6"
U9	4'-1"	1'-6"
U10	5'-6"	6'-0"



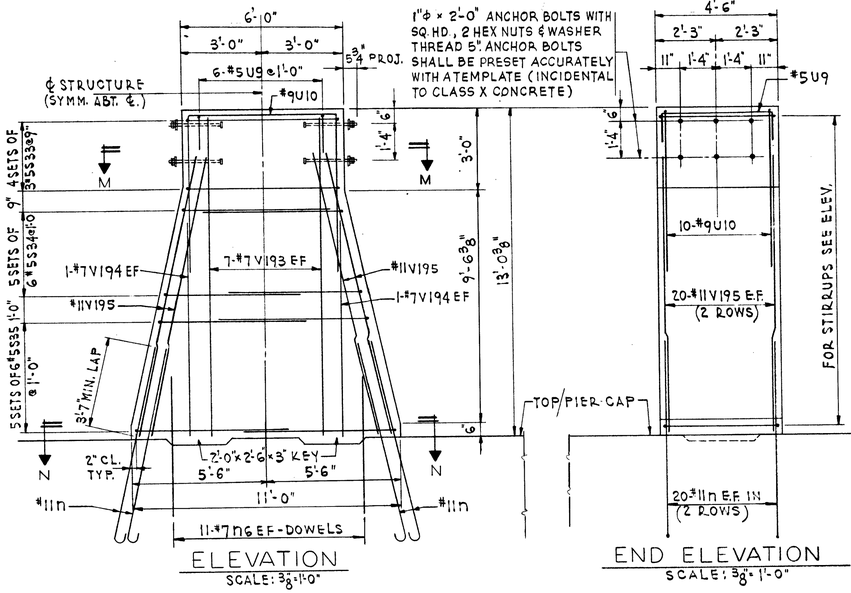
BARS S28, S31, S34, S35
U7, U8, U9 & U10



ELEVATION CLEARANCE GAGE

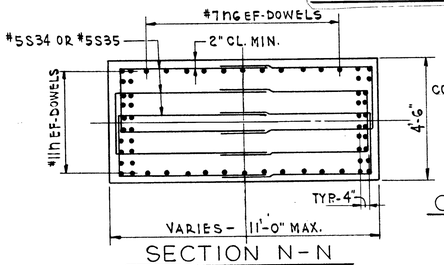


PLAN CLEARANCE GAGE
For other details see sheet 2

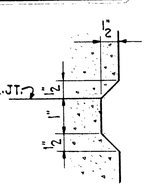


ELEVATION
SCALE: 3/8" = 1'-0"

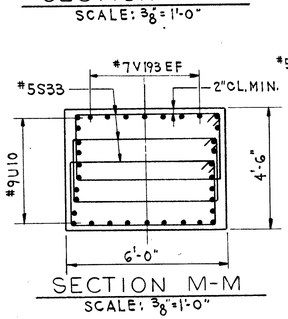
END ELEVATION
SCALE: 3/8" = 1'-0"



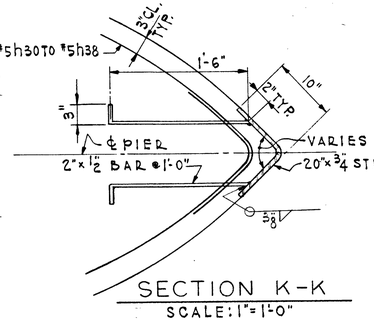
SECTION N-N
SCALE: 3/8" = 1'-0"



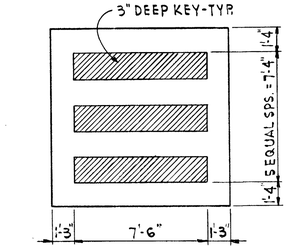
CONSTR. JT. DETAIL "C"
SCALE: 6" = 1'-0"



SECTION M-M
SCALE: 3/8" = 1'-0"



SECTION K-K
SCALE: 1" = 1'-0"



CAP CONSTR JOINT
DETAIL "B"
SCALE: 1/4" = 1'-0"

Revised 8-17-70

BAR LIST

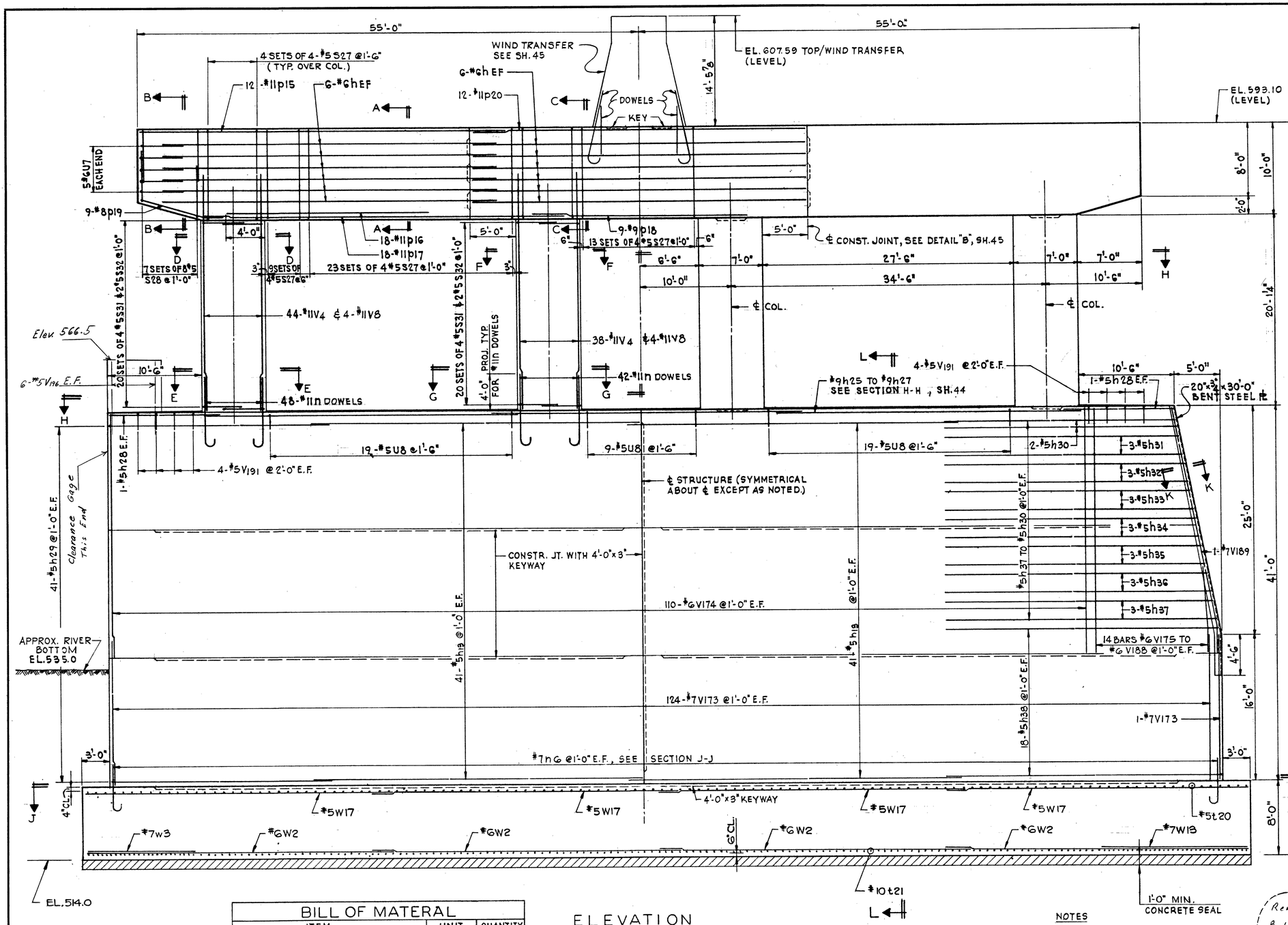
BAR	NO.	SIZE	LENGTH	SHAPE
h	24	#6	33'-6"	
h13	136	#5	36'-0"	
h25	6	#9	34'-0"	
h26	12	#9	37'-0"	
h27	15	#9	40'-9"	
h28	4	#5	15'-6"	
h29	68	#5	28'-6"	
h30	4	#5	28'-7"	
h31	6	#5	29'-1"	
h32	6	#5	29'-7"	
h33	6	#5	30'-1"	
h34	6	#5	30'-8"	
h35	6	#5	31'-2"	
h36	6	#5	31'-9"	
h37	6	#5	32'-6"	
h38	22	#5	32'-11"	
n	220	#11	9'-1"	
n6	22	#7	5'-10"	
n7	249	#8	6'-7"	
P15	24	#11	36'-0"	
P16	36	#11	22'-0"	
P17	36	#11	39'-6"	
P18	9	#9	23'-0"	
P19	18	#8	9'-8"	
P20	12	#11	44'-6"	
h39	12	#6	41'-0"	
S27	372	#5	31'-11"	
S28	112	#5	16'-10"	
S31	352	#5	17'-0"	
S32	176	#5	23'-3"	
S33	12	#5	17'-3"	
S34	30	#5	13'-6"	
S35	30	#5	15'-0"	
t20	128	#5	29'-6"	
t21	205	#10	29'-6"	
U7	10	#6	19'-1"	
U8	47	#5	14'-5"	
U9	6	#5	7'-1"	
U10	10	#9	17'-8"	
V196	18	#5	6'-0"	
V8	16	#11	13'-3"	
V36	164	#11	26'-0"	
V155	220	#8	33'-9"	
V156	2	#8	33'-9"	
V157	2	#8	33'-9"	
V158	2	#8	33'-9"	
V159	2	#8	33'-9"	
V160	2	#8	33'-9"	
V161	2	#8	33'-9"	
V162	2	#8	33'-9"	
V163	2	#8	33'-9"	
V164	2	#8	33'-9"	
V165	2	#8	33'-9"	
V166	2	#8	32'-9"	
V167	2	#8	27'-0"	
V168	2	#8	22'-6"	
V169	2	#8	16'-0"	
V170	1	#8	34'-3"	
V191	16	#5	8'-0"	
V193	14	#7	12'-9"	
V194	4	#7	9'-0"	
V195	40	#11	11'-3"	
W17	120	#5	33'-0"	
W3	29	#7	11'-6"	
W13	29	#7	15'-0"	
W2	120	#6	33'-6"	

WIND TRANSFER DETAILS

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J. Y. HUANG
DRAWN BY A. BUROKAS
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

PIER 13
MISCELLANEOUS DETAILS
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	43
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



ELEVATION
SCALE: 3/16"=1'-0"

END ELEVATION
SCALE: 3/16"=1'-0"

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Cofferdam Excavation	CU. YD.	2576
ROCK EXCAVATION FOR STRUCTURE	CU. YD.	1097
CLASS X CONCRETE	CU. YD.	3841.8
REINFORCEMENT BARS	POUND	161,720
STRUCTURAL STEEL	POUND	1920
CONCRETE SEAL	SQ. YD.	427
COFFERDAM	EACH	1

Rev. 6-16-70 Class X from 3841.8 to 3844.9 Cu. yds., Reinf. from 161,720 lbs. to 161,960 lbs. S.M.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY A. BUROKAS
CHECKED G. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

NOTES

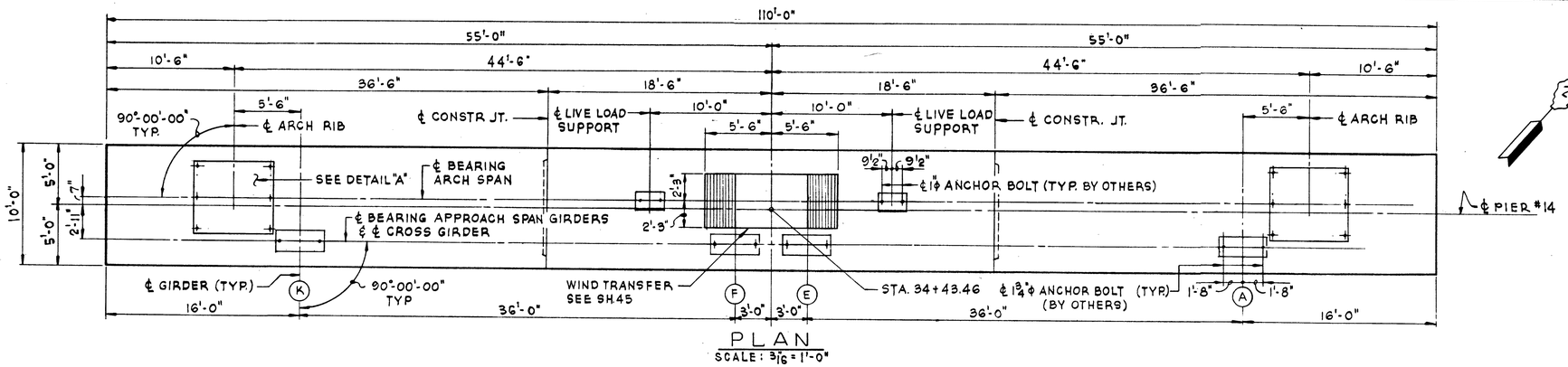
1. WORK THIS SHEET WITH SH.44 & SH.45
2. SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED & SET BY OTHERS.
3. ALL EDGES TO HAVE STANDARD ¾" CHAMFER EXCEPT AS NOTED.
4. ALL BAR DIMENSIONS ARE OUT TO OUT.
5. MIN. BAR LAP 24 DIA. UNLESS OTHERWISE NOTED.
6. MAX. BEARING PRESSURE ON SHALE 12.84 KIPS/SQ. FT., FOR A.A.S.H.O. GROUP IX LOADING @ 150%

Revised 8-17-70

PIER 14 ELEVATIONS

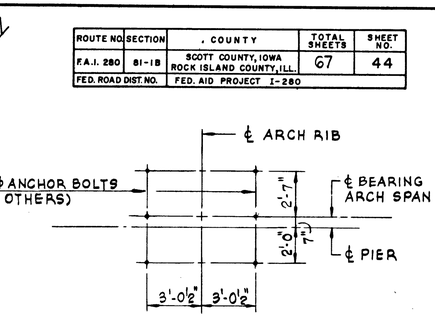
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	44
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



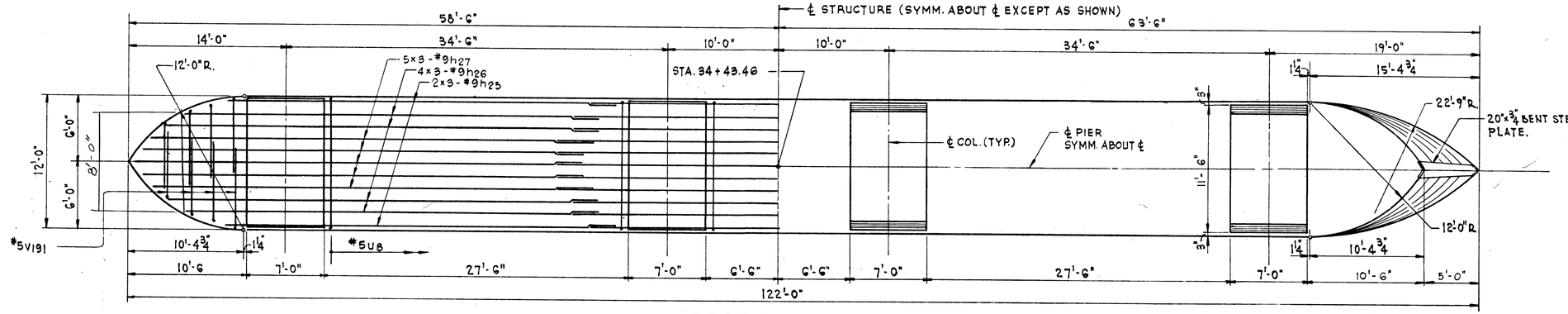
PLAN

SCALE: 3/16 = 1'-0"



DETAIL "A"

SCALE: ¼" = 1'-0"

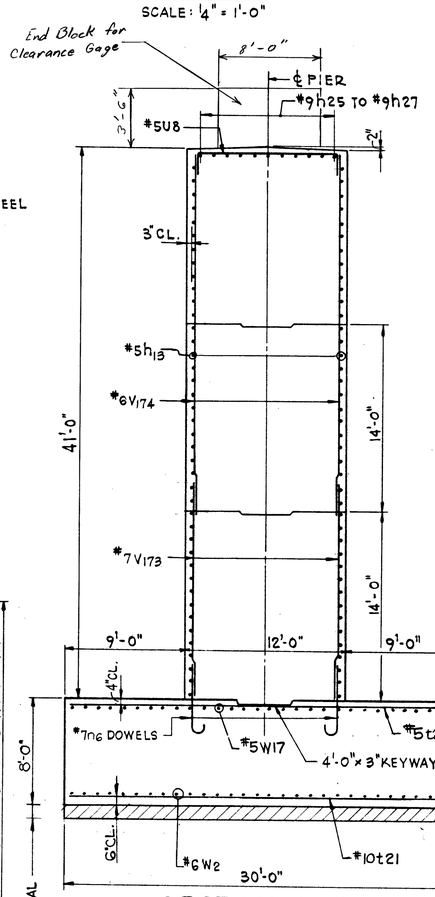


SECTION H - H

SCALE: 3/16 = 1'-0"

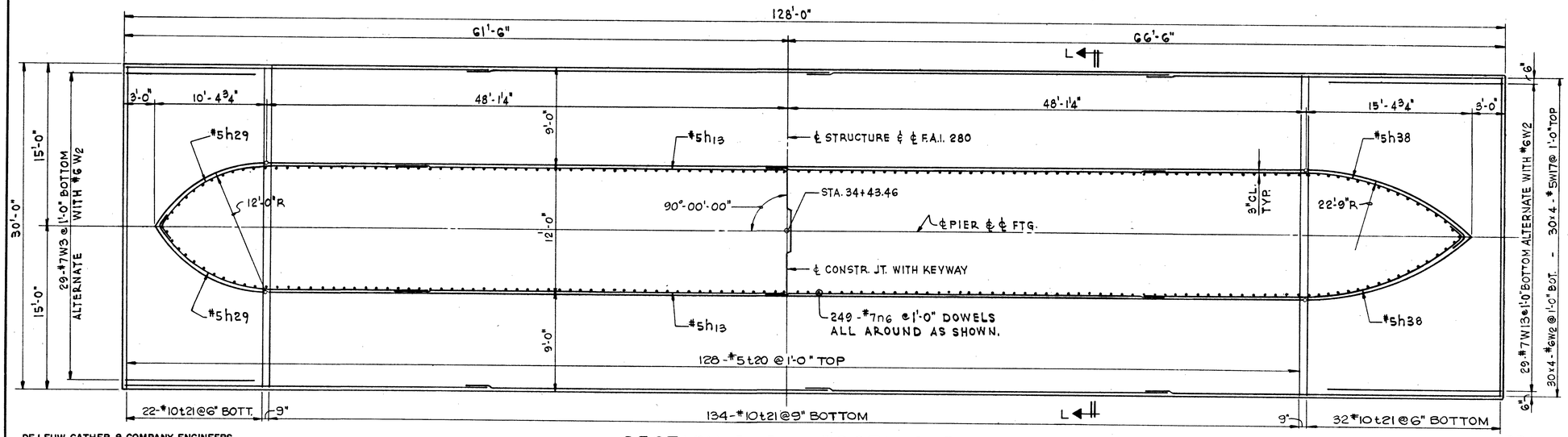
KEY TO BAR INDICATION

5x3-#9 INDICATES 5 LINES OF #9 BARS WITH 3 LENGTHS PER LINE



SECTION L - L

SCALE: 3/16 = 1'-0"



SECTION J-J - FOOTING PLAN

SCALE: 3/16 = 1'-0"

NOTE:

WORK THIS SHEET WITH SH.43 & SH.45

Revised 8-17-70

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY S. RASHID

DRAWN BY A. BUROKAS

CHECKED J. Y. Huang

IN CHARGE J. Y. HUANG

APPROVED W. G. HORN

PIER 14
CAP, WALL & FOOTING

F.A.I. ROUTE 280 SECTION 81-1B

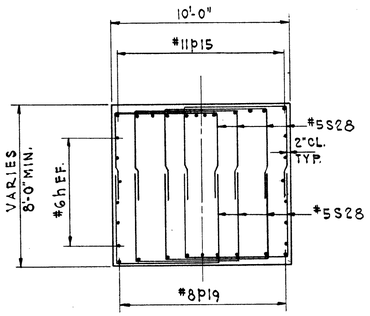
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

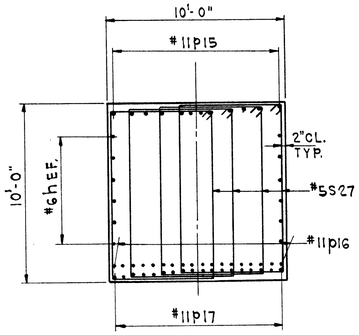
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: JULY 21, 1969

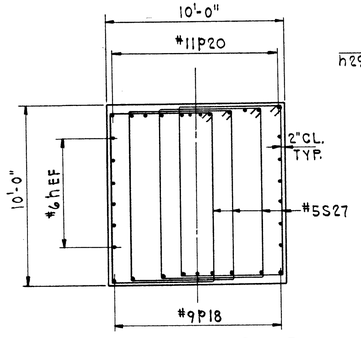
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	45
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



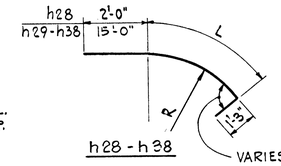
SECTION B - B
SCALE: 1/4" = 1'-0"



SECTION A - A
SCALE: 1/4" = 1'-0"

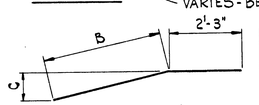


SECTION C - C
SCALE: 1/4" = 1'-0"



BAR	R	L
h29	11'-9"	12'-3"
h30	11'-10"	12'-4"
h31	12'-11"	12'-10"
h32	14'-0½"	13'-4"
h33	15'-3"	13'-10"

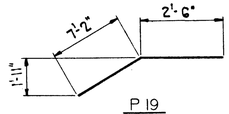
BAR	R	L
h34	16'-5⅞"	14'-5"
h35	17'-9¾"	14'-11"
h36	19'-1"	15'-6"
h37	20'-7⅝"	16'-3"
h38	22'-6"	16'-8"
h28	11'-9"	12'-3"



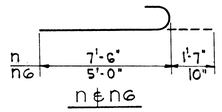
V175 - V189

BAR	B	C
V175	24'-9"	1½"
V176	24'-9"	3"
V177	24'-9"	5"
V178	24'-9"	7"
V179	24'-9"	10"
V180	24'-9"	1'-1"
V181	24'-9"	1'-5"

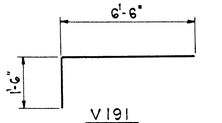
BAR	B	C
V182	24'-9"	1'-10"
V183	24'-9"	2'-2"
V184	24'-9"	2'-7"
V185	23'-9"	2'-9"
V186	18'-0"	2'-2"
V187	13'-6"	1'-6"
V188	7'-0"	9"
V189	25'-3"	4'-11"



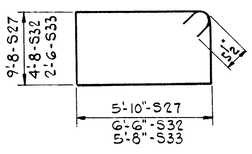
P19



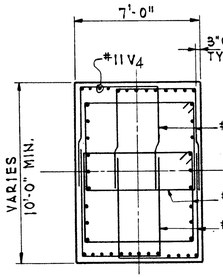
n & n6



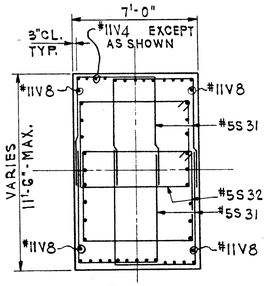
V191



S27, S32 & S33

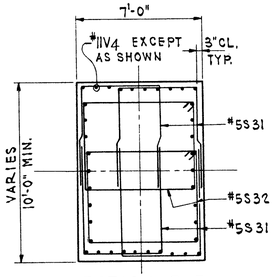


SECTION D-D

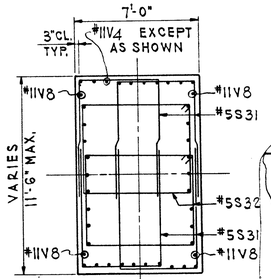


SECTION E-E

EXTERIOR COLUMN
SCALE: 1/4" = 1'-0"



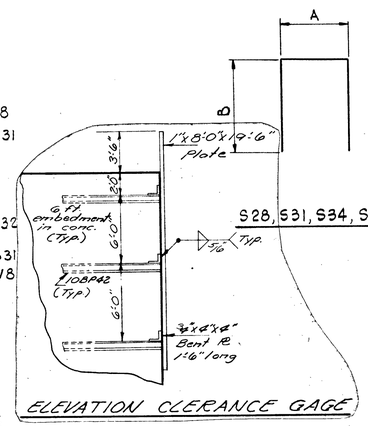
SECTION F-F



SECTION G-G

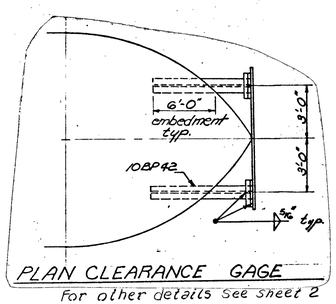
INTERIOR COLUMN
SCALE: 1/4" = 1'-0"

BAR	A	B
S28	5'-10"	5'-6"
S31	4'-6"	6'-3"
S34	2'-6"	5'-6"
S35	2'-6"	6'-3"
U7	9'-7"	4'-9"
U8	11'-5"	1'-6"
U9	4'-1"	1'-6"
U10	5'-6"	6'-0"

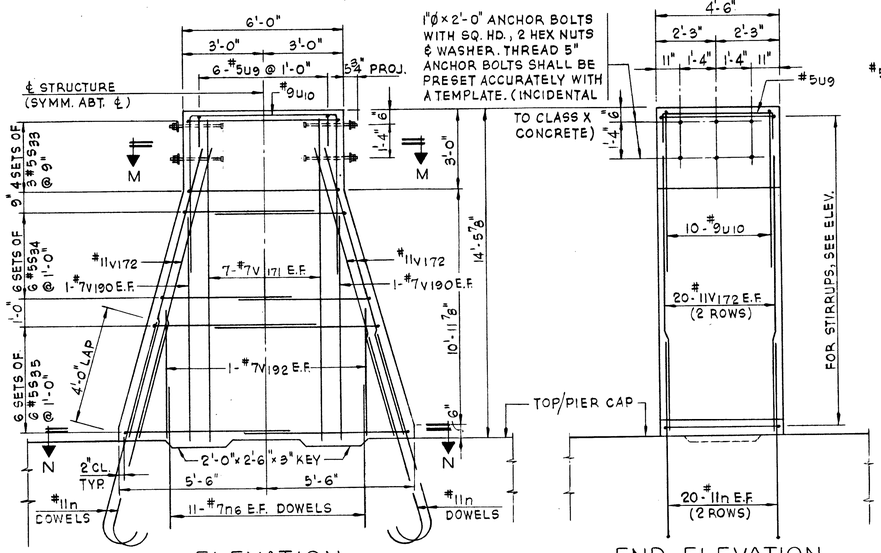


S28, S31, S34, S35, U7, U8, U9 & U10

ELEVATION CLEARANCE GAGE

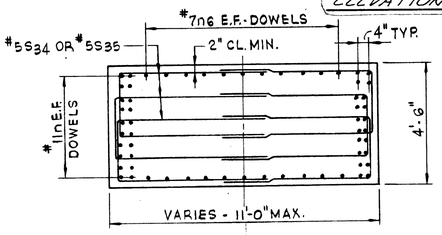


PLAN CLEARANCE GAGE
For other details see sheet 2

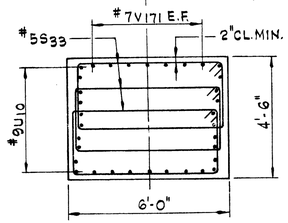


ELEVATION
SCALE: 3/8" = 1'-0"

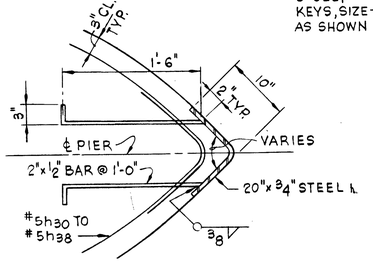
END ELEVATION
SCALE: 3/8" = 1'-0"



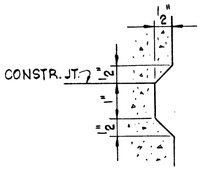
SECTION N-N
SCALE: 3/8" = 1'-0"



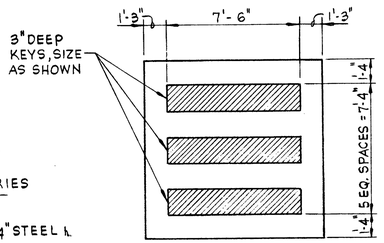
SECTION M-M
SCALE: 3/8" = 1'-0"



SECTION K-K
SCALE: 1" = 1'-0"



CONSTR. JT. DETAIL "C"
SCALE: 6" = 1'-0"



CAP CONSTR. JOINT DETAIL "B"
SCALE: 1/4" = 1'-0"

Revised 8-17-70

BAR	No.	SIZE	LENGTH	SHAPE
h39	12	#6	41'-0"	
V196	18	#5	6'-0"	
h	24	#6	33'-6"	
h18	164	#5	36'-0"	
h25	6	#9	34'-0"	
h26	12	#9	37'-0"	
h27	15	#9	40'-9"	
h28	4	#5	15'-6"	
h29	82	#5	28'-6"	
h30	4	#5	28'-7"	
h31	6	#5	29'-1"	
h32	6	#5	29'-7"	
h33	6	#5	30'-1"	
h34	6	#5	30'-8"	
h35	6	#5	31'-2"	
h36	6	#5	31'-9"	
h37	6	#5	32'-6"	
h38	36	#5	32'-11"	
n	220	#11	9'-1"	
n6	271	#7	5'-10"	
P15	24	#11	36'-0"	
P16	36	#11	22'-0"	
P17	36	#11	39'-6"	
P18	9	#9	23'-0"	
P19	18	#8	9'-8"	
P20	12	#11	44'-6"	
S27	372	#5	31'-11"	
S28	112	#5	16'-10"	
S31	320	#5	17'-0"	
S32	160	#5	23'-3"	
S33	12	#5	17'-8"	
S34	36	#5	13'-6"	
S35	36	#5	15'-0"	
t20	128	#5	29'-6"	
t21	188	#10	29'-6"	
U7	10	#6	19'-1"	
U8	47	#5	14'-5"	
U9	6	#5	7'-1"	
U10	10	#9	17'-8"	
V190	4	#7	10'-6"	
V192	4	#7	4'-6"	
V8	16	#11	13'-3"	
V4	164	#11	24'-0"	
V173	249	#7	16'-0"	
V174	220	#6	27'-0"	
V175	2	#6	27'-0"	
V176	2	#6	27'-0"	
V177	2	#6	27'-0"	
V178	2	#6	27'-0"	
V179	2	#6	27'-0"	
V180	2	#6	27'-0"	
V181	2	#6	27'-0"	
V182	2	#6	27'-0"	
V183	2	#6	27'-0"	
V184	2	#6	27'-0"	
V185	2	#6	26'-0"	
V186	2	#6	20'-3"	
V187	2	#6	15'-9"	
V188	2	#6	9'-3"	
V189	1	#6	27'-6"	
V171	14	#7	14'-3"	
V172	40	#11	13'-0"	
V191	16	#5	8'-0"	
W2	120	#6	33'-6"	
W3	29	#7	11'-6"	
W13	29	#7	15'-0"	
W17	120	#5	33'-0"	

BAR LIST

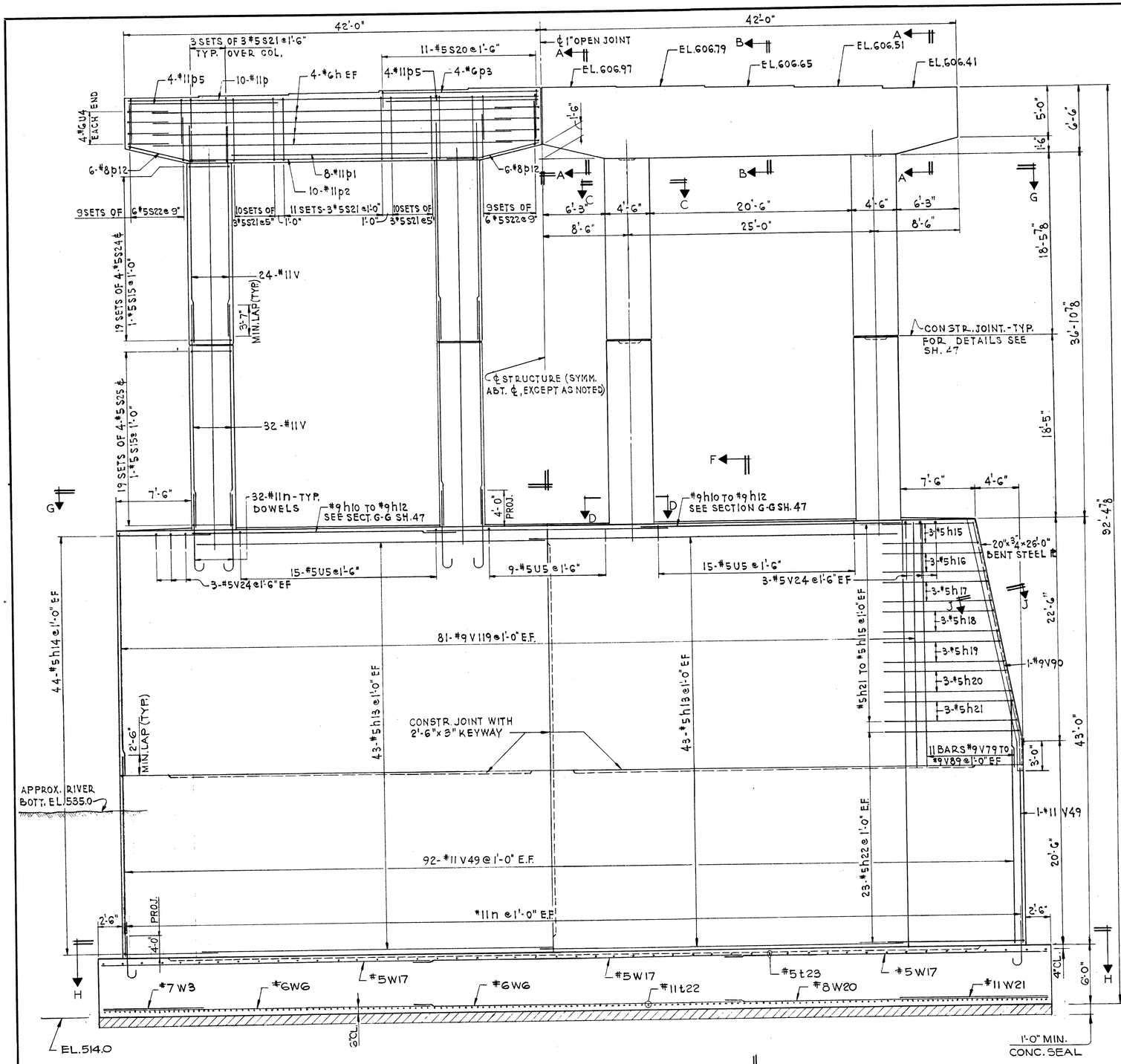
DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	S. RASHID
DRAWN BY	A. BUROKAS
CHECKED	S. Y. Huang
IN CHARGE	J. Y. HUANG
APPROVED	W. G. HORN

PIER 14
MISCELLANEOUS DETAILS

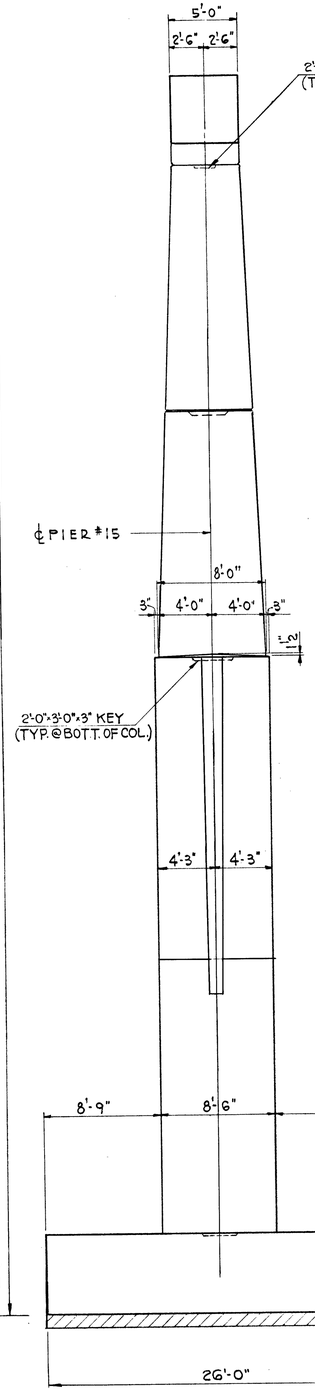
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	46
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

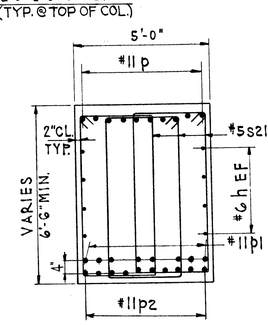


ELEVATION
SCALE: 3/16" = 1'-0"

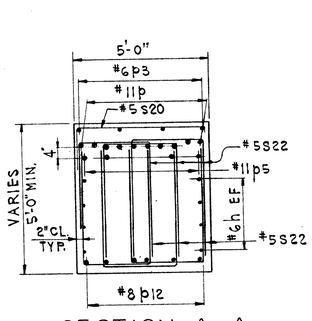
F



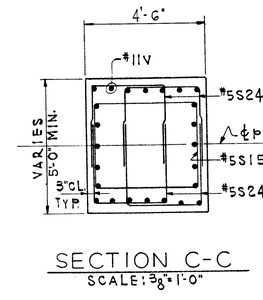
END ELEVATION
SCALE: 3/16" = 1'-0"



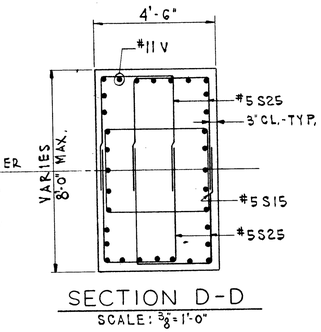
SECTION B-B
SCALE: 3/8" = 1'-0"



SECTION A-A
SCALE: 3/8" = 1'-0"



SECTION C-C
SCALE: 3/8" = 1'-0"



SECTION D-D
SCALE: 3/8" = 1'-0"

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED AND SET BY OTHERS.

ALL EDGES TO HAVE STANDARD ¾" CHAMFER EXCEPT AS NOTED.

POUR STEPS MONOLITHICALLY WITH CAP.

ALL BAR DIMENSIONS ARE OUT TO OUT.

MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

MAX. BEARING PRESSURE ON SHALE 12.62 KIPS/SQ. FT. FOR A.A.S.H.O. GROUP IX LOADING @ 150%

WORK THIS SHEET WITH SH. 47

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Cofferdam Excavation	CU. YD.	1822
ROCK EXCAVATION FOR STRUCTURE	CU. YD.	500
CLASS "X" CONCRETE	CU. YD.	1957.0
REINFORCEMENT BARS	POUND	144,350
STRUCTURAL STEEL	POUND	1640
CONCRETE SEAL	SQ. YD.	278
COFFEERDAM	EACH	1

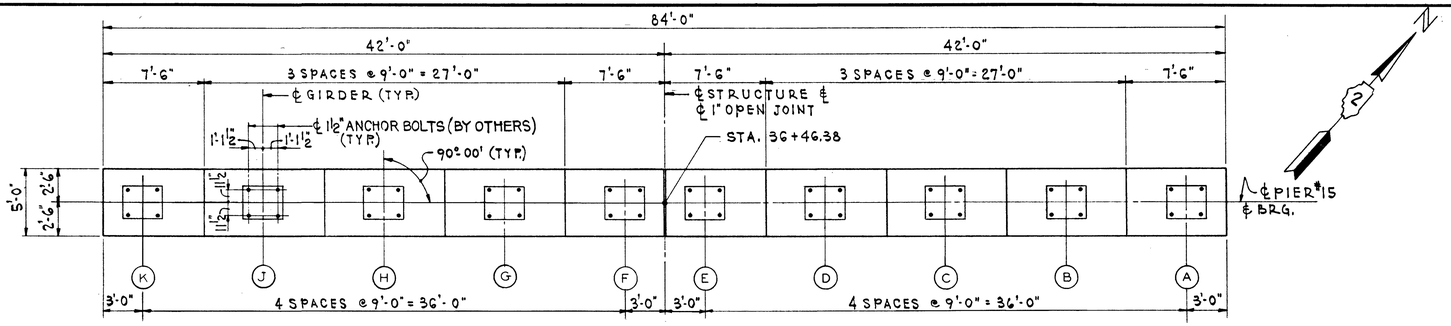
PIER 15
ELEVATIONS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

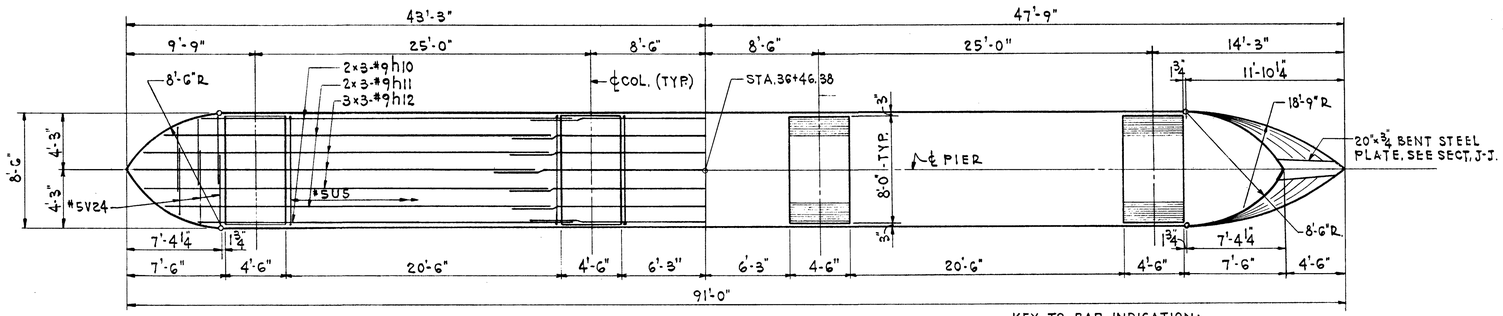
SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J. Y. HUANG
DRAWN BY A. BUROKAS
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	47
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

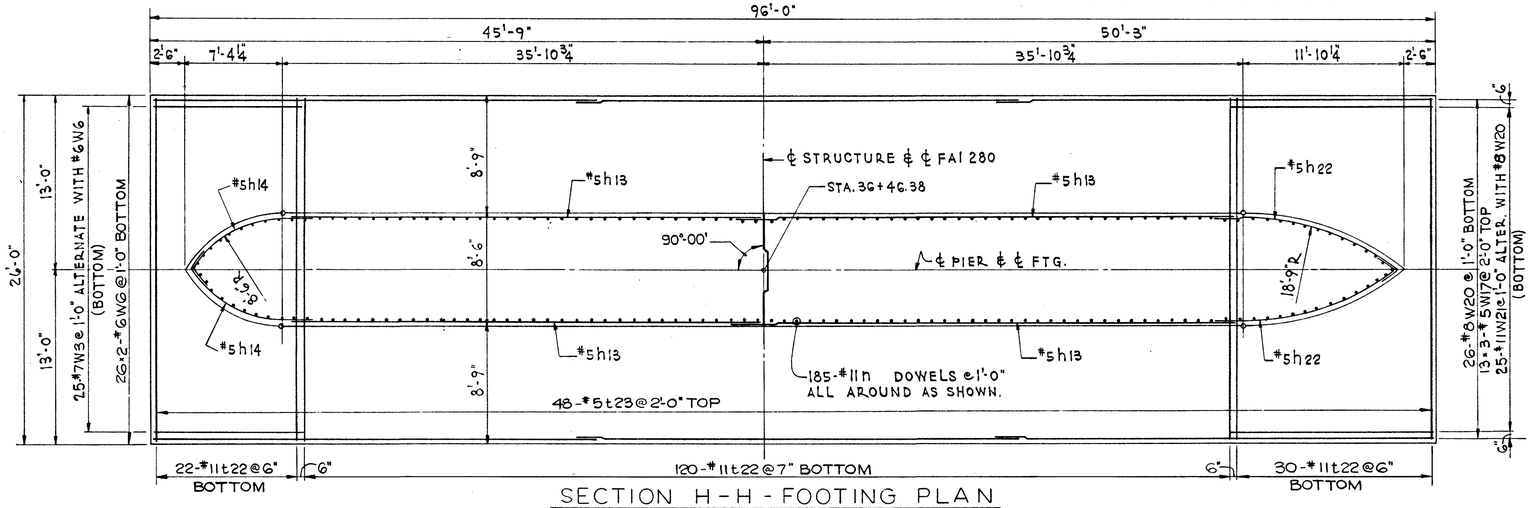


PLAN
SCALE: 3/16" = 1'-0"

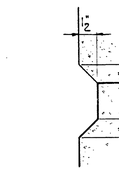


SECTION G-G
SCALE: 3/16" = 1'-0"

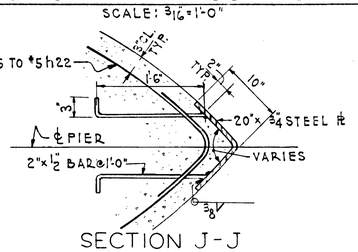
KEY TO BAR INDICATION:
26×3 - #6 INDICATES 26 LINES OF #6 BARS WITH 3 BARS PER LINE.



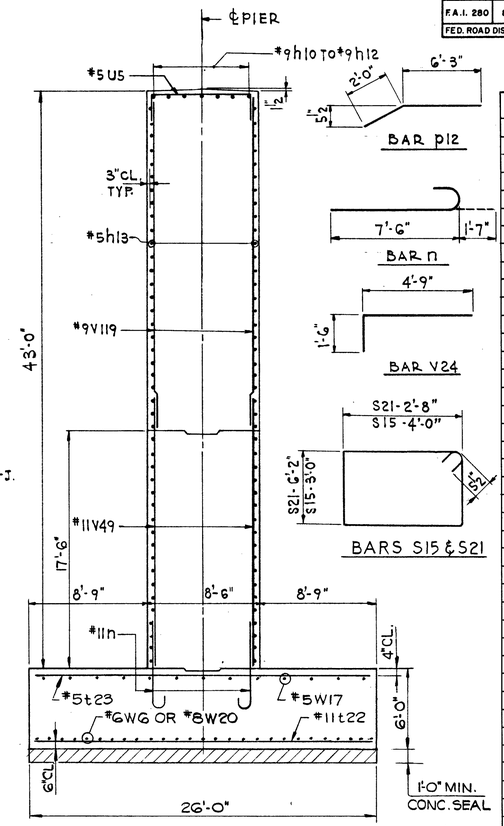
SECTION H-H - FOOTING PLAN
SCALE: 3/16" = 1'-0"



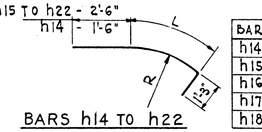
CONSTR. JT. DETAIL
SCALE: 6" = 1'-0"



SECTION J-J
SCALE: 1" = 1'-0"

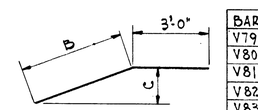


SECTION E-E
SCALE: 3/16" = 1'-0"



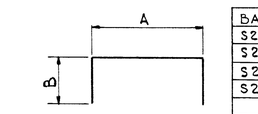
BARS h14 TO h22

BAR	R	L	BAR	R	L
h14	8'-3"	8'-6"	h19	13'-2⅝"	10'-10"
h15	8'-4⅛"	8'-8"	h20	14'-7½"	11'-4"
h16	9'-5⅛"	9'-2"	h21	16'-1⅝"	11'-10"
h17	10'-7⅛"	9'-9"	h22	18'-6"	12'-8"
h18	11'-10¼"	10'-3"			



BARS V79 TO V90

BAR	B	C	BAR	B	C
V79	22'-3"	1½"	V86	21'-0"	2'-0"
V80	22'-3"	3"	V87	15'-0"	1'-6"
V81	22'-3"	5½"	V88	9'-0"	1'-0"
V82	22'-3"	9"	V89	3'-9"	3"
V83	22'-3"	1'-1"	V90	22'-9"	4'-6"
V84	22'-3"	1'-6"			
V85	22'-3"	2'-0"			



BARS S20, S22, S24, S25, U4 & U5

BAR	A	B
S22	2'-8"	4'-4"
S24	2'-8"	3'-9"
S25	2'-8"	4'-6"
S20	4'-8"	1'-6"
U4	4'-8"	4'-6"
U5	8'-0"	1'-6"

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	16	#6	36'-0"	
h10	6	#9	26'-6"	
h11	6	#9	29'-0"	
h12	9	#9	30'-6"	
h13	172	#5	36'-0"	
h14	88	#5	11'-3"	
h15	6	#5	12'-5"	
h16	6	#5	12'-11"	
h17	6	#5	13'-6"	
h18	6	#5	14'-0"	
h19	6	#5	14'-7"	
h20	6	#5	15'-1"	
h21	6	#5	15'-7"	
h22	46	#5	16'-5"	
n	313	#11	9'-1"	
P	20	#11	41'-6"	
P1	16	#11	21'-0"	
P2	20	#11	29'-0"	
P3	8	#6	16'-0"	
P5	16	#11	15'-0"	
P12	24	#8	8'-3"	
S20	22	#5	7'-8"	
S21	222	#5	18'-7"	
S22	216	#5	11'-4"	
S15	152	#5	14'-11"	
S24	304	#5	10'-2"	
S25	304	#5	11'-8"	
t22	172	#11	25'-6"	
t23	48	#5	25'-6"	
U4	16	#6	13'-8"	
U5	39	#5	11'-0"	
V	224	#11	23'-0"	
V24	12	#5	6'-3"	
V49	185	#9	20'-3"	
V79	2	#9	25'-3"	
V80	2	#9	25'-3"	
V81	2	#9	25'-3"	
V82	2	#9	25'-3"	
V83	2	#9	25'-3"	
V84	2	#9	25'-3"	
V85	2	#9	25'-3"	
V86	2	#9	24'-0"	
V87	2	#9	18'-0"	
V88	2	#9	12'-0"	
V89	2	#9	6'-9"	
V90	1	#9	25'-9"	
V119	162	#9	25'-6"	
W3	25	#7	1'-6"	
W6	52	#6	33'-0"	
W17	39	#5	33'-0"	
W20	26	#8	33'-0"	
W21	25	#11	15'-0"	

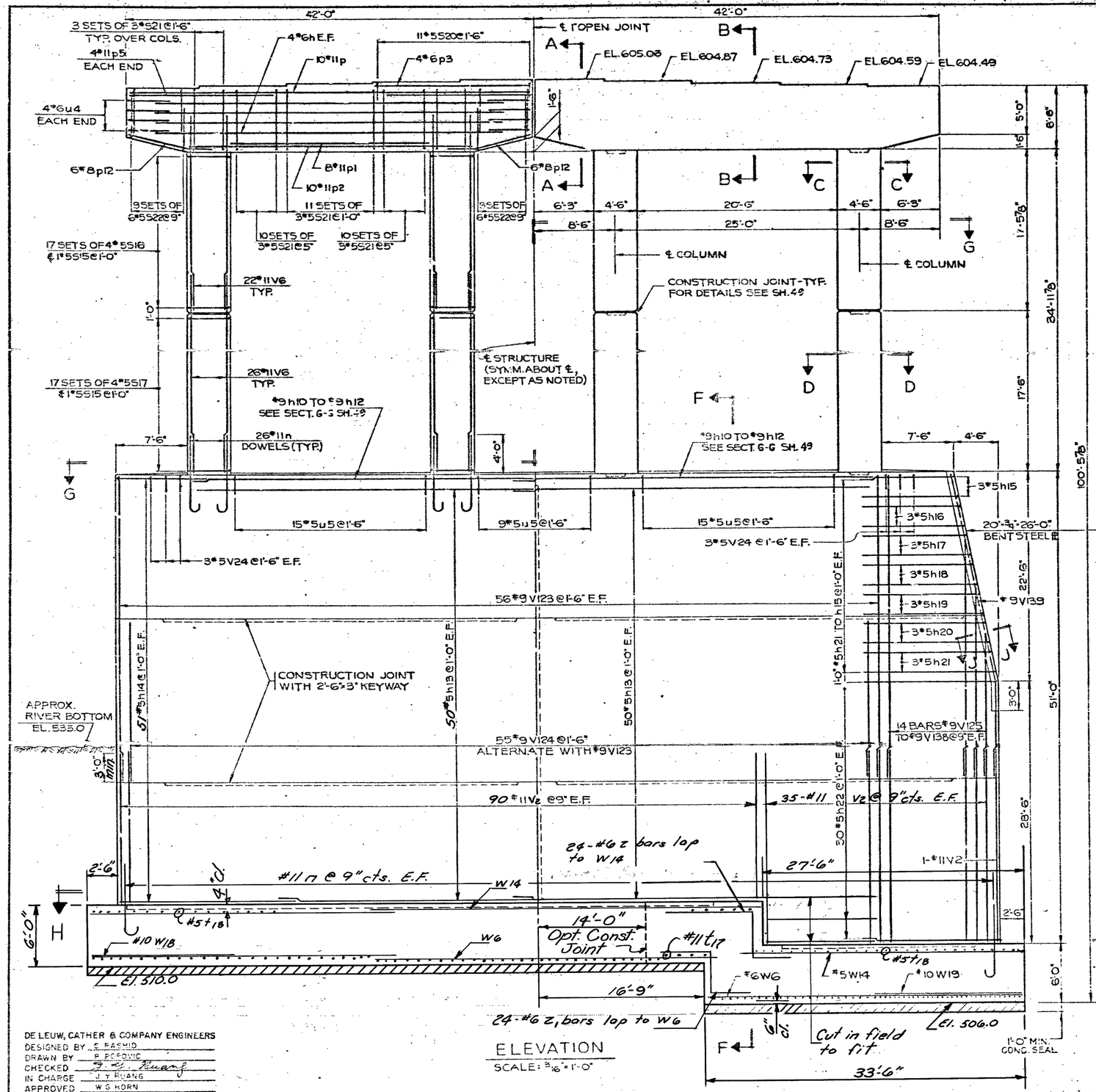
NOTE:
WORK THIS SHEET WITH SH. 46

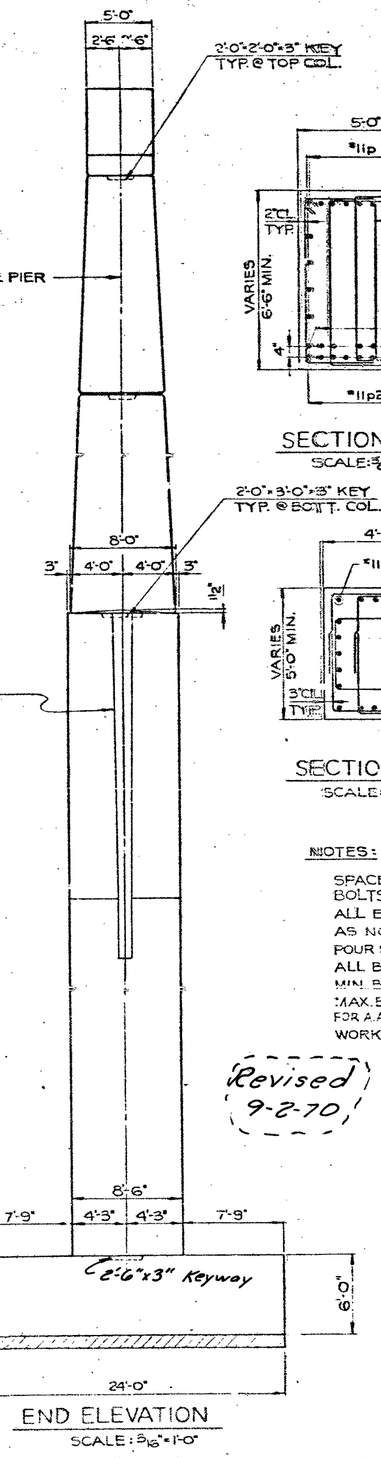
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.Y. HUANG
DRAWN BY A. BUROKAS
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W.G. HORN

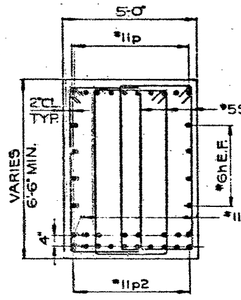
PIER 15
CAP, WALL & FOOTING

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	48
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

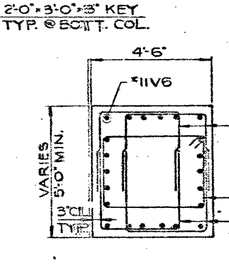






SECTION B-B
SCALE: 3/8" = 1'-0"

SECTION A-A
SCALE: 3/8" = 1'-0"



SECTION C-C
SCALE: 3/8" = 1'-0"

SECTION D-D
SCALE: 3/8" = 1'-0"

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED & SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.
MAX. BEARING PRESSURE ON SHALE 14.80 KIPS/SQ.FT., FOR A.A.S.H.O. GROUP IX LOADING @ 150%.
WORK THIS SHEET WITH SH. 49.

(Revised 9-2-70)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Cofferdam Excavation	CU. YD.	2074
ROCK EXCAV. for Struct	CU. YD.	546
CLASS "X" CONCRETE	CU. YD.	2063
REINFORCEMENT BARS	POUND	130,860
STRUCTURAL STEEL	POUND	1640
CONCRETE SEAL	SQ. YD.	256
COFFERDAM	EACH	1

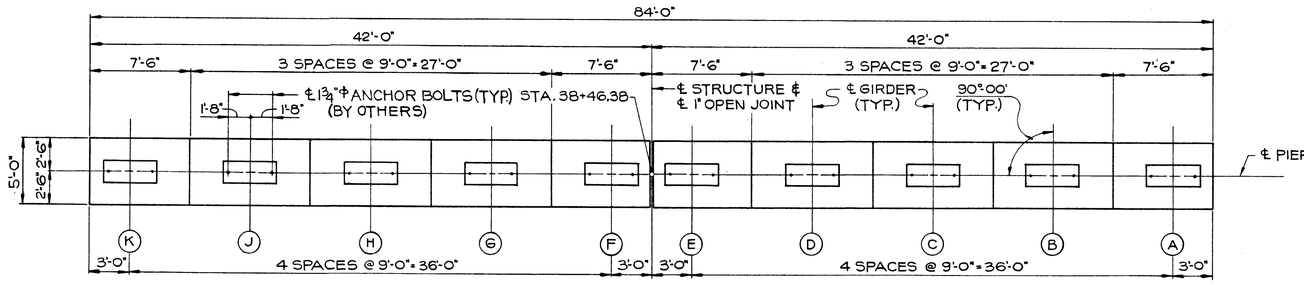
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. ESCOMIS
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. S. HORN

PIER 16 ELEVATIONS

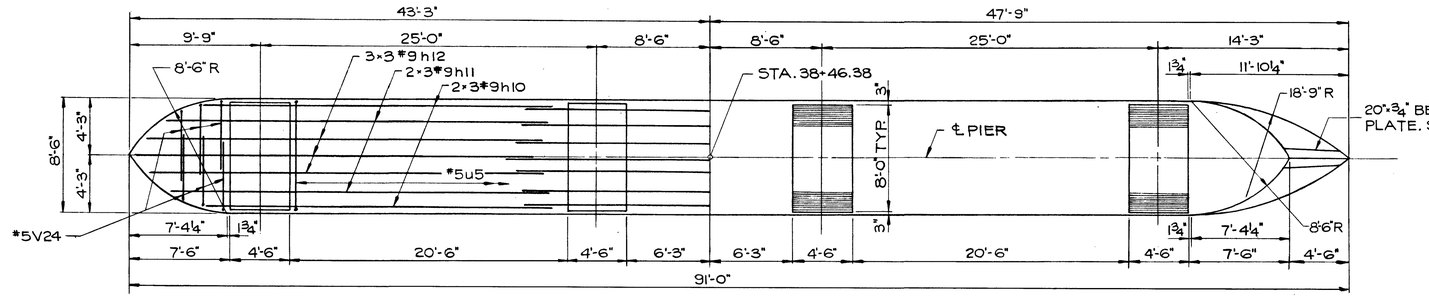
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

Rev. Rock Excav. from 766 to 546 cu.yds., Cl. X Conc. from 2121 to 2063 cu.yds., Reinf. Bars from 130120 to 130,860 lbs. S.F.M. 9-2-70

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	49
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

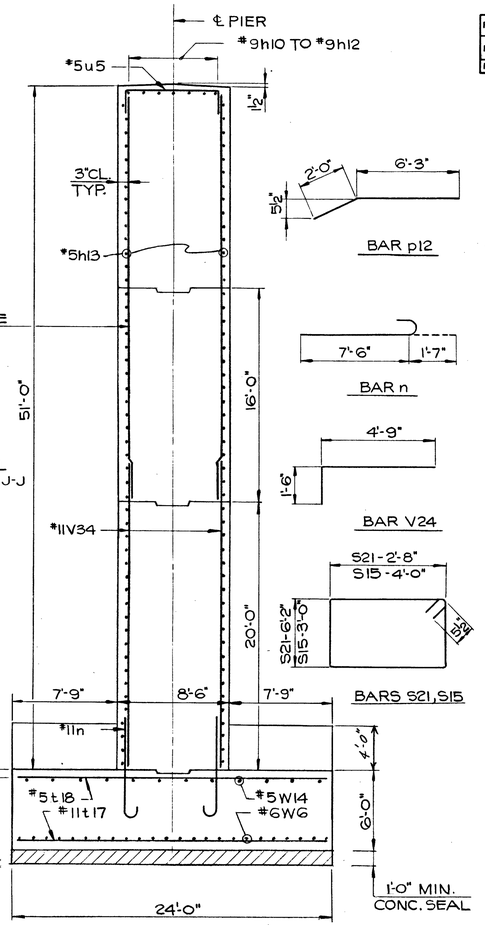


PLAN
SCALE: 3/16" = 1'-0"



SECTION G-G
SCALE: 3/16" = 1'-0"

KEY TO BAR INDICATION:
24-3 #6 - INDICATES 24 LINES OF #6 BARS WITH 3 LENGTHS PER LINE.



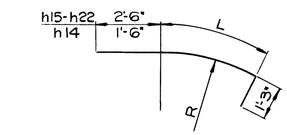
SECTION F-F
SCALE: 3/16" = 1'-0"

BAR p12

BAR n

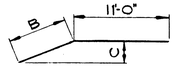
BAR V24

BARS S21, S15



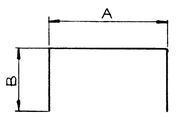
BAR h14 - h22

BAR	R	L	BAR	R	L
h14	8'-3"	8'-6"	h19	13'-2⅜"	10'-10"
h15	8'-4⅛"	8'-8"	h20	14'-7½"	11'-4"
h16	9'-5⅝"	9'-2"	h21	16'-1⅝"	11'-10"
h17	10'-7⅛"	9'-9"	h22	18'-6"	12'-8"
h18	11'-10¼"	10'-3"			



BARS V125 - V139

BAR	B	C	BAR	B	C
V125	22'-3	1½"	V132	22'-3"	1'-8"
V126	22'-3"	3"	V133	22'-3	2'-0"
V127	22'-3"	4"	V134	21'-0"	2'-4"
V128	22'-3"	6"	V135	16'-6"	1'-9"
V129	22'-3"	8½"	V136	12'-0"	1'-6"
V130	22'-3"	1'-0"	V137	7'-6"	1'-1"
V131	22'-3"	1'-3"	V138	3'-0"	7"
			V139	22'-9"	4'-6"



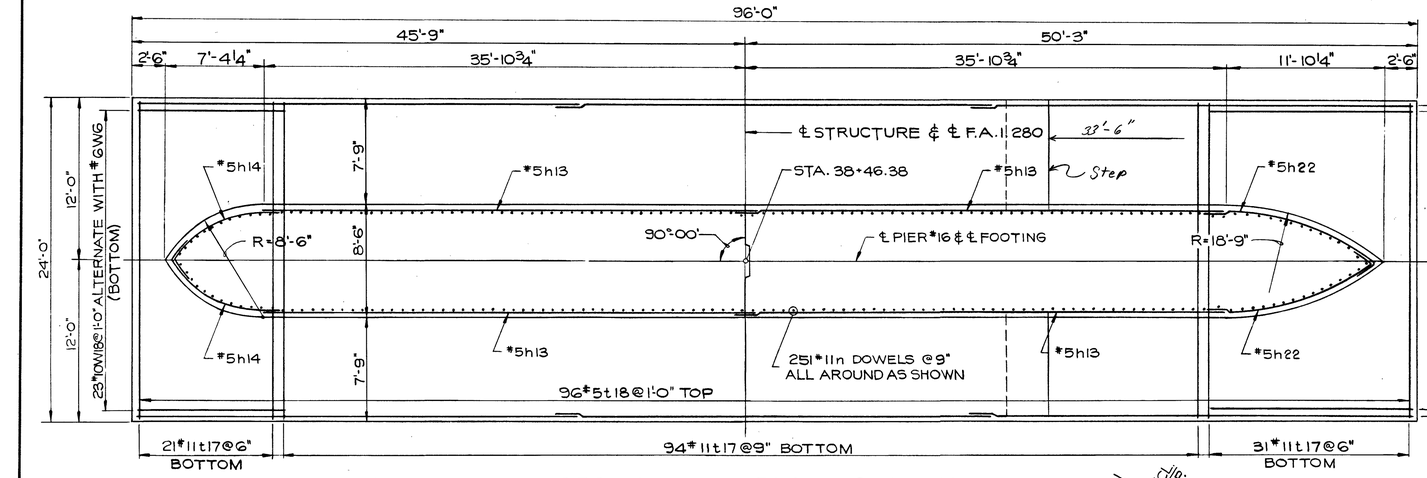
BARS S16, S17, S20, S22, u4, u5

BAR	A	B
S22	2'-8"	4'-4"
S16	3'-3"	3'-9"
S17	3'-3"	4'-6"
S20	4'-8"	1'-6"
u4	4'-8"	4'-6"
u5	8'-0"	1'-6"

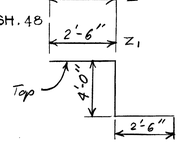
BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	16	6	36'-0"	
h10	6	9	26'-6"	
h11	6	9	29'-0"	
h12	9	9	30'-6"	
h13	200	5	36'-0"	
h14	102	5	11'-3"	
h15	6	5	12'-5"	
h16	6	5	12'-11"	
h17	6	5	13'-6"	
h18	6	5	14'-0"	
h19	6	5	14'-7"	
h20	6	5	15'-1"	
h21	6	5	15'-7"	
h22	60	5	16'-5"	
n	355	11	9'-1"	
p	20	11	41'-6"	
p1	16	11	21'-0"	
p2	20	11	29'-0"	
p3	8	6	16'-0"	
p5	16	11	15'-0"	
p12	24	8	8'-3"	
S20	22	5	7'-8"	
S21	216	5	18'-7"	
S15	136	5	14'-11"	
S22	222	5	11'-4"	
S16	272	5	10'-9"	
S17	272	5	12'-3"	
t17	146	11	23'-6"	
t18	96	5	23'-6"	
u4	16	6	13'-8"	
u5	39	5	11'-0"	
V6	192	11	22'-0"	
V24	12	5	6'-3"	
V2	251	11	20'-9"	
V125	2	9	33'-3"	
V126	2	9	33'-3"	
V127	2	9	33'-3"	
V128	2	9	33'-3"	
V129	2	9	33'-3"	
V130	2	9	33'-3"	
V131	2	9	33'-3"	
V132	2	9	33'-3"	
V133	2	9	33'-3"	
V134	2	9	32'-0"	
V135	2	9	27'-6"	
V136	2	9	23'-0"	
V137	2	9	18'-6"	
V138	2	9	14'-0"	
V123	112	9	33'-0"	
V124	110	9	16'-0"	
V139	1	9	33'-9"	
Z	24	6	11'-6"	
Z1	24	6	9'-0"	
W6	72	6	33'-0"	
W14	72	5	32'-9"	
W18	23	10	10'-0"	
W19	23	10	15'-0"	

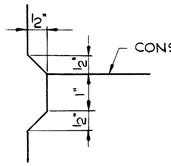
SECTION H-H - FOOTING PLAN
SCALE: 3/16" = 1'-0"



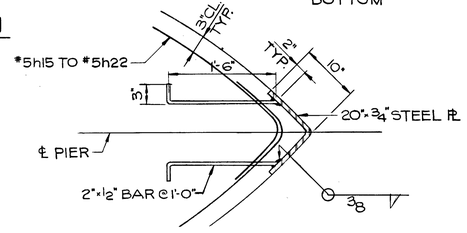
NOTE:
WORK THIS SHEET WITH SH. 48



BAR Z & Z1



CONSTR. JT. DETAIL
SCALE: 6" = 1'-0"



SECTION J-J
SCALE: 1" = 1'-0"

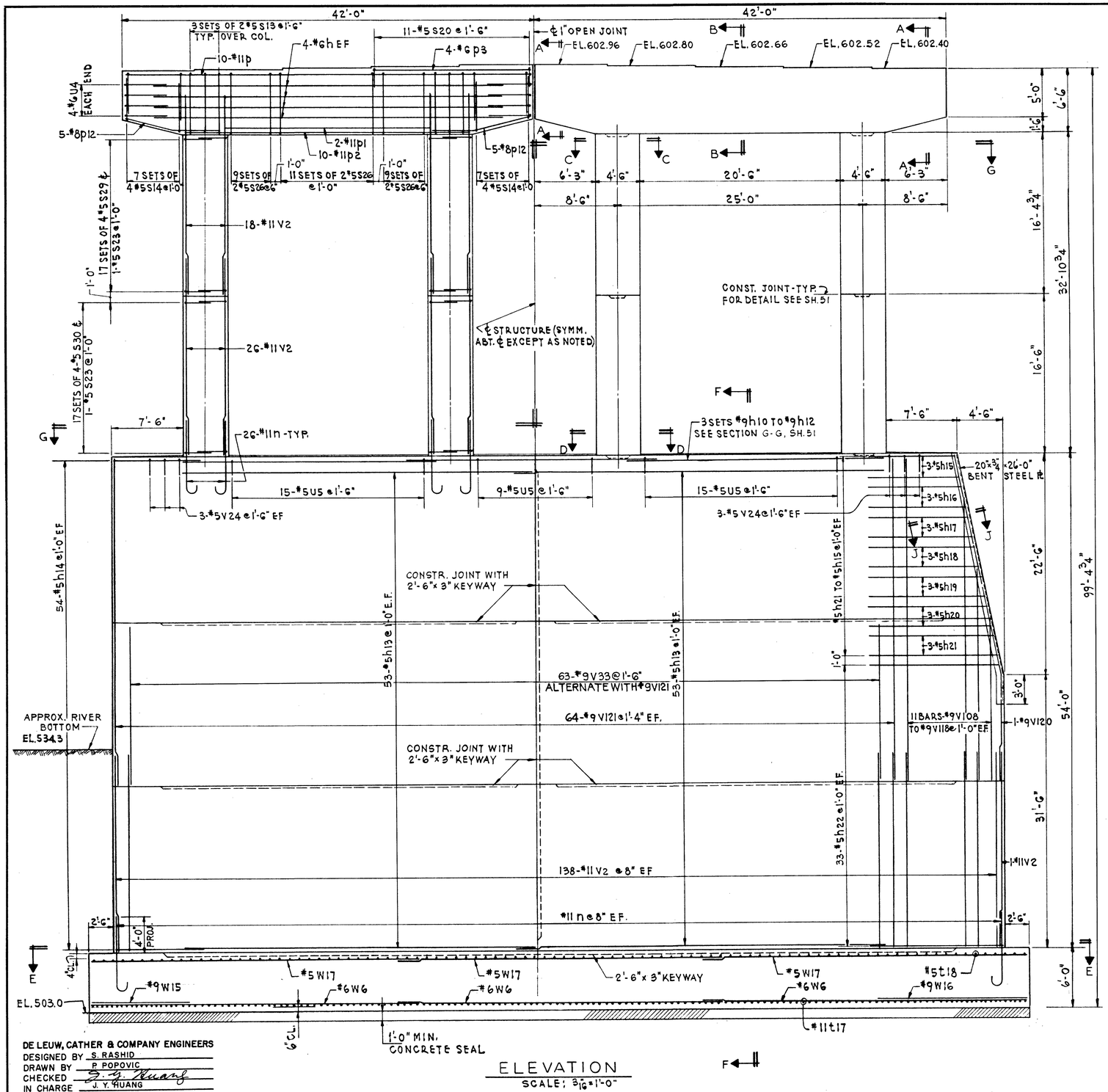
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED G. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

Rev [ ] S.F.M. 9-2-70

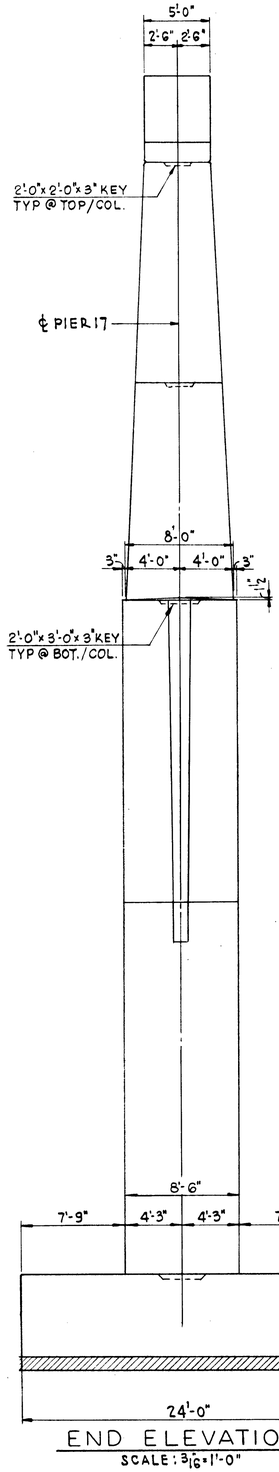
Revised 9-2-70

PIER 16
CAP, WALL & FOOTING
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

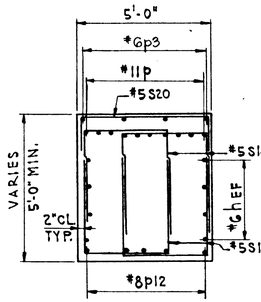
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	50
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



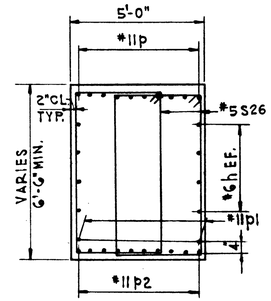
ELEVATION
SCALE: 3/16"=1'-0"



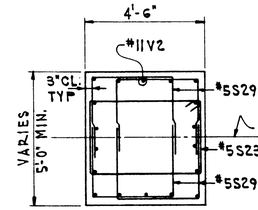
END ELEVATION
SCALE: 3/16"=1'-0"



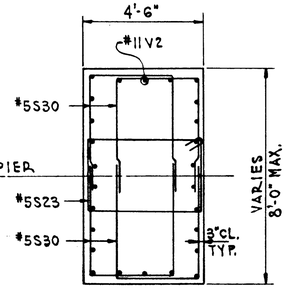
SECTION A-A
SCALE: 3/8"=1'-0"



SECTION B-B
SCALE: 3/8"=1'-0"



SECTION C-C
SCALE: 3/8"=1'-0"



SECTION D-D
SCALE: 3/8"=1'-0"

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED ℄ SET BY OTHERS.

ALL EDGES TO HAVE STANDARD ¾" CHAMFER EXCEPT AS NOTED.

POUR STEPTS MONOLITHICALLY WITH CAP.

ALL BAR DIMENSIONS ARE OUT TO OUT.

MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

MAX. BEARING PRESSURE ON SHALE 14.68 KIPS/SQ.FT. FOR A.A.S.H.O. GROUP IX LOADING @ 150%

WORK THIS SHEET WITH SH. 51

BILL OF MATERIAL

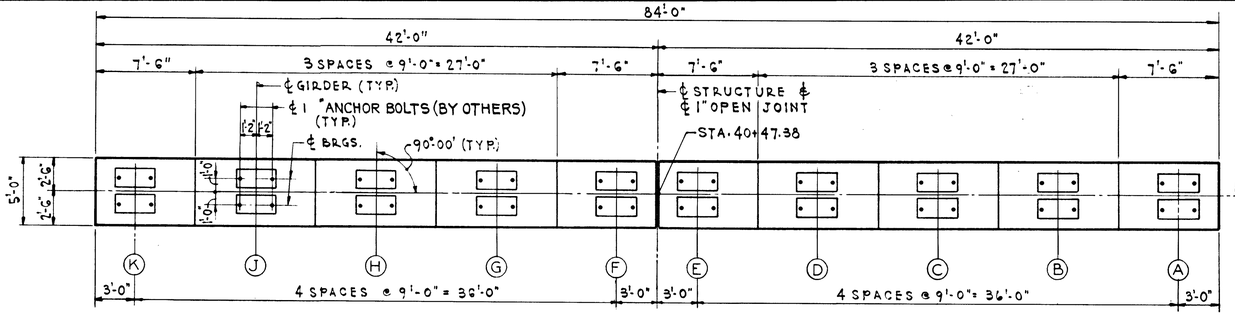
ITEM	UNIT	QUANTITY
Cofferdam Excavation	CU. YD.	1711
ROCK EXCAVATION FOR STRUCTURE	CU. YD.	1350
CLASS "X" CONCRETE	CU. YD.	2198.0
REINFORCEMENT BARS	POUND	160240
STRUCTURAL STEEL	POUND	1640
CONCRETE SEAL	SQ. YD.	256
COFFERDAM	EACH	1

PIER 17
ELEVATIONS

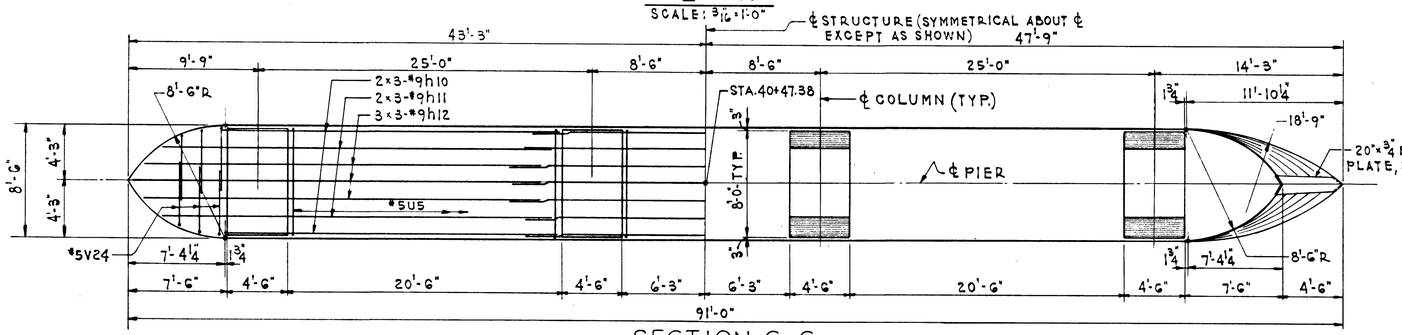
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED S. Y. HUANG
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

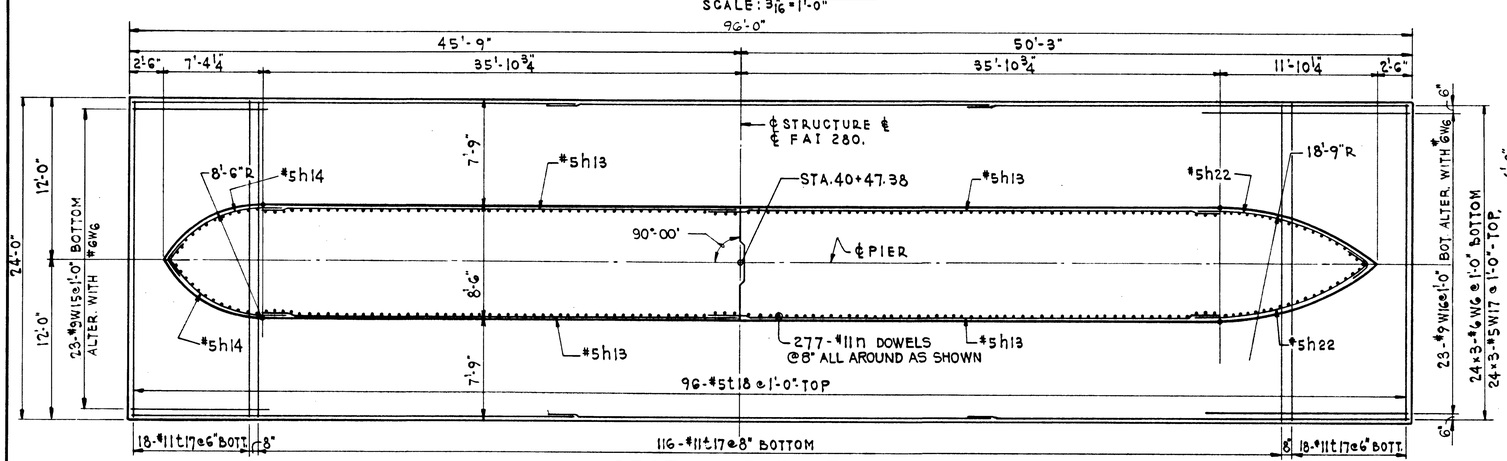
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	51
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



PLAN
SCALE: 3/16" = 1'-0"

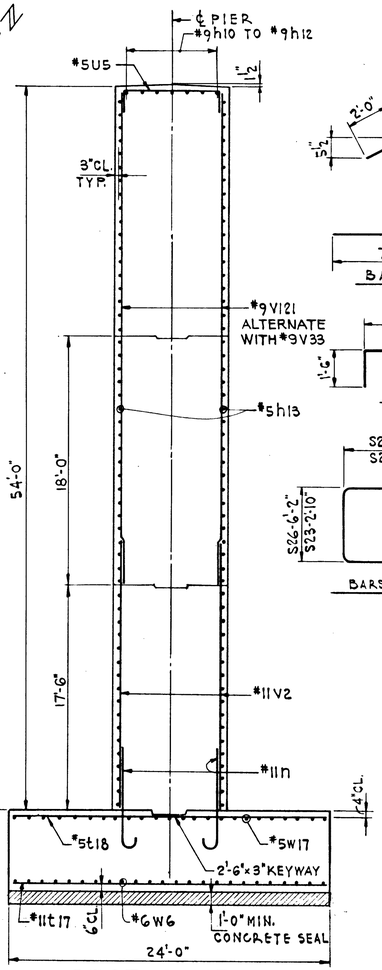


SECTION G-G
SCALE: 3/16" = 1'-0"

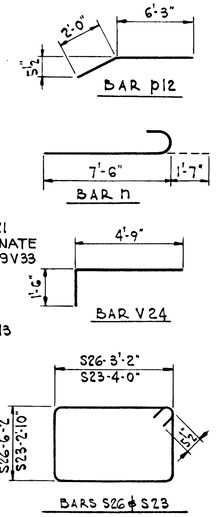


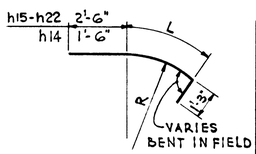
SECTION E-E - FOOTING PLAN
SCALE: 3/16" = 1'-0"

KEY TO BAR INDICATION
24×3-#6 INDICATES 24 LINES OF #6 BARS WITH 3 LENGTHS PER LINE.



SECTION F-F
SCALE: 3/16" = 1'-0"



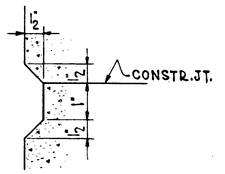


BARS h14-h22

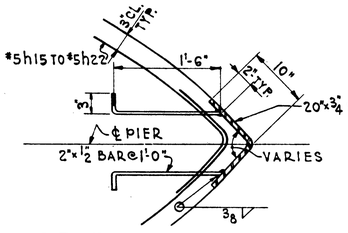
BAR	R	L	BAR	R	L
h14	8'-3"	8'-6"	h20	14'-7½"	11'-4"
h15	8'-4⅛"	8'-8"	h21	16'-1⅝"	11'-10"
h16	9'-5⅛"	9'-2"	h22	18'-6"	12'-8"
h17	10'-7⅛"	9'-9"			
h18	11'-10¼"	10'-3"			
h19	13'-2⅝"	10'-10"			

BAR LIST

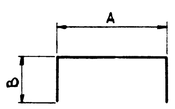
BAR	No.	SIZE	LENGTH	SHAPE
h	16	#6	36'-0"	
h10	6	#9	26'-6"	
h11	6	#9	29'-0"	
h12	9	#9	30'-6"	
h13	212	#5	36'-0"	
h14	108	#5	11'-3"	
h15	6	#5	12'-5"	
h16	6	#5	12'-11"	
h17	6	#5	13'-6"	
h18	6	#5	14'-0"	
h19	6	#5	14'-7"	
h20	6	#5	15'-1"	
h21	6	#5	15'-7"	
h22	66	#5	16'-5"	
n	381	#11	9'-1"	
P	20	#11	41'-6"	
P1	4	#11	21'-0"	
P2	20	#11	29'-0"	
P3	8	#6	16'-0"	
P12	20	#8	8'-3"	
S26	140	#5	19'-7"	
S14	112	#5	11'-10"	
S20	22	#5	7'-8"	
S23	136	#5	14'-7"	
S29	272	#5	10'-6"	
S30	272	#5	12'-0"	
t17	152	#11	23'-6"	
t18	96	#5	23'-6"	
U4	16	#6	13'-8"	
U5	39	#5	11'-0"	
V2	453	#11	20'-9"	
V24	12	#5	6'-3"	
V121	128	#9	36'-0"	
V108	2	#9	36'-0"	
V109	2	#9	36'-0"	
V110	2	#9	36'-0"	
V111	2	#9	36'-0"	
V112	2	#9	36'-0"	
V113	2	#9	36'-0"	
V114	2	#9	36'-0"	
V115	2	#9	34'-9"	
V116	2	#9	28'-9"	
V117	2	#9	22'-9"	
V118	2	#9	17'-6"	
V120	1	#9	36'-6"	
V33	126	#9	18'-0"	
W6	72	#6	33'-0"	
W15	23	#9	10'-0"	
W16	23	#9	15'-0"	
W17	72	#5	33'-0"	



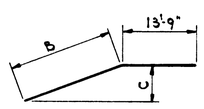
CONSTR. JT. DETAIL
SCALE: 6" = 1'-0"



SECTION J-J
SCALE: 1" = 1'-0"



BAR	A	B
S14	3'-2"	4'-4"
S20	4'-8"	1'-6"
S29	3'-0"	3'-9"
S30	3'-0"	4'-6"
U4	4'-8"	4'-6"
U5	8'-0"	1'-6"



BARS V108-V118, V120

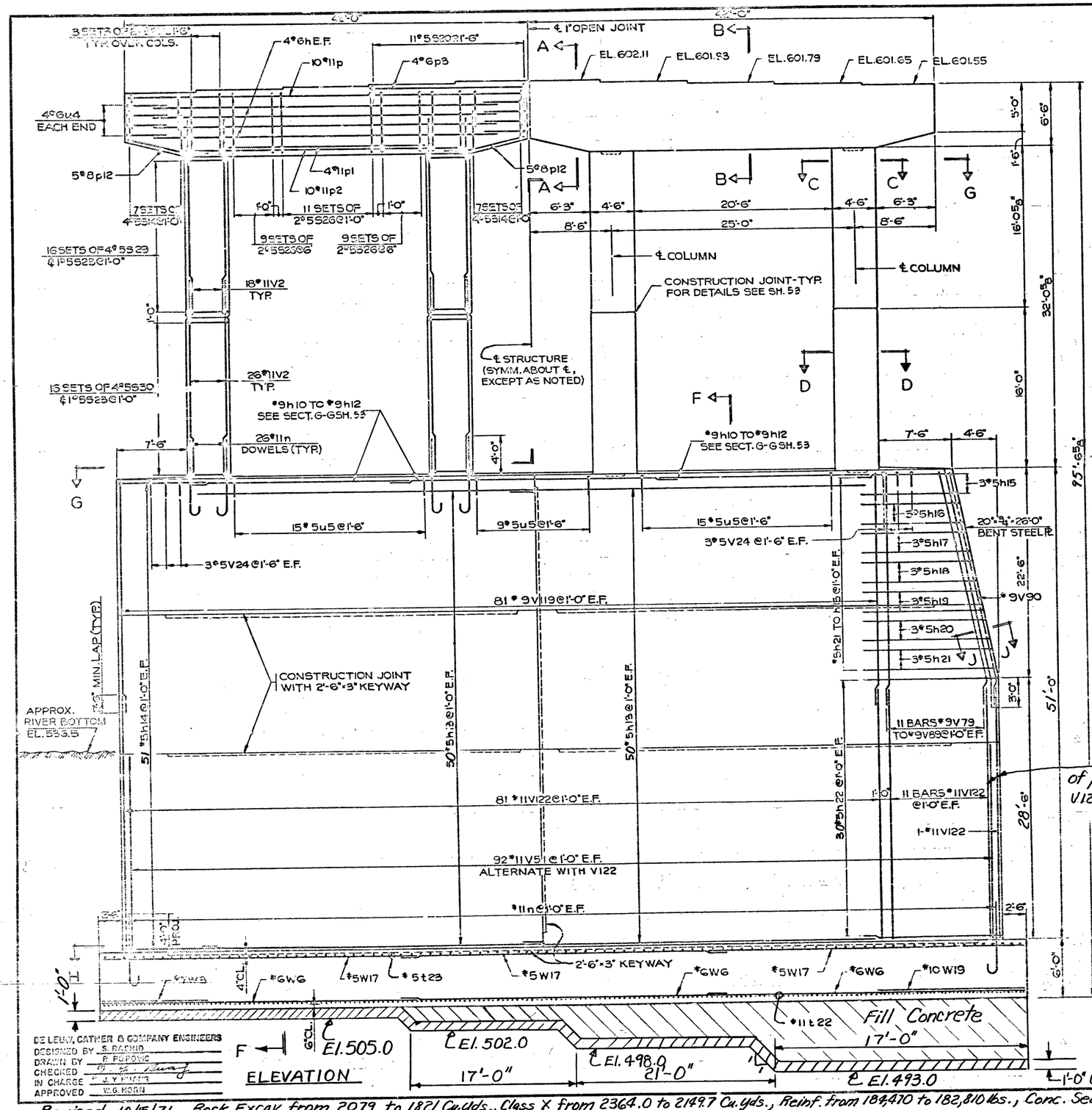
BAR	B	C	BAR	B	C
V108	22'-3"	1½"	V114	22'-3"	2'-0"
V109	22'-3"	3"	V115	21'-0"	2'-0"
V110	22'-3"	5½"	V116	15'-0"	1'-6"
V111	22'-3"	9"	V117	9'-0"	1'-0"
V112	22'-3"	1'-1"	V118	3'-9"	3"
V113	22'-3"	1'-6"	V120	22'-9"	4'-6"

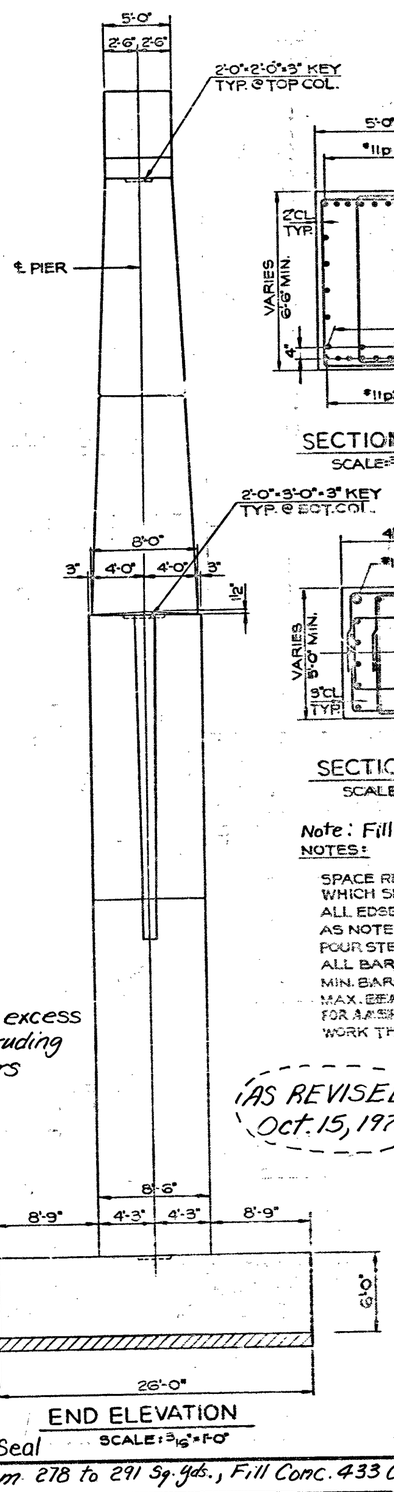
NOTE:
WORK THIS SHEET WITH SH. 50

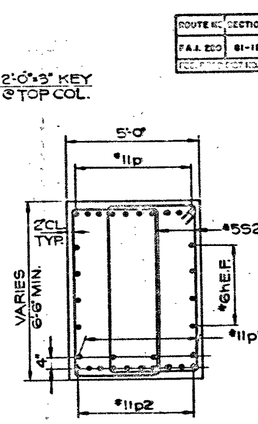
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

PIER 17
CAP, WALL & FOOTING
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

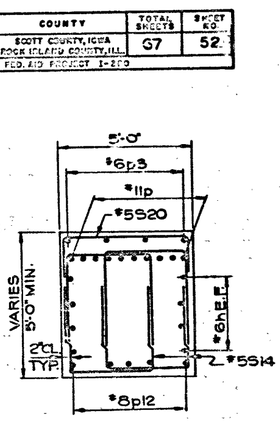
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	52
CONTRACT NOTES		FED. AID PROJECT I-280		



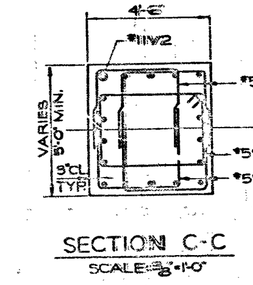




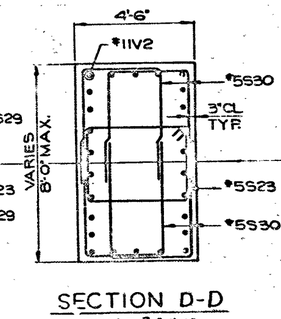
SECTION B-B
SCALE: 3/8"=1'-0"



SECTION A-A
SCALE: 3/8"=1'-0"



SECTION C-C
SCALE: 3/8"=1'-0"



SECTION D-D
SCALE: 3/8"=1'-0"

Note: Fill Concrete shall be a four bag mix.

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED ℄ SET BY OTHERS.
ALL EDGES TO HAVE STANDARD 3/4" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.
MAX. BEARING PRESSURE ON SHALE 14.95 KIPS/SQ.FT. FOR A.A.S.H.O. GROUP IX LOADING @ 150%.
WORK THIS SHEET WITH SH. 53.

(AS REVISED Oct. 15, 1971)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Cofferdam Excavation	CU.YD.	1889
ROCK EXC. For Structures	CU.YD.	1821
CLASS "X" CONCRETE	CU.YD.	2149.7
REINFORCEMENT BARS	POUND	182,810
STRUCTURAL STEEL	POUND	1640
CONCRETE SEAL	SQ.YD.	291
COFFERDAM	EACH	1
FILL CONCRETE	CU.YD.	433

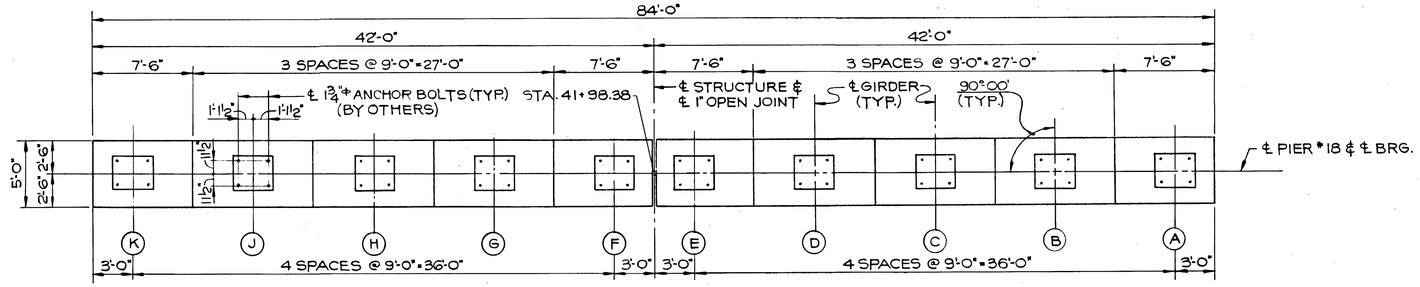
PIER 16
ELEVATIONS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.33
SCALE: AS NOTED DATE: JULY 21, 1969

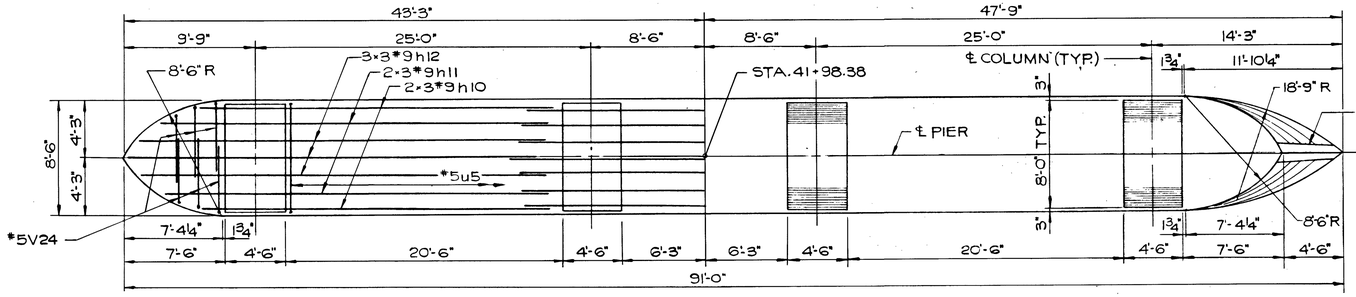
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RACHID
DRAWN BY P. POPOVIC
CHECKED
IN CHARGE J. V. EVANS
APPROVED W. G. KORN

Revised 10/15/71 Rock Excav. from 2079 to 1821 Cu.yds., Class X from 2364.0 to 2149.7 Cu.yds., Reinf. from 184,410 to 182,810 lbs., Conc. Seal from 278 to 291 Sq.yds., Fill Conc. 433 Cu.yds. added; S.M.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	53
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

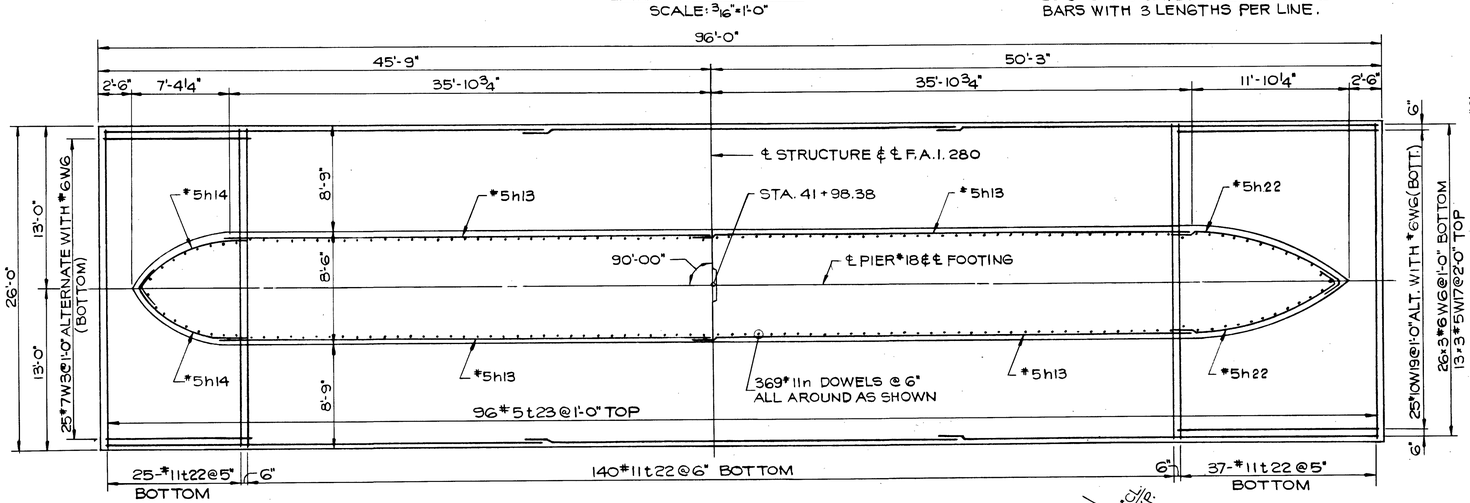


PLAN
SCALE: 3/16" = 1'-0"



SECTION G-G
SCALE: 3/16" = 1'-0"

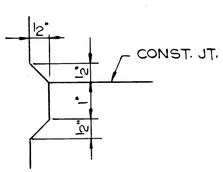
KEY TO BAR INDICATION:
26-3*6- INDICATES 26 LINES OF *6 BARS WITH 3 LENGTHS PER LINE.



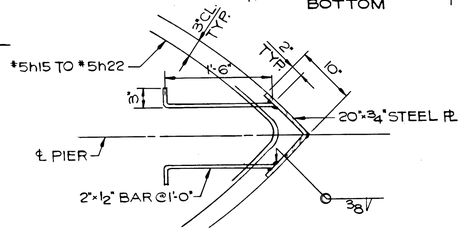
SECTION H-H FOOTING PLAN
SCALE: 3/16" = 1'-0"

NOTE:

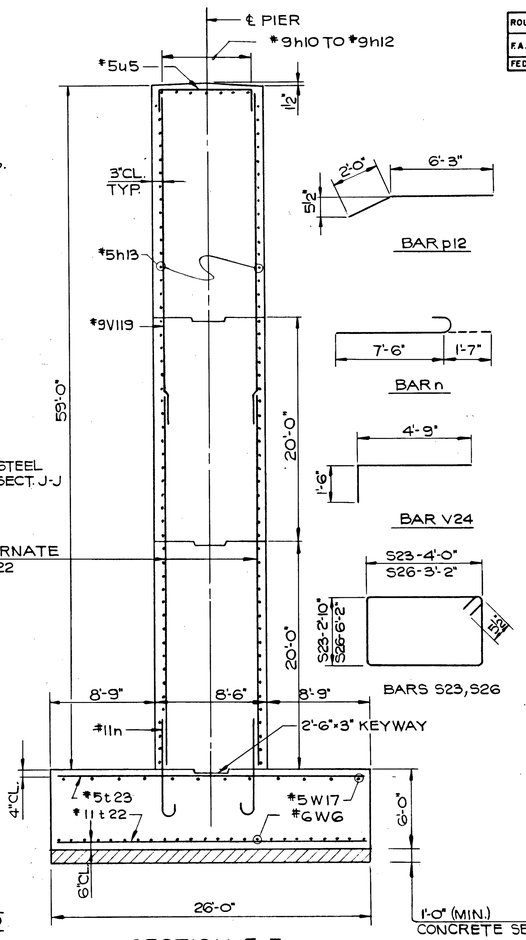
WORK THIS SHEET WITH SH. 52



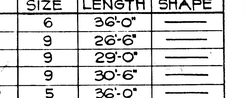
CONSTR. JT. DETAIL
SCALE: 6" = 1'-0"



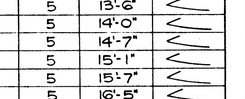
SECTION J-J
SCALE: 1" = 1'-0"



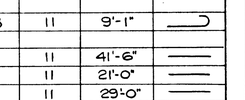
SECTION F-F
SCALE: 3/16" = 1'-0"



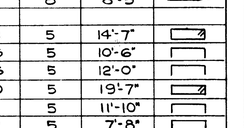
BAR p12



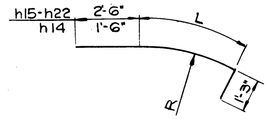
BAR n



BAR V24

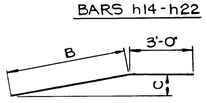


BARS S23, S26



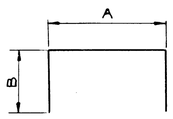
BARS h14 - h22

BAR	R	L	BAR	R	L
h14	8'-3"	8'-6"	h19	13'-2⅜"	10'-10"
h15	8'-4⅛"	8'-8"	h20	14'-7½"	11'-4"
h16	9'-5⅛"	9'-2"	h21	16'-1⅝"	11'-10"
h17	10'-7⅛"	9'-9"	h22	18'-6"	12'-8"
h18	11'-10¼"	10'-3"			



BARS V79-V90

BAR	B	C	BAR	B	C
V90	22'-3"	4'-6"	V85	22'-3"	2'-0"
V79	22'-3"	1½"	V86	21'-0"	2'-0"
V80	22'-3"	3"	V87	15'-0"	1'-6"
V81	22'-3"	5½"	V88	9'-0"	1'-0"
V82	22'-3"	9"	V89	3'-9"	3"
V83	22'-3"	1'-1"			
V84	22'-3"	1'-6"			



BARS S14, S20, S29, S30, u4, u5

BAR	A	B
S29	3'-0"	3'-9"
S30	3'-0"	4'-6"
S14	3'-2"	4'-4"
S20	4'-8"	1'-6"
u4	4'-8"	4'-6"
u5	8'-0"	1'-6"

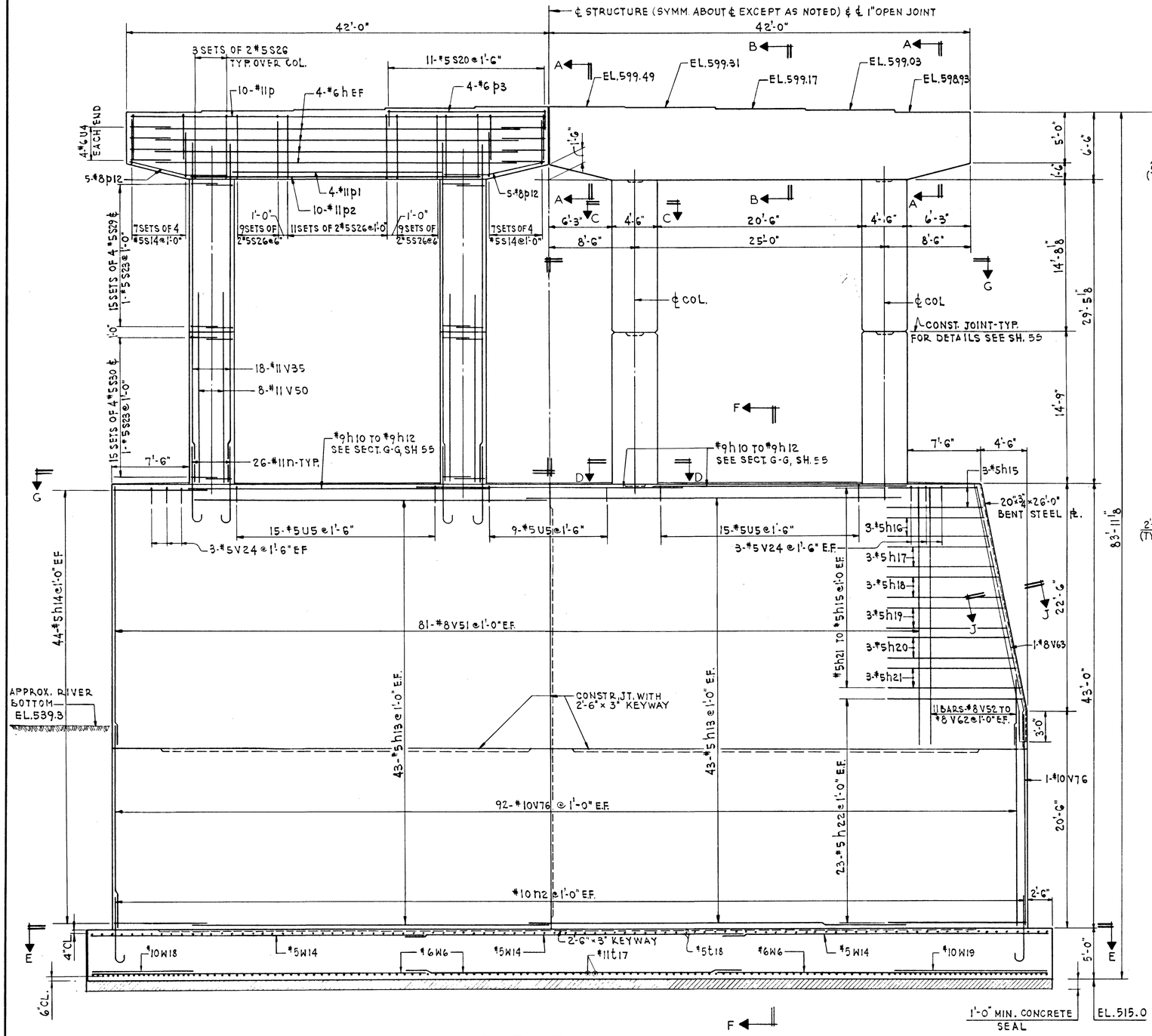
BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	16	6	36'-0"	
h10	6	9	26'-6"	
h11	6	9	29'-0"	
h12	9	9	30'-6"	
h13	200	5	36'-0"	
h14	102	5	11'-3"	
h15	6	5	12'-5"	
h16	6	5	12'-11"	
h17	6	5	13'-6"	
h18	6	5	14'-0"	
h19	6	5	14'-7"	
h20	6	5	15'-1"	
h21	6	5	15'-7"	
h22	60	5	16'-5"	
n	473	11	9'-1"	
p	20	11	41'-6"	
p1	8	11	21'-0"	
p2	20	11	29'-0"	
p3	8	6	16'-0"	
p12	20	8	8'-3"	
S23	128	5	14'-7"	
S29	256	5	10'-6"	
S30	256	5	12'-0"	
S26	140	5	19'-7"	
S14	112	5	11'-10"	
S20	22	5	7'-8"	
t22	202	11	25'-6"	
t23	96	5	25'-6"	
u4	16	6	13'-8"	
u5	39	5	11'-0"	
V5	184	11	19'-9"	
V2	176	11	20'-9"	
V24	12	5	6'-3"	
V122	185	11	36'-0"	
V90	1	9	25'-9"	
V119	162	9	25'-6"	
V79	2	9	25'-3"	
V80	2	9	25'-3"	
V81	2	9	25'-3"	
V82	2	9	25'-3"	
V83	2	9	25'-3"	
V84	2	9	25'-3"	
V85	2	9	25'-3"	
V86	2	9	24'-0"	
V87	2	9	18'-0"	
V88	2	9	12'-0"	
V89	2	9	6'-9"	
W6	78	6	33'-0"	
W3	25	7	11'-6"	
W19	25	10	15'-0"	
W17	39	5	33'-0"	

AS REVISED Oct. 15, 1971

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

PIER 18
CAP, WALL & FOOTING
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38
SCALE: AS NOTED DATE: JULY 21, 1969



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	54
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

ELEVATION

SCALE: 3/16" = 1'-0"

END ELEVATION

SCALE: 3/16" = 1'-0"

SECTION B-B

SCALE: 3/8" = 1'-0"

SECTION A-A

SCALE: 3/8" = 1'-0"

SECTION C-C

SCALE: 3/8" = 1'-0"

SECTION D-D

SCALE: 3/8" = 1'-0"

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED AND SET BY OTHERS.

ALL EDGES TO HAVE STANDARD 3/4" CHAMFER EXCEPT AS NOTED.

POUR STEPS MONOLITHICALLY WITH CAP.

ALL BAR DIMENSIONS ARE OUT TO OUT.

MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

MAX. BEARING PRESSURE ON SHALE 11.74 KIPS/SQ. FT. FOR A.A.S.H.O. GROUP IX LOADING @ 150%

WORK THIS SHEET WITH SH. 55

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
Cofferdom Excovation	CU. YD.	2281
ROCK EXCAVATION *For Structures*	CU. YD.	283
CLASS X CONCRETE	CU. YD.	1797.7
REINFORCEMENT BARS	POUND	118,490
STRUCTURAL STEEL	POUND	1640
CONCRETE SEAL	SQ. YD.	256
COFFERDAM	EACH	1

PIER 19
ELEVATIONS

F.A.I. ROUTE 280 SECTION 81-1B

I-280 OVER MISSISSIPPI RIVER

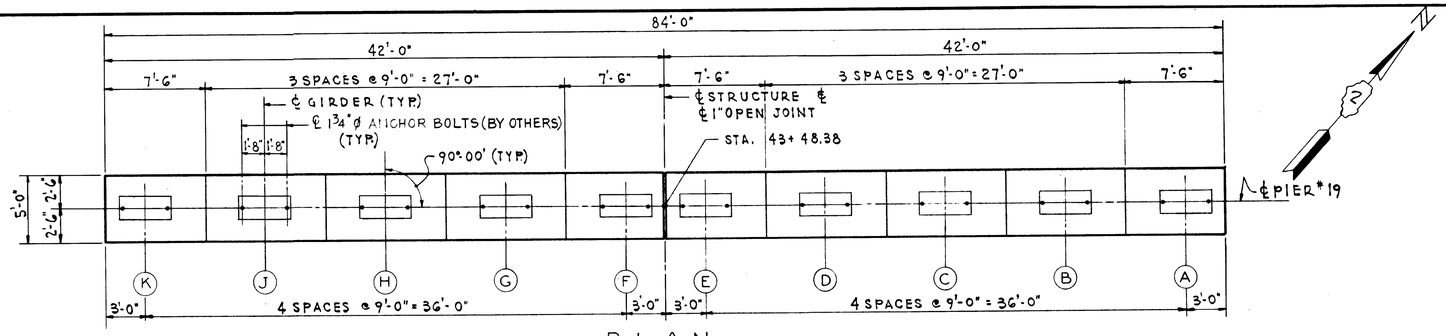
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

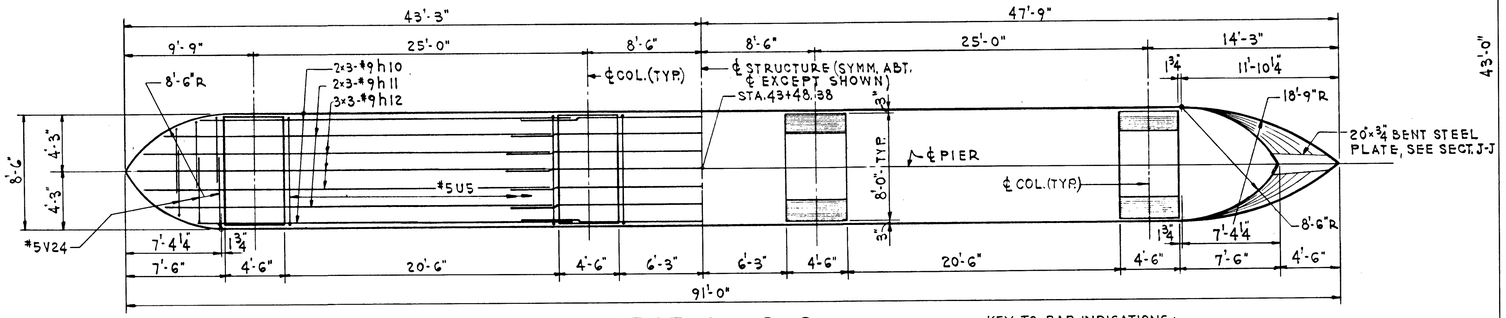
SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY A. BUROKAS
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	55
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

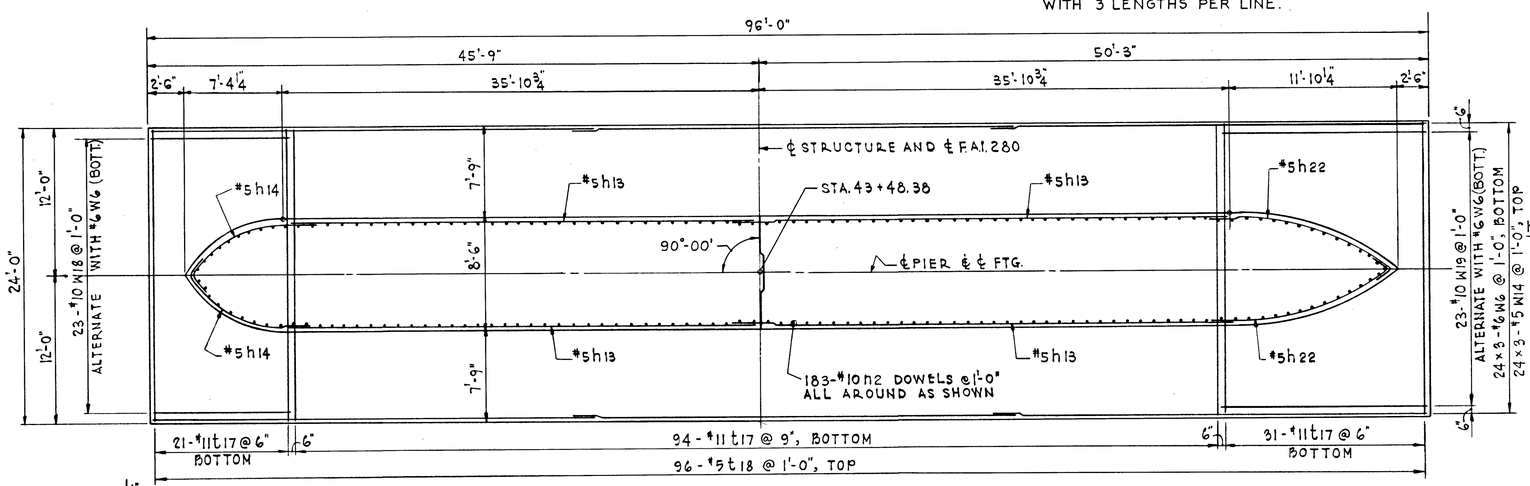


PLAN
SCALE: 3/16 = 1'-0"

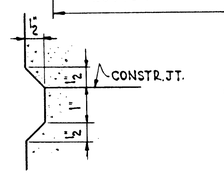


SECTION G-G
SCALE: 3/16 = 1'-0"

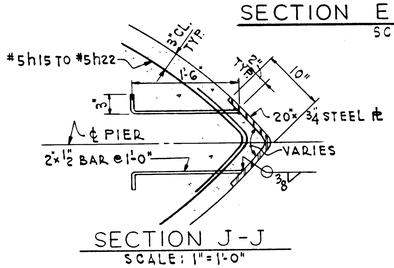
KEY TO BAR INDICATIONS:
24 x 3 - #6 INDICATES 24 LINES OF #6 BARS WITH 3 LENGTHS PER LINE.



SECTION E-E - FOOTING PLAN
SCALE: 3/16 = 1'-0"

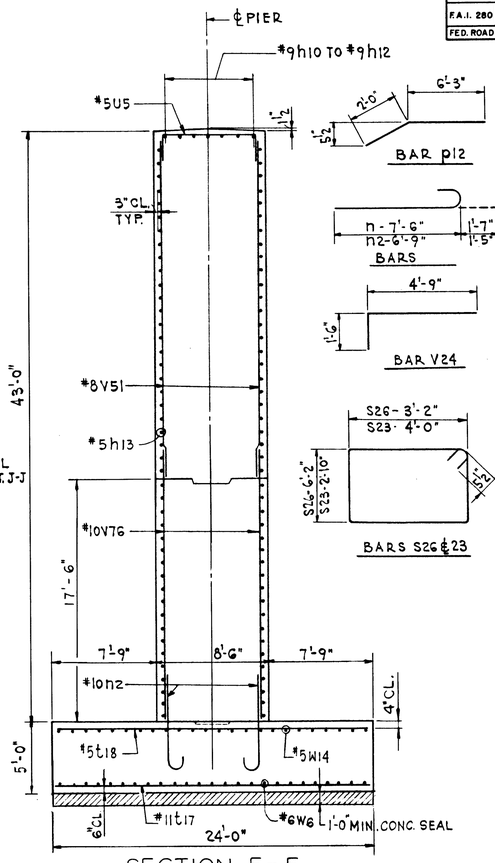


CONSTR. JT. DETAIL
SCALE: 6" = 1'-0"

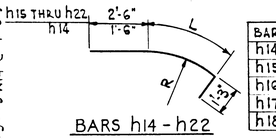


SECTION J-J
SCALE: 1" = 1'-0"

NOTE:
WORK THIS SHEET WITH SH. 54

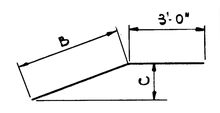


SECTION F-F
SCALE: 3/16 = 1'-0"



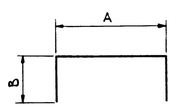
BARS h14 - h22

BAR	R	L	BAR	R	L
h14	8'-3"	8'-6"	h19	13'-2⅜"	10'-10"
h15	8'-4⅛"	8'-8"	h20	14'-7½"	11'-4"
h16	9'-5⅛"	9'-2"	h21	16'-1⅝"	11'-10"
h17	10'-7⅛"	9'-9"	h22	18'-6"	12'-8"
h18	11'-10¼"	10'-3"			



BARS V52 - V58

BAR	B	C	BAR	B	C
V52	22'-3"	1½"	V59	21'-0"	2'-0"
V53	22'-3"	3"	V60	15'-0"	1'-6"
V54	22'-3"	5½"	V61	9'-0"	1'-0"
V55	22'-3"	9"	V62	3'-9"	3"
V56	22'-3"	1'-1"	V63	22'-9"	4'-6"
V57	22'-3"	1'-6"			
V58	22'-3"	2'-0"			



BARS S14, S20, S29, S30, U4 & U5

BAR	A	B
S20	4'-8	1'-6"
S14	3'-2"	4'-4"
S29	3'-0"	3'-9"
S30	3'-0"	4'-6"
U4	4'-8"	4'-6"
U5	8'-0"	1'-6"

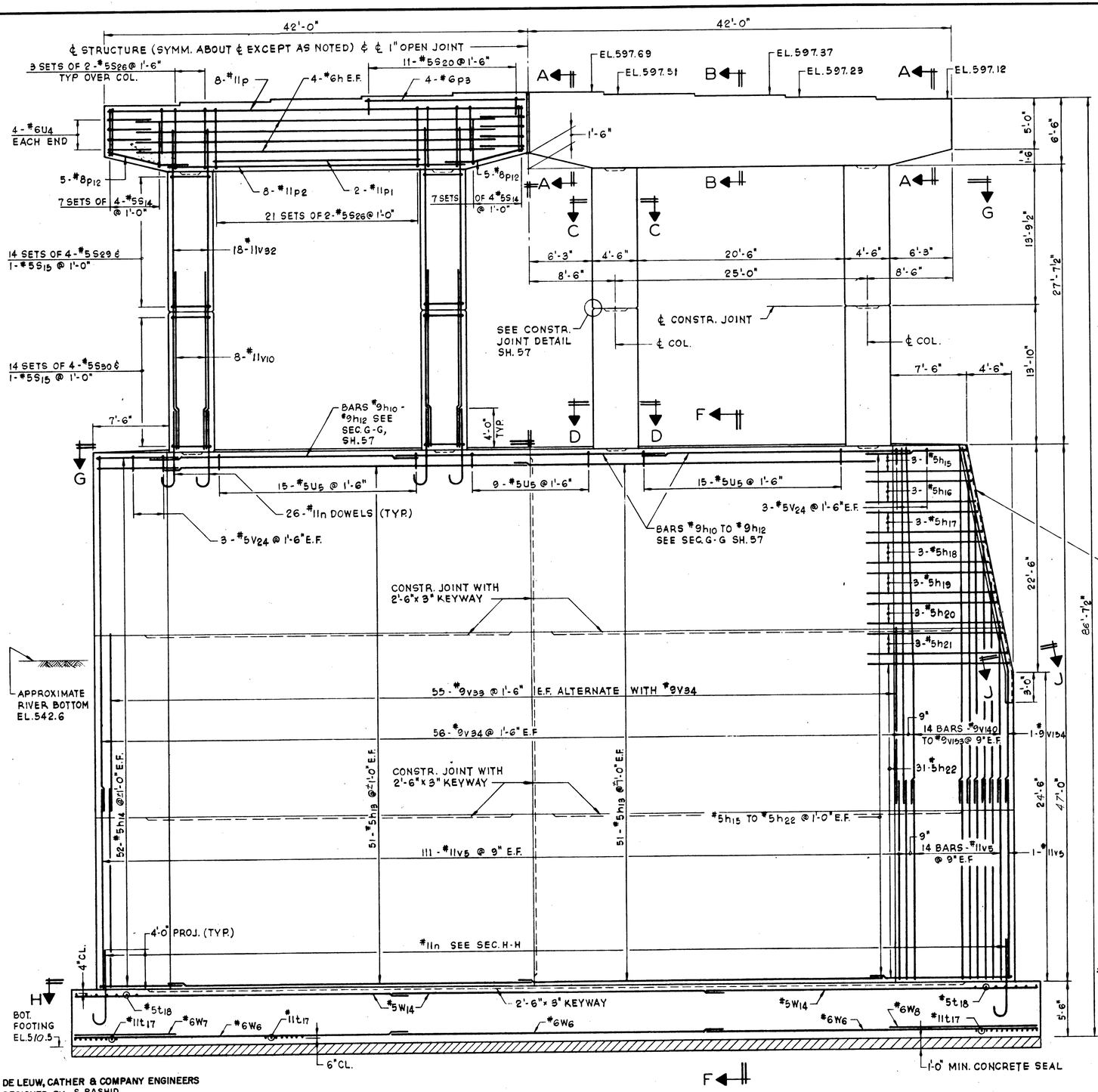
BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	16	#6	36'-0"	
h10	6	#9	26'-6"	
h11	6	#9	29'-0"	
h12	9	#9	30'-6"	
h13	172	#5	36'-0"	
h14	88	#5	11'-3"	
h15	6	#5	12'-5"	
h16	6	#5	12'-11"	
h17	6	#5	13'-6"	
h18	6	#5	14'-0"	
h19	6	#5	14'-7"	
h20	6	#5	15'-1"	
h21	6	#5	15'-7"	
h22	46	#5	16'-5"	
n	104	#11	9'-1"	
n2	185	#10	8'-2"	
P	20	#11	41'-6"	
P1	8	#11	21'-0"	
P2	20	#11	29'-0"	
P3	8	#6	16'-0"	
P12	20	#8	8'-3"	
S20	22	#5	7'-8"	
S26	149	#5	19'-7"	
S14	112	#5	11'-10"	
S23	120	#5	14'-7"	
S29	240	#5	10'-6"	
S30	240	#5	12'-0"	
t17	146	#11	23'-6"	
t18	96	#5	23'-6"	
U4	16	#6	13'-8"	
U5	39	#5	11'-0"	
V24	12	#5	6'-3"	
V35	72	#11	33'-6"	
V50	32	#11	18'-6"	
V51	162	#8	25'-6"	
V52	2	#8	25'-3"	
V53	2	#8	25'-3"	
V54	2	#8	25'-3"	
V55	2	#8	25'-3"	
V56	2	#8	25'-3"	
V57	2	#8	25'-3"	
V58	2	#8	25'-3"	
V59	2	#8	24'-0"	
V60	2	#8	18'-0"	
V61	2	#8	12'-0"	
V62	2	#8	6'-9"	
V63	1	#8	25'-9"	
V76	185	#10	20'-3"	
W6	72	#6	33'-0"	
W14	72	#5	32'-9"	
W18	23	#10	10'-0"	
W19	23	#10	15'-0"	

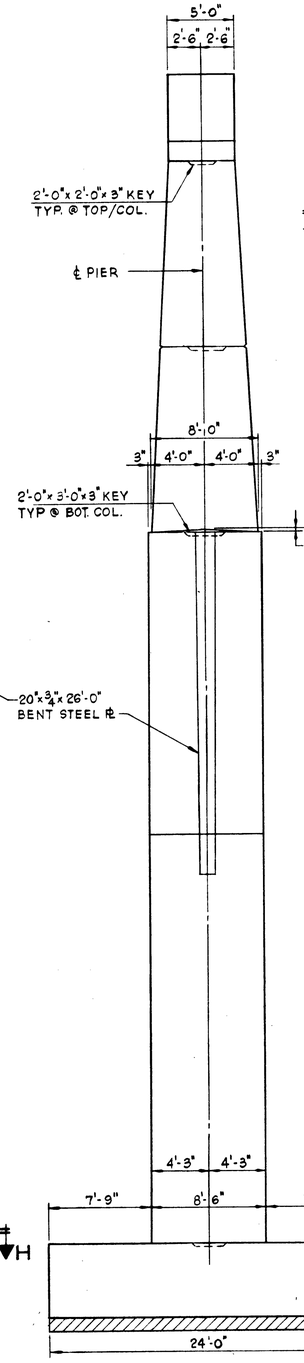
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY A. BUROKAS
CHECKED J. Y. HUANG
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

PIER 19
CAP, WALL & FOOTING
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

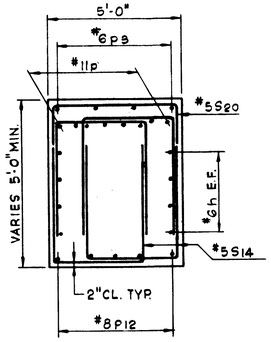
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	56
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



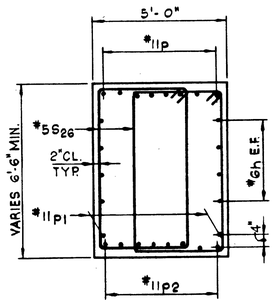
ELEVATION
SCALE: 3/16"=1'-0"



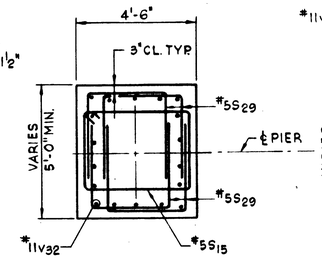
END ELEVATION
SCALE: 3/16"=1'-0"



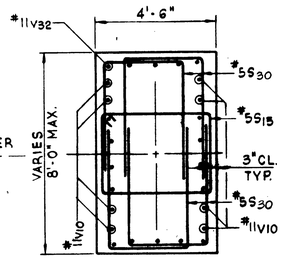
SECTION A-A
SCALE: 3/8"=1'-0"



SECTION B-B
SCALE: 3/8"=1'-0"



SECTION C-C
SCALE: 3/8"=1'-0"



SECTION D-D
SCALE: 3/8"=1'-0"

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED & SET BY OTHERS
ALL EDGES TO HAVE STANDARD ¾" CHAMFER EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP 24 DIA. UNLESS OTHERWISE NOTED.
MAX. BEARING PRESSURE ON SHALE 13.56 KIPS/SQ.FT., FOR A.A.S.H.O. GROUP IX LOADING @ 150%
WORK THIS SHEET WITH SH. 57

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Cofferdam Excavation	CU. YD.	2852
ROCK EXCAVATION FOR STRUCTURE	CU. YD.	386
CLASS "X" CONCRETE	CU. YD.	1952
REINFORCEMENT BARS	POUND	141,920
STRUCTURAL STEEL	POUND	1640
CONCRETE SEAL	SQ. YD.	256
COFFERDAM	EACH	1

As Revised 9-21-70

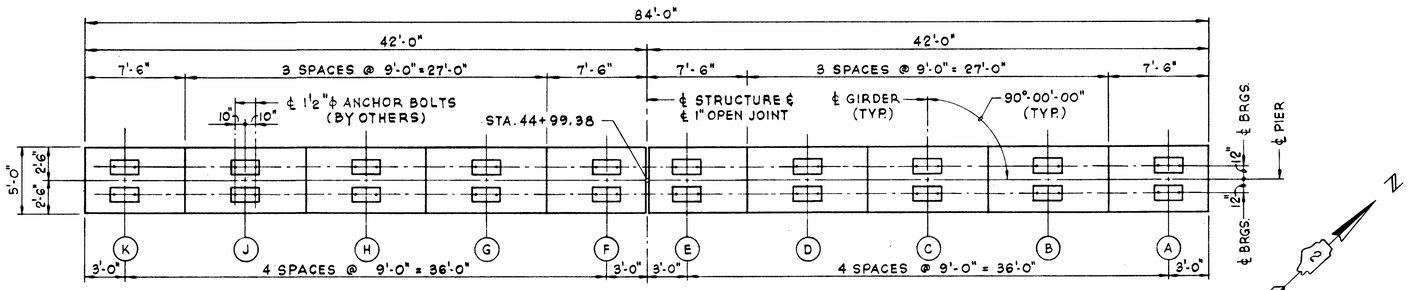
PIER 20
ELEVATIONS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38
SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY J. N. LESLIE
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W.G. HORN

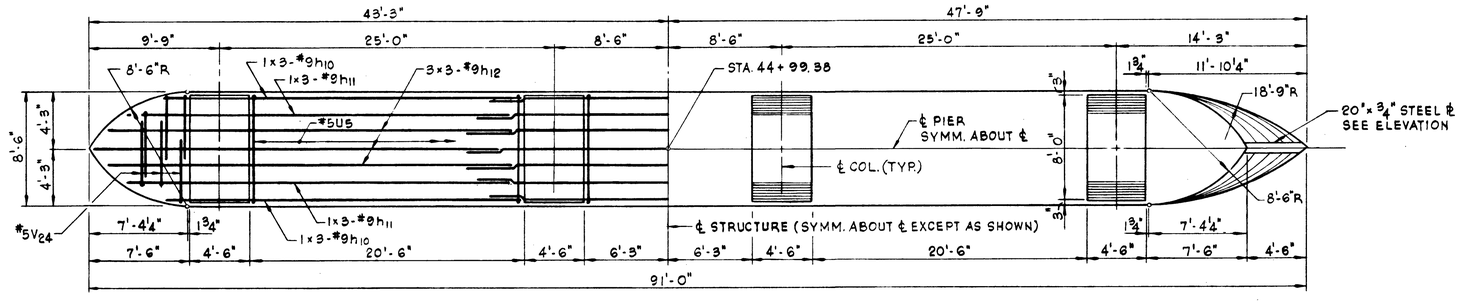
Rev. [ ] S.F.M. 9-21-70

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	57
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



PLAN

SCALE: 3/16" = 1'-0"

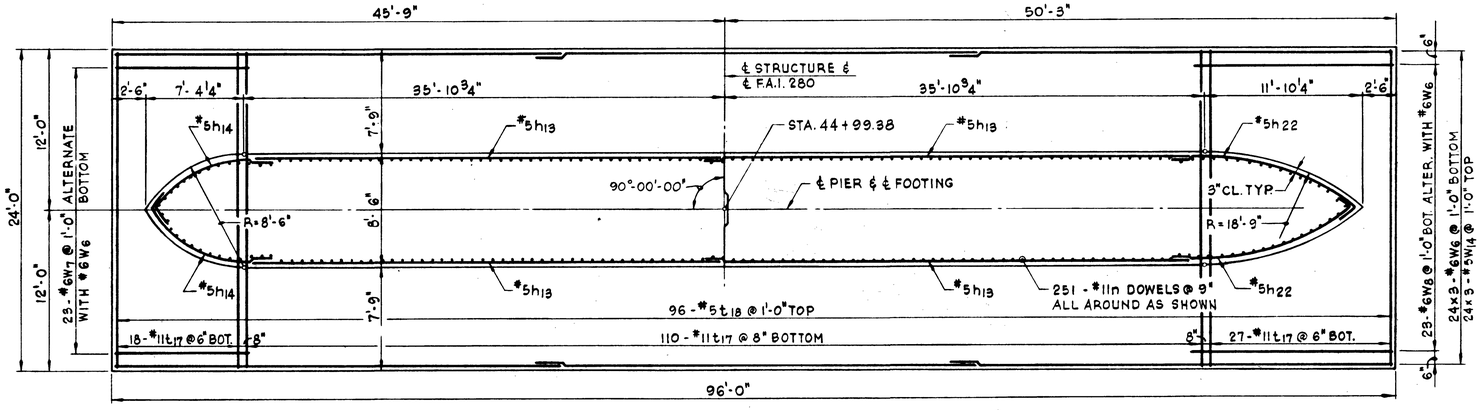


SECTION G-G

SCALE: 3/16" = 1'-0"

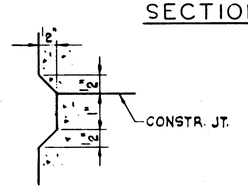
KEY TO BAR INDICATION

24 x 3 - #6 INDICATES 24 LINES OF #6 BARS WITH 3 LENGTHS PER LINE.



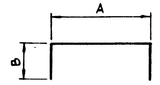
SECTION H-H - FOOTING PLAN

SCALE: 3/16" = 1'-0"



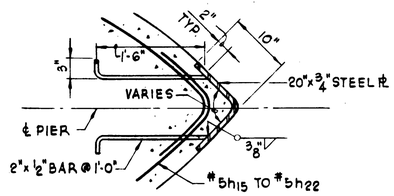
CONSTR. JT. DETAIL

SCALE: 6" = 1'-0"



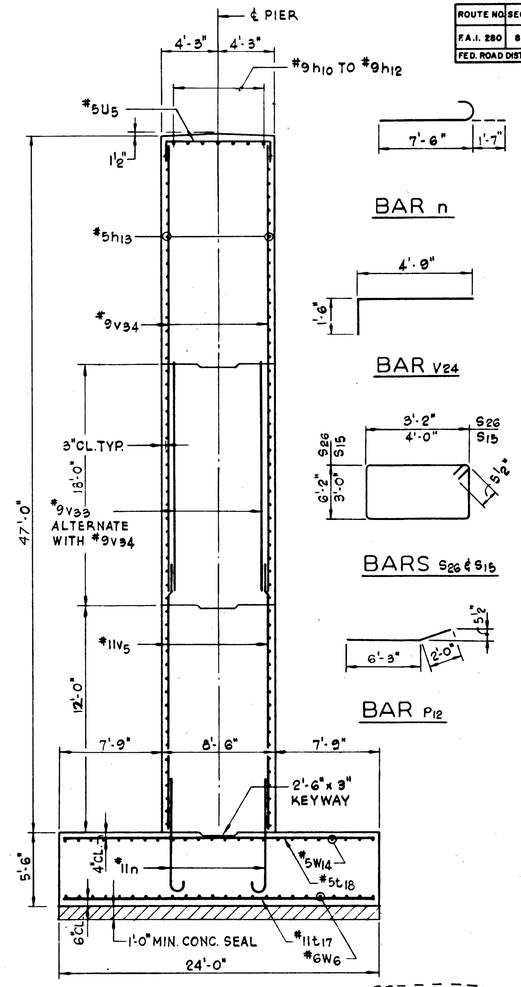
BARS S20, S14, S29 S30, U4 & U5

BAR	A	B
S20	4'-8"	1'-6"
S14	3'-2"	4'-4"
S29	3'-0"	3'-9"
S30	3'-0"	4'-6"
U4	4'-8"	4'-6"
U5	8'-0"	1'-6"



SECTION J-J

SCALE: 1" = 1'-0"



SECTION F-F

SCALE: 3/16" = 1'-0"

BAR n

BAR V24

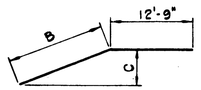
BARS S26 & S15

BAR P12

BAR LIST

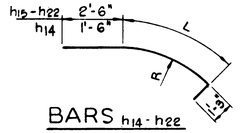
BAR	NO	SIZE	LENGTH	SHAPE
h	16	6	36'-0"	
h10	6	9	26'-6"	
h11	6	9	29'-0"	
h12	9	9	30'-6"	
h13	204	5	36'-0"	
h14	104	5	11'-3"	
h15	6	5	12'-5"	
h16	6	5	12'-11"	
h17	6	5	13'-6"	
h18	6	5	14'-0"	
h19	6	5	14'-7"	
h20	6	5	15'-1"	
h21	6	5	15'-7"	
h22	62	5	16'-5"	
n	355	11	9'-1"	
P	16	11	41'-6"	
P1	4	11	21'-0"	
P2	16	11	29'-0"	
P3	8	6	16'-0"	
P12	20	8	8'-3"	
S20	22	5	7'-8"	
S26	108	5	19'-7"	
S14	112	5	11'-10"	
S15	112	5	14'-11"	
S29	224	5	10'-6"	
S30	224	5	12'-0"	
t17	155	11	23'-6"	
t18	96	5	23'-6"	
U4	16	6	13'-8"	
U5	39	5	11'-0"	
V5	251	11	19'-9"	
V10	32	11	17'-3"	
V24	12	5	6'-3"	
V32	72	11	32'-0"	
V33	110	9	18'-0"	
V34	112	9	35'-0"	
V140	2	9	35'-0"	
V141	2	9	35'-0"	
V142	2	9	35'-0"	
V143	2	9	35'-0"	
V144	2	9	35'-0"	
V145	2	9	35'-0"	
V146	2	9	35'-0"	
V147	2	9	35'-0"	
V148	2	9	35'-0"	
V149	2	9	33'-9"	
V150	2	9	29'-3"	
V151	2	9	24'-9"	
V152	2	9	20'-3"	
V153	2	9	15'-9"	
V154	1	9	35'-6"	
W6	72	6	33'-0"	
W7	23	6	10'-0"	
W8	23	6	15'-0"	
W14	72	5	32'-9"	

As Revised 9-21-70



BARS V140-V154

BAR	B	C	BAR	B	C
V140	22'-3"	1'2"	V147	22'-3"	1'-8"
V141	22'-3"	3"	V148	22'-3"	2'-0"
V142	22'-3"	4"	V149	21'-0"	2'-4"
V143	22'-3"	6"	V150	16'-6"	1'-9"
V144	22'-3"	8 1/2"	V151	12'-0"	1'-6"
V145	22'-3"	1'-0"	V152	7'-6"	1'-1"
V146	22'-3"	1'-3"	V153	3'-0"	0'-7"
			V154	22'-9"	4'-6"



BARS h14 - h22

BAR	R	L
h14	8'-3"	8'-6"
h15	8'-4 1/8"	8'-8"
h16	9'-5 1/8"	9'-2"
h17	10'-7 1/8"	9'-9"
h18	11'-10 1/4"	10'-3"
h19	13'-2 3/8"	10'-10"
h20	14'-7 1/2"	11'-4"
h21	16'-1 5/8"	11'-10"
h22	18'-6"	12'-8"

NOTE:

WORK THIS SHEET WITH SH. 56

PIER 20
CAP, WALL & FOOTING

F.A.I. ROUTE 280 SECTION 81-1B

I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY S. RASHID

DRAWN BY J. N. LESLIE

CHECKED J. Y. Huang

IN CHARGE J. Y. HUANG

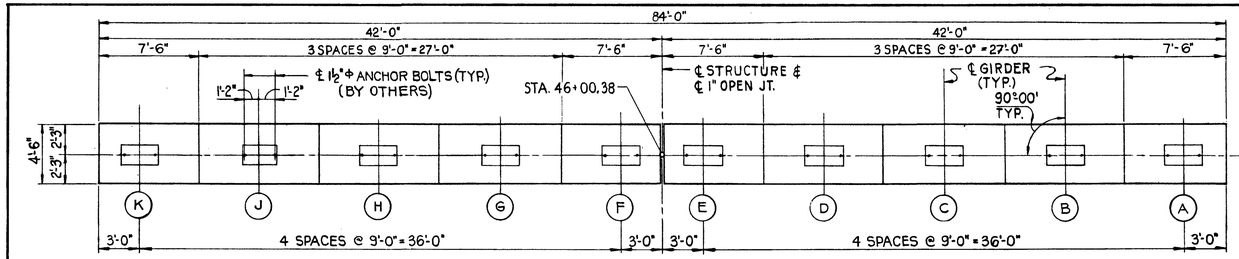
APPROVED W. G. HORN

Rev. S.F.M. 9-21-70

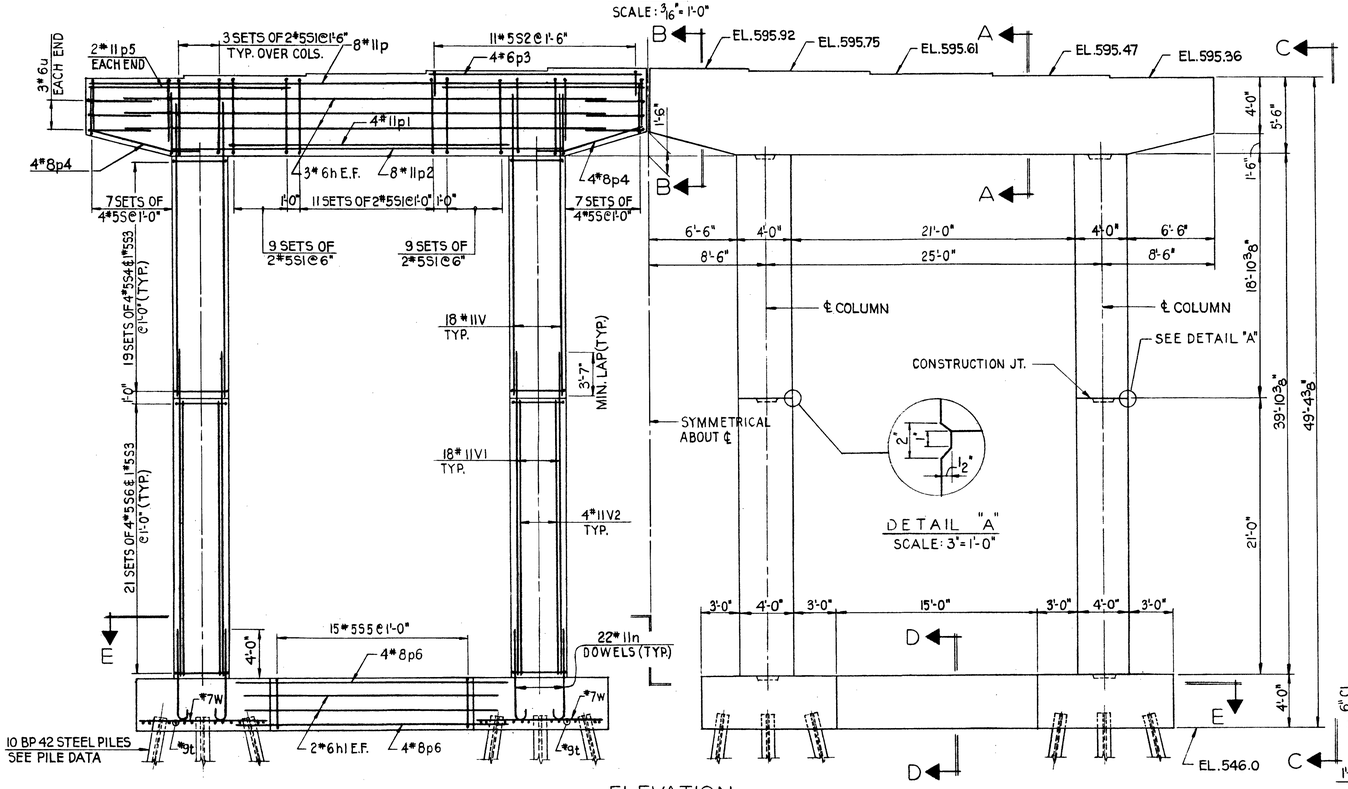
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	58
FED. ROAD DIST. NO.		FED. AID PROJECT I- 280		

BAR LIST

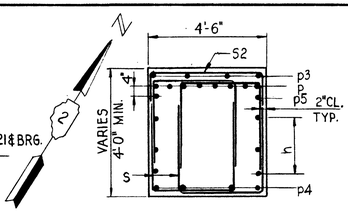
BAR	NO.	SIZE	LENGTH	SHAPE
h	12	6	36'-0"	
h1	8	6	18'-0"	
n	88	11	9'-1"	
p	16	11	41'-6"	
p1	8	11	21'-0"	
p2	16	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p5	8	11	15'-0"	
p6	16	8	19'-0"	
S	112	5	9'-9"	
S1	140	5	17'-9"	
S2	22	5	7'-2"	
S3	160	5	12'-7"	
S4	304	5	9'-0"	
S5	30	5	12'-0"	
S6	336	5	10'-0"	
t	48	9	13'-6"	
u	12	6	13'-1"	
V	72	11	23'-0"	
V1	72	11	25'-0"	
V2	16	11	20'-9"	
w	64	7	9'-6"	



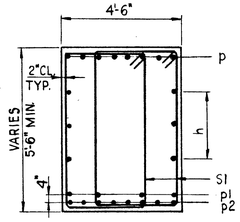
PLAN
SCALE: 3/16" = 1'-0"



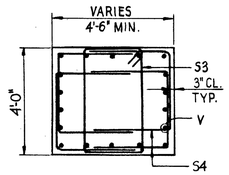
DETAIL "A"
SCALE: 3" = 1'-0"



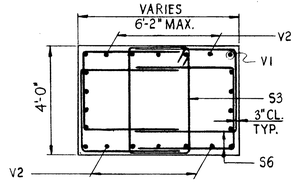
SECTION B-B
SCALE: 3/8" = 1'-0"



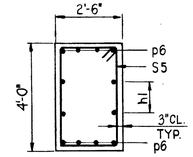
SECTION A-A
SCALE: 3/8" = 1'-0"



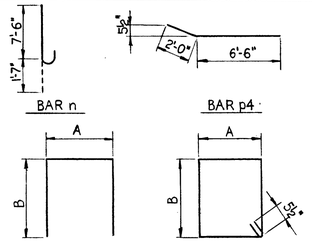
SECTION G-G
SCALE: 3/8" = 1'-0"



SECTION F-F
SCALE: 3/8" = 1'-0"



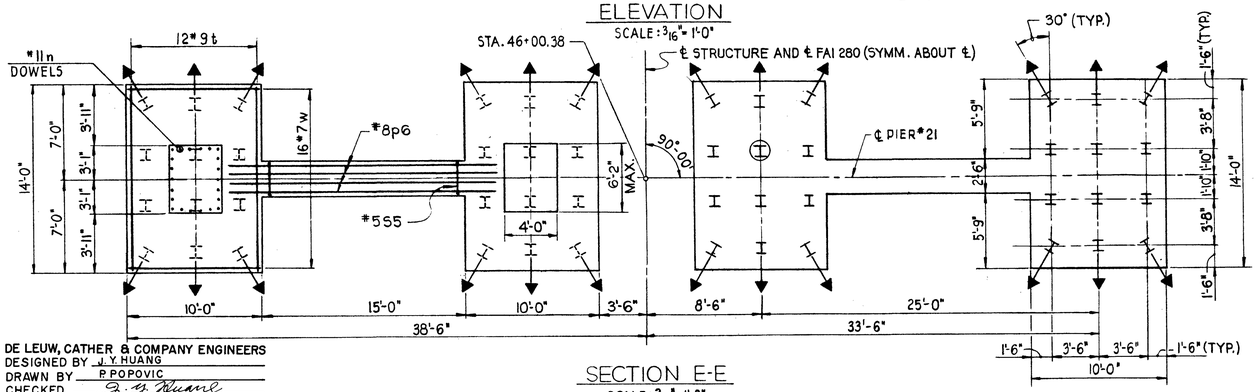
SECTION D-D
SCALE: 3/8" = 1'-0"



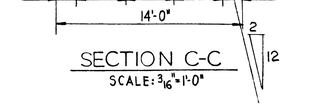
BAR	A	B
S	3'-3"	3'-3"
S2	4'-2"	1'-6"
S4	3'-0"	3'-0"
S6	3'-0"	3'-6"
u	4'-1"	4'-6"

BAR	A	B
S1	3'-3"	5'-2"
S3	2'-4"	3'-6"
S5	2'-0"	3'-6"

ELEVATION
SCALE: 3/16" = 1'-0"



SECTION E-E
SCALE: 3/16" = 1'-0"



SECTION C-C
SCALE: 3/16" = 1'-0"

Ⓘ DENOTES TEST PILE
H DENOTES BATTERED PILE

PILE DATA	
PILE TYPE	10 BP42
DESIGN CAPACITY, TONS	50
NUMBER REQUIRED*	48
ESTIMATED LENGTH, FEET	39'
CUT OFF ELEVATION	547.0

* INCLUDING 1 TEST PILE

NOTES:
SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS WHICH SHALL BE FURNISHED AND SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

BILL OF MATERIAL

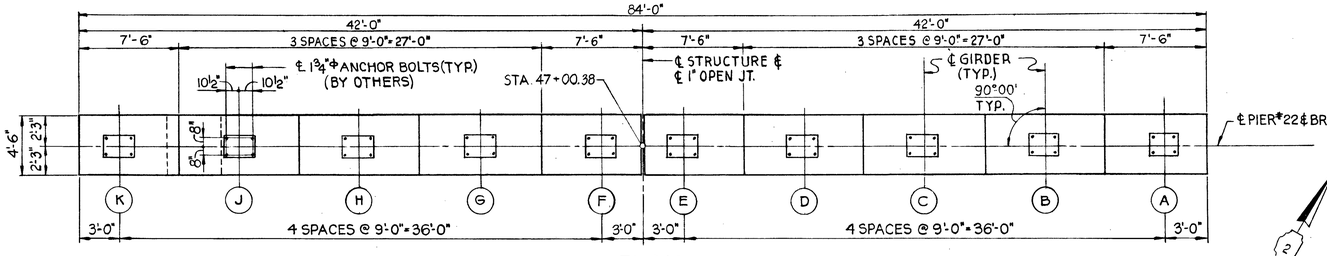
ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU. YD.	281
CLASS X CONCRETE	CU. YD.	297.4
REINFORCEMENT BARS	POUND	50,560
FURNISH STEEL PILES 10BP42	LIN. FT.	1,833
TEST PILE STEEL (10BP42)	EACH	1
DRIVING STEEL PILES	LIN. FT.	1,833

DE LEUV, CATHER & COMPANY ENGINEERS
DESIGNED BY J. Y. HUANG
DRAWN BY P. POPOVIC
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

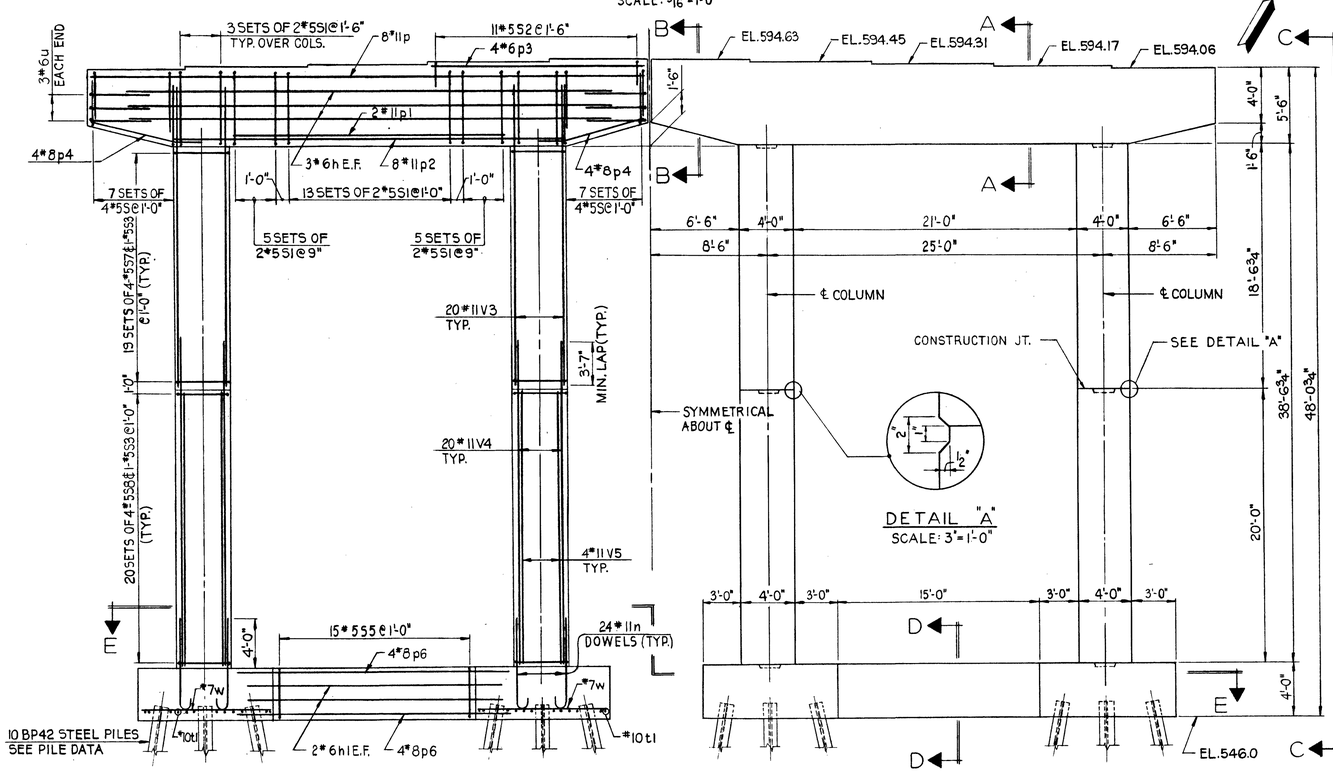
PIER 21

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	59
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

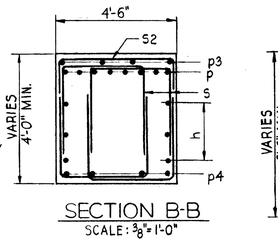


PLAN
SCALE: 3/16"=1'-0"

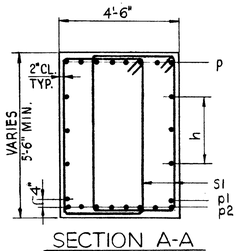


DETAIL "A"
SCALE: 3"=1'-0"

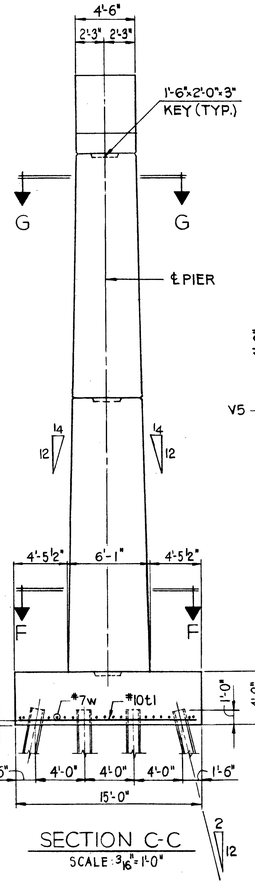
ELEVATION
SCALE: 3/16"=1'-0"



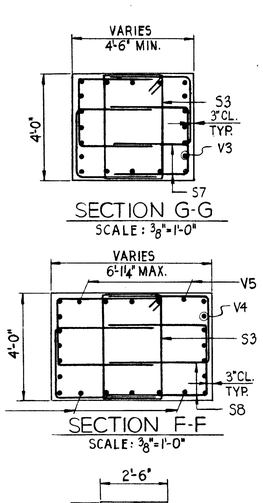
SECTION B-B
SCALE: 3/8"=1'-0"



SECTION A-A
SCALE: 3/8"=1'-0"

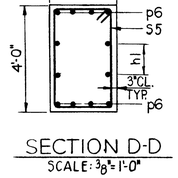


SECTION C-C
SCALE: 3/16"=1'-0"

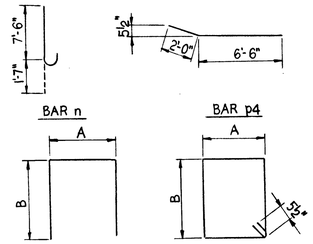


SECTION G-G
SCALE: 3/8"=1'-0"

SECTION F-F
SCALE: 3/8"=1'-0"

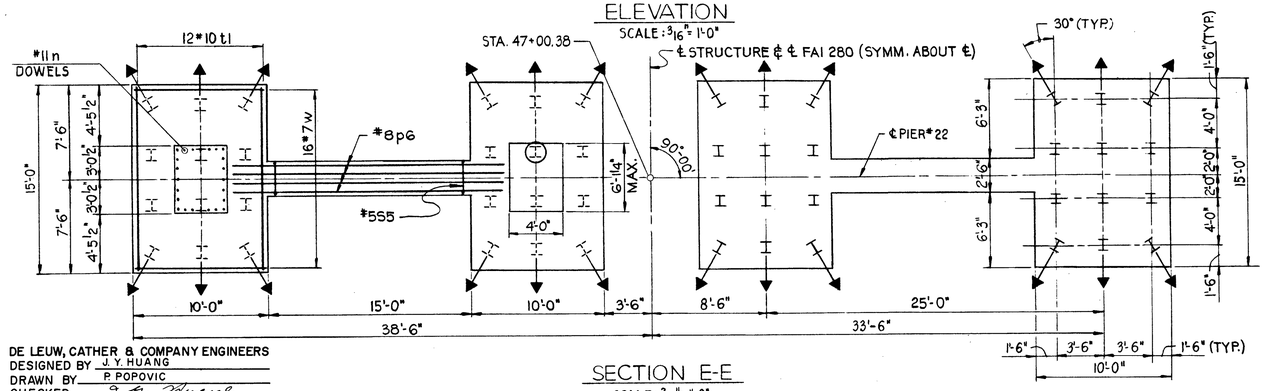


SECTION D-D
SCALE: 3/8"=1'-0"



BAR	A	B
S	3'-3"	3'-3"
S2	4'-2"	1'-6"
S7	2'-6"	3'-0"
S8	2'-6"	3'-6"
u	4'-1"	4'-6"

BAR	A	B
S1	3'-3"	5'-2"
S3	2'-4"	3'-6"
S5	2'-0"	3'-6"



SECTION E-E
SCALE: 3/16"=1'-0"

PILE DATA	
PILE TYPE	10 BP 42
DESIGN CAPACITY, TONS	50
NUMBER REQUIRED*	48
ESTIMATED LENGTH, FEET	40
CUT OFF ELEVATION	547.0

* INCLUDING 1 TEST PILE

Ⓣ DENOTES TEST PILE
I DENOTES BATTERED PILE

NOTES:
SPACE REINFORCEMENT IN GAP TO CLEAR ANCHOR BOLTS WHICH SHALL BE FURNISHED ℄ SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	12	6	36'-0"	
h1	8	6	18'-0"	
n	96	11	9'-1"	
p	16	11	41'-6"	
p1	4	11	21'-0"	
p2	16	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p6	16	8	19'-0"	
S	112	5	9'-9"	
S1	116	5	17'-9"	
S2	22	5	7'-2"	
S3	156	5	12'-7"	
S7	304	5	8'-6"	
S5	30	5	12'-0"	
S8	320	5	9'-6"	
t1	48	10	14'-6"	
u	12	6	13'-1"	
V3	80	11	22'-6"	
V4	80	11	24'-0"	
V5	16	11	19'-9"	
w	64	7	9'-6"	

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU.YD.	243
CLASS X CONCRETE	CU.YD.	298.9
REINFORCEMENT BARS	POUND	50,910
FURNISH STEEL PILES 10BP42	LIN.FT.	1,880
TEST PILE STEEL(10 BP42)	EACH	1
DRIVING STEEL PILES	LIN.FT.	1,880

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.Y. HUANG
DRAWN BY P. POPOVIC
CHECKED J.Y. Huang
IN CHARGE J.Y. HUANG
APPROVED W.G. HORN

PIER 22

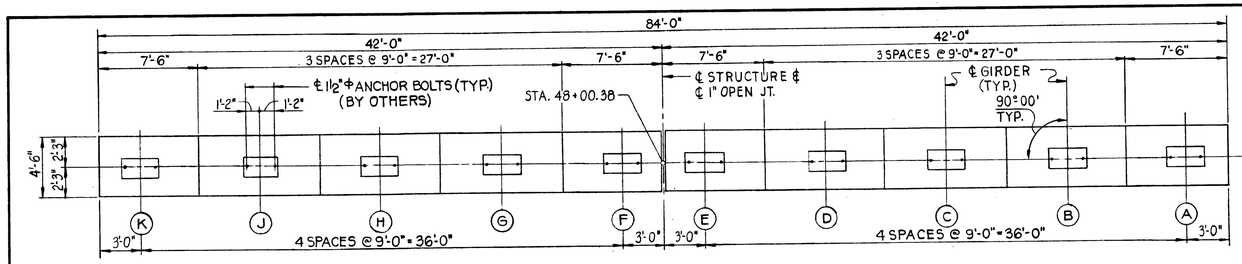
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38

SCALE: AS NOTED DATE: JULY 21, 1969

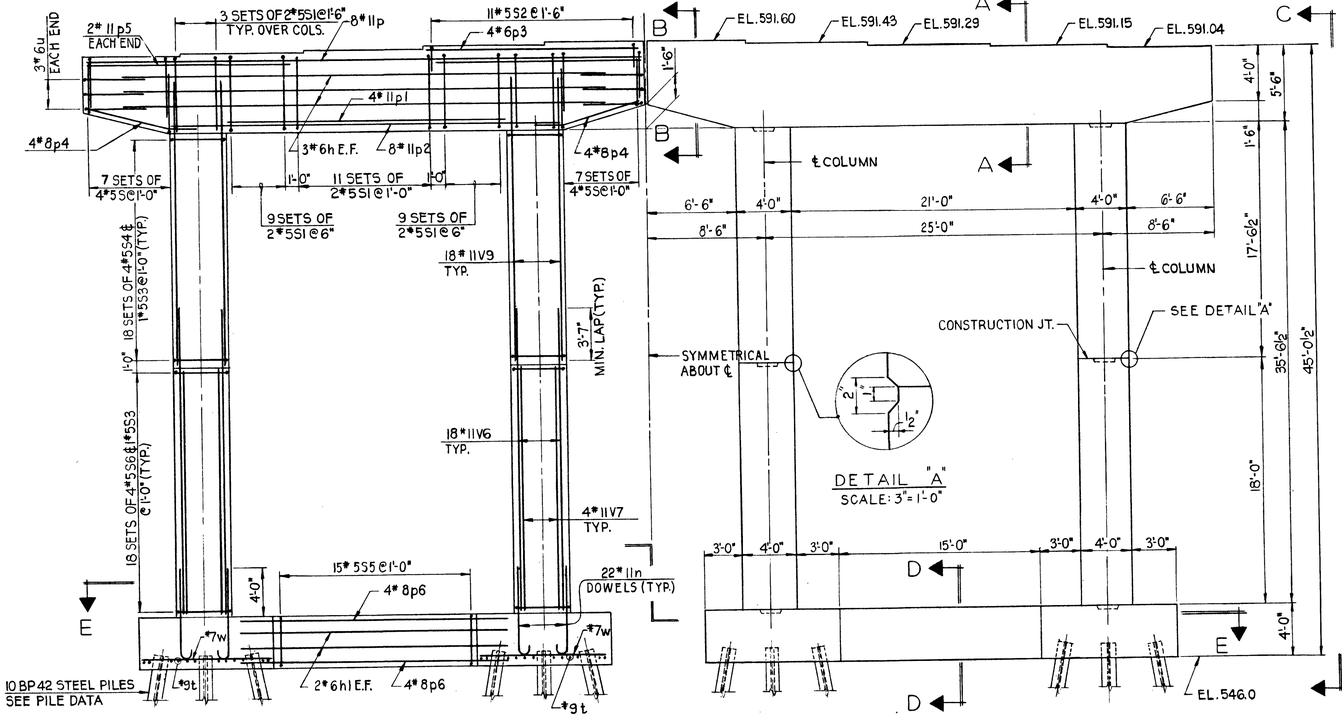
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	60
FED. ROAD DIST. NO.	FED. AID PROJECT I-280			

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	12	6	36'-0"	
h1	8	6	18'-0"	
n	88	11	9'-1"	
p	16	11	41'-6"	
p1	8	11	21'-0"	
p2	16	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p5	8	11	15'-0"	
p6	16	8	19'-0"	
s	112	5	9'-9"	
s1	140	5	17'-9"	
s2	22	5	7'-2"	
s3	144	5	12'-7"	
s4	288	5	9'-0"	
s5	30	5	12'-0"	
s6	288	5	10'-0"	
t	48	9	13'-6"	
u	12	6	13'-1"	
v9	72	11	21'-6"	
v6	72	11	22'-0"	
v7	16	11	17'-9"	
w	64	7	9'-6"	

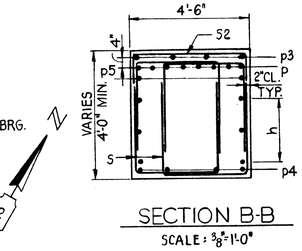


PLAN
SCALE: 3/16" = 1'-0"

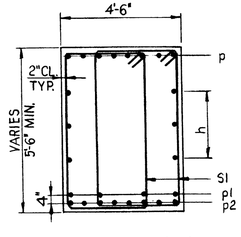


DETAIL "A"
SCALE: 3" = 1'-0"

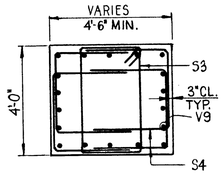
ELEVATION
SCALE: 3/16" = 1'-0"



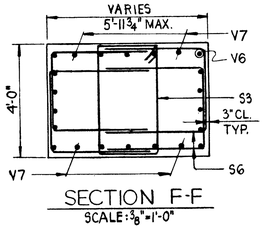
SECTION B-B
SCALE: 3/8" = 1'-0"



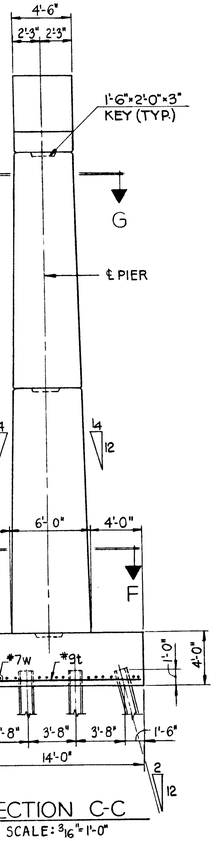
SECTION A-A
SCALE: 3/8" = 1'-0"



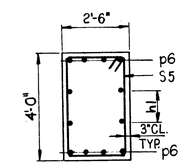
SECTION G-G
SCALE: 3/8" = 1'-0"



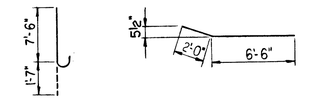
SECTION F-F
SCALE: 3/8" = 1'-0"



SECTION C-C
SCALE: 3/16" = 1'-0"

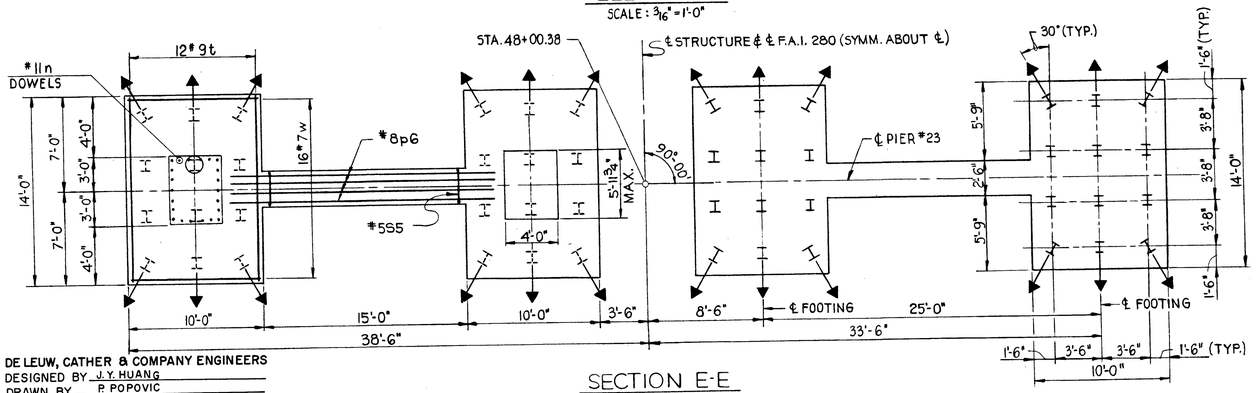


SECTION D-D
SCALE: 3/8" = 1'-0"



BAR	A	B
S	3'-3	3'-3"
S2	4'-2"	1'-6"
S4	3'-0"	3'-0"
S6	3'-0"	3'-6"
u	4'-1"	4'-6"

BAR	A	B
S1	3'-3"	5'-2"
S3	2'-4"	3'-6"
S5	2'-0"	3'-6"



SECTION E-E
SCALE: 3/16" = 1'-0"

PILE DATA	
PILE TYPE	10 BP 42
DESIGN CAPACITY, TON	50
NUMBER REQUIRED*	48
ESTIMATED LENGTH, FEET	42
CUT OFF ELEVATION	547.0

* INCLUDING 1 TEST PILE

Ⓣ DENOTES TEST PILE
DENOTES BATTERED PILE

NOTES:
SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS WHICH SHALL BE FURNISHED AND SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU. YD.	237
CLASS X CONCRETE	CU. YD.	282.1
REINFORCEMENT BARS	POUND	47,700
FURNISH STEEL PILES 10 BP 42	LIN. FT.	1,974
TEST PILE STEEL (10 BP 42)	EACH	1
DRIVING STEEL PILES	LIN. FT.	1,974

PIER 23

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J. Y. HUANG
DRAWN BY P. POPOVIC
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	61
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	12	6	36'-0"	
h1	8	6	18'-0"	
n	88	11	9'-1"	
p	14	11	41'-6"	
p1	4	11	21'-0"	
p2	14	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p6	16	6	19'-0"	
S10	112	5	9'-4"	
S19	108	5	16'-11"	
S2	22	5	7'-2"	
S4	256	5	9'-0"	
S3	136	5	12'-7"	
S5	30	5	12'-0"	
S6	288	5	10'-0"	
t2	48	7	11'-6"	
u	12	6	13'-1"	
V2	72	11	20'-9"	
V9	72	11	21'-6"	
V10	16	11	17'-3"	
w1	64	6	9'-6"	

PLAN
SCALE: 3/16"=1'-0"

ELEVATION
SCALE: 3/16"=1'-0"

DETAIL "A"
SCALE: 3"=1'-0"

SECTION B-B
SCALE: 3/8"=1'-0"

SECTION A-A
SCALE: 3/8"=1'-0"

SECTION G-G
SCALE: 3/8"=1'-0"

SECTION F-F
SCALE: 3/8"=1'-0"

SECTION D-D
SCALE: 3/8"=1'-0"

SECTION C-C
SCALE: 3/16"=1'-0"

SECTION E-E
SCALE: 3/16"=1'-0"

BAR n

BAR p4

BAR	A	B
S10	2'-10"	3'-3"
S2	4'-2"	1'-6"
S4	3'-0"	3'-0"
S6	3'-0"	3'-6"
u	4'-1"	4'-6"

BAR	A	B
S19	2'-10"	5'-2"
S3	2'-4"	3'-6"
S5	2'-0"	3'-6"

PILE DATA	
PILE TYPE	10 BP 42
DESIGN CAPACITY, TON	50
NUMBER REQUIRED*	48
ESTIMATED LENGTH, FEET	42
CUT OFF ELEVATION	547

* INCLUDING 1 TEST PILE

Ⓣ DENOTES TEST PILES

I DENOTES BATTERED PILES

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS WHICH SHALL BE FURNISHED & SET BY OTHERS.

ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.

POUR STEPS MONOLITHICALLY WITH CAP.

ALL BAR DIMENSIONS ARE OUT TO OUT.

MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU.YD.	217
CLASS X CONCRETE	CU.YD.	264.6
REINFORCEMENT BARS	POUND	43,400
FURNISH STEEL PILES 10BP42	LIN.FT.	1,974
TEST PILE STEEL (10 BP42)	EACH	1
DRIVING STEEL PILES	LIN.FT.	1,974

DE LEUW, CATHER & COMPANY ENGINEERS

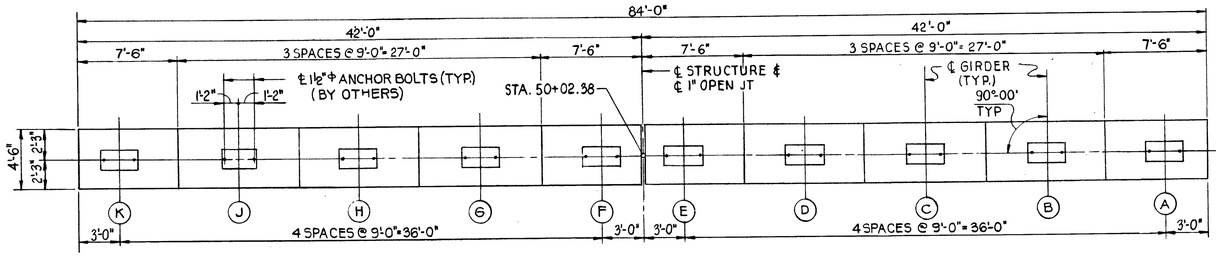
DESIGNED BY J.Y. HUANG
DRAWN BY P. POPOVIC
CHECKED J.Y. Huang
IN CHARGE J.Y. HUANG
APPROVED W.G. HORN

PIER 24

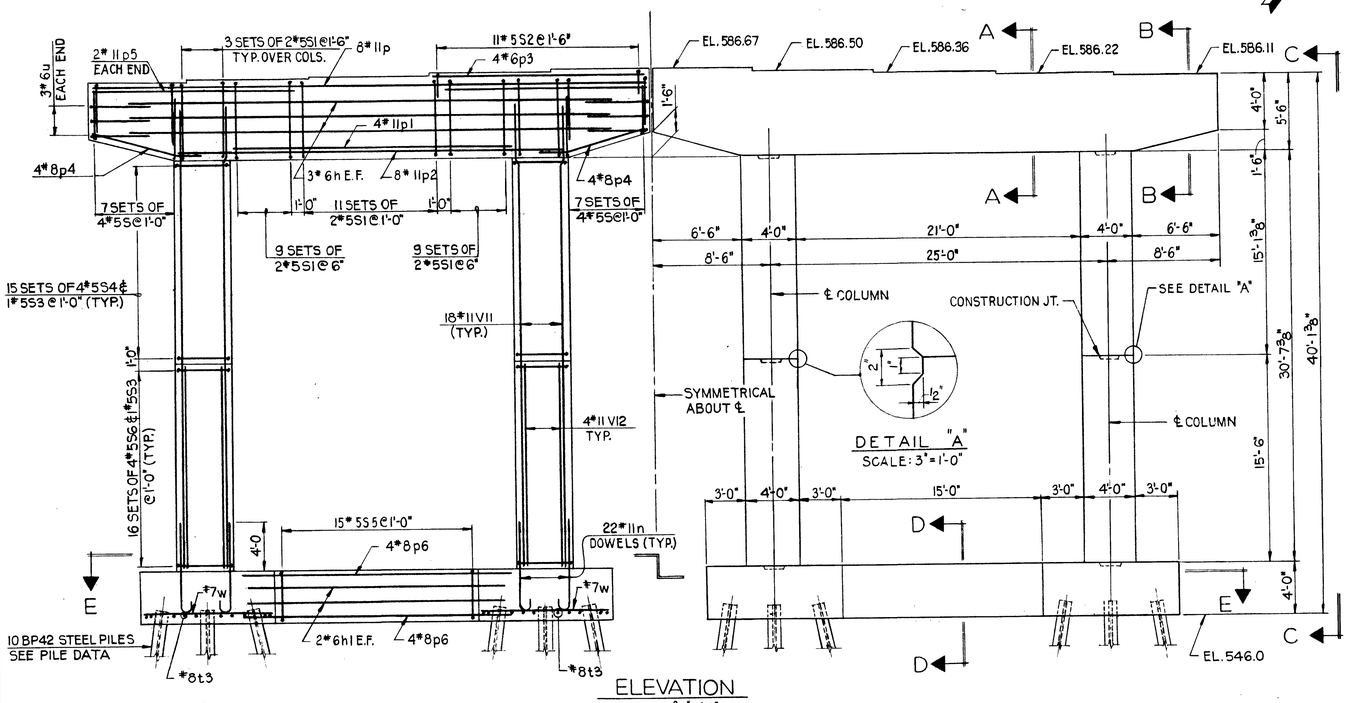
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: JULY 21, 1969

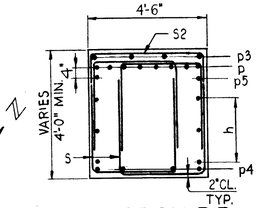
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	62
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



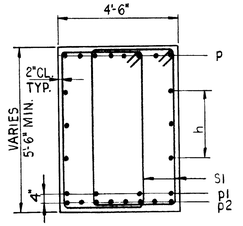
PLAN
SCALE: 3/16" = 1'-0"



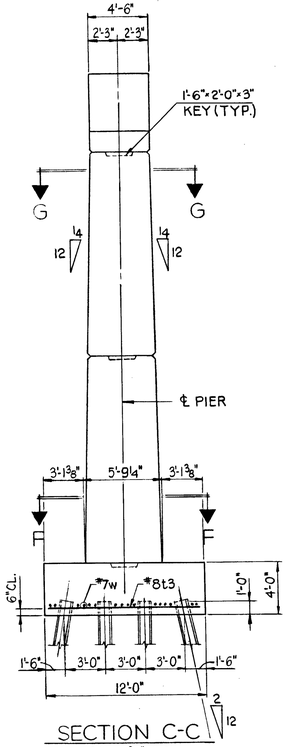
DETAIL "A"
SCALE: 3" = 1'-0"



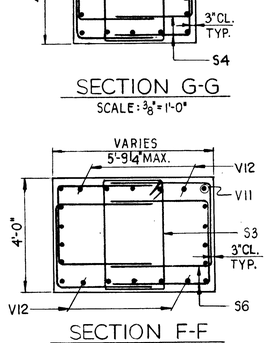
SECTION B-B
SCALE: ⅜" = 1'-0"



SECTION A-A
SCALE: ⅜" = 1'-0"

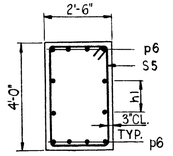


SECTION C-C
SCALE: 3/16" = 1'-0"

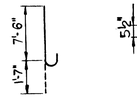


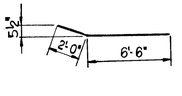
SECTION G-G
SCALE: ⅜" = 1'-0"

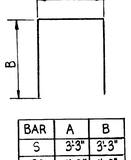
SECTION F-F
SCALE: ⅜" = 1'-0"



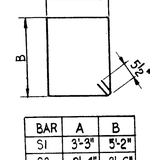
SECTION D-D
SCALE: ⅜" = 1'-0"







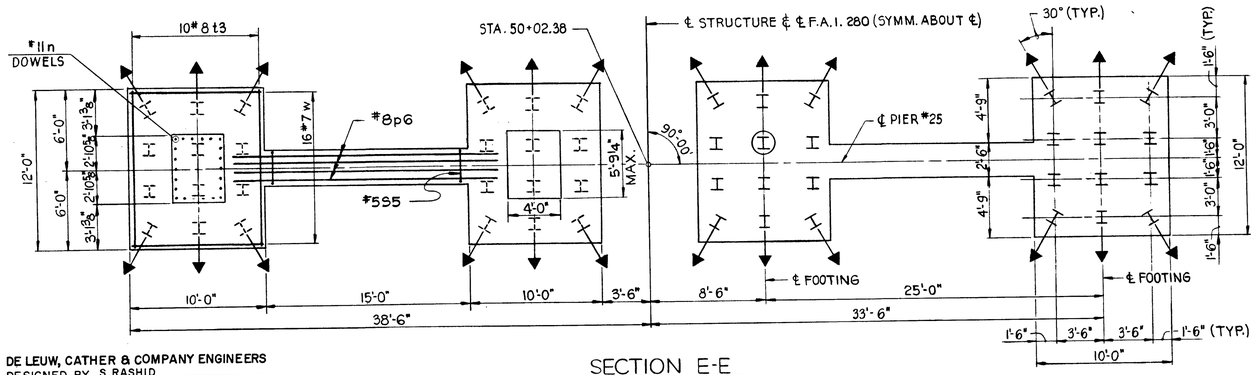
BAR	A	B
S	3'-9"	3'-3"
S2	4'-2"	1'-6"
S4	3'-0"	3'-0"
S6	3'-0"	3'-6"
u	4'-1"	4'-6"



BAR	A	B
S1	3'-3"	5'-2"
S3	2'-4"	3'-6"
S5	2'-0"	3'-6"

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	12	6	36'-0"	
h1	8	6	18'-0"	
n	88	11	9'-1"	
p	16	11	41'-6"	
p1	8	11	21'-0"	
p2	16	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p5	8	11	15'-0"	
p6	16	8	19'-0"	
S	112	5	9'-9"	
S1	140	5	17'-9"	
S2	22	5	7'-2"	
S3	124	5	12'-7"	
S6	256	5	10'-0"	
S5	30	5	12'-0"	
S4	240	5	9'-0"	
t3	40	8	11'-6"	
u	12	6	13'-1"	
VII	72	11	34'-9"	
V12	16	11	15'-3"	
w	64	7	9'-6"	



SECTION E-E
SCALE: 3/16" = 1'-0"

PILE DATA	
PILE TYPE	10 BP 42
DESIGN CAPACITY, TONS	50
NUMBER REQUIRED *	48
ESTIMATED LENGTH, FEET	41
CUT OFF ELEVATION	547.0

* INCLUDING 1 TEST PILE

Ⓣ DENOTES TEST PILE
I DENOTES BATTERED PILE

NOTES:
SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS WHICH SHALL BE FURNISHED AND SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

BILL OF MATERIAL

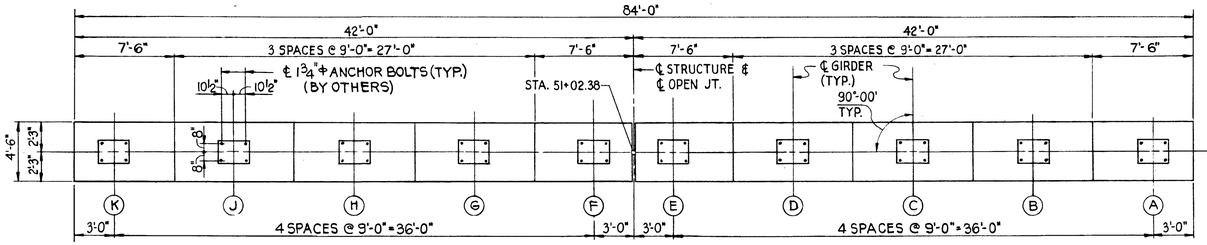
ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU.YD.	362
CLASS X CONCRETE	CU.YD.	253.0
REINFORCEMENT BARS	POUND	42,120
FURNISH STEEL PILES 10 BP42	LIN.FT.	1,927
TEST PILE STEEL (10 BP42)	EACH	1
DRIVING STEEL PILES	LIN.FT.	1,927

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED J. Y. Huang
IN CHARGE J. Y. HUANG
APPROVED W.G. HORN

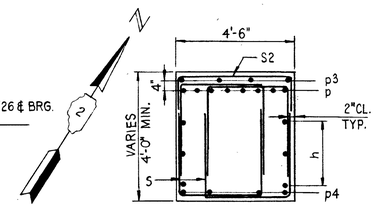
PIER 25

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

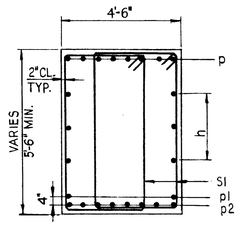
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	63
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



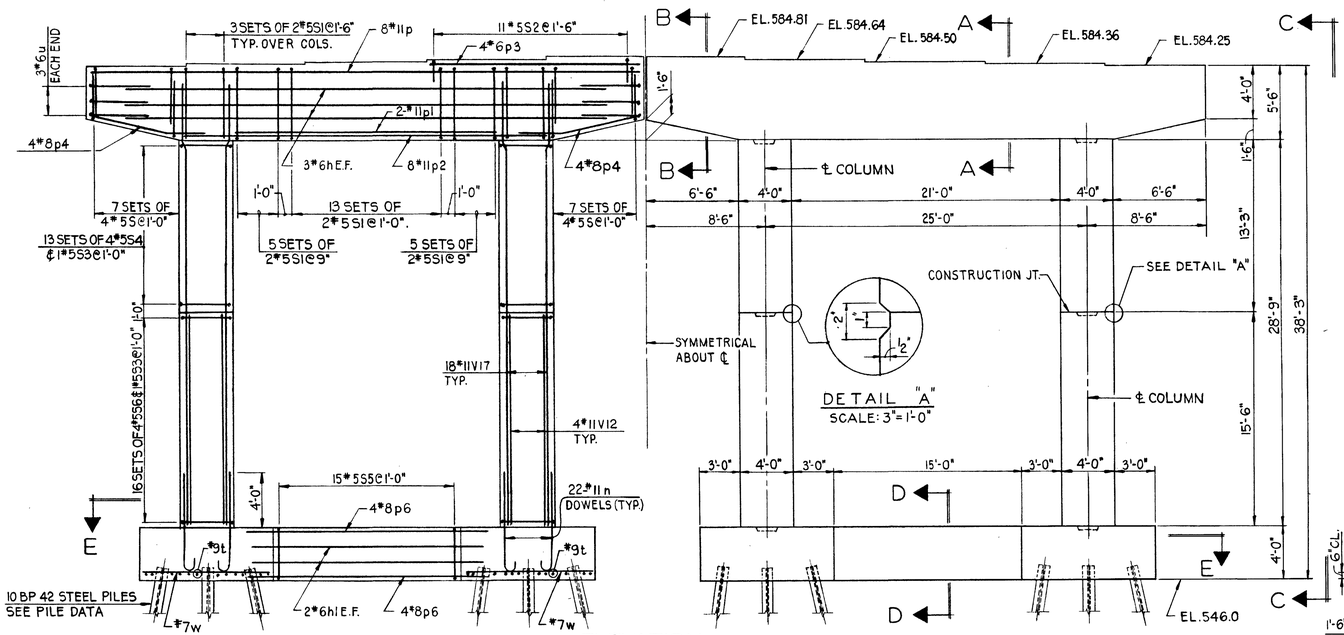
PLAN
SCALE: 3/16" = 1'-0"



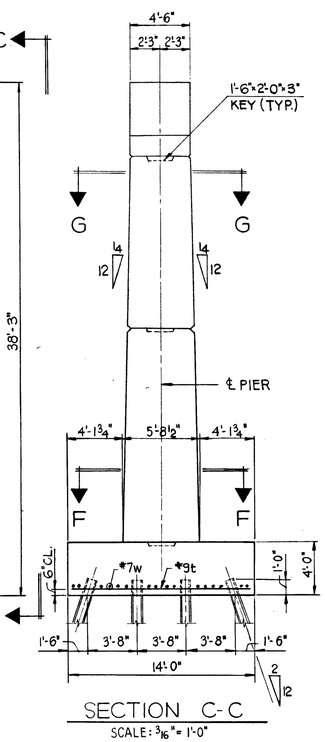
SECTION B-B
SCALE: 3/8" = 1'-0"



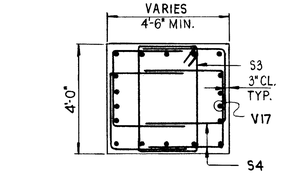
SECTION A-A
SCALE: 3/8" = 1'-0"



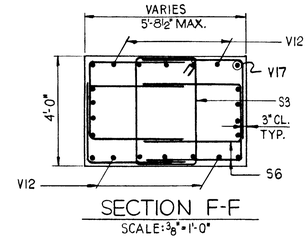
ELEVATION
SCALE: 3/16" = 1'-0"



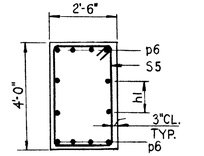
SECTION C-C
SCALE: 3/16" = 1'-0"



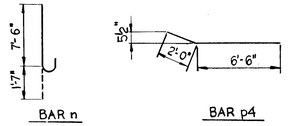
SECTION G-G
SCALE: 3/8" = 1'-0"



SECTION F-F
SCALE: 3/8" = 1'-0"



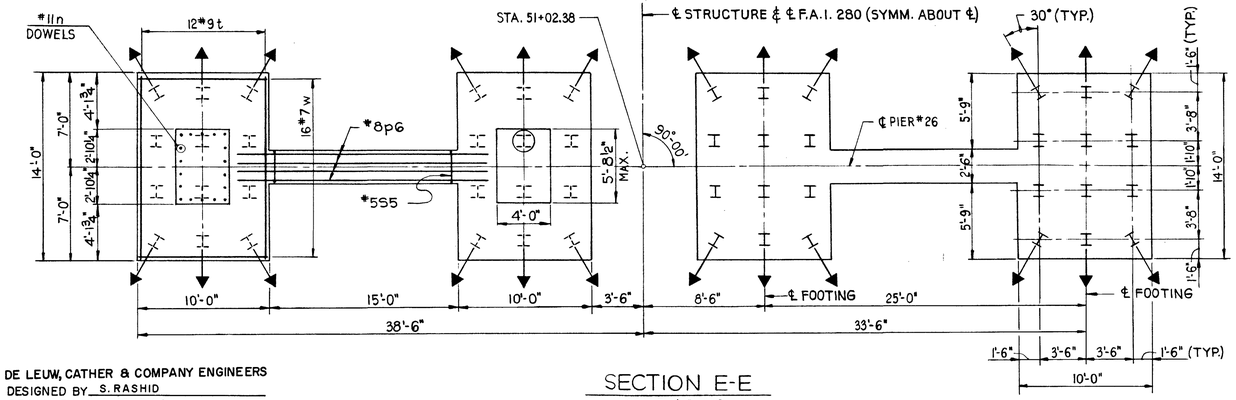
SECTION D-D
SCALE: 3/8" = 1'-0"



BAR	NO.	SIZE	LENGTH	SHAPE
h	12	6	36'-0"	
h1	8	6	18'-0"	
n	88	11	9'-1"	
p	16	11	41'-6"	
p1	4	11	21'-0"	
p2	16	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p6	16	8	19'-0"	
S	112	5	9'-9"	
S1	116	5	17'-9"	
S2	22	5	7'-2"	
S3	116	5	12'-7"	
S4	208	5	9'-0"	
S5	30	5	12'-0"	
S6	256	5	10'-0"	
t	48	9	13'-6"	
u	12	6	13'-1"	
V17	72	11	32'-9"	
V12	16	11	15'-3"	
w	64	7	9'-6"	

BAR	A	B
S	3'-3"	3'-3"
S2	4'-2"	1'-6"
S4	3'-0"	3'-0"
S6	3'-0"	3'-6"
u	4'-1"	4'-6"

BAR	A	B
S1	3'-3"	5'-2"
S3	2'-4"	3'-6"
S5	2'-0"	3'-6"



SECTION E-E
SCALE: 3/16" = 1'-0"

Ⓘ DENOTES TEST PILE
I DENOTES BATTERED PILE

PILE DATA	
PILE TYPE	10 BP42
DESIGN CAPACITY, TON	50
NUMBER REQUIRED*	48
ESTIMATED LENGTH, FEET	41
CUT OFF ELEVATION	547.0

* INCLUDING 1 TEST PILE

NOTES:
SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS WHICH SHALL BE FURNISHED AND SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

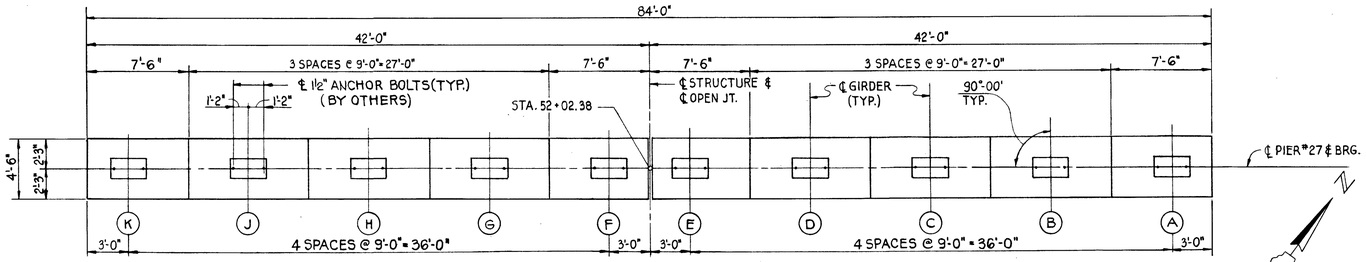
BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU.YD.	277
CLASS X CONCRETE	CU.YD.	258.7
REINFORCEMENT BARS	POUND	40,390
FURNISH STEEL PILES 10BP42	LIN.FT.	1,927
TEST PILE STEEL (10BP42)	EACH	1
DRIVING STEEL PILES	LIN.FT.	1,927

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED IN CHARGE J. Y. HUANG
APPROVED W. G. HORN

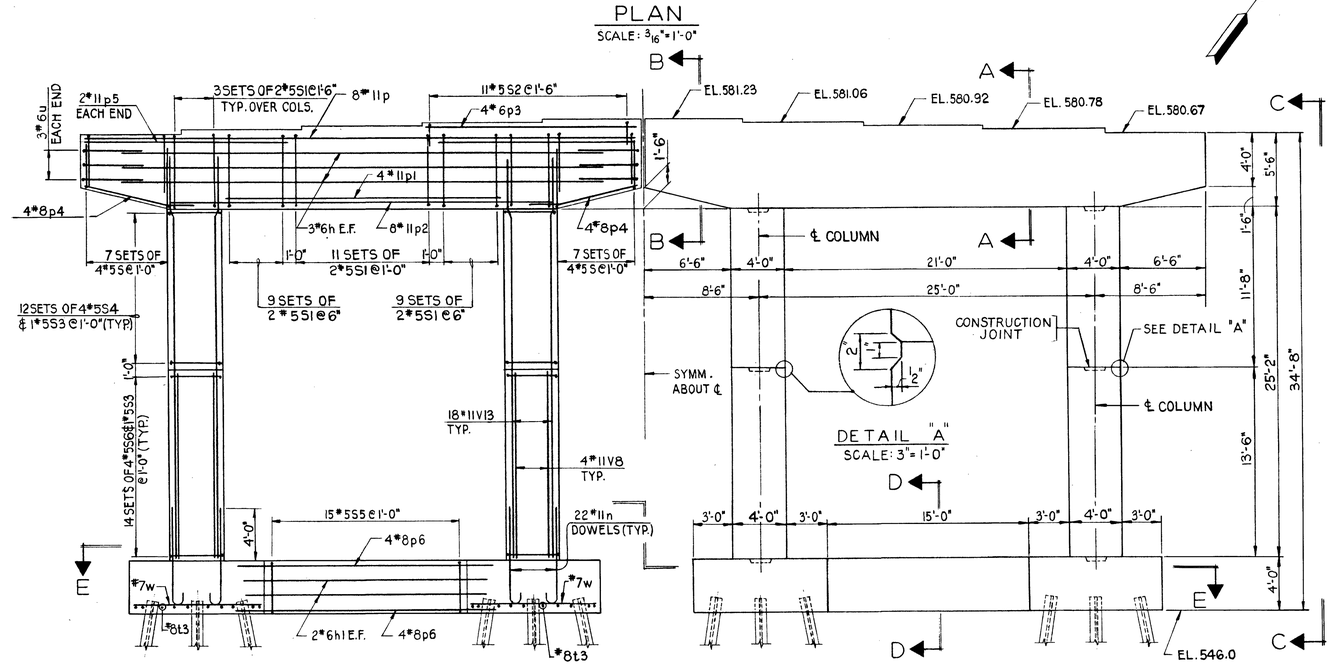
PIER 26

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	64
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

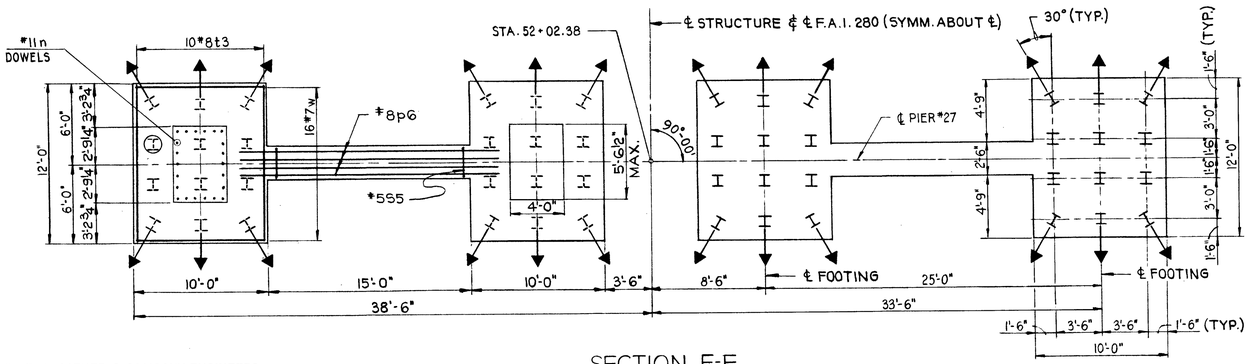


PLAN
SCALE: 3/16" = 1'-0"

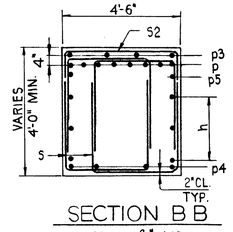


DETAIL "A"
SCALE: 3" = 1'-0"

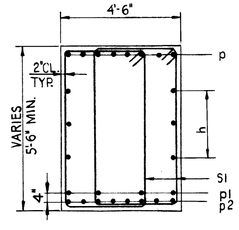
ELEVATION
SCALE: 3/16" = 1'-0"



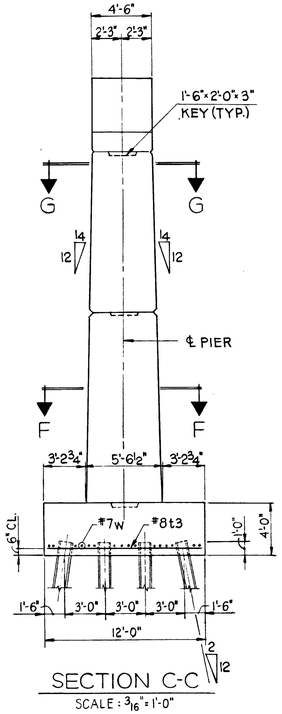
SECTION E-E
SCALE: 3/16" = 1'-0"



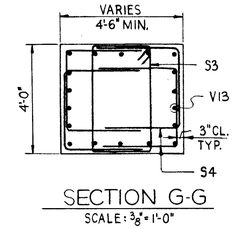
SECTION B B
SCALE: 3/8" = 1'-0"



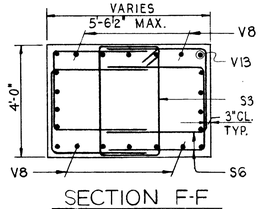
SECTION A-A
SCALE: 3/8" = 1'-0"



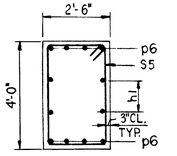
SECTION C-C
SCALE: 3/16" = 1'-0"



SECTION G-G
SCALE: 3/8" = 1'-0"



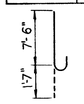
SECTION F-F
SCALE: 3/8" = 1'-0"



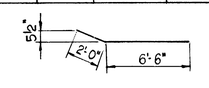
SECTION D-D
SCALE: 3/8" = 1'-0"

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h	12	6	36'-0"	
h1	8	6	18'-0"	
n	88	11	9'-1"	
p	16	11	41'-6"	
p1	8	11	21'-0"	
p2	16	11	29'-0"	
p3	8	6	16'-0"	
p4	16	8	8'-6"	
p5	8	11	15'-0"	
p6	16	8	19'-0"	
S	112	5	9'-9"	
S1	140	5	17'-9"	
S2	22	5	7'-2"	
S3	104	5	12'-7"	
S6	224	5	10'-0"	
S5	30	5	12'-0"	
S4	192	5	9'-0"	
t3	40	8	11'-6"	
u	12	6	13'-1"	
V8	16	11	13'-3"	
V13	72	11	29'-3"	
w	64	7	9'-6"	

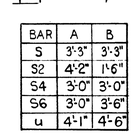


BAR u

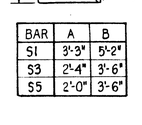


BAR p4

BAR n



BAR	A	B
S	3'-3"	3'-3"
S2	4'-2"	1'-6"
S4	3'-0"	3'-0"
S6	3'-0"	3'-6"
u	4'-1"	4'-6"



BAR	A	B
S1	3'-3"	5'-2"
S3	2'-4"	3'-6"
S5	2'-0"	3'-6"

PILE DATA	
PILE TYPE	10 BP 42
DESIGN CAPACITY, TON	50
NUMBER REQUIRED*	48
ESTIMATED LENGTH, FEET	42
CUT OFF ELEVATION	547.0

* INCLUDING 1 TEST PILE

Ⓣ DENOTES TEST PILE
I DENOTES BATTERED PILE

NOTES:
SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS WHICH SHALL BE FURNISHED AND SET BY OTHERS.
ALL EDGES TO HAVE STANDARD ¾" CHAMFERS EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN BAR LAP - 24 DIA. UNLESS OTHERWISE NOTED.

BILL OF MATERIAL

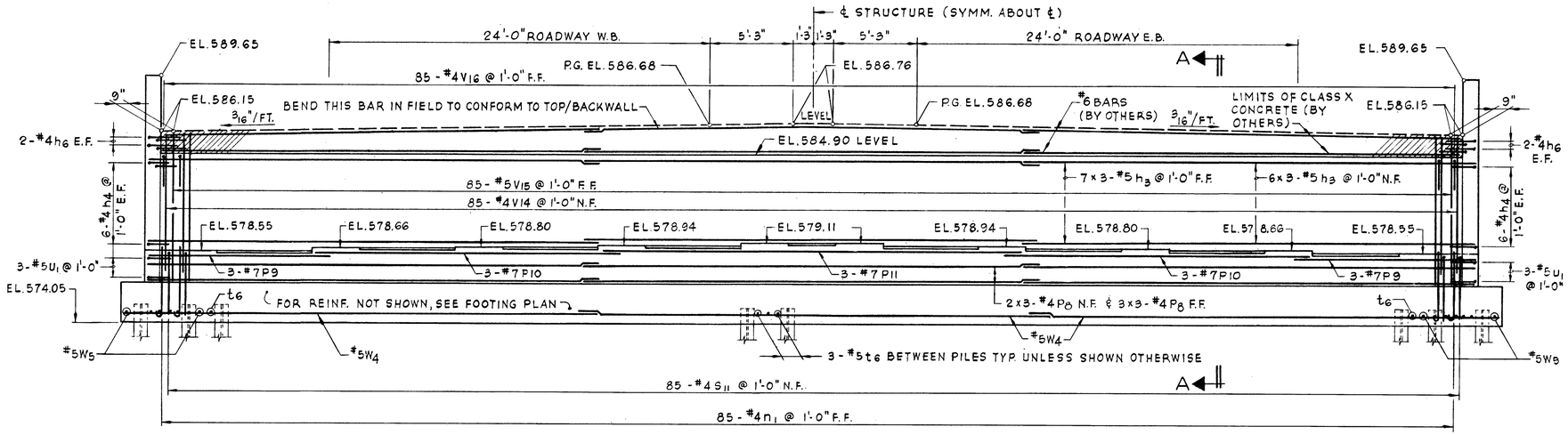
ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU.YD.	230
CLASS X CONCRETE	CU.YD.	234.7
REINFORCEMENT BARS	POUND	38,720
FURNISH STEEL PILES 10 BP 42	LIN.FT.	1,974
TEST PILE STEEL (10 BP 42)	EACH	1
DRIVING STEEL PILES	LIN.FT.	1,974

PIER 27

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: JULY 21, 1969

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY S. RASHID
DRAWN BY P. POPOVIC
CHECKED
IN CHARGE J.Y. HUANG
APPROVED W.G. HORN

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	65
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



ELEVATION

SCALE: 1/4" = 1'-0"

ABBREVIATIONS

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE

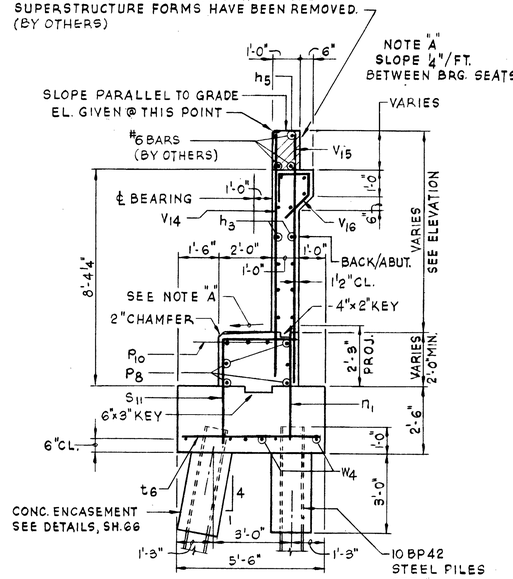
KEY TO BAR INDICATION

4 x 2-#5 INDICATES 4 LINES OF #5 BARS WITH 2 LENGTHS PER LINE.

DETAIL A

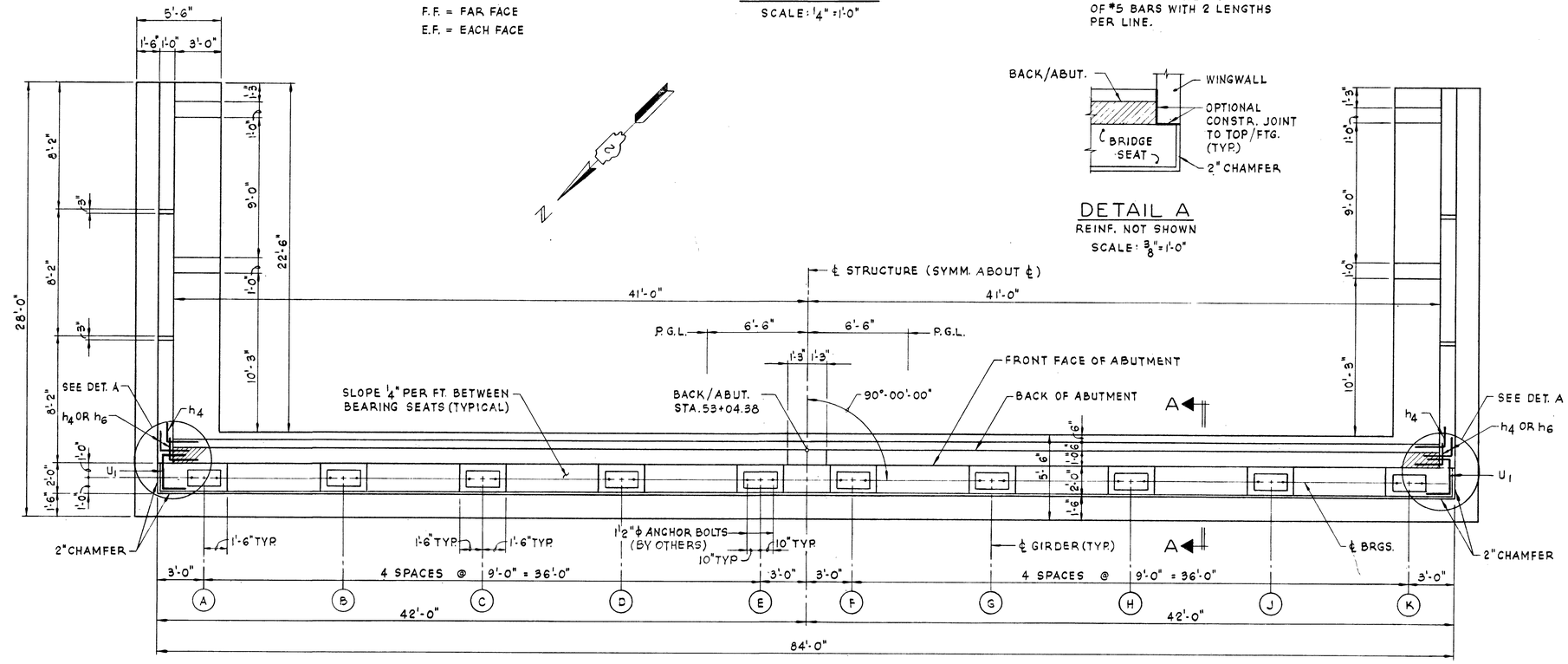
REINF. NOT SHOWN

SCALE: 3/8" = 1'-0"



SECTION A-A

SCALE 3/8" = 1'-0"



PLAN

SCALE: 1/4" = 1'-0"

NOTES:

SPACE REINFORCEMENT IN CAP TO CLEAR ANCHOR BOLTS, WHICH SHALL BE FURNISHED AND SET BY OTHERS.
ALL EDGES TO HAVE STANDARD 3/4" CHAMFER EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH ABUTMENT SEAT
ALL BAR DIMENSIONS ARE OUT TO OUT.
MIN. BAR LAP 24 DIA. UNLESS OTHERWISE NOTED.
WORK THIS SHEET WITH SH. 66

BILL OF MATERAL

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU. YD.	192
CLASS X CONCRETE	CU. YD.	134.0
CLASS X CONCRETE ENCASEMENT	CU. YD.	12
REINFORCEMENT BARS	POUND	9000
FURNISH STEEL PILES (10BP42)	LIN. FT.	3290
TEST PILE STEEL (10BP42)	EACH	1
DRIVING STEEL PILES	LIN. FT.	3290
NAME PLATE	EACH	1

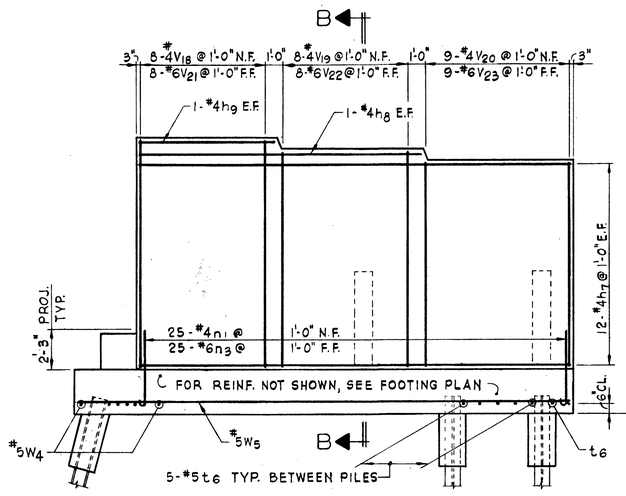
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.Y.HUANG, W.Y.HUO
DRAWN BY J.N.LESLIE
CHECKED
IN CHARGE J.Y.HUANG
APPROVED W.G.HORN

EAST ABUTMENT PLAN & ELEVATION

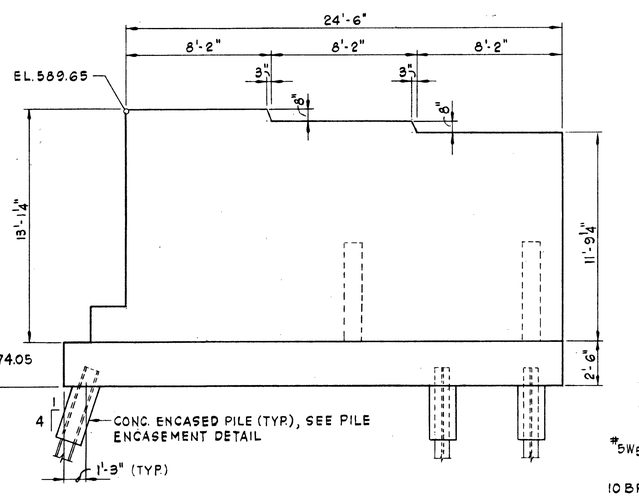
F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: JULY 21, 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	67	66
FED. ROAD DIST. NO.	FED. AID PROJECT I-280			



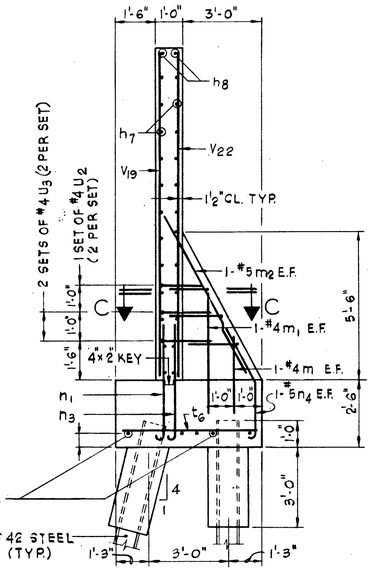
REINFORCEMENT



DIMENSIONS

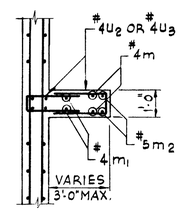
WINGWALL DETAILS

SCALE: ¼" = 1'-0"



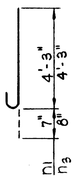
SECTION B-B

SCALE: ⅜" = 1'-0"



SECTION C-C

SCALE: ⅜" = 1'-0"



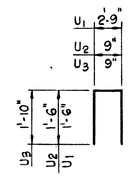
BARS n1 & n3

BAR LIST

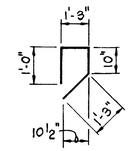
ABUTMENT & WING WALLS

BAR	NO	SIZE	LENGTH	SHAPE
h3	29	5	28'-6"	——
h4	24	4	3'-0"	⌐
h6	8	4	4'-0"	⌐
h7	48	4	24'-3"	——
h8	4	4	15'-10"	——
h9	4	4	7'-8"	——
m	8	4	2'-10"	——
m1	8	4	4'-6"	——
m2	8	5	6'-6"	——
n1	135	4	4'-10"	⊂
n3	50	6	4'-11"	⊂
n4	8	5	4'-8"	⊂
P8	15	4	28'-6"	——
P9	6	7	12'-6"	——
P10	6	7	19'-10"	——
P11	3	7	26'-6"	——
S11	85	4	6'-9"	⌐
t6	135	5	5'-0"	——
U1	6	5	5'-9"	⊓
U2	8	4	3'-9"	⊓
U3	16	4	4'-5"	⊓
V14	85	4	8'-10"	——
V15	85	5	9'-2"	——
V16	85	4	4'-4"	⊃
V18	16	4	12'-9"	——
V19	16	4	12'-0"	——
V20	18	4	11'-6"	——
V21	16	6	12'-9"	——
V22	16	6	12'-0"	——
V23	18	6	11'-6"	——
W4	18	5	29'-8"	——
W5	12	5	27'-6"	——

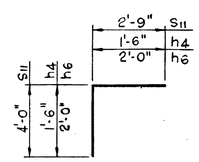
NOTE:
WORK THIS SHEET WITH SH. G5



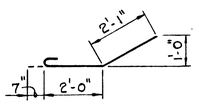
BARS U1, U2 & U3



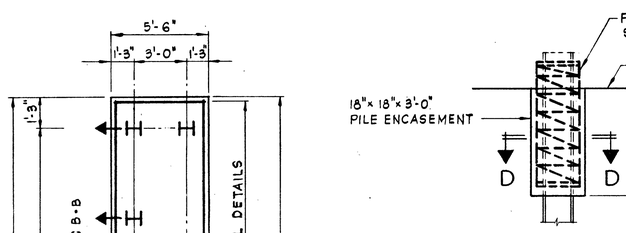
BAR V16

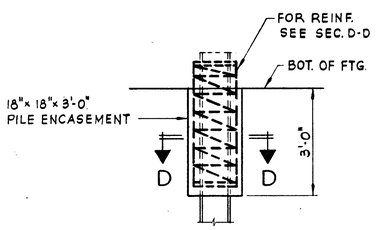


BARS h4, h6 & S11



BAR n4

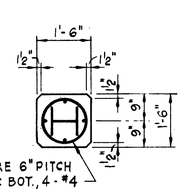




PILE ENCASEMENT DETAIL

(TYP. @ EACH ABUTMENT PILE)

SCALE: ½" = 1'-0"

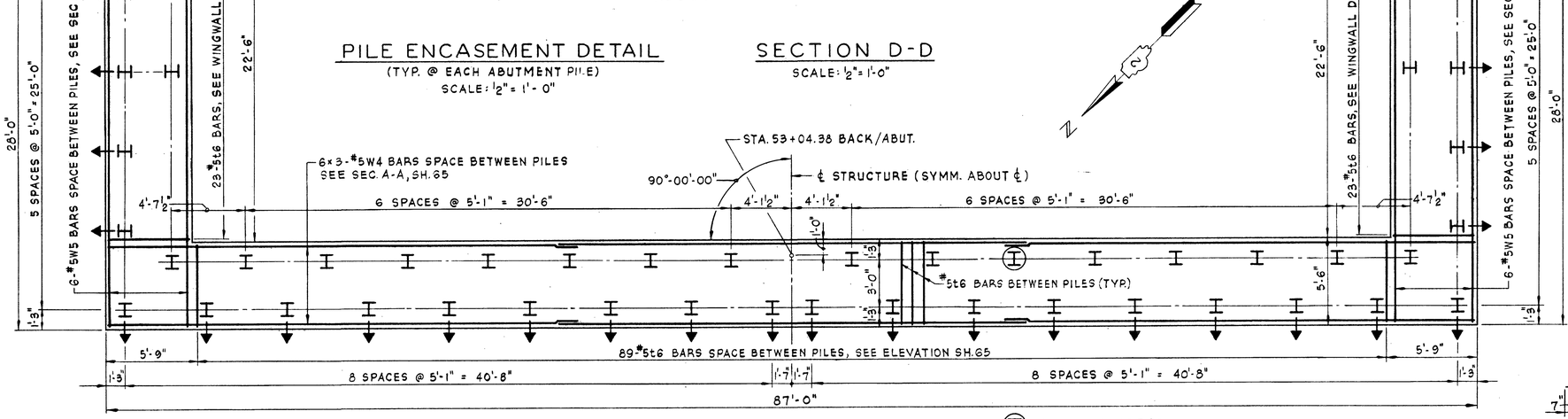


SECTION D-D

SCALE: ½" = 1'-0"

PILE DATA	
PILE TYPE	10BP42
DESIGN CAPACITY TON	50
NUMBER REQUIRED *	48
ESTIMATED LENGTH, FEET	70
CUT-OFF ELEVATION	575.05

*INCLUDES 1 TEST PILE



KEY TO BAR INDICATION

6x3-#5 INDICATES 6 LINES OF #5 BARS WITH 3 LENGTHS PER LINE

FOOTING PLAN

SCALE: ¼" = 1'-0"

DENOTES TEST PILE

DENOTES BATTERED PILE

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.Y. HUANG, W.Y. HUO
DRAWN BY J.N. LESLIE
CHECKED
IN CHARGE J.Y. HUANG
APPROVED W.G. HORN

EAST ABUTMENT
FOOTING & WINGWALL DETAILS

F.A.I. ROUTE 280 SECTION 81-1B
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38

SCALE: AS NOTED DATE: JULY 21, 1969

EJ-H

FEDERAL-AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-IF&E	ROCK ISLAND, ILL. SCOTT, IOWA	52	1
FED. ROAD DIV. NO. 7	ILLINOIS	PROJECT I-280-8(53)0		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID INTERSTATE HIGHWAY

F.A.I. ROUTE 280 SECTION 81-I(F & E)

PROJECT I-280-8(53)0

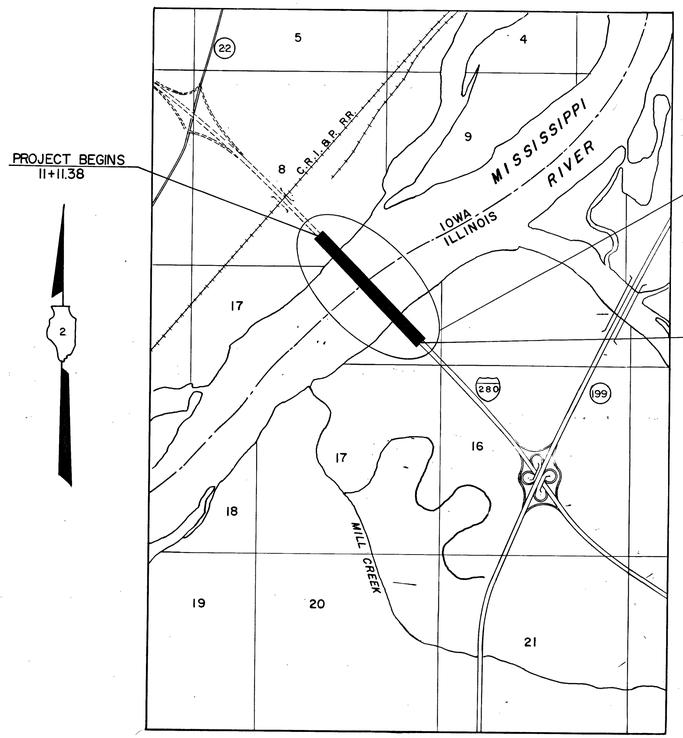
ROCK ISLAND COUNTY, ILL.

SCOTT COUNTY, IOWA

C-92-007-71

P-92-040-63

LOCATION OF SECTION INDICATED THUS:—



LAYOUT
SCALE 1" = 2000'

SECTION 81-IF & E

INCLUDES THE FABRICATION AND ERECTION OF THE STRUCTURAL STEEL FOR THE SUPERSTRUCTURE OF A BRIDGE CONSISTING OF ONE 570 FOOT TIED ARCH SPAN AND 27 WELDED GIRDER APPROACH SPANS (7 SPANS @100', 3 SPANS @150', 3 SPANS @200',... ARCH SPAN..., 3 SPANS @200', 3 SPANS @150' AND 8 SPANS @100') CARRYING F.A.I. ROUTE 280 OVER THE MISSISSIPPI RIVER BETWEEN STATIONS 11+11.38 AND 53+04.38.

LENGTH OF PROJECT-SECTION 81-IF & E = 4193 FT. = 0.794 MILES

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Carl E. Baumann Sr
Engineer of Bridges & Traffic Structures

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

SUBMITTED October 6 19 70
DISTRICT ENGINEER

EXAMINED Oct 22 19 70
ENGINEER OF ROAD PLANS AND CONTRACTS

PASSED Oct 22 19 70
ENGINEER OF DESIGN

APPROVED Oct 22 19 70
CHIEF HIGHWAY ENGINEER

APPROVED Oct 22 19 70
DIRECTOR

DEPARTMENT of TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ENGINEER DATE

W. G. HORN REGISTERED 5158 IOWA PROFESSIONAL ENGINEER

STATE OF ILLINOIS WILLIAM G. HORN No. 28782 CHICAGO REGISTERED STRUCTURAL ENGINEER

William G. Horn

CONTRACT NO. 28257

ROCK ISLAND COUNTY SECTION 81-IF&E F. A. I. ROUTE 280

DE LEUW, CATHER & CO. – CHICAGO

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-IF&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	2
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

INDEX OF SHEETS

GENERAL NOTES

DESIGN LOADING:

HS 20-44 AND ALTERNATE PLUS 25 P.S.F. INITIAL WEARING SURFACE.

DESIGN SPECIFICATIONS:

AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL'S STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, TENTH EDITION, DATED 1969 AND THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY'S STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES.

CONSTRUCTION SPECIFICATIONS:

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF ILLINOIS, DEPARTMENT OF PUBLIC WORKS, DIVISION OF HIGHWAYS, ADOPTED AUGUST 1, 1968, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

UNLESS OTHERWISE SHOWN, DIMENSIONS ON THE PLANS ARE MEASURED HORIZONTAL AT 50°F.

EXCEPT AS OTHERWISE PROVIDED, ALL STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF PAINT AND THE SEALED PORTIONS OF THE ARCH TIE SHALL RECEIVE TWO SHOP COATS OF PAINT. THE PAINT REQUIRED FOR THE SHOP COATS SHALL BE AS SPECIFIED IN THE SUPPLEMENTAL SPECIFICATIONS FOR THE BASIC LEAD SILICO-CHROMATE PAINT SYSTEM. THE FIELD PAINTING OF THE STRUCTURAL STEEL IS NOT INCLUDED IN THIS CONTRACT.

FIELD CONNECTIONS SHALL BE BOLTED, USING HIGH STRENGTH BOLTS (ASTM-A325) AND WITH SIZES AS SHOWN ON THE PLANS.

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

THE GRADES OF STRUCTURAL STEEL SHALL BE AS NOTED ON THE PLANS. FOR ASTM-A36, f_s = 20,000 P.S.I.; FOR ASTM-A588, f_s = 27,000 P.S.I.

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	QUANTITY
507030	FURNISHING AND ERECTING STRUCTURAL STEEL	LUMP SUM	1

NOTE:

CALCULATED PLAN WEIGHT OF STRUCTURAL STEEL 20,408,000 LBS. (SEE BREAKDOWN OF STRUCTURAL STEEL WEIGHT AS LISTED BELOW.)

APPROACH SPANS:

ITEM	ASTM DESIGNATION	WEIGHT
WELDED PLATE GIRDERS	A588	4,535,000
WELDED PLATE GIRDERS	A36	6,515,000
BRACING AND MISCELLANEOUS	A36	495,000
BEARINGS	A36	556,500
EXPANSION GUARDS	A36 & A588	299,000
	SUB-TOTAL =	12,400,500 LBS.

ARCH SPAN:

ITEM	ASTM DESIGNATION	WEIGHT
ROLLED BEAM STRINGERS & DIAPHRAGMS	A36	897,000
WELDED PLATE FLOORBEAMS	A36	857,000
WELDED PLATE FLOORBEAMS	A588	174,600
*ARCH RIBS AND TIES	A588	4,205,000
*TOP LATERAL BRACING	A36	1,150,000
BOTTOM LATERAL BRACING	A36	264,200
HORIZONTAL TRUSSES	A36	32,400
ARCH BEARINGS (BEARING PLATES - A237, CLASS D)	A588	168,200
STRINGER BEARINGS	A588	10,400
BRIDGE STRAND CABLE HANGERS	A586	85,200
CABLE HANGER HARDWARE	A235	38,800
INSPECTION WALKWAY, RAILING AND MISCELLANEOUS	A36	124,700
	SUB-TOTAL =	8,007,500 LBS.
	TOTAL WEIGHT =	20,408,000 LBS.

* NOTE:
THE ACTUAL CONFIGURATION OF THE ARCH RIB WEB PLATES AND THE VERTICAL PLATES OF THE TOP LATERAL BRACING STRUTS HAS BEEN USED AS THE BASIS FOR THE WEIGHTS SHOWN.

INDEX OF SHEETS, GENERAL NOTES AND SUMMARY OF QUANTITIES

F.A.I. ROUTE 280 SECTION 81-IF&E

I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

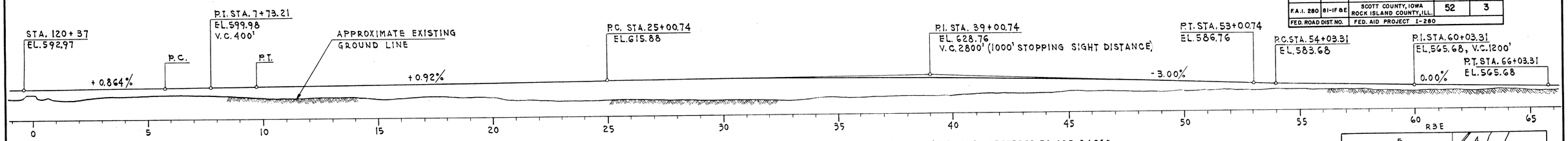
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY —
DRAWN BY P. POPOVIC
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

REV. 10-23-70 (B)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	3
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

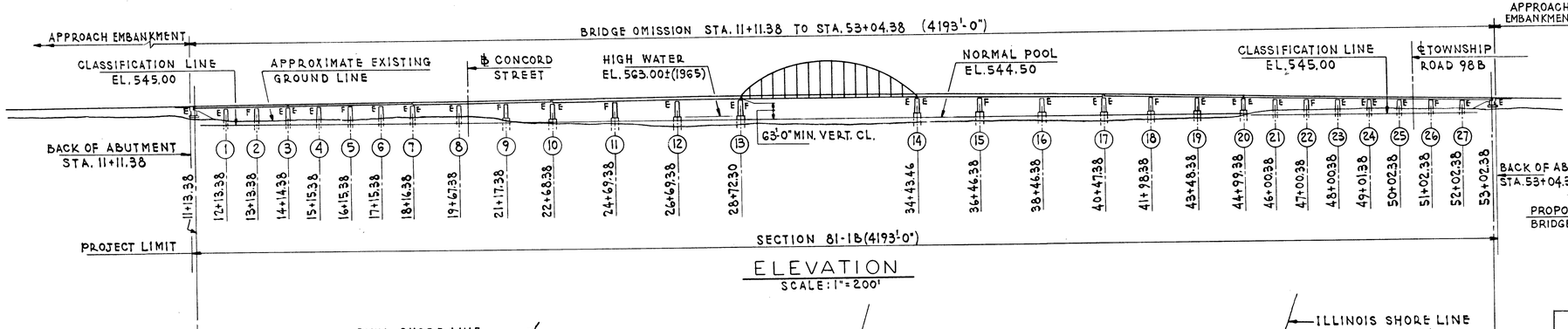


PROFILE GRADE

SCALE: 1"=200'

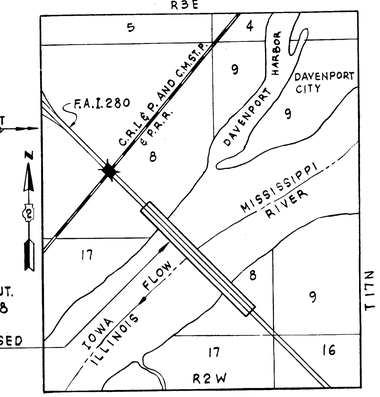
NOTE: ALL ELEVATIONS REFERRED TO ARE BASED UPON 5TH GENERAL ADJUSTMENT - ILLINOIS.

EQUATION
IOWA STA. 119+98.38 =
ILLINOIS STA. 0+00

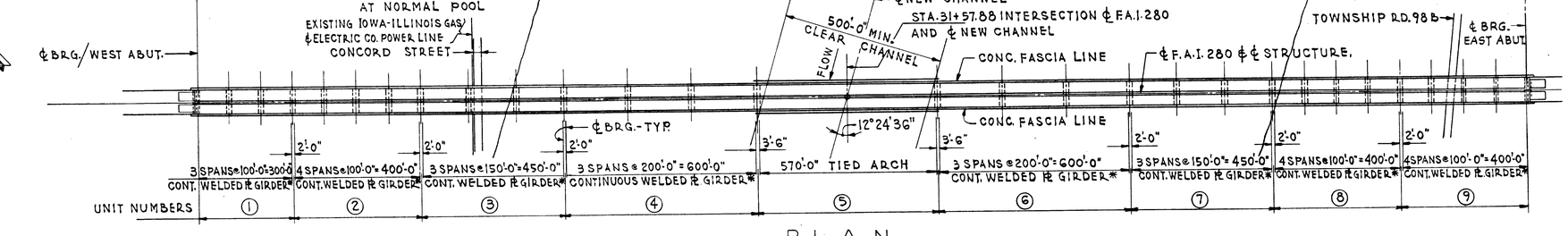


ELEVATION

SCALE: 1"=200'



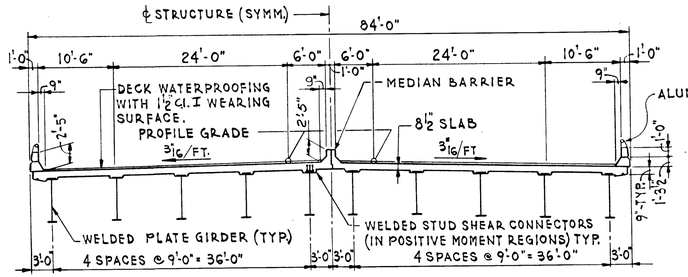
LOCATION PLAN



PLAN

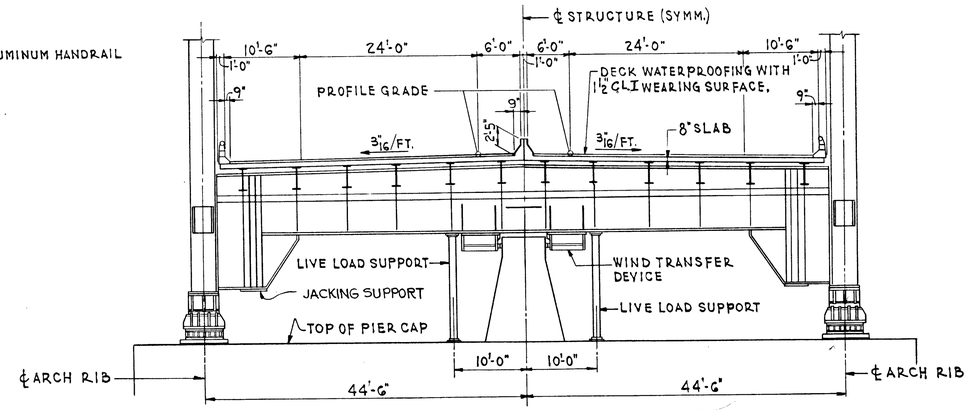
SCALE: 1"=200'

*INDICATES CONTINUOUS COMPOSITE CONSTRUCTION.



TYPICAL CROSS SECTION - APPROACH SPANS

SCALE: 1"=10'



TYPICAL CROSS SECTION - ARCH SPAN

SHOWING AT END FLOOR BEAM

SCALE: 1"=10'

WATERWAY INFORMATION

WATERWAY OPENING REQUIRED	26,000	SQ.FT.
WATERWAY OPENING PROVIDED	26,240	SQ.FT.
50 YEAR FREQUENCY DISCHARGE	293,000	CU.F.S.
50 YEAR HIGH WATER ELEVATION	562.5	
DRAINAGE AREA	99,200	SQ.MI.
MILES FROM MOUTH	1,560	MI.

QUANTITIES

ITEM	UNIT	QUANTITY
FURNISHING AND ERECTING OF STRUCTURAL STEEL	LUMP SUM	1

NOTE:
CALCULATED PLAN WEIGHT OF STRUCTURAL STEEL 20,408,000 LBS.

NOTE:
CERTAIN ITEMS OF WORK SHOWN ON THESE DRAWINGS ARE SHOWN FOR INFORMATION ONLY. THIS CONTRACT COVERS THE FABRICATION AND ERECTION OF THE STRUCTURAL STEEL FOR THE SUPERSTRUCTURE OF THE BRIDGE PLUS ADDITIONAL ITEMS OF WORK AS DEFINED IN THE SPECIAL PROVISIONS.
THE CONSTRUCTION OF THE SUBSTRUCTURE; THE CONSTRUCTION OF THE CONCRETE DECK, WEARING SURFACE, DECK RAILING AND NAVIGATION LIGHTING; AND THE FIELD PAINTING OF THE STRUCTURAL STEEL ARE COVERED UNDER SEPARATE CONTRACTS AND THEREFORE ARE NOT A PART OF THESE PLANS.

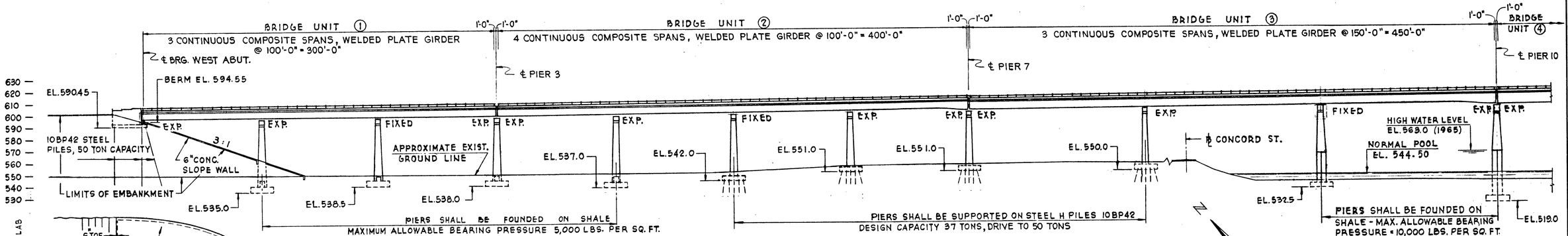
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.G. HORN
DRAWN BY A. BUROKAS
CHECKED J.Y. HUANG
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

GENERAL PLAN AND ELEVATION

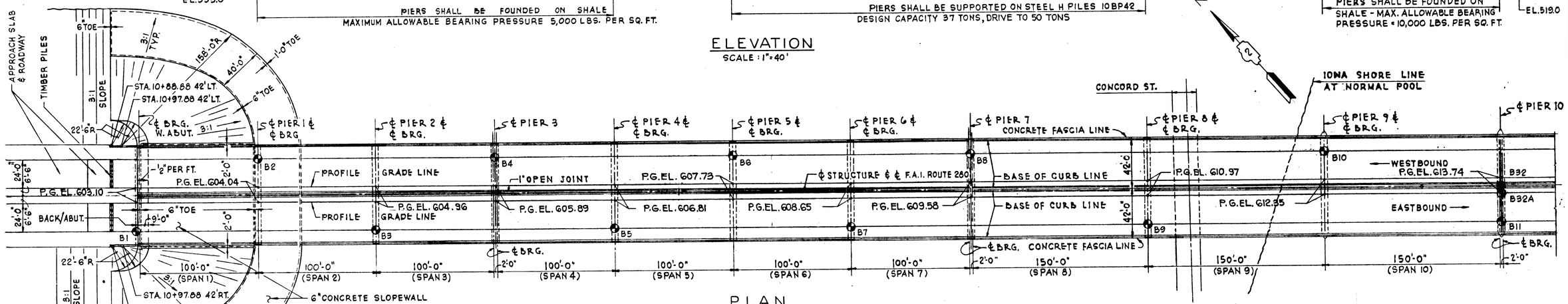
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

REV. 10-23-70 (B)

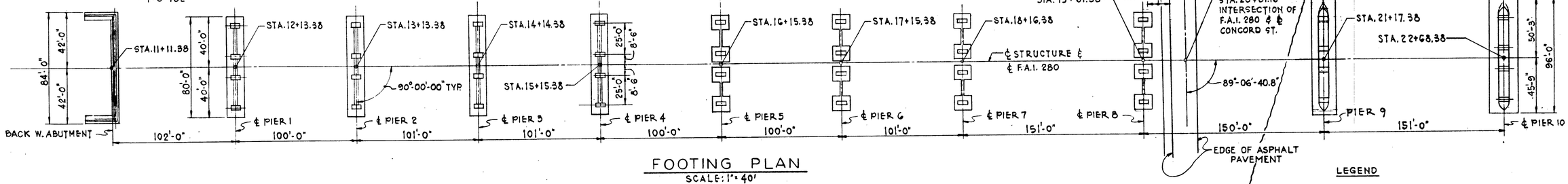
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	4
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



ELEVATION
SCALE: 1"=40'



PLAN
SCALE: 1"=40'



FOOTING PLAN
SCALE: 1"=40'

LEGEND

⊕ DENOTES BORING LOG

NOTE:

FOR FRAMING PLAN UNITS 1, 2 AND 3 SEE SHEETS NO. 8, 9 AND 10.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.G.HORN
DRAWN BY A.BUROKAS
CHECKED
IN CHARGE J.Y.HUANG
APPROVED W.G. HORN

GENERAL PLAN, ELEVATION & GROUND PLAN BRIDGE UNITS 1, 2 & 3

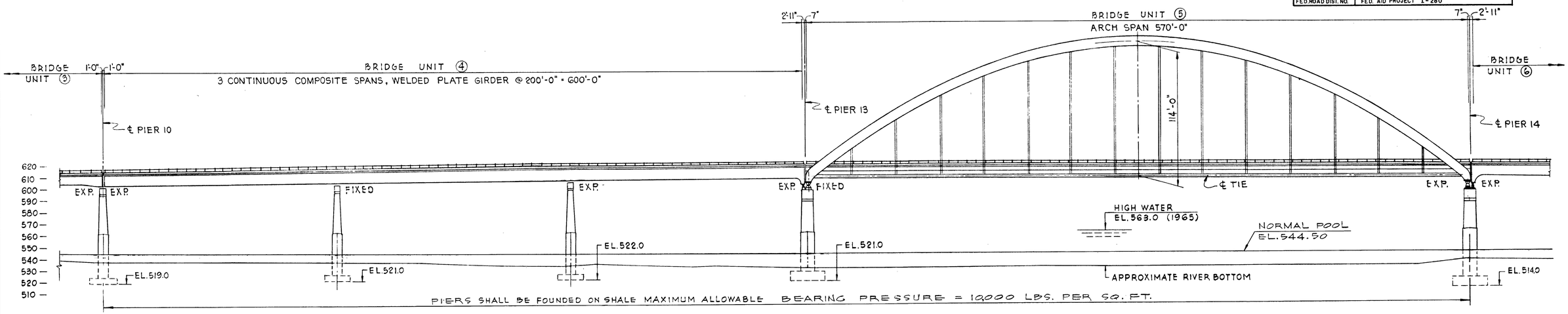
F.A.I. ROUTE 280 SECTION 81-1F&E
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

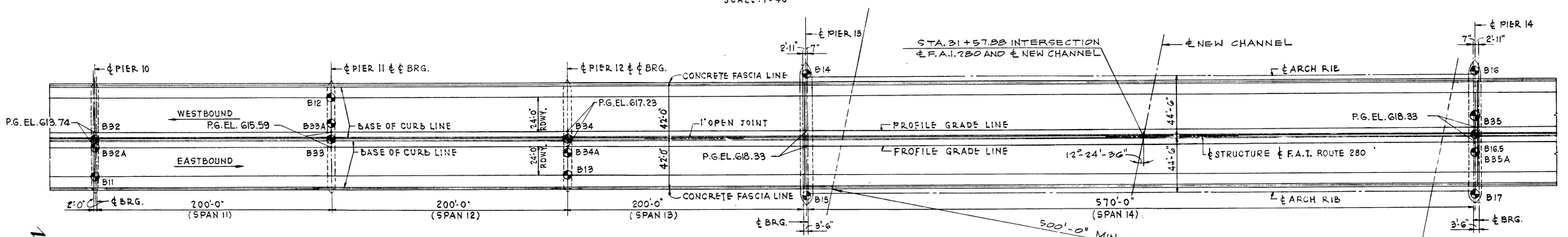
STA. 11 + 13.38 TO STA. 22 + 68.38

SCALE: AS NOTED DATE: OCT. 1, 1970

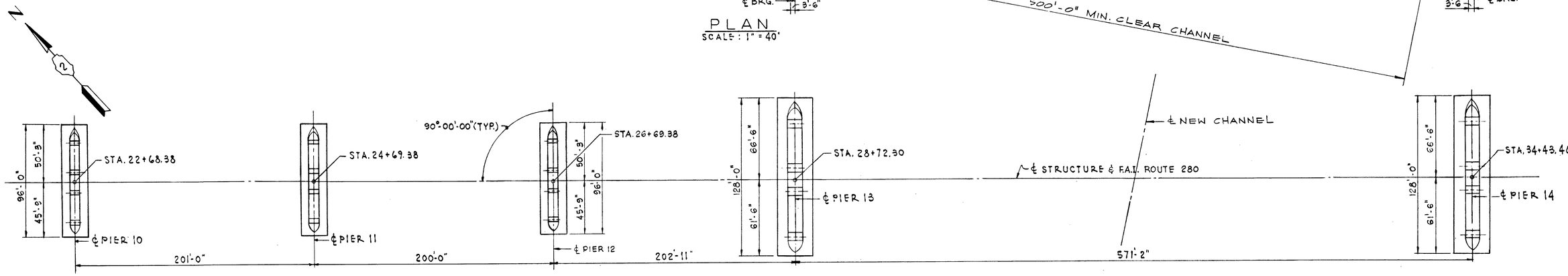
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	5
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



ELEVATION
SCALE: 1"=40'



PLAN
SCALE: 1" = 40'



FOOTING PLAN
SCALE: 1"=40'

LEGEND

● DENOTES BORING LOG

NOTES:

FOR FRAMING PLAN UNIT 4 SEE SHEET NO. 11.
FOR ARCH SPAN FRAMING PLAN SEE SHEET NO. 42.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.G. HORN
DRAWN BY A. BUROKAS
CHECKED —
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

GENERAL PLAN, ELEVATION & GROUND PLAN BRIDGE UNITS 4 & 5

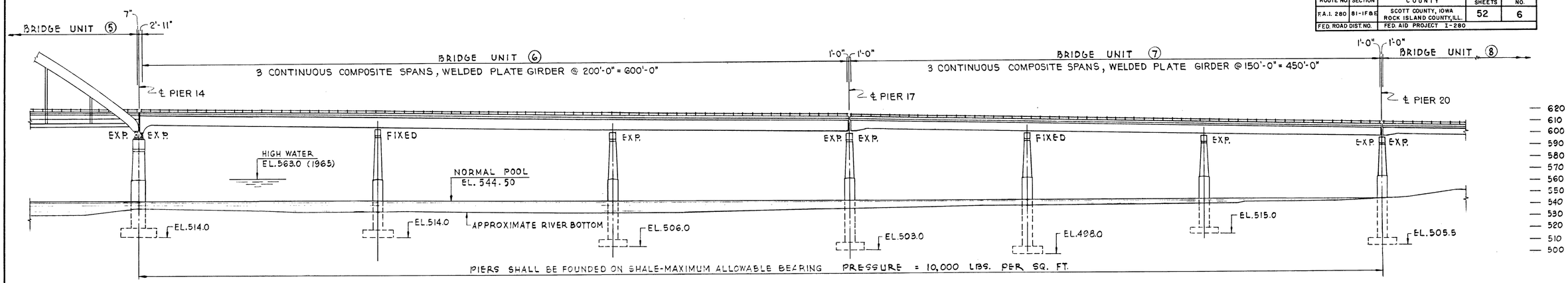
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

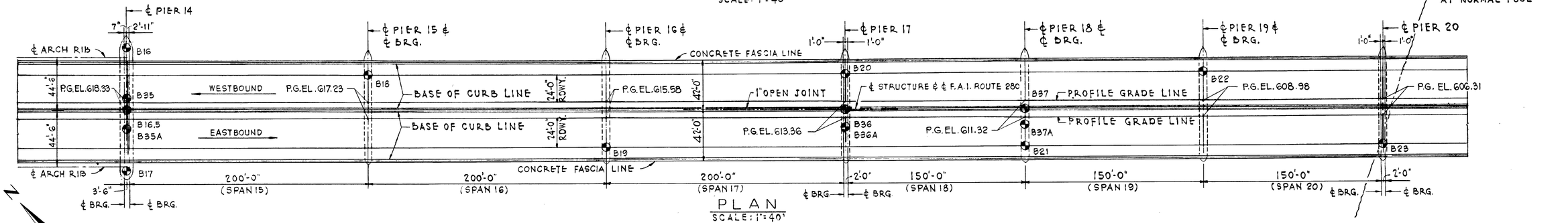
STA. 22+68.38 TO STA. 34+43.46

SCALE: AS NOTED DATE: OCT. 1, 1970

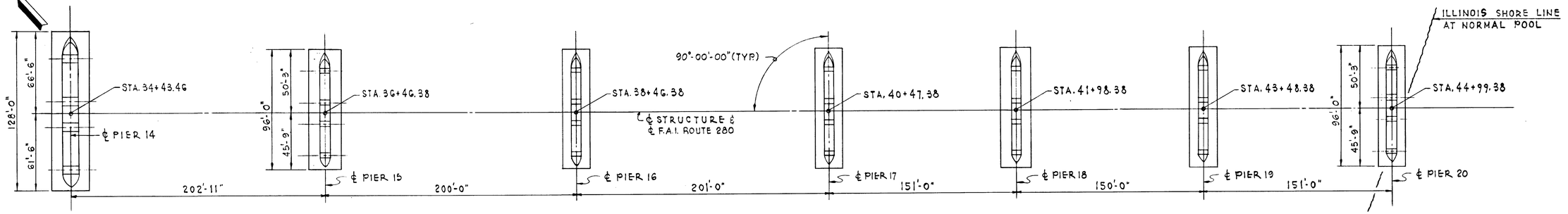
ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	6
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



ELEVATION
SCALE: 1"=40



PLAN
SCALE: 1"=40'



FOOTING PLAN
SCALE: 1"=40'

LEGEND

● DENOTES BORING LOG

NOTE:

FOR FRAMING PLAN UNITS 6 AND 7 SEE SHEET NO. 12 AND 13.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.G.HORN
DRAWN BY A. BUROKAS
CHECKED —
IN CHARGE W.J. ZAPFEL
APPROVED W. G. HORN

GENERAL PLAN, ELEVATION & GROUND PLAN BRIDGE UNITS 6 & 7

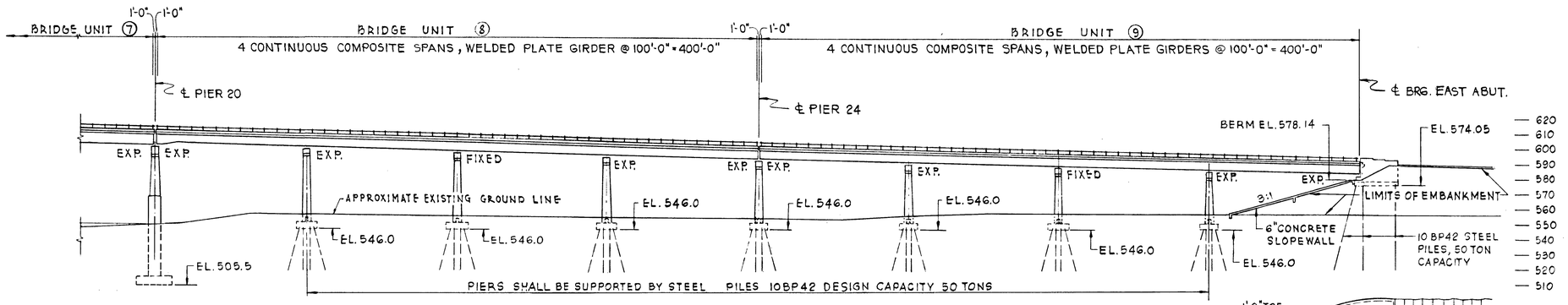
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.

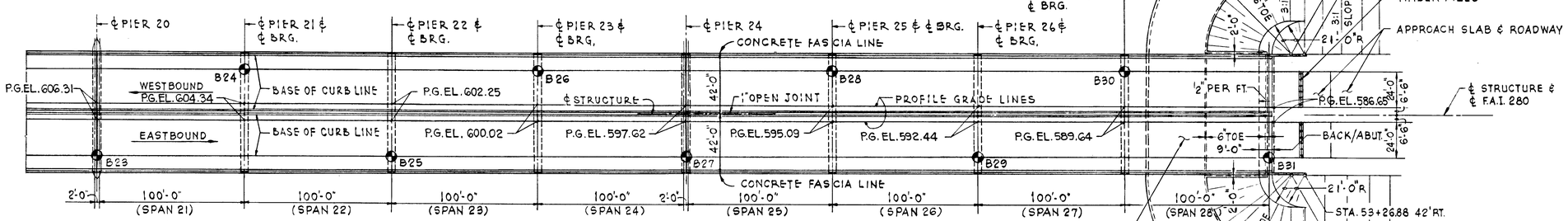
STA. 34+43.46 TO STA. 44+99.38

SCALE: AS NOTED DATE: OCT. 1, 1970

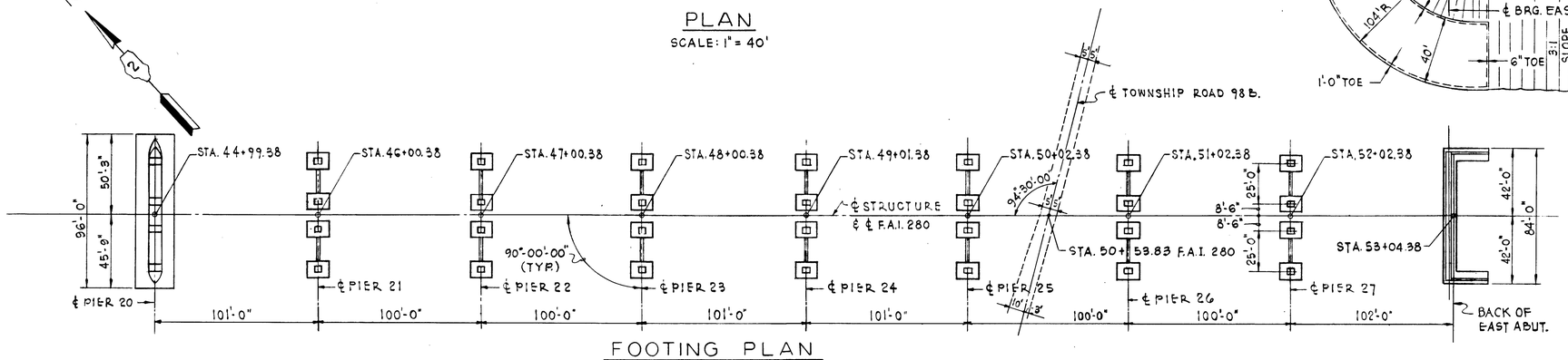
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	7
FED.ROAD DIST.NO.		FED. AID PROJECT I-280		



ELEVATION
SCALE: 1" = 40'



PLAN
SCALE: 1" = 40'



FOOTING PLAN
SCALE: 1" = 40'

NOTE:

FOR FRAMING PLAN UNITS 8 AND 9
SEE SHEETS NO. 14 AND 15.

LEGEND

⊕ DENOTES BORING LOG

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. G. HORN
DRAWN BY A. BUROKAS
CHECKED
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

GENERAL PLAN, ELEVATION & GROUND PLAN
BRIDGE UNITS 8 & 9

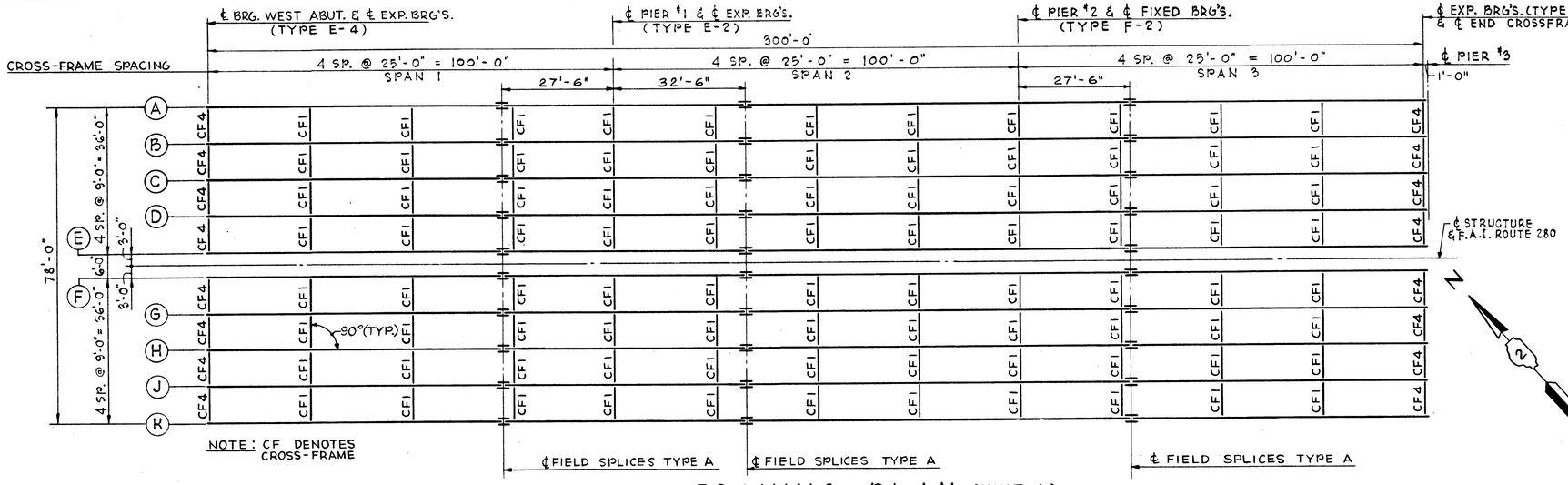
F.A.I. ROUTE 280 SECTION 81-1F&E
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 44+99.38 TO STA. 53+02.38

SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	8
FED. ROAD DIST. NO.	FED. AID PROJECT I-280			



FRAMING PLAN (UNIT 1)

SCALE : 1/16" = 1'-0"

STRUCTURAL STEEL NOTES FOR UNITS 1 THRU 4 & 6 THRU 9

FOR GIRDER DESIGN DATA SEE SH. NO. 18

FOR EXPANSION BEARING DETAILS SEE SH. NO. 29.

FOR FIXED BEARING DETAILS SEE SH. NO. 30.

FOR GIRDER FIELD SPLICE DETAILS SEE SH. NO. 23.

FOR CROSS-FRAME DETAILS SEE SH. NO. 22.

FOR BEARING & INTERMEDIATE STIFFENER DETAILS SEE SH. NO. 22 STIFFENERS SHALL BE VERTICAL IN FINAL POSITION.

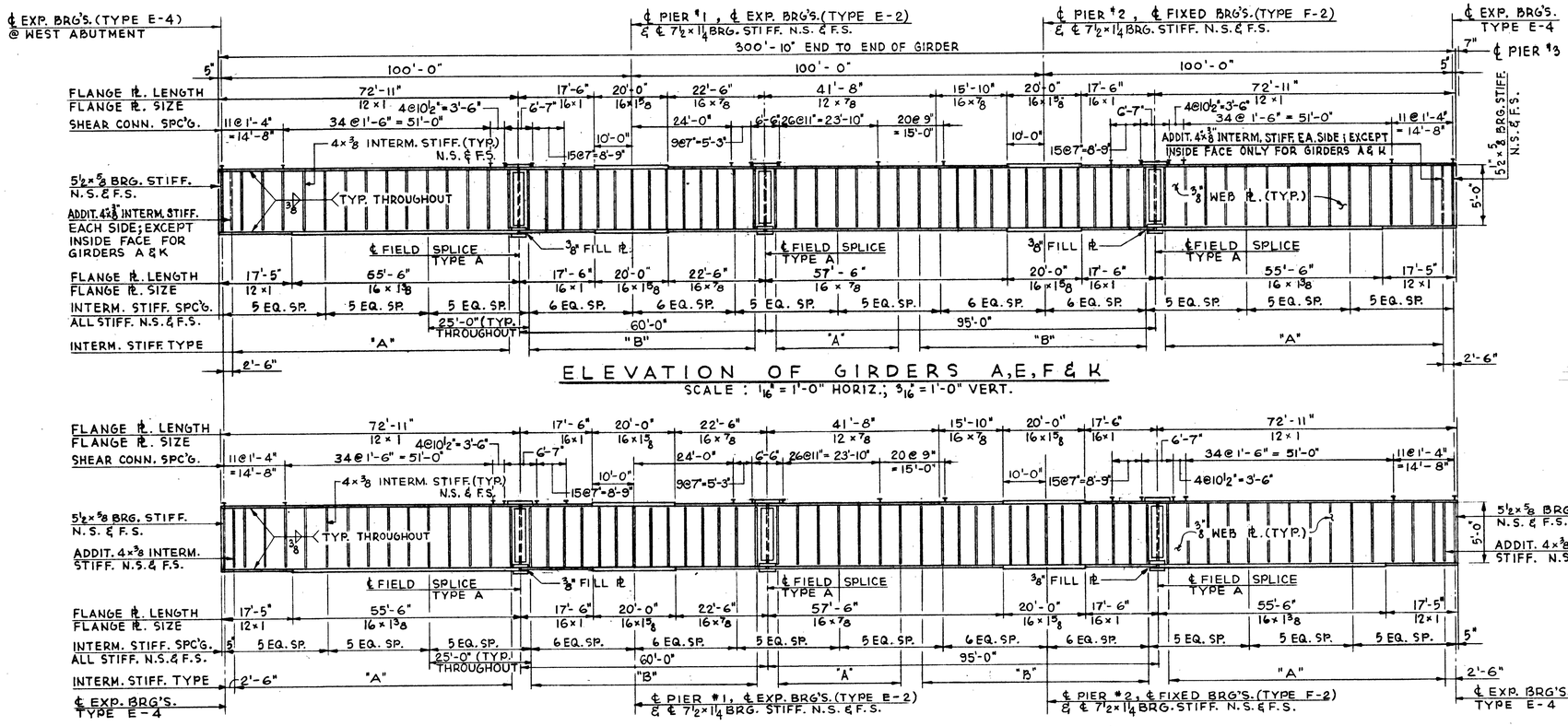
FOR SHEAR CONNECTOR DETAILS SEE SH. NO. 22. SHEAR CONNECTOR SPACINGS SHALL BE MODIFIED AS NECESSARY TO CLEAR FLANGE SHOP WELDINGS AND FIELD SPLICE CONNECTION BOLTS.

FOR GIRDER FLANGE AND WEB SHOP WELDED SPLICE DETAILS SEE SH. NO. 22.

FOR GIRDER FLANGE WIDTH AND THICKNESS TRANSITION DETAILS SEE SH. NO. 22.

ALL FLANGE AND WEB LENGTHS SHOWN ON GIRDER ELEVATIONS ARE HORIZONTAL DIMENSIONS.

THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT BUT ARE SHOWN ON THE GIRDER ELEVATIONS FOR INFORMATION ONLY. THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED UNDER THE DECK CONTRACT (SECTION 81-1D).



ELEVATION OF GIRDERS A, E, F & K

SCALE : 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.

ELEVATION OF GIRDERS B, C, D, G, H & J

SCALE : 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.

Note:
GIRDERS A, E, F & K ARE IDENTICAL TO GIRDERS B, C, D, G, H & J.

STRUCTURAL STEEL NOTES FOR UNIT 1 ONLY

ALL STRUCTURAL STEEL SHALL BE ASTM-A36.

FOR GIRDER FABRICATION DIAGRAMS SEE SH. NO. 19.

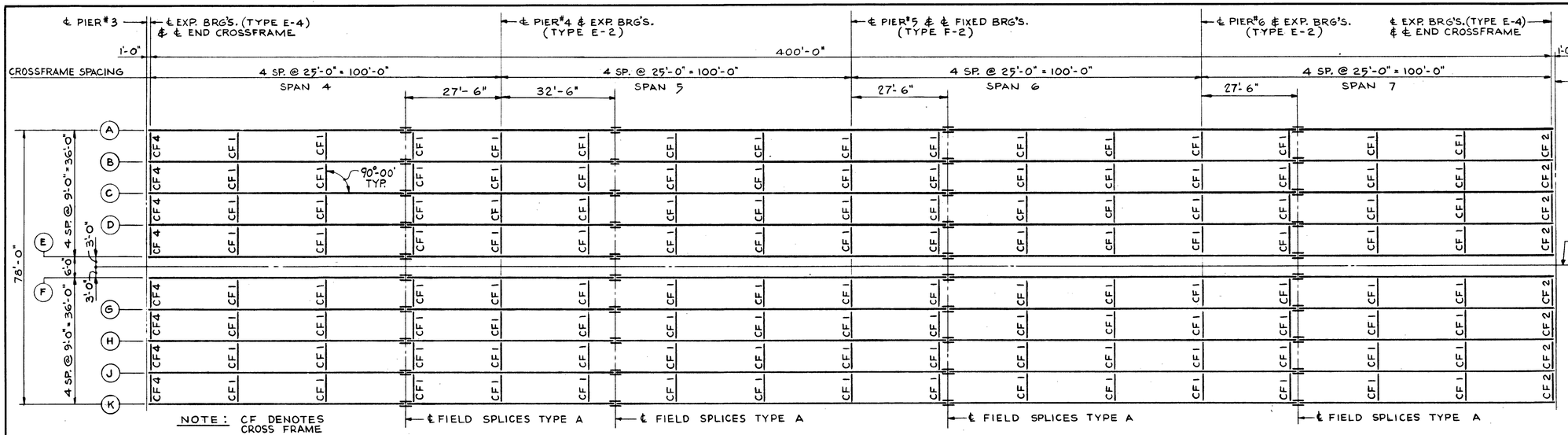
FOR DETAIL OF EXPANSION GUARDS AT WEST ABUTMENT AND PIER #3 SEE SHEETS NO'S. 24 & 25.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY F. BOBINAS
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

FRAMING PLAN - UNIT 1

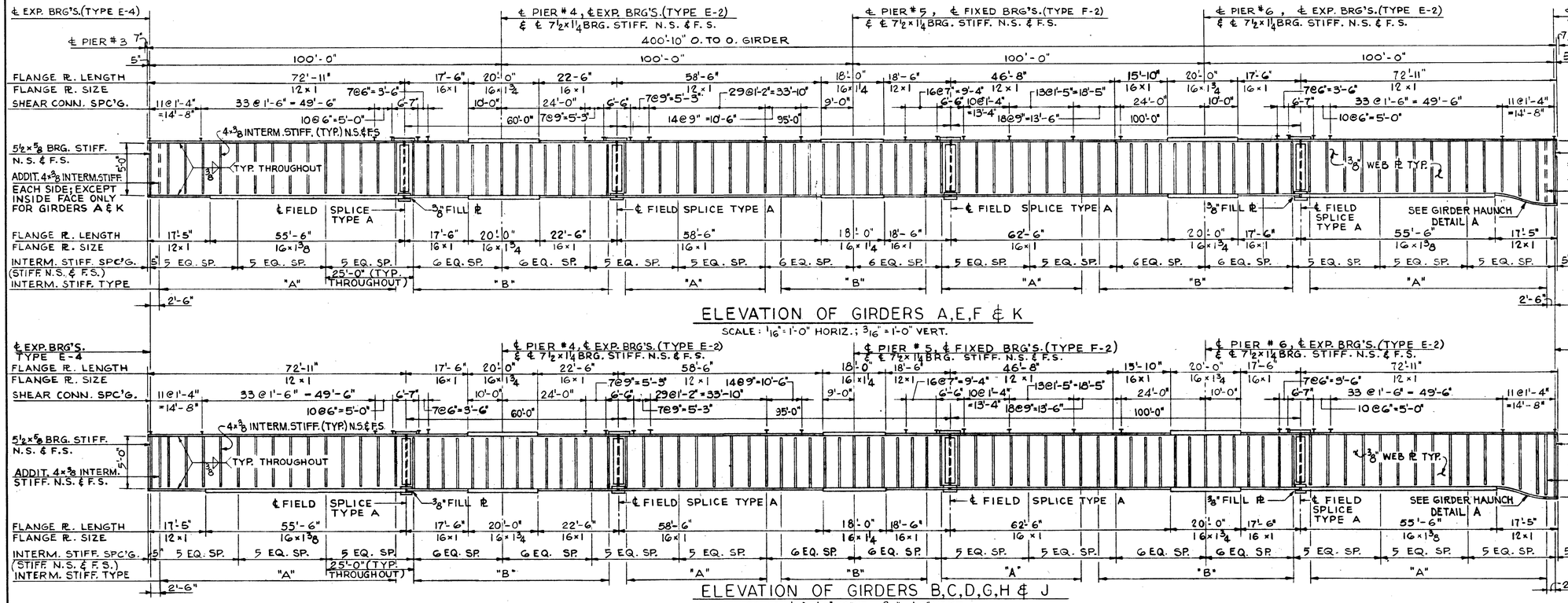
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	9
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



FRAMING PLAN (UNIT 2)

SCALE : 1/16" = 1'-0"

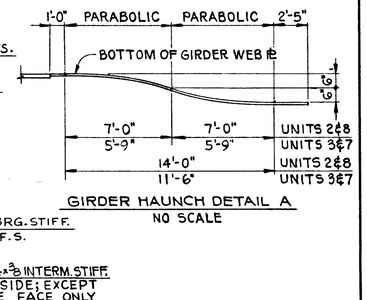


ELEVATION OF GIRDERS A, E, F & K

SCALE : 1/16" = 1'-0" HORIZ. ; 3/16" = 1'-0" VERT.

ELEVATION OF GIRDERS B, C, D, G, H & J

SCALE : 1/16" = 1'-0" HORIZ. ; 3/16" = 1'-0" VERT.



GIRDER HAUNCH DETAIL A

NO SCALE

STRUCTURAL STEEL NOTES FOR UNIT 2

ALL STRUCTURAL STEEL SHALL BE ASTM - A 36.

FOR GIRDER FABRICATION DIAGRAMS SEE SH. NO. 19.

FOR DETAIL OF EXPANSION GUARDS AT PIERS # 3 AND # 7 SEE SHEETS NO. 25 & 26.

FOR STRUCTURAL STEEL NOTES FOR UNIT 1 THRU 4 AND 6 THRU 9 SEE SH. NO. 8.

NOTE :
THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT BUT ARE SHOWN ON THE GIRDER ELEVATIONS FOR INFORMATION ONLY. THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED UNDER THE DECK CONTRACT (SECTION 81-1D).

Note :
GIRDERS A, E, F & K ARE IDENTICAL TO GIRDERS B, C, D, G, H & J.

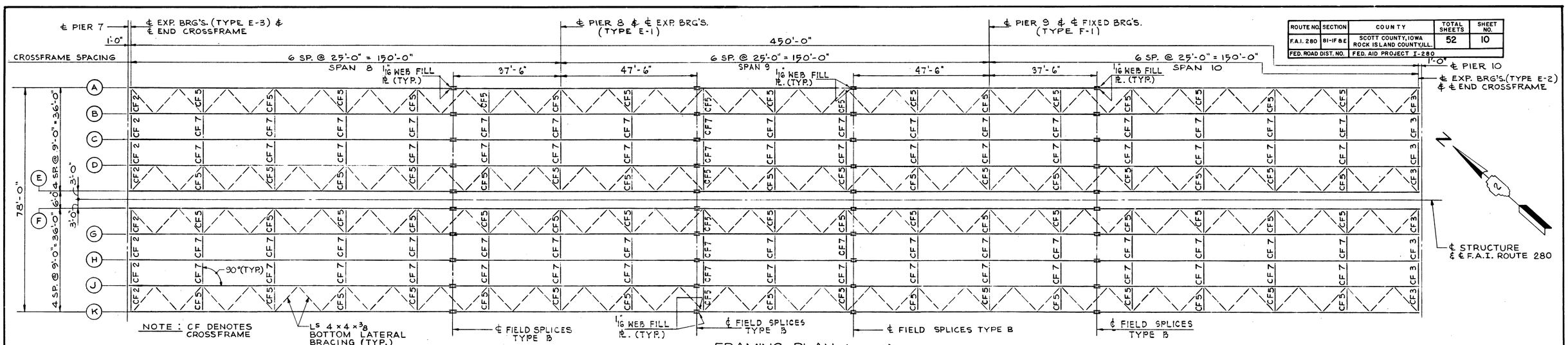
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W. Y. HUO
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

FRAMING PLAN - UNIT 2

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

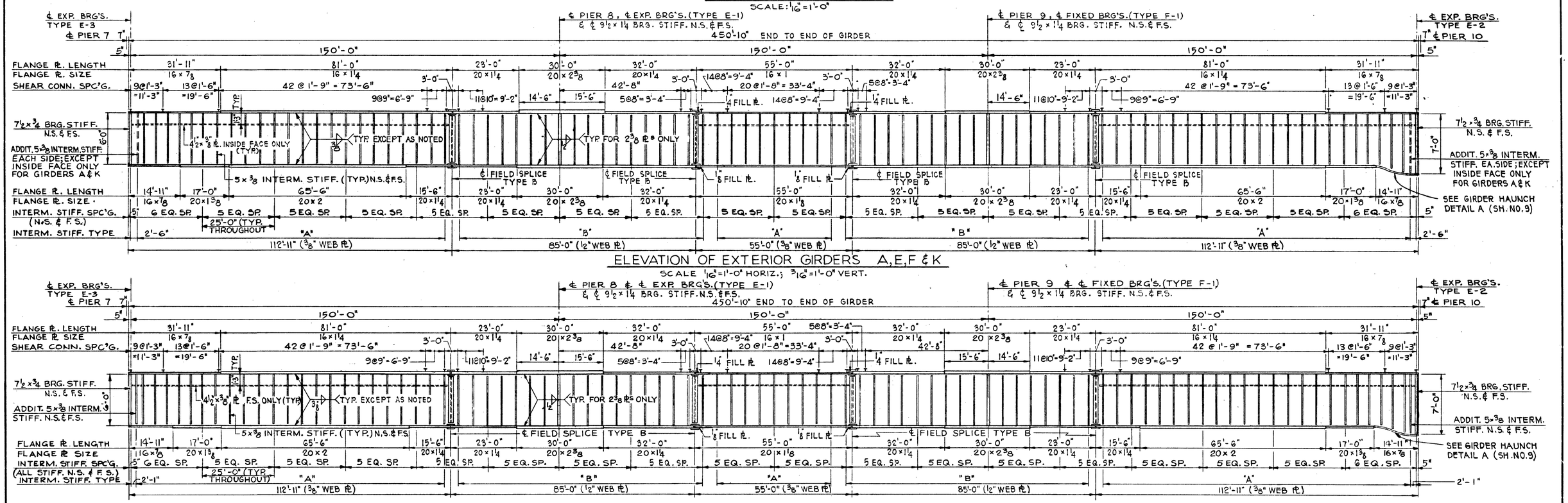
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	10
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



FRAMING PLAN (UNIT 3)

SCALE: 1/16" = 1'-0"



ELEVATION OF EXTERIOR GIRDERS A, E, F & K

SCALE 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.

ELEVATION OF GIRDERS B, C, D, G, H & J

SCALE : 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.

NOTE: THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT BUT ARE SHOWN ON THE GIRDER ELEVATIONS FOR INFORMATION ONLY. THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED UNDER THE DECK CONTRACT (SECTION 81-1D).

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

STRUCTURAL STEEL NOTES FOR UNIT 3

ALL STRUCTURAL STEEL SHALL BE ASTM - A36.
FOR GIRDER FABRICATION DIAGRAMS SEE SHEET NO. 20.
FOR DETAIL OF EXPANSION GUARDS AT PIERS ℞7 & ℞10 SEE SHEETS NO. 26 & NO. 25 RESPECTIVELY.
FOR BOTTOM BRACING & LONGITUDINAL STIFFENER DETAILS SEE SH'S. NO. 23 & NO. 22.
FOR STRUCTURAL STEEL NOTES FOR UNITS 1 THRU 4 AND 6 THRU 9, SEE SHEET NO. 8.
GIRDERS A, E, F & K ARE IDENTICAL TO GIRDERS B, C, D, G, H & J.

FRAMING PLAN - UNIT 3

F.A.I. ROUTE 280 SECTION 81-1F&E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

NOTE: THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT BUT ARE SHOWN ON THE GIRDER ELEVATIONS FOR INFORMATION ONLY. THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED UNDER THE DECK CONTRACT (SECTION 81-1D).

STRUCTURAL STEEL NOTES FOR UNIT 4

ALL STRUCTURAL STEEL IN THIS UNIT SHALL BE ASTM-A588 EXCEPT FOR CROSS FRAMES, INTERMEDIATE STIFFENERS, LONGITUDINAL STIFFENERS & END DIAPHRAGMS STRUCTURAL STEEL ASTM-A36 SHALL BE USED.

FOR GIRDER FABRICATION DIAGRAMS SEE SH. NO. 21.

FOR DETAIL OF EXPANSION GUARDS AT PIERS NO. 10 & NO. 13 SEE SH'S. NO. 25 & NO. 27 RESPECTIVELY.

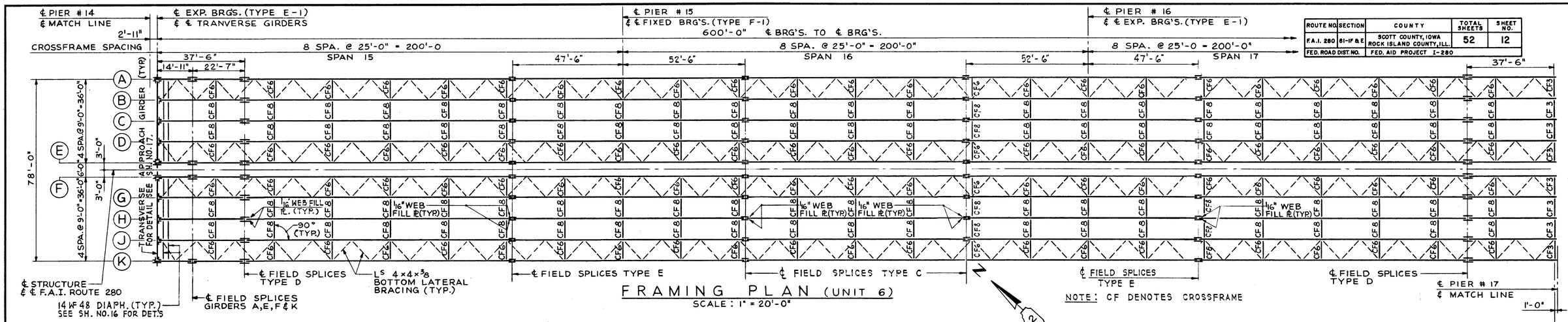
FOR BOTTOM BRACING & LONGITUDINAL STIFFENER DETAILS SEE SH'S NO. 23 & NO. 22 RESPECTIVELY.

FOR STRUCTURAL STEEL NOTES FOR UNITS 1 THRU 4 AND 6 THRU 9 SEE SH. NO. 8.

FRAMING PLAN - UNIT 4

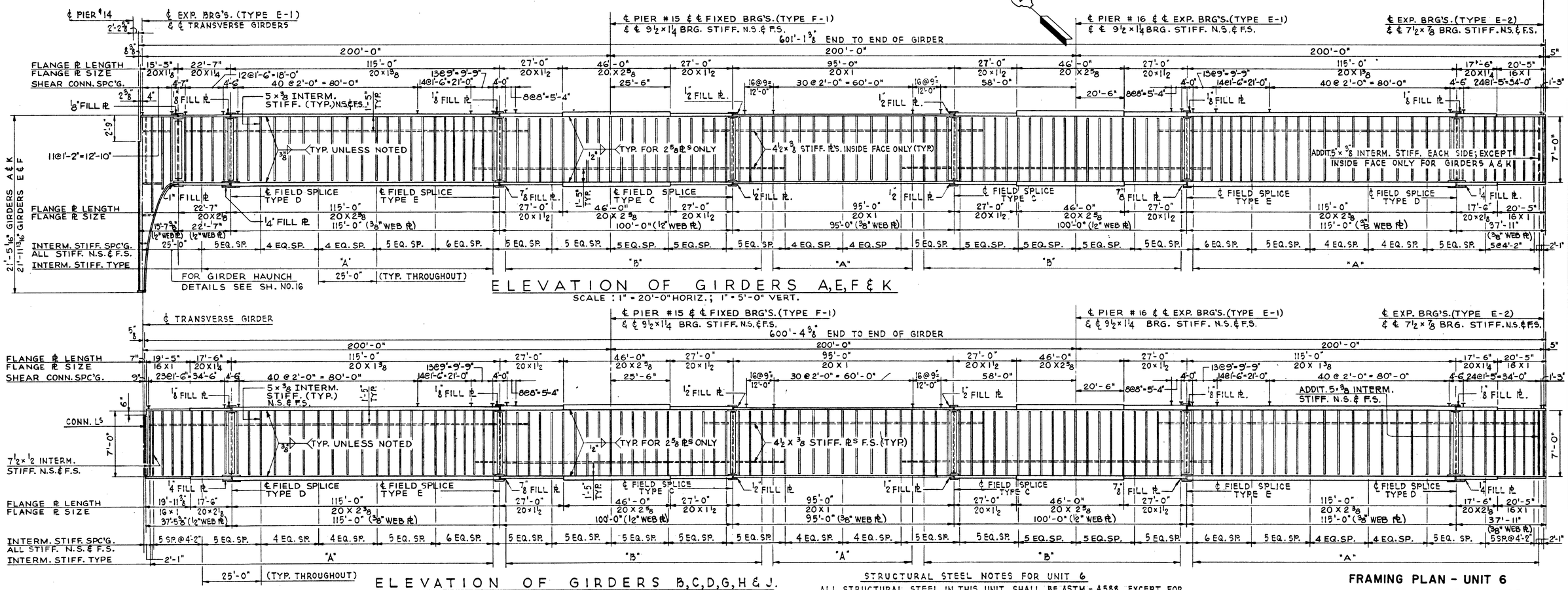
F.A.I. ROUTE 280 SECTION 81-IF & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	12
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



FRAMING PLAN (UNIT 6)

SCALE : 1" = 20'-0"



ELEVATION OF GIRDERS A, E, F & K

SCALE : 1" = 20'-0" HORIZ.; 1" = 5'-0" VERT.

ELEVATION OF GIRDERS B, C, D, G, H & J.

SCALE : 1" = 20'-0" HORIZ.; 1" = 5'-0" VERT.

NOTE : THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT BUT ARE SHOWN ON THE GIRDER ELEVATIONS FOR INFORMATION ONLY. THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED UNDER THE DECK CONTRACT (SECTION 81-1D).

STRUCTURAL STEEL NOTES FOR UNIT 6

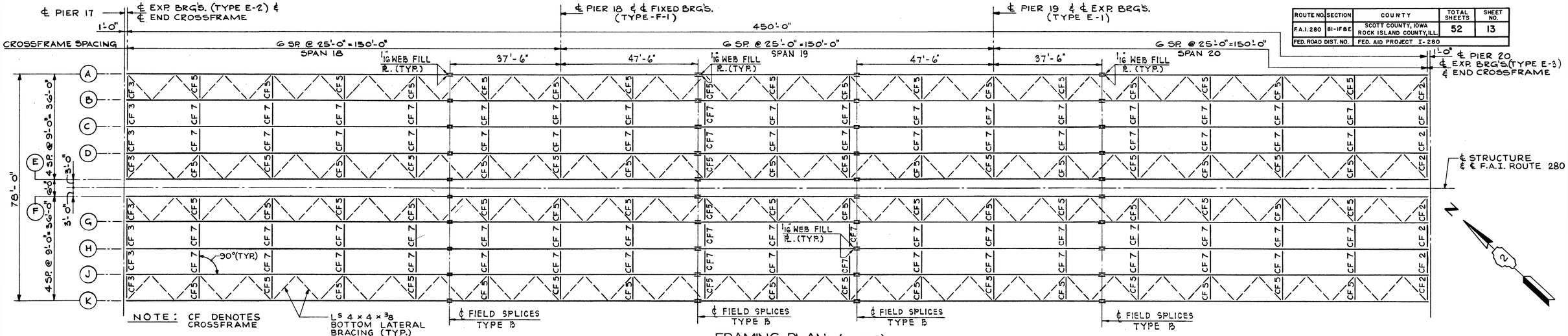
ALL STRUCTURAL STEEL IN THIS UNIT SHALL BE ASTM-A588 EXCEPT FOR CROSS FRAMES, INTERMEDIATE STIFFENERS, LONGITUDINAL STIFFENERS & END DIAPHRAGMS STRUCTURAL STEEL ASTM-A36 SHALL BE USED.
FOR GIRDER FABRICATION DIAGRAMS SEE SH. NO. 21.
FOR DETAIL OF EXPANSION GUARDS AT PIERS NO. 14 & NO. 17 SEE SH'S. NO. 27 & 26 RESPECTIVELY.
FOR BOTTOM BRACING & LONGITUDINAL STIFFENER DETAILS SEE SH'S. NO. 23 & NO. 22 RESPECTIVELY.
FOR STRUCTURAL STEEL NOTES FOR UNITS 1 THRU 4 AND 6 THRU 9, SEE SH. NO. 8.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

FRAMING PLAN - UNIT 6

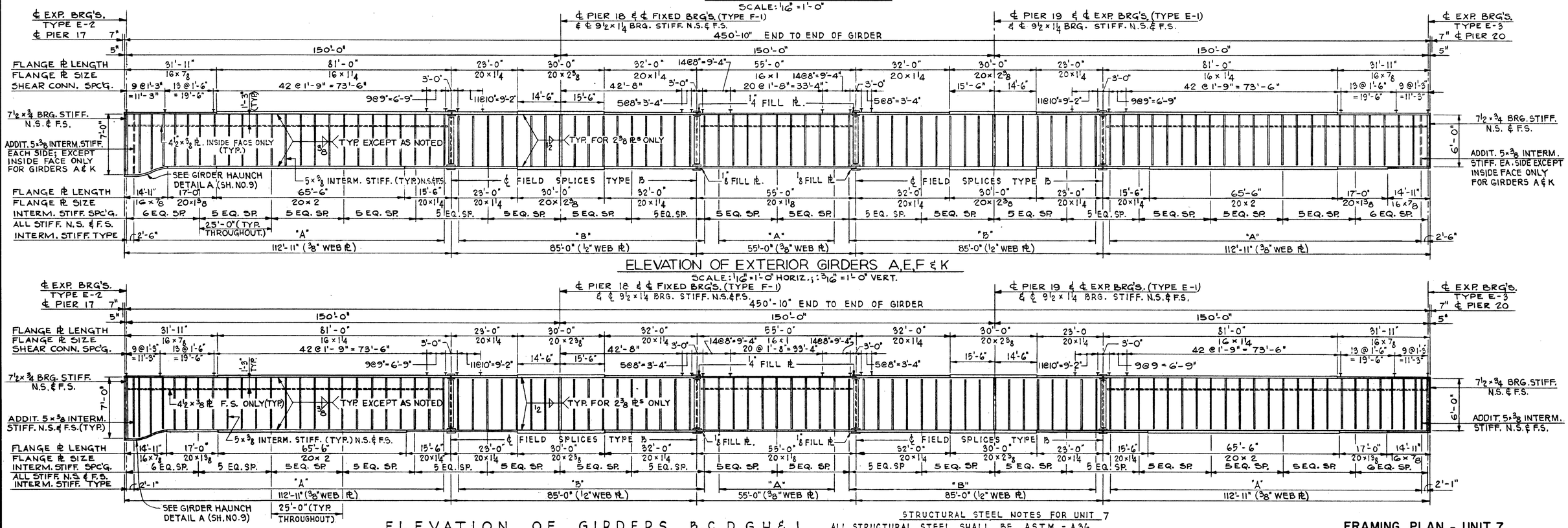
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	13
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



FRAMING PLAN (UNIT 7)

SCALE: 1/16" = 1'-0"



ELEVATION OF EXTERIOR GIRDERS A, E, F & K

SCALE: 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.

ELEVATION OF GIRDERS B, C, D, G, H & J

SCALE: 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.

NOTE: THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT BUT ARE SHOWN ON THE GIRDER ELEVATIONS FOR INFORMATION ONLY. THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED UNDER THE DECK CONTRACT (SECTION 81-1D).

STRUCTURAL STEEL NOTES FOR UNIT 7

ALL STRUCTURAL STEEL SHALL BE ASTM - A36

FOR GIRDER FABRICATION DIAGRAMS SEE SHEET NO. 20.

FOR DETAIL OF EXPANSION GUARDS AT PIERS #17 & #20 SEE SH. NO. 26.

FOR BOTTOM BRACING AND LONGITUDINAL STIFFENER DETAILS SEE SHEETS NO. 22 AND NO. 23 RESPECTIVELY.

FOR STRUCTURAL STEEL NOTES FOR UNITS 1 THRU 4 AND 6 THRU 9 SEE SHEET NO. 8.

GIRDERS A, E, F & K ARE IDENTICAL TO GIRDERS B, C, D, G, H & J.

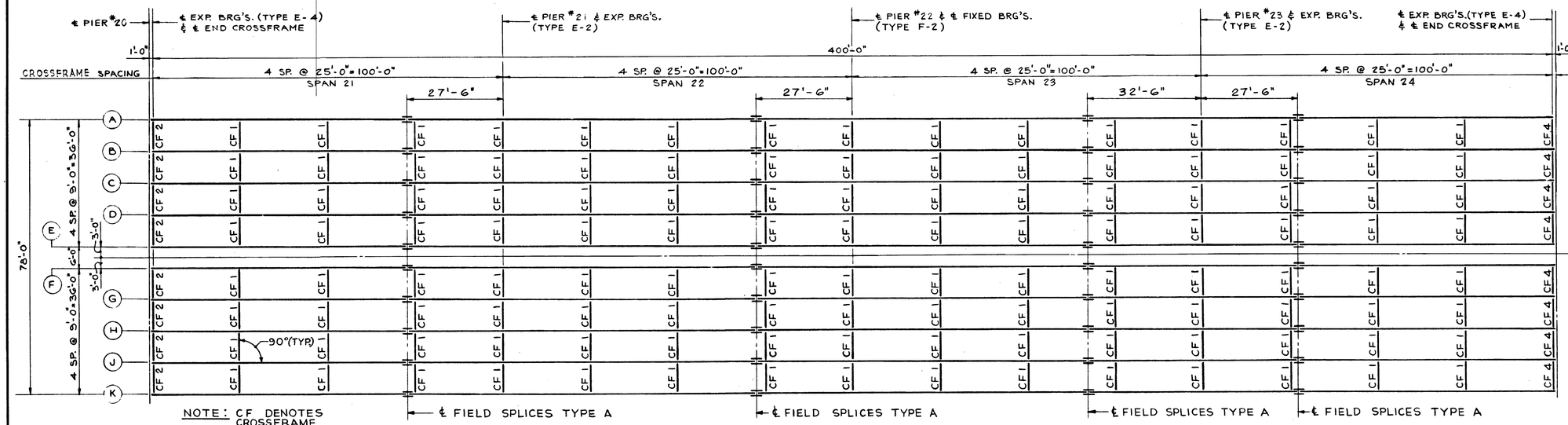
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

FRAMING PLAN - UNIT 7

F.A.I. ROUTE 280 SECTION 81-1F&E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

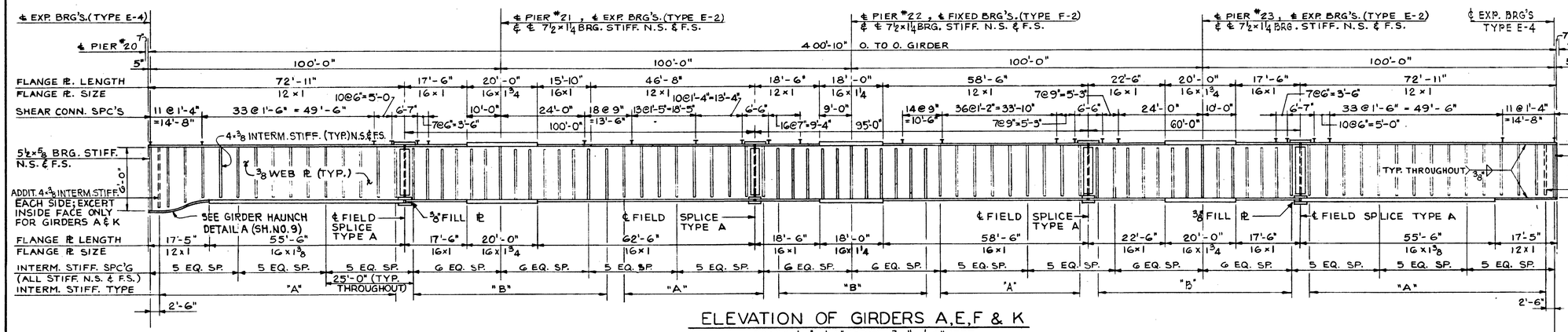
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	14
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



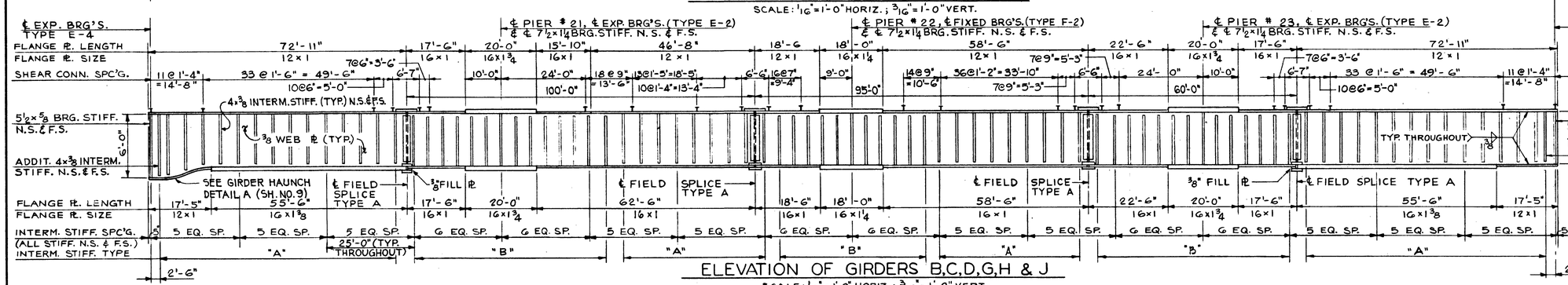
FRAMING PLAN (UNIT 8)

SCALE: 1/16"=1'-0"



ELEVATION OF GIRDERS A,E,F & K

SCALE: 1/16"=1'-0" HORIZ.; 3/16"=1'-0" VERT.



ELEVATION OF GIRDERS B,C,D,G,H & J

SCALE: 1/16"=1'-0" HORIZ.; 3/16"=1'-0" VERT.

5½x5/8 BRG. STIFF. N.S. & F.S.

ADDIT. 4x3/8" INTERM. STIFF. EACH SIDE; EXCEPT INSIDE FACE ONLY FOR GIRDERS A & K.

NOTE:
THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT BUT ARE SHOWN ON THE GIRDER ELEVATIONS FOR INFORMATION ONLY. THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED UNDER THE DECK CONTRACT (SECTION 81-1D).

℄ STRUCTURE
℄ ℄ F.A.I. ROUTE 280

N

STRUCTURAL STEEL NOTES FOR UNIT 8

ALL STRUCTURAL STEEL SHALL BE ASTM - A36
FOR GIRDER FABRICATION DIAGRAMS SEE SH. NO. 19.
FOR DETAIL OF EXPANSION GUARDS AT PIERS #20 AND #24 SEE SHEETS NO. 25 & NO. 26.
FOR STRUCTURAL STEEL NOTES FOR UNITS 1 THRU 4 AND 6 THRU 9 SEE SH. NO. 8.
GIRDERS A, E, F & K ARE IDENTICAL TO GIRDERS B, C, D, G, H & J.

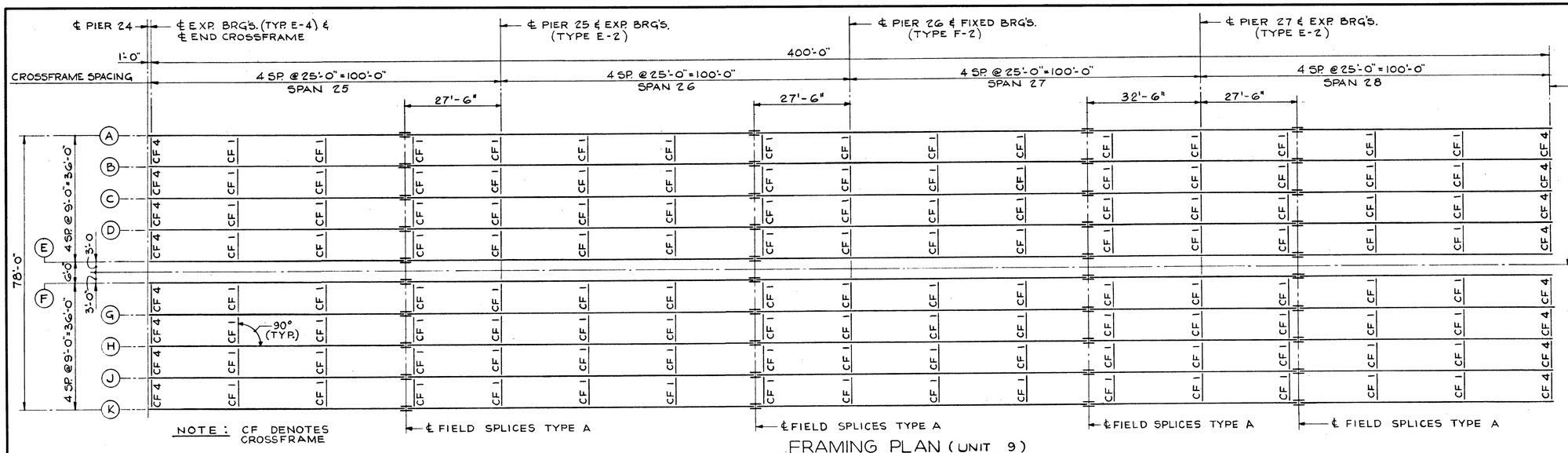
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

FRAMING PLAN - UNIT 8

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	15
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



FRAMING PLAN (UNIT 9)

SCALE: 1/16" = 1'-0"

STRUCTURAL STEEL NOTES FOR UNIT 9

ALL STRUCTURAL STEEL SHALL BE ASTM-A36

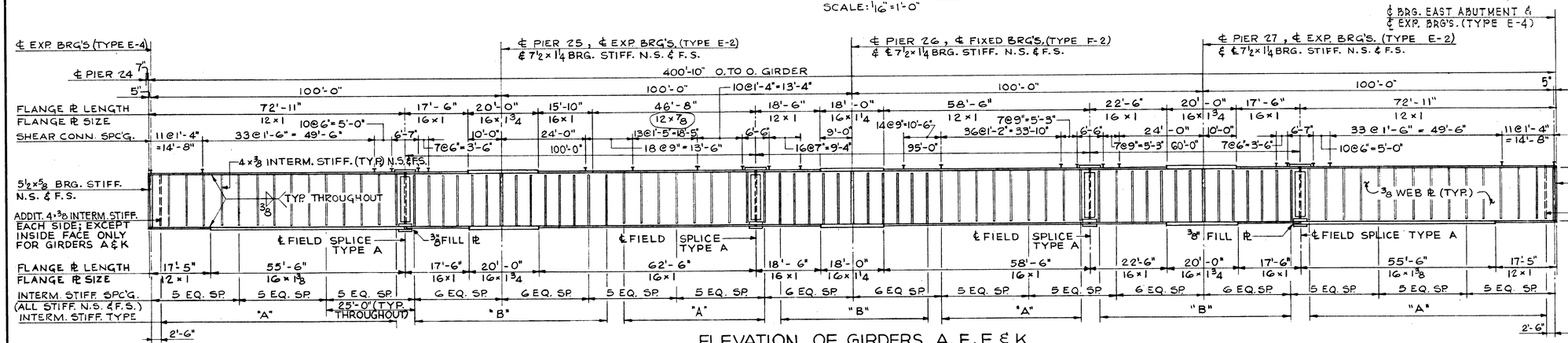
FOR GIRDER FABRICATION DIAGRAMS SEE SH. NO. 19.

FOR DETAIL OF EXPANSION GUARDS AT PIER #24 AND EAST ABUTMENT SEE SHEET NO. 24 & 25.

FOR STRUCTURAL STEEL NOTES FOR UNITS 1 THRU 4 AND 6 THRU 9 SEE SH. NO. 8.

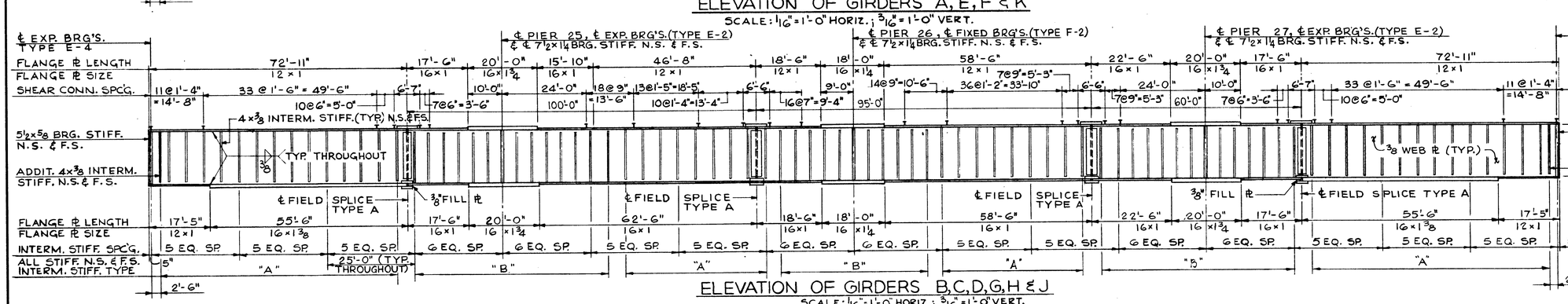
THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT BUT ARE SHOWN ON THE GIRDER ELEVATIONS FOR INFORMATION ONLY. THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED UNDER THE DECK CONTRACT (SECTION 81-1D).

GIRDERS A, E, F & K ARE IDENTICAL TO GIRDERS B, C, D, G, H & J.



ELEVATION OF GIRDERS A, E, F & K

SCALE: 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.



ELEVATION OF GIRDERS B, C, D, G, H & J

SCALE: 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W. Y. HUO
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

FRAMING PLAN - UNIT 9

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY IOWA ROCK ISLAND COUNTY, ILL.	52	15A
FED. ROAD DIST. NO.		FED. AID PROJECT NO. I-280		

℄ PIER 24 — ℄ E.P. BRG'S. (TYP. E-4) & ℄ END CROSSFRAME — ℄ PIER 25 & EXP. BRG'S. (TYPE E-2) — ℄ PIER 26 & FIXED BRG'S. (TYPE F-2) — ℄ PIER 27 & EXP. BRG'S. (TYPE E-2)

1'-0" | 400'-0"

CROSSFRAME SPACING | 4 SP. @ 25'-0" = 100'-0" SPAN 25 | 4 SP. @ 25'-0" = 100'-0" SPAN 26 | 4 SP. @ 25'-0" = 100'-0" SPAN 27 | 4 SP. @ 25'-0" = 100'-0" SPAN 28

27'-6" | 27'-6" | 32'-6" | 27'-6"

℄ BRG. EAST ABUTMENT & ℄ EXP. BRG'S. (TYPE E-4) & ℄ END CROSSFRAME

℄ STRUCTURE & ℄ F.A.I. ROUTE 280

N

A B C D E F G H J K

70'-0" | 4 SP. @ 9'-0" = 36'-0" | 6'-0" | 3'-0" | 3'-0" | 4 SP. @ 9'-0" = 36'-0"

CF 4 | CF 1 | 90° (TYP.)

NOTE: CF DENOTES CROSSFRAME

℄ FIELD SPLICES TYPE A | ℄ FIELD SPLICES TYPE A | ℄ FIELD SPLICES TYPE A | ℄ FIELD SPLICES TYPE A

FRAMING PLAN (UNIT 9)

SCALE: 1/16" = 1'-0"

STRUCTURAL STEEL NOTES FOR UNIT 9

ALL STRUCTURAL STEEL SHALL BE ASTM-A36

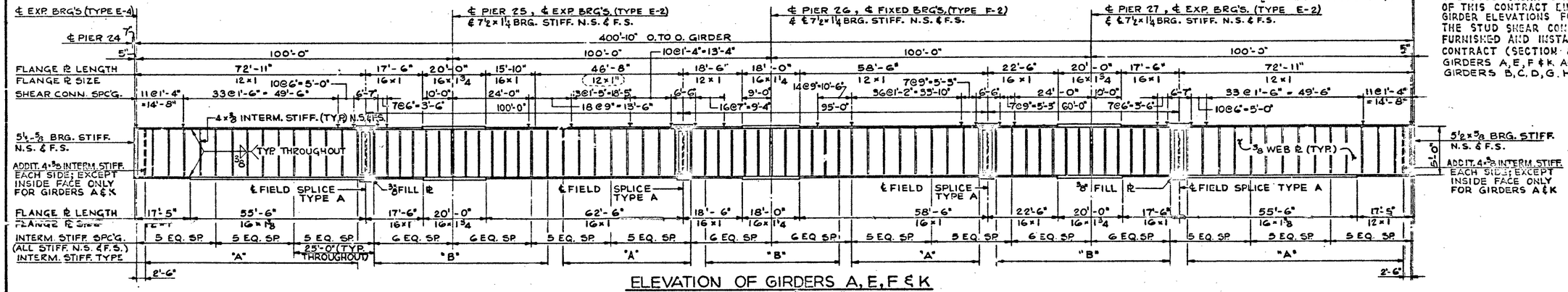
FOR GIRDER FABRICATION DIAGRAMS SEE SH. NO. 19.

FOR DETAIL OF EXPANSION GUARDS AT PIER #24 AND EAST ABUTMENT SEE SHEET NO. 24 & 25.

FOR STRUCTURAL STEEL NOTES FOR UNITS 1 THRU 4 AND 6 THRU 9 SEE SH. NO. 8.

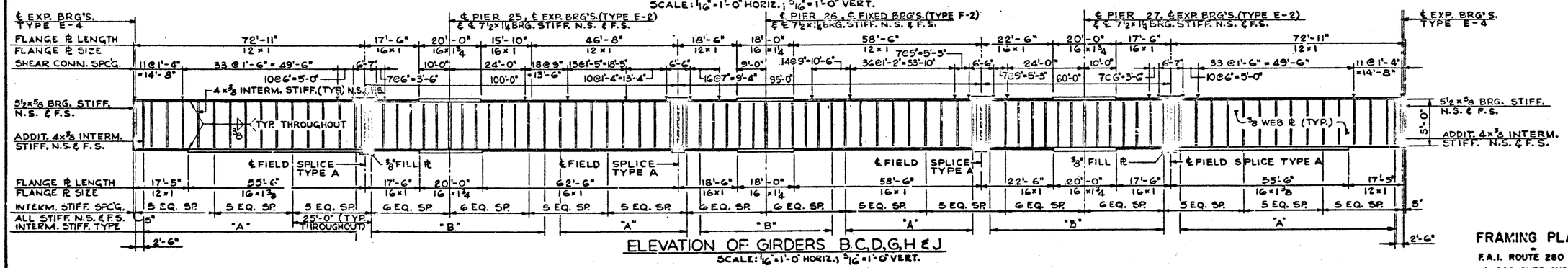
THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT BUT ARE SHOWN ON THE GIRDER ELEVATIONS FOR INFORMATION ONLY. THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED UNDER THE DECK CONTRACT (SECTION 81-1D).

GIRDERS A, E, F & K ARE IDENTICAL TO GIRDERS B, C, D, G, H & J.



ELEVATION OF GIRDERS A, E, F & K

SCALE: 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.



ELEVATION OF GIRDERS B, C, D, G, H & J

SCALE: 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.

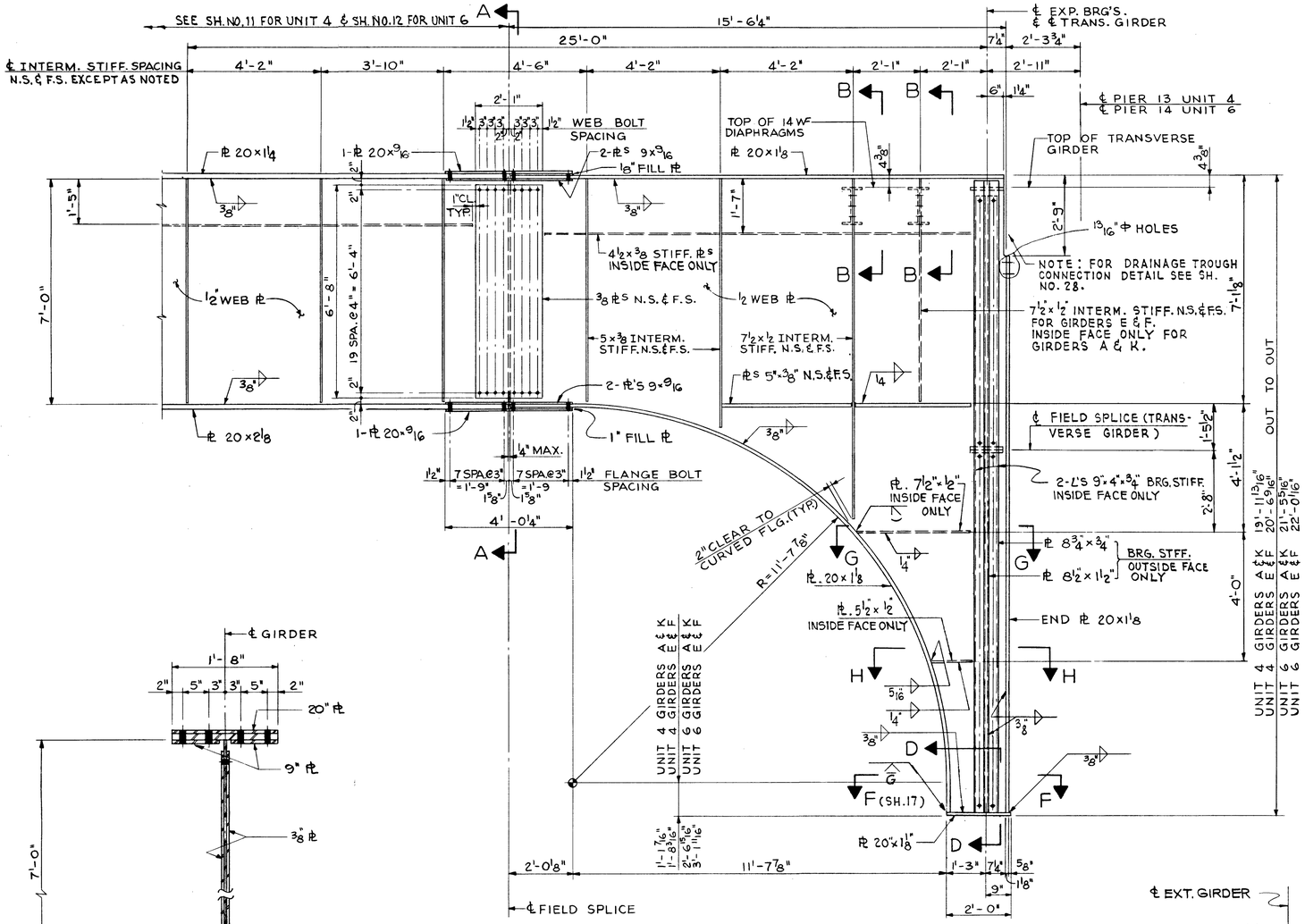
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LAITSKI
DRAWN BY G. SCHWARTZ
CHECKED W.Y. KUO
IN CHARGE W.J. ZAFFEL
APPROVED W.G. HORN

FRAMING PLAN - UNIT 9

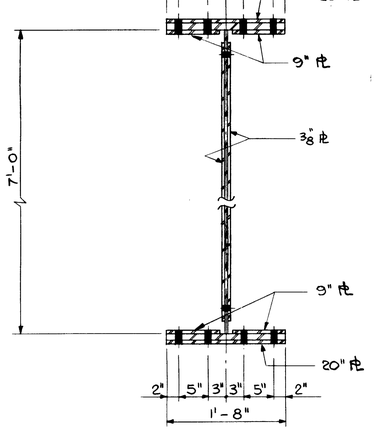
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	16
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



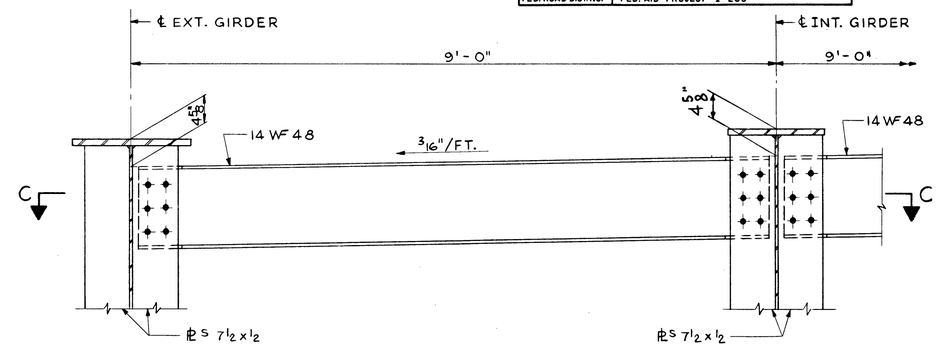
HAUNCH ELEVATION – GIRDERS A, E, F & K
(EAST END OF UNIT 4 & WEST END OF UNIT 6)
SCALE : ½" = 1'-0"



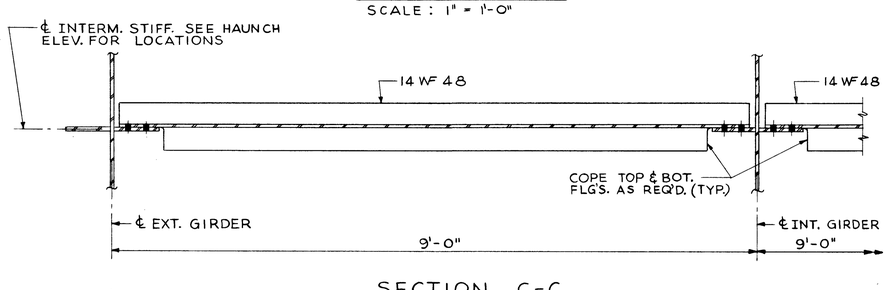
SECTION A-A
SCALE : 1" = 1'-0"

NOTES:

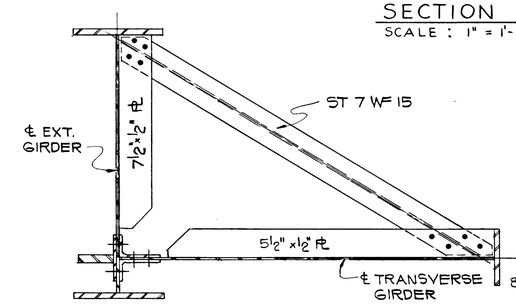
FOR FRAMING PLAN UNITS 4 & 6 SEE SH. NO. 11 & 12.
FOR STRUCTURAL STEEL NOTES SEE SHEET NO. 11 & 12.
ALL FASTENERS FOR CONNECTIONS SHALL BE HIGH STRENGTH BOLTS A.S.T.M. A325; BOLTS ⅞" Φ; OPEN HOLES 15/16" Φ EXCEPT AS NOTED.
WORK THIS SHEET WITH SHEETS NO. 17 & NO. 28.



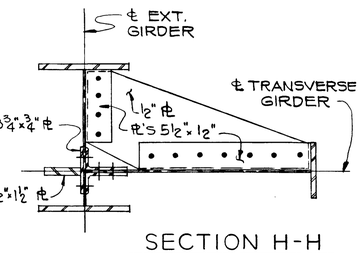
SECTION B-B
SCALE : 1" = 1'-0"



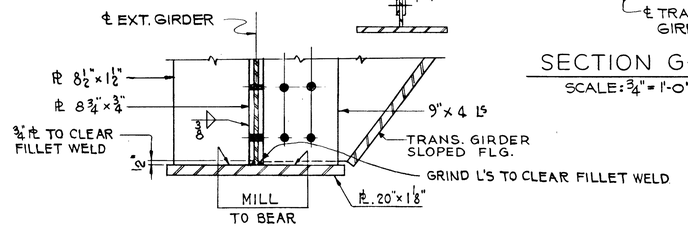
SECTION C-C
SCALE : 1" = 1'-0"



SECTION G-G
SCALE : ¾" = 1'-0"



SECTION H-H
SCALE : ¾" = 1'-0"



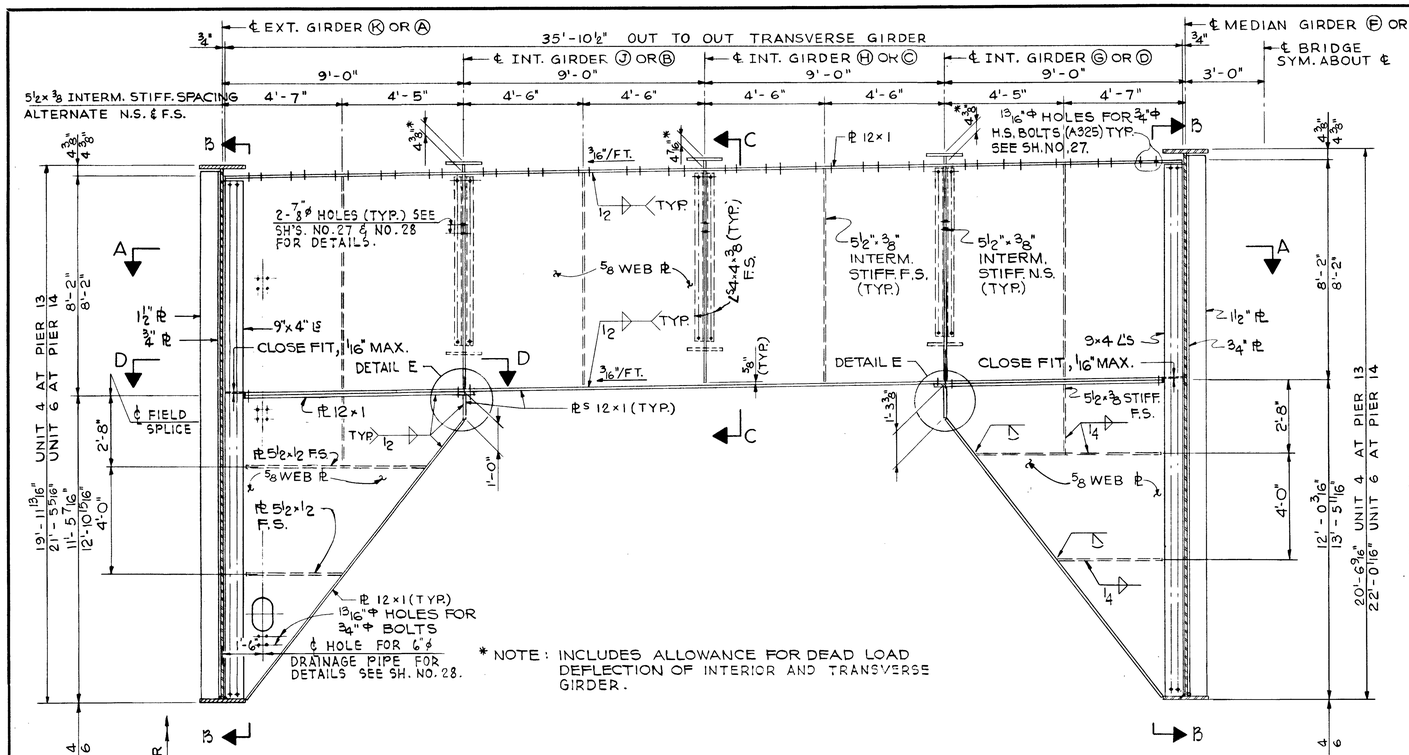
SECTION D-D
SCALE : 1½" = 1'-0"

HAUNCH DETAILS
GIRDERS A, E, F AND K
UNITS 4 AND 6

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.Y. HUO
DRAWN BY G. SCHWARTZ
CHECKED J.Y. HUANG
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

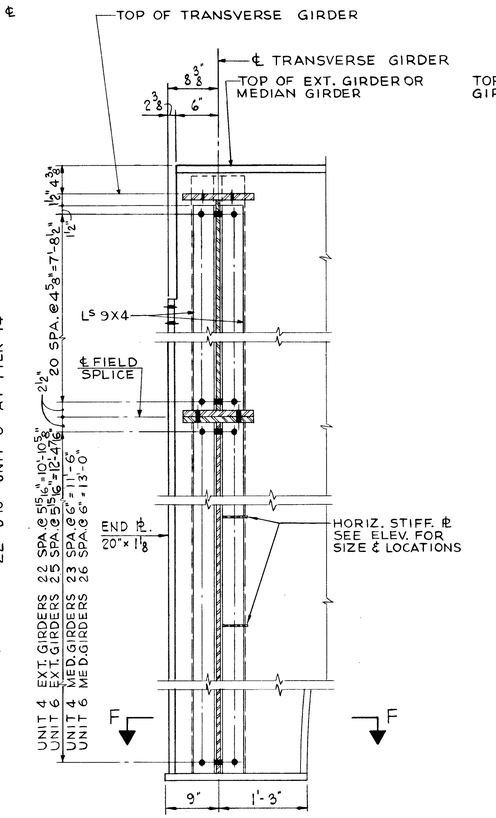
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	17
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



* NOTE: INCLUDES ALLOWANCE FOR DEAD LOAD DEFLECTION OF INTERIOR AND TRANSVERSE GIRDER.

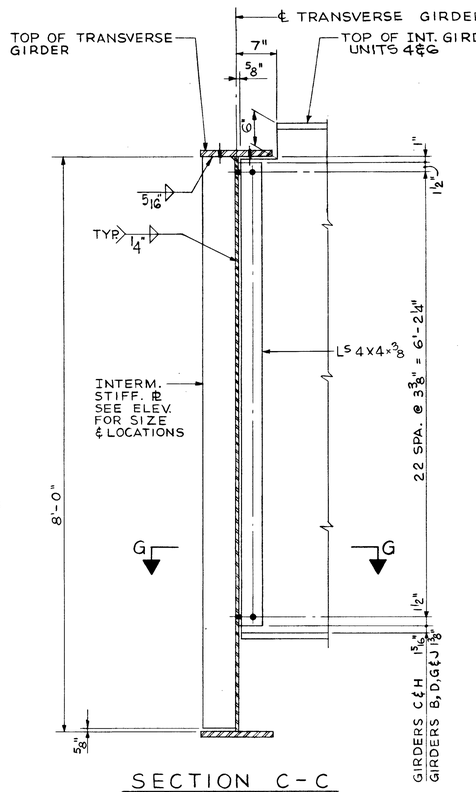
TRANSVERSE GIRDER ELEVATION AT PIER 13 OR 14

SCALE: ⅜" = 1'-0"



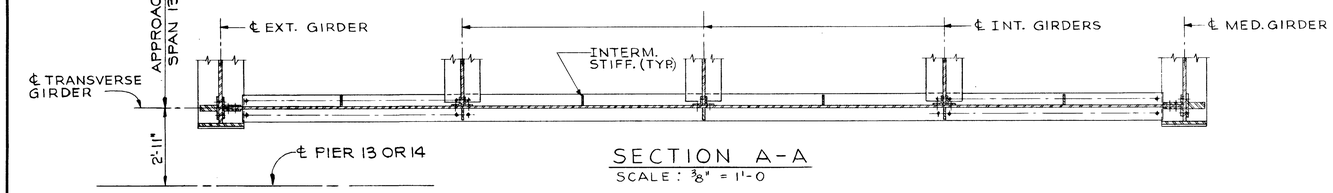
SECTION B - B

SCALE: 1" = 1'-0"



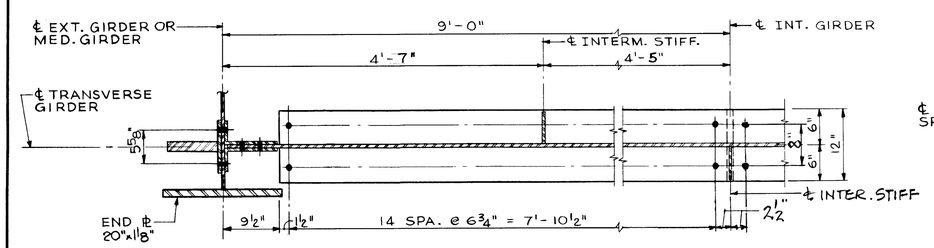
SECTION C - C

SCALE: 1" = 1'-0"



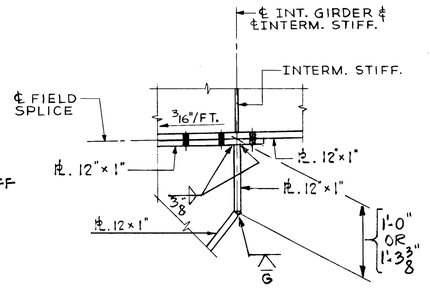
SECTION A-A

SCALE: ⅜" = 1'-0



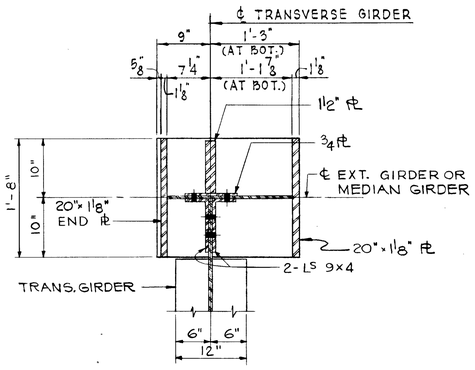
SECTION D-D

SCALE: 1" = 1'-0"



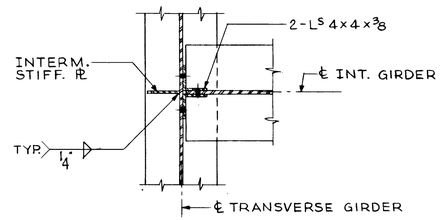
DETAIL E

SCALE: 1" = 1'-0"



SECTION F-F

SCALE: 1" = 1'-0"



SECTION G-G

SCALE: 1" = 1'-0"

LEGEND:
F.S. = FAR SIDE
N.S. = NEAR SIDE
E.S. = EACH SIDE

NOTES:

FOR FRAMING PLAN UNITS 4 & 6 SEE SHEETS NO. 11 & 12.
FOR STRUCTURAL STEEL NOTES SEE SHEET NO. 8.
ALL FASTENERS FOR CONNECTIONS SHALL BE HIGH STRENGTH BOLTS A.S.T.M. A325; BOLTS ⅞"Φ; OPEN HOLES 15/16"Φ.
WORK THIS SHEET WITH SHEETS NO. 11, 12, 16, 27 & 28.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.Y. HUO
DRAWN BY	G. SCHWARTZ
CHECKED	J.Y. HUANG
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

TRANSVERSE APPROACH GIRDERS AT PIERS 13 AND 14

F.A.I. ROUTE 280 SECTION 81-1F & E

I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	18
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

UNITS 2, 8 & 9 (A 36 STEEL)

INTERIOR GIRDER MOMENT TABLE					
		0.4 SP. 1	PIER	0.5 SP. 2	PIER
I_S	(IN^4)	36944	60147	32505	44271
I_C	(IN^4)	91266	——	75814	——
S_S	(IN^3)	1426	1894	1137	1417
S_C	(IN^3)	1831	——	1467	——
D_L	(K/I)	1.255	1.255	1.255	1.255
M_{D_L}	(IK)	905	-1502	374	-887
$F_{S_{D_L}}$	(KSI)	7.6	9.5	4.0	7.5
S_{D_L}	(K/I)	0.32	0.32	0.32	0.32
$M_{S_{D_L}}$	(IK)	264	-302	145	-208
M_{L_L}	(IK)	1040	-780	880	-674
M_{IMP}	(IK)	231	-171	195	-150
M_{SETT}	(IK)	126	-316	57	-327
TOTAL	(IK)	1661	-1569	1277	-1359
$F_{S_{L_L}}$	(KSI)	10.9	10.0	10.5	11.5
$F_{S\,TOTAL}$	(KSI)	18.5	19.5	14.5	19.0
VR	(K)	60	69	60	72

INTERIOR GIRDER REACTION TABLE			
	FIRST SUPPORT	SECOND SUPPORT	THIRD SUPPORT
R_{D_L} (K)	61	183	143
R_{L_L} (K)	53	87	83
IMP. (K)	11	19	18
R_{TOTAL} (K)	125	289	244

UNIT 1 (A 36 STEEL)

INTERIOR GIRDER MOMENT TABLE				
		0.4 SP. 1	PIER	0.5 SP. 2
I_S	(IN^4)	36944	56131	29208
I_C	(IN^4)	91266	——	70285
S_S	(IN^3)	1426	1775	1021
S_C	(IN^3)	1831	——	1346
D_L	(K/I)	1.255	1.255	1.255
M_{D_L}	(IK)	968	-1346	223
$F_{S_{D_L}}$	(KSI)	8.2	9.1	2.6
S_{D_L}	(K/I)	0.32	0.32	0.32
$M_{S_{D_L}}$	(IK)	271	-282	112
M_{L_L}	(IK)	1050	-758	850
M_{IMP}	(IK)	237	-170	187
M_{SETT}	(IK)	112	-279	77
TOTAL	(IK)	1670	-1489	1226
$F_{S_{L_L}}$	(KSI)	10.9	10.1	10.9
$F_{S\,TOTAL}$	(KSI)	19.1	19.2	13.5
VR	(K)	60	69	60

INTERIOR GIRDER REACTION TABLE		
	FIRST SUPPORT	SECOND SUPPORT
R_{D_L} (K)	62	174
R_{L_L} (K)	52	86
IMP. (K)	12	19
R_{TOTAL} (K)	126	279

UNITS 3 & 7 (A 36 STEEL)

INTERIOR GIRDER MOMENT TABLE				
		0.4 SP. 1	PIER	0.5 SP. 2
I_S	(IN^4)	86845	146973	62192
I_C	(IN^4)	190080	——	134230
S_S	(IN^3)	2953	3830	1858
S_C	(IN^3)	3550	——	2301
D_L	(K/I)	1.33	1.33	1.33
M_{D_L}	(IK)	2295	-3239	501
$F_{S_{D_L}}$	(KSI)	9.3	10.3	3.2
S_{D_L}	(K/I)	0.32	0.32	0.32
$M_{S_{D_L}}$	(IK)	595	-672	228
M_{L_L}	(IK)	1720	-1660	1265
M_{IMP}	(IK)	312	-307	226
M_{SETT}	(IK)	112	-279	77
TOTAL	(IK)	2739	-2918	1796
$F_{S_{L_L}}$	(KSI)	9.3	9.2	9.4
$F_{S\,TOTAL}$	(KSI)	18.6	19.5	12.6
VR	(K)	63	84	62

INTERIOR GIRDER REACTION TABLE		
	FIRST SUPPORT	SECOND SUPPORT
R_{D_L} (K)	98	273
R_{L_L} (K)	61	118
IMP. (K)	11	20
R_{TOTAL} (K)	170	411

UNITS 4 & 6 (A588 STEEL)

INTERIOR GIRDER MOMENT TABLE				
		0.4 SP. 1	PIER	0.5 SP. 2
I_S	(IN^4)	150025	221733	90775
I_C	(IN^4)	290492	——	174520
S_S	(IN^3)	4152	4969	2111
S_C	(IN^3)	4825	——	2562
D_L	(K/I)	1.44	1.44	1.44
M_{D_L}	(IK)	4396	-6291	980
$F_{S_{D_L}}$	(KSI)	12.7	15.2	5.6
S_{D_L}	(K/I)	0.32	0.32	0.32
$M_{S_{D_L}}$	(IK)	1056	-1200	414
M_{L_L}	(IK)	2820	-2780	1990
M_{IMP}	(IK)	424	-429	300
M_{SETT}	(IK)	112	-279	77
TOTAL	(IK)	4412	-4688	2781
$F_{S_{L_L}}$	(KSI)	11.0	11.3	13.0
$F_{S\,TOTAL}$	(KSI)	23.7	26.5	18.6
VR	(K)	66	101	73

INTERIOR GIRDER REACTION TABLE		
	FIRST SUPPORT	SECOND SUPPORT
R_{D_L} (K)	139	389
R_{L_L} (K)	70	150
IMP. (K)	11	22
R_{TOTAL} (K)	220	561

UNITS 4 & 6 AT PIERS 13 & 14 (A588 STEEL)

TRANSVERSE GIRDER MOMENT TABLE		
		0.5 SPAN
I	(IN^4)	10258
S	(IN^3)	2093
M_{D_L}	(IK)	2670
M_{L_L}	(IK)	1315
M_{IMP}	(IK)	202
M_{TOTAL}	(IK)	4187
F_S	(KSI)	24.0

TRANSVERSE GIRDER REACTION TABLE		
		SUPPORT
R_{D_L}	(K)	365
R_{L_L}	(K)	123
IMP.	(K)	19
R_{TOTAL}	(K)	507

LEGEND

I_S AND S_S ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE STEEL SECTION.

I_C AND S_C ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE COMPOSITE SECTION USED IN COMPUTING F_S.

M_{SETT} IS MOMENT DUE TO ONE INCH (1") OF POSSIBLE PIER SETTLEMENT.

VR IS THE MAXIMUM L_L + IMPACT SHEAR RANGE.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

DESIGN DATA TABLES
UNITS 1 THRU 4 AND 6 THRU 9

F.A.I. ROUTE 280 SECTION 81-1F & E

I-280 OVER MISSISSIPPI RIVER

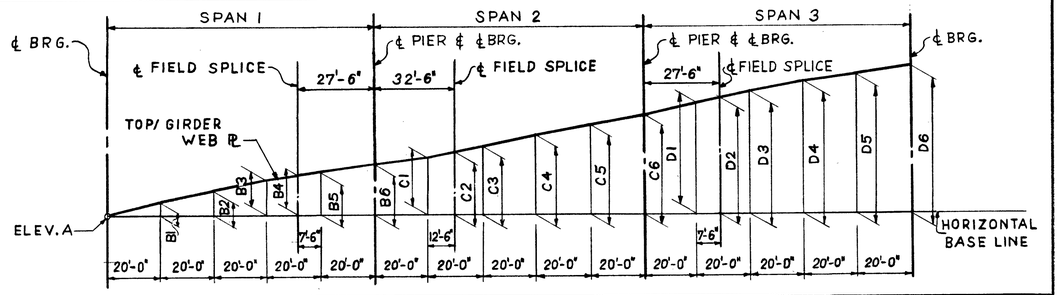
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

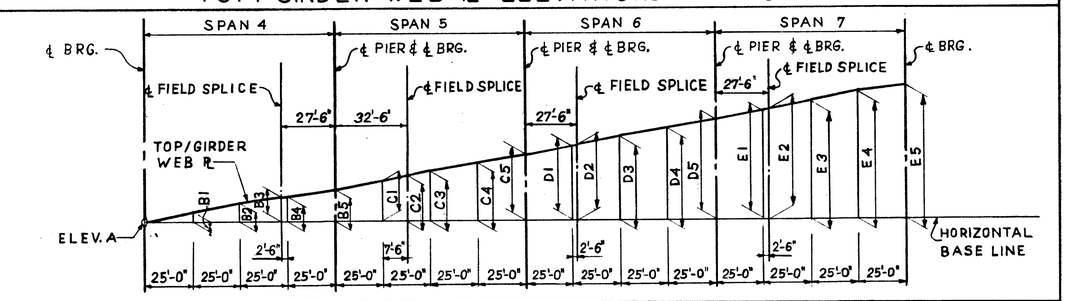
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	19
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

TOP/ GIRDER WEB ℄ ELEVATIONS* — UNIT 1



GIRDER	ELEV. A	DIMENSION																		
		B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4	D5	D6
A	601.598	3"	5 9/16"	7 5/8"	8 11/16"	9 5/16"	11 11/16"	1'-1 1/8"	1'-2 9/16"	1'-3 3/8"	1'-5 9/16"	1'-7 11/16"	1'-10 1/16"	2'-0 3/4"	2'-1 13/16"	2'-3 1/2"	2'-5 7/8"	2'-7 11/16"	2'-9 1/8"
B	601.739	3 1/16"	5 11/16"	7 3/4"	8 3/4"	9 3/8"					1'-5 5/8"	1'-7 3/4"		2'-0 13/16"	2'-1 7/8"	2'-3 5/8"	2'-6"	2'-7 13/16"	
C	601.880																		
D	602.020	3 1/16"	5 11/16"	7 3/4"	8 3/4"	9 3/8"					1'-5 5/8"	1'-7 3/4"		2'-0 13/16"	2'-1 7/8"	2'-3 5/8"	2'-6"	2'-7 13/16"	
E	602.160	3"	5 9/16"	7 5/8"	8 11/16"	9 5/16"					1'-5 9/16"	1'-7 11/16"		2'-0 3/4"	2'-1 13/16"	2'-3 1/2"	2'-5 7/8"	2'-7 11/16"	
F	602.160	3"	5 9/16"	7 5/8"	8 11/16"	9 5/16"					1'-5 9/16"	1'-7 11/16"		2'-0 3/4"	2'-1 13/16"	2'-3 1/2"	2'-5 7/8"	2'-7 11/16"	
G	602.020	3 1/16"	5 11/16"	7 3/4"	8 3/4"	9 3/8"					1'-5 5/8"	1'-7 3/4"		2'-0 13/16"	2'-1 7/8"	2'-3 5/8"	2'-6"	2'-7 13/16"	
H	601.880																		
J	601.739	3 1/16"	5 11/16"	7 3/4"	8 3/4"	9 3/8"					1'-5 5/8"	1'-7 3/4"		2'-0 13/16"	2'-1 7/8"	2'-3 5/8"	2'-6"	2'-7 13/16"	
K	601.598	3"	5 9/16"	7 5/8"	8 11/16"	9 5/16"	11 11/16"	1'-1 1/8"	1'-2 9/16"	1'-3 3/8"	1'-5 9/16"	1'-7 11/16"	1'-10 1/16"	2'-0 3/4"	2'-1 13/16"	2'-3 1/2"	2'-5 7/8"	2'-7 11/16"	2'-9 1/8"

TOP/ GIRDER WEB ℄ ELEVATIONS* — UNIT 2

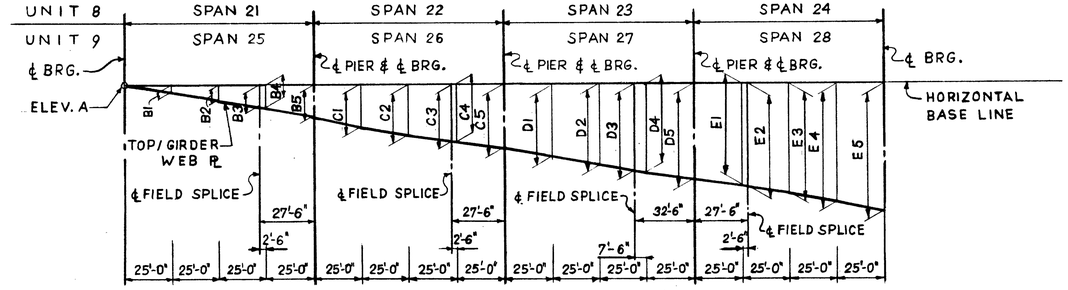


GIRDER	ELEV. A	DIMENSION																			
		B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	D1	D2	D3	D4	D5	E1	E2	E3	E4	E5
A	604.377	3 5/8"	6 1/2"	8 9/16"	8 13/16"	11 11/16"	1'-1 7/8"	1'-2 3/4"	1'-4 13/16"	1'-7 1/2"	1'-10 1/8"	2'-1"	2'-1 5/16"	2'-3 7/8"	2'-6 3/8"	2'-9 1/8"	3'-0 3/8"	3'-0 3/4"	3'-3 5/8"	3'-6 1/4"	3'-8 3/16"
B	604.518	3 11/16"	6 5/8"	8 11/16"	8 7/8"				1'-4 7/8"						2'-6 7/16"		3'-0 7/16"	3'-0 13/16"	3'-3 3/4"	3'-6 5/16"	
C	604.658																				
D	604.799	3 11/16"	6 5/8"	8 11/16"	8 7/8"				1'-4 7/8"						2'-6 7/16"		3'-0 7/16"	3'-0 13/16"	3'-3 3/4"	3'-6 5/16"	
E	604.938	3 5/8"	6 1/2"	8 9/16"	8 13/16"				1'-4 13/16"						2'-6 3/8"		3'-0 3/8"	3'-0 3/4"	3'-3 5/8"	3'-6 1/4"	
F	604.938	3 5/8"	6 1/2"	8 9/16"	8 13/16"				1'-4 13/16"						2'-6 3/8"		3'-0 3/8"	3'-0 3/4"	3'-3 5/8"	3'-6 1/4"	
G	604.799	3 11/16"	6 5/8"	8 11/16"	8 7/8"				1'-4 7/8"						2'-6 7/16"		3'-0 7/16"	3'-0 13/16"	3'-3 3/4"	3'-6 5/16"	
H	604.658																				
J	604.518	3 11/16"	6 5/8"	8 11/16"	8 7/8"				1'-4 7/8"						2'-6 7/16"		3'-0 7/16"	3'-0 13/16"	3'-3 3/4"	3'-6 5/16"	
K	604.377	3 5/8"	6 1/2"	8 9/16"	8 13/16"	11 11/16"	1'-1 7/8"	1'-2 3/4"	1'-4 13/16"	1'-7 1/2"	1'-10 1/8"	2'-1"	2'-1 5/16"	2'-3 7/8"	2'-6 3/8"	2'-9 1/8"	3'-0 3/8"	3'-0 3/4"	3'-3 5/8"	3'-6 1/4"	3'-8 3/16"

* FOR FABRICATION OF STRUCTURAL STEEL - INCLUDES AN ALLOWANCE FOR DEFLECTIONS DUE TO DEAD LOAD OF DECK SLAB CONCRETE AND STRUCTURAL STEEL AND ALSO AN ALLOWANCE FOR THE PROFILE GRADE EFFECT.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.Y. HUO
DRAWN BY L. TROUSIL
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

TOP/ GIRDER WEB ℄ ELEVATIONS* — UNITS 8 & 9



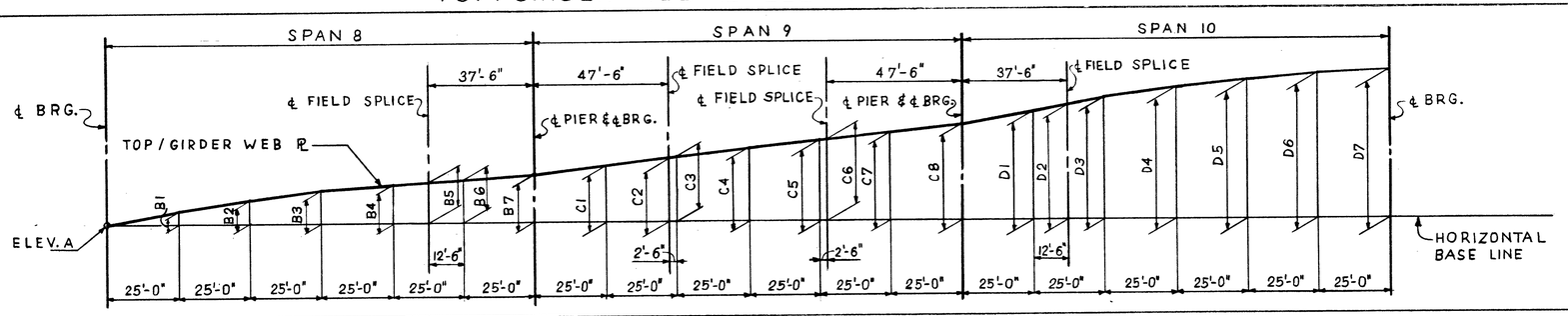
	GIRDER	ELEV. A	DIMENSION																			
			B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	D1	D2	D3	D4	D5	E1	E2	E3	E4	E5
UNIT 8	A	604.769	4 7/8"	10 1/2"	1'-4 1/4"	1'-4 7/8"	1'-11 3/8"	2'-5 7/16"	2'-11 7/16"	3'-5 1/4"	3'-5 7/8"	4'-0 15/32"	4'-6 13/16"	5'-1 3/8"	5'-6 1/4"	5'-8 3/8"	6'-3 1/4"	6'-9 5/8"	6'-10 5/16"	7'-4 3/16"	7'-11 9/16"	8'-7 5/8"
	B	604.910	4 13/16"	10 3/8"	1'-4 3/16"	1'-4 13/16"				3'-5 3/16"						5'-8 5/16"			6'-10 1/4"	7'-4 1/8"	7'-11 7/16"	
	C	605.050																				
	D	605.191	4 13/16"	10 3/8"	1'-4 3/16"	1'-4 13/16"				3'-5 3/16"						5'-8 5/16"			6'-10 1/4"	7'-4 1/8"	7'-11 7/16"	
	E	605.330	4 7/8"	10 1/2"	1'-4 1/4"	1'-4 7/8"				3'-5 1/4"						5'-8 3/8"			6'-10 5/16"	7'-4 3/16"	7'-11 9/16"	
	F	605.330	4 7/8"	10 1/2"	1'-4 1/4"	1'-4 7/8"				3'-5 1/4"						5'-8 3/8"			6'-10 5/16"	7'-4 3/16"	7'-11 9/16"	
	G	605.191	4 13/16"	10 3/8"	1'-4 3/16"	1'-4 13/16"				3'-5 3/16"						5'-8 5/16"			6'-10 1/4"	7'-4 1/8"	7'-11 7/16"	
	H	605.050																				
	J	604.910	4 13/16"	10 3/8"	1'-4 3/16"	1'-4 13/16"				3'-5 3/16"						5'-8 5/16"			6'-10 1/4"	7'-4 1/8"	7'-11 7/16"	
	K	604.769	4 7/8"	10 1/2"	1'-4 1/4"	1'-4 7/8"	1'-11 3/8"	2'-5 7/16"	2'-11 7/16"	3'-5 1/4"	3'-5 7/8"	4'-0 15/32"	4'-6 13/16"	5'-1 3/8"	5'-6 1/4"	5'-8 3/8"	6'-3 1/4"	6'-9 5/8"	6'-10 5/16"	7'-4 3/16"	7'-11 9/16"	8'-7 5/8"
UNIT 9	A	596.082	6 9/16"	1'-1 7/8"	1'-9 1/8"	1'-9 15/16"	2'-6 1/8"	3'-1 7/8"	3'-9 9/16"	4'-4 7/8"	4'-5 11/16"	5'-2"	5'-10 1/16"	6'-6 1/4"	7'-0 5/16"	7'-2 15/16"	7'-11 1/2"	8'-7 5/8"	8'-8 7/16"	9'-3 7/8"	10'-0 7/8"	10'-10 11/16"
	B	596.223	6 7/16"	1'-1 3/4"	1'-9 1/16"	1'-9 7/8"				4'-4 13/16"	4'-5 5/8"		5'-10"		7'-0 1/4"			8'-7 9/16"	8'-8 3/8"	9'-3 3/4"	10'-0 13/16"	
	C	596.364																				
	D	596.504	6 7/16"	1'-1 3/4"	1'-9 1/16"	1'-9 7/8"				4'-4 13/16"	4'-5 5/8"		5'-10"		7'-0 1/4"			8'-7 9/16"	8'-8 3/8"	9'-3 3/4"	10'-0 13/16"	
	E	596.644	6 9/16"	1'-1 7/8"	1'-9 1/8"	1'-9 15/16"				4'-4 7/8"	4'-5 11/16"		5'-10 1/16"		7'-0 5/16"			8'-7 5/8"	8'-8 7/16"	9'-3 7/8"	10'-0 7/8"	
	F	596.644	6 9/16"	1'-1 7/8"	1'-9 1/8"	1'-9 15/16"				4'-4 7/8"	4'-5 11/16"		5'-10 1/16"		7'-0 5/16"			8'-7 5/8"	8'-8 7/16"	9'-3 7/8"	10'-0 7/8"	
	G	596.504	6 7/16"	1'-1 3/4"	1'-9 1/16"	1'-9 7/8"				4'-4 13/16"	4'-5 5/8"		5'-10"		7'-0 1/4"			8'-7 9/16"	8'-8 3/8"	9'-3 3/4"	10'-0 13/16"	
	H	596.364																				
	J	596.223	6 7/16"	1'-1 3/4"	1'-9 1/16"	1'-9 7/8"				4'-4 13/16"	4'-5 5/8"		5'-10"		7'-0 1/4"			8'-7 9/16"	8'-8 3/8"	9'-3 3/4"	10'-0 13/16"	
	K	596.082	6 9/16"	1'-1 7/8"	1'-9 1/8"	1'-9 15/16"	2'-6 1/8"	3'-1 7/8"	3'-9 9/16"	4'-4 7/8"	4'-5 11/16"	5'-2"	5'-10 1/16"	6'-6 1/4"	7'-0 5/16"	7'-2 15/16"	7'-11 1/2"	8'-7 5/8"	8'-8 7/16"	9'-3 7/8"	10'-0 7/8"	10'-10 11/16"

TOP OF GIRDER WEB ELEVATIONS AND FABRICATION DIAGRAMS
UNITS 1, 2, 8 AND 9

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

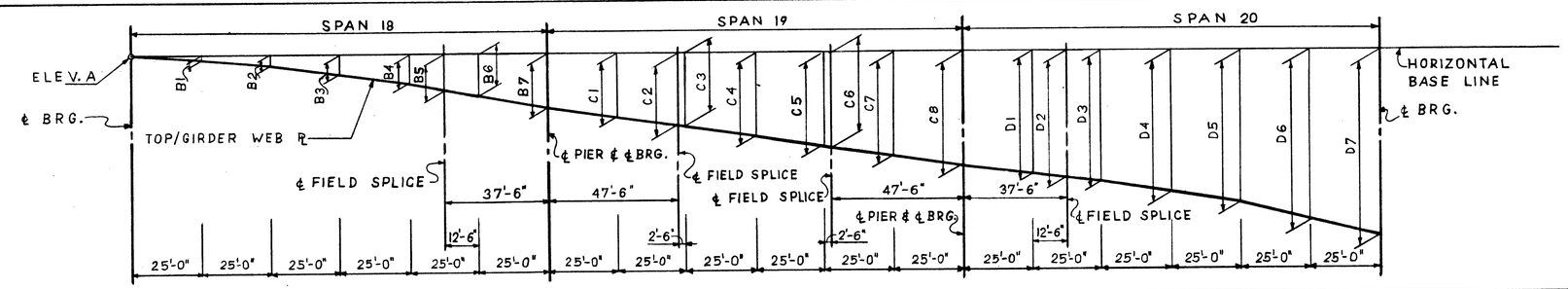
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	20
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

TOP/GIRDER WEB ℄ ELEVATIONS*— UNIT 3



GIRDER	ELEV. A	DIMENSION																				
		B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7
A	608.044	4 9/16"	8 3/8"	11 1/4"	1'-1 5/16"	1'-2 1/16"	1'-2 13/16"	1'-4 9/16"	1'-7 1/16"	1'-9 3/4"	1'-10"	2'-0 15/16"	2'-3 9/16"	2'-3 13/16"	2'-6 1/8"	2'-9 1/8"	3'-0 7/8"	3'-2 7/8"	3'-4 7/8"	3'-8 3/8"	3'-10 15/16"	4'-0 5/8"	4'-11 11/16"
B	608.184	4 11/16"	8 5/8"	11 9/16"	1'-1 1/2"	1'-2 1/4"	1'-2 7/8"		1'-7"	1'-9 11/16"			2'-3 1/2"	2'-3 3/4"	2'-6 1/16"		3'-0 15/16"	3'-3 1/16"	3'-5 1/16"	3'-8 5/8"	3'-11 3/16"	4'-0 3/4"	
C	608.325																						
D	608.465	4 11/16"	8 5/8"	11 9/16"	1'-1 1/2"	1'-2 1/4"	1'-2 7/8"		1'-7"	1'-9 11/16"			2'-3 1/2"	2'-3 3/4"	2'-6 1/16"		3'-0 15/16"	3'-3 1/16"	3'-5 1/16"	3'-8 5/8"	3'-11 3/16"	4'-0 3/4"	
E	608.605	4 9/16"	8 3/8"	11 1/4"	1'-1 5/16"	1'-2 1/16"	1'-2 13/16"		1'-7 1/16"	1'-9 3/4"			2'-3 9/16"	2'-3 13/16"	2'-6 1/8"		3'-0 7/8"	3'-2 7/8"	3'-4 7/8"	3'-8 3/8"	3'-10 15/16"	4'-0 5/8"	
F	608.605	4 9/16"	8 3/8"	11 1/4"	1'-1 5/16"	1'-2 1/16"	1'-2 13/16"		1'-7 1/16"	1'-9 3/4"			2'-3 9/16"	2'-3 13/16"	2'-6 1/8"		3'-0 7/8"	3'-2 7/8"	3'-4 7/8"	3'-8 3/8"	3'-10 15/16"	4'-0 5/8"	
G	608.465	4 11/16"	8 5/8"	11 9/16"	1'-1 1/2"	1'-2 1/4"	1'-2 7/8"		1'-7"	1'-9 11/16"			2'-3 1/2"	2'-3 3/4"	2'-6 1/16"		3'-0 15/16"	3'-3 1/16"	3'-5 1/16"	3'-8 5/8"	3'-11 3/16"	4'-0 3/4"	
H	608.325																						
J	608.184	4 11/16"	8 5/8"	11 9/16"	1'-1 1/2"	1'-2 1/4"	1'-2 7/8"		1'-7"	1'-9 11/16"			2'-3 1/2"	2'-3 3/4"	2'-6 1/16"		3'-0 15/16"	3'-3 1/16"	3'-5 1/16"	3'-8 5/8"	3'-11 3/16"	4'-0 3/4"	
K	608.044	4 9/16"	8 3/8"	11 1/4"	1'-1 5/16"	1'-2 1/16"	1'-2 13/16"	1'-4 9/16"	1'-7 1/16"	1'-9 3/4"	1'-10"	2'-0 15/16"	2'-3 9/16"	2'-3 13/16"	2'-6 1/8"	2'-9 1/8"	3'-0 7/8"	3'-2 7/8"	3'-4 7/8"	3'-8 3/8"	3'-10 15/16"	4'-0 5/8"	4'-11 11/16"

TOP/GIRDER WEB ℄ ELEVATIONS*— UNIT 7



GIRDER	ELEV. A	DIMENSION																				
		B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6	D7
A	611.803	2"	4 7/8"	8 11/16"	1'-1 9/16"	1'-4 1/2"	1'-7"	2'-0 5/16"	2'-5"	2'-8 7/8"	2'-9 5/16"	3'-1 13/16"	3'-6 11/16"	3'-7 3/16"	3'-11 3/4"	4'-4 7/16"	4'-8 1/2"	4'-10 7/16"	5'-0 7/16"	5'-4 15/16"	5'-10 7/16"	6'-5"	7'-0 5/16"
B	611.943	1 7/8"	4 5/8"	8 1/2"	1'-1 3/8"	1'-4 1/8"	1'-6 15/16"		2'-5 1/16"	2'-8 15/16"	2'-9 3/8"		3'-6 3/4"	3'-7 1/4"			4'-8 3/8"	4'-10 1/4"	5'-0 3/16"	5'-4 5/8"	5'-10 1/8"	6'-4 13/16"	
C	612.084																						
D	612.224	1 7/8"	4 5/8"	8 1/2"	1'-1 3/8"	1'-4 1/8"	1'-6 15/16"		2'-5 1/16"	2'-8 15/16"	2'-9 3/8"		3'-6 3/4"	3'-7 1/4"			4'-8 3/8"	4'-10 1/4"	5'-0 3/16"	5'-4 5/8"	5'-10 1/8"	6'-4 13/16"	
E	612.364	2"	4 7/8"	8 11/16"	1'-1 9/16"	1'-4 1/2"	1'-7"		2'-5"	2'-8 7/8"	2'-9 5/16"		3'-6 11/16"	3'-7 3/16"			4'-8 1/2"	4'-10 7/16"	5'-0 7/16"	5'-4 15/16"	5'-10 7/16"	6'-5"	
F	612.364	2"	4 7/8"	8 11/16"	1'-1 9/16"	1'-4 1/2"	1'-7"		2'-5"	2'-8 7/8"	2'-9 5/16"		3'-6 11/16"	3'-7 3/16"			4'-8 1/2"	4'-10 7/16"	5'-0 7/16"	5'-4 15/16"	5'-10 7/16"	6'-5"	
G	612.224	1 7/8"	4 5/8"	8 1/2"	1'-1 3/8"	1'-4 1/8"	1'-6 15/16"		2'-5 1/16"	2'-8 15/16"	2'-9 3/8"		3'-6 3/4"	3'-7 1/4"			4'-8 3/8"	4'-10 1/4"	5'-0 3/16"	5'-4 5/8"	5'-10 1/8"	6'-4 13/16"	
H	612.084																						
J	611.943	1 7/8"	4 5/8"	8 1/2"	1'-1 3/8"	1'-4 1/8"	1'-6 15/16"		2'-5 1/16"	2'-8 15/16"	2'-9 3/8"		3'-6 3/4"	3'-7 1/4"			4'-8 3/8"	4'-10 1/4"	5'-0 3/16"	5'-4 5/8"	5'-10 1/8"	6'-4 13/16"	
K	611.803	2"	4 7/8"	8 11/16"	1'-1 9/16"	1'-4 1/2"	1'-7"	2'-0 5/16"	2'-5"	2'-8 7/8"	2'-9 5/16"	3'-1 13/16"	3'-6 11/16"	3'-7 3/16"	3'-11 3/4"	4'-4 7/16"	4'-8 1/2"	4'-10 7/16"	5'-0 7/16"	5'-4 15/16"	5'-10 7/16"	6'-5"	7'-0 5/16"

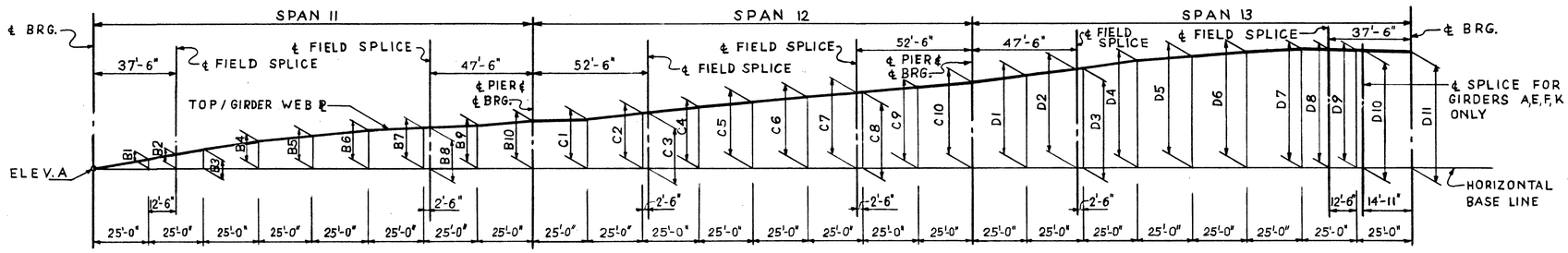
* FOR FABRICATION OF STRUCTURAL STEEL - INCLUDES AN ALLOWANCE FOR DEFLECTIONS DUE TO DEAD LOAD OF DECK SLAB CONCRETE, STRUCTURAL STEEL, PARAPET CONCRETE AND WEARING SURFACE AND ALSO AN ALLOWANCE FOR THE PROFILE GRADE EFFECT.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.Y. HUO
DRAWN BY L. TROUSIL
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

TOP OF GIRDER WEB ELEVATIONS AND FABRICATION DIAGRAMS
UNITS 3 AND 7
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

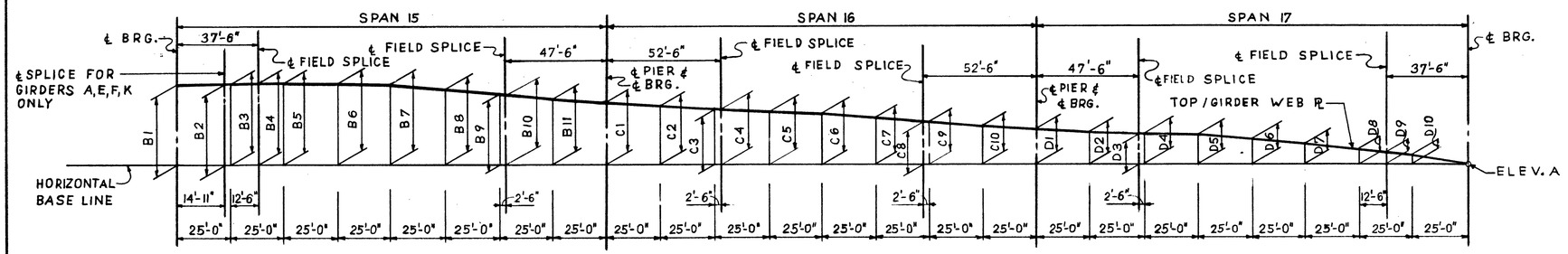
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-IF&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	21
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

TOP / GIRDER WEB ℄ ELEVATIONS* — UNIT 4



GIRDER	ELEV. A	DIMENSION																												
		B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11
A	612.181	5 9/16"	7 15/16"	10 3/8"	1'-2 3/16"	1'-4 15/16"	1'-6 3/4"	1'-7 13/16"	1'-7 7/8"	1'-8 11/16"	1'-10 1/16"	2'-0 5/16"	2'-3 3/16"	2'-3 7/16"	2'-6 3/16"	2'-8 7/8"	2'-11 1/8"	3'-0 7/8"	3'-1 1/16"	3'-3 1/8"	3'-5 3/4"	3'-9 1/8"	4'-0 1/2"	4'-0 7/8"	4'-4 5/16"	4'-7"	4'-8 1/2"	4'-8 7/8"	4'-8 9/16"	4'-8 1/4"	4'-7 11/16"	4'-6 13/16"
B	612.323	5 3/4"	8 5/16"	10 3/4"	1'-2 5/8"	1'-5 7/16"	1'-7 1/8"	1'-8 1/16"	1'-8 1/8"	1'-8 5/16"			2'-3 1/4"	2'-3 1/2"	2'-6 5/16"	2'-9 1/16"	2'-11 1/4"	3'-0 5/16"	3'-1 1/8"			3'-9 1/4"	4'-0 3/4"	4'-1 1/8"	4'-4 3/4"	4'-7 1/2"	4'-9"	4'-9 5/16"	4'-9"	4'-8 7/16"		4'-6 15/16"
C	612.463	↕	↕	↕	↕	↕	↕	↕	↕	↕	↓	↓	↕	↕	↕	↕	↕	↕	↕	↓	↓	↕	↕	↕	↕	↕	↕	↕	↕	↕	↓	4'-7"
D	612.603	5 3/4"	8 5/16"	10 3/4"	1'-2 5/8"	1'-5 7/16"	1'-7 1/8"	1'-8 1/16"	1'-8 1/8"	1'-8 13/16"			2'-3 1/4"	2'-3 1/2"	2'-6 5/16"	2'-9 1/16"	2'-11 1/4"	3'-0 5/16"	3'-1 1/8"			3'-9 1/4"	4'-0 3/4"	4'-1 1/8"	4'-4 3/4"	4'-7 1/2"	4'-9"	4'-9 5/16"	4'-9"	4'-8 7/16"		4'-6 15/16"
E	612.743	5 9/16"	7 15/16"	10 3/8"	1'-2 3/16"	1'-4 15/16"	1'-6 3/4"	1'-7 13/16"	1'-7 7/8"	1'-8 11/16"			2'-3 3/16"	2'-3 7/16"	2'-6 3/16"	2'-8 7/8"	2'-11 1/8"	3'-0 7/8"	3'-1 1/16"			3'-9 1/8"	4'-0 1/2"	4'-0 7/8"	4'-4 5/16"	4'-7"	4'-8 1/2"	4'-8 7/8"	4'-8 9/16"	4'-8 1/4"	4'-7 11/16"	4'-6 13/16"
F	612.743	5 9/16"	7 15/16"	10 3/8"	1'-2 3/16"	1'-4 15/16"	1'-6 3/4"	1'-7 13/16"	1'-7 7/8"	1'-8 11/16"			2'-3 3/16"	2'-3 7/16"	2'-6 3/16"	2'-8 7/8"	2'-11 1/8"	3'-0 7/8"	3'-1 1/16"			3'-9 1/8"	4'-0 1/2"	4'-0 7/8"	4'-4 5/16"	4'-7"	4'-8 1/2"	4'-8 7/8"	4'-8 9/16"	4'-8 1/4"	4'-7 11/16"	4'-6 13/16"
G	612.603	5 3/4"	8 5/16"	10 3/4"	1'-2 5/8"	1'-5 7/16"	1'-7 1/8"	1'-8 1/16"	1'-8 1/8"	1'-8 13/16"			2'-3 1/4"	2'-3 1/2"	2'-6 5/16"	2'-9 1/16"	2'-11 1/4"	3'-0 5/16"	3'-1 1/8"			3'-9 1/4"	4'-0 3/4"	4'-1 1/8"	4'-4 3/4"	4'-7 1/2"	4'-9"	4'-9 5/16"	4'-9"	4'-8 7/16"		4'-6 15/16"
H	612.463	↕	↕	↕	↕	↕	↕	↕	↕	↕	↓	↓	↕	↕	↕	↕	↕	↕	↕	↓	↓	↕	↕	↕	↕	↕	↕	↕	↕	↕	↓	4'-7"
J	612.323	5 3/4"	8 5/16"	10 3/4"	1'-2 5/8"	1'-5 7/16"	1'-7 1/8"	1'-8 1/16"	1'-8 1/8"	1'-8 13/16"			2'-3 1/4"	2'-3 1/2"	2'-6 5/16"	2'-9 1/16"	2'-11 1/4"	3'-0 5/16"	3'-1 1/8"			3'-9 1/4"	4'-0 3/4"	4'-1 1/8"	4'-4 3/4"	4'-7 1/2"	4'-9"	4'-9 5/16"	4'-9"	4'-8 7/16"		4'-6 15/16"
K	612.181	5 9/16"	7 15/16"	10 3/8"	1'-2 3/16"	1'-4 15/16"	1'-6 3/4"	1'-7 13/16"	1'-7 7/8"	1'-8 11/16"	1'-10 1/16"	2'-0 5/16"	2'-3 3/16"	2'-3 7/16"	2'-6 3/16"	2'-8 7/8"	2'-11 1/8"	3'-0 7/8"	3'-1 1/16"	3'-3 1/8"	3'-5 3/4"	3'-9 1/8"	4'-0 1/2"	4'-0 7/8"	4'-4 5/16"	4'-7"	4'-8 1/2"	4'-8 7/8"	4'-8 9/16"	4'-8 1/4"	4'-7 11/16"	4'-6 13/16"

TOP / GIRDER WEB ℄ ELEVATIONS* — UNIT 6



GIRDER	ELEV. A	DIMENSION																												
		B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
A	611.807	4'-11 5/16"	5'-0 1/8"	5'-0 3/4"	5'-1 1/16"	5'-1 3/8"	5'-1"	4'-11 1/2"	4'-8 13/16"	4'-5 3/8"	4'-5"	4'-1 5/8"	3'-10 1/4"	3'-7 5/8"	3'-5 9/16"	3'-5 3/8"	3'-3 5/8"	3'-1 3/8"	2'-10 11/16"	2'-7 15/16"	2'-7 5/8"	2'-4 3/4"	2'-2 1/2"	2'-0 7/8"	1'-11 13/16"	1'-11 11/16"	1'-10 1/4"	1'-7 15/16"	1'-4 9/16"	1'-0"	9 3/16"	6 3/8"
B	611.948	4'-11 7/16"		5'-1 1/16"	5'-1 9/16"	5'-1 7/8"	5'-1 9/16"	5'-0"	4'-9 1/4"	4'-5 5/8"	4'-5 1/4"	4'-1 3/4"			3'-5 5/8"		3'-3 3/4"	3'-1 9/16"	2'-10 13/16"	2'-8 1/16"	2'-7 11/16"	2'-4 13/16"		2'-1"	2'-0 1/16"	1'-11 15/16"	1'-10 5/8"	1'-8 7/16"	1'-5"	1'-0 3/8"	9 9/16"	6 9/16"
C	612.089	4'-11 1/2"		↕	↕	↕	↕	↕	↕	↕	↕	↕			↕		↕	↕	↕	↕	↕	↕		↕	↕	↕	↕	↕	↕	↕	↕	↕
D	612.229	4'-11 7/16"		5'-1 1/16"	5'-1 9/16"	5'-1 7/8"	5'-1 9/16"	5'-0"	4'-9 1/4"	4'-5 5/8"	4'-5 1/4"	4'-1 3/4"			3'-5 5/8"		3'-3 3/4"	3'-1 9/16"	2'-10 13/16"	2'-8 1/16"	2'-7 11/16"	2'-4 13/16"		2'-1"	2'-0 1/16"	1'-11 15/16"	1'-10 5/8"	1'-8 7/16"	1'-5"	1'-0 3/8"	9 9/16"	6 9/16"
E	612.368	4'-11 5/16"	5'-0 1/8"	5'-0 3/4"	5'-1 1/16"	5'-1 3/8"	5'-1"	4'-11 1/2"	4'-8 13/16"	4'-5 3/8"	4'-5"	4'-1 5/8"			3'-5 9/16"		3'-3 5/8"	3'-1 3/8"	2'-10 11/16"	2'-7 15/16"	2'-7 5/8"	2'-4 3/4"		2'-0 7/8"	1'-11 13/16"	1'-11 11/16"	1'-10 1/4"	1'-7 15/16"	1'-4 9/16"	1'-0"	9 3/16"	6 3/8"
F	612.368	4'-11 5/16"	5'-0 1/8"	5'-0 3/4"	5'-1 1/16"	5'-1 3/8"	5'-1"	4'-11 1/2"	4'-8 13/16"	4'-5 3/8"	4'-5"	4'-1 5/8"			3'-5 9/16"		3'-3 5/8"	3'-1 3/8"	2'-10 11/16"	2'-7 15/16"	2'-7 5/8"	2'-4 3/4"		2'-0 7/8"	1'-11 13/16"	1'-11 11/16"	1'-10 1/4"	1'-7 15/16"	1'-4 9/16"	1'-0"	9 3/16"	6 3/8"
G	612.229	4'-11 7/16"		5'-1 1/16"	5'-1 9/16"	5'-1 7/8"	5'-1 9/16"	5'-0"	4'-9 1/4"	4'-5 5/8"	4'-5 1/4"	4'-1 3/4"			3'-5 5/8"		3'-3 3/4"	3'-1 9/16"	2'-10 13/16"	2'-8 1/16"	2'-7 11/16"	2'-4 13/16"		2'-1"	2'-0 1/16"	1'-11 15/16"	1'-10 5/8"	1'-8 7/16"	1'-5"	1'-0 3/8"	9 9/16"	6 9/16"
H	612.089	4'-11 1/2"		↕	↕	↕	↕	↕	↕	↕	↕	↕			↕		↕	↕	↕	↕	↕	↕		↕	↕	↕	↕	↕	↕	↕	↕	↕
J	611.948	4'-11 7/16"		5'-1 1/16"	5'-1 9/16"	5'-1 7/8"	5'-1 9/16"	5'-0"	4'-9 1/4"	4'-5 5/8"	4'-5 1/4"	4'-1 3/4"			3'-5 5/8"		3'-3 3/4"	3'-1 9/16"	2'-10 13/16"	2'-8 1/16"	2'-7 11/16"	2'-4 13/16"		2'-1"	2'-0 1/16"	1'-11 15/16"	1'-10 5/8"	1'-8 7/16"	1'-5"	1'-0 3/8"	9 9/16"	6 9/16"
K	611.807	4'-11 5/16"	5'-0 1/8"	5'-0 3/4"	5'-1 1/16"	5'-1 3/8"	5'-1"	4'-11 1/2"	4'-8 13/16"	4'-5 3/8"	4'-5"	4'-1 5/8"	3'-10 1/4"	3'-7 5/8"	3'-5 9/16"	3'-5 3/8"	3'-3 5/8"	3'-1 3/8"	2'-10 11/16"	2'-7 15/16"	2'-7 5/8"	2'-4 3/4"	2'-2 1/2"	2'-0 7/8"	1'-11 13/16"	1'-11 11/16"	1'-10 1/4"	1'-7 15/16"	1'-4 9/16"	1'-0"	9 3/16"	6 3/8"

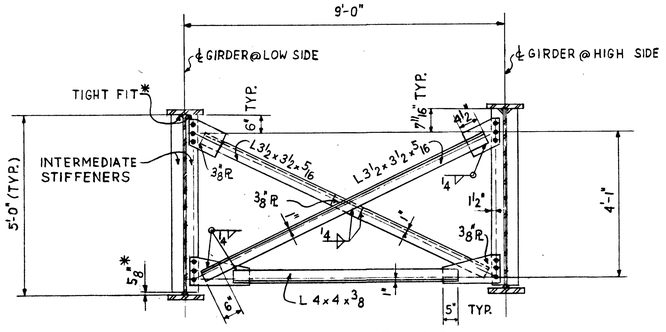
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.Y. HUO
DRAWN BY L. TROUSIL
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

* FOR FABRICATION OF STRUCTURAL STEEL - INCLUDES AN ALLOWANCE FOR DEFLECTIONS DUE TO DEAD LOAD OF DECK SLAB CONCRETE, STRUCTURAL STEEL, PARAPET CONCRETE AND WEARING SURFACE AND ALSO AN ALLOWANCE FOR THE PROFILE GRADE EFFECT.

TOP OF GIRDER WEB ELEVATIONS AND FABRICATION DIAGRAMS
UNITS 4 AND 6

F.A.I. ROUTE 280 SECTION 81-IF & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

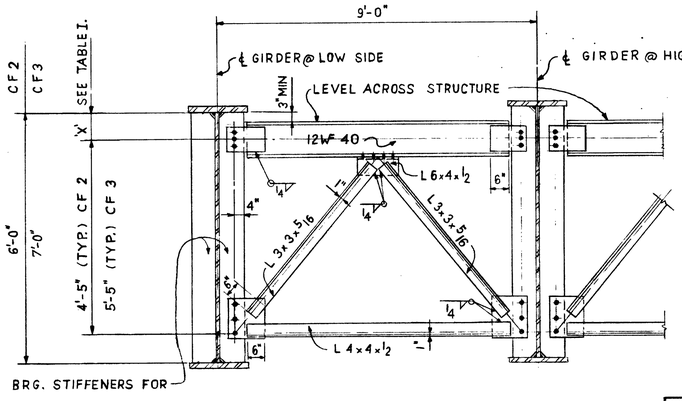
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	22
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



INTERIOR CROSS-FRAME CF 1

SCALE: 1/2" = 1'-0"

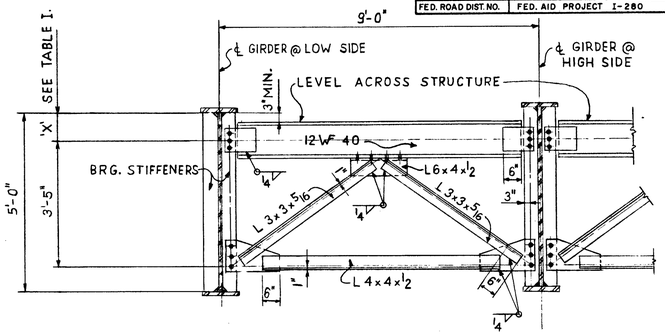
* NOTE: FOR TYPE 'A' STIFFENER ONLY
FOR TYPE 'B' SEE DETAIL THIS SHEET.



END CROSS-FRAME CF 2 & CF 3

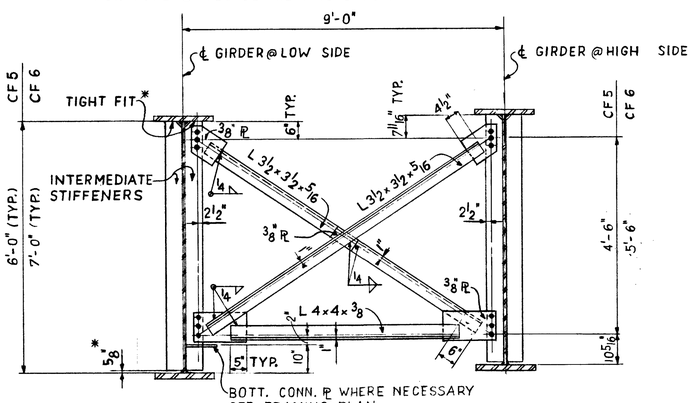
SCALE: 1/2" = 1'-0"

TABLE I.	
GIRDER@LOW SIDE	'X'
'A' & 'K'	9"
'J' & 'B'	10 11/16"
'H' & 'C'	1'-0 3/8"
'D' & 'G'	1'-2 1/16"



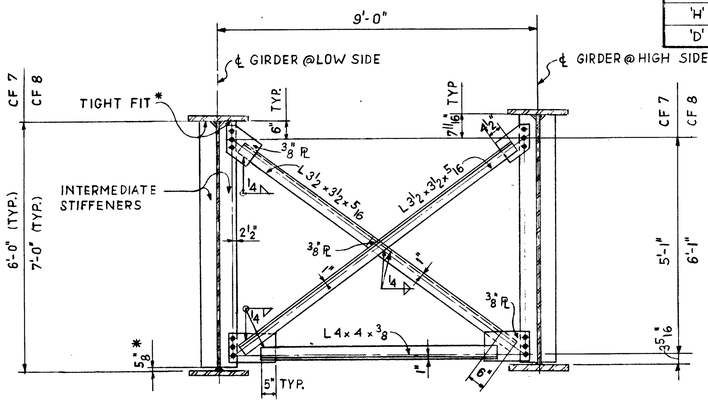
END CROSS-FRAME CF 4

SCALE: 1/2" = 1'-0"

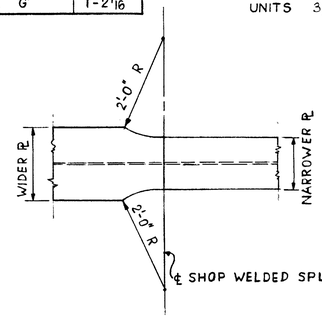


INTERIOR CROSS-FRAME CF 5 & CF 6

SCALE: 1/2" = 1'-0"



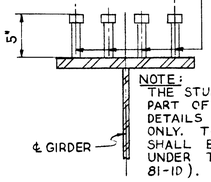
INTERIOR CROSS-FRAME CF 7 & CF 8



DETAIL OF FLANGE PLATE WIDTH TRANSITION

TYP. EXCEPT NOTED BELOW
UNITS 3, 4, 6, & 7
3 SPACES @ 3"
3 SPACES @ 4"

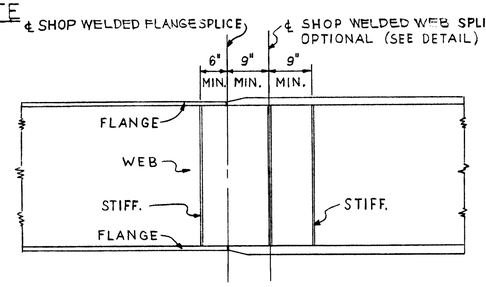
3/4" ϕ x 5" CR 1020 STL.
GRANULAR OR FLUX FILLED STUDS, AUTOMATICALLY END WELDED.



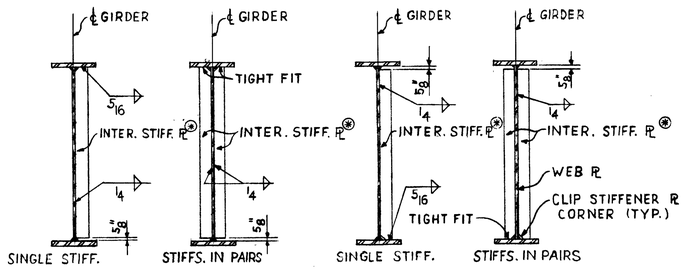
NOTE: THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT; HOWEVER, THE DETAILS ARE SHOWN FOR INFORMATION ONLY. THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED UNDER THE DECK CONTRACT (SECTION 81-1D).

DETAIL OF SHEAR CONNECTORS

FOR SHEAR CONNECTOR LOCATION & SPACING SEE GIRDER ELEVATIONS
SCALE: 1 1/2" = 1'-0"

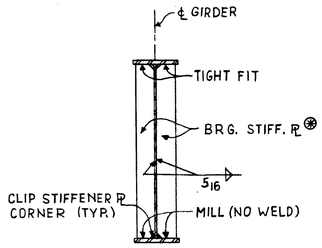


DETAIL AT GIRDER SHOP SPLICES

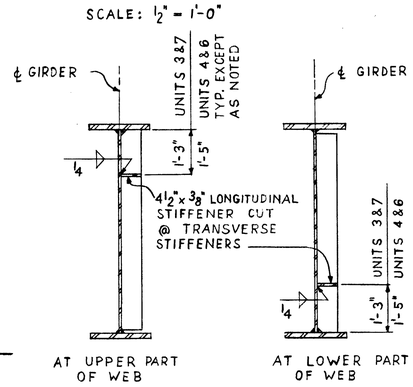


TYPE 'A' TYPE 'B'

INTERMEDIATE STIFFENER DETAIL



BRG. STIFFENER DETAIL



LONGITUDINAL STIFFENER DETAIL

⊛ NOTE: FOR PLATE SIZE SEE GIRDER ELEVATIONS EACH UNIT.

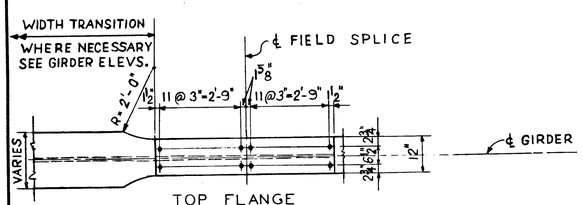
NOTE: ALL FASTENERS FOR CROSSFRAME CONNECTIONS SHALL BE ASTM-A325 HIGH STRENGTH BOLTS: BOLTS 3/4" ϕ; OPEN HOLES 13/16" ϕ.

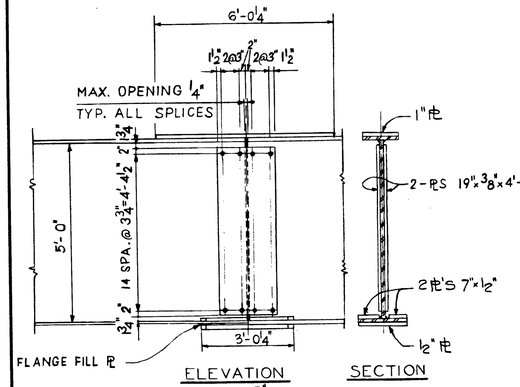
CROSS FRAME & TYPICAL DETAILS
UNITS 1 THRU 4 AND 6 THRU 9

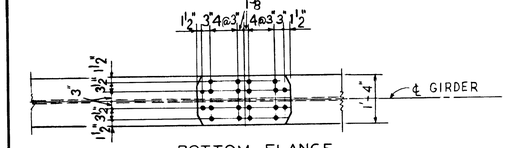
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.Y. HUO
DRAWN BY L. TROUSIL
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

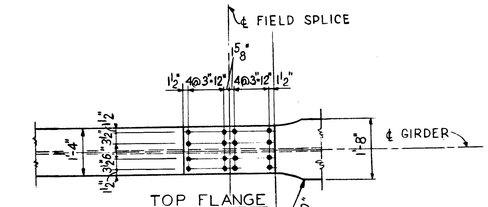
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	23
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

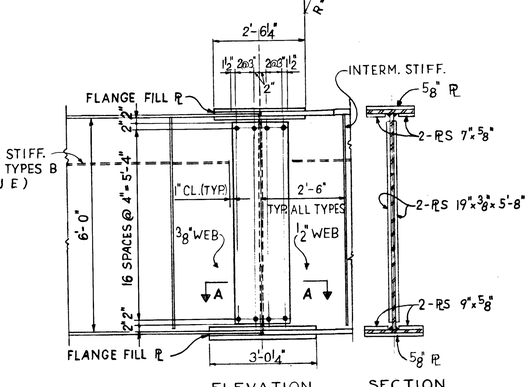


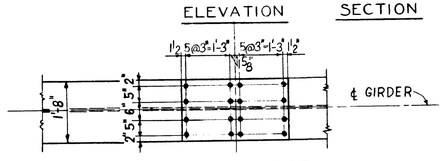




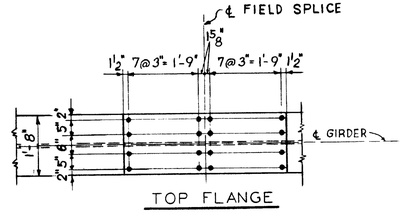
TYPE A

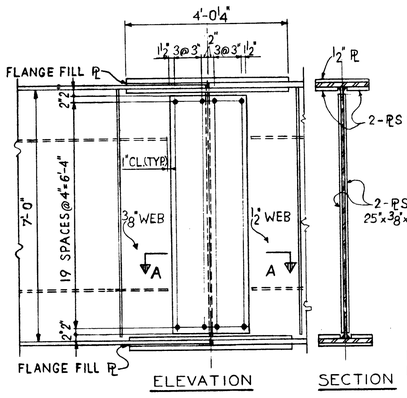




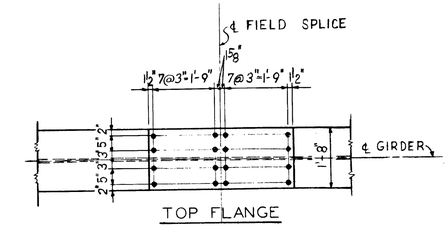


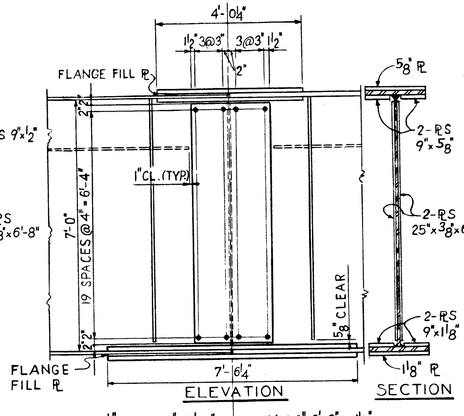
TYPE B

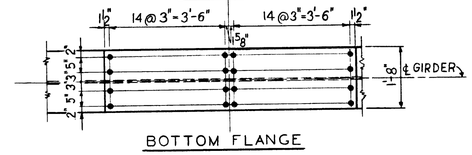




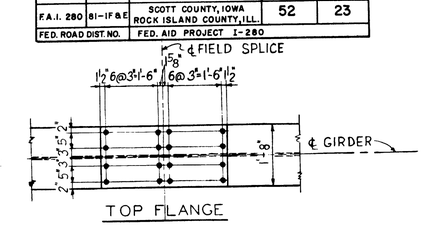
TYPE C

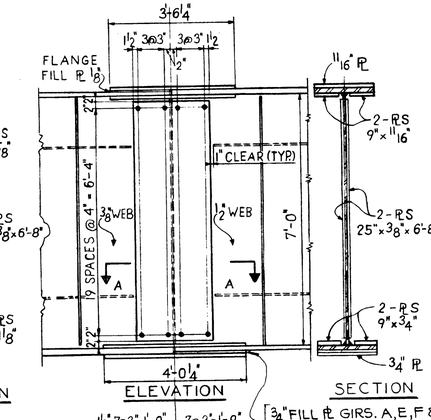


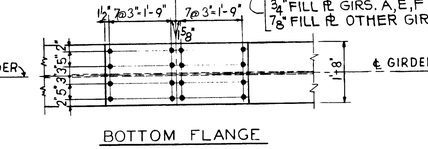




TYPE D





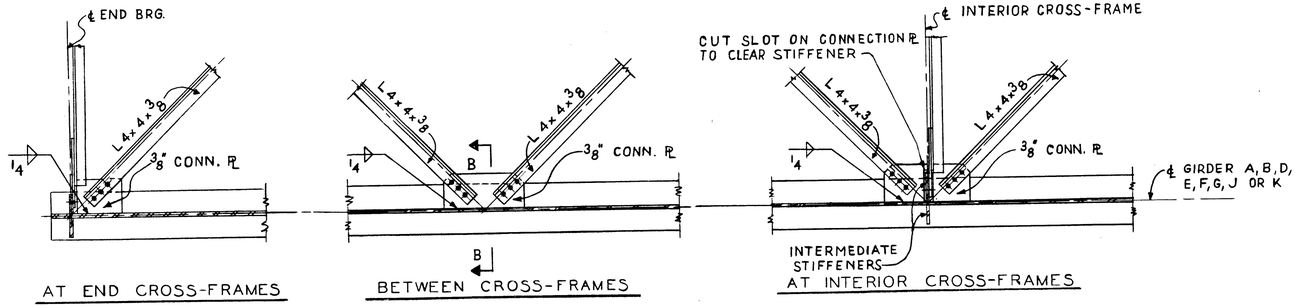


TYPE E

NOTES:
1. FASTENERS FOR GIRDER SPLICES SHALL BE HIGH STRENGTH BOLTS: BOLTS ⅞" ϕ; OPEN HOLES 15/16" ϕ.
2. FLANGE & WEB FILL PLS SHALL BE USED WHERE NECESSARY. SEE GIRDER ELEV. AND FRAMING PLAN IN EACH UNIT FOR LOCATION & SIZE RESPECTIVELY OF FLANGE FILL PLS & WEB FILL PLS.
3. FASTENERS FOR BOTTOM LATERAL CONNECTIONS SHALL BE HIGH STRENGTH BOLTS: BOLTS ¾" ϕ, OPEN HOLES 13/16" ϕ.

GIRDER FIELD SPLICE DETAILS

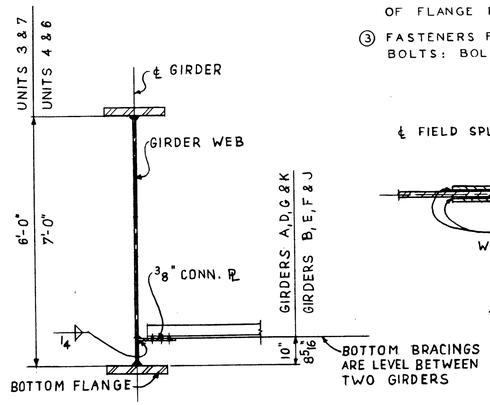
SCALE: ½" = 1'-0"



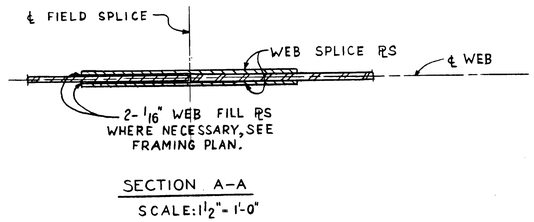
BOTTOM LATERAL CONNECTION DETAILS

PLAN VIEWS

SCALE: ½" = 1'-0"
FOR UNITS 3, 4, 6 & 7 ONLY



SECTION B-B



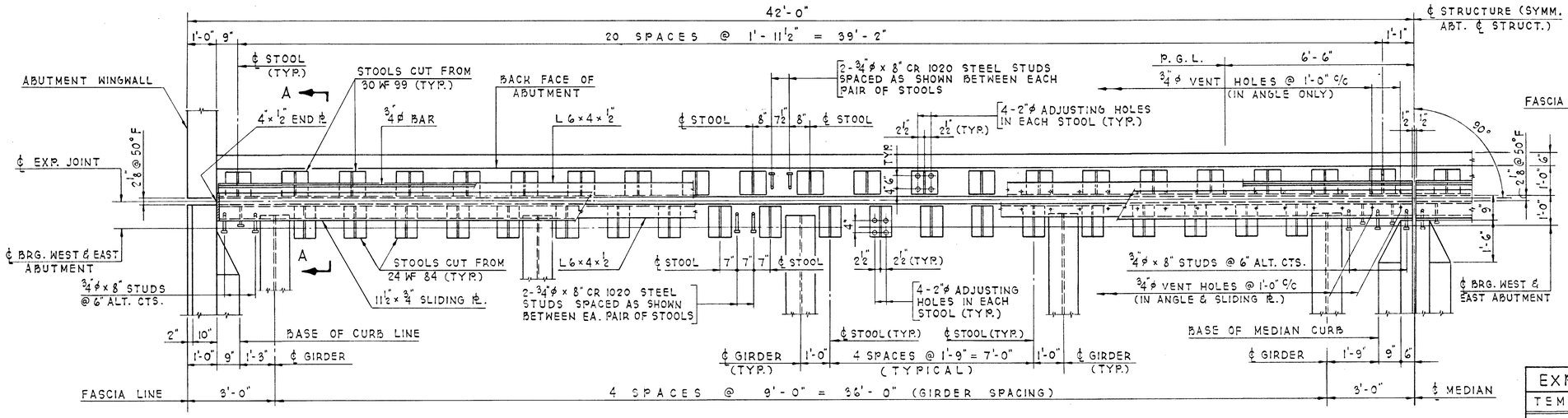
SECTION A-A

SCALE: 1½" = 1'-0"

GIRDER FIELD SPLICES AND TYPICAL DETAILS
UNITS 1 THRU 4 AND 6 THRU 9
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

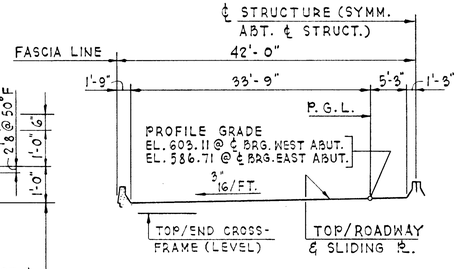
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.Y. HUO
DRAWN BY L. TROUSIL
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	24
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



PLAN OF SLIDING PLATE EXPANSION GUARD AT WEST & EAST ABUTMENTS

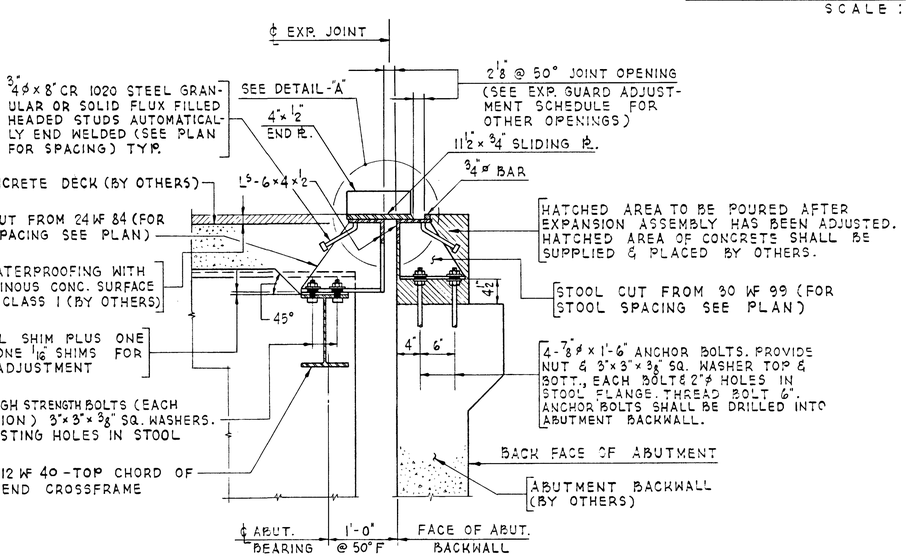
SCALE : ½" = 1'-0"



ROADWAY PROFILE

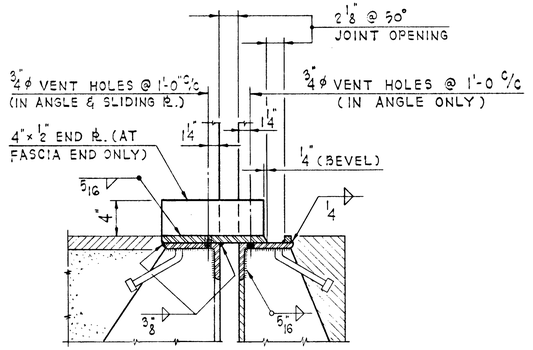
EXP. GUARD ADJUSTMENT SCHEDULE						
TEMPERATURE °F	110°	90°	70°	50°	30°	10°
JOINT OPENING *	1 3/16"	1½"	1 13/16"	2⅛"	2 7/16"	2¾"

*JOINT OPENING WILL INCREASE OR DECREASE APPROX. ¼" FOR EACH 10° DROP OR RISE IN TEMPERATURE.



SECTION A-A

SCALE : 1" = 1'-0"



DETAIL - "A"

SCALE : 1½" = 1'-0"

EXPANSION GUARD NOTES :

ALL STRUCTURAL STEEL SHALL BE ASTM - A 36.

SEE SECTION 503.08 (C) OF THE STANDARD SPECIFICATIONS FOR EXPANSION GUARD JOINT OPENINGS.

FOR STRUCTURAL STEEL NOTES SEE SHEET 8.

ALL EXPANSION GUARD ASSEMBLIES SHALL BE FABRICATED & ERECTED TO CONFORM TO THE ROADWAY CROWN AND SLOPE OF GRADE AT THE GUARD. THEY SHALL BE ASSEMBLED IN THE SHOP FOR INSPECTION.

ALL PARTS OF GUARD ASSEMBLY INCLUDING STUDS SHALL BE INCLUDED IN STRUCTURAL STEEL FOR PAYMENT.

P.G.L. DENOTES PROFILE GRADE LINE.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY —
DRAWN BY F. BOBINAS
CHECKED W. J. ZAPFEL
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

EXPANSION GUARD EAST AND WEST ABUTMENTS

F.A.I. ROUTE 280 SECTION 81-1F&E

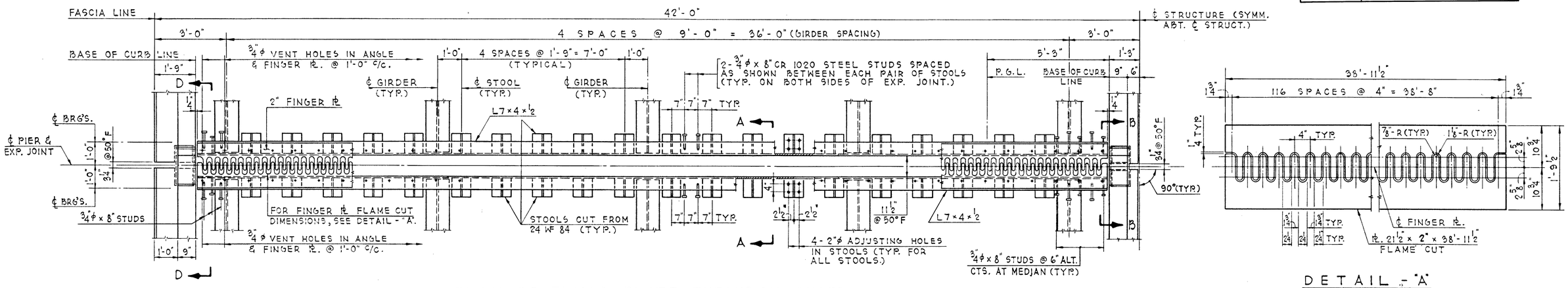
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	25
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

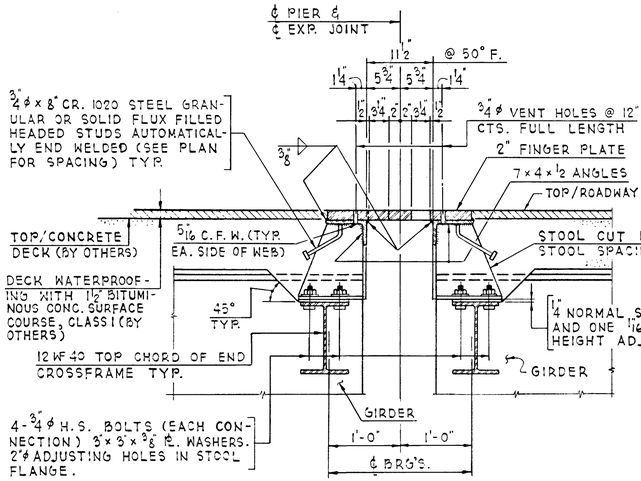


PLAN OF FINGER PLATE EXPANSION GUARD FOR PIERS #3, #10 & #24

SCALE : 1/2" = 1'-0"

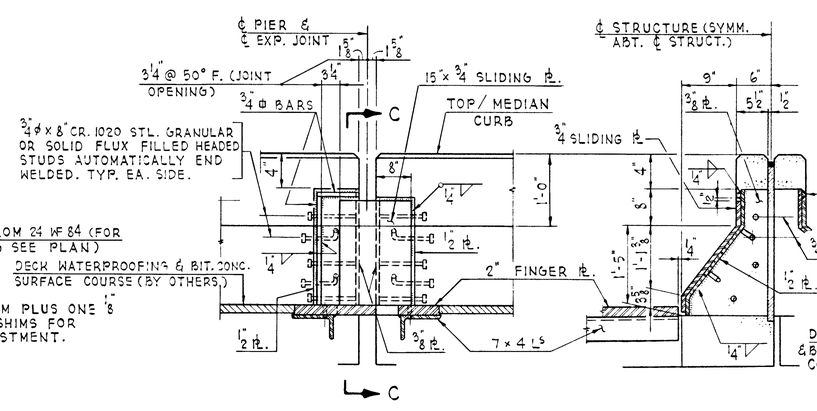
DETAIL - "A"

SCALE : 1" = 1'-0"



SECTION A - A

SCALE : 1" = 1'-0"



SECTION B - B

SECTION C - C

EXPANSION JOINT AT MEDIAN CURB

SCALE : 1" = 1'-0"

SECTION D - D

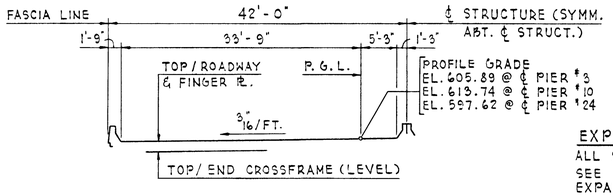
SECTION E - E

EXPANSION JOINT AT FASCIA CURB

SCALE : 1" = 1'-0"

EXP. GUARD ADJUSTMENT SCHEDULE						
TEMPERATURE °F	110°	90°	70°	50°	30°	10°
JT. OPENING @ PIERS 3 & 24 *	1 3/8"	2"	2 5/8"	3 1/4"	3 7/8"	4 1/2"
JT. OPENING @ PIER 10 *	1 5/8"	2 1/8"	2 11/16"	3 1/4"	3 13/16"	4 3/8"

* JOINT OPENING WILL INCREASE OR DECREASE APPROX. 5/16" FOR EACH 10° DROP OR RISE IN TEMPERATURE AT PIERS 3 & 24.
JOINT OPENING WILL INCREASE OR DECREASE APPROX. 1/4" FOR EACH 10° DROP OR RISE IN TEMPERATURE AT PIER 10.



ROADWAY PROFILE

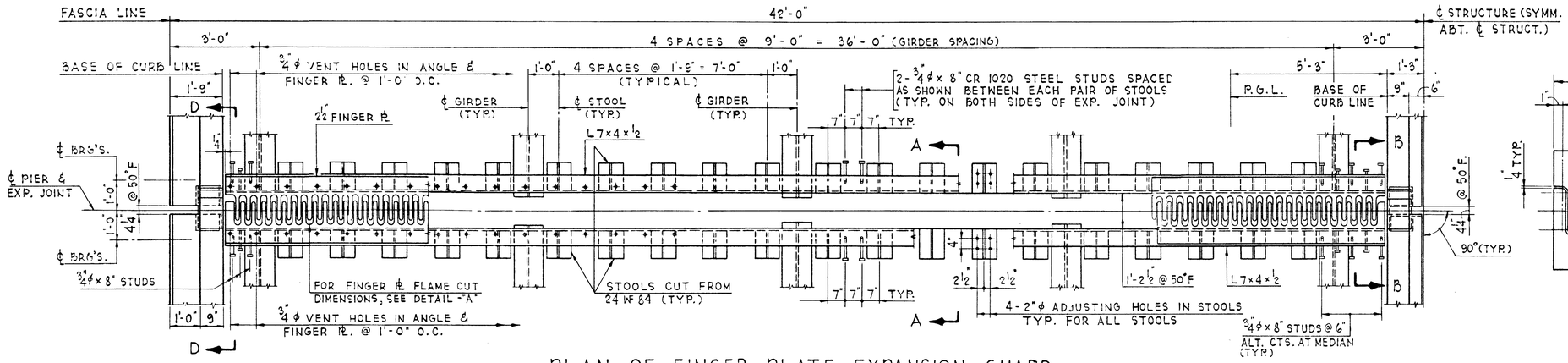
EXPANSION GUARD NOTES :

ALL STRUCTURAL STEEL SHALL BE ASTM-A36.
SEE SECTION 503.08(C) OF THE STANDARD SPECIFICATIONS FOR EXPANSION GUARD JOINT OPENINGS.
FOR STRUCTURAL STEEL NOTES SEE SHEET 8.
ALL EXPANSION GUARD ASSEMBLIES SHALL BE FABRICATED & ERECTED TO CONFORM TO THE ROADWAY CROWN AND SLOPE OF GRADE AT THE GUARD. THEY SHALL BE ASSEMBLED IN THE SHOP FOR INSPECTION.
ALL PARTS OF GUARD ASSEMBLY INCLUDING STUDS SHALL BE INCLUDED IN STRUCTURAL STEEL FOR PAYMENT.
P.G.L. DENOTES PROFILE GRADE LINE.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY ——
DRAWN BY F. BOBINAS
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

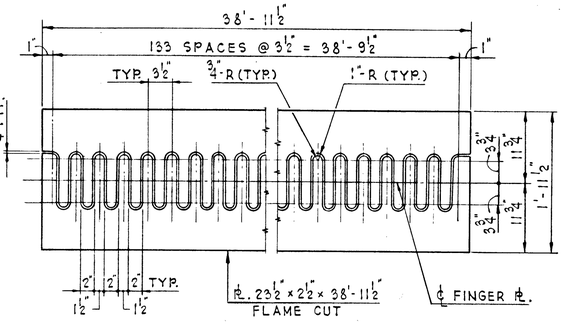
EXPANSION GUARD
PIERS 3, 10 AND 24
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	26
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



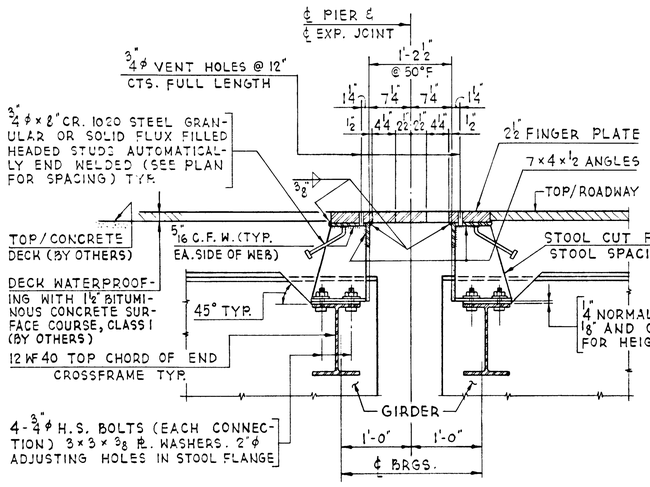
PLAN OF FINGER PLATE EXPANSION GUARD FOR PIERS #7, #17 & #20

SCALE : 1/2" = 1'-0"



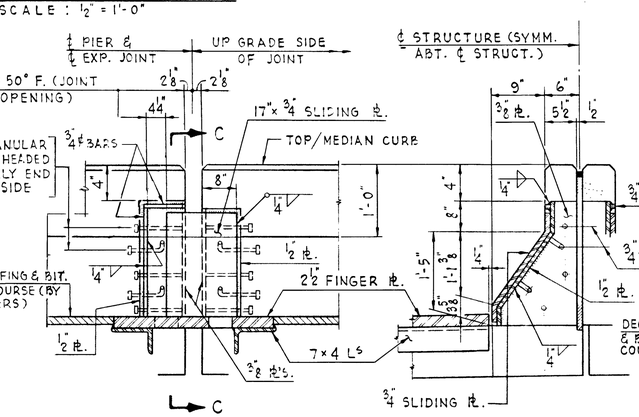
DETAIL - "A"

SCALE : 1" = 1'-0"



SECTION A - A

SCALE : 1" = 1'-0"

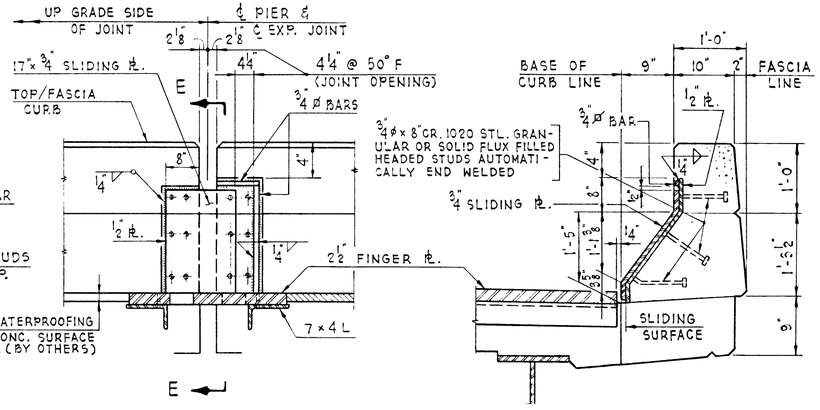


SECTION B - B

SECTION C - C

EXPANSION JOINT AT MEDIAN CURB

SCALE : 1" = 1'-0"



SECTION D - D

SECTION E - E

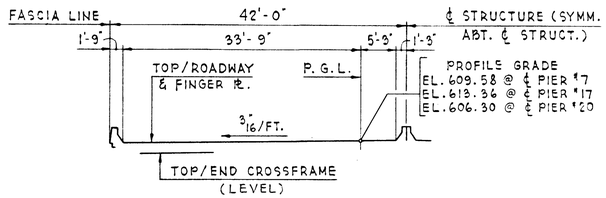
EXPANSION JOINT AT FASCIA CURB

SCALE : 1" = 1'-0"

EXP. GUARD ADJUSTMENT SCHEDULE						
TEMPERATURE °F	110°	90°	70°	50°	30°	10°
JT. OPENING @ PIERS 7 & 20 ⊛	1 7/8"	2 1/16"	3 3/16"	4 1/4"	5"	5 13/16"
JT. OPENING @ PIER 17 ⊠	1 11/16"	2 1/2"	3 3/8"	4 1/4"	5 1/8"	6"

⊛ JOINT OPENING WILL INCREASE OR DECREASE APPROX. 3/8" FOR EACH 10° DROP OR RISE IN TEMPERATURE AT PIERS 7 & 20.

⊠ JOINT OPENING WILL INCREASE OR DECREASE APPROX. 7/16" FOR EACH 10° DROP OR RISE IN TEMPERATURE AT PIER 17.



ROADWAY PROFILE

EXPANSION GUARD NOTES :

SEE SECTION 503.08(C) OF THE STANDARD SPECIFICATIONS FOR EXPANSION GUARD JOINT OPENINGS.

FOR STRUCTURAL STEEL NOTES SEE SHEET 8.

ALL EXPANSION GUARD ASSEMBLIES SHALL BE FABRICATED AND ERECTED TO CONFORM TO THE ROADWAY CROWN AND SLOPE OF GRADE AT THE GUARD. THEY SHALL BE ASSEMBLED IN THE SHOP FOR INSPECTION.

ALL PARTS OF GUARD ASSEMBLY INCLUDING STUDS SHALL BE INCLUDED IN STRUCTURAL STEEL FOR PAYMENT.

P.G.L. DENOTES PROFILE GRADE LINE.

ALL STRUCTURAL STEEL SHALL BE ASTM - A36.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY ____
DRAWN BY F. BOBINAS
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

EXPANSION GUARD PIERS 7, 17 AND 20

F.A.I. ROUTE 280 SECTION 81-1F & E

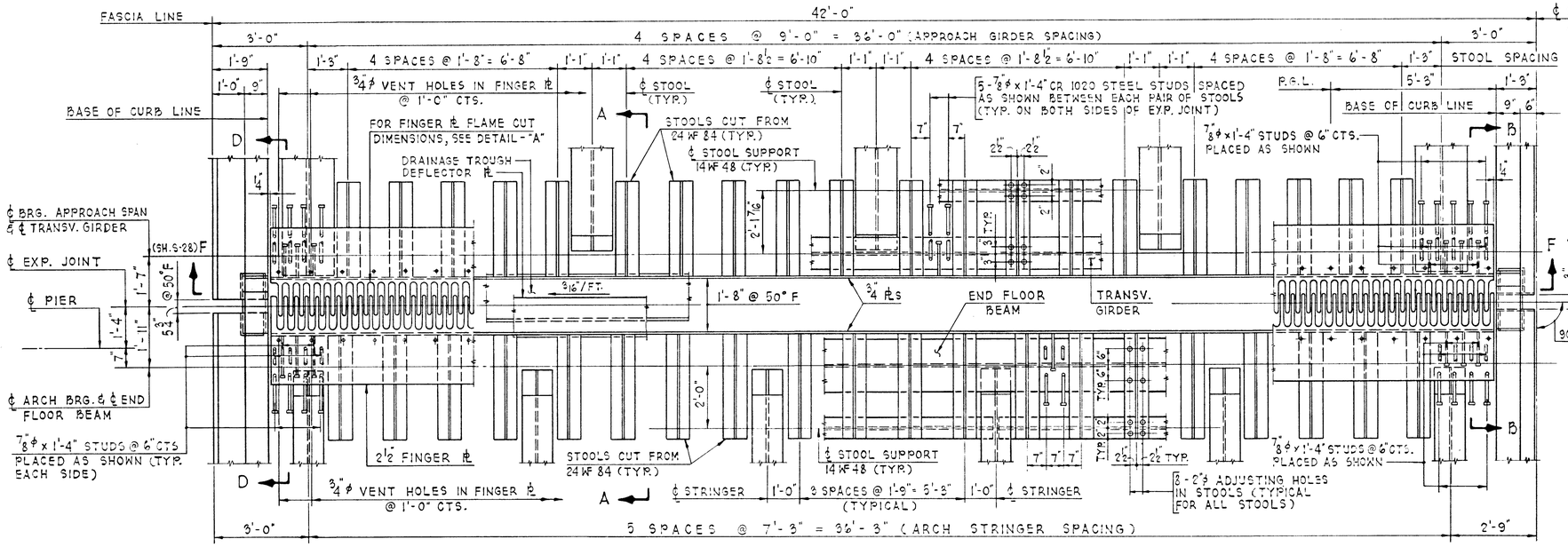
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

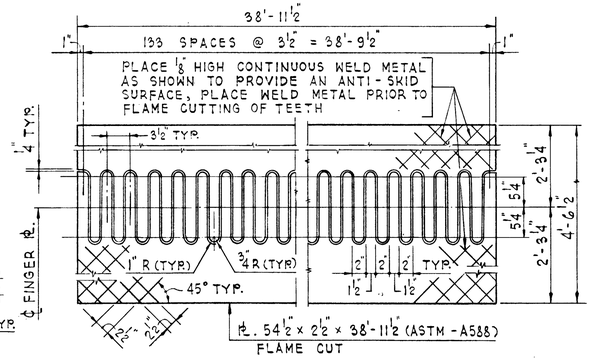
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	27
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



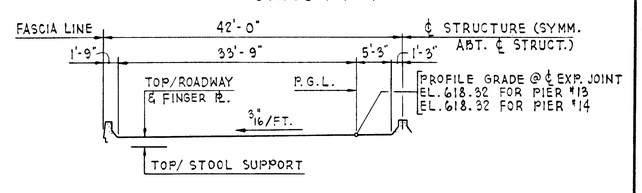
PLAN OF FINGER PLATE EXPANSION GUARD FOR PIERS #13 & #14

SCALE : ½" = 1'-0"

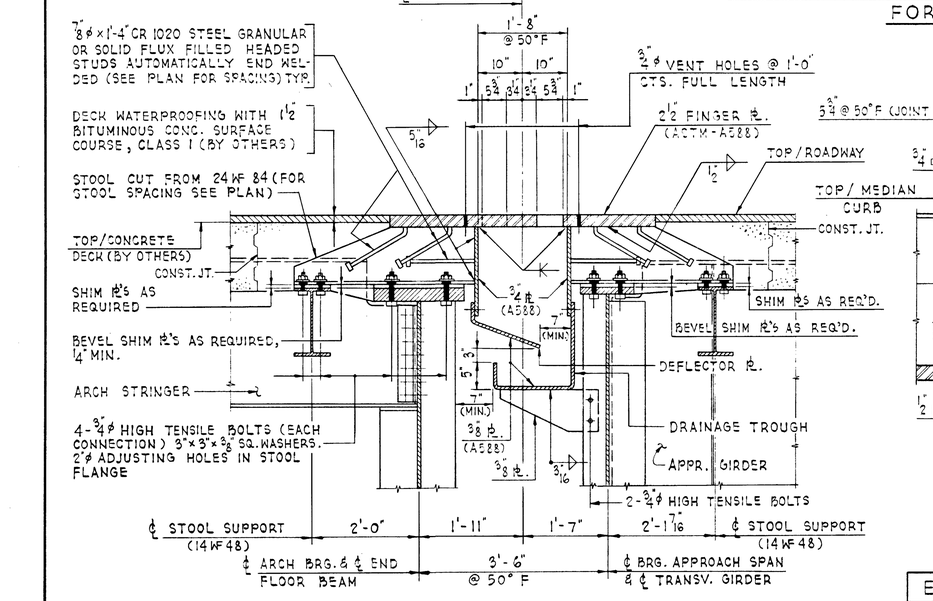


DETAIL - "A"

SCALE : 1" = 1'-0"



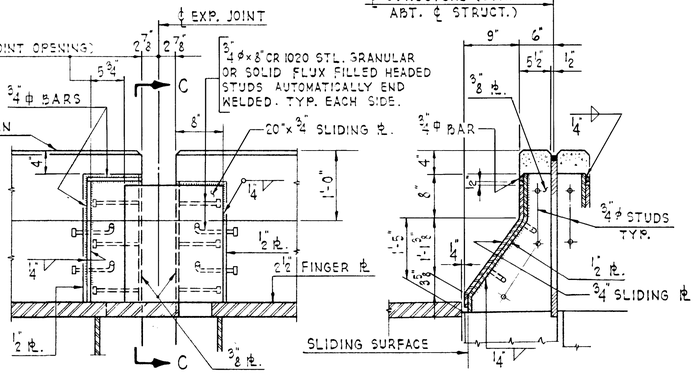
ROADWAY PROFILE



SECTION A - A

SCALE : ¾" = 1'-0"

NOTE : FINAL ADJUSTMENT OF EXPANSION GUARD SHALL BE MADE AFTER DECK CONCRETE IS POURED UP TO CONSTRUCTION JOINTS SHOWN.

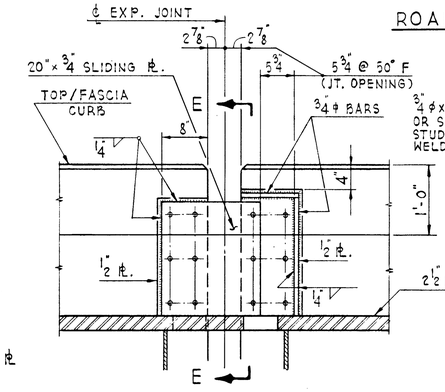


SECTION B - B

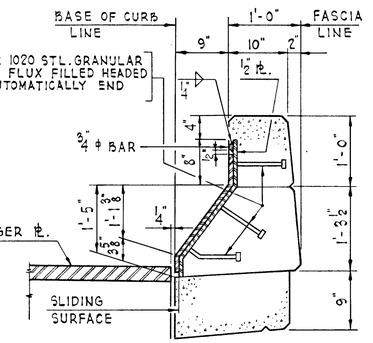
SECTION C - C

EXPANSION JOINT AT MEDIAN CURB

SCALE : 1" = 1'-0"



SECTION D - D



SECTION E - E

EXPANSION JOINT AT FASCIA CURB

SCALE : 1" = 1'-0"

EXP. GUARD ADJUSTMENT SCHEDULE						
TEMPERATURE °F	110°	90°	70°	50°	30°	10°
JT. OPENING @ PIER #13 *	1⅛"	3 5/16"	4 9/16"	5¾"	6 15/16"	8 3/16"
JT. OPENING @ PIER #14 ⊠	3⅞"	4½"	5⅛"	5¾"	6⅜"	7"

* JOINT OPENING WILL INCREASE OR DECREASE APPROX. 5/16" FOR EACH 10° DROP OR RISE IN TEMPERATURE AT PIER #13.

⊠ JOINT OPENING WILL INCREASE OR DECREASE APPROX. ⅜" FOR EACH 10° DROP OR RISE IN TEMPERATURE AT PIER #14.

EXPANSION GUARD NOTES :

ALL STRUCTURAL STEEL SHALL BE ASTM - A36, EXCEPT AS NOTED.

SEE SECTION 503.08(C) OF THE STANDARD SPECIFICATIONS FOR EXPANSION GUARD JOINT OPENINGS.

FOR STRUCTURAL STEEL NOTES SEE SHEET 8.

ALL EXPANSION GUARD ASSEMBLIES SHALL BE FABRICATED AND ERECTED TO CONFORM TO THE ROADWAY CROWN AND SLOPE OF GRADE AT THE GUARD. THEY SHALL BE ASSEMBLED IN THE SHOP FOR INSPECTION.

ALL PARTS OF GUARD ASSEMBLY INCLUDING STUDS SHALL BE INCLUDED IN STRUCTURAL STEEL FOR PAYMENT.

P.G.L. DENOTES PROFILE GRADE LINE.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY W.J. ZAPFEL
DRAWN BY F. BOBINAS
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

EXPANSION GUARD AND DRAINAGE DETAILS PIERS 13 & 14

F.A.I. ROUTE 280 SECTION 81-1F&E

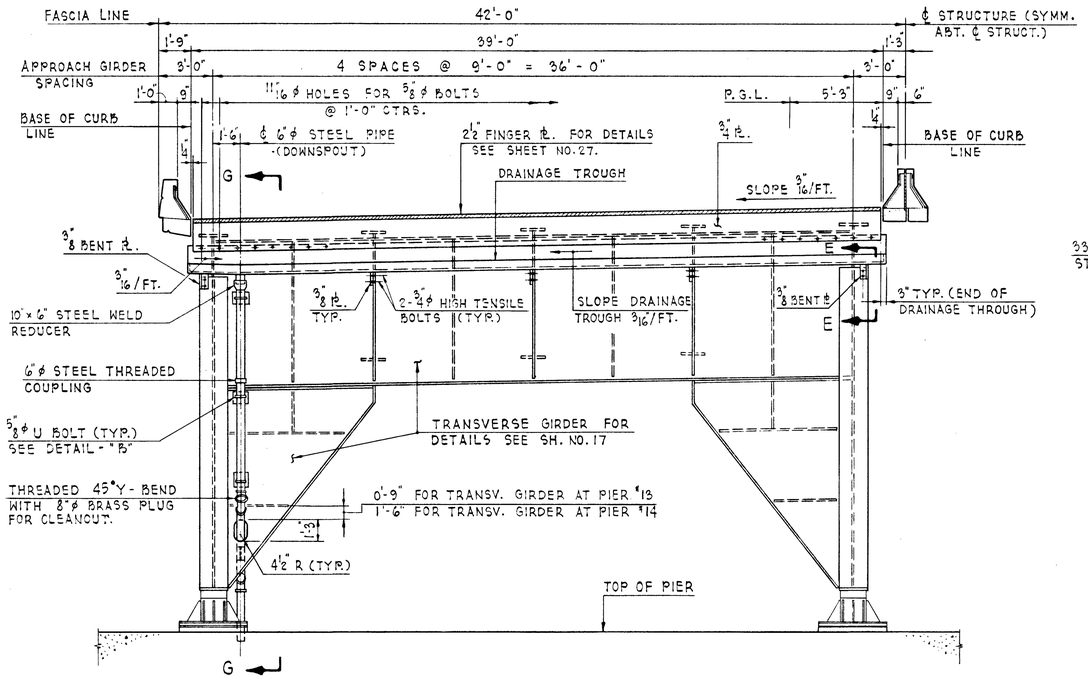
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.

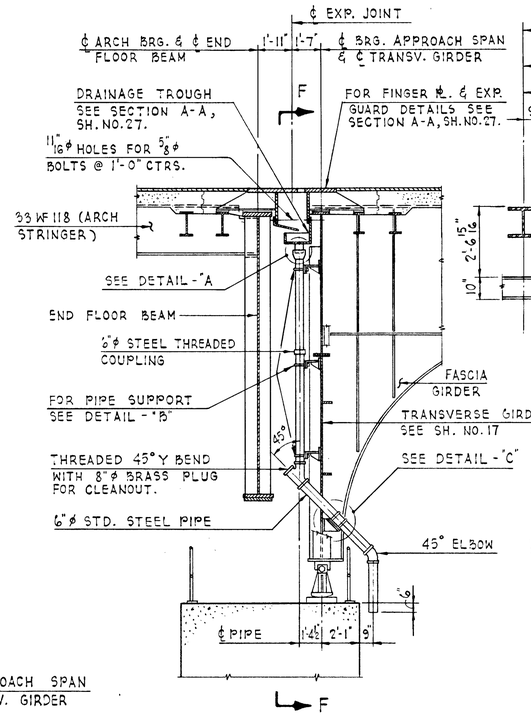
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

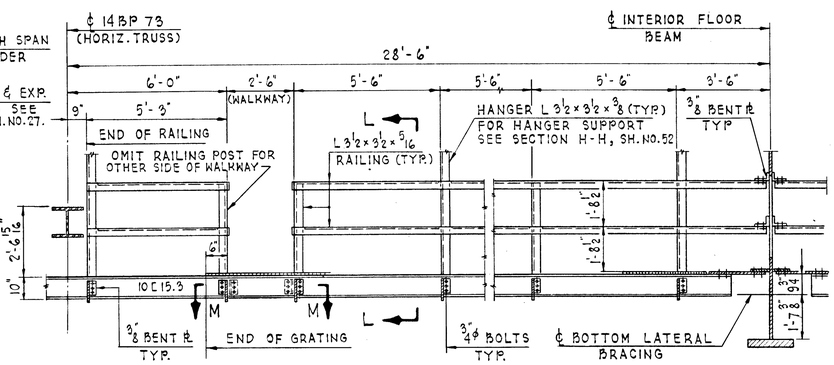
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	28
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



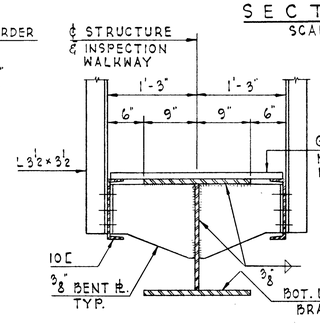
SECTION F - F/SH. S-27
SCALE : 1/4" = 1'-0"



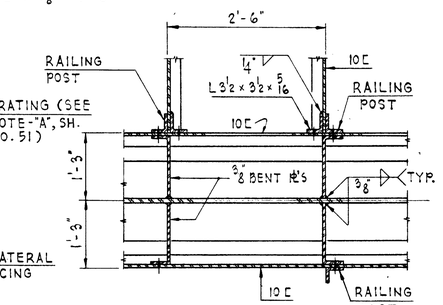
SECTION G - G
SCALE : 1/4" = 1'-0"



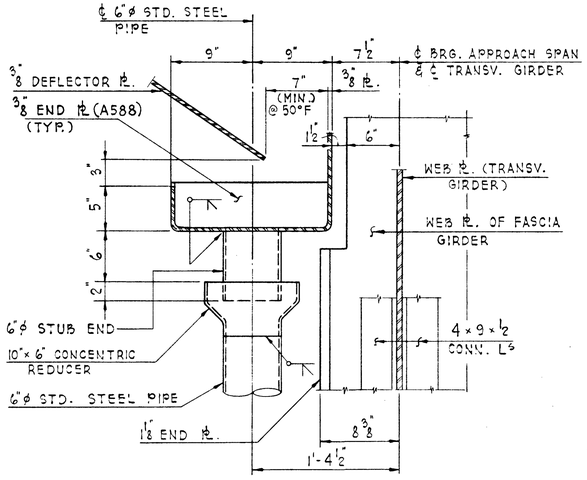
SECTION K - K/(SH. NO. 51)
SCALE : 3/8" = 1'-0"



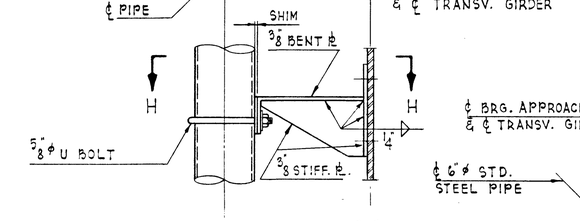
SECTION L - L
SCALE : 1" = 1'-0"



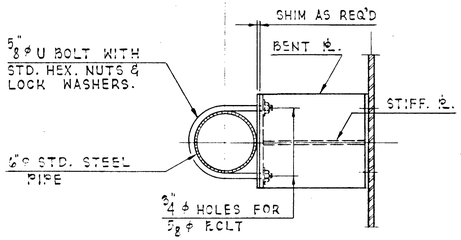
SECTION M - M
SCALE : 3/4" = 1'-0"



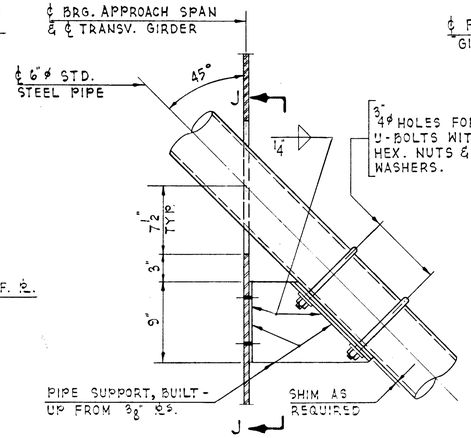
DETAIL - "A"
SCALE : 1 1/2" = 1'-0"



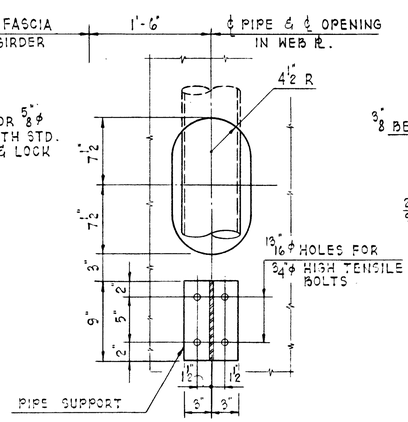
DETAIL - "B"
SCALE : 1 1/2" = 1'-0"



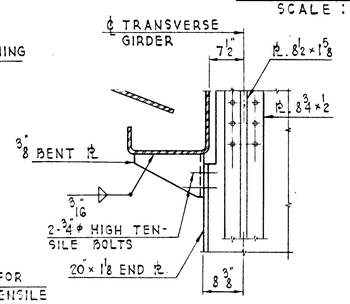
SECTION H - H
SCALE : 1 1/2" = 1'-0"



DETAIL - "C"
SCALE : 1 1/2" = 1'-0"



SECTION J - J
SCALE : 1 1/2" = 1'-0"



SECTION E - E
SCALE : 3/4" = 1'-0"

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. J. ZAPFEL
DRAWN BY F. BOBINAS
CHECKED W. J. ZAPFEL
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

EXPANSION GUARD AND DRAINAGE DETAILS PIERS 13 & 14

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
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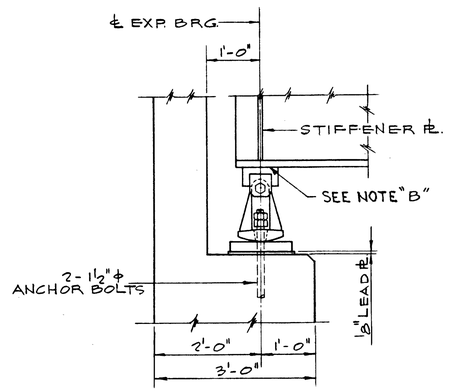
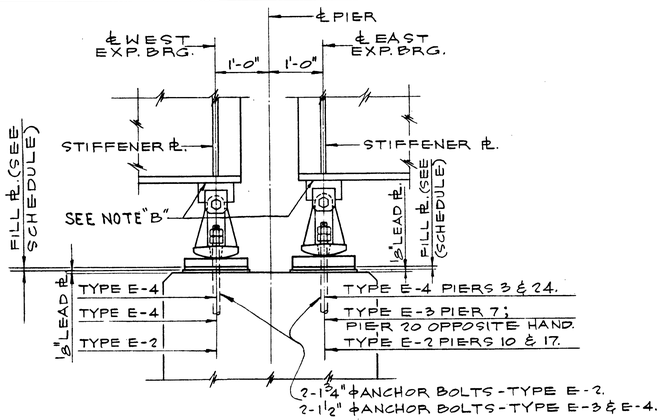
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	29
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



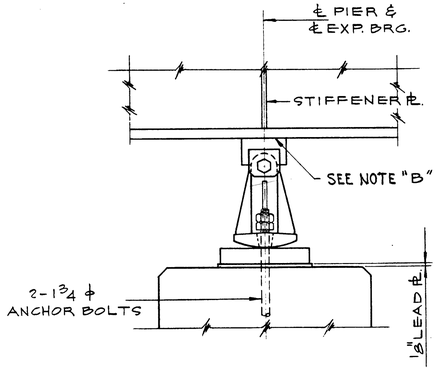
BRG. TYPE E-4 AT WEST & EAST ABUT.

SCALE: ¾" = 1'-0"



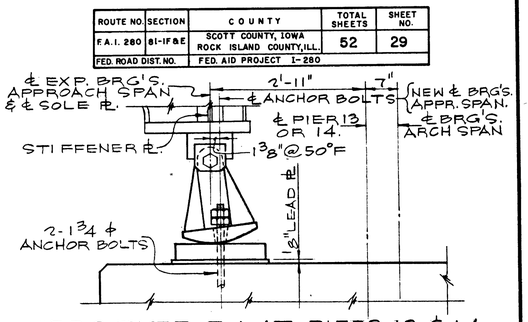
BRG'S. AT PIERS 3,7,10,17,20 & 24

SCALE: ¾" = 1'-0"



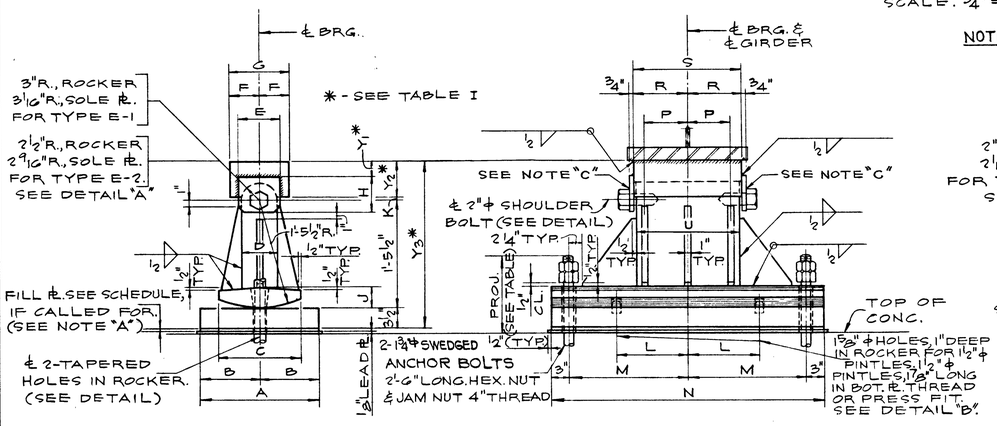
BRG. TYPE E-1 AT PIERS 8,12,16 & 19
BRG. TYPE E-2 AT PIERS 1,4,6,21,23,25 & 27

SCALE: ¾" = 1'-0"



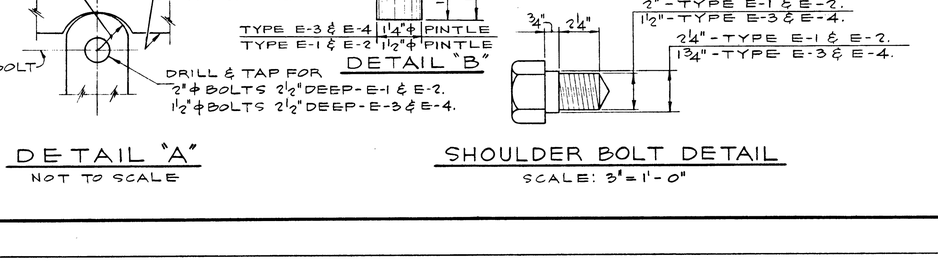
BRG. TYPE E-1 AT PIERS 13 & 14

(PIER 13 SHOWN)
(PIER 14 OPPOSITE HAND)
SCALE: ¾" = 1'-0"



BRG. TYPE	NO. REQ'D.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	U	TOTAL WEIGHT POUNDS ***
E-1	48	1'-8"	10"	1'-2"	6"	7"	5"	10"	6"	3½"	½"	7½"	1'-8"	3'-10"	7 7/16"	9 1/16"	1'-6⅝"	1'-5⅞"	2640
E-2	110	1'-4"	8"	1'-0"	5"	6"	4"	8"	5 3/4"	3"	½"	5½"	1'-2"	2'-10"	5 1/16"	7"	1'-2"	1'-1⅞"	1630

ROCKER DETAIL OF EXP. BRG. TYPE E-1 & E-2



BRG. TYPE	NO. REQ'D.	A	B	C	D	E	TOTAL WEIGHT POUNDS ***
E-3	20	1'-2"	7"	5 3/16"	1'-1⅞"	5"	880
E-4	80	10"	5"	3 3/16"	9⅞"	4"	790

ROCKER DETAIL OF EXP. BRG. TYPE E-3 & E-4

*** - TOTAL WEIGHT OF ONE ASSEMBLY INCLUDES TOP PL., ROCKER, ANCHOR BOLTS, BOTTOM PL. AND LEAD PL.. IT DOES NOT INCLUDE THE WEIGHT OF ANY FILL PL.

NOTE "A" SEE SPECIAL PROVISIONS REGARDING THE POSSIBLE NEED FOR ADDING ADDITIONAL FILL PLATES UNDER THE MASONRY PLATES OF THE BEARINGS.

NOTE "C" PROVIDE ⅛" CLEARANCE BTWN. SHOULDER BOLT & ¾" KEEPER PL. FOR BEARING TYPE E-1 AT PIERS 13 AND 14 ONLY.

NOTE "B" TOP OF SOLE PLATES TO BE BEVELED FOR GRADE OF GIRDERS IN UNITS ⑧ AND ⑨. THICKNESS OF SOLE PLATES SHOWN IN DETAILS IS AT ℄ OF BEARING. FOR PROFILE GRADE ELEVATIONS SEE SH. NO. 7.

FILL PLATE SCHEDULE			
BEARING TYPE	PIER NO.	GIRDER LINE	THICKNESS (SEE NOTE "A")
E-2	10 (WEST)	A THRU K	⅛"
	17 (EAST)	A, B, C, H, J & K	1/16"
		D, E, F & G	⅛"
E-4	7 (WEST)	A, E, F & K	⅛"
E-3	20 (WEST)	A & K	⅛"
		B, C, D, G, H & J	¼"
E-4	3 (EAST)	A THRU K	¼"
	24 (WEST)	A THRU K	9/16"

TABLE I						
	BRG. TYPE E-1 AT UNITS 3,4,6 & 7		BRG. TYPE E-2 AT UNITS 1,2,8 & 9		BRG. TYPE E-2 AT UNITS 3,4,6 & 7	
DIM. \ GIRD.	A, E, F & K	B, C, D, G, H & J	A, E, F & K	B, C, D, G, H & J	A, E, F & K	B, C, D, G, H & J
Y1	2½"	3"	2 5/8"	3"	2 3/4"	3"
Y2	6"	6½"	6⅜"	6½"	6¼"	6½"
Y3	2'-3½"	2'-4"	2'-3 5/8"	2'-4"	2'-3 3/4"	2'-4"

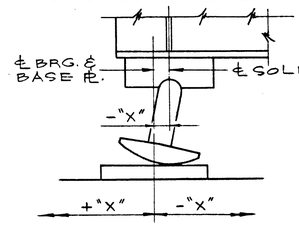
ANCHOR BOLT PROJECTION TABLE				
BEARING TYPE	E-1	E-2	E-3	E-4
PROJ. FOR FILL PL'S. 0" TO ½"	11"	10½"	9"	9"
PROJ. FOR FILL PL'S. ½" TO 1"	–	–	–	9½"

TABLE II				
	BRG. TYPE E-3 AT UNITS 3 & 7.		BRG. TYPE E-4 AT UNITS 1,2,8 & 9	
DIM. \ GIRD.	A, E, F & K	B, C, D, G, H & J	A, E, F & K	B, C, D, G, H & J
Y1	1 5/8"	1 7/8"	1½"	1 7/8"
Y2	4 3/8"	4 5/8"	4¼"	4 5/8"
Y3	1'-6 3/4"	1'-7"	1'-6 5/8"	1'-7"

TEMPERATURE F°		110°	90°	70°	50°	30°	10°
WEST ABUTMENT		+1½"	+5/8"	+1½"	0	-1½"	-5/8"
PIER 1, 4, 21, & 25		+1 1/16"	+5/16"	+1/8"	0	-1/8"	-5/16"
PIER 3	WEST BRG'S.	-1 1/16"	-5/16"	-1/8"	0	+1/8"	+5/16"
	EAST BRG'S.	+1½"	+5/8"	+1½"	0	-1½"	-5/8"
PIER 8		+1 1/16"	+7/16"	+1 1/4"	0	-1/4"	-7/16"
PIER 6, 23 & 27		-1 1/16"	-5/16"	-1/8"	0	+1/8"	+5/16"
PIER 7	WEST BRG'S.	-1½"	-5/8"	-1½"	0	+1½"	+5/8"
	EAST BRG'S.	+1 3/8"	+1½"	+1 7/16"	0	-1 1/16"	-1½"
PIER 19		-1 1/16"	-7/16"	-1/4"	0	+1/4"	+7/16"
PIER 10	WEST BRG'S.	-1 1/16"	-7/16"	-1/4"	0	+1/4"	+7/16"
	EAST BRG'S.	+1½"	+5/8"	+1½"	0	-1½"	-5/8"
PIER 12 & 16		-1½"	-5/8"	-1½"	0	+1½"	+5/8"
PIER 13 - WEST BRG'S.		-1 1/16"	-7/16"	-1/4"	+1/8"	+7/16"	+11/16"
PIER 14 - EAST BRG'S.		-1 1/16"	-7/16"	-1/4"	+1/8"	+7/16"	+11/16"
PIER 17	WEST BRG'S.	-1⅞"	-1¼"	-5/8"	0	+5/8"	+1¼"
	EAST BRG'S.	+1 1/16"	+7/16"	+1/4"	0	-1/4"	-7/16"
PIER 20	WEST BRG'S.	-1 3/8"	-15/16"	-7/16"	0	+7/16"	+15/16"
	EAST BRG'S.	+1½"	+5/8"	+1½"	0	-1½"	-5/8"
PIER 24	WEST BRG'S.	-1½"	-5/8"	-1½"	0	+1½"	+5/8"
	EAST BRG'S.	+1½"	+5/8"	+1½"	0	-1½"	-5/8"
EAST ABUTMENT		-1½"	-5/8"	-1½"	0	+1½"	+5/8"

SEE ERECTION DRAWINGS

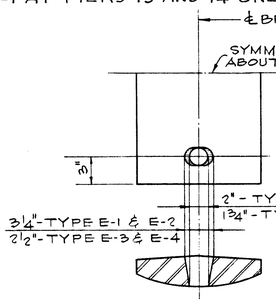
MINUS SIGN INDICATES ℄ SOLE PLATE EAST OF ℄ BEARING.
PLUS SIGN INDICATES ℄ SOLE PLATE WEST OF ℄ BEARING.



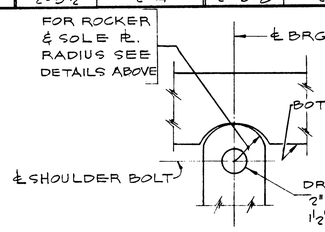
DIMENSION "X"
SEE TABLE ABOVE

NOTE:
ALL STRUCTURAL STEEL SHALL BE ASTM-A36 UNLESS OTHERWISE NOTED.

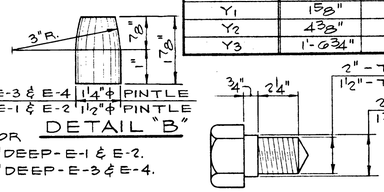
THE STRUCTURAL STEEL ERECTOR SHALL DRILL THE HOLES AND SET THE ANCHOR BOLTS INTO THE SUBSTRUCTURE UNITS.



DETAIL OF HOLE IN ROCKERS



DETAIL "A"
NOT TO SCALE



DETAIL "B"

SHOULDER BOLT DETAIL
SCALE: 3" = 1'-0"

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. ALLEMAN
CHECKED J.Y. HUANG
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

EXPANSION BEARINGS
APPROACH SPANS

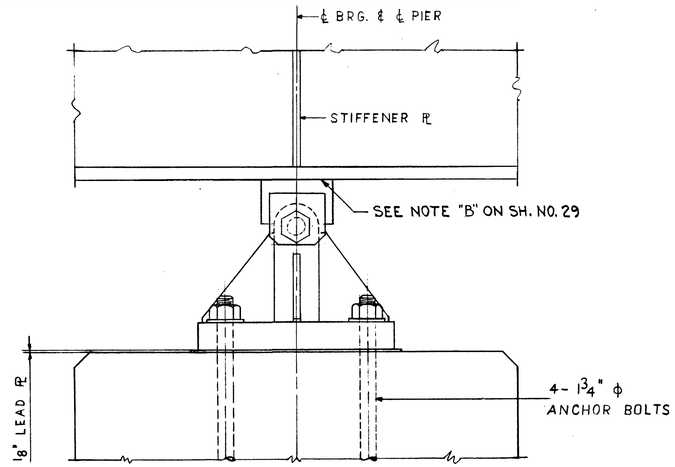
F.A.I. ROUTE 280 SECTION 81-1F&E
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

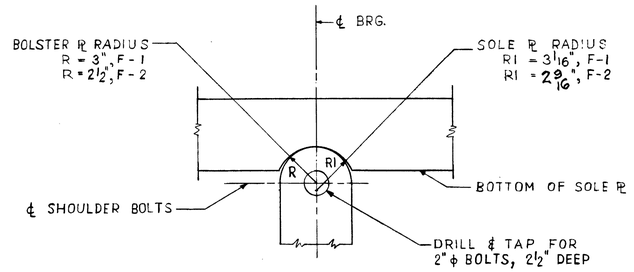
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	30
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



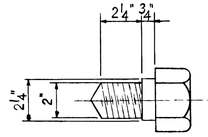
BEARING TYPE F-1 AT PIERS 9,11,15 AND 18
BEARING TYPE F-2 AT PIERS 2,5,22 AND 26

SCALE : 1½"= 1'-0"



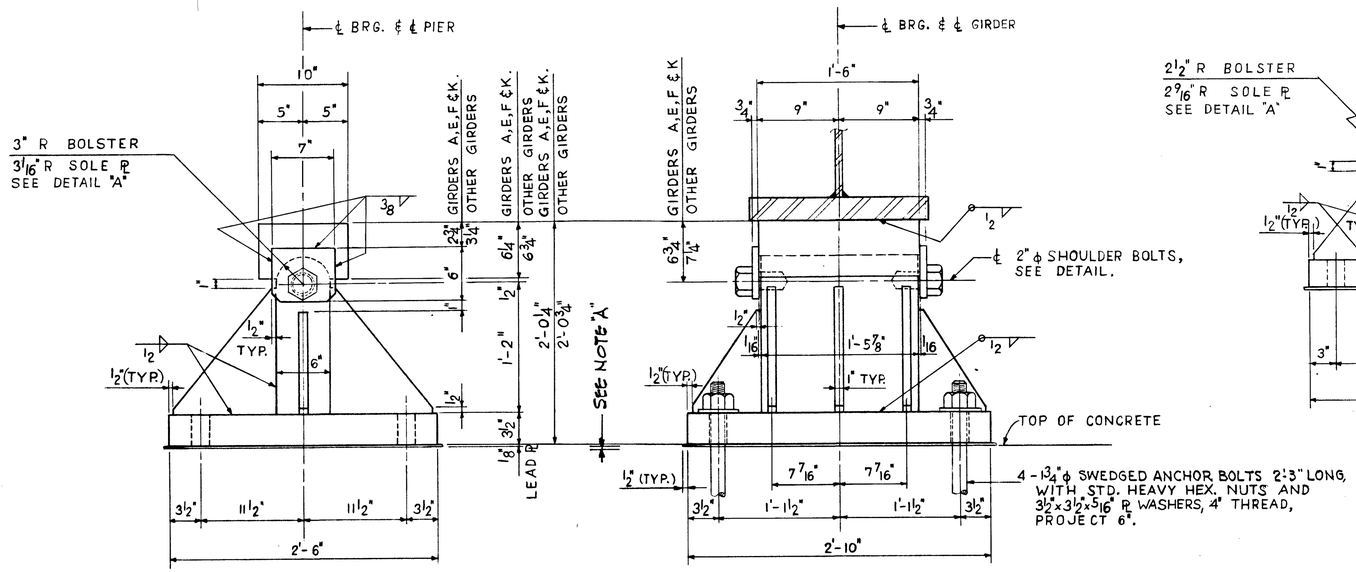
DETAIL "A"

SCALE : 2"= 1'-0"



SHOULDER BOLT DETAIL

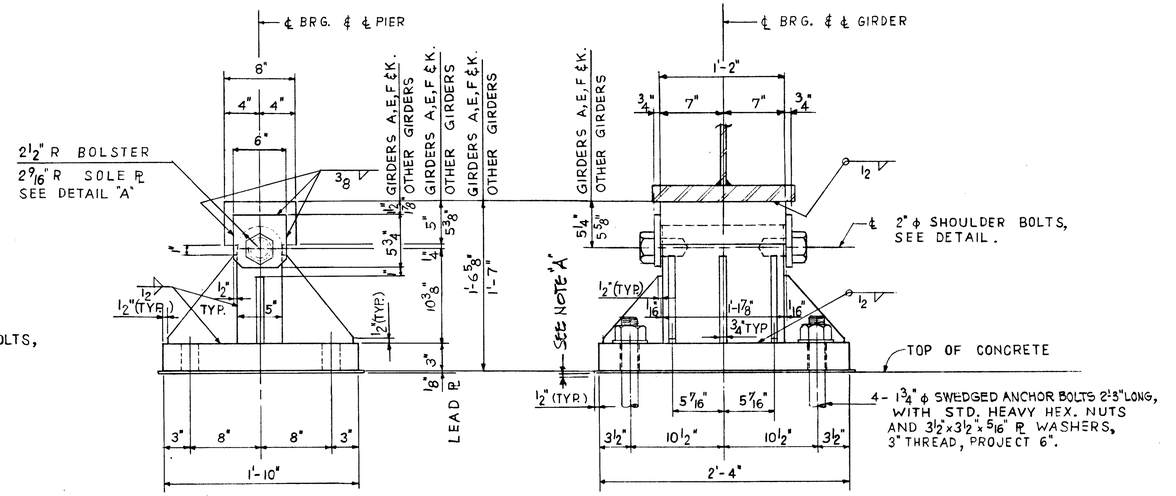
SCALE : 3"= 1'-0"



DETAILS OF FIXED BEARING TYPE F-1

SCALE : 1½" = 1'-0"

NO. REQ'D : 40



DETAILS OF FIXED BEARING TYPE F-2

SCALE : 1½" = 1'-0"

NO. REQ'D : 40

NOTE:

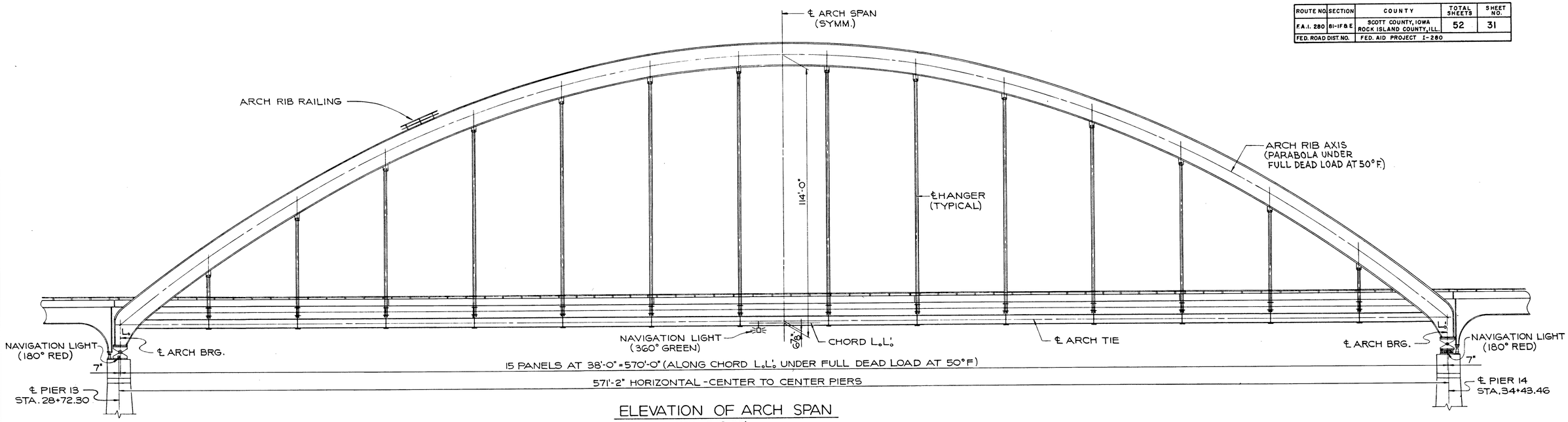
ALL STRUCTURAL STEEL SHALL BE ASTM A36 UNLESS OTHERWISE NOTED.
THE STRUCTURAL STEEL ERECTOR SHALL DRILL THE HOLES AND SET THE ANCHOR BOLTS INTO THE SUBSTRUCTURE UNITS.

NOTE "A" SEE SPECIAL PROVISIONS REGARDING THE POSSIBLE NEED FOR ADDING ADDITIONAL FILL PLATES UNDER THE MASONRY PLATES OF THE BEARINGS.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY L. TROUSIL
CHECKED J.Y. HUANG
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

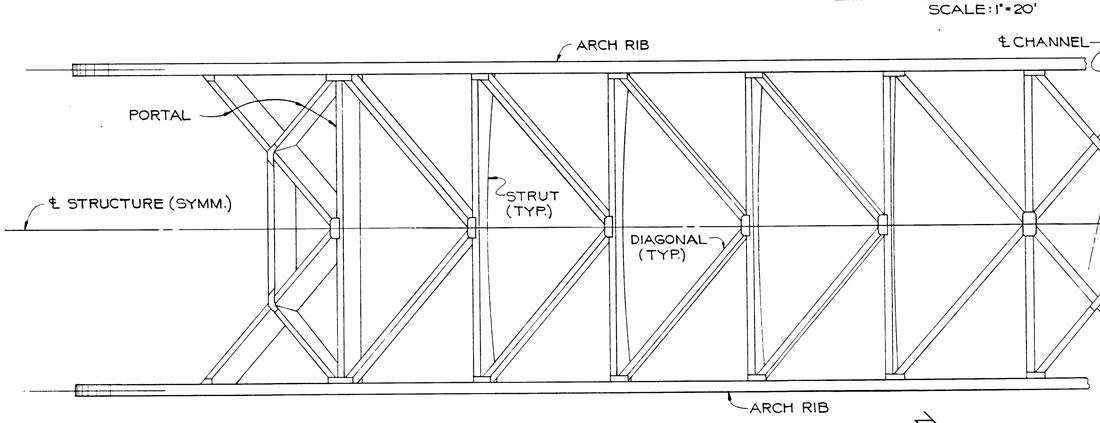
FIXED BEARINGS
APPROACH SPANS
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	31
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



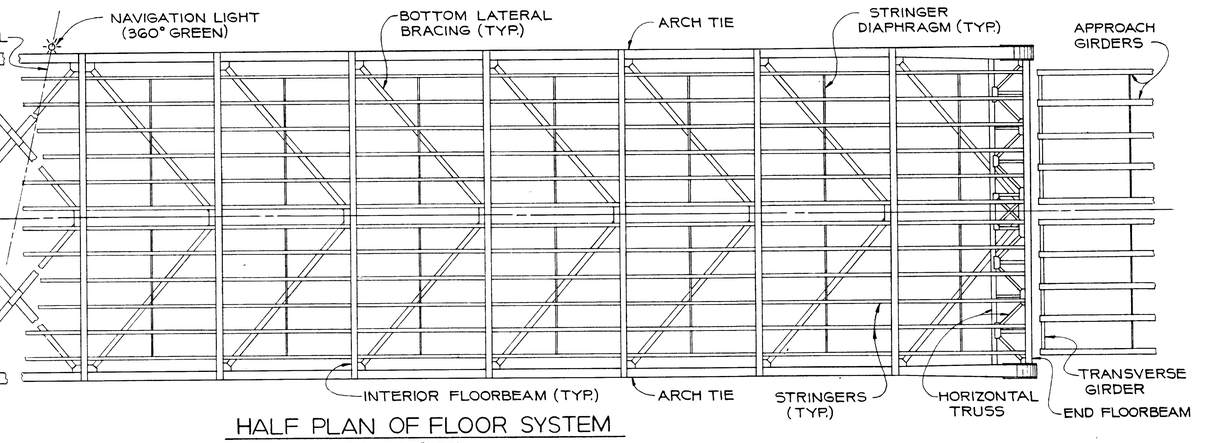
ELEVATION OF ARCH SPAN

SCALE: 1" = 20'



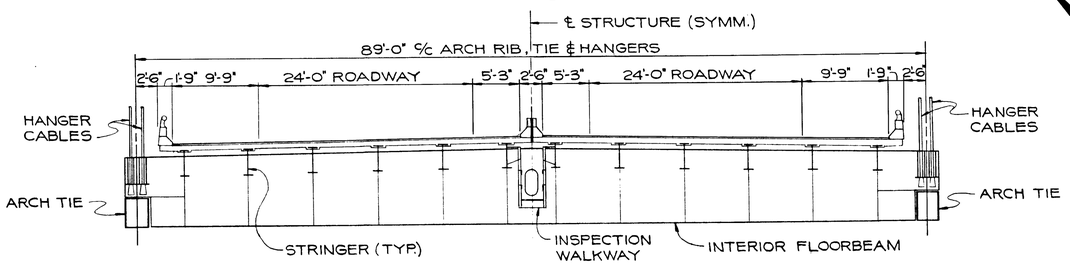
HALF PLAN OF TOP BRACING

SCALE: 1" = 20'



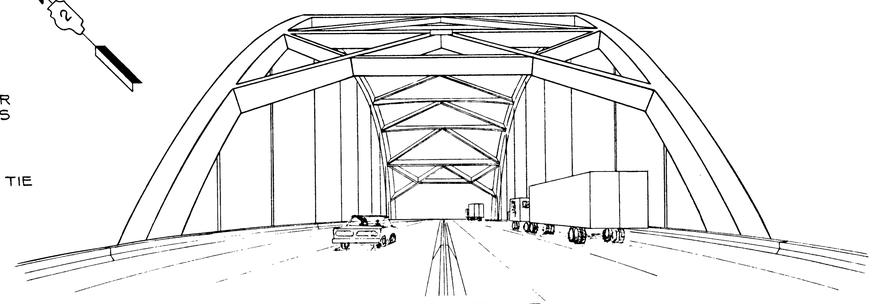
HALF PLAN OF FLOOR SYSTEM

SCALE: 1" = 20'



TYPICAL CROSS SECTION

SCALE: 1/8" = 1'-0"



PERSPECTIVE VIEW

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY W. J. ZAPFEL
DRAWN BY P. POPOVIC
CHECKED W. J. ZAPFEL
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

GENERAL LAYOUT OF ARCH SPAN
UNIT 5

F.A.I. ROUTE 280 SECTION 81-1F & E

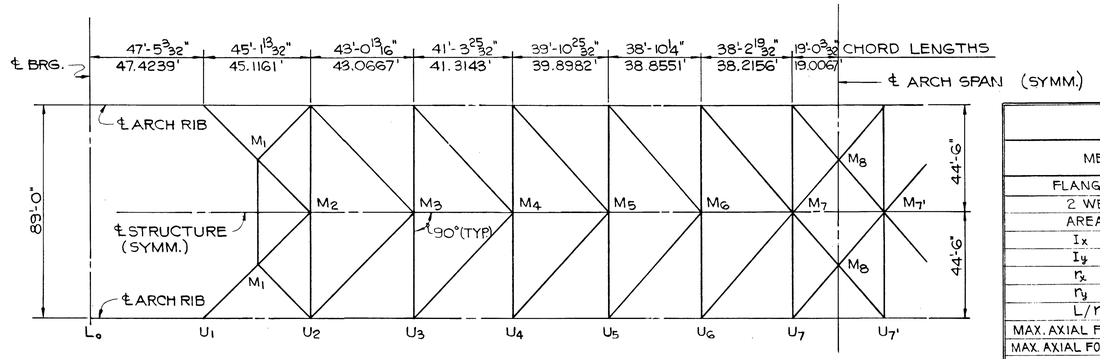
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

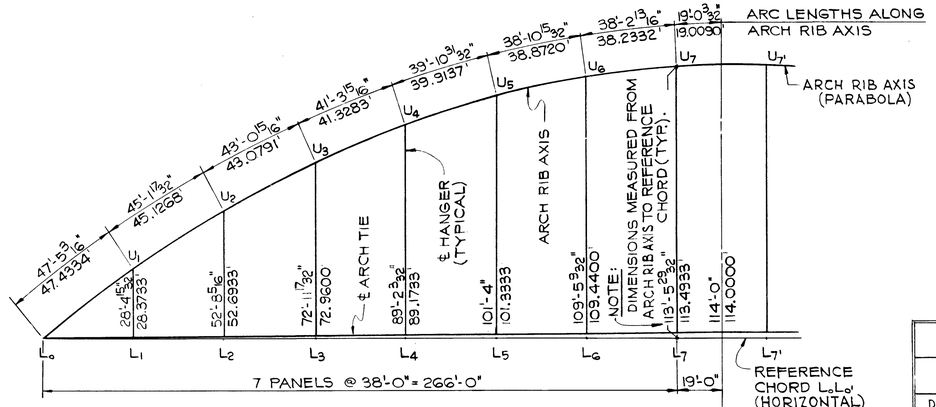
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

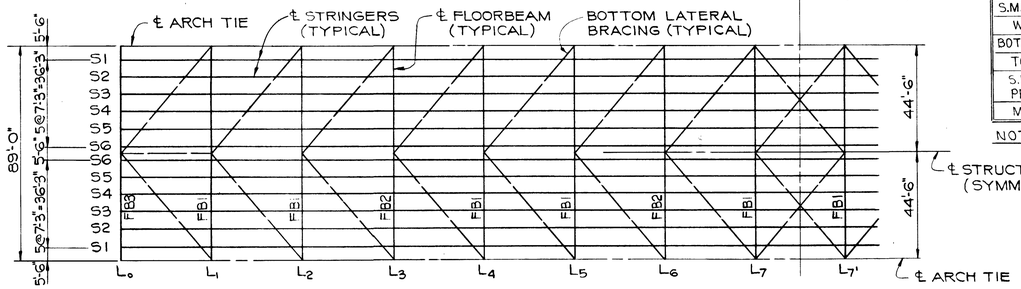
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	32
FED. ROAD DIST. NO.	FED. AID PROJECT I-280			



TOP LATERAL BRACING
(DEVELOPED)



ARCH RIB - ARCH TIE - HANGERS



FLOORBEAMS - STRINGERS - BOTTOM LATERAL BRACING
(HORIZONTAL TRUSS & STRINGER DIAPHRAGMS ARE NOT SHOWN)

TOP LATERAL BRACING

MEMBERS	DIAGONALS	STRUTS	PORTAL STRUT & DIAGONALS
FLANGE PL'S T.& B.	24"×1/2"	24"×1/2"	24"×1/2"
2 WEB PL'S	52 1/2"×1/2"	52 1/2"×1/2" (MIN.)	104 1/4"×1/2"
AREA IN²	76.5	76.5 (MIN.)	128.25
I_x IN⁴	28,920	28,920 (MIN.)	160,250
I_y IN⁴	8,870	8,870 (MIN.)	16,480
r_x IN.	19.45	19.45	35.30
r_y IN.	10.75	10.75	11.33
L/r MAX.	67	53	32
MAX. AXIAL FORCE (75#/□' WIND)-KIPS	111	93	522
MAX. AXIAL FORCE (2 1/2% RIB THRUST)-KIPS	149	243	490
D.L. BENDING MOMENT $_{x-x}$ (FT. KIPS)	120	598	474
D.L. BENDING MOMENT $_{y-y}$ (FT. KIPS)	—	35	—
WIND BENDING MOMENT (FT. KIPS)	98	49	—
MATERIAL	A36	A36	A36

NOTE:
DIFFERENTIAL DEFLECTIONS OF ARCH RIBS DUE TO LIVE LOAD HAS BEEN CONSIDERED IN PROPORTIONING THE TOP LATERAL BRACING.

BOTTOM LATERAL BRACING

FLANGE PL'S (T.& B.)	18"×3/4"
1 WEB PL	18"×1/2"
AREA IN²	36.00
I_x IN⁴	2613
I_y IN⁴	729
r_y IN.	4.50
L/r_y	140
MAX. AXIAL FORCE (75#/□' WIND)-KIPS	210
D.L. BENDING MOMENT - FT. KIPS	12
MATERIAL	A36

FLOORBEAMS & STRINGERS

	END FLOORBEAMS		INT. FLOORBEAMS		STRINGERS S1 & S6		STRGS. S2,S3,S4 & S5	
	MOMENT	SHEAR	MOMENT	SHEAR	MOMENT	SHEAR	MOMENT	SHEAR
DEAD LOAD	21,300^K	3,291^K	7,176^K	308^K			208^K	22.0^K
LIVE LOAD	—	—	3,258^K	134^K			274^K	35.8^K
IMPACT	—	—	762^K	31^K			82^K	10.8^K
TOTAL	21,300^K	3,291^K	11,196^K	473^K			564^K	68.6^K
S.M. OR AREA REQ'D.	6,300 IN³	129 IN²	6,700 IN³	39.5 IN²			338 IN³	5.7 IN²
WEB PLATE	95 5/8"×5/8" (MIN.)		102"×5/8" (MAX.)		33 WF 118		33 WF 118	
BOTTOM FLANGE	20"×3"		20"×3" (MAX.)					
TOP FLANGE	20"×3"		20"×3" (MAX.)					
S.M. OR AREA PROVIDED	6,240 IN³ (MIN.)	200 IN.² (MAX.)	10,300 IN.³ (MAX.)	63.75 IN.² (MAX.)	358.3 IN.³	12.4 IN.²	358.3 IN.³	12.4 IN.²
MATERIAL	A588		A36		A36		A36	

NOTE: END FLOORBEAMS DESIGNED FOR JACKING OF THE SUPERSTRUCTURE AT 150% OF THE BASIC ALLOWABLE STRESSES.

HANGERS - SECTION & FORCES

SECTION	4-2 1/4" ϕ BRIDGE STRAND CABLES, CLASS C COATING (SINGLE STRAND, MULTIPLE WIRE)	
	AREA EACH CABLE = 3.04 IN² (APPROX.)	
TOTAL AXIAL FORCE (KIPS)	DEAD LOAD	310
	L.L.+I.	165
	TOTAL	475
MINIMUM BREAKING STRENGTH (KIPS/CABLE)		602

ARCH RIB - STRESSES & SECTIONS

PANEL POINT IN ARCH RIB			L_0	U_1	U_2	U_3	U_4	U_5	U_6	U_7
COORDINATES		X	0.0000	38.0000	76.0000	114.0000	152.0000	190.0000	228.0000	266.0000
		Y	0.0000	28.3733	52.6933	72.9600	89.1733	101.3333	109.4400	113.4933
GROSS SECTION (ASTM-A588)	2 WEB PL'S		VARIES×1/2"	108"×1/2"	108"×1/2"	108"×1 1/8"	108"×1 1/8"	108"×1 1/8"	108"×1 1/8"	108"×1 1/8"
	I CENTER PL		43 1/2"×1/4"	43 1/2"×1/4"	43 1/2"×1/4"	44 1/4"×1/4"	44 1/4"×1/4"	44 1/4"×1/4"	44 1/4"×1/4"	44 1/4"×1/4"
	FLANGE PL'S (T.& B.)		48"×1/4"	48"×2 1/8"	48"×2 1/8"	48"×2 5/8"	48"×2 5/8"	48"×2 5/8"	48"×1 7/8"	48"×1 1/2"
	AREA (IN²)		VARIES	582.4	582.4	550.3	550.3	550.3	478.3	442.3
	MOMENT OF INERTIA (IN⁴)		VARIES	933,515	933,515	1007,335	1007,335	1007,335	779,517	667,879
	SECTION MODULUS (IN³)		VARIES	16,630	16,630	17,790	17,790	17,790	13,951	12,030
THRUST (KIPS)	DEAD LOAD		5,440	5,472	5,199	4,342	4,738	4,574	4,455	4,383
	L.L.+I (FOR POS. MOM.)		—	314	301	296	305	325	370	351
	L.L.+I (FOR NEG. MOM.)		—	508	484	461	427	387	321	328
	L.L.+I (MAX.)		—	756	722	691	664	642	625	613
MOMENT (FT. KIPS)	DEAD LOAD		0	1,902	3,469	3,467	3,246	2,763	2,350	2,257
	L.L.+I (POSITIVE)		0	6,290	10,107	11,757	11,430	9,770	7,365	5,649
	L.L.+I (NEGATIVE)		0	-5,051	-8,254	-9,746	-9,783	-8,495	-6,171	-3,964
	AMPLIFICATION (POS.)		0	1,062	2,080	2,723	2,886	2,615	2,012	1,150
SHEAR (KIPS)	DEAD LOAD		—	233	237	210	213	213	220	230
	L.L.+I (POSITIVE)		—	159	125	106	101	117	137	151
	L.L.+I (NEGATIVE)		—	98	89	90	104	133	150	155
MAX. STRESS (K/IN²)	(D.L.+L.L.+I) AXIAL		—	9.93	9.44	9.51	9.16	8.90	10.08	10.70
	(D.L.+L.L.+I) BENDING (x-x)		—	6.67	11.29	12.10	11.84	10.21	10.08	9.02
	(D.L.+L.L.+I) TOTAL		—	16.60	20.73	21.61	21.00	19.11	20.16	19.72
MAX. D.L. DEFLECTION (IN.)			0	1.16	2.26	3.15	3.82	4.30	4.61	4.76
PORTAL EFFECT	2 1/2% RIB THRUST									
	AXIAL (KIPS)			584						
	BENDING y-y (FT. KIPS)			5120						
	75#/□' WIND									
	AXIAL (KIPS)			296						
	BENDING y-y (FT. KIPS)			5163						
	STRESS, 2 1/2% RIB THRUST									
	AXIAL (K/IN²)			1.05						
	BENDING y-y (K/IN²)			7.85						

ARCH TIE - STRESSES & SECTION

SECTION (ASTM-A588)	FLANGE PL'S (T.& B.)	28 1/2"×5 8"
	2 WEB PL'S	40"×3 1/2"
	AREA (NET) IN²	221.8
	MOMENT OF INERTIA (NET) IN⁴	38,580
AXIAL FORCE (KIPS)	DEAD LOAD	4,364
	L.L.+I	629
	TOTAL	4,993
MOMENT (FT. KIPS)	BENDING DUE TO DIFFERENTIAL (L.L.+I) HANGER ELONGATION	701
MAXIMUM STRESS (K/IN²)	(D.L.+L.L.+I) AXIAL	22.5
	BENDING	4.5
	TOTAL	27.0

NOTES:
THE ARCH SPAN HAS BEEN DESIGNED AS A TIED ARCH FOR BOTH DEAD LOAD AND LIVE LOAD.
ARCH STRESSES DUE TO WIND AND PANEL SHEARS EQUAL TO 2 1/2% OF ARCH RIB THRUST ARE NOT CRITICAL EXCEPT AT PANEL POINTS L_0 & U_1.
AMPLIFICATION MOMENTS SHOWN ABOVE ARE THE MOMENTS RESULTING FROM THE LIVE LOAD PLUS IMPACT DISPLACEMENT OF THE ARCH RIB AXIS.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. J. ZAPFEL
DRAWN BY P. POPOVIC
CHECKED W. J. ZAPFEL
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

STRESS SHEET
ARCH SPAN
UNIT 5

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	33
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

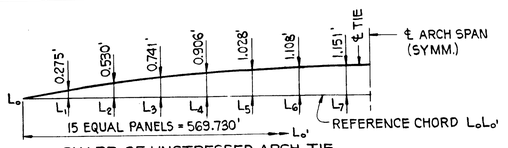
SHAPE OF UNSTRESSED ARCH RIB

(JOINTS MUST BE BUTT TIGHT IN THIS CONDITION)

SHAPE OF ARCH RIB AT CLOSURE

(UNDER DEAD LOAD OF STEEL ONLY)

SHAPE OF ARCH RIB UNDER FULL DEAD LOAD

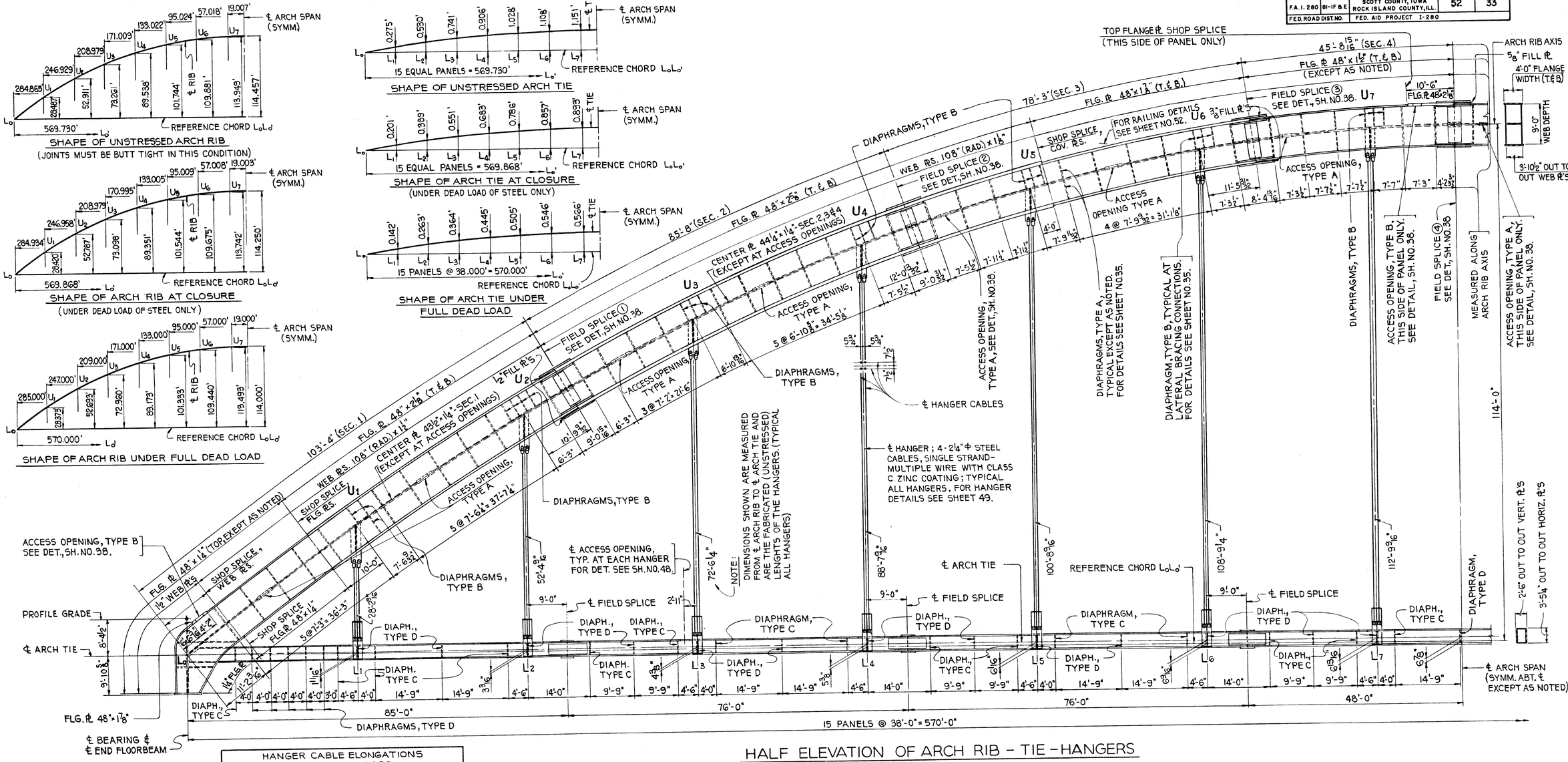


SHAPE OF UNSTRESSED ARCH TIE

SHAPE OF ARCH TIE AT CLOSURE

(UNDER DEAD LOAD OF STEEL ONLY)

SHAPE OF ARCH TIE UNDER FULL DEAD LOAD



HALF ELEVATION OF ARCH RIB - TIE - HANGERS

SCALE: 3/32" = 1'-0"

HANGER CABLE ELONGATIONS UNDER DEAD LOADS

PANEL POINT	ELONGATIONS (FEET) STEEL	CONCRETE & WEARING SURF.	TOTAL
U1 & U1'	0.007	0.013	0.020
U2 & U2'	0.017	0.033	0.050
U3 & U3'	0.025	0.051	0.076
U4 & U4'	0.032	0.064	0.096
U5 & U5'	0.038	0.074	0.112
U6 & U6'	0.041	0.081	0.122
U7 & U7'	0.045	0.084	0.129

NOTE:

THE EFFECT OF HANGER CABLE ELONGATIONS DUE TO DEAD LOADS HAS BEEN INCLUDED IN THE DIAGRAMS SHOWING THE SHAPE OF THE UNSTRESSED ARCH TIE AND THE SHAPE OF THE ARCH TIE AT CLOSURE.

NOTES:

ALL STRUCTURAL STEEL FOR ARCH RIB & ARCH TIE SHALL BE A.S.T.M.-A588.

UNLESS OTHERWISE NOTED ALL DIMENSIONS SHOWN ARE DIMENSIONS UNDER FULL DEAD LOAD AT 50°F.

ALL DIMENSIONS SHOWN FOR THE ARCH RIB ARE MEASURED ALONG THE ARCH RIB AXIS.

ALL DIMENSIONS SHOWN FOR THE ARCH TIE ARE MEASURED ALONG THE CHORD LoLo'.

ALL HANGERS SHALL BE VERTICAL UNDER FULL DEAD LOAD.

ALL DIAPHRAGMS OF THE ARCH RIB SHALL BE NORMAL TO THE ARCH RIB AXIS.

THE ARCH RIB & TIE SHALL BE CAMBERED TO GIVE THE TRUE GEOMETRIC CONFIGURATION UNDER FULL DEAD LOAD AT 50°F.

THE ARCH SPAN HAS BEEN DESIGNED AS A TIED ARCH FOR BOTH DEAD LOAD & LIVE LOAD.

ALL MEMBERS CONSTITUTING EACH TIED ARCH TRUSS SHALL BE ASSEMBLED IN THE SHOP AND FIELD BOLT HOLES DRILLED OR REAMED WHILE PARTS ARE ASSEMBLED AND ALL PARTS CORRECTLY MATCHMARKED. ASSEMBLY MAY BE BY SUCCESSIVE OPERATIONS, PROVIDED THE RESULTS OBTAINED ARE EQUIVALENT TO COMPLETE SIMULTANEOUS ASSEMBLY OF EACH TRUSS.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY W.J. ZAPFEL
DRAWN BY P. POPOVIC
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ARCH RIB, TIE AND HANGER DATA

F.A.I. ROUTE 280 SECTION 81-1F & E

I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

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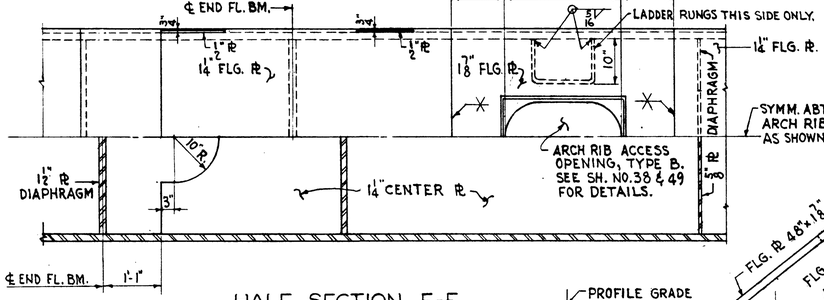
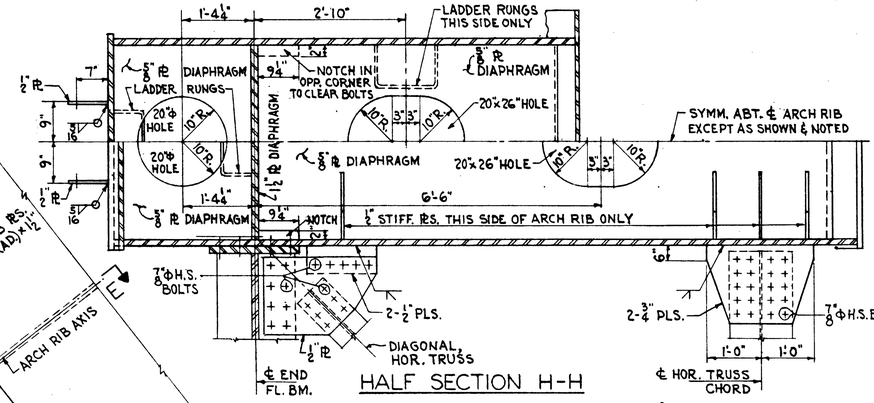
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	34
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

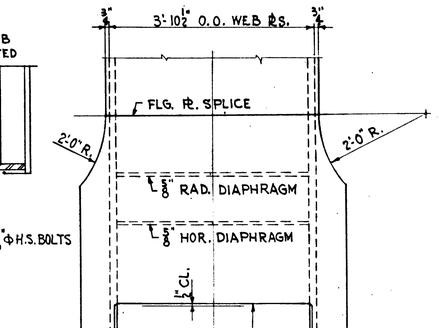
HALF SECTION F-F



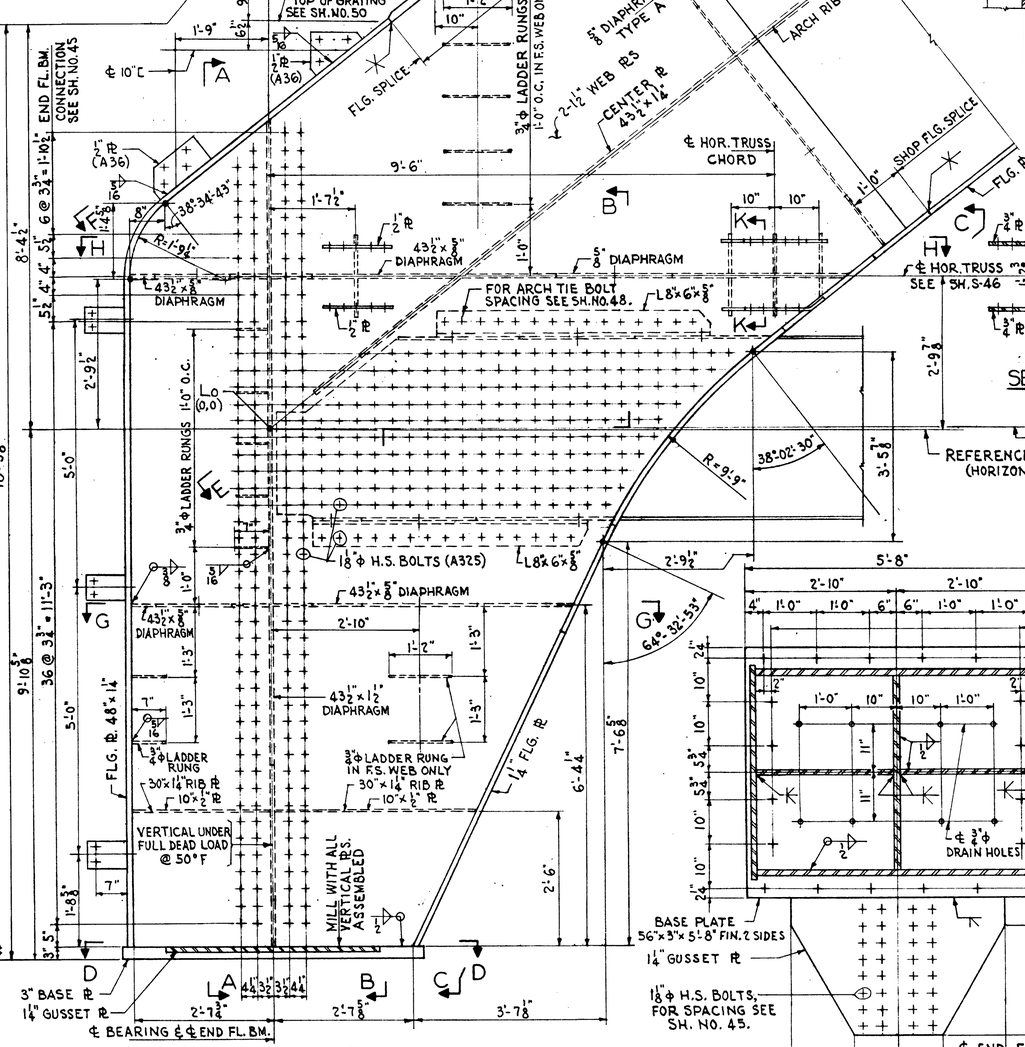
HALF SECTION G-G



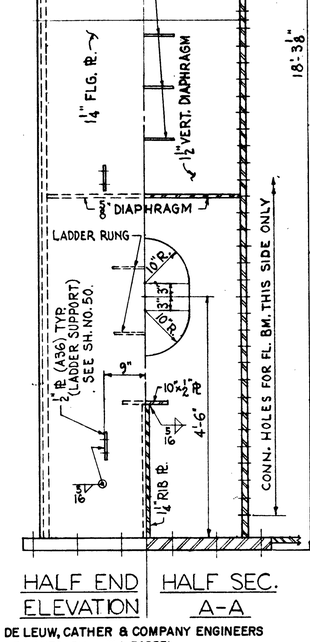
HALF SECTION H-H



HALF SECTION E-E



HALF END ELEVATION | HALF SEC. A-A

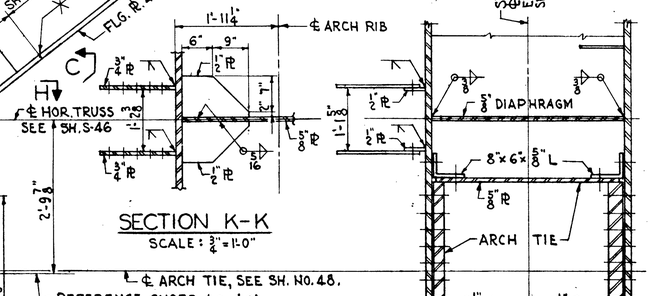


INSIDE ELEVATION

SCALE: ¾"=1'-0"

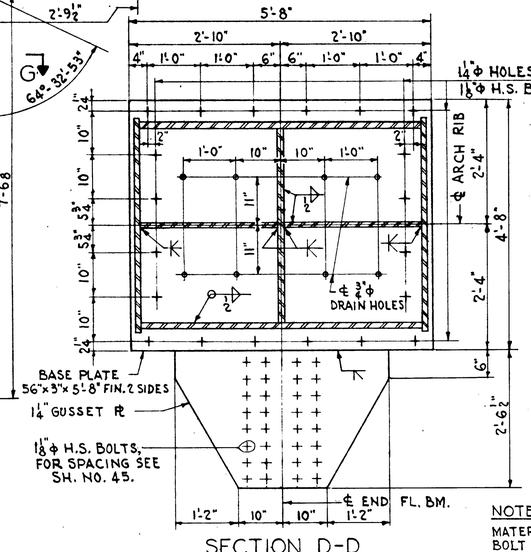
SECTION K-K

SCALE: ¾"=1'-0"



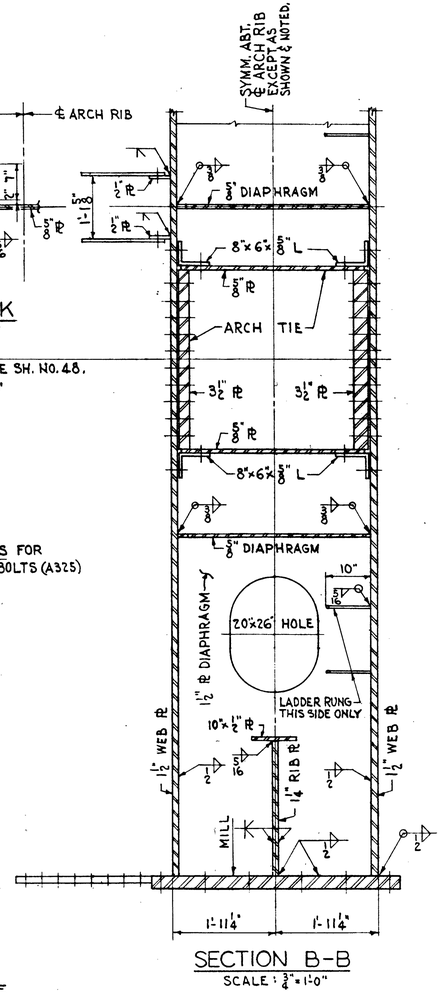
SECTION D-D

SCALE: ¾"=1'-0"



SECTION B-B

SCALE: ¾"=1'-0"



SECTION C-C

(DEVELOPED)

SCALE: ¾"=1'-0"

NOTE

MATERIAL: ASTM-A588 EXCEPT AS NOTED.
BOLT SIZES AS NOTED.
FOR ADDITIONAL DETAILS & NOTES SEE SH. NO. 33.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	M.M. VERGARA
CHECKED	W.J. ZAPFEL
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

ARCH RIB DETAILS PANEL POINT Lo

F.A.I. ROUTE 280 SECTION 81-1F & E

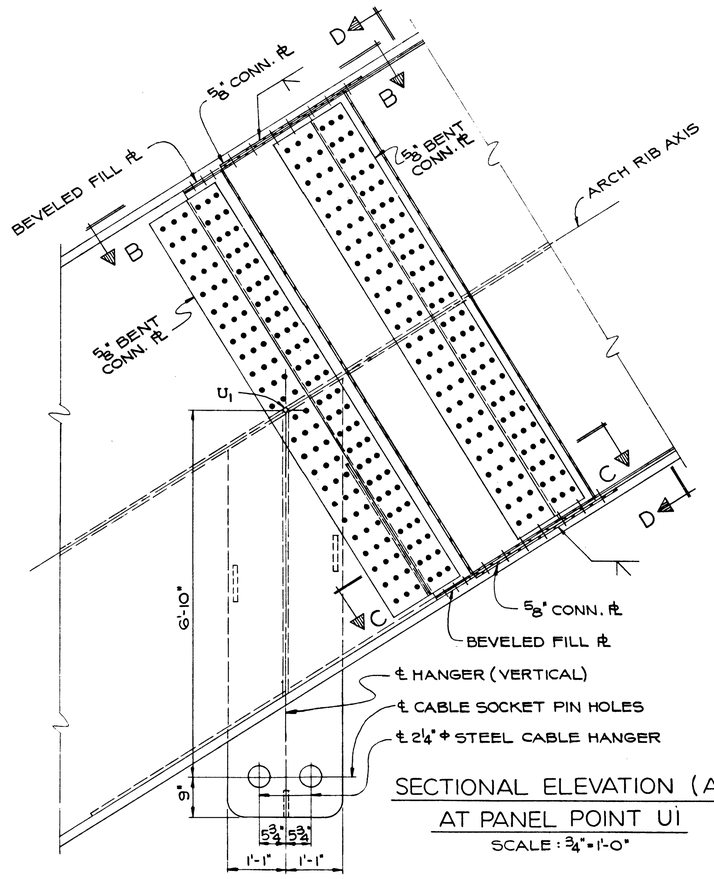
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

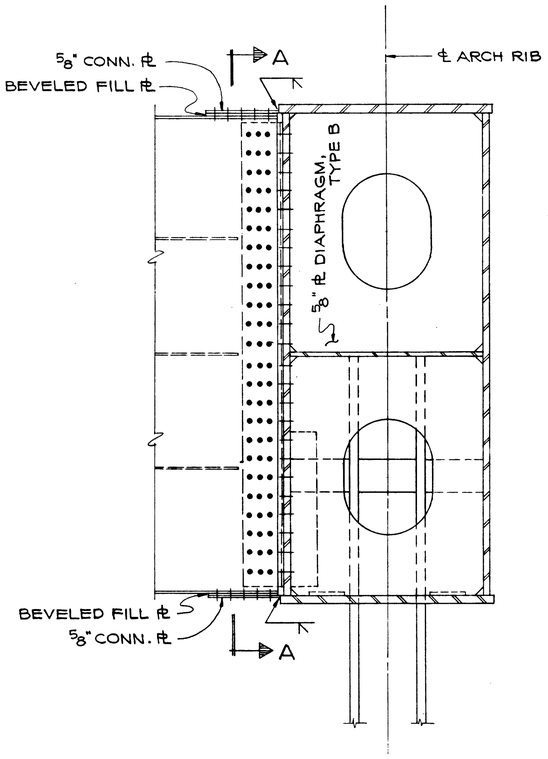
STA. 11+11.38 TO STA. 53+04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

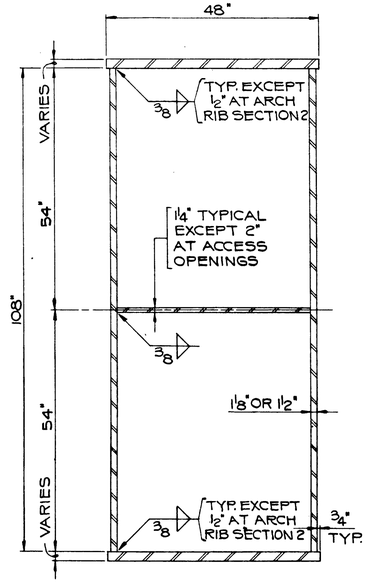
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	35
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



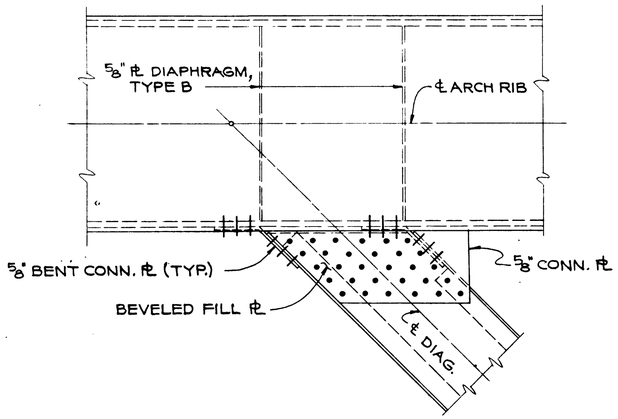
SECTIONAL ELEVATION (A-A)
AT PANEL POINT U1
SCALE : 3/4" = 1'-0"



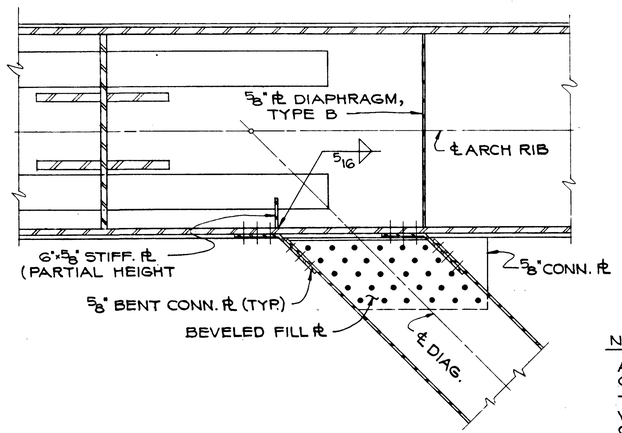
SECTION D-D
SCALE : 3/4" = 1'-0"



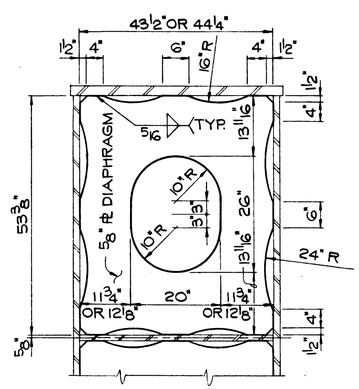
TYPICAL ARCH RIB SECTION
SCALE : 3/4" = 1'-0"



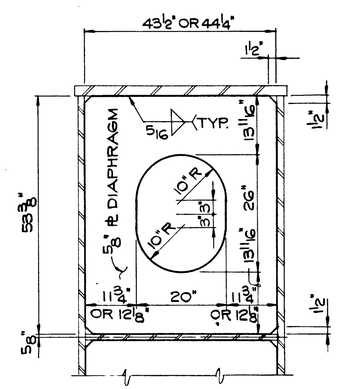
SECTION B-B
SCALE : 3/4" = 1'-0"



SECTION C-C
SCALE : 3/4" = 1'-0"



TYPE A
SCALE : 3/4" = 1'-0"



TYPE B
SCALE : 3/4" = 1'-0"

ARCH RIB DIAPHRAGM DETAILS

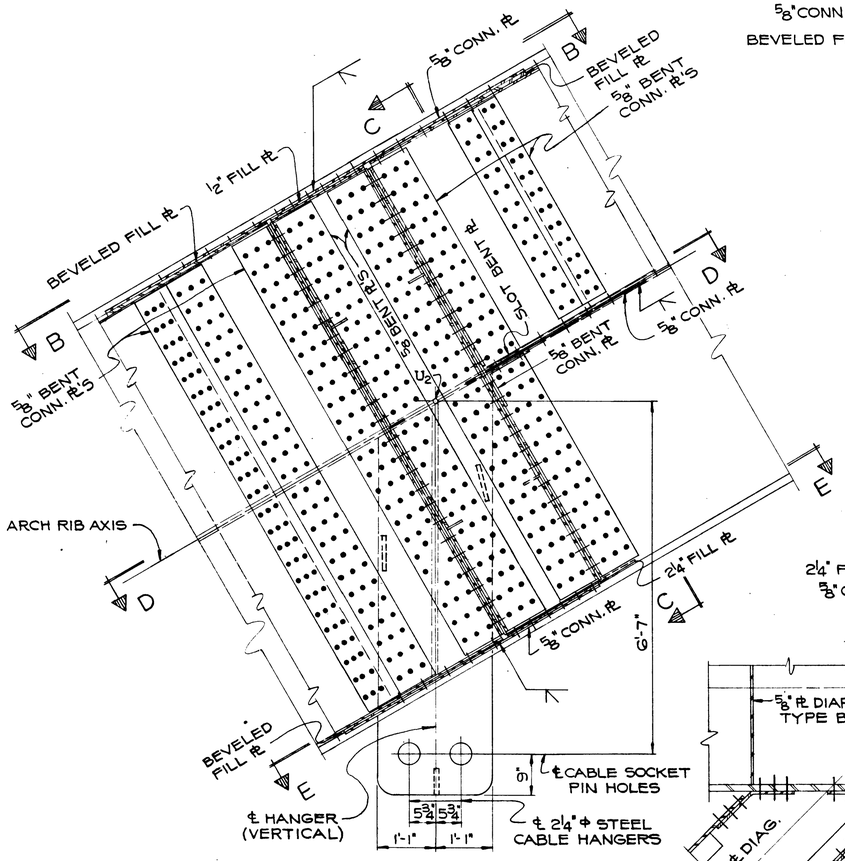
NOTES:

ALL FASTENERS FOR TOP LATERAL BRACING CONNECTIONS SHALL BE 7/8" ϕ, A325 HIGH STRENGTH BOLTS.
THE TOP LATERAL CONNECTION PLATES WHICH ARE WELDED TO THE ARCH RIB SHALL BE A.S.T.M.-A588. ALL OTHER CONNECTION PLATES AND FILL PLATES SHALL BE A.S.T.M.-A36.
FOR TYPICAL ARCH RIB HANGER CONNECTION DETAILS SEE SHEET NO. 38.
FOR TOP LATERAL BRACING DETAILS SEE SHEETS NO. 39 & 40.
FOR ADDITIONAL DETAILS & NOTES SEE SHEET NO. 33.
FOR ARCH RIB RAILING DETAILS SEE SHEET NO. 52.

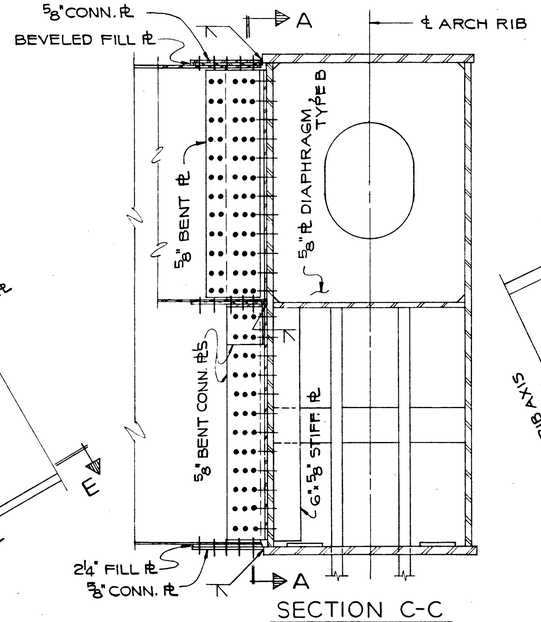
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY P. POPOVIC
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ARCH RIB DETAILS
PANEL POINT U1
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

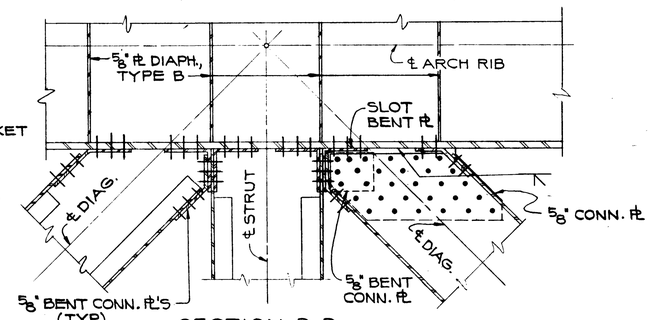
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	36
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



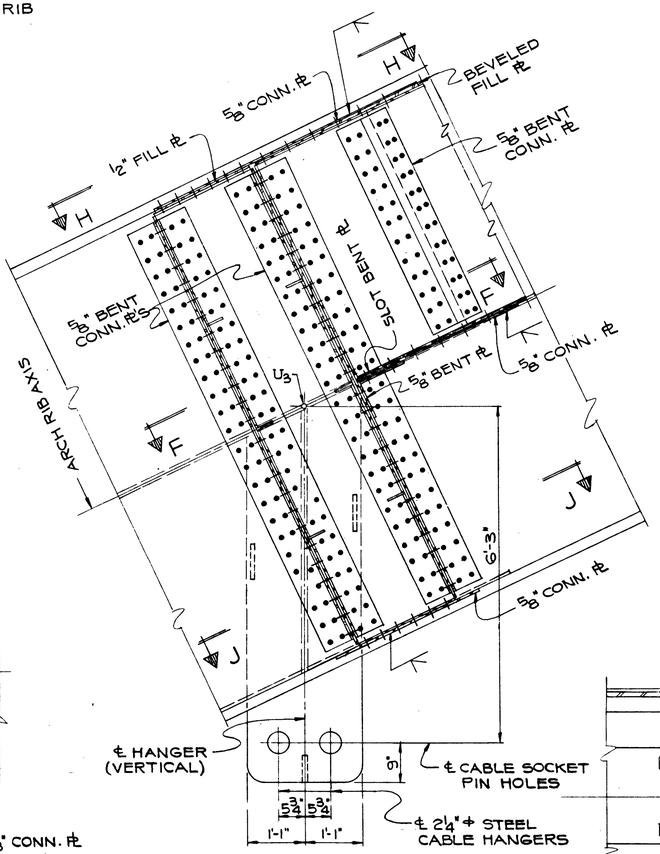
SECTIONAL ELEVATION (A-A)
AT PANEL POINT U2
SCALE: 3/4"=1'-0"



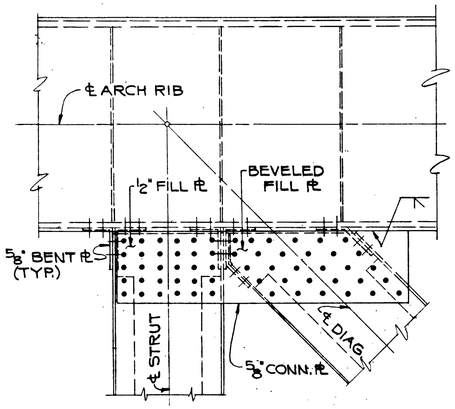
SECTION C-C
SCALE: 3/4"=1'-0"



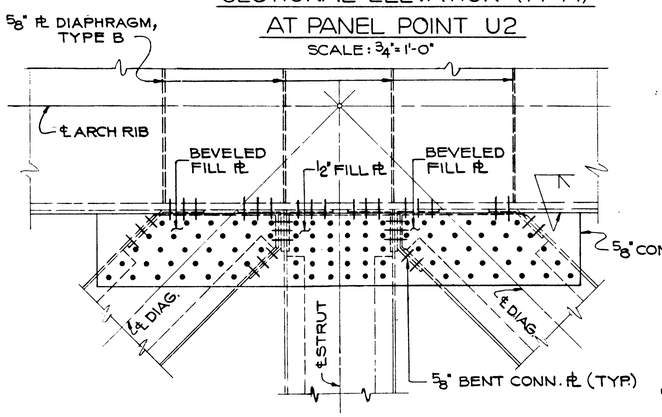
SECTION D-D
SCALE: 3/4"=1'-0"



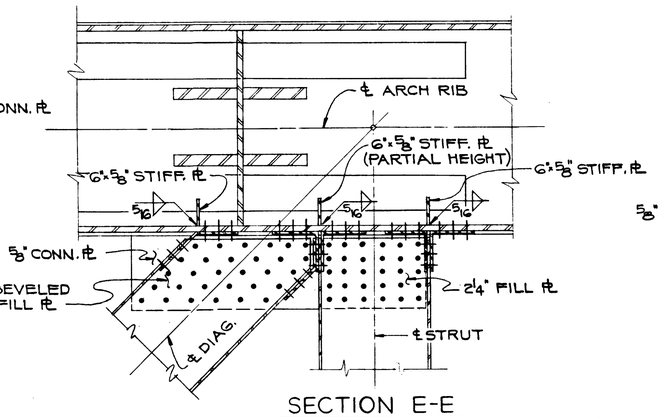
SECTIONAL ELEVATION
AT PANEL POINT U3
SCALE: 3/4"=1'-0"



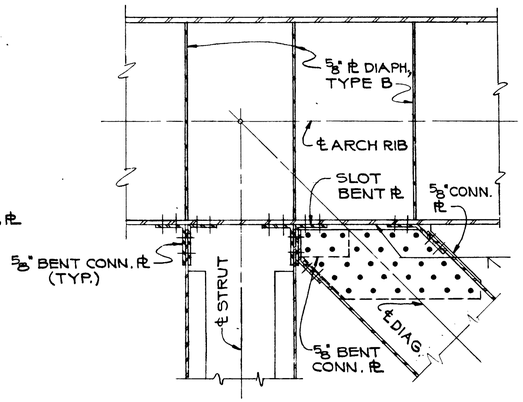
SECTION H-H
SCALE: 3/4"=1'-0"



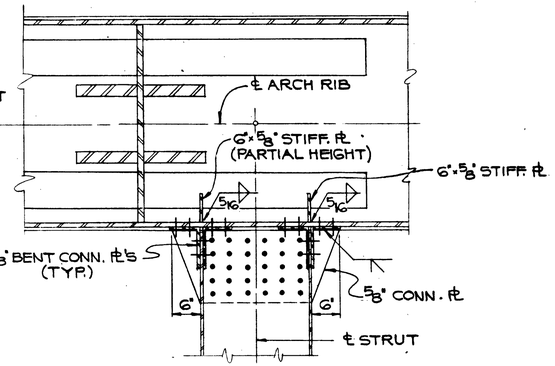
SECTION B-B
SCALE: 3/4"=1'-0"



SECTION E-E
SCALE: 3/4"=1'-0"



SECTION F-F
SCALE: 3/4"=1'-0"



SECTION J-J
SCALE: 3/4"=1'-0"

NOTES

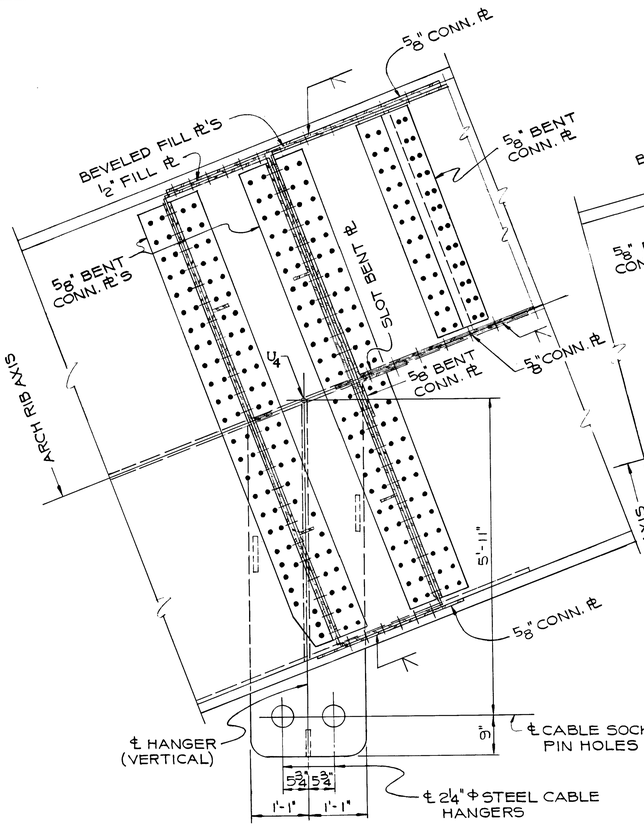
ALL FASTENERS FOR TOP LATERAL BRACING CONNECTIONS SHALL BE 7/8"℄, A325 HIGH STRENGTH BOLTS.
THE TOP LATERAL CONNECTION PLATES WHICH ARE WELDED TO THE ARCH RIB SHALL BE A.S.T.M.-A588. ALL OTHER CONNECTION PLATES AND FILL PLATES SHALL BE A.S.T.M. - A36.
FOR TYPICAL ARCH RIB HANGER CONNECTION DETAILS SEE SHEET NO. 38.
FOR TOP LATERAL BRACING DETAILS SEE SHEETS NO. 39 & 40.
FOR ADDITIONAL DETAILS & NOTES SEE SHEET NO. 33.
FOR ARCH RIB RAILING DETAILS SEE SHEET NO. 52.

ARCH RIB DETAILS
PANEL POINTS U2 AND U3

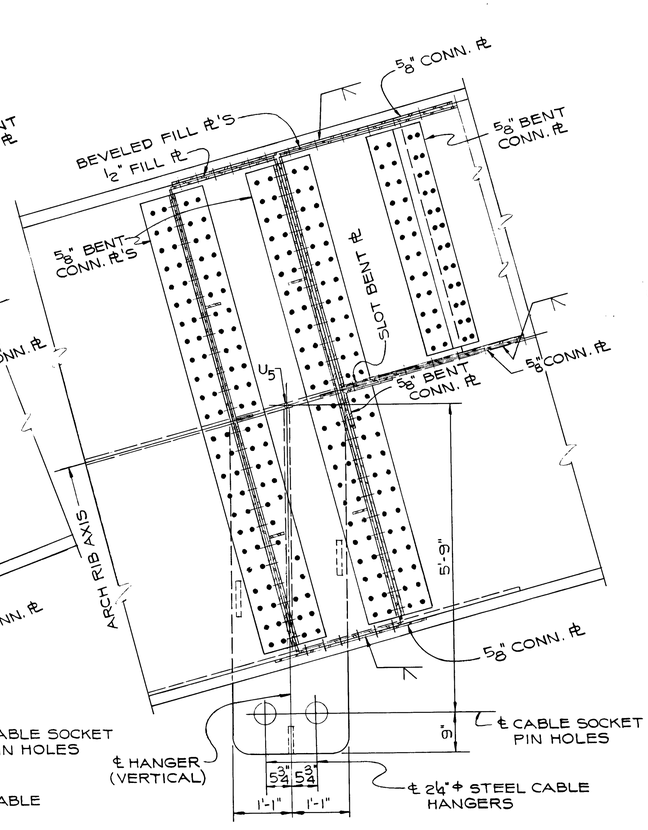
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY P. POPOVIC
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

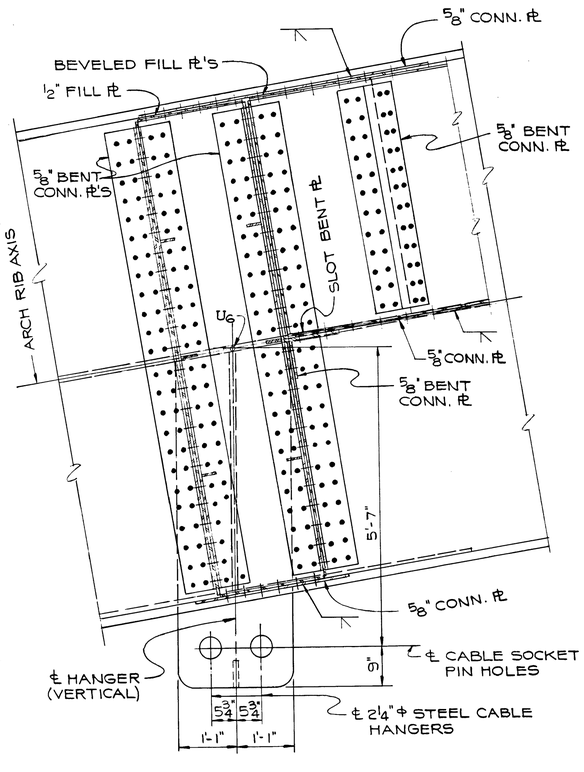
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	37
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



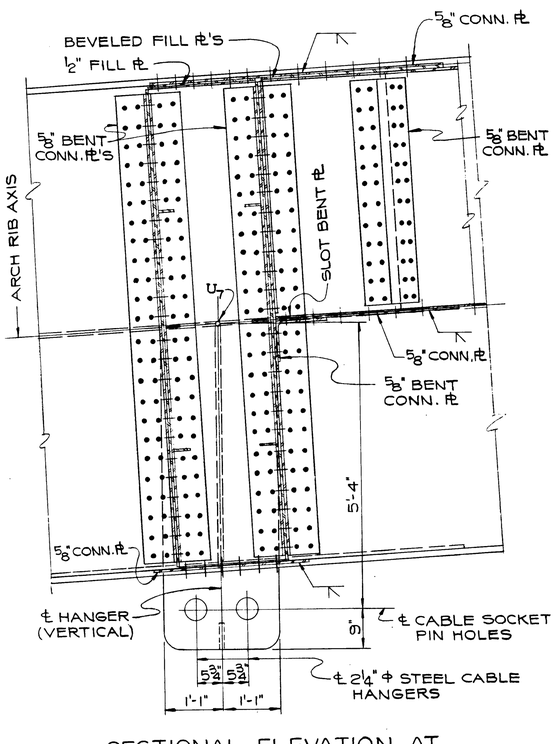
SECTIONAL ELEVATION AT
PANEL POINT U4
SCALE: 3/4" = 1'-0"



SECTIONAL ELEVATION AT
PANEL POINT U5
SCALE: 3/4" = 1'-0"



SECTIONAL ELEVATION AT
PANEL POINT U6
SCALE: 3/4" = 1'-0"



SECTIONAL ELEVATION AT
PANEL POINT U7
SCALE: 3/4" = 1'-0"

NOTE:

THE TOP LATERAL CONNECTION PLATES WHICH ARE WELDED TO THE ARCH RIB SHALL BE A.S.T.M.-A588. ALL OTHER CONNECTION PLATES AND FILL PLATES SHALL BE A.S.T.M.-A36.

ALL FASTENERS FOR TOP LATERAL BRACING CONNECTIONS SHALL BE 7/8"ϕ, A325 HIGH STRENGTH BOLTS.

FOR TYPICAL ARCH RIB HANGER CONNECTION DETAILS SEE SHEET NO. 38.

FOR TOP LATERAL BRACING DETAILS SEE SHEETS NO. 39 & 40.

FOR ADDITIONAL DETAILS & NOTES SEE SHEET NO. 33.

FOR ARCH RIB RAILING DETAILS SEE SHEET NO. 52.

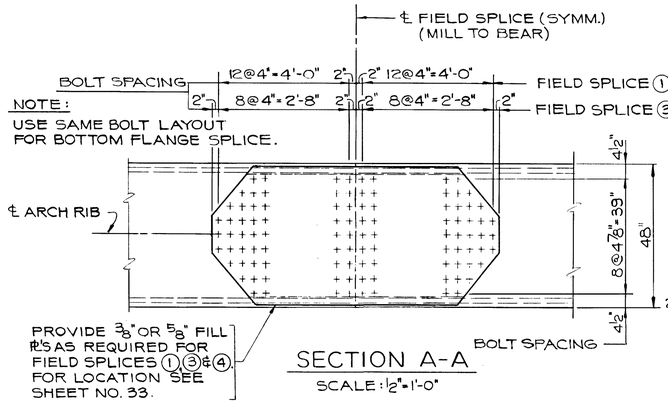
DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY W.J. ZAPFEL
DRAWN BY P. POPOVIC
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

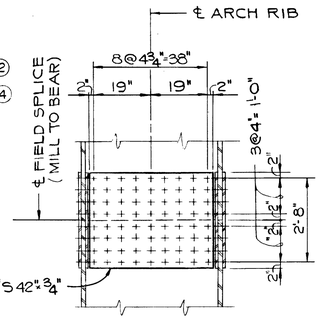
ARCH RIB DETAILS
PANEL POINTS U4, U5, U6 AND U7

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

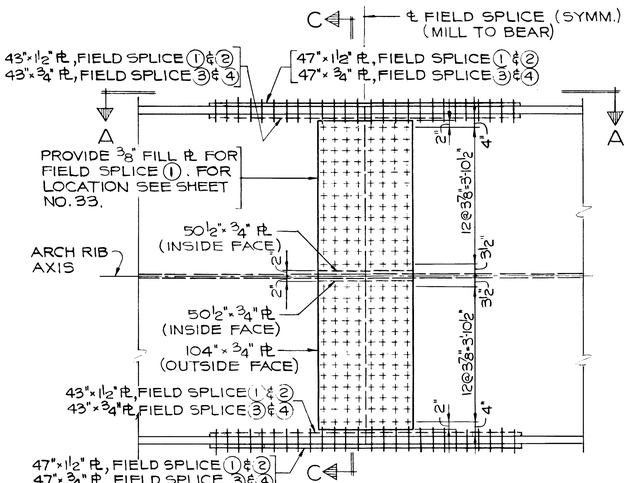
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	38
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



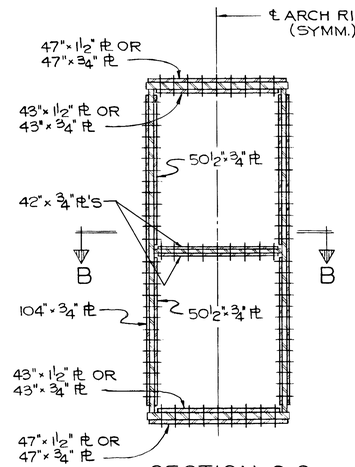
SECTION A-A
SCALE: ½"=1'-0"



SECTION B-B
SCALE: ½"=1'-0"



ELEVATION
SCALE: ½"=1'-0"

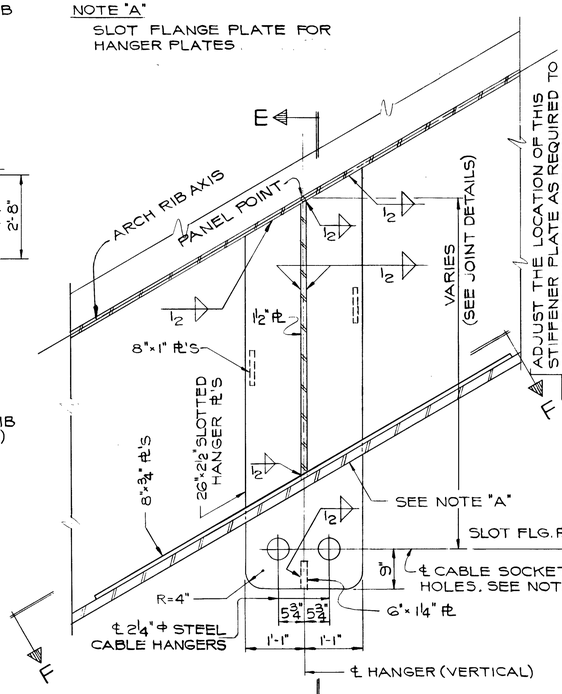


SECTION C-C
SCALE: ½"=1'-0"

NOTE:
ALL STRUCTURAL STEEL FOR ARCH RIB FIELD SPLICES SHALL BE A.S.T.M. -A588.
ALL FASTENERS SHALL BE 1⅛" ℗ A.S.T.M. -A325 HIGH STRENGTH BOLTS WITH 1³⁄₁₆" ℗ OPEN HOLES.

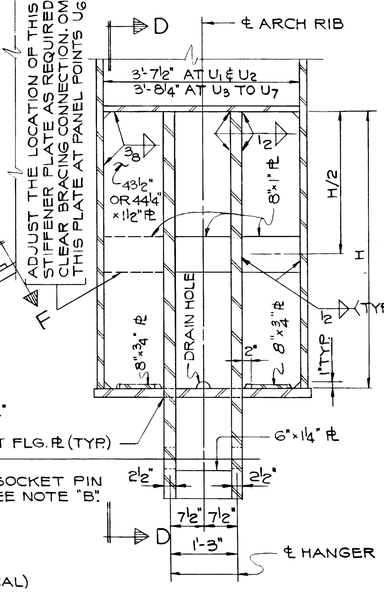
ARCH RIB FIELD SPLICE DETAILS
(FIELD SPLICE ①, ②, ③℄④)

NOTE "A"
SLOT FLANGE PLATE FOR HANGER PLATES

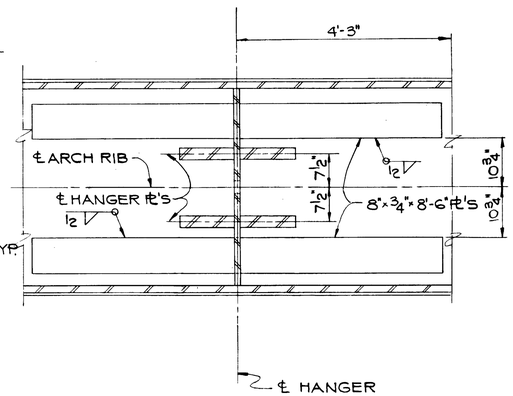


SECTION D-D
SCALE: ¾"=1'-0"

NOTE "B"
THE DIAMETER OF THE CABLE SOCKET PIN HOLE SHALL BE EQUAL TO THE DIAMETER OF THE SOCKET PIN.



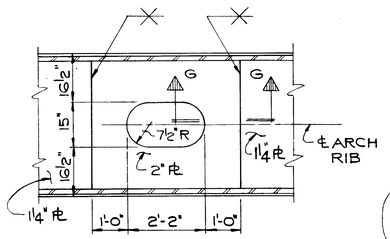
SECTION E-E
SCALE: ¾"=1'-0"



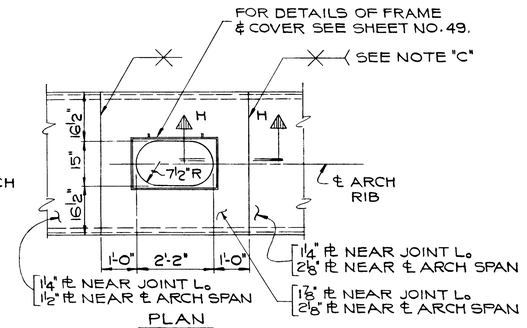
SECTION F-F
SCALE: ¾"=1'-0"

NOTE:
FOR ADDITIONAL HANGER DETAILS SEE SHEET NO. 49
ALL STRUCTURAL STEEL FOR ARCH RIB HANGER CONNECTIONS SHALL BE A.S.T.M. -A588.

TYPICAL ARCH RIB HANGER CONNECTION DETAILS

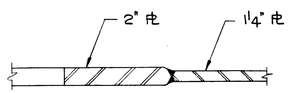


PLAN
SCALE: ½"=1'-0"



PLAN
SCALE: ½"=1'-0"

NOTE "C"
THIS SPLICE REQUIRED FOR THE ACCESS OPENING LOCATED NEAR PANEL POINT Lo ONLY. NO SPLICE PERMITTED IN THE 2'8" FLANGE PLATE LOCATED NEAR THE ℄ OF THE ARCH SPAN.



SECTION G-G
SCALE: 1½"=1'-0"

TYPE "A"

SECTION H-H
SCALE: 1½"=1'-0"

TYPE "B"

ARCH RIB ACCESS OPENING DETAILS

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY P. POPOVIC
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

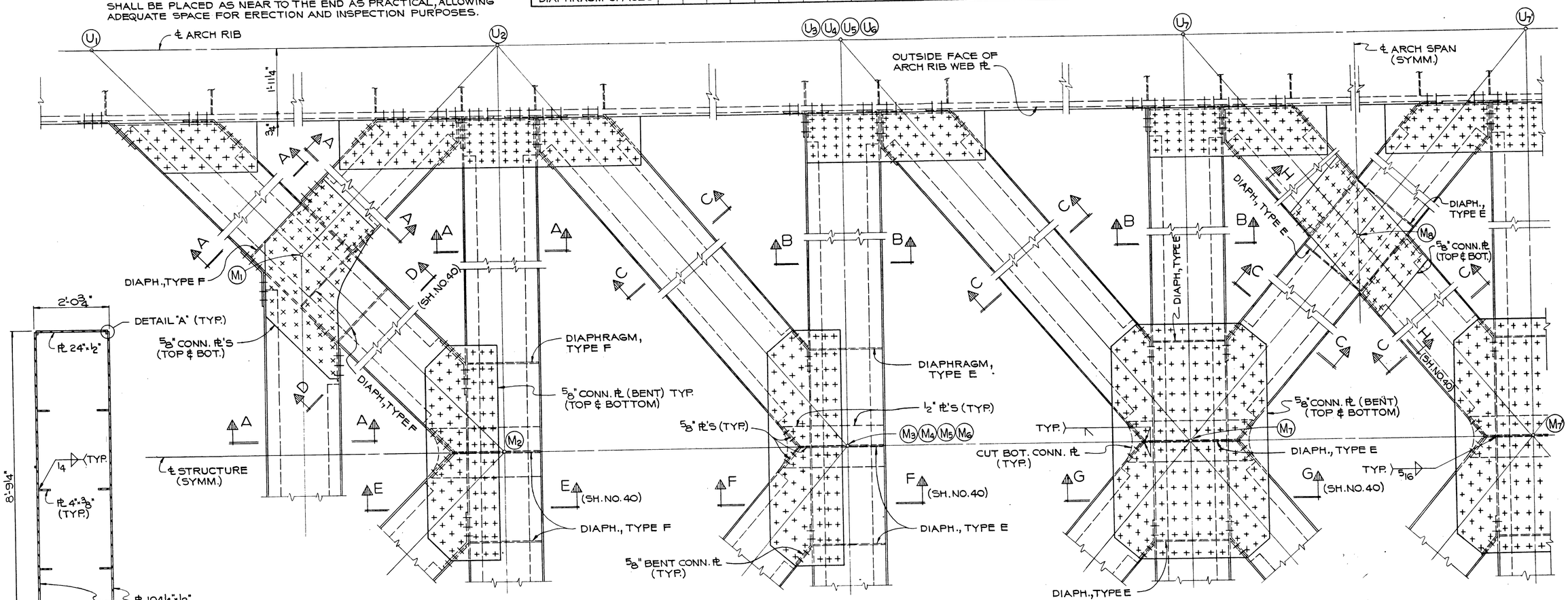
ARCH RIB DETAILS
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	39
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

DIAPHRAGM NOTE :

DIAPHRAGMS SHALL BE PLACED AT THE LATERAL INTERSECTIONS AS SHOWN. THE NUMBER OF EQUAL DIAPHRAGM SPACES REQUIRED FOR EACH MEMBER SHALL BE AS SHOWN IN THE ACCOMPANYING TABLE. THE FIRST DIAPHRAGM ADJACENT TO THE END CONNECTION SHALL BE PLACED AS NEAR TO THE END AS PRACTICAL, ALLOWING ADEQUATE SPACE FOR ERECTION AND INSPECTION PURPOSES.

MEMBER	U_1M_1	M_1M_2	M_1U_2	M_1M_1	U_2M_2	U_3M_3	U_4M_4	U_5M_5	U_6M_6	U_7M_7	U_2M_3	U_3M_4	U_4M_5	U_5M_6	U_6M_7	U_7M_8	M_7M_8
NUMBER OF EQUAL DIAPHRAGM SPACES	3	3	3	4	4	4	4	4	4	4	6	6	6	6	6	3	3

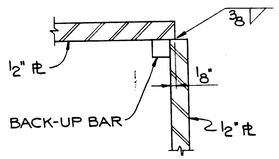


LAYOUT OF TOP LATERAL BRACING

SCALE : ¾"=1'-0"

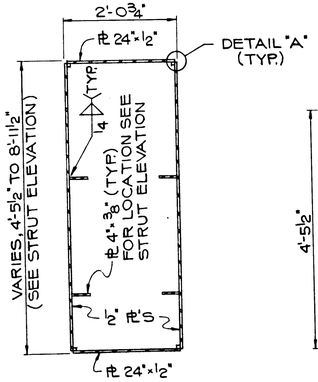
SECTION A-A

(PORTALS)
SCALE: ¾"=1'-0"



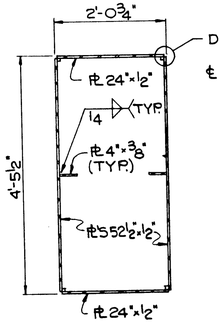
DETAIL "A"

HALF SCALE



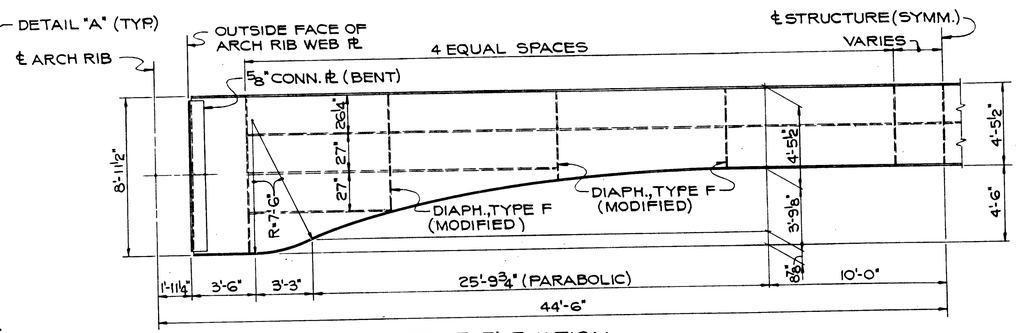
SECTION B-B

(STRUTS)
SCALE: ¾"=1'-0"



SECTION C-C

(DIAGONALS)
SCALE: ¾"=1'-0"



STRUT ELEVATION

(STRUTS U_3, U_4, U_5, U_6 & U_7)
SCALE: 1⁄4"=1'-0"

NOTES :

ALL STRUCTURAL STEEL FOR THE TOP LATERAL BRACING MEMBERS AND BOLTED CONNECTION PLATES SHALL BE A.S.T.M. - A36.

ALL FASTENERS SHALL BE ⅞" Φ, HIGH STRENGTH BOLTS (A325).

ALL TOP LATERAL BRACING MEMBERS SHALL BE FABRICATED TO FIT THE FINAL GEOMETRIC PANEL LENGTHS OF THE ARCH RIB UNDER FULL DEAD LOAD AT 50° F.

FOR DETAILS AND LOCATIONS OF ACCESS COVERS SEE SHEET NO. 40.

FOR ADDITIONAL ARCH RIB JOINT DETAILS SEE SHEETS NO. 34 THRU 37.

ARCH SPAN
TOP LATERAL BRACING

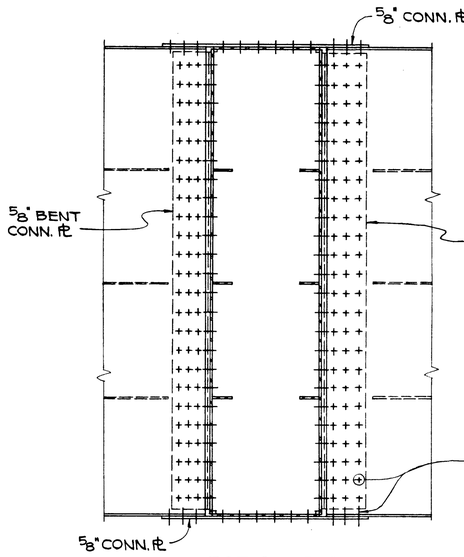
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

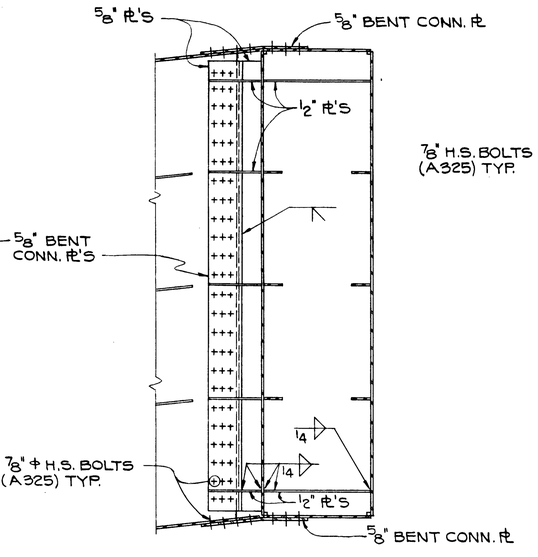
DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	P. POPOVIC
CHECKED	W.J. ZAPFEL
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

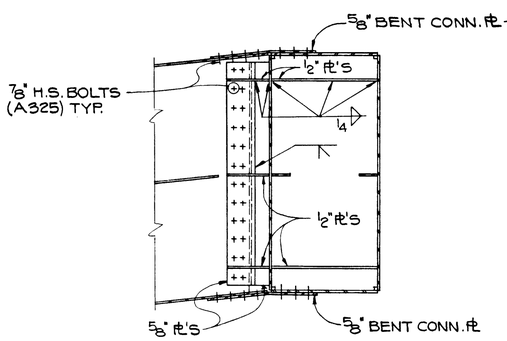
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	40
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



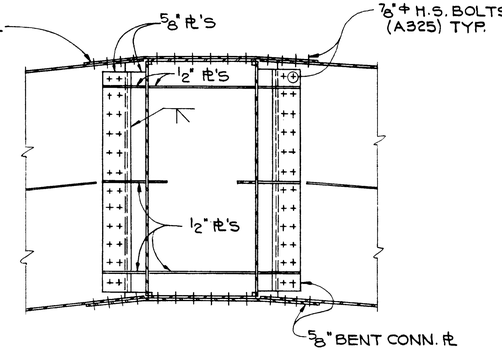
SECTION D-D
SCALE: 3/4"=1'-0"



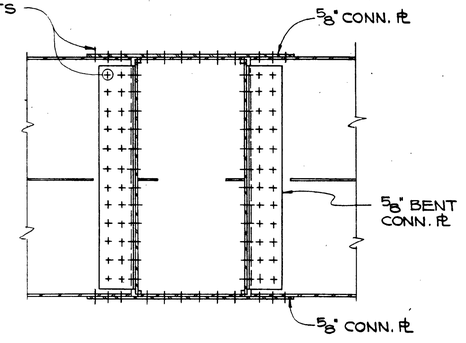
SECTION E-E
SCALE: 3/4"= 1'-0"



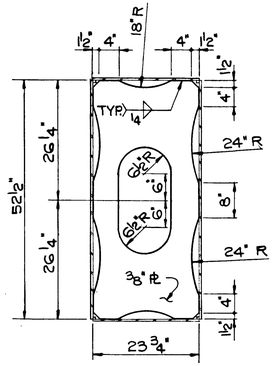
SECTION F-F
SCALE: 3/4"=1'-0"



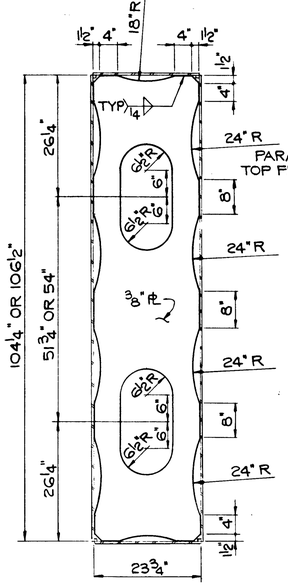
SECTION G-G
SCALE: 3/4"=1'-0"



SECTION H-H
SCALE: 3/4"=1'-0"



TYPE E
SCALE: 3/4"=1'-0"

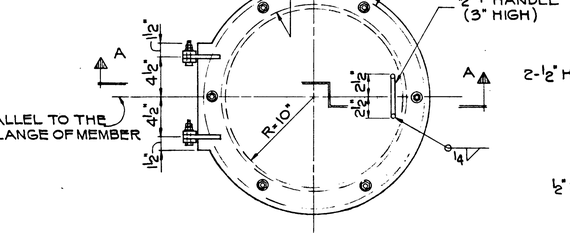


TYPE F
SCALE: 3/4"=1'-0"

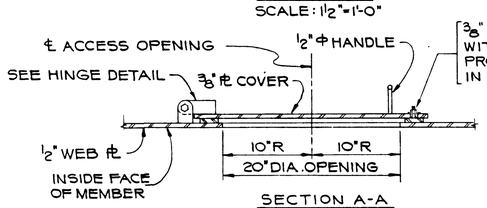
NOTE:

TYPE E DIAPHRAGMS SHALL BE USED FOR ALL DIAGONAL MEMBERS EXCEPT PORTAL DIAGONALS. TYPE F DIAPHRAGMS SHALL BE USED FOR ALL PORTAL MEMBERS AND AT THE ENDS OF THE STRUT MEMBERS. USE A DIAPHRAGM SIMILAR TO TYPE F FOR INTERMEDIATE HEIGHTS OF STRUTS U_3 THRU U_7 AND WITH ONE OPENING LOCATED AT THE BOTTOM AS SHOWN.
FOR LOCATION OF DIAPHRAGMS SEE SHEET NO. 39.

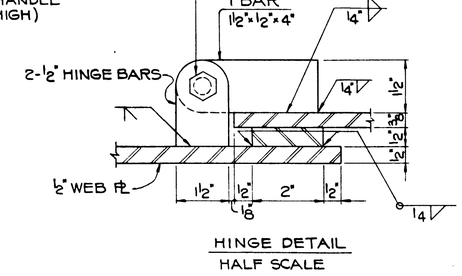
TOP LATERAL BRACING DIAPHRAGM DETAILS



ELEVATION
SCALE: 1 1/2"=1'-0"



SECTION A-A
SCALE: 1 1/2"=1'-0"



HINGE DETAIL
HALF SCALE

NOTE:

AN ACCESS OPENING ℄ COVER SHALL BE LOCATED NEAR EACH END OF ALL TOP LATERAL BRACING MEMBERS INCLUDING THE PORTAL MEMBERS. THE ACCESS OPENINGS SHALL BE PLACED IN THE WEB PLATE FACING THE ℄ OF SPAN, 4'-0" FROM THE END DIAPHRAGM; FOR STRUTS AND PORTAL MEMEBERS BETWEEN MIDDLE AND LOWER HORIZONTAL STIFFENERS AND FOR DIAGONAL MEMBERS AT THE ℄ OF THE MEMBER.

ACCESS COVER DETAILS
(TOP LATERAL BRACING)

WORK THIS SHEET WITH SHEET NO. 39.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
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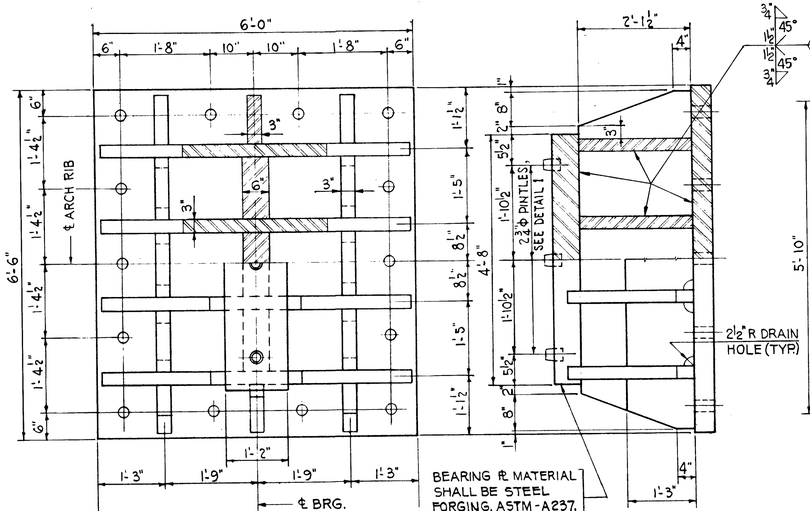
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ARCH SPAN
TOP LATERAL BRACING
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

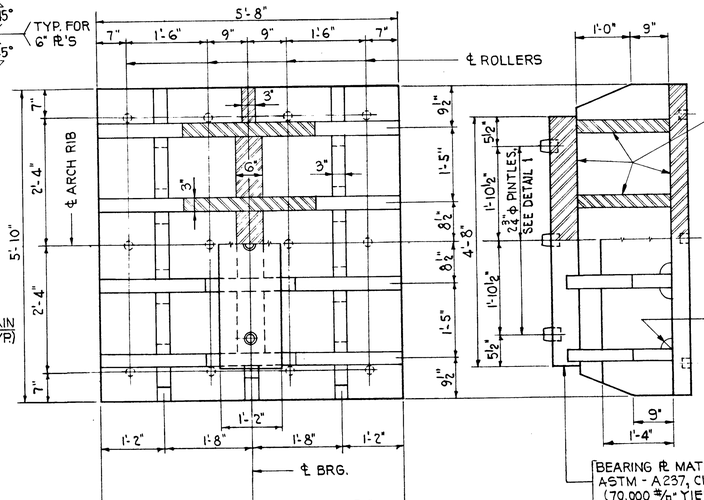
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	41
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



LOWER SHOE - LSF

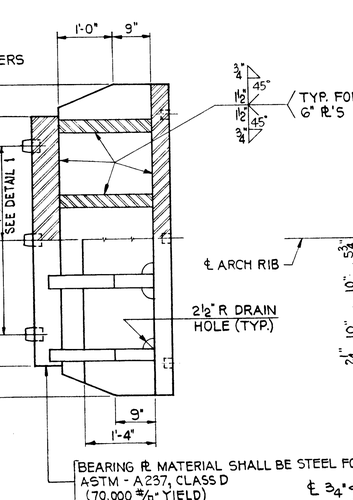
FIXED BEARING

¾" = 1'-0"



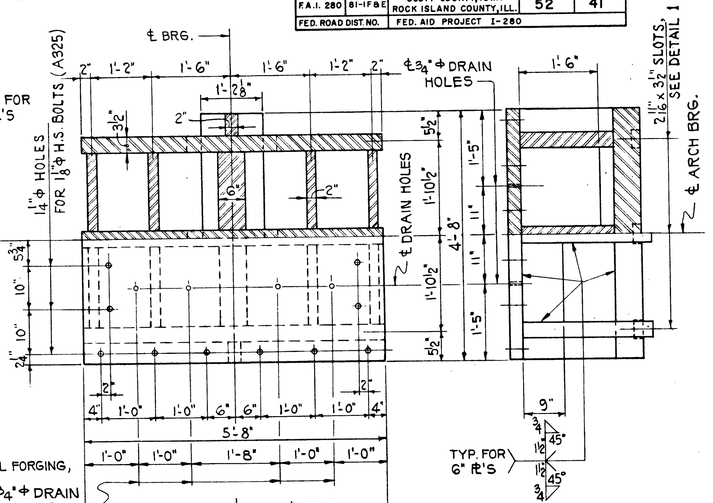
LOWER SHOE - LSE

¾" = 1'-0"



DETAIL 1

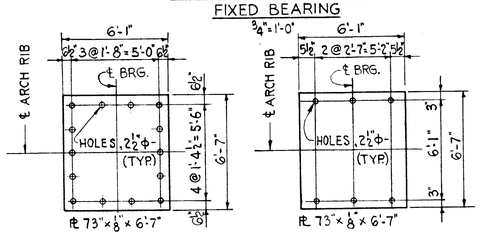
3" = 1'-0"



UPPER SHOE - US

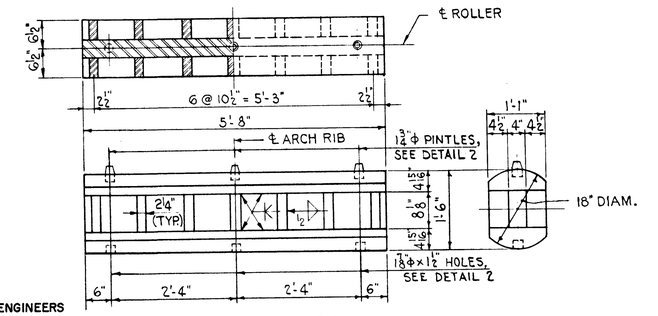
FIXED AND EXP. BEARINGS

¾" = 1'-0"



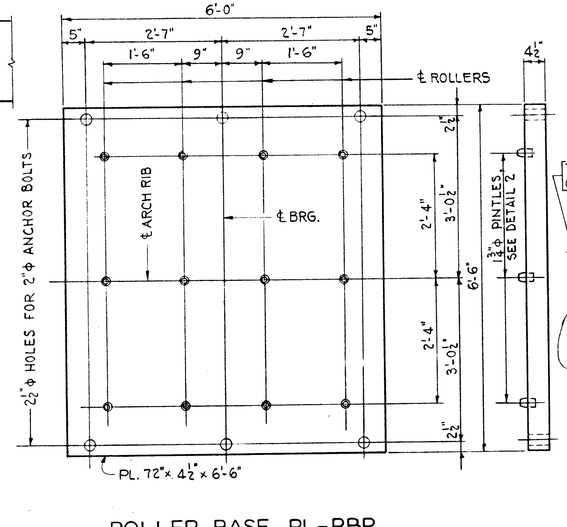
LEAD PL. - LP1

LEAD PL. - LP2



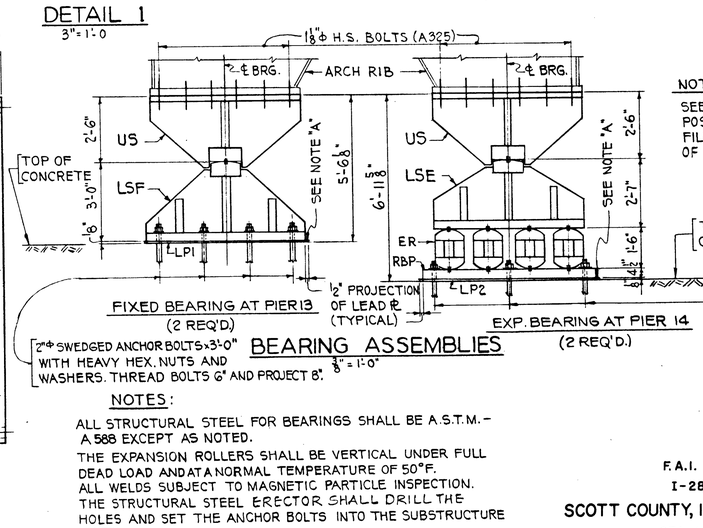
EXP. ROLLER - ER

¾" = 1'-0"



ROLLER BASE PL. - RBP

¾" = 1'-0"



FIXED BEARING AT PIER 13 (2 REQ'D.)

EXP. BEARING AT PIER 14 (2 REQ'D.)

BEARING ASSEMBLIES

⅜" = 1'-0"

NOTE "A"

SEE SPECIAL PROVISIONS REGARDING THE POSSIBLE NEED FOR ADDING ADDITIONAL FILL PLATES UNDER THE MASONRY PLATES OF THE BEARINGS.

NOTES:

ALL STRUCTURAL STEEL FOR BEARINGS SHALL BE A.S.T.M. - A 588 EXCEPT AS NOTED.

THE EXPANSION ROLLERS SHALL BE VERTICAL UNDER FULL DEAD LOAD AND AT A NORMAL TEMPERATURE OF 50°F.

ALL WELDS SUBJECT TO MAGNETIC PARTICLE INSPECTION.

THE STRUCTURAL STEEL ERECTOR SHALL DRILL THE HOLES AND SET THE ANCHOR BOLTS INTO THE SUBSTRUCTURE UNITS.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY W.J. ZAPFEL
DRAWN BY M.M. VERGARA
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ARCH SPAN BEARINGS

F.A.I. ROUTE 280 SECTION 81-1F & E

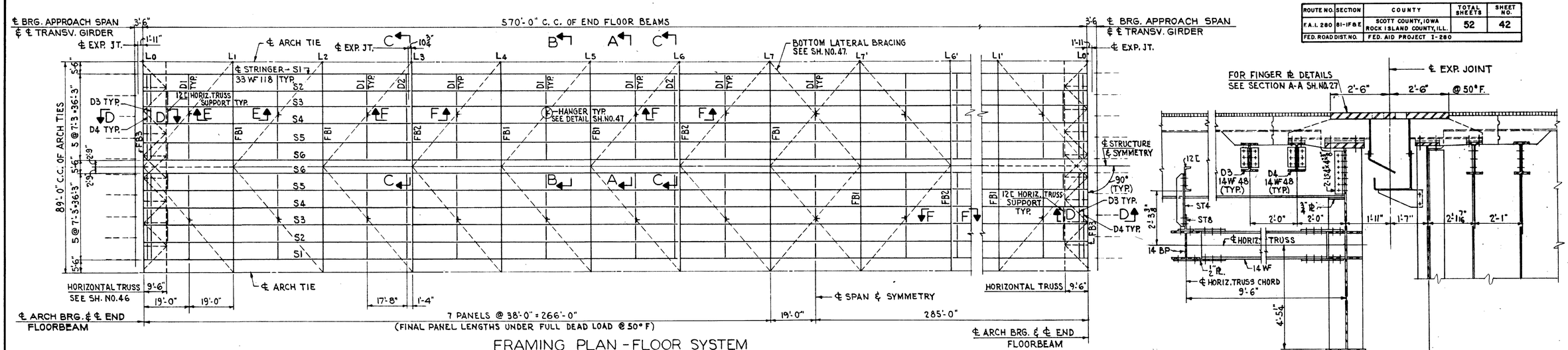
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

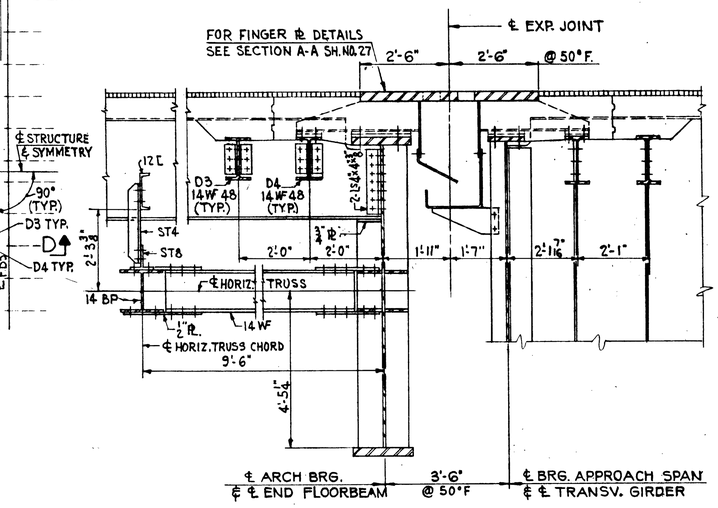
SCALE: AS NOTED DATE: OCT. 1, 1970

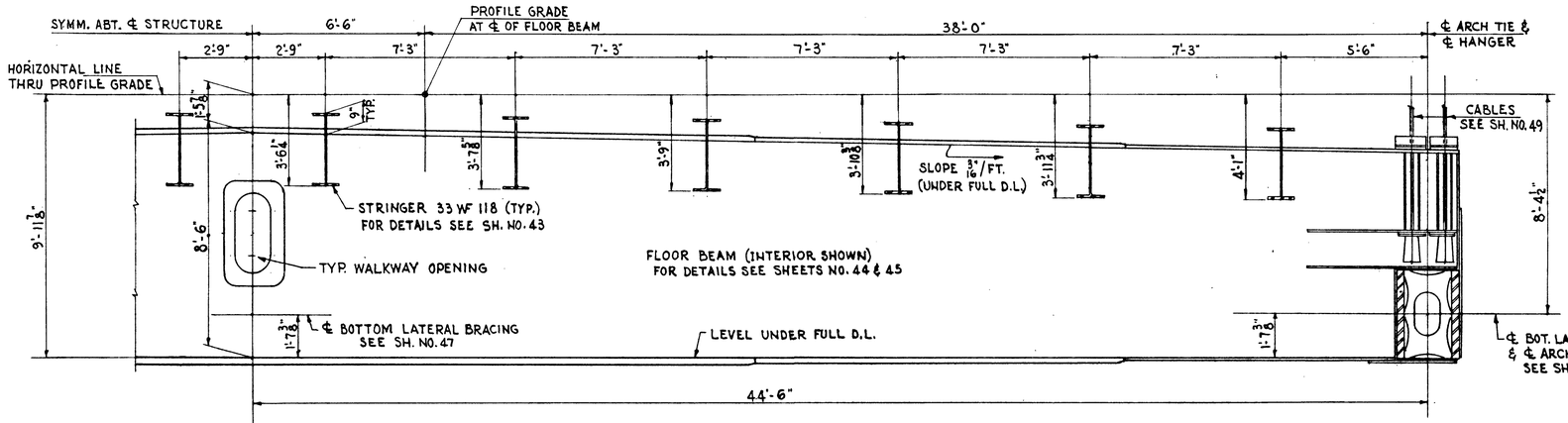
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	42
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



FRAMING PLAN - FLOOR SYSTEM

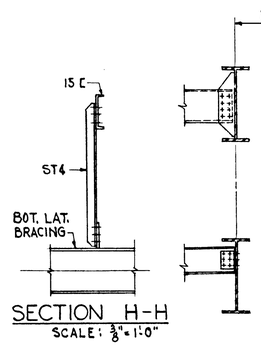
SCALE: 1" = 20'-0"





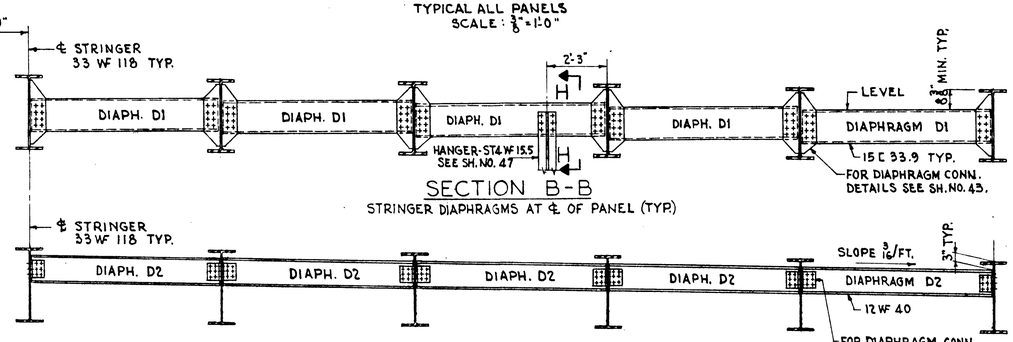
SECTION A-A

TYPICAL ALL PANELS
SCALE: 3/8" = 1'-0"



SECTION H-H

SCALE: 3/8" = 1'-0"

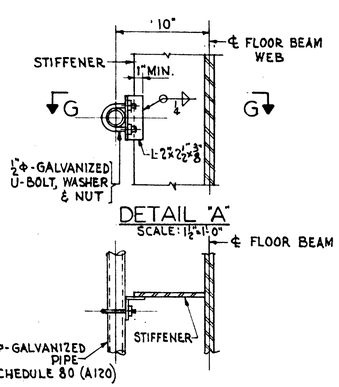


SECTION B-B

STRINGER DIAPHRAGMS AT ℄ OF PANEL (TYP.)

SECTION C-C

DECK SLAB SUPPORTS AT EXP. END OF STRINGERS



DETAIL "A"

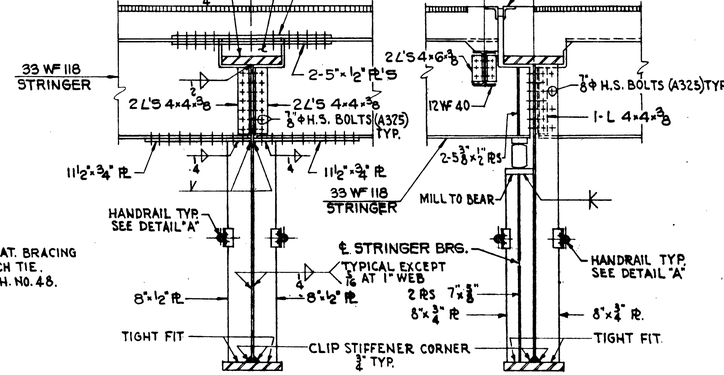
SCALE: 1 1/2" = 1'-0"

SECTION G-G

SCALE: 1 1/2" = 1'-0"

SECTION D-D

SCALE: 1/2" = 1'-0"



SECTION E-E

SCALE: 1/2" = 1'-0"

SECTION F-F

SCALE: 1/2" = 1'-0"

NOTE

INTERIOR FLOOR BEAMS TO BE CAMBERED FOR DEAD LOAD.
FOR GENERAL NOTES SEE SH. NO. 2.
MATERIAL : SEE SH. NO. 2.
BOLT SIZES AS NOTED OR SHOWN ON OTHER DRAWINGS.
SEE SH. NO. 43 FOR STRINGER AND DIAPHRAGM DETAILS.
SEE SH. NO. 44 FOR INTERIOR FLOOR BEAM DETAILS.
SEE SH. NO. 45 FOR END FLOOR BEAM DETAILS.
SEE SH. NO. 27 FOR EXPANSION JOINT DETAILS.

ARCH SPAN FLOOR SYSTEM

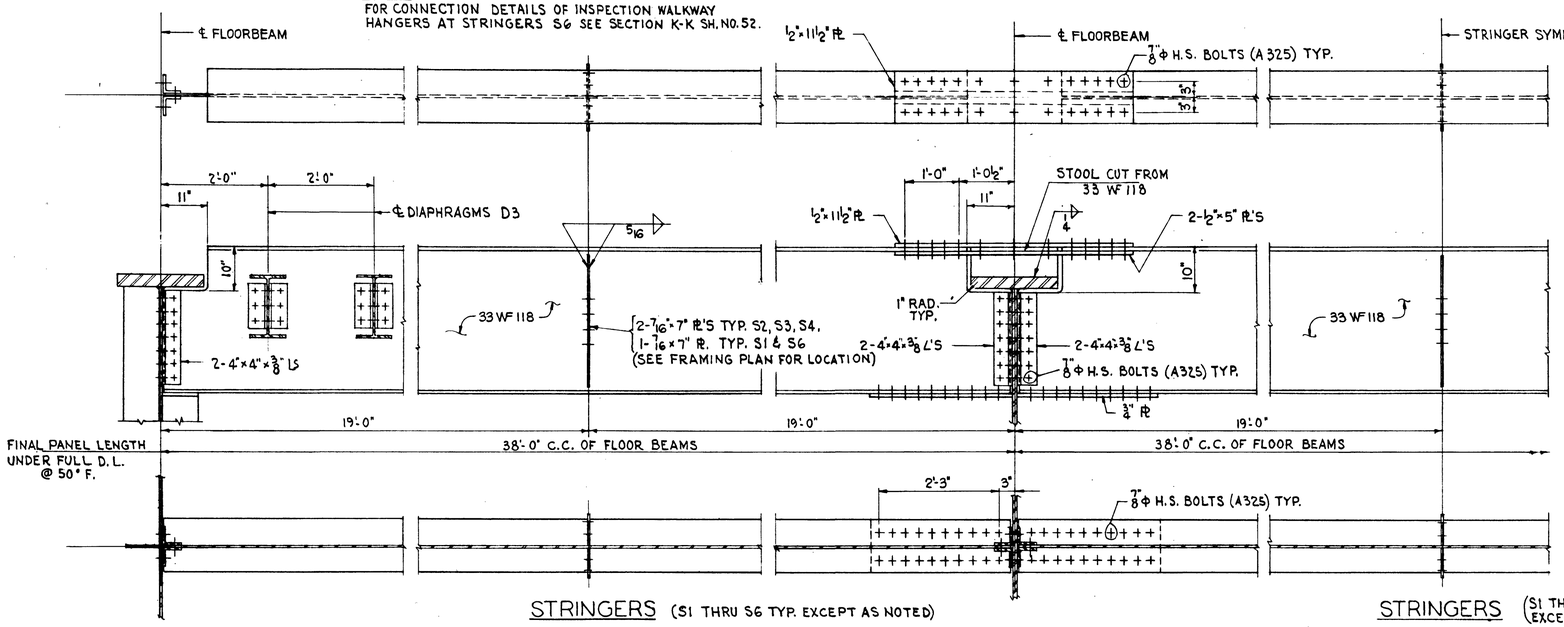
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

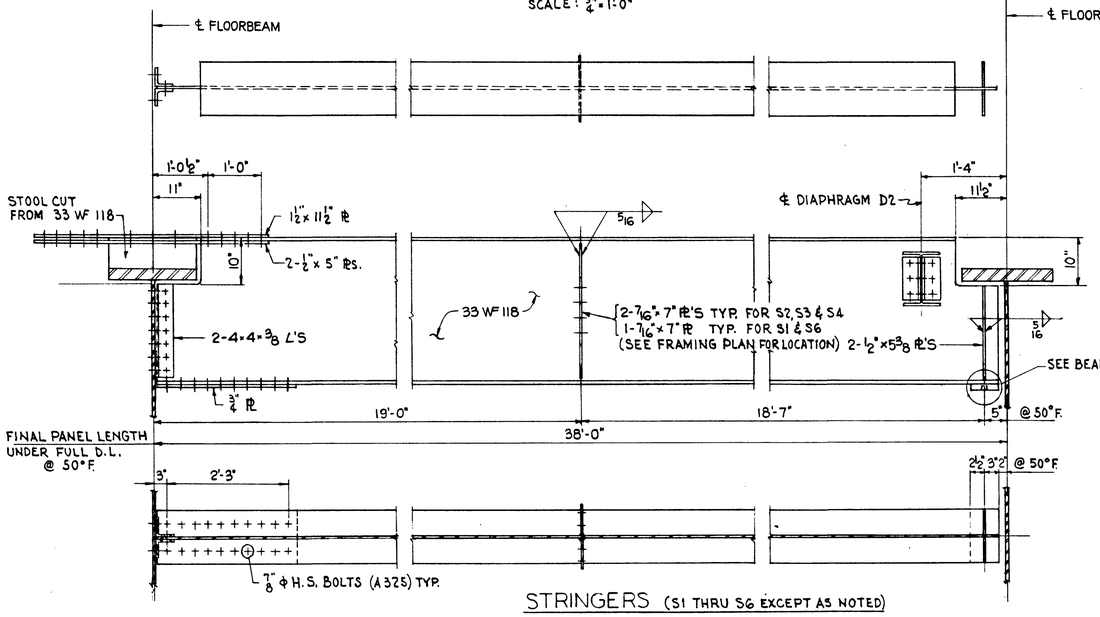
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY M.M. VERGARA
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	43
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

NOTE
FOR CONNECTION DETAILS OF INSPECTION WALKWAY HANGERS AT STRINGERS S6 SEE SECTION K-K SH. NO. 52.

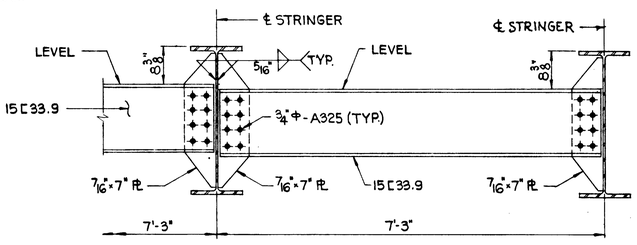


STRINGERS (S1 THRU S6 TYP. EXCEPT AS NOTED)
PANELS L0-L1, L3-L4 & L6-L7
SCALE: ¾"=1'-0"

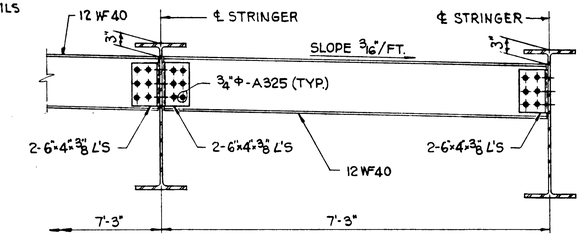


STRINGERS (S1 THRU S6 TYP. EXCEPT AS NOTED)
PANELS L2-L3 & L5-L6

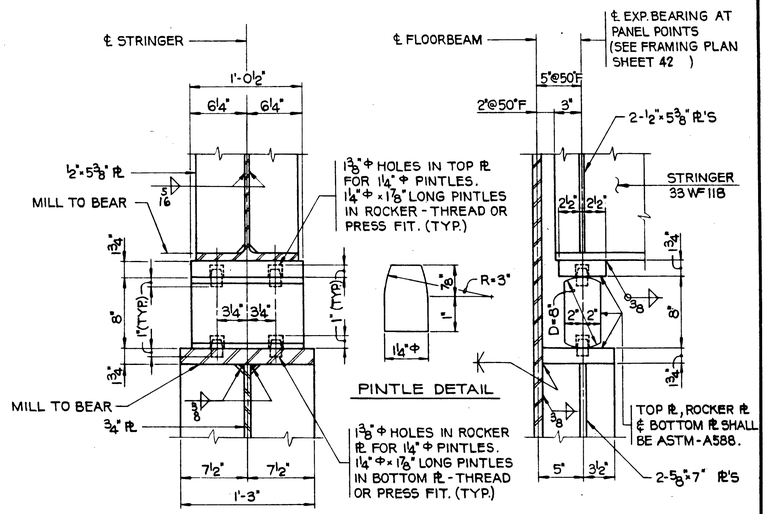
STRINGERS (S1 THRU S6 TYP. EXCEPT AS NOTED)
PANELS L1-L2, L4-L5 & L7-L7'
SCALE: ¾"=1'-0"



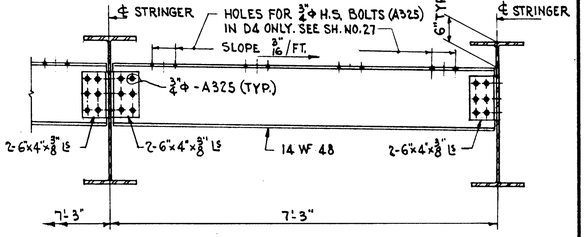
DIAPHRAGM D1
SCALE: ¾"=1'-0"



DIAPHRAGM D2
SCALE: ¾"=1'-0"



STRINGER EXPANSION BEARING DETAILS
SCALE: 1½"=1'-0"



DIAPHRAGM D3 OR D4
SCALE: ¾"=1'-0"

NOTE
BOLT SIZES AS NOTED AND SHOWN ON OTHER DRAWINGS.
ALL STRUCTURAL STEEL FOR STRINGERS SHALL BE ASTM A 36 EXCEPT STRINGER EXPANSION BEARING ASSEMBLY SHALL BE ASTM A 588.
ALL STRINGERS SHALL BE FABRICATED TO FIT THE FINAL GEOMETRIC PANEL LENGTHS UNDER FULL DEAD LOAD @ 50° F.
UNDERSIZE ERECTION BOLTS SHALL BE USED AS REQUIRED TO ACCOMMODATE THE ARCH TIE ELONGATION DUE TO THE DEAD LOAD OF STRUCTURAL STEEL. FINAL HIGH STRENGTH BOLTS SHALL NOT BE PLACED UNTIL ALL THE STRUCTURAL STEEL IS IN PLACE AND AFTER THE ARCH TIE IS CLOSED AND THE BLOCKING REMOVED.

DE LEUW, CATHER & COMPANY ENGINEERS
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DRAWN BY M. M. VERGARA
CHECKED A. MILUNAS
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

ARCH SPAN
STRINGERS

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38
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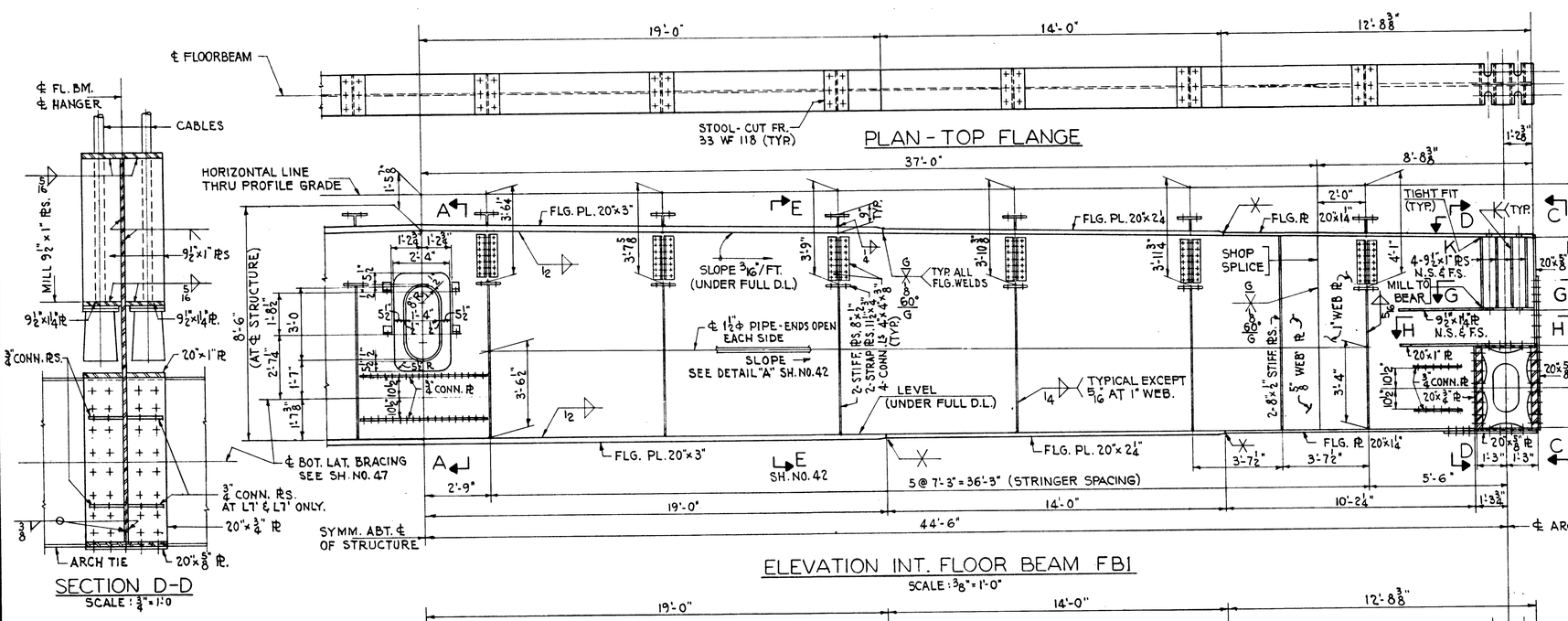
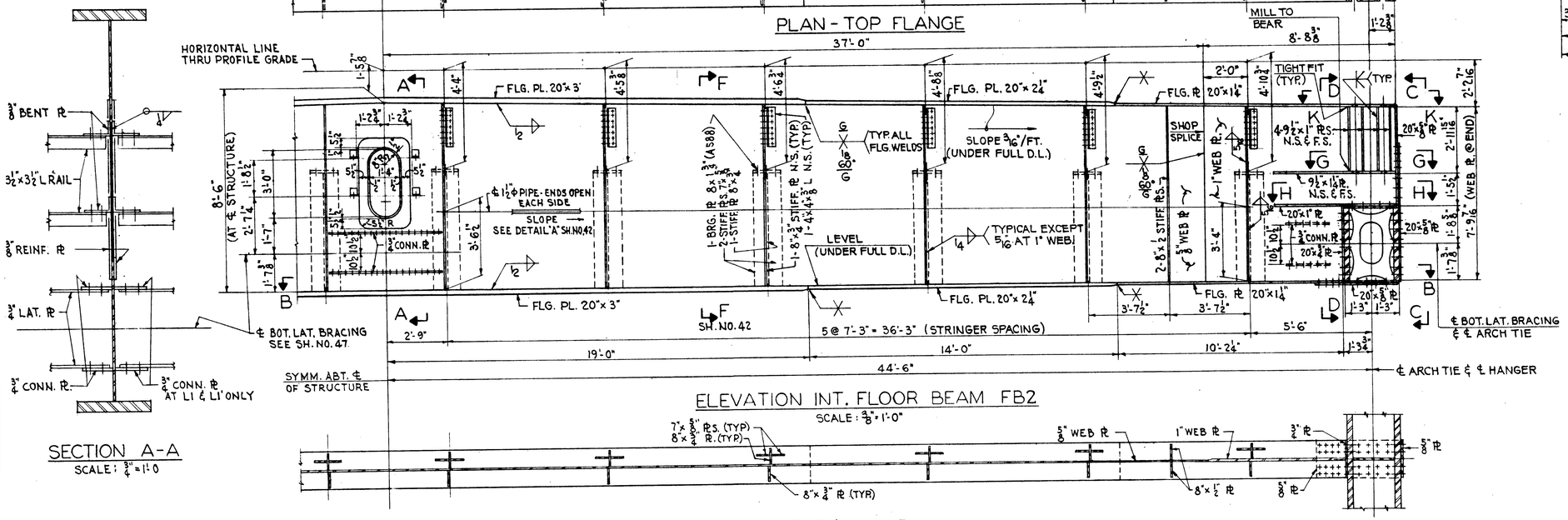
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	44
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		





DE LEUW, CATHER & COMPANY ENGINEERS

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APPROVED W. G. HORN

NOTE

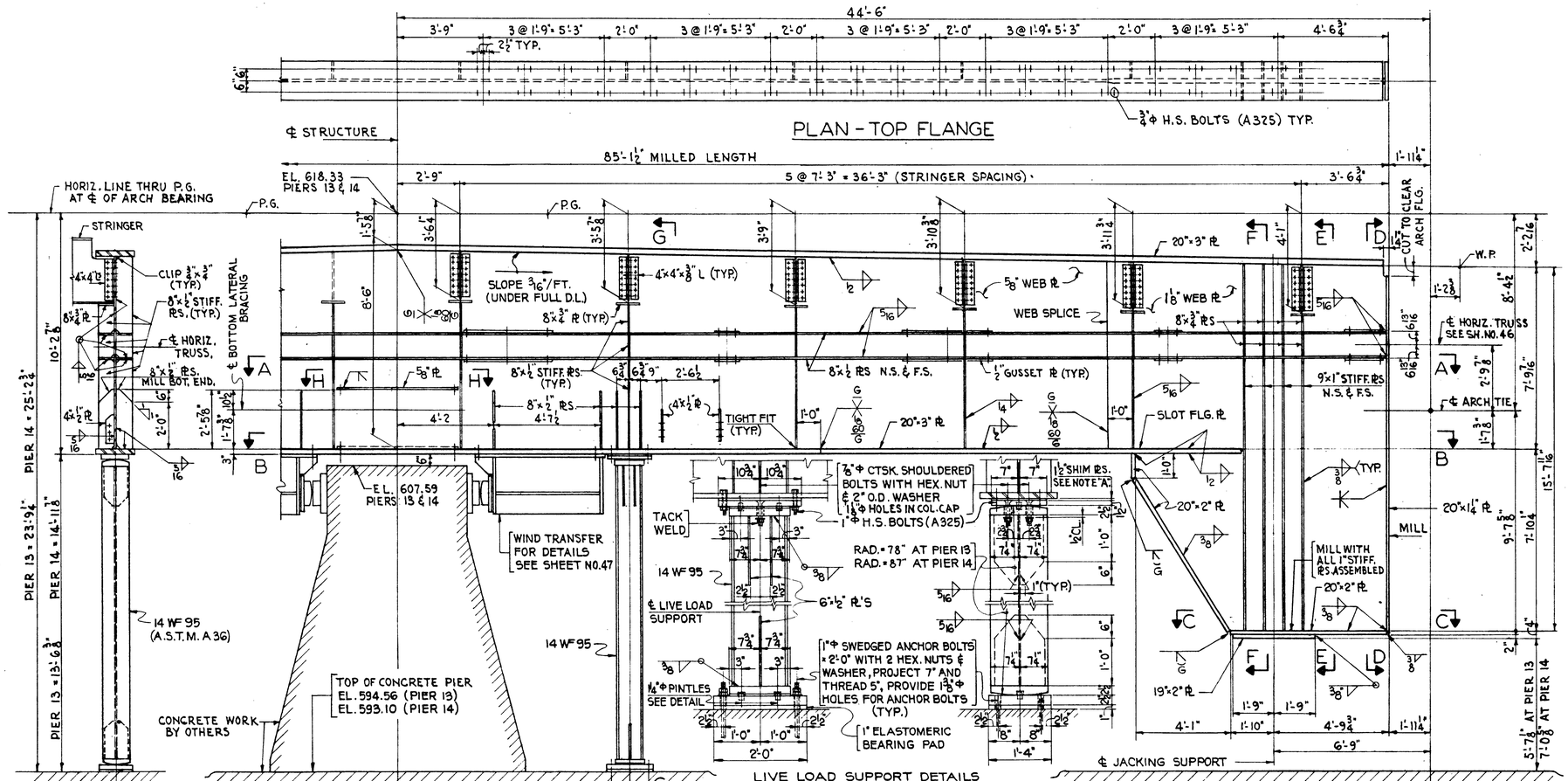
INTERIOR FLOOR BEAMS SHALL BE CAMBERED FOR FULL DEAD LOAD DEFLECTION. CAMBER SHALL BE ACHIEVED BY CUTTING THE TOP AND BOTTOM EDGES OF THE WEB PLATE TO THE CURVATURE SHOWN IN ADDITION TO THE FINAL SLOPE OF THE TOP EDGE OF THE FLOOR BEAM WEB PLATE.
BOLT SIZES AS NOTED AND AS SHOWN ON OTHER DRAWINGS.
ALL STRUCTURAL STEEL FOR INTERIOR FLOOR BEAMS SHALL BE A.S.T.M. - A36, EXCEPT FOR STRINGER BEARING PLATES WHICH SHALL BE A.S.T.M. - A588.

ARCH SPAN
INTERIOR FLOOR BEAMS

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	45
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



PLAN - TOP FLANGE

SEC. G-G
SCALE: ⅜"=1'-0"

LIVE LOAD SUPPORT DETAILS
SCALE: ⅜"=1'-0"

SEC. D-D
SCALE: ⅜"=1'-0"

SEC. E-E
SCALE: ⅜"=1'-0"

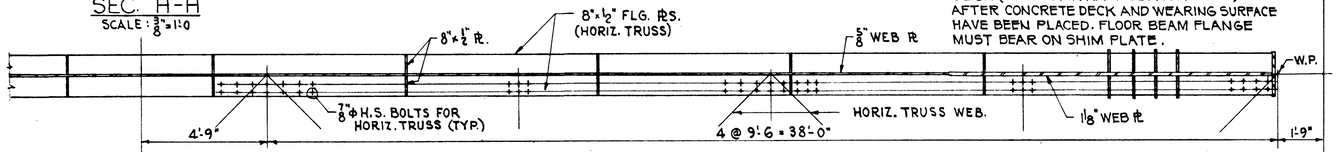
SEC. F-F
SCALE: ⅜"=1'-0"

ELEVATION END FLOOR BEAMS - FB3
SCALE: ⅜"=1'-0"

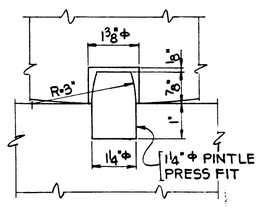
SEC. H-H
SCALE: ⅜"=1'-0"

NOTE "A"

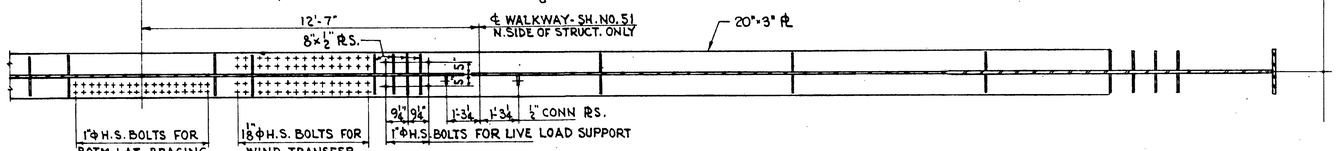
CONTRACTOR FOR THIS SECTION SHALL FURNISH SHIM PLATES OF VARYING THICKNESSES. THESE SHIMS SHALL BE INSTALLED BY THE CONTRACTOR FOR THE DECK (DECK CONTRACT SECTION 81-1D) AFTER CONCRETE DECK AND WEARING SURFACE HAVE BEEN PLACED. FLOOR BEAM FLANGE MUST BEAR ON SHIM PLATE.



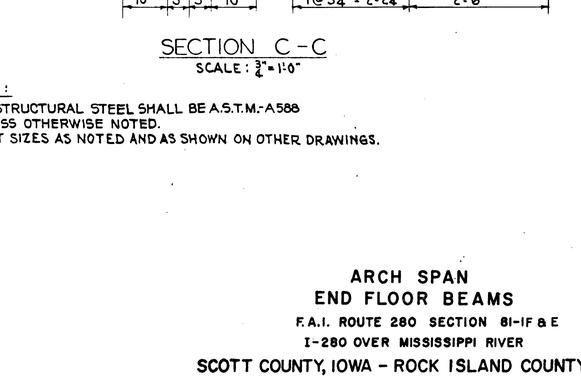
SECTION A-A
SCALE: ⅜"=1'-0"



PINTLE DETAIL
SCALE: HALF SIZE



SECTION B-B
SCALE: ⅜"=1'-0"



SECTION C-C
SCALE: ½"=1'-0"

NOTE:

ALL STRUCTURAL STEEL SHALL BE A.S.T.M.-A588 UNLESS OTHERWISE NOTED.
BOLT SIZES AS NOTED AND AS SHOWN ON OTHER DRAWINGS.

ARCH SPAN
END FLOOR BEAMS

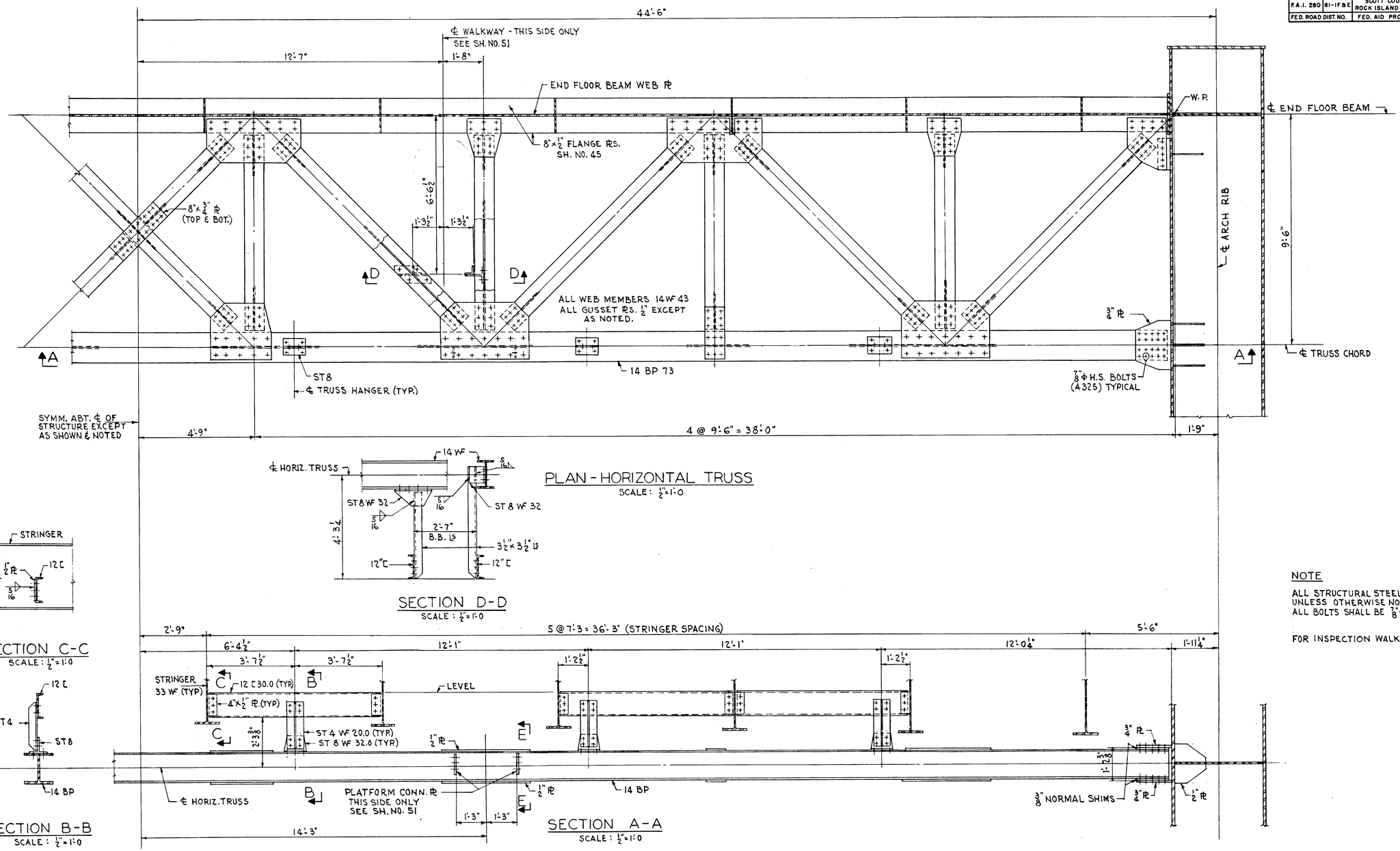
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

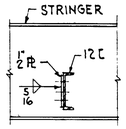
DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	M.M. VERGARA
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	46
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



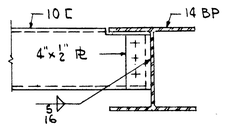
PLAN - HORIZONTAL TRUSS
SCALE: 1"=1'-0



SECTION C-C
SCALE: 1"=1'-0

SECTION B-B
SCALE: 1"=1'-0

SECTION A-A
SCALE: 1"=1'-0



SECTION E-E
SCALE: 1"=1'-0

NOTE

ALL STRUCTURAL STEEL SHALL BE A.S.T.M. - A36 UNLESS OTHERWISE NOTED.
ALL BOLTS SHALL BE ⅞" Φ H.S. (A325) UNLESS NOTED.

FOR INSPECTION WALKWAY DETAILS SEE SH. NO. 51.

ARCH SPAN
HORIZONTAL TRUSS

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY M.M. VERGARA
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	47
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

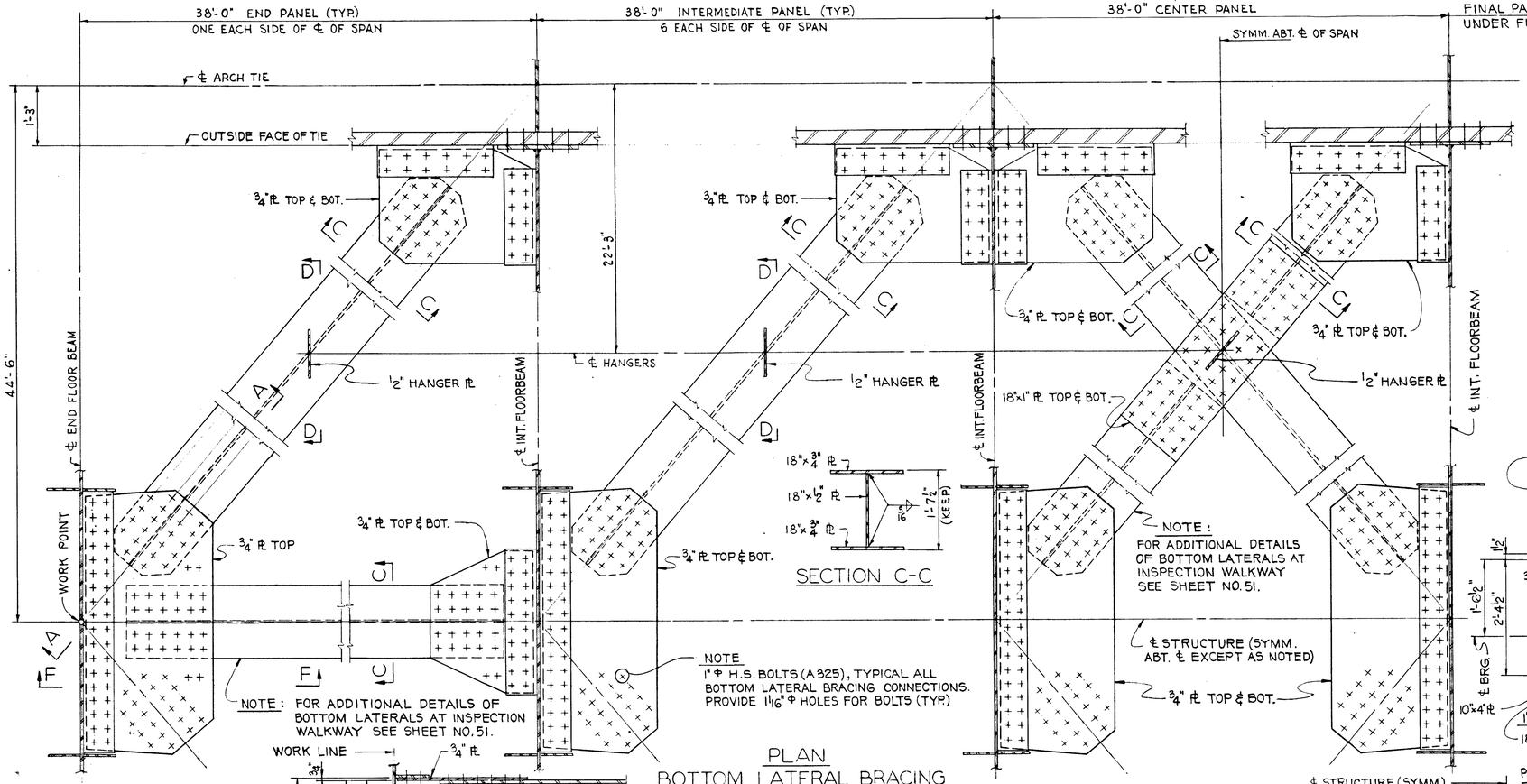
38'-0" END PANEL (TYP.)
ONE EACH SIDE OF ℄ OF SPAN

38'-0" INTERMEDIATE PANEL (TYP.)
6 EACH SIDE OF ℄ OF SPAN

38'-0" CENTER PANEL

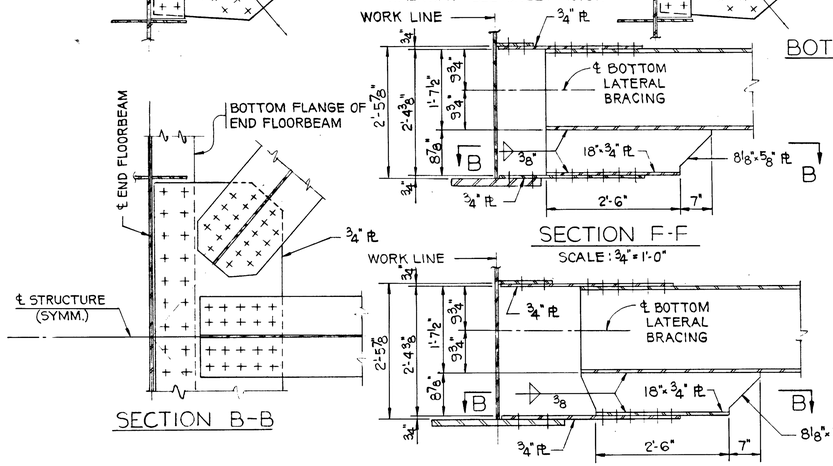
SYMM. ABT. ℄ OF SPAN

FINAL PANEL LENGTHS
UNDER FULL DEAD LOAD AT 50°F



PLAN
BOTTOM LATERAL BRACING
SCALE: ¾" = 1'-0"

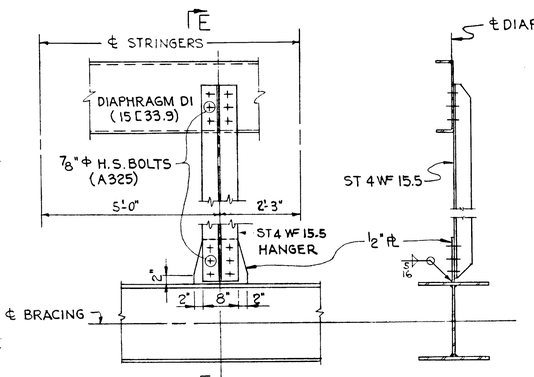
SECTION C-C



SECTION F-F
SCALE: ¾" = 1'-0"

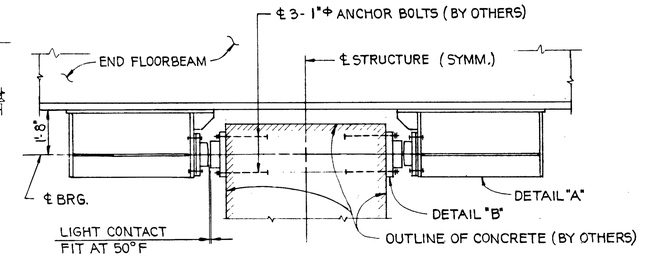
SECTION B-B

SECTION A-A
SCALE: ¾" = 1'-0"

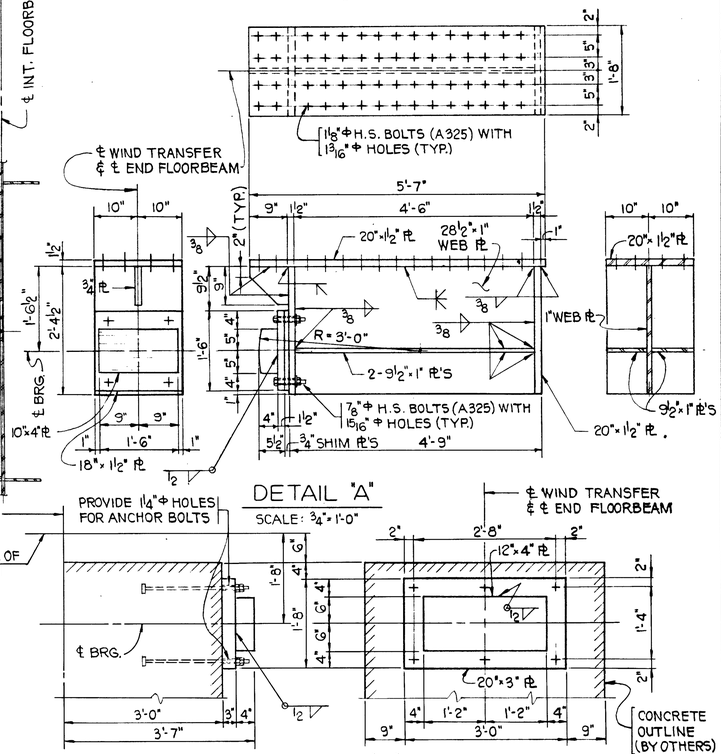


SECTION D-D
SCALE: ¾" = 1'-0"

SECTION E-E
SCALE: ¾" = 1'-0"



WIND TRANSFER DETAIL
SCALE: ⅜" = 1'-0"



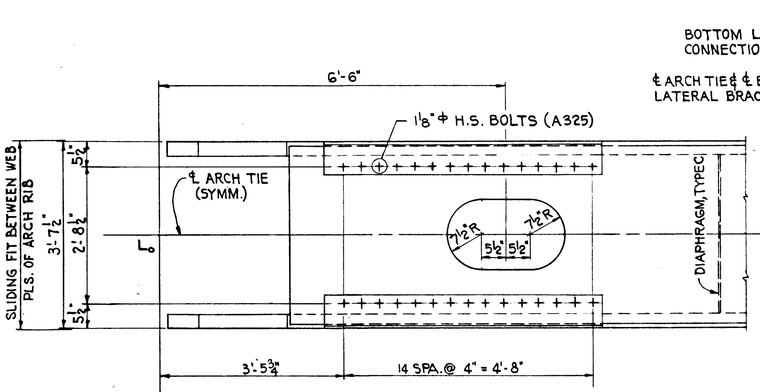
NOTES:
ALL STRUCTURAL STEEL FOR BOTTOM LATERAL BRACING & WIND TRANSFER SHALL BE ASTM-A36.
ALL BOTTOM LATERAL DIAGONAL MEMBERS AND STRUT MEMBERS SHALL BE FABRICATED TO FIT THE FINAL GEOMETRIC PANEL LENGTHS OF THE ARCH TIE UNDER FULL DEAD LOAD AT 50° F.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY P. POPOVIC
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

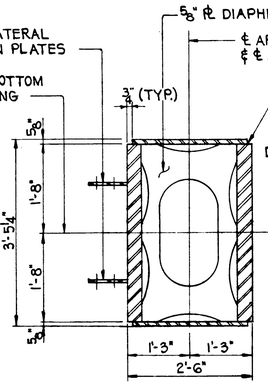
ARCH SPAN
BOTTOM LATERAL BRACING

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

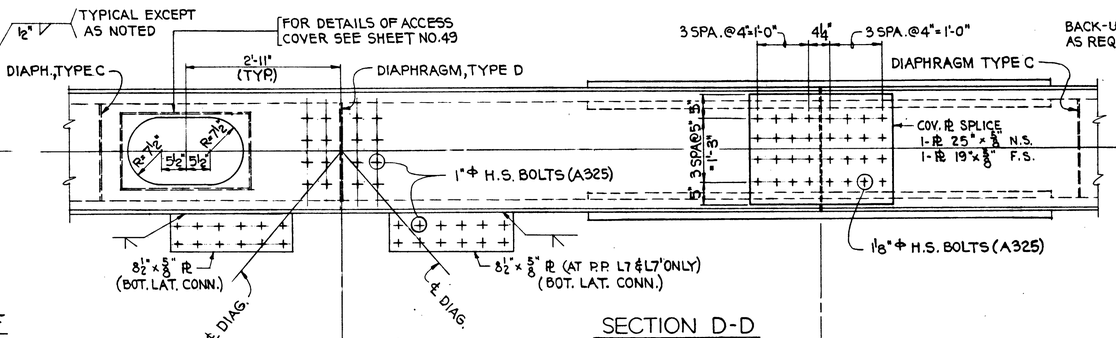
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	48
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



SECTION A-A

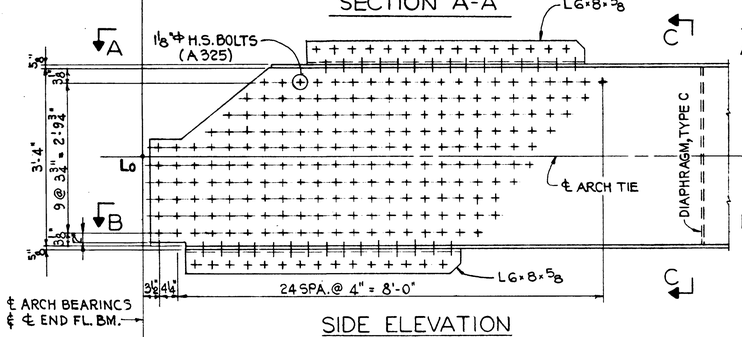


SECTION F-F

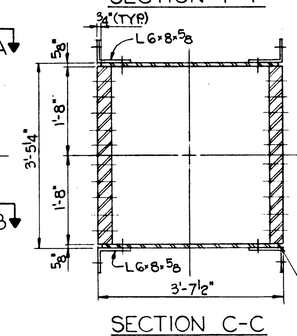


SECTION D-D

DIAPH.-TYPE C
SCALE: ¾"=1'-0"

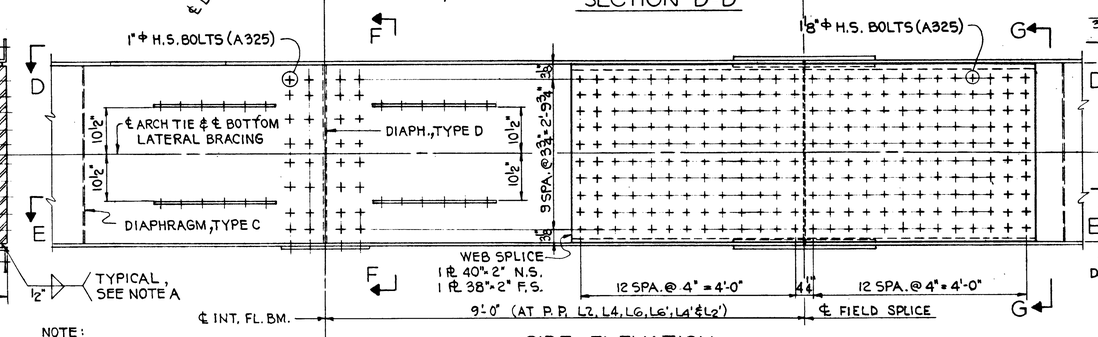


SIDE ELEVATION

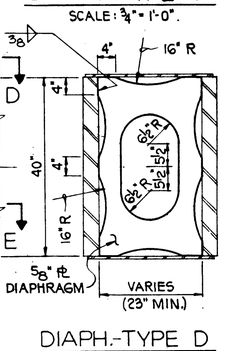


SECTION C-C

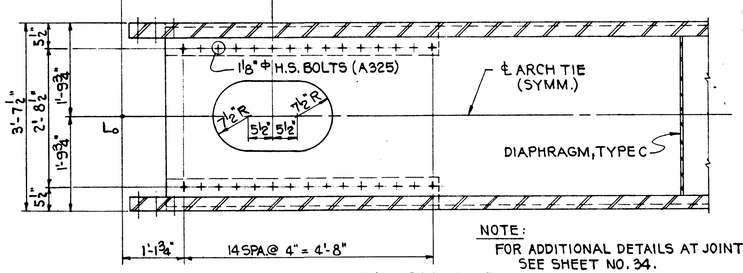
NOTE:
SEE SHEETS NO. 44 ℄ 47 FOR ADDITIONAL FLOORBEAM ℄ BOTTOM LATERAL CONNECTION DETAILS.



SIDE ELEVATION



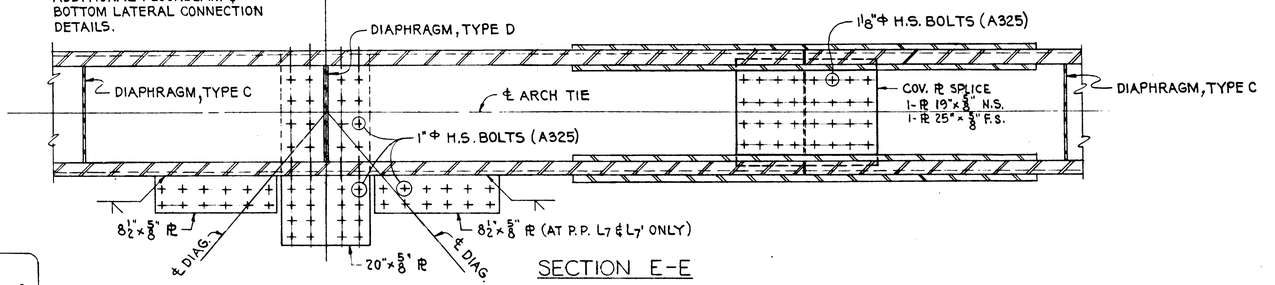
DIAPH.-TYPE D
SCALE: ¾"=1'-0"



SECTION B-B

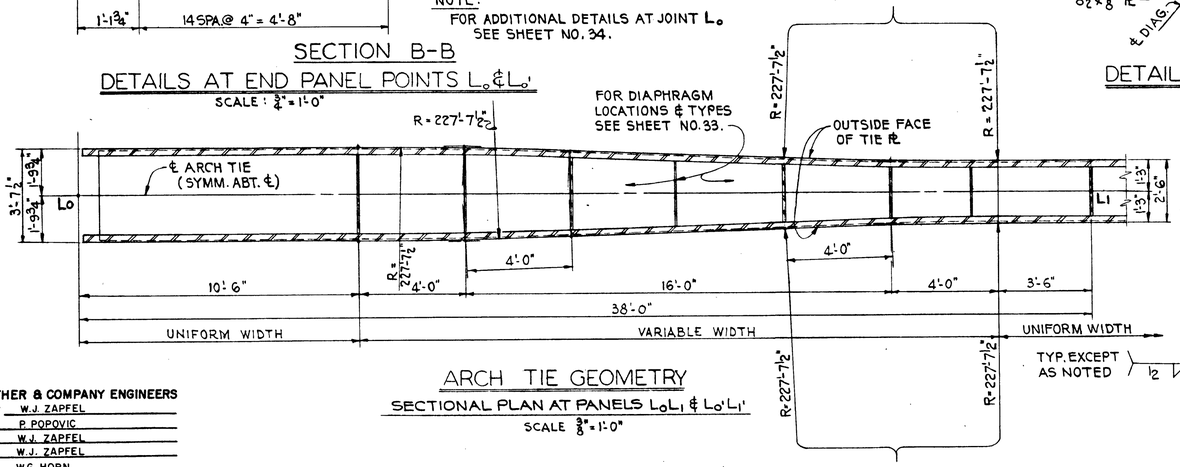
NOTE A:
PROVIDE FILLET WELDS ON INSIDE CORNERS OF TIE SECTION FOR A DISTANCE OF 13'-0" FROM PANEL POINTS L_o ℄ L_o'.

NOTE:
FOR ADDITIONAL DETAILS AT JOINT L_o SEE SHEET NO. 34.



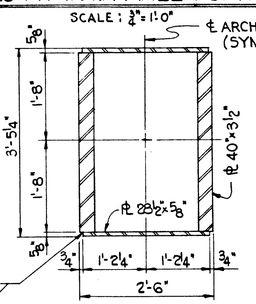
SECTION E-E

DETAILS AT END PANEL POINTS L_o ℄ L_o'
SCALE: ¾"=1'-0"



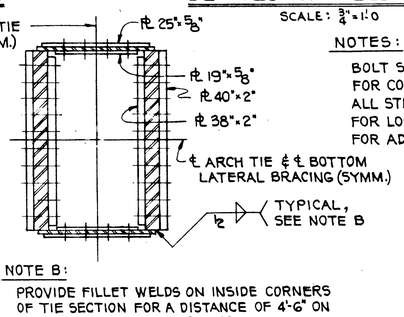
ARCH TIE GEOMETRY
SECTIONAL PLAN AT PANELS L_oL_1 ℄ $L_o'L_1'$
SCALE ⅜"=1'-0"

DETAILS AT INT. PANEL POINTS
SCALE: ¾"=1'-0"



TYP. TIE SECTION
(EXCEPT AT END PANELS)
SCALE: ¾"=1'-0"

DETAILS OF FIELD SPLICE
SCALE: ¾"=1'-0



SECTION G-G
SCALE: ¾"=1'-0"

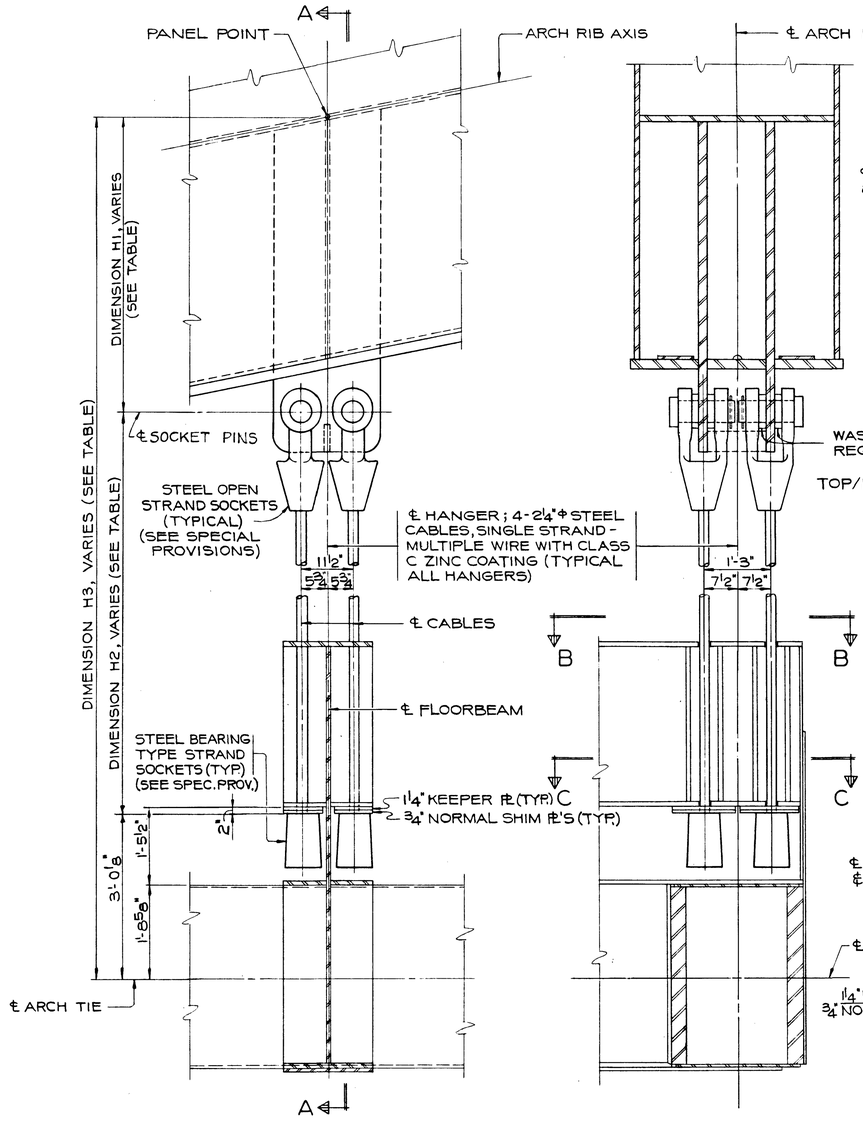
NOTES:
BOLT SIZES AS NOTED.
FOR CONFIGURATION OF ARCH TIE SEE SHEET NO.33.
ALL STRUCTURAL STEEL SHALL BE A.S.T.M.-A588.
FOR LOCATION OF ARCH TIE DIAPHRAGMS SEE SHEET NO.33.
FOR ADDITIONAL DETAILS ℄ NOTES SEE SHEET NO.33.

NOTE B:
PROVIDE FILLET WELDS ON INSIDE CORNERS OF TIE SECTION FOR A DISTANCE OF 4'-6" ON EITHER SIDE OF FIELD SPLICES.

ARCH SPAN
TIE DETAILS
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY P. POPOVIC
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	49
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

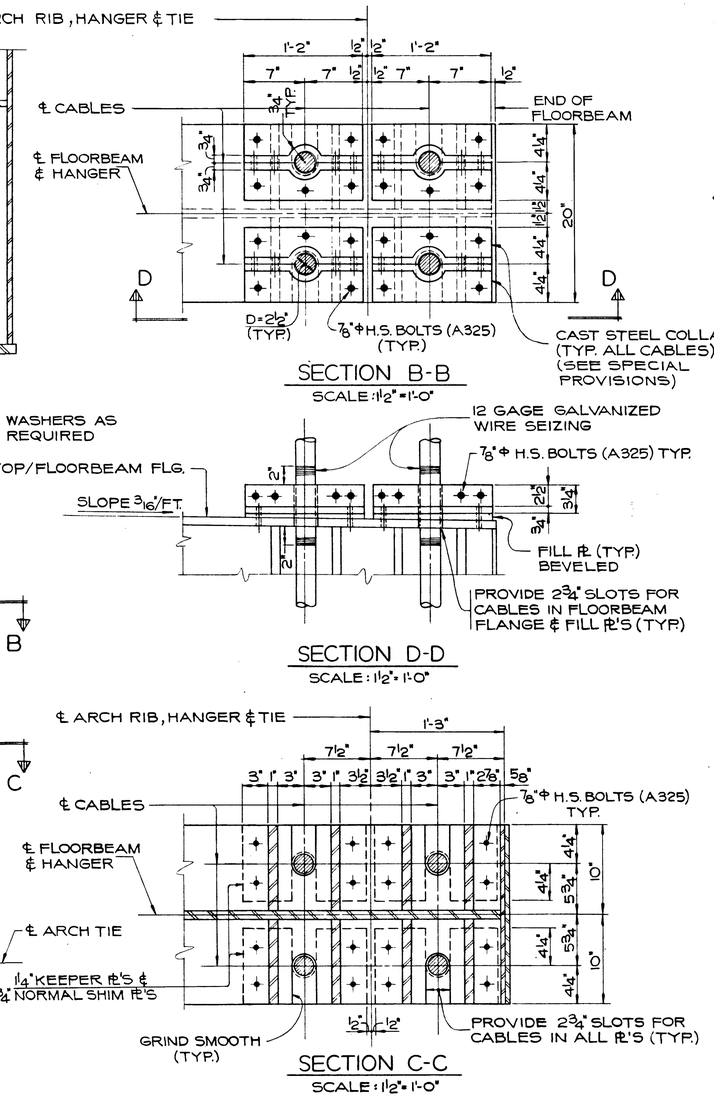


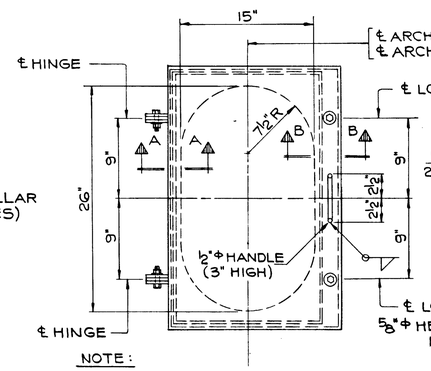
TYPICAL HANGER ELEVATION

SCALE: ¾"=1'-0"

SECTION A-A

SCALE: ¾"=1'-0"



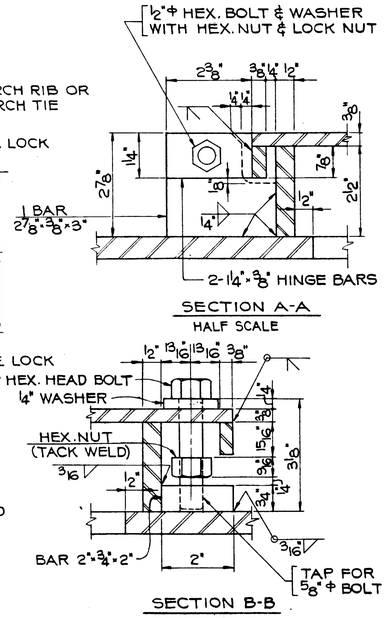


NOTE:

FOR LOCATION OF ACCESS COVERS IN ARCH RIB & ARCH TIE SEE STRUCTURAL PLANS.
ALL STRUCTURAL STEEL FOR COVER ASSEMBLIES SHALL BE ASTM-A36 EXCEPT PORTIONS WHICH ARE WELDED TO THE ARCH RIB & TIE SHALL BE ASTM-A588.

PLAN

SCALE: 1½"=1'-0"



ACCESS COVER DETAILS

(ARCH RIB & ARCH TIE)

* NOTE:

DIMENSIONS SHOWN FOR "H2" & "H3" ARE FINAL IN PLACE DIMENSIONS. HANGER CABLES SHALL BE FABRICATED SHORTER THAN THE "H2" DIMENSIONS SHOWN BY AN AMOUNT REQUIRED TO COMPENSATE FOR FULL DEAD LOAD CABLE ELONGATIONS.
FOR DEAD LOAD CABLE ELONGATIONS SEE SHEET 33.

HANGER DIMENSIONS			
PANEL POINT	DIMENSIONS		
	H1	H2 *	H3 *
U_1 & $U_{1'}$	6'-10"	18'-4 5/8"	28'-2 3/4"
U_2 & $U_{2'}$	6'-7"	42'-10"	52'-5 1/8"
U_3 & $U_{3'}$	6'-3"	63'-4"	72'-7 1/8"
U_4 & $U_{4'}$	5'-11"	79'-9 3/8"	88'-8 3/4"
U_5 & $U_{5'}$	5'-9"	92'-0 15/16"	100'-9 15/16"
U_6 & $U_{6'}$	5'-7"	100'-3 5/8"	108'-10 3/4"
U_7 & $U_{7'}$	5'-4"	104'-7"	112'-11 1/8"

NOTE:

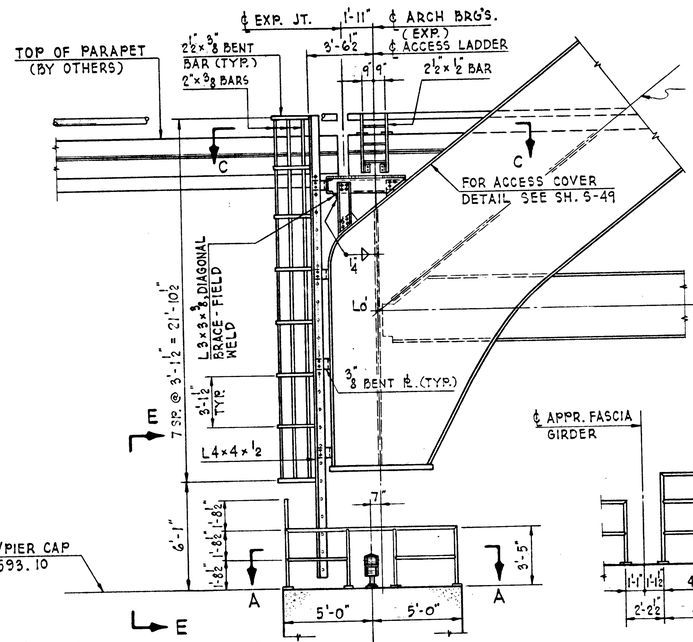
EACH STEEL HANGER CABLE SHALL BE PRESTRETCHED TO 50% OF ITS BREAKING STRENGTH AND TO UNIFORM ELASTIC PROPERTIES BEFORE ATTACHMENT OF SOCKETS. CABLE PROPERTIES SHALL BE AS FOLLOWS: NOMINAL STRAND DIAMETER - 2¼"; MINIMUM GROSS METALLIC AREA AFTER GALVANIZING - 3.04 SQ.IN.; MINIMUM MODULUS OF ELASTICITY (AFTER PRESTRETCHING) - 23,000,000 LBS/SQ.IN.; APPROXIMATE CABLE WEIGHT - 10.6 LBS/FT. THE CABLES SHALL HAVE CLASS "C" COATING FOR THE OUTER WIRES.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY P. POPOVIC
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

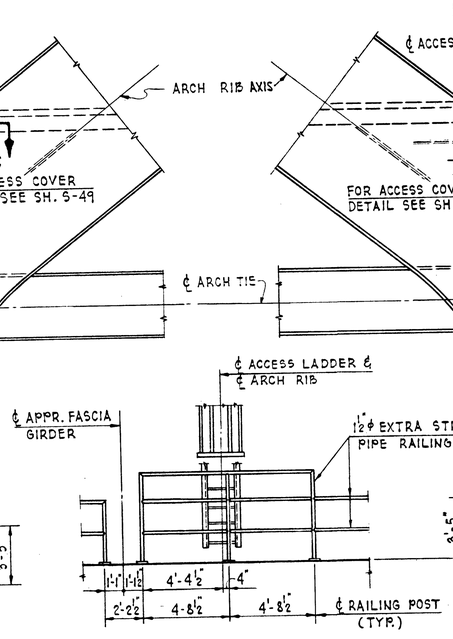
ARCH SPAN HANGER DETAILS

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

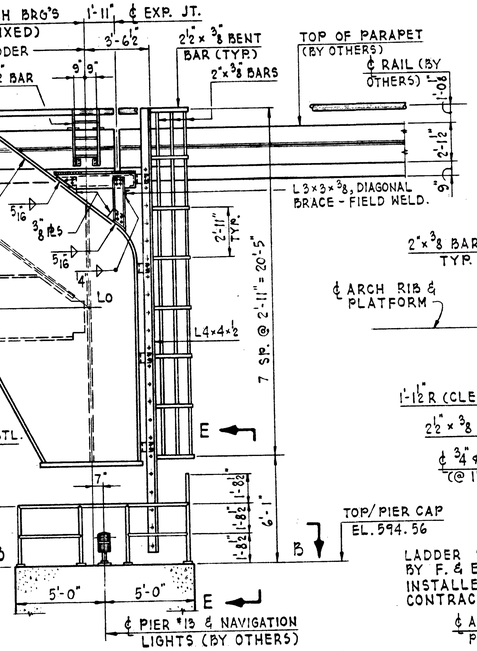
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1F & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	50
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



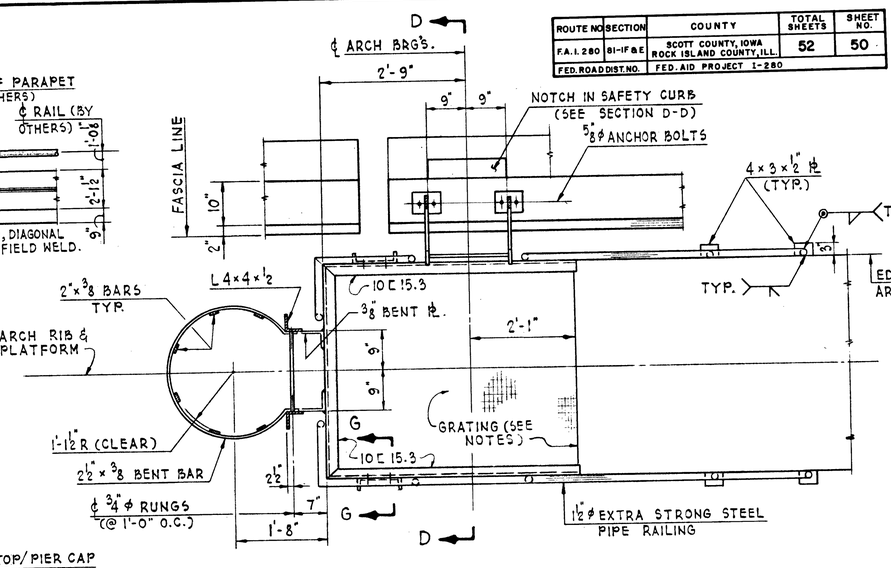
ELEVATION @ PIER #14
(LOOKING SOUTH)
SCALE : ¼" = 1'-0"



VIEW E-E
SCALE : ¼"=1'-0"

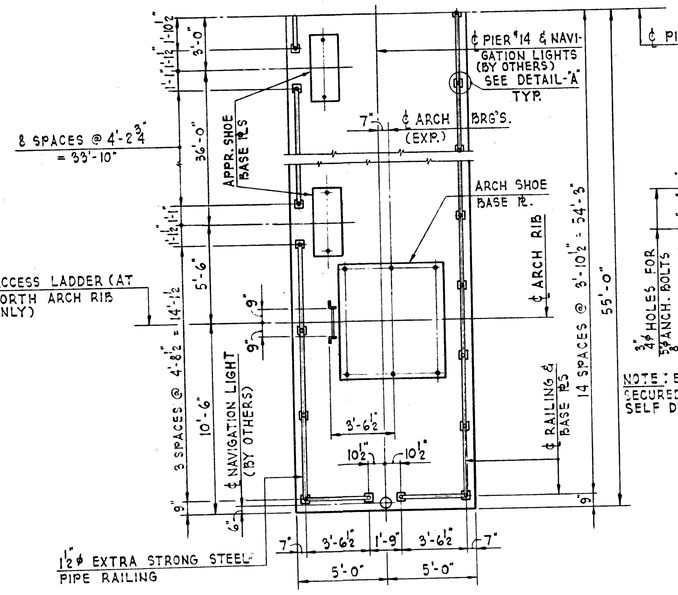


ELEVATION @ PIER #13
(LOOKING SOUTH)
SCALE : ¼" = 1'-0"

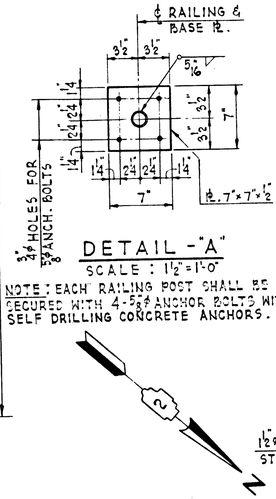


SECTIONAL PLAN C-C
SCALE : ¾" = 1'-0"

LADDER SHALL BE FURNISHED BY F. & E. CONTRACTOR AND INSTALLED BY THE DECK CONTRACTOR.

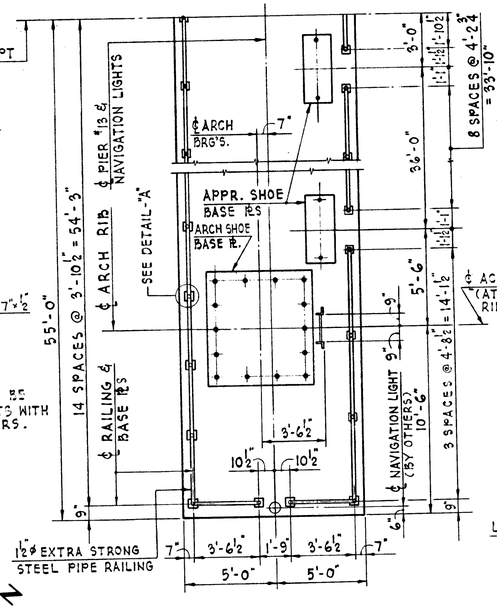


SECTIONAL PLAN A-A
SCALE : ¼" = 1'-0"

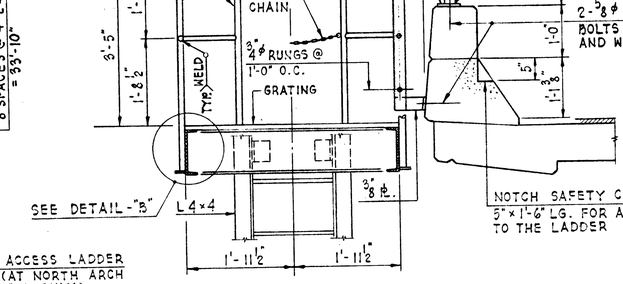


DETAIL - "A"
SCALE : 1½" = 1'-0"

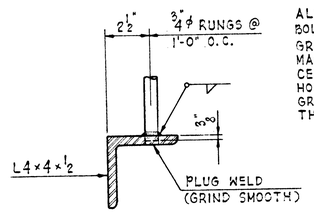
NOTE : EACH RAILING POST SHALL BE SECURED WITH 4-⅝"ø ANCHOR BOLTS WITH SELF DRILLING CONCRETE ANCHORS.



SECTIONAL PLAN B-B
SCALE : ¼" = 1'-0"



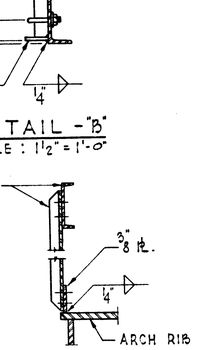
SECTION D-D
SCALE : ¾" = 1'-0"



SECTION F-F
SCALE : 3" = 1'-0"

NOTES

ALL WELDS TO BE 5/16" UNLES NOTED.
BOLTS - ⅞"ø (A325) UNLESS NOTED.
GRATING FOR PLATFORMS SHALL BE WELDED STEEL GRATING. MAIN BEARING BARS SHALL BE 1½"x3/16" SPACED 1 3/16" CENTER TO CENTER, AND CROSS BARS SPACED AT 4" CENTER TO CENTER, HOT DIP GALVANIZED AFTER FABRICATION. FIELD WELD GRATING TO SUPPORTING CHANNELS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.



DETAIL - "B"
SCALE : 1½" = 1'-0"

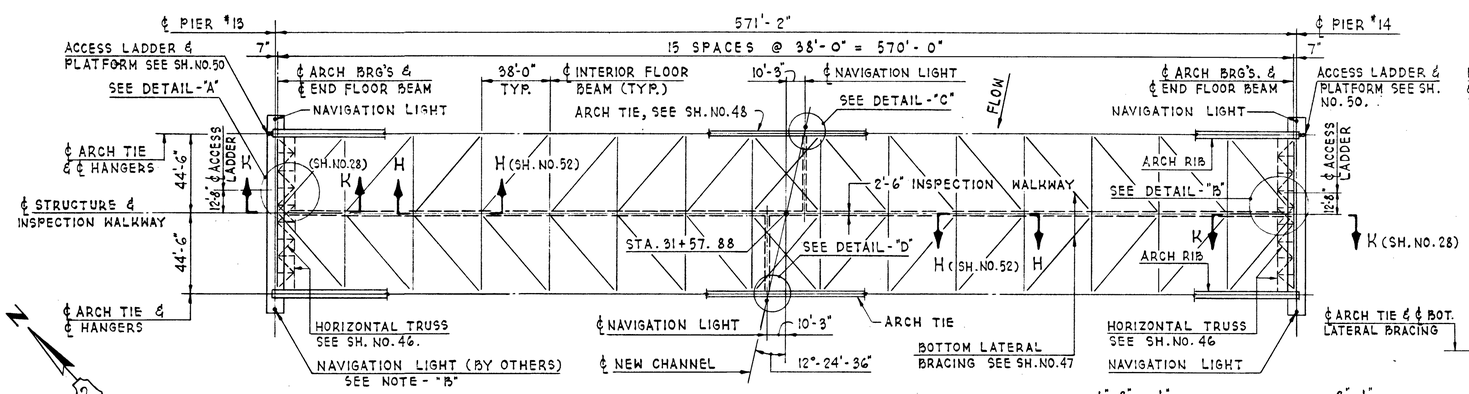
SECTION G-G
SCALE : ¾" = 1'-0"

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY F. BOBINAS
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

RAILING - PIERS 13 & 14, ACCESS LADDERS AND PLATFORMS

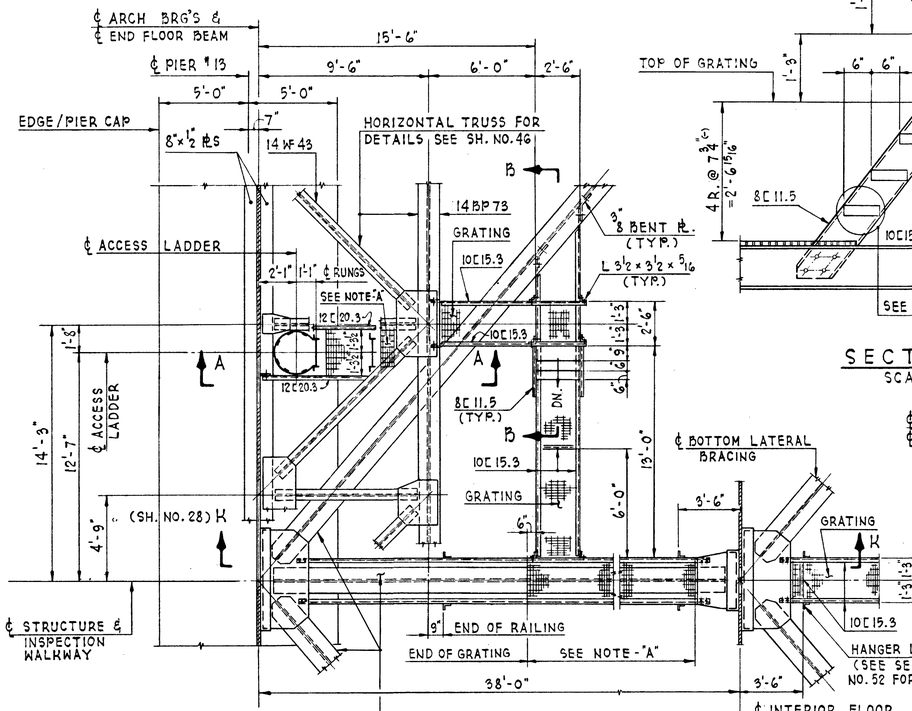
F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-IF & E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	51
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



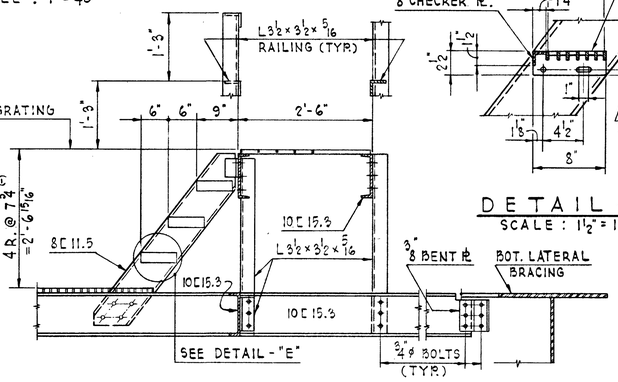
NOTE-"B":
ALL NAVIGATION LIGHTING SHALL BE FURNISHED AND INSTALLED BY OTHERS.

INSPECTION WALKWAY LAYOUT PLAN
SCALE : 1" = 40'

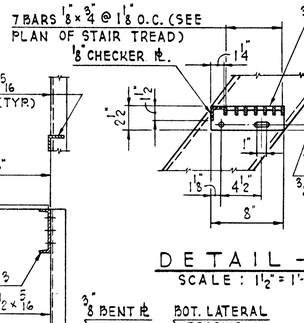


NOTE-"A": FASTEN GRATING PANELS WITH GALVANIZED STEEL SADDLE CLIPS TO FACILITATE PAINTING.

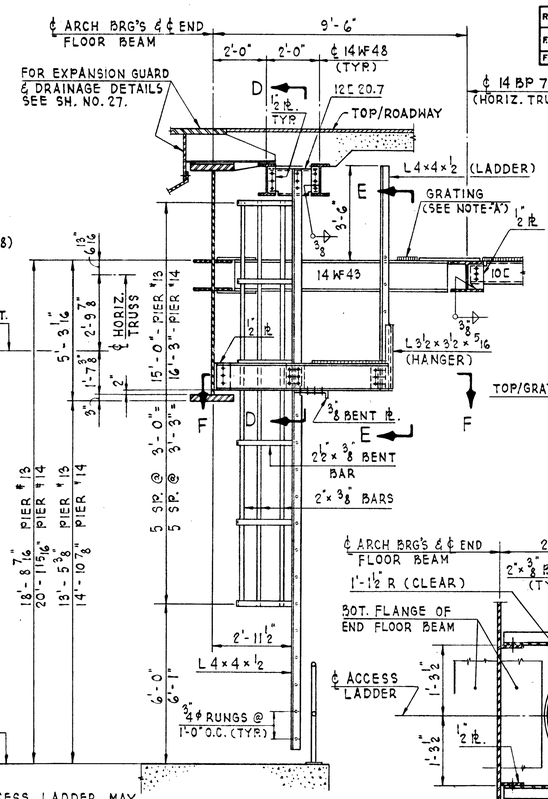
DETAIL-"A" (AS SHOWN)
DETAIL-"B" (OPP. HAND)
SCALE : ¼" = 1'-0"



SECTION B - B
SCALE : ¾" = 1'-0"

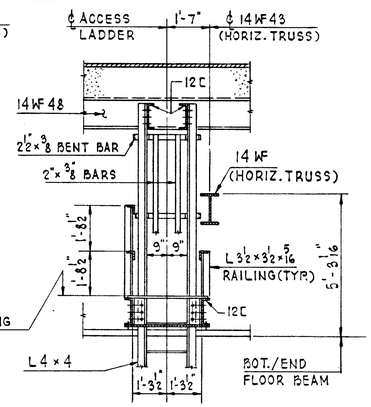


DETAIL-"E"
SCALE : 1½" = 1'-0"

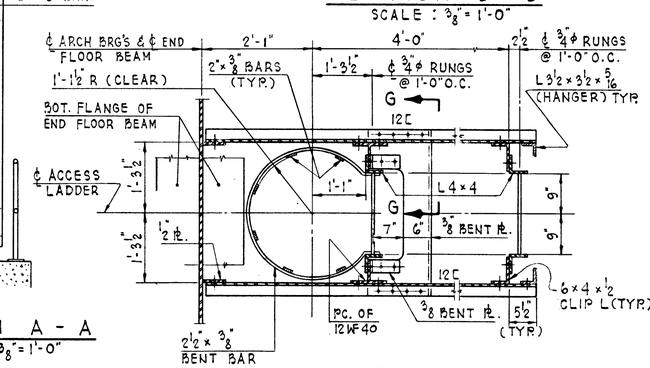


NOTE: ACCESS LADDER MAY BE FABRICATED IN SEGMENTS TO FACILITATE ERECTION.

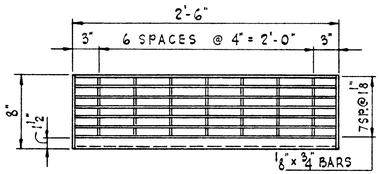
SECTION A - A
SCALE : ⅜" = 1'-0"



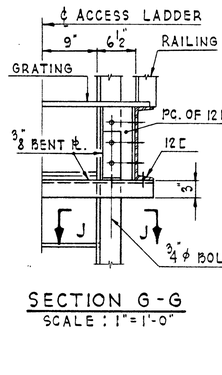
SECTION D - D
SCALE : ⅜" = 1'-0"



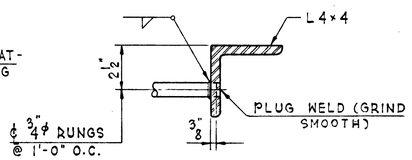
SECTION F - F
SCALE : ¾" = 1'-0"



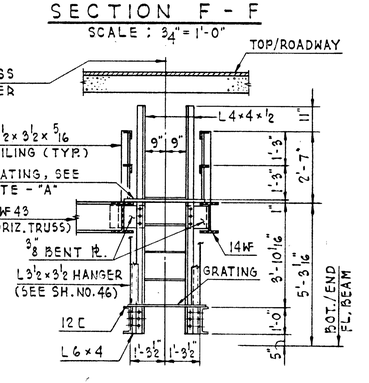
PLAN OF STAIR TREAD
SCALE : 1½" = 1'-0"



SECTION G-G
SCALE : 1" = 1'-0"

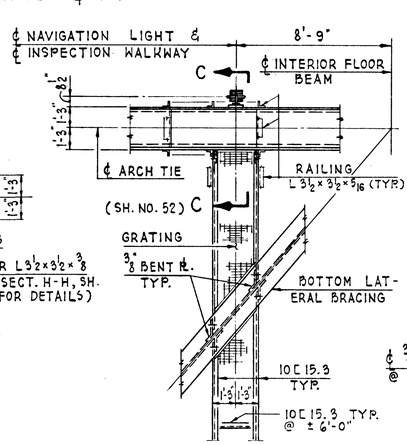


SECTION J-J
SCALE : 3" = 1'-0"



SECTION E - E

NOTE-"A": FASTEN GRATING PANELS WITH GALVANIZED STEEL SADDLE CLIPS TO FACILITATE PAINTING.



DETAIL-"C" (AS SHOWN)
DETAIL-"D" (OPP. HAND)
SCALE : ¼" = 1'-0"

NOTE:
GRATING FOR INSPECTION WALKWAY SHALL BE WELDED STEEL GRATING, MAIN BARS 1" x 3/16 @ 1 3/16 O.C. AND CROSS BARS @ 4" O.C. HOT DIP GALVANIZED AFTER FABRICATION.
FIELD WELD GRATING TO SUPPORTING CHANNELS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS EXCEPT AS NOTED.

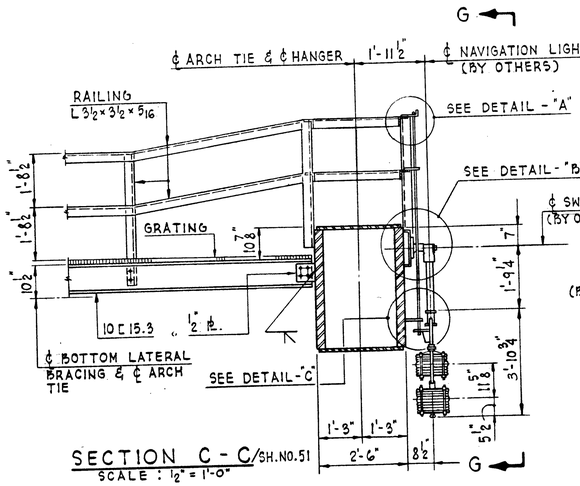
DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	F. BOBINAS
CHECKED	W.J. ZAPFEL
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

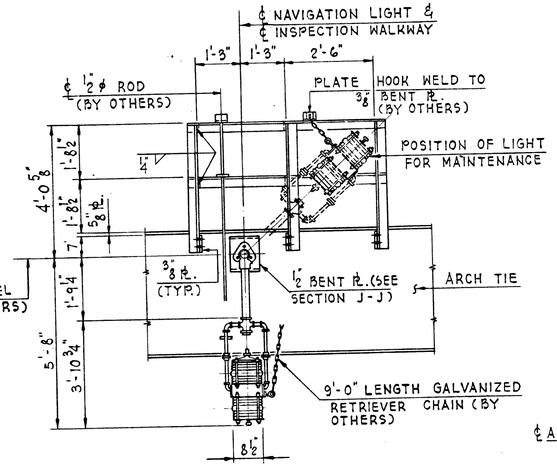
ARCH SPAN
INSPECTION WALKWAY DETAILS

F.A.I. ROUTE 280 SECTION 81-IF & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

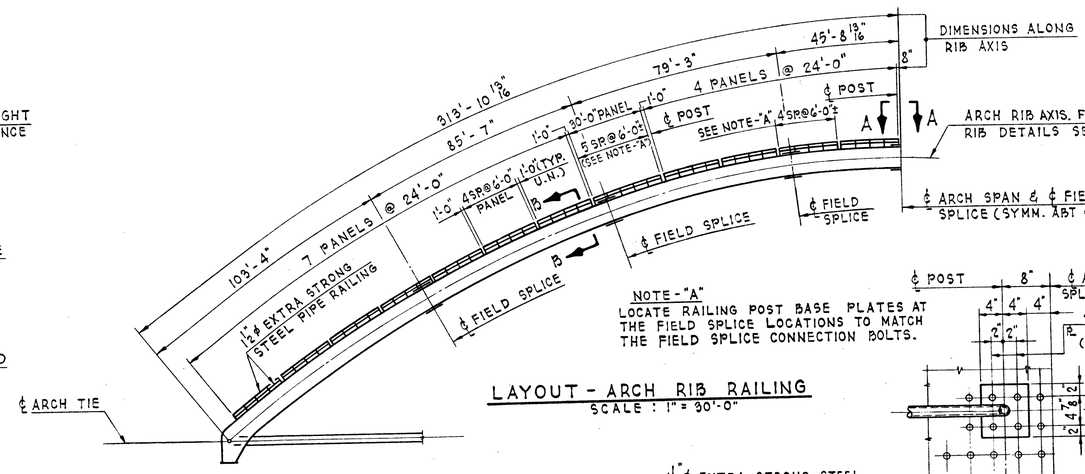
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-IF&E	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	52	52
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



SECTION C - C/SH.NO.51
SCALE : ½" = 1'-0"

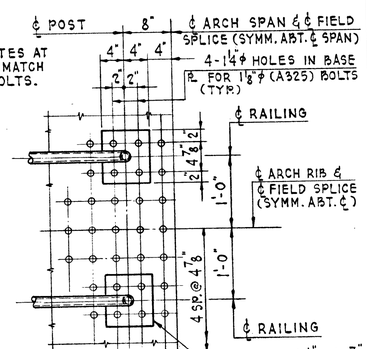


VIEW G - G
SCALE : ½" = 1'-0"

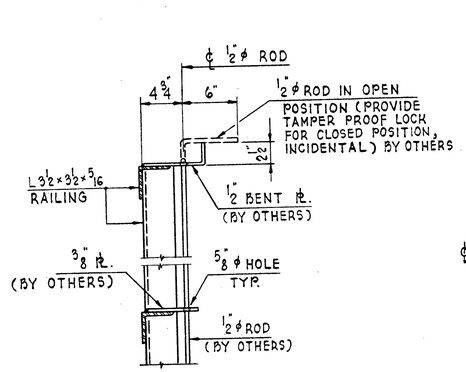


NOTE - "A"
LOCATE RAILING POST BASE PLATES AT THE FIELD SPLICE LOCATIONS TO MATCH THE FIELD SPLICE CONNECTION BOLTS.

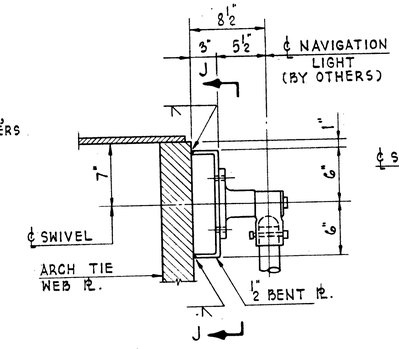
LAYOUT - ARCH RIB RAILING
SCALE : 1" = 30'-0"



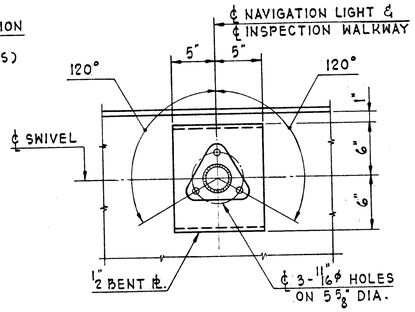
SECTIONAL PLAN A-A
SCALE : 1" = 1'-0"



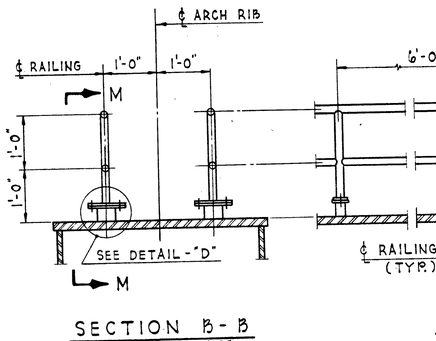
DETAIL - "A"
SCALE : 1½" = 1'-0"



DETAIL - "B"
SCALE : 1½" = 1'-0"

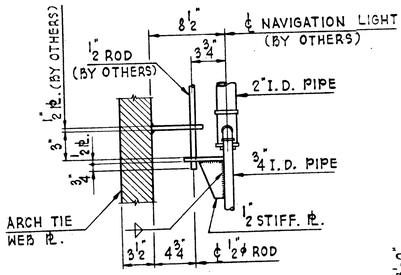


SECTION J - J
SCALE : 1½" = 1'-0"

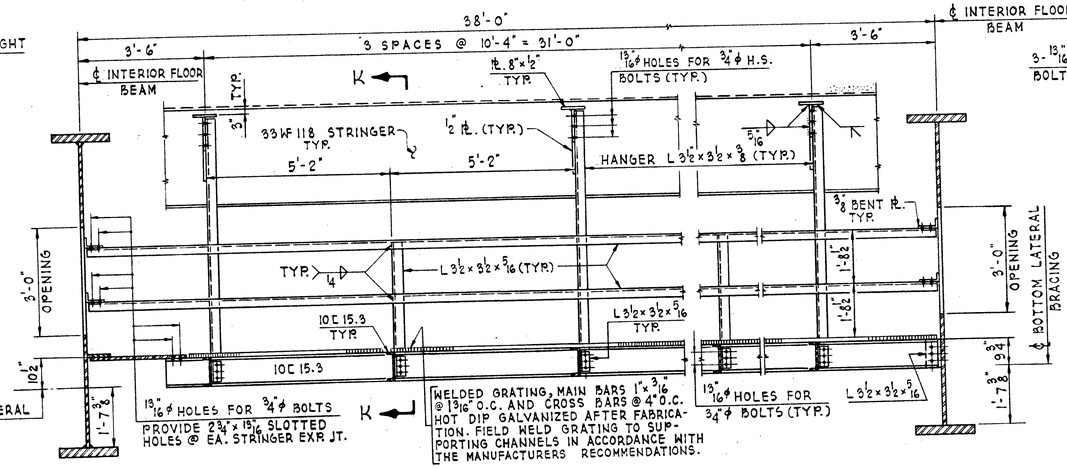


SECTION B - B
SCALE : ¾" = 1'-0"

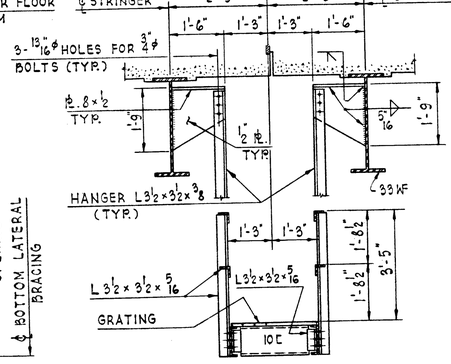
SECTION M - M
SCALE : ¾" = 1'-0"



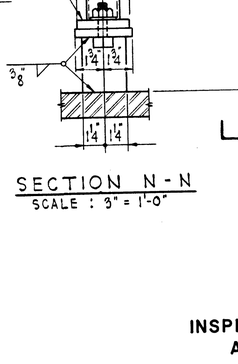
DETAIL - "C"
SCALE : 1½" = 1'-0"



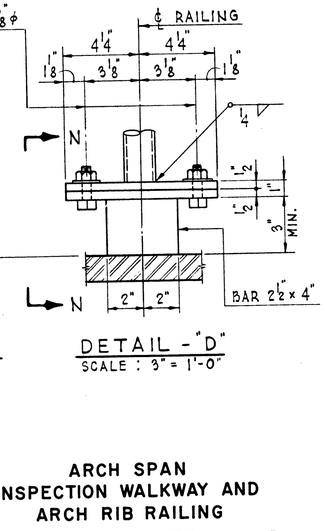
SECTION H - H/SH. NO. 51
SCALE : ½" = 1'-0"



SECTION K - K
SCALE : ½" = 1'-0"



SECTION N - N
SCALE : 3" = 1'-0"



DETAIL - "D"
SCALE : 3" = 1'-0"

ARCH SPAN INSPECTION WALKWAY AND ARCH RIB RAILING

F.A.I. ROUTE 280 SECTION 81-IF & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: OCT. 1, 1970

HER & COMPANY ENGINEERS
W.J. ZAPFEL
F. BOBINAS
J. ZAPFEL
I. ZAPFEL
HORN

02 D-2

FEDERAL-AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.280	81-IB-I	ROCK ISLAND SCOTT, IOWA	5	1
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
FEDERAL AID INTERSTATE HIGHWAY

F.A.I. ROUTE 280 SECTION 81-IB-I

PROJECT I-280-8(78)0

ROCK ISLAND COUNTY, ILL.

SCOTT COUNTY, IOWA

C-92-029-75

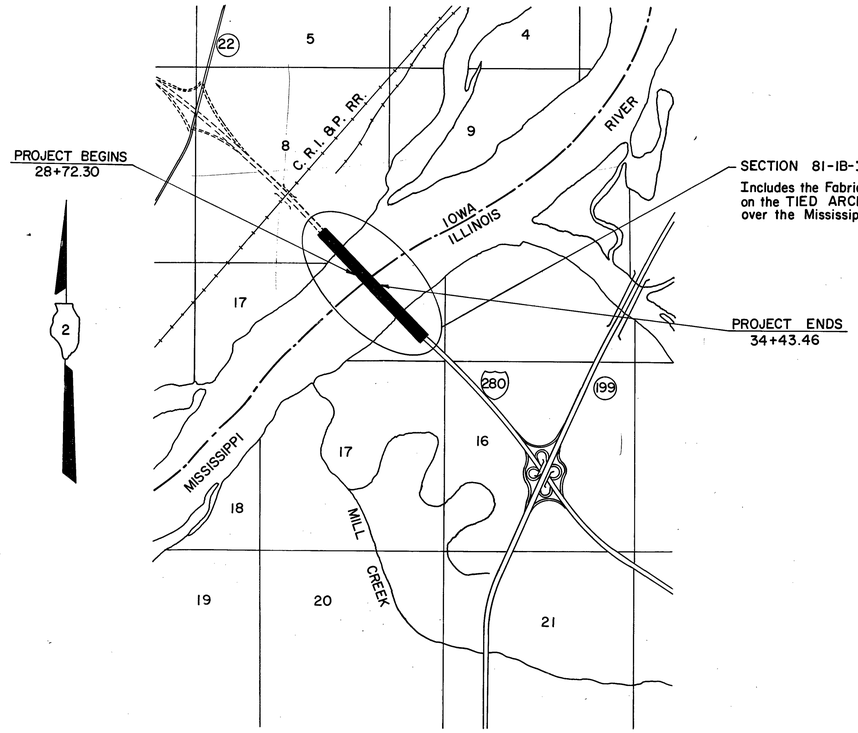
P-92-040-63

LOCATION OF SECTION INDICATED THUS:—

INDEX OF SHEETS

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL
* XZ1089	TRAFFIC CONTROL AND PROTECTION STD. 2316	LUMP SUM	1
* X05407	CABLE CLAMPS	EACH	21



LAYOUT
SCALE 1" = 2000'

SECTION 81-IB-I

Includes the Fabrication and Installation of CABLE CLAMPS on the TIED ARCH SPAN CABLES, that carries F.A.I. Route 280 over the Mississippi River.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Feb. 13, 1975
DISTRICT ENGINEER

EXAMINED Feb. 21, 1975
ENGINEER OF BLANS AND CONTRACTS

PASSED Feb. 21, 1975
ENGINEER OF DESIGN

APPROVED Feb. 21, 1975
DIRECTOR OF HIGHWAYS

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ENGINEER DATE

JOB NUMBER

CONTRACT NO. 33489

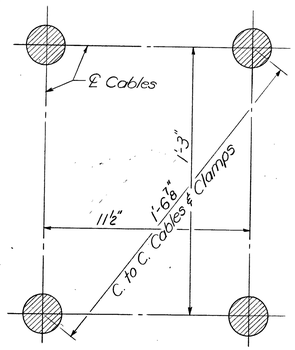
BRUNING 44-131 80-6-70

COUNTY	SECTION	F. A. I. ROUTE
ROCK ISLAND, SCOTT CO. IOWA	81-IB-I	280

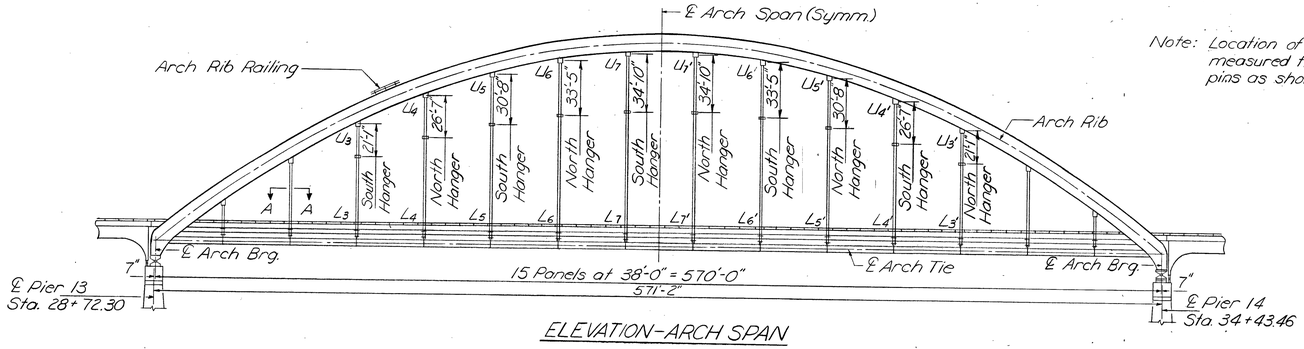
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. F. A. I. 280	81-1IR(2)	Rock Island	5	2
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. / / SHEETS

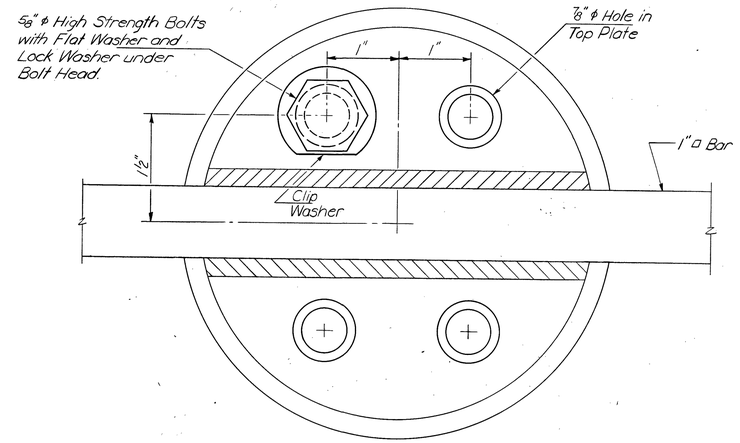


SECTION A-A
TYPICAL CABLE PATTERN

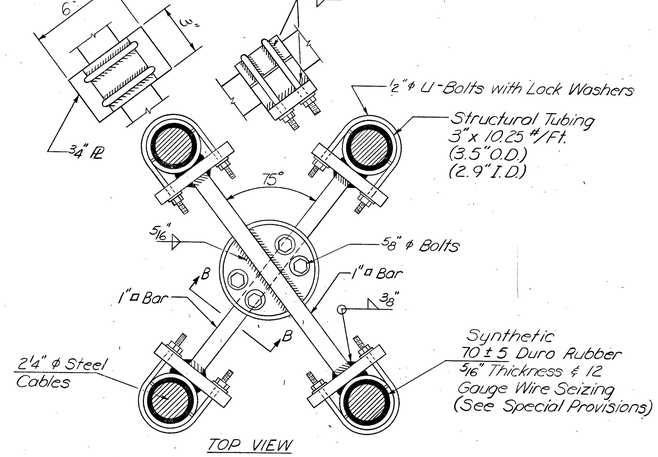


ELEVATION-ARCH SPAN

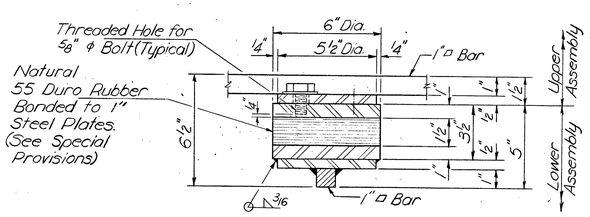
Note: Location of cable dampeners are measured from ℄ of upper socket pins as shown in the Elevation View.



PLAN UPPER ASSEMBLY



TOP VIEW



SECTION B-B

CABLE DAMPENER DETAILS

GENERAL NOTES

Initial installation of the clamps shall be limited to the ten locations shown in the elevation view. The remaining ten clamps shall be installed at locations opposite to those shown on the plans, as directed by the Engineer after the cable frequency of the clamped suspenders has been measured during construction by DOT Physical Research personnel.

One clamp assembly shall be retained for testing purposes. See special provisions.

All structural steel shall conform to A.S.T.M. A36 and shall be galvanized in accordance with AASHTO specification M111. All galvanizing shall be done prior to bonding of rubber to steel. Steel surfaces to which rubber is bonded shall not be galvanized.

BILL OF MATERIAL

Item	Unit	Total
Cable Clamps	Each	21

DESIGNED	
CHECKED	
DRAWN	L. Wonless
CHECKED	J. W. Ganci

December 17, 1974

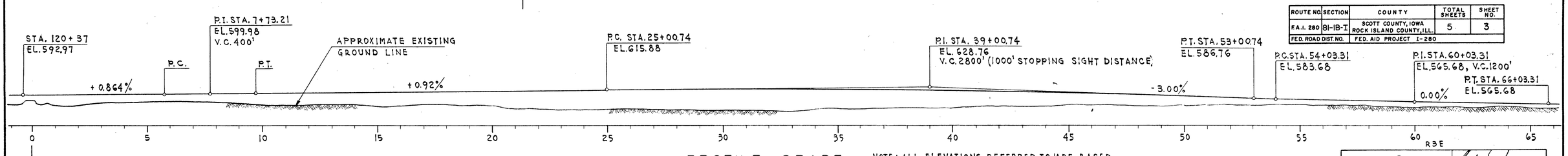
EXAMINED _____
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES

PASSED _____
ENGINEER OF DESIGN

APPROVED _____
DIRECTOR OF HIGHWAYS

SUSPENDER CABLE CLAMP DETAILS
F.A.I. ROUTE 280 SECTION 81-1B-1
I-280 OVER MISSISSIPPI RIVER
ROCK ISLAND COUNTY

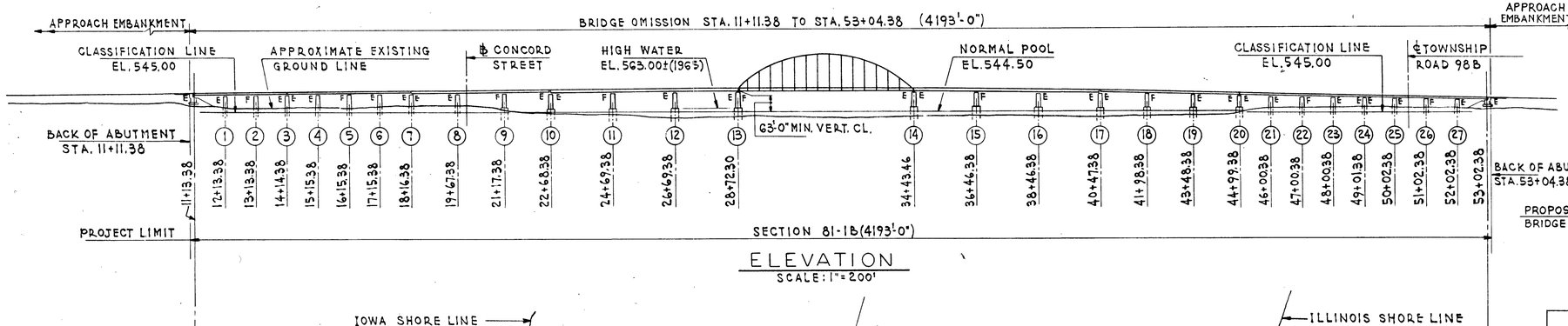
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B-1	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	5	3
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



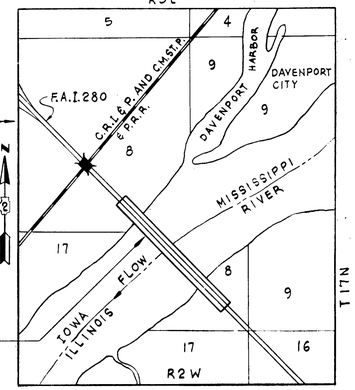
PROFILE GRADE
SCALE: 1"=200'

EQUATION
10 WA. STA. 119+98.38 =
ILLINOIS STA. 0+00

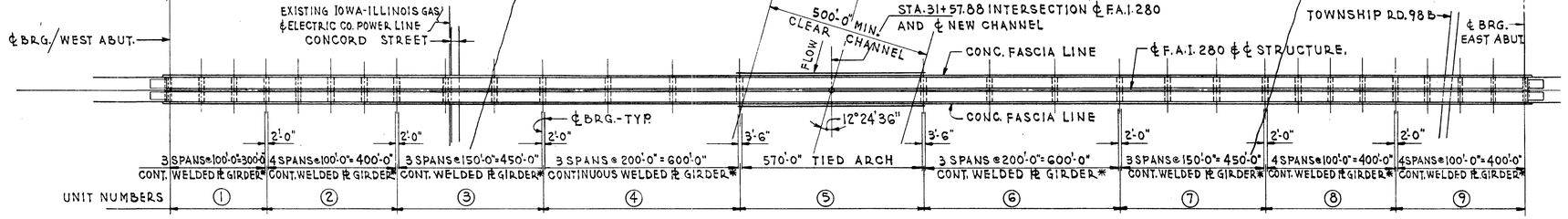
NOTE: ALL ELEVATIONS REFERRED TO ARE BASED UPON 5TH GENERAL ADJUSTMENT - ILLINOIS.



ELEVATION
SCALE: 1"=200'

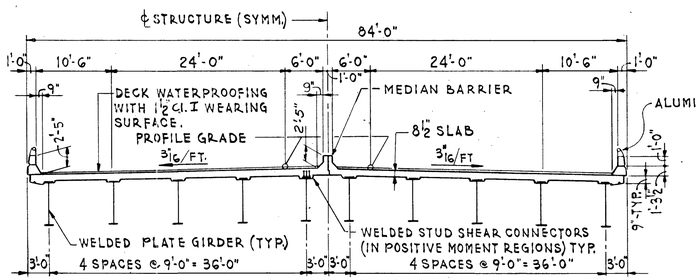


LOCATION PLAN

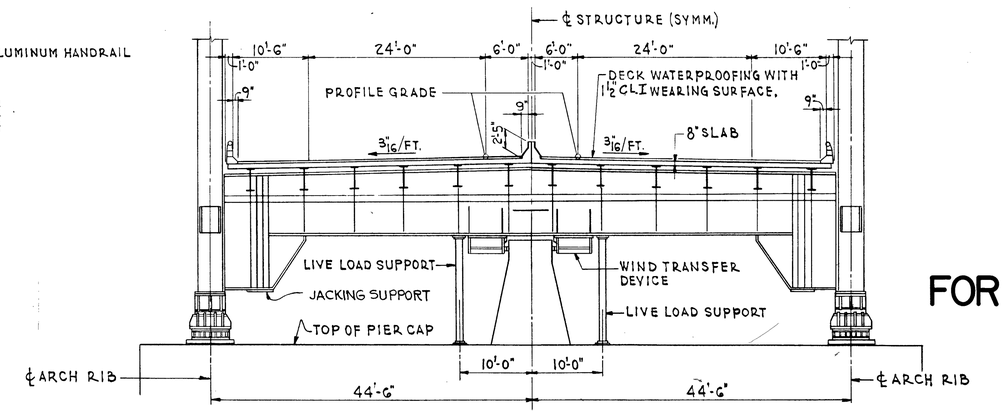


PLAN
SCALE: 1"=200'

*INDICATES CONTINUOUS COMPOSITE CONSTRUCTION.



TYPICAL CROSS SECTION - APPROACH SPANS
SCALE: 1"=10'



TYPICAL CROSS SECTION - ARCH SPAN
SHOWING AT END FLOOR BEAM
SCALE: 1"=10'

WATERWAY INFORMATION

WATERWAY OPENING REQUIRED	26,000	SQ. FT.
WATERWAY OPENING PROVIDED	26,240	SQ. FT.
50 YEAR FREQUENCY DISCHARGE	293,000	CU. F.S.
50 YEAR HIGH WATER ELEVATION	562.5	
DRAINAGE AREA	99,200	SQ. MI.
MILES FROM MOUTH	1,560	MI.

QUANTITIES

ITEM	UNIT	QUANTITY
FURNISHING AND ERECTING OF STRUCTURAL STEEL	LUMP SUM	1

NOTE:
CALCULATED PLAN WEIGHT OF STRUCTURAL STEEL 20,408,000 LBS.

NOTE:
CERTAIN ITEMS OF WORK SHOWN ON THESE DRAWINGS ARE SHOWN FOR INFORMATION ONLY. THIS CONTRACT COVERS THE FABRICATION AND ERECTION OF THE STRUCTURAL STEEL FOR THE SUPERSTRUCTURE OF THE BRIDGE PLUS ADDITIONAL ITEMS OF WORK AS DEFINED IN THE SPECIAL PROVISIONS.
THE CONSTRUCTION OF THE SUBSTRUCTURE; THE CONSTRUCTION OF THE CONCRETE DECK, WEARING SURFACE, DECK RAILING AND NAVIGATION LIGHTING; AND THE FIELD PAINTING OF THE STRUCTURAL STEEL ARE COVERED UNDER SEPARATE CONTRACTS AND THEREFORE ARE NOT A PART OF THESE PLANS.

FOR INFORMATION ONLY

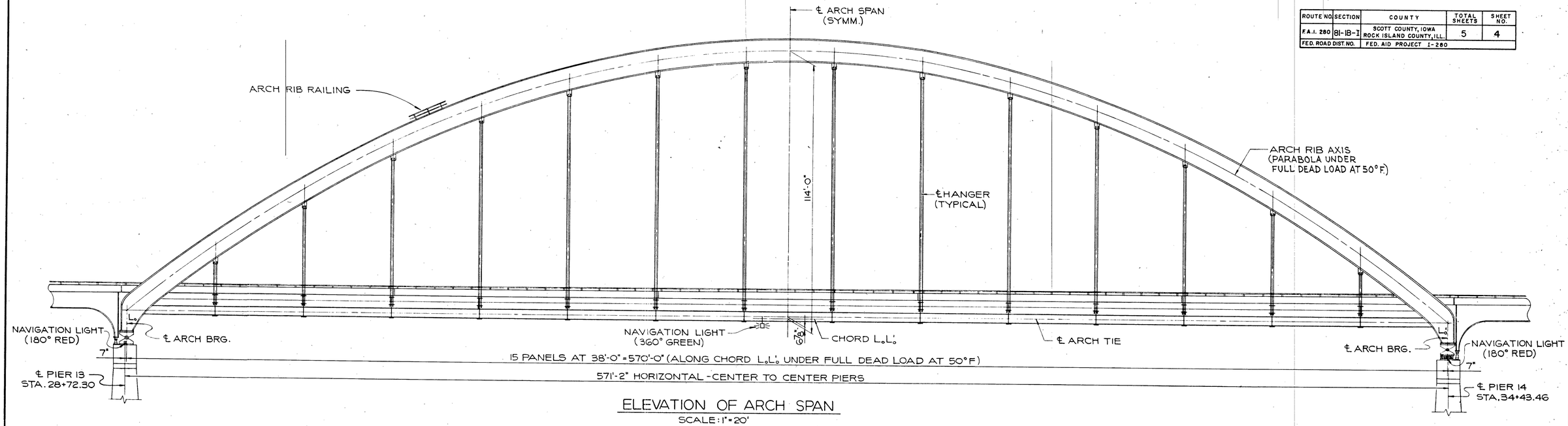
GENERAL PLAN AND ELEVATION

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.G. HORN
DRAWN BY A. BUROKAS
CHECKED J.Y. HUANG
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

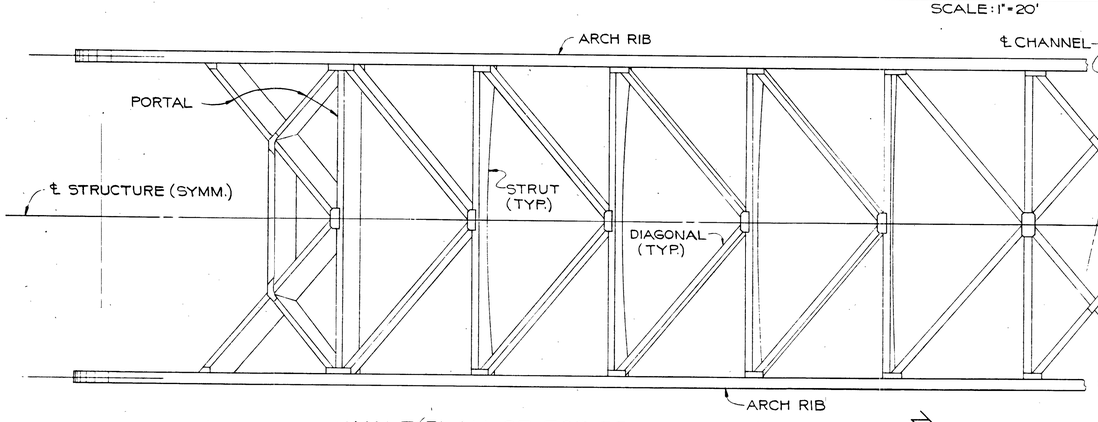
REV. 10-23-70 (B)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B-1	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	5	4
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



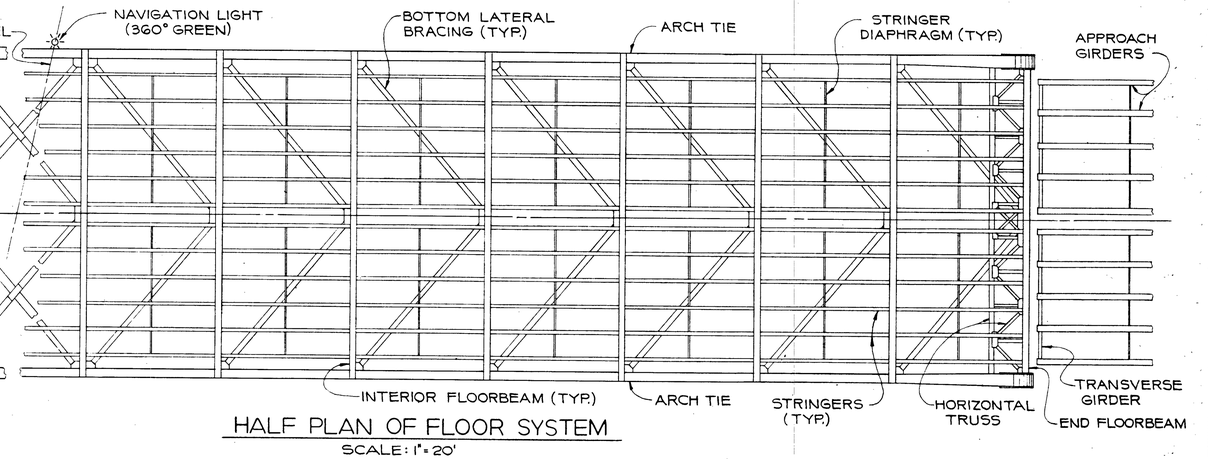
ELEVATION OF ARCH SPAN

SCALE: 1" = 20'



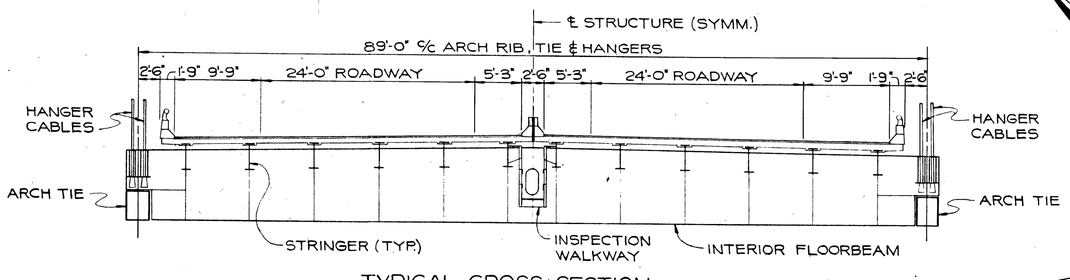
HALF PLAN OF TOP BRACING

SCALE: 1" = 20'



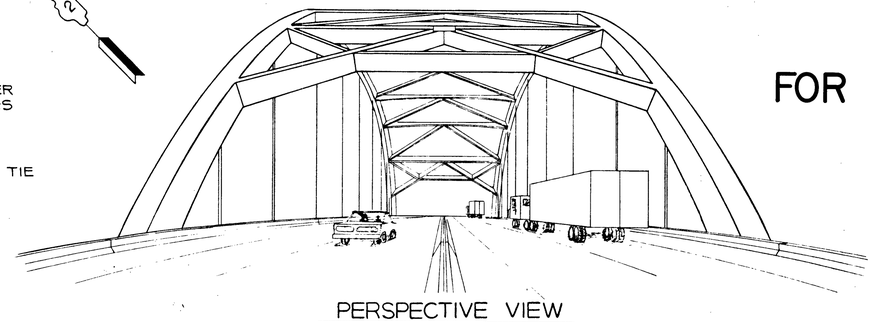
HALF PLAN OF FLOOR SYSTEM

SCALE: 1" = 20'



TYPICAL CROSS SECTION

SCALE: 1/8" = 1'-0"



PERSPECTIVE VIEW

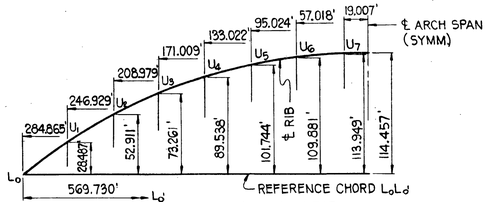
FOR INFORMATION ONLY

GENERAL LAYOUT OF ARCH SPAN
UNIT 5

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY P. POPOVIC
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

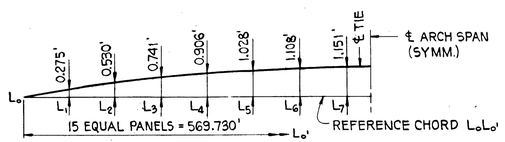
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1B-1	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	5	5
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



SHAPE OF UNSTRESSED ARCH RIB
(JOINTS MUST BE BUTT TIGHT IN THIS CONDITION)

SHAPE OF ARCH RIB AT CLOSURE
(UNDER DEAD LOAD OF STEEL ONLY)

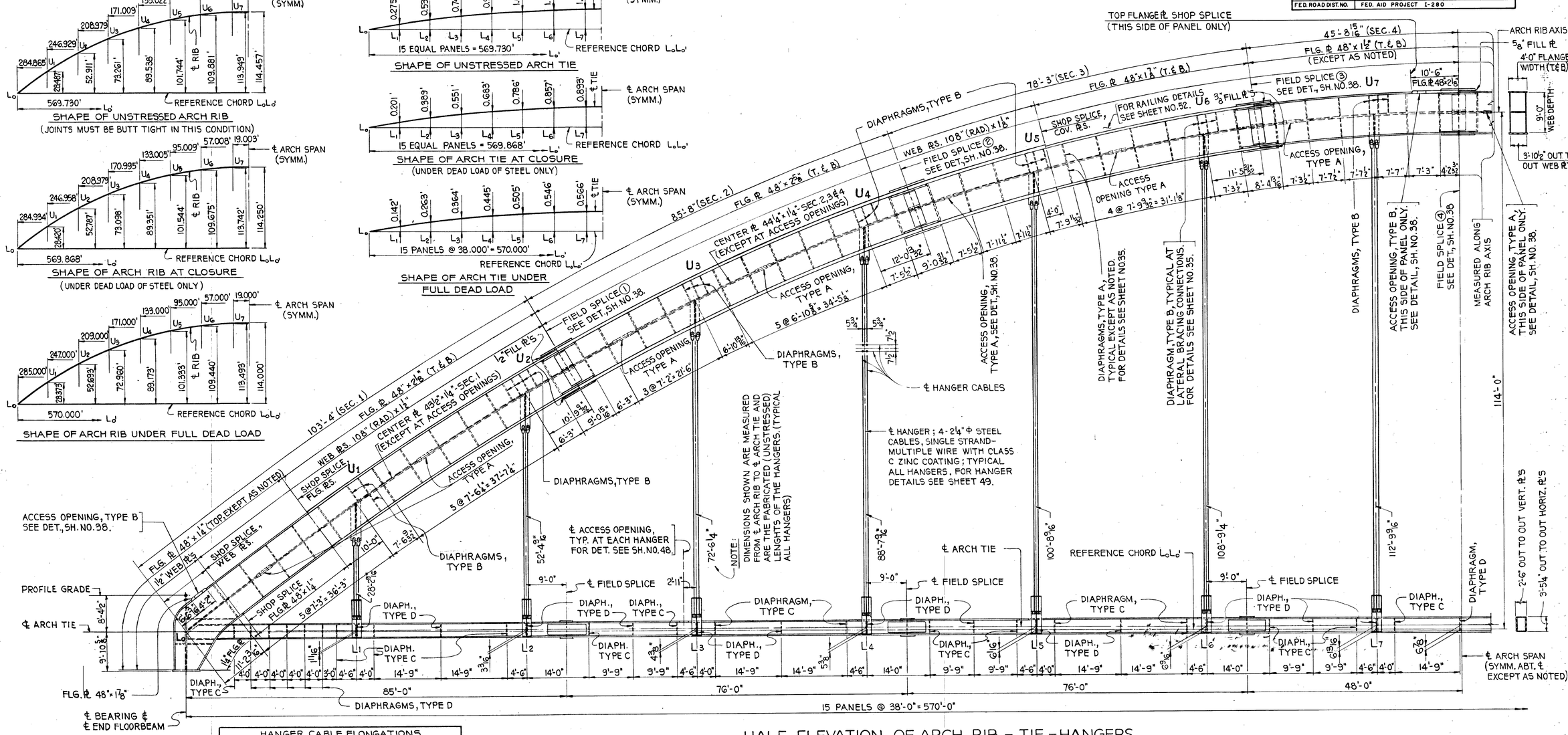
SHAPE OF ARCH RIB UNDER FULL DEAD LOAD



SHAPE OF UNSTRESSED ARCH TIE

SHAPE OF ARCH TIE AT CLOSURE
(UNDER DEAD LOAD OF STEEL ONLY)

SHAPE OF ARCH TIE UNDER
FULL DEAD LOAD



HALF ELEVATION OF ARCH RIB - TIE - HANGERS
SCALE: 3/32" = 1'-0"

HANGER CABLE ELONGATIONS UNDER DEAD LOADS			
PANEL POINT	ELONGATIONS (FEET)		
	STEEL	CONCRETE & WEARING SURF.	TOTAL
U_1 & $U_{1'}$	0.007	0.013	0.020
U_2 & $U_{2'}$	0.017	0.033	0.050
U_3 & $U_{3'}$	0.025	0.051	0.076
U_4 & $U_{4'}$	0.032	0.064	0.096
U_5 & $U_{5'}$	0.038	0.074	0.112
U_6 & $U_{6'}$	0.041	0.081	0.122
U_7 & $U_{7'}$	0.045	0.084	0.129

NOTE:
THE EFFECT OF HANGER CABLE ELONGATIONS DUE TO DEAD LOADS HAS BEEN INCLUDED IN THE DIAGRAMS SHOWING THE SHAPE OF THE UNSTRESSED ARCH TIE AND THE SHAPE OF THE ARCH TIE AT CLOSURE

NOTES:

ALL STRUCTURAL STEEL FOR ARCH RIB & ARCH TIE SHALL BE A.S.T.M. - A588.

UNLESS OTHERWISE NOTED ALL DIMENSIONS SHOWN ARE DIMENSIONS UNDER FULL DEAD LOAD AT 50°F.

ALL DIMENSIONS SHOWN FOR THE ARCH RIB ARE MEASURED ALONG THE ARCH RIB AXIS.

ALL DIMENSIONS SHOWN FOR THE ARCH TIE ARE MEASURED ALONG THE CHORD L_0L_0'.

ALL HANGERS SHALL BE VERTICAL UNDER FULL DEAD LOAD.

ALL DIAPHRAGMS OF THE ARCH RIB SHALL BE NORMAL TO THE ARCH RIB AXIS.

THE ARCH RIB & TIE SHALL BE CAMBERED TO GIVE THE TRUE GEOMETRIC CONFIGURATION UNDER FULL DEAD LOAD AT 50°F.

THE ARCH SPAN HAS BEEN DESIGNED AS A TIED ARCH FOR BOTH DEAD LOAD & LIVE LOAD.

ALL MEMBERS CONSTITUTING EACH TIED ARCH TRUSS SHALL BE ASSEMBLED IN THE SHOP AND FIELD BOLT HOLES DRILLED OR REAMED WHILE PARTS ARE ASSEMBLED AND ALL PARTS CORRECTLY MATCHMARKED. ASSEMBLY MAY BE BY SUCCESSIVE OPERATIONS, PROVIDED THE RESULTS OBTAINED ARE EQUIVALENT TO COMPLETE SIMULTANEOUS ASSEMBLY OF EACH TRUSS.

FOR INFORMATION ONLY

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY P. POPOVIC
CHECKED W.J. ZAPFEL
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ARCH RIB, TIE AND HANGER DATA

F.A.I. ROUTE 280 SECTION 81-1F & E
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: OCT. 1, 1970

Run for bidding 7-7-72

SEE SHEET 2 FOR INDEX OF SHEETS AND SUMMARY OF QUANTITIES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FEDERAL-AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-ID	ROCK ISLAND	59	1
FED. ROAD DIV. NO. 7	ILLINOIS	PROJECT I-280-8(52)0		

P-92-040-63

PLANS FOR PROPOSED FEDERAL AID INTERSTATE HIGHWAY

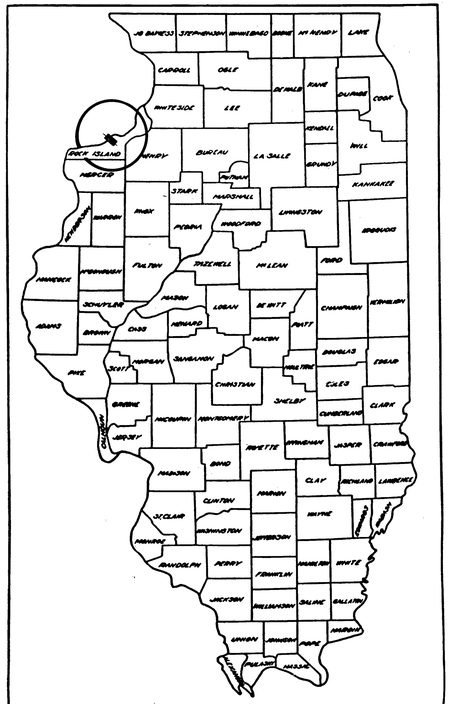
SCALES		
PLAN	1 INCH	50 FT.
PROFILE, HOR.	1 INCH	50 FT.
PROFILE, VERT.	1 INCH	5 FT.
CROSS-SECTIONS	1 INCH	5 FT. VERT.
	1 INCH	10 FT. HOR.

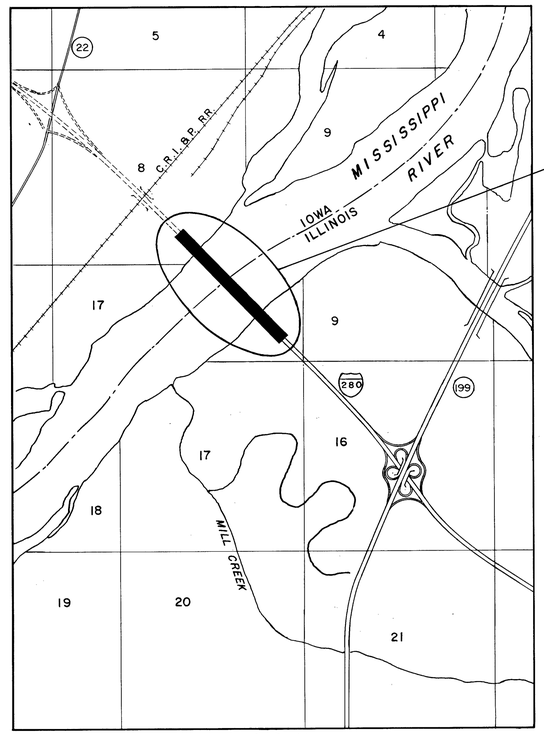
F.A.I. ROUTE 280 SECTION 81-ID

F.A. PROJECT I-280-8(52)0

ROCK ISLAND COUNTY
SCOTT COUNTY, IOWA

C-92-004-69





LAYOUT
SCALE 1" = 2000'

LENGTH OF PROJECT - SECTION 81-ID = 4,193 FT. = 0.794 MILES

SECTION 81-ID

INCLUDES THE FURNISHING AND PLACING OF THE STUD SHEAR CONNECTORS, CONSTRUCTION OF THE CONCRETE DECK, WEARING SURFACE, DECK RAILING AND NAVIGATION LIGHTING, FOR THE SUPERSTRUCTURE OF A BRIDGE CONSISTING OF ONE 570 FT. TIED ARCH SPAN AND 27 WELDED GIRDER APPROACH SPANS (7 SPANS @ 100', 3 SPANS @ 150', 3 SPANS @ 200', ... ARCH SPAN..., 3 SPANS @ 200', 3 SPANS @ 150' AND 8 SPANS @ 100') CARRYING F.A.I. ROUTE 280 OVER THE MISSISSIPPI RIVER BETWEEN STATIONS 11+11.38 AND 53+04.38.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Engineer of Bridge & Traffic Structures

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
SUBMITTED Dec. 8, 1970
D.E. Summark
DISTRICT ENGINEER
EXAMINED May 8, 1972
L.H. Wilmer
ASST. ENGINEER OF ROAD PLANS AND CONTRACTS
PASSED May 8, 1972
W.E. Bauer
ENGINEER OF DESIGN
APPROVED May 8, 1972
UNDER SECRETARY, CHIEF TRANSPORTATION ENGINEER
APPROVED May 8, 1972
SECRETARY

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ENGINEER DATE

STATE OF ILLINOIS · WILLIAM G. HORN · NO. 2273 · REGISTERED PROFESSIONAL ENGINEER · CHICAGO
W. G. HORN · REGISTERED · 5158 · IOWA · PROFESSIONAL ENGINEER

William G. Horn

CONTRACT NO. 28330

DE LEUW, CATHER & CO. – CHICAGO

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	2
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

INDEX OF SHEETS

GENERAL NOTES

DESIGN LOADING

HS 20-44 AND ALTERNATE PLUS 25 P.S.F. INITIAL WEARING SURFACE.

DESIGN SPECIFICATIONS

AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, TENTH EDITION, DATED 1969, AND THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY'S STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES.

CONSTRUCTION SPECIFICATIONS

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF ILLINOIS, DEPARTMENT OF PUBLIC WORKS AND BUILDINGS, DIVISION OF HIGHWAYS, ADOPTED JANUARY 2, 1971, SUPPLEMENTAL SPECIFICATIONS, AND SPECIAL PROVISIONS.

UNLESS OTHERWISE SHOWN, DIMENSIONS ON THE PLANS ARE MEASURED HORIZONTAL AT 50° F.

DESIGN STRESSES:

CONCRETE: f'_c = 3,500 P.S.I. ULTIMATE STRENGTH IN 14 DAYS

f_c = 1,200 P.S.I. WORKING STRENGTH

REINFORCING STEEL: f_s = 20,000 P.S.I.

STRUCTURAL STEEL: f_s = 20,000 P.S.I.

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

EXCEPT AS OTHERWISE NOTED, ALL STRUCTURAL STEEL SHALL CONFORM TO THE SPECIFICATIONS FOR STRUCTURAL STEEL, A.S.T.M. DESIGNATION A-36.

EXCEPT AS OTHERWISE PROVIDED, ALL STRUCTURAL STEEL SHALL RECEIVE ONE (1) SHOP COAT OF PAINT. THE PAINT REQUIRED FOR THE SHOP COAT SHALL BE AS SPECIFIED IN THE SUPPLEMENTAL SPECIFICATIONS FOR THE BASIC LEAD SILICO-CHROMATE PAINT SYSTEM. THE FIELD PAINTING OF THE STRUCTURAL STEEL IS NOT INCLUDED IN THIS CONTRACT.

THE EXPOSED SURFACES OF THE EXPANSION GUARDS SHALL BE GIVEN TWO (2) SHOP COATS OF PAINT. THE CONTACT SURFACES SHALL BE GIVEN ONE (1) COAT OF PAINT. ANCHOR STUDS SHALL NOT BE PAINTED.

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 THE HANDRAIL CONCRETE.

PROTECTIVE COAT SHALL NOT BE APPLIED TO SURFACES TO WHICH COAL TAR INTERLAYER PROTECTIVE COAT IS APPLIED.

THE CONTRACTOR SHALL PLACE TWO (2) PERMANENT BENCH MARKS, TYPE I ON THE BRIDGE AS DIRECTED BY THE ENGINEER.

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	QUANTITY
406008	BITUMINOUS CONCRETE SURFACE COURSE, CLASS I	TON	3,057.5
503004	PROTECTIVE COAT	SQ.YD.	5,839
507025	STUD SHEAR CONNECTORS	EACH	76,840
508005	ALUMINUM RAILING	LIN.FT.	8,382
512001	REINFORCEMENT BARS	POUND	2,608,420
XZ1100	TRAINEES	HOUR	2,000
Z10178	COAL TAR INTERLAYER PROTECTIVE COAT	SQ.YD.	36,238
Z10277	PERMANENT BENCH MARK, TYPE I	EACH	2
L04947	NAVIGATION LIGHTING	LUMP SUM	1
Z10294	PREFORMED JOINT SEALER	LIN.FT.	337
507001	F. & E. STRUCTURAL STEEL	LBS.	16,400
XZ1073	BRIDGE SEAT SEALER **	LUMP SUM	1

NOTES: * COST OF CLASS "X" CONCRETE SHALL INCLUDE THE COST OF ALUMINUM DRAINS AND ALUMINUM SHEETS IN UNITS 1 THROUGH 4, AND UNITS 6 THROUGH 9; 1-INCH DIAMETER ANCHOR BOLTS AS DETAILED IN UNIT 9; ERECTION OF ACCESS LADDERS ON UNIT 5; ERECTION OF CURB PLATES OF THE EXPANSION DEVICES AT PIERS 3, 10, 24, 7, 17, 20, 13 AND 14.

** TO BE APPLIED TO ABUTMENTS AND PIERS 3, 7, 10, 13, 14, 17, 20 AND 24. ESTIMATED AREA OF BRIDGE SEAT SEALER TO BE COATED = 4,940 SQ. FT.

(SUMMARY OF QUANTITIES CONT.)

CODE NO.	ITEM	UNIT	QUANTITY
	ALTERNATE "A"		
X50402	CLASS X CONCRETE (ALTERNATE A) *	CU. YD.	10,853.6
	ALTERNATE "B"		
X50403	CLASS X CONCRETE (ALTERNATE B) *	CU. YD.	10,853.6

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY —

DRAWN BY H. de PERCZEL

CHECKED A. MILUNAS

IN CHARGE W. J. ZAPFEL

APPROVED W. G. HORN

INDEX OF SHEETS, GENERAL NOTES AND SUMMARY OF QUANTITIES

F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

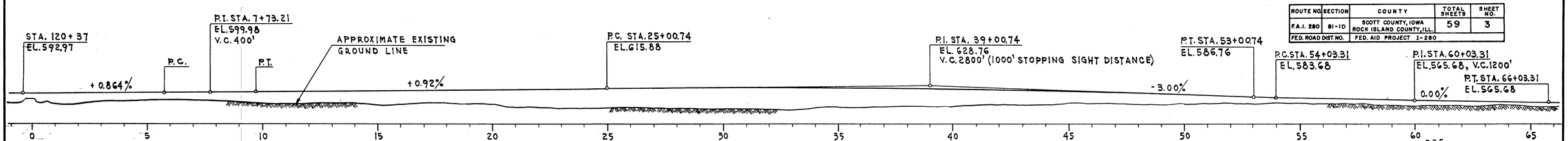
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

Rev 6-23-72 Rev. 7-8-72

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	3
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

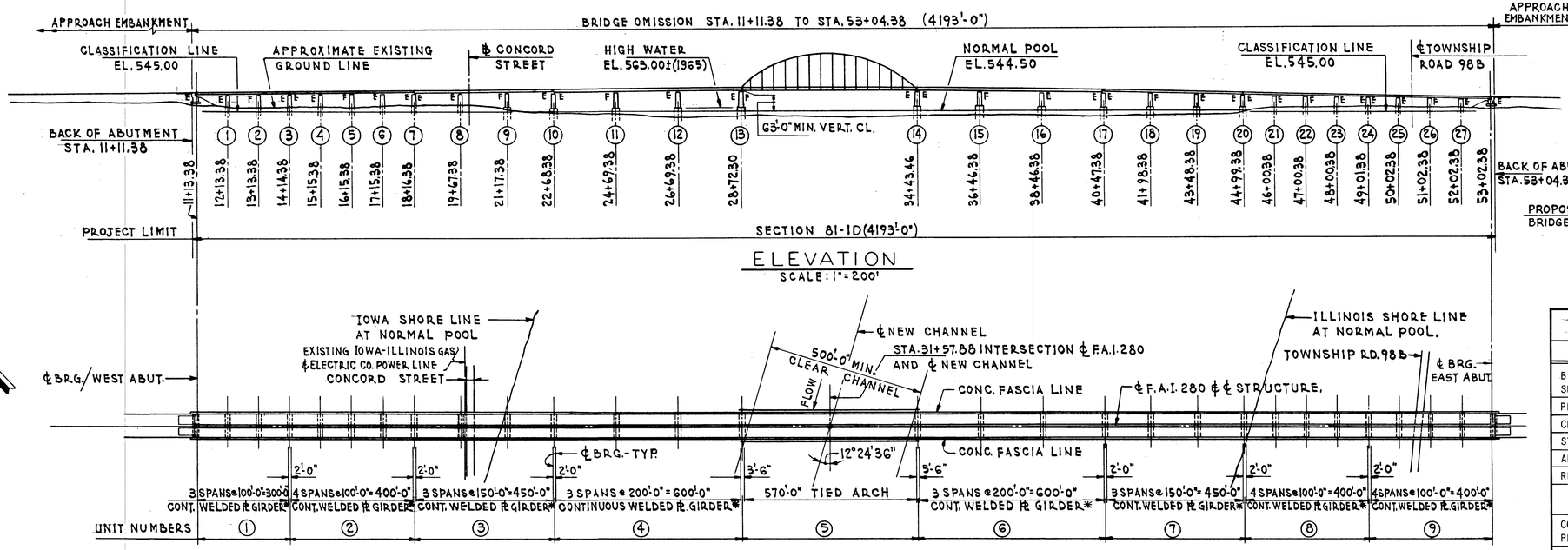


PROFILE GRADE

SCALE: 1"=200'

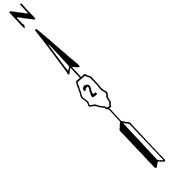
NOTE: ALL ELEVATIONS REFERRED TO ARE BASED UPON 5TH GENERAL ADJUSTMENT - ILLINOIS.

EQUATION
10WA. STA. 119+98.38 =
ILLINOIS STA. 0+00



ELEVATION

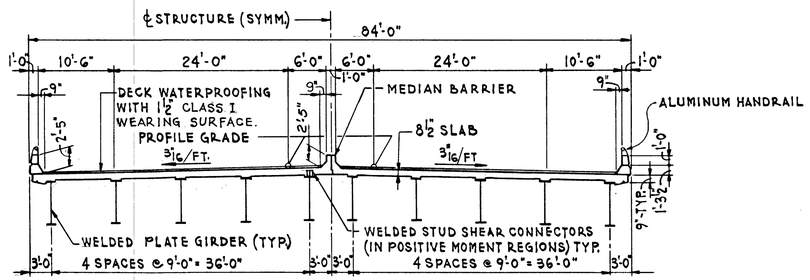
SCALE: 1"=200'



PLAN

SCALE: 1"=200'

*INDICATES CONTINUOUS COMPOSITE CONSTRUCTION.

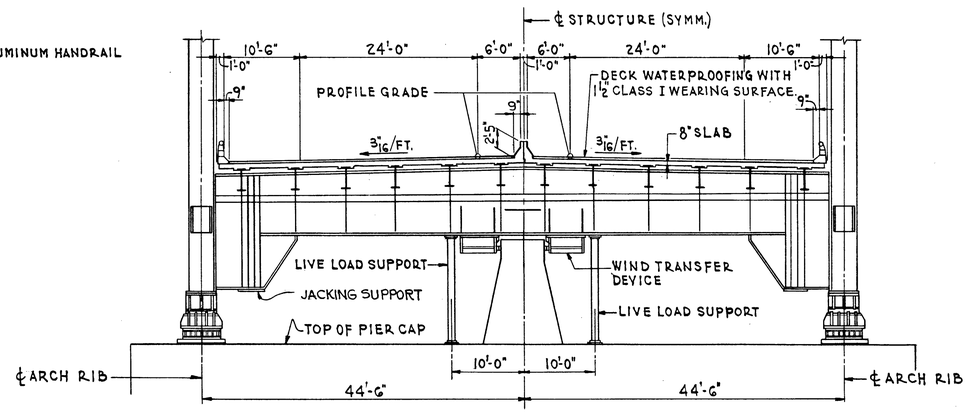


TYPICAL CROSS SECTION - APPROACH SPANS

SCALE: 1"=10'

WATERWAY INFORMATION

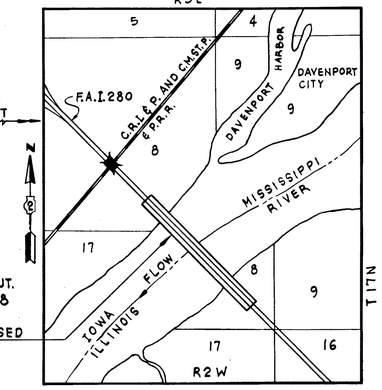
WATERWAY OPENING REQUIRED	26,000	SQ.FT.
WATERWAY OPENING PROVIDED	26,240	SQ.FT.
50 YEAR FREQUENCY DISCHARGE	293,000	CU.F.S.
50 YEAR HIGH WATER ELEVATION	562.5	
DRAINAGE AREA	99,200	SQ.MI.
MILES FROM MOUTH	1,560	MI.



TYPICAL CROSS SECTION-ARCH SPAN

SHOWING AT END FLOOR BEAM

SCALE: 1"=10'



LOCATION PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
BITUMINOUS CONCRETE SURFACE COURSE, CLASS I	TON	3,057.5
PROTECTIVE COAT	SQ. YD.	5,839
CLASS "X" CONCRETE	CU. YD.	10,853.6
STUD SHEAR CONNECTORS	EACH	76,840
ALUMINUM RAILING	LIN.FT.	8,382
REINFORCEMENT BARS	POUND	2,608,420
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	36,238
PERMANENT BENCH MARK, TYPE I	EACH	2
NAVIGATION LIGHTING	LUMP SUM	
PREFORMED JOINT SEALER	LIN.FT.	337
BRIDGE SEAT SEALER	LUMP SUM	
F. & E. STRUCTURAL STEEL	LBS.	16,400

NOTES:

CERTAIN ITEMS OF WORK SHOWN ON THESE DRAWINGS ARE SHOWN FOR INFORMATION ONLY.

THE CONTRACT COVERS THE FURNISHING AND PLACING OF THE STUD SHEAR CONNECTORS, CONSTRUCTION OF THE CONCRETE DECK, WEARING SURFACE, DECK RAILING, NAVIGATION LIGHTING, PLUS ADDITIONAL ITEMS OF WORK AS DEFINED IN THE SPECIAL PROVISIONS.

THE CONSTRUCTION OF SUBSTRUCTURE; THE FABRICATION AND ERECTION OF THE STRUCTURAL STEEL FOR THE SUPERSTRUCTURE; AND THE FIELD PAINTING OF THE STRUCTURAL STEEL ARE COVERED UNDER SEPARATE CONTRACTS AND THEREFORE ARE NOT PART OF THESE PLANS.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.G. HORN
DRAWN BY A. BUROKAS
CHECKED J.Y. HUANG
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

GENERAL PLAN AND ELEVATION

F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11+11.38 TO STA. 53+04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	4
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

BRIDGE UNIT ① — 3 CONTINUOUS COMPOSITE SPANS, WELDED PLATE GIRDER @ 100'-0" = 300'-0"
BRIDGE UNIT ② — 4 CONTINUOUS COMPOSITE SPANS, WELDED PLATE GIRDER @ 100'-0" = 400'-0"
BRIDGE UNIT ③ — 3 CONTINUOUS COMPOSITE SPANS, WELDED PLATE GIRDER @ 150'-0" = 450'-0"
BRIDGE UNIT ④

℄ BRG. WEST ABUT. · ℄ PIER 3 · ℄ PIER 7 · ℄ PIER 10

630 620 610 600 590 580 570 560 550 540 530

BERM EL. 594.55 · EL. 590.45 · 10BP42 STEEL PILES, 50 TON CAPACITY · LIMITS OF EMBANKMENT · 3:1 · 6" CONC. SLOPE WALL

EXP. · FIXED · EXP. · EXP. · EXP. · FIXED · EXP. · EXP. · EXP. · EXP. · FIXED · EXP. · EXP.

APPROXIMATE EXIST. GROUND LINE

EL. 535.0 · EL. 538.5 · EL. 538.0 · EL. 537.0 · EL. 542.0 · EL. 551.0 · EL. 551.0 · EL. 550.0 · EL. 532.5 · EL. 519.0

℄ CONCORD ST. · HIGH WATER LEVEL EL. 563.0 (1965) · NORMAL POOL EL. 544.50

PIERS SHALL BE FOUNDED ON SHALE
MAXIMUM ALLOWABLE BEARING PRESSURE 5,000 LBS. PER SQ. FT.

PIERS SHALL BE SUPPORTED ON STEEL H PILES 10BP42
DESIGN CAPACITY 37 TONS, DRIVE TO 50 TONS

PIERS SHALL BE FOUNDED ON SHALE - MAX. ALLOWABLE BEARING PRESSURE = 10,000 LBS. PER SQ. FT.

ELEVATION
SCALE: 1"=40'

APPROACH SLAB & ROADWAY · TIMBER PILES · 3:1 SLOPE · 6" TOE · 3:1 TYP. · 155'-0"R · 40'-0" · 1'-0" TOE · 6" TOE

STA. 10+88.88 42' LT. · STA. 10+97.88 42' LT. · ℄ BRG. W. ABUT. · 3:1 · 22'-6"R

℄ PIER 1 ℄ BRG. · ℄ PIER 2 ℄ BRG. · ℄ PIER 3 · ℄ PIER 4 ℄ BRG. · ℄ PIER 5 ℄ BRG. · ℄ PIER 6 ℄ BRG. · ℄ PIER 7 · ℄ PIER 8 ℄ BRG. · ℄ PIER 9 ℄ BRG. · ℄ PIER 10

CONCRETE FASCIA LINE · CONCORD ST. · IOWA SHORE LINE AT NORMAL POOL

24'-0" · 6'-6" · 1/2" PER FT. · 2'-0" · P.G. EL. 604.04 · PROFILE · GRADE LINE · P.G. EL. 604.96 · P.G. EL. 603.10 · BACK/ABUT. · 6" TOE · 19'-0" · 2'-0" · B1 · B2 · B3 · B4 · B5 · B6 · B7 · B8 · B9 · B10 · B11 · B32 · B32A

1" OPEN JOINT · P.G. EL. 605.89 · P.G. EL. 606.81 · P.G. EL. 607.73 · P.G. EL. 608.65 · P.G. EL. 609.58 · ℄ STRUCTURE & ℄ F.A.I. ROUTE 280 · BASE OF CURB LINE · 42'-0" · P.G. EL. 610.97 · P.G. EL. 612.35 · WESTBOUND P.G. EL. 613.74 · EASTBOUND

℄ BRG. · 2'-0" · 100'-0" (SPAN 1) · 100'-0" (SPAN 2) · 100'-0" (SPAN 3) · 100'-0" (SPAN 4) · 100'-0" (SPAN 5) · 100'-0" (SPAN 6) · 100'-0" (SPAN 7) · 150'-0" (SPAN 8) · 150'-0" (SPAN 9) · 150'-0" (SPAN 10)

22'-6"R · 3:1 SLOPE · STA. 10+97.88 42' RT. · STA. 10+88.88 42' RT. · 159'-0"R · 6" CONCRETE SLOPEWALL · 5" TOE · 1'-0" TOE

PLAN
SCALE: 1"=40'

EXISTING IOWA ILLINOIS GAS & ELECTRIC CO. POWER LINE · ℄ CONCORD ST. · IOWA SHORE LINE AT NORMAL POOL

12.7' · 8.3' · 16'-9" MIN. CL.

STA. 19+67.38 · STA. 20+01.16 INTERSECTION OF F.A.I. 280 & ℄ CONCORD ST. · STA. 21+17.38 · STA. 22+68.38

STA. 11+11.38 · STA. 12+13.38 · STA. 13+13.38 · STA. 14+14.38 · STA. 15+15.38 · STA. 16+15.38 · STA. 17+15.38 · STA. 18+16.38 · ℄ STRUCTURE & ℄ F.A.I. 280

84'-0" · 42'-0" · 42'-0" · 80'-0" · 40'-0" · 40'-0" · 25'-0" · 8'-6" · 25'-0" · 8'-6" · 90°-00'-00" TYP. · 89°-06'-40.8" · 50'-3" · 45'-9" · 96'-0"

BACK W. ABUTMENT · ℄ PIER 1 · ℄ PIER 2 · ℄ PIER 3 · ℄ PIER 4 · ℄ PIER 5 · ℄ PIER 6 · ℄ PIER 7 · ℄ PIER 8 · PIER 9 · ℄ PIER 10

102'-0" · 100'-0" · 101'-0" · 101'-0" · 100'-0" · 100'-0" · 101'-0" · 151'-0" · 150'-0" · 151'-0"

EDGE OF ASPHALT PAVEMENT

FOOTING PLAN
SCALE: 1"=40'

LEGEND

⊕ DENOTES BORING LOG

NOTE:
FOR SUPERSTRUCTURE PLAN & DETAILS UNITS 1,2 AND 3, SEE SHEETS NO. 8 THROUGH 16.

GENERAL PLAN, ELEVATION & GROUND PLAN BRIDGE UNITS 1, 2 & 3

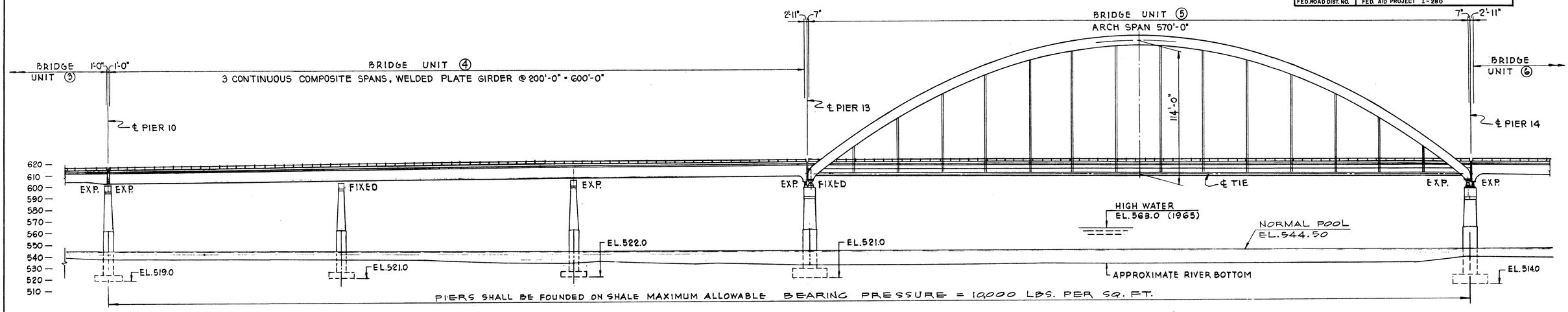
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 13.38 TO STA. 22 + 68.38

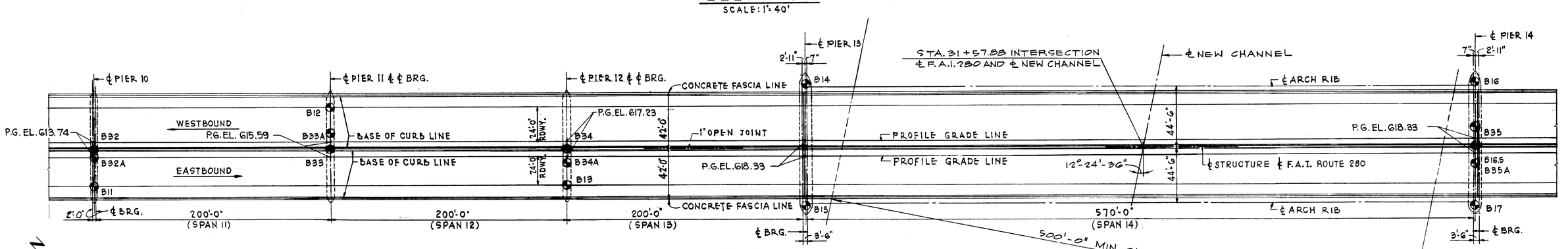
SCALE: AS NOTED DATE: NOV. 16, 1970

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.G. HORN
DRAWN BY A. BUROKAS
CHECKED
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

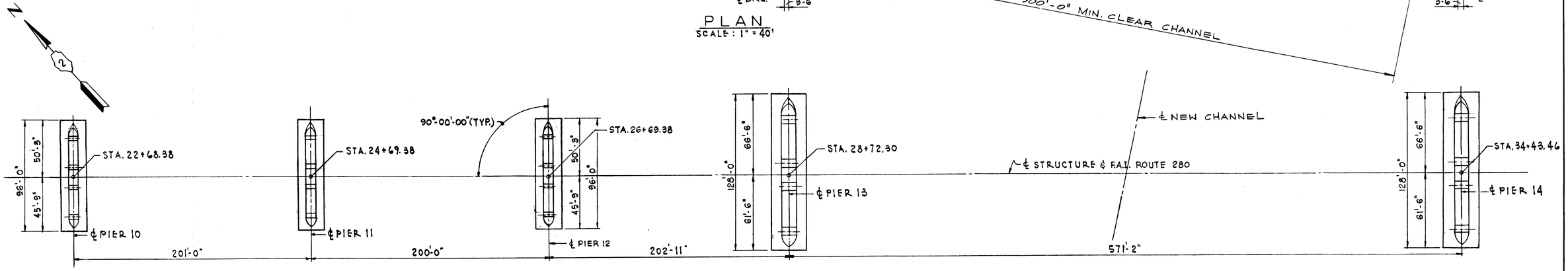
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	5
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



ELEVATION
SCALE: 1" = 40'



PLAN
SCALE: 1" = 40'



FOOTING PLAN
SCALE: 1" = 40'

LEGEND

● DENOTES BORING LOG

NOTES:

FOR SUPERSTRUCTURE PLAN AND DETAILS UNIT 4, SEE SH'S. NO. 17 THROUGH 20.

FOR ARCH SPAN SUPERSTRUCTURE PLAN AND DETAILS UNIT 5, SEE SH'S. NO. 21 THROUGH 25.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.G. HORN
DRAWN BY A. BUROKAS
CHECKED
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

GENERAL PLAN, ELEVATION & GROUND PLAN
BRIDGE UNITS 4 & 5

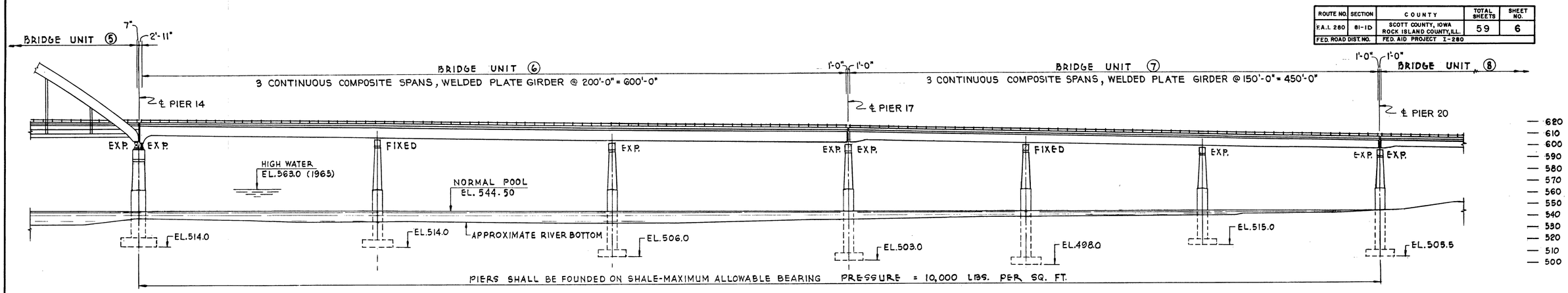
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

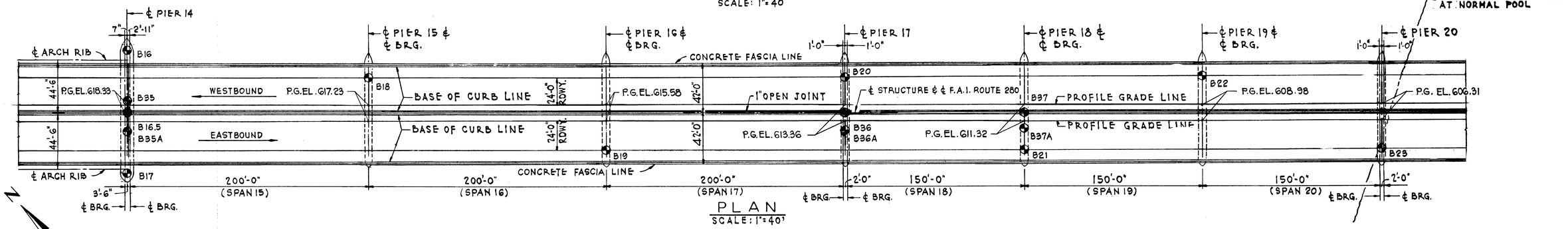
STA. 22+68.38 TO STA. 34+43.46

SCALE: AS NOTED DATE: NOV. 16, 1970

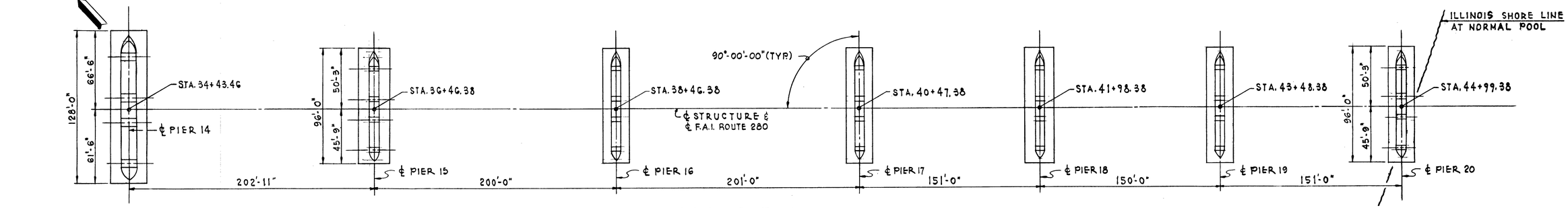
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	6
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



ELEVATION
SCALE: 1" = 40'



PLAN
SCALE: 1" = 40'



FOOTING PLAN
SCALE: 1" = 40'

LEGEND

● DENOTES BORING LOG

NOTE:

FOR SUPERSTRUCTURE PLAN AND DETAILS UNITS 6 & 7, SEE SH'S. NO. 26 THROUGH 32.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. G. HORN
DRAWN BY A. BUROKAS
CHECKED
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

GENERAL PLAN, ELEVATION & GROUND PLAN
BRIDGE UNITS 6 & 7

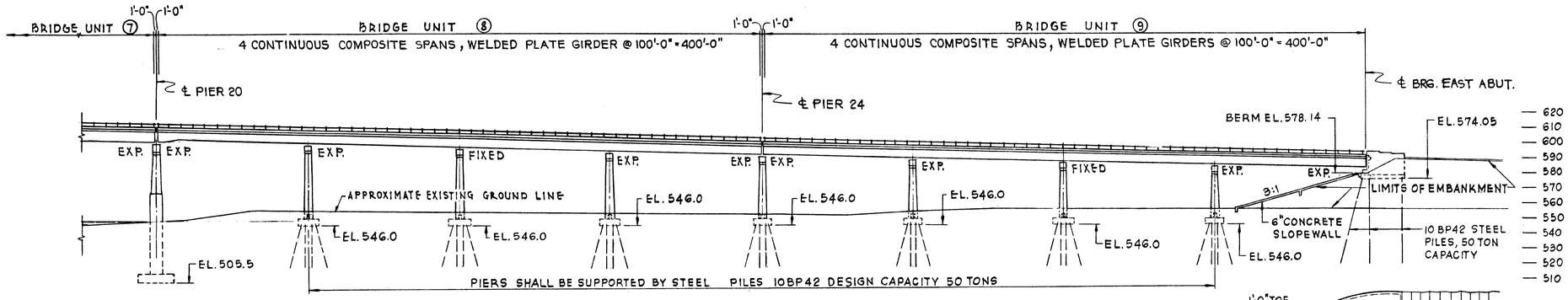
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.

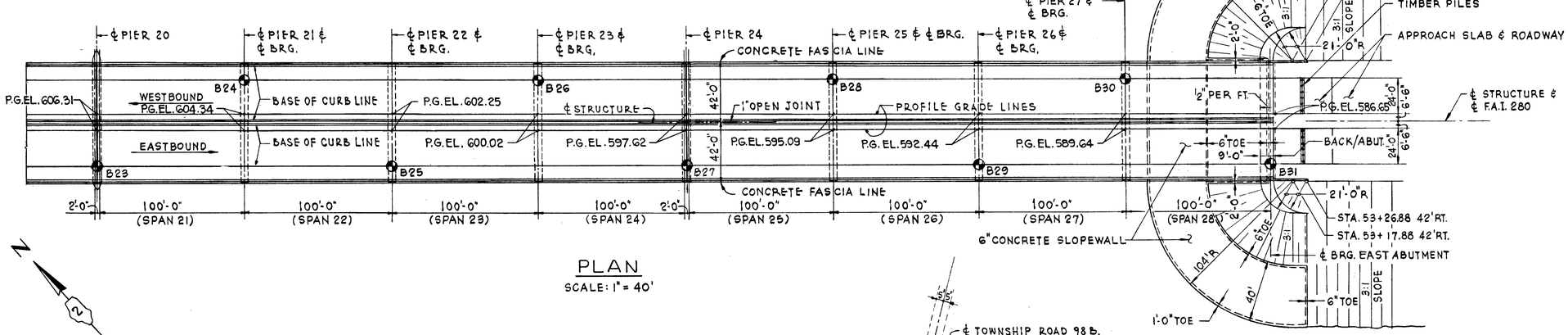
STA. 34+43.46 TO STA. 44+99.38

SCALE: AS NOTED DATE: NOV. 16, 1970

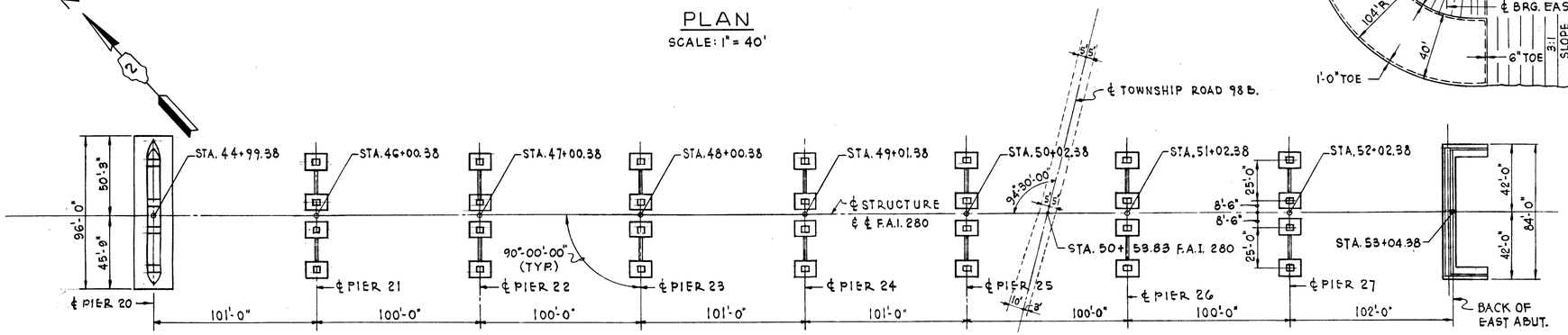
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	7
FED.ROAD DIST.NO.		FED. AID PROJECT I-280		



ELEVATION
SCALE: 1" = 40'



PLAN
SCALE: 1" = 40'



FOOTING PLAN
SCALE: 1" = 40'

NOTE:

FOR SUPERSTRUCTURE PLAN AND DETAILS-UNITS 8 & 9, SEE SH'S. NO. 33 THROUGH 38.

LEGEND

● DENOTES BORING LOG

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. G. HORN
DRAWN BY A. BUROKAS
CHECKED —
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

GENERAL PLAN, ELEVATION & GROUND PLAN
BRIDGE UNITS 8 & 9

F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 44+99.38 TO STA. 53+02.38
SCALE: AS NOTED DATE: NOV. 16, 1970

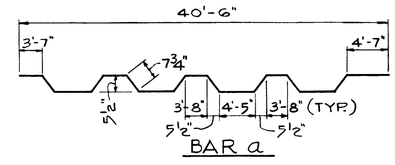
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	8
FED. ROAD DIST NO.	FED. AID PROJECT I-280			

BAR LIST

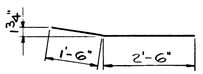
BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
a	258	258	516	6	42'-0"	
a1	514	514	1028	6	40'-6"	
a2	258	258	516	6	4'-0"	
a3	258	258	516	6	4'-3"	
b11	1	1	2	5	3'-3"	
b12	1	1	2	5	2'-10"	
b14	18	18	36	8	29'-7"	
b15	816	816	1632	5	32'-0"	
b16	16	16	32	5	15'-9"	
b17	12	12	24	8	15'-9"	
b18	84	84	168	6	40'-0"	
b19	24	24	48	5	29'-1"	
b20	204	204	408	5	28'-3"	
b21	8	8	16	5	34'-6"	
b22	6	6	12	8	34'-11"	
d	320	320	640	4	4'-7"	
d1	634	634	1268	5	3'-7"	
d2	305	305	610	5	3'-4"	

NOTES:

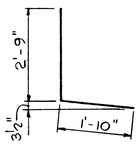
BARS INDICATED THUS 39 x 4 - # 5 ETC. INDICATES 39 LINES OF BARS WITH 4 LENGTHS PER LINE.
MIN. BAR LAP = 24 DIA.
ALL BAR DIMENSIONS ARE OUT TO OUT.



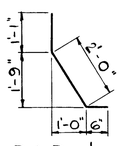
BAR a



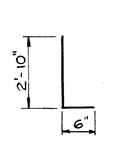
BAR a2



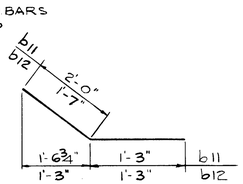
BAR d



BAR d1

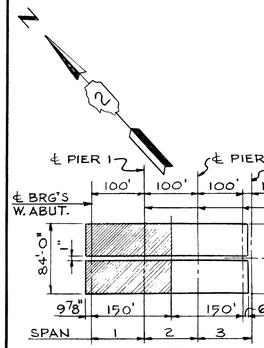


BAR d2



BARS b11 & b12

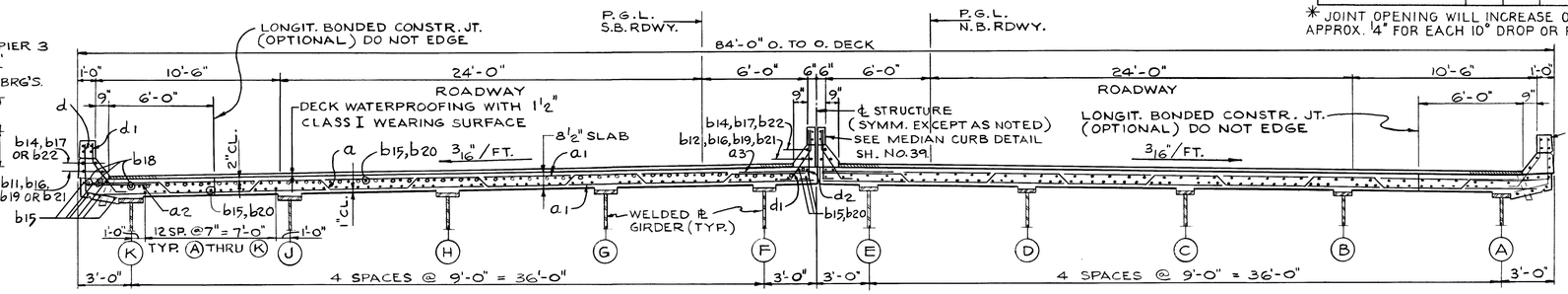
HALF PLAN (NOT TO SCALE)



UNIT 1

KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING



NEAR PIER 1 OR 2 — NEAR MIDSPAN

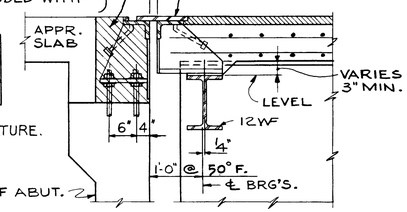
CROSS SECTION (LOOKING NORTH)

SCALE: 1/4" = 1'-0"

EXP. GUARD ADJUSTMENT SCHEDULE						
TEMPERATURE F°	110°	90°	70°	50°	30°	10°
JOINT OPENING *	3⅞"	4½"	5⅛"	5¾"	6⅜"	7"

* JOINT OPENING WILL INCREASE OR DECREASE APPROX. 1/4" FOR EACH 10° DROP OR RISE IN TEMPERATURE.

CONCRETE IN SHADED AREA TO BE POURED AFTER ALL SUPERSTRUCTURE FORMS HAVE BEEN REMOVED. QUANTITIES OF CLASS X CONCRETE INCLUDED WITH SUPERSTRUCTURE.



SECTION B-B

SCALE: 3/4" = 1'-0"

NOTE:

WORK THIS SHEET WITH SHT'S. NO. 9 & 10.
FOR SUGGESTED POURING SEQUENCE SEE SH. NO. 9.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	R.K. MILLER
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

SUPERSTRUCTURE - UNIT 1 SPANS 1 & 2

F.A.I. ROUTE 280 SECTION 81-1D

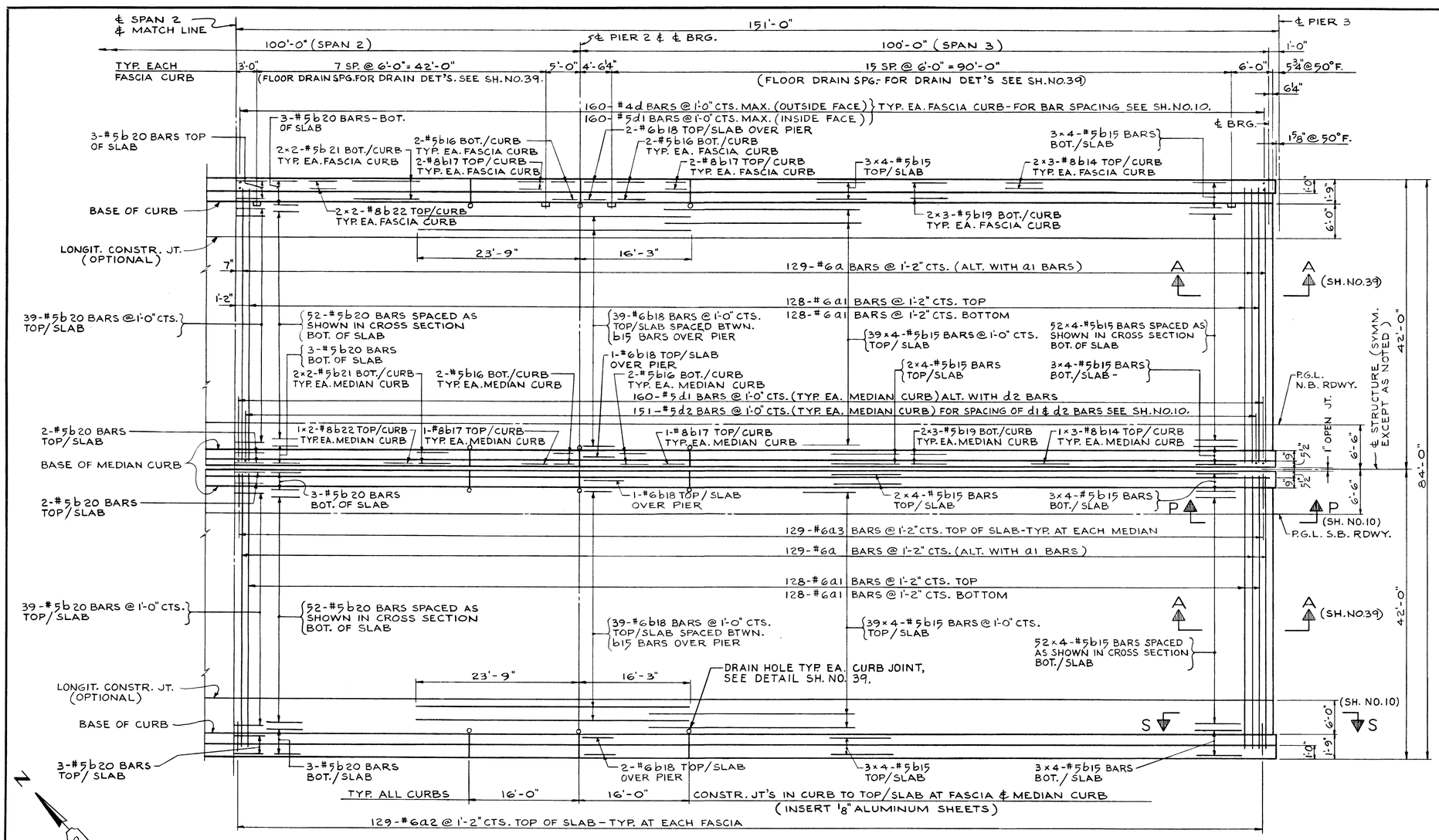
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

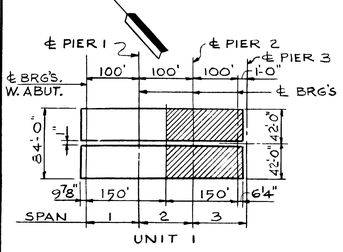
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	9
FED. ROAD DIST NO.		FED. AID PROJECT I-280		

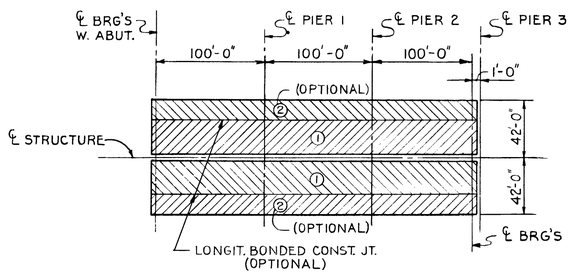


HALF PLAN (NOT TO SCALE)



KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING



SUGGESTED POURING SEQUENCE

UNIT 1 - SPANS 1 THRU 3

(NOT TO SCALE)

NOTE:

FOR FASCIA AND MEDIAN CURB SECTIONS, FLOOR DRAINS, ALUMINUM SHEETS, DECK WATERPROOFING DETAILS AND METHOD OF DETERMINING FILLET HEIGHT "t", SEE SH. NO. 39. WORK THIS SHEET WITH SHT'S. NO. 8 & 10.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE *	CU. YD.	680.4
REINFORCEMENT BARS *	POUND	195,260
PROTECTIVE COAT	SQ. YD.	417.2
BITUMINOUS CONCRETE SURFACE COURSE CLASS I (1½" THICK)	TON	220.4
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	2,612

* THE PARAPET CONCRETE & REINF. QUANTITIES ARE NOT INCLUDED. SEE SH. NO. 10.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY W.J. ZAPFEL
DRAWN BY R.K. MILLER
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

SUPERSTRUCTURE - UNIT 1 SPANS 2 & 3

F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

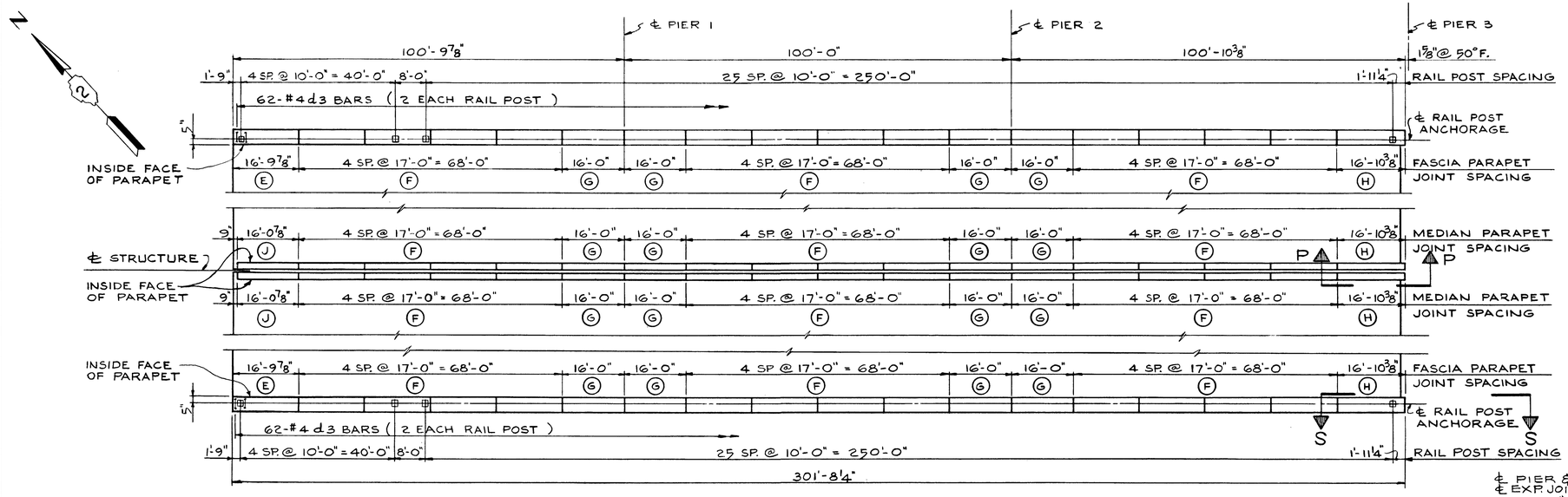
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

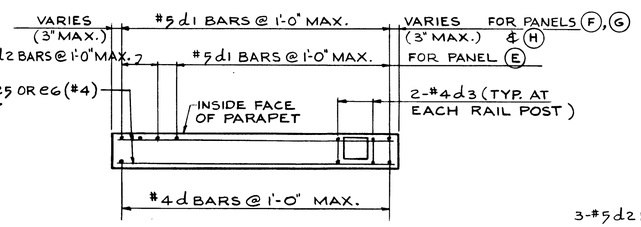
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	10
FED. ROAD DIST. NO.	FED. AID PROJECT I-280			

BAR LIST

BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
e	10	10	20	4	16'-7"	—
e4	72	72	144	4	16'-8"	—
e5	26	26	52	4	15'-10"	—
d3	62	62	124	4	2'-1	⊓



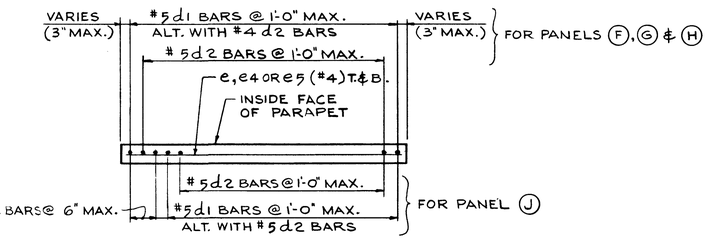
PLAN



PLAN - TYPICAL FASCIA PARAPET PANEL REINFORCEMENT

(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *			HORIZONTAL
N. BOUND	(E)	1	18-#4 d	15-#5 d1	3-#5 d2	4-#4 e
	(F)	12	18-#4 d	18-#5 d1		4-#4 e4
	(G)	4	17-#4 d	17-#5 d1		4-#4 e5
	(H)	1	18-#4 d	18-#5 d1		4-#4 e
S. BOUND	(E)	1	18-#4 d	15-#5 d1	3-#5 d2	4-#4 e
	(F)	12	18-#4 d	18-#5 d1		4-#4 e4
	(G)	4	17-#4 d	17-#5 d1		4-#4 e5
	(H)	1	18-#4 d	18-#5 d1		4-#4 e



PLAN TYPICAL MEDIAN PARAPET PANEL REINFORCEMENT

SEE TABLE BELOW)

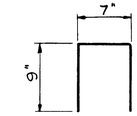
LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *		HORIZONTAL
N. BOUND	(J)	1	15-#5 d1	17-#5 d2	2-#4 e5
	(F)	12	18-#5 d1	17-#5 d2	2-#4 e4
	(G)	4	17-#5 d1	16-#5 d2	2-#4 e5
	(H)	1	18-#5 d1	17-#5 d2	2-#4 e
S. BOUND	(J)	1	15-#5 d1	17-#5 d2	2-#4 e5
	(F)	12	18-#5 d1	17-#5 d2	2-#4 e4
	(G)	4	17-#5 d1	16-#5 d2	2-#4 e5
	(H)	1	18-#5 d1	17-#5 d2	2-#4 e

* - BARS d, d1 & d2 ARE DETAILED AND BILLED ON SH. NO. 8

EXP. GUARD ADJUSTMENT SCHEDULE							
TEMPERATURE °F		110°	90°	70°	50°	30°	10°
"d"	JT. OPENING @ PIERS 3 & 24	1 3/8"	2"	2 5/8"	3 1/4"	3 7/8"	4 1/2"
	JT. OPENING @ PIER 10	1 5/8"	2 1/8"	2 11/16"	3 1/4"	3 13/16"	4 3/8"
	JT. OPENING @ PIERS 7 & 20	1 7/8"	2 11/16"	3 7/16"	4 1/4"	5"	5 13/16"
	JT. OPENING @ PIER 17	1 11/16"	2 1/2"	3 3/8"	4 1/4"	5 1/8"	6"
	JT. OPENING @ PIER 13	1 1/8"	3 5/16"	4 9/16"	5 3/4"	6 15/16"	8 3/16"
	JT. OPENING @ PIER 14	3 7/8"	4 1/2"	5 1/8"	5 3/4"	6 3/8"	7"

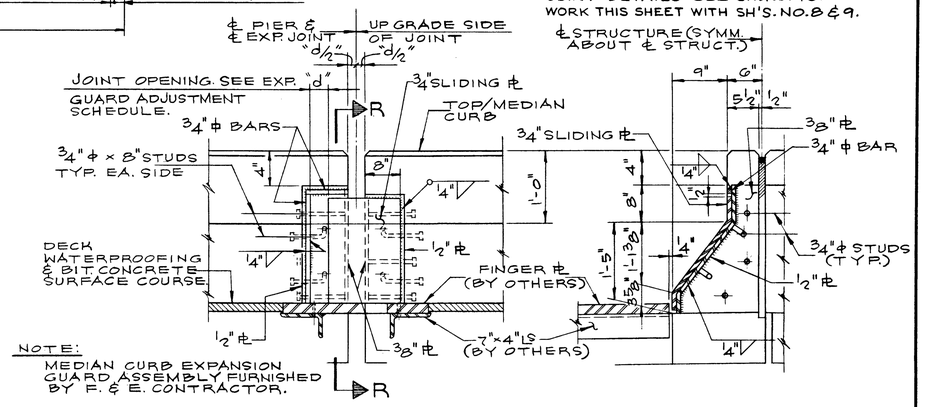
DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY W.J.ZAPFEL
DRAWN BY R.K.MILLER
CHECKED A. MILUNAS
IN CHARGE W.J.ZAPFEL
APPROVED W.G. HORN



BAR d3

NOTE:
FOR RAILING AND PARAPET JOINT DETAILS SEE SH. NO. 40.
WORK THIS SHEET WITH SH'S. NO. 8 & 9.

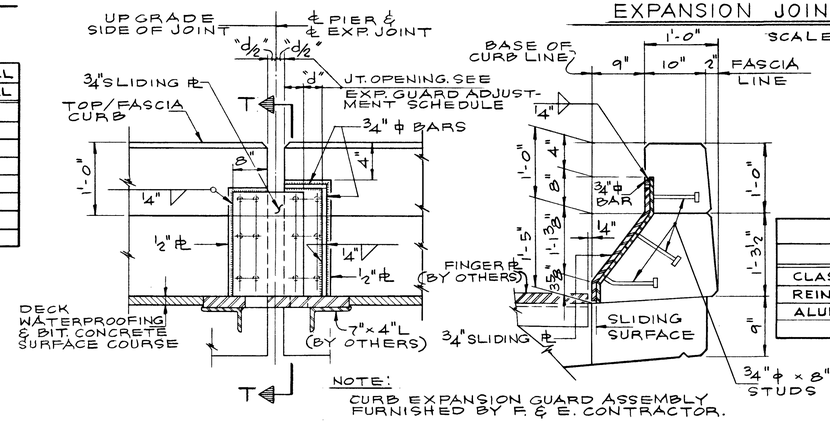


SECTION P - P

SECTION R - R

EXPANSION JOINT AT MEDIAN CURB

SCALE: 1" = 1'-0"



SECTION S - S

SECTION T - T

EXPANSION JOINT AT FASCIA CURB

SCALE: 1" = 1'-0"

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	101.6
REINFORCEMENT BARS	POUND	2,547
ALUMINUM RAILING	LIN. FT.	604

SUPERSTRUCTURE - UNIT 1
PARAPET & RAILING DETAILS

F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

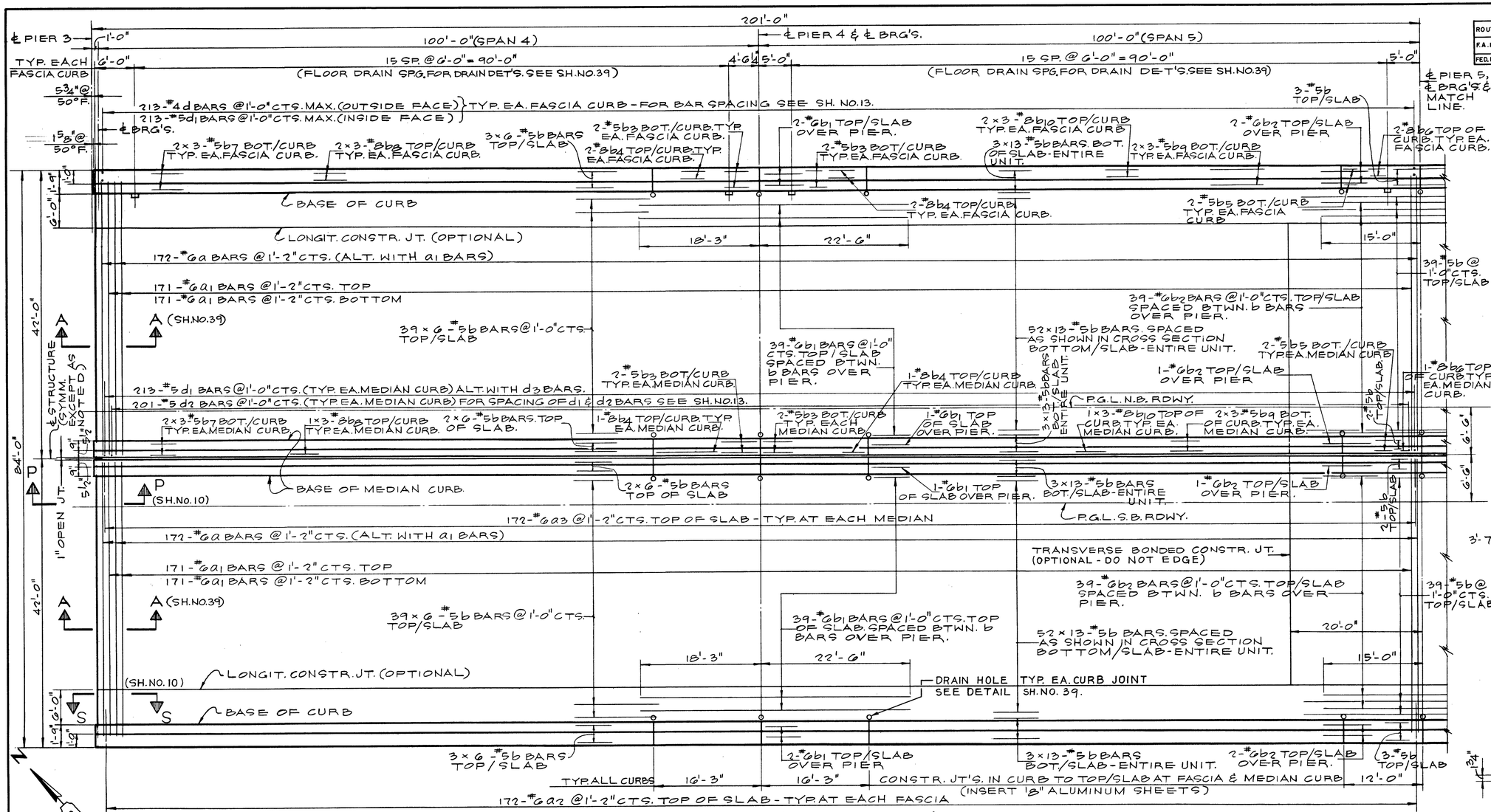
SCALE: AS NOTED DATE: NOV. 16, 1970

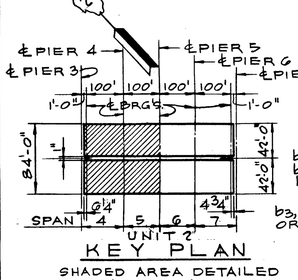
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	11
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

BAR LIST

BAR	QUANTITY N. B.	QUANTITY S. B.	TOTAL	SIZE	LENGTH	SHAPE
a	343	343	686	6	42'-0"	~
a1	684	684	1368	6	40'-6"	—
a2	343	343	686	6	4'-0"	—
a3	343	343	686	6	4'-3"	—
b	1376	1376	2752	5	32'-0"	—
b1	84	84	168	6	40'-9"	—
b2	42	42	84	6	30'-0"	—
b3	16	16	32	5	18'-0"	—
b4	12	12	24	8	18'-0"	—
b5	8	8	16	5	11'-9"	—
b6	6	6	12	8	11'-9"	—
b7	24	24	48	5	29'-0"	—
b8	18	18	36	8	29'-6"	—
b9	24	24	48	5	24'-8"	—
b10	18	18	36	8	25'-2"	—
d	426	426	852	4	4'-7"	L
d1	852	852	1704	5	3'-7"	L
d2	402	402	804	5	3'-4"	L

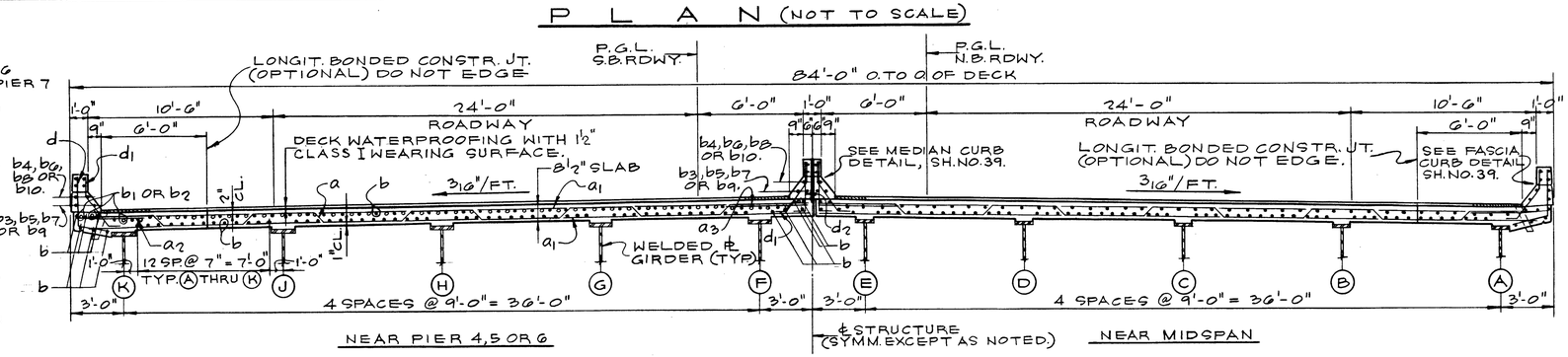
NOTES:
BARS INDICATED THUS 52×13-#5 ETC. INDICATES 52 LINES OF BARS WITH 13 LENGTHS PER LINE.
MIN. BAR LAP = 24 DIA.
ALL BAR DIMENSIONS ARE OUT TO OUT.



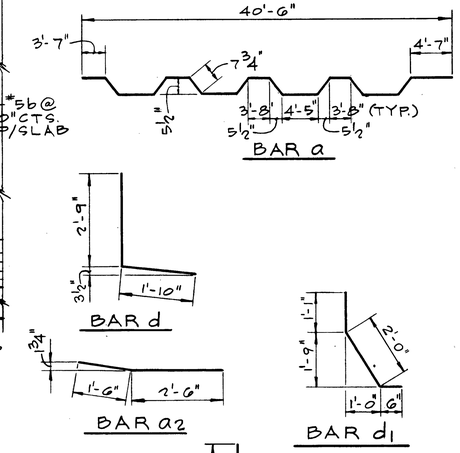


KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING.



CROSS SECTION (LOOKING NORTH) SCALE: ¼" = 1'-0"



NOTE: WORK THIS SHEET WITH SH'S. NO. 12 & 13. FOR SUGGESTED POURING SEQUENCE SEE SH. NO. 12.

SUPERSTRUCTURE - UNIT 2
SPANS 4 & 5

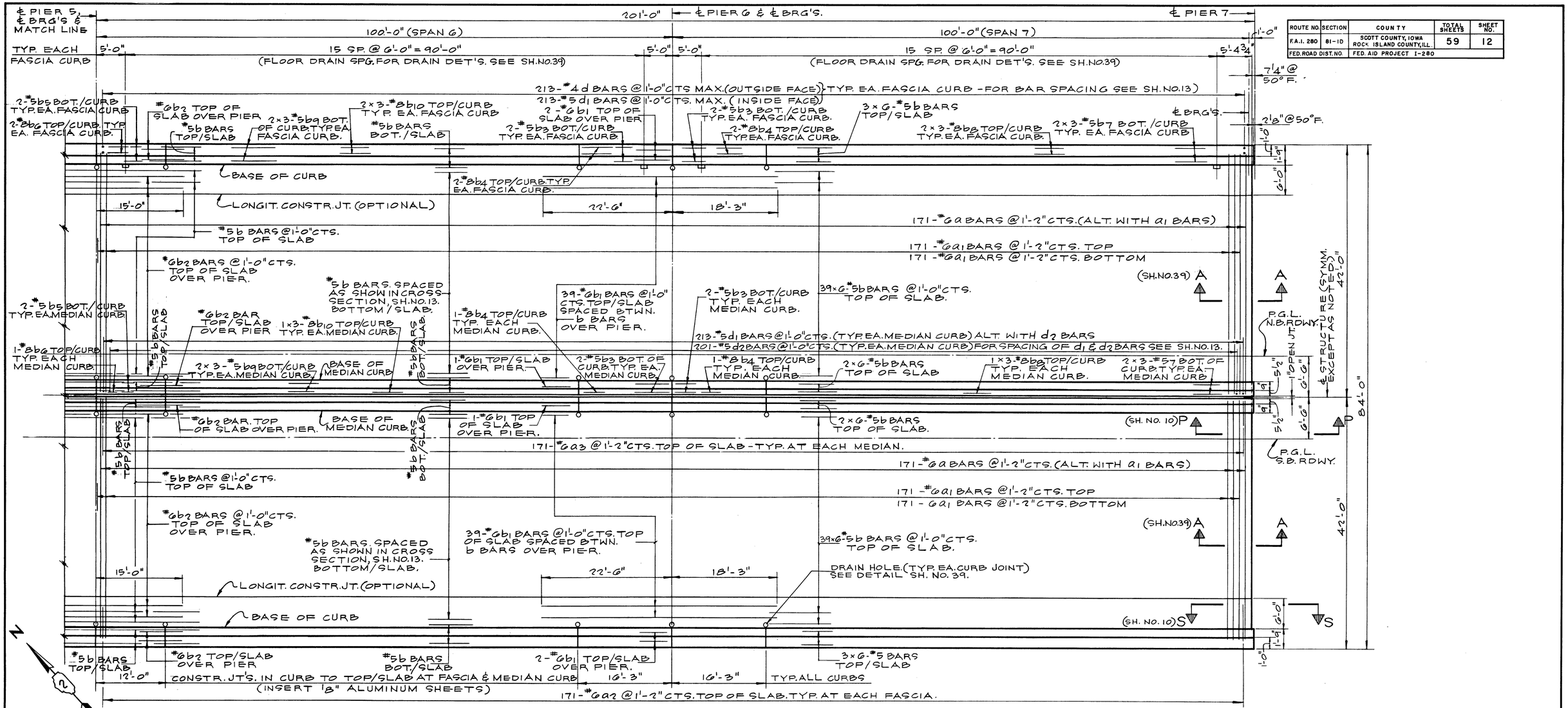
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

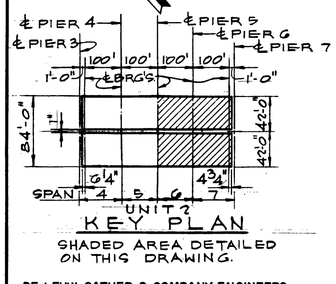
DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	G.P. ALLEMAN
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	12
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

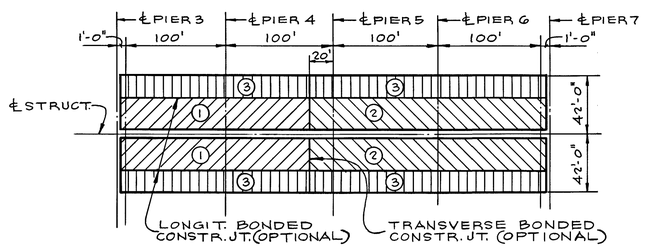


P L A N (NOT TO SCALE)



KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING.



SUGGESTED POURING SEQUENCE

UNIT 2 SPANS 4 THRU 7

NOTE:

FOR FASCIA AND MEDIAN CURB SECTIONS, FLOOR DRAINS, ALUMINUM SHEETS, DECK WATERPROOFING DETAILS AND METHOD OF DETERMINING FILLET HEIGHT "t", SEE SH. NO. 39.

WORK THIS SHEET WITH SH'S. NO. 11 & 13.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE *	CU. YD.	904.0
REINFORCEMENT BARS *	POUND	259,413
PROTECTIVE COAT	SQ. YD.	555.2
BITUMINOUS CONCRETE SURFACE COURSE CLASS I (1½" THICK)	TON	293.2
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	3,475

* - THE PARAPET CONCRETE & REINF. QUANTITIES ARE NOT INCLUDED, SEE SH. NO. 11.

SUPERSTRUCTURE - UNIT 2
SPANS 6 & 7

F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

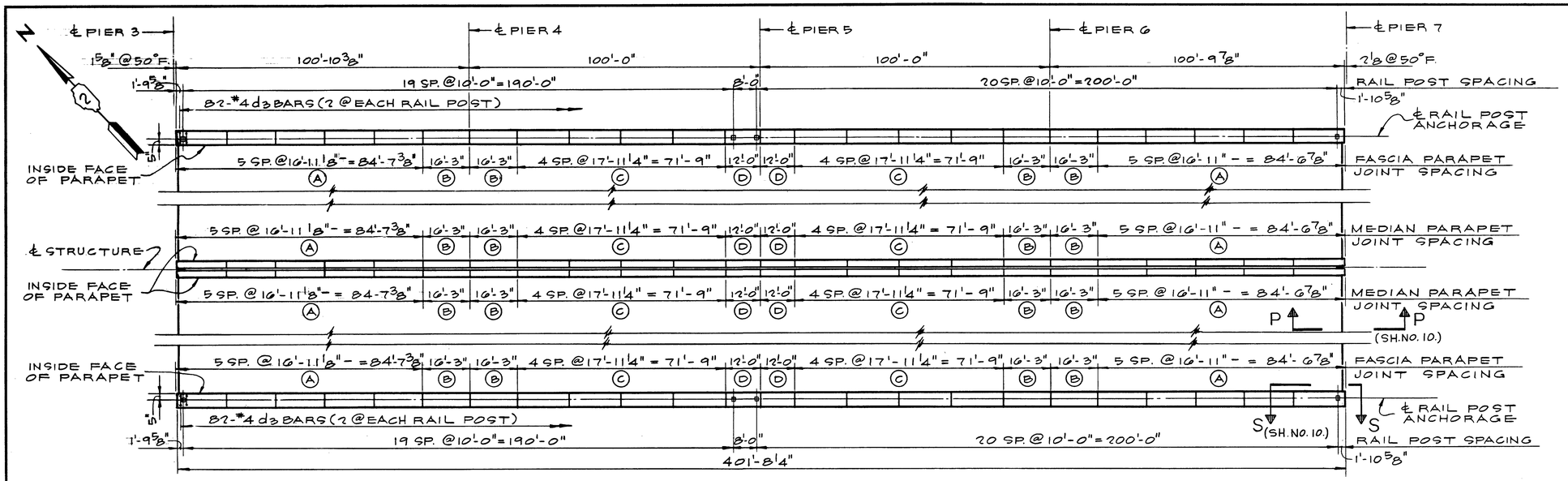
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPPEL
DRAWN BY	G.P. ALLEMAN
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPPEL
APPROVED	W.G. HORN

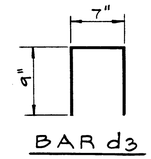


PLAN
(NOT TO SCALE)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	13
FED. ROAD DIST NO.		FED. AID PROJECT I-280		

BAR LIST

BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
e	60	60	120	4	16'-7"	—
e1	24	24	48	4	16'-0"	—
e2	48	48	96	4	17'-7"	—
e3	12	12	24	4	11'-8"	—
d3	82	82	164	4	2'-1"	⊓



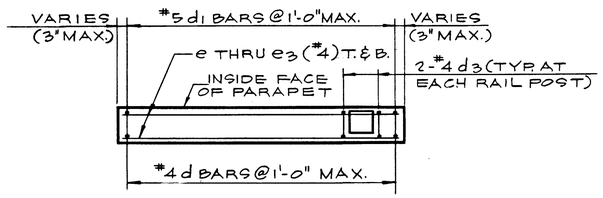
BAR d3

NOTE:

FOR RAILING AND PARAPET JOINT DETAILS SEE SH. NO. 40.

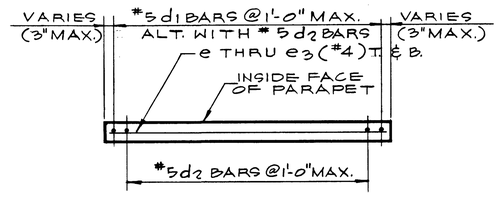
WORK THIS SHEET WITH SH'S. NO. 11 & 12.

FOR EXPANSION GUARD IN PARAPET DETAILS AND ADJUSTMENT SCHEDULE SEE SH. NO. 10.



PLAN - TYPICAL FASCIA PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *		HORIZONTAL
N. BOUND	A	10	18-#4 d	18-#5 d1	4-#4 e
	B	4	17-#4 d	17-#5 d1	4-#4 e1
	C	8	19-#4 d	19-#5 d1	4-#4 e2
	D	2	13-#4 d	13-#5 d1	4-#4 e3
S. BOUND	A	10	18-#4 d	18-#5 d1	4-#4 e
	B	4	17-#4 d	17-#5 d1	4-#4 e1
	C	8	19-#4 d	19-#5 d1	4-#4 e2
	D	2	13-#4 d	13-#5 d1	4-#4 e3



PLAN - TYPICAL MEDIAN PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *		HORIZONTAL
N. BOUND	A	10	18-#5 d1	17-#5 d2	2-#4 e
	B	4	17-#5 d1	16-#5 d2	2-#4 e1
	C	8	19-#5 d1	18-#5 d2	2-#4 e2
	D	2	13-#5 d1	12-#5 d2	2-#4 e3
S. BOUND	A	10	18-#5 d1	17-#5 d2	2-#4 e
	B	4	17-#5 d1	16-#5 d2	2-#4 e1
	C	8	19-#5 d1	18-#5 d2	2-#4 e2
	D	2	13-#5 d1	12-#5 d2	2-#4 e3

*- BARS d, d1 & d2 ARE DETAILED AND BILLED ON SH. NO. 11.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	135.3
REINFORCEMENT BARS	POUND	3,385
ALUMINUM RAILING	LIN. FT.	804

SUPERSTRUCTURE - UNIT 2
PARAPET & RAILING DETAILS

F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J.ZAPFEL
DRAWN BY G.P.ALLEMAN
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	14
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

BAR LIST

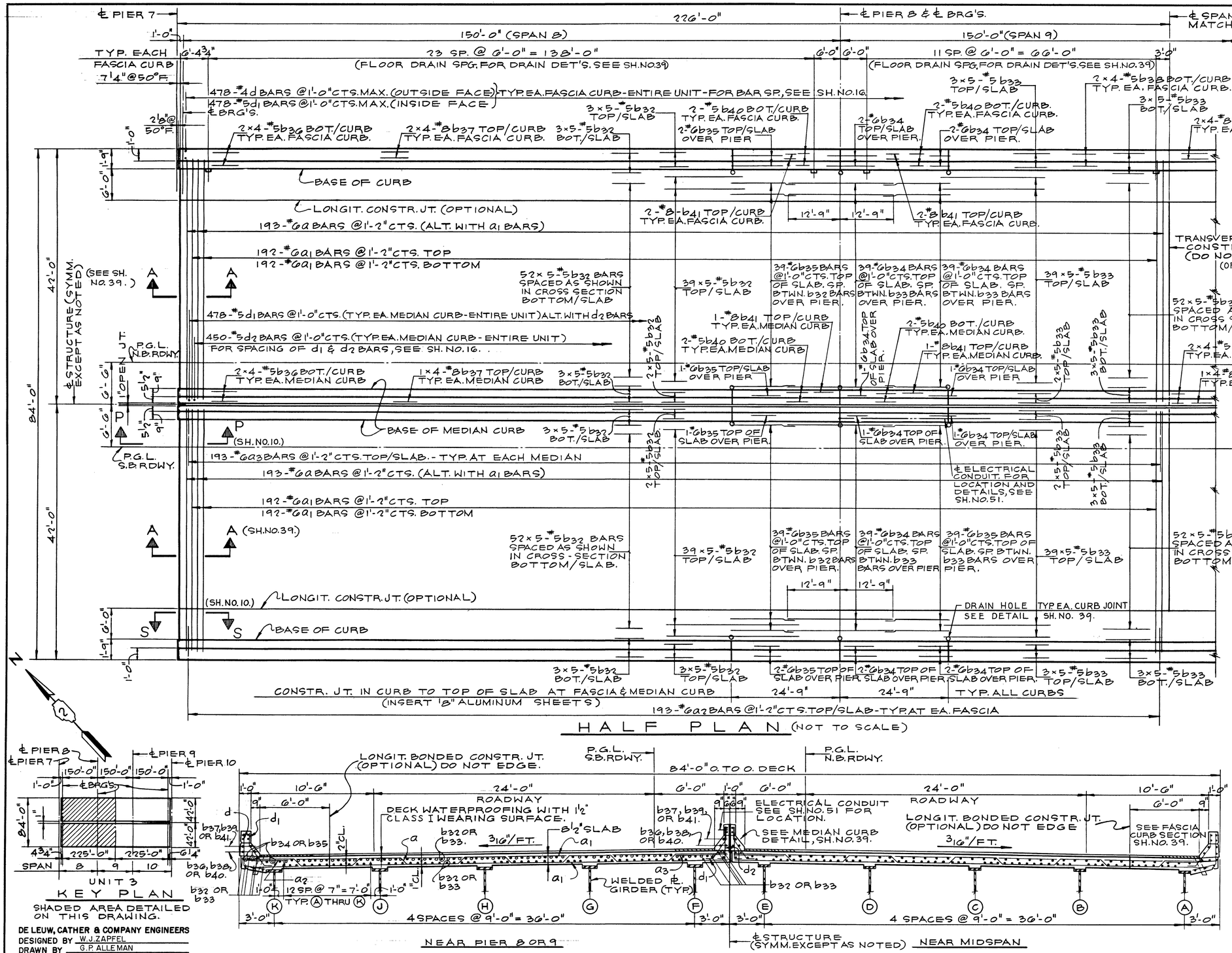
BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
a	386	386	772	6	42'-0"	
a1	384	384	768	6	40'-6"	
a2	386	386	772	6	4'-0"	
a3	386	386	772	6	4'-3"	
b32	1020	1020	2040	5	29'-3"	
b33	510	510	1020	5	35'-5"	
b34	168	168	336	6	25'-6"	
b35	84	84	168	6	14'-3"	
b36	32	32	64	5	32'-4"	
b37	24	24	48	8	32'-10"	
b38	16	16	32	5	26'-0"	
b39	12	12	24	8	26'-7"	
b40	16	16	32	5	24'-6"	
b41	12	12	24	8	24'-6"	
d	478	478	956	4	4'-7"	
d1	956	956	1912	5	3'-7"	
d2	450	450	900	5	3'-4"	

NOTES:

BARS INDICATED THUS 52×5-#5 ETC. INDICATES 52 LINES OF BARS WITH 5 LENGTHS PER LINE.

MIN. BAR LAP = 24 DIA.

ALL BAR DIMENSIONS ARE OUT TO OUT.

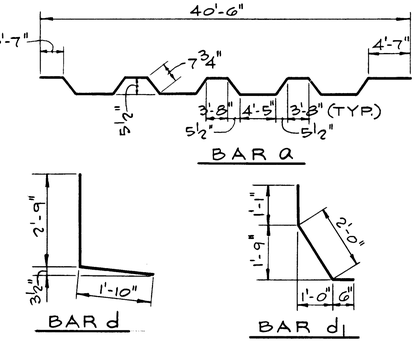


HALF PLAN (NOT TO SCALE)

KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING.

CROSS SECTION (LOOKING NORTH) SCALE: ¼" = 1'-0"



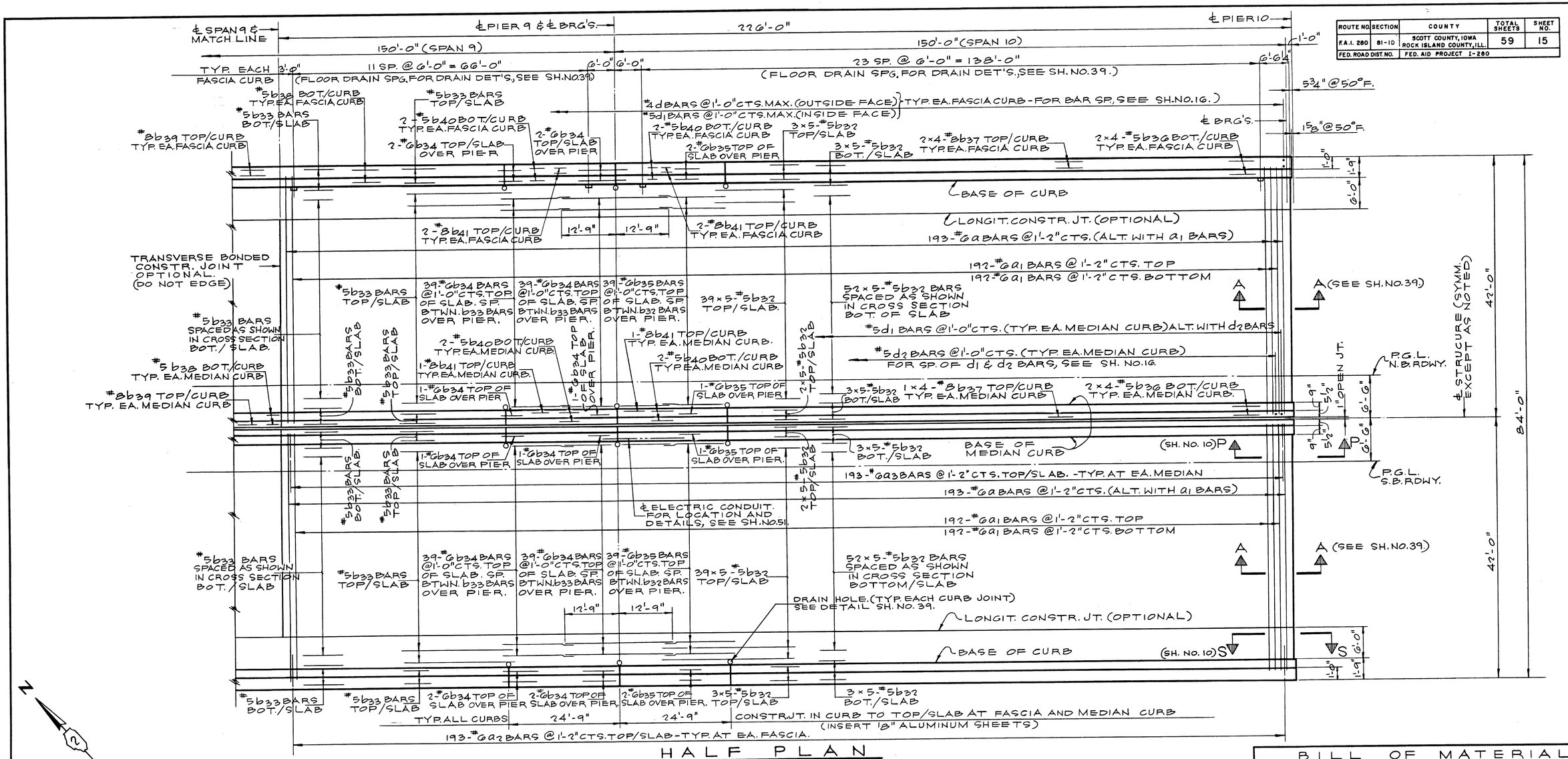
NOTE: WORK THIS SHEET WITH SH'S. NO. 15 & 16. FOR ELECTRICAL CONDUIT DETAILS FOR NAVIGATION LIGHTING, SEE SH. NO. 51. FOR SUGGESTED POURING SEQUENCE SEE SHEET NO. 15.

SUPERSTRUCTURE - UNIT 3
SPANS 8 & 9
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

DE LEUW, CATHER & COMPANY ENGINEERS

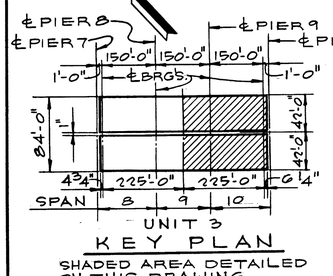
DESIGNED BY	W.J. ZAPFEL
DRAWN BY	G.P. ALLEMAN
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	15
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



HALF PLAN

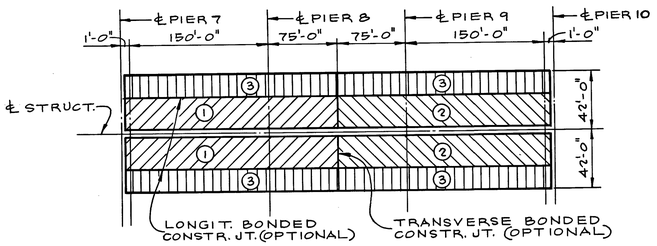
(NOT TO SCALE)



UNIT 3

KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING



SUGGESTED POURING SEQUENCE

UNIT 3 SPANS 8 THRU 10

NOTE:

FOR FASCIA AND MEDIAN CURB SECTIONS, FLOOR DRAINS, ALUMINUM SHEETS, DECK WATERPROOFING DETAILS AND METHOD OF DETERMING FILLET HEIGHT "t", SEE SH. NO. 39.

WORK THIS SHEET WITH SH'S. NO. 14 & 16.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE *	CU. YD.	1025.5
REINFORCEMENT BARS *	POUND	245,886
PROTECTIVE COAT	SQ. YD.	625.3
BITUMINOUS CONCRETE SURFACE COURSE CLASS I (1½" THICK)	TON	329.7
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	3908

*- THE PARAPET CONCRETE & REINF. QUANTITIES ARE NOT INCLUDED, SEE SH. NO. 14.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY W.J. ZAPFEL
DRAWN BY G.P. ALLEMAN
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

SUPERSTRUCTURE - UNIT 3
SPANS 9 & 10

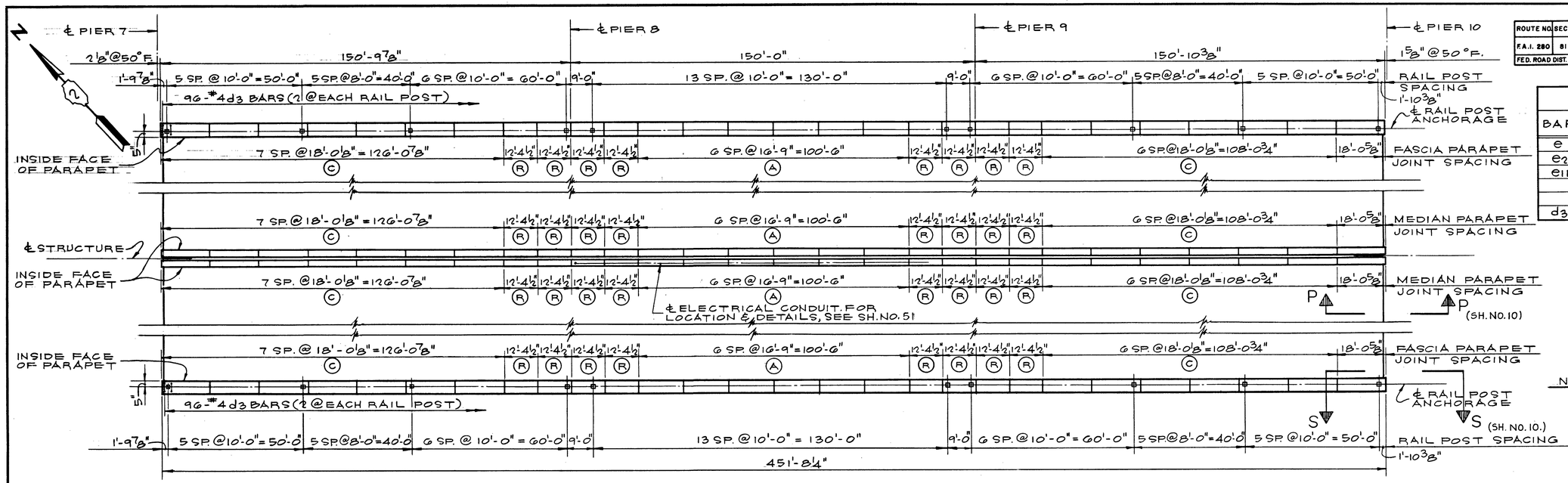
F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

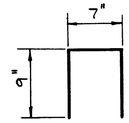


PLAN
(NOT TO SCALE)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	16
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

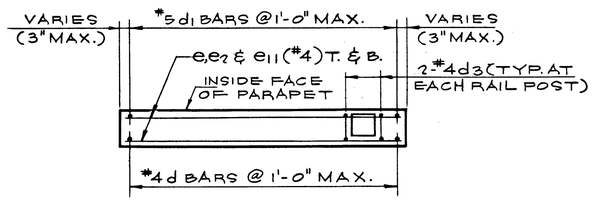
BAR LIST

BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
e	36	36	72	4	16'-7"	—
e_2	84	84	168	4	17'-7"	—
e_{11}	48	48	96	4	12'-0"	—
d_3	96	96	192	4	2'-1"	⊓



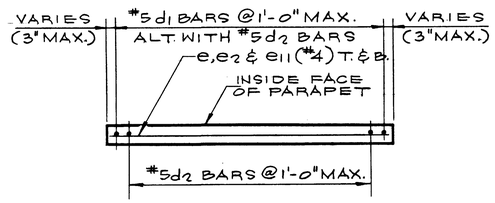
BAR d_3

NOTE:
FOR RAILING AND PARAPET JOINT DETAILS SEE SH. NO. 40.



PLAN - TYPICAL FASCIA PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *		HORIZONTAL
N. BOUND	(A)	6	18-#4d	18-#5 d_1	4-#4e
	(C)	14	19-#4d	19-#5 d_1	4-#4 e_2
	(R)	8	13-#4d	13-#5 d_1	4-#4 e_{11}
S. BOUND	(A)	6	18-#4d	18-#5 d_1	4-#4e
	(C)	14	19-#4d	19-#5 d_1	4-#4 e_2
	(R)	8	13-#4d	13-#5 d_1	4-#4 e_{11}



PLAN - TYPICAL MEDIAN PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *		HORIZONTAL
N. BOUND	(A)	6	18-#5 d_1	17-#5 d_2	2-#4e
	(C)	14	19-#5 d_1	18-#5 d_2	2-#4 e_2
	(R)	8	13-#5 d_1	12-#5 d_2	2-#4 e_{11}
S. BOUND	(A)	6	18-#5 d_1	17-#5 d_2	2-#4e
	(C)	14	19-#5 d_1	18-#5 d_2	2-#4 e_2
	(R)	8	13-#5 d_1	12-#5 d_2	2-#4 e_{11}

*-BARS d, d_1 & d_2 ARE DETAILED AND BILLED ON SH. NO. 14.

NOTE: WORK THIS SHEET WITH SH'S. NO. 14 & 15.
FOR EXPANSION GUARD IN PARAPET DETAILS AND ADJUSTMENT SCHEDULE SEE SH. NO. 10.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	152.2
REINFORCEMENT BARS	POUND	3808
ALUMINUM RAILING	LIN. FT.	904

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY G.P. ALLEMAN
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

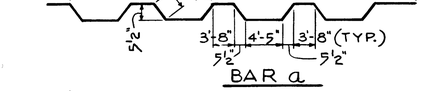
SUPERSTRUCTURE - UNIT 3
PARAPET & RAILING DETAILS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	17
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

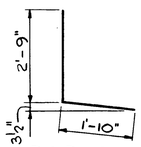
BAR LIST

BAR	QUANTITY N. B.	QUANTITY S. B.	TOTAL	SIZE	LENGTH	SHAPE
a	517	517	1034	6	42'-0"	
a1	1032	1032	2064	6	40'-6"	
a2	517	517	1034	6	4'-0"	
a3	517	517	1034	6	4'-3"	
a6	12	12	24	6	8'-6"	
b13	52	52	104	5	5'-3"	
b15	66	66	132	5	32'-0"	
b21	714	714	1428	5	34'-6"	
b24	1158	1158	2316	5	31'-11"	
b25	252	252	504	6	28'-2"	
b26	16	16	32	5	32'-3"	
b27	12	12	24	8	32'-3"	
b28	20	20	40	5	34'-7"	
b29	28	28	56	5	34'-8"	
b30	15	15	30	8	35'-2"	
b31	27	27	54	8	35'-3"	
d	635	635	1270	4	4'-7"	
d1	1270	1270	2540	5	3'-7"	
d2	605	605	1210	5	3'-4"	

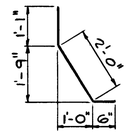
NOTES:
BARS INDICATED THUS 39 × 6 - # 5 ETC. INDICATES 39 LINES OF BARS WITH 6 LENGTHS PER LINE.
MIN. BAR LAP = 24 DIA.
ALL BAR DIMENSIONS ARE OUT TO OUT.



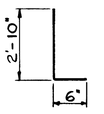
BAR a



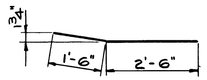
BAR d



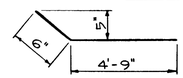
BAR d1



BAR d2

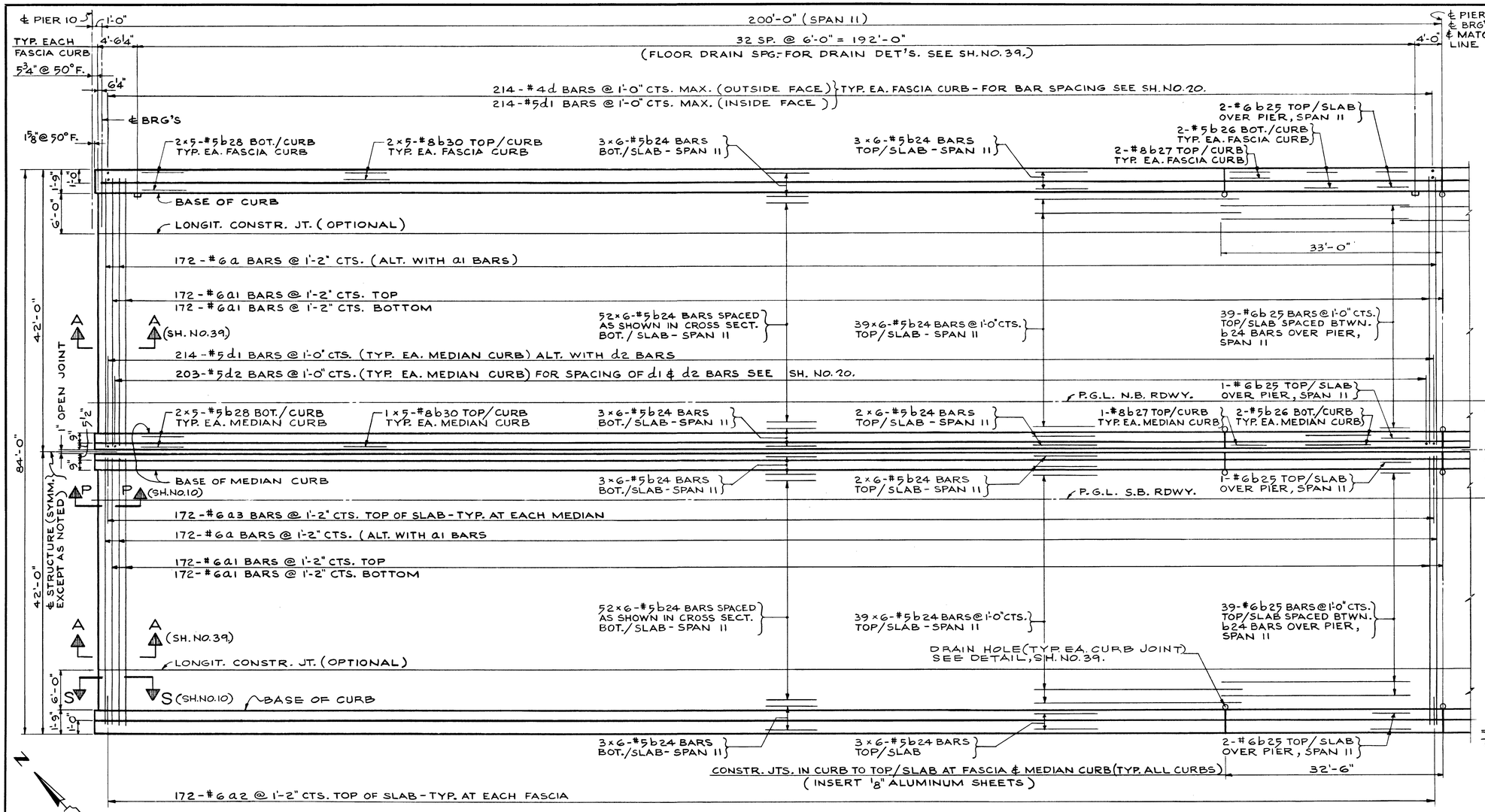


BAR a2

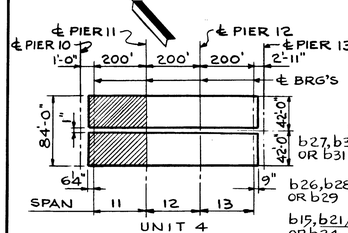


BAR b13

NOTE:
WORK THIS SHEET WITH SH'S. NO. 18, 19 & 20.
FOR ELECTRICAL CONDUIT DETAILS FOR NAVIGATION LIGHTING SEE SH. NO. 51
FOR SUGGESTED POURING SEQUENCE, SEE SH. NO. 18

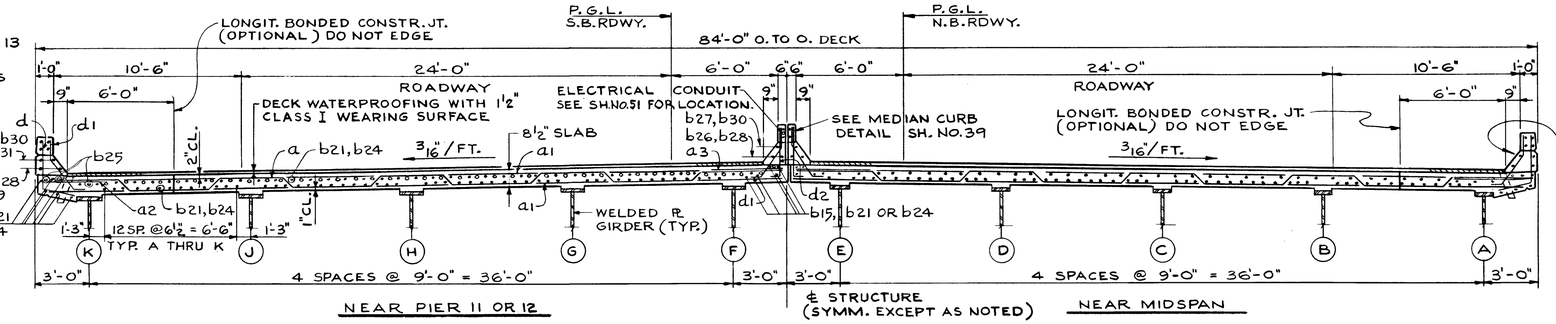


PLAN (NOT TO SCALE)



KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING



CROSS SECTION (LOOKING NORTH)

SCALE: ½" = 1'-0"

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	R.K. MILLER
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

SUPERSTRUCTURE - UNIT 4 SPAN 11

F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	18
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

200'-0" (SPAN 12)

TYP. EACH FASCIA CURB

4'-0" | 32 SP. @ 6'-0" = 192'-0" | 4'-0"

(FLOOR DRAIN SPG.-FOR DRAIN DET'S. SEE SH. NO. 39.)

℄ PIER 11, ℄ BRG'S & MATCH LINE

℄ PIER 12, ℄ BRG'S. & MATCH LINE

208-#4d BARS @ 1'-0" CTS. MAX. (OUTSIDE FACE) } TYP. EA. FASCIA CURB - FOR BAR SPACING SEE SH. NO. 20.
208-#4d1 BARS @ 1'-0" CTS. MAX. (INSIDE FACE)

2-#8b27 TOP/CURB TYP. EA. FASCIA CURB
2-#5b26 BOT./CURB TYP. EA. FASCIA CURB
2×2-#6b25 TOP/SLAB OVER PIER, SPAN 12
2×4-#5b29 BOT./CURB TYP. EA. FASCIA CURB
3×7-#5b21 BARS TOP/SLAB - SPAN 12
2×4-#8b31 TOP/CURB TYP. EA. FASCIA CURB
3×7-#5b21 BARS BOT./SLAB - SPAN 12
2×2-#6b25 TOP/SLAB OVER PIER, SPAN 12
2-#8b27 TOP/CURB TYP. EA. FASCIA CURB
2-#5b26 BOT./CURB TYP. EA. FASCIA CURB

84'-0" | 42'-0" | 1" OPEN JOINT | ℄ STRUCTURE (SYMM.) EXCEPT AS NOTED

b25

℄ BASE OF CURB

℄ LONGIT. CONSTR. JT. (OPTIONAL)

172-#6a BARS @ 1'-2" CTS. (ALT. WITH a1 BARS)

48'-6"

172-#6a1 BARS @ 1'-2" CTS. TOP
172-#6a1 BARS @ 1'-2" CTS. BOTTOM

39×2-#6b25 BARS @ 1'-0" CTS. TOP/SLAB SPACED BTWN. b21 BARS OVER PIER, SPAN 12
39×7-#5b21 BARS @ 1'-0" CTS. TOP/SLAB - SPAN 12
52×7-#5b21 BARS SPACED AS SHOWN IN CROSS SECTION BOT./SLAB - SPAN 12
39×2-#6b25 BARS @ 1'-0" CTS. TOP/SLAB SPACED BTWN. b21 BARS OVER PIER, SPAN 12

208-#5d1 BARS @ 1'-0" CTS. (TYP. EA. MEDIAN CURB) ALT. WITH d2 BARS
197-#5d2 BARS @ 1'-0" CTS. (TYP. EA. MEDIAN CURB) FOR SPACING OF d1 & d2 BARS SEE SH. NO. 20.

1-#8b27 TOP/CURB TYP. EA. MEDIAN CURB
2-#5b26 BOT./CURB TYP. EA. MEDIAN CURB
1×4-#8b31 TOP/CURB TYP. EACH MEDIAN CURB.
1×2-#6b25 TOP/SLAB OVER PIER, SPAN 12
2×7-#5b21 BARS @ 1'-0" CTS. TOP/SLAB - SPAN 12
3×7-#5b21 BARS BOT./SLAB - SPAN 12
1-#8b27 TOP/CURB TYP. EA. MEDIAN CURB
2-#5b26 BOT./CURB TYP. EA. MEDIAN CURB
1×2-#6b25 TOP/SLAB OVER PIER, SPAN 12

BASE OF MEDIAN CURB

1×2-#6b25 TOP/SLAB OVER PIER, SPAN 12
2×7-#5b21 BARS @ 1'-0" CTS. TOP/SLAB - SPAN 12
3×7-#5b21 BARS BOT./SLAB - SPAN 12
1×2-#6b25 TOP/SLAB OVER PIER, SPAN 12

172-#6a3 BARS @ 1'-2" CTS. TOP OF SLAB - TYP. AT EACH MEDIAN

172-#6a BARS @ 1'-2" CTS. (ALT. WITH a1 BARS)

172-#6a1 BARS @ 1'-2" CTS. TOP
172-#6a1 BARS @ 1'-2" CTS. BOTTOM

39×2-#6b25 BARS @ 1'-0" CTS. TOP/SLAB SPACED BTWN. b21 BARS OVER PIER, SPAN 12
39×7-#5b21 BARS @ 1'-0" CTS. TOP/SLAB - SPAN 12
52×7-#5b21 BARS SPACED AS SHOWN IN CROSS SECTION BOT./SLAB - SPAN 12
39×2-#6b25 BARS @ 1'-0" CTS. TOP/SLAB SPACED BTWN. b21 BARS OVER PIER, SPAN 12

TRANSVERSE BONDED CONSTR. JT. OPTIONAL. (DO NOT EDGE)

DRAIN HOLE. (TYP. EA. CURB JT.) SEE DETAIL SH. NO. 39.

℄ LONGIT. CONSTR. JT. (OPTIONAL)

b25

℄ BASE OF CURB

2×2-#6b25 TOP/SLAB OVER PIER, SPAN 12
3×7-#5b21 BARS TOP/SLAB - SPAN 12
3×7-#5b21 BARS BOT./SLAB - SPAN 12
2×2-#6b25 TOP/SLAB OVER PIER, SPAN 12

32'-6" | CONSTR. JT'S. IN CURB TO TOP/SLAB AT FASCIA & MEDIAN CURB (INSERT ⅛" ALUMINUM SHEETS) | 32'-6"

172-#6a2 @ 1'-2" CTS. TOP OF SLAB - TYP. AT EACH FASCIA

1'-9" | 6'-0" | b25 | 1'-0" | 1'-9"

℄ P.G.L. N.B. RDWY.

6'-0" | 5½" | 6" | 5½" | 6'-0"

℄ P.G.L. S.B. RDWY.

N

2

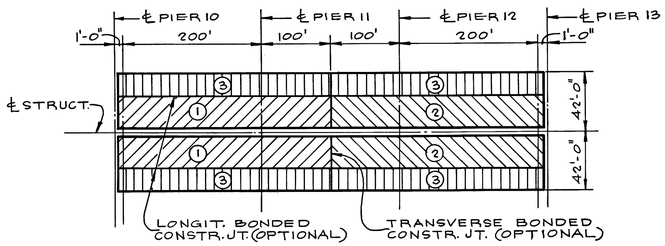
℄ PIER 11 | ℄ PIER 12
℄ PIER 10 | ℄ PIER 13
1'-0" | 200' | 200' | 200' | 2'-11"
℄ BRG'S.
84'-0" | 42'-0" | 42'-0"
6¼" | 9"
SPAN 11 12 13

UNIT 4

KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING

PLAN (NOT TO SCALE)



SUGGESTED POURING SEQUENCE

UNIT 4 SPANS 11 THRU 13

NOTE:
WORK THIS SHEET WITH SH'S. NO. 17, 19 & 20.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	R.K. MILLER
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

SUPERSTRUCTURE - UNIT 4
SPAN 12

F.A.I. ROUTE 280 SECTION 81-1D

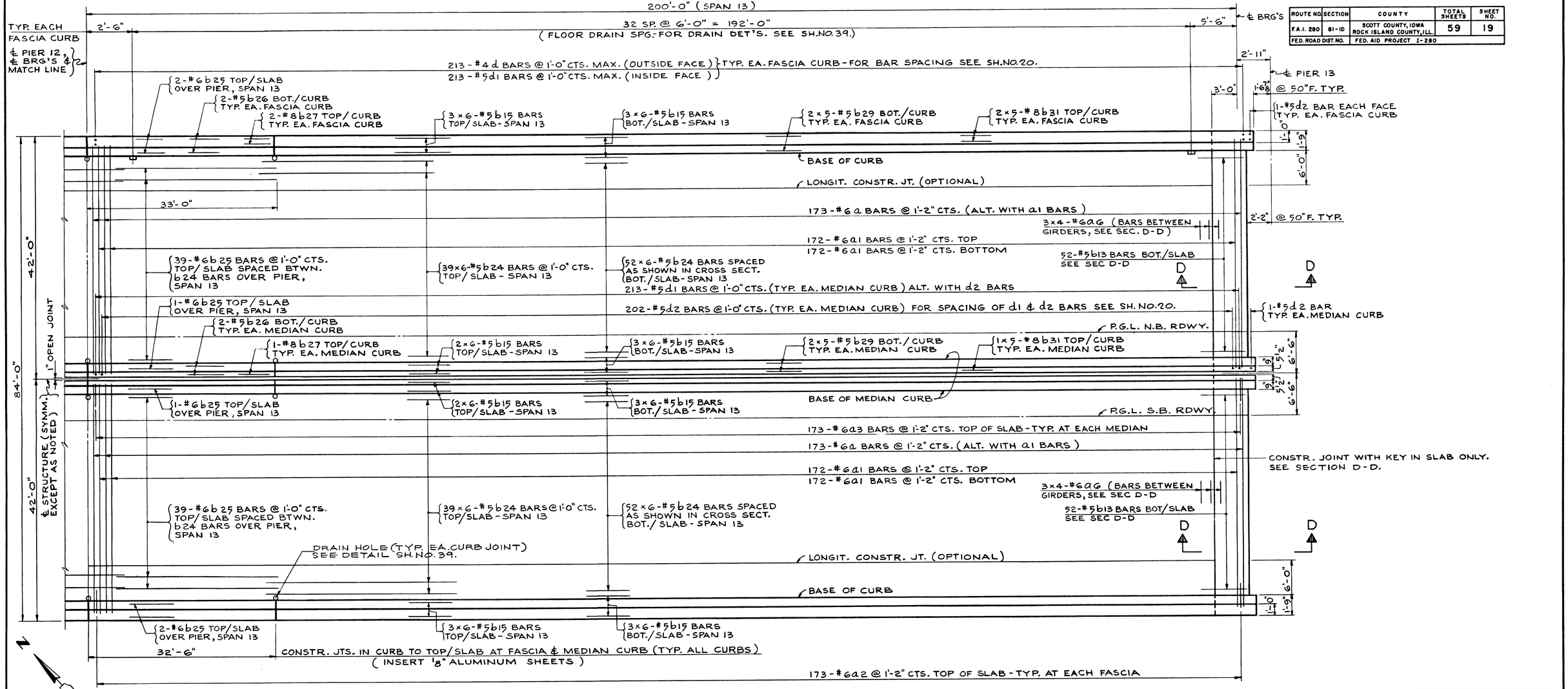
I-280 OVER MISSISSIPPI RIVER

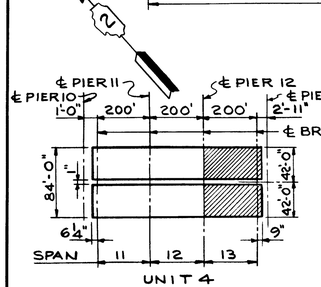
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

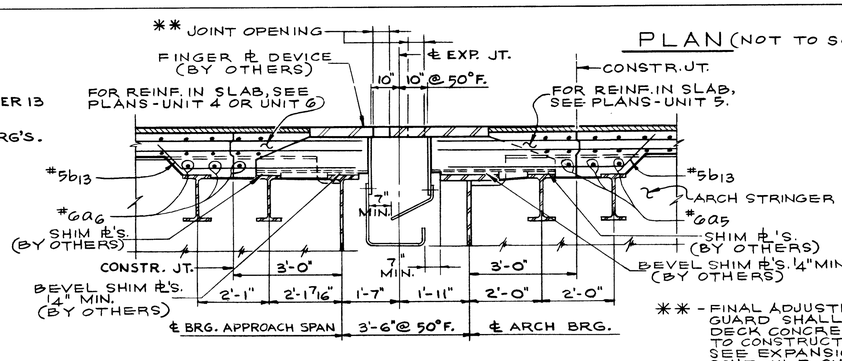
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	19
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		





KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING



PLAN (NOT TO SCALE)

SECTION D-D

SCALE: ½"=1'-0"

** - FINAL ADJUSTMENT OF EXPANSION GUARD SHALL BE MADE AFTER DECK CONCRETE IS POURED UP TO CONSTRUCTION JOINTS SHOWN. SEE EXPANSION GUARD ADJUSTMENT SCHEDULE, SH. NO.10.

NOTE:

FOR FASCIA AND MEDIAN CURB SECTIONS, FLOOR DRAINS, ALUMINUM SHEETS, DECK WATERPROOFING DETAILS AND METHOD OF DETERMINING FILLET HEIGHT "t", SEE SH. NO. 39.
WORK THIS SHEET WITH SH'S. NO.17, 18 & 19.
FOR SUGGESTED POURING SEQUENCE SEE SH.NO.18.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS X CONCRETE *	CU. YD.	1378.9
REINFORCEMENT BARS *	POUND	390,771
PROTECTIVE COAT	SQ. YD.	832.4
BITUMINOUS CONCRETE SURFACE COURSE CLASS I (1½" THICK)	TON	439.7
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	5,211

* THE PARAPET CONCRETE & REINF. QUANTITIES ARE NOT INCLUDED. SEE SH.NO.17.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	R.K. MILLER
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

SUPERSTRUCTURE - UNIT 4
SPAN 13

F.A.I. ROUTE 280 SECTION 81-1D

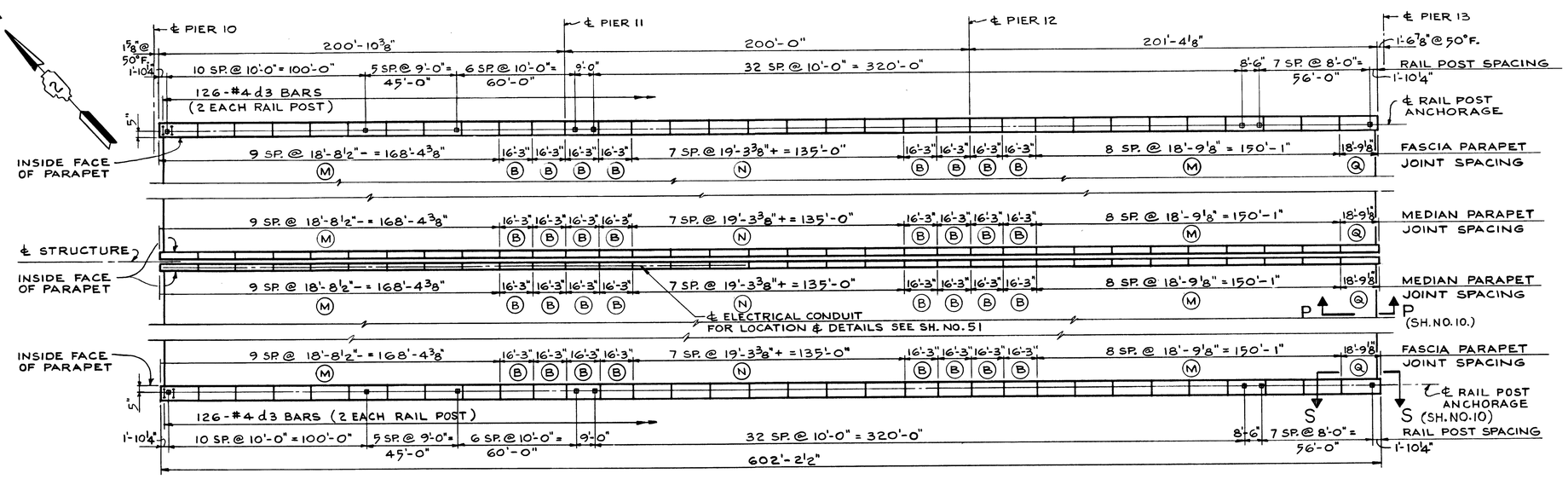
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

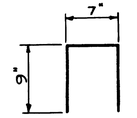
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	20
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



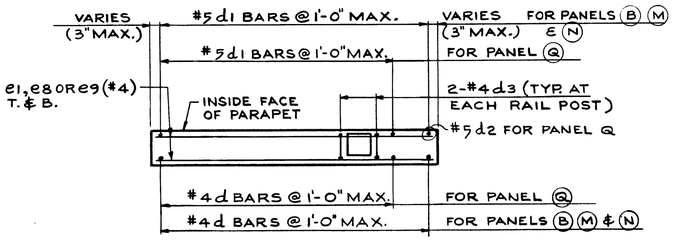
PLAN (NOT TO SCALE)

BAR LIST						
BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
e1	48	48	96	4	16'-0"	—
e8	108	108	216	4	18'-6"	—
e9	42	42	84	4	19'-0"	—
d3	126	126	252	4	2'-1"	⊓



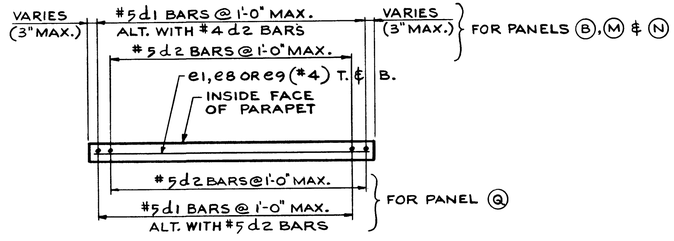
BAR d3

NOTE:
FOR RAILING AND PARAPET JOINT DETAILS SEE SH. NO. 40



PLAN-TYPICAL FASCIA PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *			HORIZONTAL
N. BOUND	(B)	8	17-#4 d	17-#5 d1	——	4-#4 e1
	(M)	17	20-#4 d	20-#5 d1	——	4-#4 e8
	(N)	7	20-#4 d	20-#5 d1	——	4-#4 e9
	(Q)	1	19-#4 d	19-#5 d1	2-#5 d2	4-#4 e8
S. BOUND	(B)	8	17-#4 d	17-#5 d1	——	4-#4 e1
	(M)	17	20-#4 d	20-#5 d1	——	4-#4 e8
	(N)	7	20-#4 d	20-#5 d1	——	4-#4 e9
	(Q)	1	19-#4 d	19-#5 d1	2-#5 d2	4-#4 e8



PLAN TYPICAL MEDIAN PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *		HORIZONTAL
N. BOUND	(B)	8	17-#5 d1	16-#5 d2	2-#4 e1
	(M)	17	20-#5 d1	19-#5 d2	2-#4 e8
	(N)	7	20-#5 d1	19-#5 d2	2-#4 e9
	(Q)	1	19-#5 d1	19-#5 d2	2-#4 e8
S. BOUND	(B)	8	17-#5 d1	16-#5 d2	2-#4 e1
	(M)	17	20-#5 d1	19-#5 d2	2-#4 e8
	(N)	7	20-#5 d1	19-#5 d2	2-#4 e9
	(Q)	1	19-#5 d1	19-#5 d2	2-#4 e8

* - BARS d, d1 & d2 ARE DETAILED AND BILLED ON SH. NO. 17.

NOTE:
WORK THIS SHEET WITH SH'S. NO. 17, 18 & 19.
FOR ELECTRICAL CONDUIT DETAILS FOR NAVIGATION LIGHTING SEE SH. NO. 51
FOR EXPANSION GUARD IN PARAPET DETAILS AND ADJUSTMENT SCHEDULE SEE SH. NO. 10.

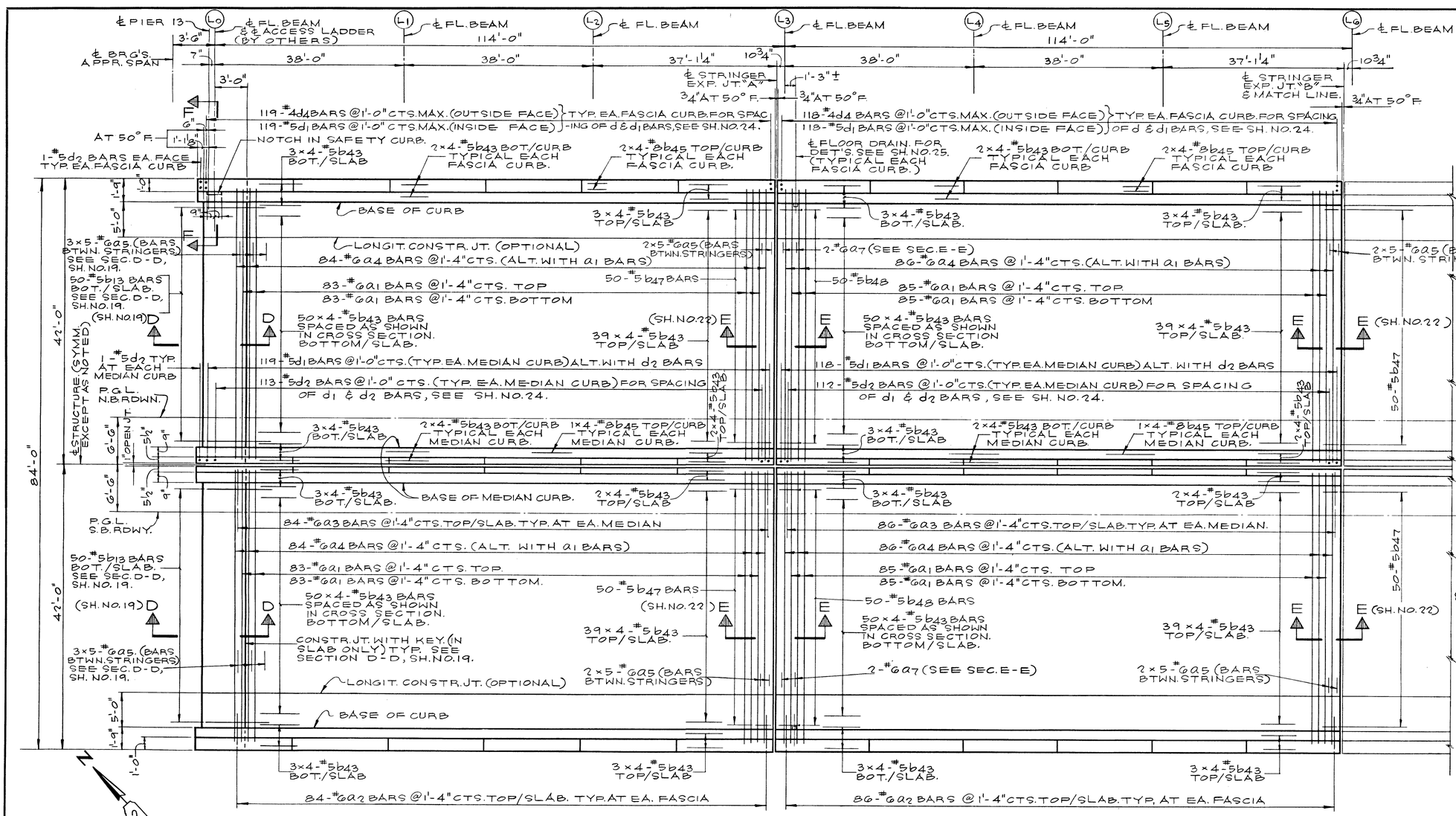
BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	2029
REINFORCEMENT BARS	POUND	5,112
ALUMINUM RAILING	LIN. FT.	1,205.5

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY R.K. MILLER
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

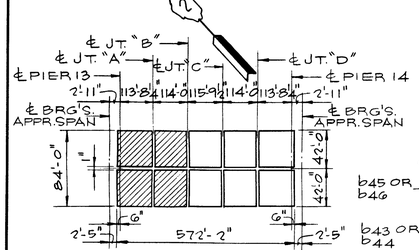
SUPERSTRUCTURE - UNIT 4
PARAPET & RAILING DETAILS

F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	21
FED. ROAD DIST. NO.	FED. AID PROJECT I-280			



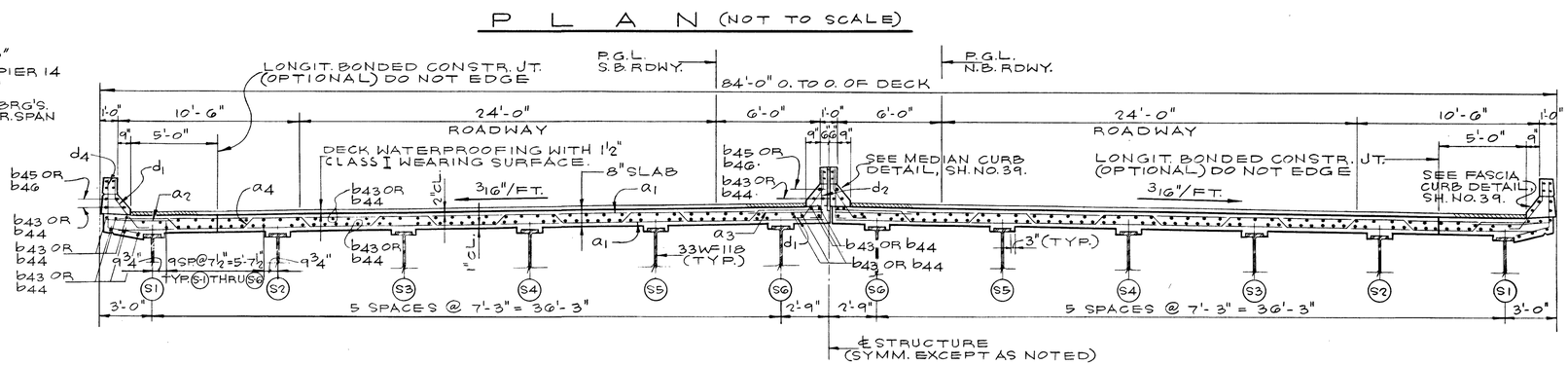
P L A N (NOT TO SCALE)



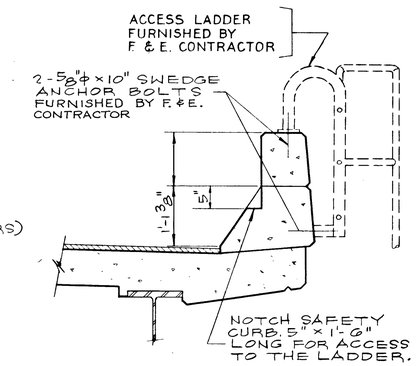
UNIT 5

KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING.

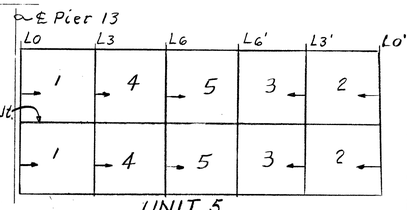


CROSS SECTION (LOOKING NORTH) SCALE: ¼" = 1'-0"



SECTION F-F

SCALE: ¾" = 1'-0"



UNIT 5 POURING SEQUENCE

Sheets #21, 22 & 23

The deck concrete pour shall be made simultaneously on each side of the longitudinal joint. The sequence shown above shall be used, or as an alternate the Contractor may have the option of pouring simultaneously from each end toward the center of the structure.

NOTES:

(L1) DESIGNATES ℄ OF FLOOR BEAM AND PANEL POINT OF THE ARCH SPAN.

WORK THIS SHEET WITH SH. NO. 22 THROUGH NO. 25.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	A. MILUNAS
DRAWN BY	G. P. ALLEMAN
CHECKED	A. MILUNAS
IN CHARGE	W. J. ZAPFEL
APPROVED	W. G. HORN

SUPERSTRUCTURE - UNIT 5

SPAN 14 PART 1 OF 3

F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

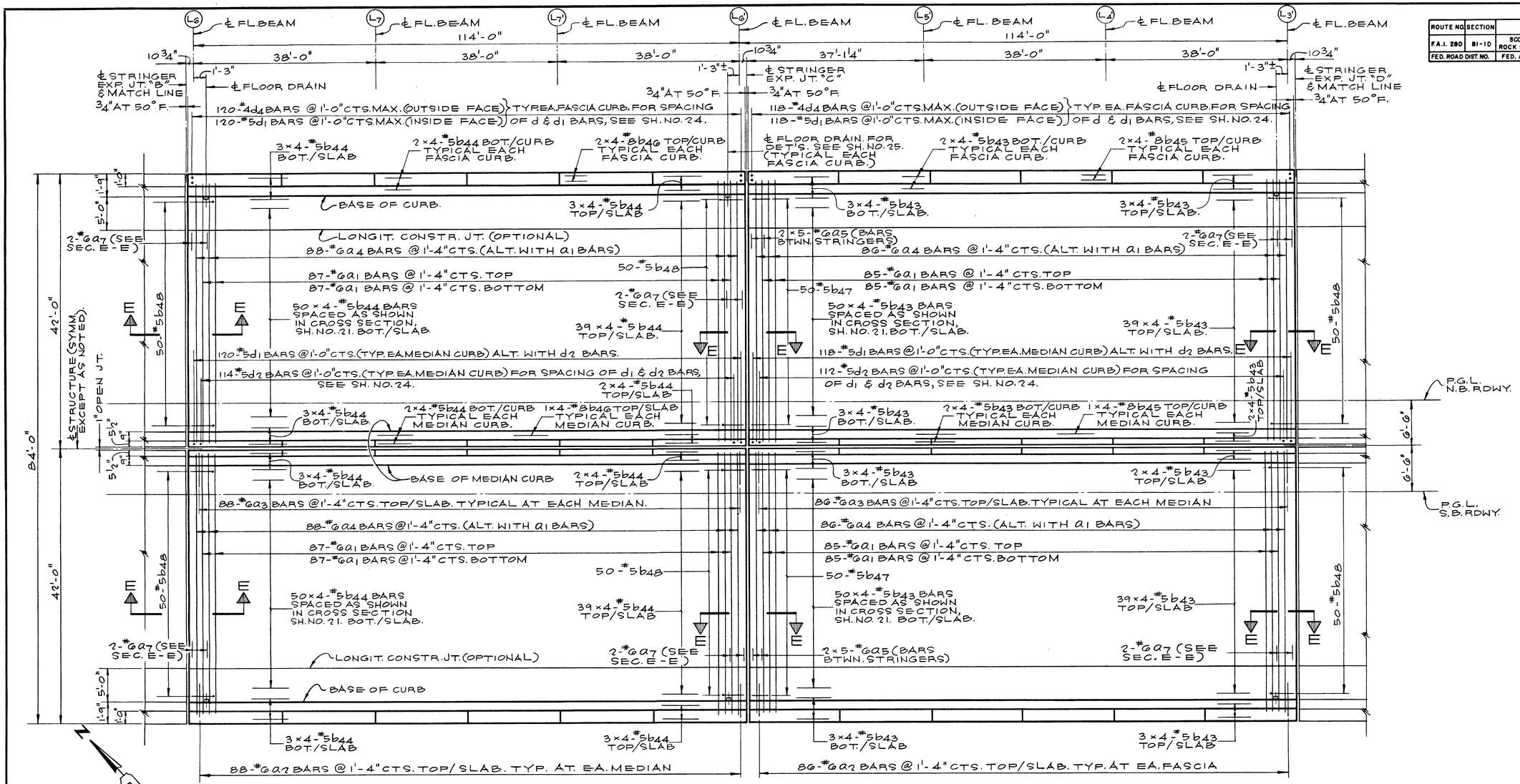
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

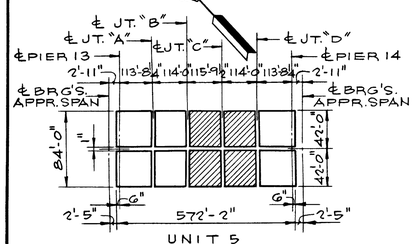
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

6-23-72 JMJ added pouring sequ.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	22
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

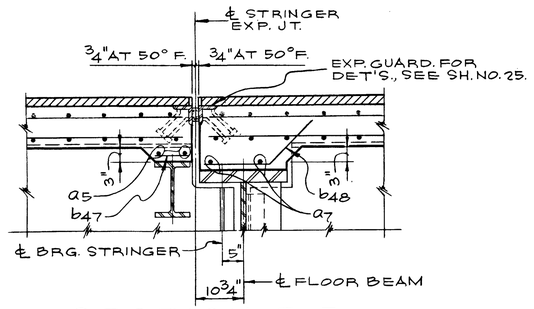




UNIT 5

KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING.



SECTION E-E

SCALE: ¾" = 1'-0"

PLAN (NOT TO SCALE)

NOTES:

(L7)-DESIGNATES ℄ OF FLOOR BEAM AND PANEL POINT OF THE ARCH SPAN.

WORK THIS SHEET WITH SH'S. NO. 21, 23, 24 AND 25.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	A. MILUNAS
DRAWN BY	G. PALLEMAN
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

SUPERSTRUCTURE - UNIT 5
SPAN 14 PART 2 OF 3

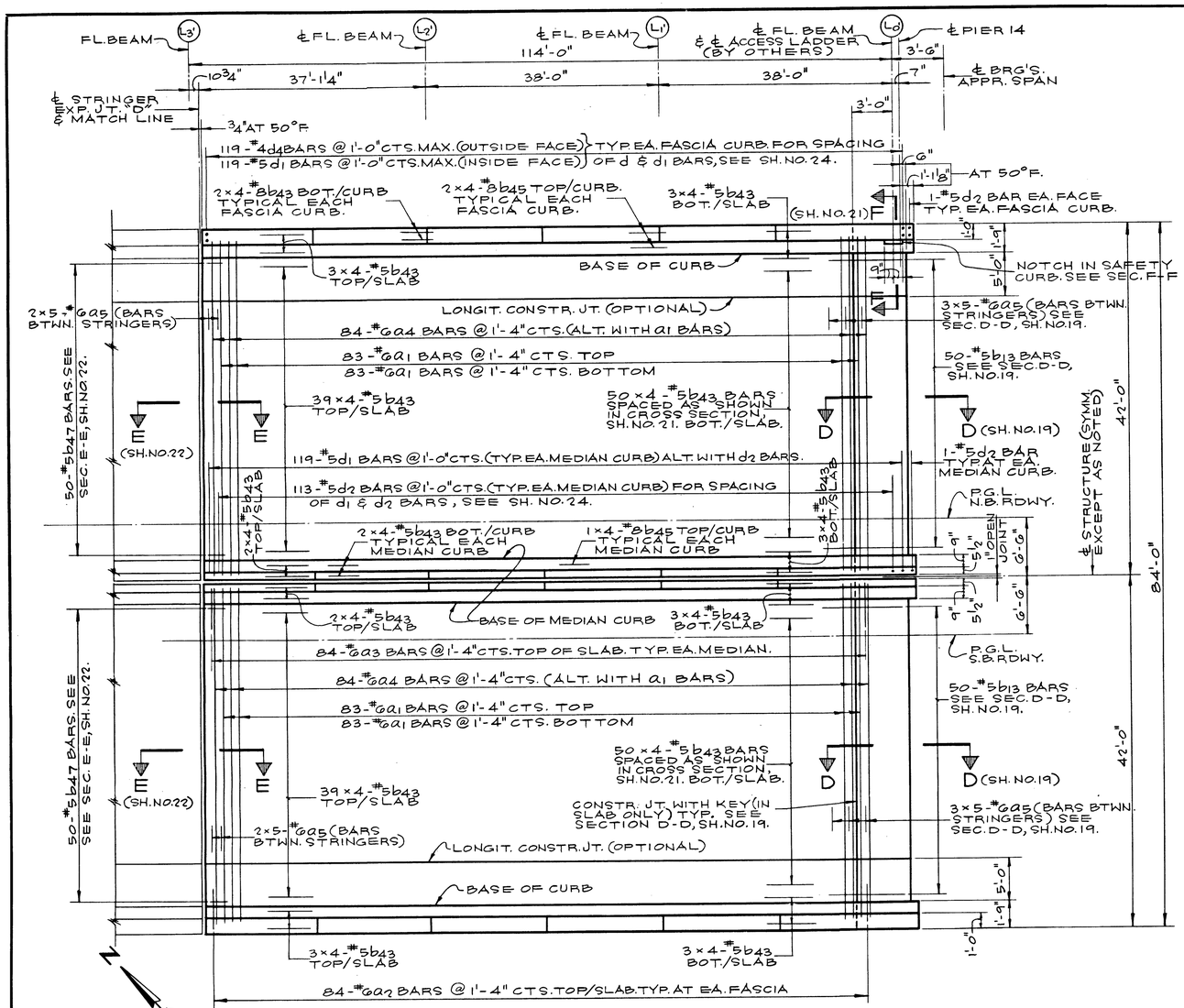
F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

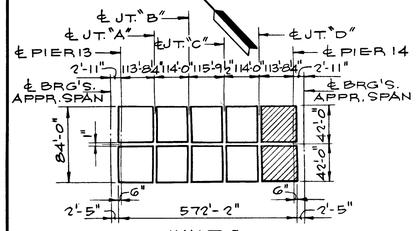
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970



PLAN (NOT TO SCALE)



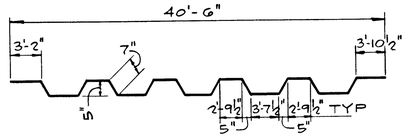
UNIT 5

KEY PLAN

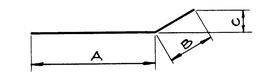
SHADED AREA DETAILED ON THIS DRAWING

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	A. MILUNAS
DRAWN BY	G. P. ALLEMAN
CHECKED	A. MILUNAS
IN CHARGE	W. J. ZAPFEL
APPROVED	W. G. HORN

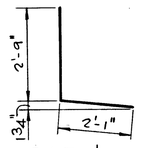


BAR a4

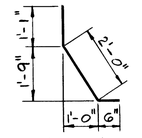


BAR a2, a8, b13 & b48

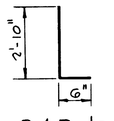
BAR \ DIM.	A	B	C
a2	2'-6"	1'-6"	1¾"
a8	2'-3"	1'-5"	1'-0"
b13	4'-9"	9"	6"
b48	1'-4"	1'-0"	8½"



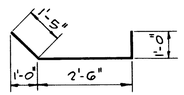
BAR d4



BAR d1



BAR d2



BAR b49

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	23
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

BAR LIST

BAR	QUANTITY N. B.	QUANTITY S. B.	TOTAL	SIZE	LENGTH	SHAPE
a1	846	846	1692	6	40'-6"	
a2	428	428	856	6	4'-0"	
a3	428	428	856	6	4'-3"	
a4	428	428	856	6	42'-2"	
a5	70	70	140	6	6'-9"	
a7	8	8	16	6	35'-9	
a8	12	12	24	5	3'-8"	
b13	100	100	200	5	5'-6"	
b43	1664	1664	3328	5	29'-5"	
b44	416	416	832	5	29'-10"	
b45	48	48	96	8	30'-0"	
b46	12	12	24	8	30'-5"	
b47	200	200	400	5	6"	
b48	200	200	400	5	2'-4"	
b49	12	12	24	5	4'-11"	
d1	1188	1188	2376	5	3'-7"	
d2	570	570	1140	5	3'-4"	
d4	594	594	1188	4	4'-10"	

NOTES:

BARS INDICATED THUS 50×4-#5 ETC. INDICATES 50 LINES OF BARS WITH 4 LENGTHS PER LINE.

MIN. BAR LAP = 24 DIA.

ALL BAR DIMENSIONS ARE OUT TO OUT.

BARS a8 AND b49 ARE ADDITIONAL BARS AT FLOOR DRAIN. FOR BAR LOCATION, SEE TYPICAL DRAIN DETAILS, SH. NO. 25.

L2-DESIGNATES ℄ OF FLOOR BEAM AND PANEL POINT OF THE ARCH SPAN.

WORK THIS SHEET WITH SH'S. NO. 21, 22, 24 & 25.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE *	CU. YD.	1232.3
REINFORCEMENT BARS*	POUND	326,072
PROTECTIVE COAT	SQ. YD.	793.8
BITUMINOUS CONC. SURFACE COURSE CLASS I (1½" THICK)	TON	418.4
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	4,959

*-THE PARAPET CONCRETE & REINF. QUANTITIES ARE NOT INCLUDED, SEE SH. NO. 24.

SUPERSTRUCTURE - UNIT 5

SPAN 14 PART 3 OF 3

F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

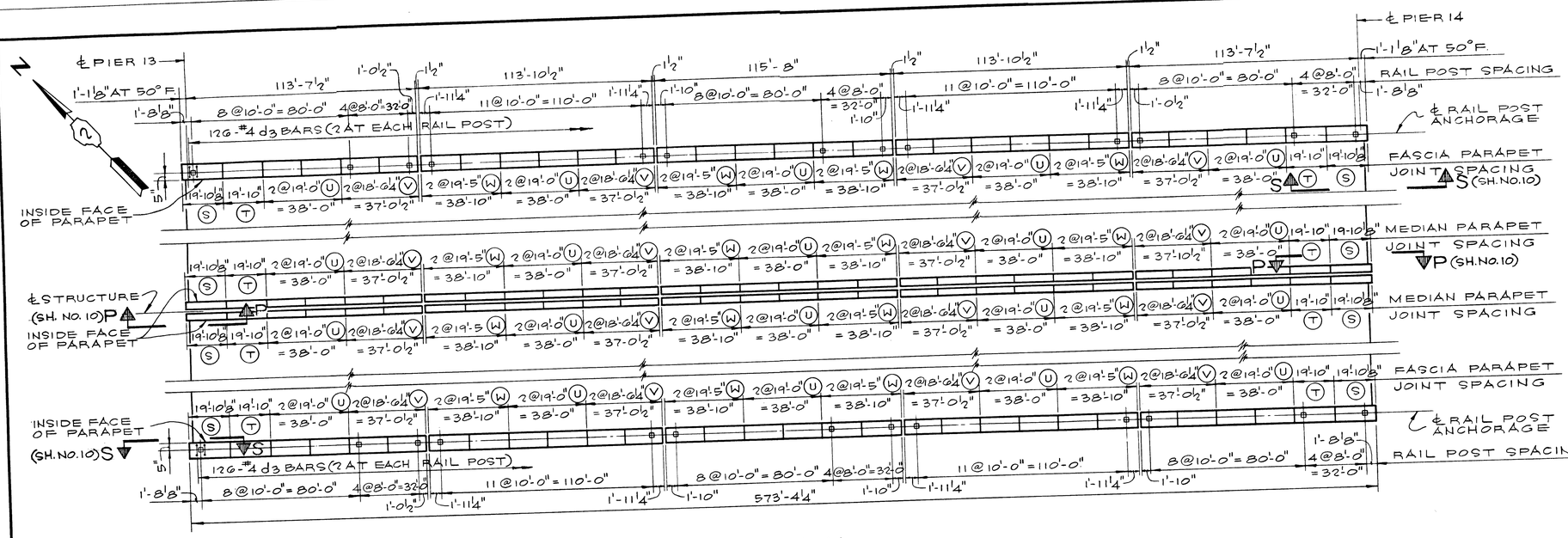
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

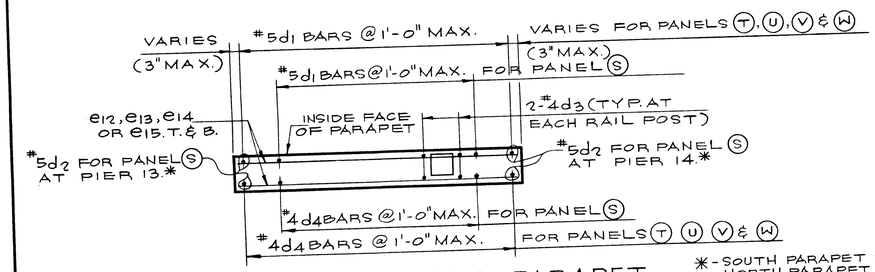
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	24
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

BAR LIST

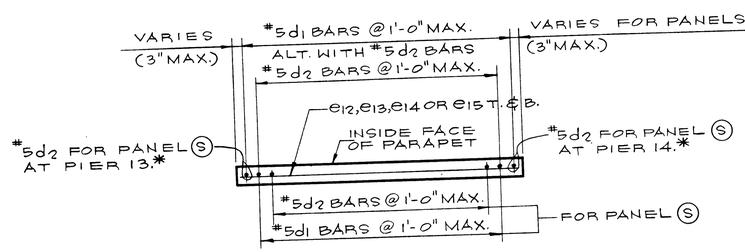
BAR	QUANTITY N. B.	QUANTITY S. B.	TOTAL	SIZE	LENGTH	SHAPE
e12	24	24	48	4	19'-7"	—
e13	60	60	120	4	18'-9"	—
e14	48	48	96	4	18'-3"	—
e15	48	48	96	4	19'-2"	—
d3	126	126	252	4	2'-1"	⊓



PLAN
(NOT TO SCALE)



PLAN - TYPICAL FASCIA PARAPET
PANEL REINFORCEMENT
(SEE TABLE BELOW)



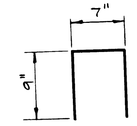
* - SOUTH PARAPET SHOWN, NORTH PARAPET SIMILAR.

PLAN - TYPICAL MEDIAN PARAPET
PANEL REINFORCEMENT
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NUMBER OF BARS EACH PANEL VERTICAL **			HORIZONTAL
N. BOUND	S	2	20-#4 d4	20-#5 d1	2-#5 d2	4-#4 e12
	T	2	21-#4 d4	21-#5 d1	—	4-#4 e12
	U	10	20-#4 d4	20-#5 d1	—	4-#4 e13
	V	8	19-#4 d4	19-#5 d1	—	4-#4 e14
	W	8	20-#4 d4	20-#5 d1	—	4-#4 e15
S. BOUND	S	2	20-#4 d4	20-#5 d1	2-#5 d2	4-#4 e12
	T	2	21-#4 d4	21-#5 d1	—	4-#4 e12
	U	10	20-#4 d4	20-#5 d1	—	4-#4 e13
	V	8	19-#4 d4	19-#5 d1	—	4-#4 e14
	W	8	20-#4 d4	20-#5 d1	—	4-#4 e15

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL **		HORIZONTAL
N. BOUND	S	2	20-#5 d1	20-#5 d2	2-#4 e12
	T	2	21-#5 d1	20-#5 d2	2-#4 e12
	U	10	20-#5 d1	19-#5 d2	2-#4 e13
	V	8	19-#5 d1	18-#5 d2	2-#4 e14
	W	8	20-#5 d1	19-#5 d2	2-#4 e15
S. BOUND	S	2	20-#5 d1	20-#5 d2	2-#4 e12
	T	2	21-#5 d1	20-#5 d2	2-#4 e12
	U	10	20-#5 d1	19-#5 d2	2-#4 e13
	V	8	19-#5 d1	18-#5 d2	2-#4 e14
	W	8	20-#5 d1	19-#5 d2	2-#4 e15

** - BARS d1, d2, & d4 ARE DETAILED AND BILLED ON SH. NO. 23.



BAR d3

NOTE:
FOR RAILING AND PARAPET JOINT DETAILS, SEE SH. NO. 40.
WORK THIS SHEET WITH SH'S. NO. 21, 22, 23 & 25.
FOR EXP. GUARD IN PARAPET DETAILS AND ADJUSTMENT SCHEDULE, SEE SH. NO. 10.

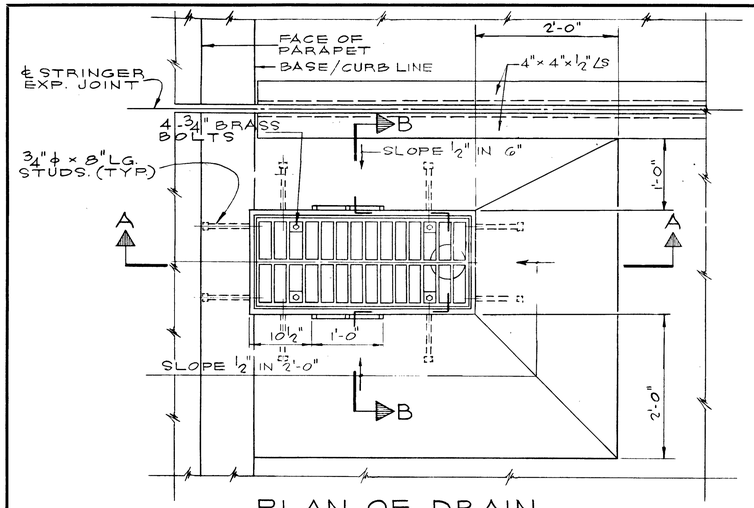
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU.YD.	193.0
REINFORCEMENT BARS	POUND	488.1
ALUMINUM RAILING	LIN.FT.	1,147

SUPERSTRUCTURE - UNIT 5
PARAPET & RAILING DETAILS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

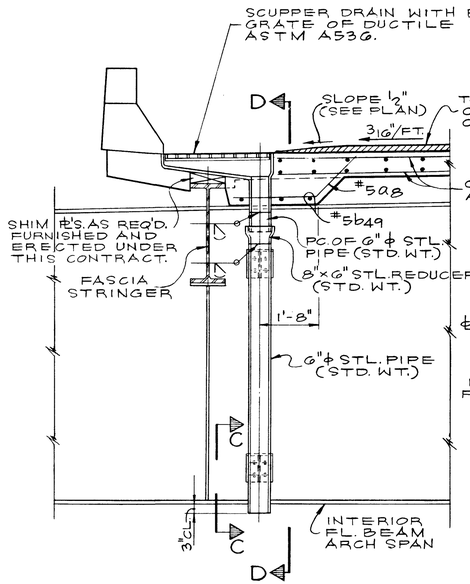
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY A. MILUNAS
DRAWN BY G.P. ALLEMAN
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	25
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



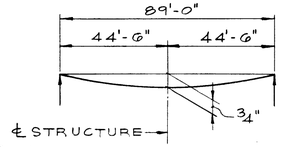
PLAN OF DRAIN

SCALE: 1" = 1'-0"



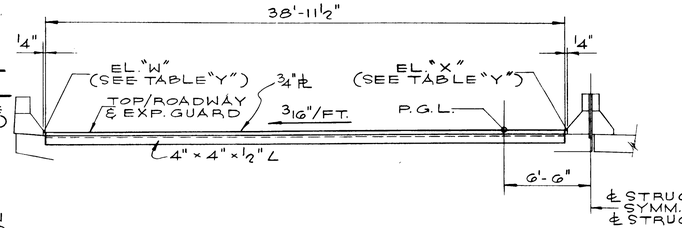
TYPICAL DRAIN DETAIL

SCALE: ½" = 1'-0"



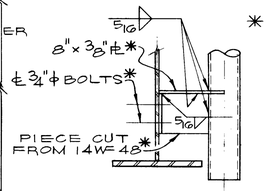
INT. FLOOR BEAM D.L. DEFLECTION DIAGRAM

(INCLUDES WEIGHT OF CONCRETE AND 1½" WEARING SURFACE ONLY)



EXPANSION GUARD - HALF ELEVATION

(NOT TO SCALE)



* - DRAIN CONNECTION DETAILS FURNISHED AND ERECTED UNDER THIS CONTRACT.

SECTION C-C

SCALE: ¾" = 1'-0"

TABLE "Y"			
EXPANSION JOINT	PROFILE GRADE* ELEVATION	ELEVATION "W"*	ELEVATION "X"*
"A"	618.696	618.170	618.778
"B"	618.879	618.353	618.961
"C"	618.879	618.353	618.961
"D"	618.696	618.170	618.778

* - GIVEN ELEVATIONS ARE THEORETICAL FINAL TOP OF ROADWAY ELEVATIONS TO BE ADJUSTED FOR D.L. DEFLECTION DUE TO CONCRETE AND W.S.

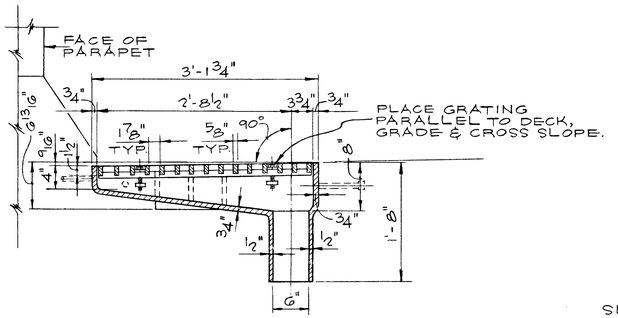
EXPANSION GUARD NOTES:

ALL STRUCTURAL STEEL SHALL BE ASTM-A36.

SEE SECTION 503.07 (c) OF THE STANDARD SPECIFICATIONS FOR EXPANSION GUARD JOINT OPENINGS.

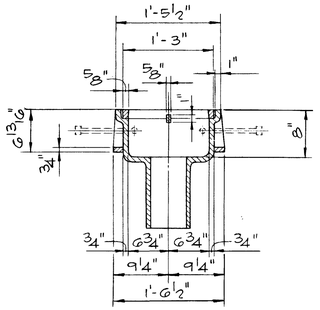
ALL EXPANSION GUARD ASSEMBLIES SHALL BE FABRICATED AND ERECTED TO CONFORM TO THE ROADWAY CROWN, SLOPE OF GRADE AT THE GUARD AND ADJUSTED FOR THE FLOOR BEAM DEAD LOAD DEFLECTION DUE TO CONCRETE & WEARING SURFACE. THEY SHALL BE ASSEMBLED IN THE SHOP FOR INSPECTION.

P.G.L. DENOTES PROFILE GRADE LINE.



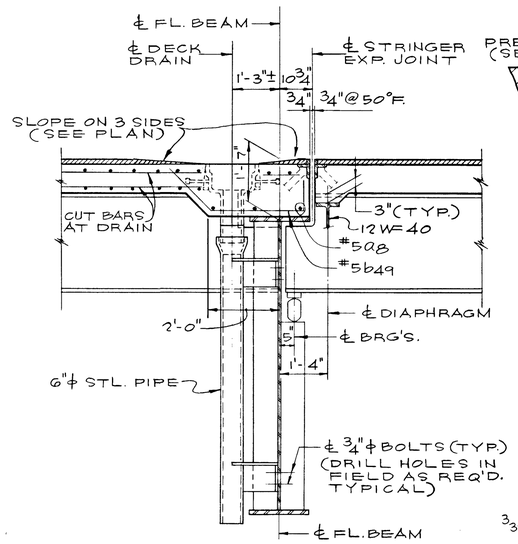
SECTION A-A

SCALE: 1" = 1'-0"



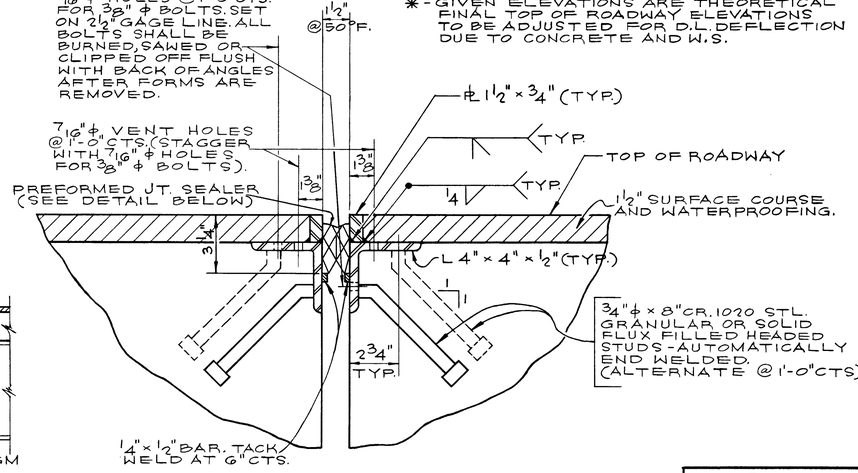
SECTION B-B

SCALE: 1" = 1'-0"



SECTION D-D

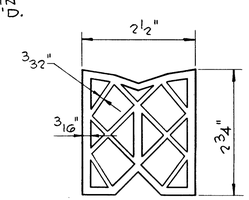
SCALE: ½" = 1'-0"



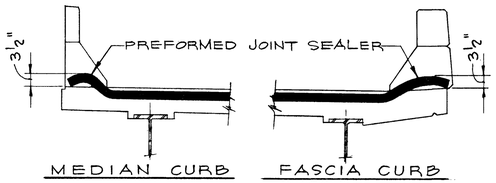
DETAIL OF STRINGER EXPANSION GUARD

SCALE: 3" = 1'-0"

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
F. & E. STRUCTURAL STEEL	LBS.	16,400
PREFORMED JOINT SEALER	LIN.FT.	337



PREFORMED JT. SEALER



TYPICAL END OF SEALER TREATMENT

NOTE:

FOR FLOOR DRAIN LOCATION, SEE SH'S. NO. 21, 22 & 23.
FOR DETAILS OF ADDITIONAL REINFORCING AT FLOOR DRAINS, SEE SH. NO. 23.

ALL PARTS OF DECK DRAIN ASSEMBLY INCLUDED WITH FABRICATION AND ERECTION OF STRUCTURAL STEEL UNDER THIS CONTRACT.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	G.P. ALLEMAN
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

SUPERSTRUCTURE - UNIT 5
DECK DRAIN & EXPANSION GUARD DETAILS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

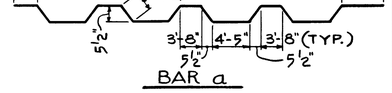
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	26
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

BAR LIST

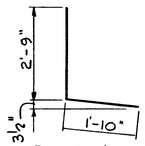
BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
a	517	517	1034	6	42'-0"	
a1	1032	1032	2064	6	40'-6"	
a2	517	517	1034	6	4'-0"	
a3	517	517	1034	6	4'-3"	
a6	12	12	24	6	8'-6"	
b13	52	52	104	5	5'-3"	
b15	66	66	132	5	32'-0"	
b21	714	714	1428	5	34'-6"	
b24	1158	1158	2316	5	31'-11"	
b25	252	252	504	6	28'-2	
b26	16	16	32	5	32'-3"	
b27	12	12	24	8	32'-3"	
b28	20	20	40	5	34'-7"	
b29	28	28	56	5	34'-8"	
b30	15	15	30	8	35'-7"	
b31	27	27	54	8	35-3"	
d	635	635	1270	4	4'-7"	
d1	1270	1270	2540	5	3'-7"	
d2	605	605	1210	5	3'-4"	

NOTES:

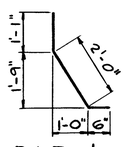
BARS INDICATED THUS 39 x 6-#5 ETC. INDICATES 39 LINES OF BARS WITH 6 LENGTHS PER LINE.
MIN. BAR LAP = 24 DIA.
ALL BAR DIMENSIONS ARE OUT TO OUT.



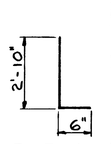
BAR a



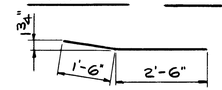
BAR d



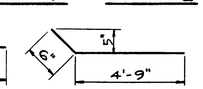
BAR d1



BAR d2



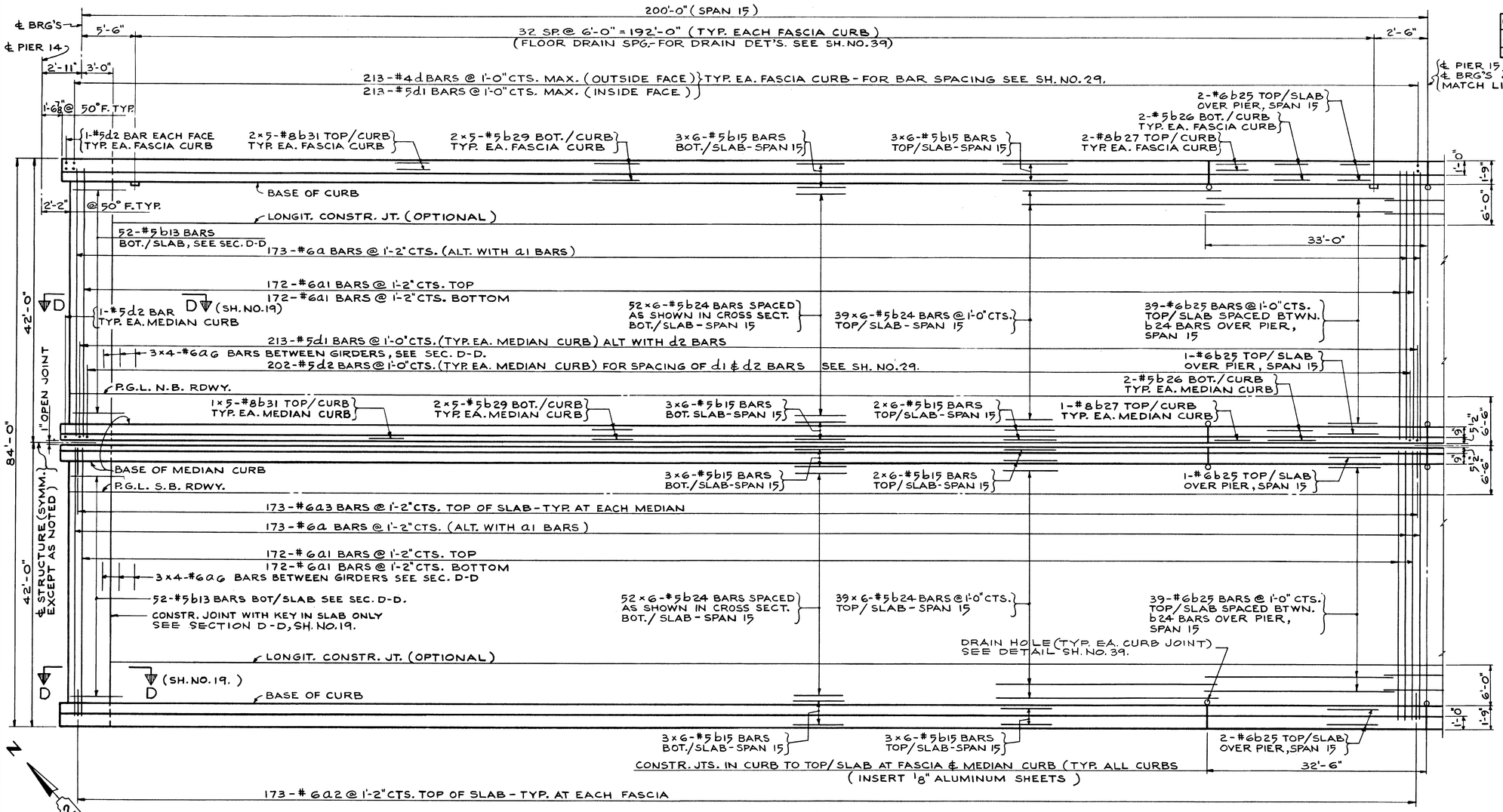
BAR a2



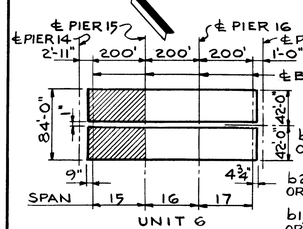
BAR b13

NOTE:

WORK THIS SHEET WITH SH'S. NO. 27, 28 & 29.
FOR SUGGESTED POURING SEQUENCE SEE SH. NO. 27.

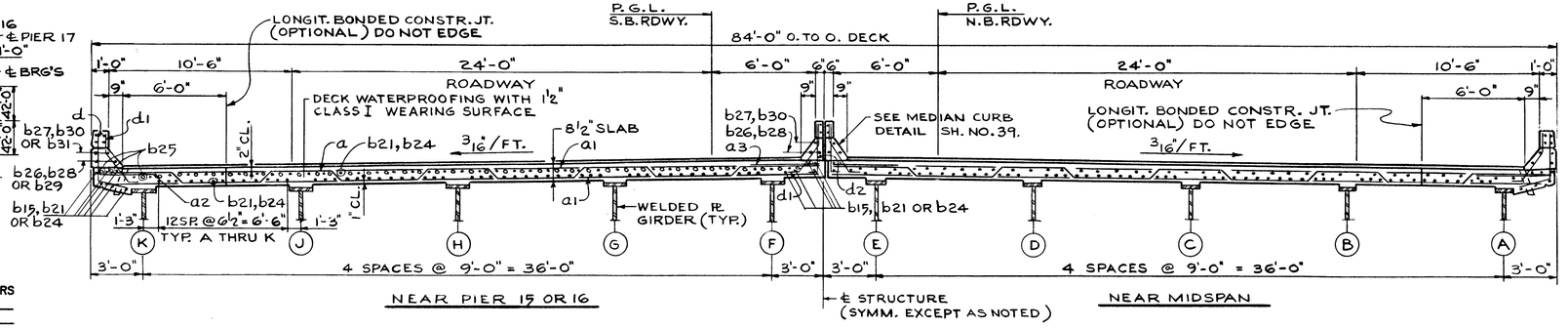


PLAN (NOT TO SCALE)



KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING



SEE FASCIA CURB DETAIL SH. NO. 39.

CROSS SECTION (LOOKING NORTH)

SCALE: 1" = 1'-0"

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	R.K. MILLER
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

SUPERSTRUCTURE - UNIT 6
SPAN 15

F.A.I. ROUTE 280 SECTION 81-1D

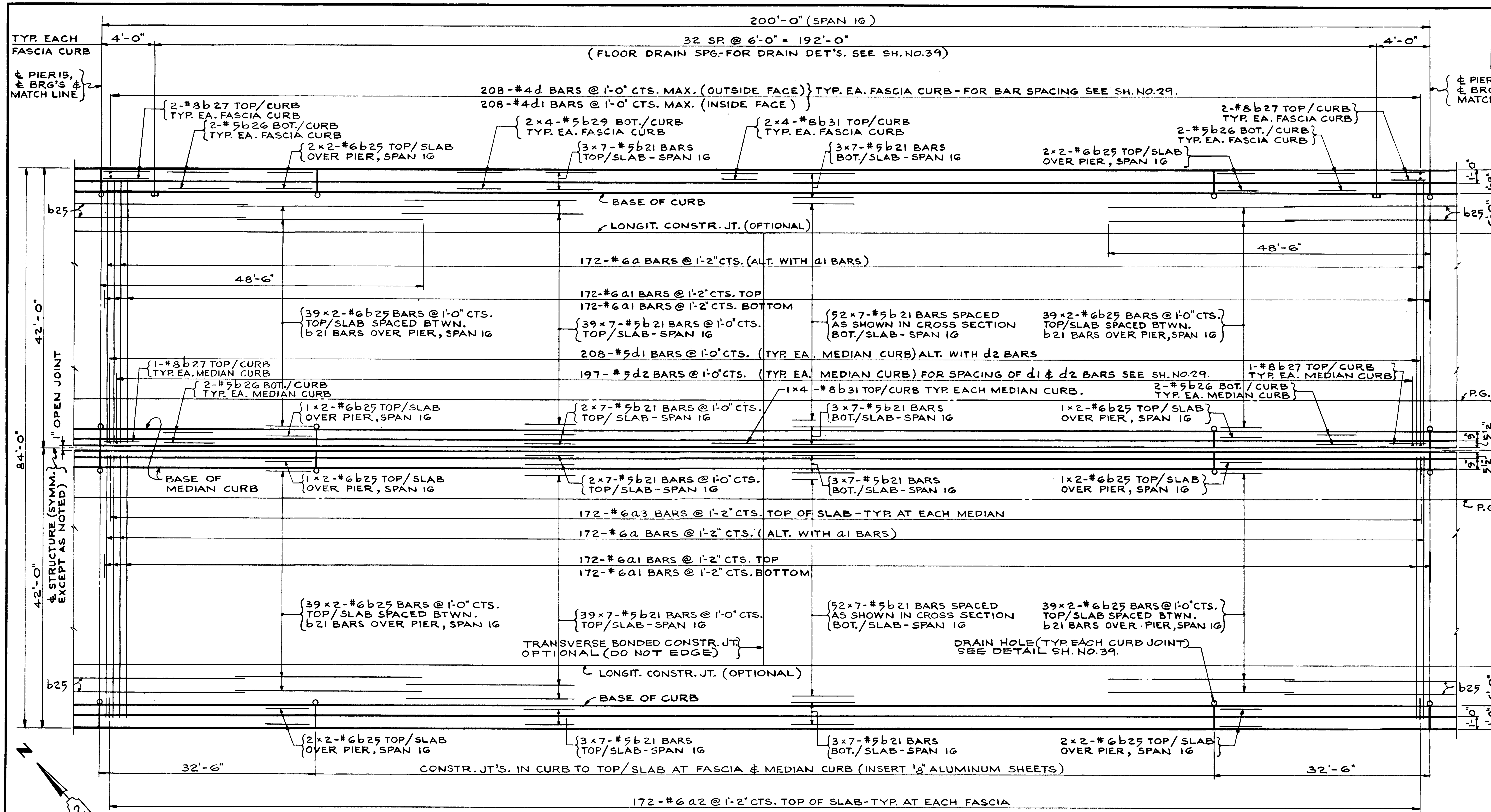
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

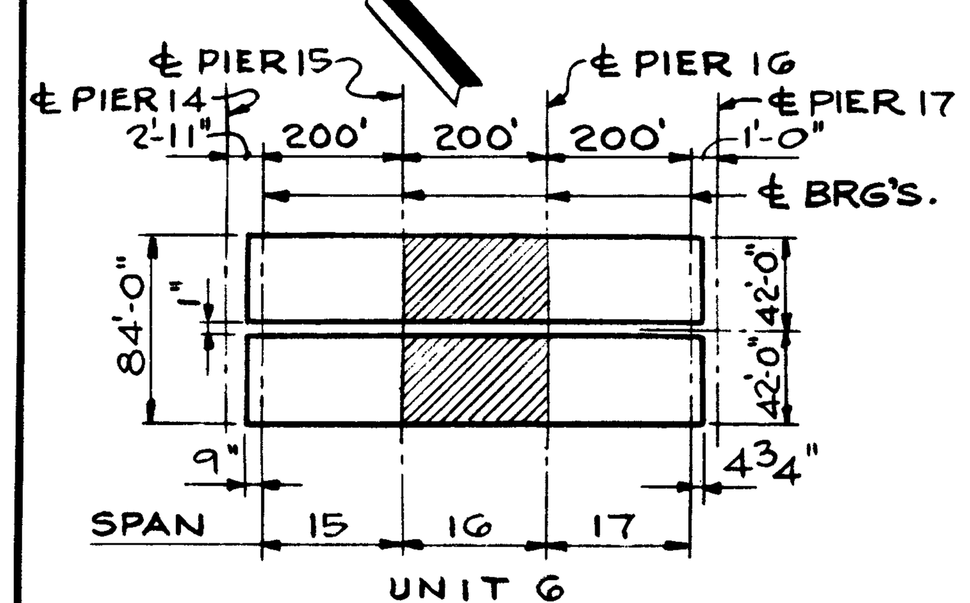
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	27
FED. ROAD DIST. NO.	FED. AID PROJECT I-280			



200'-0" (SPAN 16)
TYP. EACH FASCIA CURB
4'-0"
32 SP. @ 6'-0" = 192'-0"
(FLOOR DRAIN SPG.-FOR DRAIN DET'S. SEE SH. NO. 39)
4'-0"
℄ PIER 15, ℄ BRG'S & MATCH LINE
208-#4d BARS @ 1'-0" CTS. MAX. (OUTSIDE FACE)
208-#4d1 BARS @ 1'-0" CTS. MAX. (INSIDE FACE)
TYP. EA. FASCIA CURB - FOR BAR SPACING SEE SH. NO. 29.
℄ PIER 16, ℄ BRG'S. & MATCH LINE
2-#8b27 TOP/CURB TYP. EA. FASCIA CURB
2-#5b26 BOT./CURB TYP. EA. FASCIA CURB
2×4-#5b29 BOT./CURB TYP. EA. FASCIA CURB
2×4-#8b31 TOP/CURB TYP. EA. FASCIA CURB
2×2-#6b25 TOP/SLAB OVER PIER, SPAN 16
3×7-#5b21 BARS TOP/SLAB - SPAN 16
3×7-#5b21 BARS BOT./SLAB - SPAN 16
BASE OF CURB
LONGIT. CONSTR. JT. (OPTIONAL)
172-#6a BARS @ 1'-2" CTS. (ALT. WITH a1 BARS)
48'-6"
172-#6a1 BARS @ 1'-2" CTS. TOP
172-#6a1 BARS @ 1'-2" CTS. BOTTOM
39×2-#6b25 BARS @ 1'-0" CTS. TOP/SLAB SPACED BTWN. b21 BARS OVER PIER, SPAN 16
39×7-#5b21 BARS @ 1'-0" CTS. TOP/SLAB - SPAN 16
52×7-#5b21 BARS SPACED AS SHOWN IN CROSS SECTION BOT./SLAB - SPAN 16
208-#5d1 BARS @ 1'-0" CTS. (TYP. EA. MEDIAN CURB) ALT. WITH d2 BARS
197-#5d2 BARS @ 1'-0" CTS. (TYP. EA. MEDIAN CURB) FOR SPACING OF d1 & d2 BARS SEE SH. NO. 29.
1-#8b27 TOP/CURB TYP. EA. MEDIAN CURB
2-#5b26 BOT./CURB TYP. EA. MEDIAN CURB
1×4-#8b31 TOP/CURB TYP. EACH MEDIAN CURB.
1×2-#6b25 TOP/SLAB OVER PIER, SPAN 16
2×7-#5b21 BARS @ 1'-0" CTS. TOP/SLAB - SPAN 16
BASE OF MEDIAN CURB
P.G.L. N.B. RDWY.
P.G.L. S.B. RDWY.
172-#6a3 BARS @ 1'-2" CTS. TOP OF SLAB - TYP. AT EACH MEDIAN
172-#6a BARS @ 1'-2" CTS. (ALT. WITH a1 BARS)
TRANSVERSE BONDED CONSTR. JT. OPTIONAL (DO NOT EDGE)
DRAIN HOLE (TYP. EACH CURB JOINT) SEE DETAIL SH. NO. 39.
b25
84'-0"
42'-0"
1" OPEN JOINT
℄ STRUCTURE (SYMM. EXCEPT AS NOTED)
32'-6"
CONSTR. JT'S. IN CURB TO TOP/SLAB AT FASCIA & MEDIAN CURB (INSERT ⅛" ALUMINUM SHEETS)
172-#6a2 @ 1'-2" CTS. TOP OF SLAB - TYP. AT EACH FASCIA
N

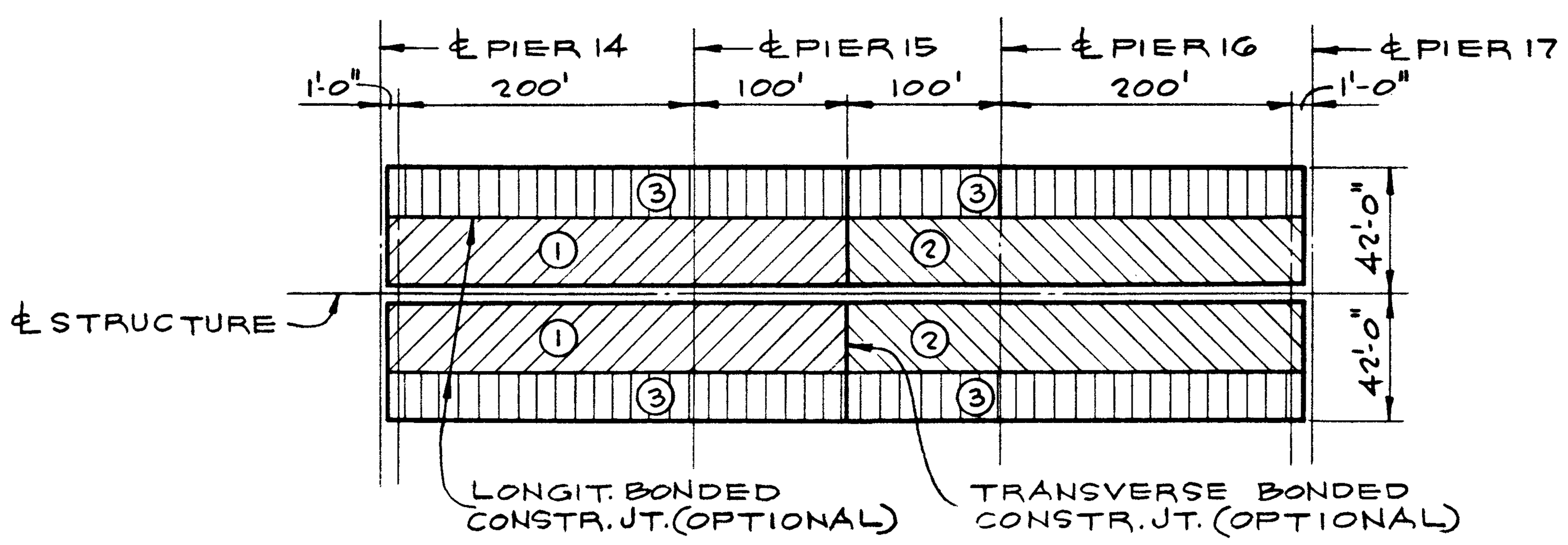
PLAN (NOT TO SCALE)

NOTE:
WORK THIS SHEET WITH SH'S. NO. 26, 28 & 29.



KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING



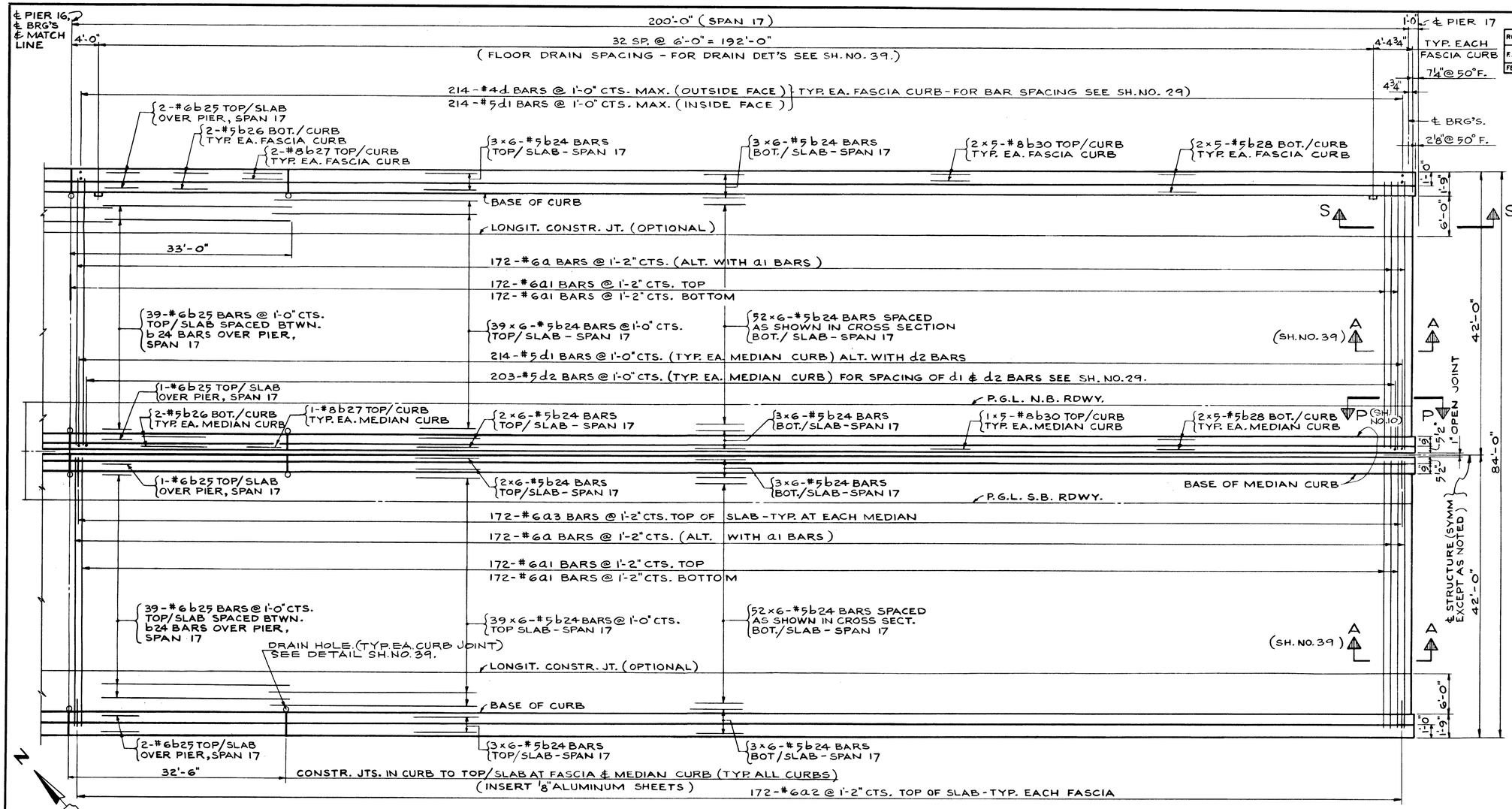
SUGGESTED POURING SEQUENCE

UNIT 6 SPANS 15 THRU 17

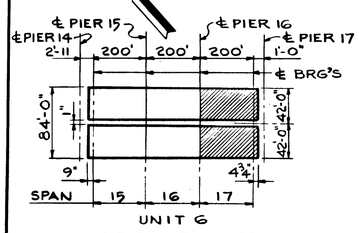
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY R.K. MILLER
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

SUPERSTRUCTURE - UNIT 6
SPAN 16

F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	28
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	R.K. MILLER
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

NOTE:

FOR FASCIA AND MEDIAN CURB SECTIONS, FLOOR DRAINS, ALUMINUM SHEETS, DECK WATERPROOFING DETAILS AND METHOD OF DETERMINING FILLET HEIGHT "t", SEE SH. NO. 39.
WORK THIS SHEET WITH SH'S. NO. 26, 27 & 29.
FOR SUGGESTED POURING SEQUENCE, SEE SH. NO. 27.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE *	CU. YD.	1,378.9
REINFORCEMENT BARS *	POUND	390,771
PROTECTIVE COAT	SQ. YD.	832.4
BITUMINOUS CONCRETE SURFACE COURSE CLASS I (1½" THICK)	TON	439.7
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	5,211

* THE PARAPET CONCRETE & REINF. QUANTITIES ARE NOT INCLUDED. SEE SH. NO. 26.

SUPERSTRUCTURE - UNIT 6
SPAN 17

F.A.I. ROUTE 280 SECTION 81-1D

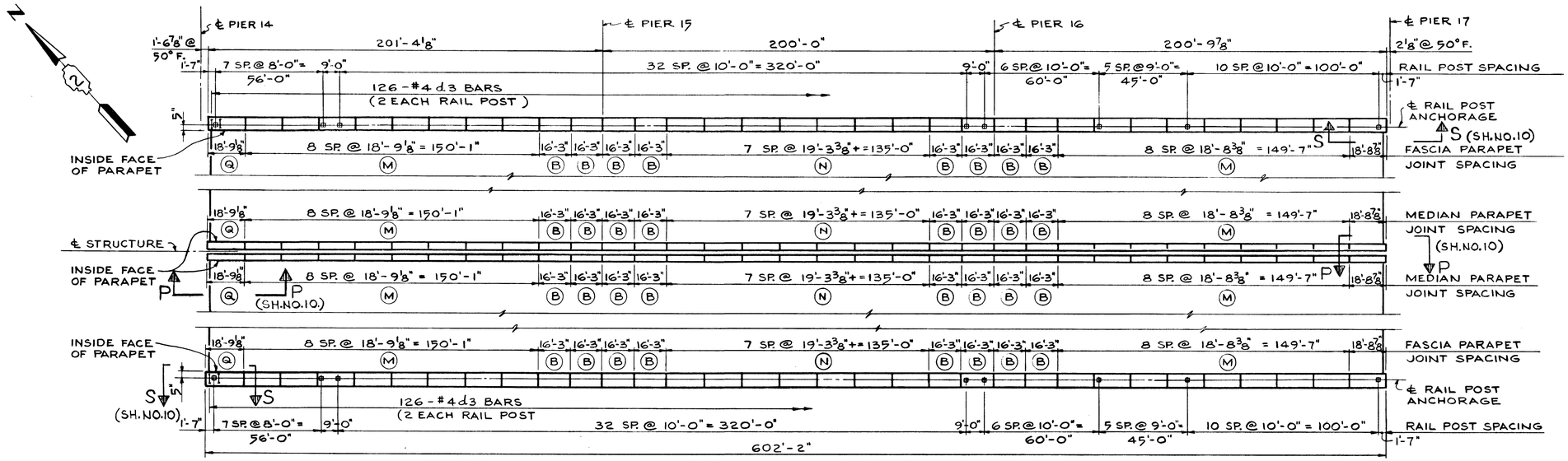
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

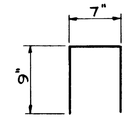
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	29
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



PLAN (NOT TO SCALE)

BAR LIST						
BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
e1	48	48	96	4	16'-0"	—
e8	108	108	216	4	18'-6"	—
e9	42	42	84	4	19'-0"	—
d3	126	126	252	4	2'-1"	⊓

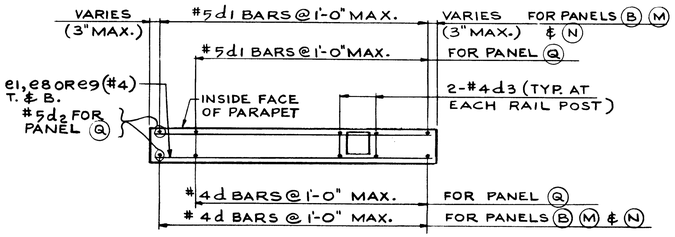


BAR d3

NOTE:

FOR RAILING AND PARAPET JOINT DETAILS SEE SH. NO. 40.

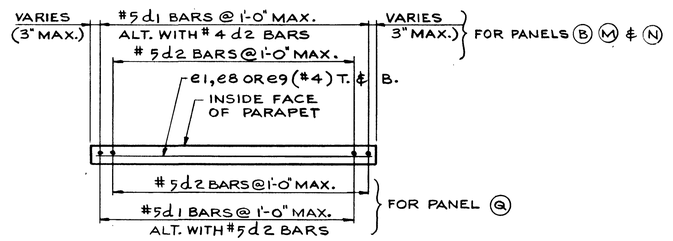
FOR EXPANSION GUARD IN PARAPET DETAILS AND ADJUSTMENT SCHEDULE SEE SH. NO. 10.



PLAN - TYPICAL FASCIA PARAPET PANEL REINFORCEMENT

(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *			HORIZONTAL
N. BOUND	(B)	8	17-#4 d	17-#5 d1	—	4-#4 e1
	(M)	17	20-#4 d	20-#5 d1	—	4-#4 e8
	(N)	7	20-#4 d	20-#5 d1	—	4-#4 e9
	(Q)	1	19-#4 d	19-#5 d1	2-#5 d2	4-#4 e8
S. BOUND	(B)	8	17-#4 d	17-#5 d1	—	4-#4 e1
	(M)	17	20-#4 d	20-#5 d1	—	4-#4 e8
	(N)	7	20-#4 d	20-#5 d1	—	4-#4 e9
	(Q)	1	19-#4 d	19-#5 d1	2-#5 d2	4-#4 e8



PLAN TYPICAL MEDIAN PARAPET PANEL REINFORCEMENT

(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *		HORIZONTAL
N. BOUND	(B)	8	17-#5 d1	16-#5 d2	2-#4 e1
	(M)	17	20-#5 d1	19-#5 d2	2-#4 e8
	(N)	7	20-#5 d1	19-#5 d2	2-#4 e9
	(Q)	1	19-#5 d1	19-#5 d2	2-#4 e8
S. BOUND	(B)	8	17-#5 d1	16-#5 d2	2-#4 e1
	(M)	17	20-#5 d1	19-#5 d2	2-#4 e8
	(N)	7	20-#5 d1	19-#5 d2	2-#4 e9
	(Q)	1	19-#5 d1	19-#5 d2	2-#4 e8

* - BARS d, d1 & d2 ARE DETAILED AND BILLED ON SH. NO. 26.

NOTE:

WORK THIS SHEET WITH SH'S. NO. 26, 27 & 28.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	202.9
REINFORCEMENT BARS	POUND	5,112
ALUMINUM RAILING	LIN. FT.	1,205.5

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY R.K. MILLER
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

SUPERSTRUCTURE - UNIT 6
PARAPET & RAILING DETAILS

F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	30
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

BAR LIST

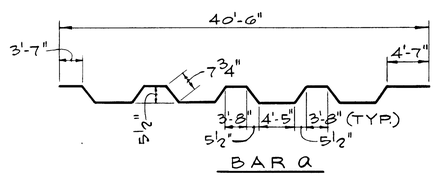
BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
a	386	386	772	6	42'-0"	~
a1	384	384	768	6	40'-6"	—
a2	386	386	772	6	4'-0"	/
a3	386	386	772	6	4'-3"	—
b32	1020	1020	2040	5	29'-3"	—
b33	510	510	1020	5	35'-5"	—
b34	168	168	336	6	25'-6"	—
b35	84	84	168	6	14'-3"	—
b36	32	32	64	5	32'-4"	—
b37	24	24	48	8	32'-10"	—
b38	16	16	32	5	26'-0"	—
b39	12	12	24	8	26'-7"	—
b40	16	16	32	5	24'-6"	—
b41	12	12	24	8	24'-6"	—
d	478	478	956	4	4'-7"	⌐
d1	956	956	1912	5	3'-7"	⌐
d2	450	450	900	5	3'-4"	⌐

NOTES:

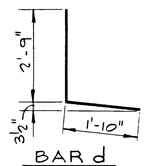
BARS INDICATED THUS 52 x 5 - #5 ETC. INDICATES 52 LINES OF BARS WITH 5 LENGTHS PER LINE.

MIN. BAR LAP = 24 DIA.

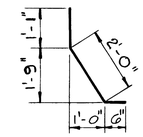
ALL BAR DIMENSIONS ARE OUT TO OUT.



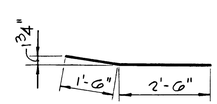
BAR a



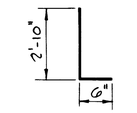
BAR d



BAR d1



BAR a2



BAR d2

NOTE: WORK THIS SHEET WITH SH'S. NO. 32 & 33.
FOR SUGGESTED POURING SEQUENCE SEE SH. NO. 31

HALF PLAN (NOT TO SCALE)

CROSS SECTION (LOOKING NORTH) SCALE: ¼" = 1'-0"

UNIT 7 KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	G.P. ALLEMAN
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

SUPERSTRUCTURE - UNIT 7
SPANS 18 & 19

F.A.I. ROUTE 280 SECTION 81-1D

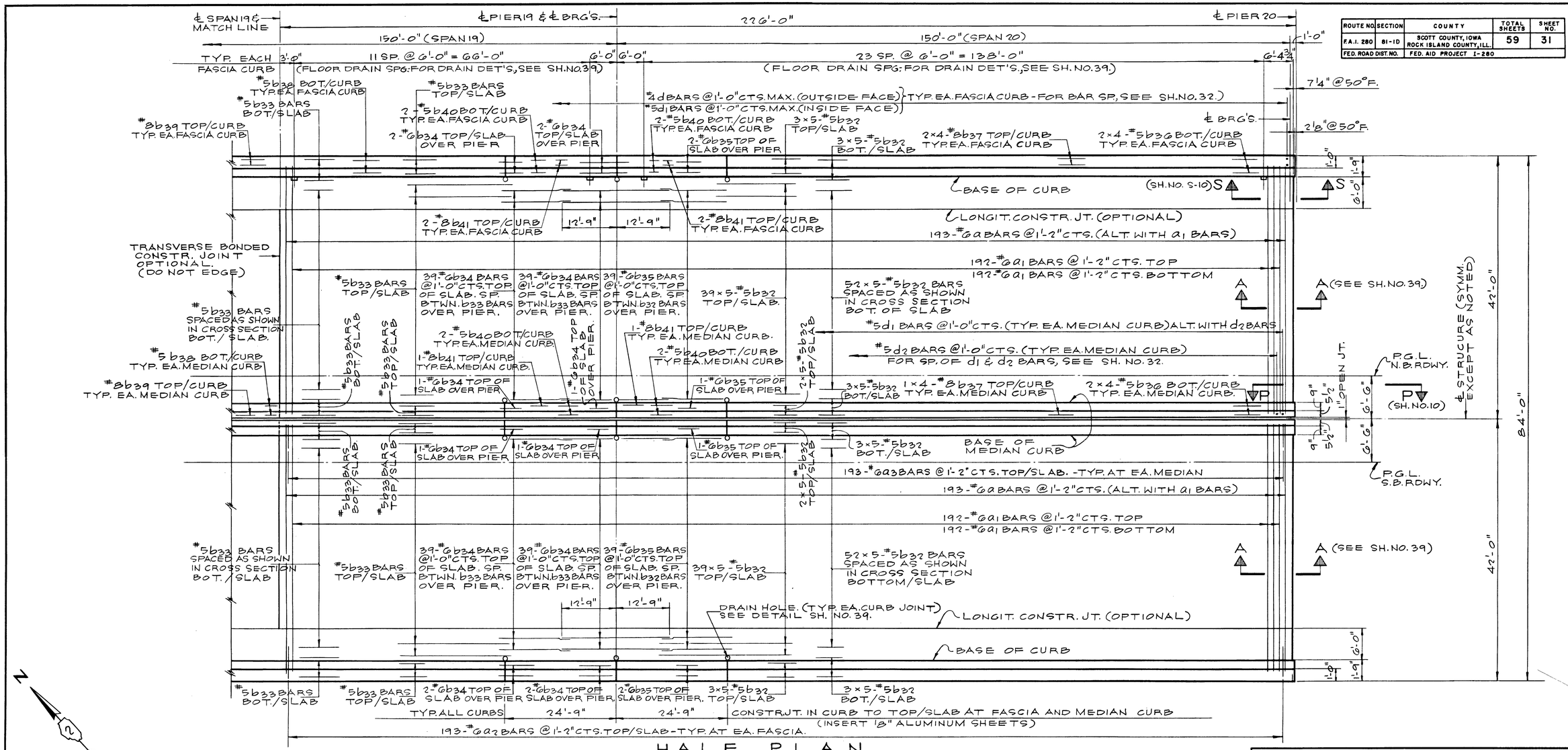
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

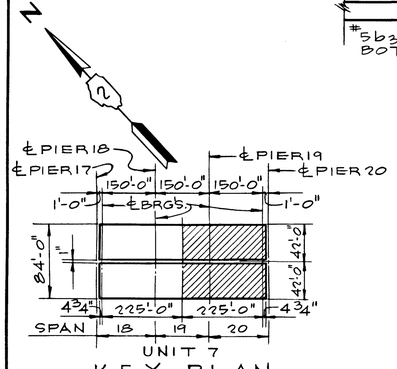
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	31
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



HALF PLAN

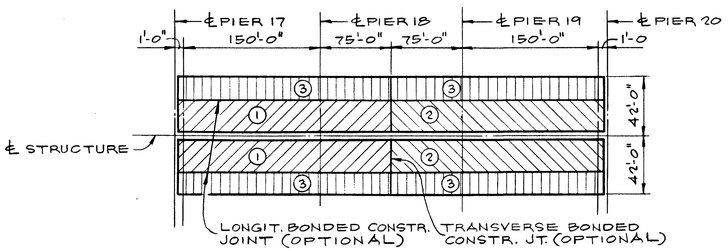
(NOT TO SCALE)



UNIT 7

KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING



SUGGESTED POURING SEQUENCE

UNIT 7 SPANS 18 THRU 20

NOTE:

FOR FASCIA AND MEDIAN CURB SECTIONS, FLOOR DRAINS, ALUMINUM SHEETS, DECK WATERPROOFING DETAILS AND METHOD OF DETERMING FILLET HEIGHT "t", SEE SH. NO. 39.

WORK THIS SHEET WITH SH'S. NO. 30 & 32.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE *	CU. YD.	1,025.5
REINFORCEMENT BARS *	POUND	245,886
PROTECTIVE COAT	SQ. YD.	625.3
BITUMINOUS CONCRETE SURFACE COURSE CLASS I (1½" THICK)	TON	329.7
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	3,908

*- THE PARAPET CONCRETE & REINF. QUANTITIES ARE NOT INCLUDED, SEE SH. NO. 30.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY G.P. ALLEMAN
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

SUPERSTRUCTURE - UNIT 7
SPANS 19 & 20

F.A.I. ROUTE 280 SECTION 81-1D

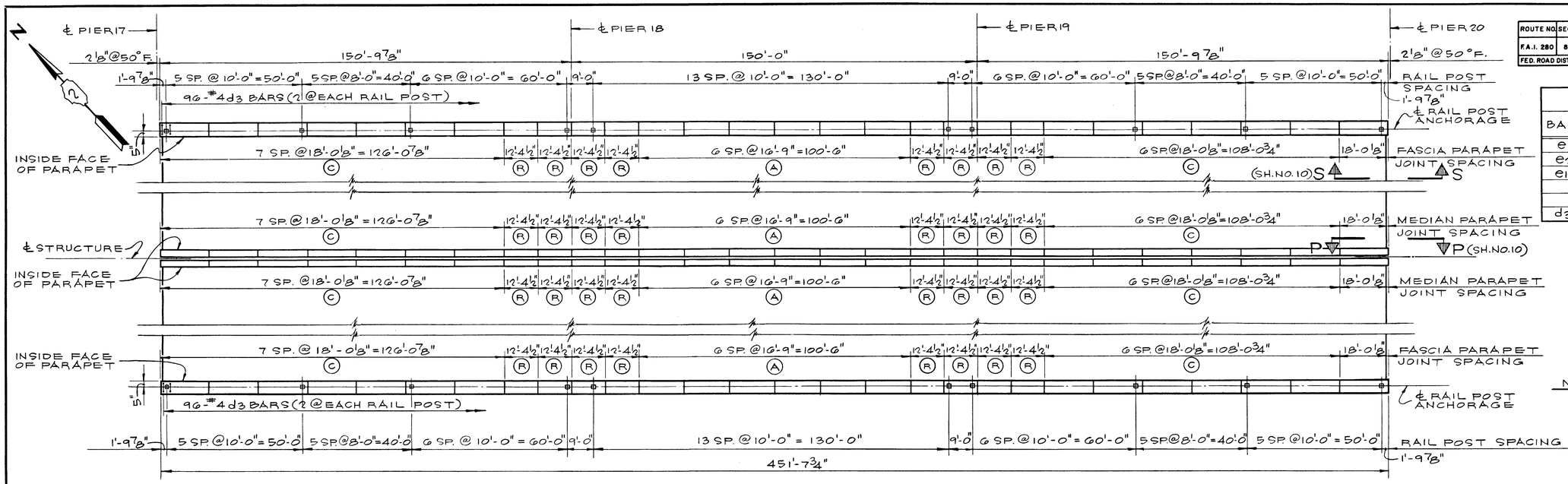
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

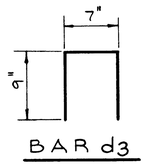
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	32
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



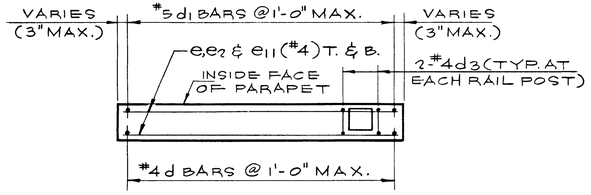
PLAN
(NOT TO SCALE)

BAR LIST						
BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
e	36	36	72	4	16'-7"	—
e_2	84	84	168	4	17'-7"	—
e_{11}	48	48	96	4	12'-0"	—
				4		—
d_3	96	96	192	4	2'-1"	⊓



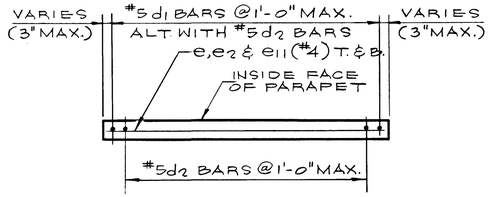
BAR d3

NOTE:
FOR RAILING AND PARAPET JOINT DETAILS SEE SH. NO. 40.



PLAN - TYPICAL FASCIA PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *		HORIZONTAL
N. BOUND	(A)	6	18-#4 d	18-#5 d_1	4-#4 e
	(C)	14	19-#4 d	19-#5 d_1	4-#4 e_2
	(R)	8	13-#4 d	13-#5 d_1	4-#4 e_{11}
S. BOUND	(A)	6	18-#4 d	18-#5 d_1	4-#4 e
	(C)	14	19-#4 d	19-#5 d_1	4-#4 e_2
	(R)	8	13-#4 d	13-#5 d_1	4-#4 e_{11}



PLAN - TYPICAL MEDIAN PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *		HORIZONTAL
N. BOUND	(A)	6	18-#5 d_1	17-#5 d_2	2-#4 e
	(C)	14	19-#5 d_1	18-#5 d_2	2-#4 e_2
	(R)	8	13-#5 d_1	12-#5 d_2	2-#4 e_{11}
S. BOUND	(A)	6	18-#5 d_1	17-#5 d_2	2-#4 e
	(C)	14	19-#5 d_1	18-#5 d_2	2-#4 e_2
	(R)	8	13-#5 d_1	12-#5 d_2	2-#4 e_{11}

*-BARS d, d_1 & d_2 ARE DETAILED AND BILLED ON SH. NO. 30.

NOTE: WORK THIS SHEET WITH SH'S. NO. 30 & 31.
FOR EXP. GUARD IN PARAPET DETAILS AND ADJUSTMENT SCHEDULE, SEE SH. NO. 10.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	152.2
REINFORCEMENT BARS	POUND	3,808
ALUMINUM RAILING	LIN. FT.	904

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY G.P. ALLEMAN
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

SUPERSTRUCTURE - UNIT 7
PARAPET & RAILING DETAILS

F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-ID	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	33
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

BAR LIST

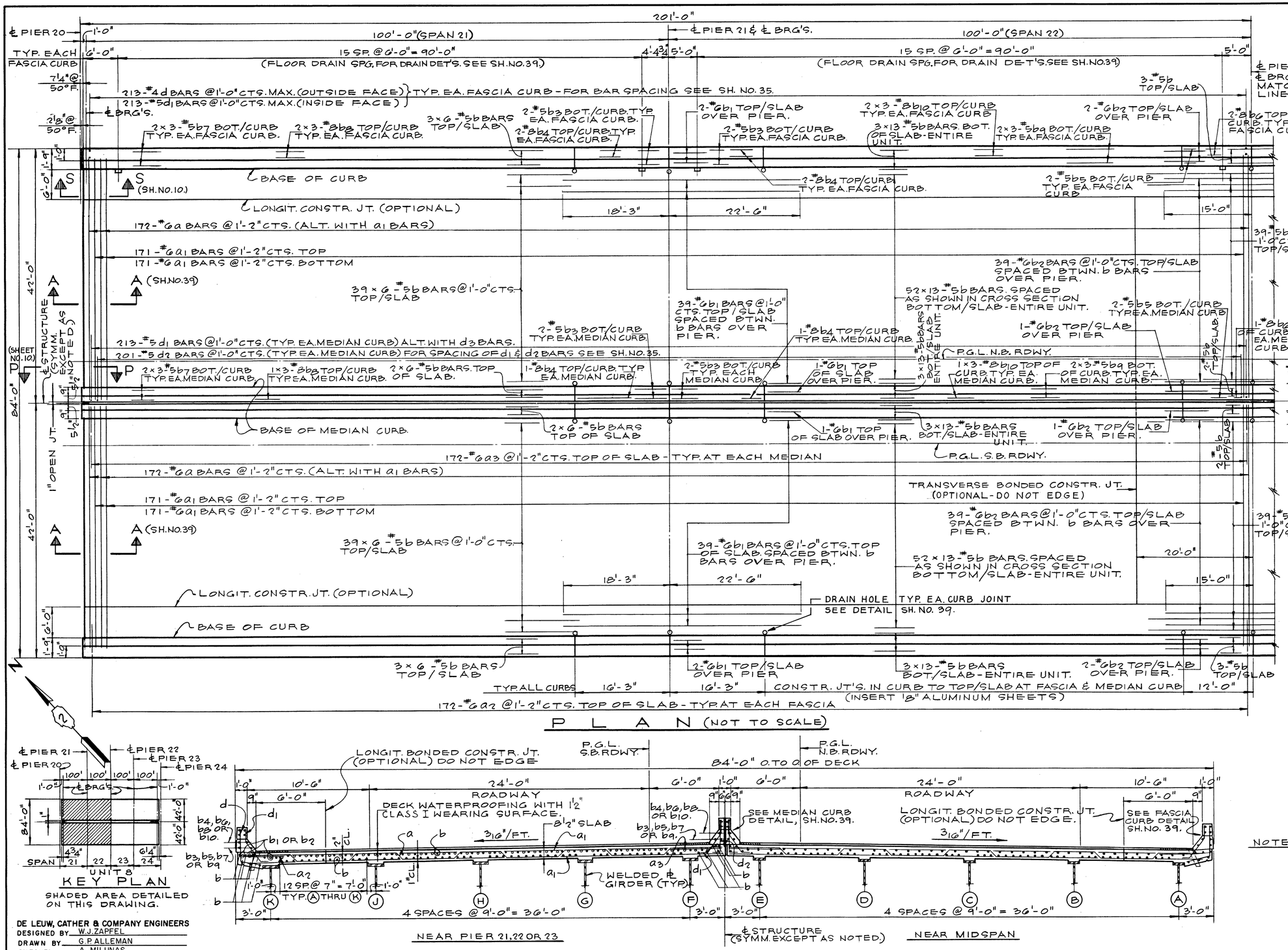
BAR	QUANTITY N. B.	QUANTITY S. B.	TOTAL	SIZE	LENGTH	SHAPE
a	343	343	686	6	42'-0"	
a1	684	684	1368	6	40'-6"	
a2	343	343	686	6	41'-0"	
a3	343	343	686	6	41'-3"	
b	1326	1326	2652	5	32'-0"	
b1	84	84	168	6	40'-9"	
b2	42	42	84	6	30'-0"	
b3	16	16	32	5	16'-0"	
b4	12	12	24	8	16'-0"	
b5	8	8	16	5	11'-9"	
b6	6	6	12	8	11'-9"	
b7	24	24	48	5	29'-0"	
b8	18	18	36	8	29'-6"	
b9	24	24	48	5	24'-8"	
b10	18	18	36	8	25'-2"	
d	426	426	852	4	4'-7"	
d1	852	852	1704	5	3'-7"	
d2	402	402	804	5	3'-4"	

NOTES:

BARS INDICATED THUS 52×13-#5 ETC. INDICATES 52 LINES OF BARS WITH 13 LENGTHS PER LINE.

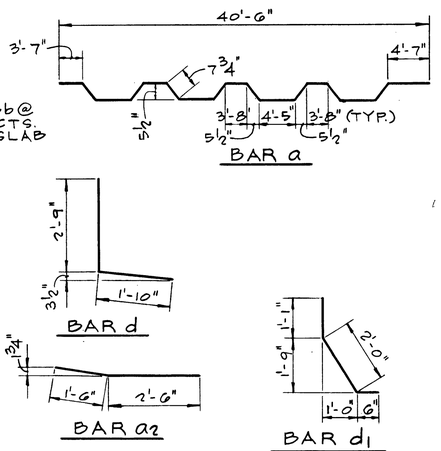
MIN. BAR LAP = 24 DIA.

ALL BAR DIMENSIONS ARE OUT TO OUT.



PLAN (NOT TO SCALE)

CROSS SECTION (LOOKING NORTH) SCALE: ¼" = 1'-0"



NOTE: WORK THIS SHEET WITH SH'S. NO. 34 & 35. FOR SUGGESTED POURING SEQUENCE SEE SH. NO. 34.

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	G.P. ALLEMAN
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

SUPERSTRUCTURE - UNIT 8 SPANS 21 & 22

F.A.I. ROUTE 280 SECTION 81-ID

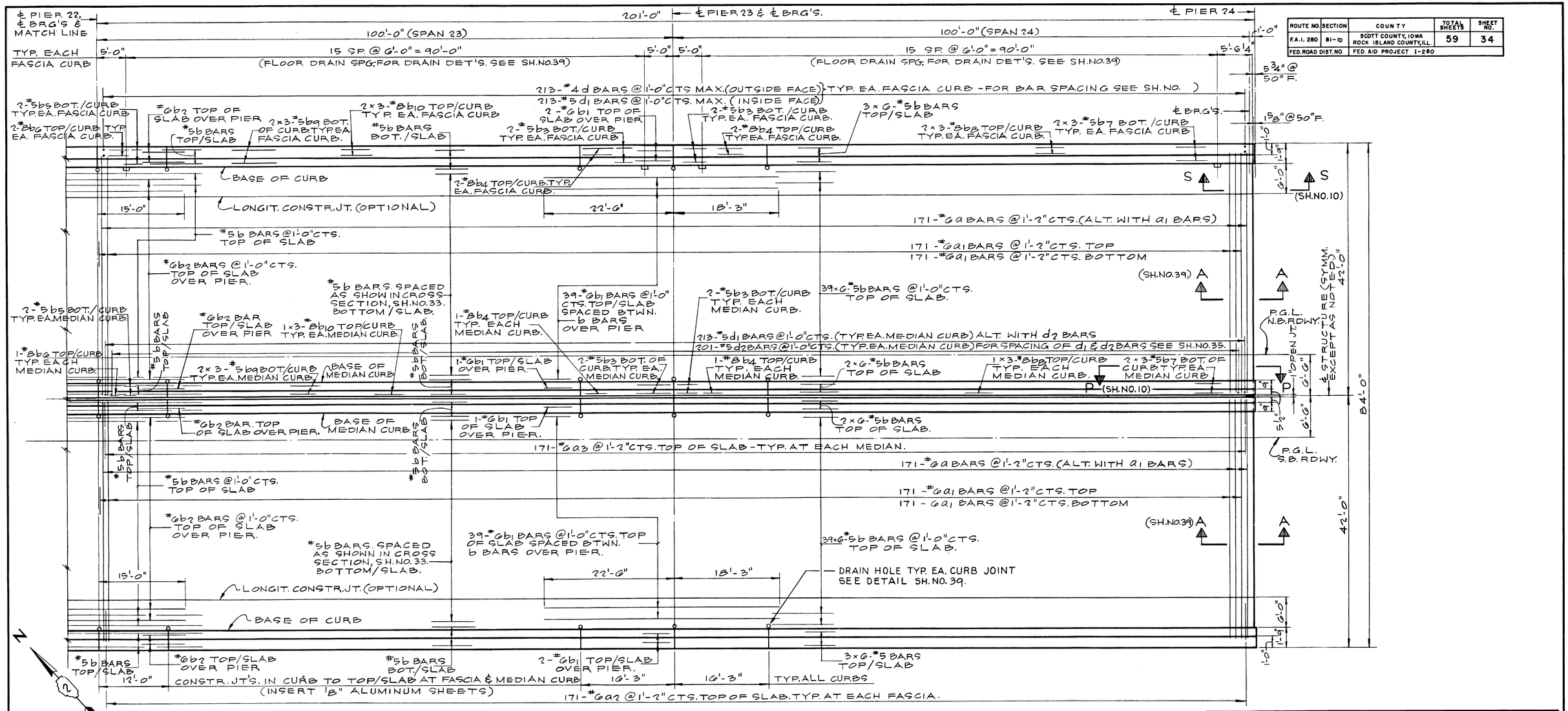
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

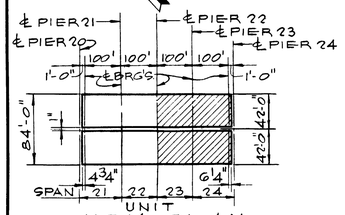
STA. 11+11.38 TO STA. 53+04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	34
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

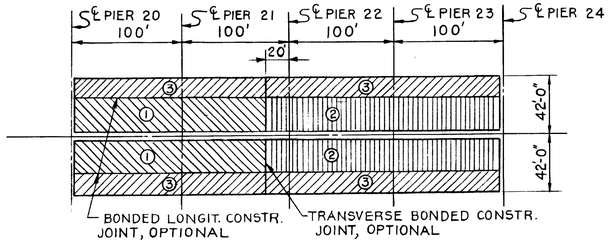


P L A N (NOT TO SCALE)



KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING.



SUGGESTED POURING SEQUENCE

UNIT 8 - SPANS 21 THRU 24

NOTE:

FOR FASCIA AND MEDIAN CURB SECTIONS, FLOOR DRAINS, ALUMINUM SHEETS, DECK WATERPROOFING DETAILS AND METHOD OF DETERMINING FILLET HEIGHT "t", SEE SH. NO. 39.

WORK THIS SHEET WITH SH'S. NO. 33 & 35.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS X CONCRETE *	CU. YD.	904.0
REINFORCEMENT BARS *	POUND	259,413
PROTECTIVE COAT	SQ. YD.	555.2
BITUMINOUS CONCRETE SURFACE COURSE CLASS I (1½" THICK)	TON	293.2
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	3,475

* - THE PARAPET CONCRETE & REINF. QUANTITIES ARE NOT INCLUDED, SEE SH. NO. 35.

SUPERSTRUCTURE - UNIT 8
SPANS 23 & 24

F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

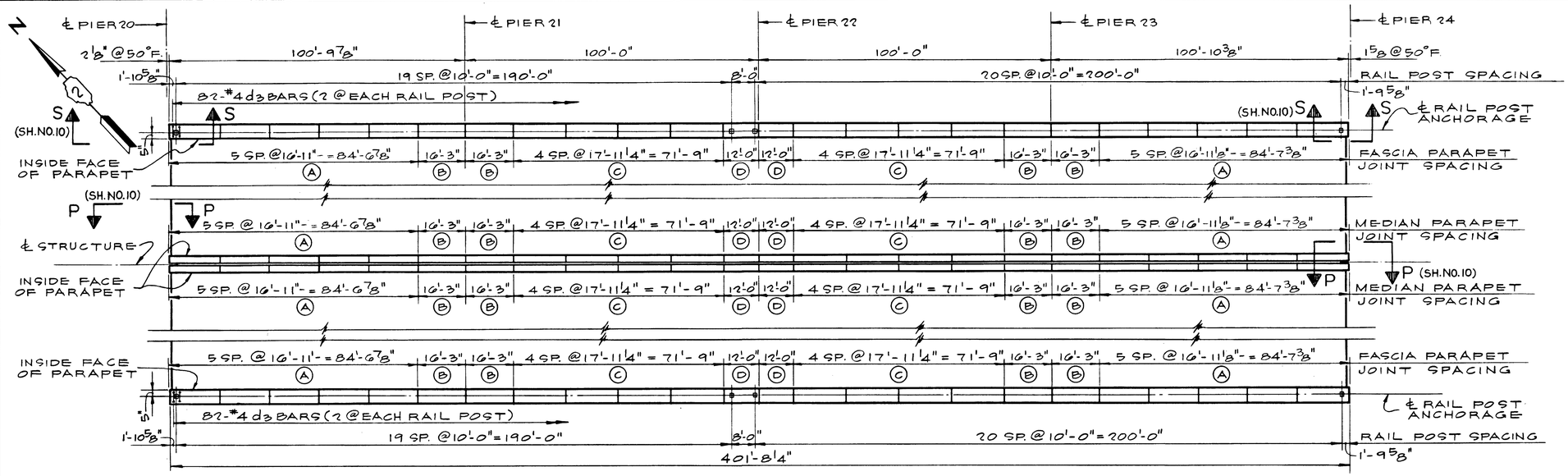
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11+11.38 TO STA. 53+04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY W.J. ZAPFEL
DRAWN BY G.P. ALLEMAN
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

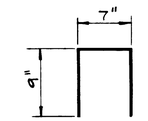


PLAN
(NOT TO SCALE)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	35
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

BAR LIST

BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
e	60	60	120	4	16'-7"	—
e1	24	24	48	4	16'-0"	—
e2	48	48	96	4	17'-7"	—
e3	12	12	24	4	11'-8"	—
d3	82	82	164	4	2'-1"	⊓



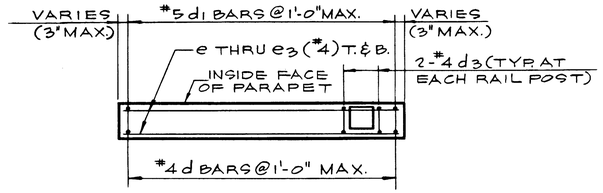
BAR d3

NOTE:

FOR RAILING AND PARAPET JOINT DETAILS SEE SH. NO. 40.

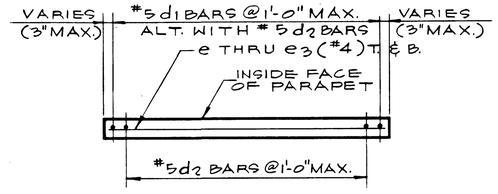
WORK THIS SHEET WITH SH'S. NO. 33 OR 34.

FOR EXPANSION GUARD IN PARAPET DETAILS & ADJUSTMENT SCHEDULE SEE SH. NO. 10.



PLAN - TYPICAL FASCIA PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *	HORIZONTAL
N. BOUND	A	10	18-#4 d	18-#5 d1	4-#4 e
	B	4	17-#4 d	17-#5 d1	4-#4 e1
	C	8	19-#4 d	19-#5 d1	4-#4 e2
	D	2	13-#4 d	13-#5 d1	4-#4 e3
S. BOUND	A	10	18-#4 d	18-#5 d1	4-#4 e
	B	4	17-#4 d	17-#5 d1	4-#4 e1
	C	8	19-#4 d	19-#5 d1	4-#4 e2
	D	2	13-#4 d	13-#5 d1	4-#4 e3



PLAN - TYPICAL MEDIAN PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *	HORIZONTAL
N. BOUND	A	10	18-#5 d1	17-#5 d2	2-#4 e
	B	4	17-#5 d1	16-#5 d2	2-#4 e1
	C	8	19-#5 d1	18-#5 d2	2-#4 e2
	D	2	13-#5 d1	12-#5 d2	2-#4 e3
S. BOUND	A	10	18-#5 d1	17-#5 d2	2-#4 e
	B	4	17-#5 d1	16-#5 d2	2-#4 e1
	C	8	19-#5 d1	18-#5 d2	2-#4 e2
	D	2	13-#5 d1	12-#5 d2	2-#4 e3

* - BARS d, d1 & d2 ARE DETAILED AND BILLED ON SH. NO. 33.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	135.3
REINFORCEMENT BARS	POUND	3,385
ALUMINUM RAILING	LIN. FT.	804

SUPERSTRUCTURE - UNIT 8
PARAPET & RAILING DETAILS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

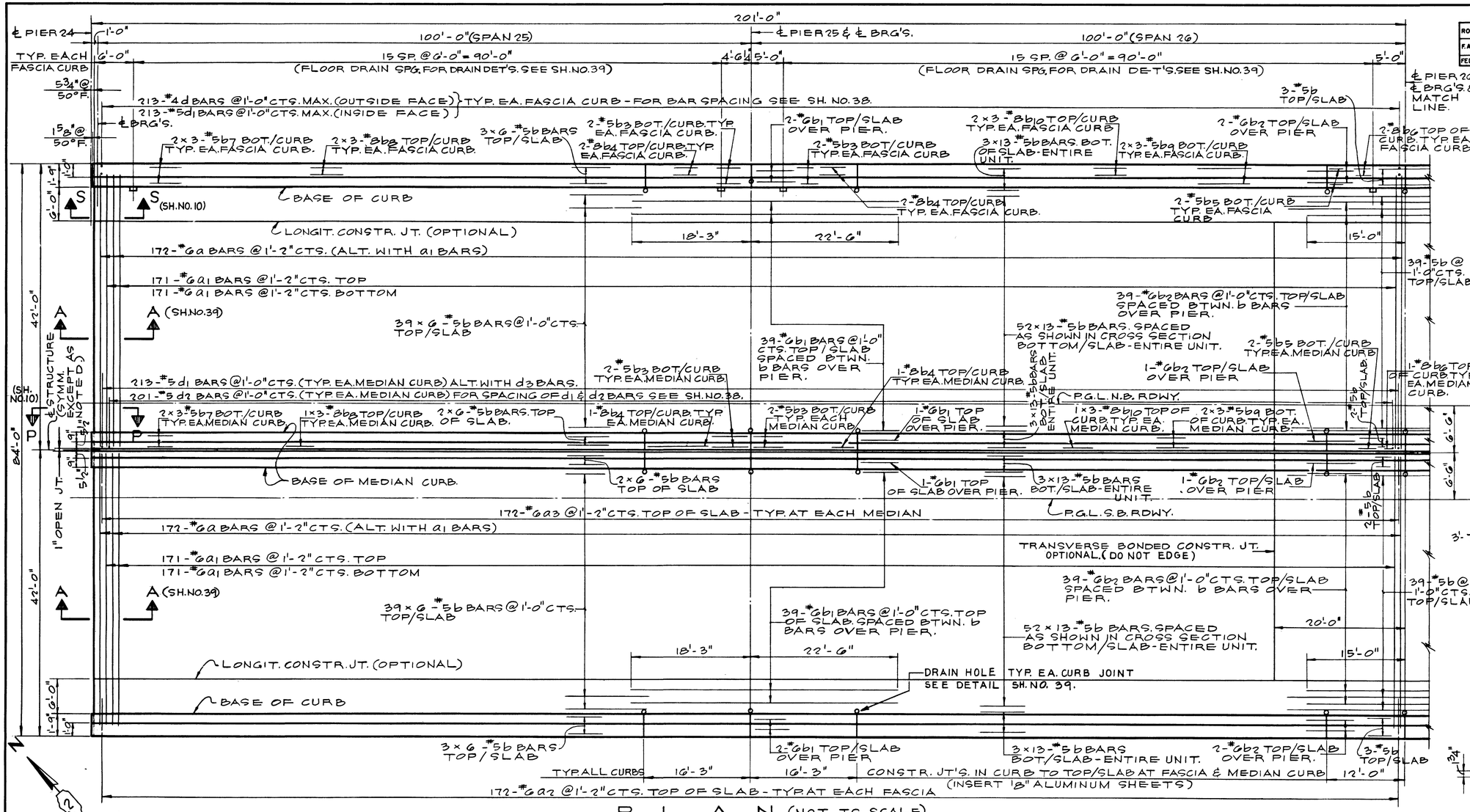
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY G.P. ALLEMAN
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	36
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

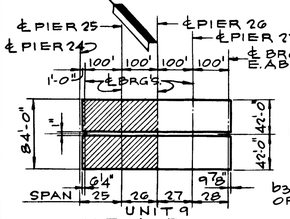
BAR LIST

BAR	QUANTITY N. B.	QUANTITY S. B.	TOTAL	SIZE	LENGTH	SHAPE
a	343	343	686	6	42'-0"	~
a1	684	684	1368	6	40'-6"	—
a2	343	343	686	6	4'-0"	—
a3	343	343	686	6	4'-3"	—
b	1376	1376	2752	5	32'-0"	—
b1	84	84	168	6	40'-9"	—
b2	42	42	84	6	30'-0"	—
b3	16	16	32	5	16'-0"	—
b4	12	12	24	8	16'-0"	—
b5	8	8	16	5	11'-9"	—
b6	6	6	12	8	11'-9"	—
b7	24	24	48	5	29'-0"	—
b8	18	18	36	8	29'-6"	—
b9	24	24	48	5	24'-8"	—
b10	18	18	36	8	25'-2"	—
b11	1	1	2	5	3'-3"	—
b12	1	1	2	5	2'-10"	—
d	428	428	852	4	4'-7"	—
d1	846	846	1692	5	3'-7"	—
d2	405	405	810	5	3'-4"	—

NOTES:
BARS INDICATED THUS 52 x 13 - #5 ETC. INDICATES 52 LINES OF BARS WITH 13 LENGTHS PER LINE.
MIN. BAR LAP = 24 DIA.
ALL BAR DIMENSIONS ARE OUT TO OUT.

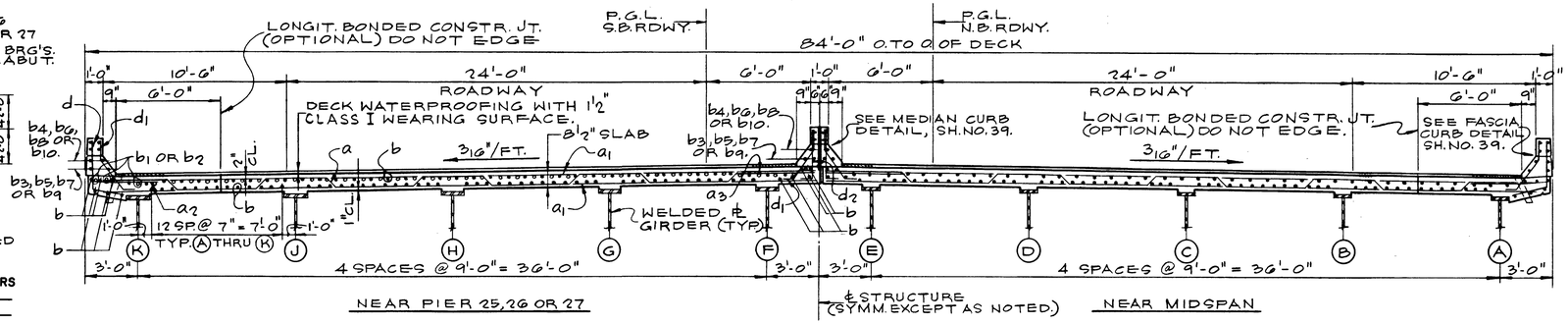


PLAN (NOT TO SCALE)

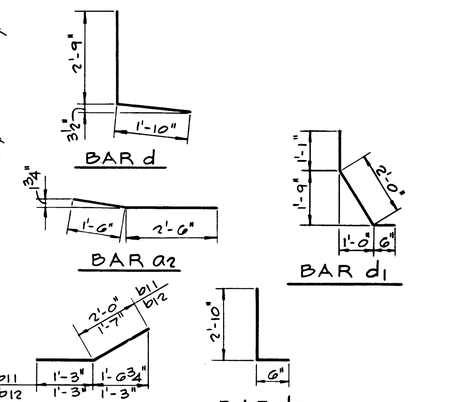


KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING.



CROSS SECTION (LOOKING NORTH) SCALE: 1/4" = 1'-0"



NOTE: WORK THIS SHEET WITH SH'S. NO. 37 & 38. FOR SUGGESTED POURING SEQUENCE SEE SH. NO. 37.

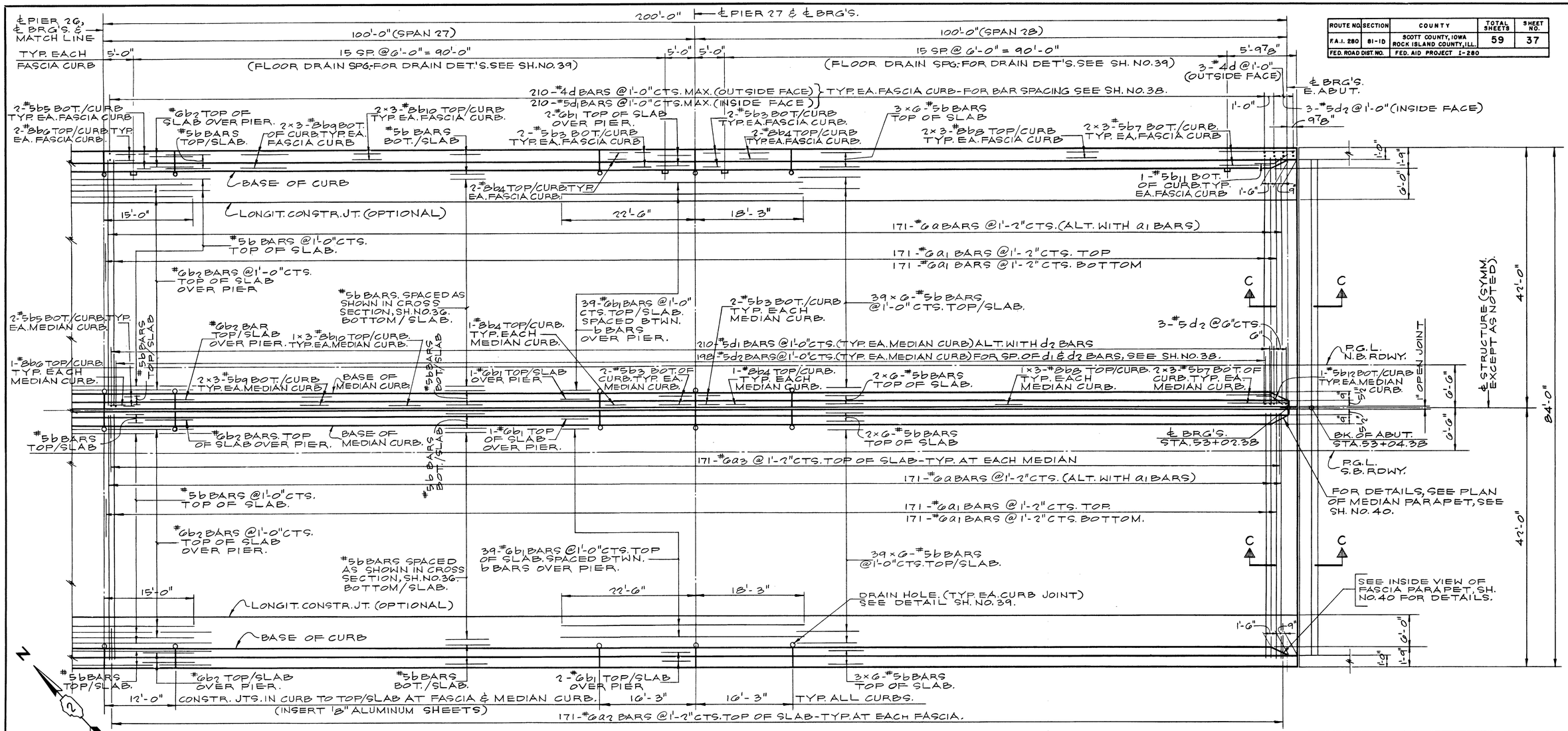
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY G.P. ALLEMAN
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

SUPERSTRUCTURE - UNIT 9
SPANS 25 AND 26

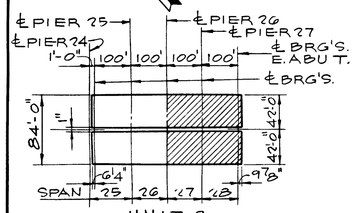
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	37
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

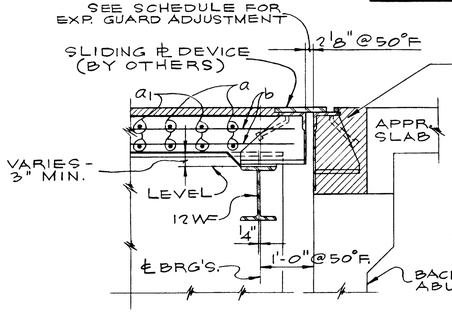


P L A N (NOT TO SCALE)



KEY PLAN

SHADED AREA DETAILED ON THIS DRAWING



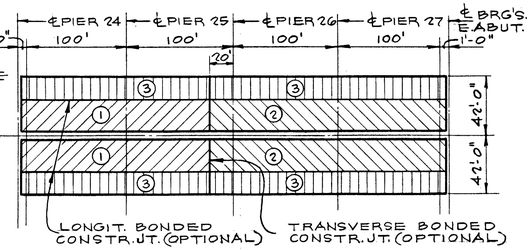
SECTION C-C

SCALE: ¾" = 1'-0"

CONCRETE IN SHADED AREA TO BE POURED AFTER ALL SUPERSTRUCTURE FORMS HAVE BEEN REMOVED. QUANTITIES OF CLASS X CONCRETE INCLUDED WITH SUPERSTRUCTURE.

EXP. GUARD ADJUSTMENT SCHEDULE						
TEMPERATURE F°	110°	90°	70°	50°	30°	10°
JT. OPENING *	1 3/16"	1 1/2"	1 13/16"	2 1/8"	2 7/16"	2 3/4"

* - JOINT OPENING WILL INCREASE OR DECREASE APPROX. ¼" FOR EACH 10° DROP OR RISE IN TEMPERATURE.



SUGGESTED POURING SEQUENCE

UNIT 9 SPANS 25 THRU 28

NOTES:

FOR FASCIA AND MEDIAN CURB SECTIONS, FLOOR DRAINS, ALUMINUM SHEETS, DECK WATERPROOFING DETAILS AND METHOD OF DETERMINING FILLET HEIGHT "t", SEE SH. NO. 39.

WORK THIS SHEET WITH SH. NO. 36

BILL OF MATERIAL

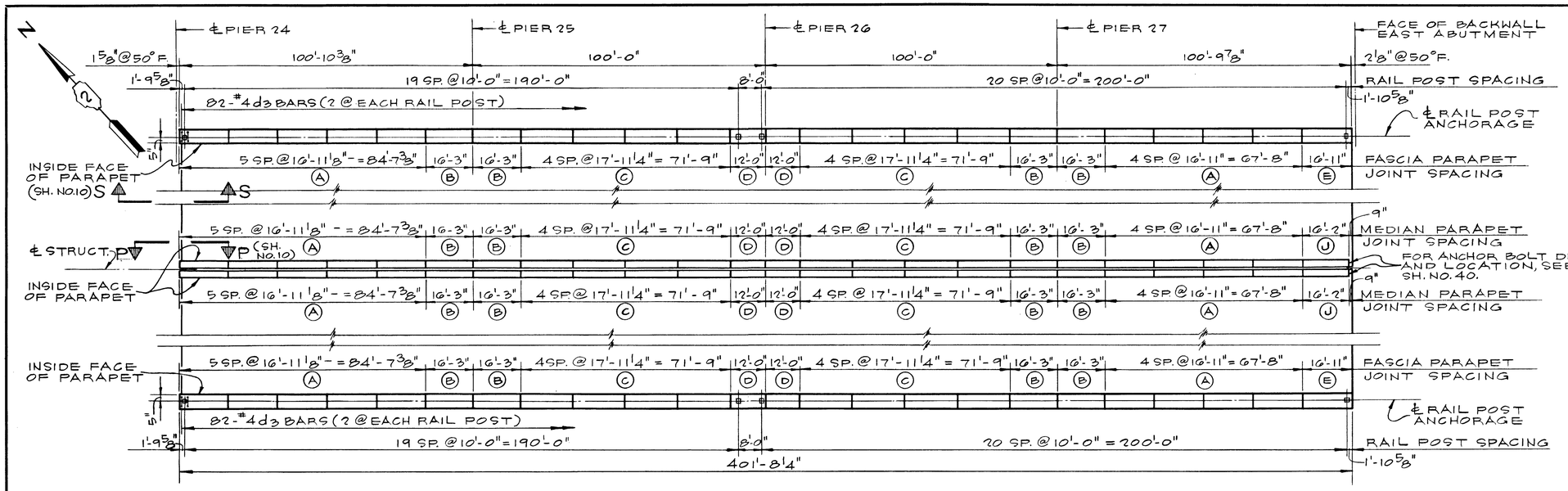
ITEM	UNIT	QUANTITY
CLASS X CONCRETE *	CU. YD.	905.0
REINFORCEMENT BARS *	POUND	259,402
PROTECTIVE COAT	SQ. YD.	556.2
BITUMINOUS CONCRETE SURFACE COURSE CLASS I (1½" THICK)	TON	293.5
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	3479

* - THE PARAPET CONCRETE & REINF. QUANTITIES ARE NOT INCLUDED, SEE SH. NO. 38.

SUPERSTRUCTURE - UNIT 9
SPANS 27 & 28

F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY G.P. ALLEMAN
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

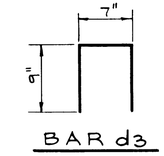


PLAN
(NOT TO SCALE)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	38
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

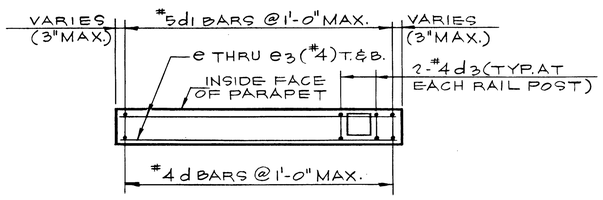
BAR LIST

BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
e	58	58	116	4	16'-7"	—
e1	24	24	48	4	16'-0"	—
e2	48	48	96	4	17'-7"	—
e3	12	12	24	4	11'-8"	—
e5	2	2	4	4	15'-10"	—
d3	82	82	164	4	2'-1"	⊓



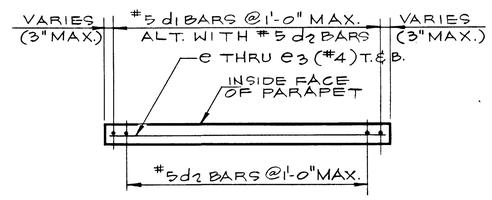
BAR d3

NOTE:
FOR RAILING AND PARAPET JOINT DETAILS SEE SH. NO. 40.
FOR EXPANSION GUARD IN PARAPET AT PIER 24 DETAILS AND ADJUSTMENT SCHEDULE SEE SH. NO. 10.



PLAN - TYPICAL FASCIA PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

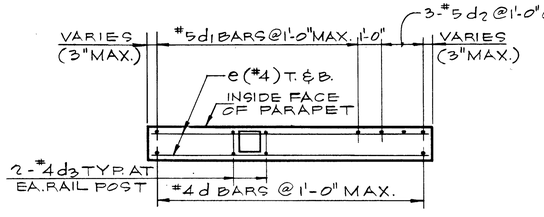
LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *	HORIZONTAL
N. BOUND	A	9	18-#4 d	18-#5d1 | 4-#4e
	B	4	17-#4 d	17-#5d1 | 4-#4e1
	C	8	19-#4 d	19-#5d1 | 4-#4e2
	D	2	13-#4 d	13-#5d1 | 4-#4e3
S. BOUND	A	9	18-#4 d	18-#5d1 | 4-#4e
	B	4	17-#4 d	17-#5d1 | 4-#4e1
	C	8	19-#4 d	19-#5d1 | 4-#4e2
	D	2	13-#4 d	13-#5d1 | 4-#4e3



PLAN - TYPICAL MEDIAN PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

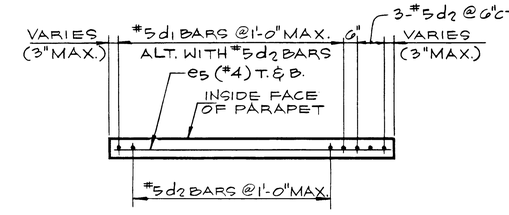
LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *	HORIZONTAL
N. BOUND	A	9	18-#5d1	17-#5d2 | 2-#4e
	B	4	17-#5d1	16-#5d2 | 2-#4e1
	C	8	19-#5d1	18-#5d2 | 2-#4e2
	D	2	13-#5d1	12-#5d2 | 2-#4e3
S. BOUND	A	9	18-#5d1	17-#5d2 | 2-#4e
	B	4	17-#5d1	16-#5d2 | 2-#4e1
	C	8	19-#5d1	18-#5d2 | 2-#4e2
	D	2	13-#5d1	12-#5d2 | 2-#4e3

*-BARS d, d1 & d2 ARE DETAILED AND BILLED ON SH. NO. 37.



PLAN - FASCIA PARAPET PANEL REINFORCEMENT - E. END
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *		HORIZONTAL
N. BOUND	E	1	18-#4 d	15-#5d1 | 3-#5d2	4-#4e
S. BOUND	E	1	18-#4 d	15-#5d1 | 3-#5d2	4-#4e



PLAN - MEDIAN PARAPET PANEL REINFORCEMENT - E. END
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *	HORIZONTAL
N. BOUND	J	1	15-#5d1	17-#5d2 | 2-#4e5
S. BOUND	J	1	15-#5d1	17-#5d2 | 2-#4e5

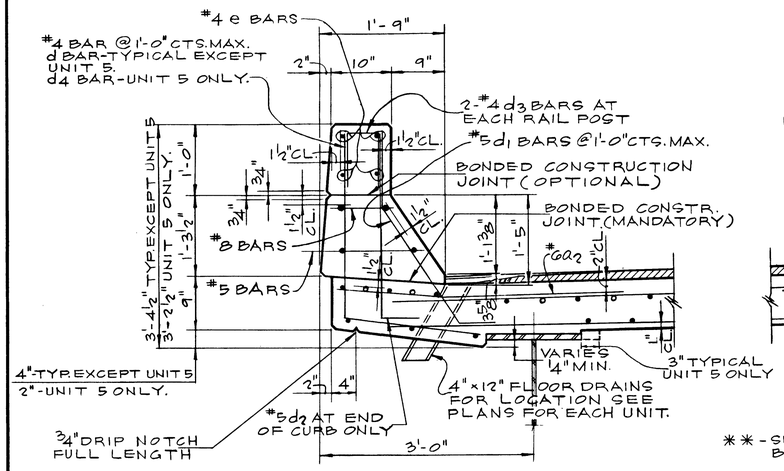
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	135.2
REINFORCEMENT BARS	POUND	3341
ALUMINUM RAILING	LIN. FT.	804

SUPERSTRUCTURE - UNIT 9
PARAPET & RAILING DETAILS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

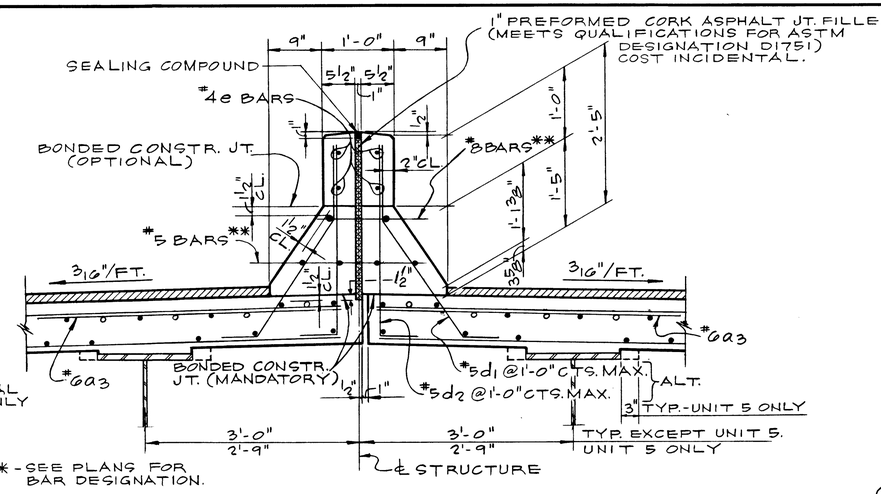
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY G.P. ALLEMAN
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	39
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



FASCIA CURB DETAIL

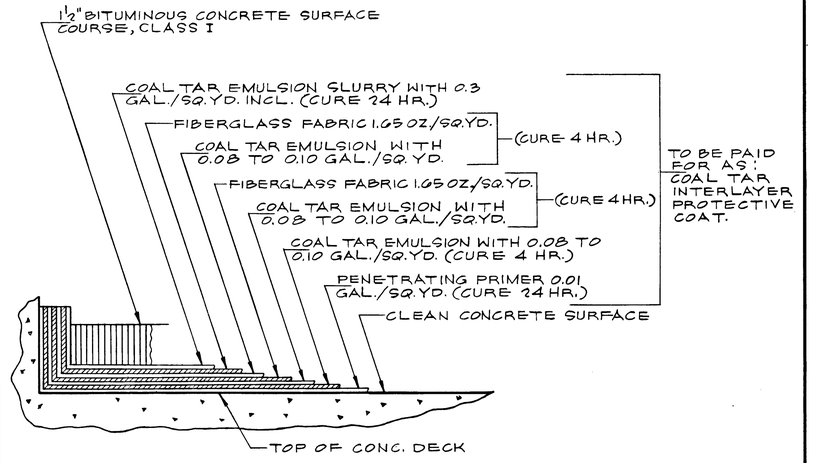
SCALE: 1" = 1'-0"



** - SEE PLANS FOR BAR DESIGNATION.

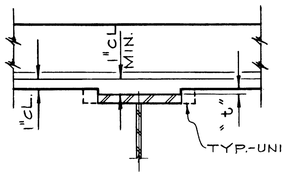
MEDIAN CURB DETAIL

SCALE: 1" = 1'-0"

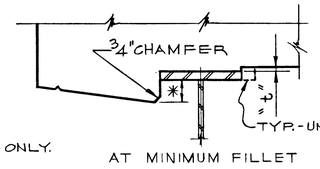


DECK WATERPROOFING

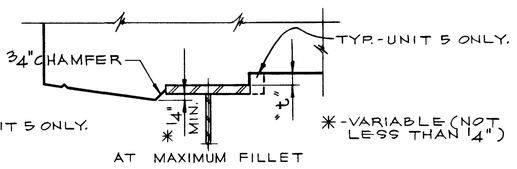
TABLE "Y"	
PIER NO.	DIMENSION "X"
3, 10 & 24	5 3/4"
7, 17 & 20	7 1/4"



INTERIOR GIRDERS



AT MINIMUM FILLET

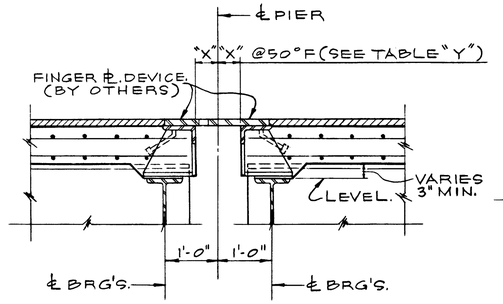


AT MAXIMUM FILLET

EXTERIOR GIRDERS

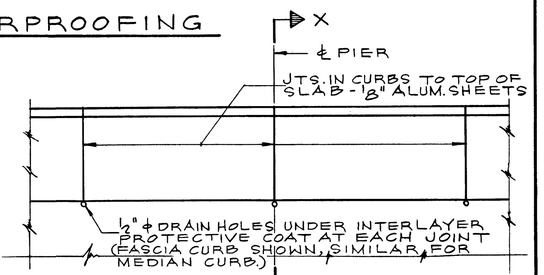
AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED, ELEVATIONS OF THE TOP FLANGES OF THE GIRDERS SHALL BE TAKEN AT THE POINTS SHOWN ON SHEETS NO. 41. THROUGH NO. 50. THESE ELEVATIONS SUBTRACTED FROM THE TABULATED "THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS" MINUS SLAB THICKNESS EQUAL THE FILLET HEIGHTS ABOVE THE TOP FLANGES OF GIRDERS. TABULATED THEORETICAL GRADE ELEVATIONS ARE TOP OF CONCRETE ELEVATIONS AND DO NOT INCLUDE BITUMINOUS SURFACE COURSE.

METHOD OF DETERMINING FILLET HEIGHT "t"

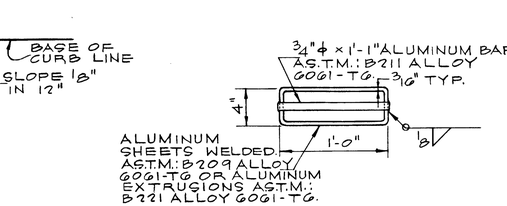


SECTION A-A

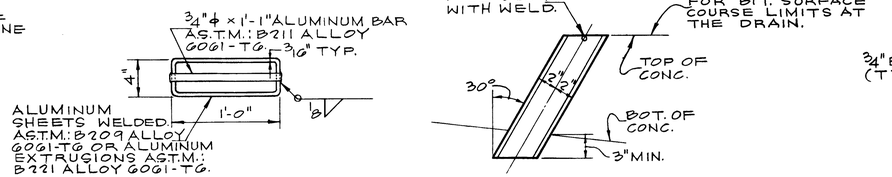
SCALE: ¾" = 1'-0"



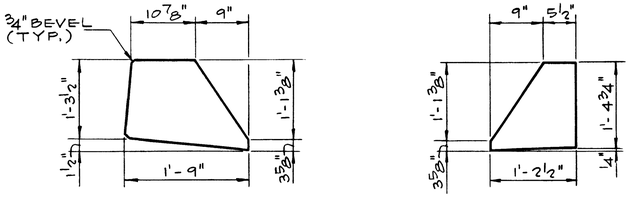
PLAN (SCALE: ¾" = 1'-0")



DETAIL "Y"



FLOOR DRAIN DETAILS

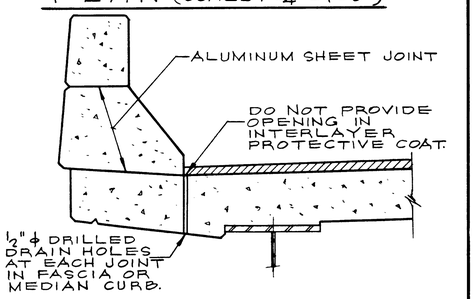


FASCIA CURB

MEDIAN CURB

DETAIL OF 1/8" ALUMINUM SHEET

(A.S.T.M. B209 ALLOY 3003-H14)



SECTION X-X (SCALE: 1" = 1'-0")

DETAIL OF DRAIN HOLES

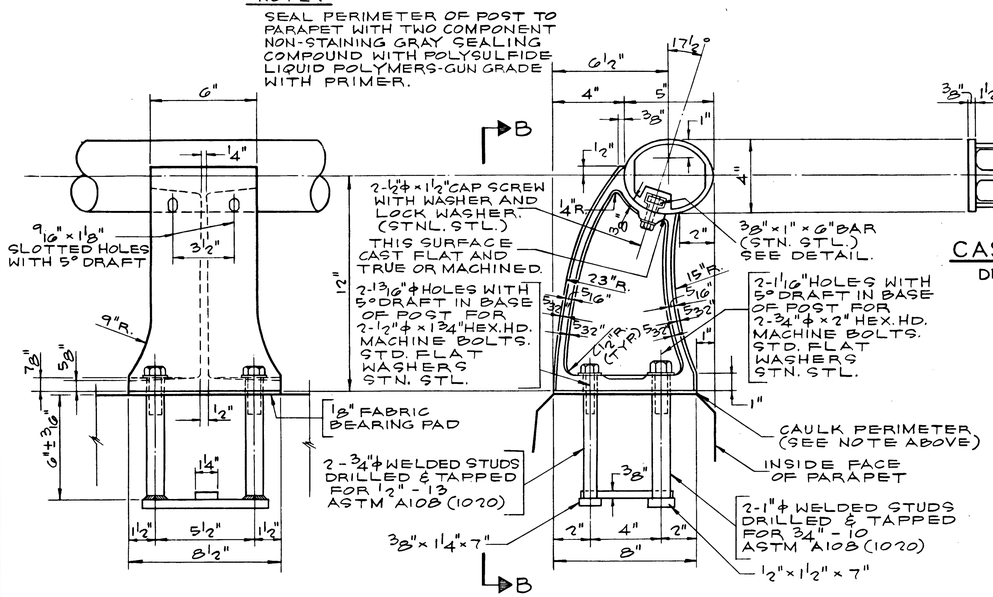
NOTE:
COST OF ALUMINUM DRAINS & SHEETS SHALL BE INCIDENTAL TO CLASS X CONCRETE.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.J. ZAPFEL
DRAWN BY G.P. ALLEMAN
CHECKED A. MILUNAS
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

SUPERSTRUCTURE
TYPICAL DETAILS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	40
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

NOTE:
SEAL PERIMETER OF POST TO PARAPET WITH TWO COMPONENT NON-STAINING GRAY SEALING COMPOUND WITH POLYSULFIDE LIQUID POLYMERS-GUN GRADE WITH PRIMER.



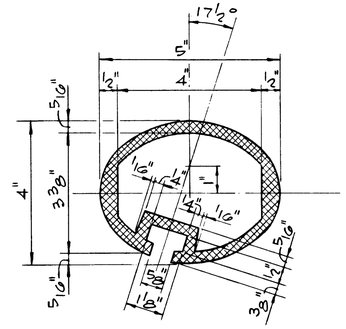
VIEW B-B

SECTION A-A

CAST END CAP

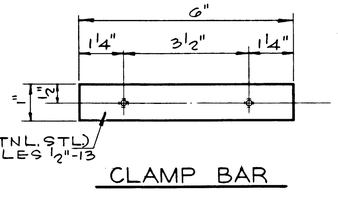
RAIL POST DETAILS

SCALE: 3" = 1'-0"

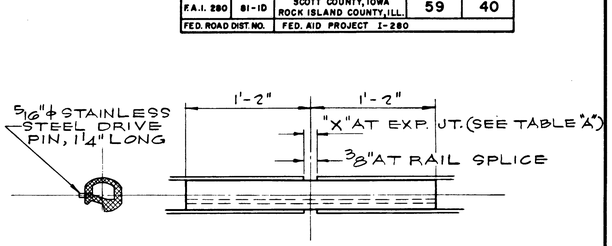


SEC. THRU ELLIPTICAL RAIL SECTION

SCALE: ½" = 1"



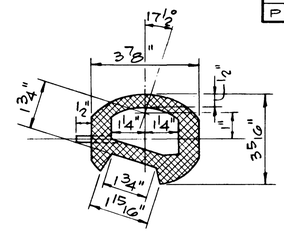
CLAMP BAR



RAIL SPLICE

SCALE: 1½" = 1'-0"

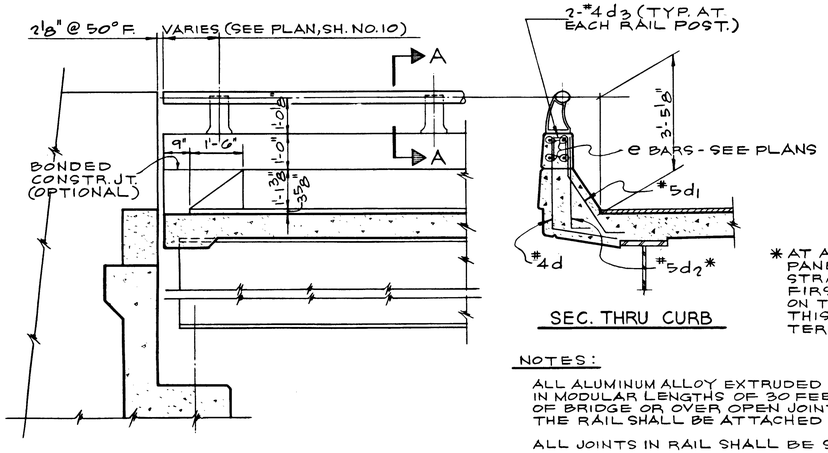
TABLE "A"	
LOCATION	OPENING "X" @ 50° F.
PIERS 3, 10 & 24	3¼"
PIERS 7, 17 & 20	4¼"
PIERS 13 & 14	5¾"



SPLICE MUST BE A SLIDING FIT IN RAIL SECTION.

SEC. THRU SPLICE

SCALE: ⅜" = 1"



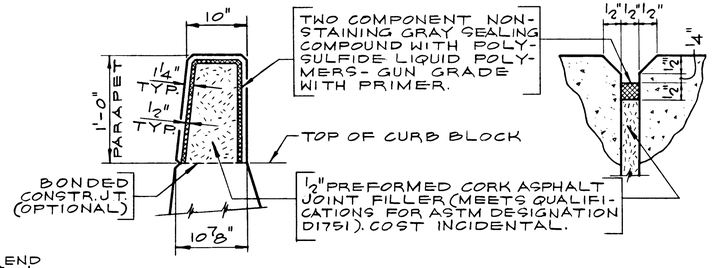
INSIDE VIEW OF FASCIA PARAPET

(WEST END SHOWN, EAST END SIMILAR)

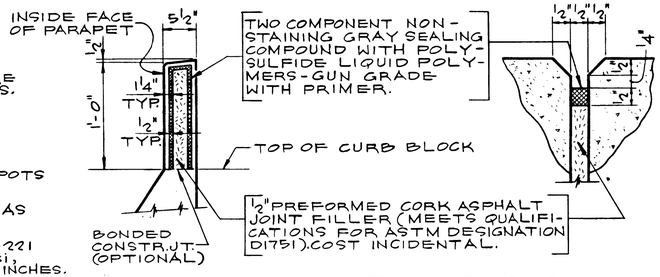
SCALE: ½" = 1'-0"

SEC. THRU CURB

* AT ABUTMENT SIDE OF END PANEL, SUBSTITUTE 3-#5d2 STRAIGHT BARS FOR THE FIRST 3-#5d1 BARS SHOWN ON TYP. PANEL REINFORCEMENT. THIS IS REQUIRED BY CURB TERMINATION.



FASCIA PARAPET JOINT DETAIL



MEDIAN PARAPET JOINT DETAIL

NOTES:

ALL ALUMINUM ALLOY EXTRUDED RAIL SHALL BE SUPPLIED IN MODULAR LENGTHS OF 30 FEET, EXCEPT AT THE END OF BRIDGE OR OVER OPEN JOINTS IN BRIDGE DECK WHERE THE RAIL SHALL BE ATTACHED TO A MINIMUM OF 2 POSTS.

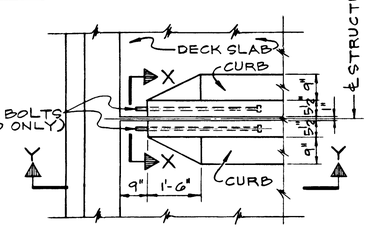
ALL JOINTS IN RAIL SHALL BE SPLICED PER DETAIL.

PROVIDE 1-⅛" AND 2-1/16" ALUMINUM SHIMS FOR 25% OF THE POSTS.

RAIL ELEMENT SHALL BE PARALLEL TO GRADE - HIGH SPOTS SHALL BE GROUND AND LOW SPOTS SHIMMED.

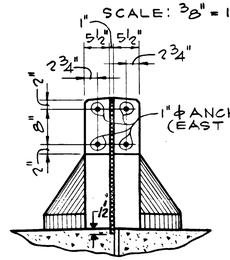
FABRIC BEARING PAD SHALL HAVE SAME DIMENSIONS AS BASE OF POST.

ALUMINUM ALLOY RAIL SHALL CONFORM TO ASTM B221 ALLOY 6061-T6 OR 6351-T5 WITH MIN. YIELD 35KSI, MIN. TENSILE 38KSI, AND ELONGATION OF 10% IN 2 INCHES.



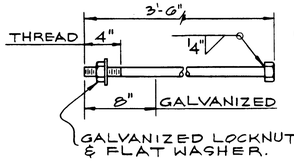
PLAN OF MEDIAN PARAPET

SCALE: ½" = 1'-0"



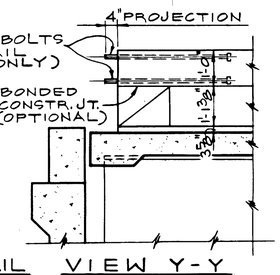
VIEW X-X

SCALE: ¾" = 1'-0"



ANCHOR BOLT DETAIL

COST OF BOLTS TO BE INCIDENTAL TO SUPERSTRUCTURE CONCRETE.



VIEW Y-Y

SCALE: ½" = 1'-0"

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	W.J. ZAPFEL
DRAWN BY	G.P. ALLEMAN
CHECKED	A. MILUNAS
IN CHARGE	W.J. ZAPFEL
APPROVED	W.G. HORN

SUPERSTRUCTURE TYPICAL DETAILS

F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	41
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

WESTBOUND OR EASTBOUND ROADWAY

SPAN 1

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	602.484	0.000	602.484
10.00		32.500	602.576	0.028	602.604
20.00		32.500	602.668	0.051	602.720
30.00		32.500	602.760	0.068	602.828
40.00	A OR K	32.500	602.852	0.076	602.928
50.00		32.500	602.944	0.075	603.019
60.00		32.500	603.036	0.066	603.102
70.00		32.500	603.128	0.050	603.178
80.00		32.500	603.220	0.031	603.251
90.00		32.500	603.312	0.012	603.325
99.99		32.500	603.404	0.000	603.404
0.00		23.500	602.624	0.000	602.624
10.00		23.500	602.716	0.030	602.747
20.00		23.500	602.808	0.055	602.866
30.00		23.500	602.900	0.072	602.973
40.00	B OR J	23.500	602.992	0.081	603.073
50.00		23.500	603.084	0.080	603.164
60.00		23.500	603.176	0.070	603.247
70.00		23.500	603.268	0.053	603.322
80.00		23.500	603.360	0.033	603.393
90.00		23.500	603.452	0.013	603.466
99.99		23.500	603.544	0.000	603.544
0.00		14.500	602.765	0.000	602.765
10.00		14.500	602.857	0.031	602.889
20.00		14.500	602.949	0.058	603.007
30.00		14.500	603.041	0.076	603.117
40.00	C OR H	14.500	603.133	0.085	603.218
50.00		14.500	603.225	0.084	603.309
60.00		14.500	603.317	0.074	603.391
70.00		14.500	603.409	0.056	603.465
80.00		14.500	603.501	0.035	603.536
90.00		14.500	603.593	0.014	603.607
99.99		14.500	603.685	0.000	603.685
0.00		5.500	602.905	0.000	602.905
10.00		5.500	602.997	0.030	603.027
20.00		5.500	603.089	0.055	603.144
30.00		5.500	603.181	0.072	603.254
40.00	D OR G	5.500	603.273	0.081	603.354
50.00		5.500	603.365	0.080	603.445
60.00		5.500	603.457	0.070	603.527
70.00		5.500	603.549	0.053	603.603
80.00		5.500	603.641	0.033	603.674
90.00		5.500	603.733	0.013	603.747
99.99		5.500	603.825	0.000	603.825
0.00		-3.500	603.045	0.000	603.045
10.00		-3.500	603.137	0.028	603.166
20.00		-3.500	603.229	0.051	603.281
30.00		-3.500	603.321	0.068	603.390
40.00	E OR F	-3.500	603.413	0.076	603.490
50.00		-3.500	603.505	0.075	603.581
60.00		-3.500	603.597	0.066	603.663
70.00		-3.500	603.689	0.050	603.740
80.00		-3.500	603.781	0.031	603.813
90.00		-3.500	603.873	0.012	603.886
99.99		-3.500	603.965	0.000	603.965

SPAN 2

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	603.404	0.000	603.404
10.00		32.500	603.496	-0.006	603.489
20.00		32.500	603.588	-0.007	603.581
30.00		32.500	603.680	-0.004	603.675
40.00	A OR K	32.500	603.772	-0.001	603.770
50.00		32.500	603.864	-0.000	603.864
60.00		32.500	603.956	-0.001	603.954
70.00		32.500	604.048	-0.005	604.042
80.00		32.500	604.140	-0.008	604.131
90.00		32.500	604.232	-0.007	604.224
99.99		32.500	604.324	0.000	604.324
0.00		23.500	603.544	0.000	603.544
10.00		23.500	603.636	-0.006	603.629
20.00		23.500	603.728	-0.007	603.721
30.00		23.500	603.820	-0.004	603.816
40.00	B OR J	23.500	603.912	-0.001	603.911
50.00		23.500	604.004	0.000	604.004
60.00		23.500	604.096	-0.001	604.095
70.00		23.500	604.188	-0.005	604.183
80.00		23.500	604.280	-0.008	604.272
90.00		23.500	604.372	-0.008	604.364
99.99		23.500	604.464	0.000	604.464
0.00		14.500	603.685	0.000	603.685
10.00		14.500	603.777	-0.007	603.769
20.00		14.500	603.869	-0.007	603.861
30.00		14.500	603.961	-0.004	603.956
40.00	C OR H	14.500	604.053	-0.001	604.051
50.00		14.500	604.145	0.000	604.145
60.00		14.500	604.237	-0.001	604.235
70.00		14.500	604.329	-0.005	604.323
80.00		14.500	604.421	-0.008	604.412
90.00		14.500	604.513	-0.008	604.504
99.99		14.500	604.605	0.000	604.605
0.00		5.500	603.825	0.000	603.825
10.00		5.500	603.917	-0.006	603.910
20.00		5.500	604.009	-0.007	604.001
30.00		5.500	604.101	-0.004	604.097
40.00	D OR G	5.500	604.193	-0.001	604.192
50.00		5.500	604.285	0.000	604.285
60.00		5.500	604.377	-0.001	604.376
70.00		5.500	604.469	-0.005	604.464
80.00		5.500	604.561	-0.008	604.553
90.00		5.500	604.653	-0.008	604.645
99.99		5.500	604.745	0.000	604.745
0.00		-3.500	603.965	0.000	603.965
10.00		-3.500	604.057	-0.006	604.051
20.00		-3.500	604.149	-0.007	604.142
30.00		-3.500	604.241	-0.004	604.237
40.00	E OR F	-3.500	604.333	-0.001	604.332
50.00		-3.500	604.425	-0.000	604.425
60.00		-3.500	604.517	-0.001	604.516
70.00		-3.500	604.609	-0.005	604.604
80.00		-3.500	604.701	-0.008	604.693
90.00		-3.500	604.793	-0.007	604.786
99.99		-3.500	604.885	0.000	604.885

SPAN 3

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	604.324	0.000	604.324
10.00		32.500	604.416	0.013	604.430
20.00		32.500	604.508	0.032	604.540
30.00		32.500	604.600	0.051	604.651
40.00	A OR K	32.500	604.692	0.066	604.758
50.00		32.500	604.784	0.075	604.860
60.00		32.500	604.876	0.076	604.952
70.00		32.500	604.968	0.068	605.036
80.00		32.500	605.060	0.052	605.112
90.00		32.500	605.152	0.028	605.180
99.99		32.500	605.244	0.000	605.244
0.00		23.500	604.464	0.000	604.464
10.00		23.500	604.556	0.014	604.571
20.00		23.500	604.648	0.034	604.683
30.00		23.500	604.740	0.054	604.795
40.00	B OR J	23.500	604.832	0.071	604.904
50.00		23.500	604.924	0.081	605.005
60.00		23.500	605.016	0.082	605.098
70.00		23.500	605.108	0.073	605.182
80.00		23.500	605.200	0.055	605.256
90.00		23.500	605.292	0.030	605.323
99.99		23.500	605.384	0.000	605.384
0.00		14.500	604.605	0.000	604.605
10.00		14.500	604.697	0.015	604.712
20.00		14.500	604.789	0.036	604.825
30.00		14.500	604.881	0.057	604.939
40.00	C OR H	14.500	604.973	0.075	605.048
50.00		14.500	605.065	0.085	605.150
60.00		14.500	605.157	0.086	605.243
70.00		14.500	605.249	0.077	605.326
80.00		14.500	605.341	0.058	605.399
90.00		14.500	605.433	0.032	605.465
99.99		14.500	605.525	0.000	605.525
0.00		5.500	604.745	0.000	604.745
10.00		5.500	604.837	0.014	604.852
20.00		5.500	604.929	0.034	604.964
30.00		5.500	605.021	0.054	605.076
40.00	D OR G	5.500	605.113	0.071	605.185
50.00		5.500	605.205	0.081	605.286
60.00		5.500	605.297	0.082	605.379
70.00		5.500	605.389	0.073	605.462
80.00		5.500	605.481	0.055	605.537
90.00		5.500	605.573	0.030	605.604
99.99		5.500	605.665	0.000	605.665
0.00		-3.500	604.885	0.000	604.885
10.00		-3.500	604.977	0.013	604.991
20.00		-3.500	605.069	0.032	605.102
30.00		-3.500	605.161	0.051	605.213
40.00	E OR F	-3.500	605.253	0.066	605.320
50.00		-3.500	605.345	0.075	605.421
60.00		-3.500	605.437	0.076	605.514
70.00		-3.500	605.529	0.068	605.598
80.00		-3.500	605.621	0.052	605.674
90.00		-3.500	605.713	0.028	605.742
99.99		-3.500	605.805	0.000	605.805

NOTES: (FOR UNITS 1 THROUGH 4 & UNITS 6 THROUGH 9)

TABULATED DISTANCES FROM SUPPORT ARE MEASURED FROM THE CENTER LINE OF BEARINGS AT WEST END OF EACH SPAN ALONG CENTER LINE OF BEAMS.

TABULATED NORMAL OFFSETS ARE MEASURED FROM THE PROFILE GRADE LINE IN WESTBOUND OR EASTBOUND ROADWAY. POSITIVE OFFSETS ARE IN THE DIRECTION AWAY FROM CENTER LINE OF STRUCTURE AND NEGATIVE OFFSETS ARE IN THE DIRECTION TOWARD CENTER LINE OF STRUCTURE.

TABULATED ELEVATIONS ARE FOR TOP OF CONCRETE SLAB ALONG CENTER LINE OF BEAMS.

TABULATED DEAD LOAD DEFLECTION FOR THIS UNIT INCLUDE DEAD LOAD OF CONCRETE SLAB ONLY. DEFLECTIONS DUE TO SUPERIMPOSED DEAD LOAD ON COMPOSITE SECTION ARE INSIGNIFICANT.

WORK THIS SHEET WITH SHEETS NO. 8 AND 52.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. Y. HUO
DRAWN BY M. VADKERTY & H. de PERCZEL
CHECKED A. MILUNAS
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

SUPERSTRUCTURE - UNIT 1
DECK ELEVATIONS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	42
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

WESTBOUND OR EASTBOUND ROADWAY

SPAN 4

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	605.262	0.000	605.262
10.00		32.500	605.354	0.025	605.380
20.00		32.500	605.446	0.046	605.493
30.00		32.500	605.538	0.061	605.599
40.00	A OR K	32.500	605.630	0.067	605.698
50.00		32.500	605.722	0.065	605.788
60.00		32.500	605.814	0.056	605.870
70.00		32.500	605.906	0.041	605.947
80.00		32.500	605.998	0.023	606.022
90.00		32.500	606.090	0.008	606.099
99.99		32.500	606.182	0.000	606.182
0.00		23.500	605.403	0.000	605.403
10.00		23.500	605.495	0.027	605.522
20.00		23.500	605.587	0.050	605.637
30.00		23.500	605.679	0.066	605.745
40.00	B OR J	23.500	605.771	0.073	605.844
50.00		23.500	605.863	0.071	605.934
60.00		23.500	605.955	0.061	606.016
70.00		23.500	606.047	0.045	606.092
80.00		23.500	606.139	0.026	606.165
90.00		23.500	606.231	0.009	606.240
99.99		23.500	606.323	0.000	606.323
0.00		14.500	605.543	0.000	605.543
10.00		14.500	605.635	0.029	605.664
20.00		14.500	605.727	0.053	605.780
30.00		14.500	605.819	0.069	605.889
40.00	C OR H	14.500	605.911	0.077	605.988
50.00		14.500	606.003	0.074	606.078
60.00		14.500	606.095	0.064	606.159
70.00		14.500	606.187	0.047	606.234
80.00		14.500	606.279	0.027	606.307
90.00		14.500	606.371	0.010	606.381
99.99		14.500	606.463	0.000	606.463
0.00		5.500	605.683	0.000	605.683
10.00		5.500	605.775	0.027	605.803
20.00		5.500	605.867	0.050	605.918
30.00		5.500	605.959	0.066	606.025
40.00	D OR G	5.500	606.051	0.073	606.124
50.00		5.500	606.143	0.071	606.214
60.00		5.500	606.235	0.061	606.296
70.00		5.500	606.327	0.045	606.372
80.00		5.500	606.419	0.026	606.446
90.00		5.500	606.511	0.009	606.521
99.99		5.500	606.603	0.000	606.603
0.00		-3.500	605.824	0.000	605.824
10.00		-3.500	605.916	0.025	605.942
20.00		-3.500	606.008	0.046	606.055
30.00		-3.500	606.100	0.061	606.161
40.00	E OR F	-3.500	606.192	0.067	606.259
50.00		-3.500	606.284	0.065	606.349
60.00		-3.500	606.376	0.056	606.432
70.00		-3.500	606.468	0.041	606.509
80.00		-3.500	606.560	0.023	606.584
90.00		-3.500	606.652	0.008	606.660
99.99		-3.500	606.744	0.000	606.744

SPAN 5

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	606.182	0.000	606.182
10.00		32.500	606.274	-0.002	606.271
20.00		32.500	606.366	0.000	606.367
30.00		32.500	606.458	0.007	606.466
40.00	A OR K	32.500	606.550	0.014	606.564
50.00		32.500	606.642	0.018	606.661
60.00		32.500	606.734	0.018	606.753
70.00		32.500	606.826	0.015	606.841
80.00		32.500	606.918	0.008	606.927
90.00		32.500	607.010	0.002	607.013
99.99		32.500	607.102	0.000	607.102
0.00		23.500	606.323	0.000	606.323
10.00		23.500	606.415	-0.002	606.412
20.00		23.500	606.507	0.001	606.508
30.00		23.500	606.599	0.008	606.607
40.00	B OR J	23.500	606.691	0.015	606.707
50.00		23.500	606.783	0.020	606.803
60.00		23.500	606.875	0.020	606.895
70.00		23.500	606.967	0.016	606.983
80.00		23.500	607.059	0.009	607.068
90.00		23.500	607.151	0.002	607.153
99.99		23.500	607.243	0.000	607.243
0.00		14.500	606.463	0.000	606.463
10.00		14.500	606.555	-0.002	606.552
20.00		14.500	606.647	0.001	606.648
30.00		14.500	606.739	0.009	606.748
40.00	C OR H	14.500	606.831	0.016	606.848
50.00		14.500	606.923	0.021	606.944
60.00		14.500	607.015	0.021	607.037
70.00		14.500	607.107	0.017	607.124
80.00		14.500	607.199	0.010	607.209
90.00		14.500	607.291	0.002	607.294
99.99		14.500	607.383	0.000	607.383
0.00		5.500	606.603	0.000	606.603
10.00		5.500	606.695	-0.002	606.693
20.00		5.500	606.787	0.001	606.789
30.00		5.500	606.879	0.008	606.888
40.00	D OR G	5.500	606.971	0.015	606.987
50.00		5.500	607.063	0.020	607.084
60.00		5.500	607.155	0.020	607.176
70.00		5.500	607.247	0.016	607.264
80.00		5.500	607.339	0.009	607.349
90.00		5.500	607.431	0.002	607.434
99.99		5.500	607.523	0.000	607.523
0.00		-3.500	606.744	0.000	606.744
10.00		-3.500	606.836	-0.002	606.833
20.00		-3.500	606.928	0.000	606.929
30.00		-3.500	607.020	0.007	607.027
40.00	E OR F	-3.500	607.112	0.014	607.126
50.00		-3.500	607.204	0.018	607.222
60.00		-3.500	607.296	0.018	607.314
70.00		-3.500	607.388	0.015	607.403
80.00		-3.500	607.480	0.008	607.489
90.00		-3.500	607.572	0.002	607.574
99.99		-3.500	607.664	0.000	607.664

SPAN 6

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	607.102	0.000	607.102
10.00		32.500	607.194	0.002	607.197
20.00		32.500	607.286	0.008	607.295
30.00		32.500	607.378	0.014	607.393
40.00	A OR K	32.500	607.470	0.018	607.488
50.00		32.500	607.562	0.017	607.580
60.00		32.500	607.654	0.013	607.667
70.00		32.500	607.746	0.006	607.752
80.00		32.500	607.838	0.000	607.837
90.00		32.500	607.930	-0.004	607.926
99.99		32.500	608.022	0.000	608.022
0.00		23.500	607.243	0.000	607.243
10.00		23.500	607.335	0.002	607.337
20.00		23.500	607.427	0.009	607.436
30.00		23.500	607.519	0.015	607.535
40.00	B OR J	23.500	607.611	0.019	607.630
50.00		23.500	607.703	0.019	607.722
60.00		23.500	607.795	0.014	607.810
70.00		23.500	607.887	0.007	607.894
80.00		23.500	607.979	-0.000	607.978
90.00		23.500	608.071	-0.004	608.067
99.99		23.500	608.163	0.000	608.163
0.00		14.500	607.383	0.000	607.383
10.00		14.500	607.475	0.002	607.478
20.00		14.500	607.567	0.009	607.577
30.00		14.500	607.659	0.016	607.676
40.00	C OR H	14.500	607.751	0.020	607.772
50.00		14.500	607.843	0.020	607.864
60.00		14.500	607.935	0.015	607.951
70.00		14.500	608.027	0.007	608.035
80.00		14.500	608.119	-0.000	608.119
90.00		14.500	608.211	-0.004	608.207
99.99		14.500	608.303	0.000	608.303
0.00		5.500	607.523	0.000	607.523
10.00		5.500	607.615	0.002	607.618
20.00		5.500	607.707	0.009	607.717
30.00		5.500	607.799	0.015	607.815
40.00	D OR G	5.500	607.891	0.019	607.911
50.00		5.500	607.983	0.019	608.003
60.00		5.500	608.075	0.014	608.090
70.00		5.500	608.167	0.007	608.175
80.00		5.500	608.259	-0.000	608.259
90.00		5.500	608.351	-0.004	608.347
99.99		5.500	608.443	0.000	608.443
0.00		-3.500	607.664	0.000	607.664
10.00		-3.500	607.756	0.002	607.758
20.00		-3.500	607.848	0.008	607.856
30.00		-3.500	607.940	0.014	607.954
40.00	E OR F	-3.500	608.032	0.018	608.050
50.00		-3.500	608.124	0.017	608.141
60.00		-3.500	608.216	0.013	608.229
70.00		-3.500	608.308	0.006	608.314
80.00		-3.500	608.400	0.000	608.399
90.00		-3.500	608.492	-0.004	608.488
99.99		-3.500	608.584	0.000	608.584

SPAN 7

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	608.022	0.000	608.022
10.00		32.500	608.114	0.009	608.124
20.00		32.500	608.206	0.024	608.231
30.00		32.500	608.298	0.041	608.340
40.00	A OR K	32.500	608.390	0.056	608.447
50.00		32.500	608.482	0.065	608.548
60.00		32.500	608.574	0.067	608.642
70.00		32.500	608.666	0.060	608.727
80.00		32.500	608.758	0.046	608.805
90.00		32.500	608.850	0.025	608.875
99.99		32.500	608.942	0.000	608.942
0.00		23.500	608.163	0.000	608.163
10.00		23.500	608.255	0.010	608.266
20.00		23.500	608.347	0.027	608.374
30.00		23.500	608.439	0.045	608.484
40.00	B OR J	23.500	608.531	0.061	608.592
50.00		23.500	608.623	0.071	608.694
60.00		23.500	608.715	0.073	608.788
70.00		23.500	608.807	0.065	608.872
80.00		23.500	608.899	0.050	608.949
90.00		23.500	608.991	0.027	609.018
99.99		23.500	609.083	0.000	609.083
0.00		14.500	608.303	0.000	608.303
10.00		14.500	608.395	0.011	608.406
20.00		14.500	608.487	0.028	608.516
30.00		14.500	608.579	0.048	608.627
40.00	C OR H	14.500	608.671	0.064	608.736
50.00		14.500	608.763	0.075	608.838
60.00		14.500	608.855	0.076	608.932
70.00		14.500	608.947	0.069	609.016
80.00		14.500	609.039	0.052	609.092
90.00		14.500	609.131	0.028	609.160
99.99		14.500	609.223	0.000	609.223
0.00		5.500	608.443	0.000	608.443
10.00		5.500	608.535	0.010	608.546
20.00		5.500	608.627	0.027	608.655
30.00		5.500	608.719	0.045	608.765
40.00	D OR G	5.500	608.811	0.061	608.873
50.00		5.500	608.903	0.071	608.975
60.00		5.500	608.995	0.073	609.068
70.00		5.500	609.087	0.065	609.153
80.00		5.500	609.179	0.050	609.229
90.00		5.500	609.271	0.027	609.299
99.99		5.500	609.363	0.000	609.363
0.00		-3.500	608.584	0.000	608.584
10.00		-3.500	608.676	0.009	608.686
20.00		-3.500	608.768	0.024	608.793
30.00		-3.500	608.860	0.041	608.902
40.00	E OR F	-3.500	608.952	0.056	609.008
50.00		-3.500	609.044	0.065	609.110
60.00		-3.500	609.136	0.067	609.203
70.00		-3.500	609.228	0.060	609.289
80.00		-3.500	609.320	0.046	609.366
90.00		-3.500	609.412	0.025	609.437
99.99		-3.500	609.504	0.000	609.504

NOTES:

TABULATED DEAD LOAD DEFLECTIONS FOR THIS UNIT INCLUDE DEAD LOAD OF SLAB ONLY. DEFLECTIONS DUE TO SUPERIMPOSED DEAD LOAD ON COMPOSITE SECTION ARE INSIGNIFICANT.

FOR ADDITIONAL NOTES, SEE SHEET NO. 41.

WORK THIS SHEET WITH SHEETS NO. 9 AND 53.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. Y. HUO
DRAWN BY M. VADKERTY & H. de PERCZEL
CHECKED A. MILUNAS
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

SUPERSTRUCTURE - UNIT 2
DECK ELEVATIONS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	43
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

WESTBOUND OR EASTBOUND ROADWAY

SPAN 8

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	608.961	0.000	608.961
9.99		32.500	609.053	0.053	609.106
19.99		32.500	609.145	0.101	609.246
29.99		32.500	609.237	0.141	609.378
39.99		32.500	609.329	0.170	609.499
49.99		32.500	609.421	0.190	609.611
59.99		32.500	609.513	0.202	609.715
69.99	A OR K	32.500	609.605	0.202	609.807
79.99		32.500	609.697	0.193	609.890
89.99		32.500	609.789	0.175	609.964
99.99		32.500	609.881	0.150	610.031
109.99		32.500	609.973	0.118	610.091
119.99		32.500	610.065	0.084	610.149
129.99		32.500	610.157	0.050	610.207
139.99		32.500	610.249	0.021	610.270
149.99		32.500	610.341	0.000	610.341
0.00		23.500	609.101	0.000	609.101
9.99		23.500	609.193	0.055	609.248
19.99		23.500	609.285	0.105	609.390
29.99		23.500	609.377	0.146	609.524
39.99		23.500	609.469	0.177	609.646
49.99		23.500	609.561	0.198	609.760
59.99		23.500	609.653	0.210	609.863
69.99	B OR J	23.500	609.745	0.210	609.955
79.99		23.500	609.837	0.200	610.038
89.99		23.500	609.929	0.182	610.111
99.99		23.500	610.021	0.155	610.176
109.99		23.500	610.113	0.122	610.235
119.99		23.500	610.205	0.086	610.291
129.99		23.500	610.297	0.050	610.348
139.99		23.500	610.389	0.021	610.410
149.99		23.500	610.481	0.000	610.481
0.00		14.500	609.241	0.000	609.241
9.99		14.500	609.333	0.057	609.391
19.99		14.500	609.425	0.110	609.535
29.99		14.500	609.517	0.153	609.671
39.99		14.500	609.609	0.185	609.795
49.99		14.500	609.701	0.207	609.909
59.99		14.500	609.793	0.220	610.013
69.99	C OR H	14.500	609.885	0.220	610.105
79.99		14.500	609.977	0.209	610.187
89.99		14.500	610.069	0.190	610.260
99.99		14.500	610.161	0.162	610.324
109.99		14.500	610.253	0.127	610.381
119.99		14.500	610.345	0.090	610.435
129.99		14.500	610.437	0.053	610.491
139.99		14.500	610.529	0.022	610.552
149.99		14.500	610.621	0.000	610.621
0.00		5.500	609.382	0.000	609.382
9.99		5.500	609.474	0.055	609.529
19.99		5.500	609.566	0.105	609.671
29.99		5.500	609.658	0.146	609.805
39.99		5.500	609.750	0.177	609.927
49.99		5.500	609.842	0.198	610.040
59.99		5.500	609.934	0.210	610.144
69.99	D OR G	5.500	610.026	0.210	610.236
79.99		5.500	610.118	0.200	610.318
89.99		5.500	610.210	0.182	610.392
99.99		5.500	610.302	0.155	610.457
109.99		5.500	610.394	0.122	610.516
119.99		5.500	610.486	0.086	610.572
129.99		5.500	610.578	0.050	610.629
139.99		5.500	610.670	0.021	610.691
149.99		5.500	610.762	0.000	610.762
0.00		-3.500	609.522	0.000	609.522
9.99		-3.500	609.614	0.053	609.667
19.99		-3.500	609.706	0.101	609 808
29.99		-3.500	609.798	0.141	609.940
39.99		-3.500	609.890	0.170	610.061
49.99		-3.500	609.982	0.190	610.173
59.99		-3.500	610.074	0.202	610.277
69.99	E OR F	-3.500	610.166	0.202	610.368
79.99		-3.500	610.258	0.193	610.452
89.99		-3.500	610.350	0.175	610.525
99.99		-3.500	610.442	0.150	610.593
109.99		-3.500	610.534	0.118	610 653
119.99		-3.500	610.626	0.084	610.711
129.99		-3.500	610.718	0.050	610.768
139.99		-3.500	610.810	0.021	610.832
149.99		-3.500	610.902	0.000	610.902

SPAN 9

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	610.341	0.000	610.341
9.99		32.500	610.433	-0.012	610.420
19.99		32.500	610.525	-0.016	610.508
29.99		32.500	610.617	-0.015	610.601
39.99		32.500	610.709	-0.009	610.699
49.99		32.500	610.801	-0.002	610.798
59.99		32.500	610.893	0.002	610.895
69.99	A OR K	32.500	610.985	0.005	610.990
79.99		32.500	611.077	0.005	611.082
89.99		32.500	611.169	0.002	611.171
99.99		32.500	611.261	-0.004	611.256
109.99		32.500	611.353	-0.010	611.342
119.99		32.500	611.445	-0.016	611.429
129.99		32.500	611.537	-0.017	611.519
139.99		32.500	611.629	-0.012	611.616
149.99		32.500	611.721	0.000	611.721
0.00		23.500	610.481	0.000	610.481
9.99		23.500	610.573	-0.013	610.560
19.99		23.500	610.665	-0.018	610.646
29.99		23.500	610.757	-0.018	610.738
39.99		23.500	610.849	-0.013	610.836
49.99		23.500	610.941	-0.006	610.934
59.99		23.500	611.033	-0.001	611.032
69.99	B OR J	23.500	611.125	0.002	611.127
79.99		23.500	611.217	0.002	611.219
89.99		23.500	611.309	-0.000	611.308
99.99		23.500	611.401	-0.006	611.394
109.99		23.500	611.493	-0.013	611.480
119.99		23.500	611.585	-0.018	611.567
129.99		23.500	611.677	-0.018	611.658
139.99		23.500	611.769	-0.013	611.756
149.99		23.500	611.861	0.000	611.861
0.00		14.500	610.621	0.000	610.621
9.99		14.500	610.713	-0.013	610.700
19.99		14.500	610.805	-0.019	610.786
29.99		14.500	610.897	-0.019	610.878
39.99		14.500	610.989	-0.014	610.975
49.99		14.500	611.081	-0.007	611.074
59.99		14.500	611.173	-0.001	611.172
69.99	C OR H	14.500	611.265	0.001	611.267
79.99		14.500	611.357	0.001	611.359
89.99		14.500	611.449	-0.001	611.448
99.99		14.500	611.541	-0.007	611.534
109.99		14.500	611.633	-0.013	611.619
119.99		14.500	611.725	-0.019	611.706
129.99		14.500	611.817	-0.019	611.798
139.99		14.500	611.909	-0.013	611.896
149.99		14.500	612.001	0.000	612.001
0.00		5.500	610.762	0.000	610.762
9.99		5.500	610.854	-0.013	610.841
19.99		5.500	610.946	-0.018	610.927
29.99		5.500	611.038	-0.018	611.019
39.99		5.500	611.130	-0.013	611.117
49.99		5.500	611.222	-0.006	611.215
59.99		5.500	611.314	-0.001	611.313
69.99	D OR G	5.500	611.406	0.002	611.408
79.99		5.500	611.498	0.002	611.500
89.99		5.500	611.590	-0.000	611.589
99.99		5.500	611.682	-0.006	611.675
109.99		5.500	611.774	-0.013	611.761
119.99		5.500	611.866	-0.018	611.847
129.99		5.500	611.958	-0.018	611.939
139.99		5.500	612.050	-0.013	612.037
149.99		5.500	612.142	0.000	612.142
0.00		-3.500	610.902	0.000	610.902
9.99		-3.500	610.994	-0.012	610.982
19.99		-3.500	611.086	-0.016	611.069
29.99		-3.500	611.178	-0.015	611.162
39.99		-3.500	611.270	-0.009	611.260
49.99		-3.500	611.362	-0.002	611.359
59.99		-3.500	611.454	0.002	611.456
69.99	E OR F	-3.500	611.546	0.005	611.552
79.99		-3.500	611.638	0.005	611.643
89.99		-3.500	611.730	0.002	611.733
99.99		-3.500	611.822	-0.004	611.818
109.99		-3.500	611.914	-0.010	611.904
119.99		-3.500	612.006	-0.016	611.990
129.99		-3.500	612.098	-0.017	612.081
139.99		-3.500	612.190	-0.012	612.177
149.99		-3.500	612.282	0.000	612.282

SPAN 10

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	611.721	0.000	611.721
9.99		32.500	611.813	0.020	611.833
19.99		32.500	611.905	0.049	611.954
29.99		32.500	611.997	0.082	612.079
39.99		32.500	612.089	0.117	612.206
49.99		32.500	612.181	0.148	612.329
59.99		32.500	612.273	0.173	612.446
69.99	A OR K	32.500	612.365	0.190	612.555
79.99		32.500	612.457	0.199	612.656
89.99		32.500	612.549	0.199	612.748
99.99		32.500	612.641	0.187	612.828
109.99		32.500	612.733	0.161	612.894
119.99		32.500	612.825	0.138	612.963
129.99		32.500	612.917	0.098	613.015
139.99		32.500	613.009	0.051	613.060
149.99		32.500	613.101	0.000	613.101
0.00		23.500	611.861	0.000	611.861
9.99		23.500	611.953	0.021	611.974
19.99		23.500	612.045	0.051	612.096
29.99		23.500	612.137	0.086	612.224
39.99		23.500	612.229	0.123	612.352
49.99		23.500	612.321	0.156	612.477
59.99		23.500	612.413	0.182	612.596
69.99	B OR J	23.500	612.505	0.201	612.706
79.99		23.500	612.597	0.210	612.807
89.99		23.500	612.689	0.210	612.899
99.99		23.500	612.781	0.198	612.979
109.99		23.500	612.873	0.176	613.049
119.99		23.500	612.965	0.145	613.110
129.99		23.500	613.057	0.103	613.160
139.99		23.500	613.149	0.053	613.203
149.99		23.500	613.241	0.000	613.241
0.00		14.500	612.001	0.000	612.001
9.99		14.500	612.093	0.022	612.116
19.99		14.500	612.185	0.053	612.239
29.99		14.500	612.277	0.090	612.368
39.99		14.500	612.369	0.128	612.498
49.99		14.500	612.461	0.163	612.625
59.99		14.500	612.553	0.191	612.745
69.99	C OR H	14.500	612.645	0.210	612.856
79.99		14.500	612.737	0.220	612.957
89.99		14.500	612.829	0.219	613.049
99.99		14.500	612.921	0.207	613.128
109.99		14.500	613.013	0.184	613.198
119.99		14.500	613.105	0.152	613.258
129.99		14.500	613.197	0.108	613.305
139.99		14.500	613.289	0.056	613.346
149.99		14.500	613.381	0.000	613.381
0.00		5.500	612.142	0.000	612.142
9.99		5.500	612.234	0.021	612.255
19.99		5.500	612.326	0.051	612.377
29.99		5.500	612.418	0.086	612.505
39.99		5.500	612.510	0.123	612.633
49.99		5.500	612.602	0.156	612.758
59.99		5.500	612.694	0.182	612.877
69.99	D OR G	5.500	612.786	0.201	612.987
79.99		5.500	612.878	0.210	613.088
89.99		5.500	612.970	0.210	613.180
99.99		5.500	613.062	0.198	613.260
109.99		5.500	613.154	0.176	613.330
119.99		5.500	613.246	0.145	613.391
129.99		5.500	613.338	0.103	613.441
139.99		5.500	613.430	0.053	613.484
149.99		5.500	613.522	0.000	613.522
0.00		-3.500	612.282	0.000	612.282
9.99		-3.500	612.374	0.020	612.395
19.99		-3.500	612.466	0.049	612.516
29.99		-3.500	612.558	0.082	612.641
39.99		-3.500	612.650	0.117	612.768
49.99		-3.500	612.742	0.148	612.890
59.99		-3.500	612.834	0.173	613.007
69.99	E OR F	-3.500	612.926	0.190	613.117
79.99		-3.500	613.018	0.199	613.218
89.99		-3.500	613.110	0.199	613.309
99.99		-3.500	613.202	0.187	613.389
109.99		-3.500	613.294	0.161	613.455
119.99		-3.500	613.386	0.138	613.525
129.99		-3.500	613.478	0.098	613.577
139.99		-3.500	613.570	0.051	613.622
149.99		-3.500	613.662	0.000	613.662

NOTES:

TABULATED DEAD LOAD DEFLECTIONS FOR THIS UNIT INCLUDE DEAD LOAD OF CONCRETE SLAB, PARAPETS AND CURBS AND WEARING SURFACE.

FOR ADDITIONAL NOTES, SEE SHEET NO. 41.

WORK THIS SHEET WITH SHEETS NO. 10 AND 54.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. Y. HUO
DRAWN BY M. VADKERTY & H. de PERCZEL
CHECKED A. MILUNAS
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

SUPERSTRUCTURE - UNIT 3
DECK ELEVATIONS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

WESTBOUND OR EASTBOUND ROADWAY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	44
FED. ROAD DIST. NO.	FED. AID PROJECT I-280			

SPAN 11

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	613.119	0.000	613.119
9.99		32.500	613.211	0.072	613.284
19.99		32.500	613.303	0.140	613.443
29.99		32.500	613.395	0.198	613.593
39.99		32.500	613.487	0.249	613.737
49.99		32.500	613.579	0.292	613.871
59.99		32.500	613.671	0.326	613.998
69.99		32.500	613.763	0.350	614.114
79.99		32.500	613.855	0.364	614.219
89.99	A OR K	32.500	613.947	0.367	614.314
99.99		32.500	614.039	0.359	614.398
109.99		32.500	614.131	0.342	614.473
119.99		32.500	614.223	0.315	614.539
129.99		32.500	614.315	0.281	614.596
139.99		32.500	614.407	0.241	614.649
149.99		32.500	614.499	0.196	614.696
159.99		32.500	614.591	0.150	614.742
169.99		32.500	614.683	0.104	614.787
179.99		32.500	614.775	0.062	614.837
189.99		32.500	614.867	0.026	614.893
0.00		23.500	613.259	0.000	613.259
9.99		23.500	613.351	0.076	613.428
19.99		23.500	613.443	0.147	613.591
29.99		23.500	613.535	0.208	613.744
39.99		23.500	613.627	0.262	613.890
49.99		23.500	613.719	0.308	614.027
59.99		23.500	613.811	0.343	614.155
69.99		23.500	613.903	0.369	614.272
79.99		23.500	613.995	0.383	614.379
89.99	B OR J	23.500	614.087	0.386	614.473
99.99		23.500	614.179	0.378	614.557
109.99		23.500	614.271	0.359	614.630
119.99		23.500	614.363	0.331	614.695
129.99		23.500	614.455	0.295	614.751
139.99		23.500	614.547	0.253	614.801
149.99		23.500	614.639	0.206	614.846
159.99		23.500	614.731	0.157	614.889
169.99		23.500	614.823	0.109	614.933
179.99		23.500	614.915	0.065	614.981
189.99		23.500	615.007	0.027	615.035
0.00		14.500	613.400	0.000	613.400
9.99		14.500	613.492	0.079	613.571
19.99		14.500	613.584	0.154	613.738
29.99		14.500	613.676	0.218	613.894
39.99		14.500	613.768	0.274	614.042
49.99		14.500	613.860	0.322	614.182
59.99		14.500	613.952	0.359	614.311
69.99		14.500	614.044	0.385	614.430
79.99		14.500	614.136	0.400	614.536
89.99	C OR H	14.500	614.228	0.403	614.631
99.99		14.500	614.320	0.395	614.715
109.99		14.500	614.412	0.376	614.788
119.99		14.500	614.504	0.346	614.851
129.99		14.500	614.596	0.309	614.905
139.99		14.500	614.688	0.264	614.953
149.99		14.500	614.780	0.215	614.996
159.99		14.500	614.872	0.164	615.036
169.99		14.500	614.964	0.114	615.078
179.99		14.500	615.056	0.068	615.124
189.99		14.500	615.148	0.028	615.177
0.00		5.500	613.540	0.000	613.540
9.99		5.500	613.632	0.076	613.708
19.99		5.500	613.724	0.147	613.871
29.99		5.500	613.816	0.208	614.025
39.99		5.500	613.908	0.262	614.171
49.99		5.500	614.000	0.308	614.308
59.99		5.500	614.092	0.343	614.436
69.99		5.500	614.184	0.369	614.553
79.99		5.500	614.276	0.383	614.659
89.99	D OR G	5.500	614.368	0.386	614.754
99.99		5.500	614.460	0.378	614.838
109.99		5.500	614.552	0.359	614.912
119.99		5.500	614.644	0.331	614.976
129.99		5.500	614.736	0.295	615.032
139.99		5.500	614.828	0.253	615.082
149.99		5.500	614.920	0.206	615.127
159.99		5.500	615.012	0.157	615.170
169.99		5.500	615.104	0.109	615.213
179.99		5.500	615.196	0.065	615.262
189.99		5.500	615.288	0.027	615.316
0.00		-3.500	613.681	0.000	613.681
9.99		-3.500	613.773	0.072	613.845
19.99		-3.500	613.865	0.140	614.005
29.99		-3.500	613.957	0.198	614.155
39.99		-3.500	614.049	0.249	614.298
49.99		-3.500	614.141	0.292	614.433
59.99		-3.500	614.233	0.326	614.559
69.99		-3.500	614.325	0.350	614.675
79.99		-3.500	614.417	0.364	614.781
89.99	E OR F	-3.500	614.509	0.367	614.876
99.99		-3.500	614.601	0.359	614.960
109.99		-3.500	614.693	0.342	615.035
119.99		-3.500	614.785	0.315	615.100
129.99		-3.500	614.877	0.281	615.158
139.99		-3.500	614.969	0.241	615.210
149.99		-3.500	615.061	0.196	615.256
159.99		-3.500	615.153	0.150	615.303
169.99		-3.500	615.245	0.104	615.349
179.99		-3.500	615.337	0.062	615.395
189.99		-3.500	615.429	0.026	615.455

SPAN 12

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	614.959	0.000	614.959
9.99		32.500	615.051	-0.018	615.033
19.99		32.500	615.143	-0.026	615.116
29.99		32.500	615.235	-0.028	615.207
39.99		32.500	615.326	-0.022	615.304
49.99		32.500	615.417	-0.013	615.403
59.99		32.500	615.505	-0.001	615.504
69.99		32.500	615.593	0.010	615.603
79.99		32.500	615.678	0.020	615.698
89.99	A OR K	32.500	615.763	0.026	615.789
99.99		32.500	615.846	0.029	615.876
109.99		32.500	615.928	0.026	615.945
119.99		32.500	616.008	0.020	616.028
129.99		32.500	616.087	0.011	616.098
139.99		32.500	616.164	-0.001	616.163
149.99		32.500	616.240	-0.012	616.228
159.99		32.500	616.315	-0.022	616.292
169.99		32.500	616.388	-0.028	616.360
179.99		32.500	616.460	-0.026	616.434
189.99		32.500	616.531	-0.018	616.513
0.00		23.500	615.099	0.000	615.099
9.99		23.500	615.191	-0.019	615.172
19.99		23.500	615.283	-0.028	615.255
29.99		23.500	615.375	-0.030	615.345
39.99		23.500	615.467	-0.025	615.442
49.99		23.500	615.557	-0.015	615.542
59.99		23.500	615.646	-0.003	615.642
69.99		23.500	615.733	0.008	615.741
79.99		23.500	615.819	0.018	615.837
89.99	B OR J	23.500	615.903	0.024	615.928
99.99		23.500	615.986	0.027	616.014
109.99		23.500	616.068	0.025	616.093
119.99		23.500	616.148	0.018	616.167
129.99		23.500	616.227	0.008	616.236
139.99		23.500	616.305	-0.003	616.302
149.99		23.500	616.381	-0.014	616.366
159.99		23.500	616.456	-0.025	616.431
169.99		23.500	616.529	-0.030	616.499
179.99		23.500	616.601	-0.028	616.572
189.99		23.500	616.671	-0.019	616.652
0.00		14.500	615.240	0.000	615.240
9.99		14.500	615.332	-0.020	615.311
19.99		14.500	615.424	-0.030	615.394
29.99		14.500	615.516	-0.032	615.483
39.99		14.500	615.607	-0.026	615.580
49.99		14.500	615.697	-0.016	615.681
59.99		14.500	615.786	-0.004	615.782
69.99		14.500	615.873	0.008	615.882
79.99		14.500	615.959	0.018	615.978
89.99	C OR H	14.500	616.044	0.025	616.069
99.99		14.500	616.127	0.027	616.155
109.99		14.500	616.208	0.025	616.234
119.99		14.500	616.289	0.018	616.307
129.99		14.500	616.368	0.008	616.376
139.99		14.500	616.445	-0.003	616.441
149.99		14.500	616.521	-0.016	616.505
159.99		14.500	616.596	-0.026	616.570
169.99		14.500	616.669	-0.031	616.637
179.99		14.500	616.741	-0.029	616.711
189.99		14.500	616.812	-0.020	616.791
0.00		5.500	615.380	0.000	615.380
9.99		5.500	615.472	-0.019	615.452
19.99		5.500	615.564	-0.028	615.536
29.99		5.500	615.656	-0.030	615.626
39.99		5.500	615.748	-0.025	615.722
49.99		5.500	615.838	-0.015	615.822
59.99		5.500	615.926	-0.003	615.923
69.99		5.500	616.014	0.008	616.022
79.99		5.500	616.100	0.018	616.118
89.99	D OR G	5.500	616.184	0.024	616.209
99.99		5.500	616.267	0.027	616.294
109.99		5.500	616.349	0.025	616.374
119.99		5.500	616.429	0.018	616.448
129.99		5.500	616.508	0.008	616.517
139.99		5.500	616.586	-0.003	616.583
149.99		5.500	616.662	-0.014	616.647
159.99		5.500	616.736	-0.025	616.711
169.99		5.500	616.810	-0.030	616.779
179.99		5.500	616.882	-0.028	616.853
189.99		5.500	616.952	-0.019	616.932
0.00		-3.500	615.521	0.000	615.521
9.99		-3.500	615.613	-0.018	615.594
19.99		-3.500	615.705	-0.026	615.678
29.99		-3.500	615.797	-0.028	615.768
39.99		-3.500	615.888	-0.022	615.866
49.99		-3.500	615.978	-0.013	615.967
59.99		-3.500	616.067	-0.001	616.065
69.99		-3.500	616.154	0.010	616.165
79.99		-3.500	616.240	0.020	616.260
89.99	E OR F	-3.500	616.325	0.026	616.352
99.99		-3.500	616.408	0.029	616.437
109.99		-3.500	616.489	0.026	616.516
119.99		-3.500	616.570	0.020	616.590
129.99		-3.500	616.648	0.011	616.660
139.99		-3.500	616.726	-0.001	616.725
149.99		-3.500	616.802	-0.012	616.789
159.99		-3.500	616.877	-0.022	616.854
169.99		-3.500	616.950	-0.028	616.921
179.99		-3.500	617.022	-0.026	616.996
189.99		-3.500	617.092	-0.018	617.074

SPAN 13

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	616.600	0.000	616.600
9.99		32.500	616.668	0.026	616.694
19.99		32.500	616.734	0.063	616.798
29.99		32.500	616.799	0.105	616.904
39.99		32.500	616.862	0.151	617.014
49.99		32.500	616.924	0.198	617.122
59.99		32.500	616.985	0.243	617.229
69.99		32.500	617.044	0.283	617.328
79.99		32.500	617.102	0.317	617.426
89.99	A OR K	32.500	617.159	0.343	617.502
99.99		32.500	617.214	0.360	617.575
109.99		32.500	617.268	0.367	617.635
119.99		32.500	617.320	0.364	617.684
129.99		32.500	617.371	0.350	617.721
139.99		32.500	617.420	0.325	617.745
149.99		32.500	617.468	0.290	617.759
159.99		32.500	617.515	0.245	617.760
169.99		32.500	617.560	0.193	617.754
179.99		32.500	617.604	0.133	617.738
189.99		32.500	617.647	0.069	617.716
199.99		32.500	617.688	0.000	617.688
0.00		23.500	616.740	0.000	616.740
9.99		23.500	616.808	0.027	616.836
19.99		23.500	616.874	0.065	616.940
29.99		23.500	616.939	0.109	617.048
39.99		23.500	617.003	0.156	617.160
49.99		23.500	617.065	0.205	617.270
59.99		23.500	617.125	0.252	617.377
69.99		23.500	617.185	0.294	617.479
79.99		23.500	617.243	0.329	617.572
89.99	B OR J	23.500	617.299	0.357	617.656
99.99		23.500	617.354	0.375	617.730
109.99		23.500	617.408	0.383	617.791
119.99		23.500	617.460	0.380	617.840
129.99		23.500	617.511	0.366	617.877
139.99		23.500	617.561	0.340	617.901
149.99		23.500	617.609	0.305	617.914
159.99		23.500	617.655	0.259	617.915
169.99		23.500	617.701	0.206	617.907
179.99		23.500	617.745	0.145	617.890
189.99		23.500	617.787	0.079	617.866
199.99		23.500	617.828	0.008	617.837
0.00		14.500	616.881	0.000	616.881
9.99		14.500	616.948	0.028	616.977
19.99		14.500	617.015	0.068	617.083
29.99		14.500	617.080	0.114	617.194
39.99		14.500	617.143	0.164	617.308
49.99		14.500	617.205	0.215	617.421
59.99		14.500	617.266	0.264	617.530
69.99		14.500	617.325	0.308	617.634
79.99		14.500	617.383	0.346	617.729
89.99	C OR H	14.500	617.440	0.375	617.815
99.99		14.500	617.495	0.394	617.889
109.99		14.500	617.548	0.402	617.951
119.99		14.500	617.601	0.399	618.000
129.99		14.500	617.651	0.384	618.036
139.99		14.500	617.701	0.358	618.060
149.99		14.500	617.749	0.321	618.071
159.99		14.500	617.796	0.274	618.070
169.99		14.500	617.841	0.218	618.059
179.99		14.500	617.885	0.154	618.040
189.99		14.500	617.927	0.085	618.013
199.99		14.500	617.969	0.012	617.981
0.00		5.500	617.021	0.000	617.021
9.99		5.500	617.089	0.027	617.116
19.99		5.500	617.155	0.065	617.220
29.99		5.500	617.220	0.109	617.329
39.99		5.500	617.283	0.156	617.440
49.99		5.500	617.346	0.205	617.551
59.99		5.500	617.406	0.252	617.658
69.99		5.500	617.466	0.294	617.760
79.99		5.500	617.523	0.329	617.853
89.99	D OR G	5.500	617.580	0.357	617.937
99.99		5.500	617.635	0.375	618.010
109.99		5.500	617.689	0.383	618.072
119.99		5.500	617.741	0.380	618.121
129.99		5.500	617.792	0.366	618.158
139.99		5.500	617.841	0.340	618.182
149.99		5.500	617.889	0.305	618.195
159.99		5.500	617.936	0.259	618.196
169.99		5.500	617.981	0.206	618.188
179.99		5.500	618.025	0.145	618.171
189.99		5.500	618.068	0.079	618.147
199.99		5.500	618.109	0.008	618.118
0.00		-3.500	617.162	0.000	617.162
9.99		-3.500	617.229	0.026	617.256
19.99		-3.500	617.295	0.063	617.359
29.99		-3.500	617.360	0.105	617.465
39.99		-3.500	617.424	0.151	617.576
49.99		-3.500	617.486	0.198	617.684
59.99		-3.500	617.547	0.243	617.790
69.99		-3.500	617.606	0.283	617.889
79.99		-3.500	617.664	0.317	617.981
89.99	E OR F	-3.500	617.720	0.343	618.064
99.99		-3.500	617.775	0.360	618.136
109.99		-3.500	617.829	0.367	618.197
119.99		-3.500	617.881	0.364	618.246
129.99		-3.500	617.932	0.350	618.282
139.99		-3.500	617.982	0.325	618.307
149.99		-3.500	618.030	0.290	618.320
159.99		-3.500	618.077	0.245	618.322
169.99		-3.500	618.122	0.193	618.316
179.99		-3.500	618.166	0.133	618.299
189.99		-3.500	618.208	0.069	618.278
199.99		-3.500	618.249	0.000	618.249

NOTES:

TABULATED DEAD LOAD DEFLECTIONS FOR THIS UNIT INCLUDE DEAD LOAD OF CONCRETE SLAB, PARAPETS AND CURBS AND WEARING SURFACE.

FOR ADDITIONAL NOTES, SEE SHEET NO. 41.

WORK THIS SHEET WITH SHEETS NO. 11 AND 55.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. Y. HUO
DRAWN BY M. VADKERTY & H. de PERCZEL
CHECKED A. MILUNAS
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

SUPERSTRUCTURE - UNIT 4
DECK ELEVATIONS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

WESTBOUND OR EASTBOUND ROADWAY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-ID	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	45
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

SPAN L_0 - L_1

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	617.702	0.003	617.705
10.00		32.500	617.741	0.023	617.765
20.00	S1	32.500	617.779	0.043	617.823
30.00		32.500	617.815	0.059	617.875
37.99		32.500	617.843	0.072	617.916
0.00		25.250	617.815	0.007	617.822
10.00		25.250	617.854	0.031	617.885
20.00	S2	25.250	617.892	0.054	617.946
30.00		25.250	617.928	0.072	618.001
37.99		25.250	617.956	0.087	618.044
0.00		18.000	617.928	0.011	617.939
10.00		18.000	617.967	0.037	618.005
20.00	S3	18.000	618.005	0.062	618.068
30.00		18.000	618.041	0.083	618.125
37.99		18.000	618.069	0.100	618.170
0.00		10.750	618.041	0.014	618.055
10.00		10.750	618.080	0.042	618.122
20.00	S4	10.750	618.118	0.069	618.187
30.00		10.750	618.154	0.091	618.246
37.99		10.750	618.183	0.109	618.292
0.00		3.500	618.154	0.016	618.171
10.00		3.500	618.193	0.045	618.239
20.00	S5	3.500	618.231	0.073	618.305
30.00		3.500	618.268	0.097	618.365
37.99		3.500	618.296	0.116	618.413
0.00		-3.750	618.267	0.017	618.285
10.00		-3.750	618.306	0.047	618.354
20.00	S6	-3.750	618.344	0.075	618.420
30.00		-3.750	618.381	0.100	618.481
37.99		-3.750	618.409	0.120	618.529

SPAN L_1 - L_2

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	617.843	0.072	617.916
10.00		32.500	617.877	0.092	617.970
20.00	S1	32.500	617.910	0.111	618.021
30.00		32.500	617.941	0.126	618.068
37.99		32.500	617.965	0.139	618.104
0.00		25.250	617.956	0.087	618.044
10.00		25.250	617.990	0.108	618.098
20.00	S2	25.250	618.023	0.127	618.150
30.00		25.250	618.054	0.142	618.196
37.99		25.250	618.078	0.154	618.232
0.00		18.000	618.069	0.100	618.170
10.00		18.000	618.103	0.120	618.224
20.00	S3	18.000	618.136	0.140	618.276
30.00		18.000	618.167	0.155	618.322
37.99		18.000	618.191	0.167	618.358
0.00		10.750	618.183	0.109	618.292
10.00		10.750	618.216	0.130	618.347
20.00	S4	10.750	618.249	0.149	618.399
30.00		10.750	618.280	0.164	618.445
37.99		10.750	618.304	0.176	618.480
0.00		3.500	618.296	0.116	618.413
10.00		3.500	618.330	0.137	618.467
20.00	S5	3.500	618.362	0.156	618.519
30.00		3.500	618.393	0.171	618.565
37.99		3.500	618.417	0.183	618.601
0.00		-3.750	618.409	0.120	618.529
10.00		-3.750	618.443	0.140	618.583
20.00	S6	-3.750	618.475	0.159	618.635
30.00		-3.750	618.506	0.174	618.681
37.99		-3.750	618.530	0.186	618.717

SPAN L_2 - L_3 ℄ BRGS. STRINGER

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	617.965	0.139	618.104
10.00		32.500	617.993	0.159	618.153
20.00	S1	32.500	618.020	0.180	618.201
30.00		32.500	618.046	0.194	618.240
37.58		32.500	618.065	0.200	618.265
0.00		25.250	618.078	0.154	618.232
10.00		25.250	618.106	0.175	618.282
20.00	S2	25.250	618.133	0.196	618.330
30.00		25.250	618.159	0.210	618.369
37.58		25.250	618.178	0.216	618.394
0.00		18.000	618.191	0.167	618.358
10.00		18.000	618.219	0.188	618.407
20.00	S3	18.000	618.247	0.209	618.456
30.00		18.000	618.272	0.222	618.495
37.58		18.000	618.291	0.229	618.520
0.00		10.750	618.304	0.176	618.480
10.00		10.750	618.332	0.197	618.530
20.00	S4	10.750	618.360	0.218	618.578
30.00		10.750	618.385	0.232	618.617
37.58		10.750	618.404	0.238	618.642
0.00		3.500	618.417	0.183	618.601
10.00		3.500	618.446	0.204	618.650
20.00	S5	3.500	618.473	0.225	618.698
30.00		3.500	618.498	0.239	618.738
37.58		3.500	618.517	0.245	618.762
0.00		-3.750	618.530	0.186	618.717
10.00		-3.750	618.559	0.207	618.766
20.00	S6	-3.750	618.586	0.227	618.813
30.00		-3.750	618.612	0.241	618.853
37.58		-3.750	618.630	0.248	618.879

SPAN L_3 - L_4

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	618.066	0.201	618.267
10.00		32.500	618.089	0.217	618.307
20.00	S1	32.500	618.111	0.233	618.344
30.00		32.500	618.131	0.244	618.376
37.99		32.500	618.147	0.253	618.400
0.00		25.250	618.179	0.216	618.396
10.00		25.250	618.202	0.233	618.435
20.00	S2	25.250	618.224	0.248	618.473
30.00		25.250	618.244	0.260	618.504
37.99		25.250	618.260	0.269	618.529
0.00		18.000	618.292	0.229	618.522
10.00		18.000	618.315	0.246	618.561
20.00	S3	18.000	618.337	0.261	618.599
30.00		18.000	618.357	0.272	618.630
37.99		18.000	618.373	0.281	618.655
0.00		10.750	618.405	0.238	618.644
10.00		10.750	618.428	0.255	618.684
20.00	S4	10.750	618.450	0.270	618.721
30.00		10.750	618.470	0.282	618.753
37.99		10.750	618.486	0.291	618.777
0.00		3.500	618.518	0.246	618.764
10.00		3.500	618.541	0.262	618.804
20.00	S5	3.500	618.563	0.278	618.841
30.00		3.500	618.584	0.289	618.873
37.99		3.500	618.599	0.298	618.897
0.00		-3.750	618.631	0.249	618.880
10.00		-3.750	618.654	0.265	618.920
20.00	S6	-3.750	618.676	0.280	618.957
30.00		-3.750	618.697	0.292	618.989
37.99		-3.750	618.712	0.301	619.013

SPAN L_4 - L_5

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	618.147	0.253	618.400
10.00		32.500	618.164	0.267	618.432
20.00	S1	32.500	618.181	0.280	618.461
30.00		32.500	618.196	0.288	618.485
37.99		32.500	618.207	0.296	618.503
0.00		25.250	618.260	0.269	618.529
10.00		25.250	618.278	0.283	618.561
20.00	S2	25.250	618.294	0.296	618.590
30.00		25.250	618.309	0.304	618.614
37.99		25.250	618.320	0.311	618.632
0.00		18.000	618.373	0.281	618.655
10.00		18.000	618.391	0.295	618.686
20.00	S3	18.000	618.407	0.308	618.716
30.00		18.000	618.422	0.317	618.740
37.99		18.000	618.433	0.324	618.758
0.00		10.750	618.486	0.291	618.777
10.00		10.750	618.504	0.305	618.809
20.00	S4	10.750	618.520	0.318	618.838
30.00		10.750	618.535	0.326	618.862
37.99		10.750	618.546	0.333	618.880
0.00		3.500	618.599	0.298	618.897
10.00		3.500	618.617	0.312	618.929
20.00	S5	3.500	618.633	0.325	618.958
30.00		3.500	618.648	0.333	618.982
37.99		3.500	618.660	0.340	619.000
0.00		-3.750	618.712	0.301	619.013
10.00		-3.750	618.730	0.314	619.045
20.00	S6	-3.750	618.746	0.327	619.074
30.00		-3.750	618.762	0.336	619.098
37.99		-3.750	618.773	0.343	619.116

SPAN L_5 - L_6 ℄ BRGS. STRINGER

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	618.207	0.296	618.503
10.00		32.500	618.220	0.308	618.528
20.00	S1	32.500	618.231	0.320	618.552
30.00		32.500	618.241	0.326	618.567
37.58		32.500	618.247	0.326	618.574
0.00		25.250	618.320	0.311	618.632
10.00		25.250	618.333	0.324	618.657
20.00	S2	25.250	618.344	0.337	618.682
30.00		25.250	618.354	0.343	618.698
37.58		25.250	618.360	0.344	618.705
0.00		18.000	618.433	0.324	618.758
10.00		18.000	618.446	0.336	618.783
20.00	S3	18.000	618.457	0.349	618.807
30.00		18.000	618.467	0.355	618.822
37.58		18.000	618.473	0.355	618.828
0.00		10.750	618.546	0.333	618.880
10.00		10.750	618.559	0.345	618.905
20.00	S4	10.750	618.570	0.358	618.929
30.00		10.750	618.580	0.364	618.944
37.58		10.750	618.587	0.364	618.951
0.00		3.500	618.660	0.340	619.000
10.00		3.500	618.672	0.353	619.025
20.00	S5	3.500	618.683	0.365	619.049
30.00		3.500	618.693	0.371	619.065
37.58		3.500	618.700	0.371	619.071
0.00		-3.750	618.773	0.343	619.116
10.00		-3.750	618.785	0.355	619.141
20.00	S6	-3.750	618.796	0.368	619.165
30.00		-3.750	618.806	0.373	619.180
37.58		-3.750	618.813	0.374	619.187

SPAN L_6 - L_7

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	618.248	0.327	618.575
10.00		32.500	618.255	0.334	618.589
20.00	S1	32.500	618.261	0.340	618.601
30.00		32.500	618.265	0.341	618.607
37.99		32.500	618.268	0.343	618.611
0.00		25.250	618.361	0.342	618.703
10.00		25.250	618.368	0.349	618.718
20.00	S2	25.250	618.374	0.355	618.730
30.00		25.250	618.378	0.357	618.736
37.99		25.250	618.381	0.359	618.740
0.00		18.000	618.474	0.355	618.829
10.00		18.000	618.481	0.362	618.844
20.00	S3	18.000	618.487	0.368	618.856
30.00		18.000	618.491	0.370	618.862
37.99		18.000	618.494	0.371	618.866
0.00		10.750	618.587	0.364	618.952
10.00		10.750	618.594	0.371	618.966
20.00	S4	10.750	618.600	0.377	618.978
30.00		10.750	618.605	0.379	618.984
37.99		10.750	618.607	0.381	618.988
0.00		3.500	618.700	0.371	619.072
10.00		3.500	618.707	0.378	619.086
20.00	S5	3.500	618.713	0.384	619.098
30.00		3.500	618.718	0.386	619.104
37.99		3.500	618.720	0.388	619.108
0.00		-3.750	618.813	0.374	619.188
10.00		-3.750	618.820	0.381	619.202
20.00	S6	-3.750	618.826	0.387	619.214
30.00		-3.750	618.831	0.389	619.220
37.99		-3.750	618.833	0.391	619.225

SPAN L_7 - L_7'

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	618.268	0.343	618.611
10.00		32.500	618.270	0.346	618.616
20.00	S1	32.500	618.270	0.347	618.618
30.00		32.500	618.270	0.345	618.615
37.99		32.500	618.268	0.343	618.612
0.00		25.250	618.381	0.359	618.740
10.00		25.250	618.383	0.361	618.745
20.00	S2	25.250	618.383	0.363	618.747
30.00		25.250	618.383	0.361	618.744
37.99		25.250	618.381	0.359	618.740
0.00		18.000	618.494	0.371	618.866
10.00		18.000	618.496	0.374	618.871
20.00	S3	18.000	618.497	0.376	618.873
30.00		18.000	618.496	0.373	618.870
37.99		18.000	618.494	0.372	618.866
0.00		10.750	618.607	0.381	618.988
10.00		10.750	618.609	0.383	618.993
20.00	S4	10.750	618.610	0.385	618.995
30.00		10.750	618.609	0.383	618.992
37.99		10.750	618.607	0.381	618.988
0.00		3.500	618.720	0.388	619.108
10.00		3.500	618.722	0.390	619.113
20.00	S5	3.500	618.723	0.392	619.116
30.00		3.500	618.722	0.390	619.112
37.99		3.500	618.720	0.388	619.109
0.00		-3.750	618.833	0.391	619.225
10.00		-3.750	618.835	0.393	619.229
20.00	S6	-3.750	618.836	0.395	619.231
30.00		-3.750	618.835	0.393	619.228
37.99		-3.750	618.833	0.391	619.225

NOTES: (TYPICAL UNIT 5 ONLY)

L_1 – DESIGNATES CENTER LINE OF FLOOR BEAM AND PANEL POINT OF THE ARCH SPAN.

L_3 ℄ BRGS. STRINGER – DESIGNATES CENTER LINE OF STRINGER BEARINGS 5" FROM CENTER LINE OF FLOOR BEAM

STRINGER SPAN DESIGNATION IS FROM CENTER LINE FLOOR BEAM TO CENTER LINE FLOOR BEAM OR CENTER LINE STRINGER BEARINGS AS THE CASE MAY BE.

TABULATED DISTANCES ARE MEASURED FROM CENTER LINE FLOOR BEAM OR CENTER LINE STRINGER BEARING AT WEST IN EACH SPAN ALONG CENTER LINE OF STRINGERS.

TABULATED ELEVATIONS ARE FOR TOP OF CONCRETE SLAB ALONG CENTER LINE OF STRINGERS AND NOT TOP OF THE ROADWAY.

NORMAL OFFSETS ARE MEASURED FROM THE PROFILE GRADE LINE.

POSITIVE OFFSETS ARE IN THE DIRECTION AWAY FROM CENTER LINE OF STRUCTURE AND NEGATIVE OFFSETS ARE TOWARD THE CENTER LINE OF STRUCTURE.

TABULATED DEAD LOAD DEFLECTIONS ARE THE TOTAL ARCH RIB, HANGER ELONGATION, FLOOR BEAM AND STRINGER DEFLECTIONS DUE TO CONCRETE AND WEARING SURFACE ONLY.

POSITIVE DEFLECTION INDICATES DOWNWARD DEFLECTION.

WORK THIS SHEET WITH SHEETS NO. 21 THROUGH 25.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY A. MILUNAS
DRAWN BY M. VADKERTY & H. de PERCZEL
CHECKED A. MILUNAS
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

SUPERSTRUCTURE – UNIT 5
DECK ELEVATIONS – PART 1 OF 2
F.A.I. ROUTE 280 SECTION 81-ID
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA – ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	46
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

WESTBOUND OR EASTBOUND ROADWAY

SPAN (L7') – (L6')

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	618.268	0.343	618.612
10.00		32.500	618.264	0.342	618.607
20.00	S1	32.500	618.260	0.339	618.599
30.00		32.500	618.254	0.332	618.587
37.99		32.500	618.248	0.327	618.575
0.00		25.250	618.381	0.359	618.740
10.00		25.250	618.378	0.357	618.735
20.00	S2	25.250	618.373	0.355	618.728
30.00		25.250	618.367	0.348	618.715
37.99		25.250	618.361	0.343	618.704
0.00		18.000	618.494	0.372	618.866
10.00		18.000	618.491	0.370	618.861
20.00	S3	18.000	618.486	0.368	618.854
30.00		18.000	618.480	0.361	618.841
37.99		18.000	618.474	0.356	618.830
0.00		10.750	618.607	0.381	618.988
10.00		10.750	618.604	0.379	618.984
20.00	S4	10.750	618.599	0.377	618.976
30.00		10.750	618.593	0.370	618.963
37.99		10.750	618.587	0.365	618.952
0.00		3.500	618.720	0.388	619.109
10.00		3.500	618.717	0.386	619.104
20.00	S5	3.500	618.712	0.384	619.097
30.00		3.500	618.706	0.377	619.084
37.99		3.500	618.700	0.372	619.072
0.00		-3.750	618.833	0.391	619.225
10.00		-3.750	618.830	0.389	619.220
20.00	S6	-3.750	618.825	0.387	619.212
30.00		-3.750	618.819	0.380	619.200
37.99		-3.750	618.813	0.375	619.189

SPAN (L6') ℄ BRGS. STRINGER – (L5')

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	618.247	0.327	618.575
10.00		32.500	618.239	0.326	618.565
20.00	S1	32.500	618.228	0.318	618.547
30.00		32.500	618.217	0.305	618.523
37.58		32.500	618.207	0.296	618.504
0.00		25.250	618.360	0.342	618.703
10.00		25.250	618.352	0.342	618.694
20.00	S2	25.250	618.342	0.334	618.676
30.00		25.250	618.330	0.321	618.651
37.58		25.250	618.320	0.312	618.633
0.00		18.000	618.473	0.355	618.829
10.00		18.000	618.465	0.355	618.820
20.00	S3	18.000	618.455	0.347	618.802
30.00		18.000	618.443	0.334	618.777
37.58		18.000	618.433	0.325	618.759
0.00		10.750	618.587	0.364	618.951
10.00		10.750	618.578	0.364	618.942
20.00	S4	10.750	618.568	0.356	618.925
30.00		10.750	618.556	0.343	618.899
37.58		10.750	618.546	0.334	618.881
0.00		3.500	618.700	0.372	619.072
10.00		3.500	618.691	0.371	619.062
20.00	S5	3.500	618.681	0.364	619.045
30.00		3.500	618.669	0.350	619.020
37.58		3.500	618.660	0.341	619.001
0.00		-3.750	618.813	0.375	619.188
10.00		-3.750	618.804	0.373	619.178
20.00	S6	-3.750	618.794	0.366	619.160
30.00		-3.750	618.782	0.353	619.136
37.58		-3.750	618.773	0.344	619.117

SPAN (L5') – (L4')

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	618.207	0.296	618.504
10.00		32.500	618.193	0.288	618.482
20.00	S1	32.500	618.178	0.279	618.457
30.00		32.500	618.161	0.265	618.426
37.99		32.500	618.147	0.254	618.401
0.00		25.250	618.320	0.312	618.633
10.00		25.250	618.306	0.304	618.610
20.00	S2	25.250	618.291	0.294	618.586
30.00		25.250	618.274	0.281	618.555
37.99		25.250	618.260	0.270	618.530
0.00		18.000	618.433	0.325	618.759
10.00		18.000	618.419	0.316	618.736
20.00	S3	18.000	618.404	0.307	618.712
30.00		18.000	618.387	0.293	618.681
37.99		18.000	618.373	0.283	618.656
0.00		10.750	618.546	0.334	618.881
10.00		10.750	618.532	0.326	618.859
20.00	S4	10.750	618.517	0.316	618.834
30.00		10.750	618.500	0.303	618.803
37.99		10.750	618.486	0.292	618.778
0.00		3.500	618.660	0.341	619.001
10.00		3.500	618.646	0.333	618.979
20.00	S5	3.500	618.630	0.323	618.954
30.00		3.500	618.613	0.310	618.924
37.99		3.500	618.599	0.299	618.898
0.00		-3.750	618.773	0.344	619.117
10.00		-3.750	618.759	0.336	619.095
20.00	S6	-3.750	618.743	0.326	619.070
30.00		-3.750	618.726	0.313	619.040
37.99		-3.750	618.712	0.302	619.014

SPAN (L4') – (L3')

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	618.147	0.254	618.401
10.00		32.500	618.127	0.243	618.371
20.00	S1	32.500	618.106	0.231	618.338
30.00		32.500	618.084	0.215	618.300
37.99		32.500	618.066	0.202	618.268
0.00		25.250	618.260	0.270	618.530
10.00		25.250	618.240	0.259	618.500
20.00	S2	25.250	618.220	0.247	618.467
30.00		25.250	618.197	0.230	618.428
37.99		25.250	618.179	0.217	618.397
0.00		18.000	618.373	0.283	618.656
10.00		18.000	618.353	0.272	618.625
20.00	S3	18.000	618.333	0.260	618.593
30.00		18.000	618.311	0.243	618.554
37.99		18.000	618.292	0.230	618.523
0.00		10.750	618.486	0.292	618.778
10.00		10.750	618.467	0.281	618.748
20.00	S4	10.750	618.446	0.269	618.715
30.00		10.750	618.424	0.252	618.677
37.99		10.750	618.405	0.239	618.645
0.00		3.500	618.599	0.299	618.898
10.00		3.500	618.580	0.288	618.868
20.00	S5	3.500	618.559	0.276	618.835
30.00		3.500	618.537	0.260	618.797
37.99		3.500	618.518	0.247	618.765
0.00		-3.750	618.712	0.302	619.014
10.00		-3.750	618.693	0.291	618.984
20.00	S6	-3.750	618.672	0.279	618.951
30.00		-3.750	618.650	0.262	618.913
37.99		-3.750	618.631	0.250	618.881

SPAN (L3') ℄ BRGS. STRINGER – (L2')

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	618.065	0.201	618.266
10.00		32.500	618.040	0.192	618.232
20.00	S1	32.500	618.014	0.176	618.190
30.00		32.500	617.986	0.154	618.141
37.58		32.500	617.965	0.139	618.104
0.00		25.250	618.178	0.217	618.395
10.00		25.250	618.153	0.208	618.362
20.00	S2	25.250	618.127	0.192	618.320
30.00		25.250	618.099	0.170	618.270
37.58		25.250	618.078	0.155	618.233
0.00		18.000	618.291	0.230	618.521
10.00		18.000	618.266	0.221	618.487
20.00	S3	18.000	618.240	0.205	618.445
30.00		18.000	618.213	0.183	618.396
37.58		18.000	618.191	0.168	618.359
0.00		10.750	618.404	0.239	618.643
10.00		10.750	618.379	0.230	618.610
20.00	S4	10.750	618.353	0.214	618.568
30.00		10.750	618.326	0.192	618.518
37.58		10.750	618.304	0.177	618.481
0.00		3.500	618.517	0.246	618.763
10.00		3.500	618.492	0.237	618.730
20.00	S5	3.500	618.466	0.221	618.688
30.00		3.500	618.439	0.199	618.638
37.58		3.500	618.417	0.184	618.601
0.00		-3.750	618.630	0.249	618.880
10.00		-3.750	618.605	0.239	618.845
20.00	S6	-3.750	618.579	0.224	618.803
30.00		-3.750	618.552	0.202	618.754
37.58		-3.750	618.530	0.187	618.718

SPAN (L2') – (L1')

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	617.965	0.139	618.104
10.00		32.500	617.935	0.124	618.059
20.00	S1	32.500	617.903	0.108	618.012
30.00		32.500	617.871	0.088	617.959
37.99		32.500	617.843	0.072	617.916
0.00		25.250	618.078	0.155	618.233
10.00		25.250	618.048	0.140	618.188
20.00	S2	25.250	618.016	0.124	618.141
30.00		25.250	617.984	0.104	618.088
37.99		25.250	617.956	0.088	618.045
0.00		18.000	618.191	0.168	618.359
10.00		18.000	618.161	0.153	618.314
20.00	S3	18.000	618.129	0.137	618.267
30.00		18.000	618.097	0.117	618.214
37.99		18.000	618.069	0.101	618.170
0.00		10.750	618.304	0.177	618.481
10.00		10.750	618.274	0.162	618.436
20.00	S4	10.750	618.243	0.146	618.389
30.00		10.750	618.210	0.126	618.336
37.99		10.750	618.183	0.110	618.293
0.00		3.500	618.417	0.184	618.601
10.00		3.500	618.387	0.169	618.557
20.00	S5	3.500	618.356	0.153	618.509
30.00		3.500	618.323	0.133	618.456
37.99		3.500	618.296	0.117	618.413
0.00		-3.750	618.530	0.187	618.718
10.00		-3.750	618.500	0.172	618.673
20.00	S6	-3.750	618.469	0.156	618.625
30.00		-3.750	618.436	0.136	618.572
37.99		-3.750	618.409	0.120	618.529

SPAN (L1') – (L0')

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	617.843	0.072	617.916
10.00		32.500	617.808	0.056	617.865
20.00	S1	32.500	617.771	0.040	617.812
30.00		32.500	617.733	0.019	617.753
37.99		32.500	617.702	0.003	617.705
0.00		25.250	617.956	0.088	618.045
10.00		25.250	617.921	0.069	617.991
20.00	S2	25.250	617.886	0.050	617.935
30.00		25.250	617.846	0.026	617.873
37.99		25.250	617.815	0.007	617.822
0.00		18.000	618.069	0.101	618.170
10.00		18.000	618.034	0.080	618.114
20.00	S3	18.000	617.998	0.058	618.056
30.00		18.000	617.959	0.032	617.992
37.99		18.000	617.928	0.011	617.939
0.00		10.750	618.183	0.110	618.293
10.00		10.750	618.147	0.087	618.235
20.00	S4	10.750	618.111	0.064	618.175
30.00		10.750	618.073	0.036	618.109
37.99		10.750	618.041	0.014	618.055
0.00		3.500	618.296	0.117	618.413
10.00		3.500	618.260	0.093	618.354
20.00	S5	3.500	618.224	0.068	618.293
30.00		3.500	618.186	0.039	618.225
37.99		3.500	618.154	0.016	618.171
0.00		-3.750	618.409	0.120	618.529
10.00		-3.750	618.374	0.095	618.469
20.00	S6	-3.750	618.337	0.070	618.407
30.00		-3.750	618.299	0.041	618.340
37.99		-3.750	618.267	0.017	618.285

NOTES:

(L7') – DESIGNATES CENTER LINE OF FLOOR BEAM AND PANEL POINT OF THE ARCH SPAN.

(L6') ℄ BRGS. STRINGER – DESIGNATES CENTER LINE OF STRINGER BEARINGS 5" FROM CENTER LINE OF FLOOR BEAM.

FOR OTHER NOTES, SEE SHEET NO. 45.

WORK THIS SHEET WITH SHEETS NO. 21 THROUGH 25 AND SHEET NO. 45.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY A. MILUNAS
DRAWN BY M. VADKERTY & H. de PERCZEL
CHECKED A. MILUNAS
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

SUPERSTRUCTURE - UNIT 5
DECK ELEVATIONS - PART 2 OF 2
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

WESTBOUND OR EASTBOUND ROADWAY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	47
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

SPAN 15

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	617.688	0.000	617.688
9.99		32.500	617.647	0.068	617.715
19.99		32.500	617.604	0.132	617.737
29.99		32.500	617.560	0.192	617.753
39.99		32.500	617.515	0.244	617.759
49.99		32.500	617.468	0.289	617.758
59.99		32.500	617.420	0.324	617.744
69.99		32.500	617.371	0.349	617.720
79.99		32.500	617.320	0.363	617.683
89.99	A OR K	32.500	617.268	0.367	617.635
99.99		32.500	617.214	0.360	617.574
109.99		32.500	617.159	0.343	617.502
119.99		32.500	617.102	0.317	617.419
129.99		32.500	617.044	0.282	617.326
139.99		32.500	616.985	0.242	617.227
149.99		32.500	616.924	0.198	617.122
159.99		32.500	616.862	0.151	617.013
169.99		32.500	616.799	0.105	616.904
179.99		32.500	616.734	0.063	616.797
189.99		32.500	616.668	0.026	616.694
0.00		23.500	617.828	0.008	617.837
9.99		23.500	617.787	0.082	617.870
19.99		23.500	617.745	0.152	617.897
29.99		23.500	617.701	0.212	617.913
39.99		23.500	617.655	0.265	617.921
49.99		23.500	617.609	0.310	617.919
59.99		23.500	617.561	0.346	617.907
69.99		23.500	617.511	0.370	617.882
79.99		23.500	617.460	0.384	617.845
89.99	B OR J	23.500	617.408	0.387	617.795
99.99		23.500	617.354	0.379	617.733
109.99		23.500	617.299	0.360	617.660
119.99		23.500	617.243	0.332	617.575
129.99		23.500	617.185	0.296	617.481
139.99		23.500	617.125	0.254	617.380
149.99		23.500	617.065	0.207	617.272
159.99		23.500	617.003	0.158	617.161
169.99		23.500	616.939	0.110	617.049
179.99		23.500	616.874	0.066	616.941
189.99		23.500	616.808	0.027	616.836
0.00		14.500	617.969	0.012	617.981
9.99		14.500	617.927	0.089	618.017
19.99		14.500	617.885	0.161	618.047
29.99		14.500	617.841	0.224	618.066
39.99		14.500	617.796	0.280	618.076
49.99		14.500	617.749	0.327	618.076
59.99		14.500	617.701	0.364	618.065
69.99		14.500	617.652	0.389	618.041
79.99		14.500	617.601	0.404	618.005
89.99	C OR H	14.500	617.548	0.406	617.955
99.99		14.500	617.495	0.398	617.893
109.99		14.500	617.440	0.378	617.818
119.99		14.500	617.383	0.349	617.732
129.99		14.500	617.325	0.311	617.636
139.99		14.500	617.266	0.266	617.533
149.99		14.500	617.205	0.217	617.423
159.99		14.500	617.143	0.166	617.309
169.99		14.500	617.080	0.115	617.195
179.99		14.500	617.015	0.069	617.084
189.99		14.500	616.948	0.029	616.978
0.00		5.500	618.109	0.008	618.117
9.99		5.500	618.068	0.082	618.150
19.99		5.500	618.025	0.152	618.177
29.99		5.500	617.981	0.212	618.194
39.99		5.500	617.936	0.265	618.202
49.99		5.500	617.889	0.310	618.200
59.99		5.500	617.841	0.346	618.188
69.99		5.500	617.792	0.370	618.163
79.99		5.500	617.741	0.384	618.126
89.99	D OR G	5.500	617.689	0.387	618.076
99.99		5.500	617.635	0.379	618.014
109.99		5.500	617.580	0.360	617.941
119.99		5.500	617.523	0.332	617.856
129.99		5.500	617.466	0.296	617.762
139.99		5.500	617.406	0.254	617.661
149.99		5.500	617.346	0.207	617.553
159.99		5.500	617.284	0.158	617.442
169.99		5.500	617.220	0.110	617.330
179.99		5.500	617.155	0.066	617.221
189.99		5.500	617.089	0.027	617.117
0.00		-3.500	618.249	0.000	618.249
9.99		-3.500	618.208	0.068	618.276
19.99		-3.500	618.166	0.132	618.298
29.99		-3.500	618.122	0.192	618.314
39.99		-3.500	618.077	0.244	618.321
49.99		-3.500	618.030	0.289	618.319
59.99		-3.500	617.982	0.324	618.306
69.99		-3.500	617.932	0.349	618.281
79.99		-3.500	617.881	0.363	618.244
89.99	E OR F	-3.500	617.829	0.367	618.196
99.99		-3.500	617.775	0.360	618.135
109.99		-3.500	617.720	0.343	618.063
119.99		-3.500	617.664	0.317	617.981
129.99		-3.500	617.606	0.282	617.888
139.99		-3.500	617.547	0.242	617.789
149.99		-3.500	617.486	0.198	617.684
159.99		-3.500	617.424	0.151	617.575
169.99		-3.500	617.360	0.105	617.465
179.99		-3.500	617.296	0.063	617.359
189.99		-3.500	617.229	0.026	617.255

SPAN 16

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	616.600	0.000	616.600
9.99		32.500	616.531	-0.018	616.513
19.99		32.500	616.460	-0.026	616.434
29.99		32.500	616.388	-0.028	616.360
39.99		32.500	616.315	-0.022	616.293
49.99		32.500	616.241	-0.012	616.229
59.99		32.500	616.164	-0.001	616.163
69.99		32.500	616.087	0.011	616.098
79.99		32.500	616.008	0.020	616.028
89.99	A OR K	32.500	615.928	0.026	615.954
99.99		32.500	615.846	0.028	615.874
109.99		32.500	615.763	0.026	615.789
119.99		32.500	615.678	0.020	615.698
129.99		32.500	615.593	0.010	615.603
139.99		32.500	615.505	-0.001	615.504
149.99		32.500	615.417	-0.013	615.404
159.99		32.500	615.327	-0.022	615.305
169.99		32.500	615.235	-0.028	615.207
179.99		32.500	615.142	-0.026	615.116
189.99		32.500	615.048	-0.018	615.030
0.00		23.500	616.740	0.000	616.740
9.99		23.500	616.671	-0.019	616.652
19.99		23.500	616.601	-0.028	616.572
29.99		23.500	616.529	-0.030	616.499
39.99		23.500	616.456	-0.025	616.431
49.99		23.500	616.381	-0.014	616.366
59.99		23.500	616.305	-0.003	616.302
69.99		23.500	616.227	0.008	616.236
79.99		23.500	616.148	0.018	616.167
89.99	B OR J	23.500	616.068	0.025	616.093
99.99		23.500	615.986	0.027	616.014
109.99		23.500	615.903	0.024	615.928
119.99		23.500	615.819	0.018	615.837
129.99		23.500	615.733	0.008	615.741
139.99		23.500	615.646	-0.003	615.642
149.99		23.500	615.557	-0.015	615.542
159.99		23.500	615.467	-0.025	615.442
169.99		23.500	615.375	-0.029	615.346
179.99		23.500	615.283	-0.024	615.258
189.99		23.500	615.188	-0.019	615.168
0.00		14.500	616.881	0.000	616.881
9.99		14.500	616.812	-0.020	616.791
19.99		14.500	616.741	-0.029	616.711
29.99		14.500	616.669	-0.031	616.637
39.99		14.500	616.596	-0.026	616.570
49.99		14.500	616.521	-0.016	616.505
59.99		14.500	616.445	-0.003	616.442
69.99		14.500	616.368	0.008	616.376
79.99		14.500	616.289	0.018	616.308
89.99	C OR H	14.500	616.209	0.025	616.234
99.99		14.500	616.127	0.027	616.155
109.99		14.500	616.044	0.025	616.069
119.99		14.500	615.959	0.018	615.978
129.99		14.500	615.873	0.008	615.882
139.99		14.500	615.786	-0.004	615.782
149.99		14.500	615.697	-0.016	615.681
159.99		14.500	615.607	-0.026	615.581
169.99		14.500	615.516	-0.032	615.484
179.99		14.500	615.423	-0.030	615.393
189.99		14.500	615.329	-0.020	615.308
0.00		5.500	617.021	0.000	617.021
9.99		5.500	616.952	-0.019	616.932
19.99		5.500	616.882	-0.028	616.853
29.99		5.500	616.810	-0.030	616.779
39.99		5.500	616.736	-0.025	616.711
49.99		5.500	616.662	-0.014	616.647
59.99		5.500	616.586	-0.003	616.583
69.99		5.500	616.508	0.008	616.517
79.99		5.500	616.429	0.018	616.448
89.99	D OR G	5.500	616.349	0.025	616.374
99.99		5.500	616.267	0.027	616.294
109.99		5.500	616.184	0.024	616.209
119.99		5.500	616.100	0.018	616.118
129.99		5.500	616.014	0.008	616.022
139.99		5.500	615.926	-0.003	615.923
149.99		5.500	615.838	-0.015	615.822
159.99		5.500	615.748	-0.025	615.722
169.99		5.500	615.656	-0.029	615.627
179.99		5.500	615.563	-0.024	615.539
189.99		5.500	615.469	-0.019	615.449
0.00		-3.500	617.162	0.000	617.162
9.99		-3.500	617.092	-0.018	617.074
19.99		-3.500	617.022	-0.026	616.996
29.99		-3.500	616.950	-0.028	616.922
39.99		-3.500	616.877	-0.022	616.855
49.99		-3.500	616.802	-0.012	616.790
59.99		-3.500	616.726	-0.001	616.725
69.99		-3.500	616.649	0.011	616.660
79.99		-3.500	616.570	0.020	616.590
89.99	E OR F	-3.500	616.489	0.026	616.515
99.99		-3.500	616.408	0.028	616.436
109.99		-3.500	616.325	0.026	616.351
119.99		-3.500	616.240	0.020	616.260
129.99		-3.500	616.154	0.010	616.164
139.99		-3.500	616.067	-0.001	616.066
149.99		-3.500	615.978	-0.013	615.965
159.99		-3.500	615.888	-0.022	615.866
169.99		-3.500	615.797	-0.028	615.769
179.99		-3.500	615.704	-0.026	615.678
189.99		-3.500	615.609	-0.018	615.591

SPAN 17

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	614.952	0.000	614.952
9.99		32.500	614.855	0.026	614.881
19.99		32.500	614.757	0.062	614.819
29.99		32.500	614.657	0.103	614.760
39.99		32.500	614.555	0.148	614.703
49.99		32.500	614.453	0.195	614.648
59.99		32.500	614.349	0.239	614.588
69.99		32.500	614.243	0.279	614.522
79.99		32.500	614.136	0.312	614.448
89.99	A OR K	32.500	614.028	0.338	614.366
99.99		32.500	613.918	0.356	614.274
109.99		32.500	613.807	0.363	614.170
119.99		32.500	613.695	0.360	614.055
129.99		32.500	613.581	0.346	613.927
139.99		32.500	613.466	0.322	613.788
149.99		32.500	613.349	0.287	613.636
159.99		32.500	613.231	0.244	613.475
169.99		32.500	613.111	0.192	613.303
179.99		32.500	612.990	0.134	613.124
189.99		32.500	612.868	0.069	612.937
199.99		32.500	612.745	0.000	612.745
0.00		23.500	615.093	0.000	615.093
9.99		23.500	614.995	0.027	615.023
19.99		23.500	614.897	0.064	614.962
29.99		23.500	614.797	0.108	614.905
39.99		23.500	614.696	0.156	614.852
49.99		23.500	614.593	0.204	614.798
59.99		23.500	614.489	0.251	614.740
69.99		23.500	614.384	0.293	614.677
79.99		23.500	614.277	0.328	614.606
89.99	B OR J	23.500	614.168	0.356	614.525
99.99		23.500	614.059	0.374	614.433
109.99		23.500	613.948	0.382	614.330
119.99		23.500	613.835	0.378	614.214
129.99		23.500	613.721	0.364	614.085
139.99		23.500	613.606	0.338	613.945
149.99		23.500	613.489	0.302	613.792
159.99		23.500	613.371	0.256	613.628
169.99		23.500	613.252	0.202	613.454
179.99		23.500	613.131	0.140	613.271
189.99		23.500	613.008	0.072	613.081
199.99		23.500	612.885	0.000	612.885
0.00		14.500	615.233	0.000	615.233
9.99		14.500	615.136	0.028	615.164
19.99		14.500	615.037	0.067	615.105
29.99		14.500	614.937	0.113	615.051
39.99		14.500	614.836	0.163	614.999
49.99		14.500	614.734	0.214	614.948
59.99		14.500	614.629	0.262	614.892
69.99		14.500	614.524	0.306	614.831
79.99		14.500	614.417	0.343	614.761
89.99	C OR H	14.500	614.309	0.372	614.681
99.99		14.500	614.199	0.391	614.590
109.99		14.500	614.088	0.399	614.487
119.99		14.500	613.975	0.396	614.371
129.99		14.500	613.862	0.380	614.242
139.99		14.500	613.746	0.354	614.100
149.99		14.500	613.630	0.316	613.946
159.99		14.500	613.512	0.268	613.780
169.99		14.500	613.392	0.211	613.604
179.99		14.500	613.271	0.147	613.418
189.99		14.500	613.149	0.076	613.225
199.99		14.500	613.025	0.000	613.025
0.00		5.500	615.373	0.000	615.373
9.99		5.500	615.276	0.027	615.303
19.99		5.500	615.178	0.064	615.243
29.99		5.500	615.078	0.108	615.186
39.99		5.500	614.977	0.156	615.133
49.99		5.500	614.874	0.204	615.079
59.99		5.500	614.770	0.251	615.021
69.99		5.500	614.664	0.293	614.958
79.99		5.500	614.557	0.328	614.886
89.99	D OR G	5.500	614.449	0.356	614.806
99.99		5.500	614.339	0.374	614.714
109.99		5.500	614.228	0.382	614.611
119.99		5.500	614.116	0.378	614.495
129.99		5.500	614.002	0.364	614.366
139.99		5.500	613.887	0.338	614.226
149.99		5.500	613.770	0.302	614.073
159.99		5.500	613.652	0.256	613.909
169.99		5.500	613.532	0.202	613.735
179.99		5.500	613.412	0.140	613.552
189.99		5.500	613.289	0.072	613.362
199.99		5.500	613.166	0.000	613.166
0.00		-3.500	615.514	0.000	615.514
9.99		-3.500	615.417	0.026	615.443
19.99		-3.500	615.318	0.062	615.380
29.99		-3.500	615.218	0.103	615.321
39.99		-3.500	615.117	0.148	615.265
49.99		-3.500	615.014	0.195	615.209
59.99		-3.500	614.910	0.239	615.149
69.99		-3.500	614.805	0.279	615.084
79.99		-3.500	614.698	0.312	615.010
89.99	E OR F	-3.500	614.590	0.338	614.928
99.99		-3.500	614.480	0.356	614.836
109.99		-3.500	614.369	0.363	614.732
119.99		-3.500	614.256	0.360	614.616
129.99		-3.500	614.142	0.346	614.488
139.99		-3.500	614.027	0.322	614.349
149.99		-3.500	613.910	0.287	614.197
159.99		-3.500	613.792	0.244	614.036
169.99		-3.500	613.673	0.192	613.865
179.99		-3.500	613.552	0.134	613.686
189.99		-3.500	613.430	0.069	613.499
199.99		-3.500	613.306	0.000	613.306

NOTES:

TABULATED DEAD LOAD DEFLECTIONS IN THIS UNIT INCLUDE DEAD LOAD OF CONCRETE SLAB, PARAPETS AND CURBS AND WEARING SURFACE.

FOR ADDITIONAL NOTES, SEE SHEET NO. 41.

WORK THIS SHEET WITH SHEETS NO. 12 AND 56.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. Y. HUO
DRAWN BY M. VADKERTY & H. de PERCZEL
CHECKED A. MILUNAS
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

SUPERSTRUCTURE - UNIT 6
DECK ELEVATIONS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	48
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

WESTBOUND OR EASTBOUND ROADWAY

SPAN 18

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	612.719	0.000	612.719
9.99		32.500	612.594	0.051	612.646
19.99		32.500	612.467	0.098	612.565
29.99		32.500	612.339	0.137	612.477
39.99		32.500	612.210	0.166	612.376
49.99		32.500	612.079	0.187	612.266
59.99		32.500	611.946	0.198	612.145
69.99	A OR K	32.500	611.812	0.198	612.011
79.99		32.500	611.677	0.190	611.867
89.99		32.500	611.541	0.173	611.715
99.99		32.500	611.403	0.147	611.413
109.99		32.500	611.263	0.116	611.380
119.99		32.500	611.123	0.081	611.006
129.99		32.500	610.980	0.048	611.029
139.99		32.500	610.837	0.020	610.857
149.99		32.500	610.692	0.000	610.692
0.00		23.500	612.860	0.000	612.860
9.99		23.500	612.734	0.053	612.788
19.99		23.500	612.608	0.103	612.711
29.99		23.500	612.480	0.145	612.625
39.99		23.500	612.350	0.176	612.526
49.99		23.500	612.219	0.197	612.417
59.99		23.500	612.087	0.209	612.296
69.99	B OR J	23.500	611.953	0.209	612.163
79.99		23.500	611.818	0.200	612.018
89.99		23.500	611.681	0.182	611.864
99.99		23.500	611.543	0.155	611.699
109.99		23.500	611.404	0.122	611.526
119.99		23.500	611.263	0.086	611.349
129.99		23.500	611.121	0.051	511.172
139.99		23.500	610.977	0.021	610.999
149.99		23.500	610.832	0.000	610.832
0.00		14.500	613.000	0.000	613.000
9.99		14.500	612.875	0.056	612.931
19.99		14.500	612.748	0.108	612.856
29.99		14.500	612.620	0.152	612.772
39.99		14.500	612.490	0.184	612.674
49.99		14.500	612.359	0.206	612.566
59.99		14.500	612.227	0.219	612.447
69.99	C OR H	14.500	612.093	0.219	612.313
79.99		14.500	611.958	0.209	612.168
89.99		14.500	611.822	0.190	612.012
99.99		14.500	611.684	0.162	611.846
109.99		14.500	611.544	0.128	611.672
119.99		14.500	611.403	0.090	611.494
129.99		14.500	611.261	0.053	611.315
139.99		14.500	611.118	0.022	611.140
149.99		14.500	610.973	0.000	610.973
0.00		5.500	613.141	0.000	613.141
9.99		5.500	613.015	0.053	613.069
19.99		5.500	612.889	0.103	612.992
29.99		5.500	612.760	0.145	612.906
39.99		5.500	612.631	0.176	612.807
49.99		5.500	612.500	0.197	612.698
59.99		5.500	612.367	0.209	612.577
69.99	D OR G	5.500	612.234	0.209	612.444
79.99		5.500	612.099	0.200	612.299
89.99		5.500	611.962	0.182	612.144
99.99		5.500	611.824	0.155	611.980
109.99		5.500	611.685	0.122	611.807
119.99		5.500	611.544	0.086	611.630
129.99		5.500	611.402	0.051	611.453
139.99		5.500	611.258	0.021	611.279
149.99		5.500	611.113	0.000	611.113
0.00		-3.500	613.281	0.000	613.281
9.99		-3.500	613.156	0.051	613.207
19.99		-3.500	613.029	0.098	613.127
29.99		-3.500	612.901	0.137	613.038
39.99		-3.500	612.771	0.166	612.938
49.99		-3.500	612.640	0.187	612.828
59.99		-3.500	612.508	0.198	612.707
69.99	E OR F	-3.500	612.374	0.198	612.572
79.99		-3.500	612.239	0.190	612.429
89.99		-3.500	612.102	0.173	612.276
99.99		-3.500	611.964	0.147	612.112
109.99		-3.500	611.825	0.116	611.942
119.99		-3.500	611.684	0.081	611.766
129.99		-3.500	611.542	0.048	611.591
139.99		-3.500	611.398	0.020	611.419
149.99		-3.500	611.254	0.000	611.254

SPAN 19

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	610.692	0.000	610.692
9.99		32.500	610.546	-0.012	610.533
19.99		32.500	610.398	-0.017	610.380
29.99		32.500	610.249	-0.016	610.233
39.99		32.500	610.098	-0.010	610.087
49.99		32.500	609.946	-0.003	609.942
59.99		32.500	609.793	0.003	609.796
69.99	A OR K	32.500	609.638	0.006	609.645
79.99		32.500	609.482	0.006	609.488
89.99		32.500	609.324	0.003	609.328
99.99		32.500	609.165	-0.003	609.162
109.99		32.500	609.005	-0.009	608.995
119.99		32.500	608.843	-0.015	608.828
129.99		32.500	608.680	-0.016	608.663
139.99		32.500	608.515	-0.012	608.503
149.99		32.500	608.349	0.000	608.349
0.00		23.500	610.832	0.000	610.832
9.99		23.500	610.686	-0.013	610.673
19.99		23.500	610.538	-0.018	610.519
29.99		23.500	610.389	-0.018	610.371
39.99		23.500	610.238	-0.013	610.225
49.99		23.500	610.086	-0.006	610.080
59.99		23.500	609.933	-0.000	609.932
69.99	B OR J	23.500	609.778	0.002	609.781
79.99		23.500	609.622	0.002	609.624
89.99		23.500	609.465	-0.001	609.464
99.99		23.500	609.306	-0.006	609.299
109.99		23.500	609.145	-0.013	609.132
119.99		23.500	608.983	-0.018	608.965
129.99		23.500	608.820	-0.018	608.801
139.99		23.500	608.656	-0.013	608.643
149.99		23.500	608.490	0.000	608.490
0.00		14.500	610.973	0.000	610.973
9.99		14.500	610.826	-0.013	610.813
19.99		14.500	610.679	-0.019	610.659
29.99		14.500	610.529	-0.019	610.510
39.99		14.500	610.379	-0.013	610.365
49.99		14.500	610.227	-0.007	610.220
59.99		14.500	610.074	-0.001	610.072
69.99	C OR H	14.500	609.919	0.001	609.921
79.99		14.500	609.763	0.001	609.764
89.99		14.500	609.605	-0.001	609.604
99.99		14.500	609.446	-0.007	609.439
109.99		14.500	609.286	-0.014	609.272
119.99		14.500	609.124	-0.019	609.104
129.99		14.500	608.961	-0.019	608.941
139.99		14.500	608.796	-0.013	608.782
149.99		14.500	608.630	0.000	608.630
0.00		5.500	611.113	0.000	611.113
9.99		5.500	610.967	-0.013	610.954
19.99		5.500	610.819	-0.018	610.800
29.99		5.500	610.670	-0.018	610.651
39.99		5.500	610.519	-0.013	610.506
49.99		5.500	610.367	-0.006	610.361
59.99		5.500	610.214	-0.000	610.213
69.99	D OR G	5.500	610.059	0.002	610.061
79.99		5.500	609.903	0.002	609.905
89.99		5.500	609.745	-0.001	609.744
99.99		5.500	609.586	-0.006	609.580
109.99		5.500	609.426	-0.013	609.413
119.99		5.500	609.264	-0.018	609.246
129.99		5.500	609.101	-0.018	609.082
139.99		5.500	608.937	-0.013	608.923
149.99		5.500	608.771	0.000	608.771
0.00		-3.500	611.254	0.000	611.254
9.99		-3.500	611.107	-0.012	611.094
19.99		-3.500	610.959	-0.017	610.941
29.99		-3.500	610.810	-0.016	610.794
39.99		-3.500	610.660	-0.010	610.649
49.99		-3.500	610.508	-0.003	610.504
59.99		-3.500	610.354	0.003	610.357
69.99	E OR F	-3.500	610.200	0.006	610.206
79.99		-3.500	610.043	0.006	610.049
89.99		-3.500	609.886	0.003	609.889
99.99		-3.500	609.727	-0.003	609.723
109.99		-3.500	609.566	-0.009	609.557
119.99		-3.500	609.405	-0.016	609.388
129.99		-3.500	609.242	-0.016	609.226
139.99		-3.500	609.077	-0.012	609.064
149.99		-3.500	608.911	0.000	608.911

SPAN 20

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	608.349	0.000	608.349
9.99		32.500	608.182	0.021	608.204
19.99		32.500	608.013	0.050	608.064
29.99		32.500	607.843	0.084	607.928
39.99		32.500	607.671	0.119	607.791
49.99		32.500	607.499	0.150	607.649
59.99		32.500	607.324	0.176	607.500
69.99	A OR K	32.500	607.148	0.193	607.342
79.99		32.500	606.971	0.201	607.173
89.99		32.500	606.793	0.201	606.994
99.99		32.500	606.613	0.189	606.802
109.99		32.500	606.431	0.168	606.600
119.99		32.500	606.249	0.139	606.388
129.99		32.500	606.064	0.099	606.070
139.99		32.500	605.879	0.052	605.932
149.99		32.500	605.692	0.000	605.692
0.00		23.500	608.490	0.000	608.490
9.99		23.500	608.322	0.021	608.344
19.99		23.500	608.154	0.051	608.205
29.99		23.500	607.983	0.086	608.070
39.99		23.500	607.812	0.122	607.935
49.99		23.500	607.639	0.155	607.795
59.99		23.500	607.465	0.182	607.647
69.99	B OR J	23.500	607.289	0.200	607.489
79.99		23.500	607.112	0.210	607.322
89.99		23.500	606.933	0.209	607.143
99.99		23.500	606.753	0.197	606.951
109.99		23.500	606.572	0.176	606.748
119.99		23.500	606.389	0.145	606.534
129.99		23.500	606.205	0.103	606.308
139.99		23.500	606.019	0.054	606.073
149.99		23.500	605.832	0.000	605.832
0.00		14.500	608.630	0.000	608.630
9.99		14.500	608.463	0.022	608.485
19.99		14.500	608.294	0.053	608.348
29.99		14.500	608.124	0.090	608.214
39.99		14.500	607.952	0.128	608.081
49.99		14.500	607.779	0.162	607.942
59.99		14.500	607.605	0.190	607.796
69.99	C OR H	14.500	607.429	0.209	607.639
79.99		14.500	607.252	0.219	607.472
89.99		14.500	607.073	0.219	607.293
99.99		14.500	606.893	0.206	607.100
109.99		14.500	606.712	0.184	606.896
119.99		14.500	606.529	0.152	606.682
129.99		14.500	606.345	0.108	606.453
139.99		14.500	606.160	0.056	606.216
149.99		14.500	605.973	0.000	605.973
0.00		5.500	608.771	0.000	608.771
9.99		5.500	608.603	0.021	608.625
19.99		5.500	608.434	0.051	608.486
29.99		5.500	608.264	0.086	608.351
39.99		5.500	608.093	0.122	608.215
49.99		5.500	607.920	0.155	608.075
59.99		5.500	607.745	0.182	607.928
69.99	D OR G	5.500	607.570	0.200	607.770
79.99		5.500	607.392	0.210	607.602
89.99		5.500	607.214	0.209	607.424
99.99		5.500	607.034	0.197	607.232
109.99		5.500	606.853	0.176	607.029
119.99		5.500	606.670	0.145	606.815
129.99		5.500	606.486	0.103	606.589
139.99		5.500	606.300	0.054	606.354
149.99		5.500	606.113	0.000	606.113
0.00		-3.500	608.911	0.000	608.911
9.99		-3.500	608.744	0.021	608.765
19.99		-3.500	608.575	0.050	608.626
29.99		-3.500	608.405	0.084	608.489
39.99		-3.500	608.233	0.119	608.353
49.99		-3.500	608.060	0.150	608.211
59.99		-3.500	607.886	0.176	608.062
69.99	E OR F	-3.500	607.710	0.193	607.904
79.99		-3.500	607.533	0.201	607.735
89.99		-3.500	607.354	0.201	607.555
99.99		-3.500	607.174	0.189	607.188
109.99		-3.500	606.993	0.168	607.162
119.99		-3.500	606.810	0.139	606.950
129.99		-3.500	606.626	0.099	606.726
139.99		-3.500	606.440	0.052	606.493
149.99		-3.500	606.253	0.000	606.253

NOTES:

TABULATED DEAD LOAD DEFLECTIONS FOR THIS UNIT INCLUDE DEAD LOAD OF CONCRETE SLAB, PARAPETS AND CURBS AND WEARING SURFACE.

FOR ADDITIONAL NOTES, SEE SHEET NO. 41.

WORK THIS SHEET WITH SHEETS NO. 13 AND 57.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. Y. HUO
DRAWN BY M. VADKERTY & H. de PERCZEL
CHECKED A. MILUNAS
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

SUPERSTRUCTURE - UNIT 7
DECK ELEVATIONS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	49
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

WESTBOUND OR EASTBOUND ROADWAY

SPAN 21

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	605.654	0.000	605.654
10.00		32.500	605.466	0.025	605.491
20.00		32.500	605.276	0.046	605.322
30.00		32.500	605.084	0.060	605.145
40.00	A OR K	32.500	604.891	0.066	604.958
50.00		32.500	604.697	0.065	604.762
60.00		32.500	604.501	0.055	604.557
70.00		32.500	604.304	0.040	604.345
80.00		32.500	604.106	0.023	604 130
90.00		32.500	603.906	0.008	603.915
99.99		32.500	603.705	0.000	603.705
0.00		23.500	605.795	0.000	605.795
10.00		23.500	605.606	0.027	605.633
20.00		23.500	605.416	0.049	605.466
30.00		23.500	605.225	0.065	605.290
40.00	B OR J	23.500	605.032	0.072	605.104
50.00		23.500	604.837	0.070	604.908
60.00		23.500	604.642	0.060	604.702
70.00		23.500	604.445	0.044	604.489
80.00		23.500	604.246	0.026	604.272
90.00		23.500	604.046	0.009	604.056
99.99		23.500	603.845	0.000	603.845
0.00		14.500	605.935	0.000	605.935
10.00		14.500	605.746	0.028	605.775
20.00		14.500	605.556	0.052	605.609
30.00		14.500	605.365	0.068	605.434
40.00	C OR H	14.500	605.172	0.076	605.248
50.00		14.500	604.978	0.074	605.052
60.00		14.500	604.782	0.063	604.846
70.00		14.500	604.585	0.047	604.632
80.00		14.500	604.387	0.027	604.414
90.00		14.500	604.187	0.010	604.197
99.99		14.500	603.986	0.000	603.986
0.00		5.500	606.075	0.000	606.075
10.00		5.500	605.887	0.027	605.914
20.00		5.500	605.697	0.049	605.747
30.00		5.500	605.505	0.065	605.571
40.00	D OR G	5.500	605.312	0.072	605.385
50.00		5.500	605.118	0.070	605.189
60.00		5.500	604.923	0.060	604.983
70.00		5.500	604.726	0.044	604.770
80.00		5.500	604.527	0.026	604.553
90.00		5.500	604.327	0.009	604.337
99.99		5.500	604.126	0.000	604.126
0.00		-3.500	606.216	0.000	606.216
10.00		-3.500	606.027	0.025	606.052
20.00		-3.500	605.837	0.046	605.883
30.00		-3.500	605.646	0.060	605.706
40.00	E OR F	-3.500	605.453	0.066	605.520
50.00		-3.500	605.259	0.065	605.324
60.00		-3.500	605.063	0.055	605.119
70.00		-3.500	604.866	0.040	604.907
80.00		-3.500	604.667	0.023	604.691
90.00		-3.500	604.468	0.008	604.476
99.99		-3.500	604.266	0.000	604.266

SPAN 22

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	603.705	0.000	603.705
10.00		32.500	603.502	-0.002	603.499
20.00		32.500	603.298	0.000	603.299
30.00		32.500	603.093	0.007	603.100
40.00	A OR K	32.500	602.886	0.014	602.900
50.00		32.500	602.678	0.018	602.696
60.00		32.500	602.468	0.018	602.487
70.00		32.500	602.257	0.015	602 272
80.00		32.500	602.044	0.008	602.053
90.00		32.500	601.831	0.002	601.833
99.99		32.500	601.615	0.000	601.615
0.00		23.500	603.845	0.000	603.845
10.00		23.500	603.643	-0.002	603.640
20.00		23.500	603.438	0.001	603.440
30.00		23.500	603.233	0.008	603.242
40.00	B OR J	23.500	603.026	0.015	603.042
50.00		23.500	602.818	0.020	602.838
60.00		23.500	602.608	0.020	602.629
70.00		23.500	602.397	0.016	602.414
80.00		23.500	602.185	0.009	602.194
90.00		23.500	601.971	0.002	601.974
99.99		23.500	601.756	0.000	601.756
0.00		14.500	603.986	0.000	603.986
10.00		14.500	603.783	-0.002	603.780
20.00		14.500	603.579	0.001	603.580
30.00		14.500	603.373	0.009	603.383
40.00	C OR H	14.500	603.167	0.016	603.183
50.00		14.500	602.958	0.021	602.980
60.00		14.500	602.749	0.021	602.770
70.00		14.500	602.538	0.017	602.555
80.00		14.500	602.325	0.010	602.335
90.00		14.500	602.111	0.002	602.114
99.99		14.500	601.896	0.000	601.896
0.00		5.500	604.126	0.000	604.126
10.00		5.500	603.923	-0.002	603.921
20.00		5.500	603.719	0.001	603.721
30.00		5.500	603.514	0.008	603.522
40.00	D OR G	5.500	603.307	0.015	603.323
50.00		5.500	603.099	0.020	603.119
60.00		5.500	602.889	0.020	602.910
70.00		5.500	602.678	0.016	602.694
80.00		5.500	602.466	0.009	602.475
90.00		5.500	602.252	0.002	602.254
99.99		5.500	602.036	0.000	602.036
0.00		-3.500	604.266	0.000	604.266
10.00		-3.500	604.064	-0.002	604.061
20.00		-3.500	603.860	0.000	603.860
30.00		-3.500	603.654	0.007	603.662
40.00	E OR F	-3.500	603.447	0.014	603.462
50.00		-3.500	603.239	0.018	603.258
60.00		-3.500	603.029	0.018	603.048
70.00		-3.500	602.818	0.015	602.833
80.00		-3.500	602.606	0.008	602.615
90.00		-3.500	602.392	0.002	602.395
99.99		-3.500	602.177	0.000	602.177

SPAN 23

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	601.615	0.000	601.615
10.00		32.500	601.399	0.002	601.401
20.00		32.500	601.181	0.008	601.189
30.00		32.500	600.961	0.014	600.976
40.00	A OR K	32.500	600.740	0.018	600.758
50.00		32.500	600.518	0.017	600.536
60.00		32.500	600.294	0.013	600.308
70.00		32.500	600.069	0.006	600.076
80.00		32.500	599.843	0.000	599.842
90.00		32.500	599.615	-0.004	599.611
99.99		32.500	599.386	0.000	599.386
0.00		23.500	601.756	0.000	601.756
10.00		23.500	601.539	0.002	601.542
20.00		23.500	601.321	0.009	601.330
30.00		23.500	601.102	0.015	601.117
40.00	B OR J	23.500	600.881	0.019	600.901
50.00		23.500	600.658	0.019	600.678
60.00		23.500	600.435	0.014	600.450
70.00		23.500	600.210	0.007	600.217
80.00		23.500	599.983	-0.000	599.983
90.00		23.500	599.755	-0.004	599.751
99.99		23.500	599.526	0.000	599.526
0.00		14.500	601.896	0.000	601.896
10.00		14.500	601.679	0.002	601.682
20.00		14.500	601.461	0.009	601.471
30.00		14.500	601.242	0.016	601.259
40.00	C OR H	14.500	601.021	0.020	601.042
50.00		14.500	600.799	0.020	600.819
60.00		14.500	600.575	0.015	600.591
70.00		14.500	600.350	0.007	600.358
80.00		14.500	600.124	-0.000	600.124
90.00		14.500	599.896	-0.004	599.892
99.99		14.500	599.667	0.000	599.667
0.00		5.500	602.036	0.000	602.036
10.00		5.500	601.820	0.002	601.822
20.00		5.500	601.602	0.009	601.611
30.00		5.500	601.382	0.015	601.398
40.00	D OR G	5.500	601.161	0.019	601.181
50.00		5.500	600.939	0.019	600.959
60.00		5.500	600.716	0.014	600.731
70.00		5.500	600.491	0.007	600.498
80.00		5.500	600.264	-0.000	600.264
90.00		5.500	600.036	-0.004	600.032
99.99		5.500	599.807	0.000	599.807
0.00		-3.500	602.177	0.000	602.177
10.00		-3.500	601.960	0.002	601.963
20.00		-3.500	601.742	0.008	601.751
30.00		-3.500	601.523	0.014	601.537
40.00	E OR F	-3.500	601.302	0.018	601.320
50.00		-3.500	601.080	0.017	601.097
60.00		-3.500	600.856	0.013	600.869
70.00		-3.500	600.631	0.006	600.637
80.00		-3.500	600.404	0.000	600.404
90.00		-3.500	600.177	-0.004	600.172
99.99		-3.500	599.947	0.000	599.947

SPAN 24

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	599.386	0.000	599.386
10.00		32.500	599.155	0.009	599.165
20.00		32.500	598.923	0.025	598.948
30.00		32.500	598.690	0.042	598.732
40.00	A OR K	32.500	598.455	0.057	598.512
50.00		32.500	598.219	0.066	598.285
60.00		32.500	597.981	0.068	598.049
70.00		32.500	597.742	0.061	597.803
80.00		32.500	597.501	0.047	597.549
90.00		32.500	597.260	0.025	597.286
99.99		32.500	597.016	0.000	597.016
0.00		23.500	599.526	0.000	599.526
10.00		23.500	599.296	0.011	599.307
20.00		23.500	599.063	0.027	599.091
30.00		23.500	598.830	0.046	598.876
40.00	B OR J	23.500	598.595	0.061	598.657
50.00		23.500	598.359	0.071	598.431
60.00		23.500	598.121	0.073	598.195
70.00		23.500	597.882	0.066	597.949
80.00		23.500	597.642	0.050	597.693
90.00		23.500	597.400	0.028	597.428
99.99		23.500	597.157	0.000	597.157
0.00		14.500	599.667	0.000	599.667
10.00		14.500	599.436	0.011	599.448
20.00		14.500	599.204	0.029	599.233
30.00		14.500	598.970	0.048	599.019
40.00	C OR H	14.500	598.736	0.065	598.801
50.00		14.500	598.499	0.075	598.575
60.00		14.500	598.262	0.077	598.339
70.00		14.500	598.023	0.070	598.093
80.00		14.500	597.782	0.053	597.836
90.00		14.500	597.540	0.029	597.570
99.99		14.500	597.297	0.000	597.297
0.00		5.500	599.807	0.000	599.807
10.00		5.500	599.576	0.011	599.587
20.00		5.500	599.344	0.027	599.372
30.00		5.500	599.111	0.046	599.157
40.00	D OR G	5.500	598.876	0.061	598.938
50.00		5.500	598.640	0.071	598.712
60.00		5.500	598.402	0.073	598.476
70.00		5.500	598.163	0.066	598.230
80.00		5.500	597.923	0.050	597.974
90.00		5.500	597.681	0.028	597.709
99.99		5.500	597.437	0.000	597.437
0.00		-3.500	599.947	0.000	599.947
10.00		-3.500	599.717	0.009	599.727
20.00		-3.500	599.485	0.025	599.510
30.00		-3.500	599.251	0.042	599.294
40.00	E OR F	-3.500	599.016	0.057	599.073
50.00		-3.500	598.780	0.066	598.846
60.00		-3.500	598.542	0.068	598.611
70.00		-3.500	598.303	0.061	598.365
80.00		-3.500	598.063	0.047	598.110
90.00		-3.500	597.821	0.025	597.847
99.99		-3.500	597.578	0.000	597.578

NOTES:

TABULATED DEAD LOAD DEFLECTIONS FOR THIS UNIT INCLUDE DEAD LOAD OF SLAB ONLY. DEFLECTIONS DUE TO SUPERIMPOSED DEAD LOAD ON COMPOSITE SECTION ARE INSIGNIFICANT.

FOR ADDITIONAL NOTES, SEE SHEET NO. 41.

WORK THIS SHEET WITH SHEETS NO. 33 THROUGH NO. 35 AND NO. 58.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. Y. HUO
DRAWN BY M. VADKERTY & H. de PERCZEL
CHECKED A. MILUNAS
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

SUPERSTRUCTURE - UNIT 8
DECK ELEVATIONS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	50
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

WESTBOUND OR EASTBOUND ROADWAY

SPAN 25

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	596.967	0.000	596.967
10.00		32.500	596.723	0.025	596.748
20.00		32.500	596.476	0.046	596.523
30.00		32.500	596.228	0.061	596.290
40.00	A OR K	32.500	595.979	0.067	596.047
50.00		32.500	595.729	0.065	595.794
60.00		32.500	595.477	0.056	595.533
70.00		32.500	595.224	0.041	595.265
80.00		32.500	594.969	0.023	594.993
90.00		32.500	594.713	0.008	594.721
99.99		32.500	594.455	0.000	594.455
0.00		23.500	597.108	0.000	597.108
10.00		23.500	596.863	0.027	596.891
20.00		23.500	596.617	0.050	596.667
30.00		23.500	596.369	0.066	596.435
40.00	B OR J	23.500	596.120	0.073	596.193
50.00		23.500	595.869	0.071	595.940
60.00		23.500	595.617	0.061	595.678
70.00		23.500	595.364	0.045	595.409
80.00		23.500	595.109	0.026	595.136
90.00		23.500	594.853	0.009	594.863
99.99		23.500	594.596	0.000	594.596
0.00		14.500	597.248	0.000	597.248
10.00		14.500	597.003	0.029	597.033
20.00		14.500	596.757	0.053	596.810
30.00		14.500	596.509	0.069	596.579
40.00	C OR H	14.500	596.260	0.077	596.337
50.00		14.500	596.010	0.074	596.085
60.00		14.500	595.758	0.064	595.822
70.00		14.500	595.504	0.047	595.552
80.00		14.500	595.250	0.027	595.277
90.00		14.500	594.993	0.010	595.004
99.99		14.500	594.736	0.000	594.736
0.00		5.500	597.389	0.000	597.389
10.00		5.500	597.144	0.027	597.172
20.00		5.500	596.897	0.050	596.948
30.00		5.500	596.650	0.066	596.716
40.00	D OR G	5.500	596.401	0.073	596.474
50.00		5.500	596.150	0.071	596.221
60.00		5.500	595.898	0.061	595.959
70.00		5.500	595.645	0.045	595.690
80.00		5.500	595.390	0.026	595.416
90.00		5.500	595.134	0.009	595.144
99.99		5.500	594.876	0.000	594.876
0.00		-3.500	597.529	0.000	597.529
10.00		-3.500	597.284	0.025	597.310
20.00		-3.500	597.038	0.046	597.085
30.00		-3.500	596.790	0.061	596.851
40.00	E OR F	-3.500	596.541	0.067	596.608
50.00		-3.500	596.290	0.065	596.356
60.00		-3.500	596.038	0.056	596.095
70.00		-3.500	595.785	0.041	595.826
80.00		-3.500	595.530	0.023	595.554
90.00		-3.500	595.274	0.008	595.283
99.99		-3.500	595.017	0.000	595.017

SPAN 26

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	594.455	0.000	594.455
10.00		32.500	594.196	-0.002	594.194
20.00		32.500	593.936	0.000	593.936
30.00		32.500	593.674	0.007	593.682
40.00	A OR K	32.500	593.411	0.014	593.425
50.00		32.500	593.147	0.018	593.165
60.00		32.500	592.881	0.018	592.899
70.00		32.500	592.613	0.015	592.628
80.00		32.500	592.345	0.008	592.353
90.00		32.500	592.074	0.002	592.077
99.99		32.500	591.803	0.000	591.803
0.00		23.500	594.596	0.000	594.596
10.00		23.500	594.337	-0.002	594.334
20.00		23.500	594.076	0.001	594.078
30.00		23.500	593.815	0.008	593.823
40.00	B OR J	23.500	593.551	0.015	593.567
50.00		23.500	593.287	0.020	593.307
60.00		23.500	593.021	0.020	593.042
70.00		23.500	592.754	0.016	592.770
80.00		23.500	592.485	0.009	592.495
90.00		23.500	592.215	0.002	592.218
99.99		23.500	591.943	0.000	591.943
0.00		14.500	594.736	0.000	594.736
10.00		14.500	594.477	-0.002	594.474
20.00		14.500	594.217	0.001	594.218
30.00		14.500	593.955	0.009	593.964
40.00	C OR H	14.500	593.692	0.016	593.709
50.00		14.500	593.427	0.021	593.449
60.00		14.500	593.161	0.021	593.183
70.00		14.500	592.894	0.017	592.911
80.00		14.500	592.625	0.010	592.635
90.00		14.500	592.355	0.002	592.358
99.99		14.500	592.084	0.000	592.084
0.00		5.500	594.876	0.000	594.876
10.00		5.500	594.617	-0.002	594.615
20.00		5.500	594.357	0.001	594.358
30.00		5.500	594.095	0.008	594.104
40.00	D OR G	5.500	593.832	0.015	593.848
50.00		5.500	593.568	0.020	593.588
60.00		5.500	593.302	0.020	593.322
70.00		5.500	593.034	0.016	593.051
80.00		5.500	592.766	0.009	592.775
90.00		5.500	592.496	0.002	592.498
99.99		5.500	592.224	0.000	592.224
0.00		-3.500	595.017	0.000	595.017
10.00		-3.500	594.758	-0.002	594.755
20.00		-3.500	594.498	0.000	594.498
30.00		-3.500	594.236	0.007	594.243
40.00	E OR F	-3.500	593.973	0.014	593.987
50.00		-3.500	593.708	0.018	593.727
60.00		-3.500	593.442	0.018	593.461
70.00		-3.500	593.175	0.015	593.190
80.00		-3.500	592.906	0.008	592.915
90.00		-3.500	592.636	0.002	592.638
99.99		-3.500	592.364	0.000	592.364

SPAN 27

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	591.803	0.000	591.803
10.00		32.500	591.530	0.002	591.532
20.00		32.500	591.256	0.008	591.264
30.00		32.500	590.980	0.016	590.994
40.00	A OR K	32.500	590.703	0.018	590.721
50.00		32.500	590.424	0.017	590.442
60.00		32.500	590.144	0.013	590.158
70.00		32.500	589.863	0.006	589.869
80.00		32.500	589.580	0.000	589.581
90.00		32.500	589.296	-0.004	589.292
99.99		32.500	589.011	0.000	589.011
0.00		23.500	591.943	0.000	591.943
10.00		23.500	591.670	0.002	591.673
20.00		23.500	591.396	0.009	591.405
30.00		23.500	591.120	0.015	591.136
40.00	B OR J	23.500	590.843	0.019	590.863
50.00		23.500	590.565	0.019	590.584
60.00		23.500	590.285	0.014	590.300
70.00		23.500	590.003	0.007	590.011
80.00		23.500	589.721	-0.000	589.721
90.00		23.500	589.437	-0.004	589.433
99.99		23.500	589.151	0.000	589.151
0.00		14.500	592.084	0.000	592.084
10.00		14.500	591.811	0.002	591.813
20.00		14.500	591.536	0.009	591.546
30.00		14.500	591.261	0.016	591.278
40.00	C OR H	14.500	590.984	0.020	591.005
50.00		14.500	590.705	0.020	590.726
60.00		14.500	590.425	0.015	590.441
70.00		14.500	590.144	0.007	590.152
80.00		14.500	589.861	-0.000	589.861
90.00		14.500	589.577	-0.004	589.573
99.99		14.500	589.291	0.000	589.291
0.00		5.500	592.224	0.000	592.224
10.00		5.500	591.951	0.002	591.954
20.00		5.500	591.677	0.009	591.686
30.00		5.500	591.401	0.015	591.417
40.00	D OR G	5.500	591.124	0.019	591.144
50.00		5.500	590.845	0.019	590.865
60.00		5.500	590.565	0.014	590.580
70.00		5.500	590.284	0.007	590.292
80.00		5.500	590.001	-0.000	590.001
90.00		5.500	589.717	-0.004	589.713
99.99		5.500	589.432	0.000	589.432
0.00		-3.500	592.364	0.000	592.364
10.00		-3.500	592.092	0.002	592.094
20.00		-3.500	591.817	0.008	591.826
30.00		-3.500	591.541	0.014	591.556
40.00	E OR F	-3.500	591.264	0.018	591.282
50.00		-3.500	590.986	0.017	591.003
60.00		-3.500	590.706	0.013	590.719
70.00		-3.500	590.425	0.006	590.431
80.00		-3.500	590.142	0.000	590.141
90.00		-3.500	589.858	-0.004	589.854
99.99		-3.500	589.572	0.000	589.572

SPAN 28

DISTANCE FROM SUPPORT (FT)	BEAM NO.	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00		32.500	589.011	0.000	589.011
10.00		32.500	588.724	0.009	588.734
20.00		32.500	588.435	0.025	588.460
30.00		32.500	588.146	0.042	588.188
40.00	A OR K	32.500	587.854	0.057	587.912
50.00		32.500	587.562	0.066	587.628
60.00		32.500	587.268	0.068	587.336
70.00		32.500	586.973	0.061	587.034
80.00		32.500	586.676	0.047	586.723
90.00		32.500	586.378	0.025	586.404
99.99		32.500	586.078	0.000	586.078
0.00		23.500	589.151	0.000	589.151
10.00		23.500	588.864	0.011	588.875
20.00		23.500	588.576	0.027	588.603
30.00		23.500	588.286	0.046	588.332
40.00	B OR J	23.500	587.995	0.061	588.057
50.00		23.500	587.702	0.071	587.774
60.00		23.500	587.408	0.073	587.482
70.00		23.500	587.113	0.066	587.180
80.00		23.500	586.816	0.050	586.867
90.00		23.500	586.518	0.028	586.546
99.99		23.500	586.219	0.000	586.219
0.00		14.500	589.291	0.000	589.291
10.00		14.500	589.004	0.011	589.016
20.00		14.500	588.716	0.029	588.745
30.00		14.500	588.426	0.048	588.475
40.00	C OR H	14.500	588.135	0.065	588.201
50.00		14.500	587.843	0.075	587.918
60.00		14.500	587.549	0.077	587.626
70.00		14.500	587.253	0.070	587.324
80.00		14.500	586.957	0.053	587.010
90.00		14.500	586.659	0.029	586.688
99.99		14.500	586.359	0.000	586.359
0.00		5.500	589.432	0.000	589.432
10.00		5.500	589.145	0.011	589.156
20.00		5.500	588.857	0.027	588.884
30.00		5.500	588.567	0.046	588.613
40.00	D OR G	5.500	588.276	0.061	588.338
50.00		5.500	587.983	0.071	588.055
60.00		5.500	587.689	0.073	587.763
70.00		5.500	587.394	0.066	587.460
80.00		5.500	587.097	0.050	587.148
90.00		5.500	586.799	0.028	586.827
99.99		5.500	586.500	0.000	586.500
0.00		-3.500	589.572	0.000	589.572
10.00		-3.500	589.285	0.009	589.295
20.00		-3.500	588.997	0.025	589.022
30.00		-3.500	588.707	0.042	588.749
40.00	E OR F	-3.500	588.416	0.057	588.473
50.00		-3.500	588.124	0.066	588.190
60.00		-3.500	587.830	0.068	587.898
70.00		-3.500	587.534	0.061	587.596
80.00		-3.500	587.238	0.047	587.285
90.00		-3.500	586.939	0.025	586.965
99.99		-3.500	586.640	0.000	586.640

NOTES:

TABULATED DEAD LOAD DEFLECTIONS FOR THIS UNIT INCLUDE DEAD LOAD OF SLAB ONLY. DEFLECTIONS DUE TO SUPERIMPOSED DEAD LOAD ON COMPOSITE SECTION ARE INSIGNIFICANT.

FOR ADDITIONAL NOTES, SEE SHEET NO. 41.

WORK THIS SHEET WITH SHEETS NO. 36 THROUGH NO. 38. AND NO. 59.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. Y. HUO
DRAWN BY M. VADKERTY & H. de PERCZEL
CHECKED A. MILUNAS
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

SUPERSTRUCTURE - UNIT 9
DECK ELEVATIONS
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	51
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		

IOWA-ILLINOIS GAS & ELECTRIC POWER CO. 480 VOLT, 1 PHASE POWER LINE.

900'-0"

12°-24'-36"

CONCORD STREET

PIER 87

RUN NEAR BOTTOM FLANGE

1"C.-2"Ø 10

1"C.-2"Ø 8, 1"Ø 10

1/4"C.-2"Ø 8 1"Ø 12

SERVICE POLE

PIER 13

PIER NAVIGATION LIGHTS TO BE TURNED SO THAT AXIS THRU CENTER OF LENS IS PARALLEL TO SKEW OF BRIDGE.

PIER 14

PLAN OF BRIDGE
SCALE: 1" = 40'

NOTE:
1. DRILL TWO 3/8" HOLES IN THE BOTTOM OF JUNCTION BOX FOR DRAINAGE.
2. SET RELAY WITH COVER AND RELAY IN A VERTICAL POSITION ONLY.

SIMILAR TO SEC. "B-B" BUT OPPOSITE HAND.

APPROXIMATE LOCATION OF PASS-THRU IN INTERIOR FLOOR BEAMS.

WALKWAY

1¼" CONDUIT

6"x8"x4" BOX

4"x6"x4" BOX

1'-6½"

BOTTOM OF END FLOOR BEAM

OUTER EDGE OF WALKWAY HANGER ANGLES.

1" CONDUIT

6"x8"x4" BOX

RUBBER COVERED FLEXIBLE CONDUIT

AUXILIARY LAMP RELAY

PIER NAVIGATION LIGHT (2-180° RED LENSES)

TOP OF PIER

TO NAVIGATION LIGHT AT END OF PIER

SECTION "C-C"
SCALE: 1/4" = 1'-0"

30'± VERIFY IN FIELD

2'-6"

SECTION "A-A"
SCALE: 3/32" = 1'-0"

110 VOLTS 60 CYCLE, A.C.

AL

RL

WIRING DIAGRAM FOR AUXILIARY LAMP RELAY WITH COIL ENERGIZED

WALKWAY

2'-0"

2'-0"

"LR" & "LL" CONDUIT FITTINGS

FLEXIBLE CONDUIT

PHOTO ELEC. CONTROL

120/240 VOLT 1Ø, 60~

#8

#10

SERVICE SWITCH

WIRING DIAGRAM

SECTION "D-D"
SCALE: 1/4" = 1'-0"

½" Ø ROD IN OPEN POSITION (PROVIDE TAMPER PROOF LOCK FOR CLOSED POSITION, INCIDENTAL).

WEATHER HEAD

PHOTO ELECTRIC CONTROL

ALLOW 5 FEET OF WIRE. POWER CO. WILL FURNISH SERVICE BRACKET AND MAKE FINAL CONNECTION.

¾" C.-2"Ø 8 1"Ø 12

1½" C.-2"Ø 8

SWITCH

METER & SOCKET

4'-0"

STIFF ℄

℄ NAVIGATION LIGHT

CONCRETE ENCASEMENT

3"

5'-0"

5/8" Ø x 20 FT. GROUND ROD

SERVICE POLE
SCALE: 3/8" = 1'-0"

12"x12"x8" BOX

SECTION "K-K"
SCALE: 3/8" = 1'-0"

4¾"

6"

2"

½" BENT ℄.

DETAIL 3
SCALE: 1½" = 1'-0"

3"

5½"

7"

6"

BENT PLATE (BY OTHERS)

DETAIL 5
SCALE: 1½" = 1'-0"

½" ROD

3¾"

2" I.D. PIPE

¾" I.D. PIPE

DETAIL 4
SCALE: 1½" = 1'-0"

NOTE
ALL BRIDGE STEEL WORK WILL BE DONE UNDER ANOTHER CONTRACT. ALL SUPPORTS, FASTENINGS, BRACKETS AND ANCHORS FOR THE NAVIGATION LIGHTING SYSTEM SHALL BE INCLUDED IN THIS CONTRACT AS SHOWN AND SPECIFIED EXCEPT WHERE NOTED OTHERWISE.

SEE DETAIL NO. 2

PROVIDE SUFFICIENT CABLE TO ALLOW LIGHT TO SWING TO UP POSITION.

SECTION "E-E"
SCALE: ½" = 1'-0"

PLATE HOOK, WELD TO ⅜" BENT PLATE

5¼"

1'-3"

2'-6"

℄ OF LIGHT IN RE-LAMP POSITION

1'-9¼"

9 FT. LENGTH GALVANIZED RETRIEVER CHAIN

2'-10¾"

NAVIGATION LIGHT (1-360° GREEN LENSES)

SECTION "G-G"
SCALE: ½" = 1'-0"

¼" GALV. U-BOLT

2½"x2½"x¼" ANGLE

1" CONDUIT

⅜" Ø HEX HEAD BOLTS

DETAIL 2
SCALE: 3" = 1'-0"

SECTION "L-L"
SCALE: 3" = 1'-0"

SEE DETAIL 3

"LB" CONDUIT FITTING

AUXILIARY LAMP RELAY

SEE DETAIL 5

SEE DET. 4

4"x6"x4" BOX

8½"

SECTION "H-H"
SCALE: ½" = 1'-0"

4"x6"x4"

EXPANSION-DEFLECTION FITTING

SECTION "J-J"
SCALE: ⅜" = 1'-0"

TO NAVIGATION LIGHT AT END OF PIER

PASS-THRU OPENING

DRILL HOLE FOR CONDUIT

4"x6"x4" BOX

SECTION "F-F"
SCALE: ½" = 1'-0"

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY	G.R. FARRINGER
DRAWN BY	G.R. FARRINGER
CHECKED	T. HANSEN
IN CHARGE	W.J. ZAPPEL
APPROVED	T. HANSEN

NAVIGATION LIGHTING

F.A.I. ROUTE 280 SECTION 81-1D

I-280 OVER MISSISSIPPI RIVER

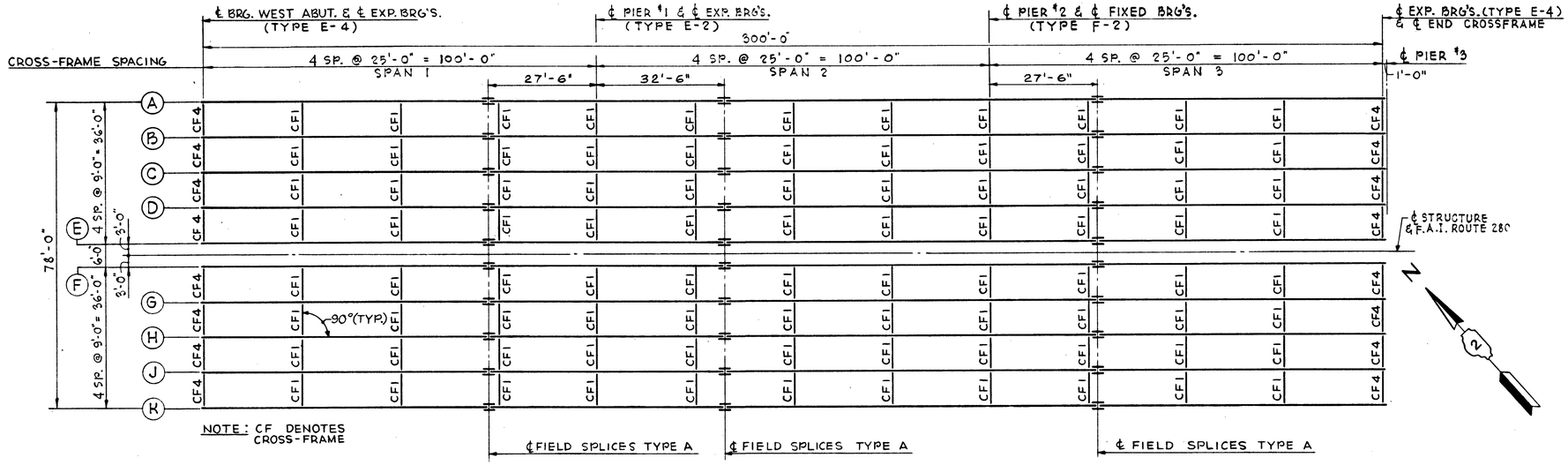
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

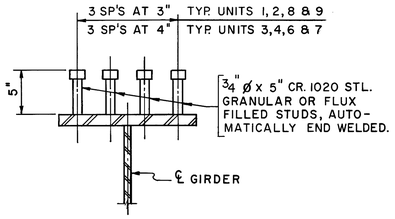
Rev. 6-23-72

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	52
FED. ROAD DIST. NO.		FED. AID PROJECT I-230		



FRAMING PLAN (UNIT 1)

SCALE : $1\frac{1}{16}$" = 1'-0"

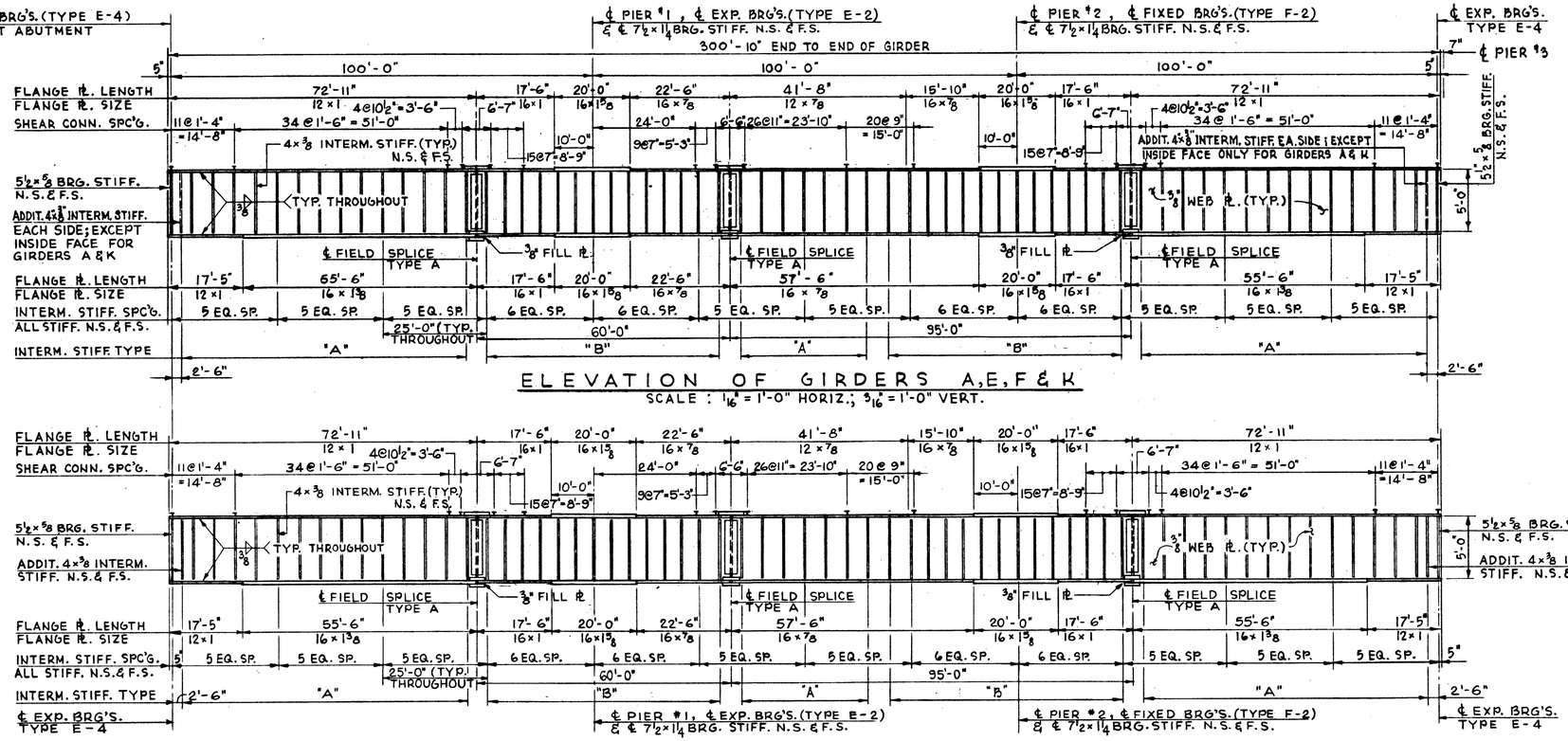


DETAIL OF SHEAR CONNECTOR

SCALE: $1\frac{1}{8}$" = 1"

FOR SHEAR CONNECTOR LOCATION AND SPACING, SEE GIRDER ELEVATIONS, SHEETS NO. 52 THROUGH 59.

SHEAR CONNECTOR SPACING SHALL BE MODIFIED AS NECESSARY TO CLEAR FLANGE SHOP WELDINGS.



NOTE:

THIS DRAWING HAS BEEN REPRODUCED IN PART FROM STRUCTURAL STEEL CONTRACT 81-1F & E TO BE USED ONLY AS REFERENCE FOR FURNISHING AND PLACING THE STUD SHEAR CONNECTORS WHICH ARE PART OF THIS CONTRACT.

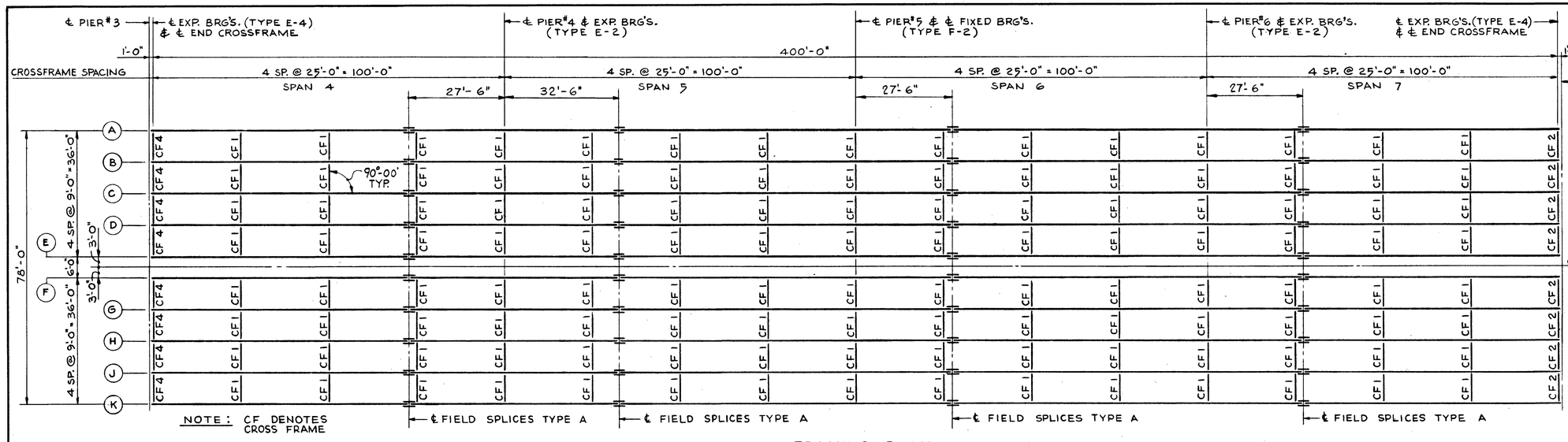
BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
STUD SHEAR CONNECTORS	EACH	7,560

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY F. BOBINAS
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

FRAMING PLAN - UNIT 1

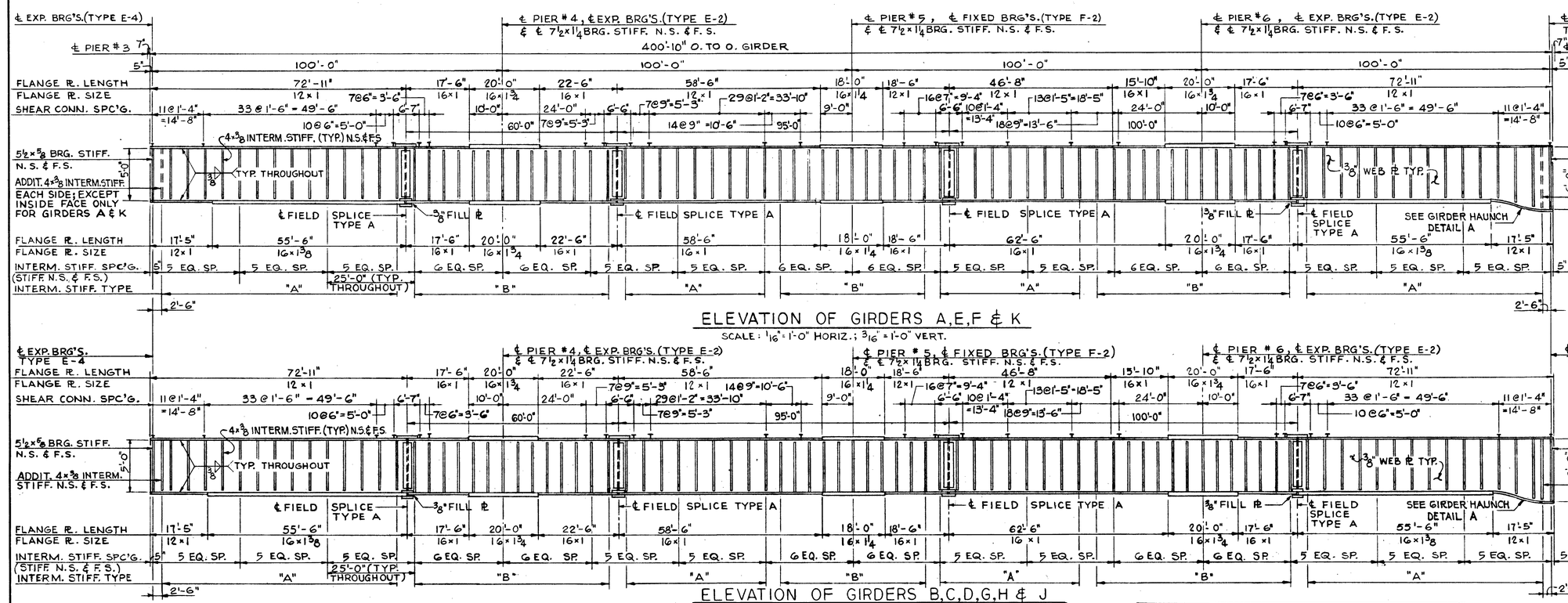
F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	53
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



FRAMING PLAN (UNIT 2)

SCALE: 1/16" = 1'-0"

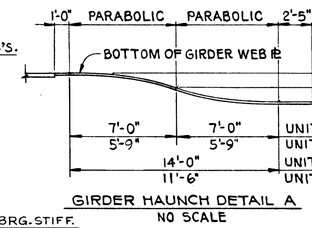


ELEVATION OF GIRDERS A, E, F & K

SCALE: 1/16" = 1'-0" HORIZ.; ⅜" = 1'-0" VERT.

ELEVATION OF GIRDERS B, C, D, G, H & J

SCALE: 1/16" = 1'-0" HORIZ.; ⅜" = 1'-0" VERT.



GIRDER HAUNCH DETAIL A

NO SCALE

NOTE: THIS DRAWING HAS BEEN REPRODUCED IN PART FROM STRUCTURAL STEEL CONTRACT 81-1F & E TO BE USED ONLY AS REFERENCE FOR FURNISHING AND PLACING THE STUD SHEAR CONNECTORS WHICH ARE PART OF THIS CONTRACT.

FOR DETAIL OF SHEAR CONNECTORS, SEE SHEET NO. 52.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
STUD SHEAR CONNECTORS	EACH	9,760

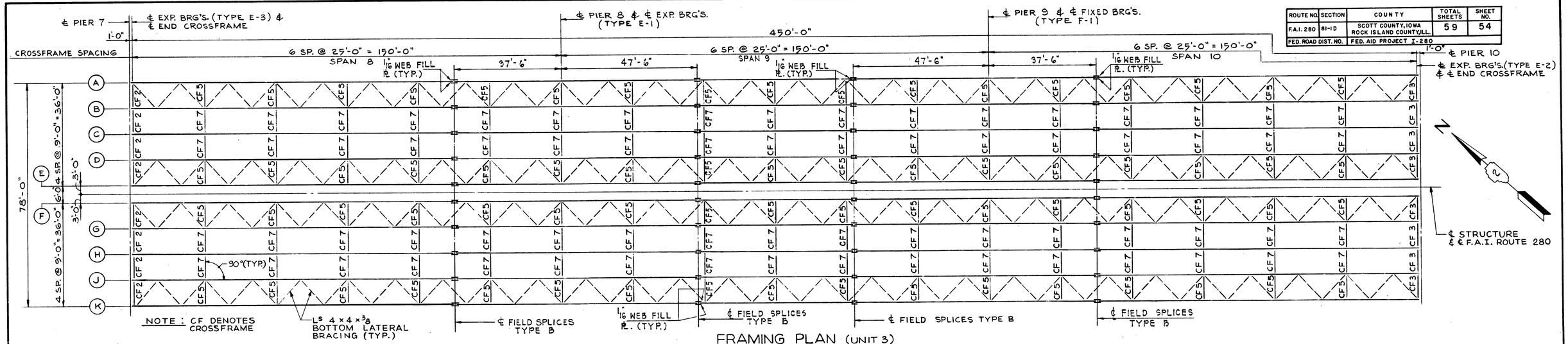
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W. Y. HUO
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

FRAMING PLAN - UNIT 2

F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11+11.38 TO STA. 53+04.38

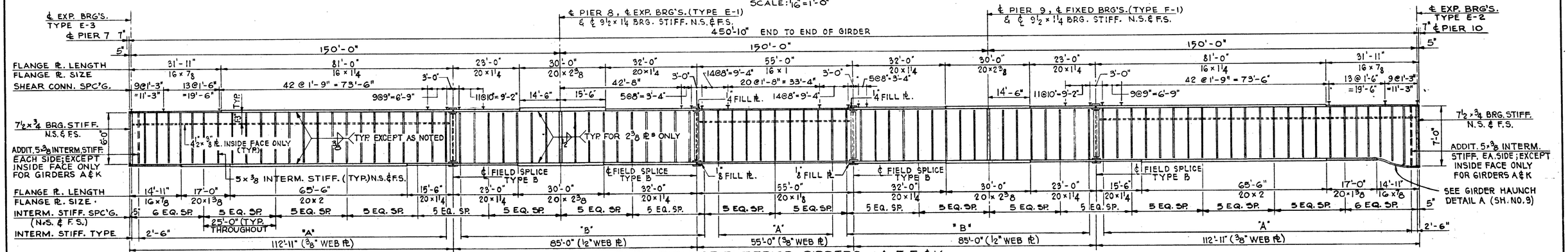
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	54
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



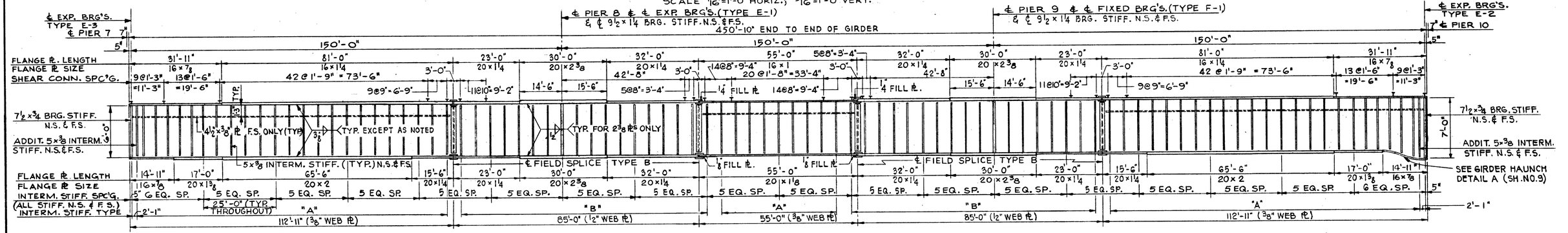
FRAMING PLAN (UNIT 3)

SCALE: 1/16" = 1'-0"



ELEVATION OF EXTERIOR GIRDERS A, E, F & K

SCALE 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.



ELEVATION OF GIRDERS B, C, D, G, H & J

SCALE : 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.

NOTE :

THIS DRAWING HAS BEEN REPRODUCED IN PART FROM STRUCTURAL STEEL CONTRACT 81-1F & E TO BE USED ONLY AS REFERENCE FOR FURNISHING AND PLACING THE STUD SHEAR CONNECTORS WHICH ARE PART OF THIS CONTRACT.

FOR DETAIL OF SHEAR CONNECTORS, SEE SHEET NO. 52.

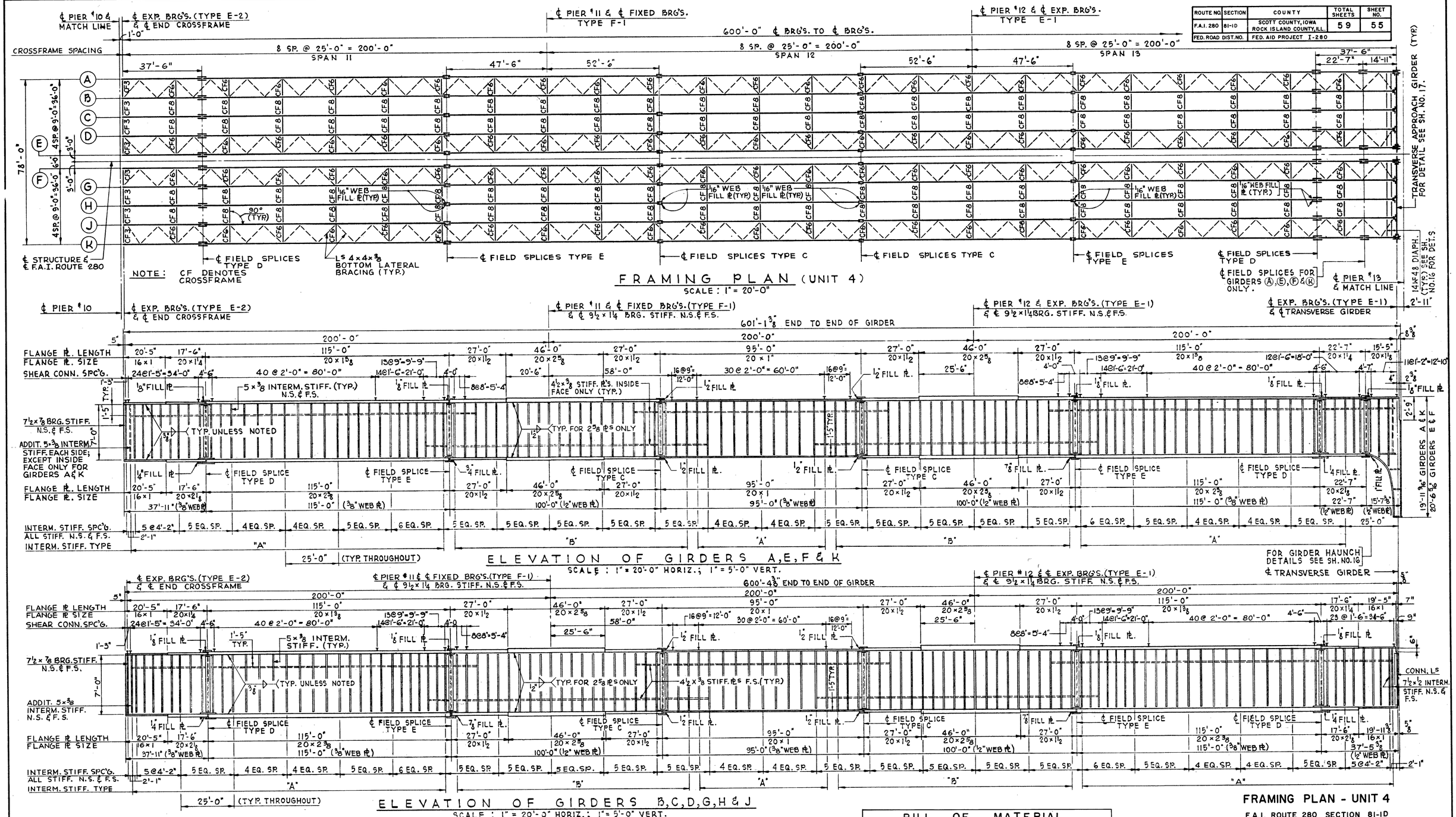
BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
STUD SHEAR CONNECTORS	EACH	9, 320

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

FRAMING PLAN - UNIT 3

F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	55
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



FRAMING PLAN (UNIT 4)

SCALE : 1" = 20'-0"

ELEVATION OF GIRDERS A, E, F & K

SCALE : 1" = 20'-0" HORIZ.; 1" = 5'-0" VERT.

ELEVATION OF GIRDERS B, C, D, G, H & J

SCALE : 1" = 20'-0" HORIZ.; 1" = 5'-0" VERT.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
STUD SHEAR CONNECTORS	EACH	10,680

NOTE:

THIS DRAWING HAS BEEN REPRODUCED IN PART FROM STRUCTURAL STEEL CONTRACT 81-1F & E TO BE USED ONLY AS REFERENCE FOR FURNISHING AND PLACING THE STUD SHEAR CONNECTORS WHICH ARE PART OF THIS CONTRACT.

FOR DETAIL OF SHEAR CONNECTORS, SEE SHEET NO. 52.

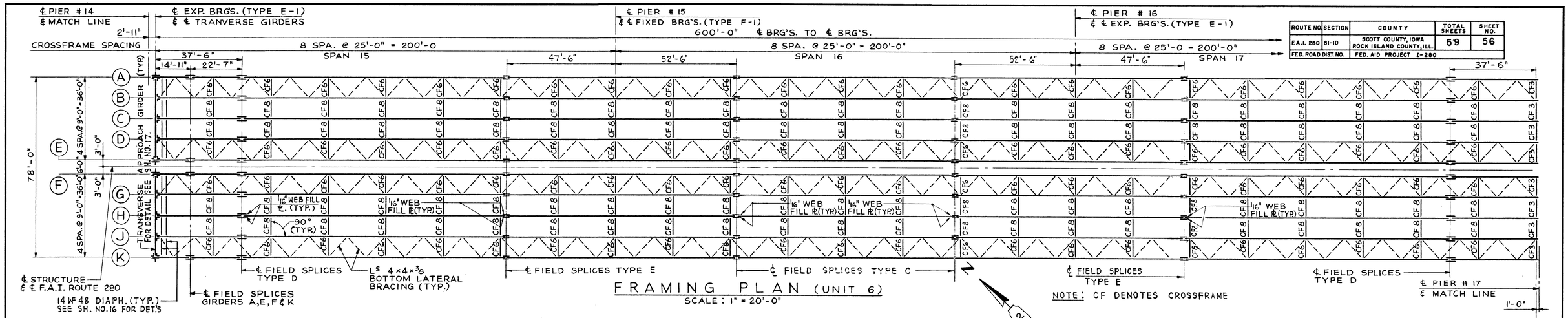
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

FRAMING PLAN - UNIT 4

F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970

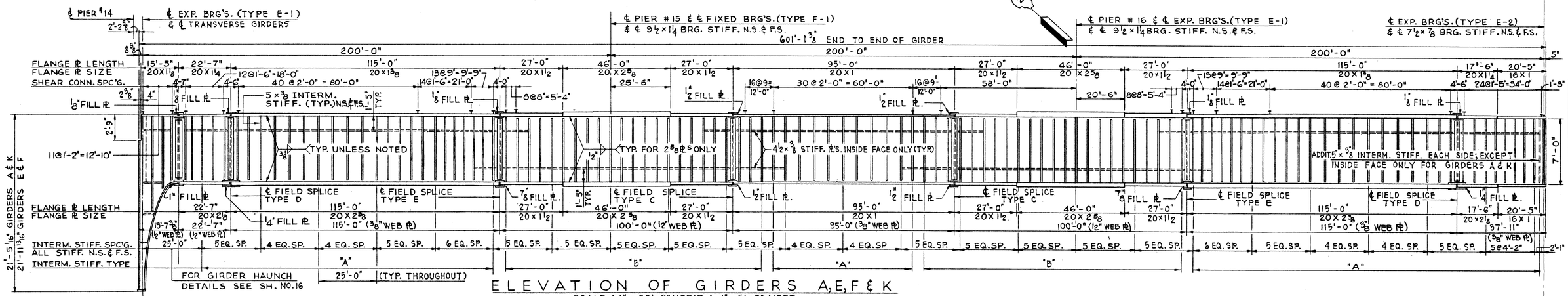
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	56
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



FRAMING PLAN (UNIT 6)

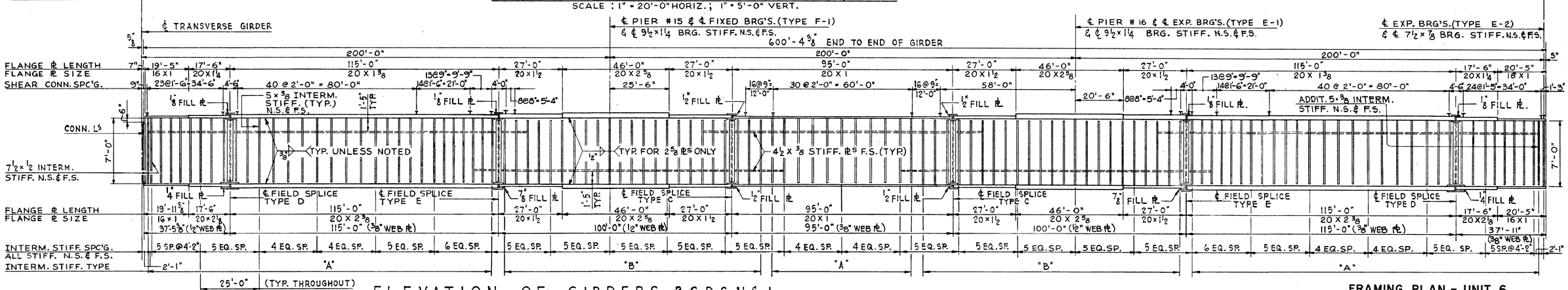
SCALE : 1" = 20'-0"

NOTE: CF DENOTES CROSSFRAME



ELEVATION OF GIRDERS A, E, F & K

SCALE : 1" = 20'-0" HORIZ. ; 1" = 5'-0" VERT.



ELEVATION OF GIRDERS B, C, D, G, H & J.

SCALE : 1" = 20'-0" HORIZ. ; 1" = 5'-0" VERT.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
STUD SHEAR CONNECTORS	EACH	10,680

DE LEUW, CATHER & COMPANY ENGINEERS

DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

NOTE:

THIS DRAWING HAS BEEN REPRODUCED IN PART FROM STRUCTURAL STEEL CONTRACT 81-1F & E TO BE USED ONLY AS REFERENCE FOR FURNISHING AND PLACING THE STUD SHEAR CONNECTORS WHICH ARE PART OF THIS CONTRACT.

FOR DETAIL OF SHEAR CONNECTORS, SEE SHEET NO. 52.

FRAMING PLAN - UNIT 6

F.A.I. ROUTE 280 SECTION 81-1D

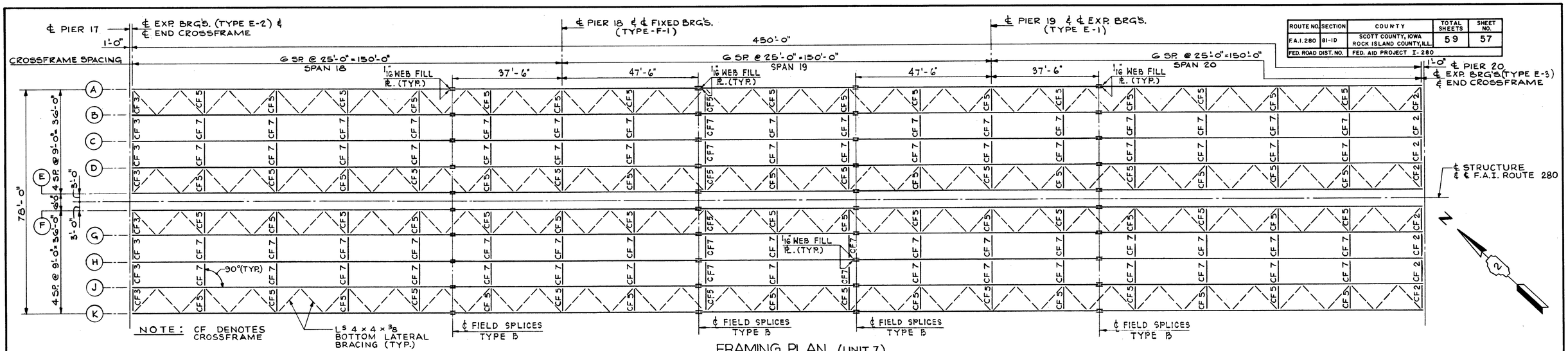
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

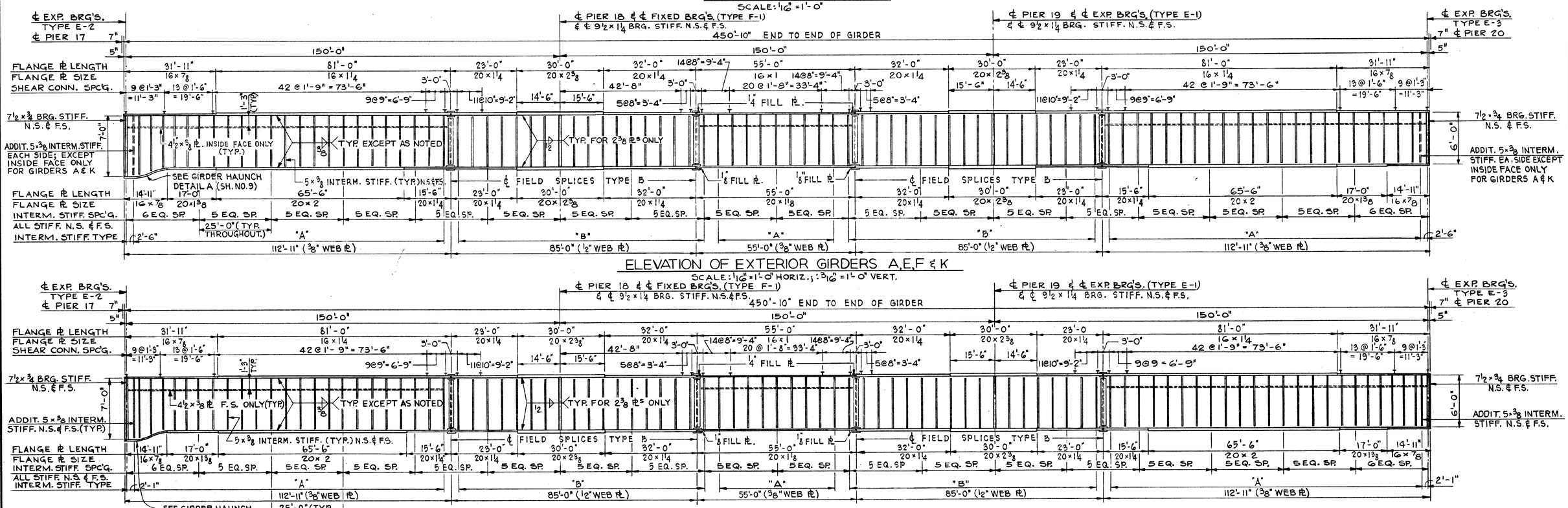
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-ID	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	57
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



FRAMING PLAN (UNIT 7)

SCALE: 1/16" = 1'-0"



ELEVATION OF EXTERIOR GIRDERS A, E, F & K

SCALE: 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.

ELEVATION OF GIRDERS B, C, D, G, H & J

SCALE: 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.

NOTE:

THIS DRAWING HAS BEEN REPRODUCED IN PART FROM STRUCTURAL STEEL CONTRACT 81-IF & E TO BE USED ONLY AS REFERENCE FOR FURNISHING AND PLACING THE STUD SHEAR CONNECTORS WHICH ARE PART OF THIS CONTRACT.

FOR DETAIL OF SHEAR CONNECTORS, SEE SHEET NO. 52.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
STUD SHEAR CONNECTORS	EACH	9,320

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W. Y. HUO
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

FRAMING PLAN - UNIT 7

F.A.I. ROUTE 280 SECTION 81-ID

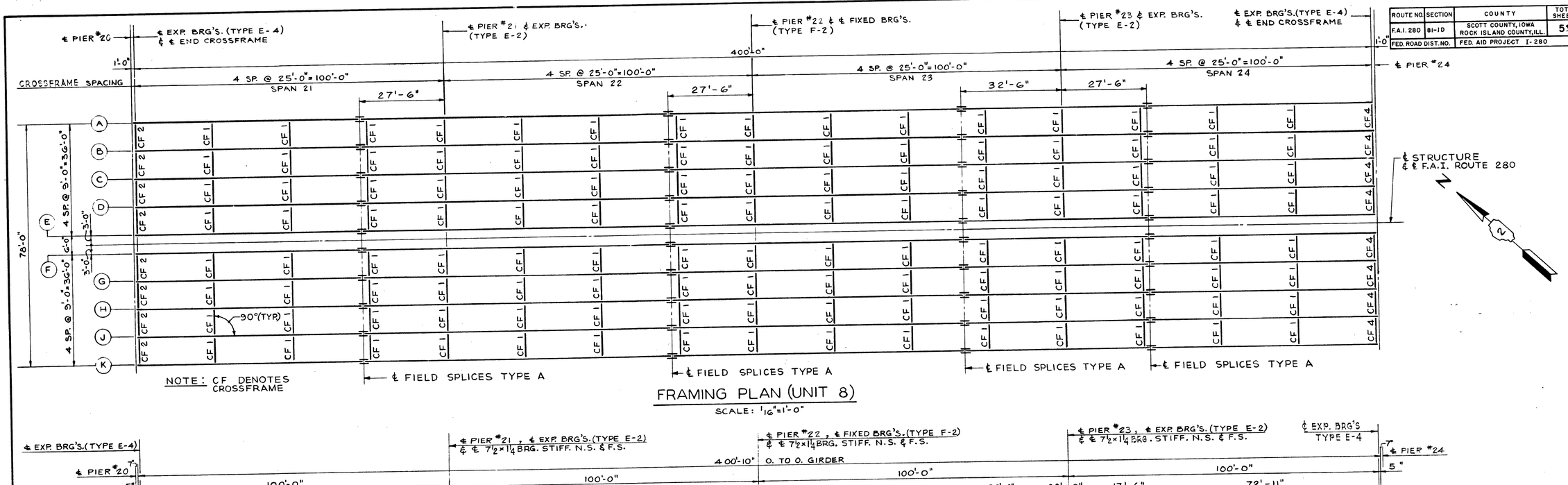
I-280 OVER MISSISSIPPI RIVER

SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.

STA. 11 + 11.38 TO STA. 53 + 04.38

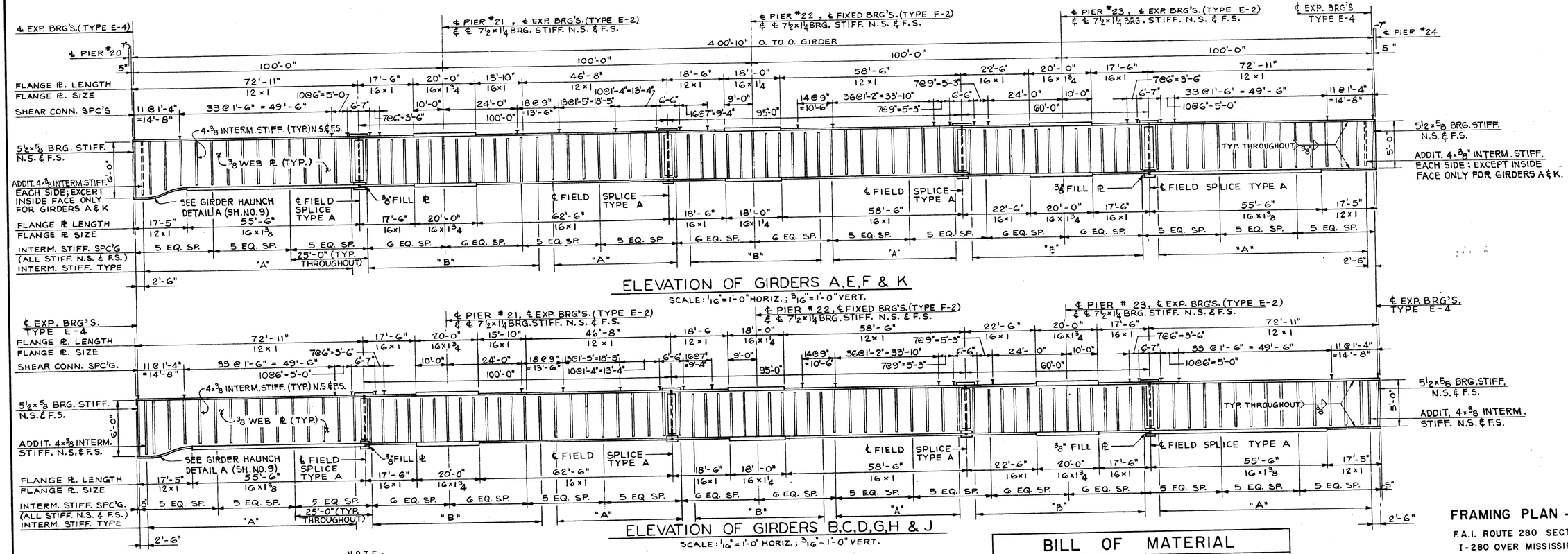
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	58
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



FRAMING PLAN (UNIT 8)

SCALE: 1/16"=1'-0"



BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
STUD SHEAR CONNECTORS	EACH	9,760

NOTE:

THIS DRAWING HAS BEEN REPRODUCED IN PART FROM STRUCTURAL STEEL CONTRACT 81-1F & E TO BE USED ONLY AS REFERENCE FOR FURNISHING AND PLACING THE STUD SHEAR CONNECTORS WHICH ARE PART OF THIS CONTRACT.

FOR DETAIL OF SHEAR CONNECTORS, SEE SHEET NO. 52.

DE LEUW, CATHER & COMPANY ENGINEERS

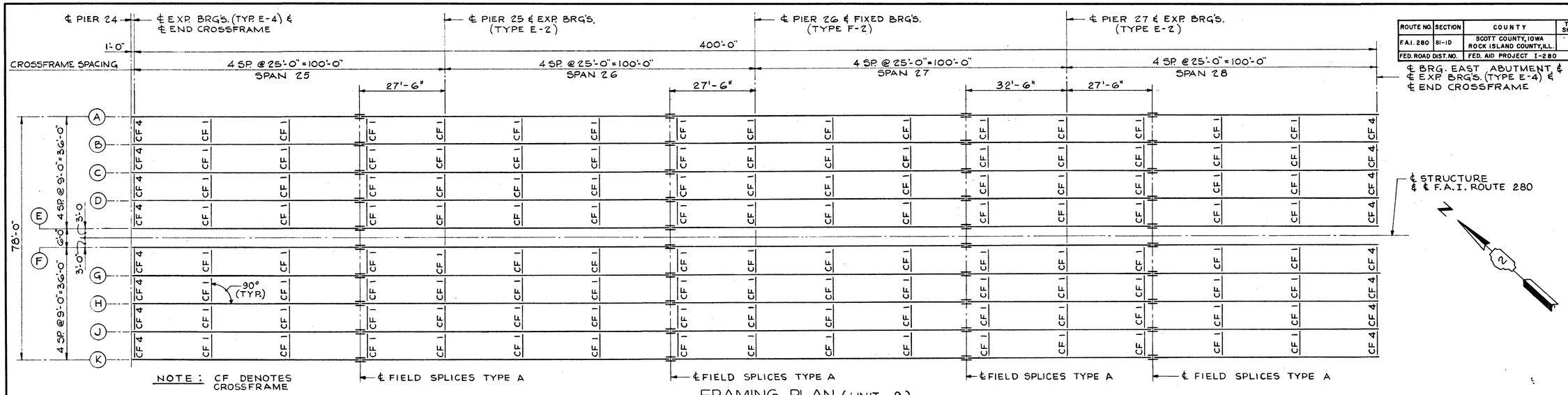
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W.Y. HUO
IN CHARGE W.J. ZAPFEL
APPROVED W.G. HORN

FRAMING PLAN - UNIT 8

F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

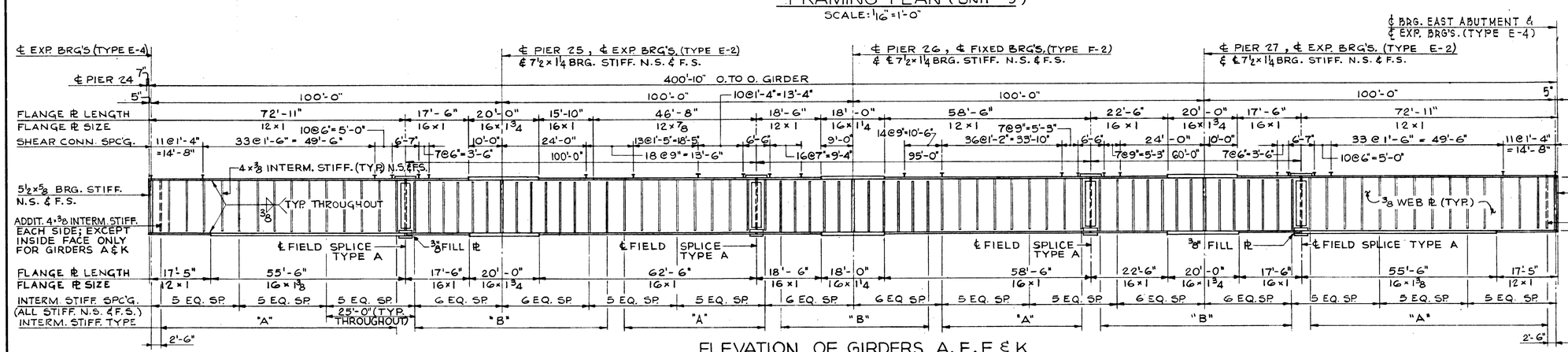
SCALE: AS NOTED DATE: NOV. 16, 1970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 280	81-1D	SCOTT COUNTY, IOWA ROCK ISLAND COUNTY, ILL.	59	59
FED. ROAD DIST. NO.		FED. AID PROJECT I-280		



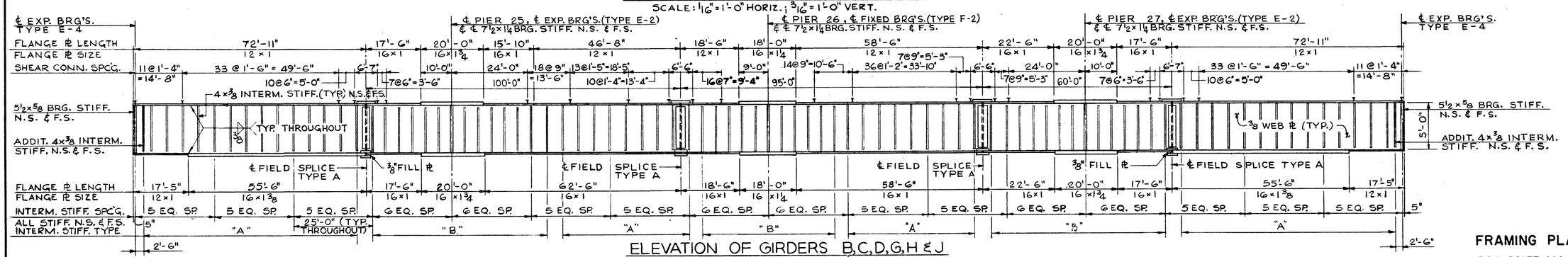
FRAMING PLAN (UNIT 9)

SCALE: 1/16" = 1'-0"



ELEVATION OF GIRDERS A, E, F & K

SCALE: 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.



ELEVATION OF GIRDERS B, C, D, G, H & J

SCALE: 1/16" = 1'-0" HORIZ.; 3/16" = 1'-0" VERT.

NOTE:

THIS DRAWING HAS BEEN REPRODUCED IN PART FROM STRUCTURAL STEEL CONTRACT 81-1F & E TO BE USED ONLY AS REFERENCE FOR FURNISHING AND PLACING THE STUD SHEAR CONNECTORS WHICH ARE PART OF THIS CONTRACT.

FOR DETAIL OF SHEAR CONNECTORS, SEE SHEET NO. 52.

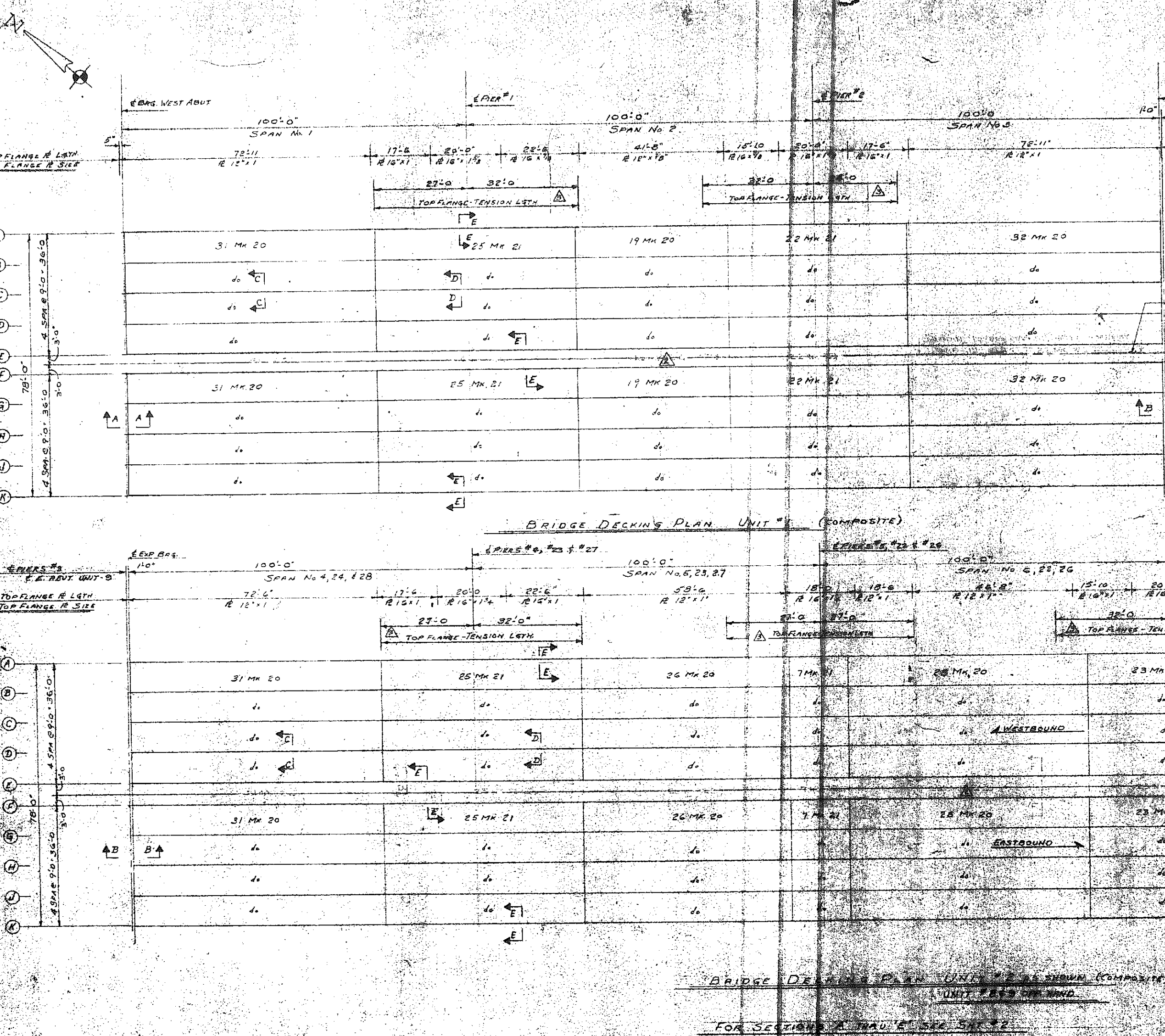
BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
STUD SHEAR CONNECTORS	EACH	9,760

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. LANTSKI
DRAWN BY G. SCHWARTZ
CHECKED W. Y. HUO
IN CHARGE W. J. ZAPFEL
APPROVED W. G. HORN

FRAMING PLAN - UNIT 9

F.A.I. ROUTE 280 SECTION 81-1D
I-280 OVER MISSISSIPPI RIVER
SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
STA. 11 + 11.38 TO STA. 53 + 04.38

SCALE: AS NOTED DATE: NOV. 16, 1970



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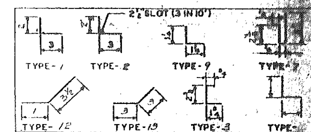
Engineer of Bridge & Traffic Structures



BRIDGEDECK ACCESSORIES

ASTM A-446 GRADE C

MARK	TYPE	LENGTH	NO.	THICKNESS
1	1	10'-0	1415	0.0972
2	2	10'-0	10400	0.0972
				0.0284
7	7	2' WIDE	5450	0.0972
9	9	10'-0	740	0.0972
12	12	9'-0	64	0.0972
13	13	9'-0	64	0.0972
#14 × ¾	TEK SELF TAPPING SCREWS			22100

BRIDGEDECK

ASTM A-446 GRADE C

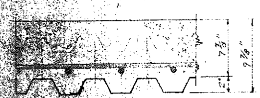
MARK	GAGE	PITCH	LENGTH	NO.
20	16	7	7'-10"	3440
21	18	7	7'-6"	1000

(11) 4 WEEP HOLES SHALL BE FIELD DRILLED AT NOT LESS THAN 12" O.C. ALONG THE BOTTOM OF THE FLUTE AT THE CONSTRUCTION JOINTS.

GENERAL NOTES & RECOMMENDATIONS

1. BRIDGE DECK is roll formed from high strength structural quality steel sheet conforming to the yield and tensile requirements of ASTM Designation A446-71, Grade C.
2. Steel for brake formed accessory sections will be structural quality steel sheet conforming to ASTM A446-71, Grade C.
3. Galvanized coating for all BRIDGE DECK and accessory sections will be in conformance with ASTM A525-71, coating class ...
4. Elevation of supports will be adjusted by the erector.
5. All BRIDGE DECK sheets shall bear a minimum of 1" on supports.
6. Each sheet shall be placed and secured before moving on to the next sheet.
7. All cutting of BRIDGE DECK and accessory sections shall be done by saw.
8. Care should be exercised during pouring operations not to permit heavily concentrated or undue impact loads or equipment to be placed on the BRIDGE DECK.
9. Concrete admixtures containing calcium chloride shall not be used over permanent steel BRIDGE DECK.
10. STRUCTURAL STL SURFACES THAT ARE INACCESSIBLE FOR FIELD PAINTING AFTER ERECTION IS ENTIRELY COMPLETED, SHALL BE PAINTED ... PRIOR TO ERECTION, IN ACCORDANCE WITH STD. SPEC., ART. 509.05.

FILE SET



BRIDGEDECK
2½" COVER — 7" PITCH
16 GA. S = 0.4573 IN³ I = 0.5304 IN⁴
18 GA. S = 0.6091 IN³ I = 0.7086 IN⁴

UNITS No 1, 2, 8 & 9

APPROVED FINAL DRAWINGS
ISSUED FOR
FILES, FABRICATION AND ERECTION

CYCLOPS CORPORATION — REEVES-BOWMAN DIVISION
BOX 2159 | PITTSBURGH, PENNSYLVANIA 15230 | (412) 999-9990

PRINTS ISSUED			REVISIONS	
NO.	DATE	FOR	DATE	DESCRIPTION
		APPROVAL	11-1-72 △1	ADDED UNITS 8 & 9 & MEDIAN
		APPROVAL	12-12-72 △2	MEDIAN DECKING & RELATED DETAILS ELIMINATED PER VERBAL APPROVAL
		APPROVAL △3 12/13/72	12-29 △3	REVISED TENSION LGTHS. & RELATED ACCESSORIES
		FINAL APPROVAL		

CUSTOMER: BRIGHTON KRUG

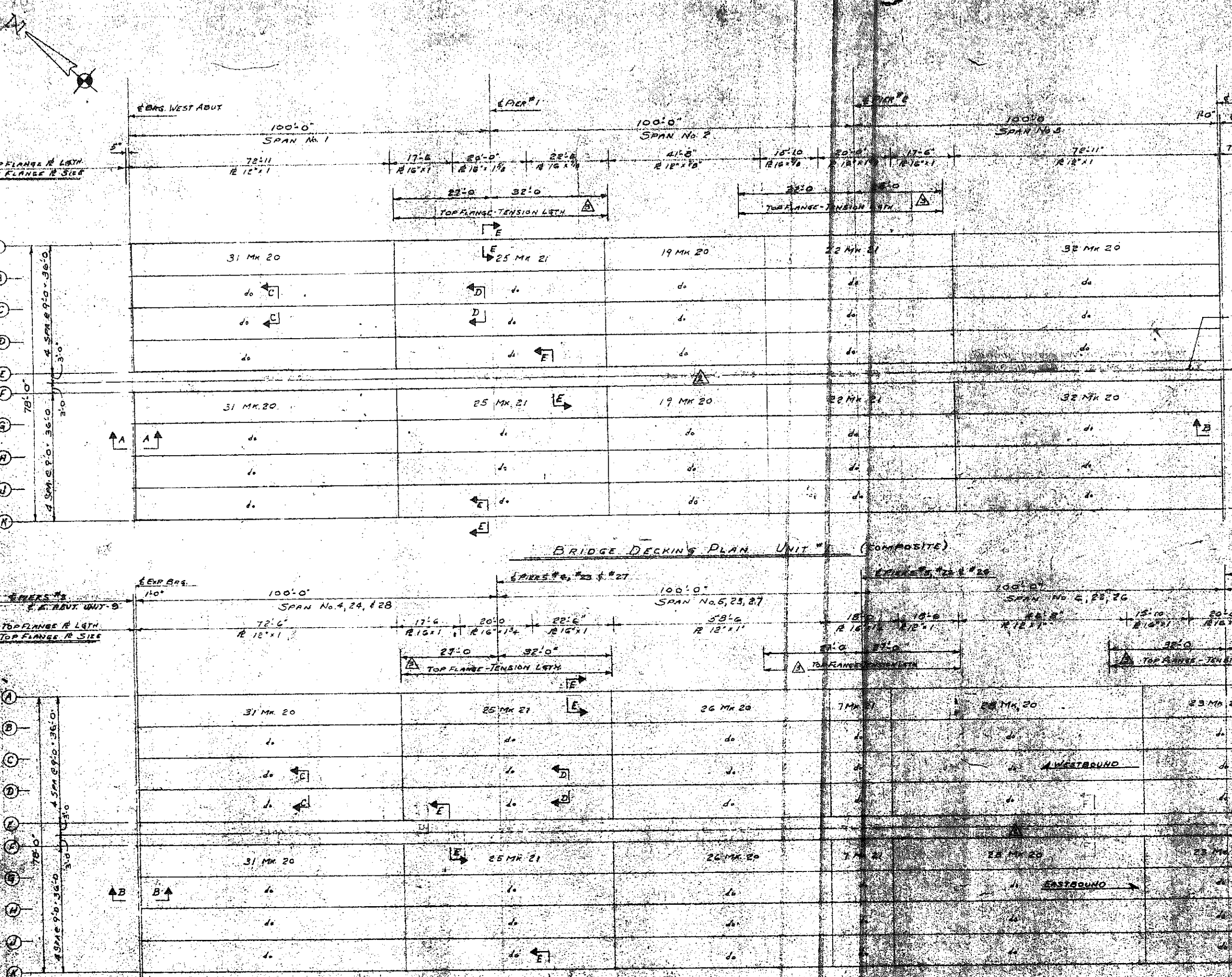
PROJECT: F.A.I. RTE. 280-SECTION 81-1D | FAP No. I-280-...

LOCATION: SCOTT COUNTY, IOWA-ROCK ISLAND COUNTY, ILL.

ARCHITECT: DE LEUW, CATHER & CO. ENGINEERS

DRAWN: RB | DATE: 11-9-72 | CUSTOMER ORDER NO. | CONTRACT: XE-3149

CHECKED | DATE | SHEET 1 OF ...



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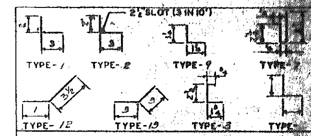
FILE SET



BRIDGEDECK ACCESSORIES

ASTM A-446 GRADE C

MARK	TYPE	LENGTH	NO.	THICKNESS
1	1	10'-0	[illegible]	[illegible]
2	2	10'-0	[illegible]	0.0972
				[illegible]
7	7	2" WIDE	5450	[illegible]
9	9	10'-0	[illegible]	[illegible]
12	12	9'-0	64	0.0972
13	13	9'-0	64	0.0972
#14 x 3/4	TEK SELF TAPPING SCREWS			[illegible]

BRIDGEDECK

ASTM A-446 GRADE C

MARK	GAGE	PITCH	LENGTH	NO.
20	16	7	7'-10"	[illegible]
21	18	7	7'-6"	[illegible]

(11) 4" WEEP HOLES SHALL BE FIELD DRILLED AT NOT LESS THAN 12" O.C. ALONG THE BOTTOM OF THE FLUTE AT THE CONSTRUCTION JOINTS.

GENERAL NOTES & RECOMMENDATIONS

1. BRIDGE DECK is roll formed from high strength structural quality steel sheet conforming to the yield and tensile requirements of ASTM Designation A446-71, Grade C.
2. Steel for brake formed accessory sections will be structural quality steel sheet conforming to ASTM A446-71, Grade C.
3. Galvanized coating for all BRIDGE DECK and accessory sections will be in conformance with ASTM A525-71, coating [illegible]
4. Elevation of supports will be adjusted by the erector.
5. All BRIDGE DECK sheets shall bear a minimum of 1" on supports.
6. Each sheet shall be placed and secured before moving on to the next sheet.
7. All cutting of BRIDGE DECK and accessory sections shall be done by saw.
8. Care should be exercised during pouring operations not to permit heavily concentrated or undue impact loads or equipment to be placed on the BRIDGE DECK.
9. Concrete admixtures containing calcium chloride shall not be used over permanent steel BRIDGE DECK.
10. STRUCTURAL STL SURFACES THAT ARE INACCESSIBLE FOR FIELD PAINTING AFTER ERECTION IS ENTIRELY COMPLETED, SHALL BE PAINTED [illegible] PRIOR TO ERECTION, IN ACCORDANCE WITH STD. SPEC., ART. 509.05.

BRIDGEDECK
[illegible] — 7" PITCH
I = 0.5304 IN⁴
I = 0.7086 IN⁴

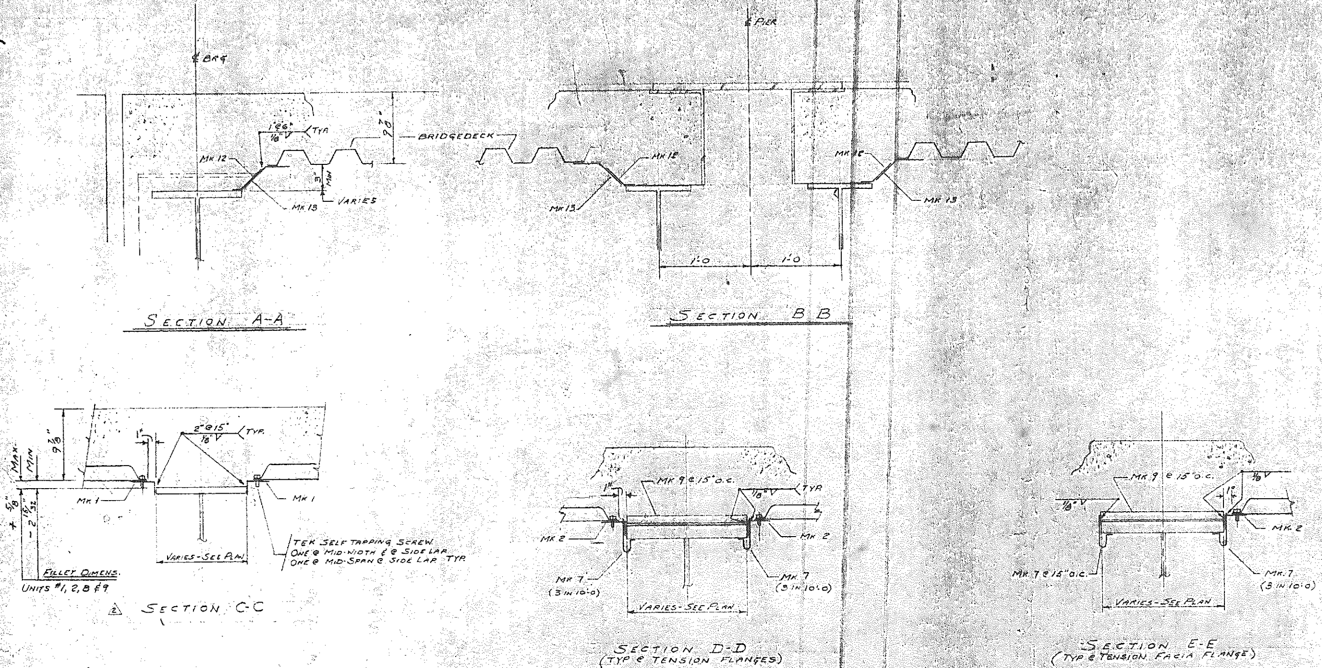
UNITS No. [illegible]

APPROVED FINAL DRAWINGS
ISSUED FOR
FILES, FABRICATION AND ERECTION

PRINTS ISSUED			REVISIONS	
NO.	DATE	FOR	DATE	DESCRIPTION
[illegible]	[illegible]	APPROVAL	12-1-72	ADDED UNITS 8 & 9 & MEDIAN
[illegible]	[illegible]	APPROVAL	12-22-72	MEDIAN DECKING & RELATED DETAILS ELIMINATED PER VERBAL APPROVAL
[illegible]	[illegible]	APPROVAL	[illegible]	REVISED TENSION LGTHS. & RELATED ACCESSORIES
6	[illegible]	FINAL APPROVAL		

CYCLOPS CORPORATION — REEVES-BOWMAN DIVISION
BOX 2180 | PITTSBURGH, PENNSYLVANIA [illegible]

CUSTOMER	BRIGHTON KRUG
PROJECT	F.A.I. RTE. 280-SECTION 81-1D; FAP NO. I-280-[illegible]
LOCATION	SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
ARCHITECT	DE LEUW, CATHER & CO. ENGINEERS
DRAWN	[illegible] — DATE 11-9-72 — CUSTOMER ORDER NO. — CONTRACT [illegible]
CHECKED	DATE — SHEET [illegible]



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JAN 9 1973
Engineer of Bridge & Traffic Structures

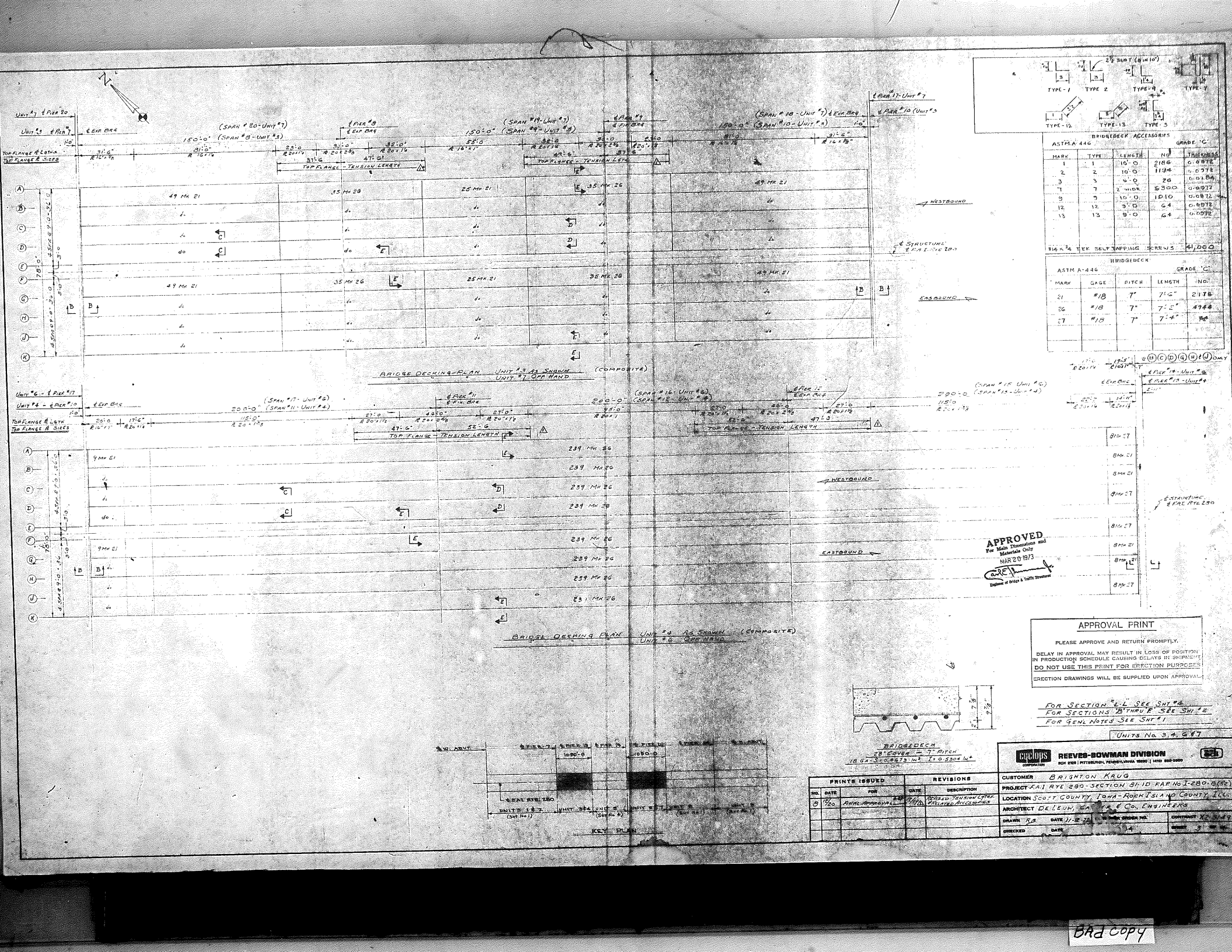
APPROVED FINAL DRAWINGS
ISSUED FOR
FILES: FABRICATION AND ERECTION

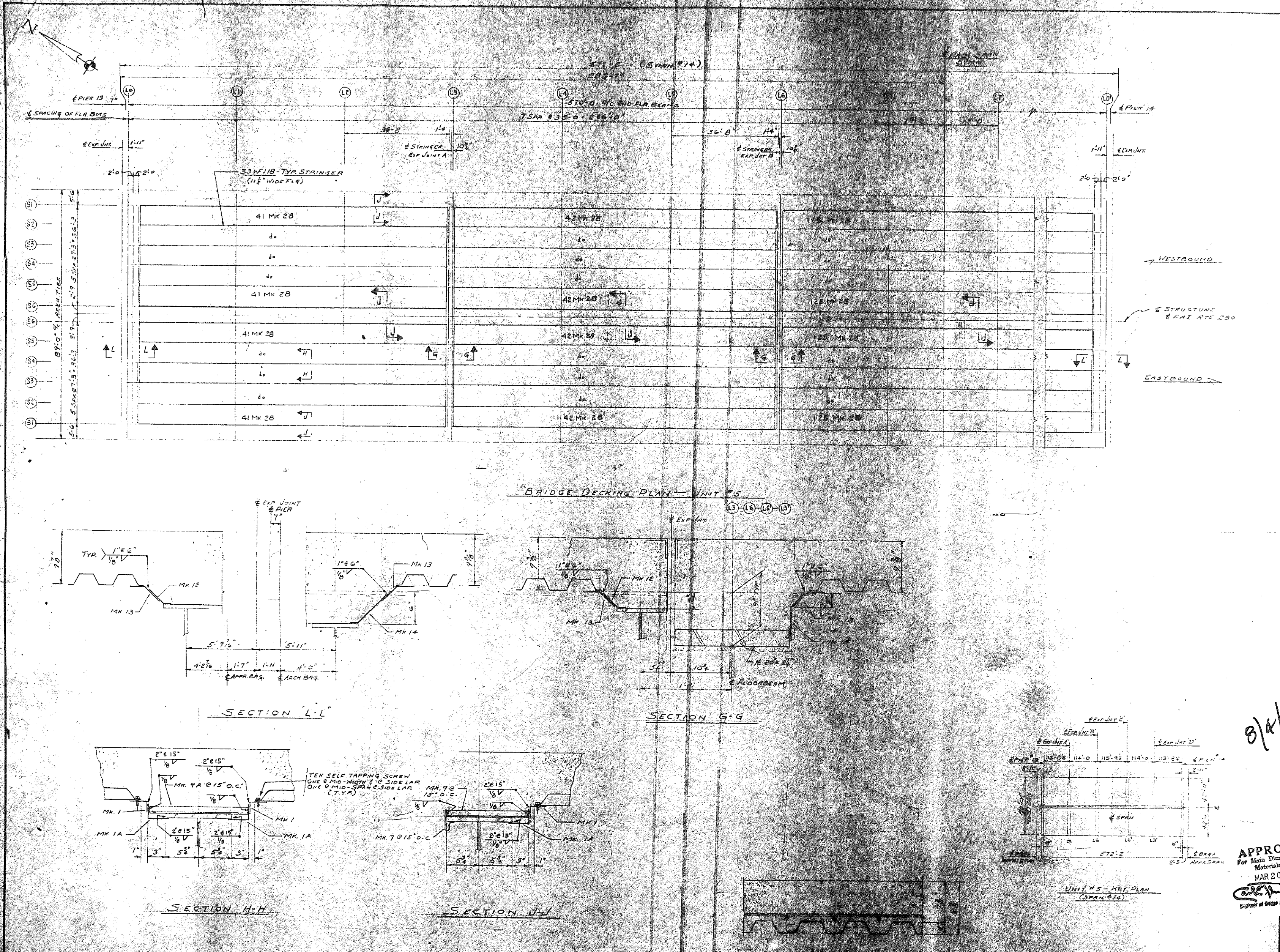
cyclops CORPORATION
REEVES-BOWMAN DIVISION
BOX 9123 | PITTSBURGH, PENNSYLVANIA 15230 | (412) 323-2300

PRINTS ISSUED			REVISIONS	
NO.	DATE	FOR	DATE	DESCRIPTION
6	11/15/72	APPROVAL	12-1-72 ⚠1	ADDED MEDIAN SEC. F-F & K-K
6	12-1-72	APPROVAL	12-12-72 ⚠2	NOTED FILLET VARIATION & DELETED MEDIAN DETAILS
6	12/13/72	APPROVAL		
6	1/2/73	FINAL APPROVAL		
8	1/2/73	FILES & DISTRIB.		

CUSTOMER: BRIGHTON KRUG
PROJECT: F.A.I RTE 280-SECTION 8-10 FAP No I-280
LOCATION: SCOTT COUNTY IOWA-ROCK ISLAND COUNTY
ARCHITECT: DE LEUW, CATHER & CO. ENGINEERS
DRAWN: RB DATE: 11-10-72 CUSTOMER ORDER NO. 134 CONTRACT
CHECKED DATE SHEET

BAD COPY


BRIDGE DECKING PLAN UNIT #3 AS SHOWN (COMPOSITE)
UNIT #7 OPP HAND
BRIDGE DECKING PLAN UNIT #4 AS SHOWN (COMPOSITE)
UNIT #6 OPP HAND
KEY PLAN
WESTBOUND
EASTBOUND
BRIDGEDECK ACCESSORIES
ASTM A 446 GRADE 'C'
BRIDGEDECK
ASTM A-446 GRADE 'C'
APPROVED
For Main Dimensions and Materials Only
MAR 20 1973
APPROVAL PRINT
PLEASE APPROVE AND RETURN PROMPTLY.
DELAY IN APPROVAL MAY RESULT IN LOSS OF POSITION IN PRODUCTION SCHEDULE CAUSING DELAYS IN SHIPMENT
DO NOT USE THIS PRINT FOR ERECTION PURPOSES
ERECTION DRAWINGS WILL BE SUPPLIED UPON APPROVAL
FOR SECTION "E-E" SEE SHT #2
FOR SECTIONS "B" THRU "F" SEE SHT #2
FOR GEN'L NOTES SEE SHT #1
UNITS No. 3 & 7
REEVES-BOWMAN DIVISION
CUSTOMER BRIGHTON KRUG
PROJECT F.A.I RTE 280 - SECTION 81-1D F.A.P No I-280-8(62)
LOCATION SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
ARCHITECT DE LEUW, CATHER & CO. ENGINEERS
DRAWN RA DATE 11-12-72
CHECKED DATE
PRINTS ISSUED
REVISIONS
BAD COPY



9 BRIDGEDECK ACCESSORIES

ASTM GRADE "C

MARK	TYPE	LENGTH	NO.	THIC
1	1	10'-0	1110	0.09
1A	1A	10'-0	1110	0.09
7	7	2" WIDE	1900	0.09
9	9	1'-8½"	1810	0.09
9A	9	1'-5½"	3600	0.09
12	12	7'-2"	40	0.09
13	13	7'-2"	100	0.09
14	14	7'-2"	20	0.09
15	15	7'-2"	40	0.09

#14 x ¾ TEK SELF TAPPING SCREWS 1250

BRIDGEDECK

GRADE "C

MARK	GAGE	PITCH	LENGTH	No
28	21	8	5'-7½	20[illegible]

NOTE: No welding will be permitted to the top flange of the stringers for a distance of 7'-9" in either direction from L1, L2, L4, L5, L7, L7', L5', L4', L2', L1'.

FILE SET
I-280+8(52)0
FAI RTE 280
SECTION 81-1D
ROCK ISLAND COUNTY
C 92-004-69
CONTR NO. 100716

8/4/72(72)

APPROVED FINAL DRAWINGS
ISSUED FOR
FILES; FABRICATION AND ERECTION

APPROVED
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MAR 20 1973
Engineer of Bridges & Traffic Structures

FOR GENL NOTES SEE SHT #1

UNIT No 5

CYCLOPS CORPORATION
REEVES-BOWMAN DIVISION
BOX [illegible] | PITTSBURGH, PENNSYLVANIA [illegible]

PRINTS ISSUED			REVISIONS	
NO.	DATE	FOR	DATE	DESCRIPTION
[illegible]	[illegible]	APPROVAL	3/6/73	PER APPL DATED 1-22-73 & GEN'L CHECK
[illegible]	[illegible]	FILES & DISTRIB.		

CUSTOMER: BRIGHTON KRUG
PROJECT: F.A.I. RTE 280 - SECTION 81-1D F.A.P. No I 280-[illegible]
LOCATION: SCOTT COUNTY IOWA - ROCK ISLAND COUNTY ILL
ARCHITECT: DE LEUW, CATHER & CO. ENGINEERS
DRAWN: RB DATE: 11-15-72
CHECKED: [illegible] DATE: 3-8-73
CUSTOMER ORDER NO.
CONTRACT: [illegible]
SHEET: [illegible]

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