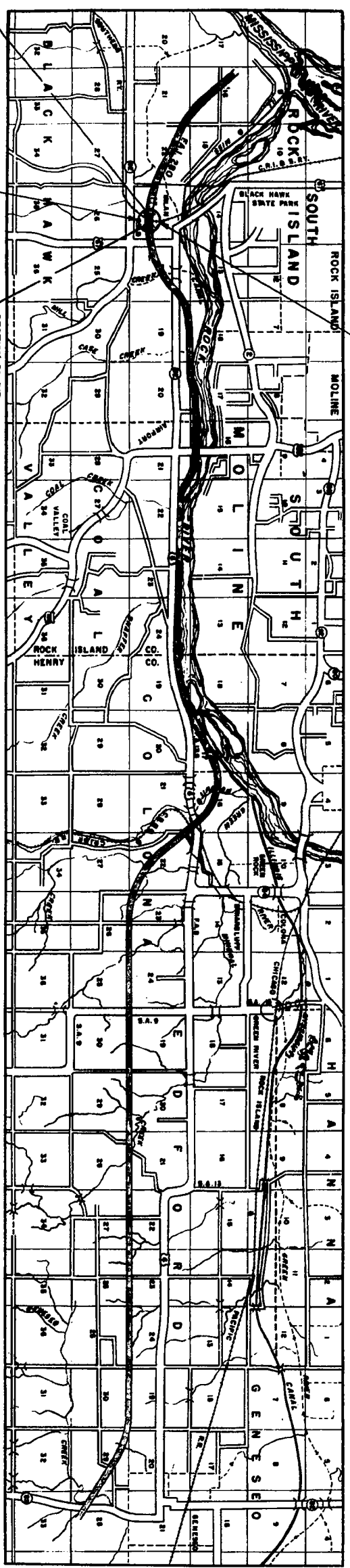


- 1. TITLE SHEET
- 2. GENERAL NOTES, DIMENSIONS AND QUANTITIES
- 3. SITE PLAN
- 4. GENERAL PLAN AND ELEVATION
- 5. FILE DETAILS
- 6. EMBANKMENT BRIDGE APPROXIMATIONS
- 7. VESTIBULE BRIDGE APPROXIMATIONS
- 8. PIER DETAILS
- 9. SUPERSTRUCTURE - SLAB DETAILS
- 10. ELEVATIONS AND REFLECTIONS
- 11. SUPERSTRUCTURE - FRAMING PLAN
- 12. BEARING AND EXPANSION GIRDERS DETAILS
- 13. BEARING AND EXPANSION GIRDERS DETAILS
- 14. CROSS SECTIONS - STA. 230+00 TO 230+05
- 15. CROSS SECTIONS - STA. 231+00 TO 231+05
- 16. CROSS SECTIONS - STA. 232+00 TO 232+05
- 17. CROSS SECTIONS - STA. 233+00 TO 233+05
- 18. CROSS SECTIONS - STA. 234+00 TO 234+05
- 19. CROSS SECTIONS - STA. 235+00 TO 235+05
- 20. CROSS SECTIONS - STA. 236+00 TO 236+05
- 21. STD. 1976 - R.C. HEADWALL FOR PIPE CULVERT
- 22. STD. 2113 - NAME PLATES
- 23. STD. 2155-2 SIGN FOR INTERSTATE SYSTEM PROJECT, 2/14

**STATE OF ILLINOIS**  
**DEPARTMENT OF PUBLIC WORKS AND BUILDINGS**  
**DIVISION OF HIGHWAYS**  
**PLANS FOR PROPOSED**  
**FEDERAL AID HIGHWAY**  
**GRADE SEPARATION STRUCTURES**  
**FA.I. ROUTE 280 SECTION 81-IVB**  
**ROCK ISLAND COUNTY**



SECTION 81-IVB  
PROJECT IG-280-6(2)3  
BEGINNING STA. 231+45.90

SECTION 81-IVB  
PROJECT IG-280-6(2)3  
ENDS STA. 233+42.55

SECTION 81-IVB includes the construction of a grade separation structure over the existing Rock Island State Park and Moline Creek. The structure is to be constructed on a concrete foundation and will be supported by two steel girders. The structure will be located at the intersection of the proposed highway and the existing Rock Island State Park and Moline Creek. The structure will be located at the intersection of the proposed highway and the existing Rock Island State Park and Moline Creek. The structure will be located at the intersection of the proposed highway and the existing Rock Island State Park and Moline Creek.

ENTIRE SECTION INSPECTED AND APPROVED AS TO FACTS  
 DATE *May 16 1965*  
 DISTRICT ENGINEER *Wm. J. Spillman*

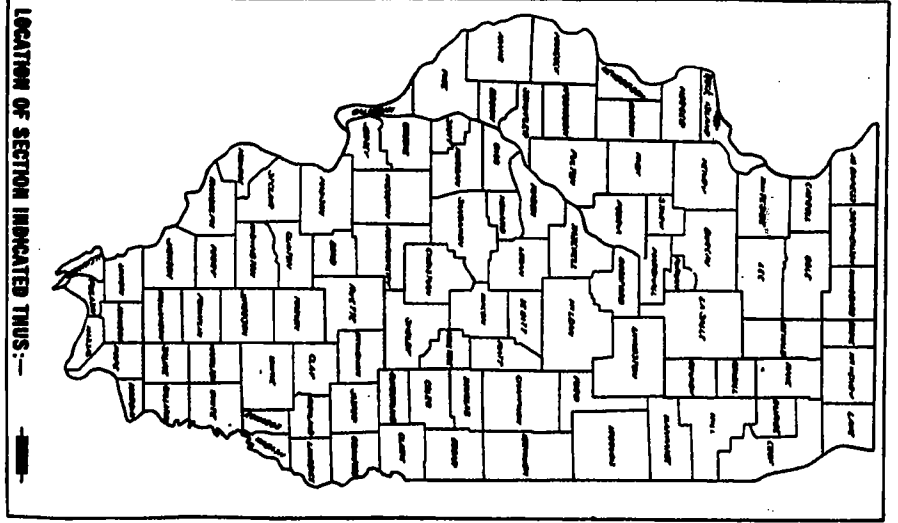
ROAD CLASSIFICATION  
 1100-T-70

DE LEWY, CATHER & COMPANY  
 ENGINEERS  
 CHICAGO

JOB NO. 23149

ROCK ISLAND COUNTY SECTION 81-IVB F. A. ROUTE 280

LAYOUT  
 SCALE: 1 INCH = 1 MILE  
 NET LENGTH OF PROJECT: 196.45 FEET = 0.367 MILES



LOCATION OF SECTION INDICATED THIS:

SECTION NO.	SEC.	COUNTY	SHEET NO.	TOTAL SHEETS
FA.I. 280	81-IVB	ROCK ISLAND	22	1

APPROVED  
 FOR STRUCTURAL DESIGN & CONSTRUCTION  
*Wm. J. Spillman* 2/11/65  
 DISTRICT ENGINEER

STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF HIGHWAYS  
 APPROVED *Wm. J. Spillman* 5/16/65  
 DATE *May 16 1965*  
 DISTRICT ENGINEER *Wm. J. Spillman*

DEPARTMENT OF COMMERCE  
 BUREAU OF PUBLIC ROADS  
 APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
 DIVISION ENGINEER

Checked Project Length 6-10-65 R.P.T.

081-0018 30019





U.S.G.S. DATUM  
5th G.A. 1929

B.M. = 20, R.R. Spike in RR  
222' D. - 231'-23, E.I. 562.22

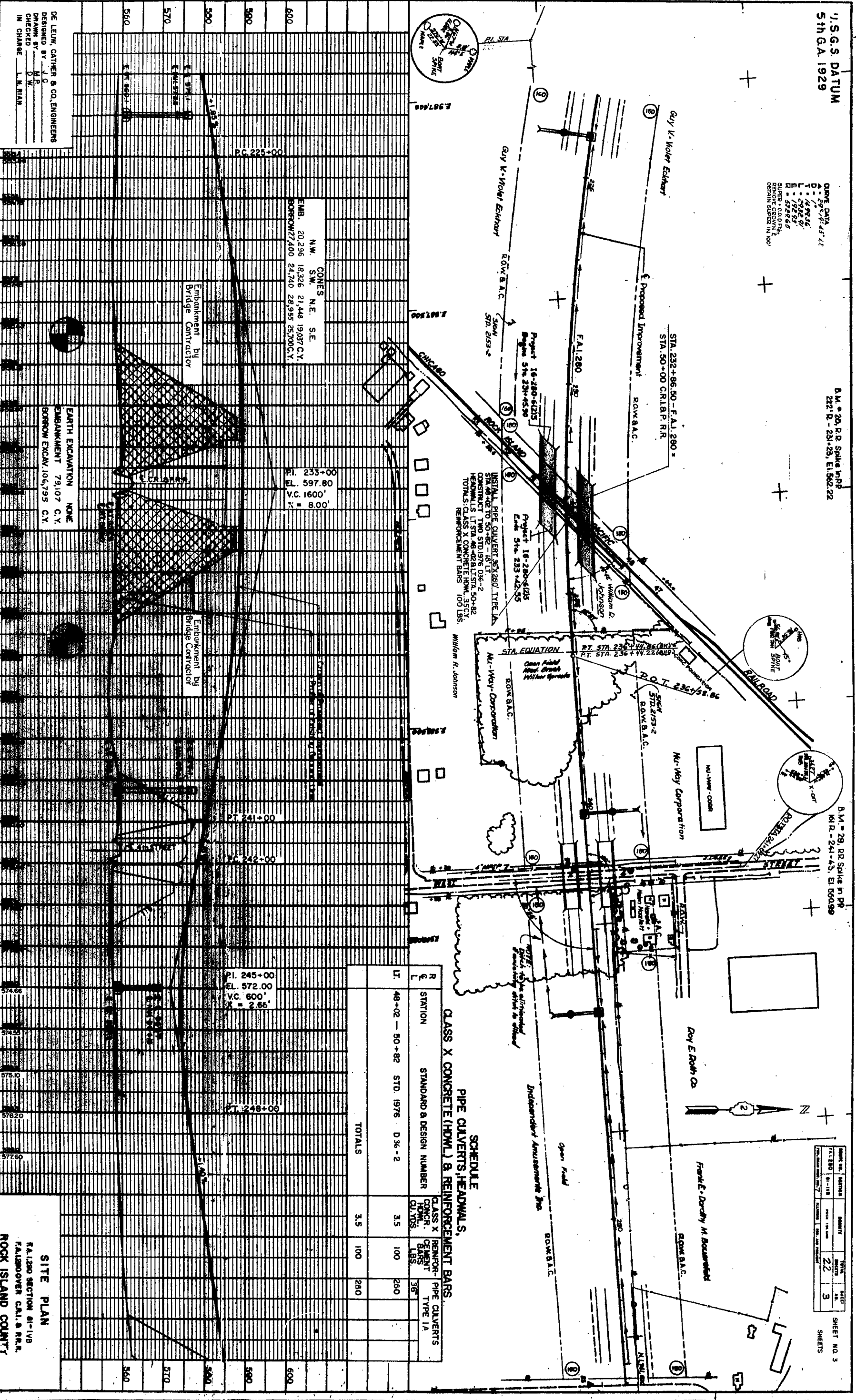
B.M. = 29, RR Spike in RR  
161' R. - 241'-43, E.I. 600.99

SHEET NO. 3  
SHEETS

GRADE DATA  
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B. 297.25  
C. 297.75  
D. 298.25  
E. 298.75  
F. 299.25  
G. 299.75  
H. 300.25  
I. 300.75  
J. 301.25  
K. 301.75  
L. 302.25  
M. 302.75  
N. 303.25  
O. 303.75  
P. 304.25  
Q. 304.75  
R. 305.25  
S. 305.75  
T. 306.25  
U. 306.75  
V. 307.25  
W. 307.75  
X. 308.25  
Y. 308.75  
Z. 309.25

PLAN	DATE	BY	CHK

PROFILE	DATE	BY	CHK



**SCHEDULE  
PIPE CULVERTS, HEADWALS,  
& REINFORCEMENT BARS.**

STATION	STANDARD & DESIGN NUMBER	CLASS X CONCRETE CUMULATIVE QTY. YDS.	REINFORCING CEMENT LBS.	PIPE CULVERTS TYPE I/A
48+02 - 50+82	STD. 1976 D-36-2	3.5	100	200
<b>TOTALS</b>		<b>3.5</b>	<b>100</b>	<b>200</b>

DE LEIN, GATHER & CO. ENGINEERS  
DESIGNED BY J.C.  
DRAWN BY M.P.  
CHECKED BY D.W.  
IN CHARGE L.M. BLAN

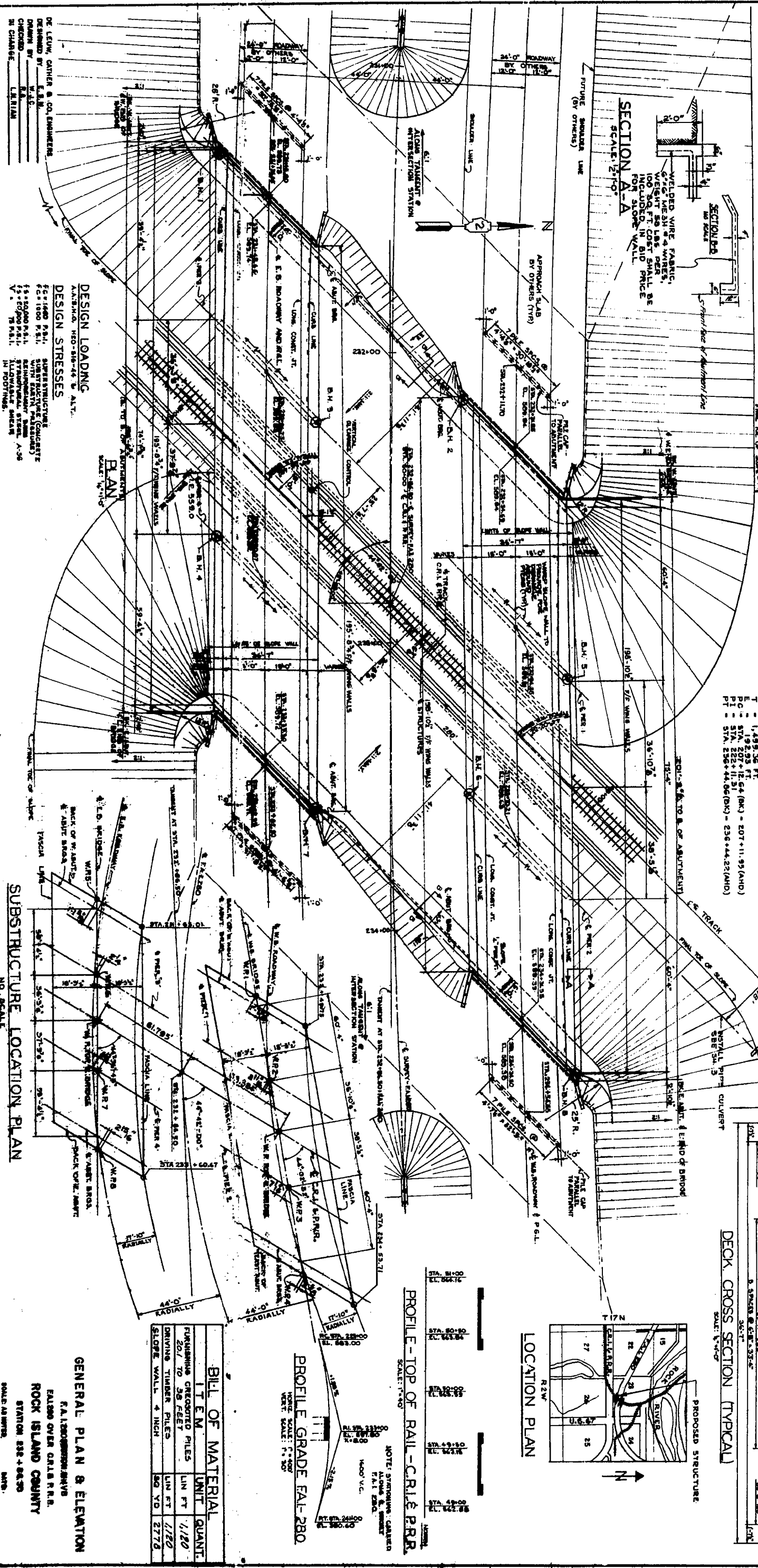
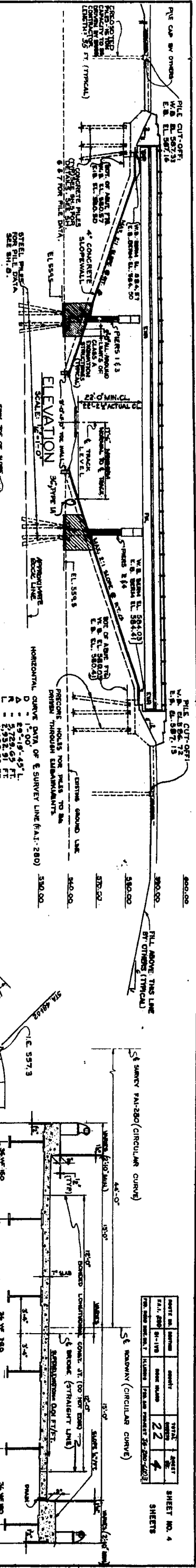
EARTH EXCAVATION NONE  
EMBANKMENT 79,107 C.Y.  
BORROW EXCAV 106,795 C.Y.

N.W. CONES  
S.W. 18,326  
N.E. 21,448  
S.E. 19,897 C.Y.  
EMB. 20,296  
BORROW 27,400  
24,740 28,995 25,700 C.Y.

**SITE PLAN**  
FA 1280 SECTION 81-118  
FA 1300 OVER CAL. & R.R.  
ROCK ISLAND COUNTY  
DIVISION 882+85.0

Division 8-5-81, Re-located Highway R. 1280 - 1285 (Section 81-118) between streets 850' and 850' and 850' and 850'.

FA 1280 SECTION 81-118  
FA 1300 OVER CAL. & R.R.  
ROCK ISLAND COUNTY  
DIVISION 882+85.0



**DECK CROSS SECTION (TYPICAL)**  
SCALE: 1" = 10'

**LOCATION PLAN**  
SCALE: 1" = 10'

**PROFILE - TOP OF RAIL - C.R.I. & P.R.R.**  
SCALE: 1" = 40'

**PROFILE GRADE F.A.J. 280**  
HORIZ. SCALE: 1" = 20'  
VERT. SCALE: 1" = 20'

**BILL OF MATERIAL**

ITEM	UNIT	QUANT.
FURNISHING GROUTED PILES	LIN FT	1,120
DRIVING TIMBER PILES	LIN FT	1,120
SLOPE WALL 4 INCH	SQ YD	2,772

**GENERAL PLAN & ELEVATION**  
F.A.J. 280 OVER C.A.L.B. F.R.R.  
ROCK ISLAND COUNTY  
STATION 232 + 84.30

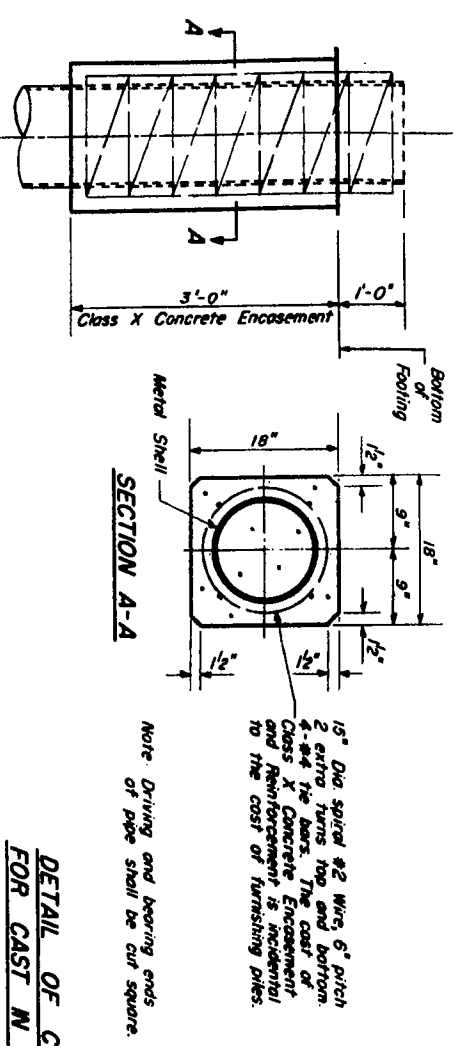
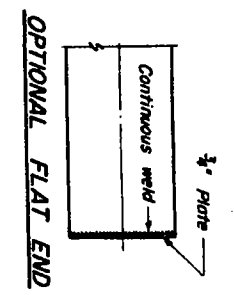
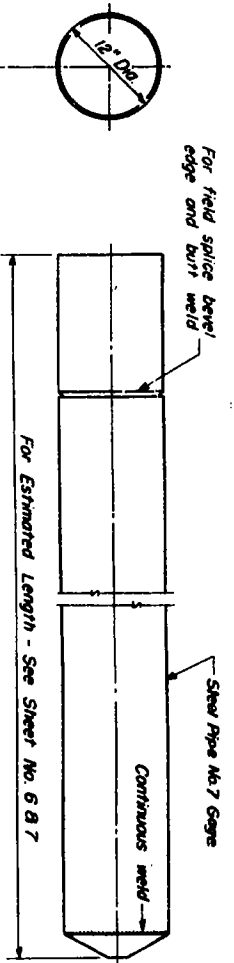
**DESIGN LOADING**  
A.M.S.D. NO. 518-26 & ALT.

**DESIGN STRESSES**

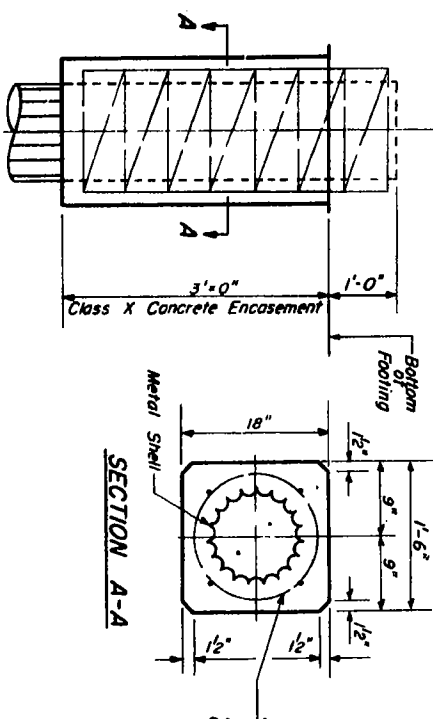
**GENERAL PLAN & ELEVATION**  
F.A.J. 280 OVER C.A.L.B. F.R.R.  
ROCK ISLAND COUNTY  
STATION 232 + 84.30

**REVISIONS:** 6-4-23 Make slope wall continuous between abutments. Change slope wall quantity from 1172 sq yd to 2772 sq yd.  
Change of structure from P.R.R. to C.R.I. & P.R.R. (see note 2).  
Change driving timber piles from 1,120 lin ft to 1,120 lin ft.  
K.C.K.

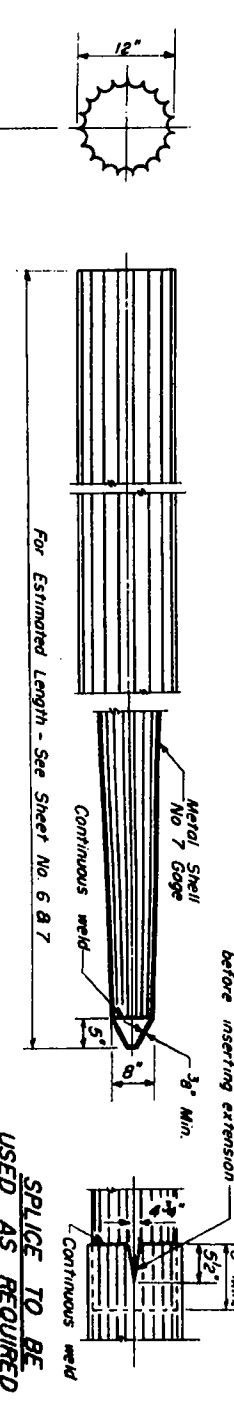




DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES

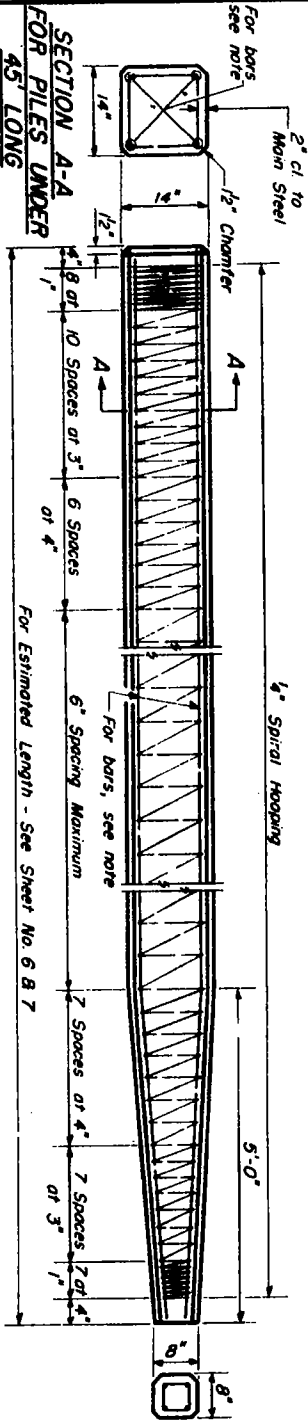


DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES



SPlice TO BE USED AS REQUIRED

- ALLOWABLE TAPERS**
- 1 - Taper 1/2"-6" for 10' + 12" Cylindrical Section Extension
  - 2 - Taper 1/4"-0" for 17' + 12" Cylindrical Section Extension
  - 3 - Taper 1/7"-0" for 30' + 12" Cylindrical Section Extension

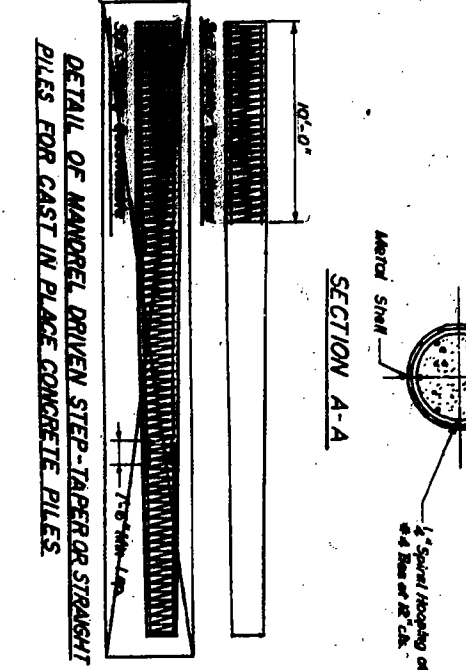
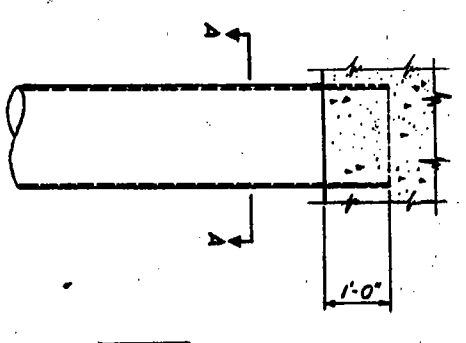


SECTION A-A FOR PILES UNDER 45' LONG

Note: For 14" piles 45' long or more use 8-#8 bars. For 14" piles under 45' long use 4-#8 bars the full length.

Handling: For pile lengths up to 45', use two slings placed at a distance of 0.21 L\* from each end. For piles longer than 45', use three slings placed at a distance of 0.12 L\* from each end and at mid-point of pile.

\*L = Over all length of pile to be handled



PILE DETAILS

FAI 280 SECTION 8-11B  
 FAI 280 OVER C.R. & P.R.R.  
 ROCK ISLAND COUNTY  
 STATION 232+89.50  
 SCALE: AS NOTED DATE:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 280	8-11B	ROCK ISLAND	22	5

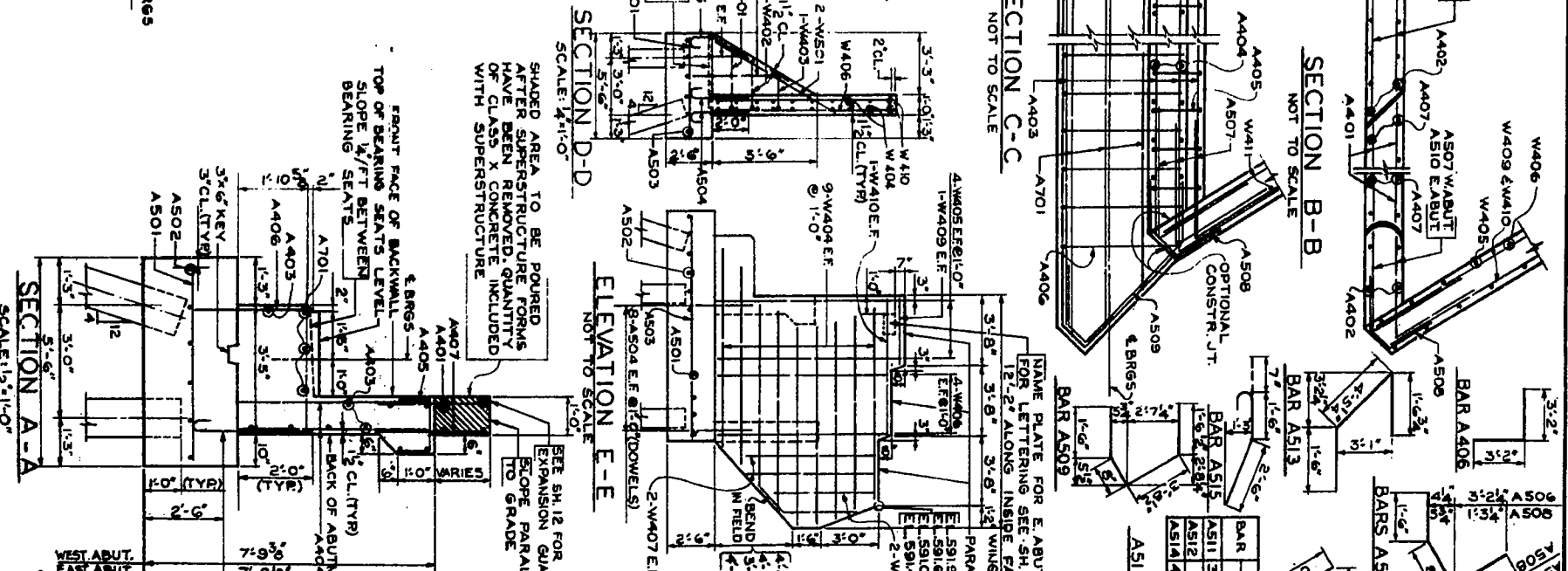
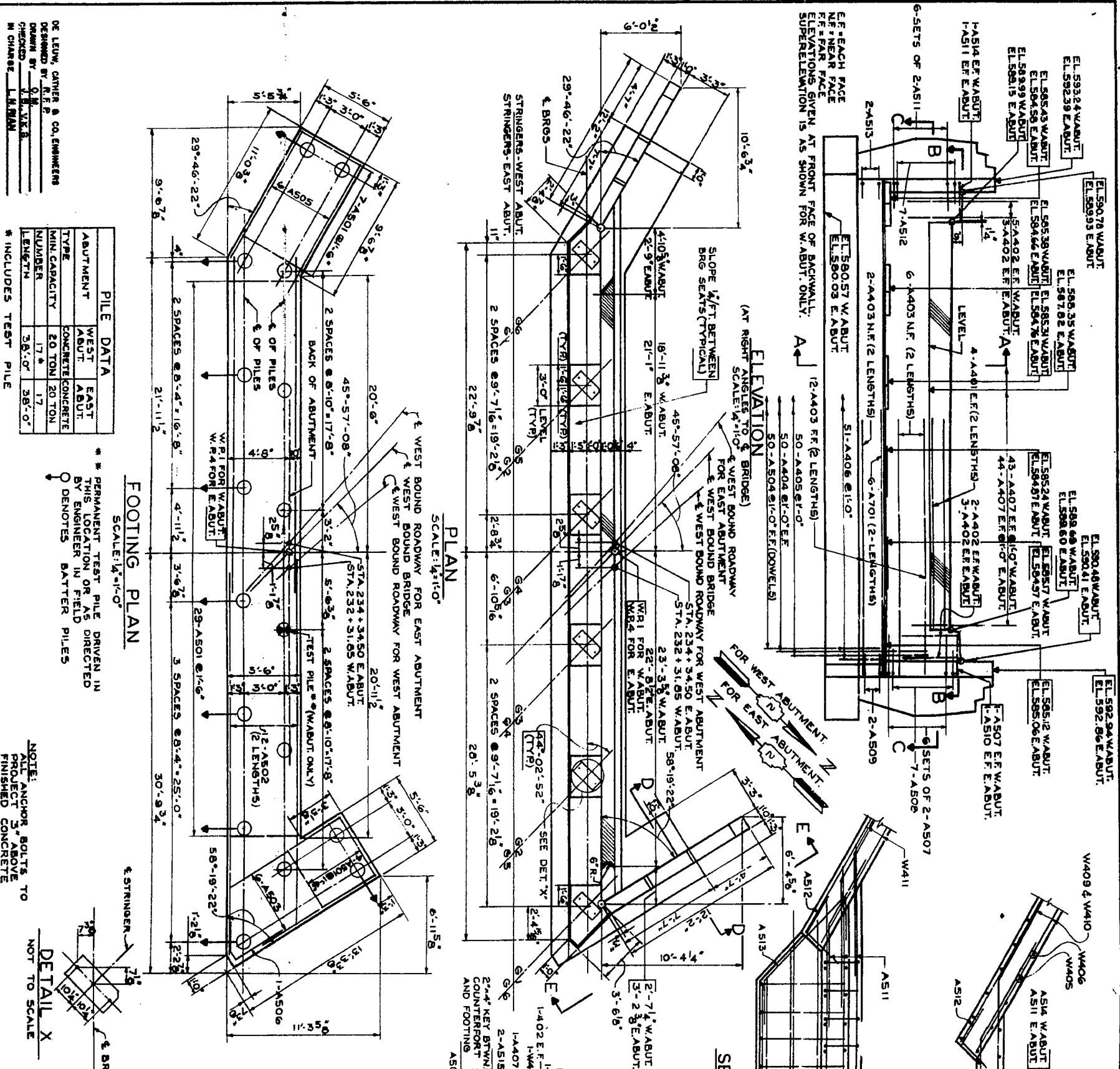
SHEET NO. 5  
 SHEETS

DELEUN, CATHEN & CO., ENGINEERS  
 DESIGNED BY  
 DRAWN BY  
 CHECKED BY  
 IN CHARGE L. M. BIAH

DETAIL OF PRECAST CONCRETE PILES

G-4-G3 Revised details of Manifold Driven Pile, M.C.K.

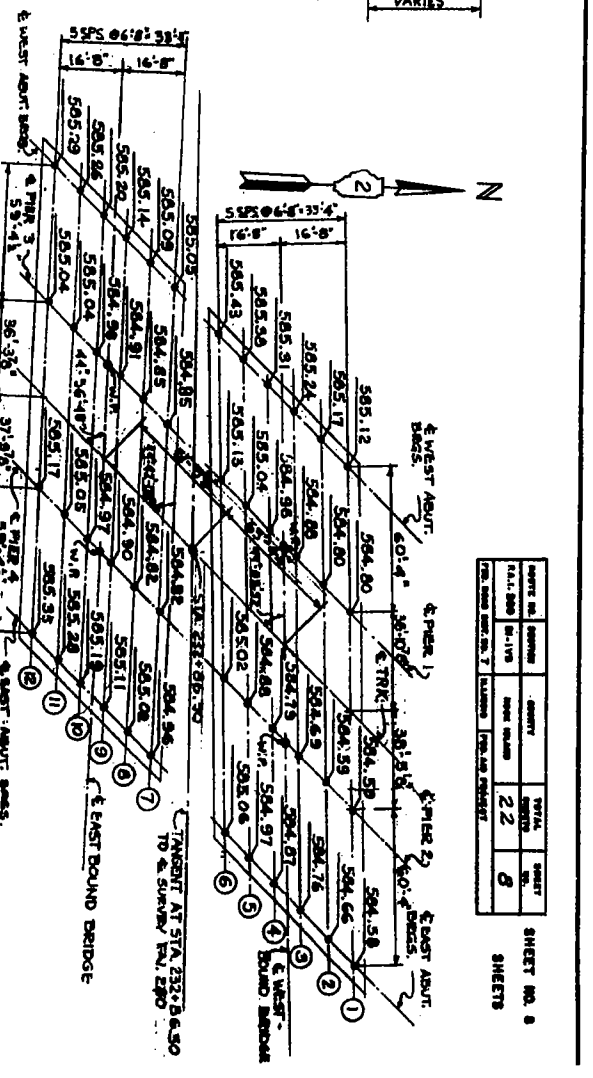
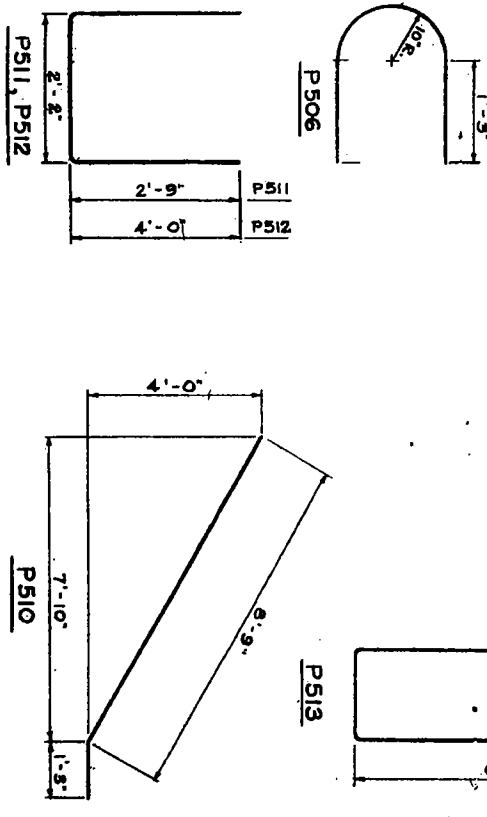
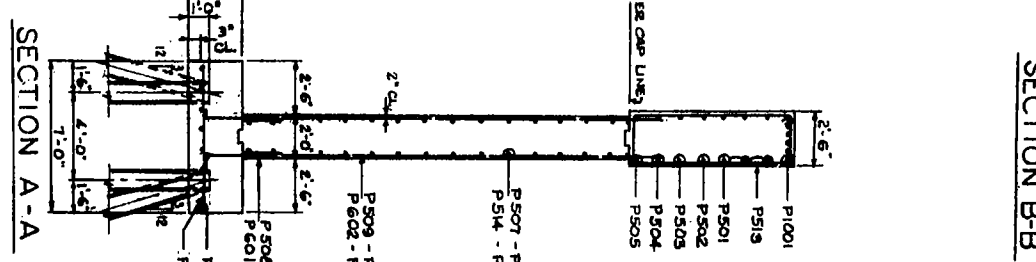
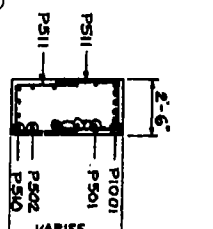
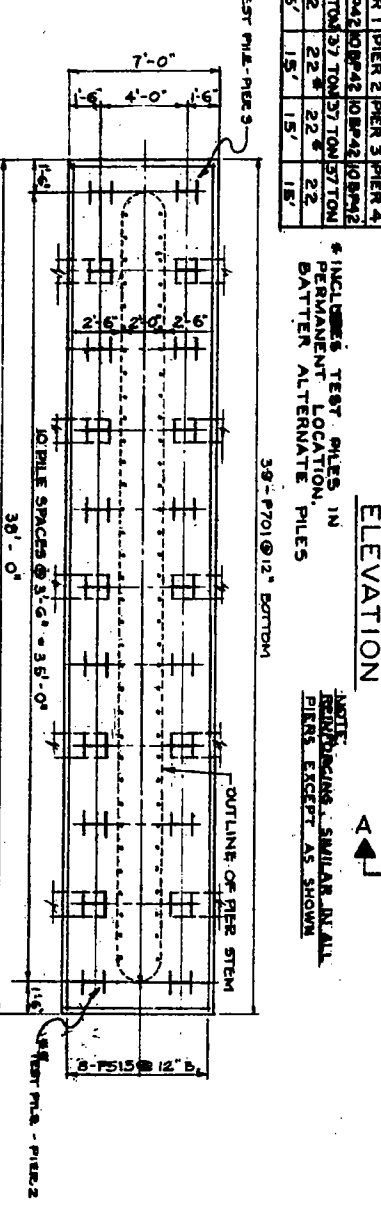
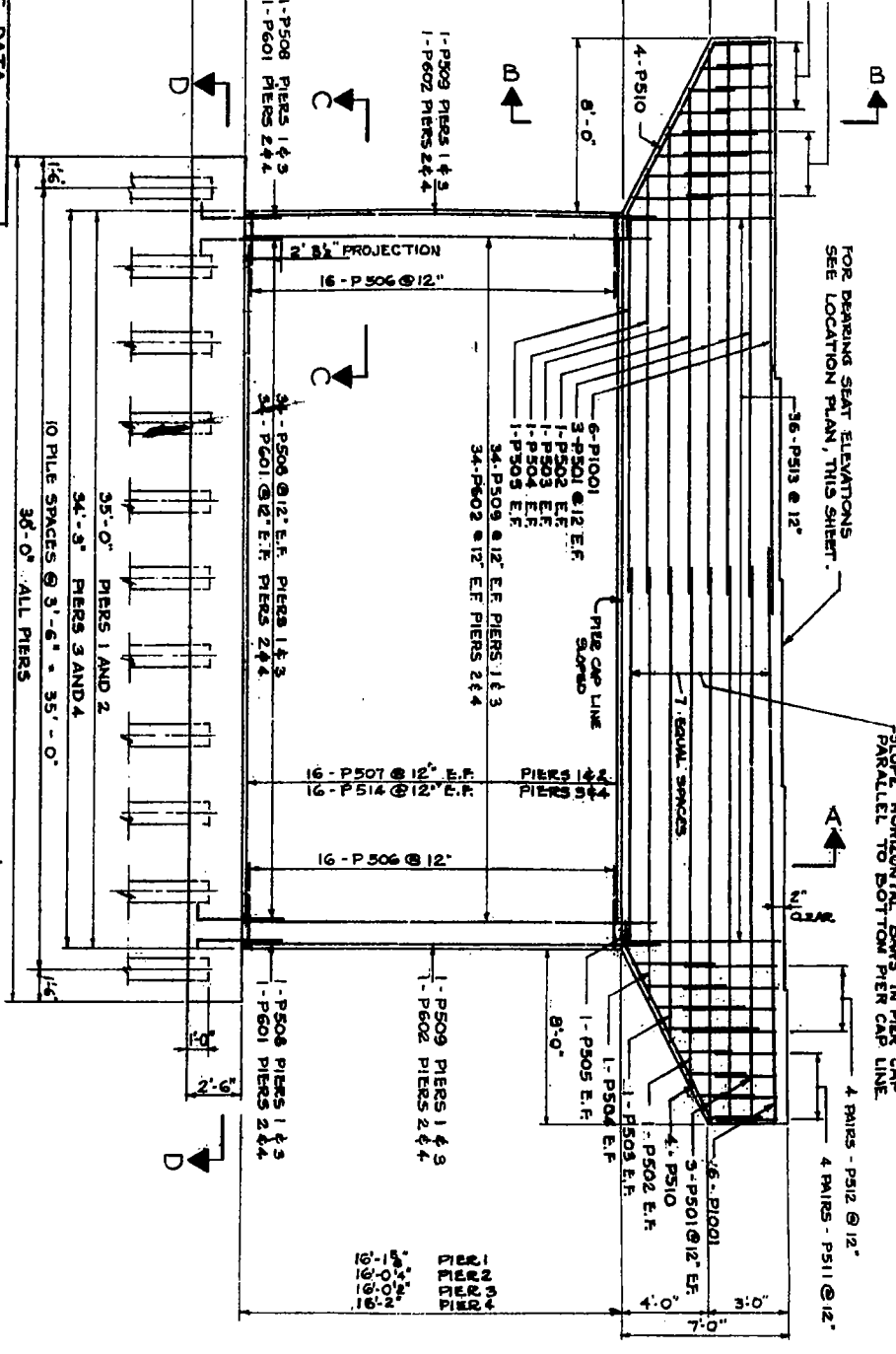
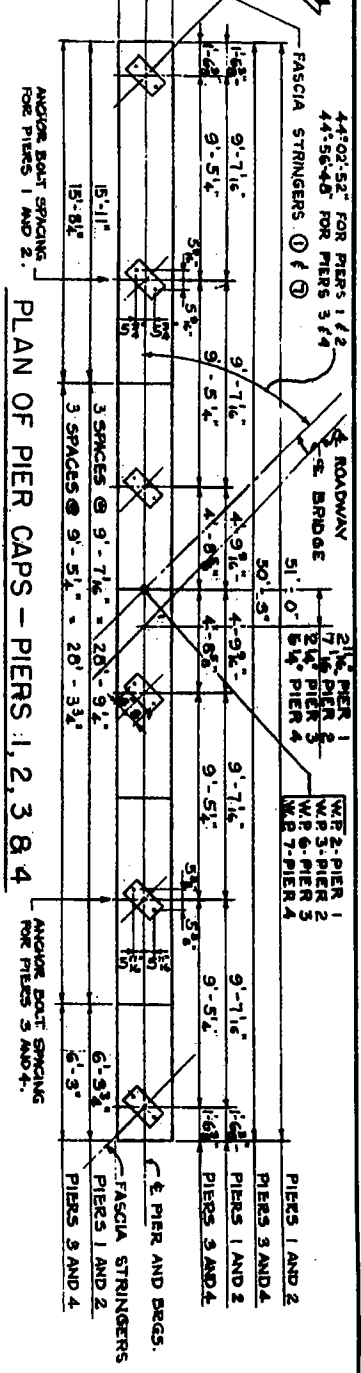
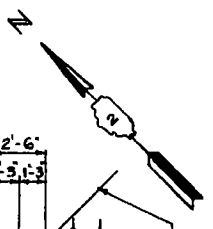




BAR NO.	DESCRIPTION	QUANTITY	SIZE	LENGTH	WEIGHT
W401	W/ABUT TOTAL	2	40	60	5.0
W402	W/ABUT TOTAL	2	40	60	5.0
W403	W/ABUT TOTAL	2	40	60	5.0
W404	W/ABUT TOTAL	2	40	60	5.0
W405	W/ABUT TOTAL	2	40	60	5.0
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W409	W/ABUT TOTAL	2	40	60	5.0
W410	W/ABUT TOTAL	2	40	60	5.0
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W412	W/ABUT TOTAL	2	40	60	5.0
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W414	W/ABUT TOTAL	2	40	60	5.0
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W417	W/ABUT TOTAL	2	40	60	5.0
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W419	W/ABUT TOTAL	2	40	60	5.0
W420	W/ABUT TOTAL	2	40	60	5.0
W421	W/ABUT TOTAL	2	40	60	5.0
W422	W/ABUT TOTAL	2	40	60	5.0
W423	W/ABUT TOTAL	2	40	60	5.0
W424	W/ABUT TOTAL	2	40	60	5.0
W425	W/ABUT TOTAL	2	40	60	5.0
W426	W/ABUT TOTAL	2	40	60	5.0
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W428	W/ABUT TOTAL	2	40	60	5.0
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W500	W/ABUT TOTAL	2	40	60	5.0

WESTBOUND BRIDGE - ABUTMENTS  
 F.A.I. 280 SECTION 81-1-18  
 F.A.I. 280 OVER C.N.I. B.R.R.  
 ROCK ISLAND COUNTY  
 STATION 238+00.50  
 SCALE AS SHOWN  
 DATE





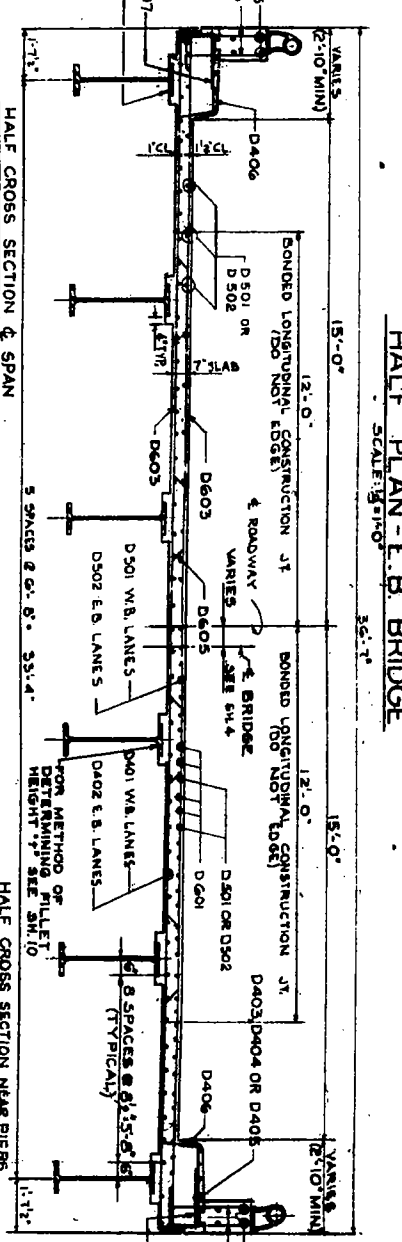
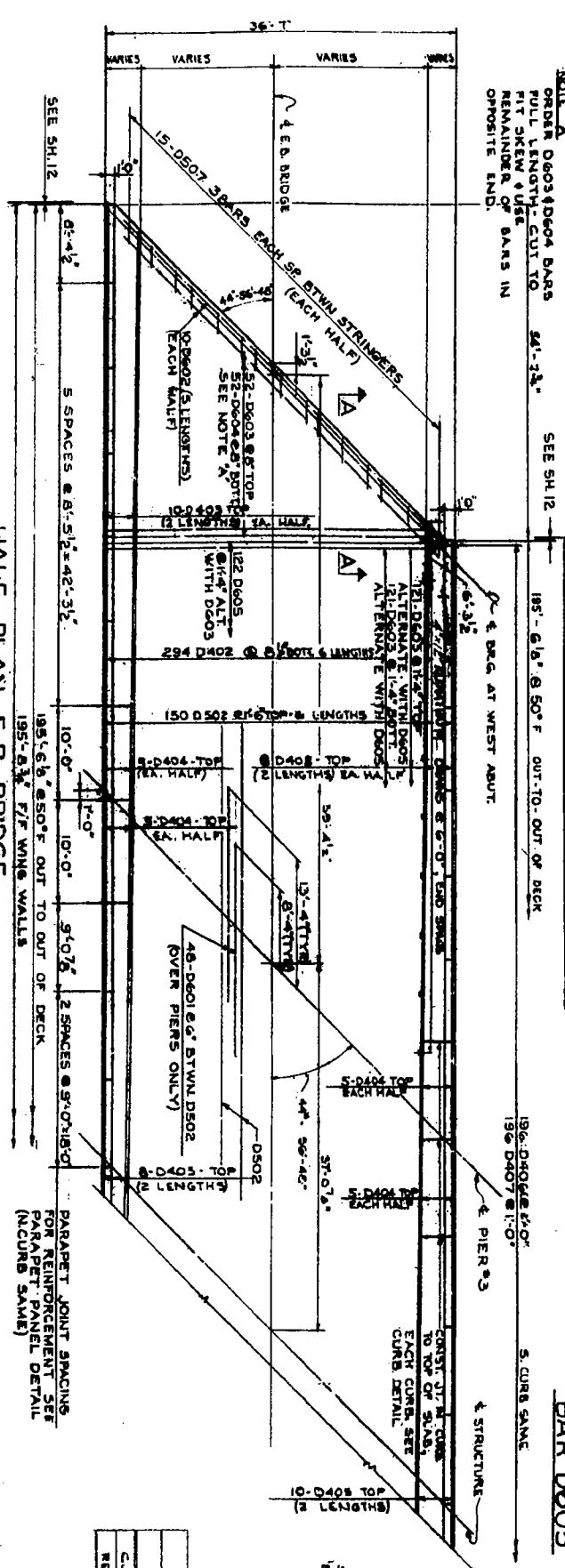
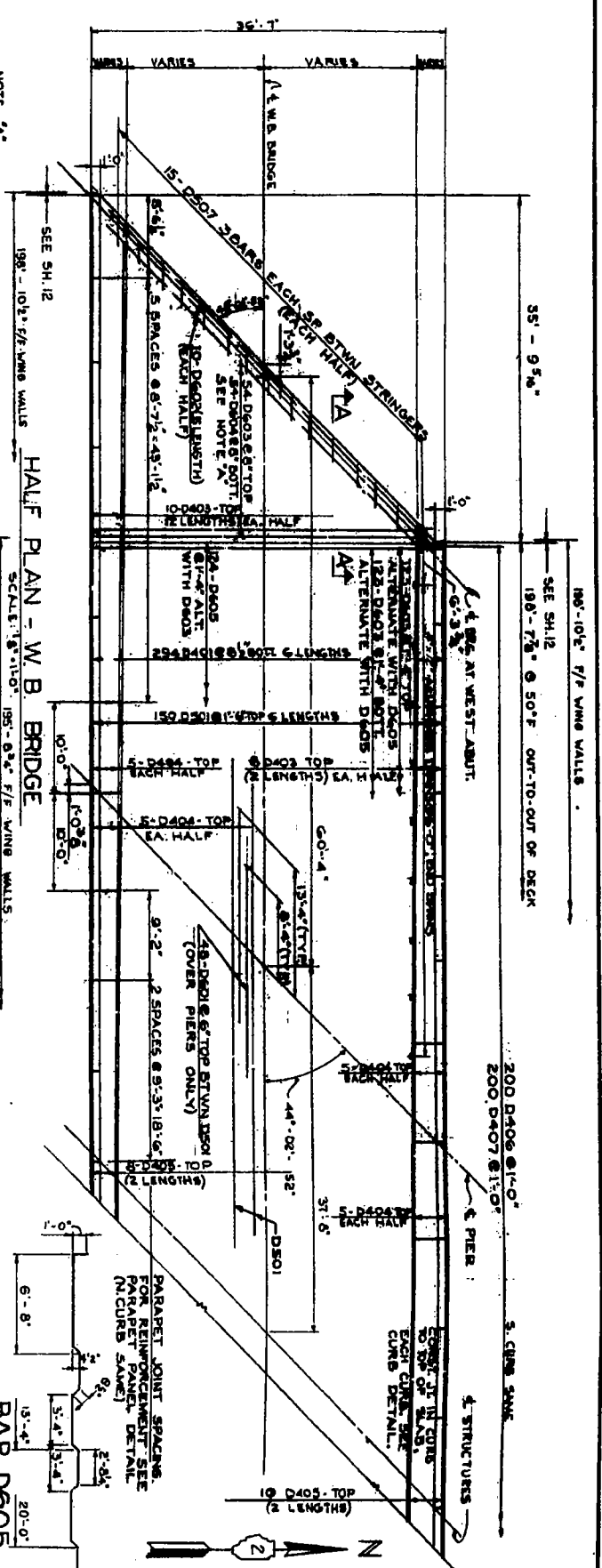
BAR NO.	SIZE	LENGTH	SHAPE	WEIGHT
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P502	1#	5	24'-0"	401
P503	1#	5	22'-0"	367
P504	1#	5	20'-0"	334
P505	1#	5	18'-0"	300
P506	1#	5	17'-0"	283
P507	1#	5	16'-0"	265
P508	1#	5	15'-0"	247
P509	1#	5	14'-0"	229
P510	1#	5	13'-0"	211
P511	1#	5	12'-0"	193
P512	1#	5	11'-0"	175
P513	1#	5	10'-0"	157
P514	1#	5	9'-0"	139
P515	1#	5	8'-0"	121
P601	1#	6	4'-6"	981
P602	1#	6	1'-0"	3785
P701	1#	7	6'-6"	2073
P1001	1#	48	25'-7"	3491

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURE	CU YD	574
CLASS X CONCRETE	CU YD	3643
REINFORCEMENT BARS	ROUND	28,713
FINISHING STEEL PILES 10#P42	LN FT	4,280
TEST PILES (STEEL) 10#P42	EACH	2
DRIVING STEEL PILES	LN FT	1,290

PIER DETAILS  
 F.A.I. 280 SECTION 6-119  
 F.A.I. 280 OVER CAL. BRN.  
 ROCK ISLAND COUNTY  
 STATION 532 + 00.00

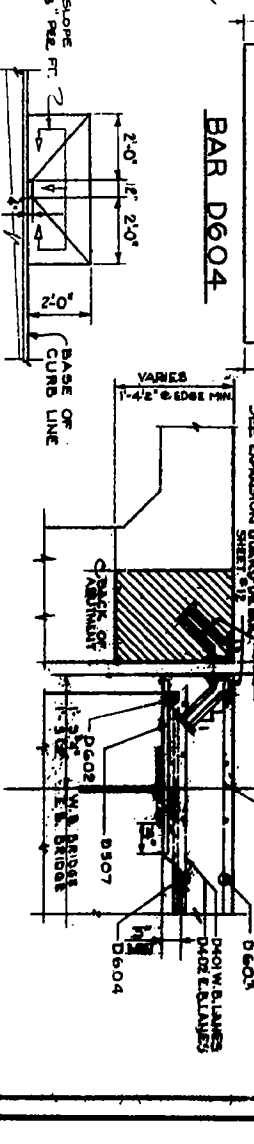
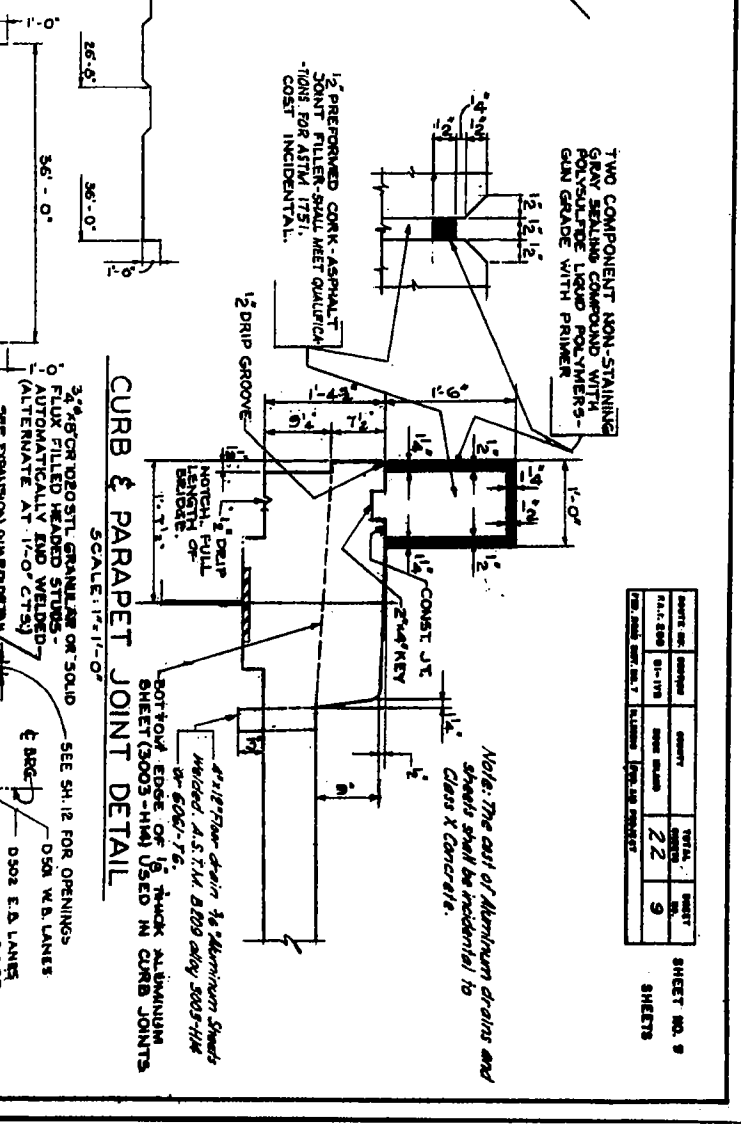
DE LEUW, GUTHER & CO. ENGINEERS  
 DRAWN BY: M.M.M.  
 CHECKED BY: E.H.H.  
 IN CHARGE: L.M. BLUM

Revision 6-5-53: Change Class A Concrete to Class X Concrete in Bill of Materials.



DESIGNED BY: C.H.L.  
 DRAWN BY: A.F.M. & M.V.  
 CHECKED BY: E.H.L.  
 IN CHARGE: L.H.H.M.

DE LEUW, CATHEN & CO. ENGINEERS  
 1000 MARKET STREET, PHOENIX, ARIZONA



DETAIL 'A'

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU YD	105,474
REINFORCEMENT BARS	POUND	15,474

BAR LIST (2 BRIDGES)

BAR	NUMBER	SIZE	LENGTH	SHAPE	WEIGHT
D401	254	3/4"	34'-0"		10,416
D402	294	5/8"	33'-6"		10,263
D403	36	3/4"	27'-3"		1,311
D404	40	5/8"	27'-3"		1,311
D405	18	3/4"	28'-0"		587
D406	400	3/8"	4'-5'-0"		2,648
D407	400	3/8"	4'-5'-0"		2,648
D501	150	5/8"	34'-0"		5,318
D502	150	5/8"	33'-6"		5,241
D503	56	5/8"	33'-0"		1,802
D504	48	5/8"	33'-0"		1,602
D505	32	5/8"	33'-0"		1,068
D506	848	5/8"	2'-9"		4,868
D507	30	5/8"	1'-9"		110
D508	36	5/8"	21'-6"		1,248
D509	20	5/8"	17'-0"		661
D510	300	5/8"	36'-0"		32,119
D511	54	5/8"	36'-0"		6,080
D512	124	5/8"	35'-9"		14,687
TOTAL					105,474

PARAPET PANEL DETAIL

PARAPET PANEL	LENGTH	NUMBER OF BARS	NUMBER OF PANELS	NUMBER OF BARS
A	8'-4 1/2"	4	16	72
B	8'-8 1/2"	20	80	360
C	8'-6 1/2"	4	16	72
D	8'-7 1/2"	20	80	360
E	9'-0"	8	32	160
F	9'-0 1/2"	4	16	80
G	9'-2"	4	16	80
H	9'-3"	8	32	160
K	10'-0"	16	64	352

NOTE: ALL BAR DIMENSIONS ARE OUT TO OUT.

NOTE: BARS D401 & D402 ARE #5 BARS.

NOTE: THE CAST OF ALUMINUM DRAINS AND SHEETS SHALL BE INCIDENTAL TO CLASS X CONCRETE.

SCALE: AS NOTED

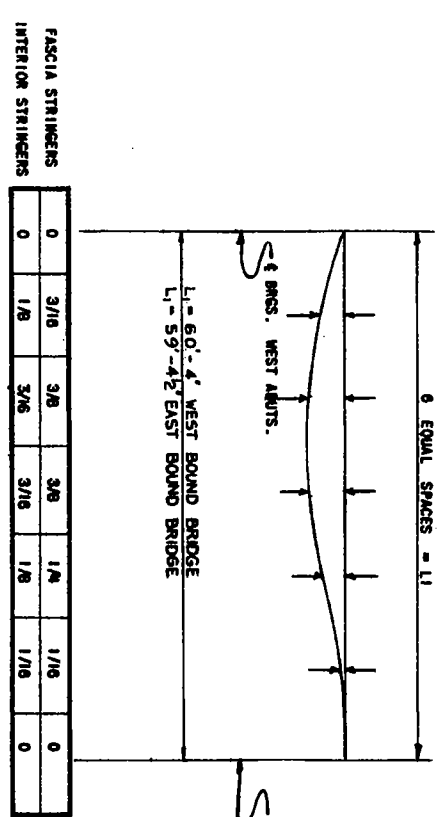
DESIGNED BY: C.H.L.  
 DRAWN BY: A.F.M. & M.V.  
 CHECKED BY: E.H.L.  
 IN CHARGE: L.H.H.M.

DE LEUW, CATHEN & CO. ENGINEERS  
 1000 MARKET STREET, PHOENIX, ARIZONA

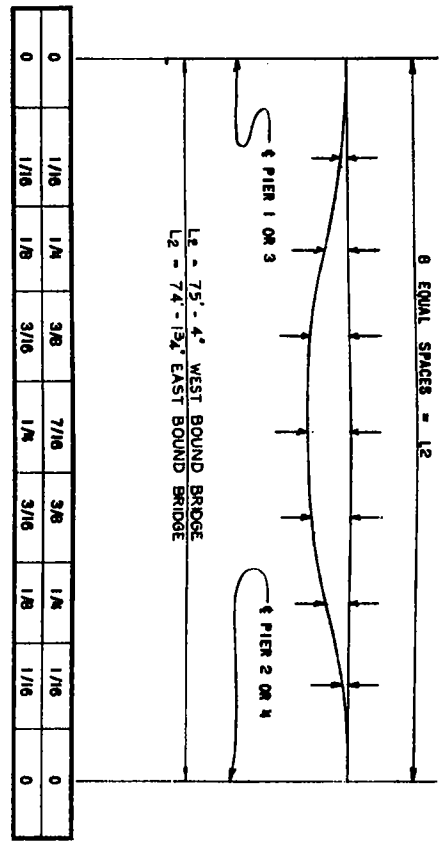
SUPERSTRUCTURE - SLAB DETAILS  
 F.A.I. 280 SUPERSTRUC-141V  
 F.A.I. 280 OVER C&L & P&R  
 ROCK ISLAND COUNTY  
 STATION 332+06.50

DATE	QUANTITY	TOTAL
FULL SHEET	22	10
PER SHEET	1	1

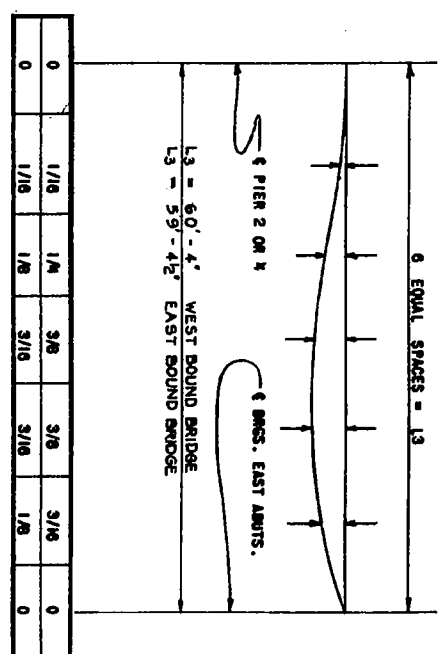
SHEET NO. 10  
SHEETS



SPAN 1



SPAN 2



SPAN 3

ELEVATION @ STATION 232+50.00

STRINGER	WEST ABUTTS.	1/8 L1	1/3 L1	1/2 L1	2/3 L1	5/8 L1	PIER 1 ON 3
G 1	9.09	9.70	9.71	9.70	9.68	9.65	9.62
G 2	9.75	9.75	9.75	9.74	9.73	9.71	9.69
G 3	9.82	9.83	9.83	9.82	9.80	9.78	9.77
G 4	9.89	9.90	9.90	9.89	9.88	9.86	9.85
G 5	9.95	9.97	9.97	9.97	9.96	9.94	9.92
G 6	9.99	10.02	10.03	10.03	10.02	10.00	9.99
G 7	9.02	9.05	9.06	9.06	9.06	9.06	9.06
G 8	9.06	9.09	9.71	9.72	9.73	9.73	9.73
G 9	9.72	9.75	9.77	9.78	9.78	9.78	9.80
G 10	9.77	9.81	9.83	9.85	9.85	9.85	9.85
G 11	9.83	9.85	9.86	9.86	9.81	9.82	9.83
G 12	9.85	9.90	9.93	9.95	9.96	9.96	9.97

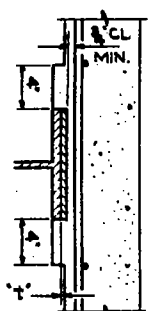
ELEVATION @ STATION 231+04.23

PIER 1 ON 3	1/8 L2	1/4 L2	3/8 L2	1/2 L2	5/8 L2	3/4 L2	7/8 L2	PIER 2 ON 4
9.62	9.61	9.61	9.59	9.57	9.54	9.50	9.46	9.41
9.69	9.67	9.66	9.64	9.62	9.60	9.56	9.52	9.49
9.77	9.75	9.74	9.73	9.71	9.68	9.65	9.62	9.59
9.85	9.83	9.83	9.81	9.80	9.77	9.74	9.71	9.67
9.92	9.91	9.91	9.90	9.88	9.86	9.83	9.78	9.76
9.98	9.98	9.99	9.99	9.97	9.94	9.91	9.87	9.84
9.06	9.70	9.71	9.72	9.72	9.71	9.69	9.67	9.65
9.73	9.74	9.75	9.75	9.75	9.75	9.73	9.72	9.71
9.80	9.81	9.82	9.82	9.83	9.82	9.81	9.79	9.78
9.86	9.87	9.88	9.89	9.89	9.89	9.88	9.87	9.86
9.93	9.94	9.95	9.95	9.95	9.95	9.94	9.94	9.93
9.97	9.99	10.01	10.03	10.04	10.03	10.02	10.01	9.99

PIER 2 ON 4	1/8 L3	1/3 L3	1/2 L3	2/3 L3	5/6 L3	EAST ABUTTS.
9.41	9.38	9.36	9.32	9.27	9.21	9.14
9.49	9.46	9.43	9.39	9.35	9.29	9.23
9.56	9.55	9.52	9.49	9.44	9.39	9.34
9.67	9.64	9.62	9.58	9.54	9.49	9.44
9.78	9.74	9.71	9.68	9.64	9.59	9.54
9.84	9.82	9.80	9.77	9.73	9.68	9.62
9.95	9.94	9.93	9.92	9.90	9.87	9.82
9.71	9.70	9.69	9.68	9.66	9.63	9.59
9.78	9.78	9.77	9.76	9.74	9.71	9.66
9.86	9.85	9.85	9.84	9.82	9.80	9.77
9.93	9.93	9.93	9.92	9.90	9.89	9.85
9.99	9.99	10.00	9.99	9.98	9.95	9.92

THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS

AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED, ELEVATIONS OF THE TOP FILLETS OF THE BEAMS SHALL BE TAKEN AT THE POINTS FOR WHICH DEAD LOAD DEFLECTIONS ARE GIVEN. THESE ELEVATIONS SHALL BE ADJUSTED FOR DEAD LOAD DEFLECTIONS AND PLATE THICKNESS (IF ANY) TO OBTAIN THE THEORETICAL GRADE ELEVATIONS. THESE ELEVATIONS SHALL BE USED TO DETERMINE THE THEORETICAL GRADE ELEVATIONS ABOVE THE TOP OF BEAMS.

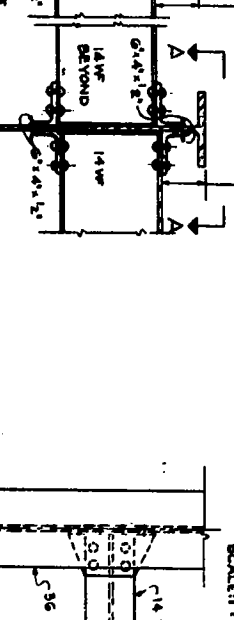
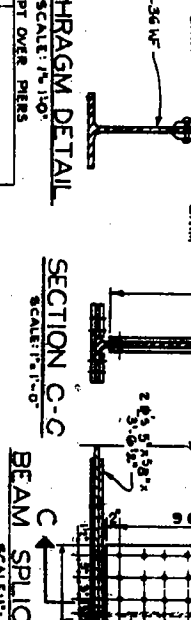
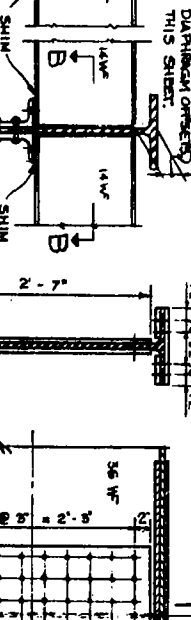
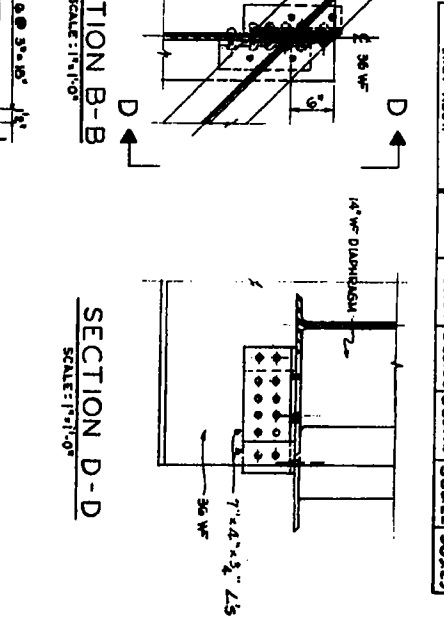
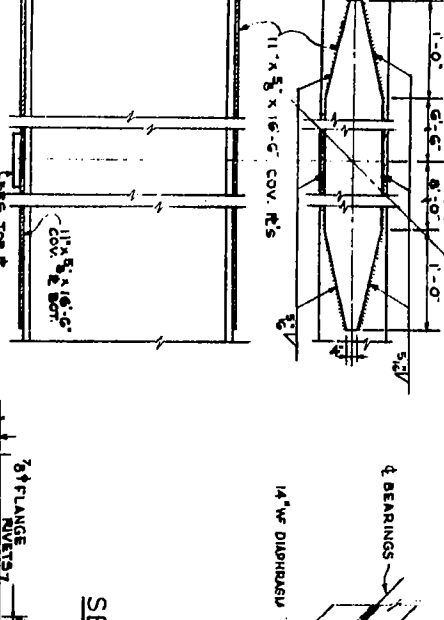
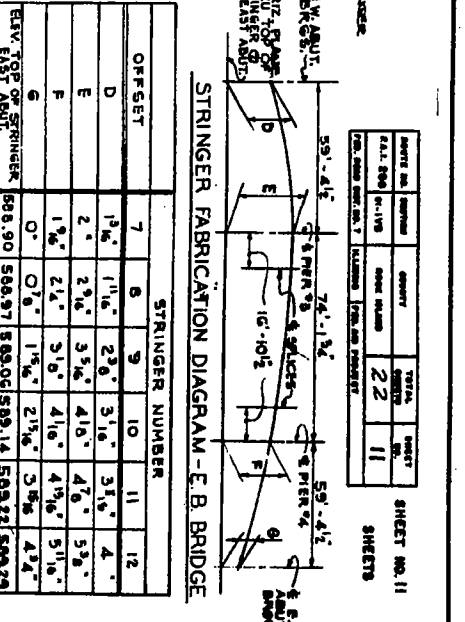
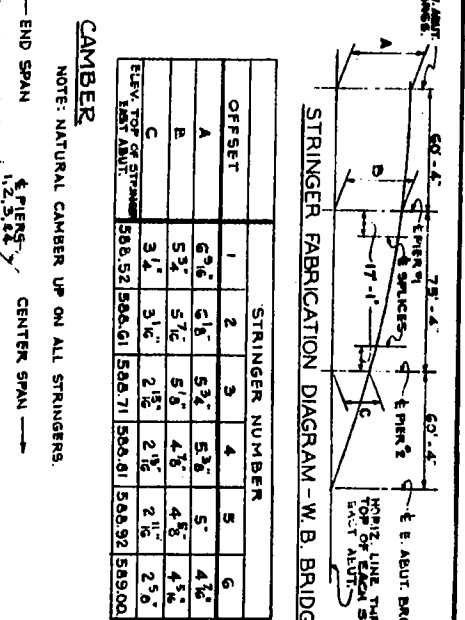
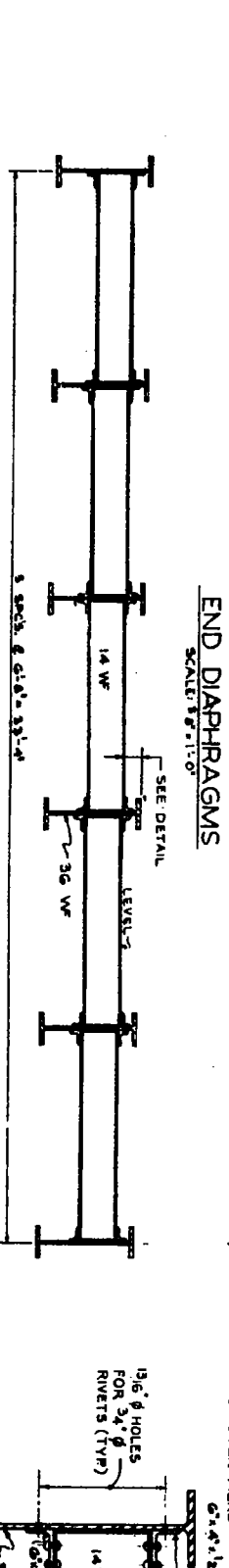
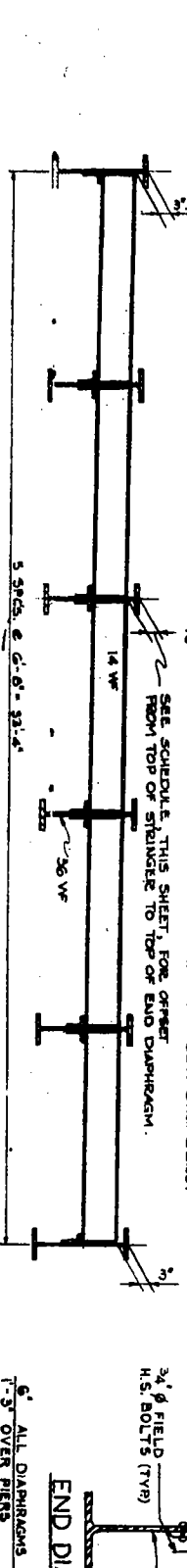
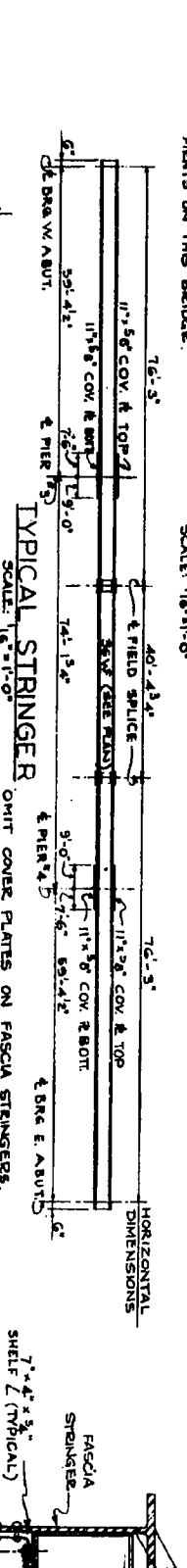
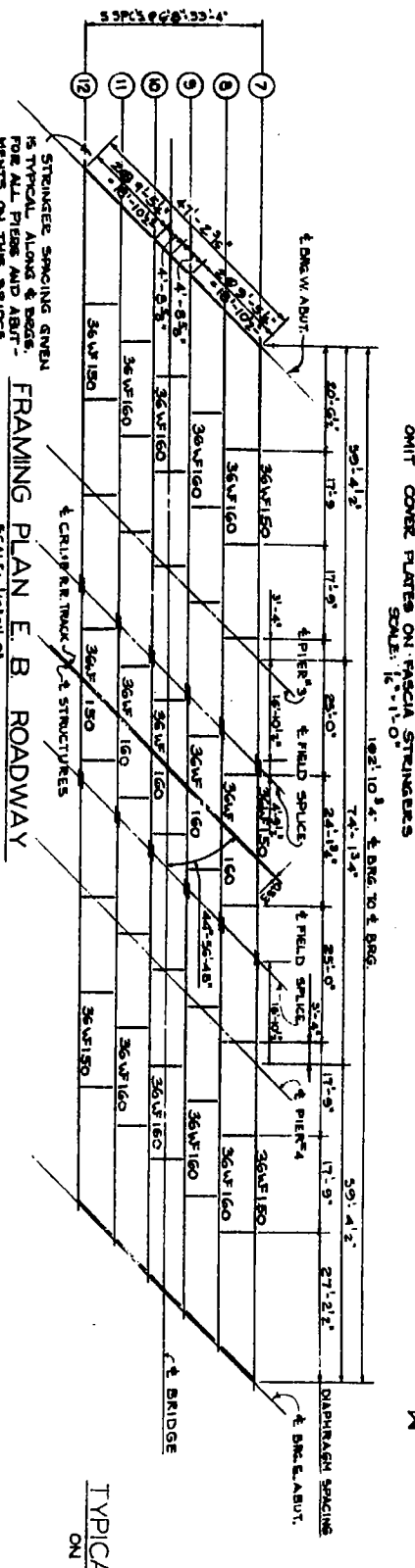
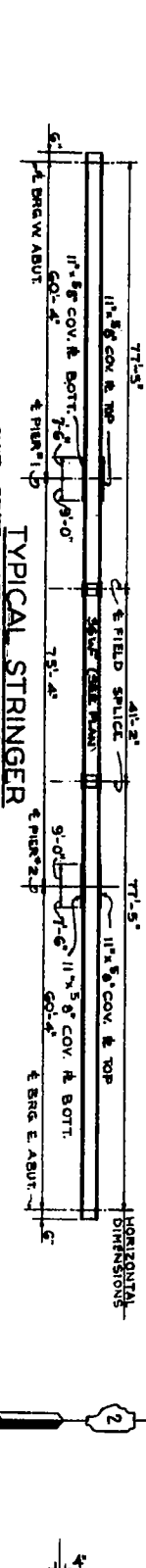
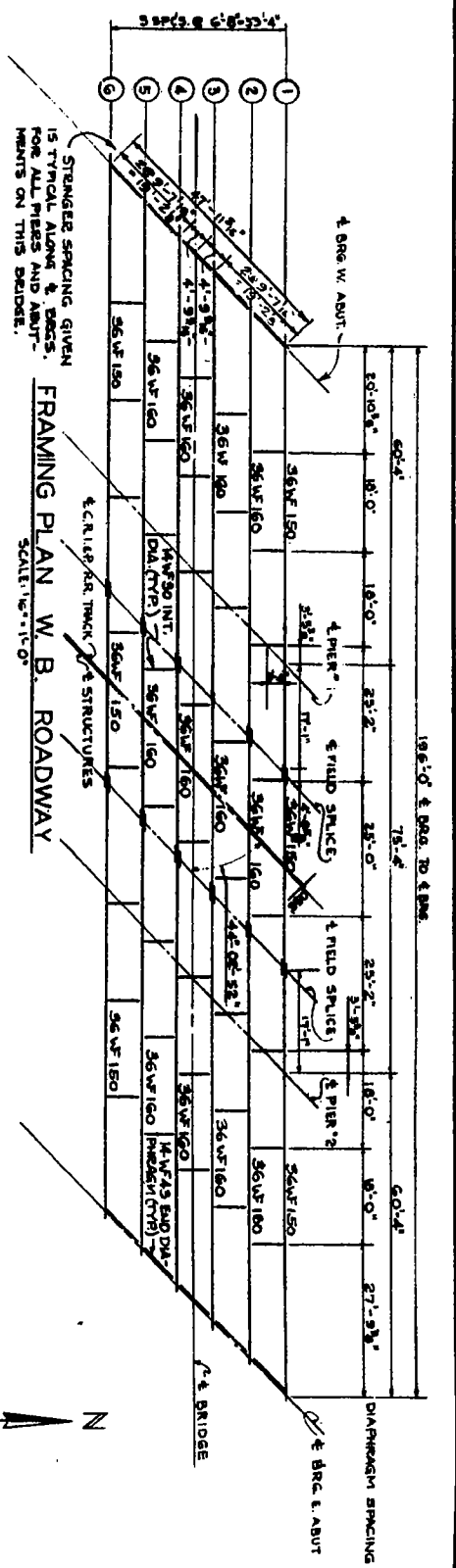


METHOD OF DETERMINING FILLET HEIGHTS

ELEVATIONS AND DEFLECTIONS

F.A.L. 280 SECTION B-17B  
R.O.C.K. I.S.L.A.N.D. C.O.U.N.T.Y.  
STATION 232 + 06.50  
SCALE AS NOTED

DE LEUW, CATHEN & CO. ENGINEERS  
DESIGNED BY J. B. ...  
CHECKED BY V. K. B. ...  
IN CHARGE L. H. ...



**SCHEDULE OF END DIAPHRAGM OFFSETS**

ABUT. LOC.	1	2	3	4	5	6
EAST	3'	2'	3'	3'	3'	3'
WEST	3'	3'	3'	3'	3'	3'

ABUT. LOC.	7	8	9	10	11	12
EAST	3'	2'	3'	3'	3'	3'
WEST	3'	3'	3'	3'	3'	3'

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
FINISHING & RESISTING STRUCTURAL STEEL	ROUND	480,462

**SUPERSTRUCTURE FRAMING PLAN**

F.A. 1880 SECTION 8-118  
 FALLS OVER CULMARS  
 ROCK ISLAND COUNTY  
 STATION 832 + 86.50  
 SCALE AS SHOWN DATE:

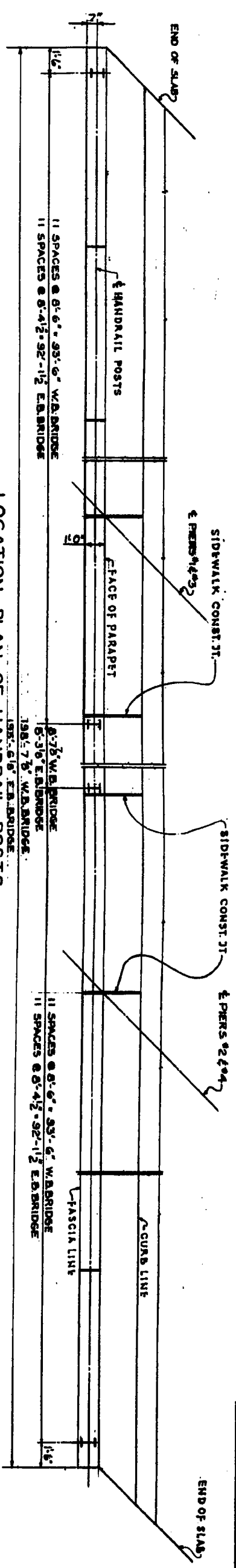
DESIGNED BY: E.A.H.  
 DRAWN BY: E.A.H.  
 CHECKED BY: E.A.H.  
 IN CHARGE: L.H.H.

Revision 2-1-63: removed last page detail from plans; Deleted 4,180 pounds of structural steel due to removal of steel plates; Structural Steel changed from 425,192 pounds to 420,462 pounds. W.C.K.





DATE	BY	CHKD	APP'D
FALL 1966	J.M.H.	J.M.H.	J.M.H.
REV. NO.	DESCRIPTION	DATE	BY
1	AS SHOWN		
2	REVISED	2.2	J.M.H.
3	REVISED	1.9	J.M.H.



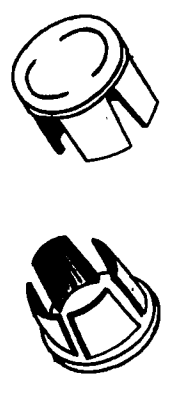
NOTE 2:  
ALUMINUM HANDRAIL SHALL BE MEASURED IN LINEAL FEET. THE LENGTH PAID FOR SHALL BE THE OVERALL LENGTH ALONG THE TOP LONGITUDINAL RAILING MEMBER THROUGH ALL POSTS AND GAPS.

ALL POSTS SHALL BE PLACED NORMAL TO PARAPET. ALL POSTS SHALL BE OF ALUMINUM CONFORMING TO A.S.T.M. SPECIFICATION B-108 ALLOY S&T-10 B.T.O. ALL RAIL TUBING SHALL BE OF ALUMINUM CONFORMING TO A.S.T.M. SPECIFICATION B-235 ALLOY 6061-T6. THE CONTRACT UNIT PRICE FOR ALUMINUM HANDRAIL SHALL INCLUDE THE COST OF FURNISHING, FABRICATING, TRANSPORTATION AND ERECTION OF ALL MATERIAL.

RAIL TUBING MAY SPAN ONE, TWO OR MAXIMUM OF THREE PARAPETS. FOR MATERIAL COMPOSITION OF PREFABRICATED PAD SEE NOTE 1. SET SCREWS SHALL BE ALUMINUM CONFORMING TO A.S.T.M. SPECIFICATION B-211 ALLOY 2024-T4.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
ALUMINUM HANDRAIL TYPE D	LN. FT.	790

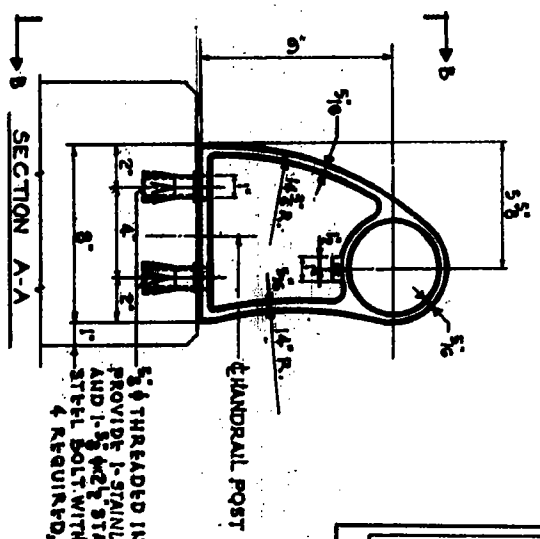


**CAST END CAP**  
DRIVE FIT TYPE  
(INCIDENTAL TO ALUMINUM HANDRAIL ITEM)  
8 REQUIRED

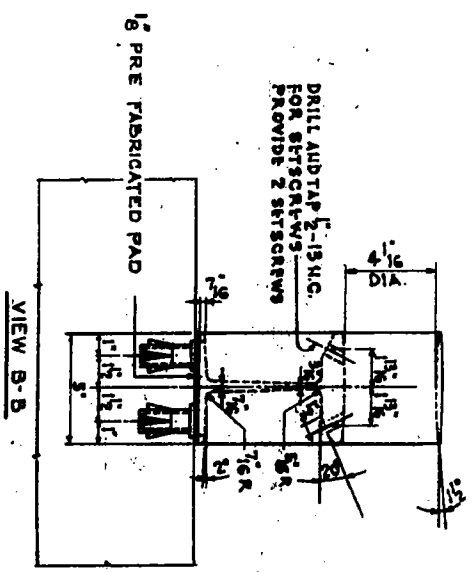
STATION 232+86.50  
BUILT 196 BY  
STATE OF ILLINOIS  
F.A. PROJ. IG-280-6(2)  
LOADING H20-S16 & ALT.

STANDARD NO. 213  
LETTERING FOR NAME PLATE

5/8" THREADED INSERTS,  
PROVIDE 1-1/2" STAINLESS STEEL WASHER  
AND 1-1/2" 4-21 STAINLESS  
STEEL BOLT WITH ZINC INSERT  
& REQUIRED, EACH POST.

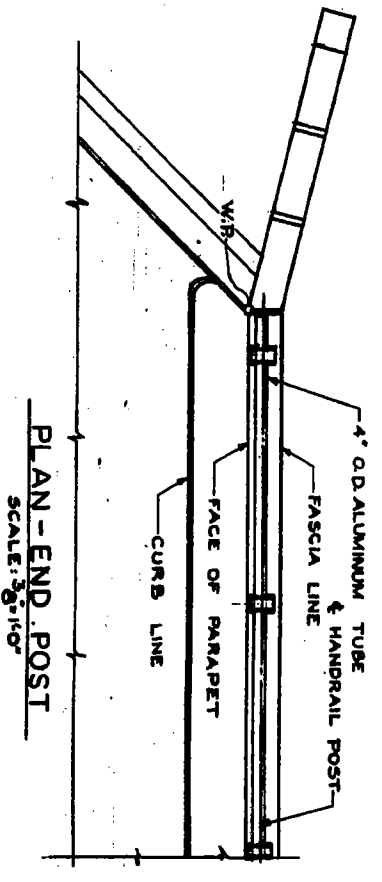


**HANDRAIL POST DETAIL**  
SCALE: 3/4"=1'-0"



**SECTION THRU CURB**  
SCALE: 3/8"=1'-0"

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



**PLAN-END POST**  
SCALE: 3/4"=1'-0"

DE LEUK, GUNTER & CO., ENGINEERS  
DESIGNED BY: E.H.L.  
DRAWN BY: J.M.H.  
CHECKED BY: J.M.H.  
IN CHARGE: L.H. BURN

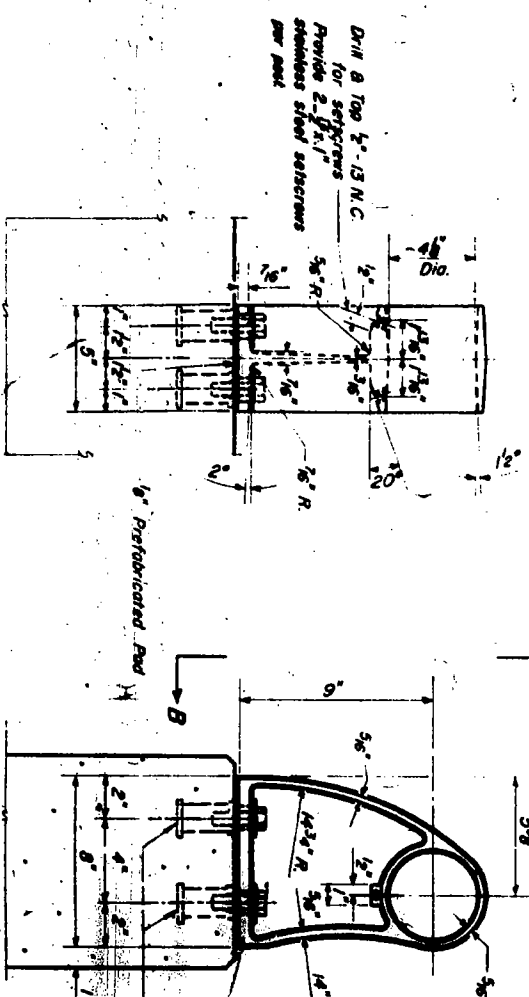
Revision 8-2-63: Minor loads to match the steel post changes. Change elevation of post and section thru curb drawings from a R.C. Girder bridge to a Warren bridge. M.H.

TYPE D  
ALUMINUM  
HANDRAIL DETAILS  
F.A.I. 280 SECTION 8-1-1B  
F.A.I. 280 OVER CUL. & M.H.  
ROCK ISLAND COUNTY  
STATION 232+86.50

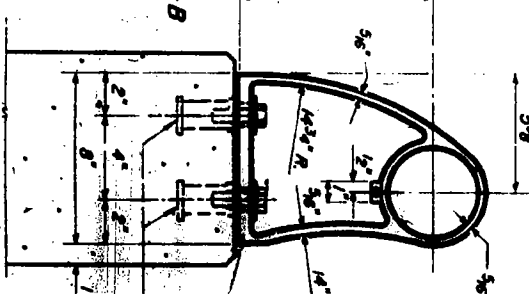
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

NO.	REV.	DATE	BY	CHKD.
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100				

NOTE: FOR RAIL POST SPACING AND OTHER DIMENSIONS SEE SHEET 15.



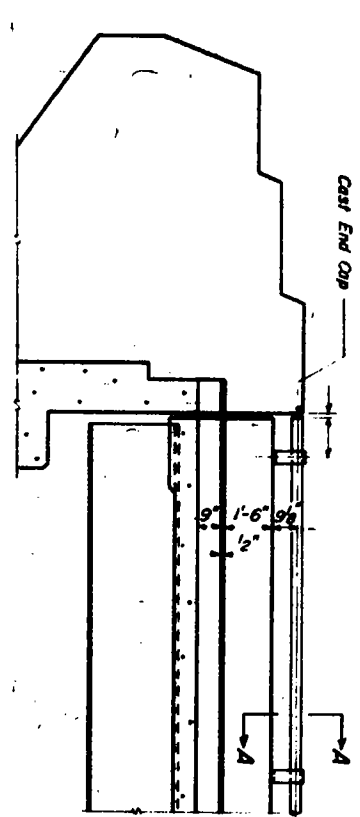
VIEW B-B  
RAIL POST DETAILS



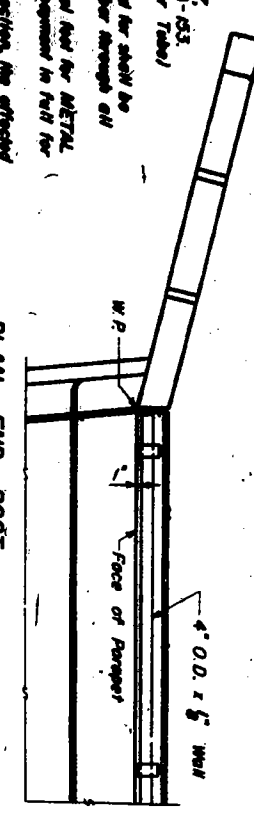
SECTION A-A



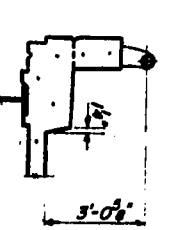
CAST END CAP  
DRIVE FIT TYPE  
Q Required  
Governor to ASTM A-533  
Incidental to Item "Metal Handrail"



ELEVATION - END POST



PLAN - END POST



SEC. THRU CURB

BILL OF MATERIAL

Item	Unit	Quantity
METAL HANDRAIL	LN. FT.	750

TYPE E  
METAL HANDRAIL

F.A.I. 280 SECTION 61-11B  
F.A.I. 280 OVER C&I & PRR.  
ROCK ISLAND COUNTY  
STATION 232+ 88.50

DESIGNED	EXAMINED
CHECKED	MADE
DRAWN BY M. M. BIRD	APPROVED
CHECKED	

R-14 Drawn 11-2-62 Rev. 5-8-63  
THIS SHEET ADDED TO PLAN 6-4-63

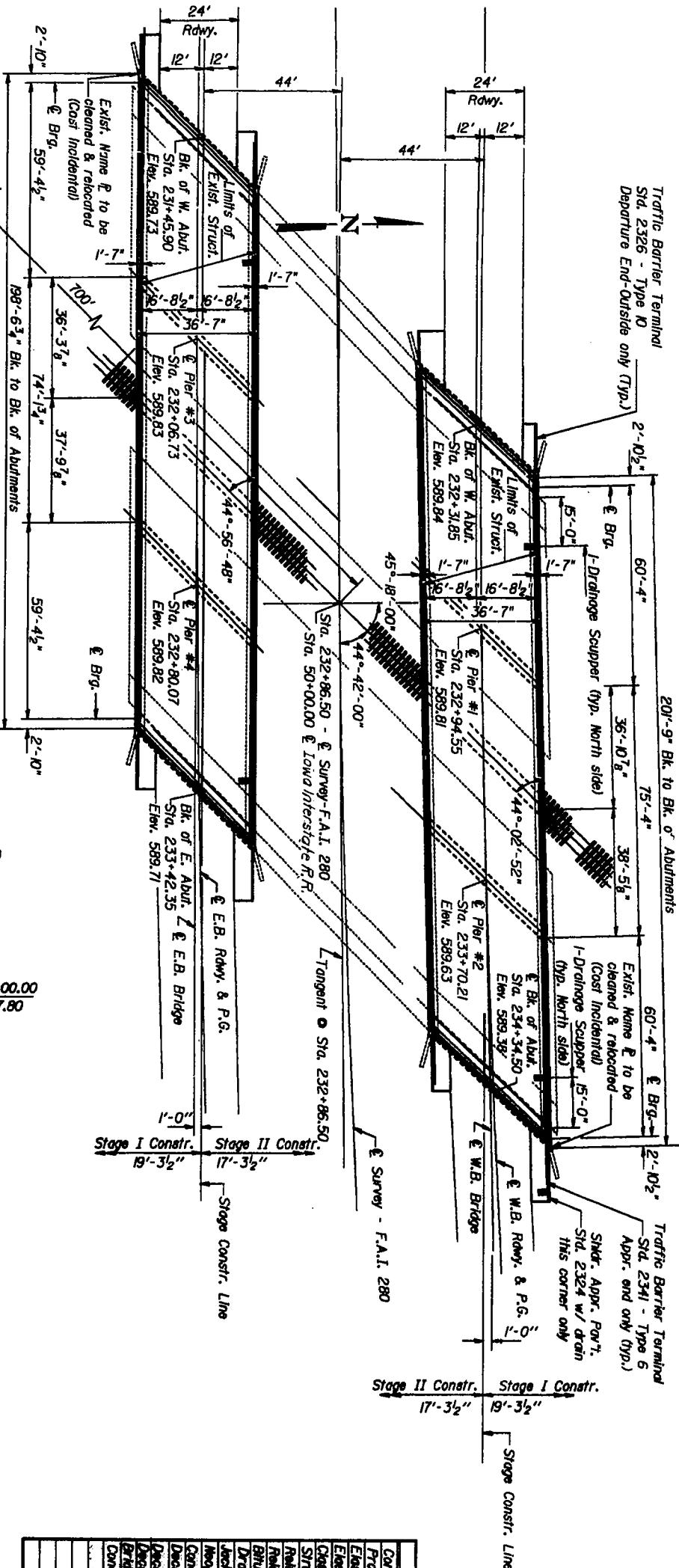
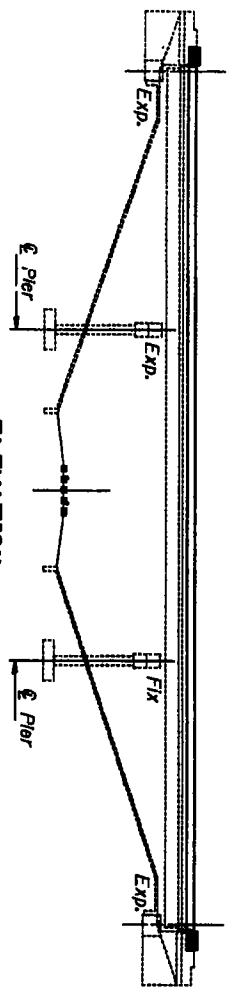
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Existing Structure: #081-0018 and 081-0019 is 198'-6 3/4" and 20'-9" bk. to bk. of abutment with a 36'-7" cut to cut width. Built as F.A.I. 280, Section 81-NB at Sta. 232+86.50 in 1964. Traffic shall be maintained in stages during the rehabilitation of the existing structure.  
Existing Aluminum Rolling shall be salvaged and delivered to District Maintenance Storage Yard. Cost is incidental to Concrete Removal Special.

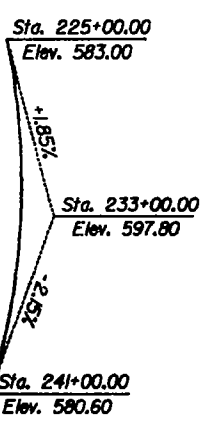
CURVE DATA

$\Delta = 29^{\circ}-19'-45''$   
 $D = 1'$   
 $T = 1453.32'$   
 $L = 2932.91'$   
 $E = 192.93'$   
 $R = 5729.65'$   
 $S.E. = 0.000'$

ELEVATION



PLAN

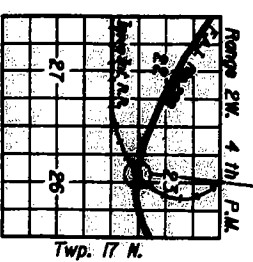


DESIGN SPECIFICATIONS

AASHTO (983) and applicable Interims (2004 thru 1987)  
LOADING HS 20-44 & M.

DESIGN STRESSES

$f_c = 3000$  psi (nominal)  
 $f_y = 60000$  psi (nominal)



GENERAL PLAN  
 I 280 OVER ROCK ISLAND INTERSTATE, R.R.  
 F.A.I. ROUTE 280 SECTION 81-NBY  
 STA. 232+86.50  
 ROCK ISLAND COUNTY  
 STRUCTURE NUMBER 081-0018 (E.B.)  
 STRUCTURE NUMBER 081-0019 (N.B.)

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.  
 Shoulder transition to wingwall shall be sloped with broken concrete. Cost incidental.  
 Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.  
 All new structural steel shall be shop painted with one coat of the lead and chrome free alkyd paint system primer and two coats of aluminum paint. All contact surfaces of new and existing Structural Steel shall be free of paint or lacquer.

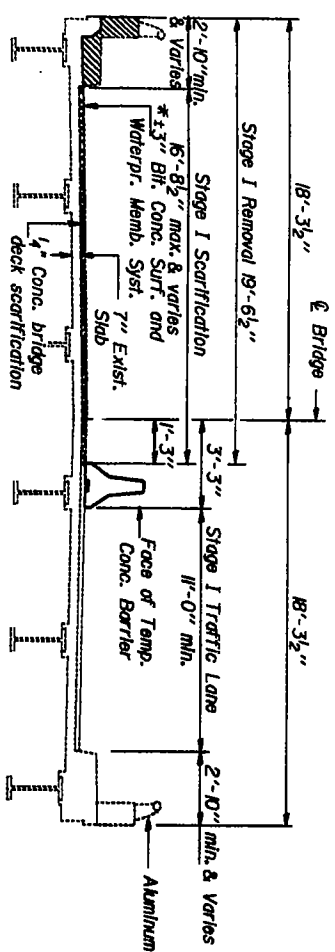
TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Concrete Removal	Cu. Yd.	25	18	43
Protective Coating	Sq. Yd.	333		333
Electromech. Brq. Assembly Type I	Each	24		24
Electromech. Brq. Assembly Type II	Each	12		12
Class X Concrete Superstructure	CU. Yd.	107		107
Structural Steel	Pound	9,370		9,370
Reinforcement Bars	Pound	17,990		16,800
Reinforcement Bars Epoxy Coated	Pound	17,990		16,800
Bituminous Concrete Surface Removal	Sq. Yd.	1,293		1,293
Drainage Scupper's	Each	3		3
Jack and Remove Existing Bearings	Ln. Ft.	69		69
Moisture Expansion Joint (2")	Sq. Yd.	1,293		1,293
Concrete Bridge Deck Scaffolding 1"	Sq. Yd.	221		221
Deck Slop Rigger (Full Depth Type I)	Sq. Yd.	129		129
Deck Slop Rigger (Full Depth Type II)	Sq. Yd.	25		25
Bridge Deck Latex Concrete Overlay	Sq. Yd.	1,398		1,398
Concrete Removal/Special	Cu. Yd.	02		02

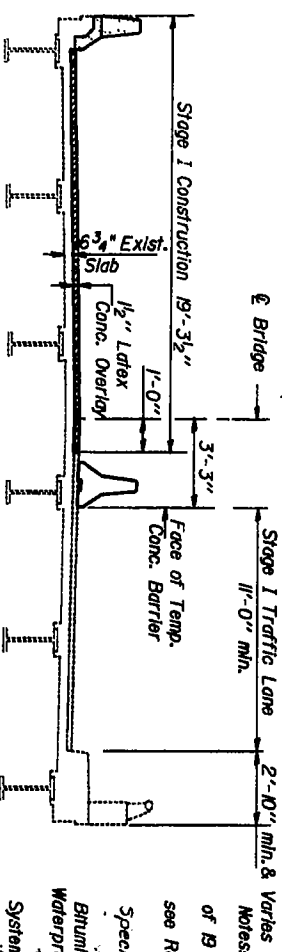


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

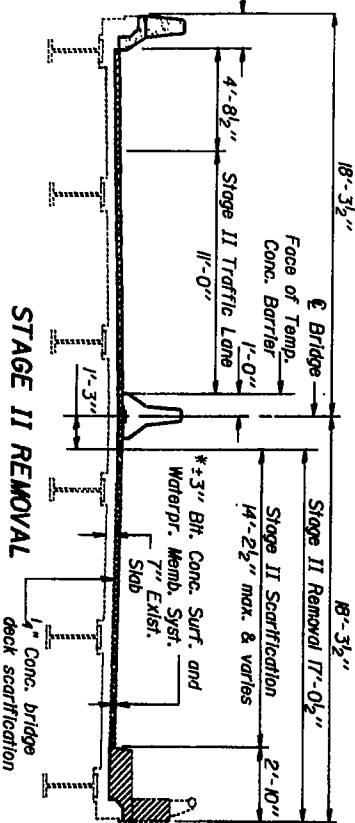
PROJECT NO.	DATE	SHEET NO.	TOTAL SHEETS
1-230	8/1/54	45	318
R. ISLAND			19 SHEETS



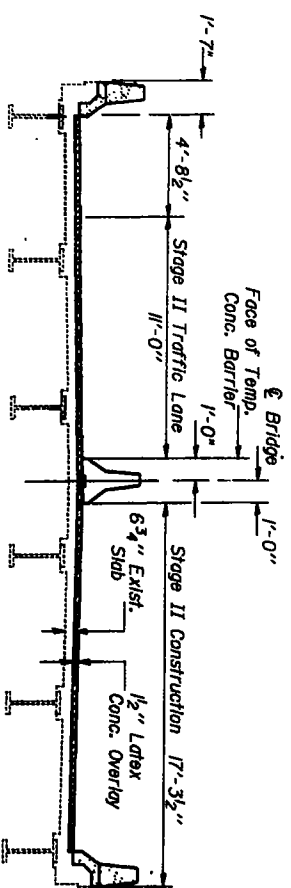
STAGE I REMOVAL



STAGE I CONSTRUCTION



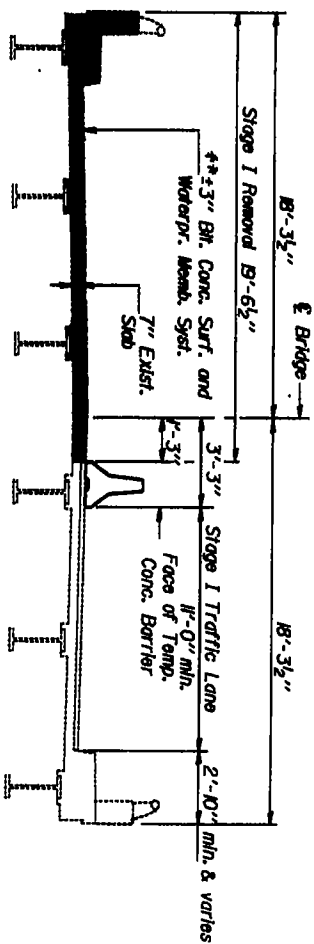
STAGE II REMOVAL



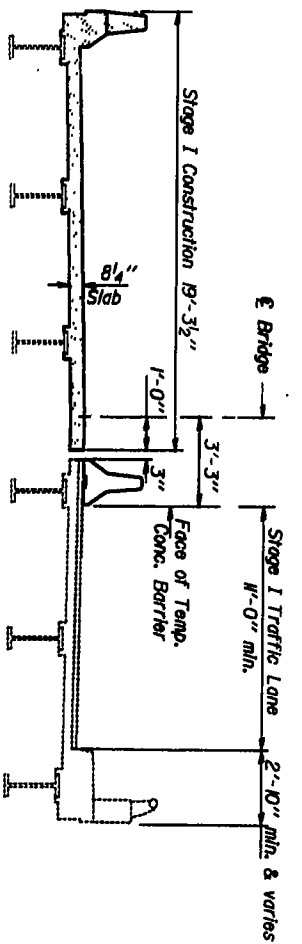
STAGE II CONSTRUCTION

W. BD. BRIDGE LOOKING EAST  
E. BD. BRIDGE LOOKING WEST  
(SECTION G-G)

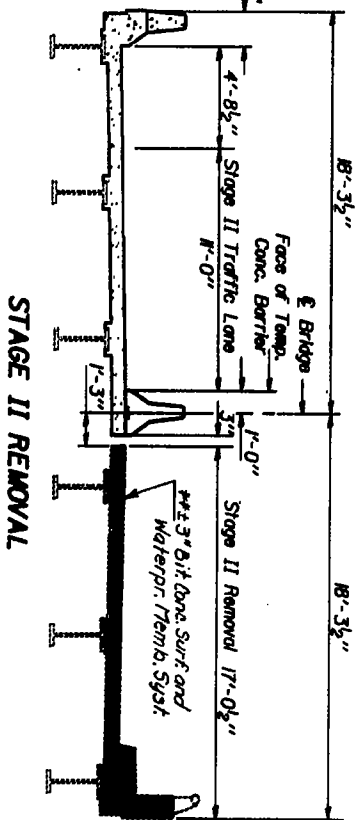
Notes:  
 \* For Temporary Concrete Barrier see sheet #12 of 19 For Quantity of Temporary Concrete Barrier see R.W.M. Plans.  
 Hatched areas indicates Concrete Removal Special.  
 Cross hatched area indicates Removal of Bituminous Concrete Surface and Removal of Waterproofing Membrane System.  
 \* Cost of Removing Waterproofing Membrane System in Cross hatched areas is incidental to the pay item for Bituminous Concrete surface Removal.  
 All dimensions are at Rt. L.S. to the  $\epsilon$  of Bridge.  
 Cost of removing Aluminum Rolling and delivering to the District is incidental to "Concrete Removal Special."  
 Shaded area indicates Concrete removal.  
 \*\* Cost of removing Bituminous Concrete Surface and Waterproofing Membrane System in shaded areas is incidental to the pay item for Concrete Removal.  
 For location for Sec. E-E and Sec. G-G see sheets #4 and #5 of 19.



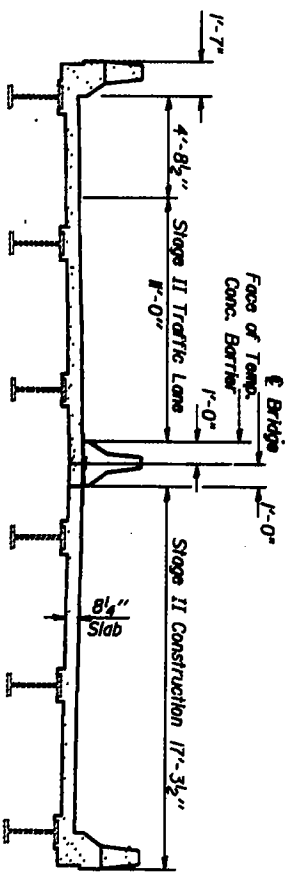
STAGE I REMOVAL



STAGE I CONSTRUCTION



STAGE II REMOVAL



STAGE II CONSTRUCTION

W. BD. BRIDGE LOOKING EAST  
E. BD. BRIDGE LOOKING WEST  
(SECTION E-E)

DESIGNED: Staker, Boston  
 CHECKED: Suresh, Desai  
 DRAWN: Mercado  
 CHECKED: S.A.

May 23 1988  
 EXAMINED: Roy O. Stinson  
 APPROVED: [Signature]  
 SUPERVISOR OF TRAVEL

STAGE CONSTRUCTION  
 F.A.I. RTE. 230 SEC. 8-NBY  
 ROCK ISLAND COUNTY  
 STA. 12+05.50

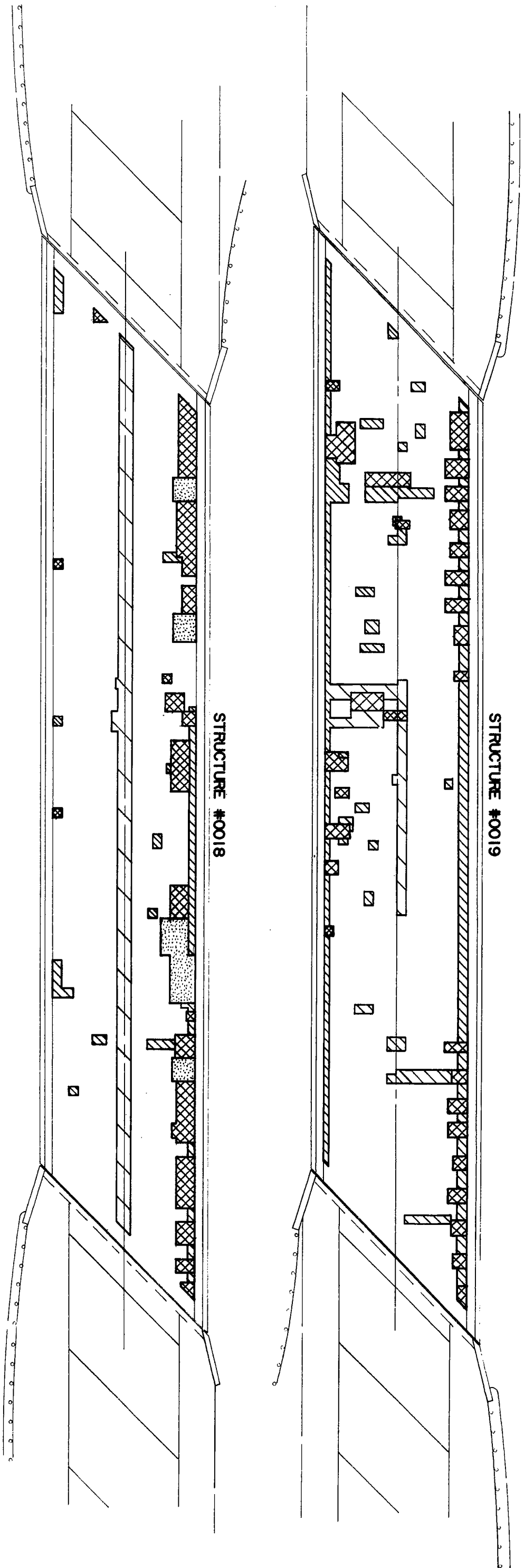
**LEGEND**  
 [Cross-hatched box] FULL DEPTH TYPE I (ESTIMATED QUANTITY OF 129 SQ YDS)  
 [Diagonal hatched box] FULL DEPTH TYPE II (ESTIMATED QUANTITY OF 25 SQ YDS)  
 [Dotted box] PARTIAL DEPTH (ESTIMATED QUANTITY OF 221 SQ YDS)

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

STRUCTURE #0019

*81-181-1-181-1-2RS, 81-1-N B4			
DATE	ISSUE	REVISION	BY
FAT 280	*	ROCK ISLAND	45
			314

SHEET NO. 3  
 19 SHEETS



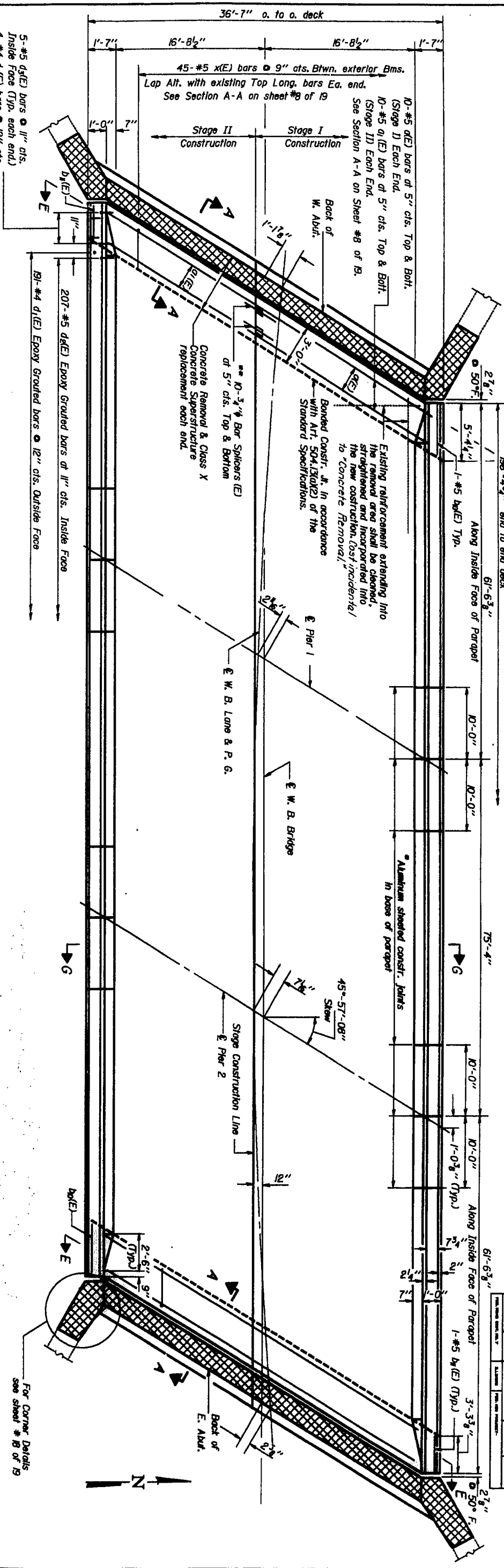
DESIGNED: Shaker Asfaw  
 CHECKED: Suresh Dasai  
 DRAWN: FM  
 CHECKED: SK

DATE: May 25, 1988  
 BY: [Signature]  
 [Signature]  
 [Signature]

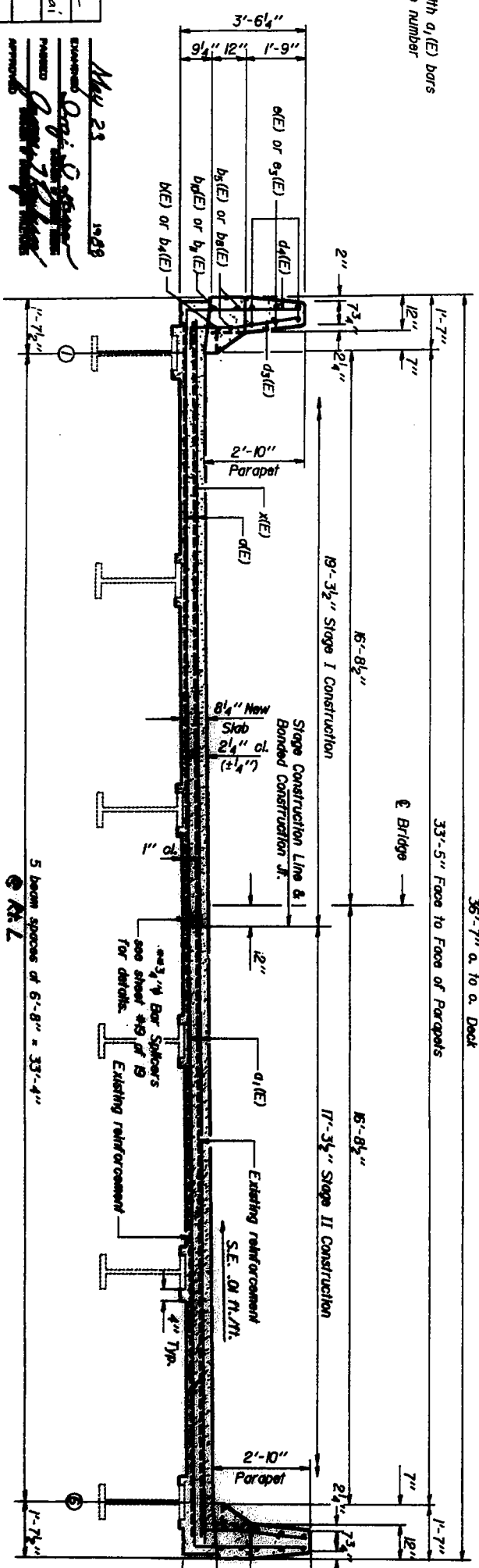
DECK PATCHING DETAILS  
 FAI, RTE. 280, SEC. B1-VB1  
 ROCK ISLAND COUNTY  
 STA. 232+86.50

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SHEET NO. 4	DATE	BY	CHKD.
19	11/20/85	R. ILLIAND	45
31D			
19 SHEETS			



PLAN



CROSS SECTION E-E

\*\* Bar Splicers lapped with d(E) bars shall be tied with double the number of ties normally used.

\* Cut existing aluminum sheet used in streetly walk joints as required.

5-#5 d(E) bars @ 12" cts. Inside Face (Typ. each end).  
4-#4 d(E) bars @ 12" cts. Outside Face (Typ. each end).  
See Cross Sec. at End of Deck sheet #8 of 19.

Notes:  
See sheet # 8 of 19 for Sec. A-A.  
See sheet # 9 of 19 for superstructure details and Bill of material.  
Reinforcement bars designated (E) shall be epoxy coated.  
Cross hatched area to be poured after Superstructure is in place and forms have been removed. Concrete quantity shall be billed with Class X Concrete Superstructure.

See sheet # 6 of 19 for Parapet Details.  
See sheet # 8 of 19 for Sec. thru Parapet of Ends.  
All longitudinal dimensions are along the E of Bridge and all transverse dimensions are of Rt. L's to the E of Bridge.  
See sheet # 5 of 19 for Sec. G-G

MIN. BAR LAPS  
#5 bars 2'-2"

SUPERSTRUCTURE  
WEST BOUND LANES

F.A.I. RTE. AND SEC. 81-NBY  
ROCK ISLAND COUNTY  
STA. 232+00.50

DESIGNED	Shake Asfour	EXAMINED	David S. ...
CHECKED	Suresh Desai	APPROVED	...
DRAWN	marcodo		
CHECKED	S.A.		

May 23 1985  
APPROVED

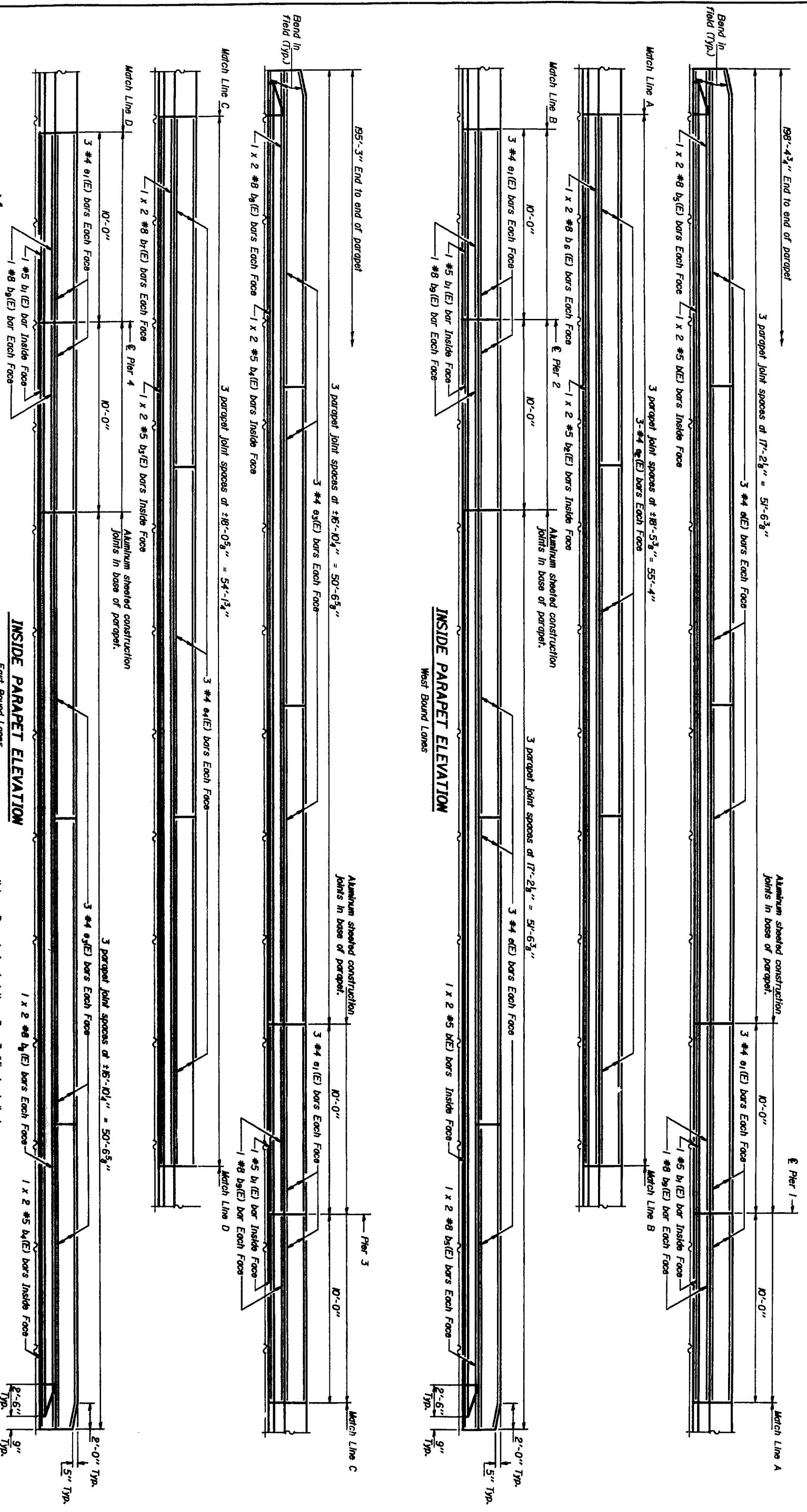
P1-1(L)159 12-31-85





STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	81-	SECTION	Q.15/AND	DATE	4/5
DRAWN BY	MA1280	DESIGNED BY	MA1280	SCALE	3/4"
CHECKED BY	SA	DATE	11/23/88	SHEET NO.	6
				TOTAL SHEETS	19



DESIGNED: Shaker Asfaw  
 CHECKED: Suresh Desai  
 DRAWN: mercedo  
 CHECKED: SA

DATE: May 23, 1988

APPROVED: [Signature]

MIN. BAR LAPS  
 #5 Bars = 2'-2"  
 #8 Bars = 4'-6"

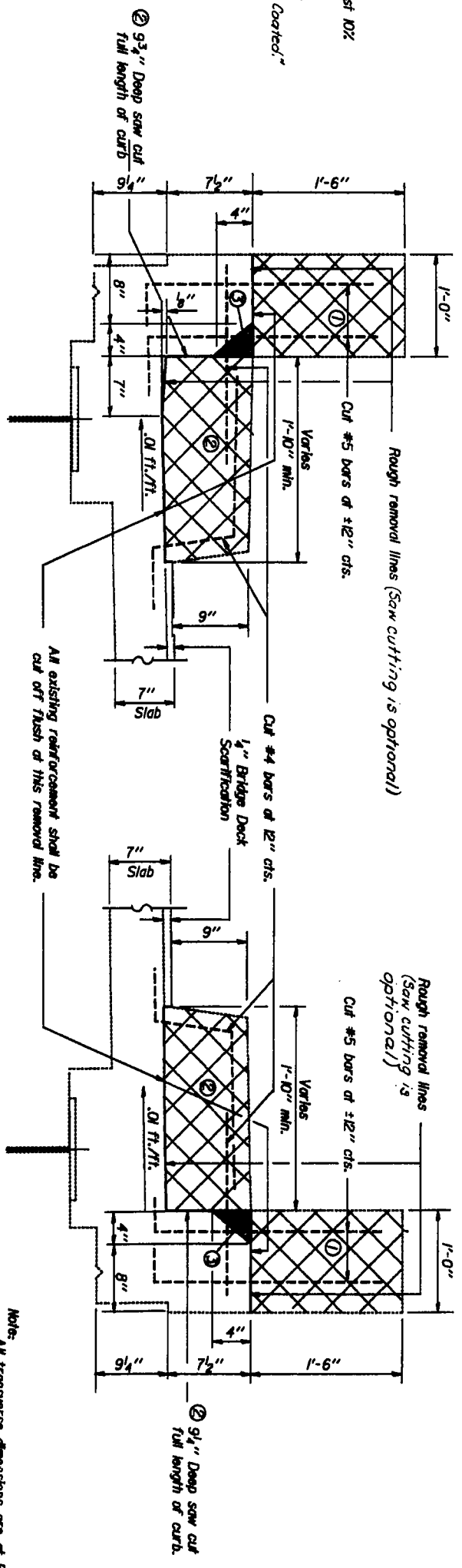
SUPERSTRUCTURE DETAILS  
 F.A.I. RTE. 280 SEC. 81-NBY  
 ROCK ISLAND COUNTY  
 STA. 232+86.50

PROJECT NO.	280	SECTION	4/5	SHEET NO.	7
DATE	12/20/04	BY	R. ISLAND	3/26	
CHECKED	SA	DATE			
				9	SHEETS

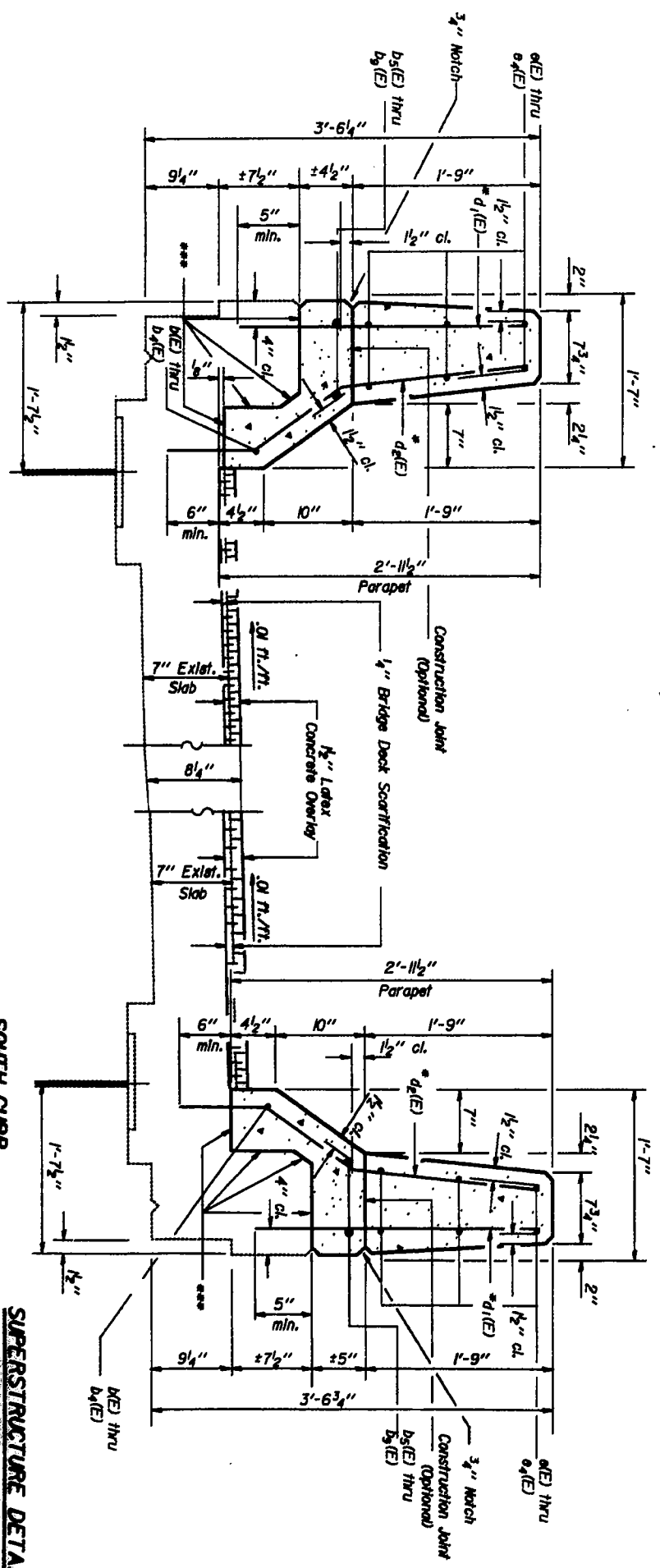
\* Epoxy grout d(1E) bars in 3/4" x 5" min. drilled holes and d(2)bars in 7/8" x 6" min. drilled holes. (See Special Provisions). The Contractor shall test 10% of the d(1E) bars to meet a min. pull out load of 9.3 kips. For every bar that fails to meet the pull out load of 9.3 kips, the Contractor shall test 2 additional bars and grout an additional d(1E) bar 3/4" either side of the failed bar. Cost of testing and additional bars shall be incidental to "Reinforcement Bars Epoxy Coated."

- PARAPET AND SAFETY WALK REMOVAL SEQUENCE**
- 1 Remove parapet above safety walk.
  - 2 Saw cut safety walk as shown and remove to rough removal lines.
  - 3 Complete removal to finish line with light hammer (45# or less) or water jet or saw cut.

**Notes:**  
 \*\*\*Bonded Construction Jt. In accordance with Art. 504.3(a)(2) of the Standard Specifications.  
 \* Removing Concrete in areas 1, 2 and 3 is billed as "Concrete Removal Special." Cost of cutting existing reinforcement bars in Parapet and Side Walk is incidental to the per item of "Concrete Removal Special."



**\*\* CONCRETE PARAPET & SAFETY WALK REMOVAL DETAILS**  
(Except at Ends of Deck)



DESIGNED Shaker Biscuit  
 CHECKED Tiyesh Desai  
 DRAWN mrcardo  
 May 23 1998  
 EXAMINED Roy J. O'Shea  
 APPROVED [Signature]  
 CHECKED SA

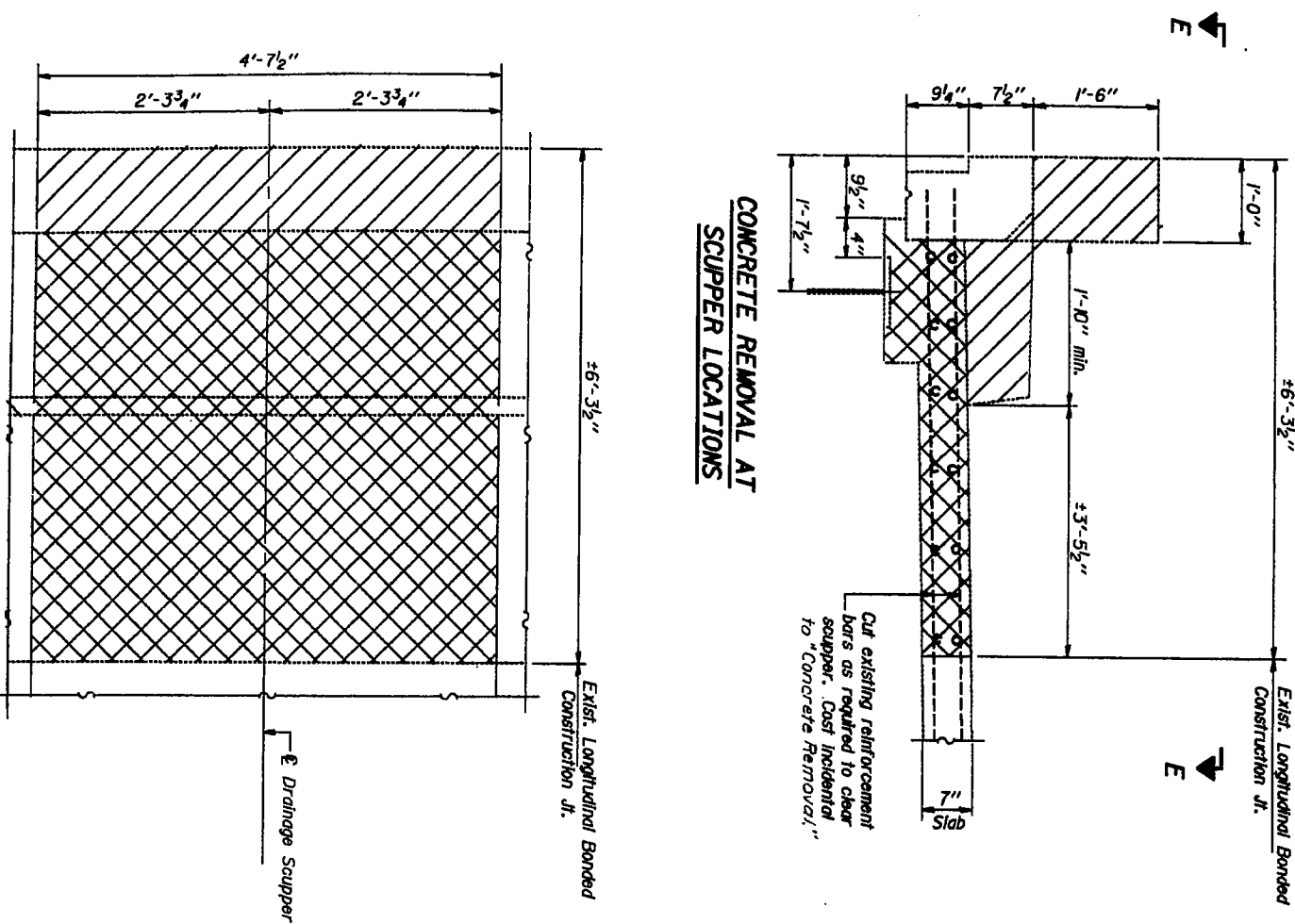
**CONCRETE PARAPET DETAILS**  
(Except at Ends of Deck)

**SUPERSTRUCTURE DETAILS**  
 F.A.I. RTE. 280 SEC. 8-NBY  
 ROCK ISLAND COUNTY  
 STA. 232+06.50

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DATE	BY	CHKD	NO.	SHEET NO.
12/20/11	MEY	NEV	45	324
				19 SHEETS

CONCRETE REMOVAL AT  
SCUPPER LOCATIONS

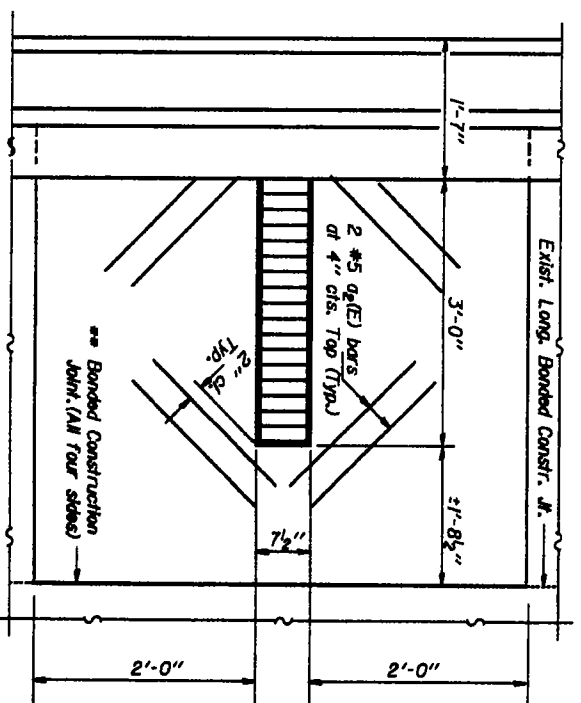


VIEW E-E

Notes:  
Hatched area indicates Concrete Removal Special.  
Cross hatched area indicates Concrete Removal.

DESIGNED	Shaker Bastou	DATE	12/23/11
CHECKED	Suresh Desai	PROJECT	Capital Project
DRAWN	marcdo	APPROVED	[Signature]
CHECKED	SA	REVISION	

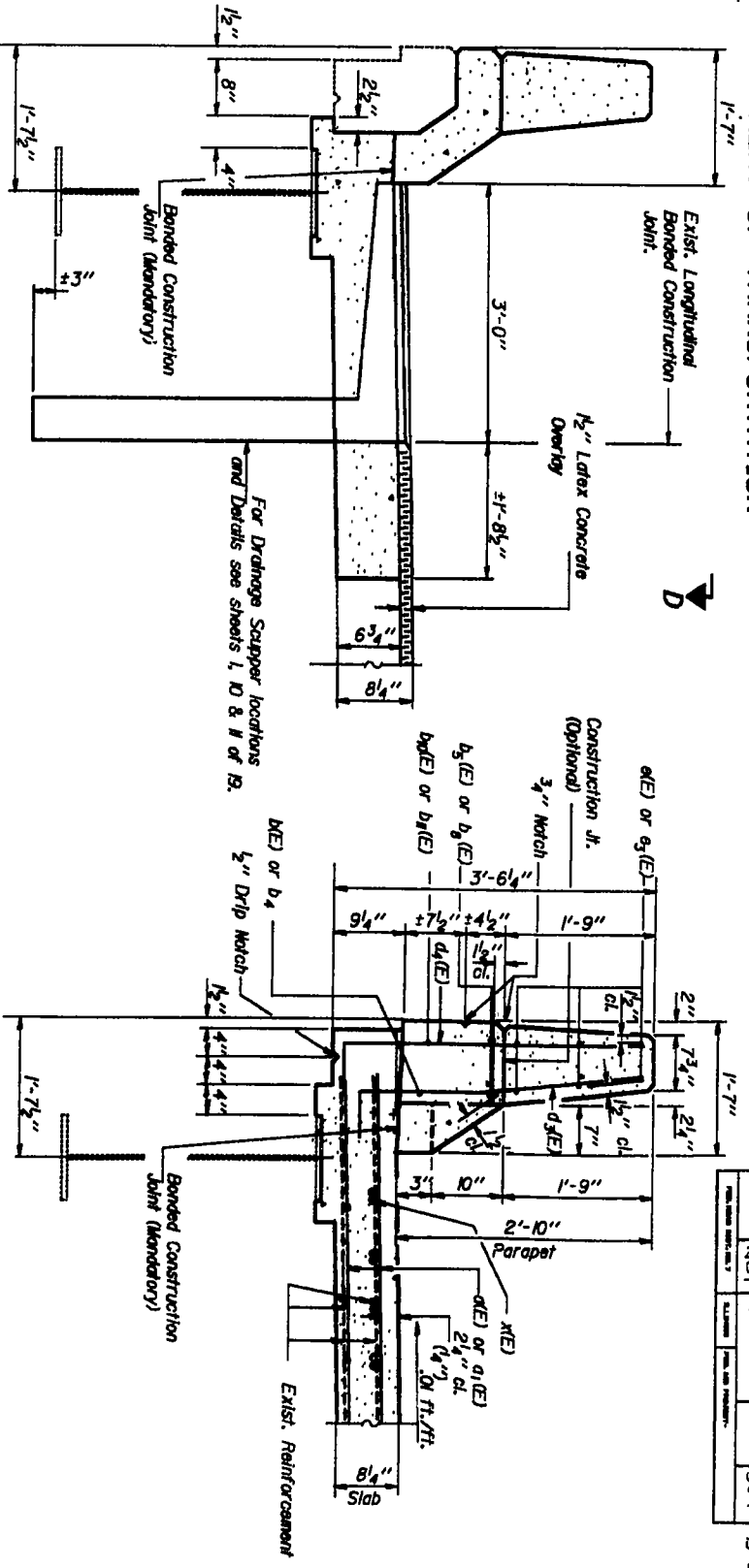
SEC. THRU PARAPET  
AT SCUPPER LOCATIONS



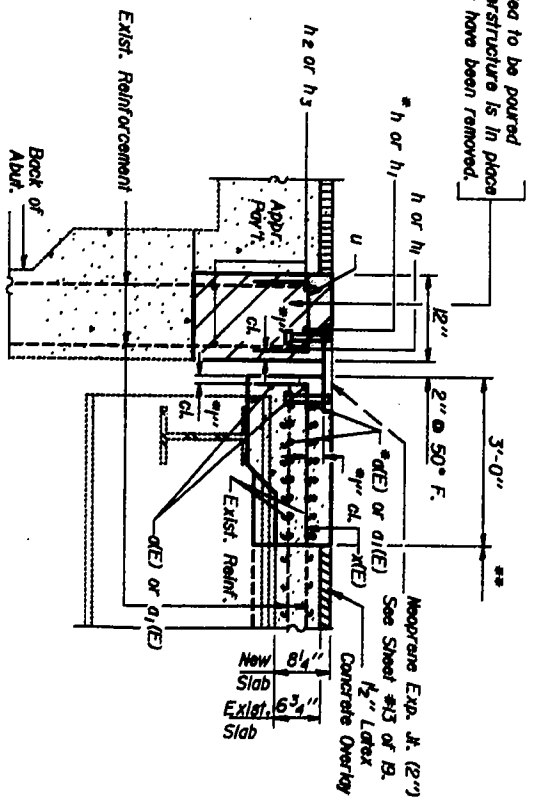
VIEW D-D

Notes: Existing longitudinal and transverse reinforcement shall be cleaned and incorporated into the new construction (as incidental to Concrete Removal).

CONCRETE REMOVAL AT  
SCUPPER LOCATIONS



SEC. THRU N. PARAPET  
AT ENDS OF DECK

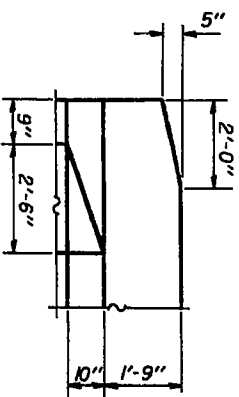


SECTION A-A

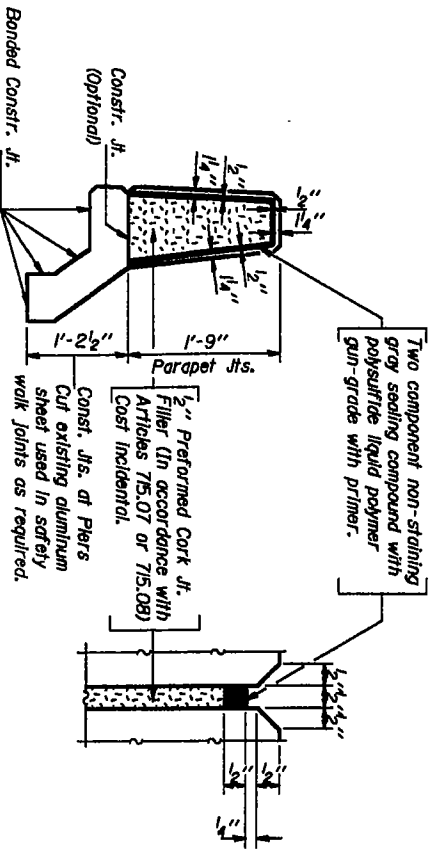
Notes:  
Hatched area to be poured after superstructure is in place and forms have been removed.  
Banded Construction Joints shall be in accordance with Article 504.13 (a)(2) of the Standard Specifications.  
Place d(E) or a(E) and h or h1 bars in back of anchor bolts as shown if required to maintain 1\"/>

SUPERSTRUCTURE DETAILS  
EAL RTE. 200 SEC. 01-NBY  
ROCK ISLAND COUNTY  
STA. 232+06.50

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

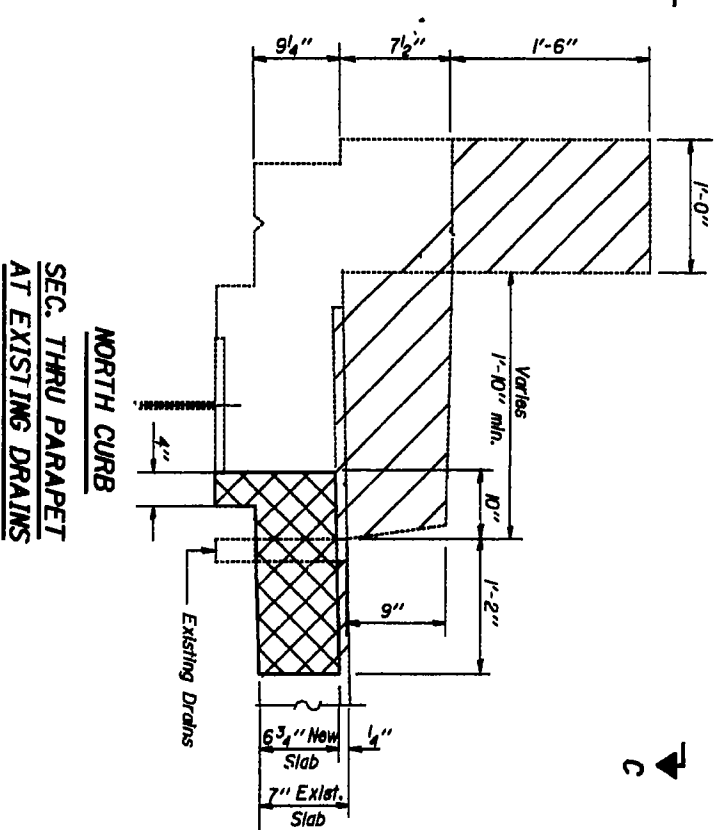


END OF PARAPET ELEVATION

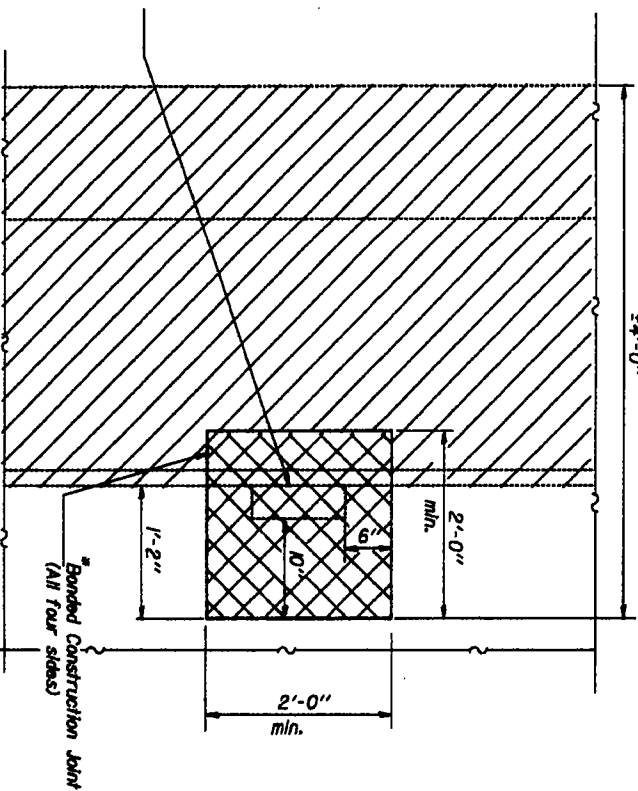


PARAPET JOINT DETAILS

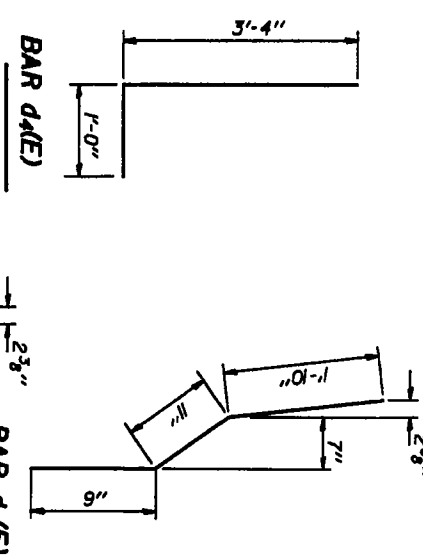
10 Existing 4" x 12" drains at 6'-0" cts. North Curb each structure Spans 1 and 3 shall be removed and 2'-0" x 2'-0" x 6" deck area shall be replaced. Cost is incidental to "Deck Slab Repair" (Full Depth Type I or Type II)



SEC. THRU PARAPET AT EXISTING DRAINS



VIEW C-C



BAR DATE

BAR d(E)



BAR x(E)

BILL OF MATERIAL FOR TWO STRUCTURES

Bar	No.	Size	Length	Shape	
d(E)	80	#5	26'-4"		
d(E)	80	#5	23'-5"		
d(E)	32	#5	2'-0"		
d(E)	8	#5	26'-9"		
d(E)	4	#5	28'-7"		
d(E)	4	#5	28'-0"		
d(E)	8	#8	26'-3"		
d(E)	8	#8	29'-9"		
d(E)	8	#8	27'-5"		
d(E)	32	#5	9'-9"		
d(E)	4	#5	3'-1"		
d(E)	758	#4	2'-5"		
d(E)	820	#5	3'-6"		
d(E)	40	#5	4'-4"		
d(E)	32	#4	4'-4"		
d(E)	72	#4	6'-4"		
d(E)	96	#4	9'-9"		
d(E)	36	#4	8'-2"		
d(E)	72	#4	6'-7"		
d(E)	36	#4	17'-9"		
x(E)	180	#5	4'-9"		
Concrete Removal				Cu Yds.	25
Concrete Removal/Spall				Cu Yds.	62
Class I Concrete				Cu Yds.	107
Reinforcement Bars				Pound	12930
Epoxy-Coated					

PROJECT NO.	388	SHEET NO.	9
DATE	3/1	SCALE	3/4" = 1'-0"
DRAWN BY	R. ISLAND	CHECKED BY	J. I.
DESIGNED BY		APPROVED BY	
NO. OF SHEETS		9 SHEETS	

DESIGNED: Shaker & Biskamp  
CHECKED: Steven J. Esai  
DRAWN: Marcardo  
CHECKED: SA

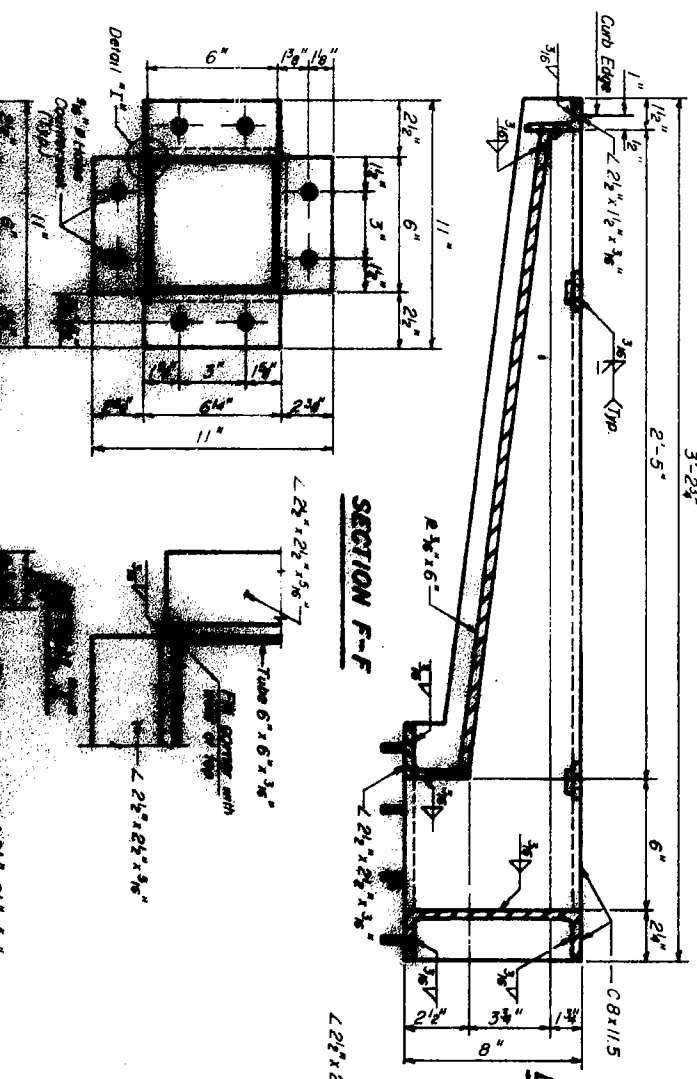
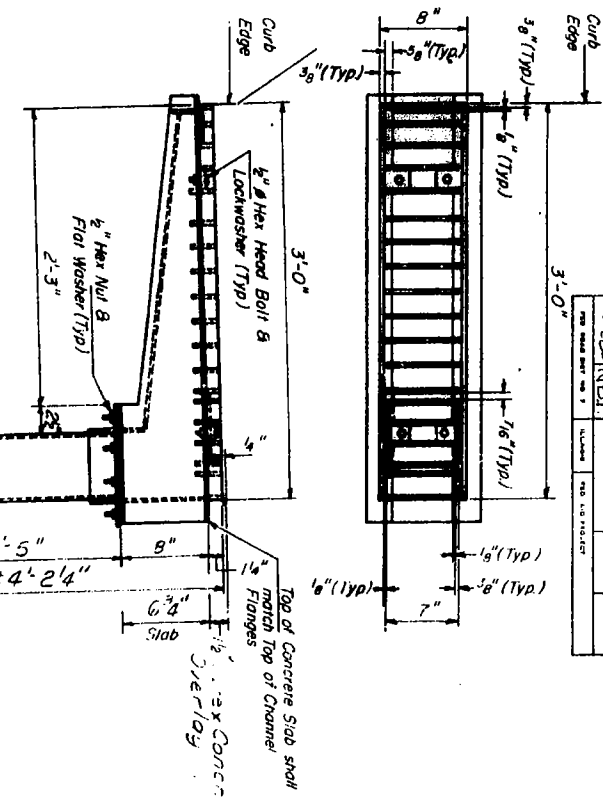
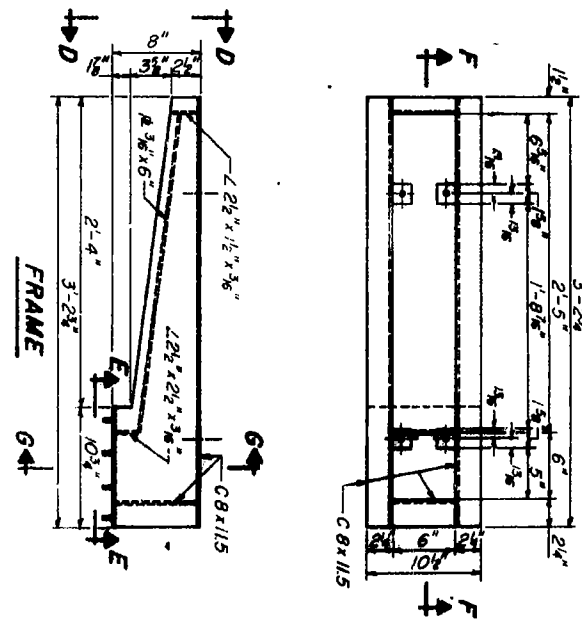
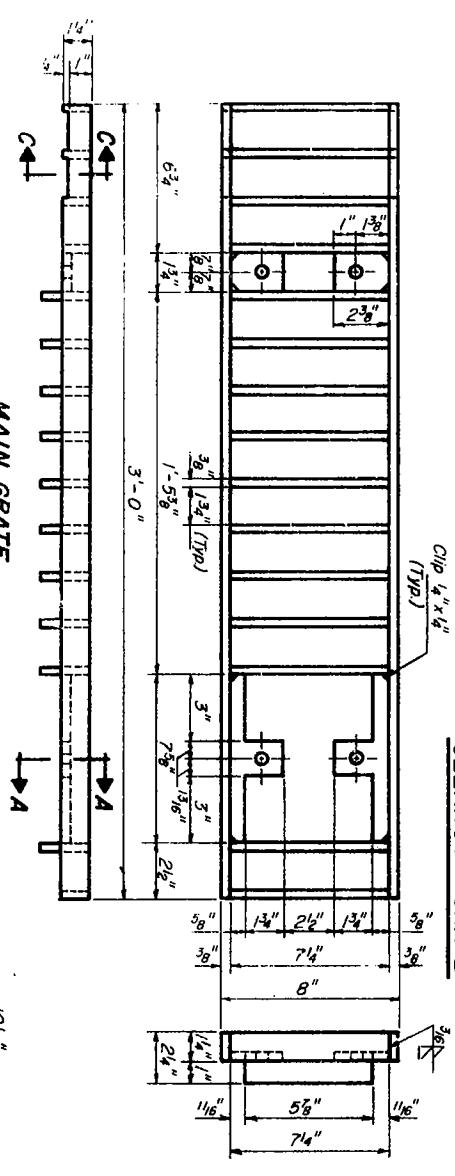
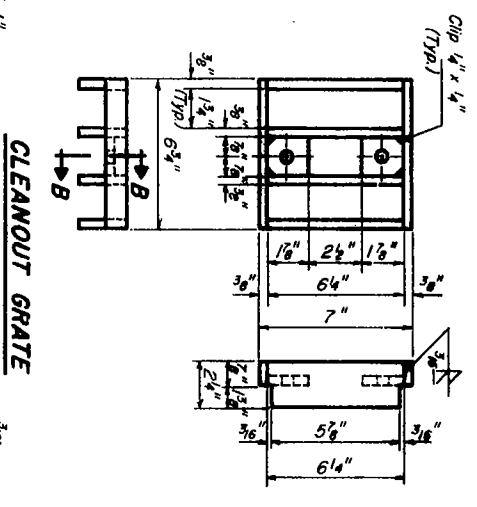
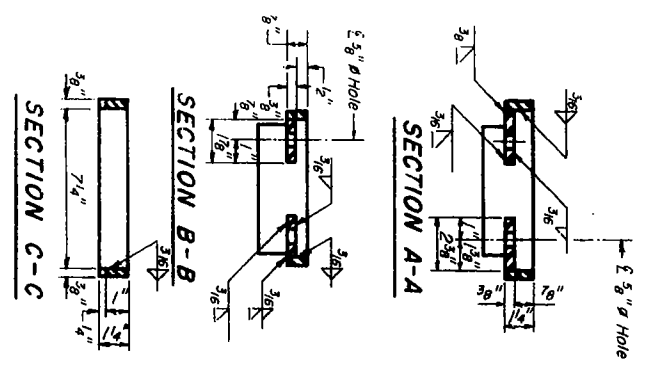
Notes: Hatched areas indicate concrete removal. Spalls, Cross-hatched areas indicate Deck Slab Repair (Full Depth Type I or Type II). Existing longitudinal and transverse reinforcement shall be cleaned and incorporated into new construction. Cost incidental to Deck Slab Repair (Full Depth Type I or Type II). Bonded Construction Joints shall be in accordance with ART. 504.1(b)(2) of the Standard Specifications.

SUPERSTRUCTURE DETAILS  
F.A.I. RTE. 280 SEC. 8-NBY  
NOOK ISLAND COUNTY  
STA. 232+06.50



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	00000000	SHEET NO.	2
CONTRACT NO.	15-1-1-1	TOTAL SHEETS	2
DATE	12-1-83	DESIGNED BY	SA
		CHECKED BY	SA
		DRAWN BY	SA
		APPROVED BY	SA



Notes  
 Follow structural steel tubing shall conform to the requirements of A.S.T.M. Designation A-500 Grade B, or A-501 Structural Steel Tubing.  
 All other shapes, plates and bars shall conform to the requirements of A.S.T.M. M 193  
 Bolts, studs, washers and nuts shall conform to the requirements of ASTM: A-307.  
 The Main Grate, Cleanout Grate, Frame and Downspout shall be galvanized after fabrication in accordance with AASHTO Mill B ASTM A-385.  
 All bolts, washers and nuts shall be galvanized in accordance with AASHTO: M 232.  
 The Waterproofing Membrane System shall be installed such that the membrane covers the entire tongue and extends down into the frame with the grates placed on top of the membrane.  
 Cost of the Main Grate, Cleanout Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper shall be paid for of the unit bid price for "DRAINAGE SCUPPERS".

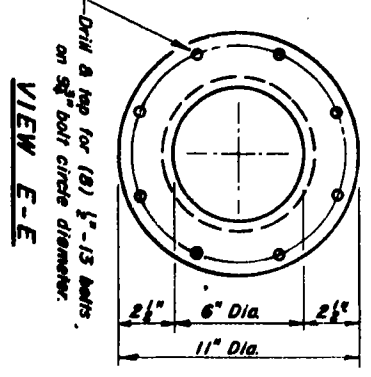
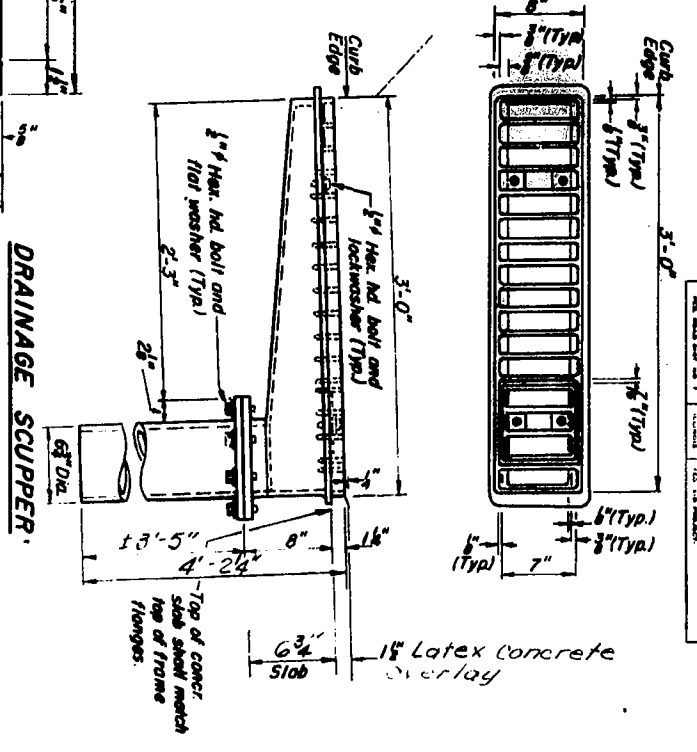
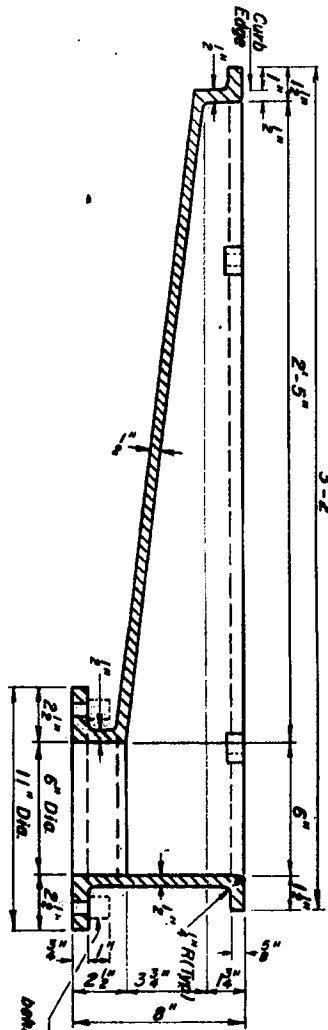
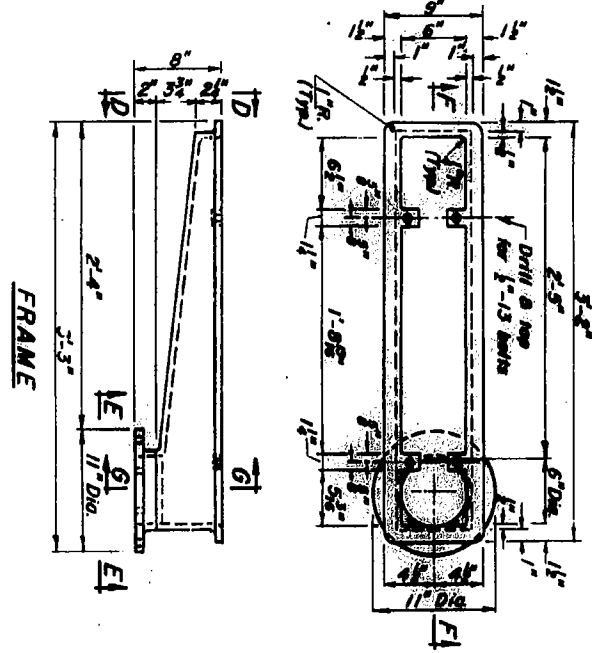
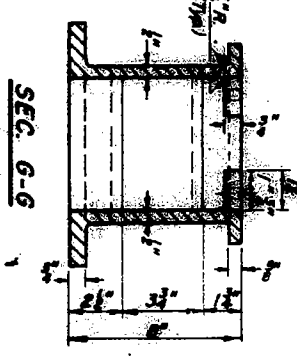
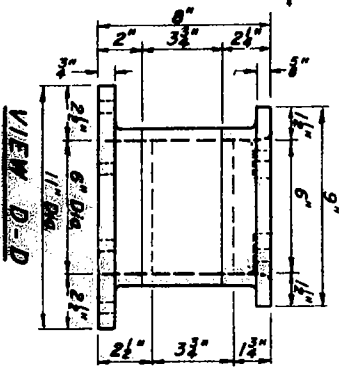
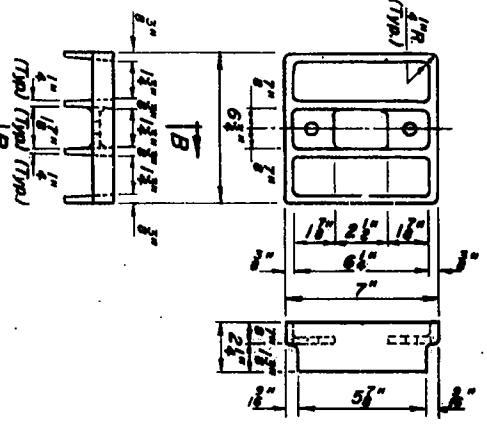
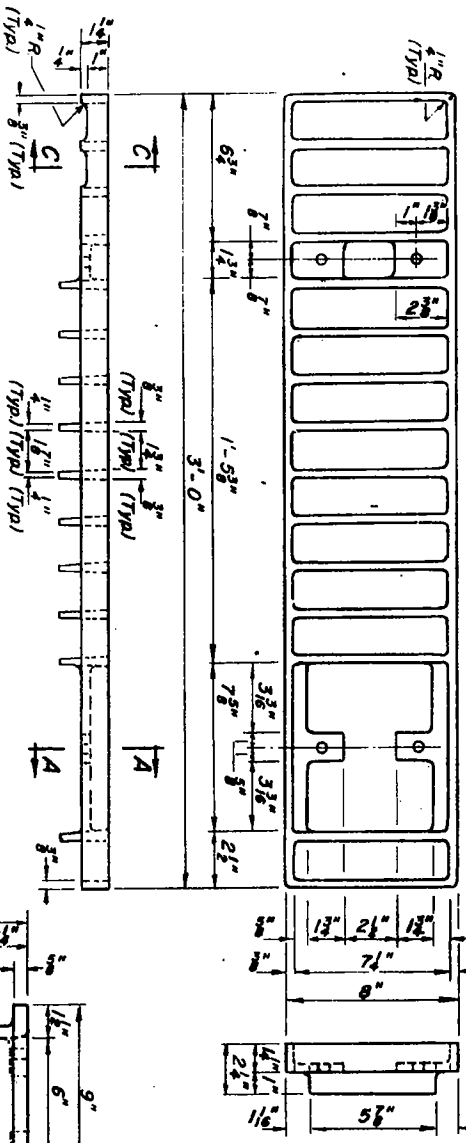
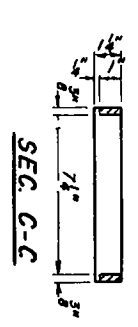
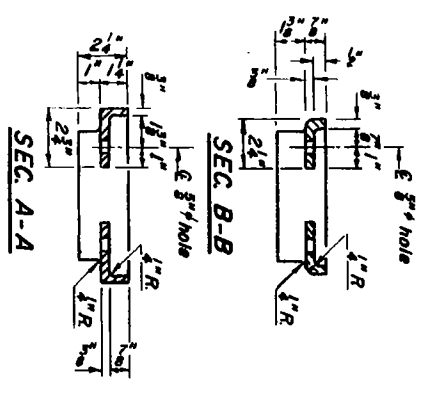
**LIST OF MATERIAL**

ITEM	QTY	UNIT	QUANTITY
Drainage Scupper	1	Each	1

(See sheet 1 of 2)  
**DRAINAGE SCUPPER**

DESIGNED: S. HAKKA, ASST. CIVIL ENGR.  
 CHECKED: J. J. JENSEN, CIVIL ENGR.  
 DRAWN: J. J. JENSEN  
 CHECKED: SA, J. J. JENSEN  
 APPROVED: J. J. JENSEN, CIVIL ENGR.  
 DATE: May 23, 1988  
 PROJECT: FAALRITE 280 SEC. 8 HWY  
 ROCK ISLAND COUNTY  
 STA. 232+86.50  
 DS-1 12-1-83 (W.T. to inside of exterior stringer flange shall not be > 3'-11")

PROJECT NO.	280	SHEET NO.	11
CONTRACT NO.	R. ISLAND	TOTAL SHEETS	19
DISTRICT	45	DATE	3-11
CITY	ROCK ISLAND COUNTY	DESIGNED BY	W. J. ...
ENGINEER	...	CHECKED BY	...



NOTES:  
All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 30.  
Bolts, washers and nuts shall conform to the requirements of ASTM A-307.  
All bolts, washers and nuts shall be galvanized in accordance with AASHTO M 232.  
The waterproofing membrane system shall be installed such that the membrane covers the frame flanges and extends down into the frame with the grates placed on top of the membrane.  
Cast of the Main Grate, Cleanout Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper shall be paid for at the unit bid price for "DRAINAGE SCUPPERS".  
The Contractor may use at his option steel frames and steel grates or cast frames and cast grates, but will not be allowed to use steel grates with cast frames nor cast grates with steel frames.

DESIGNED: Shaker Astrom  
CHECKED: Suresh Desai  
DRAWN: F.M.  
CHECKED SA

EXAMINED: Roy S. ...  
PREPARED: James J. ...  
APPROVED: ...

May 23 1988

DS-2 12-1-83 (W.T. to inside of exterior stringer flange shall not be > 3'-11")

ALTERNATE - CAST IRON  
DRAINAGE SCUPPER

FAALRTE.280 SEC.81-LVBY  
ROCK ISLAND COUNTY  
STA. 232+86.50

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

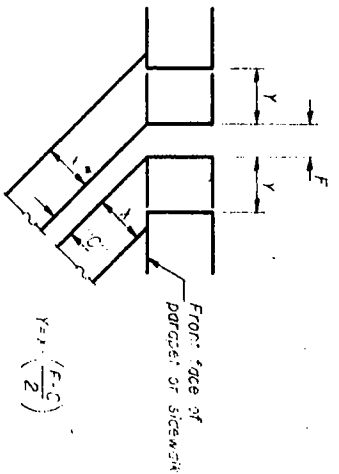
Joint Size	"C" at 50° F. "D" at 50° F.	1/2" Min.	1 3/4" Min.
2"	2"	1/2" Min.	1 3/4" Min.
2 1/2"	2 1/2"	3"	2 1/2" Min.
4"	3"	2 1/2" Min.	

INSTALLATION NOTES

1. Install expansion membrane into positions shown in Forming Blockout Sketch.
  2. Install 1/2" diameter or sidewalk piece trim roadway form to fit before applying epoxy.
  3. Install reinforcement steel in roadway.
  4. Install concrete blocks as indicated.
- NOTE: A. Maximum spacing of anchor bolts shall be 12" centers.

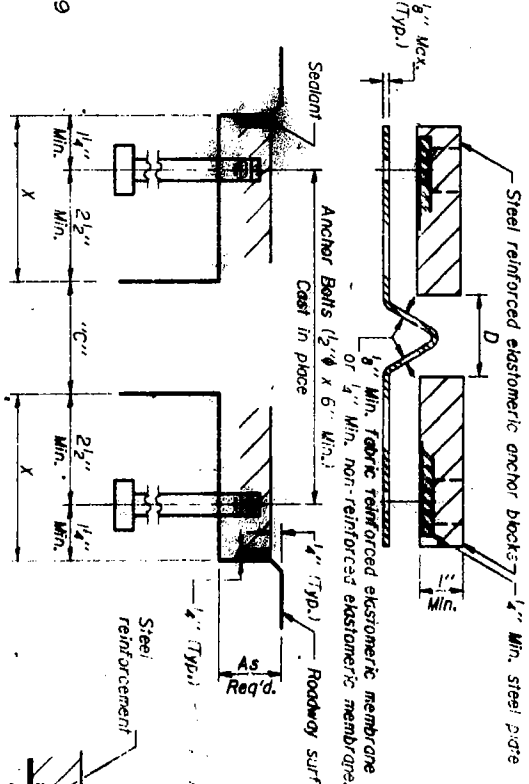
SKIEW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skew. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimensions of 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at 12" c/s.

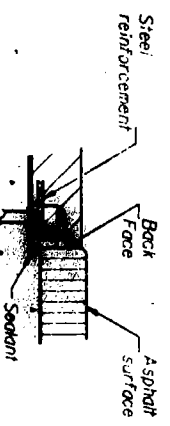


FORMING BLOCKOUT SKETCH

CROSS SECTION



ANCHOR BLOCK INSTALLMENT WITH ASPHALT



**GENERAL NOTES**

Continuous Seal Expansion Joint shall consist of milled anchor blocks of elastomeric and steel, field assembled over continuous lengths of elastomeric membrane. See Special Provisions.

The elastomeric membrane shall be provided with a slope or a double upward convolution that will have a "runway" to return to its milled position upon joint closure.

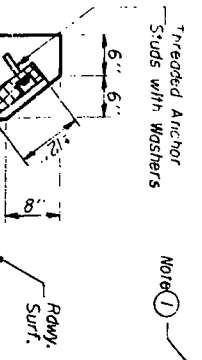
The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is omitted in concrete backout.

The convolution length shall be such that the expanded length will not be greater than the developed length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.

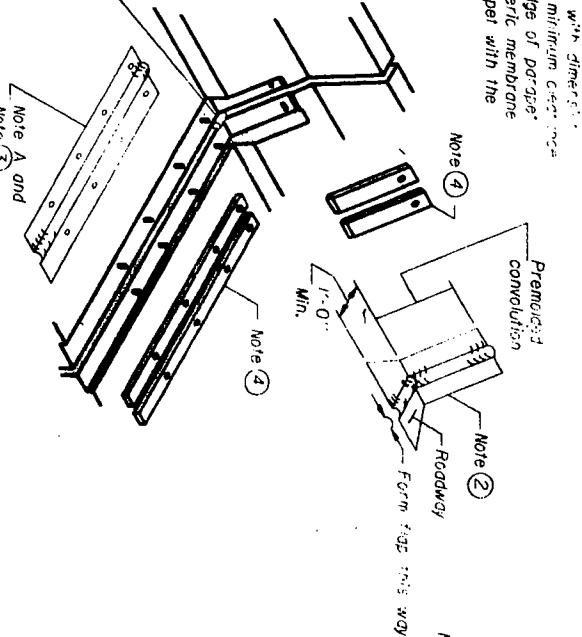
Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications when the steel is placed at an ambient temperature other than 50° F.

The contractor shall provide the membrane of the expansion joint to the roadway maintenance provided the membrane is maintained and the process and method meet the approval of the Engineer.

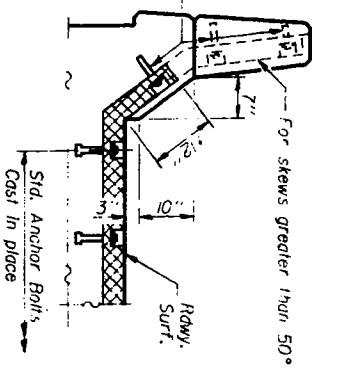
Sheet No. 1/3	1/3
28D IN 1	45
28D IN 1	23A



AT CURB

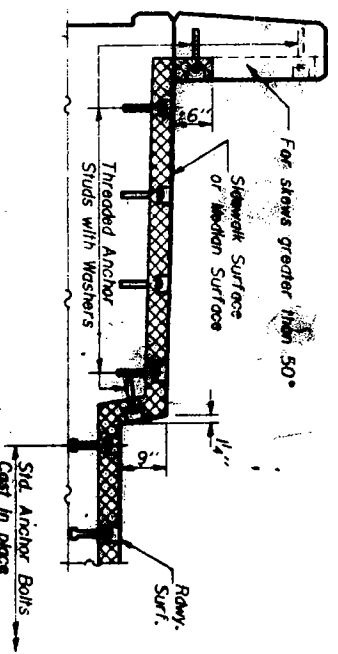


AT PARAPET



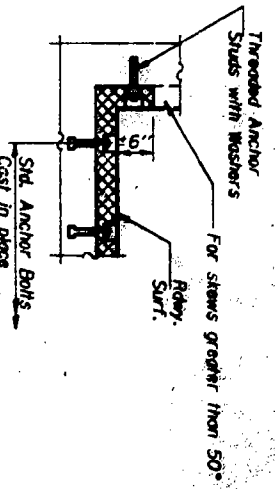
AT PARAPET

AT SIDEWALK OR MEDIAN

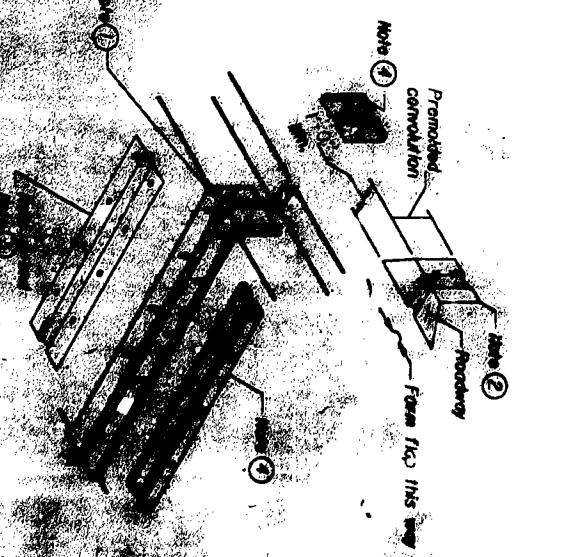


AT SIDEWALK OR MEDIAN TYPICAL END TREATMENTS

AT WALL



AT WALL



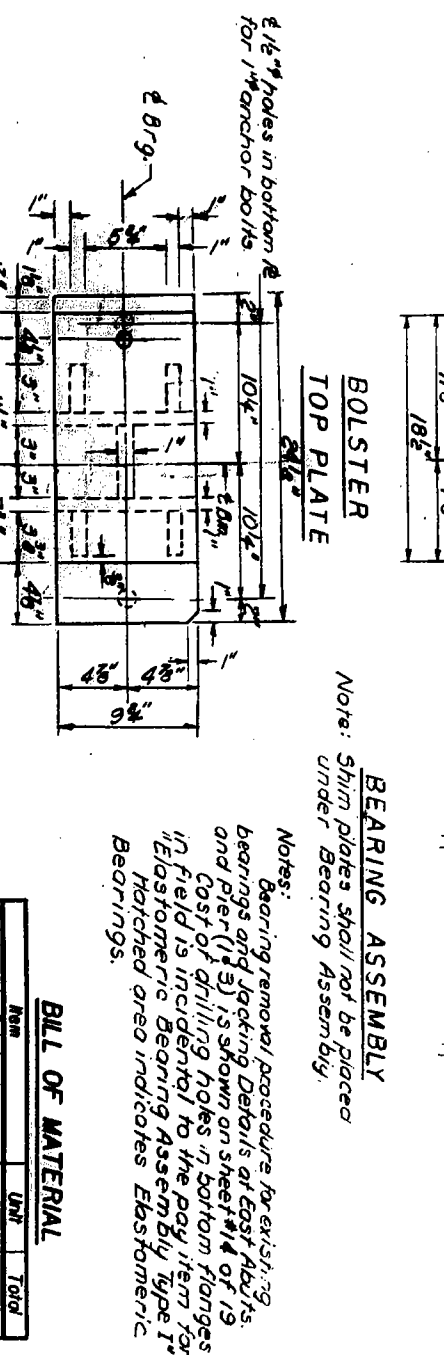
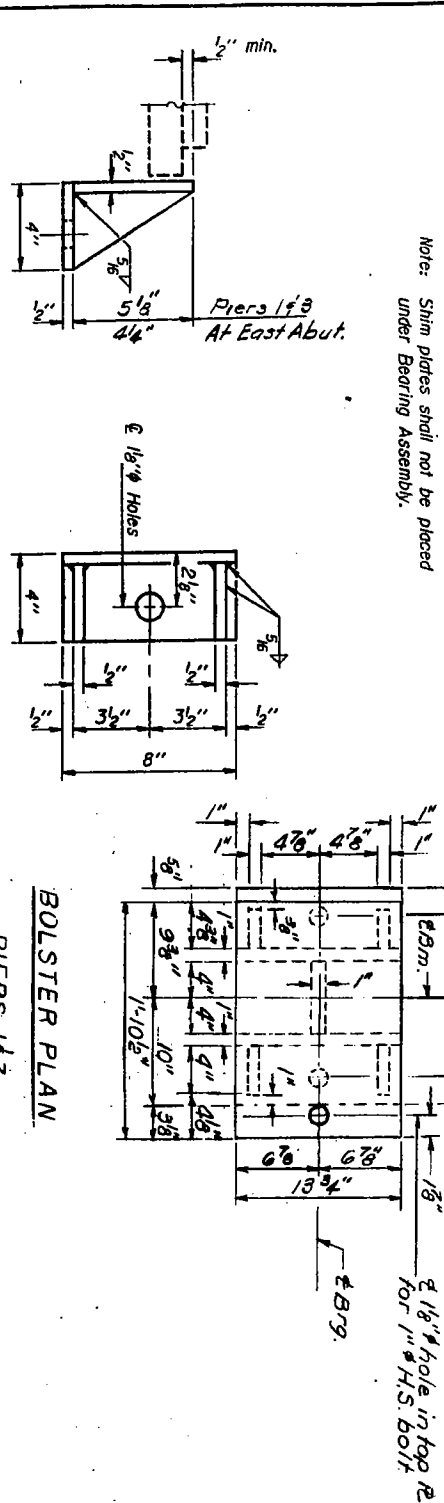
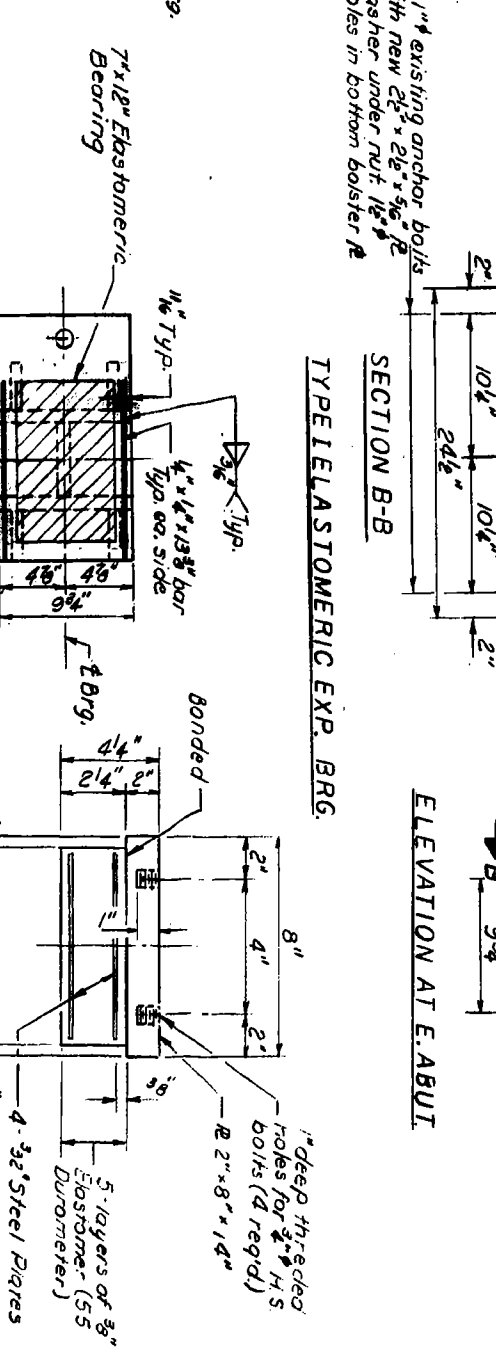
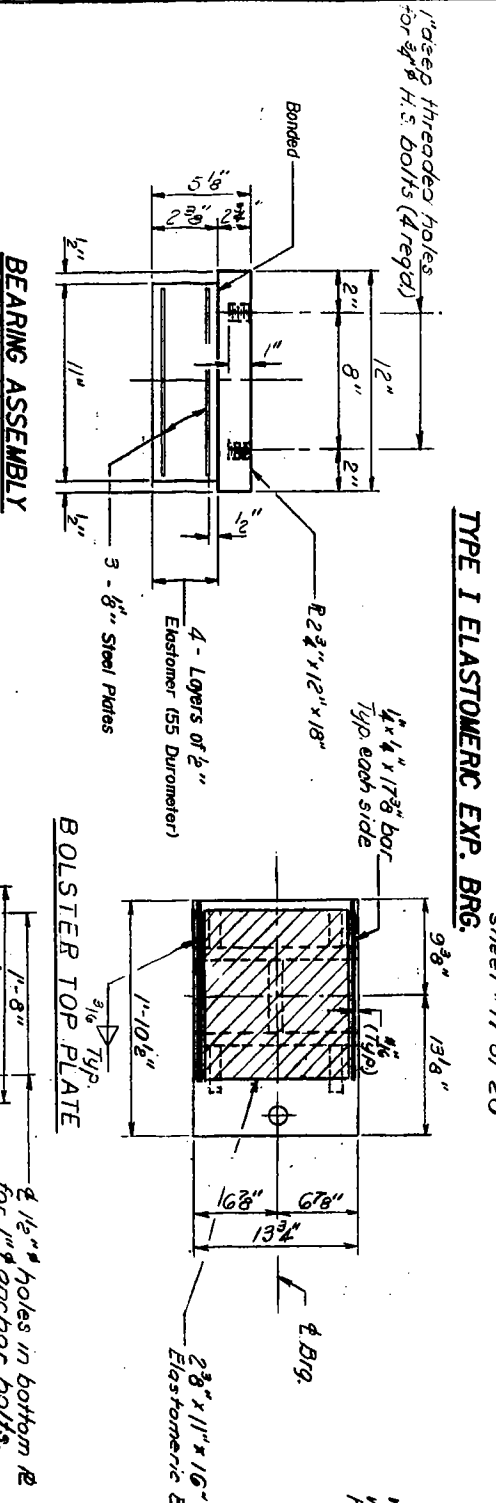
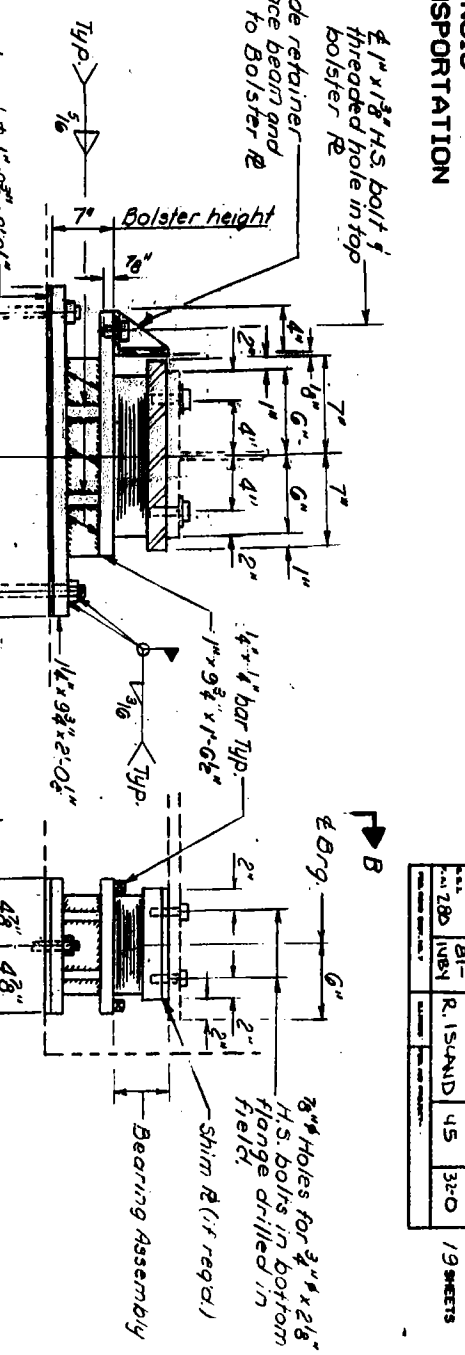
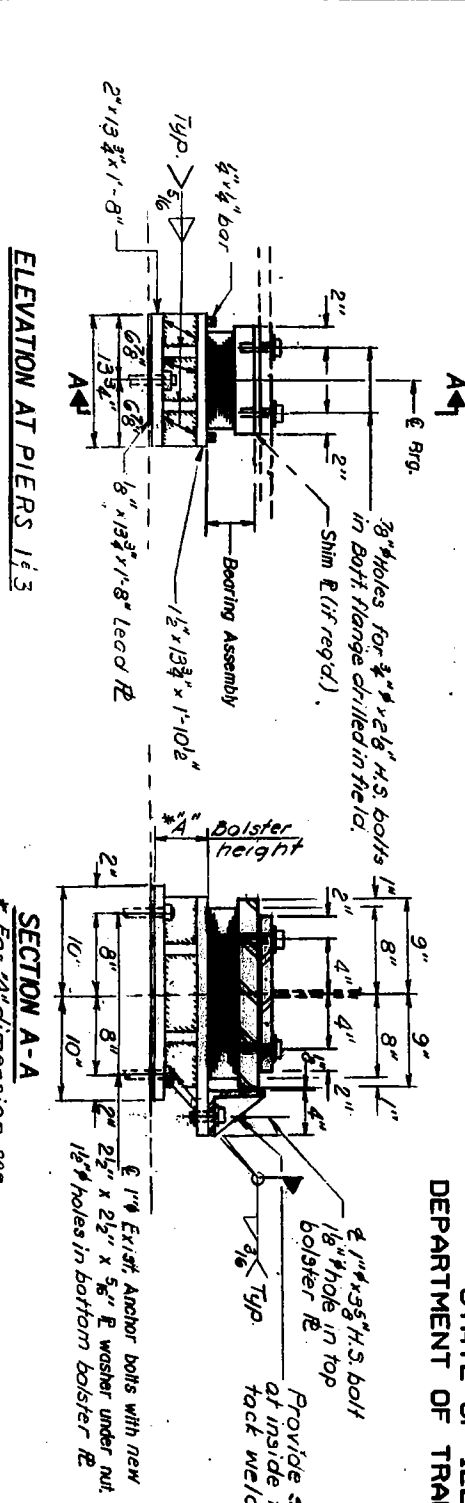
CONTINUOUS SEAL TYPE  
MEMBRANE EXPANSION JOINTS  
For 2", 2 1/2" and 4" Movement

EALRIE 280 SEC. B1-VBY  
ROCK ISLAND COUNTY  
STA. 232+86.50

DESIGNED Shaker Asfour  
CHECKED Suresh Desai  
DRAWN F.M.  
CHECKED S.A.  
EJ-CS 12-1-83

EXAMINED May 23 1988  
PASSED  
APPROVED  
DIRECTOR OF HIGHWAYS





SIDE RETAINER  
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BOLSTER PLAN  
PIERS 1 & 3

BOLSTER PLAN  
EAST ABUT.

**BILL OF MATERIAL**

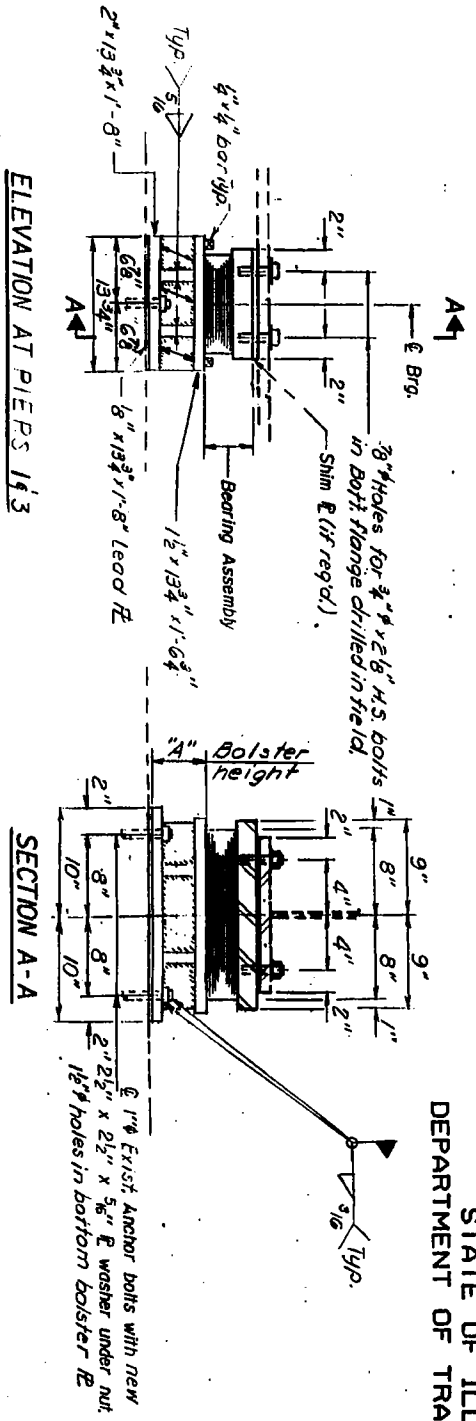
Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	8
1/2" x 1 3/4" x 1-10 1/2" Lead R	Each	8
1 1/4" x 9 3/4" x 1-9 1/2" Bar	Each	8

DESIGNED Shaker Astour  
CHECKED Suresh Desai  
DRAWN MERCADO

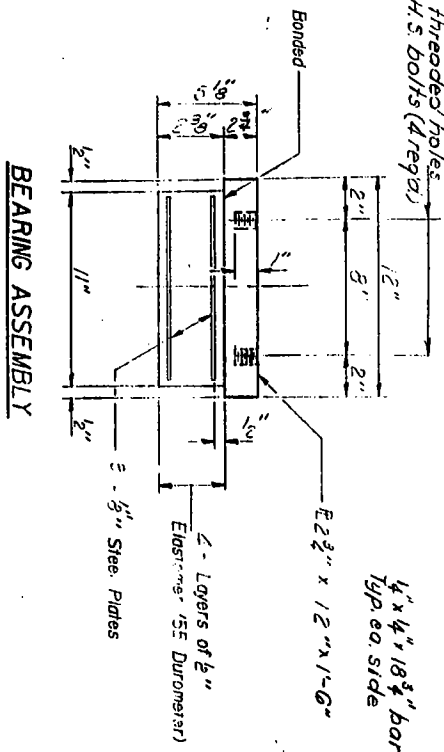
APPROVED  
MAY 23 1983  
SA

EXTERIOR BEAMS  
EAST ABUT AND PIER (1 & 3)  
F.A. RTE. 280 SEC. 8-IV B  
ROCK ISLAND COUNTY  
STA. 23+86.50

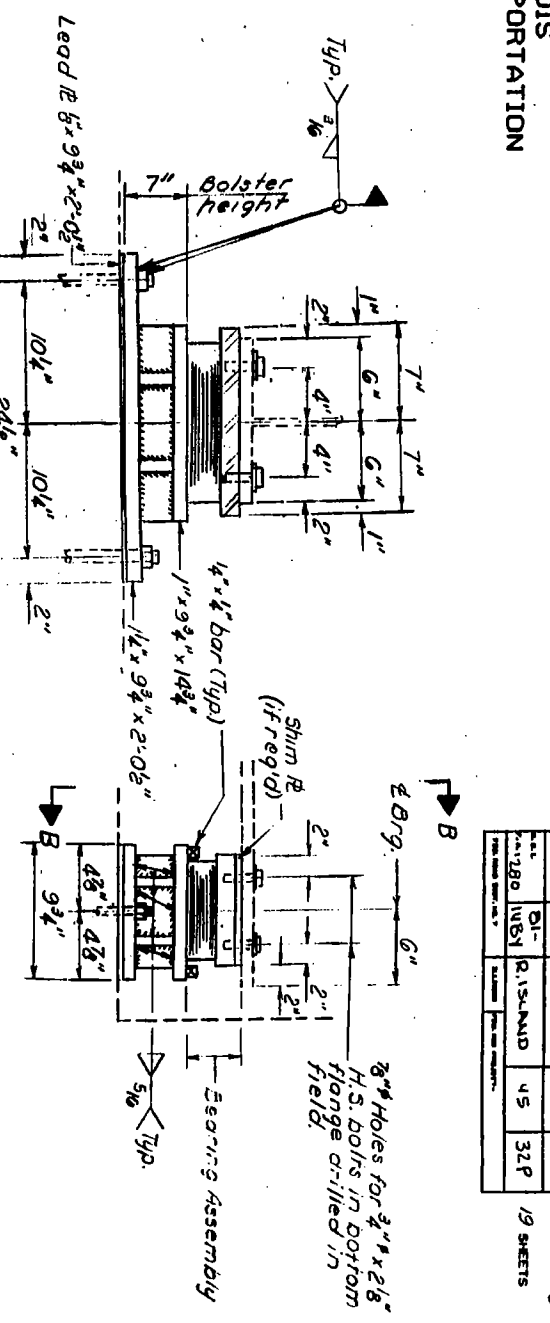




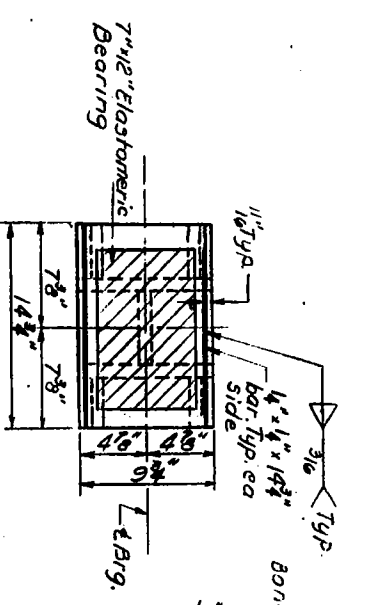
TYPE I ELASTOMERIC EXP. BRG.



Note: Shim plates shall not be placed under Bearing Assembly.

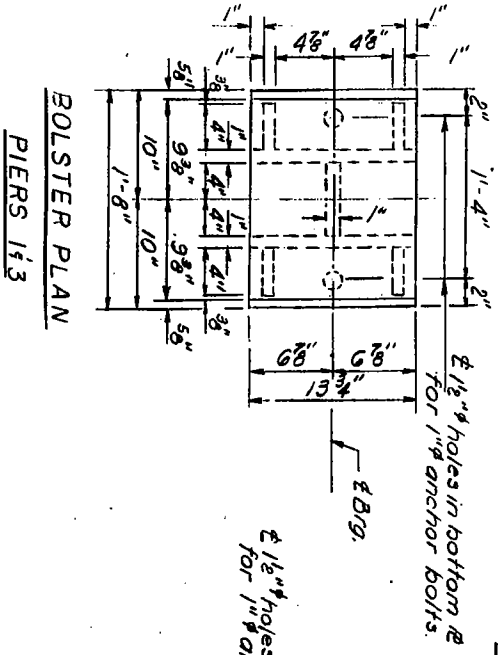


TYPE II ELASTOMERIC EXP. BRG.

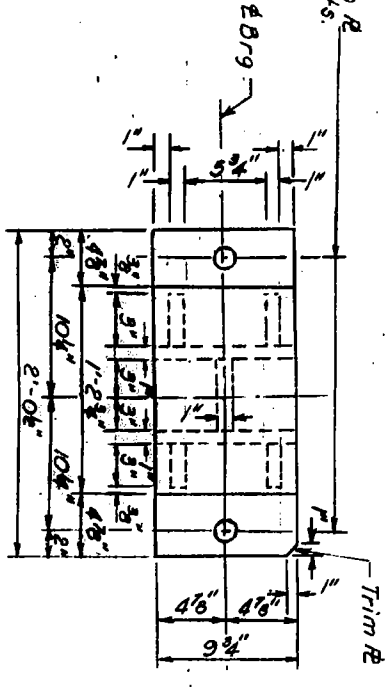


"A" DIMENSION

Dim. No.	7 1/4"	9 1/4"	9 3/8"	9 3/4"
THRU 6				
THRU 11				
THRU 12				



BOLSTER PLAN PIER 1&3



BOLSTER PLAN EAST ABUT

Note: Shim plates shall not be placed under Bearing Assembly.

Notes:  
Bearing removal procedure for existing bearings and jacking details at East Abut. and Pier (1&3) is shown on sheet #14 of 19.  
Cost of drilling holes in bottom flanges in field is included in the quantity item for "Elastomeric Bearing Assembly Type I".  
Hatched area indicates Elastomeric Bearings.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	16
Lock & Remove Existing Brgs	Each	16

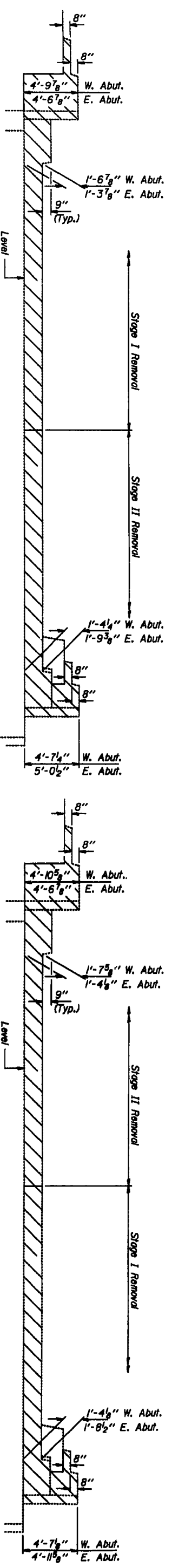
INTERIOR BEAMS  
EAST ABUT AND PIER (1&3)

F.A.I.R.I.E. 280 SEC 81-IV 6Y  
ROCK ISLAND COUNTY  
STA. 232+86.50

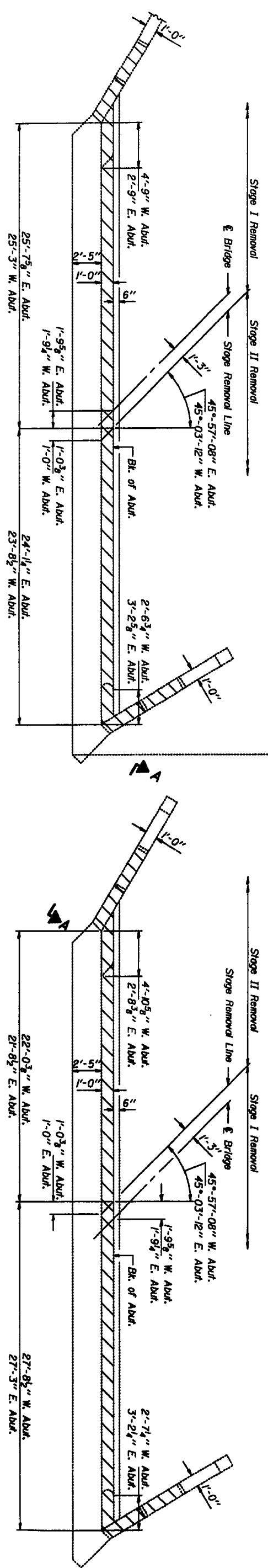
DESIGNED: Shaker Asfour  
CHECKED: Suresh Desai  
DRAWN: MARCH 2000  
CHECKED: SA  
APPROVED: [Signature]  
DIRECTOR OF DISTRICT

DESIGNED: [Signature] 12-23-88  
CHECKED: [Signature]  
DRAWN: [Signature]  
CHECKED: SA  
DIRECTOR OF DISTRICT

PROJECT NO.	232-06-50	SHEET NO.	17
CONTRACT NO.	232-06-50	TOTAL SHEETS	19
DATE	MAY 23 1988	SCALE	AS SHOWN
DESIGNED BY	SHAKER ASFAUR	APPROVED BY	PAUL SUMNER
CHECKED BY	SIVESH DESAI	DATE	MAY 23 1988



ELEVATION

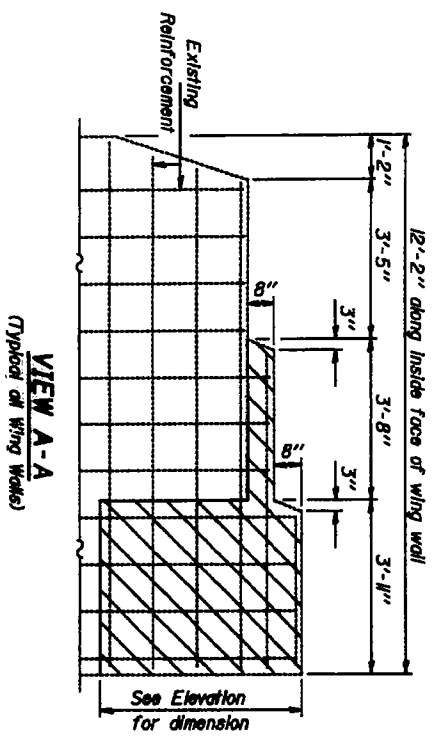


PLAN

**EAST ABUTMENT - W. BD. BRIDGE  
AND WEST ABUTMENT - E. BD. BRIDGE**  
East Abutment Looking East  
West Abutment Looking West

**WEST ABUTMENT - W. BD. BRIDGE  
AND EAST ABUTMENT - E. BD. BRIDGE**  
West Abutment Looking West  
East Abutment Looking East

DESIGNED Shaker Asfaur  
CHECKED Sivesh Desai  
DRAWN Paul Sumner  
CHECKED S.A.  
MAY 23 1988  
PAUL SUMNER  
SIVESH DESAI  
SHAKER ASFAUR

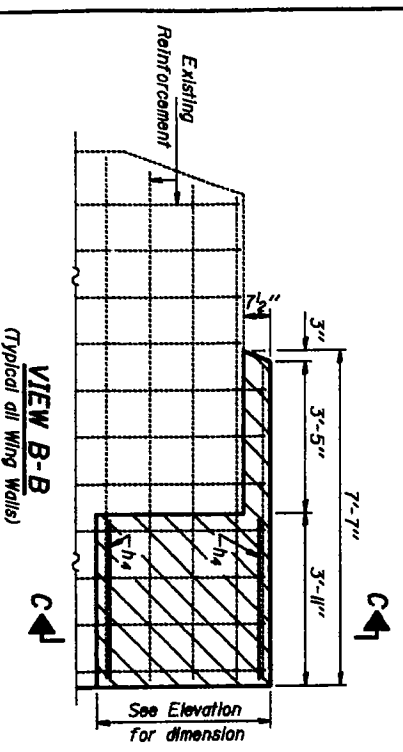
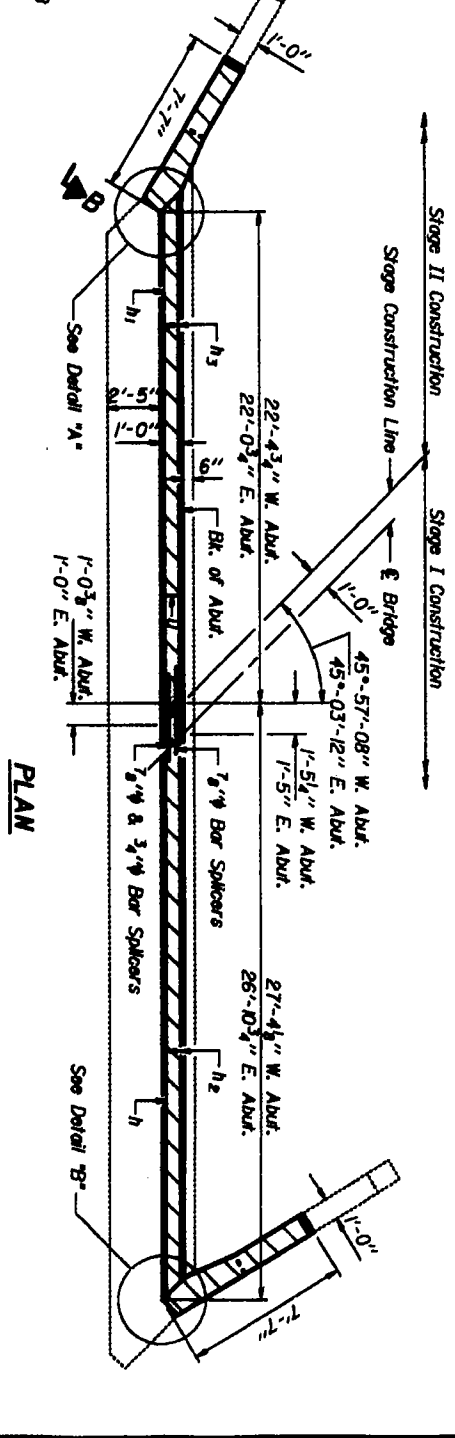
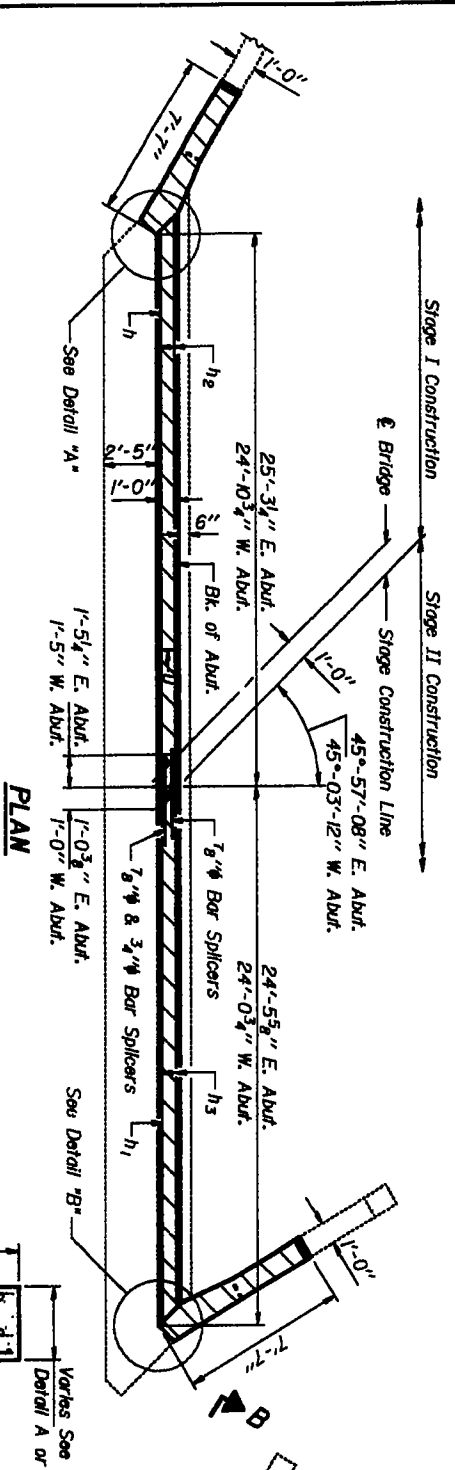
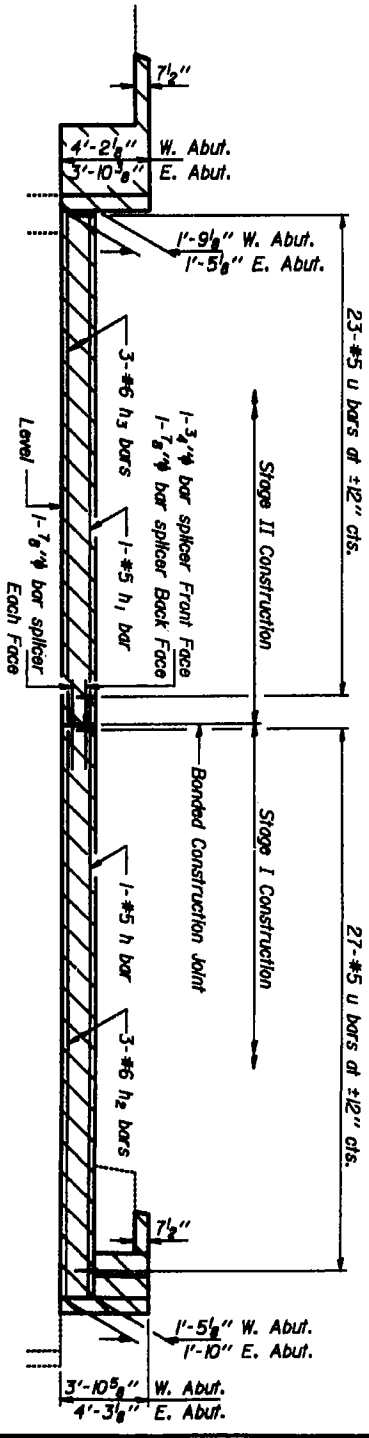
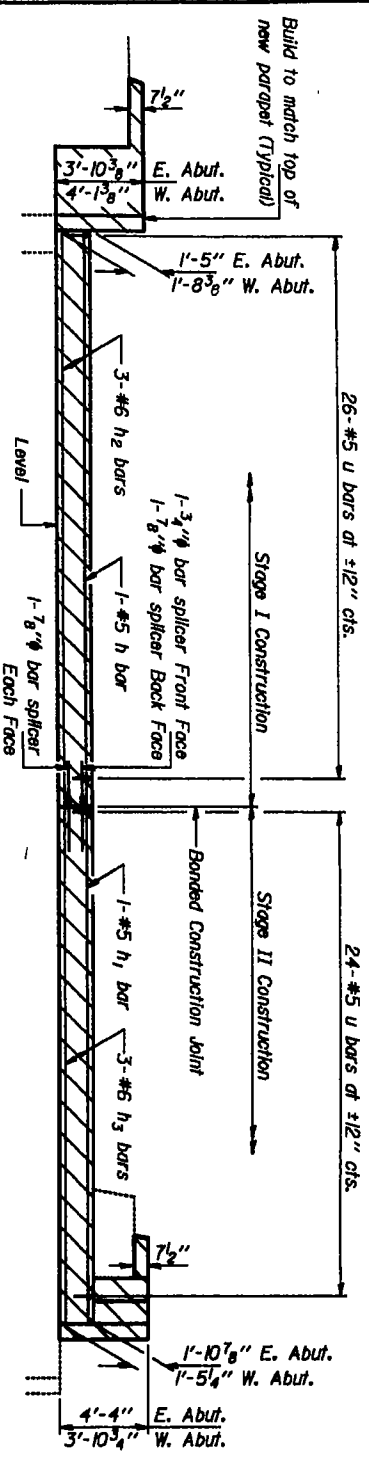


VIEW A-A  
(Typical at Wing Walls)

**Notes:**  
Hatched areas indicate concrete removal.  
Existing reinforcement extending into new construction shall be cleaned, straightened and incorporated into the new construction. †  
Existing reinforcement not extending into new construction shall be cut off and covered with a 2" layer of cement grout incidental.  
† Cast incidental to "Concrete Removal."

**BILL OF MATERIAL  
FOR FOUR ABUTMENTS**  
Concrete Removal 101.741 B

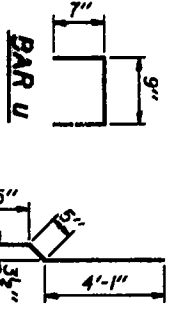
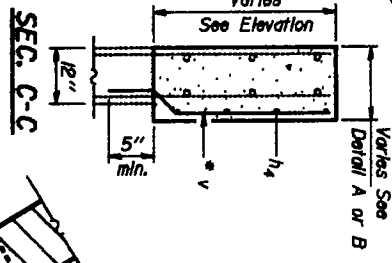
**ABUTMENTS  
CONCRETE REMOVAL DETAILS**  
F.A.I. RT. 200 SEC. 81-NBY  
ROCK ISLAND COUNTY  
STA. 232+06.50



DESIGNED Shaker & Blount  
CHECKED Survesh Desai  
DRAWN Paul Sumner  
CHECKED S.A.  
APPROVED  
DATE: May 23 1952

**EAST ABUTMENT - W. BD. BRIDGE  
AND WEST ABUTMENT - E. BD. BRIDGE**  
East Abutment Looking East  
West Abutment Looking West

**WEST ABUTMENT - W. BD. BRIDGE  
AND EAST ABUTMENT - E. BD. BRIDGE**  
West Abutment Looking West  
East Abutment Looking East



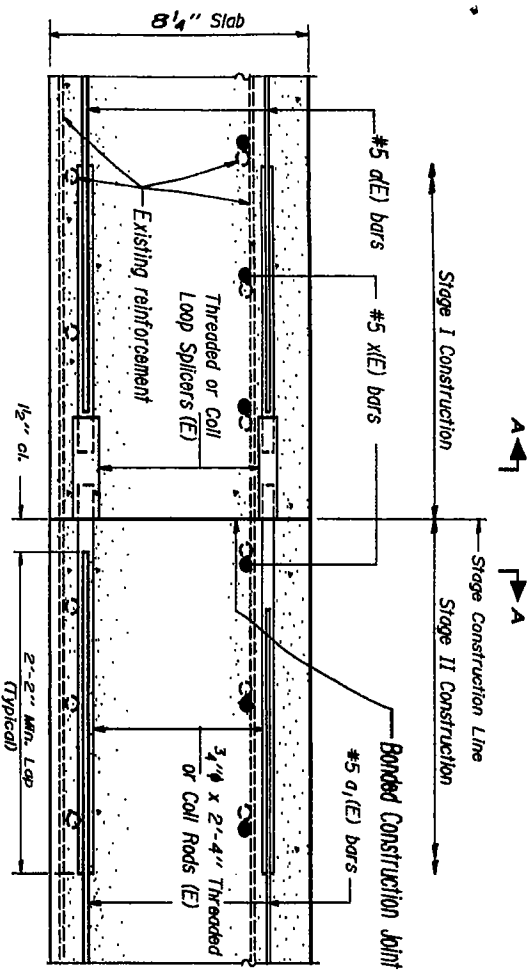
**BILL OF MATERIAL FOR FOUR ABUTMENTS**

Bar	No.	Size	Length	Shape
h	4	#5	26'-0"	
h1	4	#5	23'-3"	
h2	4	#5	26'-0"	
h3	2	#5	23'-3"	
h4	2	#4	3'-9"	
U	200	#5	1'-0"	
V	32	#4	4'-0"	
W				
Reinforcement Bars				LBS.
				6800

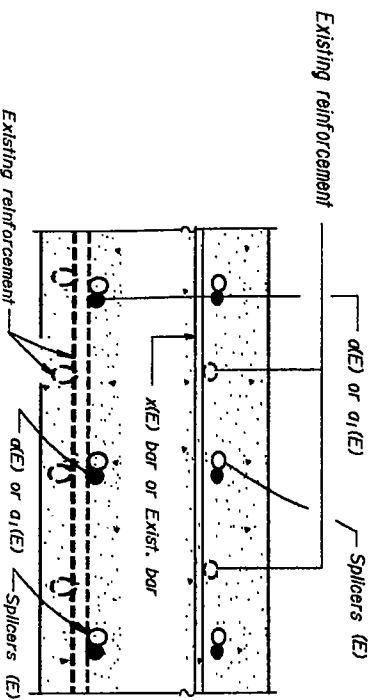
Notes: The hatched area shall be poured after the new parapets are in place. Concrete quantity is bid with Class X Concrete Superstructure see Sheet 9 of B.

Existing reinforcement extending into new construction shall be checked, straightened and incorporated into the new construction. Existing reinforcement not extending into new construction shall be cut off and covered with a 2" layer of coarsest grout coat incidental. For bar splicer details see Sheet 19 of B. For locations of h thru h5 see Sec. A-A on Sheet 8 of B. Epoxy grout v bars in 3/4" x 5" min. drilled holes. See Special Provisions. \* \* \* Cost incidental to Concrete Removal.

**ABUTMENTS  
CONCRETE REPLACEMENT DETAILS**  
F.A.I. RT. 280 SEC. B1-NBY  
ROCK ISLAND COUNTY  
STA. 232+66.50



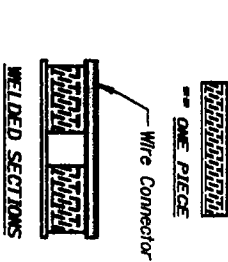
SECTION THRU SLAB



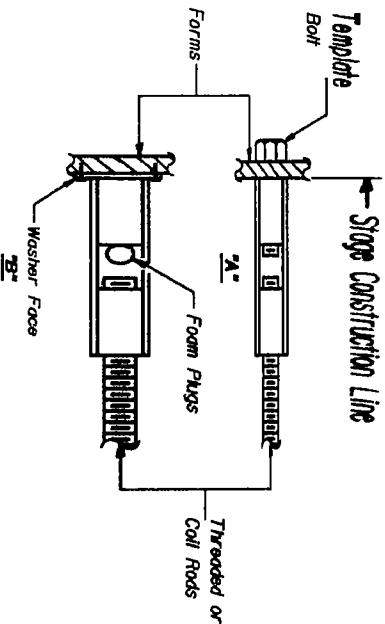
SPLICER DETAILS  
(No. Required = 80)

Notes:  
Cost of Epoxy coated bar splicers is incidental to Reinforcement Bars (Epoxy Coated)

The diameter of this part of the Splicer is the same diameter of the bar spliced.



SPLICER ALTERNATIVES  
\*\* Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.

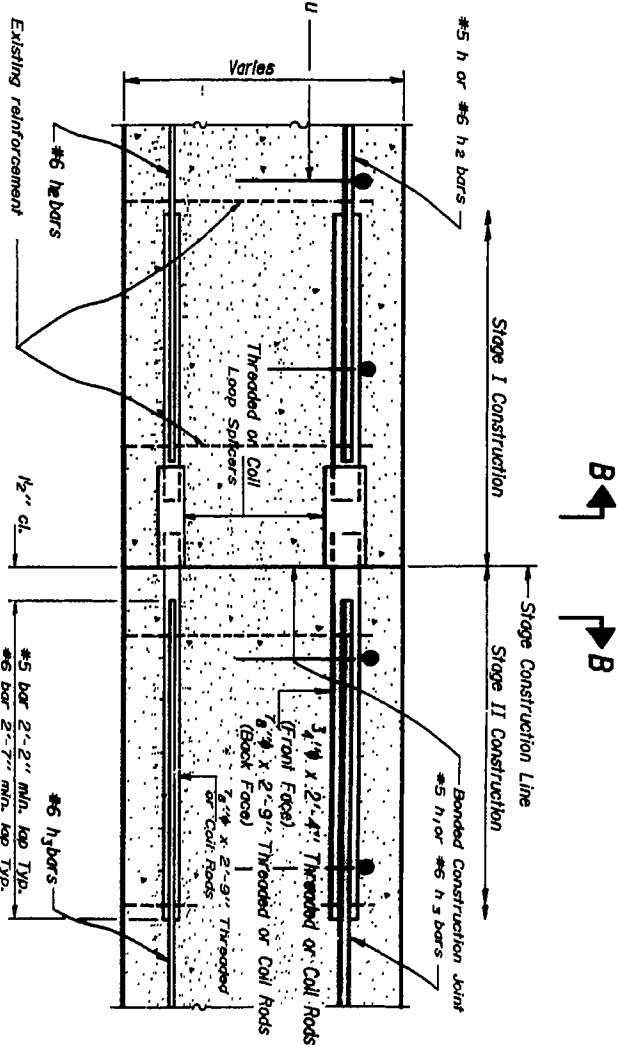


INSTALLATION AND SETTING METHODS  
"A": Set splicer by means of a Template Bolt.  
"B": Set splicer by nailing to wood forms or cementing to steel forms.

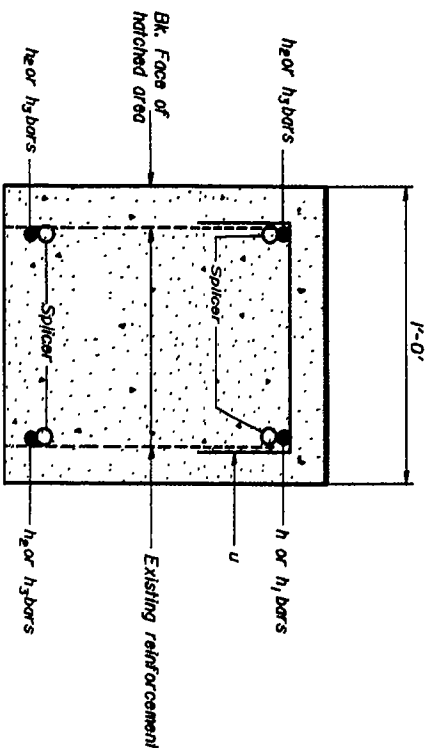
NOTES  
Steel Splicer (Coupler) assembly shall be of an approved type and shall develop in tension of least 125 percent of the yield strength of the lapped reinforcement bars.  
Steel Splicer rods shall be of minimum 60 ksi yield strength, threaded or cold full length and have effective tensile stress area equal or greater than that of the lapped reinforcement bars.  
All reinforcement bars shall be lapped and tied to the splicer rods.  
Splicer (coupler) assembly in the slab shall be epoxy coated in accordance with the requirements for reinforcement bars.  
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed splicer (coupler) assembly satisfies the following requirements:  
① Minimum Capacity =  $1.25 \times T_y \times A_t$   
② Minimum "Pull-out" Strength =  $1.25 \times f_{saw} \times A_t$   
Where  $T_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $f_{saw}$  = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)  
 $A_t$  = Tensile stress area of lapped reinforcement bars.  
 $f_{saw}$  = 28 day concrete

Typical Splicer (Coupler) Assembly Sizes

In Slabs	In Hatched Block	Minimum Capacity = 23.0 kips-tension	Minimum "Pull-out" Strength = 9.2 kips-tension
#5 bar lap with 3/4" Splicer (Coupler) x 2'-4" Splicer Rods	#5 bar lap with 3/4" Splicer (Coupler) x 2'-9" Splicer Rods	Minimum Capacity = 33.1 kips-tension	Minimum "Pull-out" Strength = 13.3 kips-tension



SECTION THRU ABUTMENT HATCHED BLOCK



SPLICER DETAILS  
(No. Required = 15)

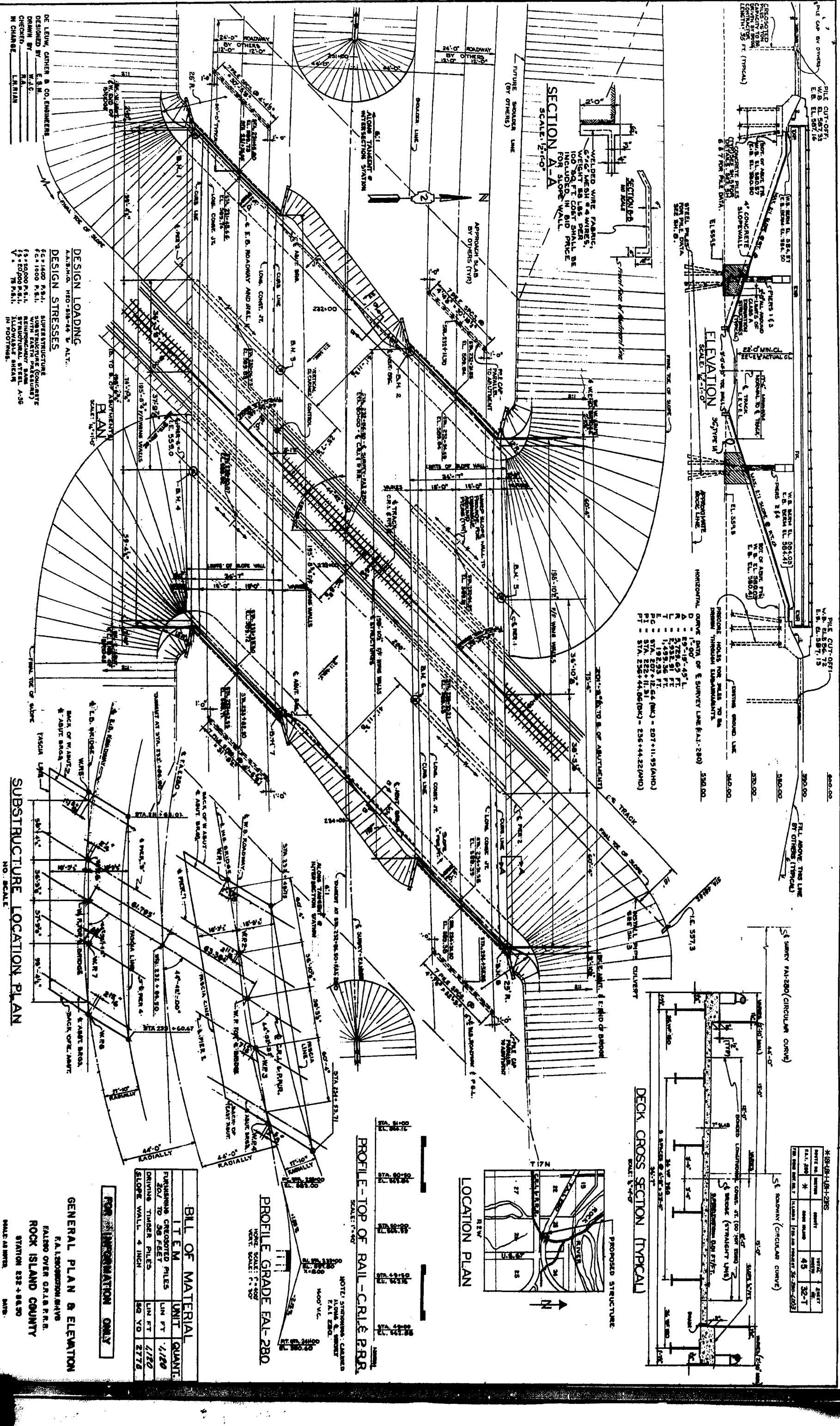
Notes:  
Cost of bar splicers is incidental to Reinforcement Bars.

BAR SPICER (COUPLER) DETAILS  
AT STAGE CONSTRUCTION  
F.A. RTE.280 SEC.81-WB1  
ADDER 151 AND ADJUTRY  
STA.232+06.50

DESIGNED: Shaker Defour  
CHECKED: Suresh Dasari  
DRAIN: Marcelo

DATE: May 23 1988  
DRAWN: [Signature]  
CHECKED: [Signature]  
APPROVED: [Signature]

BSD-1



PILE CUT-OFF:  
W.B. EL. 587.35  
E.B. EL. 587.16

CREOSOTED PILES  
W.B. EL. 587.00  
E.B. EL. 586.80  
LENGTH: 35 FT (TYPICAL)

CONCRETE PILES  
W.B. EL. 586.50  
E.B. EL. 586.30  
SLOPE WALL  
6.5 FROM PILE DATA

STEEL PILES  
W.B. EL. 587.50  
E.B. EL. 587.30  
FROM PILE DATA

PILES CUT-OFF:  
W.B. EL. 587.15  
E.B. EL. 587.00

PILES CUT-OFF:  
W.B. EL. 587.40  
E.B. EL. 587.25

PILES CUT-OFF:  
W.B. EL. 587.70  
E.B. EL. 587.55

PILES CUT-OFF:  
W.B. EL. 588.00  
E.B. EL. 587.85

PILES CUT-OFF:  
W.B. EL. 588.30  
E.B. EL. 588.15

PILES CUT-OFF:  
W.B. EL. 588.60  
E.B. EL. 588.45

PILES CUT-OFF:  
W.B. EL. 588.90  
E.B. EL. 588.75

PILES CUT-OFF:  
W.B. EL. 589.20  
E.B. EL. 589.05

PILES CUT-OFF:  
W.B. EL. 589.50  
E.B. EL. 589.35

PILES CUT-OFF:  
W.B. EL. 589.80  
E.B. EL. 589.65

PILES CUT-OFF:  
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PILES CUT-OFF:  
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E.B. EL. 592.70

PILES CUT-OFF:  
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E.B. EL. 593.00

PILES CUT-OFF:  
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E.B. EL. 593.30

PILES CUT-OFF:  
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E.B. EL. 593.60

PILES CUT-OFF:  
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E.B. EL. 593.90

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E.B. EL. 594.20

PILES CUT-OFF:  
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PILES CUT-OFF:  
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E.B. EL. 597.80

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PILES CUT-OFF:  
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E.B. EL. 598.40

PILES CUT-OFF:  
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E.B. EL. 598.70

PILES CUT-OFF:  
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E.B. EL. 599.00

PILES CUT-OFF:  
W.B. EL. 599.40  
E.B. EL. 599.30

PILES CUT-OFF:  
W.B. EL. 599.70  
E.B. EL. 599.60

PILES CUT-OFF:  
W.B. EL. 600.00  
E.B. EL. 599.90

HORIZONTAL CURVE DATA OF SURVEY LINE (F.A.I.-280)

POINT	STATIONING	TYPE	ANGLE	RC (FT)	PC (F.A.I.)	PT (F.A.I.)	PI (F.A.I.)	P2 (F.A.I.)	P3 (F.A.I.)
D	1+00	B	113° 10'	115.00	113+50	115+00	116+50	118+00	119+50
A	1+190	T	113° 10'	115.00	113+50	115+00	116+50	118+00	119+50
L	1+232.51	L	113° 10'	115.00	113+50	115+00	116+50	118+00	119+50
T	1+495.56	T	113° 10'	115.00	113+50	115+00	116+50	118+00	119+50
PC	1+927.35	PC	113° 10'	115.00	113+50	115+00	116+50	118+00	119+50
P1	2+111.95 (HAND)	P1	113° 10'	115.00	113+50	115+00	116+50	118+00	119+50
P2	2+257.44 (HAND)	P2	113° 10'	115.00	113+50	115+00	116+50	118+00	119+50
P3	2+402.93 (HAND)	P3	113° 10'	115.00	113+50	115+00	116+50	118+00	119+50

**PROFILE - TOP OF RAIL-CRLE P.R.R.**  
SCALE: 1"=40'

NOTE: SYNCHRONOUS CARRIERS  
FROM F.A.I. DESIGN  
F.A.I. CENTER  
400' V.C.  
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**DECK CROSS SECTION (TYPICAL)**  
SCALE: 1"=4'-0"

PROPOSED STRUCTURE

NOTE: SYNCHRONOUS CARRIERS  
FROM F.A.I. DESIGN  
F.A.I. CENTER  
400' V.C.  
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**LOCATION PLAN**

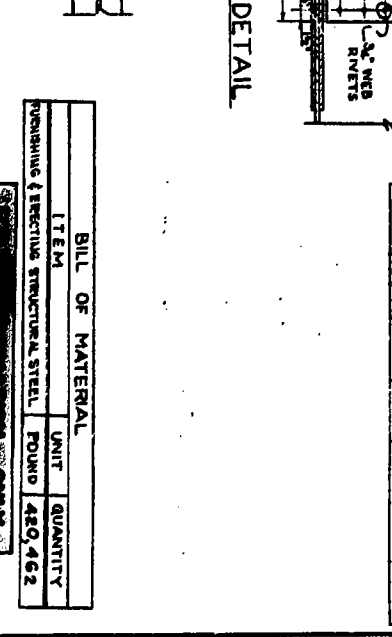
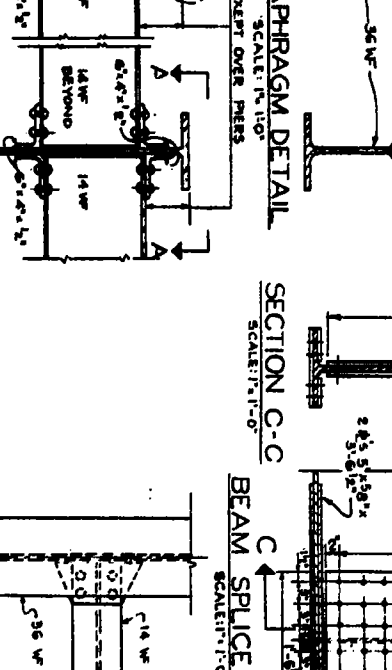
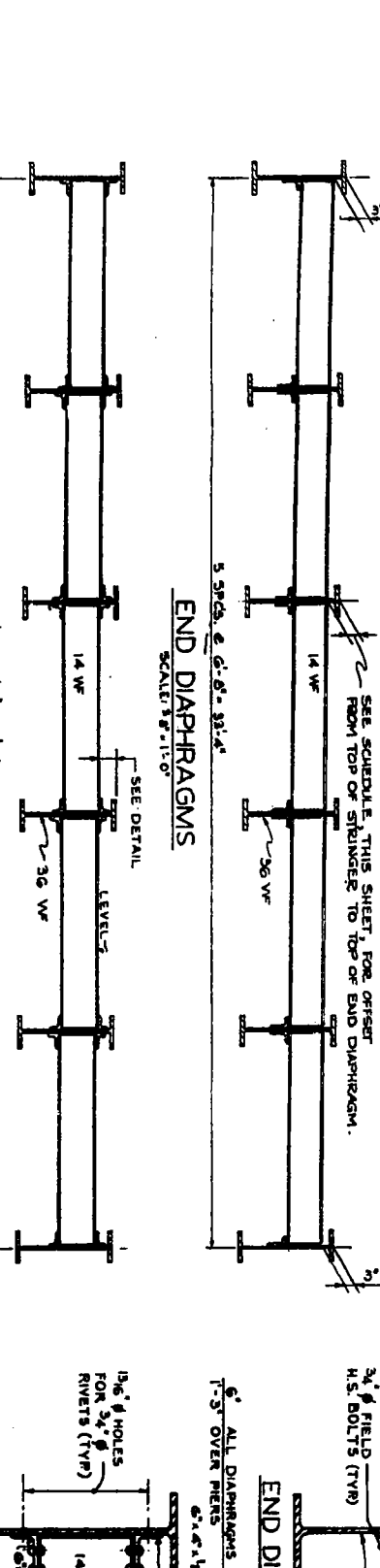
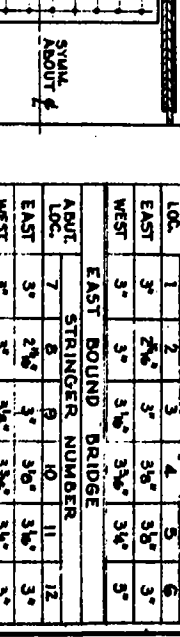
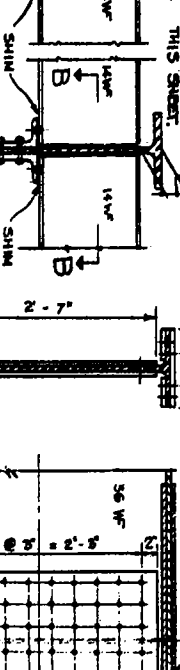
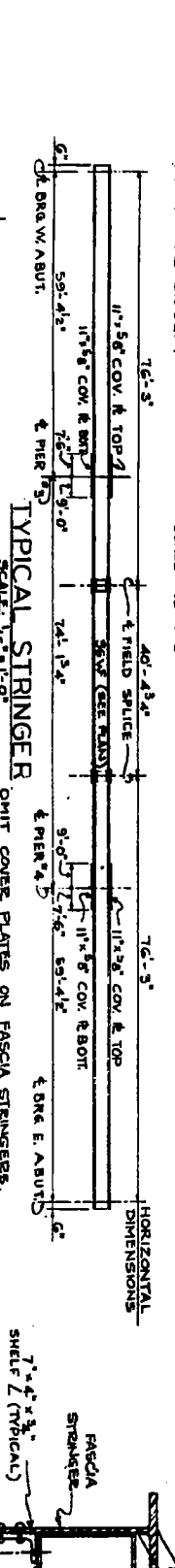
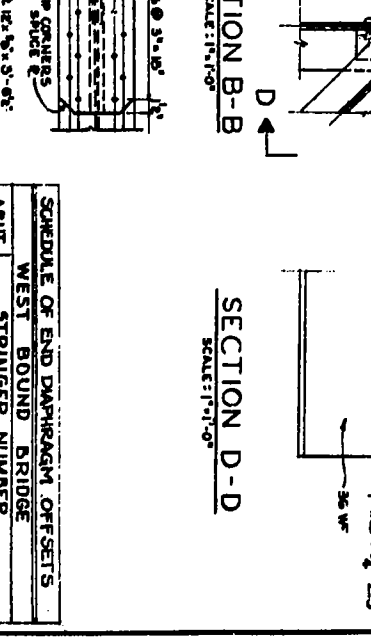
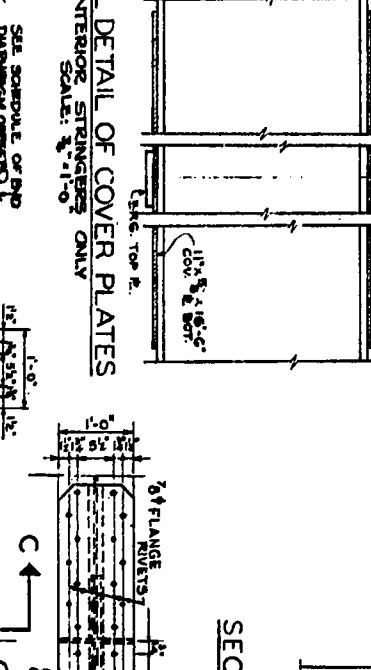
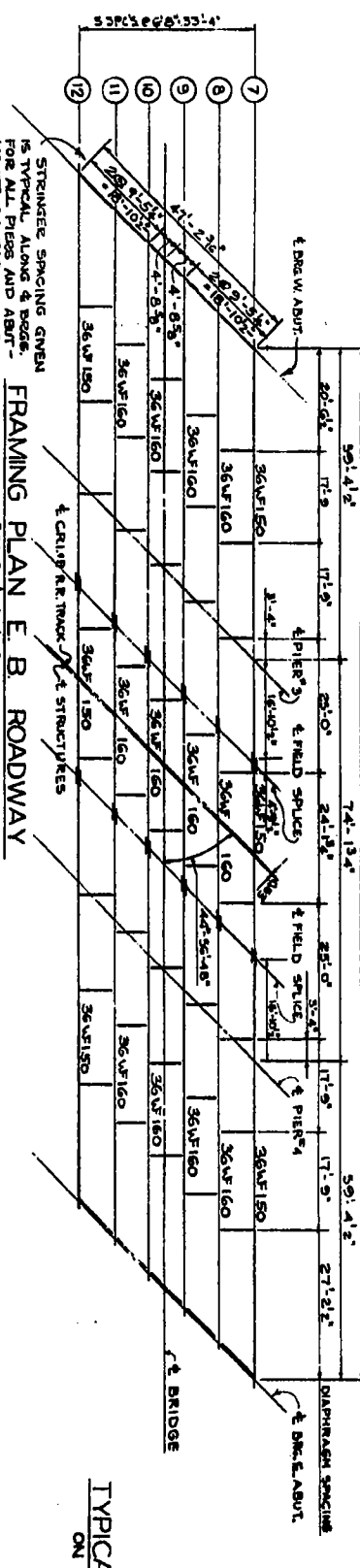
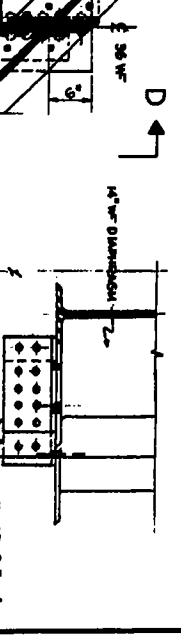
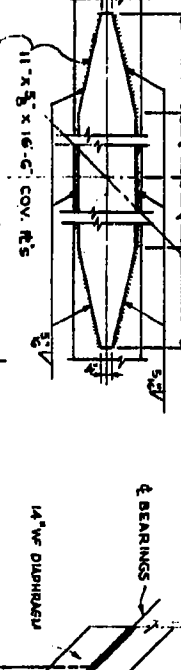
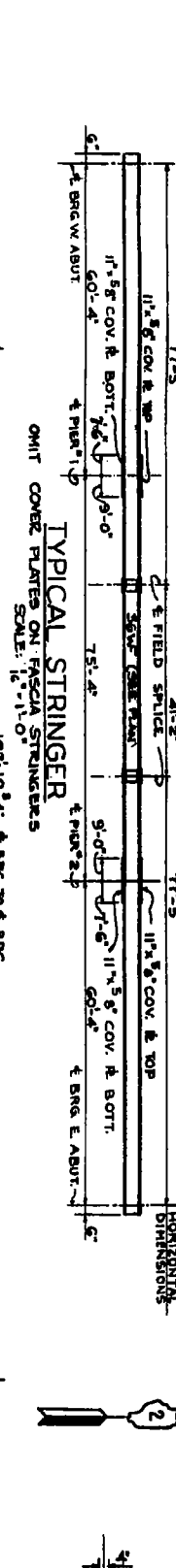
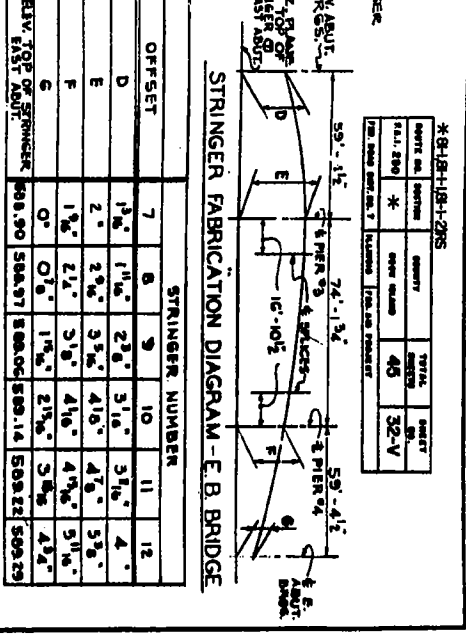
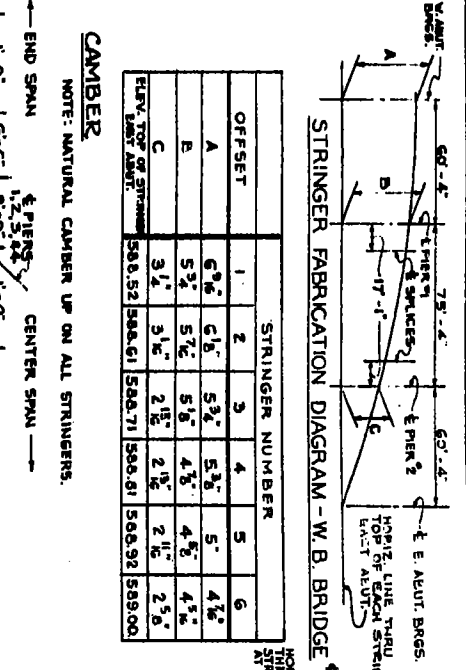
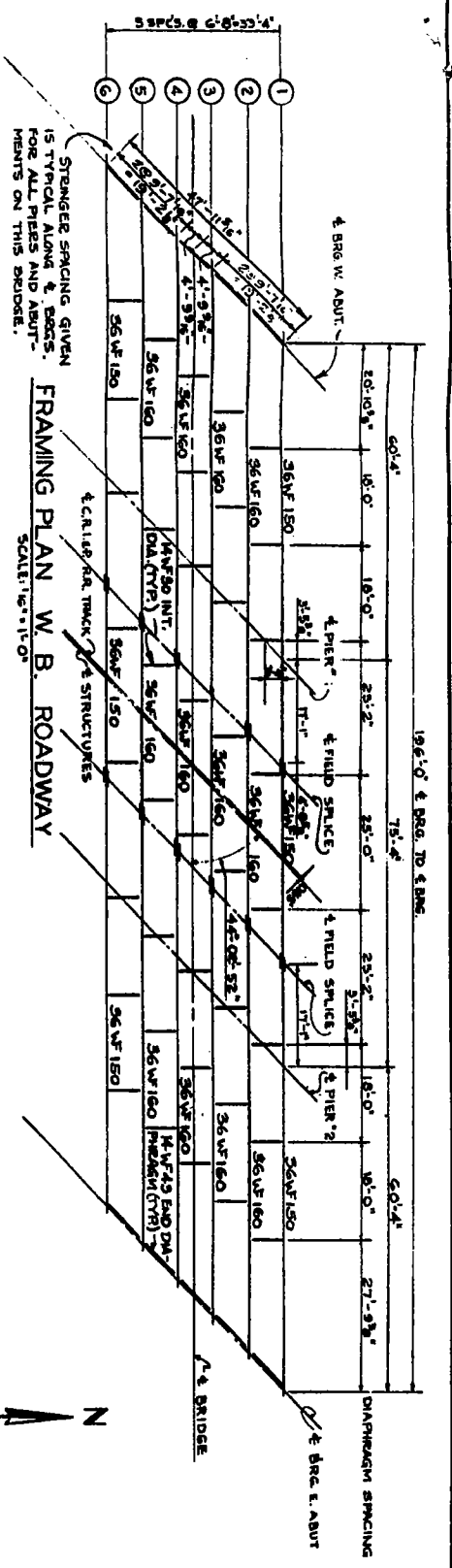
PROPOSED STRUCTURE

NOTE: SYNCHRONOUS CARRIERS  
FROM F.A.I. DESIGN  
F.A.I. CENTER  
400' V.C.  
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**GENERAL PLAN & ELEVATION**  
FALCONSBORO BRIDGE  
ROCK ISLAND COUNTY  
STATION 232 + 84.50  
MADE AS NOTED







ABUT. LOC.	1	2	3	4	5	6
WEST	3'	2 3/4"	3'	3 3/8"	3 3/4"	3'
EAST	3'	2 3/4"	3'	3 3/8"	3 3/4"	3'

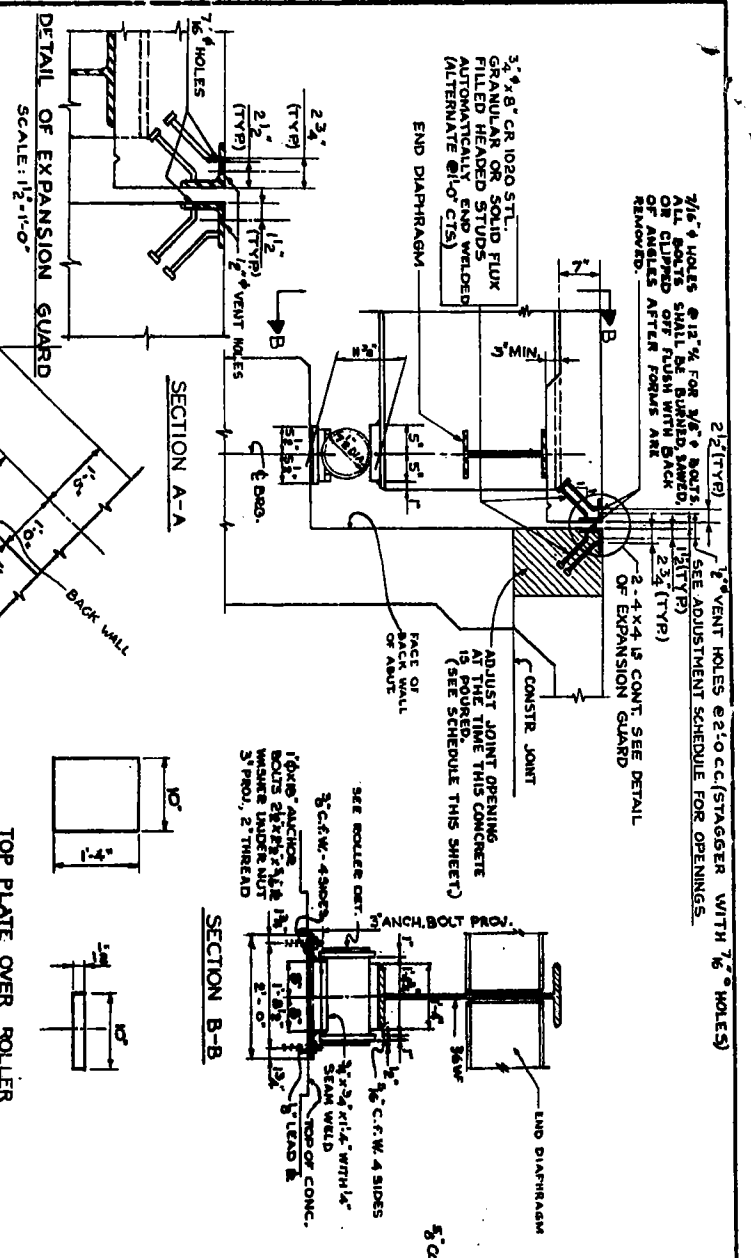
ITEM	UNIT	QUANTITY
ERECTING STRUCTURAL STEEL	POUND	420,462

DE LEIUN, CARRIER & CO. ENGINEERS  
 DESIGNED BY: E.H.L.M.  
 DRAWN BY: E.H.L.M.  
 CHECKED BY: E.H.L.M.  
 IN CHARGE: L.H. RYAN

SUPERSTRUCTURE FRAMING PLAN  
 F.A. 1280 SECTION B-12  
 FALL 800 OVER GARAGE  
 ROCK ISLAND COUNTY  
 STATION 232 + 96.50  
 SCALE: AS NOTED

Revision 3-4-42: Removed last part of plan showing of structural steel due to removal of steel plates; structural steel changed from 420,182 pounds to 420,462 pounds. N.C.K.

2" VENT HOLES @ 2'-0" C.C. (STAGGER WITH 7/8" HOLES)  
 SEE ADJUSTMENT SCHEDULE FOR OPENINGS.  
 1/2" VENT HOLES @ 12" FOR 1/2" ROLLER BEARING  
 ON CLIPPED OFF FLUSH WITH BACK  
 OF ANGLE AFTER FORMS ARE  
 REMOVED.  
 2" x 4" IS CONT. SEE DETAIL  
 OF EXPANSION GUARD

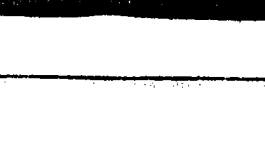
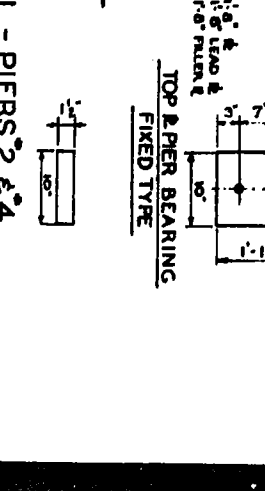
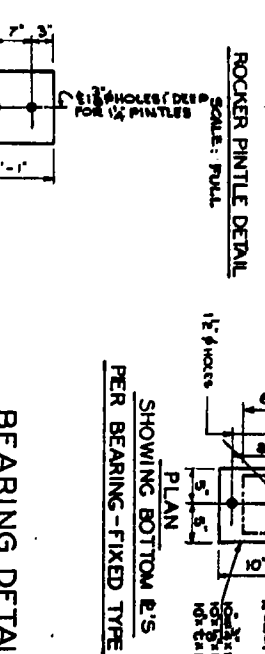
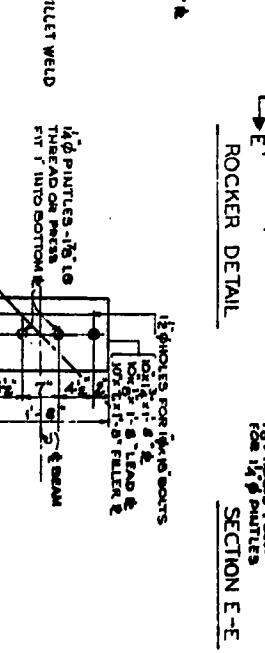
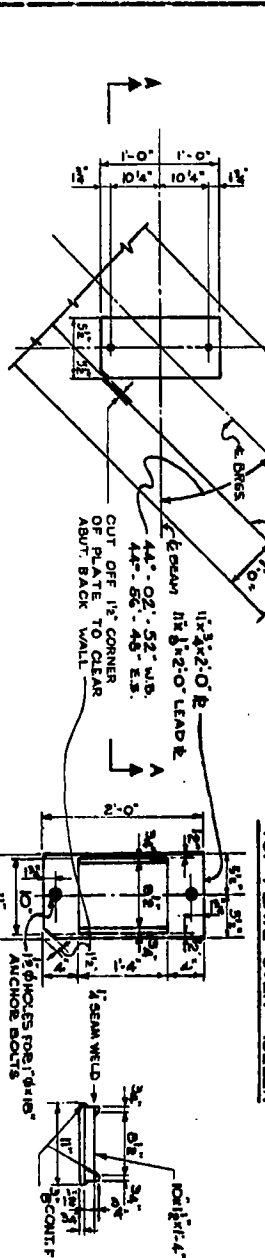


FILLER PLATE THICKNESS = t

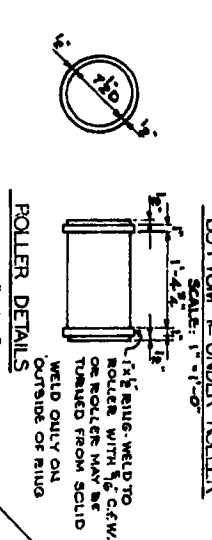
GIRDER NO.	PIER NO.	t	WEIGHT
2	2	10"	6
7	3	10"	6
7	4	10"	6
12	3	12"	26

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

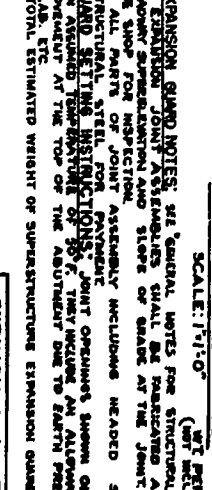
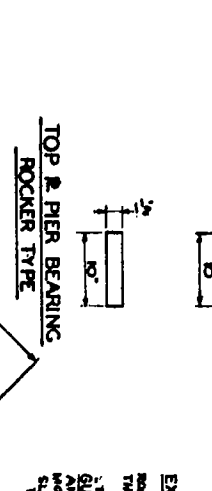
PIER NO.	SECTION	WEIGHT	NET WT.
FALL 280	*	40	32-W
PER BRIDGE	7	280	224-W



PLAN  
 SHOWING BOTTOM R. AT ABUT.  
 SCALE: 1/2" = 1'-0"



BEARING DETAIL AT ABUTMENTS  
 TYPE "A" - BEARING  
 SCALE: 1/2" = 1'-0" EXCEPT AS NOTED  
 CURB LINE  
 W.T. PER BRG. = 301 LB.



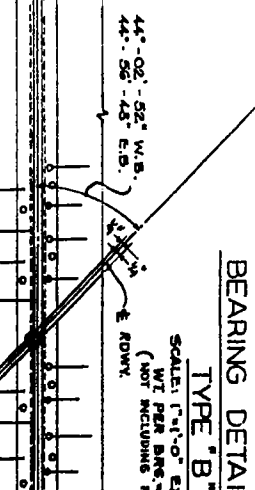
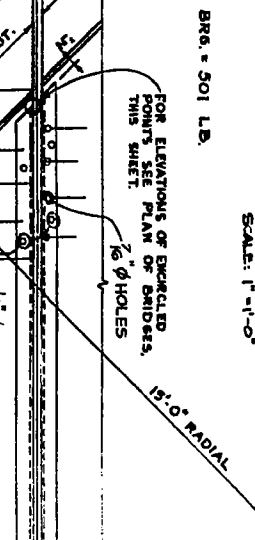
EXPANSION GUARD NOTES: SEE GENERAL NOTES FOR STRUCTURAL STEEL. SHEET NO. 2  
 SHOWING DIMENSIONS AND DETAILS OF ALL PARTS OF THE GUARD AND CONNECTIONS TO THE  
 ROCKER OR FIXED BEARING AND STRINGS. ALL PARTS SHALL BE CONFORMING TO THE  
 THE SHOP FOR INSPECTION.  
 ALL PARTS OF JOINT ASSEMBLY INCLUDING HEADED STUDS SHALL BE INCLUDED IN  
 STRUCTURAL STEEL FOR PAYMENT.  
 GUARD SETTING SHALL BE IN ACCORDANCE WITH THE DETAIL SHEET. JOINT DETAILS ARE BASED ON  
 ASSUMPTIONS THAT THE GUARD WILL BE SET IN PLACE AND SHALL BE SET TO EXACT PRESSURE, TENSION OR ANCHOR  
 MEASUREMENT AT THE TOP OF THE ABUTMENT OR TO EXACT PRESSURE, TENSION OR ANCHOR  
 SLAB, ETC.  
 TOTAL ESTIMATED WEIGHT OF SUPERSTRUCTURE EXPANSION GUARDS = 4000 LBS.

EXPANSION JOINT ADJUSTMENT SCHEDULE

TEMPERATURE °F.	110	90	70	50	30	10
WEST ABUTMENT	1/2"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"
EAST ABUTMENT	1 3/4"	1 1/2"	1 1/4"	1 1/2"	1 3/4"	1 1/2"

JOINT OPENINGS GIVEN ARE PARALLEL TO & OF BRIDGE.

BEARING DETAIL AT ABUTMENTS  
 TYPE "A" - BEARING  
 SCALE: 1/2" = 1'-0" EXCEPT AS NOTED  
 CURB LINE  
 W.T. PER BRG. = 301 LB.



EXPANSION JOINT ADJUSTMENT SCHEDULE

TEMPERATURE °F.	110	90	70	50	30	10
WEST ABUTMENT	1/2"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"
EAST ABUTMENT	1 3/4"	1 1/2"	1 1/4"	1 1/2"	1 3/4"	1 1/2"

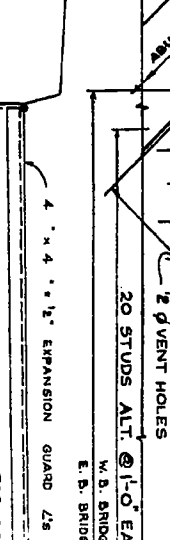
JOINT OPENINGS GIVEN ARE PARALLEL TO & OF BRIDGE.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
STEEL FOR GUARD AND SETTING	POUND	24,349
STRUCTURAL STEEL		

\* INCLUDES FILLER @ 3.

PLAN OF BRIDGES  
 GIVING ROADWAY ELEVATION AT  
 ENDS OF EXPANSION GUARDS



PLAN  
 4" x 4" x 1/2" EXPANSION GUARD 1/2  
 FOR ELEVATIONS OF BRIDGES  
 POINTS SEE PLAN OF BRIDGES  
 THIS SHEET.  
 16" Ø HOLES  
 15'-0" RADIAL  
 44'-02" - 02" W.B.  
 44'-08" - 45" E.B.  
 20 STUDS ALT. @ 1'-0" EACH SIDE  
 W.B. BRIDGE, CURB TO CURB:  
 E.B. BRIDGE, CURB TO CURB:

PLAN  
 4" x 4" x 1/2" EXPANSION GUARD 1/2  
 FOR ELEVATIONS OF BRIDGES  
 POINTS SEE PLAN OF BRIDGES  
 THIS SHEET.  
 16" Ø HOLES  
 15'-0" RADIAL  
 44'-02" - 02" W.B.  
 44'-08" - 45" E.B.  
 20 STUDS ALT. @ 1'-0" EACH SIDE  
 W.B. BRIDGE, CURB TO CURB:  
 E.B. BRIDGE, CURB TO CURB:

PROFILE  
 W.B. BRIDGE: 21'-0 3/4" W. ABUT., 21'-9 3/4" E. ABUT.  
 E.B. BRIDGE: 20'-9 1/2" W. ABUT., 21'-5" E. ABUT.

DETAIL OF EXPANSION GUARD  
 W.B. BRIDGE: 21'-0 3/4" W. ABUT., 21'-9 3/4" E. ABUT.  
 E.B. BRIDGE: 20'-9 1/2" W. ABUT., 21'-5" E. ABUT.

DE LEM, CARTER & CO. ENGINEERS  
 DESIGNED BY: S.G.  
 DRAWN BY: M.H.M.  
 CHECKED BY: S.G.  
 IN CHARGE: L.N.G.

NOTE: EXPANSION GUARD 4" IS AGE STRAIGHT BETWEEN ELEVATIONS SHOWN.

BEARINGS & EXPANSION GUARD DETAILS  
 FALL 280 SECTION 81-118  
 FALL 280 OVER C&A & P.R.R.  
 ROCK ISLAND COUNTY  
 STATION 232 + 88-50  
 SCALE: AS SHOWN

BEARINGS & EXPANSION GUARD DETAILS  
 FALL 280 SECTION 81-118  
 FALL 280 OVER C&A & P.R.R.  
 ROCK ISLAND COUNTY  
 STATION 232 + 88-50  
 SCALE: AS SHOWN

BEARINGS & EXPANSION GUARD DETAILS  
 FALL 280 SECTION 81-118  
 FALL 280 OVER C&A & P.R.R.  
 ROCK ISLAND COUNTY  
 STATION 232 + 88-50  
 SCALE: AS SHOWN

BEARINGS & EXPANSION GUARD DETAILS  
 FALL 280 SECTION 81-118  
 FALL 280 OVER C&A & P.R.R.  
 ROCK ISLAND COUNTY  
 STATION 232 + 88-50  
 SCALE: AS SHOWN