

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 944	.	ALEXANDER, IL MISSISSIPPI, MO	85	1

•(138D-BR) P-1

FOR INDEX OF SHEETS, SEE SHEET NO. 2.
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4.

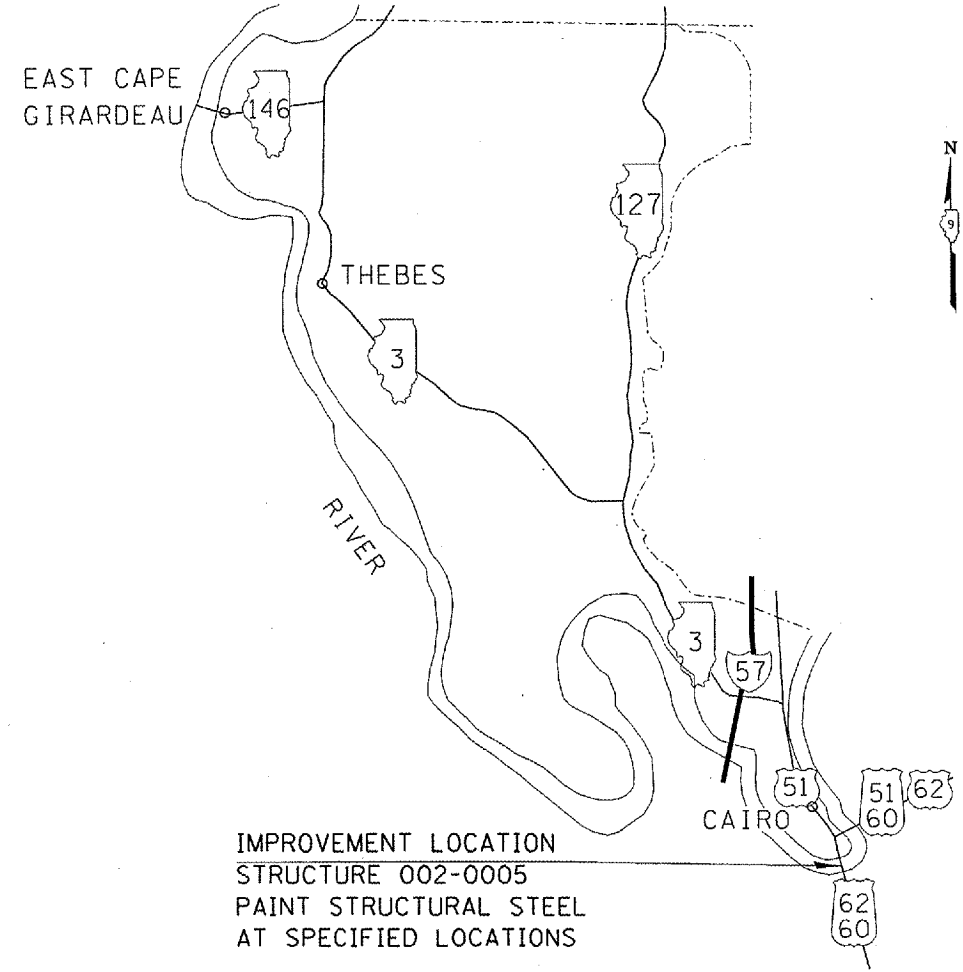
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAS ROUTE 944 (U.S. 60/62)
SECTION (138D-BR) P-1
ALEXANDER COUNTY, ILLINOIS
MISSISSIPPI COUNTY, MISSOURI
C-99-002-06



LOCATION OF SECTION INDICATED THUS: - ■ -



IMPROVEMENT LOCATION
STRUCTURE 002-0005
PAINT STRUCTURAL STEEL
AT SPECIFIED LOCATIONS

CAIRO TOWNSHIP
ADT = 4450 22% TRUCKS
POSTED SPEED = 55 M.P.H.
INVENTORY RATING HS 14.0
OPERATING RATING HS 22.5

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123 or www.julie1call.com

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Nov. 2, 2005
Mary C. Lomis
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 9, 2005
Mike Hines
ENGINEER OF DESIGN AND ENVIRONMENT

December 9, 2005
Eric Ham
DEPUTY DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

CONTRACT NO. 98939

MAP NOT TO SCALE

PROJECT ENGINEER: CASEY TECKENBROCK
SQUAD LEADER: RITA CAUTNEY
PHONE: (618) 549-2171
CENTREX: 782-4554

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 944	.	ALEXANDER, IL MISSISSIPPI, MO	85	2
FED. ROAD DIST. NO. 7		ILLINOIS		

•(138D-BR) P-1

INDEX OF SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	COVER SHEET
2	INDEX OF SHEETS, STANDARDS, SIGNATURES
3	GENERAL NOTES
4	SUMMARY OF QUANTITIES
5-85	STRUCTURAL STEEL PLAN SHEETS FOR INFORMATION ONLY

STANDARDS

701201-02
702001-05

AGREEMENTS

STATE OF MISSOURI
STATE OF KENTUCKY

Approved: Mary C. Lamin
REGION 5 ENGINEER
DATE 11/02/2005

Prepared By: J. Amthuis
DISTRICT OPERATIONS ENGINEER
Examined By: Nancy L. Clayton
ASSISTANT REGIONAL ENGINEER
Examined By: James Davis Emery
DISTRICT LAND ACQUISITION ENGINEER
Examined By: Carrie Nelson
DISTRICT PROGRAM DEVELOPMENT ENGINEER
Examined By: Joe Zdaniewicz
DISTRICT STUDIES & PLANS ENGINEER
Examined By: Joseph Lemire
DISTRICT CONSTRUCTION ENGINEER
Examined By: Bruce Beckler
DISTRICT MATERIALS ENGINEER
Examined By: Nancy L. Clayton
DISTRICT PROJECT IMPLEMENTATION ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 944	*	ALEXANDER, IL MISSISSIPPI, MO	85	3
FED. ROAD DIST. NO. 7	ILLINOIS			

GENERAL NOTES

*1380-BR P-1

The Contractor shall supply 3 portable changeable message signs at least two weeks prior to any lane closure. The exact message to be displayed shall be provided by the Engineer. This will be paid for as CHANGEABLE MESSAGE SIGN.

The painting on this project is limited to structural steel which is located at or below the level of the bridge deck and (1) within 10 feet of either side of a deck joint on truss spans, (2) within 5 feet of either side of a deck joint on approach spans, (3) within 5 feet of the centerline of a pier on truss spans, or (4) the last 5 feet of the superstructure at the north or south abutment. The intention is to clean and paint structural steel which is exposed to road salt runoff.

The color of the final finish coat shall be Interstate Green, Munsell No. 7.5G 4 / 8

Cleaning and painting shall conform to the requirements of special provision "Cleaning And Painting Existing Steel Structures". Near White Metal Blast Cleaning - SSPC - SP10 and Paint System 1 - OZ / E / U shall be used.

SSPC - QP1 and SSPC - QP2 Painting Contractor Certifications are not required.

The Contractor is advised that navigational illumination is present on this structure. All cable or conduit is to remain in service. Any cable or conduit which is damaged as a result of the Contractor's operations shall be replaced by the Contractor at the Contractor's expense. Replacement material and methods shall meet or exceed the original specifications for the wiring. Splicing will not be permitted.

The Contractor shall submit to the Illinois Department of Transportation a work plan which includes a work schedule and containment details for each painting location over water. No work will be permitted prior to approval of the plan by the United States Coast Guard.

A minimum of one air monitor is required when work is performed at a location within 1000 feet of the boundary of Illinois' Fort Defiance State Park.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 944	.	ALEXANDER, IL MISSISSIPPI, MO	85	4
FED. ROAD DIST. NO. 7		ILLINOIS		

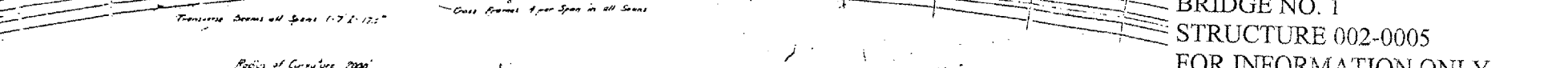
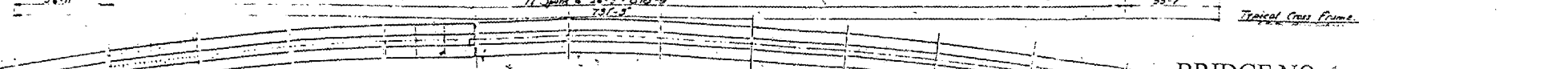
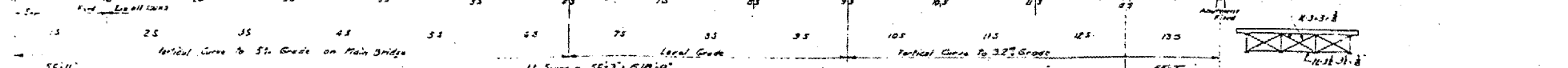
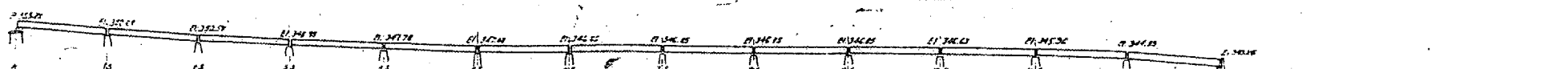
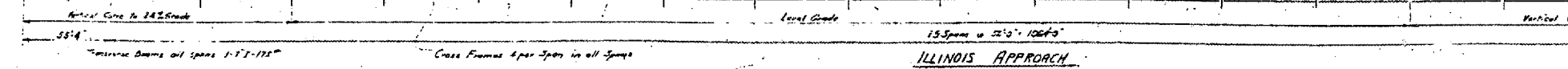
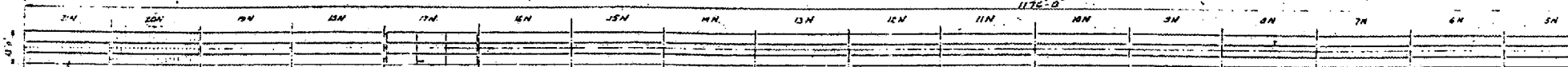
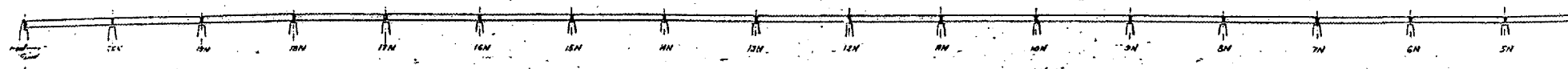
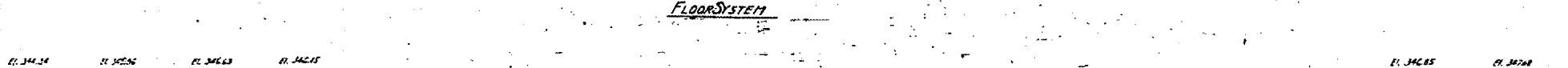
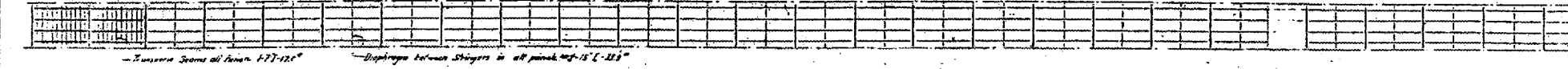
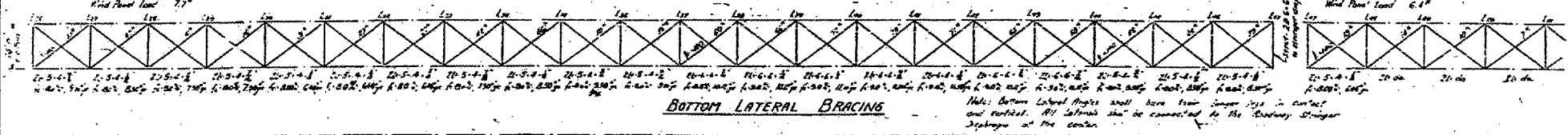
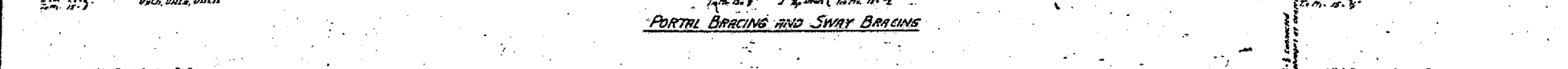
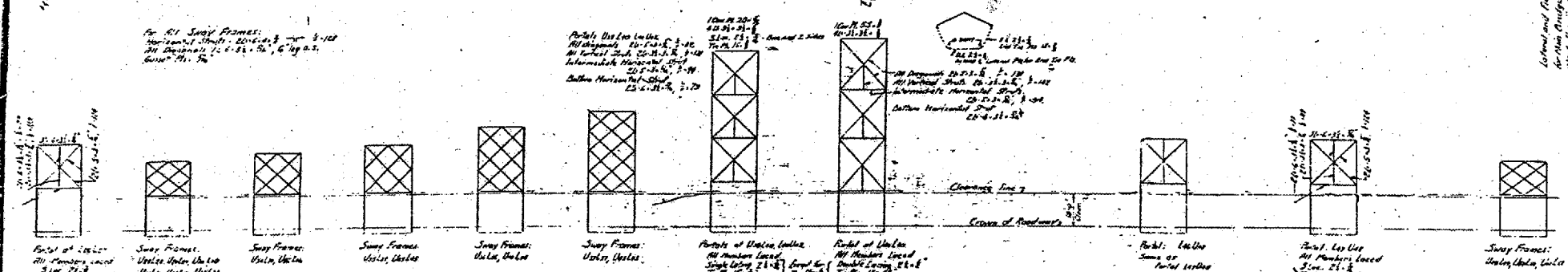
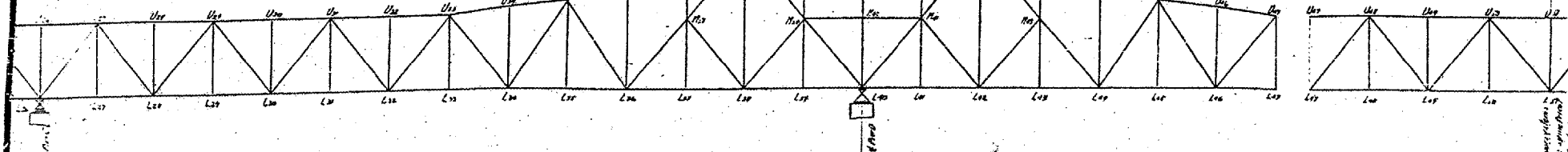
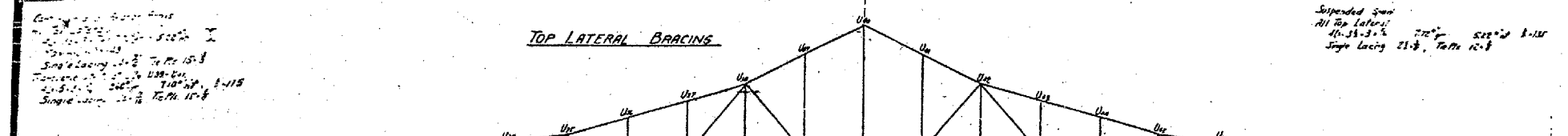
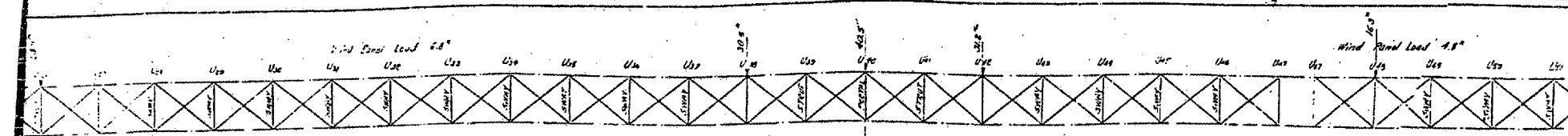
*138D-BR) P-1

SUMMARY OF QUANTITIES

50% ILLINOIS
50% MISSOURI

CONSTRUCTION TYPE CODE SFTY-2A		<i>SFTY-2A</i>	
		RURAL	
CODE NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY
50600600	CLEANING & PAINTING STEEL BRIDGE NO. 1	L. SUM	1
50606401	CONTAINMENT & DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L. SUM	1
67100100	MOBILIZATION	L. SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L. SUM	1
X7015000	CHANGEABLE MESSAGE SIGN	CAL. MO.	21
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL. MO.	8

CONTRACT 98939
 U.S. RTE. 60 & U.S. RTE. 62
 (138D-BR) P-1
 ALEXANDER COUNTY
 SHEET 5 OF 85



Section Modulus Required = 15000 - 99
 Use 7" x 11 1/2" ST 11

Member	Area	Weight
Dead Load	82000	11600
Live Load	117000	16000
Impact 30%	35000	4800
Total	234000	32400

Section Modulus Req. = 15000 - 99
 Use 7" x 11 1/2" ST 11

Member	Area	Weight
Dead Load	23000	3200
Live Load	110000	15100
Impact 30%	31000	4200
Total	264000	36500

Section Modulus Required = 6000 - 181
 Use 24" Carnegie Beams 24" ST 112

Member	Area	Weight
Dead Load	31000	4200
Live Load	220000	29000
Impact 30% - Max. and Min. Shear	61000	8000
Total	352000	47200

Section Modulus Required = 12000 - 129
 Use 24" Carnegie Beams 24" ST 112

Member	Area	Weight
Dead Load	31000	4200
Live Load	220000	29000
Impact 30%	61000	8000
Total	352000	47200

Section Modulus Required = 12000 - 129
 Use 24" Carnegie Beams 24" ST 112

Member	Area	Weight
Dead Load	32000	4300
Live Load	220000	29000
Impact 30%	67000	8900
Total	329000	44200

Section Modulus Required = 12000 - 129
 Use 24" Carnegie Beams 24" ST 112

Guard Rail: Same as Main Bridge

Approaches: Same as Main Bridge

Stringers: Note: Data given below is based on same length of stringers as shown on main bridge.

Member	Area	Weight
Dead Load	31000	4200
Live Load	230000	30000
Impact 30%	71000	9400
Total	620000	82600

Member	Area	Weight
Dead Load	32000	4300
Live Load	220000	29000
Impact 30%	67000	8900
Total	329000	44200

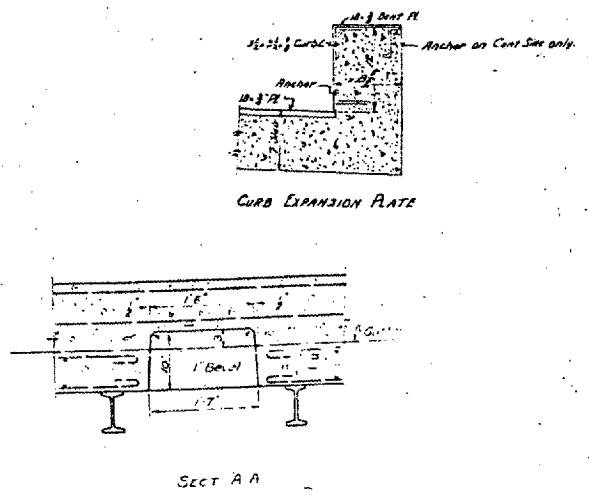
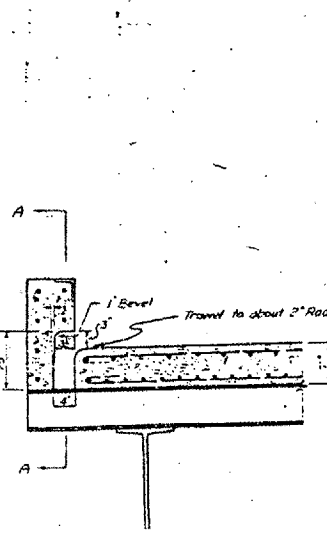
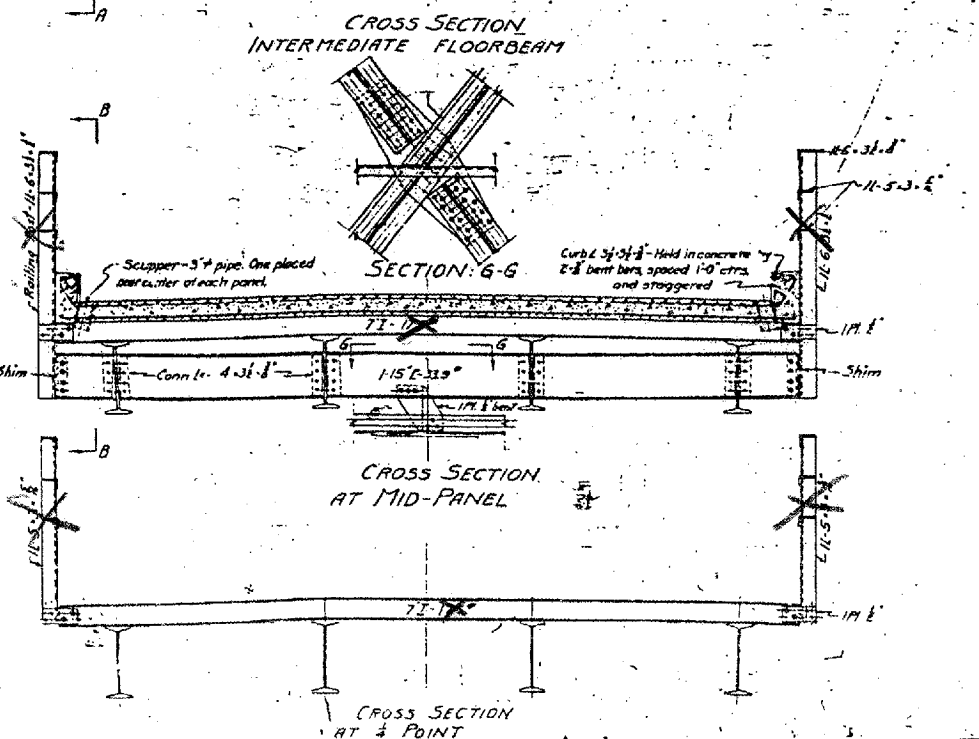
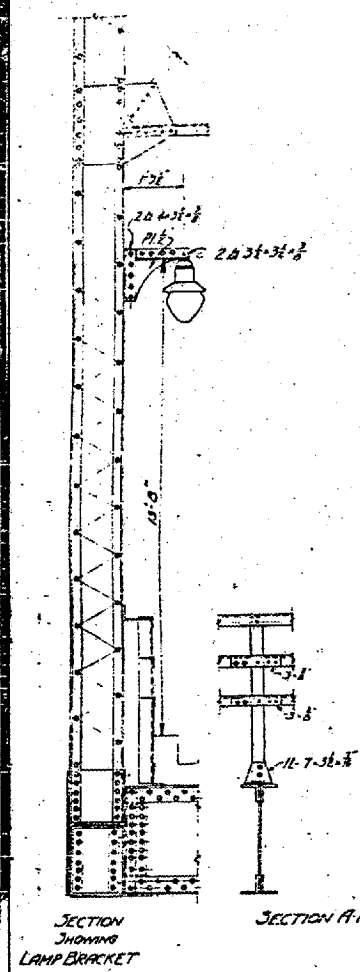
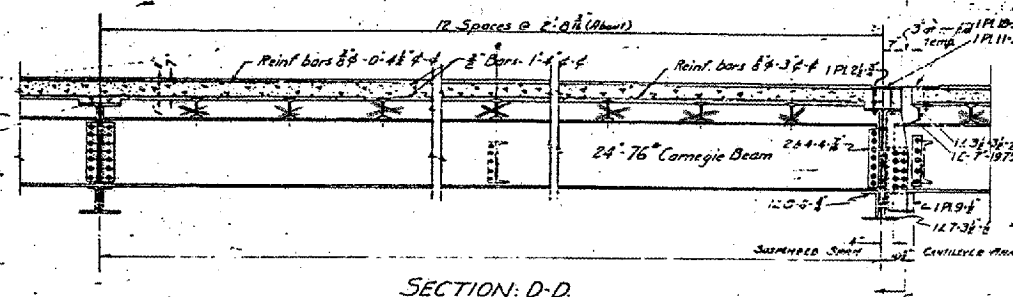
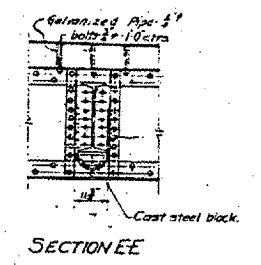
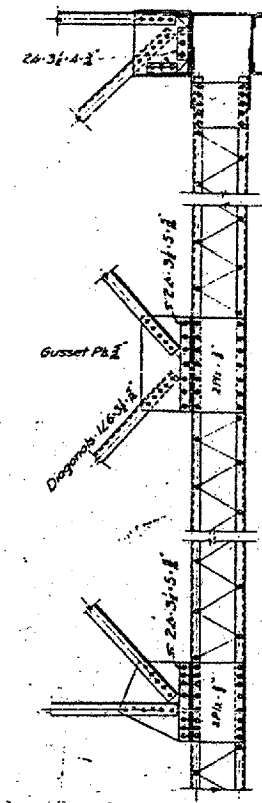
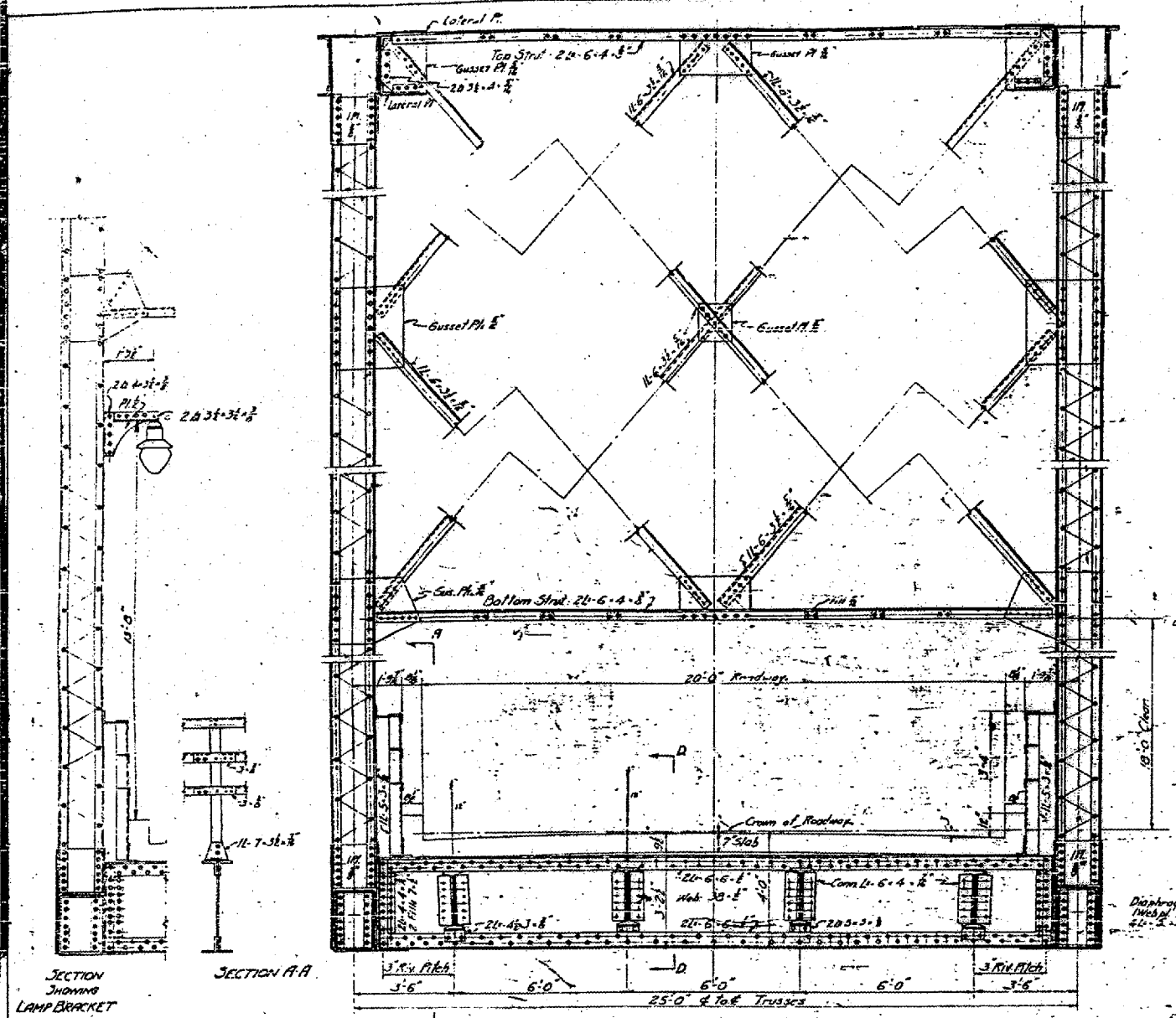
Section Modulus Required = 12000 - 129
 Use 24" Carnegie Beams 24" ST 112

Materials: Steel, Material Carbon Steel
 Details: Connection Carbon Steel
 Rivets: 7/8" diameter except 1/2" in

BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

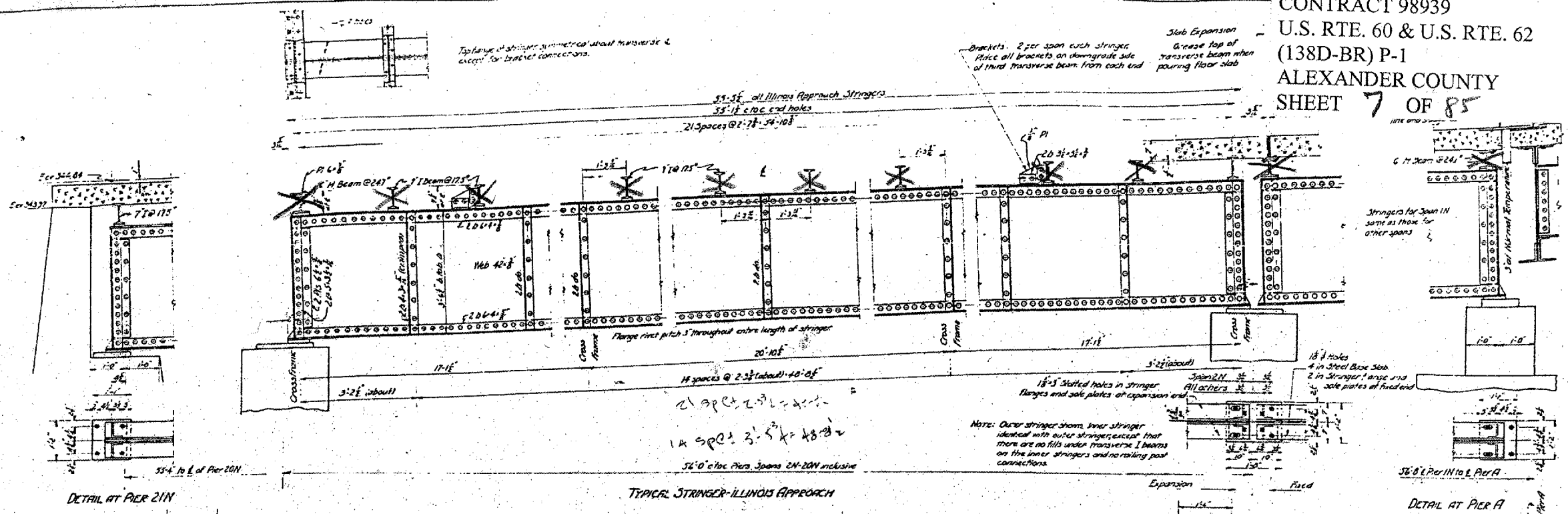
THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS
 APPROACH SPANS AND FLOOR AND BRACING ON MAIN SPANS
 STRESS SHEET
 WADDELL AND HARDESTY, CONSULTING ENGINEERS
 NEW YORK CITY
 MAY 12, 1927

CONTRACT 98939
 U.S. RTE. 60 & U.S. RTE. 62
 (138D-BR) P-1
 ALEXANDER COUNTY
 SHEET 6 OF 85



BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

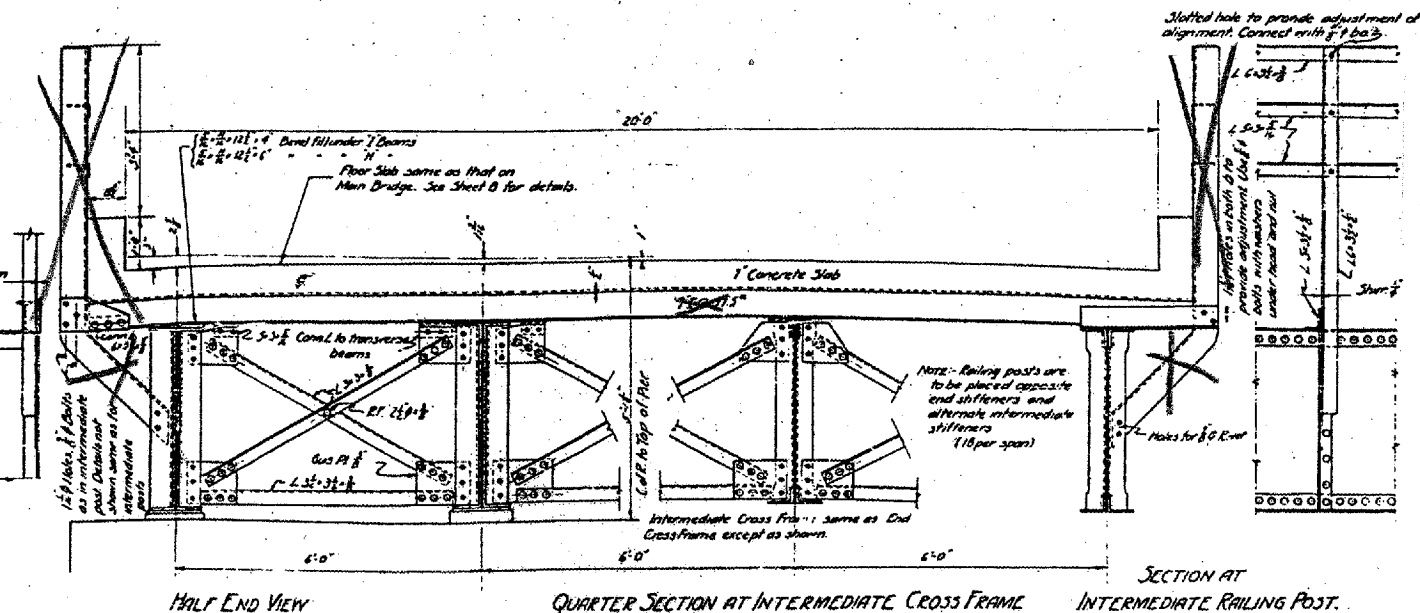
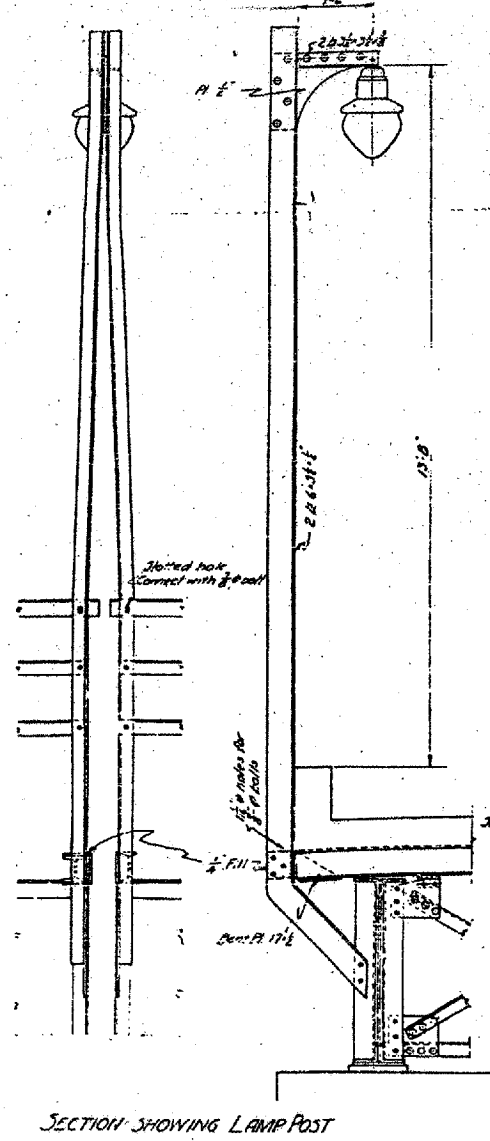
THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS
 FLOOR-MAIN SPAN
 Scale: 1/4" = 1'-0"
 WADSWELL AND HARDESTY CONSULTING ENGINEERS
 NEW YORK CITY MAY 12, 1927
 Revised Dec 20 1927
 Mar 9 1928



BASE PLATES

Span	Cross of Roadway	Elev	Grade	Full Depth	Thickness of Sole Pls	Sp. Bolts	Sp. Bolts
	at Pier	at Pier		at Pier	at Exp End	at Exp End	at Base
1	11N	352.15	2.57	4.52%	36" x 0"	3" x 3"	2 1/2"
2	21N	350.38	2.10	3.25	36" x 0"	3" x 3"	2 1/2"
3	31N	348.25	1.63	2.32	36" x 0"	3" x 3"	2 1/2"
4	41N	347.28	1.17	2.09	36" x 0"	3" x 3"	2 1/2"
5	51N	347.00	0.70	1.25	36" x 0"	3" x 3"	2 1/2"
6	61N	346.85	0.23	0.41	36" x 0"	3" x 3"	2 1/2"
7-10	7-10N	346.85	—	Level	36" x 0"	3" x 3"	2 1/2"
15	15N	346.45	0.22	0.39	36" x 0"	3" x 3"	2 1/2"
20	20N	345.26	0.67	1.20	36" x 0"	3" x 3"	2 1/2"
21	21N	344.84	1.12	2.00	35" x 18"	3" x 3"	2 1/2"

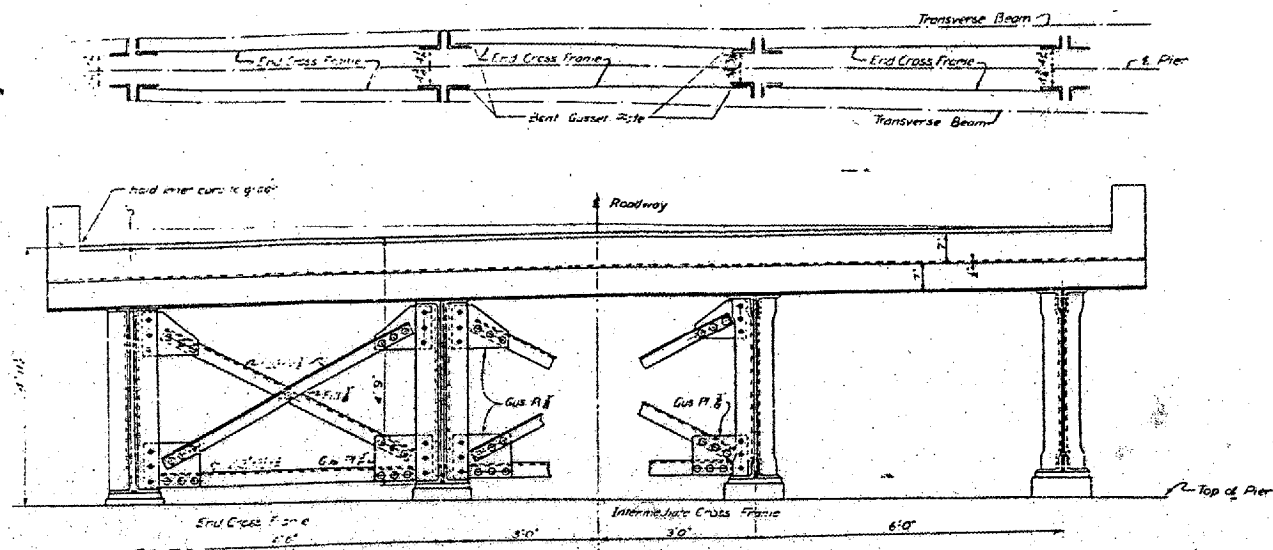
All sole plates 12" wide x 72" long a thickness corresponding to 1/2" at E. of Pier.



**BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY**

Note: See Sheets 417 for General Profile of this Approach.

**THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS
 ILLINOIS GIDER APPROACH DETAILS
 Scale 1/4" = 1'-0"
 WADDELL AND HARDESTY CONSULTING ENGINEERS
 NEW YORK CITY
 JULY 1927**

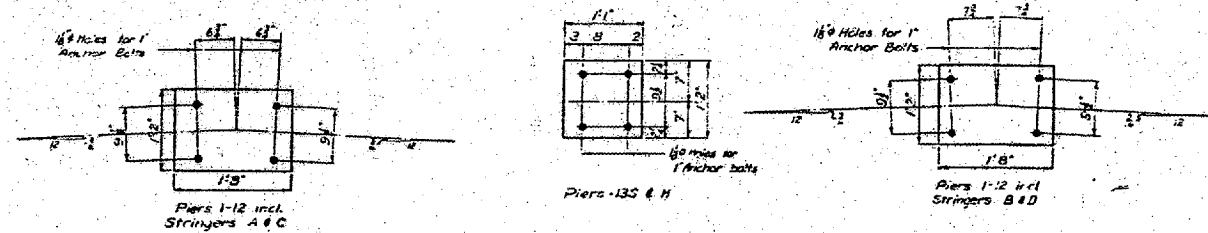


SPAN	CROWN OF ROADWAY	PIER ELEVATION	GRADE	INCLINE	SPAN	POSITIONS OF SLAB														
						1	2	3	4	5	6	7	8	9	10					
15	352.25	257	42.5%	56°-11'	15															
25	350.59	270	3.74%	56°-33'	25															
35	348.95	42	2.97%	56°-33'	35															
45	347.29	117	2.06%	56°-34'	45															
55	345.93	273	1.25%	56°-26'	55															
65	344.65	423	0.61%	56°-3'	65															
75-85-95	343.65	Level	56°-3'	75-85																
105	342.43	0.22	0.39%	56°-3'	105															
115	341.96	0.67	1.17%	56°-3'	115															
125	341.64	1.12	1.90%	56°-3'	125															

Base Data for MC Approach

Pier	Stringer	Span	Thickness	Sp. 2
H	A	13'-11"	24"	10"
	B	13'-11"	24"	10"
	C	13'-11"	24"	10"
	D	13'-11"	24"	10"
13-25	A	20'-11"	18"	8"
	B	20'-11"	18"	8"
	C	20'-11"	18"	8"
	D	20'-11"	18"	8"
135	A	13'-11"	24"	10"
	B	13'-11"	24"	10"
	C	13'-11"	24"	10"
	D	13'-11"	24"	10"

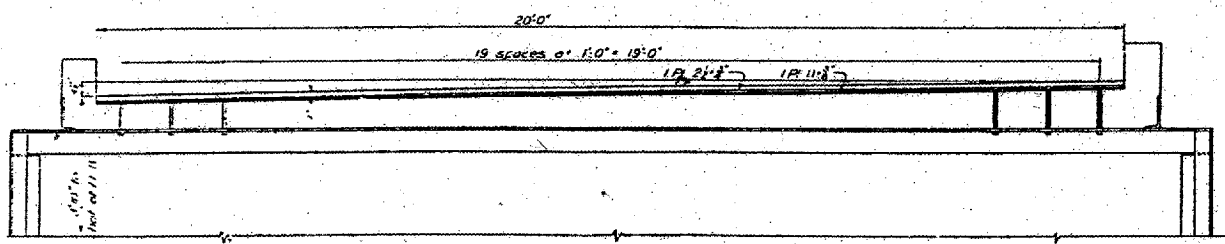
SECTIONS AT PIERS H-125, INC.



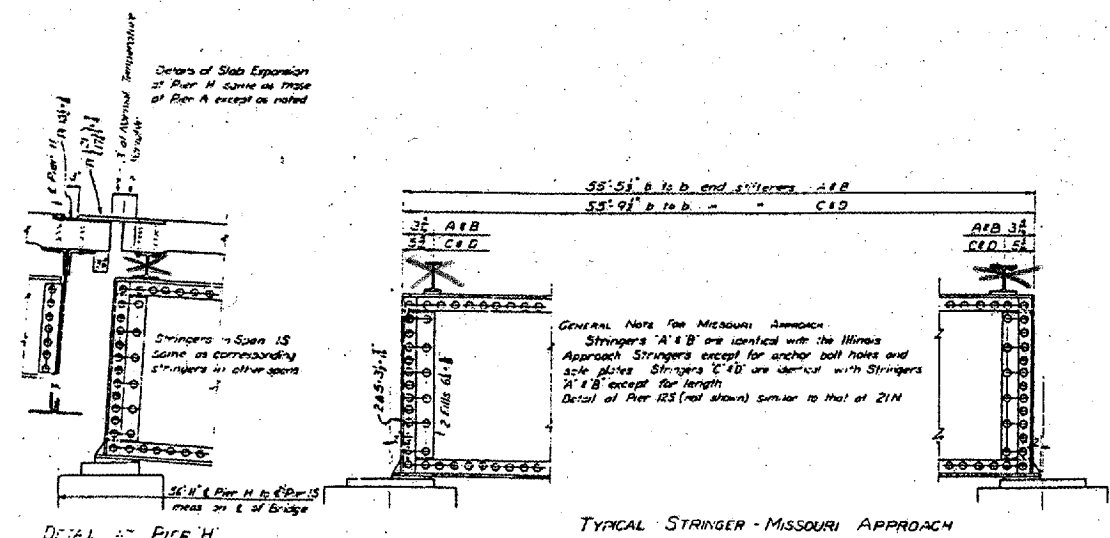
The transition from the curved roadway surface to the flat super-elevated surface of the Mass. approach will occur in the end panel of the Mass. bridge (0+02). Sealed fits as given below will be placed under the transverse beams of stringers C and D. Adjustments not provided for by these fits will be made in the thickness of the slab.

POINT	FITNESS AT E		FITNESS AT W		FITNESS AT S		FITNESS AT N	
	SP. C	SP. D	SP. C	SP. D	SP. C	SP. D	SP. C	SP. D
0+00	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
0+02	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
0+04	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
0+06	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
0+08	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
0+10	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
0+12	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

All drilled fits under transverse beams 4'-11"



SECTION AT END FLOOR BEAM - PIER H

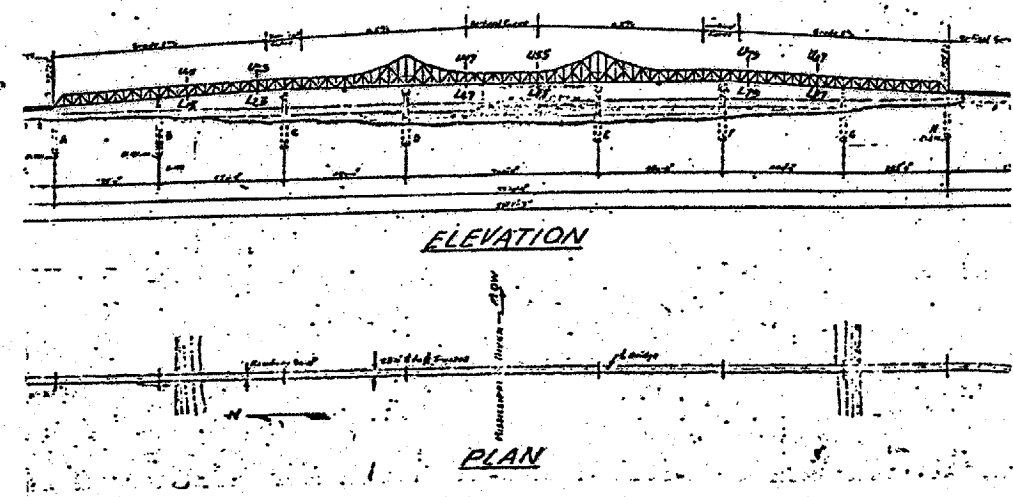


BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

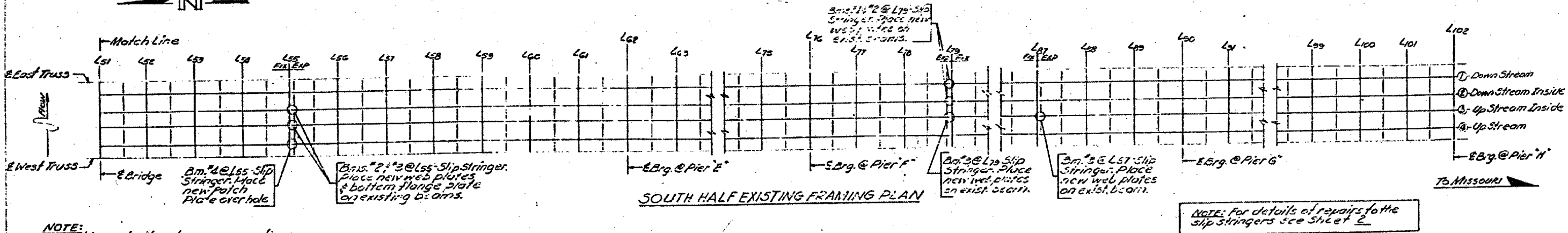
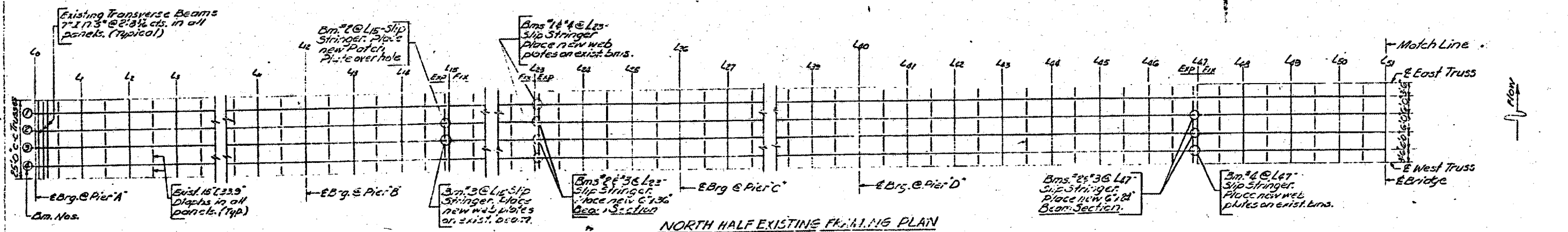
THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS
 MISSOURI APPROACH DETAILS
 SCALE 1"=10'
 WADDELL & PARDEE'S ENGINEERS
 NEW YORK CITY
 AUGUST 19, 1927
 SHEET NO. 22

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT 98939
U.S. RTE. 60 & U.S. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 9 OF 85



All new structural steel shall conform to ASTM Classification A-36.
All new high strength bolts shall be ASTM A-325.
Holes shall be sub-drilled flat and reamed to 15% of bolt diameter. (Original design plans show 8 rivets in connections)
All new structural steel and areas damaged in making repairs shall receive one coat of red lead paint and two field coats of paint to match the existing color.
It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.
Traffic Control shall be determined by the District Office and Day Lab.



NOTE: For details of repairs to the slip stringers see sheet 2.

NOTE: All stringer to floor beam connections are fixed except at locations shown on this sheet.

TOTAL BILL OF MATERIAL

Item	Unit	Total
Temporary Slab Support System	L.SUM	L.S.
F&E Structural Steel	L.SUM	L.S.
Traffic Control	L.SUM	L.S.

Est. Wt. Structural Steel = 1,305 Lbs. ~ H.S. Bolts not incl.

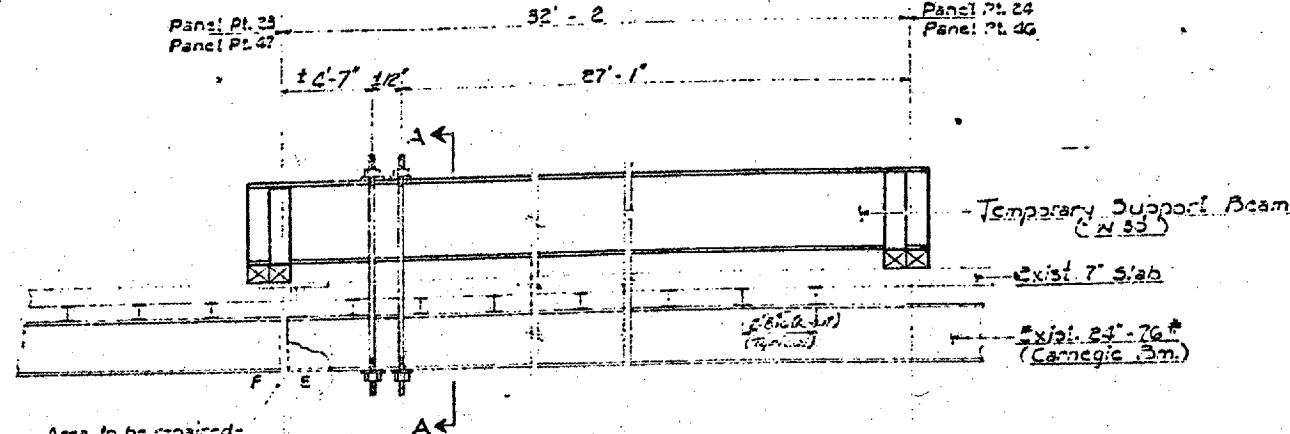
BRIDGE NO. 1
STRUCTURE 002-005
FOR INFORMATION ONLY

BRIDGE REPAIRS
HANGER SPAN EXPANSION PANELS
MISSISSIPPI RIVER BRIDGE AT CAIRO, ILL.
ALEXANDER COUNTY

DESIGNED ENR
CHECKED APW
DRAWN ENR
CHECKED APIV

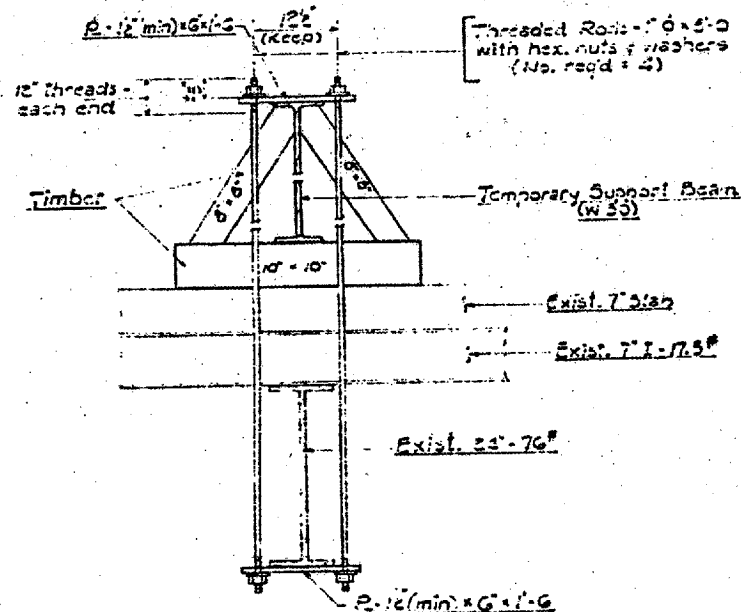
Flow No. 1077
EXAMINED
PASSED
APPROVED

582 150
138-D-3-1116-DL
\$ 53,250.00



Area to be repaired:
Saddle detail not
shown.

TEMPORARY SUPPORT



SEC. A-A

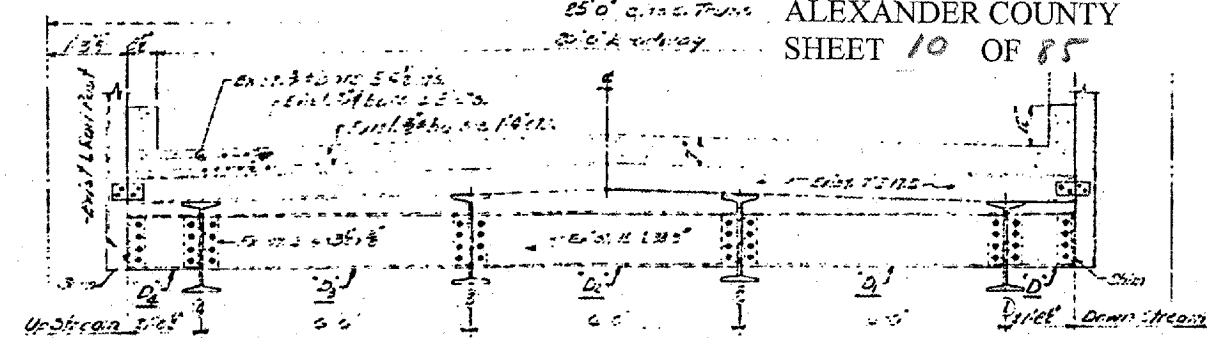
MATERIAL LIST

Type	No.	Size
Em. Sections	6	24" x 20" x 3/8" - 6 x 3' 0"
Web Plates	6	2 1/2" x 6"
	12	2 1/2" x 2 1/2" x 6"
Field Plates	4	2 1/2" x 6"
Flange Plates	6	4" x 2"
Diaph. B.	10	2 1/2" x 6" x 1' 4"

NOTE: H.S. Bolts not shown in field detail.

DIAPHRAGM NOTES

- "L-15" CUT 1/2" OFF THE END OF DIAPHRAGMS D2 & D3 NEXT TO B.S. #3. INSTALL NEW CONNECTION ANGLES 4" x 6" x 3/8" x 1'-4" AND 1/2" FILL PLATES ON THE CUT-OFF END OF DIAPHS. D2 & D3. FIELD LOCATE THE HOLES AND DRILL FOR H.S. BOLTS.
- "L-23" CUT 1/2" OFF THE END OF DIAPHRAGMS D1, D3 & D4 NEXT TO B.S. #1 & #4. INSTALL NEW CONNECTION ANGLES 4" x 6" x 3/8" x 1'-4" AND 1/2" FILL PLATES ON THE CUT-OFF END OF DIAPHS. D1, D3 & D4. FIELD LOCATE THE HOLES AND DRILL FOR H.S. BOLTS.
- "L-47" CUT 1/2" OFF THE END OF DIAPHRAGMS D3 & D4 NEXT TO B.S. #4. INSTALL NEW CONNECTION ANGLES 4" x 6" x 3/8" x 1'-4" AND 1/2" FILL PLATES ON THE CUT-OFF END OF DIAPHS. D3 & D4. FIELD LOCATE THE HOLES AND DRILL FOR H.S. BOLTS.
- "L-55" CUT 1" OFF THE END OF DIAPHRAGM D2 NEXT TO B.S. #2. CUT 1/2" OFF THE END OF DIAPHRAGMS D1 & D3 NEXT TO B.S. #2 & #3 RESPECTIVELY. SALVAGE AND REUSE EXISTING CONNECTION ANGLE ON DIAPH. D2 AT B.S. #2 AND USE 1/2" FILL PLATES. INSTALL NEW CONNECTION ANGLES 4" x 6" x 3/8" x 1'-4" AND 1/2" FILL PLATES ON THE CUT-OFF END OF DIAPHS. D1 & D3. FIELD LOCATE THE HOLES AND DRILL FOR H.S. BOLTS.
- "L-79" CUT 1" OFF THE END OF DIAPHRAGMS D1 & D3 NEXT TO B.S. #1 & #3. CUT 1/2" OFF THE END OF DIAPHRAGMS D2 & D4 NEXT TO B.S. #2 & #4 RESPECTIVELY. SALVAGE AND REUSE EXISTING CONNECTION ANGLE ON DIAPH. D1 & D3 AT B.S. #1 & #3 AND USE 1/2" FILL PLATES. INSTALL NEW CONNECTION ANGLES 4" x 6" x 3/8" x 1'-4" AND 1/2" FILL PLATES ON THE CUT-OFF END OF DIAPHS. D2 & D4. FIELD LOCATE THE HOLES AND DRILL FOR H.S. BOLTS.
- "L-87" CUT 1/2" OFF THE END OF DIAPHRAGMS D2 & D3 NEXT TO B.S. #2. INSTALL NEW CONNECTION ANGLES 4" x 6" x 3/8" x 1'-4" AND 1/2" FILL PLATES ON THE CUT-OFF END OF DIAPHS. D2 & D3. FIELD LOCATE THE HOLES AND DRILL FOR H.S. BOLTS.



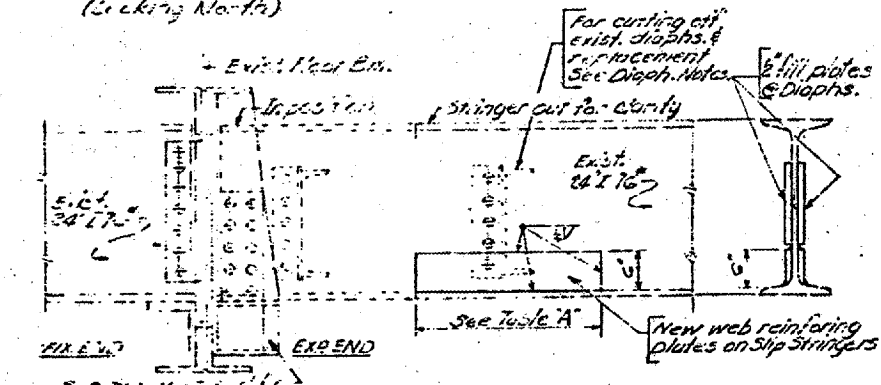
CROSS SECTION
(Looking North)

TABLE 1

Location	Diaph. No.	End
L15	D2 & D3	End
L23	D1, D3 & D4	End
L47	D3 & D4	End
L55	D2	End
L79	D1 & D3	End
L87	D2 & D3	End

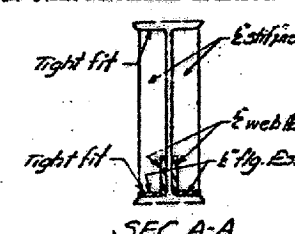
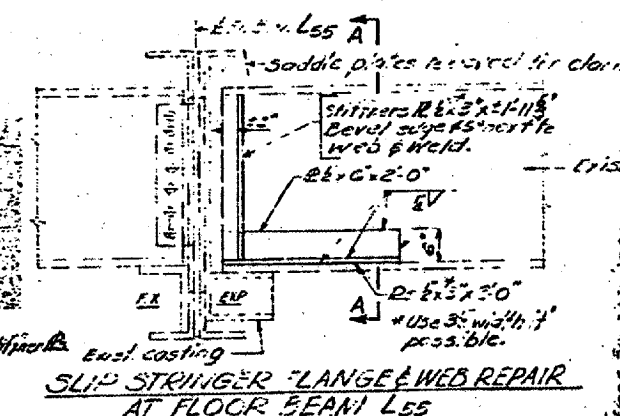
NOTE: For location of diaphragms see sheet No. 1 and for size TABLE 1.

Ball plate shall be 3/8" x 6" x 6" and shall be welded to the diaphragm at locations as indicated by the E's.

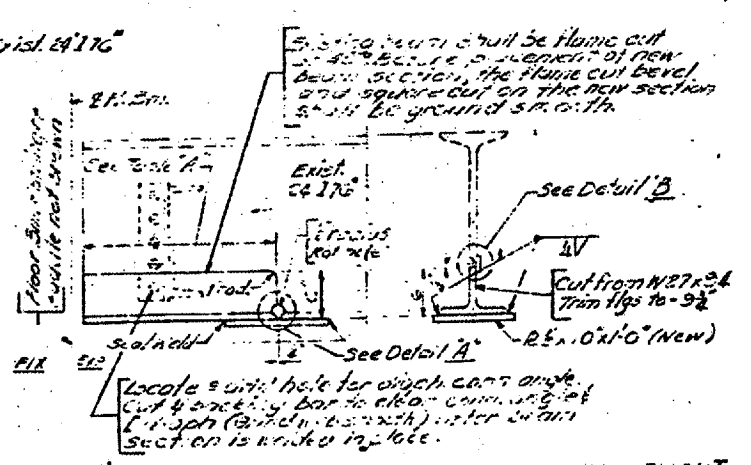


SLIP STRINGER WEB REPAIR

NOTE: For location see sheet No. 1 and for size TABLE A.

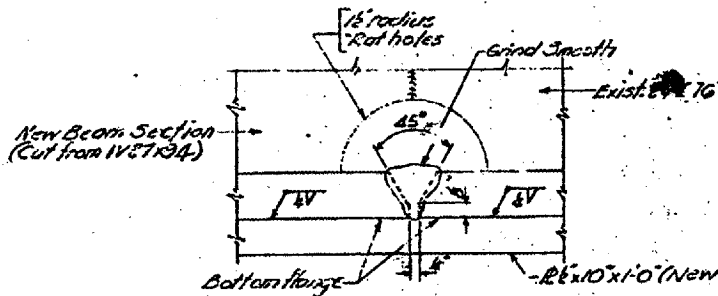


SEC. A-A



SLIP STRINGER BEAM SECTION REINFORCEMENT

NOTE: For location see sheet No. 1 and for size on this sheet. Size shown on sheet No. 1 - Flange Plan.



DETAIL A

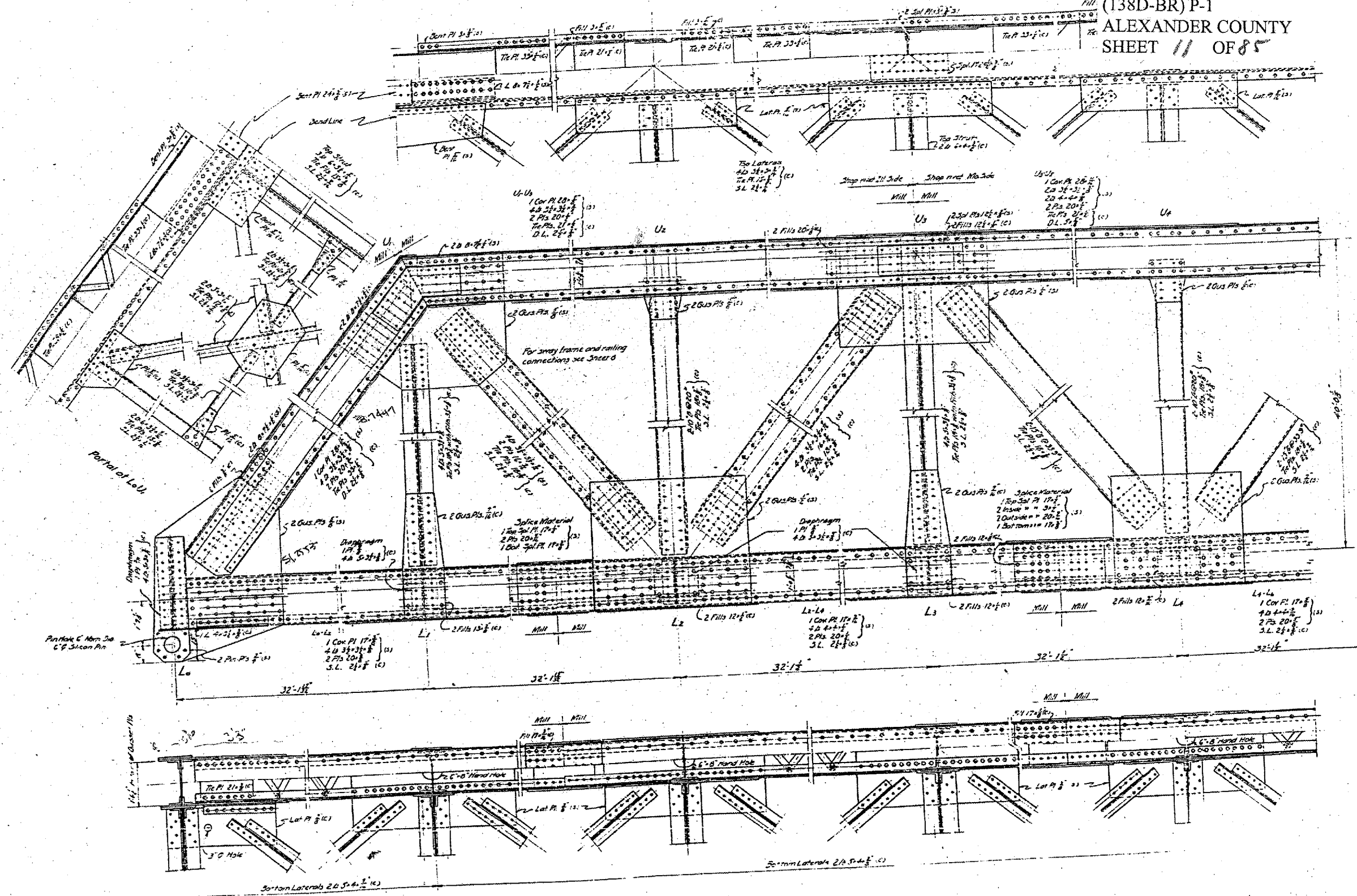
Welding shall be in accordance with the Specifications for Welded Highway and Railway Bridge, D.2.0-63, AWS

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

BRIDGE REPAIRS
MISSISSIPPI RIVER BRIDGE AT CAIRO, ILL.
ALEXANDER COUNTY

DESIGNED ENR
CHECKED APW
DRAWN ENR
CHECKED APW

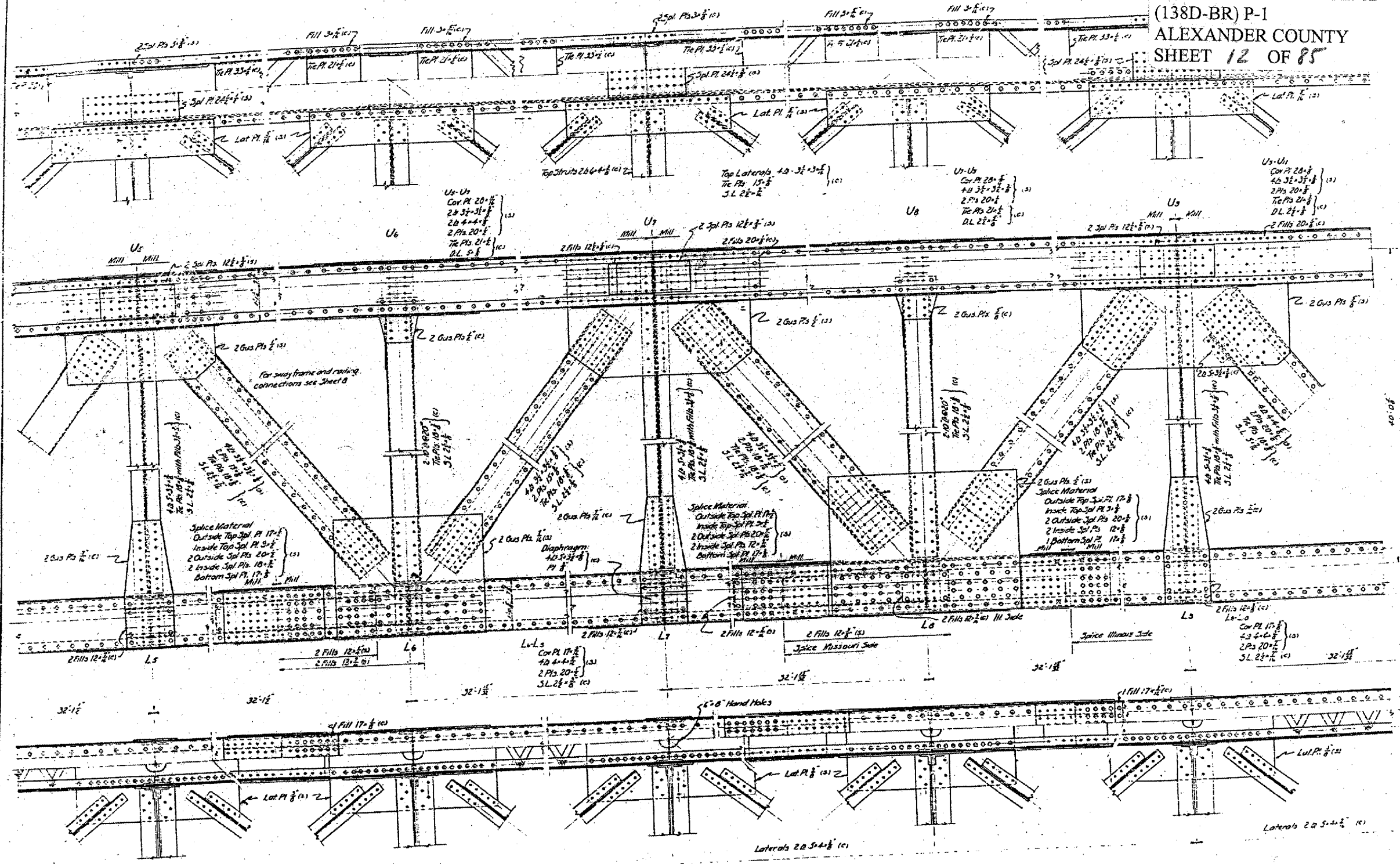
EXAMINED
PASSED
APPROVED



BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS
 385 FOOT SPAN
 SCALE 1/4" = 1'-0"
 MERRILL AND HARDESTY CONSULTING ENGINEERS
 NEW YORK CITY JULY, 1927

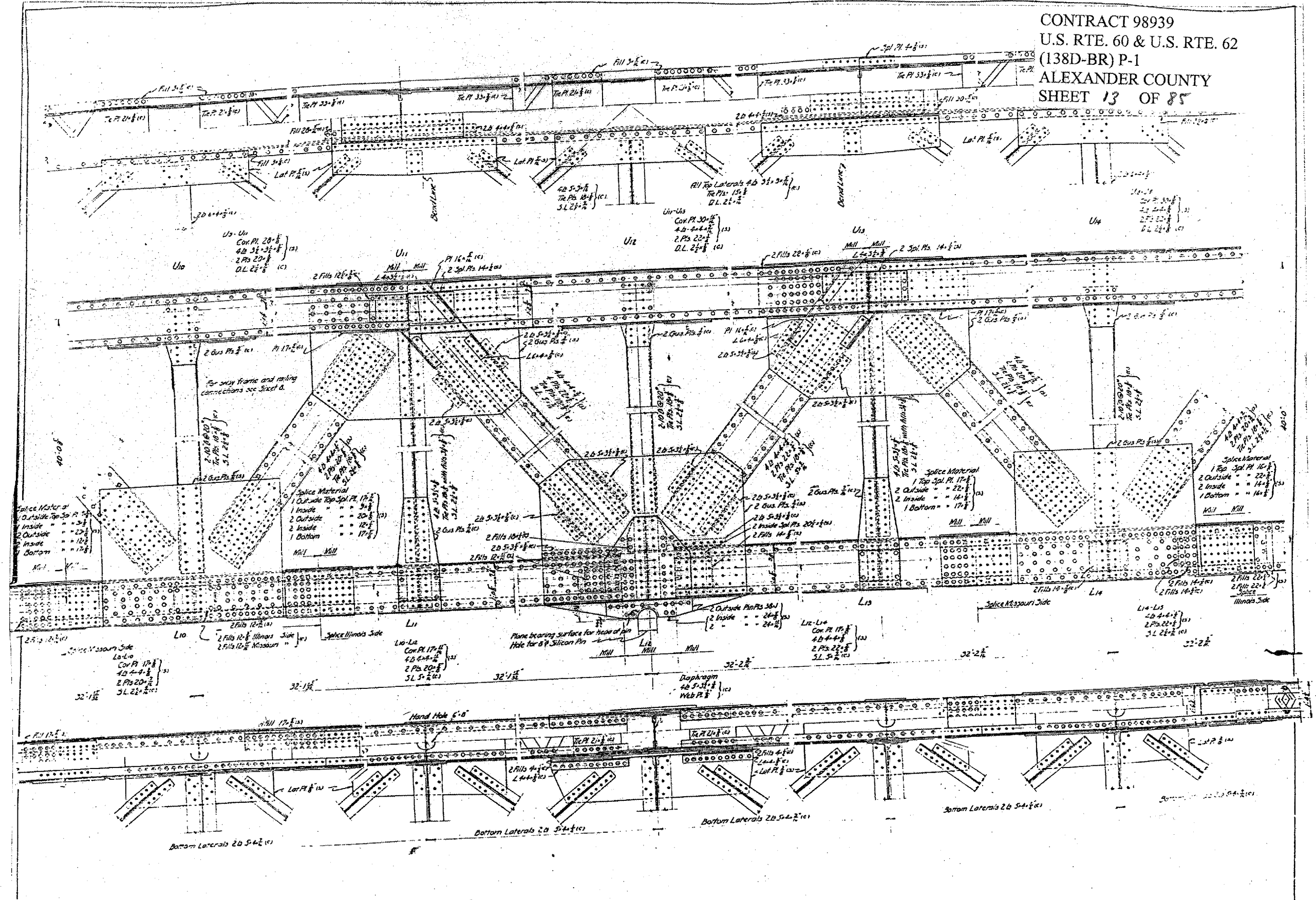
CONTRACT 98939
 U.S. RTE. 60 & U.S. RTE. 62
 (138D-BR) P-1
 ALEXANDER COUNTY
 SHEET 12 OF 85



Note
 (1) Denotes Cast
 (2) " " Steel

BRIDGE NO. 1
STRUCTURE 002-0005
 FOR INFORMATION ONLY

THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS
 385 FOOT SPAN
 Scale 1/4" = 1'-0"
 WADDELL AND HARGREAVY
 NEW YORK CITY
 JULY 5, 1927



Splice Material
 1 Outside Top Sp. Pl. 12x12
 1 Inside " " " " " "
 2 Outside " " " " " "
 1 Inside " " " " " "
 1 Bottom " " " " " "

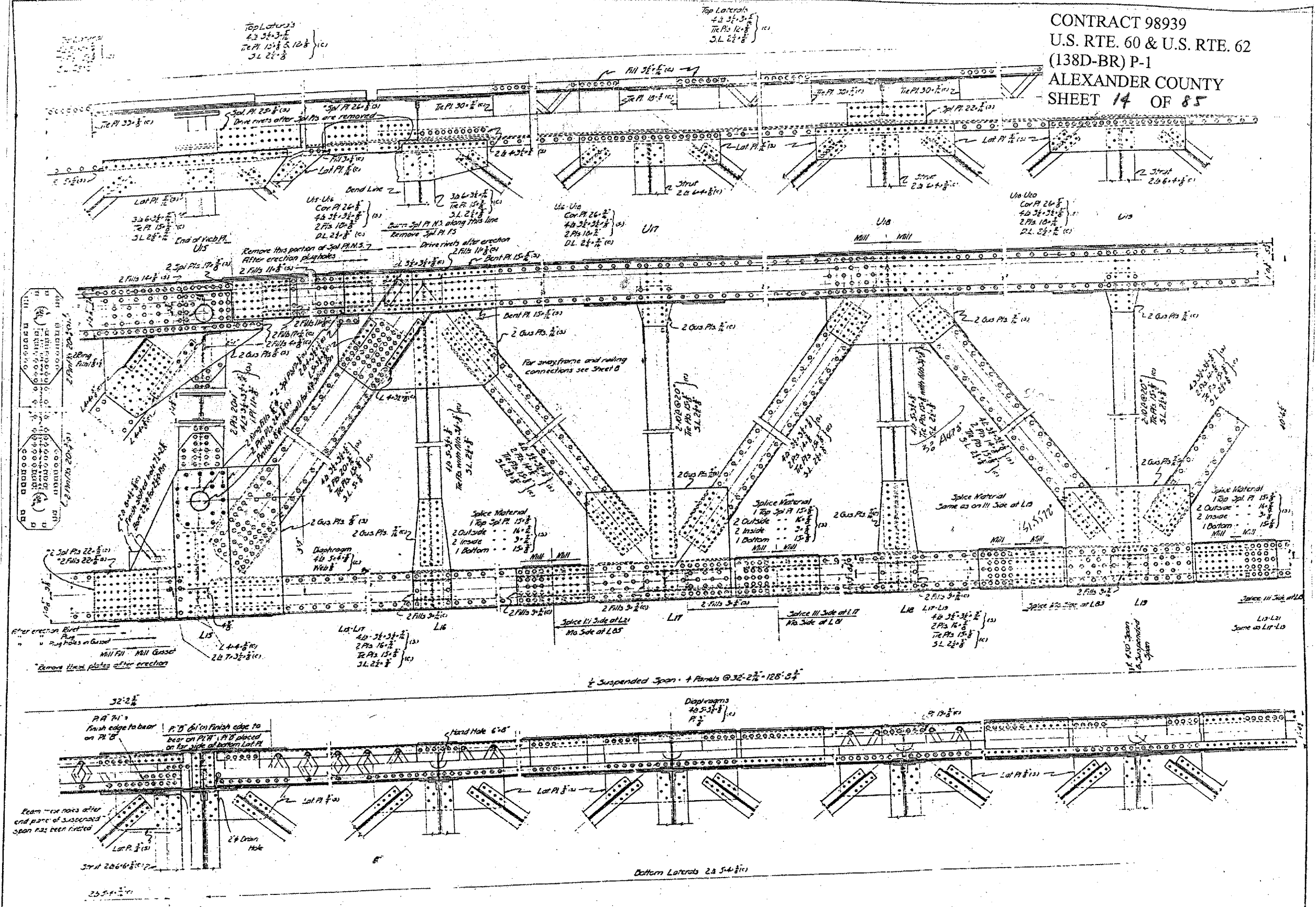
Splice Material
 1 Outside Top Sp. Pl. 12x12
 1 Inside " " " " " "
 2 Outside " " " " " "
 1 Inside " " " " " "
 1 Bottom " " " " " "

Splice Material
 1 Top Sp. Pl. 12x12
 2 Outside " " " " " "
 2 Inside " " " " " "
 1 Bottom " " " " " "

Splice Material
 1 Top Sp. Pl. 12x12
 2 Outside " " " " " "
 2 Inside " " " " " "
 1 Bottom " " " " " "

BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

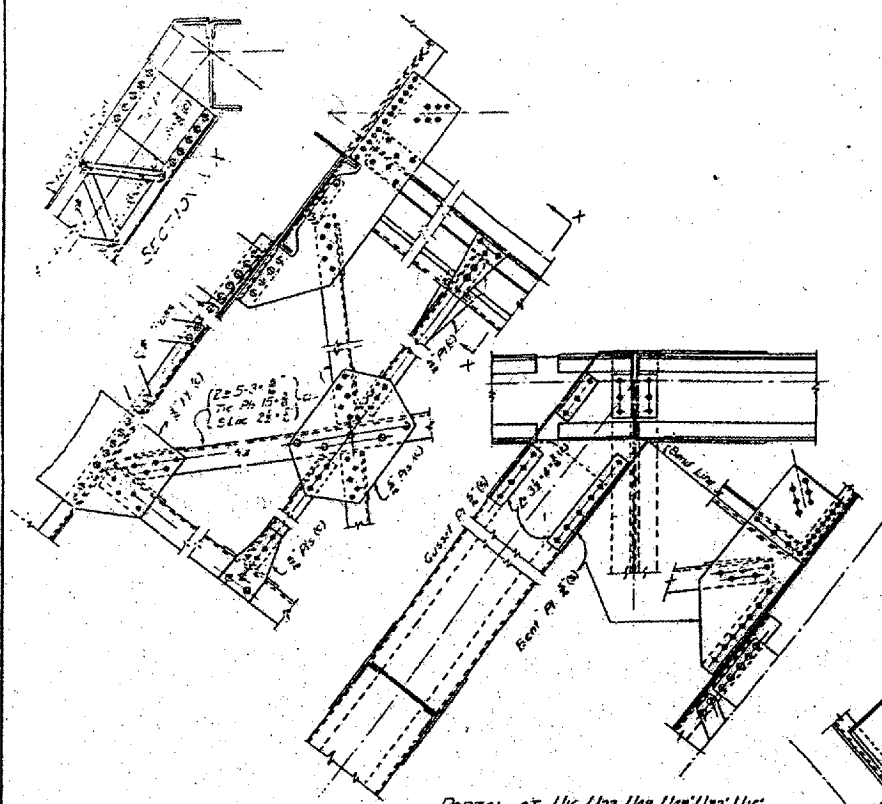
THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS
 305 FOOT ARCH AND 450 FOOT CANTILEVER SPANS
 Scale 1/4" = 1'-0"
 WADDILL AND HARDESTY CONSULTING ENGINEERS
 NEW YORK CITY JULY 14, 1927



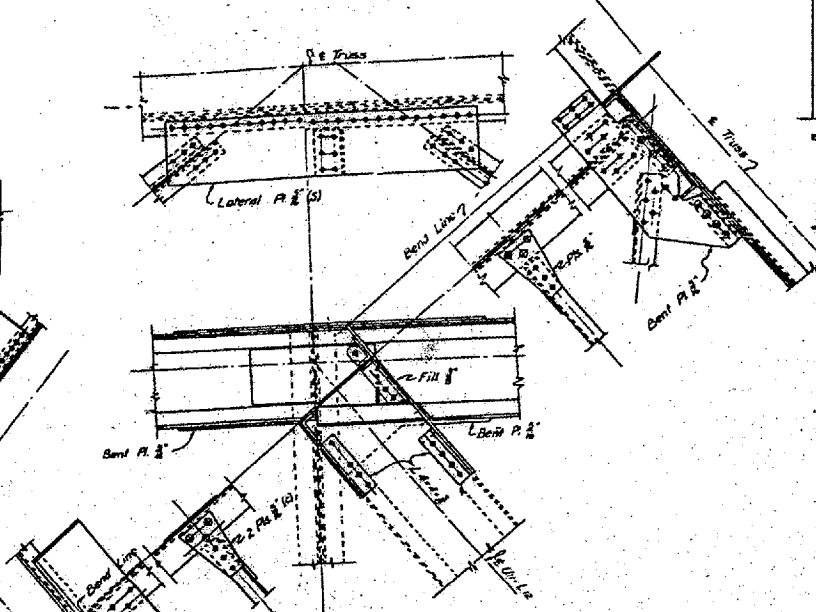
BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS
 450 FOOT CANTILEVER SPAN
 WADDELL AND HARDESTY CONSULTING ENGINEERS
 NEW YORK CITY JULY 14, 1927

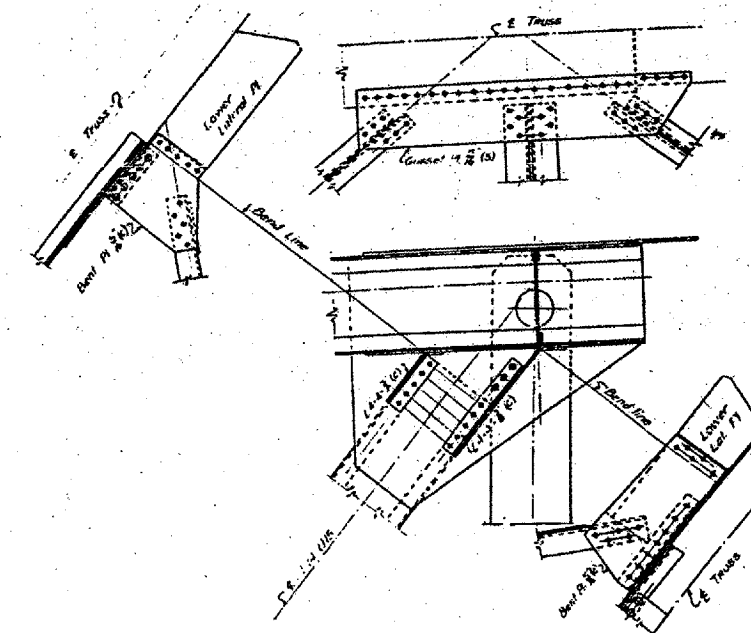
CONTRACT 98939
 U.S. RTE. 60 & U.S. RTE. 62
 (138D-BR) P-1
 ALEXANDER COUNTY
 SHEET 15 OF 85



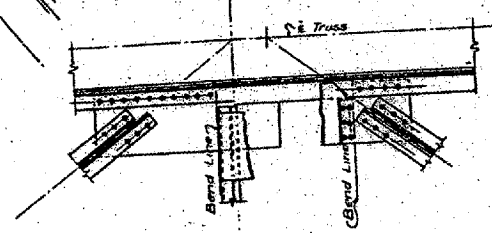
PORTAL AT U16, U22, U28, U34, U40, U46



PORTAL AT U11, U13, U15, U17
 Details not shown similar to those in portal at U16

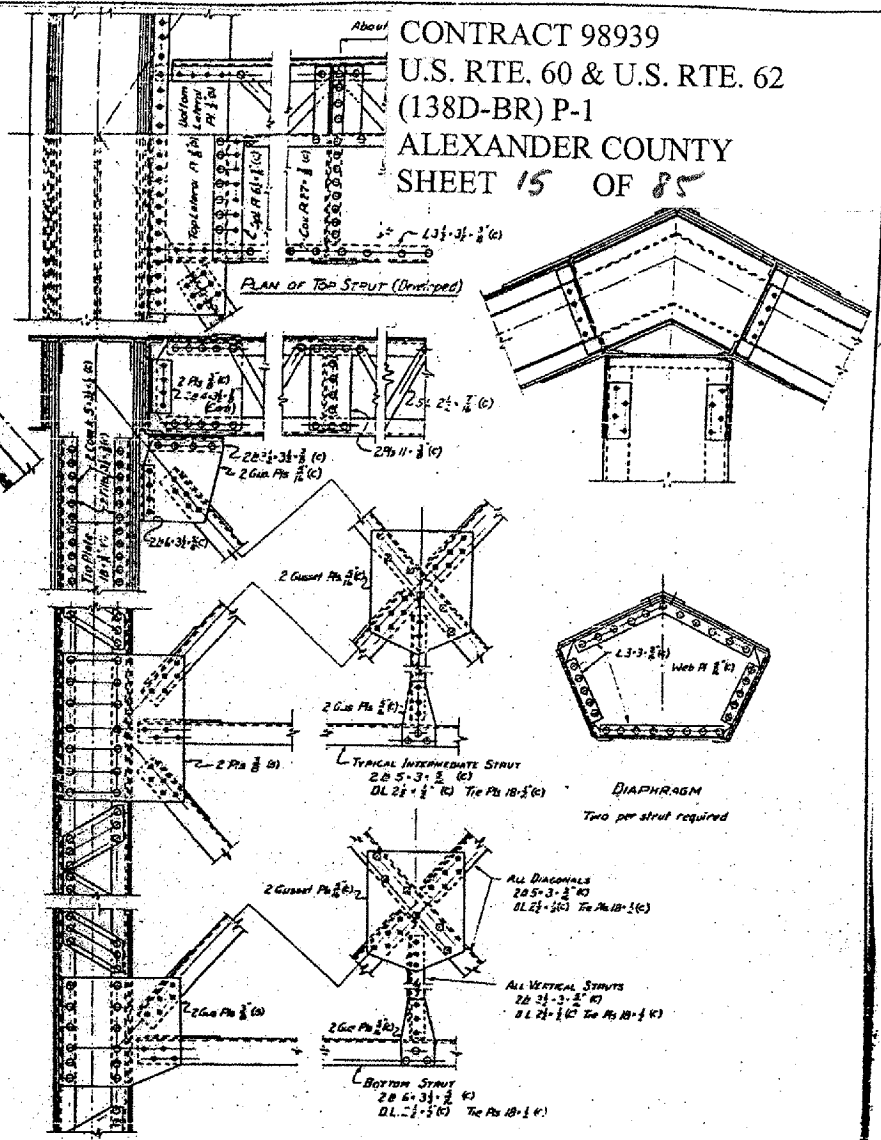


PORTAL AT U15, U15', U21, U21'

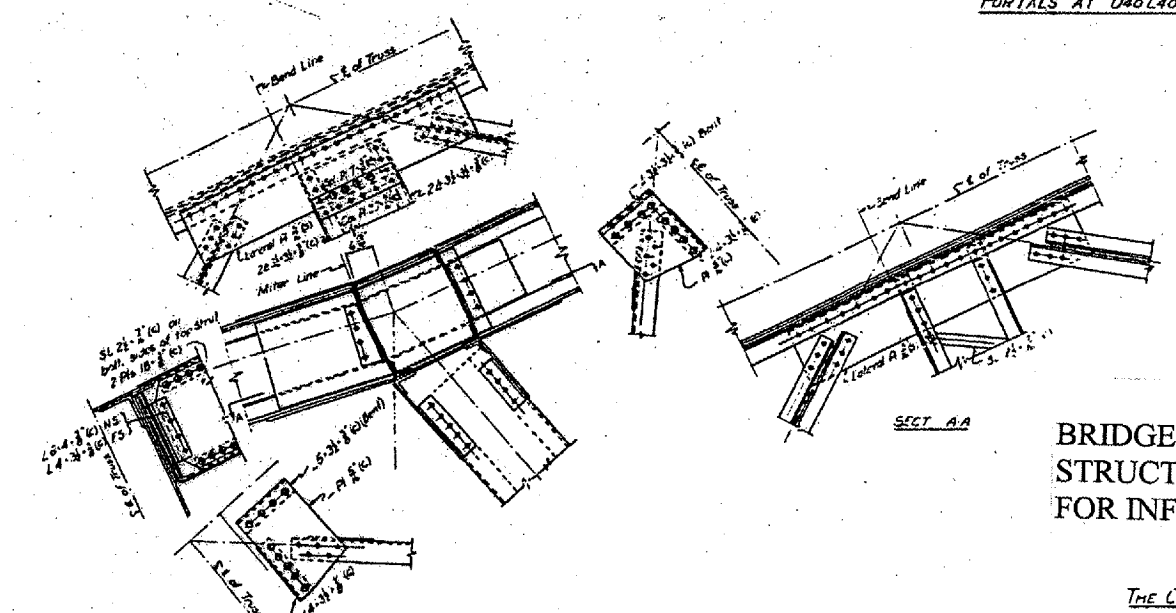


PORTALS AT U40, L40, U42, L42, U44, L44

Note: Details not shown are similar to those in portal at U16, except for the 12, 13 and the plates in the diagonals and vertical and horizontal struts. Use S.L. 24-31-2 (6) and Te. Ph. 15-3 (10).



PORTALS AT U40, L40, U42, L42



PORTALS AT U38, L40, L40, U42, U60, L62, L62, U64

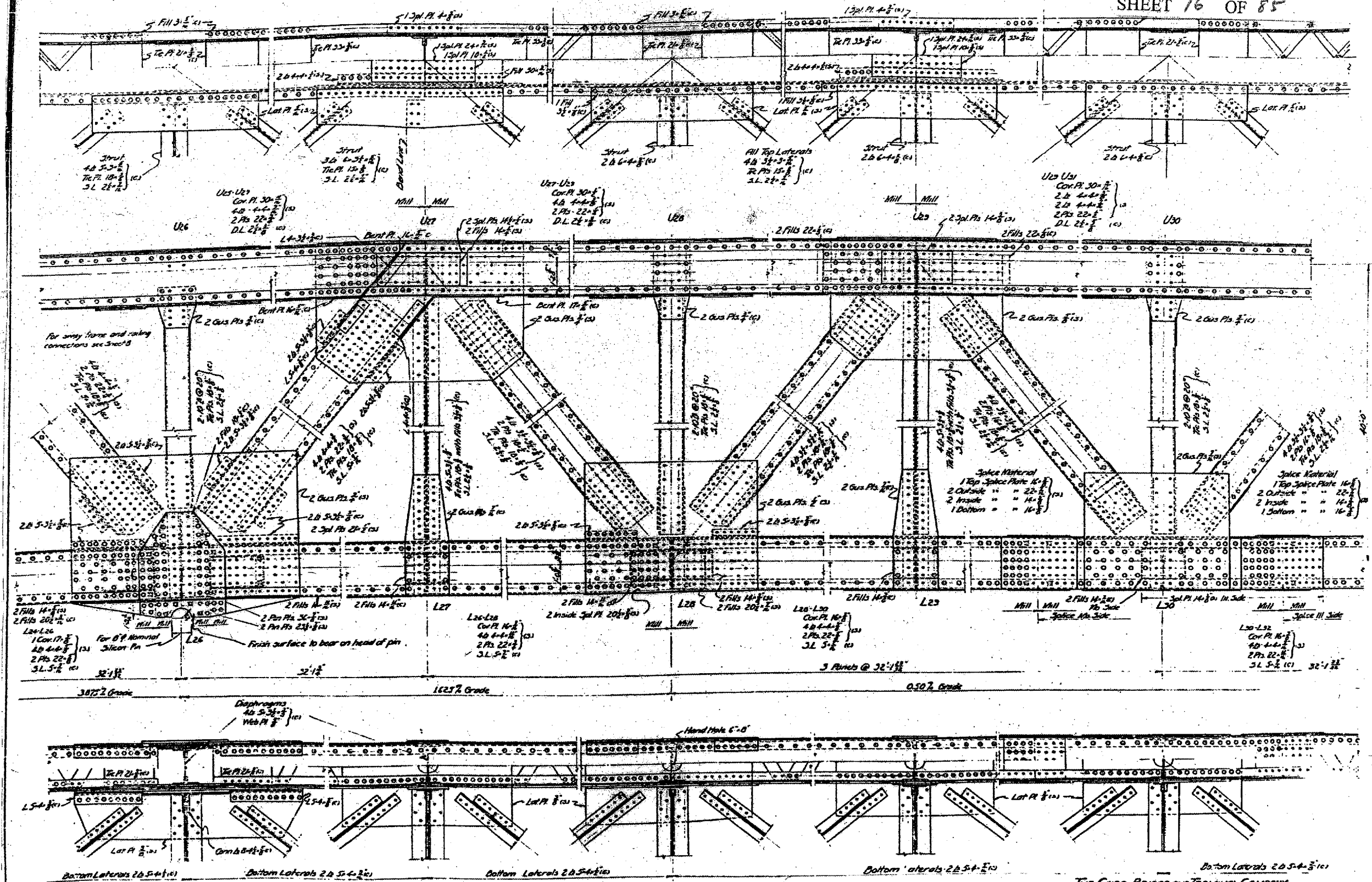
Note: Details not shown are similar to those in portal at U16, except for the 12, 13 and the plates in the diagonals and vertical and horizontal struts. Use S.L. 24-31-2 (6) and Te. Ph. 15-3 (10).

BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS

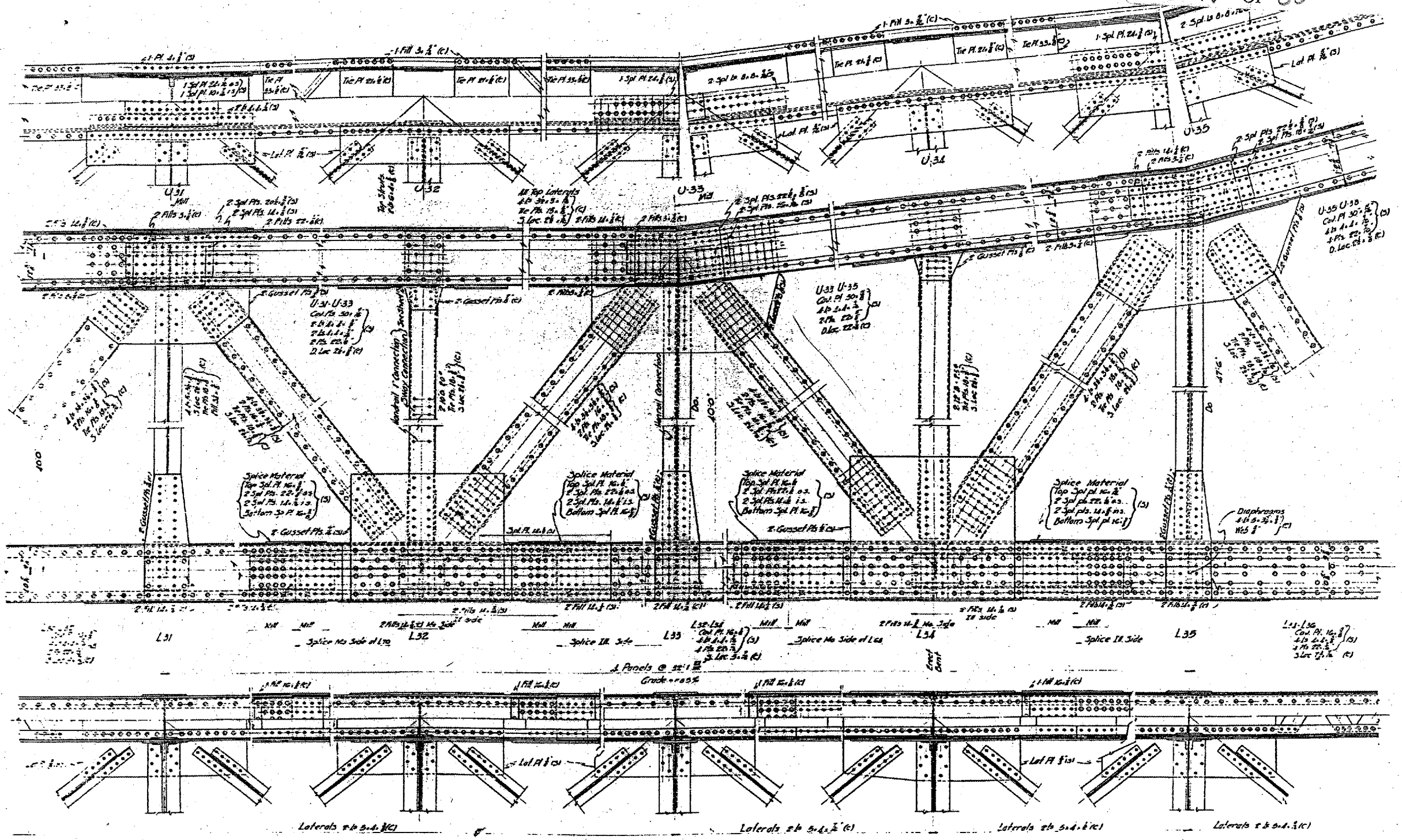
— PORTALS MAIN BRIDGE —

WADSWELL & HARDY
 NEW YORK CITY
 CONSULTING ENGINEERS
 AUG 27, 1927
 SHEET NO. 13



BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS
 450 FOOT ANCHOR ARM
 Scale 3/4" = 1'
 WADDELL AND HARDESTY CONSULTING ENGINEERS
 NEW YORK CITY JULY 26, 1927

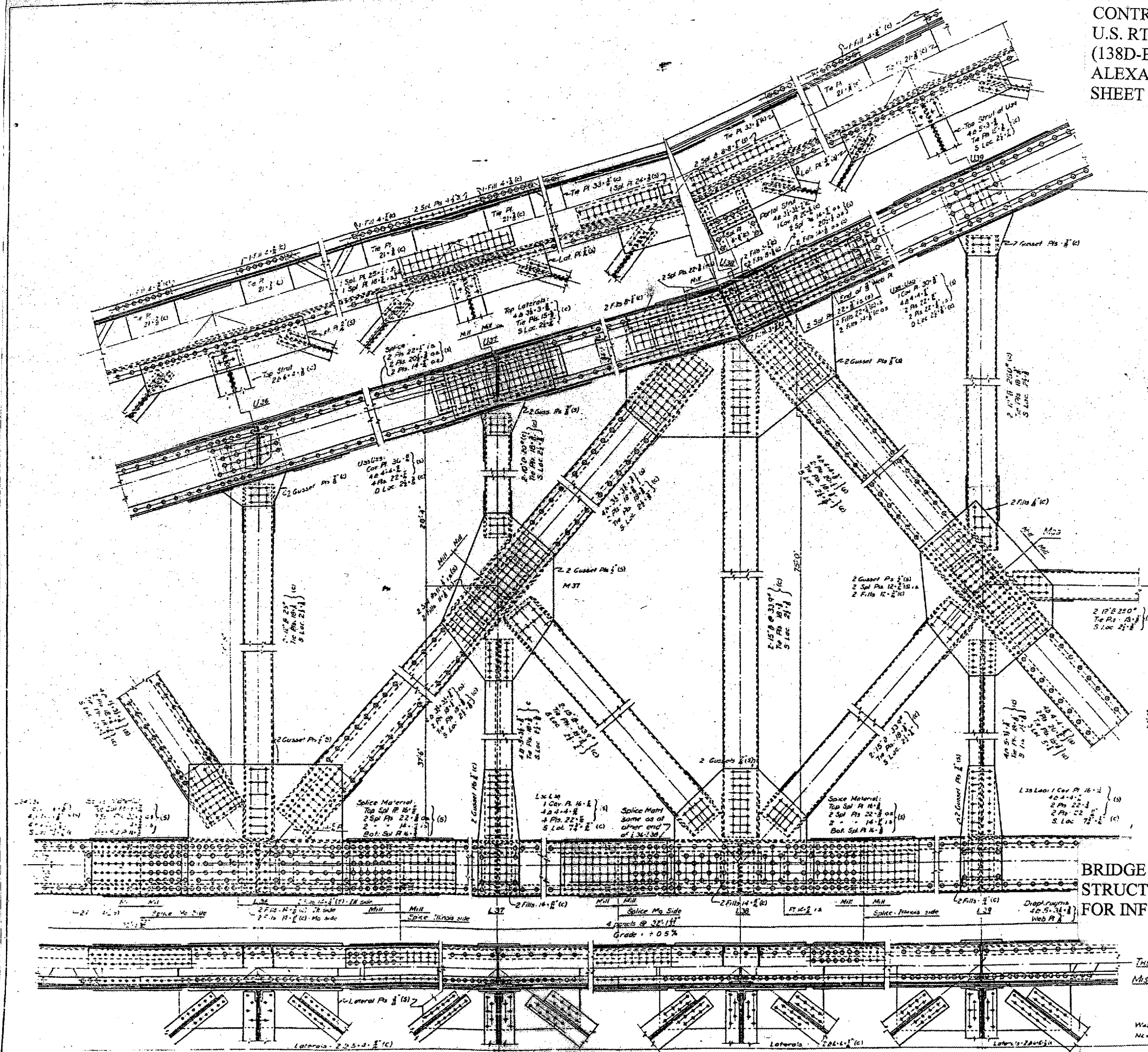


BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS
 — 450' ANCHOR ARM —

WADSWORTH & HARDESTY CONSULTING ENGINEERS
 NEW YORK CITY JULY 30 1927

CONTRACT 98939
 U.S. RTE. 60 & U.S. RTE. 62
 (138D-BR) P-1
 ALEXANDER COUNTY
 SHEET 18 OF 85

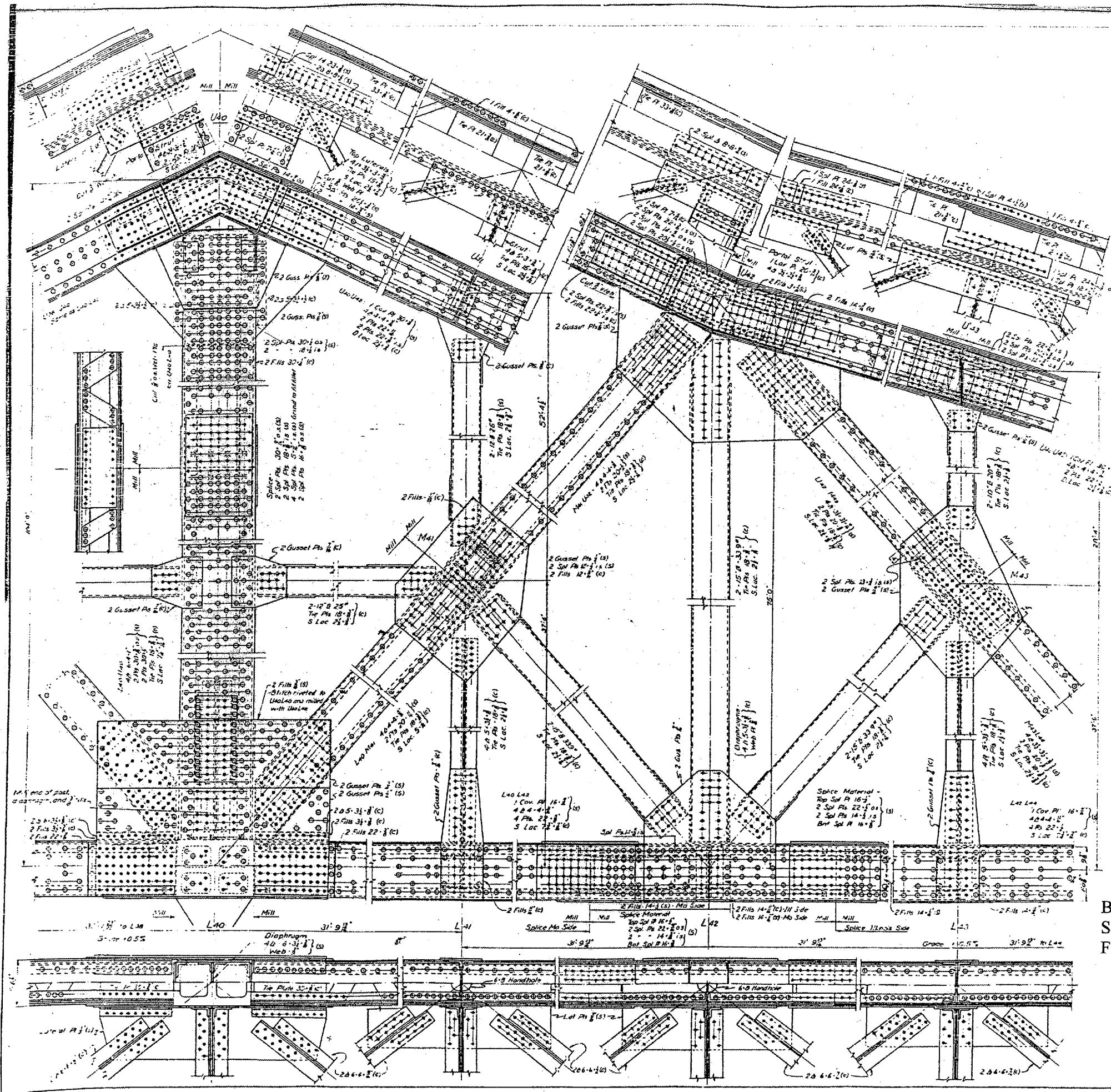


BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS

— 450' ANCHOR ARM —

WADDALL & HARDESTY
 NEW YORK CITY
 CONSULTING ENGINEERS
 AUG. 6, 1927
 SHEET 18 OF 85

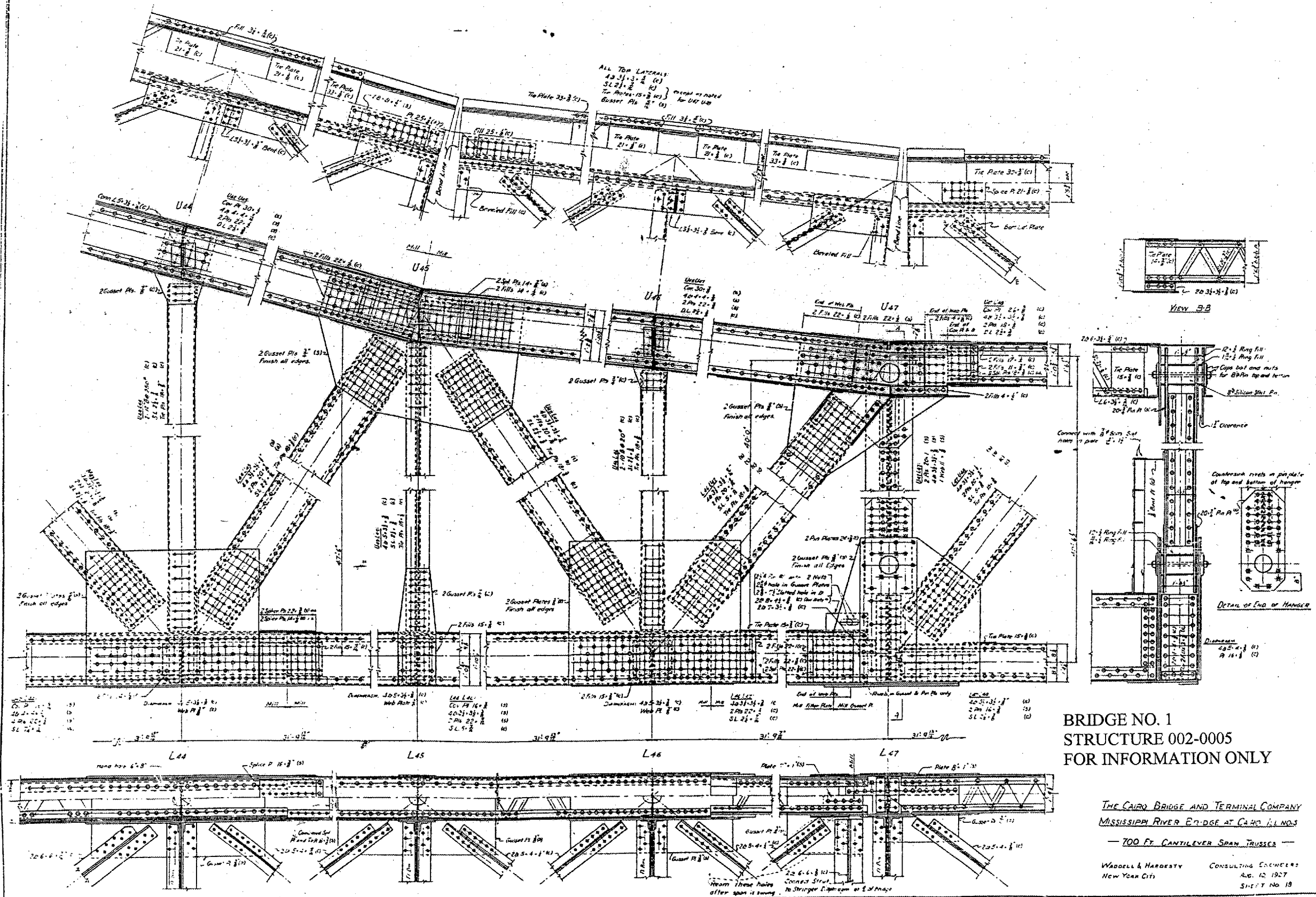


BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

THE CHIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CHIRO, ILLINOIS

— 700 FT. CHANNEL SPAN TRUSSE —

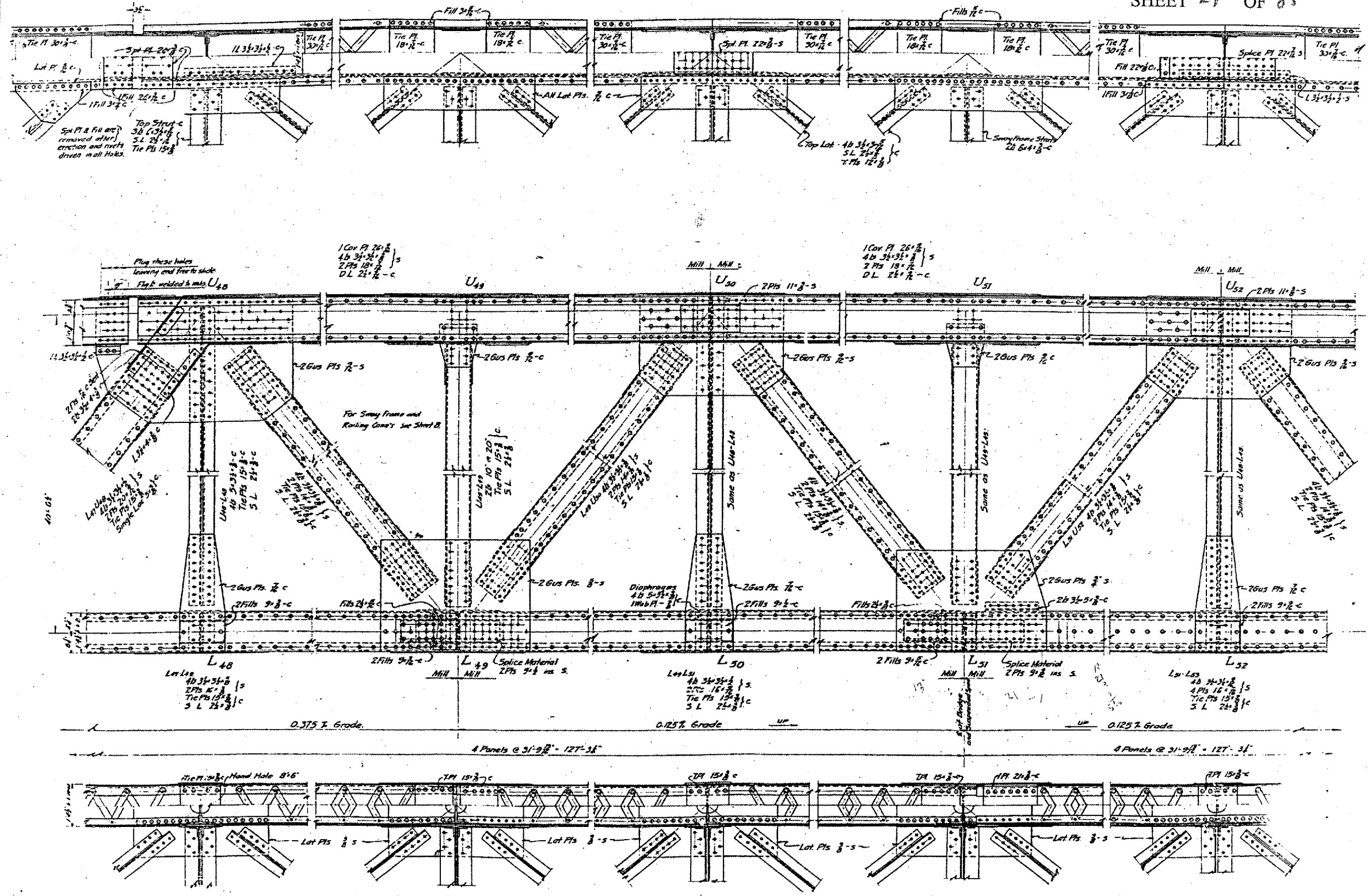
WADDELL & HARDESTY CONSULTING ENGINEERS
 NEW YORK CITY AUG. 13, 1927
 SHEET NO. 17



BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

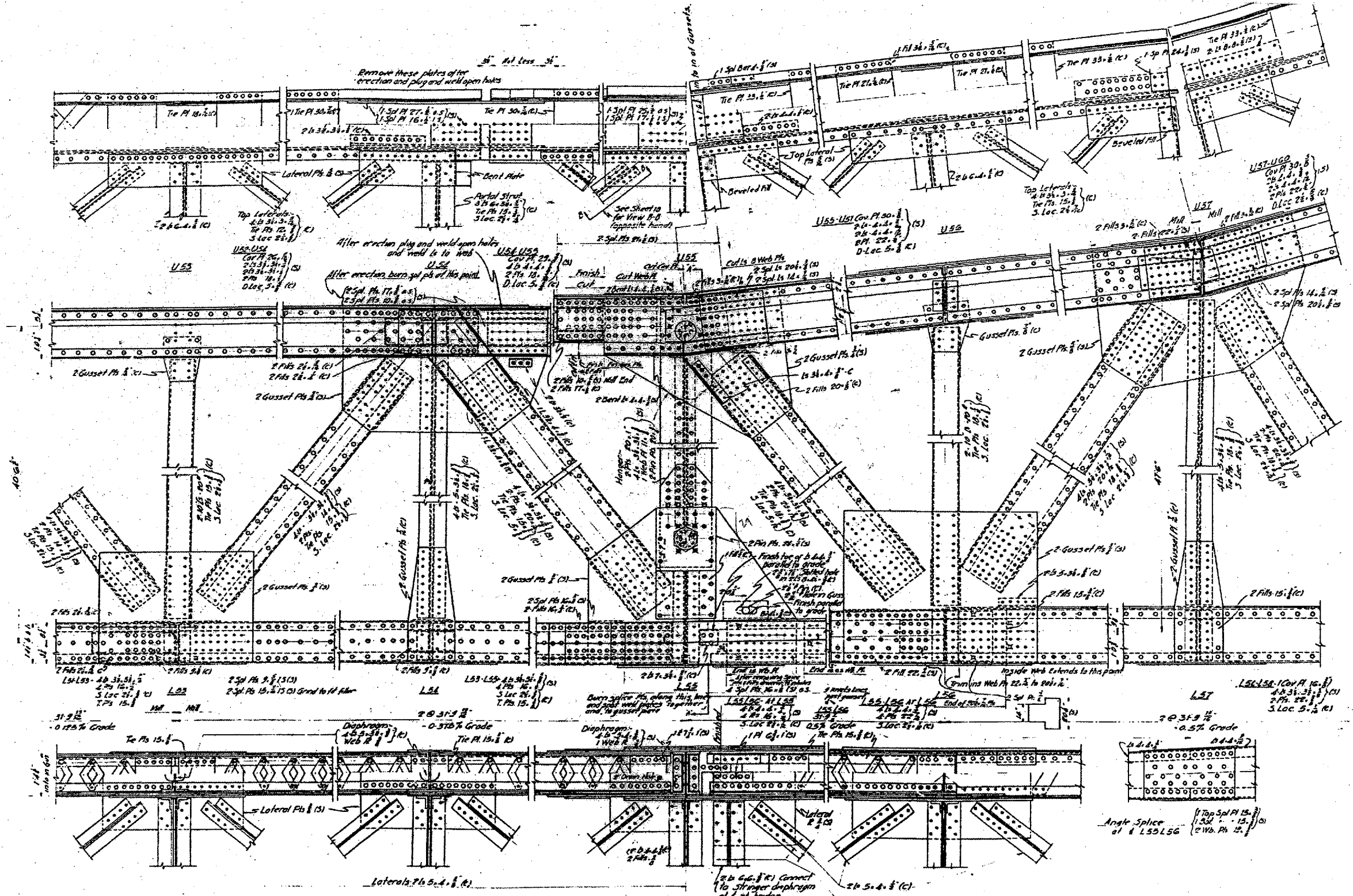
THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS
 — 700 FT. CANTILEVER SPAN TRUSSES —
 WADDELL & HARDISTY CONSULTING ENGINEERS
 NEW YORK CITY AUG. 10, 1927
 SHEET NO. 19

CONTRACT 98939
 U.S. RTE. 60 & U.S. RTE. 62
 (138D-BR) P-1
 ALEXANDER COUNTY
 SHEET 21 OF 85



BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS
 254 FT 6 1/2 IN SUSPENDED SPAN
 SCALE 3/4" = 1'-0"
 WADDELL AND HARDESTY CONSULTING ENGINEERS
 NEW YORK CITY AUGUST 16, 1927



Note: See Sheet 16 for Sec. A-A thru hanger USS L55 and for note about skewed to 2.25°

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

THE CAIRO BRIDGE AND TERMINAL COMPANY
 MISSISSIPPI RIVER BRIDGE AT CAIRO, ILLINOIS

— 700 FT. CHANNEL SPAN TRUSSES —

WADDILL & HARDESTY ENGINEERS
 NEW YORK CITY
 AUG 27 1927
 SHEET NO. 20

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

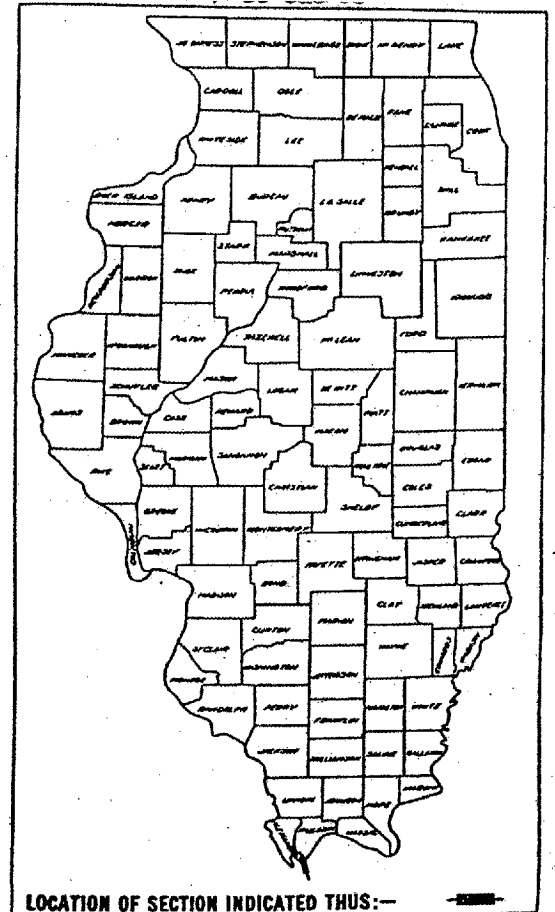
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

F.A.U.S. ROUTE 9811 (U.S. 60 & 62)
FAS ROUTE 1216

SECTION 138D-BR

ALEXANDER COUNTY, ILLINOIS
MISSISSIPPI COUNTY, MISSOURI
PROJECT BHM-BHS-5006(7)

CONTRACT 98939
U.S. RTE. 60 & U.S. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 23 OF 85



INDEX OF SHEETS SHEET NO. 2
SUMMARY OF QUANTITIES SHEET NO. 2

PREPARED BY: BRIGHTON ENGINEERING COMPANY
CONSULTING ENGINEERS
SCHAUMBURG, ILLINOIS

EXAMINED BY: *Harry D. Ross*
DISTRICT DESIGN ENGINEER

EXAMINED BY: *Ray Harris*
DISTRICT CONSTRUCTION ENGINEER

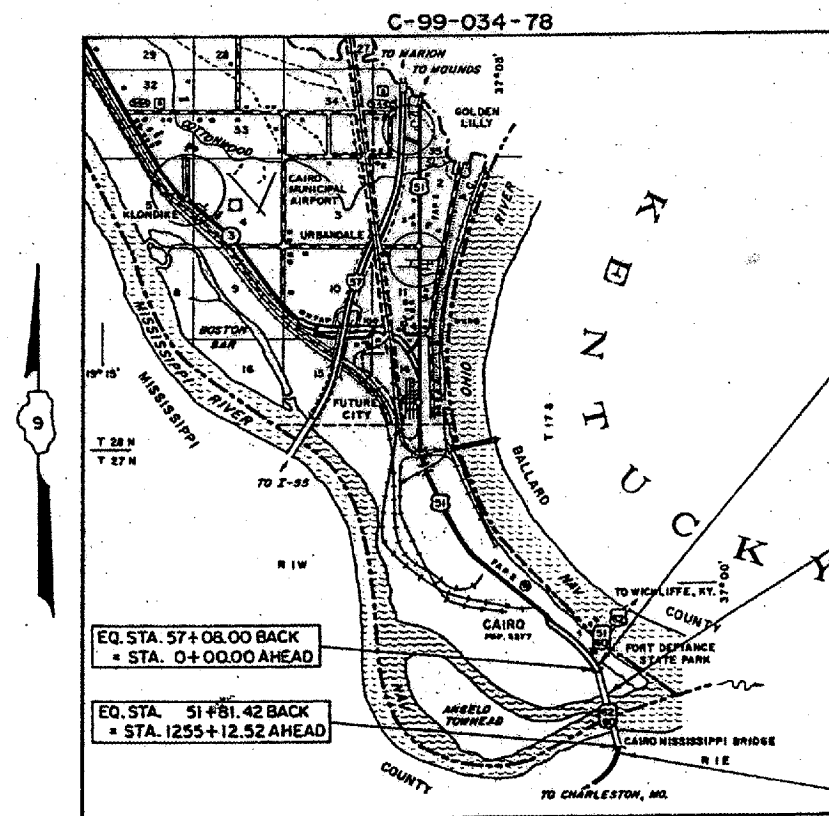
EXAMINED BY: *Carl J. Devitt*
DISTRICT MAINTENANCE ENGINEER

EXAMINED BY: *A.C. Zolialis*
DISTRICT TRAFFIC ENGINEER

EXAMINED BY: *R.S.M. Crink*
DISTRICT MATERIALS ENGINEER

EXAMINED BY: *H. Meyer*
DISTRICT LAND ACQUISITION ENGINEER

APPROVED: *August 13, 1981*
DATE
J. F. Newton
DISTRICT ENGINEER



PROPOSED IMPROVEMENT BEGINS
STATION 56+58.50

SECTION 138D-BR INCLUDES REPLACEMENT OF THE EXISTING CONCRETE DECK WITH A NEW REINFORCED CONCRETE DECK OR ALTERNATE CONCRETE FILLED STEEL GRID DECK, REPAIR & REPLACEMENT OF EXISTING FLOOR SYSTEM COMPONENTS, CONSTRUCTION OF CONCRETE CURB OR ALTERNATE STEEL CURB, CONSTRUCTION OF HANDRAILS, WATERPROOFING OF THE NEW DECK WHERE CALLED FOR ON THE PLANS AND CLEANING AND PAINTING OF THE ENTIRE BRIDGE, AND OTHER MISCELLANEOUS WORK. LENGTH OF BRIDGE (BACK TO BACK OF EXISTING ABUTMENTS) = 5181'-5"

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED: *August 13, 1981*
EXAMINED: *Oct 1, 1981*
PASSED: *Oct 1, 1981*
APPROVED: *Oct 1, 1981*

U.S. DEPARTMENT OF
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR DATE

CONTRACT NO. 34723

NET PROJECT LENGTH = 5280.42 LIN. FT. = 1.000 MILES

REEL 9-110

ALLOWABLE STRESSES		
TYPE OF STEEL	INVENTORY LEVEL (0.55F _y) PSI	OPERATING LEVEL (0.75F _y) PSI
CARBON STEEL (all except truss members, tension)	16,500	22,500
SILICON STEEL (truss members, tension)	24,750	33,750

EXISTING STRUCTURAL MEMBER RATINGS - CONCRETE FLOOR ALTERNATE									
MEMBER	SECTION CAPACITY (K-FI)		DEAD LOAD MOMENT (K-FI)	LIVE LOAD + IMPACT MOMENT (K-FI)		DEAD LOAD + LIVE LOAD + IMPACT MOMENT (K-FI)		HS RATING	
	AT INVENTORY STRESS	AT OPERATING STRESS		HS 15	HS 20	HS 15	HS 20	INVENTORY	OPERATING
APPROACH GIRDERS	878.5	1,231.5	* 313.3	369.7	492.9	683.0	806.2	HS 20	HS 20
INTERIOR TRUSS STRINGERS	404.6	580.6	* 104.1	166.2	221.6	270.3	325.7	HS 20	HS 20
INTERIOR FLOOR BEAMS	639.3	871.7	302.0	335.9	448.1	637.9	750.1	HS 15	HS 20

* Composite & Non-Composite Dead Load Moment

EXISTING STRUCTURAL MEMBER RATINGS - STEEL GRID FLOOR ALTERNATE									
MEMBER	SECTION CAPACITY (K-FI)		DEAD LOAD MOMENT (K-FI)	LIVE LOAD + IMPACT MOMENT (K-FI)		DEAD LOAD + LIVE LOAD + IMPACT MOMENT (K-FI)		HS RATING	
	AT INVENTORY STRESS	AT OPERATING STRESS		HS 15	HS 20	HS 15	HS 20	INVENTORY	OPERATING
APPROACH GIRDERS	714.8	974.8	236.4	338.9	451.8	575.3	688.2	HS 20	HS 20
INTERIOR TRUSS STRINGERS	250.2	341.2	68.2	152.4	203.1	220.6	271.3	HS 15	HS 20
INTERIOR FLOOR BEAMS	639.3	871.7	191.7	335.9	448.1	527.6	639.8	HS 20	HS 20

GENERAL NOTES:

The bridge shall be closed to traffic during bridge repair.

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 conform to AASHTO M-183, except as noted.

Estimated weight of existing structural steel to be painted = 12,530,000 Lbs. [See Spans = 1,006,000 Lbs.
Truss Spans = 11,524,000 Lbs.]

All new replacement stringers and all main structural members used for the repair of the bottom flanges and webs of the existing plate girders and stringers and top and bottom flanges and webs of the existing floor beams shall conform to the supplemental requirements for Notch Toughness, Zone 2.

Expansion bolts shall consist of approved expansion anchors, providing certified min. proof load = 4,080 lbs., and 3/4" x 12" hooked bolts.

Field welding of construction accessories will not be permitted to the bottom flanges of stringers and plate girders and top and bottom flanges of the floor beams. Field welding of construction accessories in other areas will be permitted only when approved by the Engineer.

All construction operations in or over the river shall conform to the requirements of the Special Provision for PROTECTION TO NAVIGATION.

The basic lead Silica Chromate Paint System shall be used for shop and field painting of all new and existing Structural Steel, including curb plates, floor drains and Filled Steel Grid Floor as specified.

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.

Loosen the utilities on the bridge and move them so that sand blasting and painting can be performed properly.

The U.S.G.S. Bench Marks described on Sheet 6 are to be destroyed and reset by I.D.O.T. District Forces.

Any reference to a Standard in these plans shall be interpreted to mean the edition as indicated by the sub-number listed in the Index of Sheets or the copy of the Standard included in these plans.

Existing Name Plates shall be salvaged, cleaned and placed below new name plates.

The Grid Units including Curb Plates shall be AASHTO M-183. A 12" x 12" specimen shall be submitted for approval prior to mass fabrication of the grid units. (See Special Provision)

Shop drawing will not be required except for Steel Grid Floor & Slip Stringer Spans. Fasteners shall be High Strength Bolts, Bolts 5/8" Ø, Open Holes 1 1/8" Ø, unless otherwise noted.

All Existing Structural Steel in Truss Spans shall be cleaned by Method I (±10 feet above the deck to low steel), by Method II for the remaining truss members (±10 feet above) and painted.

All existing Structural Steel in approach spans shall be cleaned by Method I and painted.

Existing Structural Steel to be cleaned by Method I shall be given three full coats of paint.

Existing Structural Steel to be cleaned by Method II shall be spot painted and given two full coats of paint.

The exposed underside of the Filled Steel Grid Floor below the form pans, and all curb plates, riser beams, riser tubes and shims, and railing support brackets shall be painted as specified above, except shop coats may be applied in the field to avoid interference with welding.

BEAM MOMENT TABLE - HS 15 LIVE LOAD							BEAM MOMENT TABLE - HS 20 LIVE LOAD						
CONCRETE FLOOR ALTERNATE			MAXIMUM AT E OF SPAN	STEEL GRID FLOOR ALTERNATE			CONCRETE FLOOR ALTERNATE			MAXIMUM AT E OF SPAN	STEEL GRID FLOOR ALTERNATE		
APPROACHES	MAIN TRUSS			APPROACHES	MAIN TRUSS		APPROACHES	MAIN TRUSS			APPROACHES	MAIN TRUSS	
INTERIOR GIRDER (COMPOSITE)	INTERIOR STRINGER (NON COMPOSITE)	FLOOR BEAM (NON COMPOSITE)	INTERIOR GIRDER (NON COMPOSITE)	INTERIOR STRINGER (NON COMPOSITE)	FLOOR BEAM (NON COMPOSITE)	INTERIOR GIRDER (COMPOSITE)	INTERIOR STRINGER (NON COMPOSITE)	FLOOR BEAM (NON COMPOSITE)	INTERIOR GIRDER (NON COMPOSITE)	INTERIOR STRINGER (NON COMPOSITE)	FLOOR BEAM (NON COMPOSITE)		
11,400	2,180	9,150	I _s (in. ⁴)	11,400	2,180	9,150	11,400	2,180	9,150	I _s (in. ⁴)	11,400	2,180	9,150
26,486	9,049	—	I _c (in. ⁴)	—	—	—	26,486	9,049	—	I _c (in. ⁴)	—	—	—
520	182	465	S _s (in. ³)	520	182	465	520	182	465	S _s (in. ³)	520	182	465
706	352	—	S _c (in. ³)	—	—	—	706	352	—	S _c (in. ³)	—	—	—
0.697	0.663	4.412	Q (K/ft)	0.639	0.533	2.801	0.697	0.663	4.412	Q (K/ft)	0.639	0.533	2.801
257.8	84.9	302.0	M _Q (IK)	236.4	68.2	191.7	257.8	84.9	302.0	M _Q (IK)	236.4	68.2	191.7
5.95	5.60	—	f _s -non-comp. (ksi)	—	—	—	5.95	5.60	—	f _s -non-comp. (ksi)	—	—	—
0.150	0.150	—	S _Q (K/ft)	—	—	—	0.150	0.150	—	S _Q (K/ft)	—	—	—
55.5	19.2	—	M _{SQ} (IK)	—	—	—	55.5	19.2	—	M _{SQ} (IK)	—	—	—
289.1	127.9	258.4	M _L (IK)	265.0	117.2	258.4	385.4	170.5	344.7	M _L (IK)	353.3	156.2	344.7
80.6	38.3	77.5	M _{IMP} (IK)	73.9	35.2	77.5	107.5	51.1	103.4	M _{IMP} (IK)	98.5	46.9	103.4
425.2	185.4	637.9	TOTAL (IK)	575.3	220.6	527.6	548.4	240.8	750.1	TOTAL (IK)	688.2	271.3	639.8
7.22	6.32	—	f _s -comp. (ksi)	—	—	—	9.32	8.20	—	f _s -comp. (ksi)	—	—	—
13.17	11.92	16.46	f _s TOTAL (ksi)	13.28	14.55	13.62	15.27	13.80	19.36	f _s TOTAL (ksi)	15.88	17.89	16.51
31.3	27.2	—	VR (K)	—	—	—	41.7	36.2	—	VR (K)	—	—	—

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing f_s TOTAL.
I_c and S_c are the moment of inertia and section modulus of the composite section used in computing f_s TOTAL.
VR is the maximum 1/4 + impact shear range in span.

DESIGNED <i>(Signature)</i>
CHECKED <i>R.F.C.</i>
DRAWN <i>A.B.</i>
CHECKED <i>R.F.C./F.S.</i>

STATION 28+13.08
REBUILT 198
BY STATES OF
ILLINOIS AND MISSOURI
F.A.U.S. RTE. 9811 SEC. 138D-BR
PROJ. BHM - BHS-5006(7)
LOADING HS
STRUCTURE NO. 002-0005

BRIDGE NAME PLATE
SEE STANDARD 2113

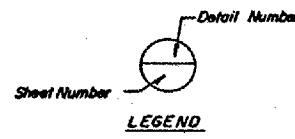
BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

GENERAL NOTES
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

ILLINOIS APPROACH - PLATE GIRDER REPAIR SCHEDULE

SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				REMARKS	SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE	
21 N	N. ABUT. TO 20 N	Sole plate and outside flange angle have 1/8" pack rust in between them at North Abutment. See Note "4", This Sheet.	Sole plate and outside flange angle have 1/8" pack rust in between them at North Abutment. See Note "4", This Sheet.	Sole plate and outside flange angle have 1/8" pack rust in between them at North Abutment. See Note "4", This Sheet.	Sole plate and outside flange angle have 1/8" pack rust in between them at North Abutment. See Note "4", This Sheet.		18 N	18 N TO 17 N	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 17 N. See Note "2", This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" pack rust in between them at Pier 17 N. See Note "2", This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" pack rust in between them at Pier 17 N. See Note "2", This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" pack rust in between them at Pier 17 N. See Note "2", This Sheet.	
		Sole plate and inside flange angle have 1/8" pack rust in between them at Pier 20 N. See Note "2", This Sheet.	Sole plate and inside flange angle have 1/8" pack rust in between them at North Abutment. See Note "4", This Sheet.	Sole plate and inside flange angle have 1/8" pack rust in between them at Pier 20 N. See Note "2", This Sheet.	Sole plate and outside flange angle have 1/8" pack rust in between them at Pier 20 N. See Note "2", This Sheet.				Sole plate and inside bottom flange angle have 1/8" pack rust in between them at Pier 18 N. See Note "1", This Sheet.	Sole plate and outside bottom flange angle have 1/8" pack rust in between them at Pier 18 N. See Note "1", This Sheet.	Sole plate and outside bottom flange angle have 1/8" pack rust in between them at Pier 18 N. See Note "1", This Sheet.	Sole plate and outside bottom flange angle have 1/8" pack rust in between them at Pier 18 N. See Note "1", This Sheet.	The web has a hole near the bottom between stiffener #1 and the end. See Note "3", This Sheet.
20 N	20 N TO 19 N	Sole plate and outside bottom flange angle have 1/8" to 1/4" loss at top adjacent to sole plate at Pier 20 N. See Note "2", This Sheet.	Inside and outside bottom flange angles have 1/8" to 3/16" loss at top adjacent to sole plate at Pier 20 N. See Note "2", This Sheet.	Outside bottom flange angle has 3/16" loss at bottom adjacent to sole plate at Pier 20 N. See Note "2", This Sheet.	Inside and outside bottom flange angles have 1/8" to 3/16" loss at top adjacent to sole plate at Pier 20 N. See Note "2", This Sheet.		17 N	17 N TO 16 N	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	
		Outside bottom flange angle has 1/8" to 3/16" loss between stiffeners #13 and #14 at top. See Note "3", This Sheet.	Inside and outside bottom flange angles have 1/8" loss at bottom adjacent to sole plate at Pier 20 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" to 3/16" loss between stiffeners #13 and #14 at top. See Note "3", This Sheet.	Outside bottom flange angle has 1/8" to 3/16" loss between stiffeners #13 and #14 at top. See Note "3", This Sheet.				Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Upstream - Inside Girder: A = 34 1/2" for Detail "6" N = 5
19 N	19 N TO 18 N	Sole plate and outside bottom flange angle have 1/8" loss at top adjacent to sole plate at Pier 19 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top adjacent to sole plate at Pier 19 N. See Note "2", This Sheet.	Inside bottom flange angle has 1/8" loss at top adjacent to sole plate at Pier 19 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top adjacent to sole plate at Pier 19 N. See Note "2", This Sheet.		17 N	17 N TO 16 N	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	
		Outside bottom flange angle has 1/8" loss at top adjacent to sole plate at Pier 19 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top adjacent to sole plate at Pier 19 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top adjacent to sole plate at Pier 19 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top adjacent to sole plate at Pier 19 N. See Note "2", This Sheet.				Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/4" loss at bottom adjacent to sole plate at Pier 17 N. See Note "2", This Sheet.	Downstream - Inside Girder: A = 34 1/2" for Detail "6" N = 5

- NOTES:
- Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Seal bearing using Fixed Bearing Repair Detail, Sheet 31.
 - Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Expansion bearing is being replaced. See Bearing Repair Schedule, Sheets 28-30 and Expansion Bearing Replacement Details, Sheet 32.
 - Clean and remove all rust, foreign material and old paint down to the bare metal. Cost incidental to "Cleaning and Painting."
 - Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Abutment bearing is being replaced. See Bearing Repair Schedule, Sheets 28-30 and Abutment Bearing Replacement Details, Sheet 31.



NOTE: Work This Sheet with Sheets 25 thru 32.

DESIGNED *[Signature]*
CHECKED R.F.C.
DRAWN *[Signature]*
CHECKED R.S.-R.F.C.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

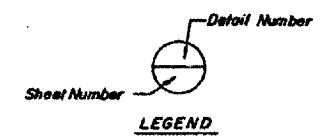
ILLINOIS APPROACH SPANS
GIRDER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

ILLINOIS APPROACH - PLATE GIRDER REPAIR SCHEDULE

SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				REMARKS	SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				REMARKS
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE	
16 N	16 N TO 15 N	Sole plate and inside bott. flange angle have pack rust in between them at Pier 16 N. See Note "1", This Sheet.	Sole plate and outside bottom flange angle have pack rust in between them at Pier 16 N. See Note "1", This Sheet.	Sole plate and inside bott. flange angle have pack rust in between them at Pier 16 N. See Note "1", This Sheet.	Sole plate and outside bott. flange angle have pack rust in between them at Pier 16 N. See Note "1", This Sheet.	Upstream Girder: A = 34 1/2" for Detail "6" N = 5	14 N (CONT.)	14 N TO 13 N	Outside bott. flange angle has 4" to 3/8" loss at top between stiffener #15 and the end. For repair, see detail (26)	Inside bott. flange angle has 4" to 1/16" total loss at top and bott. between stiff #15 and the end. See above for repair.	Outside bott. flange angle has 4" to 3/8" loss at top and bottom between stiffener #1 and the end. For repair, see detail (27)	Outside bott. flange angle has 1/4" to 3/8" loss at top and bott. between stiffener #1 and the end. For repair, see detail (27)	Downstream Girder: A = 28 1/2" for Detail "6" N = 4
		Outside bott. flange angle has 3/16" loss btwn. stiff. 1-2, 1/8" loss btwn. stiff. 15-End at bottom. See Note "3", This Sheet.	Outside stiffener #2 has 4" loss of section at bottom. See Note "3", This Sheet.	Outside top flange angle has 1/8" loss at top between stiffener #1 and the end. See Note "3", This Sheet.	Outside top flange angle has 1/8" loss at top between stiffener #1 and the end. See Note "3", This Sheet.								
		Outside bottom flange angle has 3/16" loss btwn. stiff. 6-7, 8-9 & 11-13 at top. See Note "3", This Sheet.	Inside and outside bottom flange angles have 4" loss at top btwn. stiffener #1 and the end. See Note "3", This Sheet.	Inside bott. flange angle has 1/8" loss at top between stiffener #1 and the end. See Note "3", This Sheet.	Outside bott. flange angle has 3/16" total loss at top and bott. btwn. stiffener #1 and the end. See Note "3", This Sheet.								
		Outside bott. flange angle has 1/8" loss btwn. stiff. 1-2, 3-5, 7-8, 9-10 & 11-12. 1/16" loss btwn. stiff. 13-14 at top. See Note "3", This Sheet.	Outside stiffener #2 has 4" loss of section at bottom. See Note "3", This Sheet.	Inside top flange angle has 1/8" loss at top between stiffener #1 and the end. See Note "3", This Sheet.	Sole plate and outside bott. flange angle have pack rust in between them at Pier 15 N. See Note "1", This Sheet.								
15 N	15 N TO 14 N	The outside bott. flange angle is thin at expansion slot at Pier 14 N. See Note "3", This Sheet.	Sole plate and outside bott. flange angle have pack rust in between them at Pier 14 N. See Note "1", This Sheet.	Inside top flange angle has 1/8" loss at top between stiffener #1 and the end. See Note "3", This Sheet.	Sole plate and outside bott. flange angle have pack rust in between them at Pier 14 N. See Note "1", This Sheet.	Downstream - Inside Girder: A = 34 1/2" for Detail "6" N = 5 Downstream Girder: A = 40 1/2" for Detail "6" N = 6	13 N	13 N TO 12 N	Sole plate and inside and outside bott. flange angles have 1/8" pack rust in between them at Pier 13 N. See Note "1", This Sheet.	Sole plate and inside and outside bott. flange angles have 1/8" pack rust in between them at Pier 13 N. See Note "1", This Sheet.	Sole plate and inside and outside bott. flange angles have 1/8" pack rust in between them at Pier 13 N. See Note "1", This Sheet.	Sole plate and inside and outside bott. flange angles have 1/8" pack rust in between them at Pier 13 N. See Note "1", This Sheet.	
		Outside face of the web has 1/8" loss near the bottom between stiffener #1 and the end. See Note "3", This Sheet.	Outside stiffener #2 has 4" loss of section at bottom. See Note "3", This Sheet.	Outside face of the web has 1/8" loss near the bottom between stiffener #1 and the end. See Note "3", This Sheet.	Outside face of the web has 1/8" loss near the bottom between stiffener #1 and the end. See Note "3", This Sheet.								
		Inside top flange angle has 3/16" loss at bottom between stiffener #1 and the end. See Note "3", This Sheet.	Inside and outside faces of the web have 3/16" loss near the bott. between stiffener #1 and the end. See Note "3", This Sheet.	Inside and outside top flange angles have 1/8" to 3/8" loss at top btwn. stiffener #1 and the end. See Note "3", This Sheet.	Outside bott. flange angle has 1/8" to 3/8" total loss at top and bott. btwn. stiff. #1 and the end. For repair, see detail (27)								
		Outside bottom flange angle has 1/8" to 3/8" loss at top between stiffener #1 and the end. For repair, see detail (27)	Outside bott. flange angle has 1/8" to 1/4" loss btwn. stiff. 4-5, 8-9 & 13-15, 1/8" to 1/4" loss btwn. stiff. 6-7 at top. See Note "3", This Sheet.	Inside top flange angle has 3/16" loss at top between stiffener #1 and the end. See Note "3", This Sheet.	Outside bott. flange angle has 1/8" loss at top between stiffener #1 and the end. See Note "3", This Sheet.								
14 N	14 N TO 13 N	Sole plate and inside bott. flange angle have pack rust in between them at Pier 13 N. See Note "2", This Sheet.	Sole plate and outside bott. flange angle have pack rust in between them at Pier 13 N. See Note "2", This Sheet.	Sole plate and inside bott. flange angle have pack rust in between them at Pier 13 N. See Note "2", This Sheet.	Sole plate and outside bott. flange angle have pack rust in between them at Pier 13 N. See Note "2", This Sheet.	Upstream - Inside Girder: A = 28 1/2" for Detail "6" N = 4	12 N	12 N TO 11 N	Sole plate and outside bott. flange angle have pack rust in between them at Pier 12 N. See Note "1", This Sheet.	Sole plate and outside bott. flange angle have pack rust in between them at Pier 12 N. See Note "1", This Sheet.	Sole plate and outside bott. flange angle have pack rust in between them at Pier 12 N. See Note "1", This Sheet.	Sole plate and outside bott. flange angle have pack rust in between them at Pier 12 N. See Note "1", This Sheet.	
		Inside face of the web has 1/8" loss near the bottom between stiffener #1 and the end. See Note "3", This Sheet.	Outside top flange angle has 1/8" to 1/16" loss btwn. stiff. 1-15, 1/8" loss btwn. stiff. 15 and the end at top. See Note "3", This Sheet.	Inside and outside top flange angles have 1/8" to 1/16" loss top and bott. between stiffener #1 and the end. See Note "3", This Sheet.	Outside top flange angle has 1/8" loss at top and bott. between stiffener #1 and the end. For repair, see detail (27)								
		Outside bott. flange angle has 3/16" total loss at top and bott. btwn. stiffener #1 and the end. See Note "3", This Sheet.	Inside top flange angle has 1/4" loss at top and bottom between stiffener #1 and the end. See Note "3", This Sheet.	Outside bott. flange angle has 1/8" loss at bott. between stiffener #1 and the end. See Note "3", This Sheet.	Outside bott. flange angle has 1/8" loss at bott. between stiffener #1 and the end. See Note "3", This Sheet.								
		Outside bott. flange angle has 1/8" loss at top between stiffeners 1-2, 9-10 and 12-14. See Note "3", This Sheet.	Inside top flange angle has 1/8" loss at top and bottom between stiffener #1 and the end. See Note "3", This Sheet.	Outside bott. flange angle has 3/16" total loss at top and bottom btwn. stiffeners 8-9. See Note "3", This Sheet.									

DESIGNED *[Signature]*
CHECKED R.F.C.
DRAWN *[Signature]*
CHECKED R.F.C. - F.S.

- NOTES:
- Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Seal bearing using Fixed Bearing Repair Details, Sheet 31.
 - Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Expansion bearing is being replaced. See Bearing Repair Schedule, Sheets 28-30, and Expansion Bearing Replacement Details, Sheet 32.
 - Clean and remove all rust, foreign material and old paint down to the bare metal. Cost incidental to "Cleaning and Painting."



NOTE: Work This Sheet with Sheets 25 thru 32.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

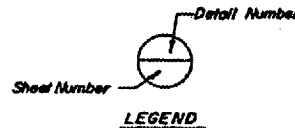
ILLINOIS APPROACH SPANS
GIRDER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28 + 13.08

ILLINOIS APPROACH - PLATE GIRDER REPAIR SCHEDULE

SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				REMARKS	SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE	
11N	11N TO 10N	Sole plate and inside batt. flange angle have 1/8" pack rust in between them at Pier 11N. See Note "1", This Sheet.	Sole plate and outside batt. flange angle have 1/8" pack rust in between them at Pier 11N. See Note "1", This Sheet.	Sole plate and inside batt. flange angle have 1/8" pack rust in between them at Pier 11N. See Note "1", This Sheet.	Sole plate and outside batt. flange angle have 1/8" pack rust in between them at Pier 11N. See Note "1", This Sheet.		9N (CONT.)	9N TO 8N		Outside batt. flange angle has 3/16" loss b/wn. stiff. 4-5, 1/8" loss b/wn. 5-6 & 7-8, 1/8" loss b/wn. 1-3, 6-7, 8-10 & 13-14 at top. See Note "3", This Sheet.	The web has a hole near the batt. between stiffener #1 and the end. See Note "3", This Sheet.		
		Sole plate and outside batt. flange angle have 1/8" pack rust in between them at Pier 10N. See Note "2", This Sheet.	Sole plate and inside batt. flange angle have 1/8" pack rust in between them at Pier 10N. See Note "2", This Sheet.	Sole plate and outside batt. flange angle have 1/8" pack rust in between them at Pier 10N. See Note "2", This Sheet.	Sole plate and inside batt. flange angle have 1/8" pack rust in between them at Pier 10N. See Note "2", This Sheet.								
		Inside batt. flange angle has 3/16" loss b/wn. stiff. 15 and the end, 1/4" loss b/wn. stiff. 1 and the end at bott. See Note "3", This Sheet.	Inside and outside top flange angles have 1/8" loss at top from end to end. See Note "3", This Sheet.	Inside and outside top flange angles have 1/8" loss at top between stiff. #1 and the end. See Note "3", This Sheet.	Inside and outside batt. flange angles have 1/8" to 3/16" loss at bott. adjacent to sole plate at Pier 11N. See Note "1", This Sheet.								
		Outside batt. flange angle has 1/8" loss between stiff. 7-8, 11-12 and 14-15 at top. See Note "3", This Sheet.	Inside and outside bottom flange angles have 1/8" loss at bott. adjacent to sole plate at Pier 10N. See Note "2", This Sheet.	Inside batt. flange angle has 3/16" loss at bott. between stiff. #1 and the end. See Note "3", This Sheet.	Inside batt. flange angle has 3/16" loss at bott. between stiffener #1 and the end. See Note "3", This Sheet.								
10N	10N TO 9N	Sole plate and inside batt. flange angle have pack rust in between them at Pier 10N. See Note "1", This Sheet.	Sole plate and outside batt. flange angle have pack rust in between them at Pier 10N. See Note "1", This Sheet.	Sole plate and inside batt. flange angle has 3/16" total loss at top and bott. between stiffener #15 and the end. See Note "3", This Sheet.	Sole plate and outside batt. flange angle have pack rust in between them at Pier 9N. See Note "2", This Sheet.		8N	8N TO 7N	Sole plate and outside batt. flange angle have pack rust in between them at Pier 7N. See Note "2", This Sheet.	Sole plate and outside batt. flange angle have pack rust in between them at Pier 7N. See Note "2", This Sheet.	Sole plate and outside batt. flange angle have pack rust in between them at Pier 7N. See Note "2", This Sheet.	Sole plate and outside batt. flange angle have pack rust in between them at Pier 7N. See Note "2", This Sheet.	
		Outside batt. flange angle has 1/8" loss b/wn. stiff. 1-2 and 15-End at top. See Note "3", This Sheet.	Sole plate and outside batt. flange angle have pack rust in between them at Pier 9N. See Note "2", This Sheet.	Inside batt. flange angle has 3/16" total loss at top and bott. between stiff. #1 and the end. See Note "3", This Sheet.	Inside and outside top flange angles have 1/8" to 3/16" loss at top between stiffener #1 and the end. See Note "3", This Sheet.								
		Inside face of the web has 1/8" loss near the bott. between stiff. #1 and the end. See Note "3", This Sheet.	Inside top flange angle has 1/8" loss at top between stiffener #1 and the end. See Note "3", This Sheet.	Outside top flange angle has 1/8" loss at top b/wn. stiff. 1-End and 1/4" loss at bott. b/wn. stiff. 15-End. See Note "3", This Sheet.	Outside batt. flange angle has 1/8" loss at top and bott. between stiff. #1 and the end. See Note "3", This Sheet.	Downstream and Upstream-Inside Girders: A = 16 1/2" for Detail "6" N = 2							
		Outside face of the web has 1/8" loss near the bott. between stiffeners 9-10. See Note "3", This Sheet.	Outside batt. flange angle has 1/8" loss at top and bott. between stiff. #1 and the end. See Note "3", This Sheet.	Inside batt. flange angle has 3/16" total loss at top and bott. between stiff. #1 and the end. See Note "3", This Sheet.	Outside batt. flange angle has 1/8" total loss at top and bott. between stiff. #1 and the end. See Note "3", This Sheet.								
9N	9N TO 8N	Sole plate and inside batt. flange angle has 1/8" pack rust in between them at Pier 8N. See Note "2", This Sheet.	Sole plate and outside batt. flange angle has 1/8" pack rust in between them at Pier 8N. See Note "2", This Sheet.	Sole plate and inside batt. flange angle has 1/8" total loss at top and bott. between stiffener #15 and the end. See Note "3", This Sheet.	Sole plate and outside batt. flange angle has 1/8" pack rust in between them at Pier 8N. See Note "2", This Sheet.		7N	7N TO 6N	Sole plate and inside batt. flange angle have pack rust in between them at Pier 6N. See Note "2", This Sheet.	Sole plate and inside batt. flange angle have pack rust in between them at Pier 6N. See Note "2", This Sheet.	Sole plate and inside batt. flange angle have pack rust in between them at Pier 6N. See Note "2", This Sheet.	Sole plate and outside bottom flange angle have pack rust in between them at Pier 7N. See Note "1", This Sheet.	
		Inside batt. flange angle has 3/16" loss at top and bott. between stiff. #15 and the end. See Note "3", This Sheet.	Sole plate and outside batt. flange angle have 1/8" pack rust in between them at Pier 8N. See Note "2", This Sheet.	Outside batt. flange angle has 1/8" loss at top and bott. between stiff. #1 and the end. See Note "3", This Sheet.	Sole plate and outside batt. flange angle have 1/8" pack rust in between them at Pier 8N. See Note "2", This Sheet.								
		Outside batt. flange angle has 3/16" loss at bott. between stiff. #1 and the end. See Note "3", This Sheet.	Inside and outside top flange angles have 1/8" loss at top from end to end. See Note "3", This Sheet.	Inside top flange angle has 1/8" loss at top between stiffener #1 and the end. See Note "3", This Sheet.	Inside and outside top flange angles have 1/8" loss at top between stiff. #1 and the end. See Note "3", This Sheet.	Downstream-Inside Girder: A = 22 1/2" for Detail "6" N = 3							
		Outside batt. flange angle has 1/8" loss at top between stiffeners 4-6, 7-8, 11-12 and 13 to the end. See Note "3", This Sheet.	Inside batt. flange angle has 1/8" loss at bott. adjacent to sole plates at Piers 8N and 9N. See Note "3", This Sheet.	Outside top flange angle has 1/8" loss at top between stiffener #15 and the end. See Note "3", This Sheet.	Inside batt. flange angle has 3/16" loss at top and bott. between stiff. #1 and the end. See Note "3", This Sheet.	Downstream-At Pier 8N- See Note "2", This Sheet. At Pier 9N- See Note "1", This Sheet.							

DESIGNED *[Signature]*
CHECKED R.F.C.
DRAWN *[Signature]*
CHECKED R.F.C.-F.S.

- NOTES:
- Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Seal bearing using Fixed Bearing Repair Details, Sheet 31.
 - Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Expansion bearing is being replaced. See Bearing Repair Schedule, Sheets 28-30, and Expansion Bearing Replacement Details, Sheet 32.
 - Clean and remove all rust, foreign material and old paint down to the bare metal. Cost incidental to "Cleaning and Painting".



NOTE: Work This Sheet with Sheets 25 thru 32.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

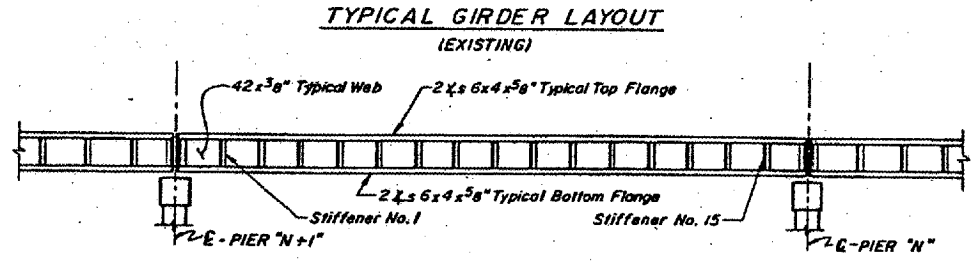
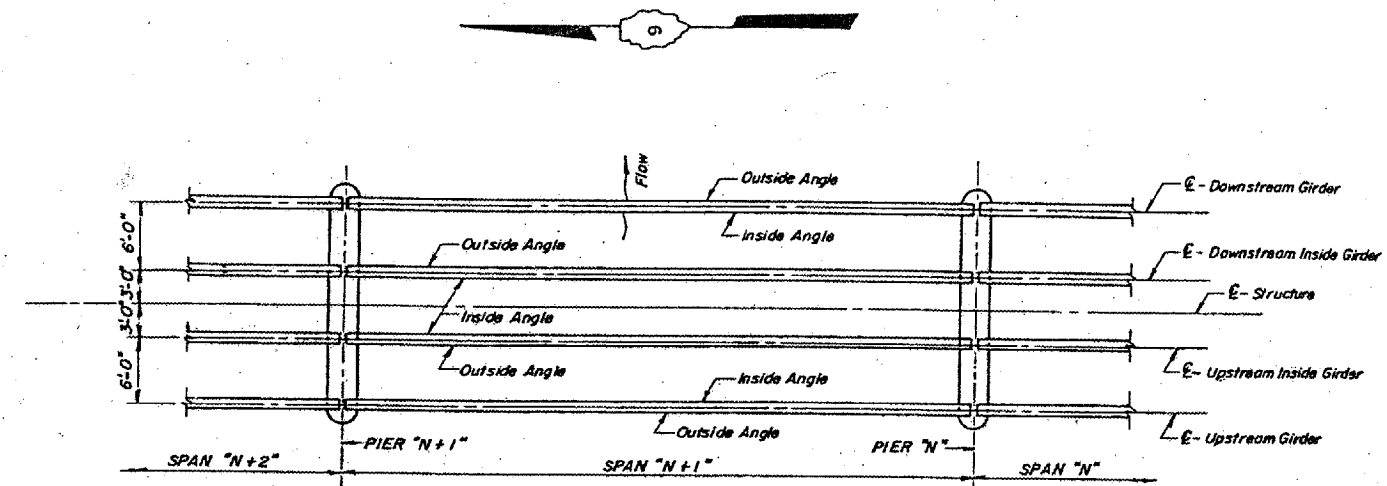
ILLINOIS APPROACH SPANS
GIRDER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

ILLINOIS APPROACH - PLATE GIRDER REPAIR SCHEDULE

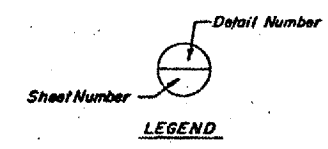
SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				REMARKS
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE	
3N (CONT.)	3N TO 2N	Inside bott. flange angle has 1/8" loss at bott. adjacent to sole plate at Pier 3N. See Note "1", This Sheet.	Inside bott. flange angle has 1/4" total loss at top and bott. btwn. stiffener #15 and the end. See Note "3", This Sheet.	Inside bott. flange angle has 1/8" loss at bott. adjacent to sole plate at Pier 3N. See Note "1", This Sheet.	Outside bott. flange angle has 5/8" total loss at top and bott. and a hole between stiff. #15 and the end. For repair, see detail 25.	
		Outside bott. flange angle has 1/8" loss at bott. adjacent to sole plate at Pier 2N. See Note "2", This Sheet.	Outside bott. flange angle has 1/8" loss btwn. stiff. 1-2 & 7-9 and 3/16" loss btwn. 11-12 at top. See Note "3", This Sheet.	Outside bott. flange angle has 1/8" total loss btwn. stiff. 1-End and 3/16" total loss btwn. 15-End at top and bott. See Note "3", This Sheet.	Inside bott. flange angle has 3/16" loss at bott. between stiffener #1 and the end. See Note "3", This Sheet.	
2N	2N TO 1N	Sole plate and inside bottom flange angle have 1/8" pack rust in between them at Pier 2N. See Note "1", This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in btwn. them at Pier 1N. See Note "2", This Sheet.	Sole plate and inside bottom flange angle have 1/8" pack rust in between them at Pier 2N. See Note "1", This Sheet.	Sole plate and outside bott. flange angle have 1/8" pack rust in between them at Pier 2N. See Note "1", This Sheet.	
		Sole plate and outside bottom flange angle have 1/4" pack rust in between them at Pier 1N. See Note "2", This Sheet.	Sole plate and outside bott. flange angle have 1/8" pack rust in btwn. them at Pier 2N. See Note "1", This Sheet.	Sole plate and outside bottom flange angle have 1/4" pack rust in between them at Pier 1N. See Note "2", This Sheet.	Sole plate and inside bottom flange angle have 1/8" pack rust in between them at Pier 1N. See Note "1", This Sheet.	
		Inside top flange angle has 1/8" total loss at top and bottom between stiffener #1 and the end. See Note "3", This Sheet.	Inside top flange angle has 1/8" loss at top between stiffener #1 and the end. See Note "3", This Sheet.	Inside and outside top flange angles have 1/8" loss at top between stiff. #1 and the end. See Note "3", This Sheet.	Inside and outside top flange angles have 1/8" loss at top between stiff. #1 and the end. See Note "3", This Sheet.	
		Inside bott. flange angle has 1/8" loss at top and bottom between stiffener #15 and the end. See Note "3", This Sheet.	Outside top flange angle has 1/8" loss at top and bottom between stiff. #1 and the end. See Note "3", This Sheet.	Inside bottom flange angle has 3/16" loss at bottom adjacent to sole plate at Pier 1N. See Note "2", This Sheet.	Outside bottom flange angle has 1/8" loss at bott. btwn. stiff. #1 and the end. See Note "3", This Sheet.	
		Inside bott. flange angle has 3/16" loss at top between stiffener #1 and the end. See Note "3", This Sheet.	Outside bott. flange angle has 1/8" loss btwn. stiff. 5-6, 7-8 & 13-14 and 3/16" loss btwn. 12-13 & 2-End. See Note "3", This Sheet.	Inside bottom flange angle has 1/4" loss at top and 1/8" loss at bottom between stiffener #1 and the end. See Note "3", This Sheet.	Outside bottom flange angle has 1/8" loss at top and 3/16" loss at bottom between stiffener #15 and the end. See Note "3", This Sheet.	
		Outside bott. flange angle has 1/8" loss btwn. stiff. 1-End, 5-9, 11-12 & 14-15 and 3/16" loss btwn. 10-11 at top. See Note "3", This Sheet.	Inside bott. flange angle has 3/16" loss at top between stiffener #1 and the end. See Note "3", This Sheet.	Outside bottom flange angle has 1/8" loss at top & bott. btwn. stiffener #1 and the end and btwn. stiff. #15 and the end. See Note "3", This Sheet.	Inside bott. flange angle has 1/8" loss at top between stiffener #1 and the end. See Note "3", This Sheet.	
		Outside bott. flange angle has 1/8" loss at bottom and 3/16" loss at top between stiffener #15 and the end. See Note "3", This Sheet.	Inside bott. flange angle has 3/16" loss at top and bottom between stiffener #15 and the end. See Note "3", This Sheet.	Outside face of the web has 1/8" loss near the top and the bottom between stiffener #1 and the end. See Note "3", This Sheet.	Inside bottom flange angle has 1/8" loss at bottom between stiffener #15 and the end. See Note "3", This Sheet.	
		Sole plate and inside bottom flange angle have 1/4" pack rust in between them at Pier A. See Note "2", This Sheet.	Sole plate and outside bott. flange angle have 1/8" pack rust in between them at Pier A. See Note "2", This Sheet.	Sole plate and inside bottom flange angle have 1/8" pack rust in between them at Pier A. See Note "2", This Sheet.	Sole plate and outside bott. flange angle have 1/8" pack rust in between them at Pier A. See Note "2", This Sheet.	
		Sole plate and outside bott. flange angle have 1/8" pack rust in between them at Pier 1N. See Note "1", This Sheet.	Sole plate and outside bott. flange angle have 1/8" pack rust in between them at Pier 1N. See Note "1", This Sheet.	Sole plate and outside bott. flange angle have 1/8" pack rust in between them at Pier 1N. See Note "1", This Sheet.	Sole plate and inside bottom flange angle have 1/8" pack rust in between them at Pier 1N. See Note "1", This Sheet.	
		Inside bottom flange angle has 1/8" loss btwn. stiff. #15 and the end and 3/16" loss btwn. stiff. #1 and the end at bott. See Note "3", This Sheet.	Inside and outside top flange angles have 1/8" to 1/4" loss at top from end to end. See Note "3", This Sheet.	Inside and outside top flange angles have 1/8" loss at top between stiff. #1 and the end. See Note "3", This Sheet.	Outside top flange angle has 1/8" loss at top between stiffener #1 and the end and btwn. #15 and the end. See Note "3", This Sheet.	
Outside bottom flange angle has 1/8" loss at top between stiffeners 3-4, 11-12 and 14-15. See Note "3", This Sheet.	Outside bottom flange angle has 1/8" loss between stiff. 8-9 and 1/8" loss btwn. 12-13, 3-6 & 2-End at top. See Note "3", This Sheet.	Inside and outside bottom flange angles have 3/16" to 1/4" loss at bott. between stiffener #15 and the end. See Note "3", This Sheet.	Inside top flange angle has 1/8" loss at top between stiffener #1 and the end and btwn. #15 and the end. See Note "3", This Sheet.			
Outside bottom flange angle has 1/8" loss at bottom between stiffener #15 and the end. See Note "3", This Sheet.	Inside bottom flange angle has 3/16" loss at bottom between stiff. #15 and the end. See Note "3", This Sheet.	Outside bottom flange angle has 1/8" loss at top between stiffener #15 and the end. See Note "3", This Sheet.	Outside bottom flange angle has 3/16" loss at bottom adjacent to sole plate at Pier A. See Note "2", This Sheet.			
Outside face of the web has 1/8" loss near the bottom between stiffener #1 and the end. See Note "3", This Sheet.			Outside bottom flange angle has 1/8" loss btwn. stiff. 14-15 and 3/16" loss btwn. stiff. 1 and the end at top. See Note "3", This Sheet.			
The web has a hole near the bottom between stiffener #15 and the end. See Note "3", This Sheet.			Inside bottom flange angle has 1/8" loss at bottom adjacent to sole plate at Pier 1N. See Note "1", This Sheet.			
			Inside face of the web has 1/8" loss and a hole near the bottom btwn. stiffener #1 and the end. See Note "3", This Sheet.			
			Inside and outside faces of the web have 1/8" to 1/16" loss and a hole near the bott. between stiffener #15 and the end. See Note "3", This Sheet.			

DESIGNED: *Sanis*
CHECKED: *R.F.C.*
DRAWN: *Sanis*
CHECKED: *R.F.C. - F.S.*

- NOTES:
1. Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Seal bearing using Fixed Bearing Repair Details, Sheet 31.
 2. Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Expansion bearing is being replaced. See Bearing Repair Schedule, Sheets 28-30, and Expansion Bearing Replacement Details, Sheet 32.
 3. Clean and remove all rust, foreign material and old paint down to the bare metal. Cost incidental to "Cleaning and Painting."



Note: All Stiffeners Are Numbered From The North End Of The Girders.



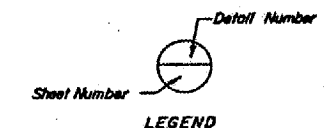
NOTE: Work This Sheet with Sheets 25 thru 32.

MISSOURI APPROACH - PLATE GIRDER REPAIR SCHEDULE

SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				REMARKS	SPAN NUMBER	PIER NUMBER	GIRDER LOCATION			
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE
15	H TO IS	Sole plate and inside bottom flange angle have 1/8" pack rust in between them at Pier 15. See Note 1, This Sheet.	Sole plate and outside bottom flange angle have 1/4" pack rust in between them at Pier 15. See Note 1, This Sheet.	Sole plate and inside botl. flange angle have 1/8" pack rust in between them at Pier 15. See Note 1, This Sheet.	Sole plate and outside bottom flange angle have 1/8" pack rust in between them at Pier 15. See Note 1, This Sheet.		35	2S TO 3S	Outside top flange angle has 1/8" loss at top between stiffener #15 and the end. See Note 3, This Sheet.	Sole plate and outside botl. flange angle have pack rust in between them at Pier 25. See Note 2, This Sheet.	Inside and outside top flange angles have 3/16" loss at top between stiffener #15 and the end. See Note 3, This Sheet.	Inside and outside top flange angles have 1/8" to 3/16" loss at top btwn. stiffener #15 and the end. See Note 3, This Sheet.
		Sole plate and outside bottom flange angle have 1/8" pack rust in between them at Pier H. See Note 2, This Sheet.	Sole plate and outside bottom flange angle have 1/4" pack rust in between them at Pier H. See Note 2, This Sheet.	Sole plate and inside bottom flange angle have 1/8" pack rust in between them at Pier H. See Note 2, This Sheet.	Sole plate and outside bottom flange angle have 1/8" pack rust in between them at Pier H. See Note 2, This Sheet.				Inside and outside bottom flange angles have 1/8" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.	Outside top flange angle has 1/8" loss at top between stiffener #15 and the end. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 3/16" total loss at top and bott. btwn. stiff. #1 and the end. (25) For repair, see detail (25)
		Outside top flange angle has 1/8" loss at top between stiffener #15 and the end. See Note 3, This Sheet.	Outside top flange angle has 1/8" loss at top between stiffener #15 and the end. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" loss between stiffener 15-End and 3/16" loss between 1-End at bottom. See Note 3, This Sheet.	Inside and outside bottom flange angles have 1/8" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.				Inside and outside bottom flange angles have 1/8" loss at bottom between stiffener #1 and the end. See Note 3, This Sheet.	Outside top flange angle has 1/8" loss at top between stiffener #15 and the end. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" total loss at top and bottom between stiffener #1 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 3/16" total loss at top and bottom btwn. stiff. #1 and the end. See above for repair.
		Outside bottom flange angle has 1/8" loss at top between stiffeners 10-11 and between 13-14. See Note 3, This Sheet.	Outside bottom flange angle has 3/16" loss at bottom between stiff. 15-End and between 1-End. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss between stiffener 1-End and 1/8" loss between 15-End at bottom. See Note 3, This Sheet.	Inside and outside bottom flange angles have 1/8" loss at bottom between stiffener #1 and the end. See Note 3, This Sheet.				Inside and outside bottom flange angles have 1/8" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss at top between stiffeners 8-9. See Note 3, This Sheet.	Inside bottom flange angle has 3/16" total loss at top and bottom between stiffener #1 and the end. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" loss at bottom adjacent to sole plate at Pier 25. See Note 1, This Sheet.
		The web has a hole near the top between stiffener #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss between stiffeners 10-11 and 3/16" loss between 7-8 at top. See Note 3, This Sheet.	Inside and outside faces of the web have 3/16" loss and holes near the bottom between stiffener #15 and the end. Also, the inside face of the web has 1/4" loss near the bott. between stiffeners 14-15. For repair, see detail (25)	Outside stiffener #1 has 90% loss of section at bottom. See Note 3, This Sheet.				Inside face of the web has 3/16" loss near the top between stiffener #15 and the end. See Note 3, This Sheet.	Outside stiffener #6 has 3/16" loss btwn. stiff. 1-End and 1/8" total loss btwn. 15-End at top and bott. end. See Note 3, This Sheet.	The web has a hole near the bott. between stiffener #15 and the end. See Note 3, This Sheet.	The web has a hole near the bott. between stiffener #15 and the end. See Note 3, This Sheet.
		Inside stiffeners #2 & 3 have 50% loss of section at bottom. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" loss between stiff. 1-End and 3/16" loss btwn. 15-End at bottom. See Note 3, This Sheet.	Inside face of the web has 1/8" loss near the bottom between stiffener #1 and the end. See Note 3, This Sheet.					Inside face of the web has 3/16" to 1/2" loss near the bottom between stiffener #1 and the end. See Note 3, This Sheet.	Outside stiffeners #6 and 7 have 3/16" loss of section at bott. See Note 3, This Sheet.		
		Outside stiffeners #6 & 12 have 50% loss of section at bottom. See Note 3, This Sheet.	Outside stiffener #1 has 50% loss of section at bottom. See Note 3, This Sheet.							Inside face of the web has 1/8" loss near the bottom between stiff. 7-9. See Note 3, This Sheet.		
			Outside stiffener #12 has 60% loss of section at bottom. See Note 3, This Sheet.							The web has a hole near the bott. between stiffener #15 and the end. See Note 3, This Sheet.		
			Inside stiffener #1 has 60% loss of section at bottom. See Note 3, This Sheet.									
			The web has a hole near the top and near the bottom between stiff. #15 and the end. See Note 3, This Sheet.									
	The web has a hole near the bott. between stiffeners 1-2. See Note 3, This Sheet.											
25	IS TO 2S	Sole plate and inside bottom flange angle have 1/8" pack rust in between them at Pier 25. See Note 1, This Sheet.	Sole plate and outside bottom flange angle have 1/4" pack rust in between them at Pier 15. See Note 1, This Sheet.	Sole plate and inside bottom flange angle have 1/8" pack rust in between them at Pier 25. See Note 1, This Sheet.	Sole plate and outside bottom flange angle have 1/8" pack rust in between them at Pier 15. See Note 1, This Sheet.		45	3S TO 4S	Inside bottom flange angle has 1/8" loss at bottom between stiff. #15 and the end. See Note 3, This Sheet.	Sole plate and outside bottom flange angle have pack rust in between them at Pier 45. See Note 2, This Sheet.	Inside top flange angle has 1/8" loss at top between stiffener #15 and the end. See Note 3, This Sheet.	Inside top flange angle has 3/16" total loss at top and bott. btwn. stiffener #15 and the end. See Note 3, This Sheet.
		Sole plate and inside bottom flange angle have 1/8" pack rust in between them at Pier 15. See Note 2, This Sheet.	Sole plate and outside bottom flange angle have 1/4" pack rust in between them at Pier 25. See Note 2, This Sheet.	Sole plate and inside bottom flange angle have 1/8" pack rust in between them at Pier 15. See Note 2, This Sheet.	Sole plate and outside bottom flange angle have 1/8" pack rust in between them at Pier 25. See Note 2, This Sheet.				Inside and outside top flange angles have 1/8" loss at top between stiff. #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss at bottom between stiff. #15 and the end. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" total loss at top and bott. btwn. stiffener #15 and the end. See Note 3, This Sheet.	Outside top flange angle has 3/16" total loss at top and bott. between stiffener #15 and the end. See Note 3, This Sheet.
		Inside and outside top flange angles have 1/8" loss at top between stiff. #15 and the end. See Note 3, This Sheet.	Inside and outside top flange angles have 1/8" loss at top between stiff. #15 and the end. See Note 3, This Sheet.	Inside and outside top flange angles have 1/8" loss at top between stiff. #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss at bottom between stiff. #15 and the end. See Note 3, This Sheet.				Outside bottom flange angle has 1/8" loss at bottom between stiff. #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss at bottom between stiff. 1-End and 1/8" total loss btwn. 15-End at top and bott. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" total loss at top and bott. btwn. stiffener #15 and the end. See Note 3, This Sheet.
		Inside bottom flange angle has 1/8" loss between stiffener #15-End and 1/8" loss between 1-End at bottom. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss at bottom between stiff. #1 and the end. See Note 3, This Sheet.	Inside and outside bottom flange angles have 1/8" loss at bott. btwn. stiffener #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" total loss at top and bottom between stiffener #1 and the end. See Note 3, This Sheet.				Outside bottom flange angle has 1/8" loss at top between stiff. #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss btwn. stiff. 8-9 and 3/16" loss btwn. 1-End at bottom. See Note 3, This Sheet.	Outside bottom flange angle has 3/16" total loss at top and bott. btwn. stiffener 1-End. See above for repair.	
		Outside bottom flange angle has 3/16" loss between stiffener #1-End and between #15-End at bottom. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" loss at top and 1/4" at bott. between stiffener #1 and the end. (4) For repair, see detail (25)	Outside bottom flange angle has 1/8" total loss at top and bottom between stiffener #1 and the end. See Note 3, This Sheet.	Inside bottom flange angle has 3/16" loss at top between stiffener #1 and the end. See Note 3, This Sheet.				Inside and outside faces of the web have 3/16" to 1/4" loss near the bott. between stiffener #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss at bottom between stiff. 6-7. See Note 3, This Sheet.	Outside bottom flange angle has 3/16" loss at bottom adjacent to sole plate at Pier 45. See Note 1, This Sheet.	
		The web has a hole near the top between stiffener #15 and the end. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" loss at bottom between stiffener #1 and the end. See Note 3, This Sheet.	Inside face of the web has 1/8" loss near the bottom between stiff. #1 and the end. See Note 3, This Sheet.				Inside face of the web has 3/16" loss near the bottom between stiffener #1 and the end. See Note 3, This Sheet.	Outside face of the web has 1/8" loss adjacent to stiffeners 2, 4 and 5 at bottom. See Note 3, This Sheet.	Inside face of the web has 3/16" to 1/2" loss and holes near the bott. btwn. stiff. 15-End. (25) For repair, see detail (25) A = 35 1/4", B = 15 1/2", n = 11, n1 = 3	
		The web has a hole near the bott. between stiffener #1 and the end. See Note 3, This Sheet.	Inside face of the web has 3/16" loss and a hole near the bottom between stiffener #15 and the end. See Note 3, This Sheet.	The web has a hole near the bott. between stiffener #1 and the end. See Note 3, This Sheet.	The web has a hole near the bott. between stiffener #15 and the end. See Note 3, This Sheet.				The web has a hole near the bott. between stiffener #15 and the end. See Note 3, This Sheet.	The web has a hole near the top and near the bottom between stiffener #15 and the end. See Note 3, This Sheet.		
		Inside face of the web has 3/16" to 1/4" loss near the bottom between stiffener #15 and the end. See Note 3, This Sheet.	Outside stiffener #3 has 75% loss of section at bottom. See Note 3, This Sheet.	The web has a hole near the bott. between stiffener #15 and the end. See Note 3, This Sheet.	The web has a hole near the top between stiffener #15 and the end. See Note 3, This Sheet.				The web has a hole near the bott. between stiffener #15 and the end. See Note 3, This Sheet.	Outside stiffener #4 has 1/8" loss of section at bottom. See Note 3, This Sheet.		
		Inside stiffener #1 has 50% loss of section at bottom. See Note 3, This Sheet.	Outside stiffener #4 has 60% loss of section at bottom. See Note 3, This Sheet.		Inside bottom flange angle has 3/16" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.							

DESIGNED: *[Signature]*
CHECKED: R.F.C.
DRAWN: *[Signature]*
CHECKED: R.F.C.-FS

- NOTES:
- Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Seal bearing using Fixed Bearing Repair Details, Sheet 31.
 - Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Expansion bearing is being replaced. See Bearing Repair Schedule, Sheets 28-30, and Expansion Bearing Replacement Details, Sheet 32.
 - Clean and remove all rust, foreign material and old paint down to the bare metal. Cost incidental to "Cleaning and Painting"



*NOTE: Work This Sheet with Sheets 25 thru 32.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

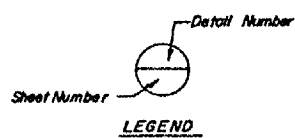
MISSOURI APPROACH BEANS
GIRDER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 B 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

MISSOURI APPROACH - PLATE GIRDER REPAIR SCHEDULE

SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				REMARKS	SPAN NUMBER	PIER NUMBER	GIRDER LOCATION					
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE		
45 (CONT.)	35 TO 45		Outside stiffener #5 has 3/16" loss of section and a hole at bottom. See Note "3," This Sheet.				65 (CONT.)	55 TO 65	Inside stiffener #1 has loss of section at bottom. See Note "3," This Sheet.	Outside bottom flange angle has 1/8" loss b/wn. stiff. 1-2, 5-6, 7-8 & 12-13, 1/4" loss b/wn. 10-11 & 1/8" to 1/4" loss b/wn. 8-9 at top. See Note "3," This Sheet.	The web has a hole near the bottom between stiffener #15 and the end. See Note "3," This Sheet.			
			Outside stiffener #7 has 100% loss of section at bottom. See Note "3," This Sheet.						Outside stiffeners 2 and 12 have loss of section at bottom. See Note "3," This Sheet.					
			Outside stiffener #10 has 3/16" loss of section at bottom. See Note "3," This Sheet.						Outside stiffeners #5 and #6 have 50% to 60% loss of section at bottom. See Note "3," This Sheet.					
			Outside stiffener #13 has 1/4" loss of section at bottom. See Note "3," This Sheet.						Outside face of the web has loss of section at bottom between stiff. #15 and the end. See Note "3," This Sheet.					
55	45 TO 55	Inside and outside top flange angles have 5/16" total loss at top and bott. between stiffener #15 and the end. See Note "3," This Sheet.	Outside and inside top flange angles have 3/16" to 1/4" total loss at top and bottom between stiffener #15 and the end. See Note "3," This Sh.	Sole plate and inside bottom flange angle have pack rust in between them at Pier 4S. See Note "2," This Sheet.	Sole plate and outside bott. flange angle have pack rust in between them at Pier 4S. See Note "2," This Sheet.		75	65 TO 75	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 7S. See Note "1," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 7S. See Note "2," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in b/wn. them at Pier 7S. See Note "1," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" max. pack rust in between them at Pier 7S. See Note "1," This Sheet.		
		Inside bottom flange angle has 1/8" loss at bottom between stiffener #15 and the end. See Note "3," This Sheet.	Inside bottom flange angle has 1/8" total loss at top and bottom b/wn. stiffener #1 and the end. For repair, see detail (25)	Inside and outside top flange angles have 1/8" loss at top between stiff. #15 and the end. See Note "3," This Sheet.	Inside and outside top flange angles have 1/8" loss at top between stiff. #15 and the end. See Note "3," This Sheet.	Downstream Girder: A = 16 1/2" for Detail "6" N = 2			Inside top flange angle has 3/16" loss of top between stiffener #15 and the end. See Note "3," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "2," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.
		Inside bottom flange angle has 3/16" loss at top to 7/16" total loss at top & bott. b/wn. 1-End. (26)	Inside and outside bottom flange angles have 1/2" to 3/8" total loss at top & bott. b/wn. stiff. 15-End. (27)	Inside and outside bottom flange angles have 1/8" loss at top and bottom b/wn. stiff. 1-End. (28)	Inside and outside bottom flange angles have 1/8" loss at top and bottom b/wn. stiff. 1-End. (29)	Downstream-Inside Girder: A = 16 1/2" for Detail "6" N = 2			Inside and outside top flange angles have 1/8" loss at top between stiff. #15 and the end. See Note "3," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "2," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.
		Outside bott. flange angle has 1/8" loss b/wn. stiff. 3-5 and 1/4" loss b/wn. 1-End at top. See Note "3," This Sheet.	Outside bottom flange angle has 1/8" loss b/wn. stiff. 3-5 and 1/4" loss b/wn. 1-End at top. See Note "3," This Sheet.	Inside bottom flange angle has 3/16" total loss at top and bottom b/wn. stiffener #15 and the end. See Note "3," This Sheet.	Inside and outside bott. flange angles have 1/2" to 3/8" total loss at top and bott. b/wn. stiff. 15-End. (27)				Inside and outside top flange angles have 1/8" loss at top between stiff. #15 and the end. See Note "3," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "2," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.
		Inside stiffener #1 has 1/8" loss of section and a hole at bottom. See Note "3," This Sheet.	Outside stiffener #1 has 1/8" loss of section at bottom. See Note "3," This Sheet.	Outside bottom flange angle has 1/8" loss at bottom adjacent to sole plate at Pier 5S. See Note "1," This Sheet.	The web has a hole near the bott. between stiffener #15 and the end. See Note "3," This Sheet.				Inside and outside top flange angles have 1/8" loss at top between stiff. #15 and the end. See Note "3," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "2," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.
		Outside stiffeners 2, 4, 5 and 8 have 1/8" loss of section at bottom. See Note "3," This Sheet.	Outside stiffeners 4, 6, 8 and 12 have holes at bottom. See Note "3," This Sheet.	Inside stiffener #1 has 3/16" loss of section at bottom. See Note "3," This Sheet.					Outside face of the web has 3/8" loss near the bottom between stiffeners 3-5. See Note "3," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "2," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.
65	55 TO 65	Outside face of the web has 3/8" loss near the bottom between stiffener #15 and the end. See Note "3," This Sheet.	Outside face of the web has 1/4" loss near the bottom between stiffeners 3-5. See Note "3," This Sheet.	Inside face of the web has 1/4" loss, outside face has 1/8" loss and a hole near the bott. b/wn. stiff. #15 and the end. See Note "3," This Sh.	Inside face of the web has 1/4" loss near the bottom between stiffener #1 and the end. See Note "3," This Sheet.		85	75 TO 85	Outside bottom flange angle has 1/8" loss b/wn. stiff. 2-3, 5-6 & 13-14 and 3/16" loss b/wn. 6-7 & 9-10 at top. See Note "3," This Sheet.	Outside face of the web has 3/8" loss near the bottom adjacent to stiffener #4. See Note "3," This Sheet.	Inside face of the web has 3/16" loss and holes near the bottom between stiffener #15 and the end. See Note "3," This Sheet.	Outside bottom flange angle has 3/16" loss at bottom between stiff. #15 and the end. See Note "3," This Sheet.	Upstream - Inside Girder: A = 34 1/2" for Detail "6" N = 5	
		Inside face of the web has 1/4" loss b/wn. stiff. 15-End and 3/16" to 1/4" loss b/wn. stiff. 1-End at bott. See Note "3," This Sheet.	The web has a hole near the top and near the bottom between stiffener #15 and the end. See Note "3," This Sheet.	Inside face of the web has 1/4" loss near the bottom between stiffener #1 and the end. See Note "3," This Sheet.					Outside stiffeners 8 and 12 have 50% loss of section at bottom. See Note "3," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 7S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "2," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "1," This Sheet.	
		Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 5S. See Note "2," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 5S. See Note "2," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.				The web has holes near the bott. between stiffener #15 and the end. See Note "3," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 7S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "2," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "1," This Sheet.	Sole plate and outside bott. flange angle have 1/4" pack rust in between them at Pier 7S. See Note "1," This Sheet.	
		Sole plate and outside bottom flange angle has 1/8" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 5S. See Note "2," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 6S. See Note "1," This Sheet.				Inside and outside top flange angles have 1/8" loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note "3," This Sheet.	Inside and outside top flange angles have 1/8" loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note "3," This Sheet.	Outside bottom flange angle has 1/4" loss at top and bottom between stiffener #15 and the end. See Note "3," This Sheet.	Sole plate and inside bottom flange angle have 3/8" pack rust in b/wn. them at Pier 7S. See Note "2," This Sheet.	Inside and outside top flange angles have 1/8" to 1/4" loss at top between stiffener #15 and the end. See Note "3," This Sheet.	Inside and outside top flange angles have 1/8" to 1/4" loss at top between stiffener #15 and the end. See Note "3," This Sheet.
		Inside and outside top flange angles have 1/8" loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note "3," This Sheet.	Outside top flange angle has 3/16" loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note "3," This Sheet.	Outside top flange angle has 3/16" loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note "3," This Sheet.	Outside top flange angle has 1/8" loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note "3," This Sheet.				Inside and outside top flange angles have 1/8" loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note "3," This Sheet.	Outside bottom flange angle has 1/4" loss at top and bottom between stiffener #15 and the end. See Note "3," This Sheet.	Sole plate and inside bottom flange angle have 3/8" pack rust in b/wn. them at Pier 7S. See Note "2," This Sheet.	Inside and outside top flange angles have 1/8" to 1/4" loss at top between stiffener #15 and the end. See Note "3," This Sheet.	Inside and outside top flange angles have 1/8" to 1/4" loss at top between stiffener #15 and the end. See Note "3," This Sheet.	Inside and outside top flange angles have 1/8" to 1/4" loss at top between stiffener #15 and the end. See Note "3," This Sheet.
		Outside bottom flange angle has 1/8" to 3/16" loss b/wn. stiff. 2-3 and 1/4" loss b/wn. 2-End, 3-4, 6-8 and 15-End at top. See Note "3," This Sh.	Inside top flange angle has 1/8" total loss at top and bottom b/wn. stiffener #15 and the end. See Note "3," This Sheet.	Inside top flange angle has 3/16" loss at top and 1/8" loss at bottom b/wn. stiff. 15-End and the end. See Note "3," This Sheet.	Inside top flange angle has 1/8" total loss at top and bottom b/wn. stiffener #15 and the end. See Note "3," This Sheet.				Inside bottom flange angle has 1/8" loss at top and 1/8" loss at bottom b/wn. stiff. 15-End and 1-End. See Note "3," This Sheet.	Outside bottom flange angle has 1/4" loss at top and bottom between stiffener #15 and the end. See Note "3," This Sheet.	Inside and outside top flange angles have 1/8" to 1/4" loss at top between stiffener #15 and the end. See Note "3," This Sheet.	Outside bottom flange angle has 1/4" loss at top and bottom b/wn. stiff. 15-End. See Note "3," This Sheet.	Inside and outside top flange angles have 1/8" to 1/4" loss at top between stiffener #15 and the end. See Note "3," This Sheet.	Outside bottom flange angle has 1/4" loss at top and bottom b/wn. stiffener #15 and the end. See Note "3," This Sheet.

DESIGNED *L. L. Smith*
CHECKED *R. E. C.*
DRAWN *L. L. Smith*
CHECKED *R. E. C. - F. S.*

- NOTES:
- Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Seal bearing using Fixed Bearing Repair Details, Sheet 31.
 - Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Expansion Bearing is being replaced. See Bearing Repair Schedule, Sheets 28-30, and Expansion Bearing Replacement Details, Sheet 32.
 - Clean and remove all rust, foreign material and old paint down to the bare metal. Cost incidental to "Cleaning and Painting."



NOTE: Work This Sheet with Sheets 25 thru 32.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

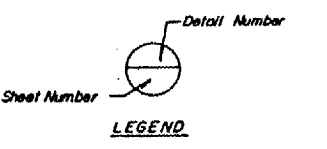
MISSOURI APPROACH - PANS
GIRDER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138 D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28 + 13.08

MISSOURI APPROACH - PLATE GIRDER REPAIR SCHEDULE

CONTRACT 98939
U.S. RTE. 60 & U.S. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 32 OF 85

SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				REMARKS	SPAN NUMBER	PIER NUMBER	GIRDER LOCATION						
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE			
85 (CONT.)	7S TO 8S	Outside bottom flange angle has 1/8" loss at top between stiffener #15 and the end. See Note 3, This Sheet.	Inside face of the web has 1/4" to 3/8" loss and holes near the bott. stiffener 15-End. For repair, see detail (25)				10S (CONT.)	9S TO 10S	Inside face of the web has 3/16" loss and outside face has 1/8" loss near the bottom between stiffener #15 and the end. Use A = 26 1/4", B = 15 1/2", n = 8 and n1 = 3. For repair, see detail (25)	The web has a hole near the bottom between stiffener #15 and the end. See Note 3, This Sheet.	Inside stiffener #15 has loss of section at bottom. See Note 3, This Sheet.				
		Outside face of the web has 1/4" loss near the bott. btwn. stiff. 1-End and btwn. stiff. 15-End. See Note 3, This Sheet.	Use A = 25 1/4", B = 15", n = 8 and n1 = 3.									Outside face of the web has 1/4" loss near the bottom adjacent to stiff. 2 and 4. See Note 3, This Sheet.	Outside stiffener #6 has loss of section at bottom. See Note 3, This Sheet.		
95	8S TO 9S	Sole plate and inside and outside bottom flange angles have light to 1/8" pack rust in between them at Pier 9S. See Note 1, This Sheet.	Sole plate and inside and outside bottom flange angles have light to 1/8" pack rust in between them at Pier 9S. See Note 1, This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" max. pack rust in between them at Pier 8S. See Note 2, This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 9S. See Note 1, This Sheet.		11S	10S TO 11S	Inside and outside top flange angles have 3/16" to 1/4" total loss at top and bottom between stiffener #15 and the end. See Note 3, This Sheet.	Sole plate and outside bott. flange angle have heavy pack rust in btwn. them at Pier 10S. See Note 2, This Sheet.	Sole plate and inside bottom flange angle have pack rust in between stiffener #15 and the end. See Note 3, This Sheet.	Outside top flange angle has 3/16" + total loss at top and bottom btwn. stiffener #15 and the end. See Note 3, This Sheet.			
		Sole plate and inside and outside bottom flange angles have 1/4" max. pack rust in between them at Pier 8S. See Note 2, This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" max. pack rust in between them at Pier 8S. See Note 2, This Sheet.	Sole plate and inside and outside bottom flange angles have light to 1/8" pack rust in between them at Pier 9S. See Note 1, This Sheet.	Sole plate and inside and outside bottom flange angles have light to 1/8" pack rust in between them at Pier 8S. See Note 2, This Sheet.							Inside and outside top flange angles have 3/16" total loss at top and bottom between stiffener #15 and the end. See Note 3, This Sheet.	Inside and outside top flange angles have 1/8" loss at top between stiff. #15 and the end. See Note 3, This Sheet.	Inside top flange has 1/8" loss of top between stiffener #15 and the end. See Note 3, This Sheet.	Inside top flange has 1/8" loss of top between stiffener #15 and the end. See Note 3, This Sheet.
		Outside top flange angle has 3/16" loss at top and 1/8" loss at bott. btwn. stiffener #15 and the end. See Note 3, This Sheet.	Outside top flange angle has 1/4" loss btwn. stiff. 15-End and 1/8" loss btwn. 14-15 at top. See Note 3, This Sheet.	Outside top flange angle has 3/16" loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.	Outside top flange angle has 3/16" loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.							Inside bottom flange angle has 1/8" loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.	Inside and outside bottom flange angles have 1/8" loss at bottom adjacent to sole plate at Pier 10S. See Note 2, This Sheet.	Inside bottom flange angle has 1/8" total loss at top and bottom between stiffener #1 and the end. See Note 3, This Sheet.	Inside and outside bottom flange angles have 1/8" to 3/16" total loss at top and bottom between stiff. #15-End. See Note 3, This Sheet.
		Inside top flange angle has 1/4" loss at top and 1/8" loss at bott. stiffener #15 and the end. See Note 3, This Sheet.	Inside top flange has 1/8" loss of top between stiffener #14 and the end. See Note 3, This Sheet.	Inside top flange angle has 3/16" loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.							Outside bottom flange angle has 1/8" loss at top btwn. stiff. 1-End and 1/8" loss at bott. 15-End. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/8" loss at bott. 1-End at top. See Note 3, This Sheet.	Outside bottom flange angle has 3/16" loss at top and 1/8" loss at bott. 15-End. See Note 3, This Sheet.	Inside and outside faces of the web have 1/4" to 3/16" loss near the bott. between stiffener #15 and the end. Use A = 19 1/4", B = 9", n = 6 and n1 = 1. For repair, see detail (25)
		Outside bottom flange angle has 1/8" loss btwn. stiff. 15-End and 1/8" loss btwn. 6-7 and 1-End at bott. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss at top between stiff. 2-3 and between 15-End. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss at top btwn. stiff. 1-End and 1/8" loss at bott. 15-End. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/8" loss at bott. 1-End at top. See Note 3, This Sheet.							Inside bottom flange angle has 1/8" loss at top and 1/8" loss at bott. between stiffener #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 1/8" loss at top and 1/8" loss at bott. between stiffener #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has 3/16" total loss at top and bottom between stiffener #15 and the end. See Note 3, This Sheet.	
		Inside bottom flange angle has 1/8" total loss at top and bott. btwn. stiffener #15 and the end. See Note 3, This Sheet.	Outside bottom flange angle has lost 1/4" of its outer edge between stiffener #1 and the end. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" loss at top and 1/8" loss at bott. between stiffener #15 and the end. See Note 3, This Sheet.	Inside face of the web has 1/4" loss near the bottom between stiffener #15-End. See Note 3, This Sheet.							Outside stiffener #2 has 1/8" loss of section at bottom. See Note 3, This Sheet.	Outside stiffener #1 has 1/8" loss of section at bottom. See Note 3, This Sheet.	Outside bottom flange angle has 3/16" total loss at top and bottom between stiffener #15 and the end. See Note 3, This Sheet.	
		Inside bottom flange angle has 1/4" loss at bottom adjacent to sole plate at Pier 8S. See Note 2, This Sheet.	Inside bottom flange angle has 3/16" loss between stiffener #1 and the end. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" + loss at top between stiffener #1 and the end. See Note 3, This Sheet.	Outside face of the web has 1/8" loss near the bottom between stiffener #1 and the end. See Note 3, This Sheet.							Outside stiffener #6 has 1/8" loss of section and bottom. See Note 3, This Sheet.	Outside stiffener #6 has holes at bottom. See Note 3, This Sheet.	Inside face of the web has 3/16" loss near the bottom between stiff. #15 and the end. See Note 3, This Sheet.	
		Outside stiffeners 2 and 4 have 1/8" loss of section at bottom. See Note 3, This Sheet.	Inside bottom flange angle has 1/8" + loss at top and 1/8" loss at bottom between stiffener #15 and the end. See Note 3, This Sheet.	Inside face of the web has 1/8" loss near the bottom between stiffener #1 and the end. See Note 3, This Sheet.	Outside face of the web has 1/8" loss near the bottom between stiffener #15 and the end. See Note 3, This Sheet.							The web has a hole near the bott. between stiffener #15 and the end. Use A = 20 1/4", B = 12 1/2", n = 6 and n1 = 2. For repair, see detail (25)	Inside face of the web has 3/8" loss and holes near the bottom between stiffener #15 and the end. Use A = 19 1/4", B = 12", n = 6 and n1 = 2. For repair, see detail (25)		
		Inside face of the web has 1/4" loss near the bottom between stiffener #1 and the end. See Note 3, This Sheet.	Outside stiffeners 6 and 10 have a hole at bottom. See Note 3, This Sheet.	Inside face of the web has 1/4" loss near the bottom between stiffener #15 and the end. See Note 3, This Sheet.	Inside face of the web has 1/4" loss near the bottom between stiffener #15 and the end. See Note 3, This Sheet.							Outside face of the web has 1/4" loss and inside face has 3/16" loss near the bottom between stiff. #1 and the end. See Note 3, This Sheet.			

- NOTES:
1. Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Seal bearing using Fixed Bearing Repair Details, Sheet 31.
 2. Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Expansion bearing is being replaced. See Bearing Repair Schedule, Sheets 28-30, and Expansion Bearing Replacement Details, Sheet 32.
 3. Clean and remove all rust, foreign material and old paint down to the bare metal. Cost incidental to "Cleaning and Painting."



NOTE: Work This Sheet with Sheets 25 thru 32.

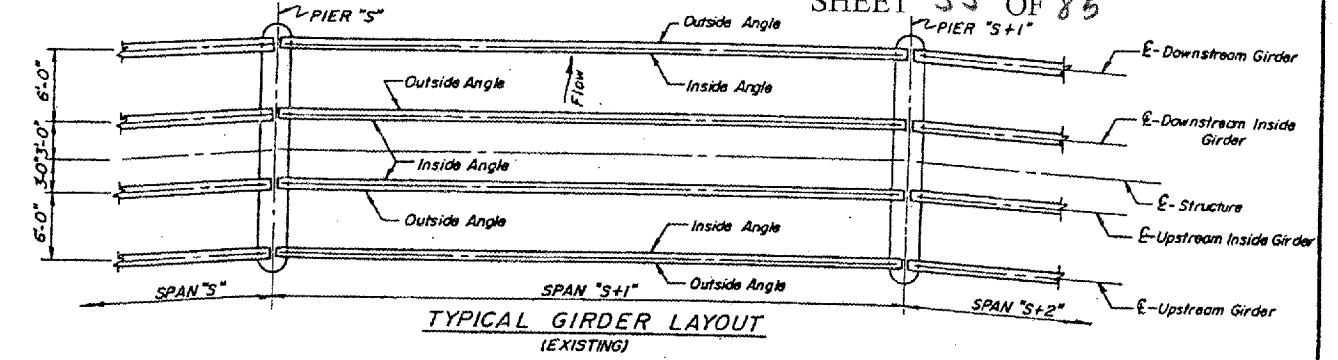
DESIGNED *[Signature]*
CHECKED R.F.C.
DRAWN *[Signature]*
CHECKED R.F.C./E.S.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

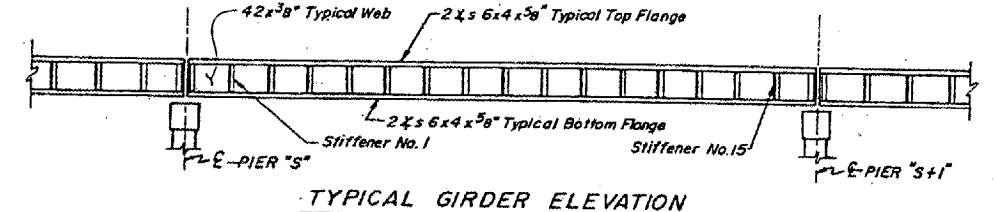
MISSOURI APPROACH BRNS
GIRDER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

MISSOURI APPROACH - PLATE GIRDER REPAIR SCHEDULE

SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				REMARKS	
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE		
12S (CONT.)	11S TO 12S	Inside face of the web has 3/16" loss near the bottom between stiff. #15 and the end. See Note "3", This Sheet.	Inside/bottom flange angle has 3/16" loss at top and bottom b/wn stiff. #15 and the end. See Note "3", This Sheet.	Inside and outside faces of the web have 3/16" loss near the bott. between stiffener #15 and the end. Use A = 26 1/4", B = 15 1/2", n = 8 and n1 = 3. For repair, see detail 25	Inside and outside faces of the web have 3/16" loss and a hole near the bottom between stiffener #15 and the end. Use A = 16 1/2", B = 12", n = 5 and n1 = 2. For repair, see detail 25	Downstream Girder: A = 16 1/2" for Detail "6" N = 2	
		Inside face of the web has 3/16" loss near the bottom between stiffener #1 and the end. See Note "3", This Sheet.	Outside stiffener #6 has 80% loss of section at bottom. See Note "3", This Sheet.		The web has a hole near the top between stiffener #15 and the end. See Note "3", This Sheet.		
13S	12S TO S.ABUT.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 12S. See Note "2", This Sheet.	Sole plate and inside and outside bottom flange angles have light pack rust in between them at S. Abut. See Note "1", This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 12S. See Note "2", This Sheet.	Sole plate and outside bott. flange angle have light pack rust in b/wn them at South Abutment. See Note "1", This Sheet.		
		Outside bottom flange angle has 1/4" loss at bottom adjacent to sole plate at South Abutment. See Note "1", This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" pack rust in between them at Pier 12S. See Note "2", This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" pack rust in between them at S. Abut. See Note "1", This Sheet.	Sole plate and inside and outside bottom flange angles have 1/8" to 1/4" pack rust in between them at Pier 12S. See Note "2", This Sheet.		
		Outside bottom flange angle has 1/8" loss at bottom between stiff. #1 and the end. See Note "3", This Sheet.	Inside bottom flange angle has 1/8" loss at top and bottom b/wn stiffener #1 and the end. See Note "3", This Sheet.	Outside bottom flange angle has 1/8" loss at top between stiff. #1 and the end. See Note "3", This Sheet.	Outside bottom flange angle has 3/16" loss at top between stiffener #1 and the end. See Note "3", This Sheet.		
		Inside bottom flange angle has 1/8" loss at bottom between stiff. #15 and the end. See Note "3", This Sheet.	Outside face of the web has 1/4" loss near the bottom between stiffener #1 and the end. See Note "3", This Sheet.	Inside bottom flange angle has lost 2" of its outer edge b/wn stiff. #1-End. For repair, see detail 26	Inside bottom flange angle has lost 3" of its outer edge between stiff. #1-End. For repair, see detail 26		
		Inside bottom flange angle has 1/8" total loss at top and bottom between stiffener #1 and the end. See Note "3", This Sheet.					



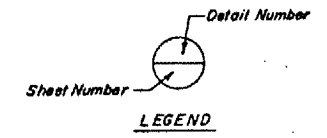
Note: All Stiffeners Are Numbered From The North End Of The Girders



NOTES:

1. Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Seal bearing using Fixed Bearing Repair Details, Sheet 31.
2. Clean girder end and remove all rust, foreign material and old paint down to the bare metal. Expansion bearing is being replaced. See Bearing Repair Schedule, Sheets 28-30, and Expansion Bearing Replacement Details, Sheet 32.
3. Clean and remove all rust, foreign material and old paint down to the bare metal. Cost incidental to "Cleaning and Painting."

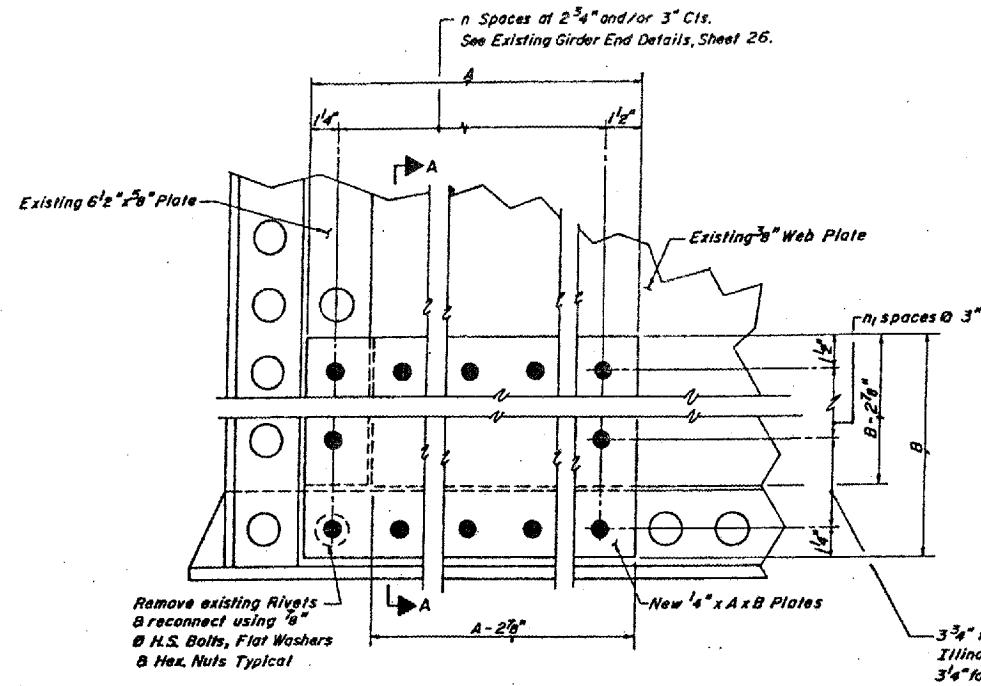
DESIGNED: *[Signature]*
CHECKED: R.F.C.
DRAWN: *[Signature]*
CHECKED: R.F.C. - F.S.



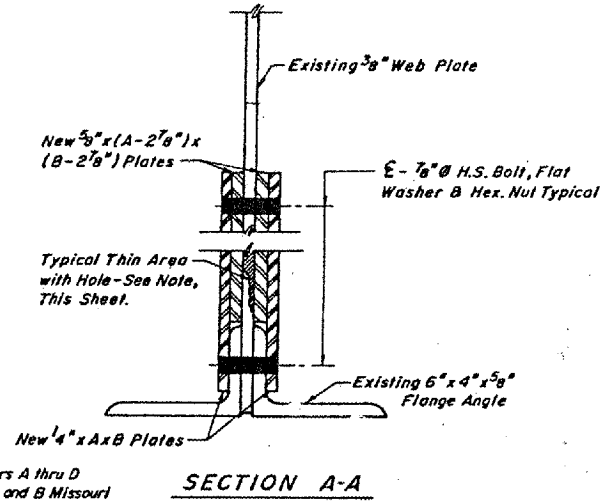
NOTE: Work This Sheet with Sheets 25 thru 32.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

MISSOURI APPROACH - SPANS
GIRDER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138 D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08



GIRDER WEB REPAIR TYPE "A"
DETAIL "1"



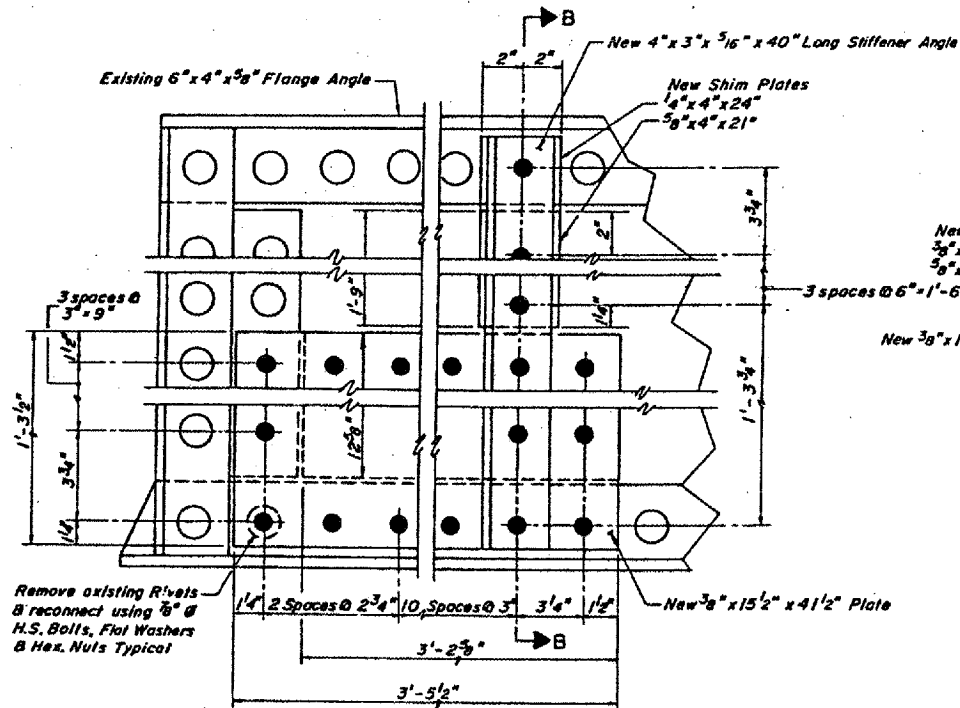
SECTION A-A

LIST OF MATERIAL

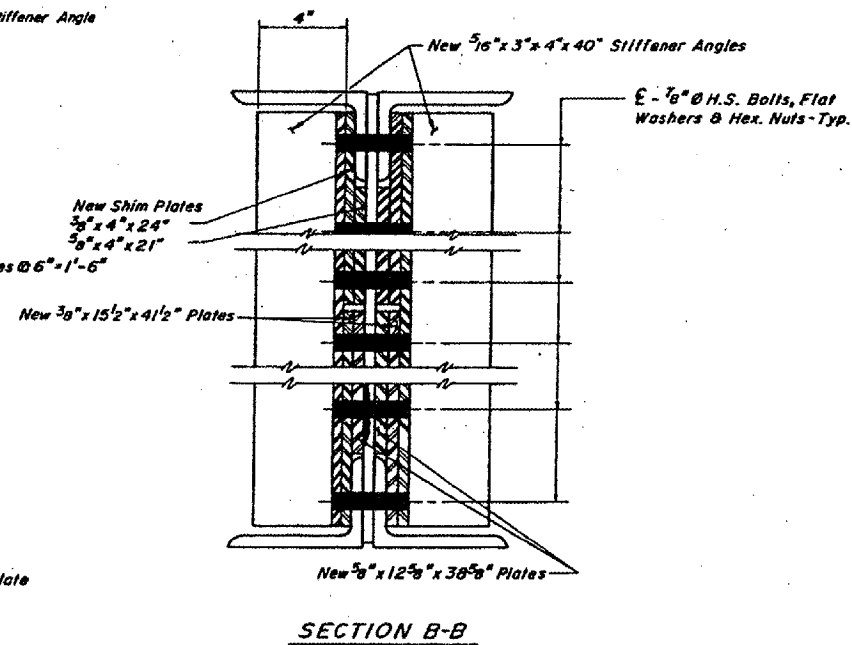
DETAIL NUMBER	NO. PLACES OCCURRING	LIST OF MATERIAL PER LOCATION	
		PLATES	5/8" Ø BOLTS
	1	2-1/4" x 14 1/4" x 9/16"; 2-5/8" x 11 3/8" x 6 3/8"	10
	1	2-1/4" x 16 1/2" x 12"; 2-5/8" x 13 3/8" x 9 1/8"	16
	1	2-1/4" x 17 1/4" x 12 1/2"; 2-5/8" x 14 3/8" x 9 5/8"	16
	1	2-1/4" x 17 1/4" x 15 1/2"; 2-5/8" x 14 3/8" x 12 7/8"	18
	1	2-1/4" x 19 1/4" x 9"; 2-5/8" x 16 3/8" x 6 3/8"	16
	1	2-1/4" x 19 1/4" x 12"; 2-5/8" x 16 3/8" x 9 1/8"	18
	1	2-1/4" x 19 1/4" x 15"; 2-5/8" x 16 3/8" x 12 1/8"	20
	1	2-1/4" x 20 1/4" x 12 1/2"; 2-5/8" x 17 3/8" x 9 5/8"	18
	1	2-1/4" x 22 1/4" x 9"; 2-5/8" x 19 3/8" x 6 3/8"	18
	1	2-1/4" x 25 1/4" x 15"; 2-5/8" x 22 3/8" x 12 1/8"	24
	2	2-1/4" x 26 1/4" x 9 1/2"; 2-5/8" x 23 3/8" x 6 3/8"	20
	1	2-1/4" x 26 1/4" x 15 1/2"; 2-5/8" x 23 3/8" x 12 7/8"	24
	1	2-1/4" x 29 1/4" x 15 1/2"; 2-5/8" x 26 3/8" x 12 7/8"	26
	1	2-1/4" x 35 1/4" x 15 1/2"; 2-5/8" x 32 3/8" x 12 7/8"	30
2	1	2-3/8" x 15 1/2" x 4 1/2"; 2-5/8" x 12 5/8" x 38 5/8" 2-3/8" x 4" x 24"; 2-5/8" x 4" x 21" 2-5/8" x 3" x 4" x 40" Angles	42

BILL OF MATERIAL

DESCRIPTION	NO. OF LOC. OCCURRING	UNIT	TOTAL QUANTITY
Girder Web Repair Type "A" Illinois Approach Girders	3	Lb.	370
Girder Web Repair Type "A" Missouri Approach Girders	12	Lb.	1680
Girder Web Repair Type "B" Missouri Approach Girders	1	Lb.	410



GIRDER WEB REPAIR TYPE "B"
DETAIL "2"



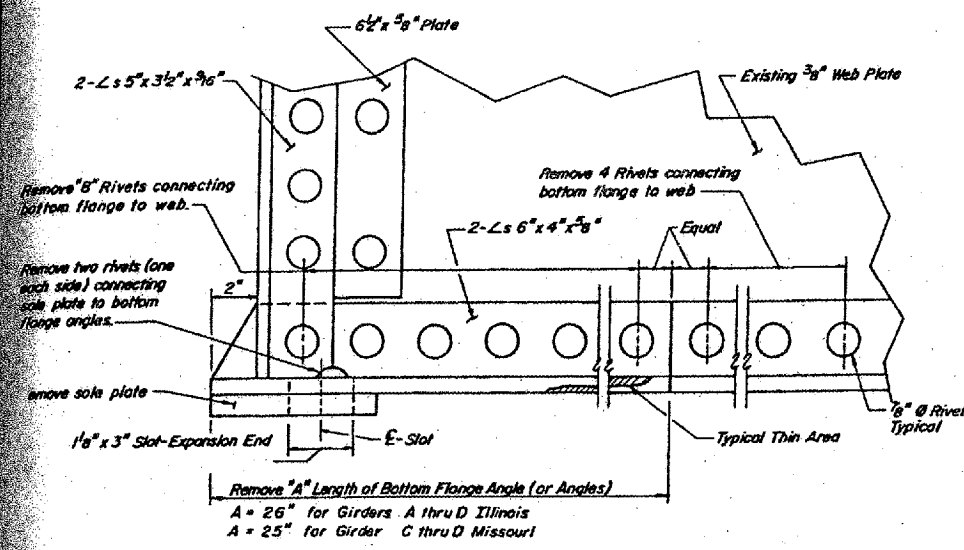
SECTION B-B

Note:
Contractor to clean the vicinity of the thin area and remove all rust, foreign material and all old paint down to the bare metal.

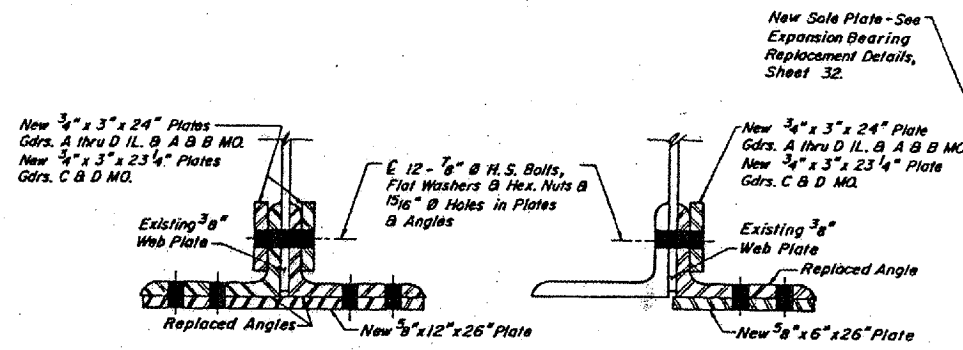
BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

APPROACH SPANS
GIRDER REPAIR DETAILS
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL MISSISSIPPI CO., MO.
STATION 28+13.08

DESIGNED <i>Spencer</i>
CHECKED <i>R.E.G.</i>
DRAWN <i>C.P.L. - S.H.</i>
CHECKED <i>R.C.C. - P.S.</i>

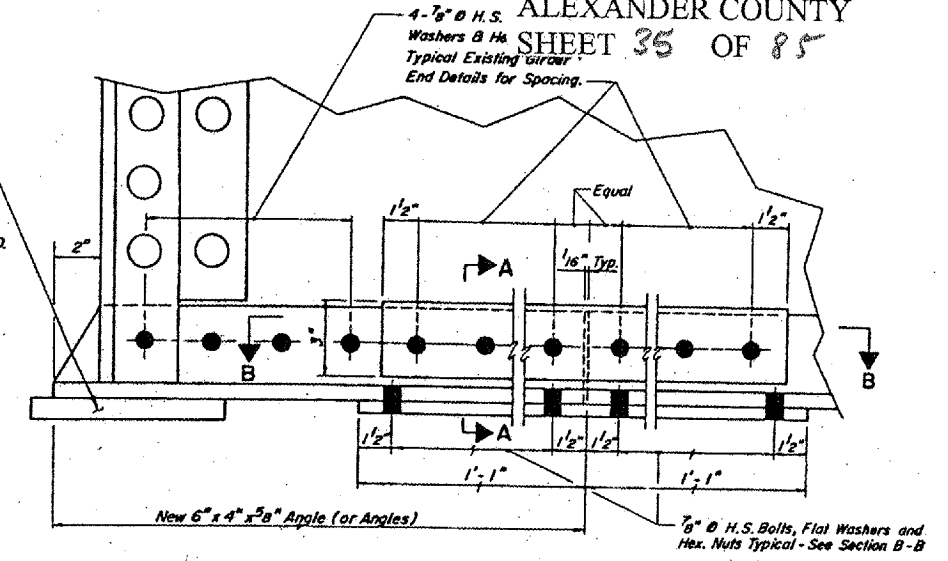


ELEVATION
EXISTING



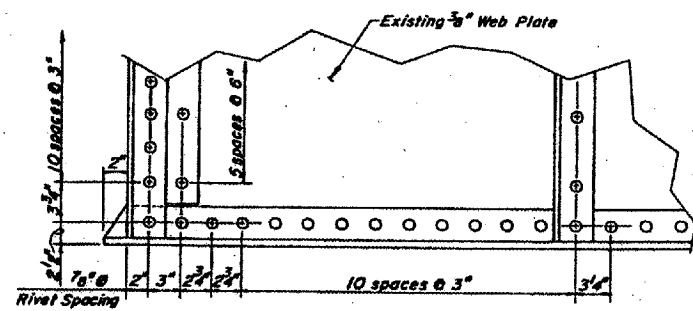
DETAIL-3
(BOTH SIDES)

DETAIL-4
(ONE SIDE)

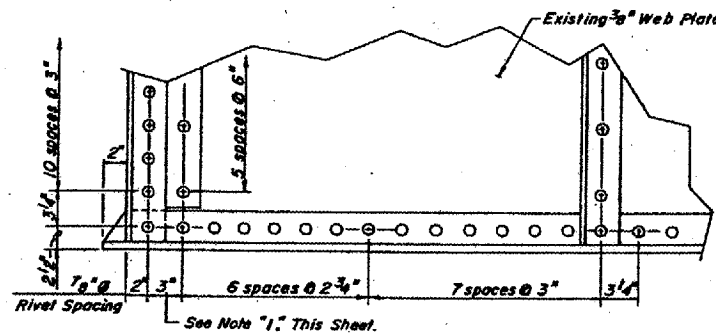


ELEVATION
REPAIRED

GIRDER EXPANSION END FLANGE REMOVAL AND REPLACEMENT DETAILS "3" & "4"



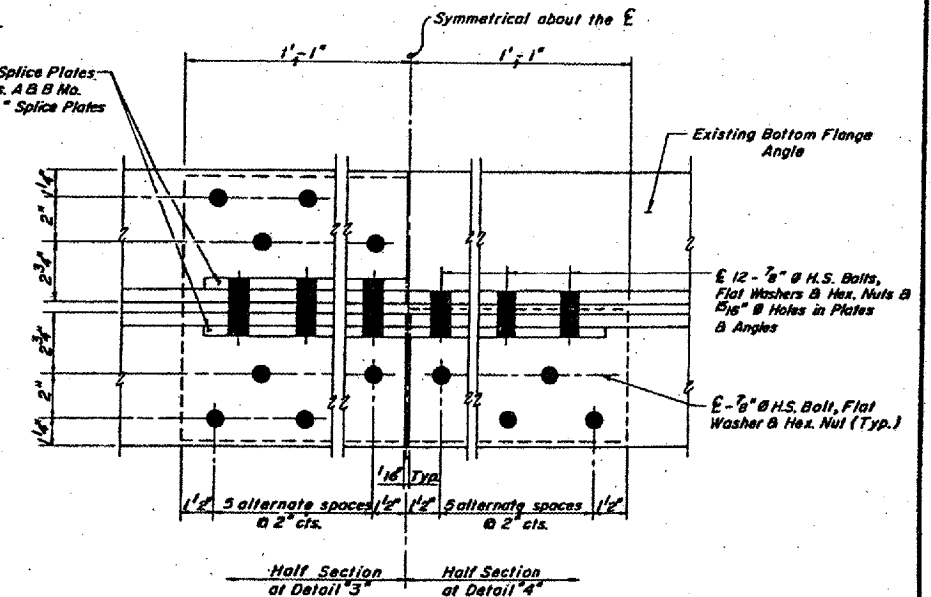
GIRDERS A-D ILL., A & B MO.



GIRDERS C & B MO.

EXISTING GIRDERS - END DETAILS

New 3/4"x3"x24" Splice Plates:
Gdrs. A-D IL, Gdrs. A & B Mo.
New 3/4"x3"x23 1/4" Splice Plates:
Gdrs. C & D Mo.



SECTION B-B

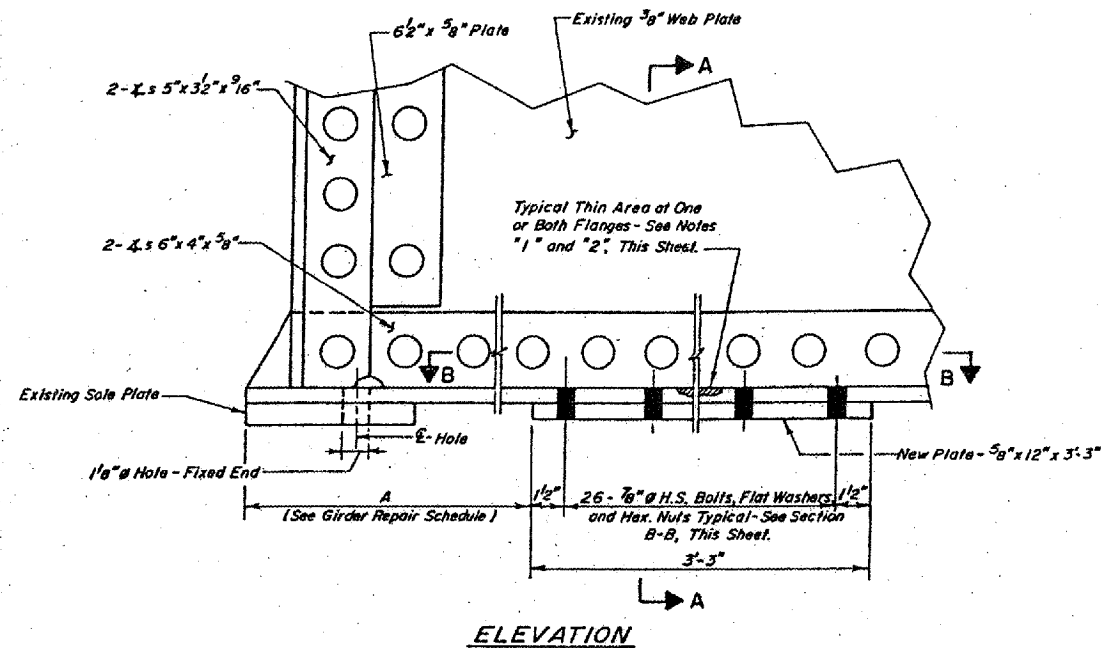
NOTES:

1. Has been measured to be 3/4" at some locations. Plate dimensions given in the list of material are based on 3" rivet spacing. This dimension shall be field verified when necessary before ordering material.
2. For Bill of Material and List of Material, See Sheet 27.

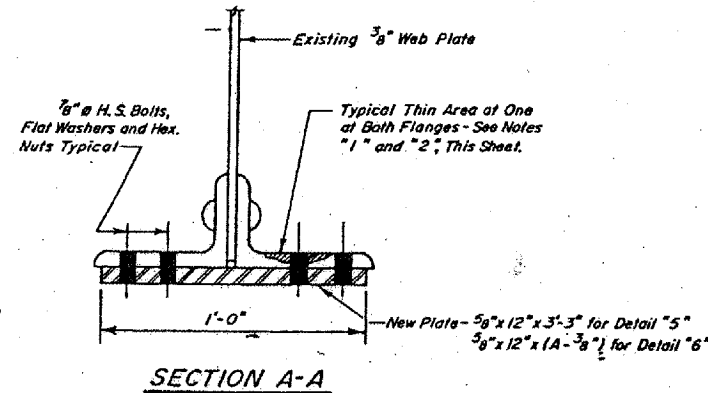
DESIGNED	<i>Am...</i>
CHECKED	<i>R.E.C.</i>
DRAWN	<i>C.P.L.-R.S.</i>
CHECKED	<i>R.E.C.-R.S.</i>

BRIDGE NO. 1
STRUCTURE 002-005
FOR INFORMATION ONLY

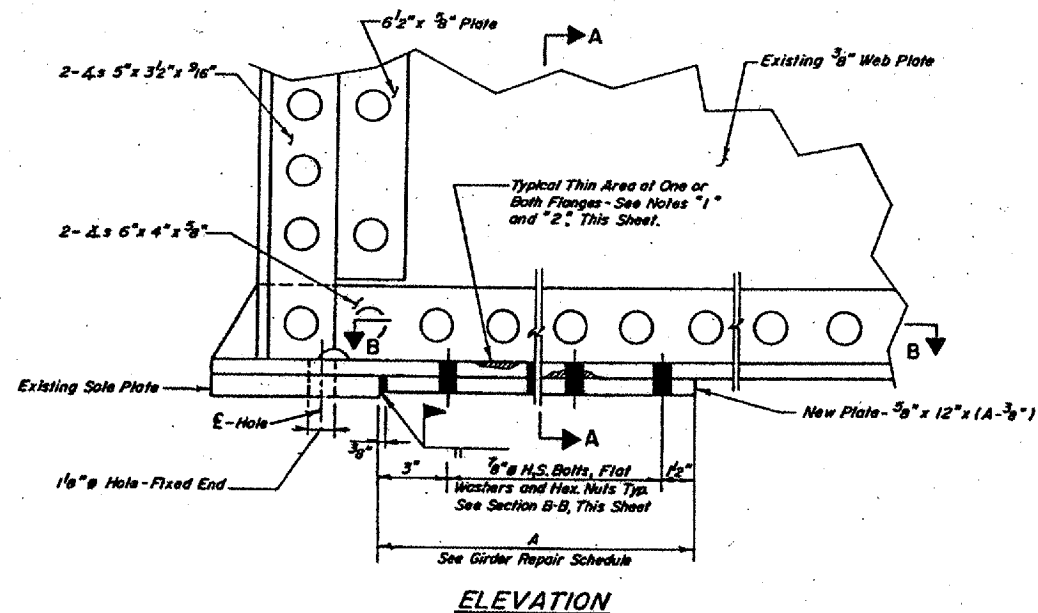
APPROACH SF
GIRDER REPAIR DETAILS
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138 D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08



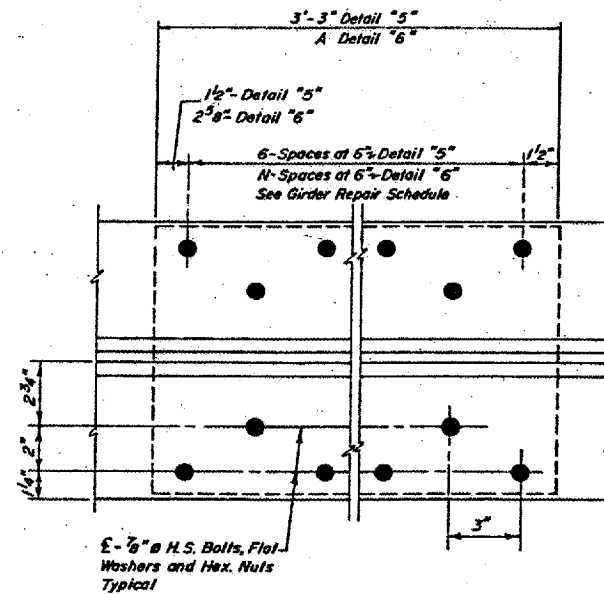
GIRDER MID-FLANGE REPAIR - DETAIL "5"



SECTION A-A



GIRDER FIXED END FLANGE REPAIR - DETAIL "6"



SECTION B-B

- NOTES:
- Contractor to clean the vicinity of the thin area and remove all rust, foreign material and all old paint down to the bare metal.
 - Filler plates of 3/8" minimum thickness shall be used at locations where connection bolts pass thru thin area of existing members.

BILL OF MATERIAL			
Description	No. of Locations Occurring	Unit	Total Quantity
Girder Expansion End Flange Removal and Replacement - Illinois Approach Girders	13	Lb.	1990
Girder Expansion End Flange Removal and Replacement - Missouri Approach Girders	13	Lb.	1880
Girder Mid-Flange Repair Illinois Approach Girders	4	Lb.	440
Girder Mid-Flange Repair Missouri Approach Girders	0	Lb.	0
Girder Fixed End Flange Repair Illinois Approach Girders	17	Lb.	1330
Girder Fixed End Flange Repair Missouri Approach Girders	4	Lb.	230

LIST OF MATERIAL			
DETAIL NUMBER	NO. PLACES OCCURRING	LIST OF MATERIAL PER LOCATION	
		PLATES	7/8" Ø BOLTS
3	7	2-3/4 x 3" x 24", 1-5/8" x 12" x 26", 2-5/8" x 6" x 4" x 2'-2" Angles	36
	2	2-3/4 x 3" x 23 1/4", 1-5/8" x 12" x 26", 2-5/8" x 6" x 4" x 2'-1" Angles	36
4	14	1-3/4 x 3" x 24", 1-5/8" x 6" x 26", 1-5/8" x 6" x 4" x 2'-2" Angle	24
	3	1-3/4 x 3" x 23 1/4", 1-5/8" x 6" x 26", 1-5/8" x 6" x 4" x 2'-1" Angle	24
5	4	1-5/8" x 12" x 3'-3"	26
	5	1-5/8" x 12" x 16 1/8"	10
	5	1-5/8" x 12" x 22 1/8"	14
	3	1-5/8" x 12" x 28 1/8"	18
	7	1-5/8" x 12" x 34 1/8"	22
6	1	1-5/8" x 12" x 40 1/8"	26

DESIGNED	<i>[Signature]</i>
CHECKED	R.F.C.
DRAWN	<i>[Signature]</i>
CHECKED	R.F.C. - F.C.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

APPROACH SP...
GIRDER REPAIR DETAILS
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

ILLINOIS APPROACH - PLATE GIRDER BEARING REPAIR SCHEDULE

SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				REMARKS
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE	
2N	2N TO IN	Inside anchor bolt is missing at Pier 1N. See Expansion Bearing Replacement Detail, Sheet 32	Base plate has 1/4" loss of section at top on the outside and the inside anchor bolt is missing at Pier 1N. See Exp. Brg. Replacement Detail, Sheet 32			
1N	1N TO A	Base plate has 1/4" loss of section at top on the inside, sole plate has 50% loss of section on the outside and the inside and outside anchor bolts are missing at Pier A. See Exp. Bearing Replacement Detail, Sheet 32	Base plate has 1/4" loss of section at top on the outside and the inside and outside anchor bolts are missing at Pier A. See Expansion Bearing Replacement Detail, Sheet 32	Base plate has 1/4" loss of section on the inside and 1/4" loss of section on the outside at top and the inside and outside anchor bolts are missing at Pier A. See Expansion Bearing Replacement Detail, Sheet 32	Base plate has 1/4" loss of section at top on the outside, sole plate has 50% loss of section on the inside and the inside and outside anchor bolts are missing at Pier A. See Exp. Bearing Replacement Detail, Sheet 32	

ILLINOIS APPROACH SPANS

PIER NUMBER	PLATE SIZE	
	U.S.I.S. B D.S.I.S.	U.S. B D.S.
A	14"x13"x4 1/2"	14"x13"x2 9/16"
21N	14"x13"x3 1/2"	14"x13"x1 9/16"
1N - 20N	14"x20"x3 1/2"	14"x20"x1 9/16"

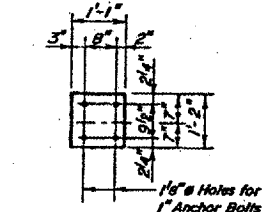
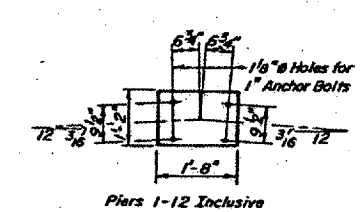
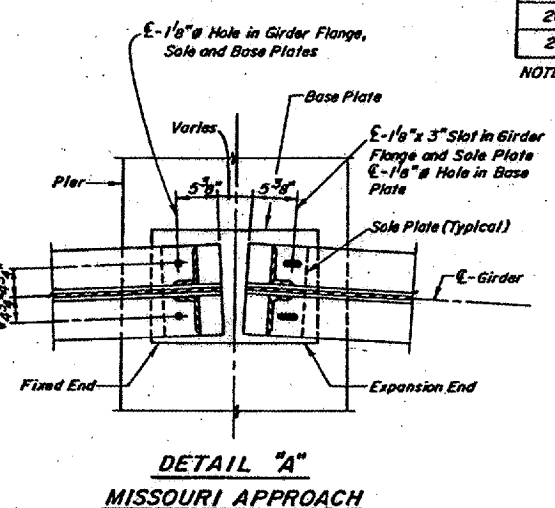
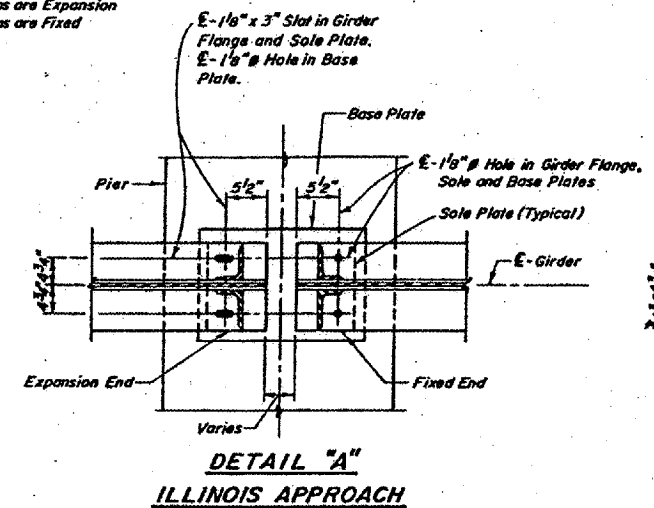
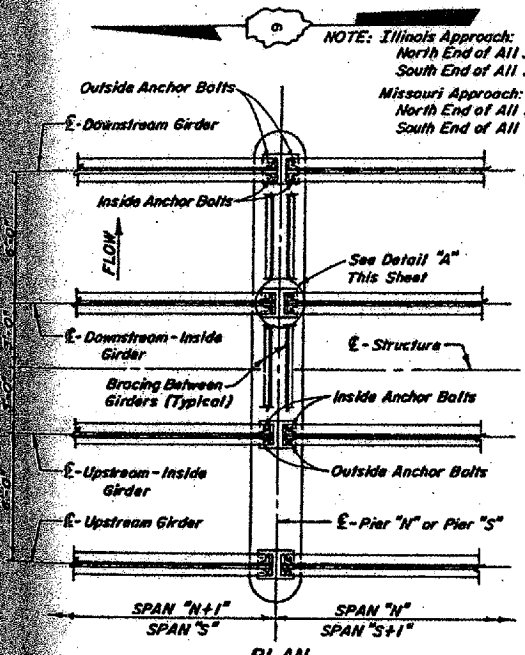
PIER NUMBER	PLATE SIZE			
	U.S. (GIRDER A)	U.S.I.S. (GIRDER B)	D.S.I.S. (GIRDER C)	D.S. (GIRDER D)
H	13"x14"x2 5/8"	13"x14"x3 5/8"	13"x14"x4 5/8"	13"x14"x5 5/8"
15-12S	20"x14"x1 5/8"	20"x14"x2 5/8"	20"x14"x3 5/8"	20"x14"x4 5/8"
13S	13"x14"x1 5/8"	13"x14"x2 5/8"	13"x14"x3 5/8"	13"x14"x4 5/8"

PIER NUMBER	PLATE THICKNESS	
	EXPANSION END	FIXED END
A	*	*
1N	2 3/32" x 2"	7/8" x 1 7/16"
2N	3/4" x 1 5/32"	7/8" x 1 9/16"
3N	2 3/32" x 9/16"	7/8" x 1 1/8"
4N	1 1/16" x 5/8"	2 7/32" x 3 1/32"
5N	1 3/16" x 1 1/16"	2 7/32" x 2 3/32"
6N	1 3/16" x 2 5/32"	1 3/16" x 2 3/32"
7N-18N	1 3/16"	1 3/16"
19N	1 3/16" x 2 5/32"	1 3/16" x 2 7/32"
20N	1 3/16" x 1 1/16"	2 7/32" x 3 3/32"
21N	*	1 3/16" x 2 3/32"

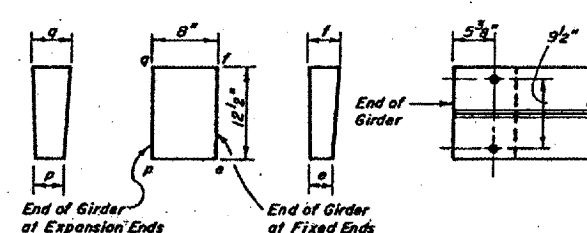
NOTE: All Sole Plates are 12 1/2" Wide and 7 1/2" Long.

PIER NUMBER	PLATE THICKNESS							
	EXPANSION END				FIXED END			
	e	f	p	q	e	f	p	q
H	2 1/32"	2 3/32"	1"	1 3/16"	1"	1 3/16"	1 1/32"	1 1/32"
15	1 1/16"	2 3/32"	7/8"	1 1/16"	1"	1 3/16"	1 1/32"	1 1/32"
25	1 1/16"	7/8"	2 3/32"	1 3/32"	1"	1 3/16"	1 3/32"	1 1/32"
35	3/4"	1 5/16"	2 3/32"	1 3/32"	1"	1 3/16"	1 5/32"	1 1/32"
45	1 3/16"	1"	2 3/32"	1 3/32"	3 1/32"	1 3/32"	1 8/16"	1 1/16"
55	2 3/32"	1 3/32"	1 5/16"	1 1/8"	3 1/32"	1 3/32"	1 1/8"	1 1/8"
65-85	1 5/16"	1 1/8"	1 5/16"	1 1/8"	1 5/16"	1 1/8"	3 1/32"	1 3/32"
95	2 3/32"	1 3/32"	1 5/16"	1 1/8"	1 5/16"	1 1/8"	1 5/16"	1 1/8"
105	1 5/16"	1"	2 3/32"	1 3/32"	1 5/16"	1 1/8"	3 1/32"	1 3/32"
115	3/4"	1 5/16"	2 3/32"	1 3/32"	3 1/32"	1 3/32"	1 1/8"	1 1/8"
125	*	*	*	*	1 5/16"	1 1/8"	1 1/8"	1 1/8"

* Values Not Available

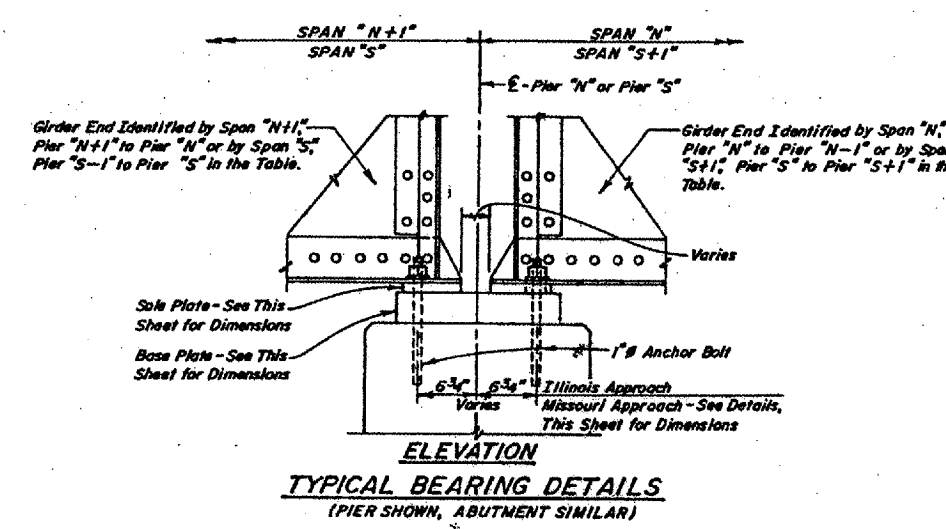
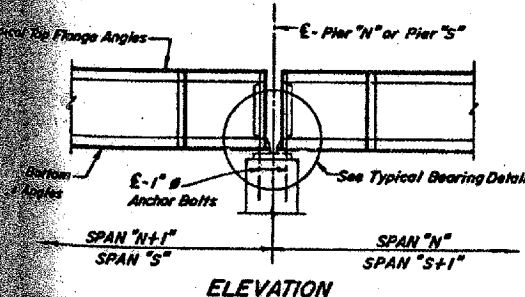


BASE PLATE DETAILS



SOLE PLATE DETAILS

MISSOURI APPROACH SOLE AND BASE PLATE DETAILS (EXISTING)



NOTE: Existing Girder Bearing Details given on this Sheet are for information only.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

ILLINOIS APPROACH SPANS
BEARING REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

DESIGNED: [Signature]
CHECKED: R.F.C.
DRAWN: [Signature]
CHECKED: R.F.C. - F.S.
ENGINEERING COMPANY CONSULTING ENGINEERS SCHALMURG, ILLINOIS

MISSOURI APPROACH - PLATE GIRDER BEARING REPAIR SCHEDULE

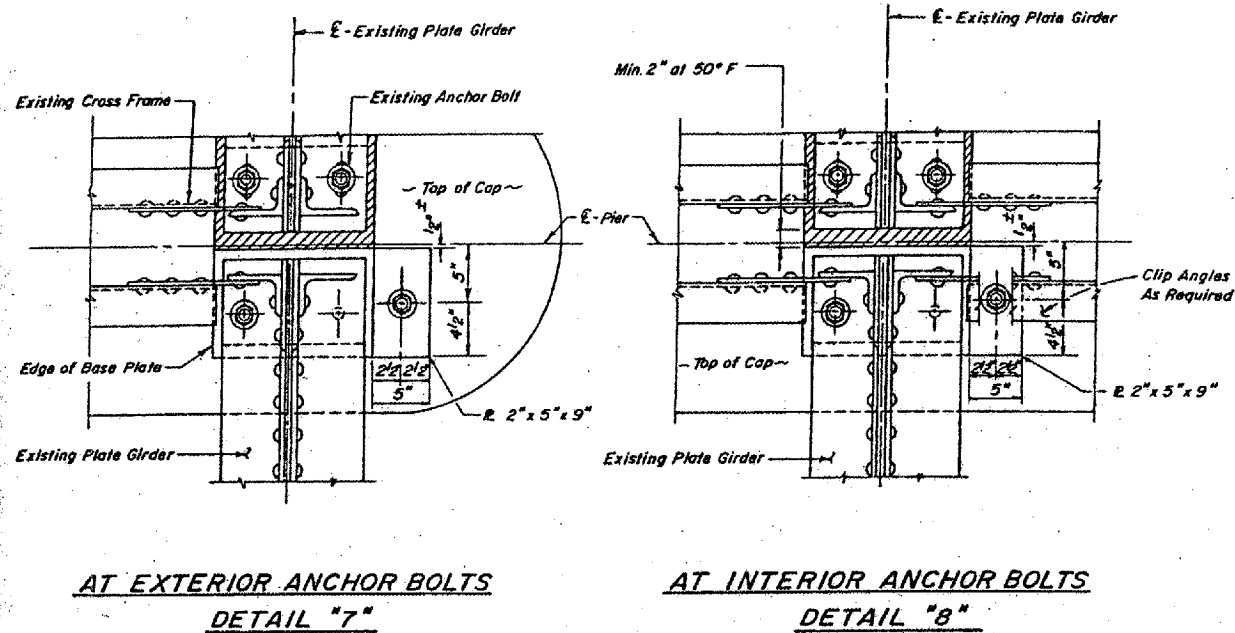
SPAN NUMBER	PIER NUMBER	GIRDER LOCATION				REMARKS	SPAN NUMBER	PIER NUMBER	GIRDER LOCATION			
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE
15	H TO 15	Base plate has 1/8" loss of section at top on the outside and the inside and outside anchor bolts are missing at Pier H. See Expansion Bearing Replacement Detail, Sheet 32	Inside and outside anchor bolts are missing at Pier H. See Expansion Bearing Replacement Detail, Sheet 32	Inside and outside anchor bolts are missing at Pier H. See Expansion Bearing Replacement Detail, Sheet 32	Inside and outside anchor bolts are missing at Pier H. See Expansion Bearing Replacement Detail, Sheet 32		95	85 TO 95	Sole and base plates have light pack rust in between them on the inside and 1/8" on the outside at Pier 9S. See Note "1," This Sheet.	Sole and base plates have light pack rust in between them on the inside and outside at Pier 9S. See Note "1," This Sheet.	Sole and base plates have light pack rust in between them on the inside and outside at Pier 9S. See Note "1," This Sheet.	Sole and base plates have 1/8" pack rust in between them on the inside and 1/8" on the outside at Pier 9S. See Note "1," This Sheet.
					Sole and base plates have 1/8" pack rust in between them on the inside at Pier 1S. See Note "1," This Sheet.					Sole and base plates have 1/4" pack rust in between them on the inside and light on the outside, the inside anchor bolt has 3/4 loss of section and the outside anchor bolt has 2/3 loss of section at Pier 8S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have 1/8" pack rust in between them on the inside and outside, the inside anchor bolt has 3/4 loss of section and the outside anchor bolt has 1/2 loss of section at Pier 8S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have 1/4" max. pack rust in between them on the inside and outside and the outside anchor bolt has 1/3 loss of section at Pier 8S. See Expansion Bearing Replacement Detail, Sheet 32
25	15 TO 25		Inside and outside anchor bolts are missing at Pier 15. See Expansion Bearing Replacement Detail, Sheet 32				35	25 TO 35	Sole and base plates have light pack rust in between them on the inside and 1/8" on the outside at Pier 3S. See Note "1," This Sheet.	Sole and base plates have 1/8" pack rust in between them on the inside and outside at Pier 3S. See Note "1," This Sheet.	Sole and base plates have 1/4" max. pack rust in between them on the inside and outside at Pier 3S. See Exp. Brg. Replacement Detail, Sh. 32	Sole and base plates have 1/8" pack rust in between them on the inside and light on the outside at Pier 3S. See Note "1," This Sheet.
											Sole and base plates have light pack rust in between them on the inside and outside, the inside anchor bolt has 75% loss of section at Pier 9S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have light pack rust in between them on the inside and outside and the outside anchor bolt has 75% loss of section at Pier 9S. See Expansion Bearing Replacement Detail, Sheet 32
35	25 TO 35	Sole and base plates have pack rust in between them on the inside and the inside and outside anchor bolts have loss of section at Pier 2S. See Exp. Bearing Replacement Detail, Sheet 32	Sole and base plates have pack rust in between them on the outside at Pier 3S. See Note "1," This Sheet.	Sole and base plates have pack rust in between them on the outside at Pier 3S. See Note "1," This Sheet.			45	35 TO 45	Inside anchor bolt is missing and the outside anchor bolt has loss of section at Pier 3S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have pack rust in between them on the outside at Pier 4S. See Note "1," This Sheet.	Sole and base plates have 3/8" pack rust in between them on the inside and the inside and outside anchor bolts have loss of section at Pier 3S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have pack rust in between them on the inside and the inside and outside anchor bolts are missing at Pier 3S. See Expansion Bearing Replacement Detail, Sheet 32
											Sole and base plates have pack rust in between them on the outside, the inside anchor bolt is missing and the outside anchor bolt has loss of section at Pier 3S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have pack rust in between them on the inside at Pier 4S. See Note "1," This Sheet.
45	35 TO 45						55	45 TO 55	Inside anchor bolt is missing and the outside anchor bolt has loss of section at Pier 4S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have 3/8" pack rust in between them on the outside at Pier 4S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have pack rust in between them on the inside and the outside anchor bolt has loss of section at Pier 4S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have pack rust in between them on the outside at Pier 4S. See Expansion Bearing Replacement Detail, Sheet 32
55	45 TO 55						65	55 TO 65	Sole and base plates have 1/8" pack rust in between them on the inside and 1/8" on the outside and the inside and outside anchor bolts have 50% loss of section at Pier 5S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have 1/8" pack rust in between them on the inside and 1/8" on the outside and the inside anchor bolt is missing at Pier 5S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have 3/16" pack rust in between them on the inside and 1/8" on the outside and the inside anchor bolt is missing at Pier 5S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have 3/16" pack rust in between them on the inside and 1/8" on the outside and the inside anchor bolts are missing at Pier 5S. See Exp. Brg. Replacement Detail, Sheet 32
											Sole and base plates have 1/8" pack rust in between them on the inside and 1/8" on the outside at Pier 6S. See Note "1," This Sheet.	Sole and base plates have 1/8" pack rust in between them on the inside and 1/8" on the outside at Pier 6S. See Note "1," This Sheet.
65	55 TO 65						75	65 TO 75	Sole and base plates have 1/8" pack rust in between them on the inside and 1/8" on the outside at Pier 6S. See Note "1," This Sheet.	Sole and base plates have 1/8" pack rust in between them on the inside and 1/8" on the outside at Pier 6S. See Note "1," This Sheet.	Sole and base plates have 3/16" pack rust in between them on the inside and 1/8" on the outside and the inside anchor bolt is missing at Pier 6S. See Note "1," This Sheet.	Sole and base plates have 1/8" pack rust in between them on the inside and outside at Pier 6S. See Note "1," This Sheet.
75	65 TO 75						85	75 TO 85	Inside anchor bolt has 75% loss of section and the outside anchor bolt has 50% loss of section at Pier 6S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have 1/4" pack rust in between them on the inside, the inside anchor bolt is missing and the outside anchor bolt has 50% loss of section at Pier 6S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have 1/4" pack rust in between them on the inside and the inside and outside anchor bolts are missing at Pier 6S. See Expansion Bearing Replacement Detail, Sheet 32	Base plate and the two sole plates have pack rust in between them on the outside at Pier 7S. See Note "1," This Sheet.
85	75 TO 85						135	125 TO 135	Inside and outside anchor bolts have loss of section at Pier 7S. See Expansion Bearing Replacement Detail, Sheet 32	Sole and base plates have pack rust in between them on the inside, inside anchor bolt is missing and the outside anchor bolt has loss of section at Pier 7S. See Exp. Bearing Replacement Detail, Sheet 32	The two sole plates have 3/8" pack rust in between them on the inside, the sole and base plates have pack rust in between them on the outside and the inside and outside anchor bolts are missing at Pier 7S. See Expansion Bearing Replacement Detail, Sheet 32	The two sole plates have pack rust in between them on the inside, the sole and base plates have 3/8" pack rust in between them on the outside and the inside and outside anchor bolts are missing at Pier 7S. See Expansion Bearing Replacement Detail, Sheet 32

NOTES:
1. Clean and remove all rust, foreign material and old paint down to the bare metal. Cost incidental to "Painting and Cleaning."
2. Re-position existing base plates, replace anchor bolts as per Inside and Outside Anchor Bolt Replacement Details specified in the Table.

DESIGNED *Lewis*
CHECKED *R.F.C.*
DRAWN *Lewis*
CHECKED *R.F.C.-F.S.*

BRIDGE NO. 1
STRUCTURE 002-005
FOR INFORMATION ONLY

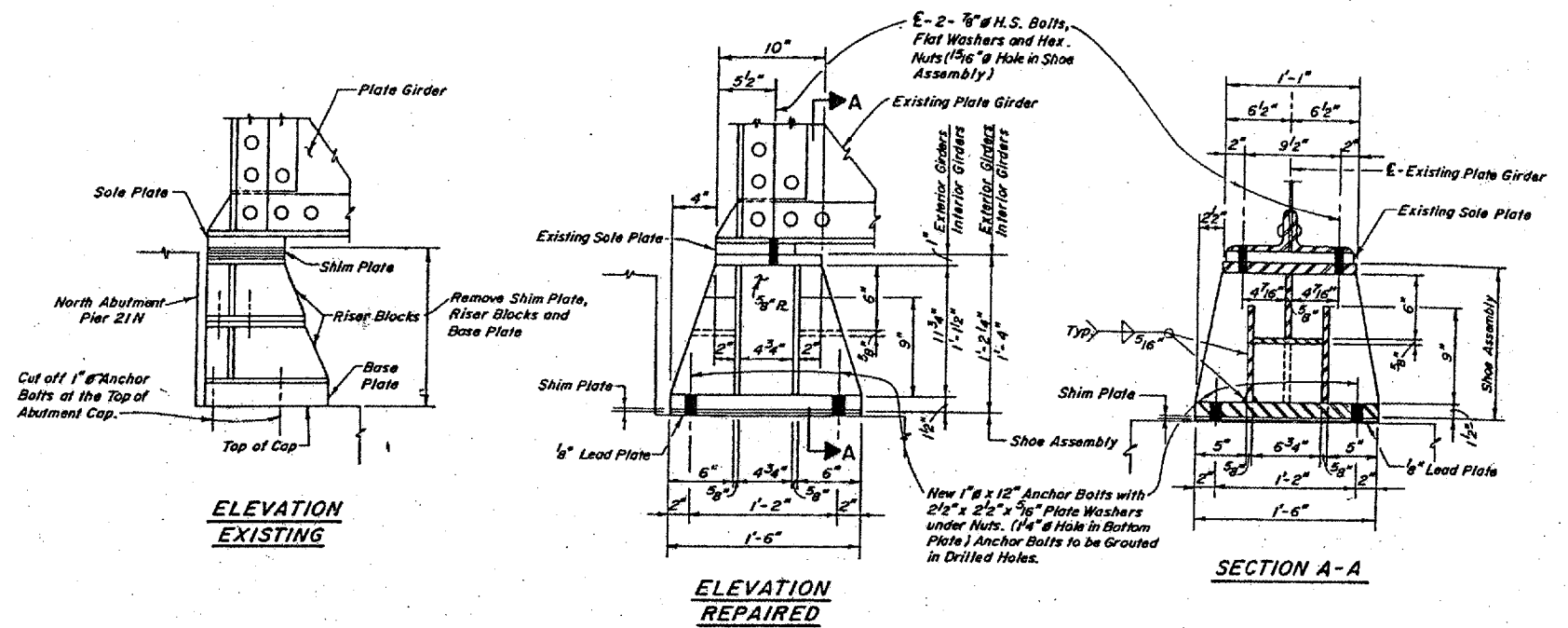
MISSOURI APPROACH BRG. S
BEARING REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138 D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08



AT EXTERIOR ANCHOR BOLTS
DETAIL "7"

AT INTERIOR ANCHOR BOLTS
DETAIL "8"

PLAN

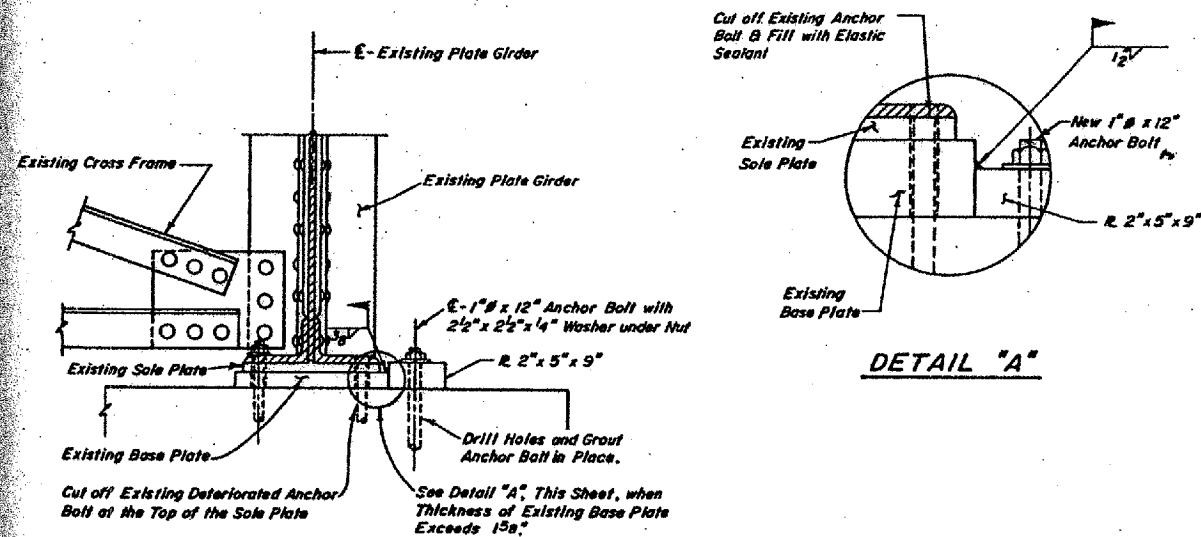


ELEVATION
EXISTING

ELEVATION
REPAIRED

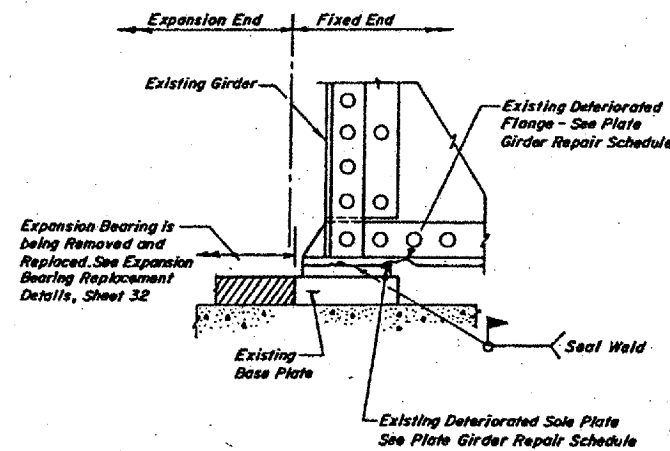
SECTION A-A

ABUTMENT BEARING REPLACEMENT DETAILS



TYPICAL ELEVATION
(SHOWN AT EXTERIOR ANCHOR BOLT,
INTERIOR ANCHOR BOLT SIMILAR.)

ANCHOR BOLT REPLACEMENT DETAILS "7" AND "8"
(AT FIXED BEARING)



ELEVATION
FIXED BEARING REPAIR DETAILS

BILL OF MATERIAL

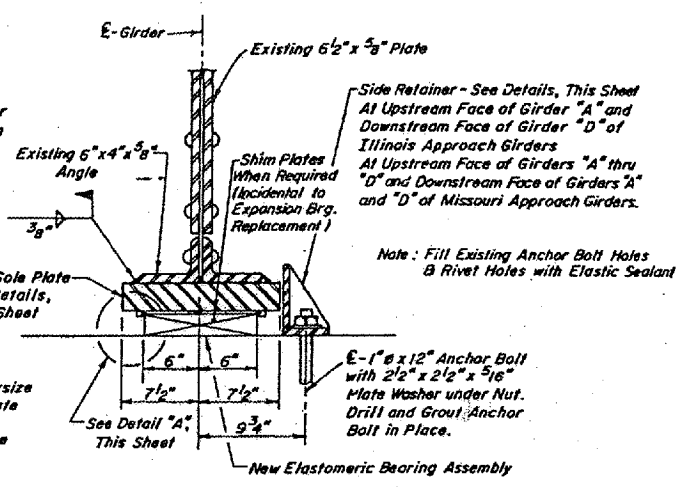
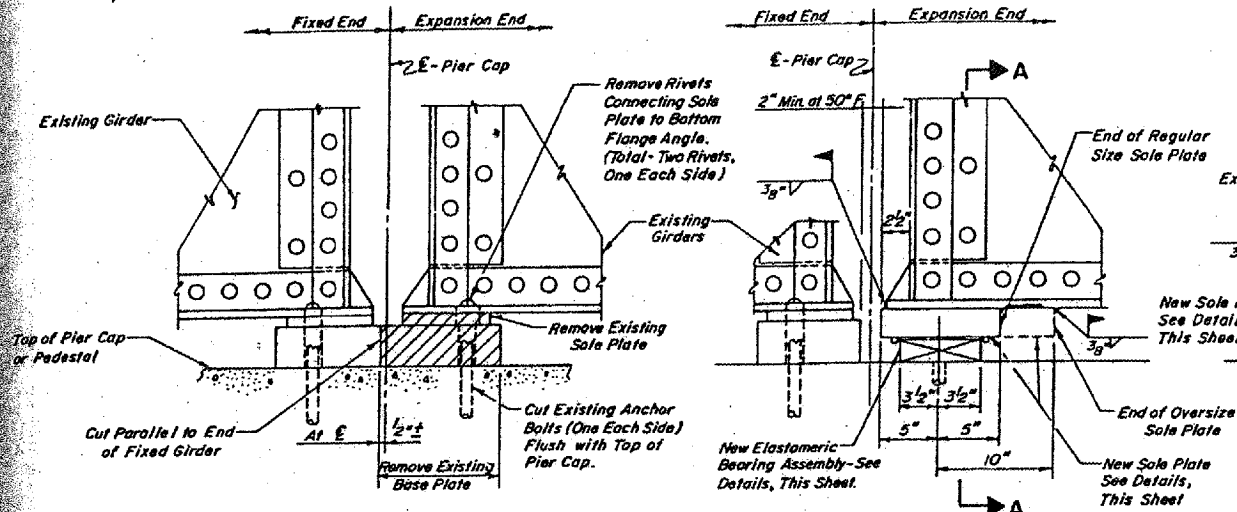
DESCRIPTION	UNIT	NUMBER OF LOCATIONS OCCURRING		
		ILLINOIS SPANS	MISSOURI SPANS	TOTAL
Interior Anchor Bolt Replacement	Each	3	3	6
Exterior Anchor Bolt Replacement	Each	4	9	13
Fixed Bearing Repair	Each	80	52	132
Abutment Bearing Replacement	Each	4	0	4

DESIGNED *J. J. J.*
CHECKED *R. E. C.*
DRAWN *J. J. J.*
CHECKED *R. E. C. R. S.*

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

APPROACH SPANS - ORDER
FIXED BEARING REHABILITATION
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

NOTE: Clean bottom of Bottom Flange, after Existing Sole Plate removed, prior to New Sole Plate Installation



SOLE PLATE THICKNESS FOR MISSOURI APPROACH SPANS

PIER NO.	GIRDER "A"				GIRDER "B"				GIRDER "C"				GIRDER "D"			
	f	q	e	p	f	q	e	p	f	q	e	p	f	q	e	p
H	1 1/8	2 1/8	1 7/8	1 7/8	2 1/2	3 1/8	2 1/4	2 7/8	3 1/8	4 1/8	3 7/8	3 7/8	4 1/2	5 1/8	4 1/4	4 7/8
1S	1/2	1	1/4	3/4	1 1/2	2	1 1/4	1 3/4	2 1/2	3	2 1/4	2 3/4	3 5/8	4	3 3/8	3 3/4
2S	5/8	1	3/8	3/4	1 5/8	2	1 5/8	1 3/4	2 3/8	3	2 1/2	2 3/4	3 5/8	4	3 3/8	3 3/4
3S	1 5/16	1 5/16	1 1/16	1 1/16	1 15/16	1 15/16	1 11/16	1 11/16	2 15/16	2 15/16	2 11/16	2 11/16	3 15/16	3 15/16	3 11/16	3 11/16
4S	1 5/16	1 5/16	1 1/16	1 1/16	1 15/16	1 15/16	1 11/16	1 11/16	2 15/16	2 15/16	2 11/16	2 11/16	3 15/16	3 15/16	3 11/16	3 11/16
5S	1	1	3/4	3/4	2	2	1 3/4	1 3/4	3	3	2 3/4	2 3/4	4	4	3 3/4	3 3/4
6S	1	1	3/4	3/4	2	2	1 3/4	1 3/4	3	3	2 3/4	2 3/4	4	4	3 3/4	3 3/4
7S	1	1	3/4	3/4	2	2	1 3/4	1 3/4	3	3	2 3/4	2 3/4	4	4	3 3/4	3 3/4
8S	1	1	3/4	3/4	2	2	1 3/4	1 3/4	3	3	2 3/4	2 3/4	4	4	3 3/4	3 3/4
9S	1	1	3/4	3/4	2	2	1 3/4	1 3/4	3	3	2 3/4	2 3/4	4	4	3 3/4	3 3/4
10S	1	1	3/4	3/4	2	2	1 3/4	1 3/4	3	3	2 3/4	2 3/4	4	4	3 3/4	3 3/4
11S	1 5/16	1 5/16	1 1/16	1 1/16	1 15/16	1 15/16	1 11/16	1 11/16	2 15/16	2 15/16	2 11/16	2 11/16	3 15/16	3 15/16	3 11/16	3 11/16
12S	1	1	3/4	3/4	2	2	1 3/4	1 3/4	3	3	2 3/4	2 3/4	4	4	3 3/4	3 3/4

Calculated Weight of New Sole Plates, including Retainer Angles, Retainer Bars and Shim Plates = 8670 Lbs. (Incidental to Expansion Bearing Replacement)

Note that of the total 52 sole plates listed above, 40 (located at Piers 3S-12S) are sloping 1/4" in the E-W direction, the remaining 12 are sloping in E-W and N-S directions.

● Indicates using extra long sole plate to cover deteriorated flange area.

Table thickness given in inches.

SOLE PLATE THICKNESS FOR EXPANSION BEARINGS ILLINOIS APPROACH SPANS

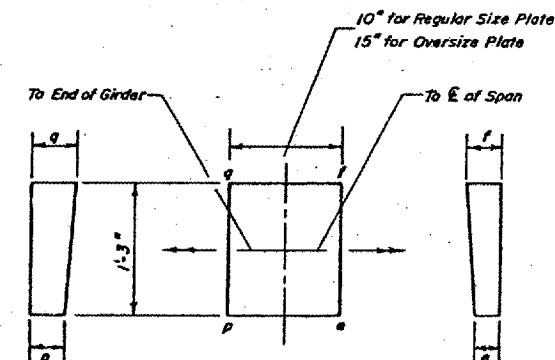
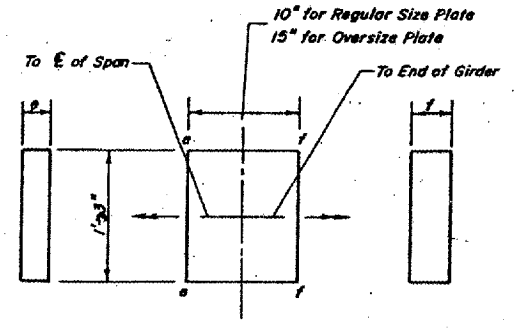
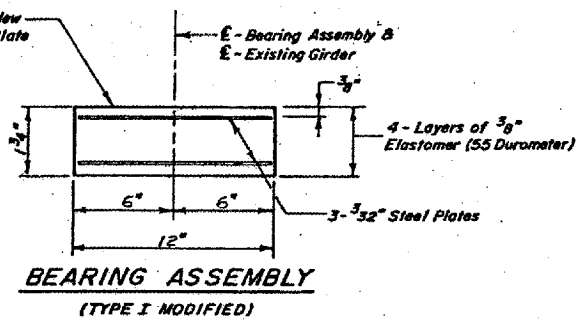
PIER NO.	GIRDER "A"		GIRDER "B"		GIRDER "C"		GIRDER "D"	
	e	f	e	f	e	f	e	f
20N	3/8	3/8	2 1/2	2 1/2	2 1/2	2 1/2	3 1/8	3 1/8
19N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
18N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
17N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
16N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
15N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
14N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
13N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
12N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
11N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
10N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
9N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
8N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
7N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
6N	5/8	5/8	2 9/16	2 9/16	2 9/16	2 9/16	5/8	5/8
5N	3/8	3/8	2 1/2	2 1/2	2 1/2	2 1/2	3 1/8	3 1/8
4N	3/8	3/8	2 1/2	2 1/2	2 1/2	2 1/2	3 1/8	3 1/8
3N	1/2	1/2	2 1/8	2 1/8	2 1/8	2 1/8	1/2	1/2
2N	1/4	5/8	2 3/16	2 3/16	2 3/16	2 3/16	1/4	1 5/16
1N	1/4	1 1/8	2 7/16	2 7/16	2 7/16	2 7/16	1/4	1 5/16
A	1 5/16	2	3 7/8	3 7/8	3 7/8	3 7/8	1 5/16	1 5/16

Calculated Weight of New Sole Plates, including Retainer Angles, Retainer Bars and Shim Plates = 8670 Lbs. (Incidental to Expansion Bearing Replacement)

● Indicates using extra long sole plate to cover deteriorated flange area.

Note that of the total 84 sole plates listed above, all except 12 sole plates (located at Piers A, 1N and 2N) are of constant thickness.

Table thickness given in inches.



SOLE PLATE DETAILS (SEE TABLES - THIS SHEET)

BILL OF MATERIAL

DESCRIPTION	UNIT	NUMBER OF LOCATIONS OCCURRING		
		ILLINOIS SPANS	MISSOURI SPANS	TOTAL
Expansion Bearing Replacement	Each	84	52	136
Elastomeric Bearing Assembly - Type I Modified	Each	84	52	136

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

APPROACH SPANS - GIRDER EXPANSION BEARING REHABILITATION
 F.A.U.S. Rte. 9811 (U.S. 60 & 62)
 S.B.I. 150 SECTION 138D-BR
 ALEXANDER CO., IL. MISSISSIPPI CO., MO.
 STATION 28+13.08

DESIGNED: *[Signature]*
 CHECKED: *R.E.C.*
 DRAWN: *[Signature]*
 CHECKED: *R.E.C. - F.S.*

TRUSS SPANS - STRINGER REPAIR SCHEDULE

PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS	PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE	
0	1	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.				10	11	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
1	2	The bottom flange has thin area at the bottom end. See detail (17/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		11	12	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.			
2	2	The bottom clip angle is rusted and bent. See detail (15/40) for repair.	Inside face of the web has thin area near the bottom end. See Note Sheet. See Remarks.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.	Downstream: The bottom clip angle is rusted and bent. See detail (15/40) for repair.	12	12	The vertical connection angle is rusted and cracked near the bottom end. See detail (22/41) for repair.		The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
2	2						12	13			The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
3	4	The bottom clip angle is rusted and bent. See detail (15/40) for repair.	The bottom clip angle is rusted and bent. See detail (15/40) for repair.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.		13	14			The bottom clip angle is rusted. See detail (16/40) for repair.		
4	4	The bottom clip angle is rusted and bent. See detail (15/40) for repair.	The bottom clip angle is rusted and bent. See detail (15/40) for repair.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.		14	14	The bottom clip angle is rusted and bent. See detail (15/40) for repair.	Inside face of the web has thin area and a hole near the bolt end, the bolt clip angle is rusted and bent. See details (22/41) and (15/40) Use A=36", B=12", n=11, n1=3.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted and bent. See details (22/41) and (16/40) Use A=26", B=12", n=11, n1=3.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.	
4	5	The bottom clip angle is rusted and bent. See detail (15/40) for repair.	The bottom clip angle is rusted and bent. See detail (15/40) for repair.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.		14	15	The bottom clip angle is rusted and bent. See detail (15/40) for repair.	Outside face of the web has thin area near the bottom end. See above for repair.			
5	6	The bottom clip angle is rusted and bent. See detail (15/40) for repair.			The bottom clip angle is rusted and bent. See detail (16/40) for repair.		14	15		Inside face of the web has thin area near the top end. See Note "1" This Sheet.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
6	6	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (18/40) for repair.	The bottom clip angle is rusted. See detail (18/40) for repair.	The bottom clip angle is rusted. See detail (18/40) for repair.		15	15	The slip stringer is being replaced. See Sheets 69 and 70 for details.	Outside face of the web has a hole and thin area near the bottom end, the bottom clip angle is rusted. See (15/40) and (22/41) Use A=19", B=9", n=5, n1=2.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.
6	7	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		16	17			The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
8	8	Outside face of the web has thin area near the bolt end, the bolt clip angle is rusted and bent. See details (22/41) and (15/40) Use A=18", B=9", n=5, n1=2.	The bottom clip angle is rusted and bent. See detail (15/40) for repair.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.		17	17	The bottom clip angle is rusted and bent. See detail (15/40) for repair.		The bottom clip angle is rusted and bent. See detail (16/40) for repair.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.	The bottom clip angle is rusted and bent. See detail (16/40) for repair.
8	9	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		17	18	The bottom clip angle is rusted. See detail (15/40) for repair.		The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.
9	10		The bottom clip angle is rusted. See detail (15/40) for repair.				18	19	The bottom clip angle is rusted. See detail (15/40) for repair.		The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.
10	10	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	Remove the bottom clip angle. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		19	19	The bottom clip angle is rusted. See detail (15/40) for repair.		The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.

NOTE: Work This Sheet with Sheets 40 thru 42, 69 and 70.

DESIGNED *S. J. ...*
CHECKED *S. J. ...*
DRAWN *S. J. ...*
CHECKED *S. J. ...*

NOTE:
1. Contractor to clean the thin area and remove all rust, foreign material and all old paint down to the bare metal.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

TRUSS SPAN
STRINGER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 B 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28 + 13.08

TRUSS SPANS - STRINGER REPAIR SCHEDULE

PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS	PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE	
19	20	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		28	29	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
20	21		The bottom clip angle is rusted. See detail (15/40) for repair.		The bottom clip angle is rusted. See detail (16/40) for repair.		29	30	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.			
21	21	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		30	30	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	Outside face of the web has a hole near the bottom end, the bottom clip angle is rusted. See details (23/41) and (16/40). Use A=45", B=15", n=14, n1=4.	
22	23	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.			Upstream - Clean and install 2-6" H.S. Bolts, Flat Washers and Hex Nuts in place of the 2-Broken Rhebs at the Connection to the Floor Beam. Cast Incidental Lip-Clip angle Removal.	30	30	Outside face of the web has thin area near the top end. See detail (18/40) for repair.	The web has a hole near the top end. See detail (15/40) for repair. Use A=18", B=9", n=5, n1=2.		Inside face of the web has a hole near the bottom end. See above for repair.	
23	24	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.		30	31	The bottom clip angle is rusted. See detail (15/40) for repair.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (23/41) and (15/40). Use A=60", B=12", n1=3.		The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.
24	24	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.				31	31		Outside face of the web has thin area near the top end. See Note "I" This Sheet.			
24	25	The web has a hole near the top end. See detail (15/40) for repair. Use A=12", B=9", n=3, n1=2.					32	32	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
25	26	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.				32	33	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom flange has thin area from 0" to 24", the bottom clip angle is rusted. See details (15/40) and (17/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
26	26			The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		33	34	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.			
26	27			The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		34	34	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (23/41) and (18/40). Use A=24", B=9", n=7, n1=2.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (23/41) and (18/40). Use A=15", B=9", n=14, n1=2.	
27	28	The bottom clip angle is rusted. See detail (15/40) for repair.					34	34	Outside face of the web has thin area near the top end. See Note "I" This Sheet.	Outside face of the web has thin area near the top end. See Note "I" This Sheet.	Outside face of the web has thin area near the bottom end. See above for repair.		
28	28	The bottom clip angle is rusted. See detail (15/40) for repair.	Outside face of the web has thin areas near the top and bottom ends, the bottom clip angle is rusted. See details (18/40) and (20/40). Use A=12", n=3.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (16/40) and (23/41). Use A=24", B=9", n=7, n1=2.	Inside face of the web has thin areas near the top and bottom ends. See Note "I" This Sheet.		34	35	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (23/41) and (18/40). Use A=48", B=12", n=15, n1=3.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (15/40) and (23/41). Use A=39", B=9", n=12, n1=2.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
		Outside face of the web has thin area near the top end. See Note "I" This Sheet.	Inside face of the web has thin area near the top end. See above for repair.	Inside face of the web has thin area near the top end. See Note "I" This Sheet.	The bottom clip angle is rusted. See detail (16/40) for repair.				Inside face of the web has thin area near the top end. See detail (18/40) for repair. Use A=12", B=12", n=3, n1=3.				

NOTE: Work This Sheet with Sheets 40 thru 42, 69 and 70.

DESIGNED *[Signature]*
CHECKED *[Signature]*
DRAWN *[Signature]*
CHECKED *[Signature]*

NOTE:
1. Contractor to clean the thin area and remove all rust, foreign material and all old paint down to the bare metal.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

TRUSS SPAN
STRINGER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

TRUSS SPANS - STRINGER REPAIR SCHEDULE

PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS	PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE	
35	36	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.				43	44	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.			
		The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		44	44	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
36	36	Outside face of the web has thin area near the top end. See Note "J" This Sheet.					44	45	The bottom clip angle is rusted. See detail (13/40) for repair.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (23/40) and (15/40) Use A=24", B=9", n=2	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
		The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (15/45) for repair.	The bottom clip angle is rusted. See detail (16/45) for repair.		46	46	The bottom clip angle is rusted off. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		
36	37		The web has a hole near the top end. See Note "I" This Sheet.				46	47	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
			The bottom clip angle is rusted. See detail (13/40) for repair.				47	47	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	
37	38	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.				48	49	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.			
38	38	The bottom clip angle is rusted. See detail (13/40) for repair.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (24/41) and Use A=42", B=9", C=34", n=13, n1=2	The bottom clip angle is rusted. See detail (15/40) for repair.	The web has holes near the bottom end, the bottom clip angle is rusted. See details (23/41) and (16/40) Use A=30", B=9", n=9, n1=2		49	49	Inside face of the web has thin area and a hole near the bottom end, the bottom clip angle is rusted. See details (15/40) and (23/41) See Remarks	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	Outside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (23/41) and (16/40) Use A=45", B=9", n=14, n1=2	Upstream Use A=54", B=9", n=17, n1=2
38	39	Inside face of the web has thin area near the bottom end. See detail (22/41) B=9", n=9, n1=2			Outside face of the web has thin area near the bottom end. See detail (22/41) B=9", n=9, n1=2							Inside face of the web has thin area and a hole near the bottom end. See above for repair.	
39	40	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.				49	50	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
40	40			The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		51	51	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
40	41			The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		51	52	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
41	42	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.				53	53	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
42	42	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		53	54	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
42	43	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (13/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.								

NOTE: Work This Sheet with Sheets 40 thru 42, 69 and 70.

DESIGNED *Louman*
CHECKED *B. D. H.*
DRAWN *A. J. E. C.*
CHECKED *F. S. B. C.*

NOTE:
1. Contractor to clean the thin area and remove all rust, foreign material and all old paint down to the bare metal.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

TRUSS SPAN
STRINGER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 50 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

TRUSS SPANS - STRINGER REPAIR SCHEDULE

PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS	PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE	
55	56	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.		64	65	The bottom clip angle is rusted. See detail (15/40) for repair.	Outside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (22/41) and (15/40) Use A=30°, B=9°, n=9, nj=2	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
56	56	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		65	65	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.			
56	57	Outside face of the web has thin area and a hole near the bottom end. See Note "1" This Sheet. See Remarks	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		Upstream: The bottom clip angle is rusted. See detail (15/40) for repair.	65	66	The bottom clip angle is rusted. See detail (15/40) for repair.				
58	58	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		66	66	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (22/41) and (15/40) Use A=12°, B=9°, C=15°, n=5, nj=1	The bottom clip angle is rusted. See detail (15/40) for repair.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (22/41) and (15/40) Use A=30°, B=12°, n=9, nj=3	The bottom clip angle is rusted. See detail (16/40) for repair.	
58	59	Outside face of the web has thin area near the top and bottom ends and a hole near the top end. See detail (15/40) for repair. Use A=12°, n=3 See Remarks	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	Upstream-Inside face of the web has a hole near the top end.	66	67	The bottom clip angle is rusted. See detail (15/40) for repair.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (22/41) and (15/40) Use A=30°, B=12°, n=9, nj=3	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
60	60	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See detail (15/40) and below for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	Outside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (22/41) and (15/40) Use A=30°, B=12°, n=9, nj=3	The bottom clip angle is rusted. See detail (16/40) for repair.		68	68	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
60	61	Outside face of the web has thin area near the top and bottom ends. See detail (20/40) for repair. Use A=45°, n=14	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		68	69	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
60	61	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (22/41) and (15/40) Use A=24°, B=9°, n=7, nj=2	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		69	69	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.			
62	62	The web has a hole near the top end. See detail (19/40) for repair. Use A=12°, B=9°, n=3, nj=2					69	70	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.			
62	62	Outside face of the web has thin area near the top end. See Note "1" This Sheet.		The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		70	70	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
62	63			The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.		70	71	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
63	63		The bottom clip angle is rusted. See detail (15/40) for repair.				71	71	The bottom clip angle is rusted. See detail (15/40) for repair.				
64	64	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.								

NOTE: Work This Sheet with Sheets 40 thru 42, 69 and 70.

DESIGNED *S. S. S.*
CHECKED *B. C. D.*
DRAWN *J. B. C. S.*
CHECKED *F. J. A. C.*

NOTE:
1. Contractor to clean the thin area and remove all rust, foreign material and all old paint down to the bare metal.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

TRUSS SPAN
STRINGER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. CO B 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

TRUSS SPANS - STRINGER REPAIR SCHEDULE

PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS	PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE	
72	72	The bottom clip angle is rusted. See detail (15) for repair.	The bottom clip angle is rusted. See detail (15) for repair.	The bottom clip angle is rusted. See detail (16) for repair.	The bottom clip angle is rusted. See detail (16) for repair.								
72	73	The bottom clip angle is rusted. See detail (15) for repair.	The bottom clip angle is rusted. See detail (15) for repair.	The bottom clip angle is rusted. See detail (16) for repair.	The bottom clip angle is rusted. See detail (16) for repair.		78 (CONT.)	78 (CONT.)					
73	73	The bottom clip angle is rusted. See detail (15) for repair.	The bottom clip angle is rusted. See detail (15) for repair.										
73	74	The bottom clip angle is rusted. See detail (15) for repair.					78	79	Outside face of the web has thin area, holes and cracks near the bottom end. See detail (22) for repair. Use A=19", B=41", n=5, n1=2	Outside face of the web has thin area near the bottom end. See detail (22) for repair. Use A=30", B=41", n=9, n1=2			
74	74	Inside face of the web has thin area and a hole near the bottom end, the bottom clip angle is rusted. See detail (18) and below for repair.	The bottom clip angle is rusted. See detail (15) for repair.				79	79	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	
74	75	The bottom clip angle is rusted. See detail (15) for repair.	Outside face of the web has thin area and holes near the bottom end, the bottom clip angle is rusted. See details (15) and (23) Use A=24", B=9", n=7, n1=2	The bottom clip angle is rusted. See detail (16) for repair.	The bottom clip angle is rusted. See detail (16) for repair.		80	80	The bottom clip angle is rusted. See detail (15) for repair.	The bottom clip angle is rusted. See detail (15) for repair.			
75	75	The bottom clip angle is rusted. See detail (15) for repair.	The bottom clip angle is rusted. See detail (15) for repair.				81	81	Inside face of the web has thin area near the top end. See below for repair.	Inside face of the web has thin area near the top end. See Note "1" This Sheet.			
75	76	The bottom clip angle is rusted. See detail (15) for repair.	The bottom clip angle is rusted. See detail (15) for repair.				81	82	Inside face of the web has thin area near the bottom end. See detail (21) for repair. Use A=21", n=6	Inside face of the web has thin area and a hole near the bottom end. See detail (22) for repair. Use A=39", B=41", n=9, n1=2	Outside face of the web has thin area near the bottom end. See detail (22) for repair. Use A=18", B=9", n=5, n1=2		
76	76		The stringer is being replaced. See detail (26) for details.	Outside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (16) and (23) Use A=24", B=9", n=7, n1=2	The bottom clip angle is rusted. See detail (16) for repair.		82	82	The bottom clip angle is rusted. See detail (15) for repair.	The bottom clip angle is rusted. See detail (15) for repair.			
76	77	Outside face of the web has thin area near the top and bottom ends, the web has a crack near the bottom end. See detail (20) for repair. Use A=12", n=3	Inside face of the web has thin area and holes near the bottom end. See below for repair.	The bottom clip angle is rusted. See detail (16) for repair.	The bottom clip angle is rusted. See detail (16) for repair.		83	83	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (15) and (41) Use A=24", B=9", n=7, n1=2	Inside face of the web has thin area near the top and bottom ends, the bottom clip angle is rusted. See details (13) and (20) Use A=36", n=11, n1=2	The bottom clip angle is rusted. See detail (15) for repair.	Inside face of the web has a hole near the top end. See Note "1" This Sheet.	
77	77	Inside face of the web has a crack near the bottom end. See above for repair.	Outside face of the web has thin area near the top and bottom ends. See detail (20) for repair. Use A=15", n=4						Inside face of the web has thin area and a hole near the top end. See Note "1" This Sheet.	Outside face of the web has thin area near the top and bottom ends. See above for repair.			
77	77	The bottom clip angle is rusted. See detail (15) for repair.	The bottom clip angle is rusted. See detail (15) for repair.						Outside face of the web has a hole near the top end. See Note "1" This Sheet.				
78	78	Inside face of the web has thin area near the bottom end. See Note "1" This Sheet.	The bottom clip angle is rusted. See detail (15) for repair.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (16) and (22) Use A=18", B=9", n=5, n1=2	Outside face of the web has thin area and a hole near the bottom end. See repair on 78 Continued.								

NOTE: Work This Sheet with Sheets 40 thru 42, 69 and 70.

DESIGNED *[Signature]*
CHECKED *[Signature]*
DRAWN *[Signature]*
CHECKED *[Signature]*

NOTE:
1. Contractor to clean the thin area and remove all rust, foreign material and all old paint down to the bare metal.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

TRUSS SPAN
STRINGER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 B 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

TRUSS SPANS - STRINGER REPAIR SCHEDULE

PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS	PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE				UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE	
83	84	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	Outside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (23/41) and (16/40). Use A = 11", B = 9", n = 46, n1 = 2.	Outside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (23/41) and (16/40). Use A = 7", B = 9", n = 30, n1 = 2.		90 (CONT.)	90 (CONT.)					
				Inside face of the web has thin area near the bottom end. See above for repair.	Inside face of the web has thin area near the bottom end. See above for repair.		90	91	The inside vertical connection angle has thin area near the bottom end. See detail (25/41) for repair.	Outside face of the web has thin area near the top and bottom ends. See Note "I" This Sheet.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	
85	85	The bottom clip angle is rusted. See detail (15/40) for repair.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (19/40) and (22/41). Use A = 24", B = 9", n = 7, n1 = 2.	The bottom clip angle is rusted. See detail (15/40) for repair.	Outside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (23/41) and (16/40). Use A = 24", B = 9", n = 7, n1 = 2.								
		The web has a hole near the top end. See Note "I" This Sheet.			Inside face of the web has thin area near the top end. See Note "I" This Sheet.								
					Inside face of the web has thin area and a hole near the bottom end. See above for repair.								
85	86	The bottom clip angle is rusted. See detail (15/40) for repair.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (22/41) and (19/40). Use A = 24", B = 9", n = 7, n1 = 2.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.								
		Inside face of the web has thin area near the top end. See detail (19/40) for repair. Use A = 12", B = 9", n = 3, n1 = 2.											
		Outside face of the web has thin area near the top end. See above for repair.											
86	86	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.								
87	88	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.	The slip stringer is being replaced. See Sheets 69 and 70 for details.								
88	88	Outside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (22/41) and (16/40). Use A = 24", B = 9", n = 7, n1 = 2.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (23/41) and (19/40). Use A = 54", B = 9", n = 17, n1 = 2.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.								
			Outside face of the web has thin area and holes near the bottom end. See above for repair.										
88	89	The bottom clip angle is rusted. See detail (15/40) for repair.	Outside face of the web has a crack near the bottom end, the bottom clip angle is rusted. See details (23/41) and (19/40). Use A = 18", B = 9", n = 5, n1 = 2.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.								
89	89	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.	The bottom clip angle is rusted. See detail (16/40) for repair.								
90	90		Inside face of the web has thin area near the bottom end. See detail (23/41) for repair. Use A = 18", B = 9", n = 5, n1 = 2.	The bottom clip angle is rusted. See detail (16/40) for repair.									
							95	96	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.			

NOTE: Work This Sheet with Sheets 40 thru 42, 69 and 70.

DESIGNED *L. Schaub*
CHECKED *L. Schaub*
DRAWN *L. Schaub*
CHECKED *L. Schaub*

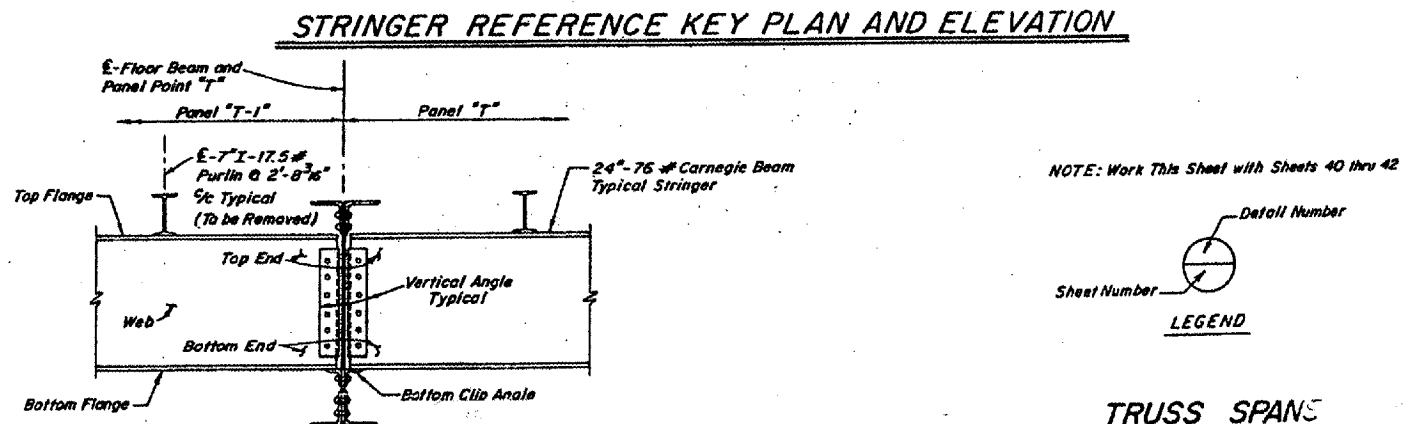
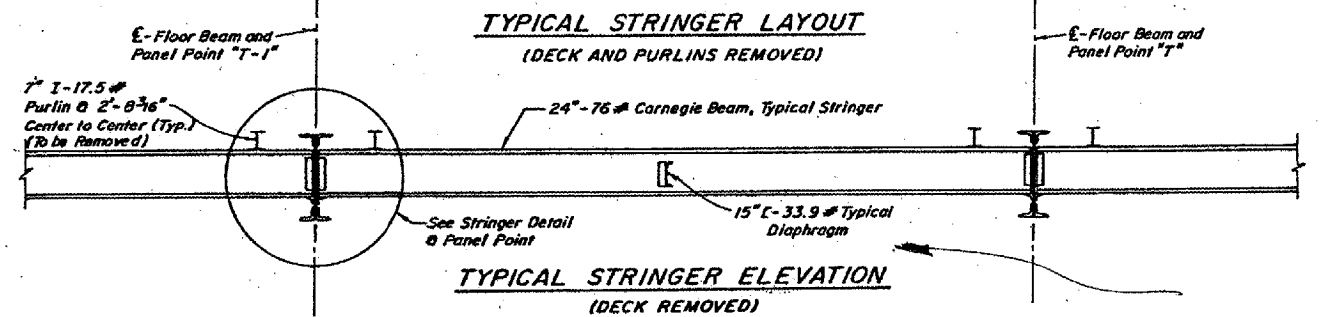
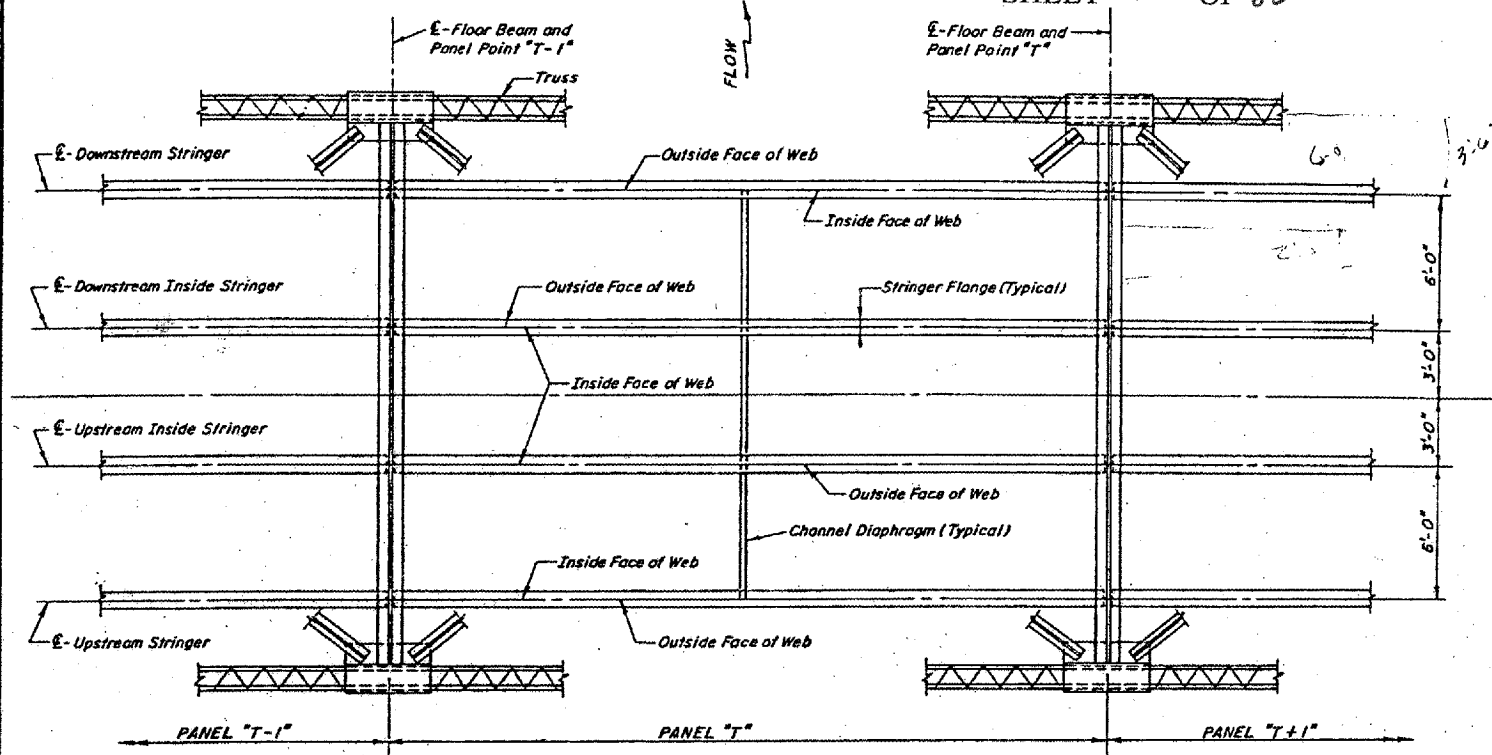
NOTE:
1. Contractor to clean the thin area and remove all rust, foreign material and all old paint down to the bare metal.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

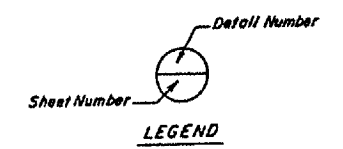
TRUSS SPAN
STRINGER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

TRUSS SPANS - STRINGER REPAIR SCHEDULE

PANEL PT. NO.	PANEL NUMBER	STRINGER LOCATION				REMARKS
		UPSTREAM	DOWNSTREAM	UPSTREAM-INSIDE	DOWNSTREAM-INSIDE	
96	96	Outside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See detail (15/40) and Use A=18", B=9", n=5, n1=2	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	
96	97	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (15/40) and Use A=39", B=9", n=12, n1=2	Inside face of the web has thin area near the bottom end. See Note "I" This Sheet	Outside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (15/40) and Use A=60", B=9", n=19, n1=2	The bottom clip angle is rusted. See detail (15/40) for repair.	Downstream: The bottom clip angle is rusted. See detail (15/40) for repair.
97	97	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.			
97	98	The bottom clip angle is rusted. See detail (15/40) for repair.				
98	98	The bottom clip angle is rusted. See detail (15/40) for repair.	Inside face of the web has a hole near the bottom end, the bottom clip angle is rusted. See detail (15/40) and below for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	
98	98		Outside face of the web has thin area near the top and bottom ends and a hole near the bottom end. See detail (20/40) for repair. Use A=12", n=3			
98	99	The bottom clip angle is rusted. See detail (15/40) for repair.	Inside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (15/40) and (22/41) Use A=24", B=9", n=7, n1=2	The bottom clip angle is rusted. See detail (15/40) for repair.	Outside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See detail (15/40) and below for repair.	Inside face of the web has thin area near the bottom end. See detail (23/41) for repair. Use A=54", B=9", n=17, n1=2
99	99	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	
100	100	The bottom clip angle is rusted. See detail (15/40) for repair.	Outside face of the web has thin area near the bottom end, the bottom clip angle is rusted. See details (15/40) and (22/41) Use A=18", B=9", n=5, n1=2	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	
100	100		Outside face of the web has thin area near the top end. See Note "I" This Sheet			
100	101	Outside face of the web has thin area and a hole near the bottom end, the bottom clip angle is rusted. See details (15/40) and (23/41) Use A=24", B=9", n=7, n1=2	Inside face of the web has thin area and holes near the bottom end, the bottom clip angle is rusted. See details (15/40) and (23/41) Use A=36", B=9", n=11, n1=2	Outside face of the web has thin area and a hole near the bottom end, the bottom clip angle is rusted. See details (15/40) and (23/41) Use A=30", B=9", n=9, n1=2	The bottom clip angle is rusted. See detail (15/40) for repair.	
101	101	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.	The bottom clip angle is rusted. See detail (15/40) for repair.		
101	102		The bottom clip angle is rusted. See detail (15/40) for repair.			



NOTE: Work This Sheet with Sheets 40 thru 42

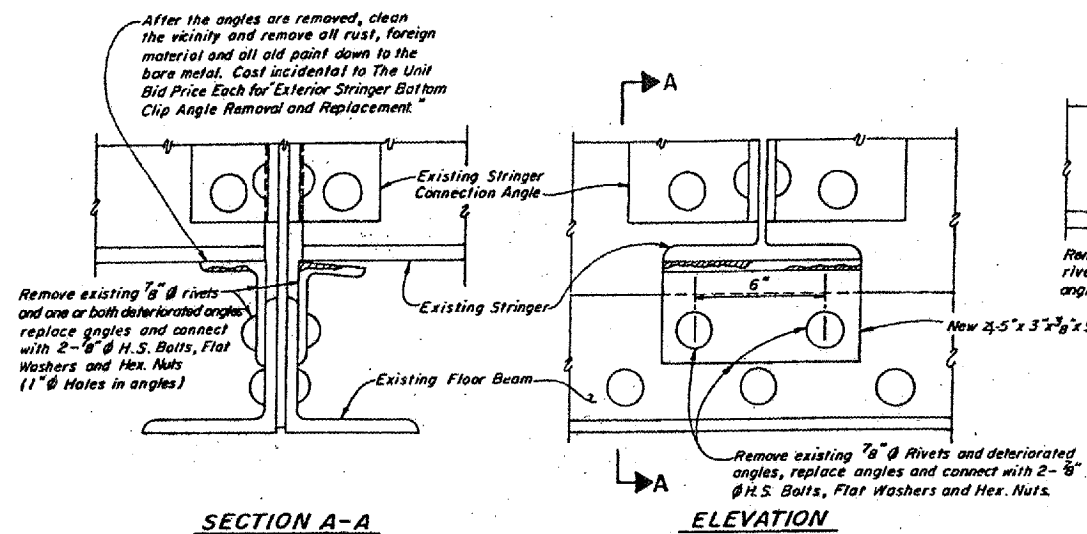


DESIGNED [Signature]
CHECKED [Signature]
DRAWN [Signature]
CHECKED [Signature]

NOTE:
1. Contractor to clean the thin area and remove all rust, foreign material and all old paint down to the bare metal.

STRINGER DETAIL AT P. BRIDGE NO. 1
(TYPICAL EXCEPT AT SLIP STRINGERS A) STRUCTURE 002-0005
FOR INFORMATION ONLY

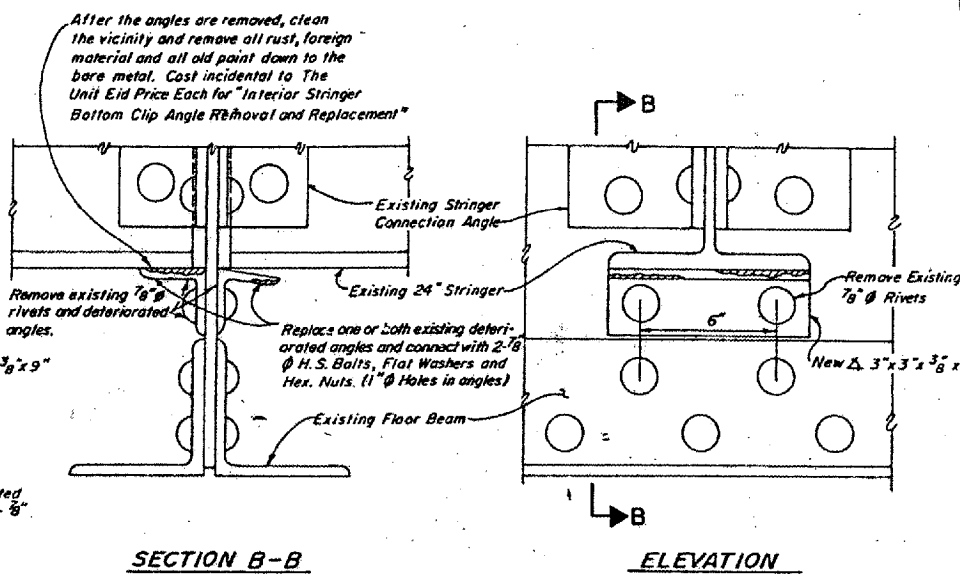
TRUSS SPANS
STRINGER REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28 + 13.08



SECTION A-A

ELEVATION

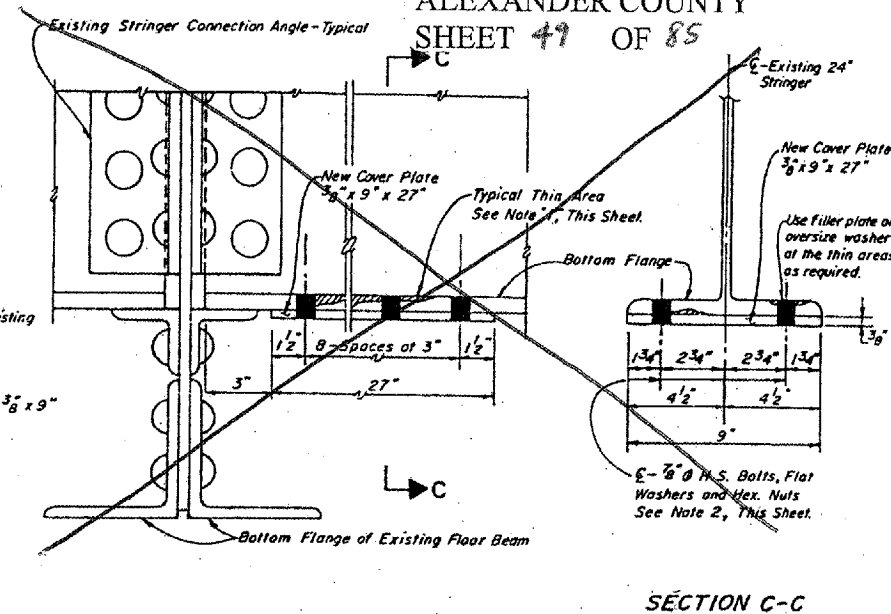
EXTERIOR STRINGER BOTTOM CLIP ANGLE REMOVAL AND REPLACEMENT - DETAIL "15"



SECTION B-B

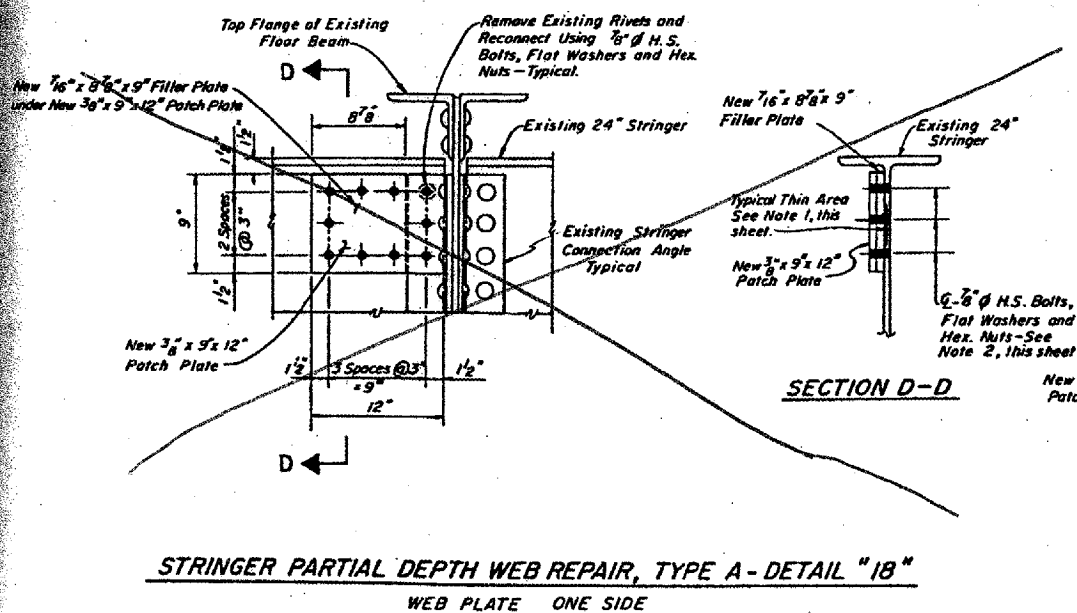
ELEVATION

INTERIOR STRINGER BOTTOM CLIP ANGLE REMOVAL AND REPLACEMENT - DETAIL "16"



SECTION C-C

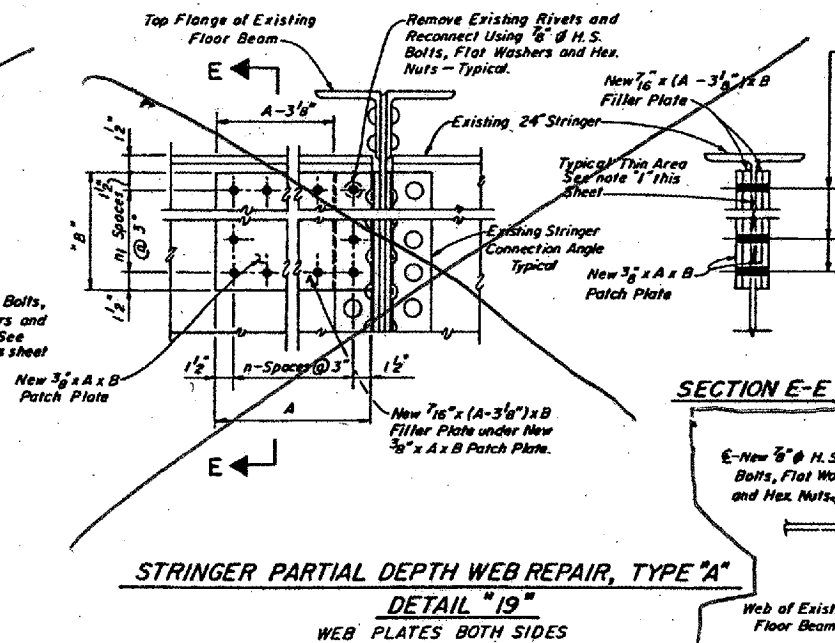
STRINGER BOTTOM FLANGE REPAIR - DETAIL "17"



SECTION D-D

STRINGER PARTIAL DEPTH WEB REPAIR, TYPE A - DETAIL "18"

WEB PLATE ONE SIDE

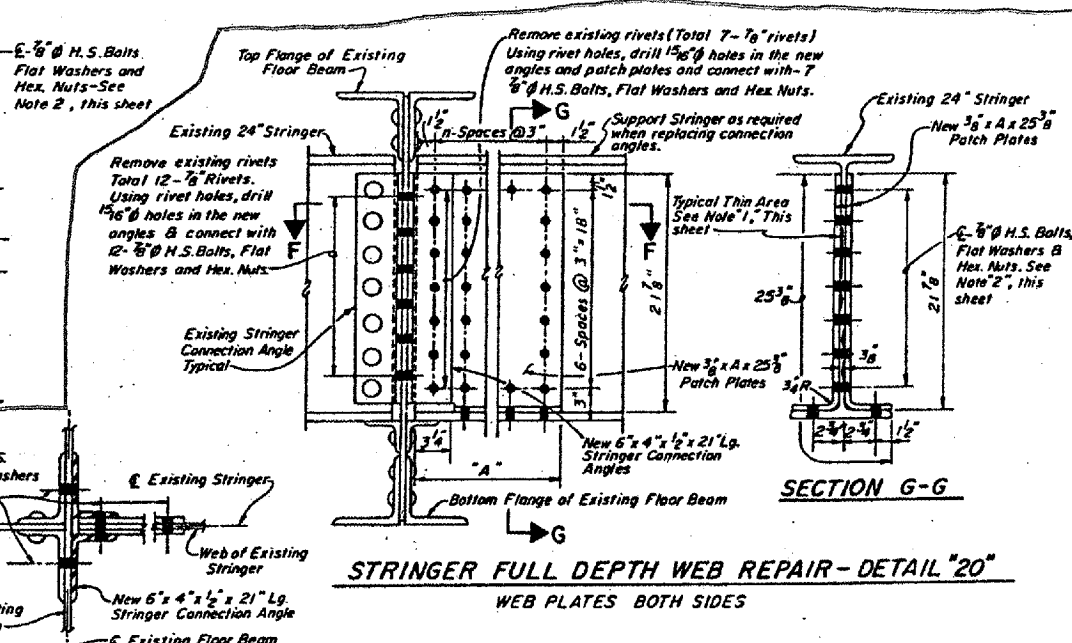


SECTION E-E

STRINGER PARTIAL DEPTH WEB REPAIR, TYPE "A"

DETAIL "19"

WEB PLATES BOTH SIDES



SECTION F-F

STRINGER FULL DEPTH WEB REPAIR - DETAIL "20"

WEB PLATES BOTH SIDES

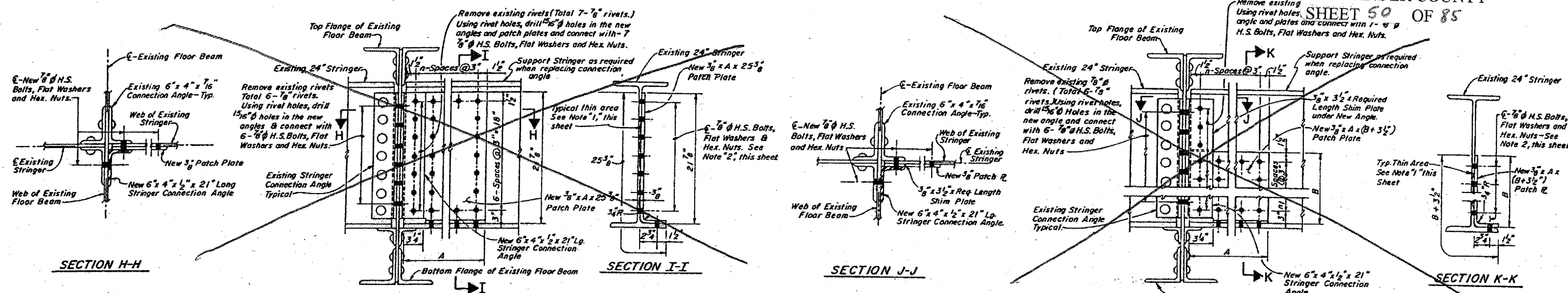
NOTES:

- Contractor to clean the thin area and remove all rust, foreign material and all old paint down to the bare metal.
- Filler plates of 3/8" minimum thickness shall be used at locations where connection bolts pass thru thin area of existing members.

DESIGNED	J. J. Smith
CHECKED	R. E. C.
DRAWN	J. E. Smith
CHECKED	R. E. C. - F. S.

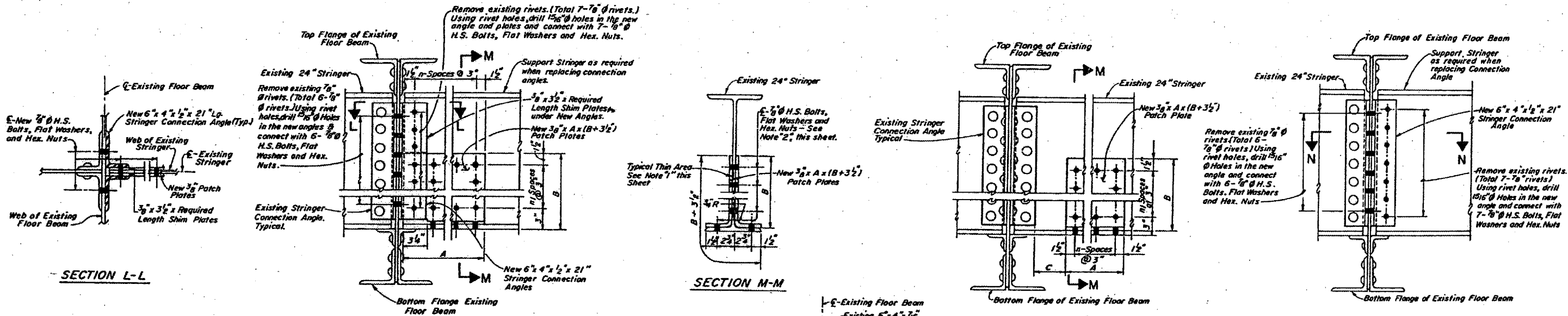
BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

TRUSS SPANS
STRINGER REPAIR DETAILS
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28 + 13.08



STRINGER FULL DEPTH WEB REPAIR - DETAIL "21"
WEB PLATE ONE SIDE

STRINGER PARTIAL DEPTH WEB REPAIR - TYPE "B" - DETAIL "22"
WEB PLATE ONE SIDE



STRINGER PARTIAL DEPTH WEB REPAIR - TYPE "B" - DETAIL "23"
WEB PLATES BOTH SIDES

STRINGER PARTIAL DEPTH WEB REPAIR - TYPE "C" - DETAIL "24"
WEB PLATES BOTH SIDES

STRINGER END CONNECTION REPAIR
DETAIL "25"

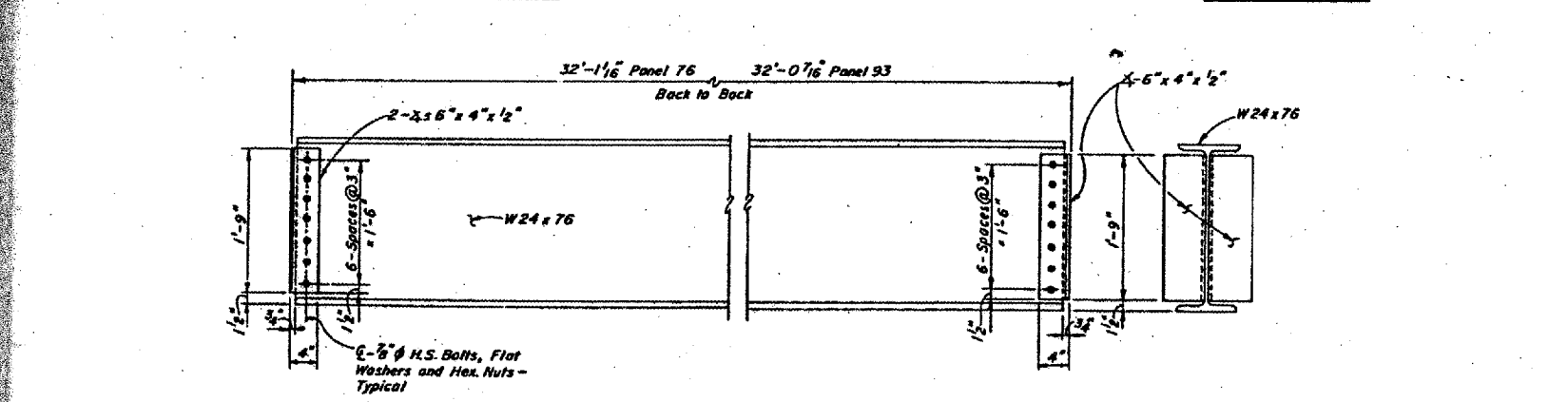
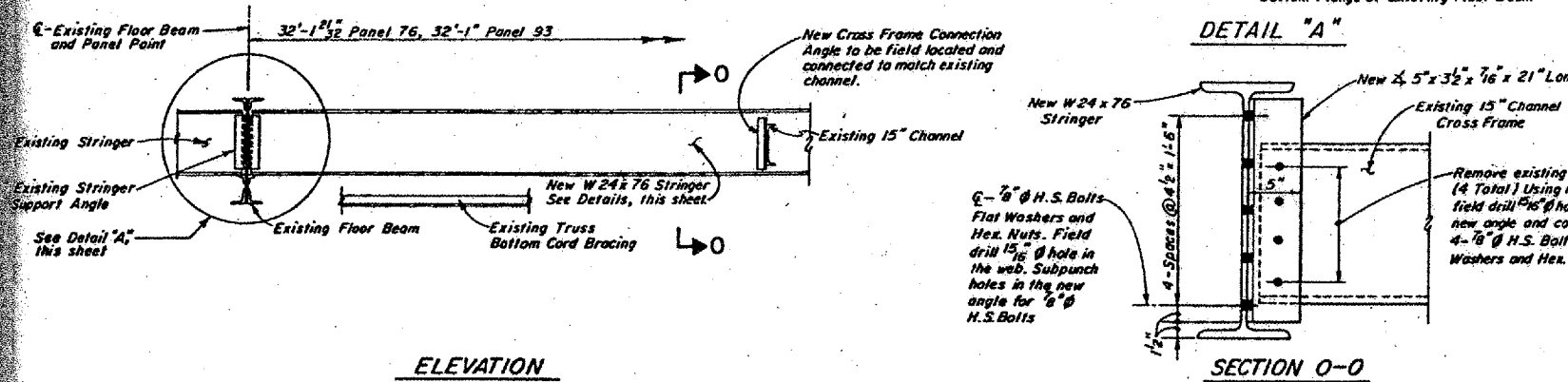
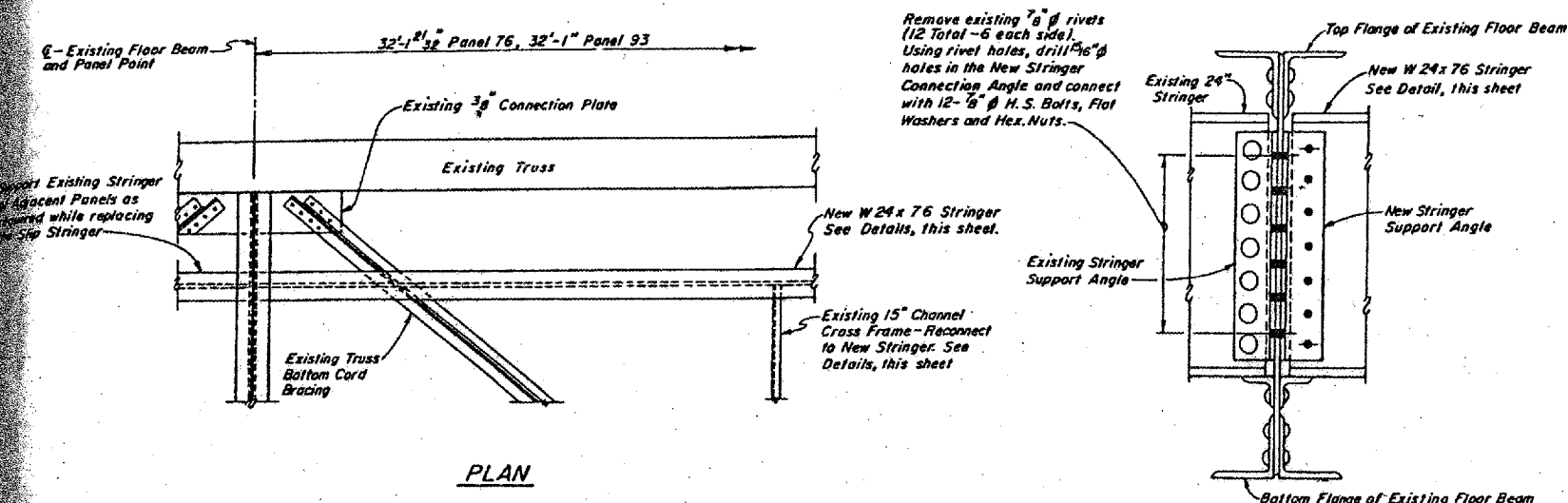
NOTES:

- Contractor to clean the thin area and remove all rust, foreign material and all old paint down to the bare metal.
- Filler plates of $\frac{3}{8}$ " minimum thickness shall be used at locations where connection bolts pass thru thin area of existing members.

DESIGNED	<i>J. S. Smith</i>
CHECKED	<i>R. E. C.</i>
DRAWN	<i>CG</i>
CHECKED	<i>R. E. C. F. S.</i>

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

TRUSS SPAN
STRINGER REPAIR DETAILS
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08



STRINGER REPLACEMENT DETAILS

FULL LENGTH STRINGER REPLACEMENT - DETAIL "26"

BILL OF MATERIAL			
Description	No. of Locations Occurring	Unit	Total Quantity
Exterior Stringer Bottom Clip Angle Removal and Replacement	233	Each	233
Interior Stringer Bottom Clip Angle Removal and Replacement	191	Each	191
Stringer Bottom Flange Repair	2	Lb.	90
Stringer Partial Web Depth Repair - Type "A"	8	Lb.	410
Stringer Full Depth Web Repair	11	Lb.	2530
Stringer Partial Depth Web Repair - Type "B"	61	Lb.	12,320
Stringer Partial Depth Web Repair - Type "C"	4	Lb.	520
Stringer End Connection Repair	2	Each	2
Full Length Stringer Replacement	2	Each	2

DESIGNED *[Signature]*
CHECKED R.F.C.
DRAWN G.L.
CHECKED R.F.C.-ES

DETAIL NUMBER	NO. PLACES OCCURRING	LIST OF MATERIAL PER LOCATION			
		PLATES	ANGLES	$\frac{7}{8}$ " ϕ BOLTS	
15	233*		1-5"x3"x $\frac{3}{8}$ "x9"	2	
16	191*		1-3"x3"x $\frac{3}{8}$ "x9"	2	
17	2	1- $\frac{3}{8}$ "x9"x27"		18	
18	3	1- $\frac{3}{8}$ "x9"x12", 1- $\frac{7}{16}$ "x8" $\frac{7}{8}$ "x9"		10	
19	3	2- $\frac{3}{8}$ "x12"x9", 2- $\frac{7}{16}$ "x8" $\frac{7}{8}$ "x9"		10	
	1	2- $\frac{3}{8}$ "x12"x12", 2- $\frac{7}{16}$ "x8" $\frac{7}{8}$ "x12"		12	
20	1	2- $\frac{3}{8}$ "x18"x9", 2- $\frac{7}{16}$ "x14" $\frac{7}{8}$ "x9"		14	
	5	2- $\frac{3}{8}$ "x12"x25 $\frac{3}{8}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	41	
	1	2- $\frac{3}{8}$ "x15"x25 $\frac{3}{8}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	45	
	2	2- $\frac{3}{8}$ "x36"x25 $\frac{3}{8}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	73	
	1	2- $\frac{3}{8}$ "x39"x25 $\frac{3}{8}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	77	
23	1	2- $\frac{3}{8}$ "x45"x25 $\frac{3}{8}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	85	
	21	1- $\frac{3}{8}$ "x21"x25 $\frac{3}{8}$ "	1-6"x4"x $\frac{1}{2}$ "x21"	41	
	22	5	1- $\frac{3}{8}$ "x18"x12 $\frac{1}{2}$ ", 1- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	1-6"x4"x $\frac{1}{2}$ "x21"	30
		11	1- $\frac{3}{8}$ "x24"x12 $\frac{1}{2}$ ", 1- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	1-6"x4"x $\frac{1}{2}$ "x21"	36
	24	5	1- $\frac{3}{8}$ "x30"x12 $\frac{1}{2}$ ", 1- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	1-6"x4"x $\frac{1}{2}$ "x21"	42
		3	1- $\frac{3}{8}$ "x30"x15 $\frac{1}{2}$ ", 1- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x9 $\frac{1}{2}$ "	1-6"x4"x $\frac{1}{2}$ "x21"	44
		4	2- $\frac{3}{8}$ "x18"x12 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	41
		1	2- $\frac{3}{8}$ "x18"x18 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x6 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	45
		8	2- $\frac{3}{8}$ "x24"x12 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	49
		4	2- $\frac{3}{8}$ "x30"x12 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	57
		1	2- $\frac{3}{8}$ "x36"x12 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	65
		2	2- $\frac{3}{8}$ "x36"x15 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x9 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	67
		4	2- $\frac{3}{8}$ "x39"x12 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	69
		1	2- $\frac{3}{8}$ "x39"x15 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x9 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	71
		2	2- $\frac{3}{8}$ "x45"x12 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	77
		1	2- $\frac{3}{8}$ "x45"x18 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x6 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	81
		1	2- $\frac{3}{8}$ "x48"x15 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x9 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	83
		3	2- $\frac{3}{8}$ "x54"x12 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	89
		2	2- $\frac{3}{8}$ "x60"x12 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	97
		1	2- $\frac{3}{8}$ "x60"x15 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x9 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	99
		1	2- $\frac{3}{8}$ "x7 $\frac{1}{2}$ "x12 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	141
1		2- $\frac{3}{8}$ "x11 $\frac{1}{2}$ "x12 $\frac{1}{2}$ ", 2- $\frac{3}{8}$ "x3 $\frac{1}{2}$ "x12 $\frac{1}{2}$ "	2-6"x4"x $\frac{1}{2}$ "x21"	205	
25		1	2- $\frac{3}{8}$ "x18"x12 $\frac{1}{2}$ "		26
	1	2- $\frac{3}{8}$ "x27"x12 $\frac{1}{2}$ "		38	
	1	2- $\frac{3}{8}$ "x39"x12 $\frac{1}{2}$ "		54	
	1	2- $\frac{3}{8}$ "x42"x12 $\frac{1}{2}$ "		58	
25	2		1-6"x4"x $\frac{1}{2}$ "x21"	13	
26	2	See Detail, This Sheet for Sizes of the Plates and Angles			

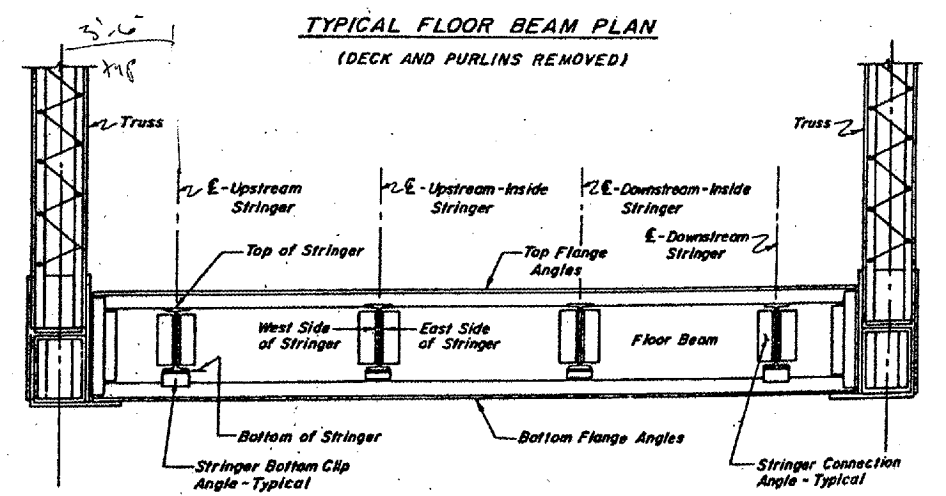
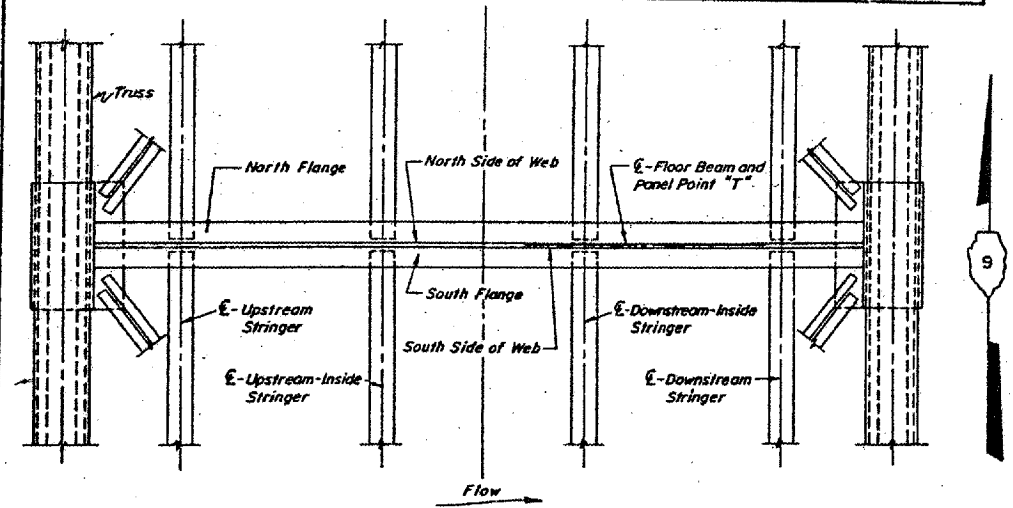
* These are the total numbers of angles requiring replacement for Details 15 and 16. At 83 locations for Detail 15 and at 78 locations for Detail 16 the angles are located on opposite sides of common panel points and share the same connection bolts.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

TRUSS SPANS
STRINGER REPAIR DETAILS
F.A.U.S. Rte. 9811 (U.S. RD B 62)
S.B.I. 150 SECTION 138 D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

TRUSS SPANS - FLOOR BEAM REPAIR SCHEDULE

FLOOR BEAM AT PANEL POINT NO.	DESCRIPTION	REMARKS	FLOOR BEAM AT PANEL POINT NO.	DESCRIPTION	REMARKS	FLOOR BEAM AT PANEL POINT NO.	DESCRIPTION	REMARKS
1	South bottom flange angle has thin area at several locations along the entire length. See detail (13) for repair.	X	30 CONT.	The north side of the web has thin area along the vertical connection angle near the west side of the downstream stringer. See detail (14) for repair.	X	87	North top flange angle has thin areas from 0 to 1' of the upstream & downstream ends. Remove angle - See expansion joint details sheets 71, 84 and 85.	Also, add cover plate to bottom flange. See detail (13) for repair.
3	The south side of the web has thin area at the bottom near the west side of the upstream stringer. See Note "I," This Sheet.		34	The south side of the web has thin area at the top and bottom near the east side of the downstream stringer. See detail (14) for repair.		92	The north side of the web has thin area at the bottom at several locations for entire length. See Note "I," This Sheet.	Also, add cover plate to bottom flange. See detail (13) for repair.
4	The north side of the web has thin area at the bottom near the east side of the downstream stringer. See Note "I," This Sheet.		38	The north side of the web has thin area at the bottom at several locations along the entire length. See Note "I," This Sheet.		94	The north side of the web has thin area at the top near the downstream-inside stringer. See Note "I," This Sheet.	
6	The south side of the web has thin area at the top near the west side of the upstream stringer. See Note "I," This Sheet.		47	Also, add a cover plate to bottom flange. See detail (13) for repair.		96	The south side of the web has thin area at the bottom near the east side of the upstream stringer. See Note "I," This Sheet.	
14	The north side of the web has thin area at the bottom near the east side of the downstream stringer. See detail (14) for repair.		49	The south side of the web has thin area at the bottom near the west side of the downstream-inside stringer. See Note "I," This Sheet.				
15	The north side of the web has thin area at the top near the east side of the downstream stringer. See above to repair.		55	North bottom flange angle has thin areas at all the stringer locations. See detail (13) for repair.				
21	South bottom flange angle has thin area near mid-span of the floor beam. See detail (13) for repair.		74	The north side of the web has thin area at the top near the upstream stringer. See Note "I," This Sheet.				
	North top flange angle has thin areas from 1' to 6' of upstream & downstream ends. South top flange angle has thin areas from 1' to 6' of upstream & downstream ends. See detail (13) for repair.		76	The north side of the web has thin area at the top near the upstream stringer. See Note "I," This Sheet.				
	South bottom flange angle has thin areas from 1' to 6' of upstream & downstream ends. See detail (13) for repair.		78	The south side of the web has thin area at the bottom near the downstream-inside stringer. See Note "I," This Sheet.				
23	The south side of the web has thin area at the bottom near the bottom flange angle at several locations along the entire length. See Note "I," This Sheet.		79	The south side of the web has thin area at the top near the upstream stringer. See Note "I," This Sheet.				
26	Also, add a cover plate to bottom flange. See detail (13) for repair.		83	The north side of the web has thin area at the bottom near the downstream-inside stringer. See Note "I," This Sheet.				
30	North top flange angle has thin area from upstream end to mid-span. See detail (13) for repair.							
	The north side of the web has thin area at the top near the east side of the upstream-inside stringer. See Note "I," This Sheet.							
	The north side of the web has thin area at the top near the west side of the downstream-inside stringer. See Note "I," This Sheet.							



FLOOR BEAM REFERENCE KEY PLAN AND ELEVATION

Note "I":
Contractor to clean the vicinity of all thin and deteriorated areas and remove all rust, foreign material and all old paint down to the bare metal. (Cost incidental to Lump Sum Bid Price for "Cleaning and Painting")

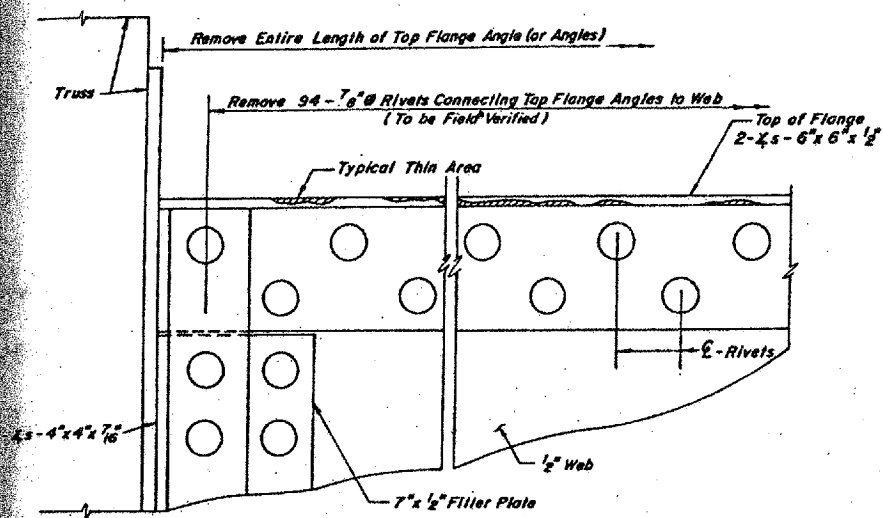
NOTE: Work This Sheet with Sheets 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

DESIGNED *[Signature]*
CHECKED *[Signature]*
DRAWN *[Signature]*
CHECKED *[Signature]*

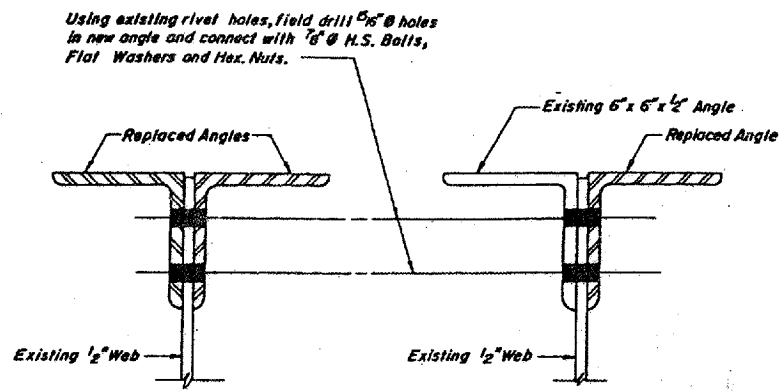
Detail Number
Sheet Number
LEGEND

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

TRUSS SPANS
FLOOR BEAM REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28 + 13.08

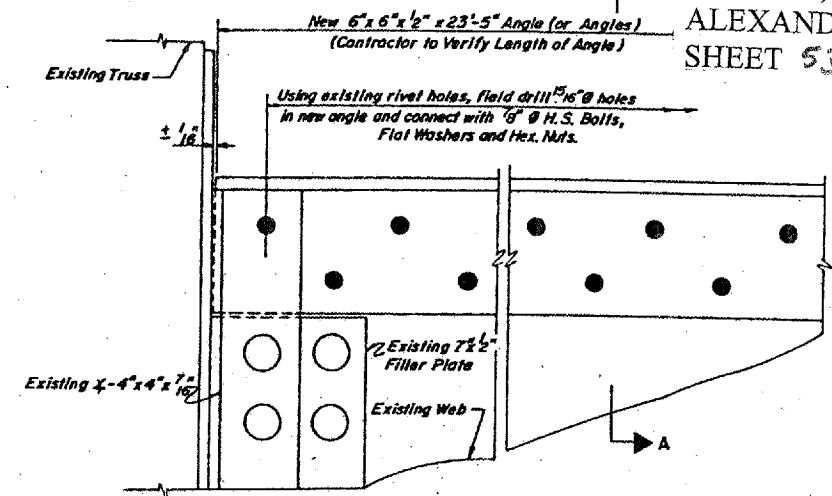


ELEVATION
EXISTING



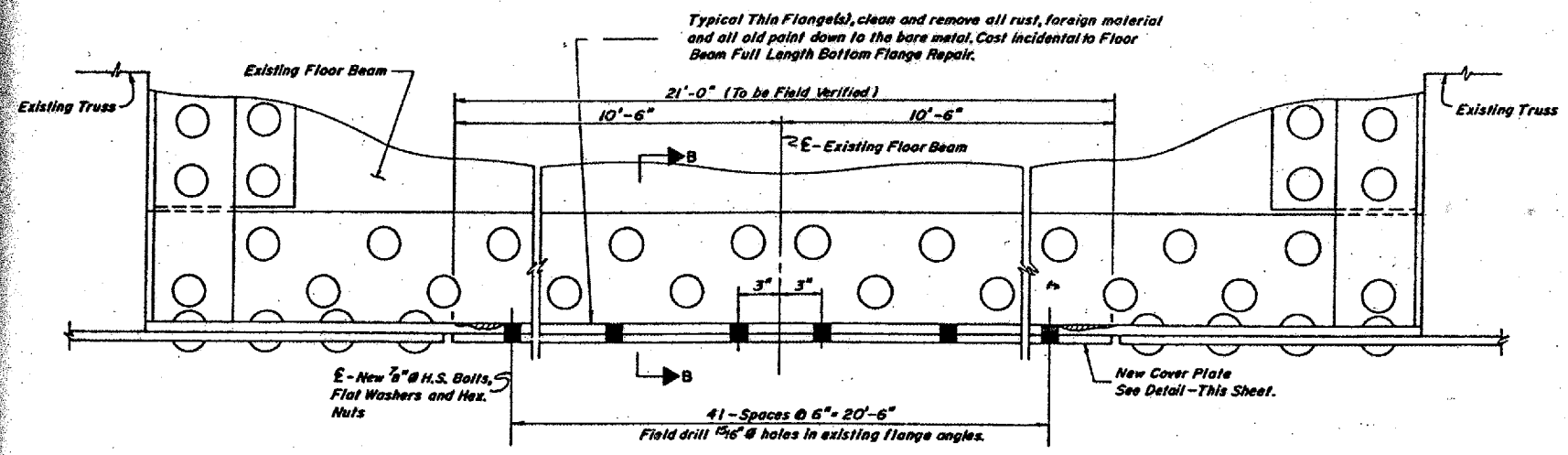
DETAIL-11
TYPE "B" DETAIL-10
TYPE "A"

SECTION A-A



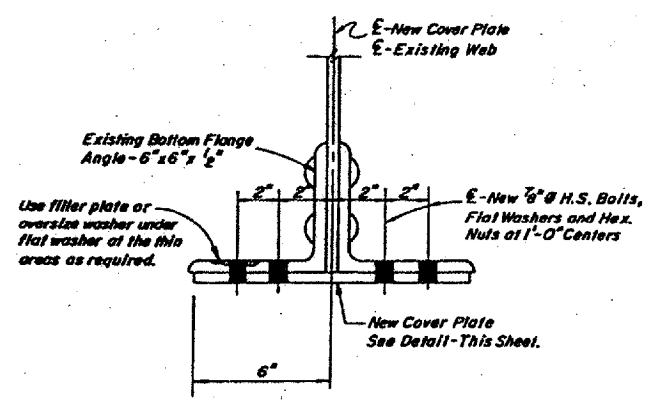
ELEVATION
REPAIRED

FLOOR BEAM TOP FLANGE REPLACEMENT TYPE "A" & "B" - DETAILS "10" & "11"

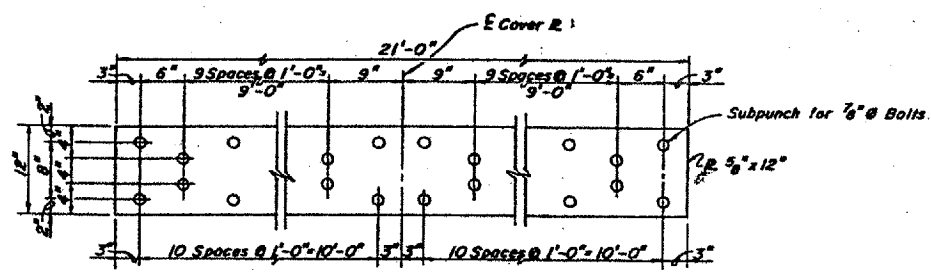


ELEVATION

FLOOR BEAM FULL LENGTH BOTTOM FLANGE REPAIR - DETAIL "13"



SECTION B-B



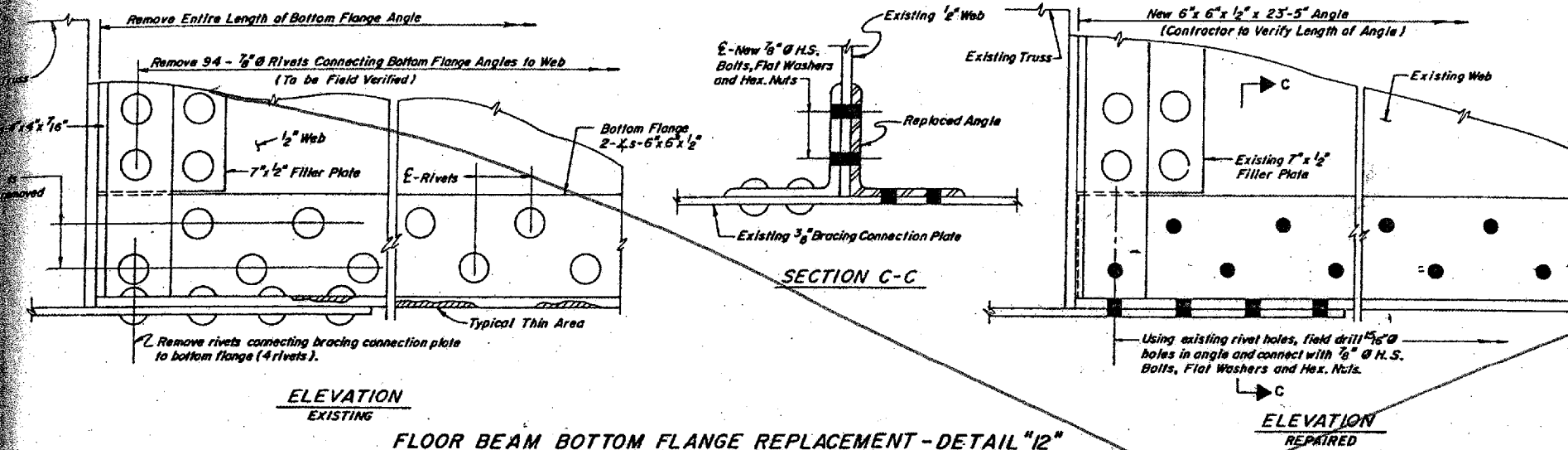
COVER PLATE DETAIL

NOTE:
Work This Sheet with Sheets 43 and 45.

DESIGNED	C.P.L.
CHECKED	R.E.C.
DRAWN	C.P.L.
CHECKED	R.E.C. - F.S.

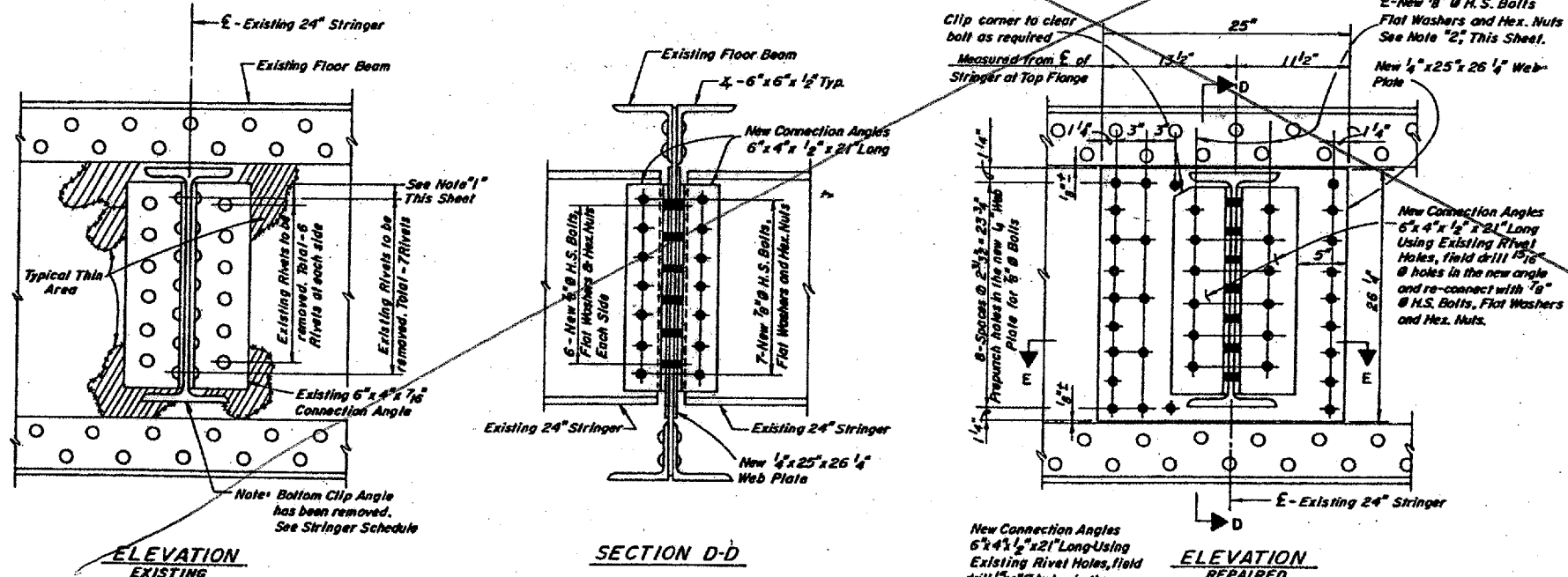
BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

TRUSS SPAN
FLOOR BEAM REPAIR DETAIL
F.A.U.S. Rte. 9811 (U.S. 60 B 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08



FLOOR BEAM BOTTOM FLANGE REPLACEMENT - DETAIL "12"

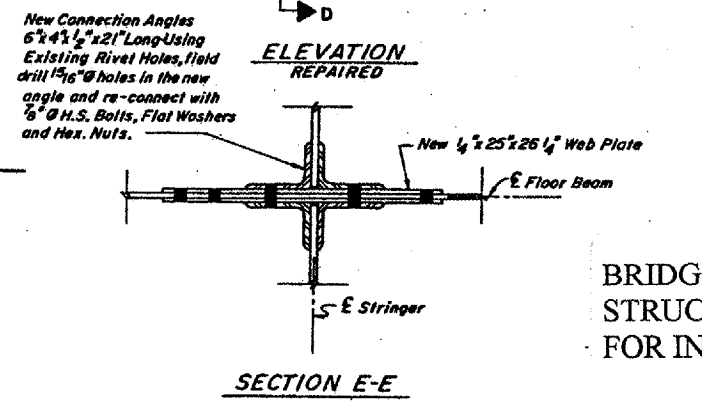
BILL OF MATERIAL				
DESCRIPTION	DETAIL NO.	NO. OCCURRING	LOG UNIT	TOTAL QUANTITY
Floor Beam Top Flange Replacement, Type "A"	10	1	Lb.	560
Floor Beam Top Flange Replacement, Type "B"	11	1	Lb.	1020
Floor Beam Bottom Flange Replacement	12	1	Lb.	560
Floor Beam Full Length Bottom Flange Repair	13	9	Lb.	5620
Floor Beam Full Depth Web Repair	14	5	Lb.	3650



FLOOR BEAM FULL DEPTH WEB REPAIR - DETAIL "14"

LIST OF MATERIAL				
DETAIL NO.	NO. PLACES OCCURRING	LIST OF MATERIAL PER LOCATION		
		PLATE	ANGLE	7/8" BOLT
10	1		1-6" x 6" x 1/2" x 23'-5"	94
11	1		2-6" x 6" x 1/2" x 23'-5"	94
12	1		1-6" x 6" x 1/2" x 23'-5"	94
13	9	1-6" x 12" x 21'-0"		84
14	5	2- 1/4" x 25" x 26' 1/4"	4-6" x 4" x 1/2" x 21"	51

- NOTES:
- Support existing stringers at either side of the floor beam and remove the existing 7/8" diameter rivets connecting the stringers to the floor beam and the connection angles to the stringer. Clean the thin area and remove all rust, foreign material and all old paint down to the bare metal. (Cost incidental)
 - Filler plates of 3/8" min. thickness shall be used at locations where connection bolts pass thru thin area of existing members.
 - Work This Sheet with Sheets 43 and 44.



SECTION E-E

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

TRUSS SPAN:
FLOOR BEAM REPAIR DETAIL
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28 + 13.08

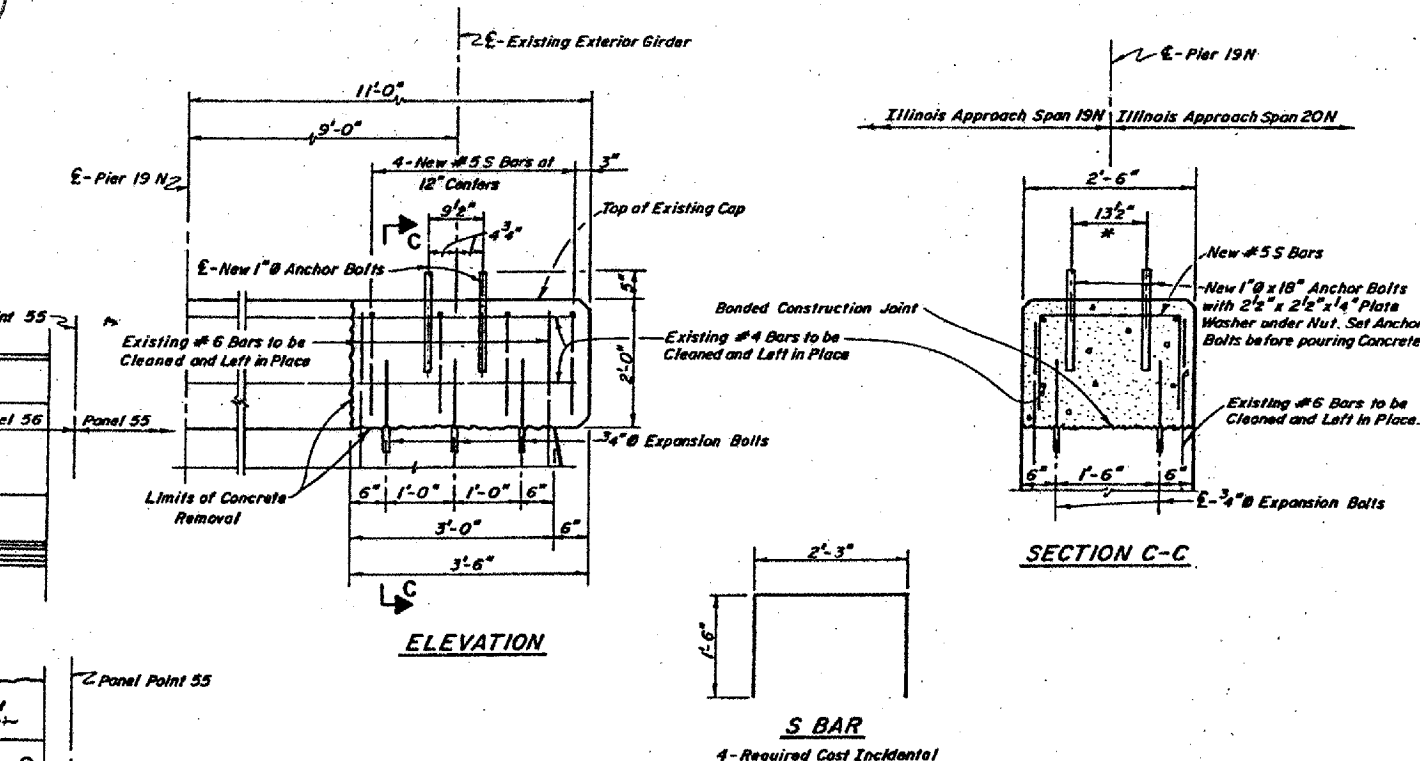
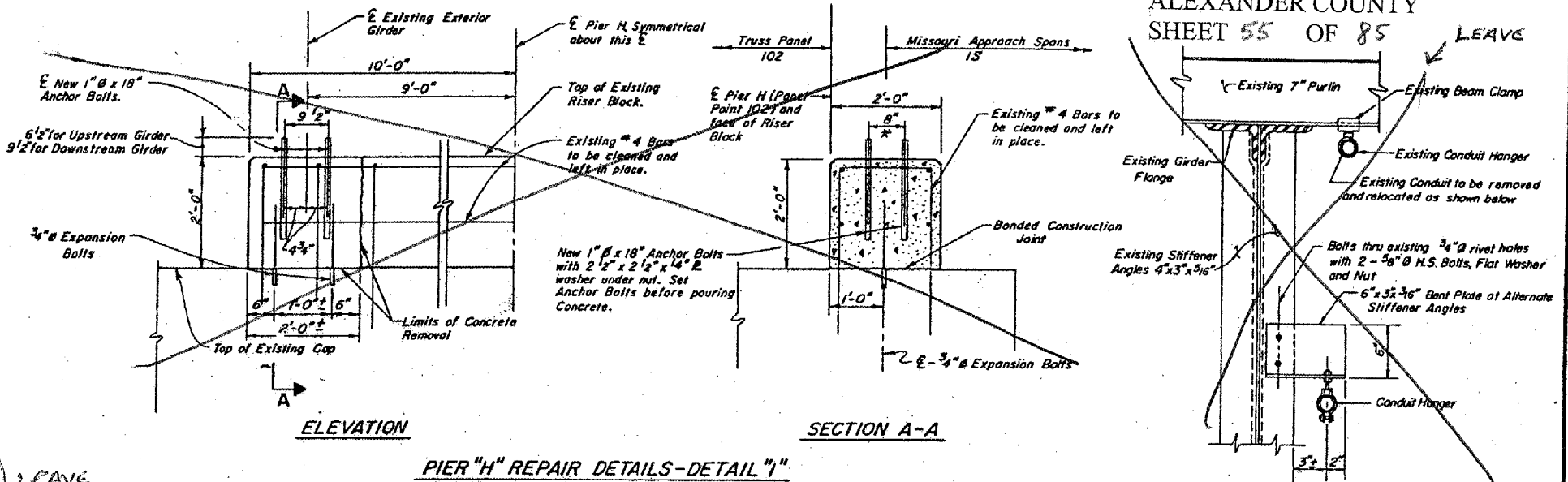
DESIGNED	J. J. J.
CHECKED	R.E.G.
DRAWN	G.P.L.
CHECKED	R.E.G. - F.S.

* This Work Shall Be Paid for by the Lump Sum Bid Price for "Miscellaneous Repair."

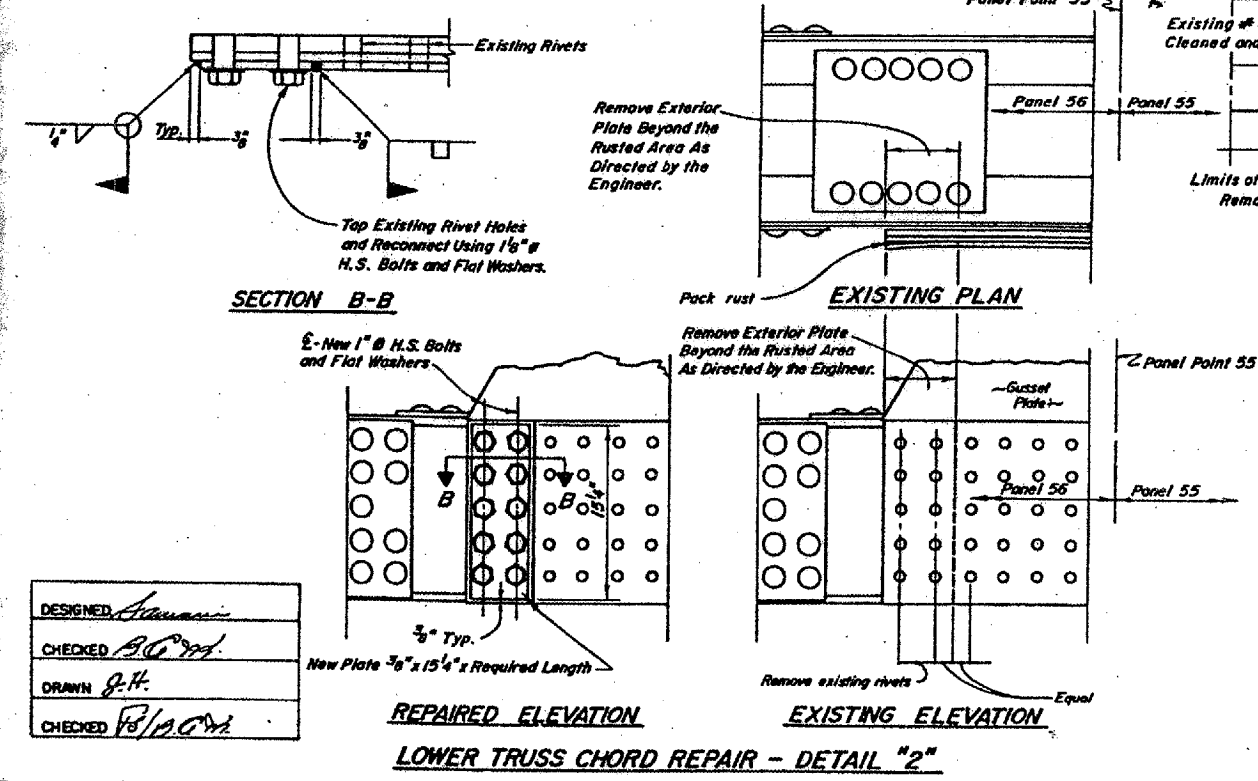
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT 98939
U.S. RTE. 60 & U.S. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 55 OF 85 LEAVE

* MISCELLANEOUS REPAIR SCHEDULE			
SPAN NO. OR PANEL NO.	PIER NO. OR PANEL POINT NO.	DESCRIPTION	REPAIR REQUIREMENTS
15	H	The West and East ends of Concrete Bearing Block for the approach spans are leaching and spalling.	See Detail "1", This Sheet.
1	O	The Electrical Conduit is loose from the North Abutment to Panel Point No. 1.	Reconnect as directed by the Engineer.
24	23	The 2 1/2" Ø Pin of the upstream lower slip chord connection does not have adequate clearance from the edge of 25" x 7 1/2" slot.	Increase the length of slot to the South by 1 1/2".
56	55	Slip Connection at the Upstream side has pack rust between the two outside splice plates.	See Detail "2", This Sheet.
	19N	The West End of the Pier Cap is badly deteriorated.	See Detail "3", This Sheet.
		Conduit Hangers for Navigational Lighting are Broken or Missing.	Provide and Install New Hangers as directed by the Engineer.
		Electrical Conduit is hanging from west end of Existing Purlins. (Note Purlins are being removed.)	Remove and Relocate Existing Conduit. See Detail "4", This Sheet. II. Approach only.



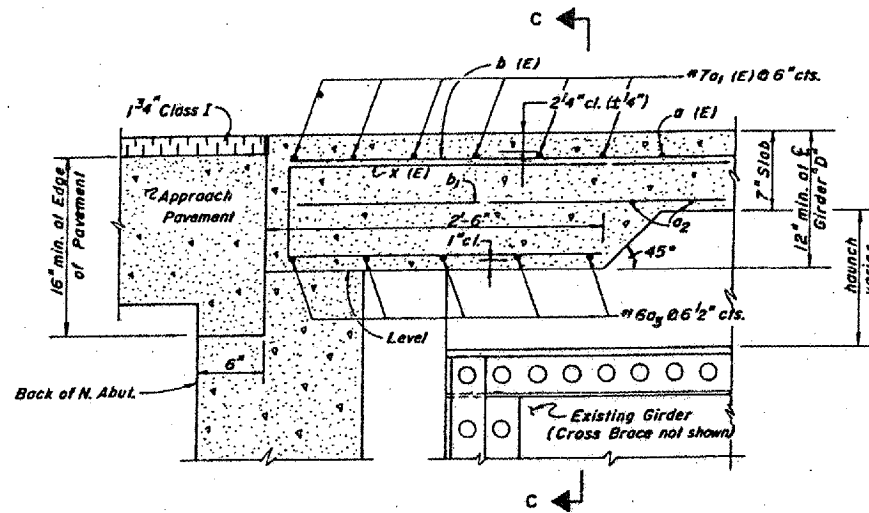
* May Change - Position Anchor Bolts at Center of Existing 3" Slots of the Expansion Girder End at 50" E



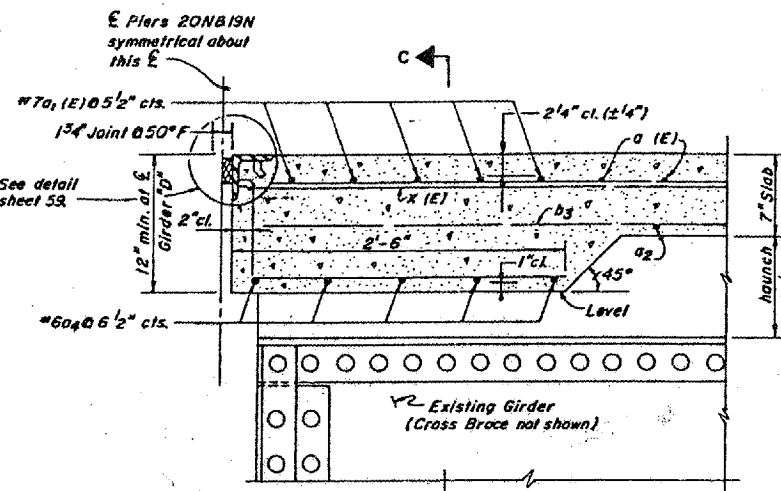
DESIGNED *[Signature]*
CHECKED *[Signature]*
DRAWN *[Signature]*
CHECKED *[Signature]*

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

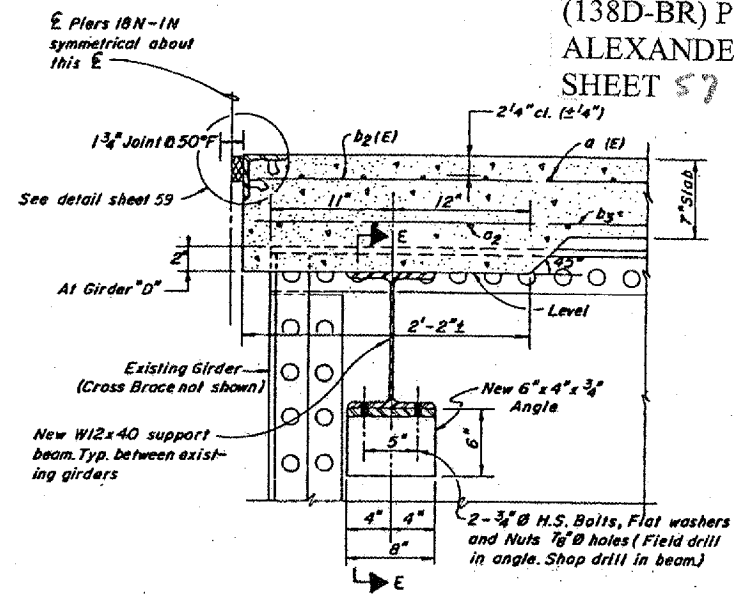
MISCELLANEOUS REPAIR SCHEDULE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138 D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28 + 13.08



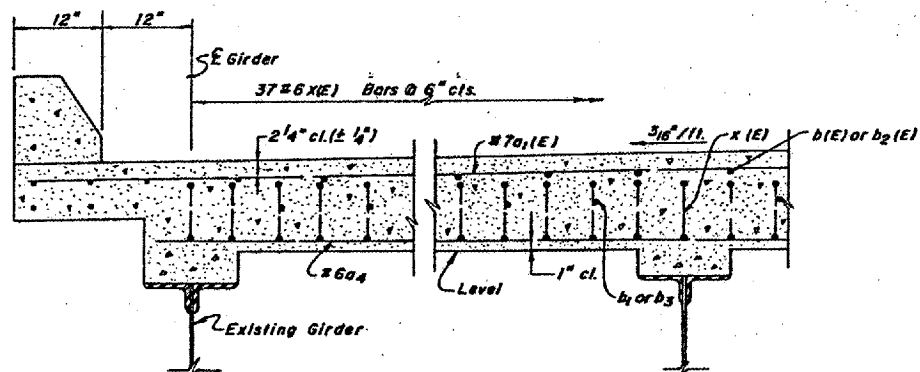
SECTION A-A



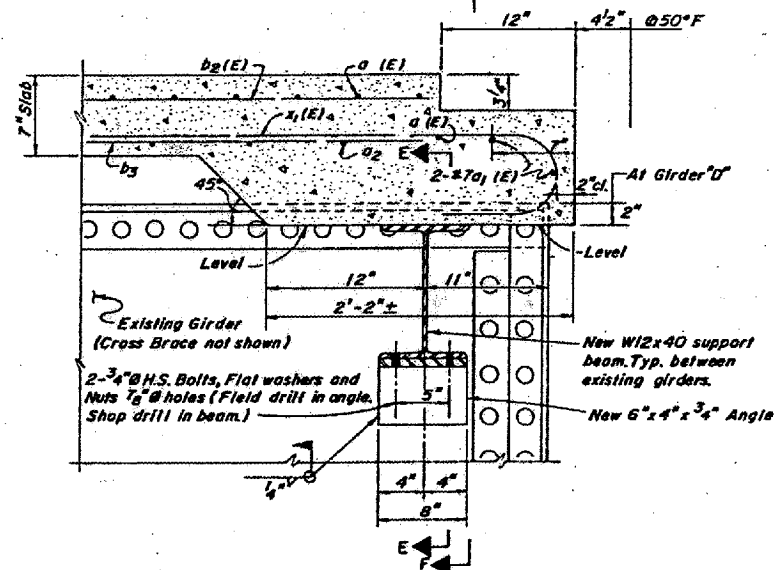
SECTION B-B
(AT PIERS 19N & 20N)



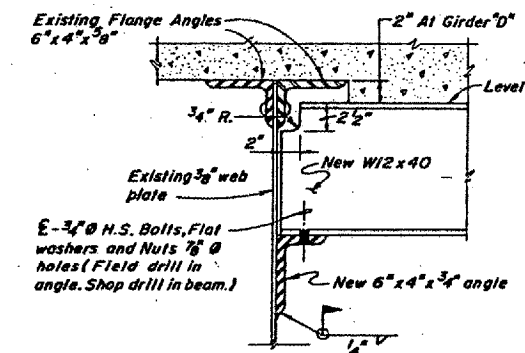
SECTION B-B
(AT PIERS 1N-18N)



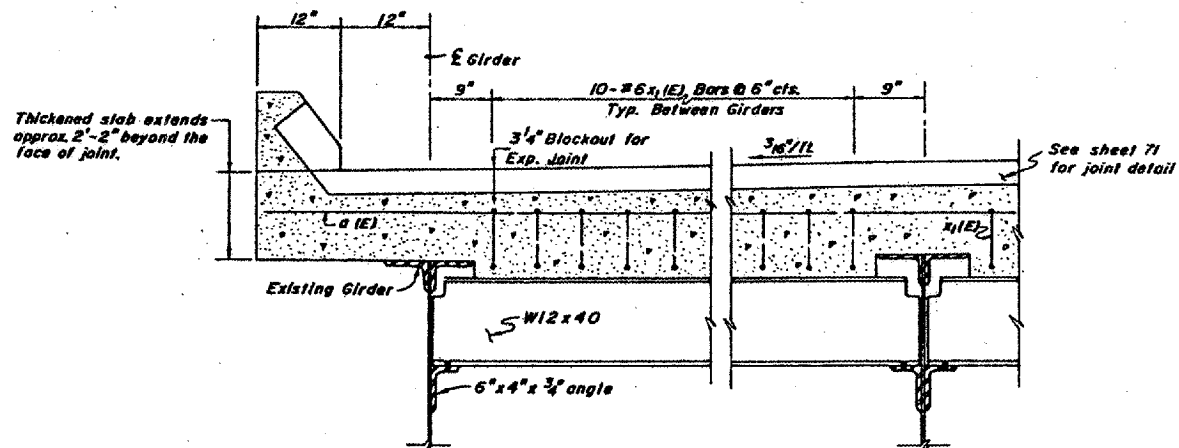
SECTION C-C
PIER SHOWN - ABUT. SIMILAR



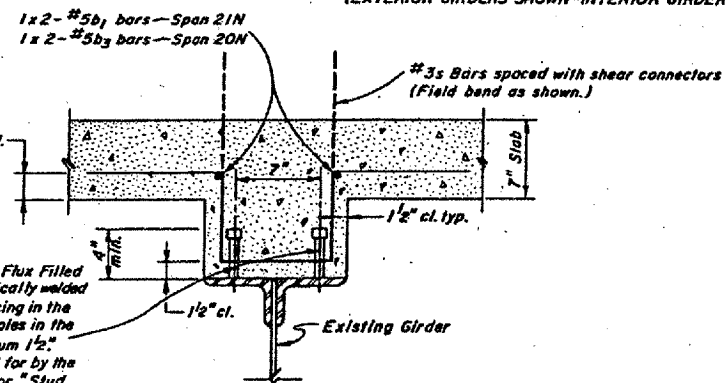
SECTION D-D
TYP SPANS IN-19N



SECTION E-E
(EXTERIOR GIRDERS SHOWN - INTERIOR GIRDERS SIMILAR)



SECTION F-F



SECTION G-G
TYP SPANS IN-19N

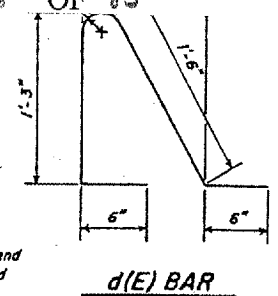
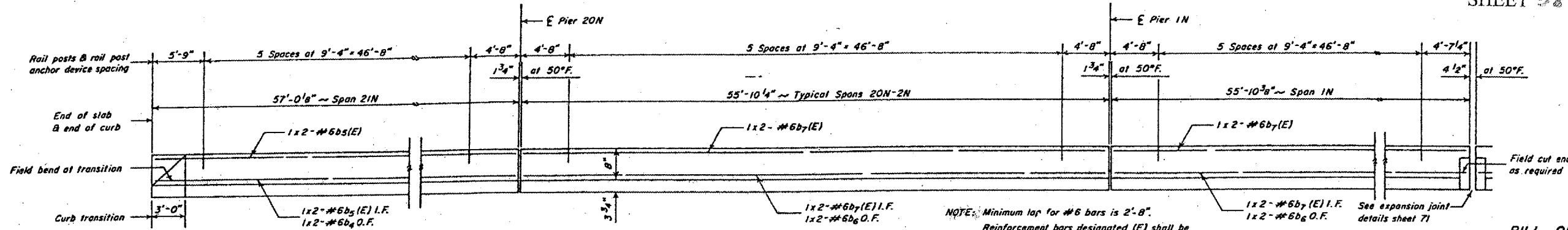
Total Number of Shear Connectors
Required for Illinois approach
spans = 10248

3/4 inch Granular or Solid Flux Filled
Headed Studs automatically welded
to Flange - Adjust spacing in the
field to miss existing holes in the
flange angles by minimum 1/2 inch.
This work shall be paid for by the
Unit Bid Price, Each, for "Stud
Shear Connectors."

DESIGNED	S.M.
CHECKED	R.E.C.
DRAWN	C.F.L.
CHECKED	R.E.C.-E.S.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

ILLINOIS APPRO. SPANS
DECK DETAILS
CONCRETE FLOOR ALTERNATE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL MISSISSIPPI CO., MO.
STATION 28+13.08

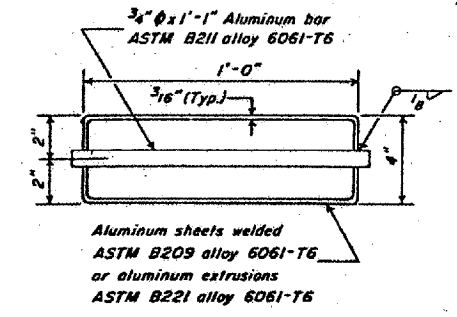


NOTE: Minimum lap for #6 bars is 2'-8".
Reinforcement bars designated (E) shall be epoxy coated. See special provisions.

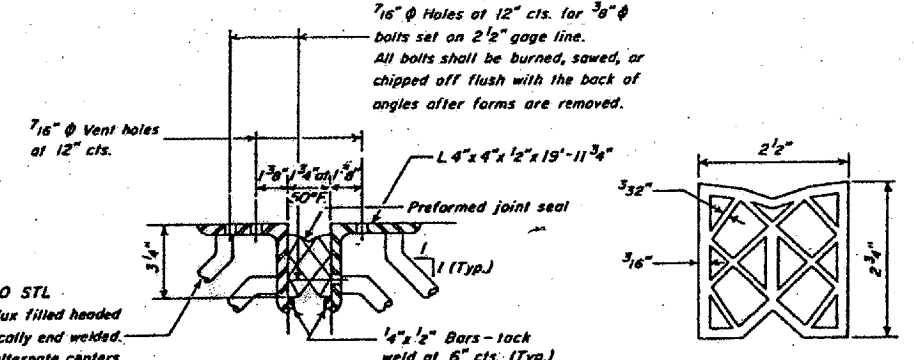
BILL OF MATERIAL

BAR	NUMBER			SIZE	LENGTH	SHAPE	
	SPAN 21N	SPAN 20N-2N	SPAN 1N				TOTAL
a(E)	113	2284	120	2517	#5	21'-8"	
a1(E)	11	15	2	28	#7	21'-8"	
a2	74	1489	77	1640	#5	21'-8"	
a3	5			5	#6	21'-8"	
a4	5	15		20	#6	18'-8"	
b(E)	48			48	#5	29'-5"	
b1	54			54	#5	29'-5"	
b2(E)		912	48	960	#5	29'-10"	
b3		738	38	776	#5	29'-10"	
b4	4			4	#6	29'-8"	
b5(E)	8			8	#6	29'-8"	
b6		76	4	80	#6	29'-1"	
b7(E)		152	8	160	#6	29'-1"	
d(E)	114	2128	112	2354	#4	3'-10"	
s	244	244		488	#3	4'-1"	
x(E)	74	111		185	#6	6'-4"	
x1(E)			30	30	#6	6'-2"	
						Pound	67,200
Reinforcement Bars						Pound	104,430
Reinforcement Bars (Epoxy Coated)						Cu. Yd.	685.6
Class X Concrete						Pound	41,240
Furnishing & Erecting Structural Steel						Lin. Ft.	433.4
Shear Connectors 3/4" Ø						Each	152
Preformed Joint Sealer 2 1/2"							
Floor Drains							

INSIDE ELEVATION OF CURB

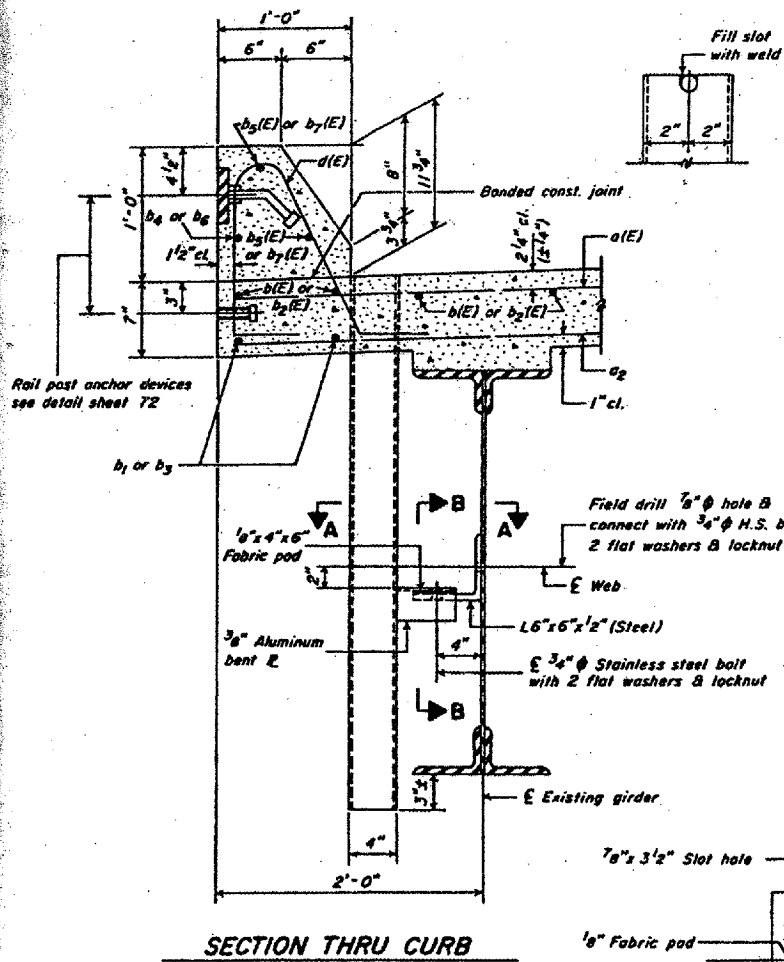


DRAIN DETAIL

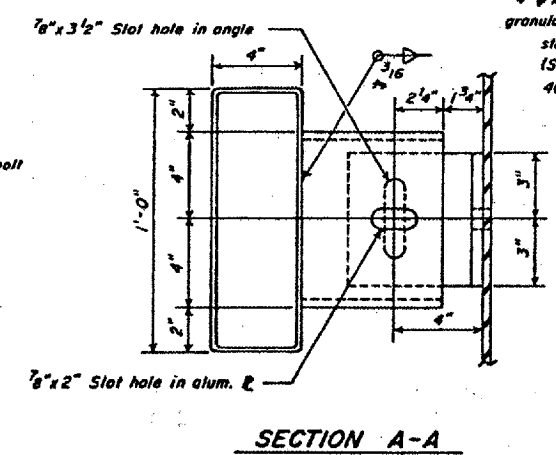


TYPICAL SECTION

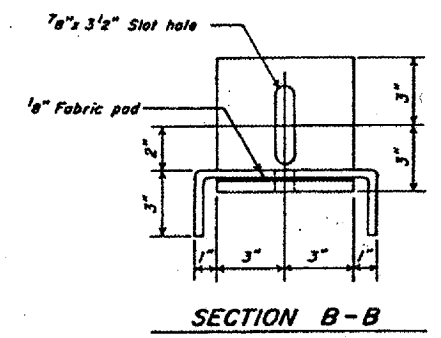
PREFORMED JOINT SEAL



SECTION THRU CURB



SECTION A-A

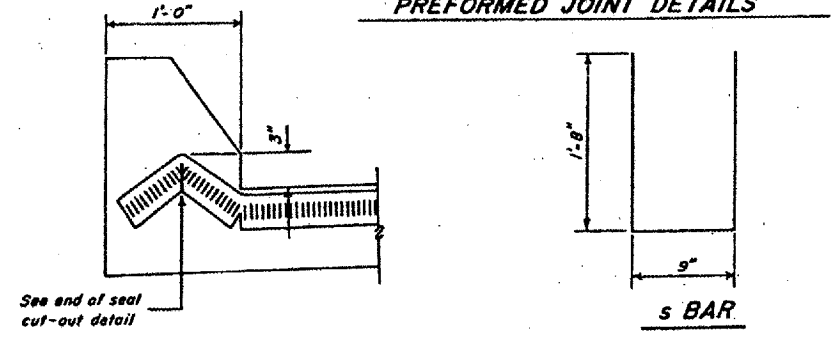


SECTION B-B

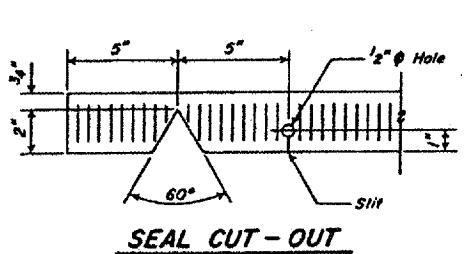
NOTE

The exterior surfaces of the aluminum drains shall be cleaned and given a washcoat pretreatment in accordance with the Steel Struct. Painting Council's Spec. SSPC-SPI & SSPC-PT3 followed by the Basic Lead Silico Chromate Painting specified for structural steel.

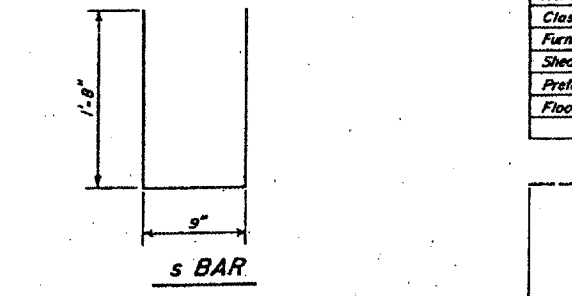
PREFORMED JOINT DETAILS



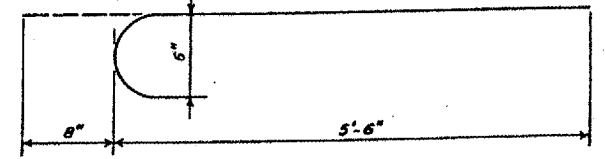
TYPICAL END OF SEAL TREATMENT



SEAL CUT-OUT



s BAR

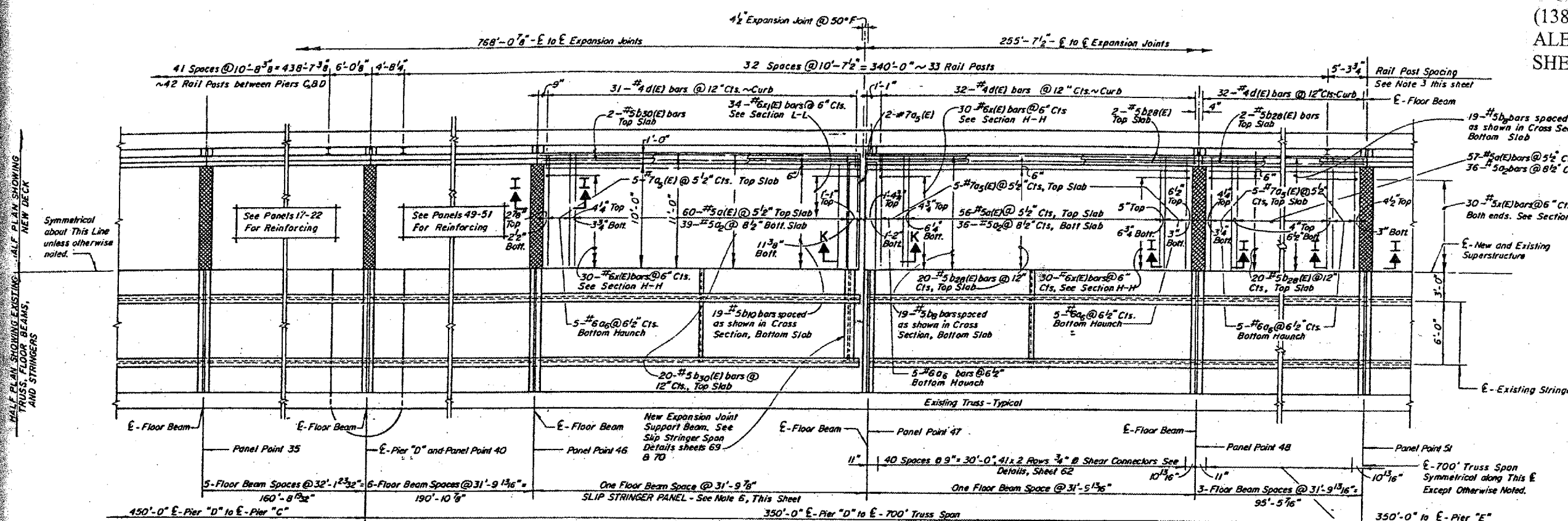


x1(E) BAR

DESIGNED	hmc
CHECKED	RFC
DRAWN	shr
CHECKED	RFC-ES

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

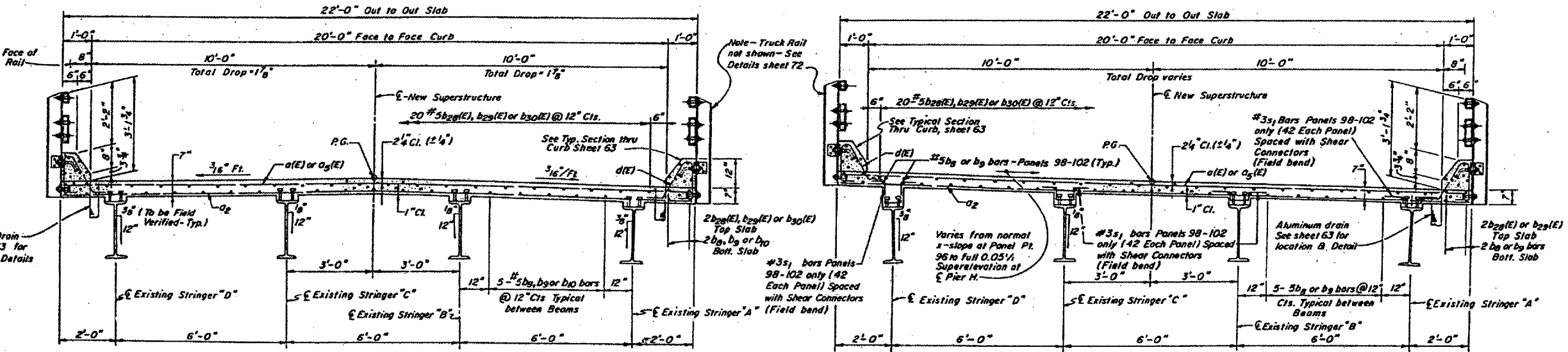
ILLINOIS APPRO SPANS
DECK DETAILS
CONCRETE FLOOR ALTERNATE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08



- NOTES:**
- 1- See sheets 63 & 64 for Details and Bill of Material.
 - 2- Reinforcement Bars designated (E) shall be Epoxy Coated. See Special Provisions.
 - 3- The Rail Post spacing given provides a total of 3 Posts per Truss Panel, two of which are short posts (one either side of E Floor Beam) and one is a longer post of approximate $\frac{1}{2}$ of Panel. The longer post is provided to support a continuous Truck Rail that extends to the limits of the Main Truss and is for the purpose of protecting the Truss Members. Truss Span Railing shall be paid for by The Unit Bid Price per Lin. Ft. for "Steel Railing Type T-1 Modified with Truck Rail." See Railing Details sheet 72 & Special Provisions.
 - 4- Vary last curb bar space at joint as required to clear joint, blackout, etc.
 - 5- See Sheet 62 for Sections I-I & K-K.
 - 6- Replace Existing Slip Stringer Panel, See Details, Sheets 69 & 70.
 - 7- For Deck Drain Spacing & Details, See Sheet 63.

PANELS 36 THRU 40 PANELS 41 THRU 46 PANEL 47 (TYPE II PANEL) PANEL 48 (TYPE I PANEL) PANELS 49 THRU 51 (TYPE III PANEL)

PLAN PANELS 36 THRU 51



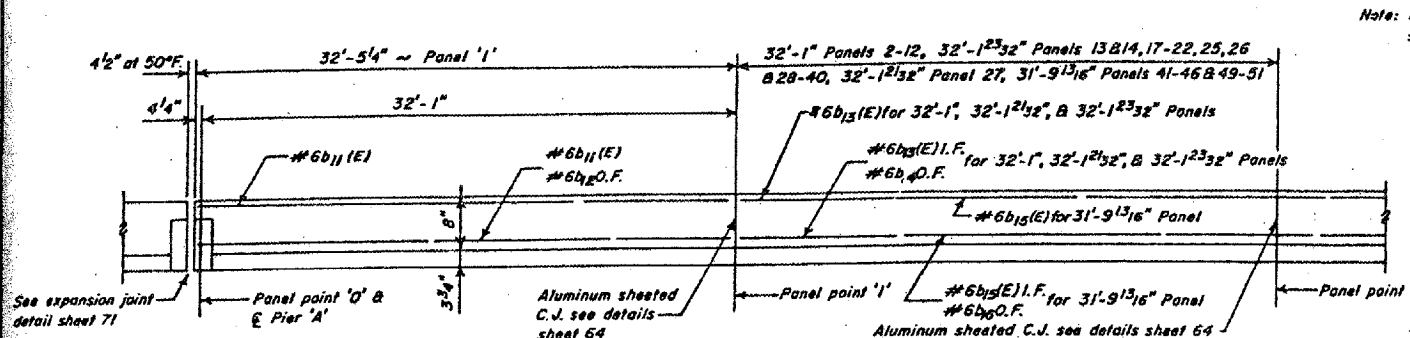
SECTION THRU NEW DECK TYPICAL PANELS 1-96 (LOOKING AHEAD)

SECTION THRU NEW DECK TYPICAL PANELS 97-102 (LOOKING AHEAD)

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

TRUSS SPANS DEC. PLANS
CONCRETE FLOOR ALTERNATE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

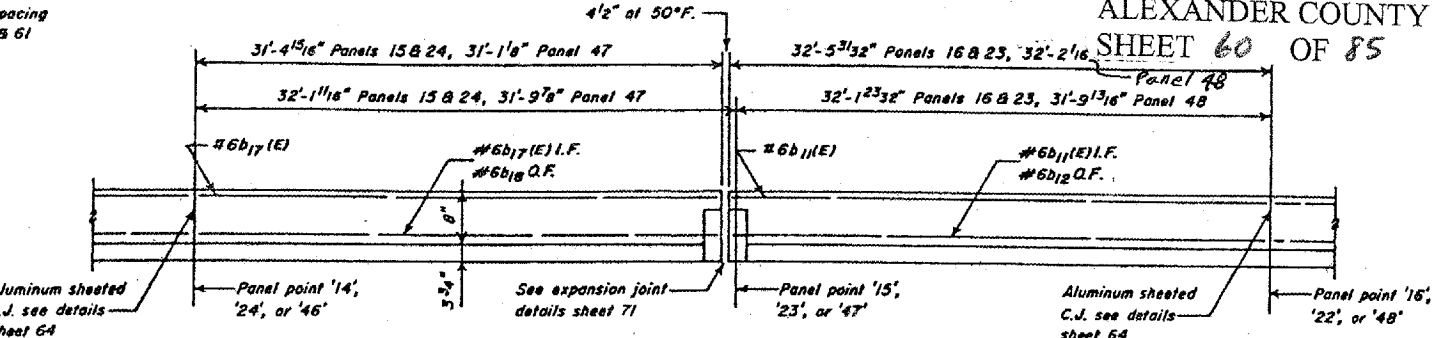
DESIGNED	<i>Shanni</i>
CHECKED	<i>R.E.C.</i>
DRAWN	<i>R.E.C.</i>
CHECKED	<i>R.E.C. - F.S.</i>



AT TYPICAL PIER PANEL
(TYPE I PANEL)

AT TYPICAL INTERIOR PANEL
(TYPE III & IV PANELS)

PARTIAL INSIDE ELEVATION OF CURB
(Curb elevation is symmetrical about panel point '51')

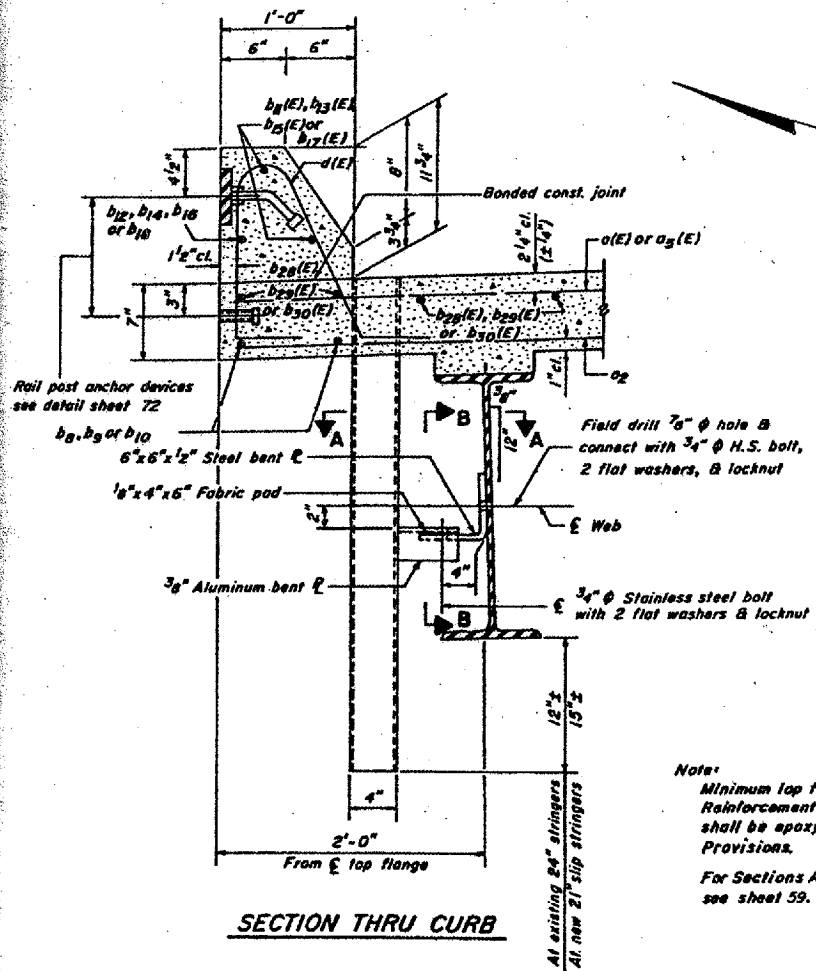


AT TYPICAL SLIP STRINGER PANEL
(TYPE I & II PANELS)

BILL OF MATERIAL

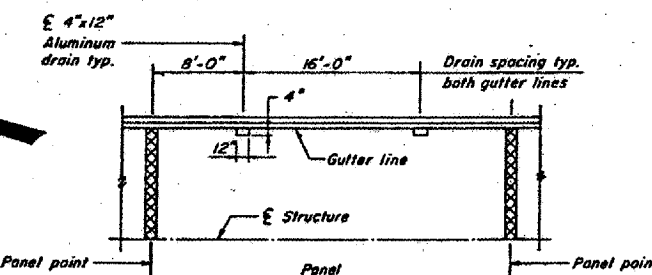
- Type I Panels**
Panels 1, 6, 23, 48, 55, 80, 87 & 102
Total 8 Panels
- Type II Panels**
Panels 15, 24, 47, 56, 79 & 88
Total 6 Panels
- Type III Panels**
Panels 41-46, 49-54 & 57-62
Total 18 Panels
- Type IV Panels**
Panels 2-14, 17-22, 25-40, 63-78,
81-86 & 89-101
Total 70 Panels

BAR	NUMBER				TOTAL	SIZE	LENGTH	SHAPE	
	TYPE I PANELS	TYPE II PANELS	TYPE III PANELS	TYPE IV PANELS					
a(E)	448	360	1026	3990	5824	#5	21'-8"	—	
a ₂	288	234	648	2520	3690	#5	21'-8"	—	
a ₃ (E)	80	42	180	700	1002	#7	21'-8"	—	
a ₆	80	30	180	700	990	#6	18'-5"	—	
b ₂	160		342		502	#5	30'-4"	—	
b ₃				1362	1362	#5	30'-8"	—	
b ₄		114			114	#5	29'-4"	—	
b ₁₁ (E)	32				32	#6	32'-0"	—	
b ₁₂	16				16	#6	32'-0"	—	
b ₁₃ (E)				280	280	#6	31'-10"	—	
b ₁₄				140	140	#6	31'-10"	—	
b ₁₅ (E)			72		72	#6	31'-7"	—	
b ₁₆			36		36	#6	31'-7"	—	
b ₁₇ (E)		24			24	#6	30'-11"	—	
b ₁₈		12			12	#6	30'-11"	—	
b ₂₂ (E)	192		432		624	#5	30'-4"	—	
b ₂₃ (E)				1680	1680	#5	30'-8"	—	
b ₃₀ (E)			144		144	#5	29'-4"	—	
d(E)	512	372	1152	4480	6516	#4	3'-10"	—	
s ₁	168			672	840	#3	4'-0"	—	
x(E)	480	180	1080	4200	5940	#6	8'-4"	—	
x ₁ (E)		204			204	#6	6'-2"	—	
Reinforcement Bars								Pound	184,700
Reinforcement Bars (Epoxy Coated)								Pound	366,250
Class X Concrete								Cu.Yd.	1,938.0
Shear Connectors 3/4" #								Each	34,016
Furnishing & Erecting Structural Steel								Pound	146,440
Floor Drains								Each	302

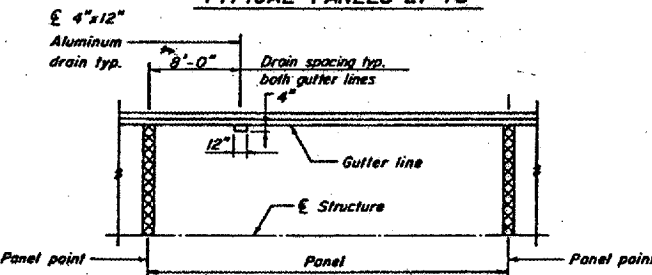


SECTION THRU CURB

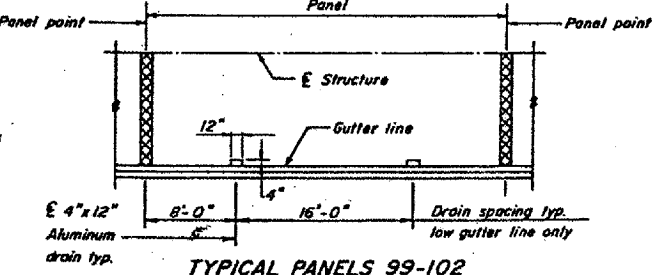
Note:
Minimum lap for #6 Bars = 2'-8"
Reinforcement bars designated (E)
shall be epoxy coated. See Special
Provisions.
For Sections A-A, B-B & Drain details
see sheet 59.



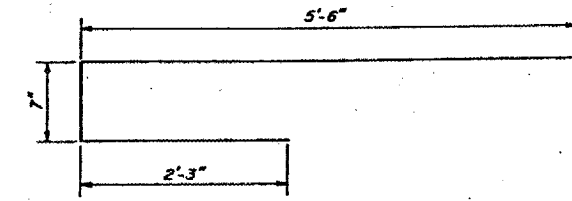
TYPICAL PANELS 27-75



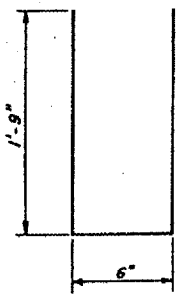
TYPICAL PANELS 1-26 & 76-98



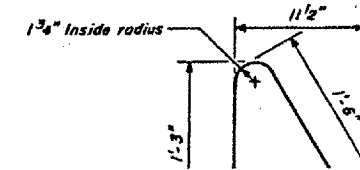
KEY PLAN-DRAIN SPACING
(Total number of drains required = 302)



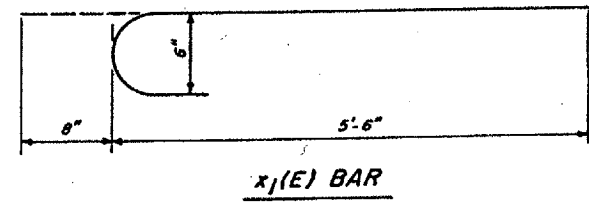
x(E) BAR



s₁ BAR



BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY



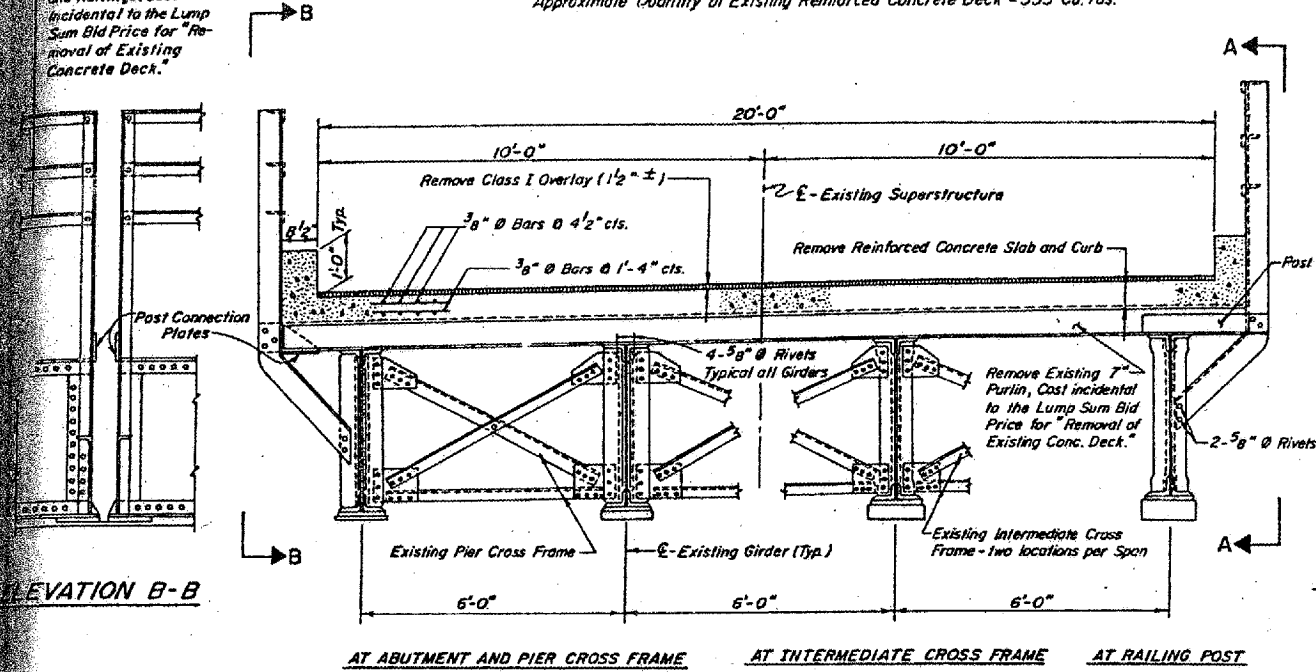
TRUSS SPANS DECK DETAILS
CONCRETE FLOOR ALTERNATE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28 + 13.08

DESIGNED	SP
CHECKED	R.F.C.
DRAWN	brh
CHECKED	R.F.C.-E.S.

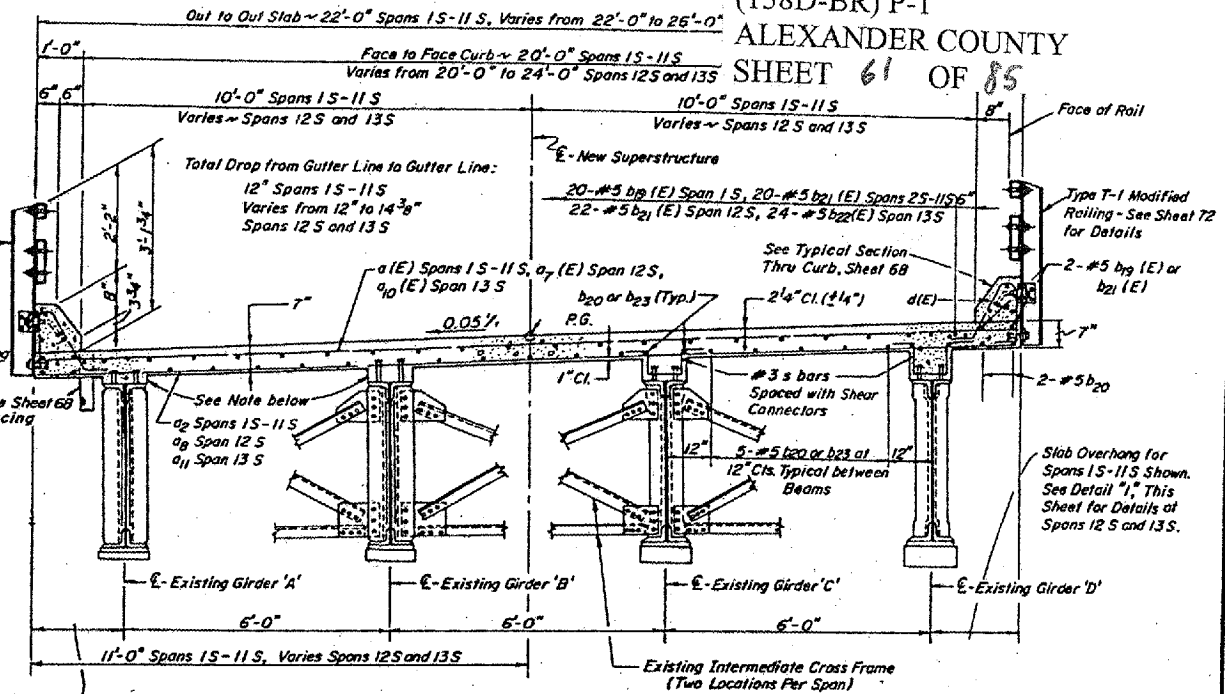
MISSOURI APPROACH SPANS:

Total Number of Existing Purlins = 286
Total Number of Existing Rail Posts (Both Sides) = 234
Approximate Quantity of Existing Reinforced Concrete Deck = 355 Cu. Yds.

Remove Posts, Post Connection Plates and Railings. Cost incidental to the Lump Sum Bid Price for "Removal of Existing Concrete Deck."



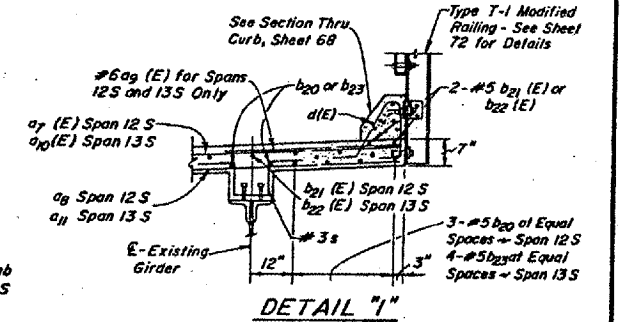
SECTION THRU EXISTING DECK



SECTION THRU NEW DECK
(LOOKING NORTH)

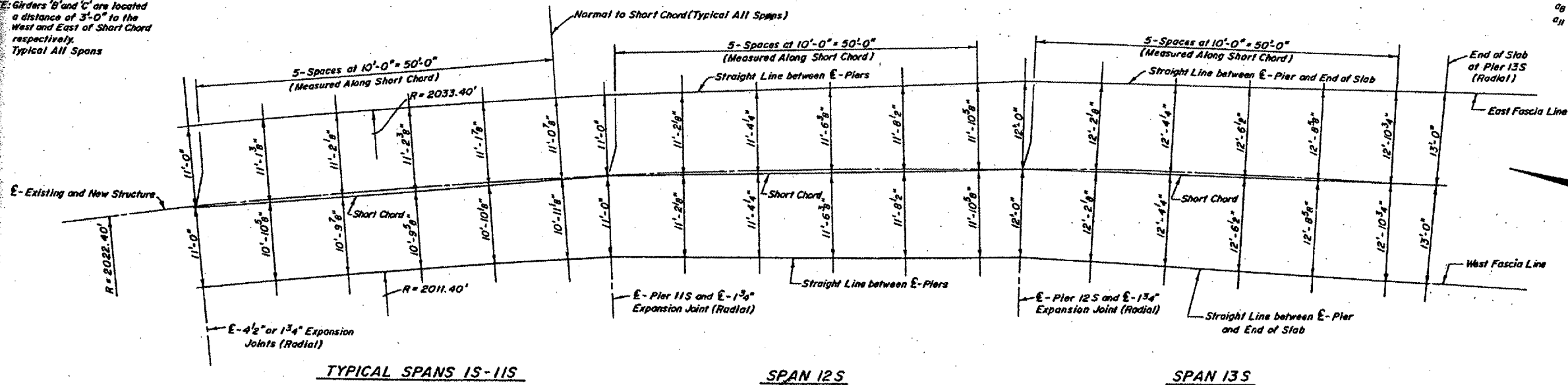
2'-0" Spans 1S-11S (Shown)
Varies from 2'-0" at E-Pier 11S to 4'-0" at End of Slab at Pier 13S for Spans 12 S and 13 S.
Typical Both Fascias - See Fascia Offset below.

NOTE:
Shallow haunches shown. See Layout, Sheet 65 & Shear Connector Details, Sheet 67 for #5, #6 & #8 requirements at Girders A & B with deep haunches.



DETAIL "1"

NOTE: Girders 'B' and 'C' are located a distance of 3'-0" to the West and East of Short Chord respectively.
Typical All Spans



TYPICAL SPANS 1S-11S

SPAN 12S

SPAN 13S

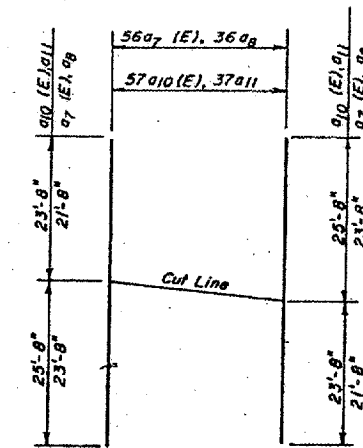
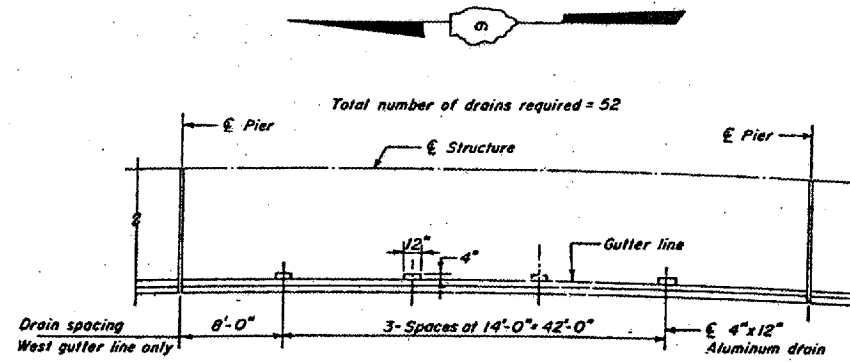
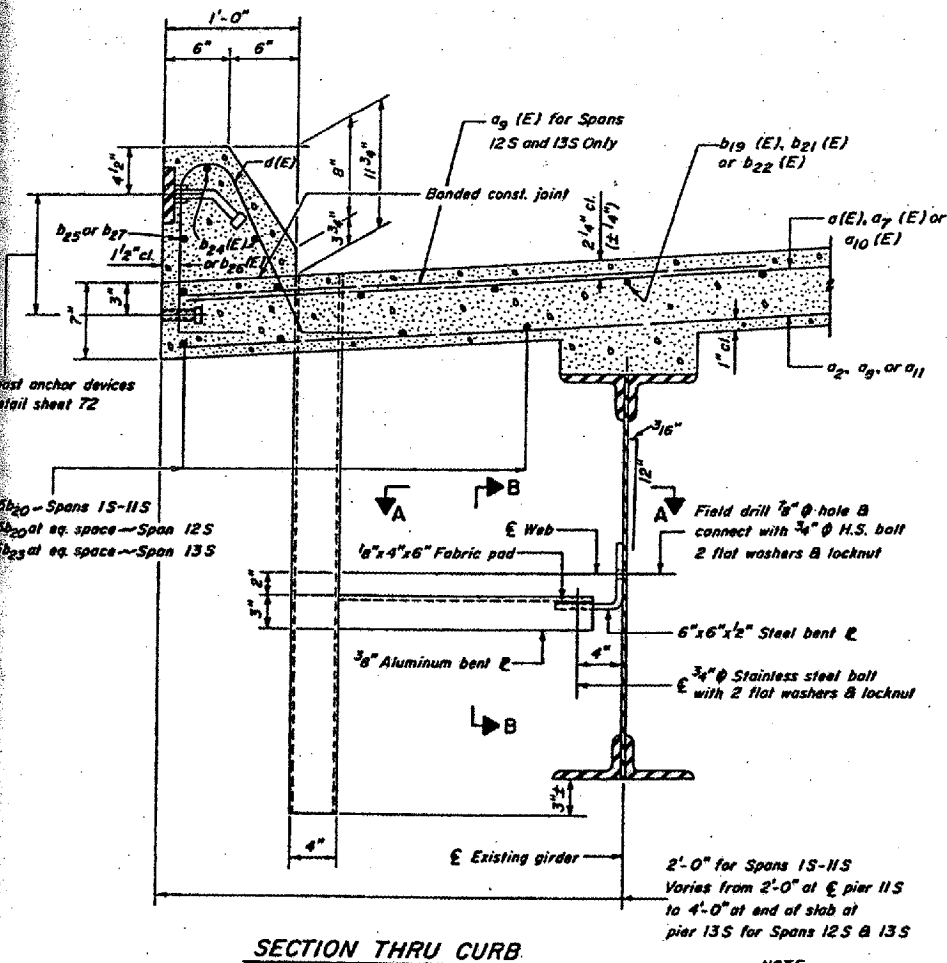
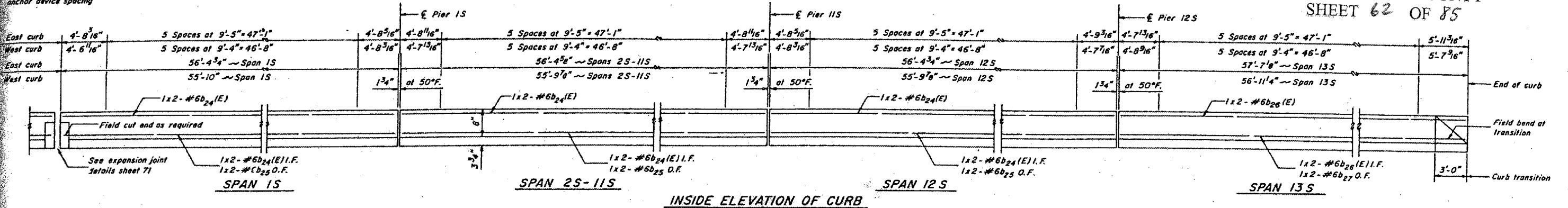
FASCIA OFFSET FROM SHORT CHORD

DESIGNED	Checked
CHECKED	R.F.C.
DRAWN	Checked
CHECKED	R.F.C. - F.S.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

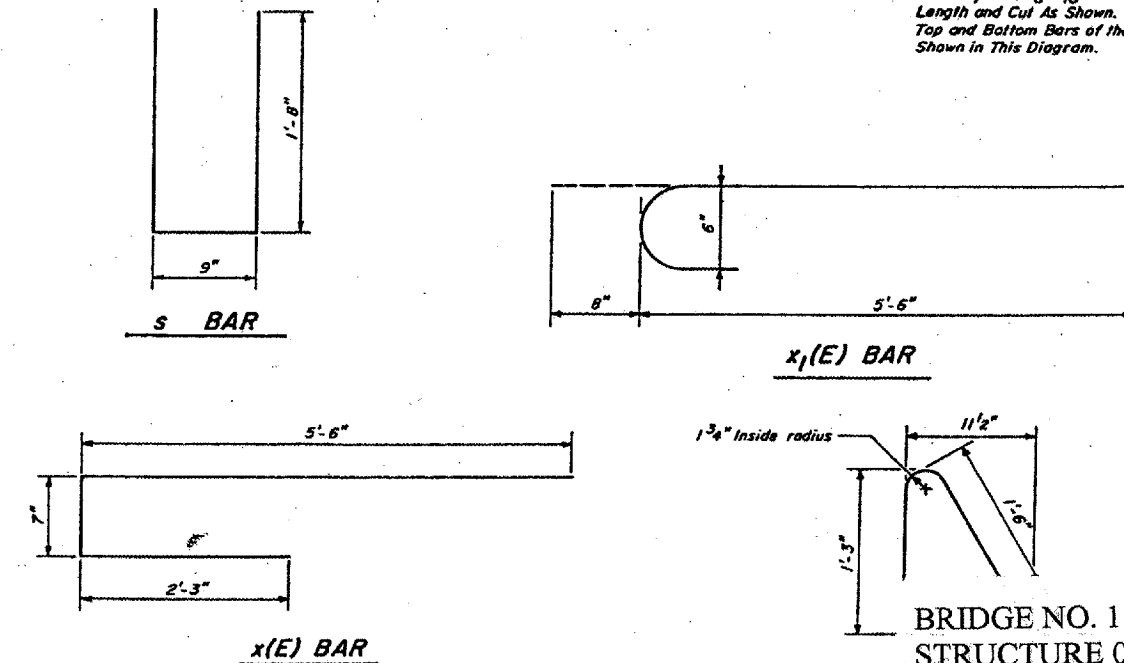
MISSOURI APPROACH 5
DECK SECTIONS
CONCRETE FLOOR ALTERNATE
F.A.U.S. Rte. 9811 (U.S. 60 & 52)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

Rail posts & rail post
anchor device spacing



BILL OF MATERIAL

BAR	NUMBER				TOTAL	SIZE	LENGTH	SHAPE	
	SPAN 1 S	SPAN 2S-11S	SPAN 12 S	SPAN 13 S					
a ₁ (E)	116	1120			1236	#5	21'-8"		
a ₂	74	720	5		112	#7	21'-8"		
a ₄	5		10		794	#5	21'-8"		
a ₇ (E)			56		115	#6	18'-8"		
a ₈			36		56	#5	45'-4"		
a ₉ (E)			122	126	248	#6	6'-0"		
a ₁₀ (E)				57	57	#5	49'-4"		
a ₁₁				37	37	#5	49'-4"		
a ₁₂ (E)			5	5	10	#7	23'-8"		
a ₁₃ (E)				6	6	#7	25'-8"		
a ₁₄				5	5	#6	25'-8"		
b ₁₉ (E)	48				48	#5	28'-7"		
b ₂₀	54	460	54		568	#5	29'-1"		
b ₂₁ (E)		480	52		532	#5	29'-1"		
b ₂₂ (E)				56	56	#5	29'-8"		
b ₂₃				58	58	#5	29'-8"		
b ₂₄ (E)	8	80	8		96	#6	29'-5"		
b ₂₅	4	40	4		48	#6	29'-5"		
b ₂₆ (E)				8	8	#6	30'-0"		
b ₂₇				4	4	#6	30'-0"		
d(E)	113	1130	113	115	1471	#4	3'-10"		
s	244	1220	183	183	1830	#3	4'-1"		
x ₁ (E)	37	607	60	60	764	#6	8'-4"		
x ₁ (E)	30				30	#6	6'-2"		
Reinforcement Bars								Pound	49,100
Reinforcement Bars (Epoxy Coated)								Pound	79,020
Class X Concrete								Cu. Yd.	462.4
Floor Drains								Each	52
Furnishing and Erecting Structural Steel								Pound	7,740
Shear Connectors 3/4" φ								Each	6,344
Preformed Joint Seal 2 1/2"								Lin. Ft.	262



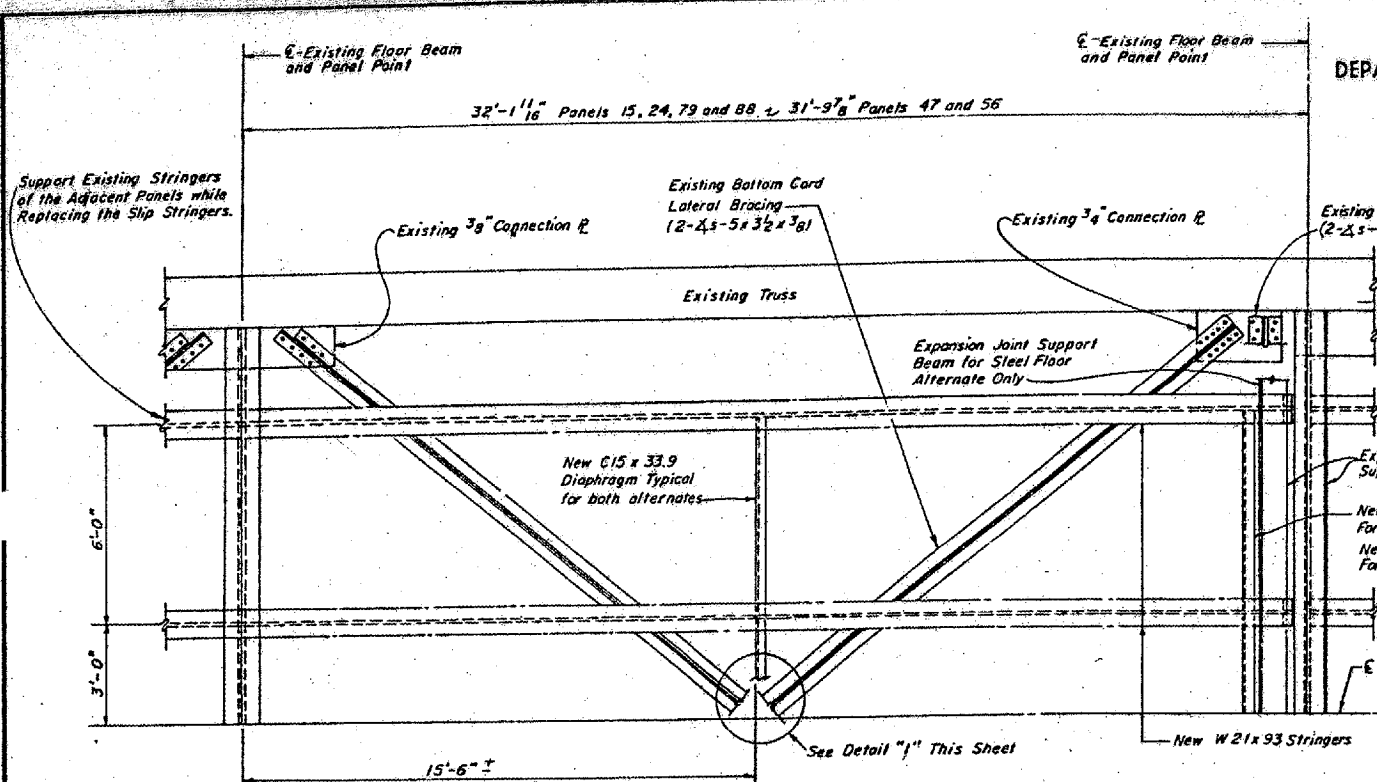
BRIDGE NO. 1
STRUCTURE 002-005
FOR INFORMATION ONLY

MISSOURI APPROACH
DECK DETAIL
CONCRETE FLOOR ALTERNATE
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO
STATION 28 + 13.08

DESIGNED: *[Signature]*
CHECKED: R.F.C.
DRAWN: brb
CHECKED: R.F.C.-F.S.

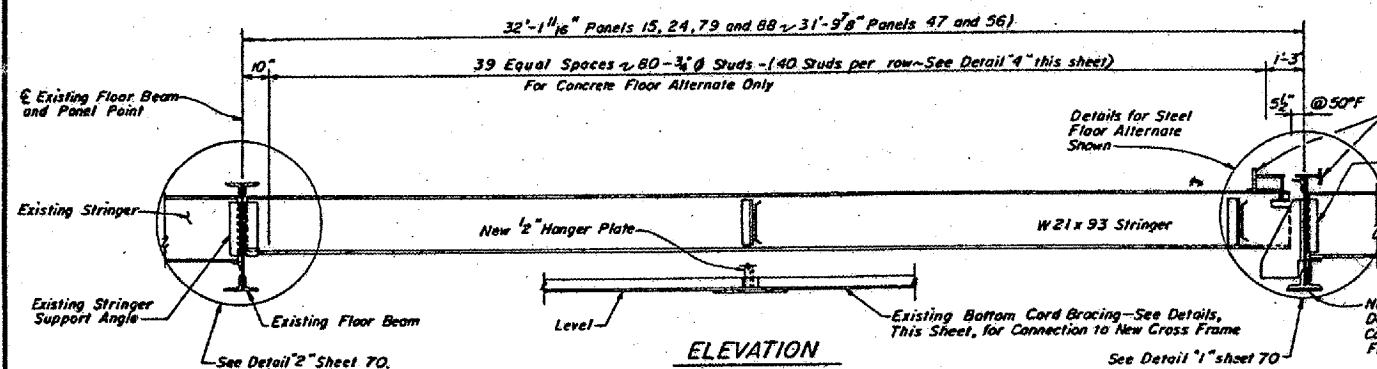
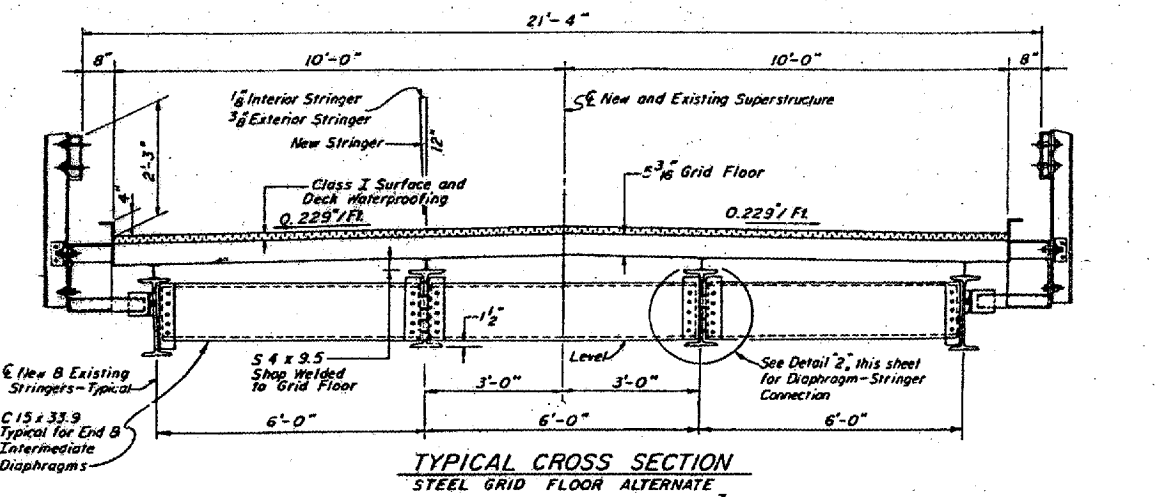
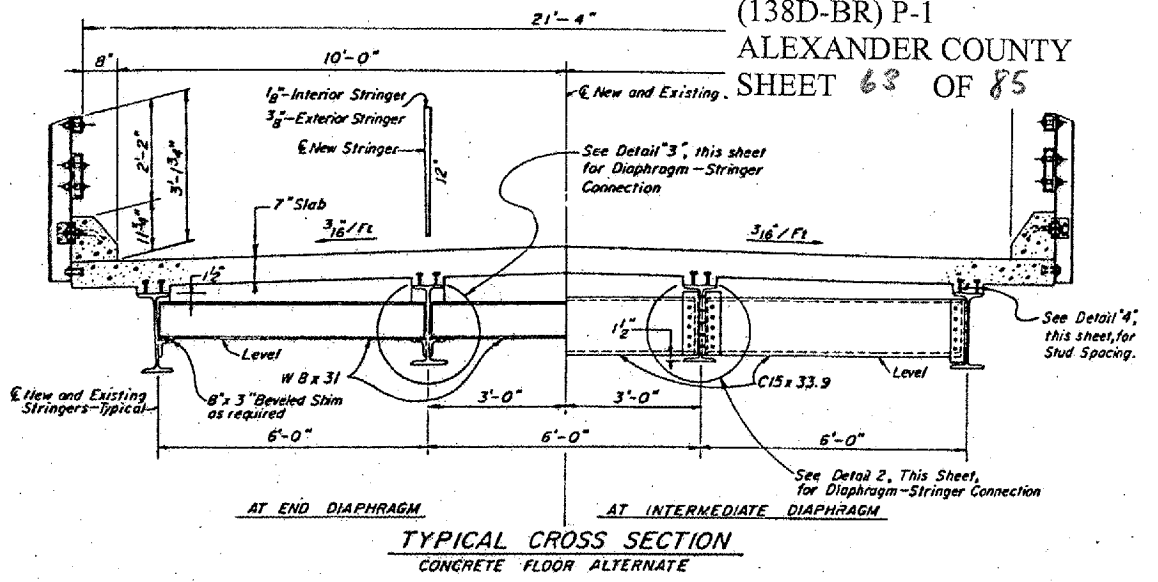
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT 98939
U.S. RTE. 60 & U.S. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 63 OF 85

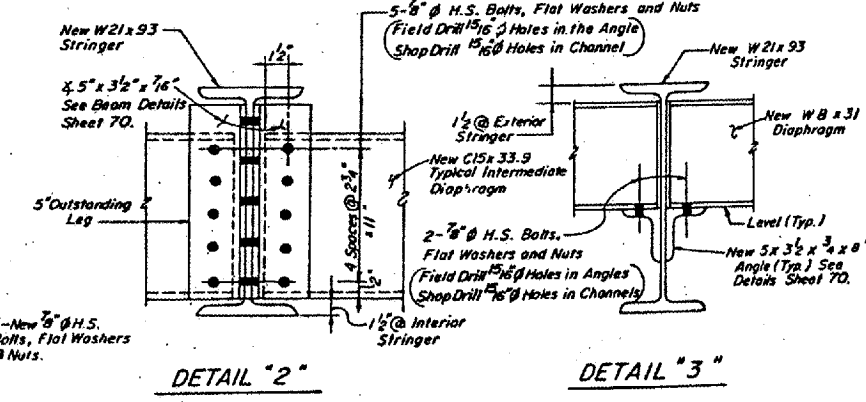
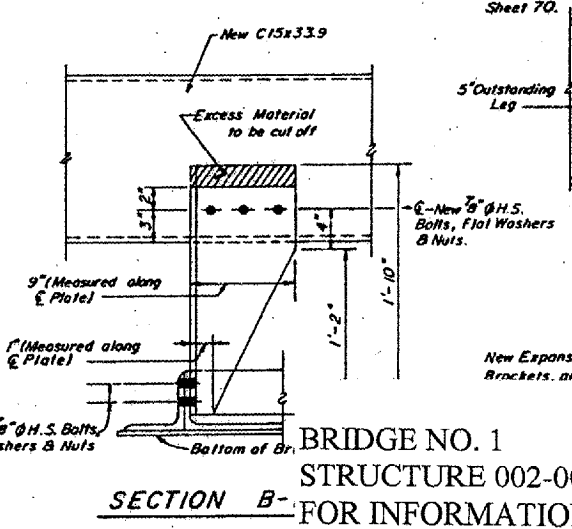
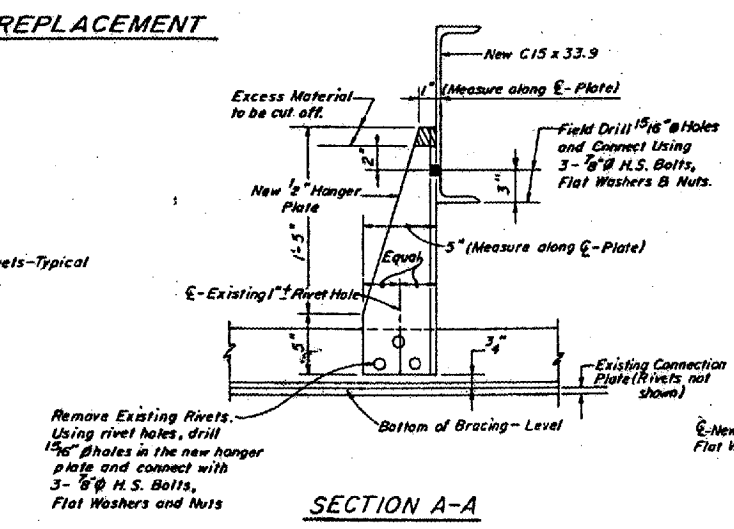
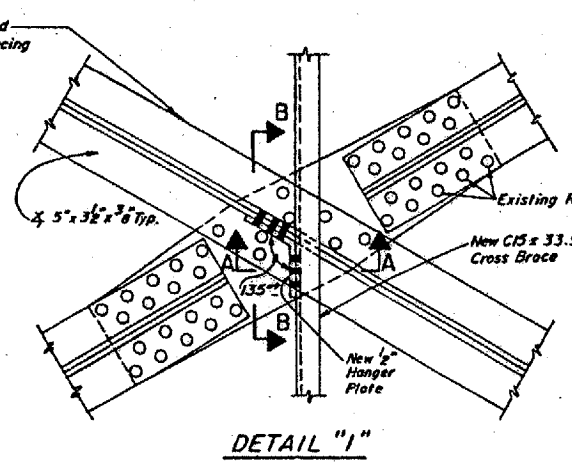


HALF FRAMING PLAN (DECK REMOVED)
PANELS 15, 47 & 79 SHOWN, PANELS 24, 55 & 88 OPPOSITE

NOTE:
This work shall be paid for by the Unit Price Bid each for "Slip Stringer Span Removal & Replacement" Concrete Floor Alternate or "Slip Stringer Span Removal & Replacement" Steel Grid Floor Alternate and "Elastomeric Bearing Assembly Type III" See Special Provisions.



SLIP STRINGER SPAN REMOVAL AND REPLACEMENT

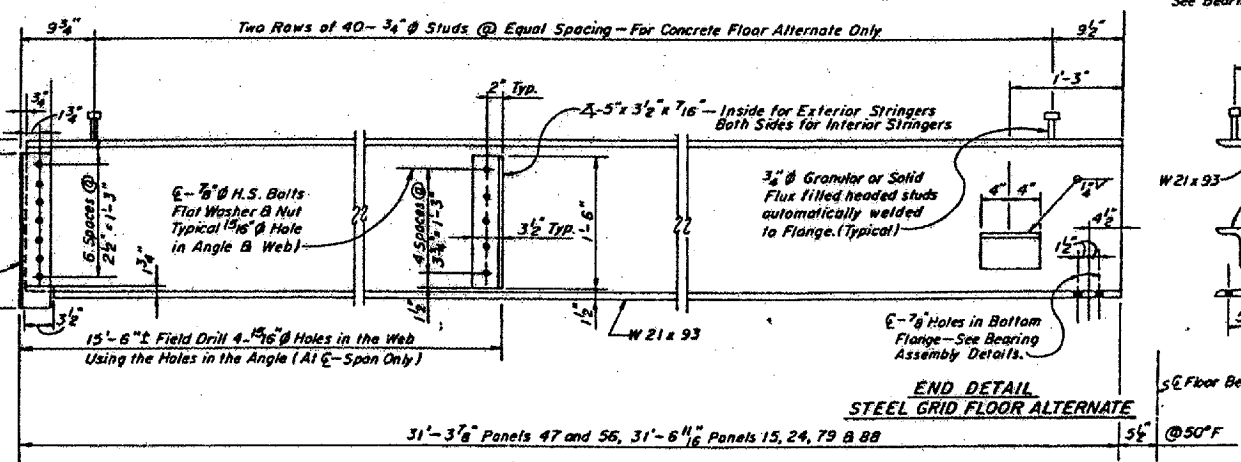
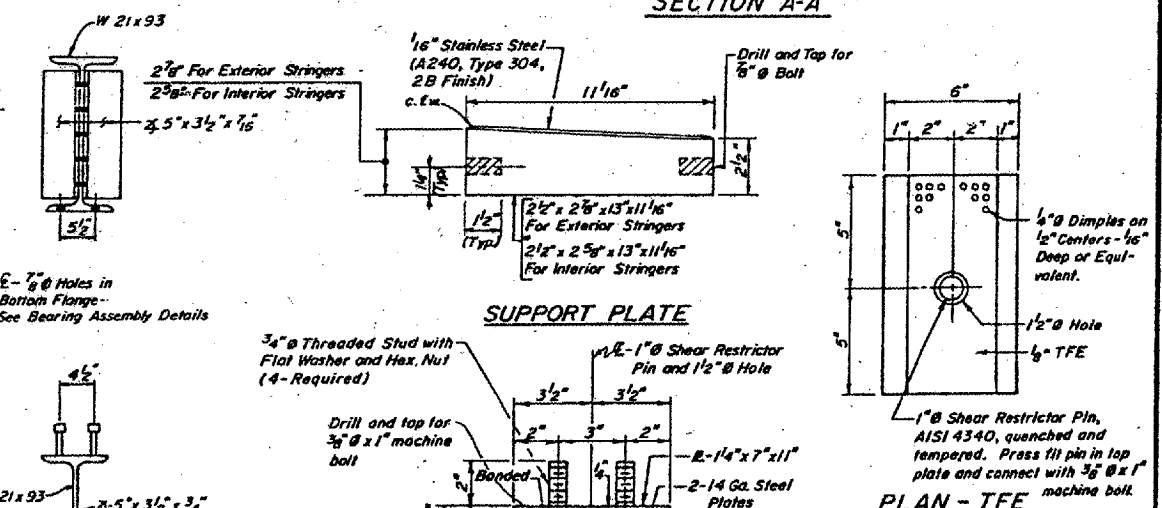
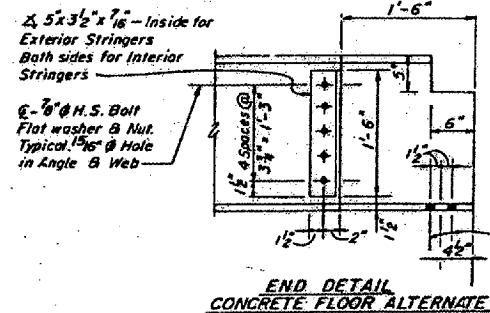
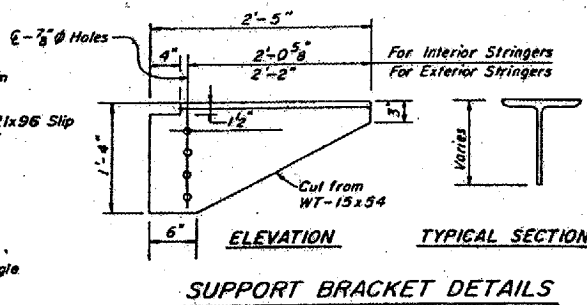
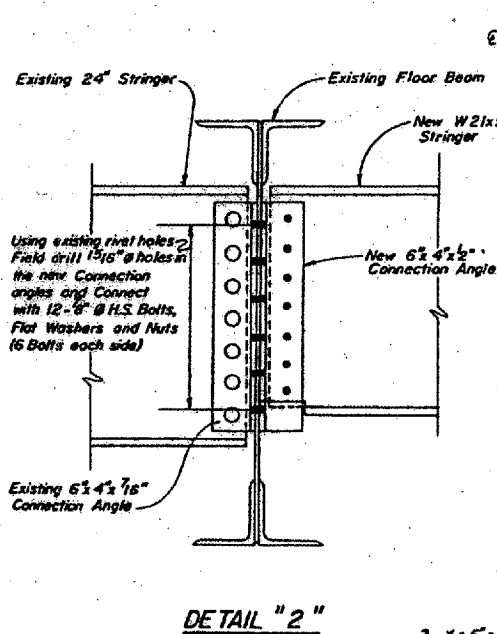
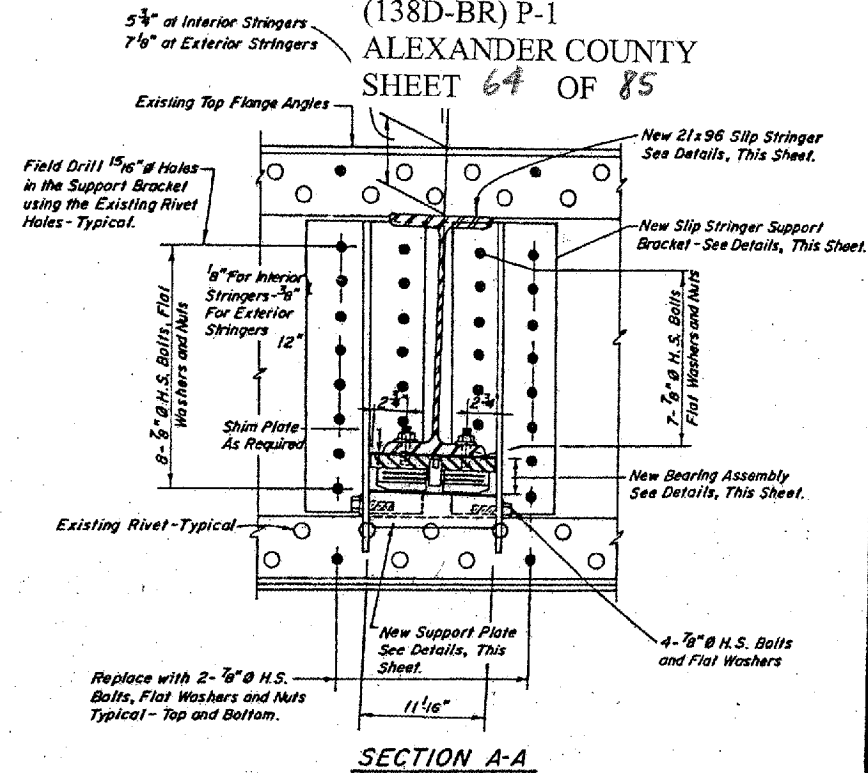
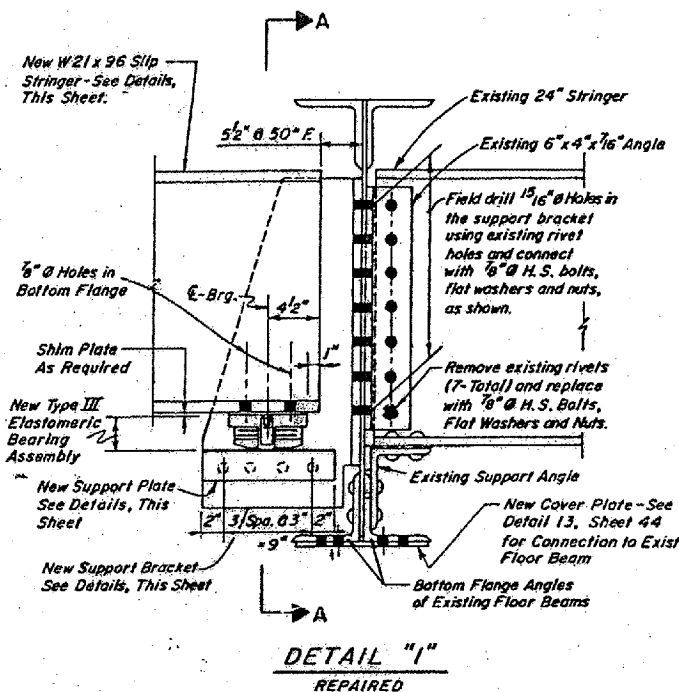
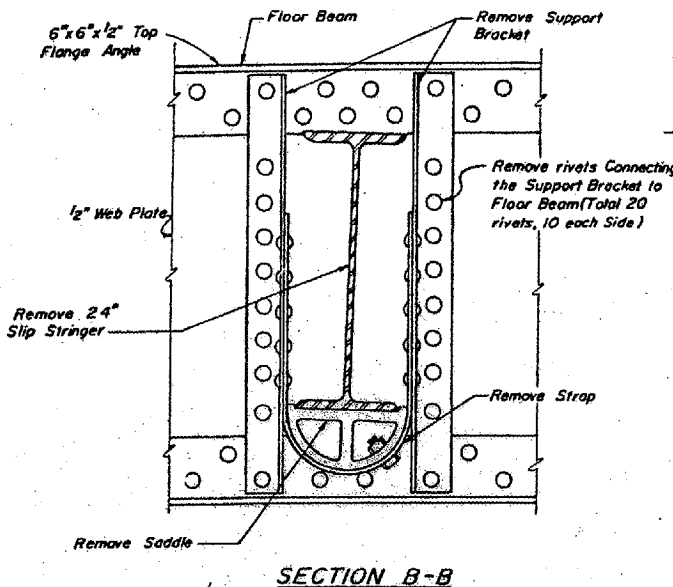
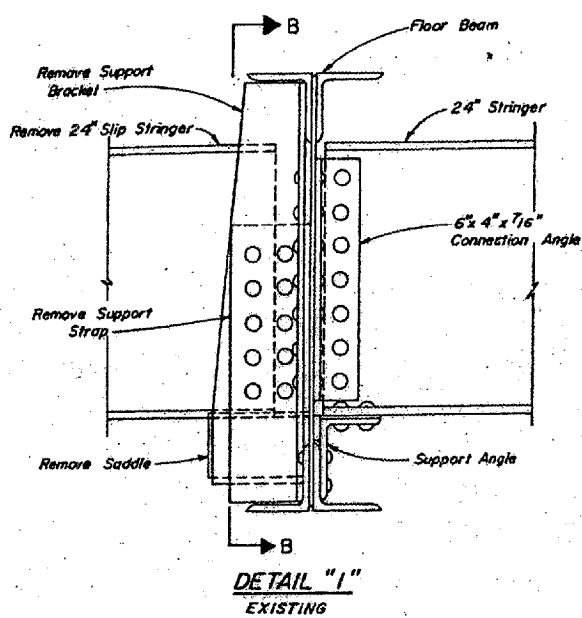


NOTE:
New Expansion Joint Support Beams, Brackets, and Floor Beam Bottom

DESIGNED	Sumner
CHECKED	D.C.C.
DRAWN	A.E.
CHECKED	R.P.R. - F.S.

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

SLIP STRINGER SPAN DETAILS
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138 D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28 + 13.08



NOTE:
The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

DESIGNED *[Signature]*
CHECKED *[Signature]*
DRAWN *[Signature]*
CHECKED *[Signature]*

BILL OF MATERIAL CONCRETE FLOOR ALTERNATE		
DESCRIPTION	UNIT	QUANTITY
Slip Stringer Span Removal and Replacement	Each	6
Elastomeric Bearing Assembly Type III	Each	24

BILL OF MATERIAL STEEL GRID FLOOR ALTERNATE		
DESCRIPTION	UNIT	QUANTITY
Slip Stringer Span Removal and Replacement	Each	6
Elastomeric Bearing Assembly Type III	Each	24

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

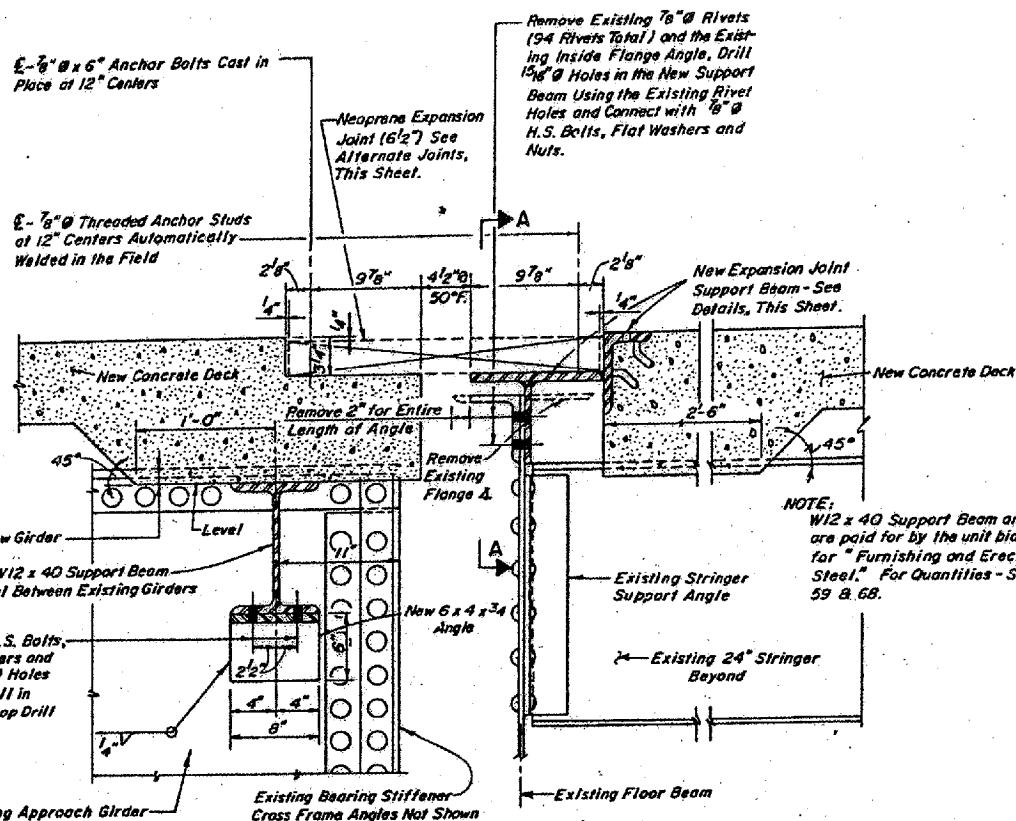
SLIP STRINGER SPAN DETAILS
F.A.U.S. Rte. 9811 (U.S. 60 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT 98939
U.S. RTE. 60 & U.S. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 65 OF 85
GENERAL TIRE COMPANY

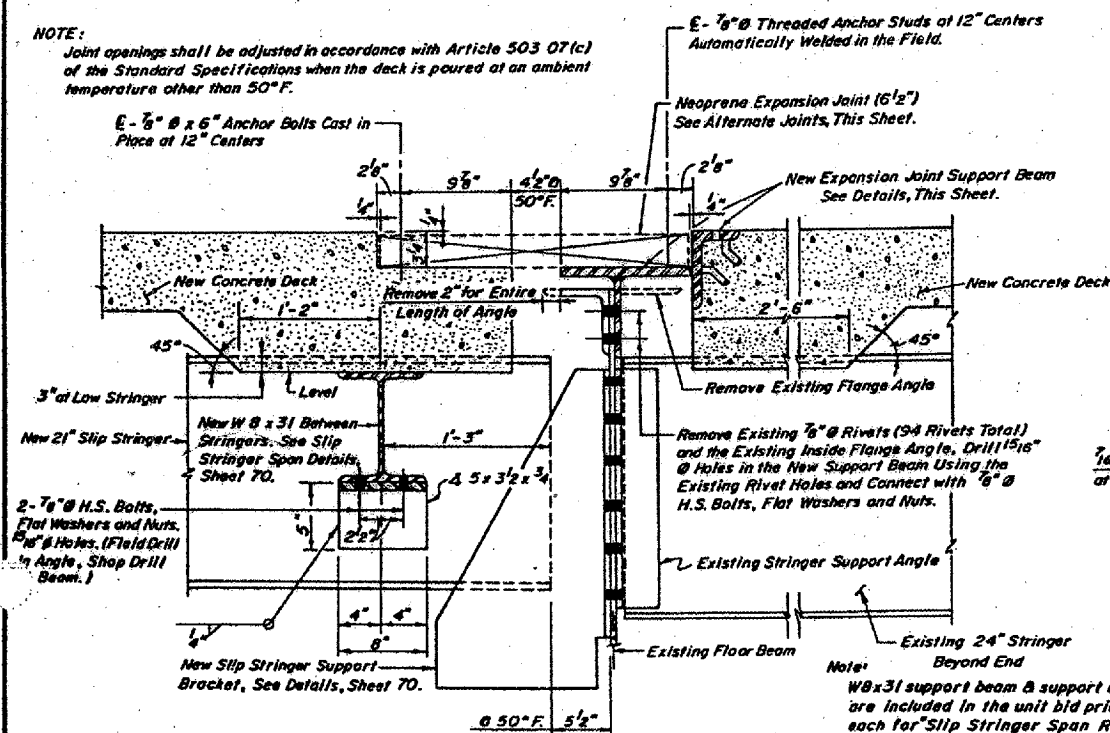
MODEL
TRANSFLEX, MODEL 650
NEOPRENE EXPANSION JOINTS (6 1/2")
(SEE SPECIAL PROVISIONS)

BILL OF MATERIAL			
DESCRIPTION	LOCATION	UNIT	TOTAL QUANTITY
Furnishing and Erecting Structural Steel	Pier "H"	Pound	1,810
Furnishing and Erecting Structural Steel	Pier "A" and Panel Points 15, 23, 47, 55, 79 and 87	Pound	10,860
Neoprene Expansion Joints (6 1/2")	Pier "A" and Panel Points 15, 23, 47, 55, 79 and 87	Lin. Ft.	171

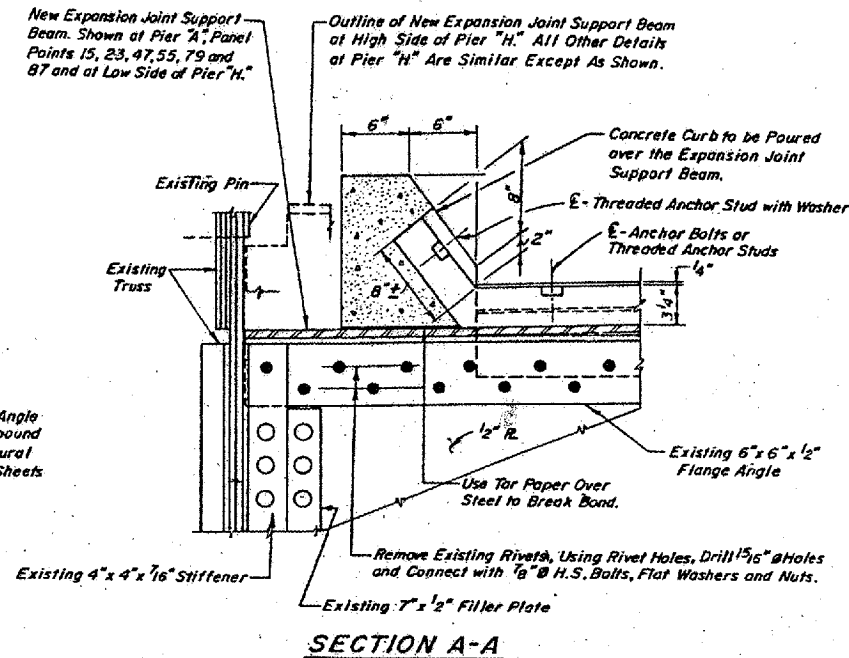


SECTION AT PIER "A" AND "H" EXPANSION JOINTS
(PIER "A" SHOWN, PIER "H" SIMILAR)

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

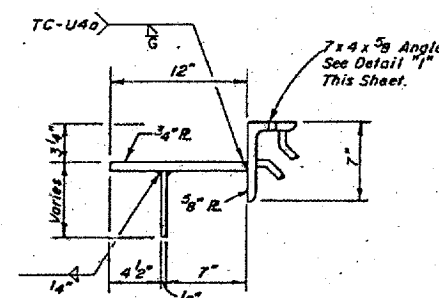


SECTION AT SLIP STRINGER EXPANSION JOINTS
(TYPICAL PANEL POINTS 15, 23, 47, 55, 79 & 87)

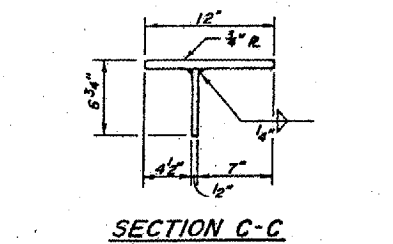


SECTION A-A

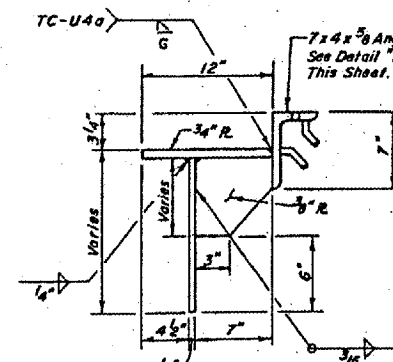
NOTE:
Expansion Joint Support Beams are paid for by the unit bid price per pound for "Furnishing and Erecting Structural Steel." For Quantities See Table of Bill of Material, This Sheet.



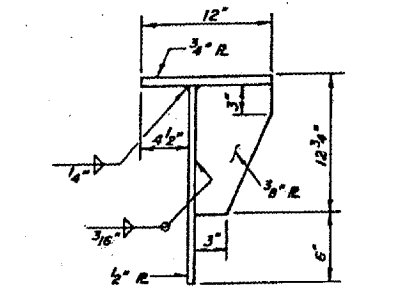
SECTION B-B



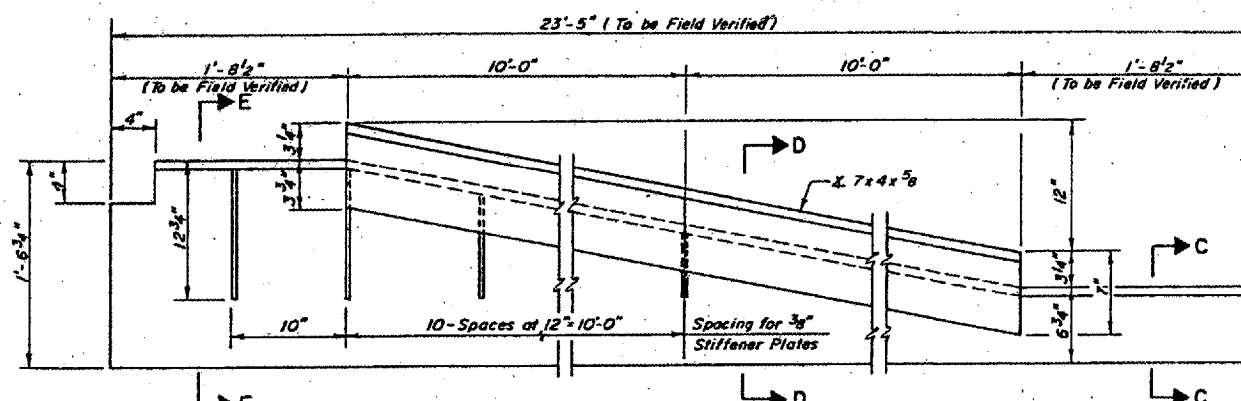
SECTION C-C



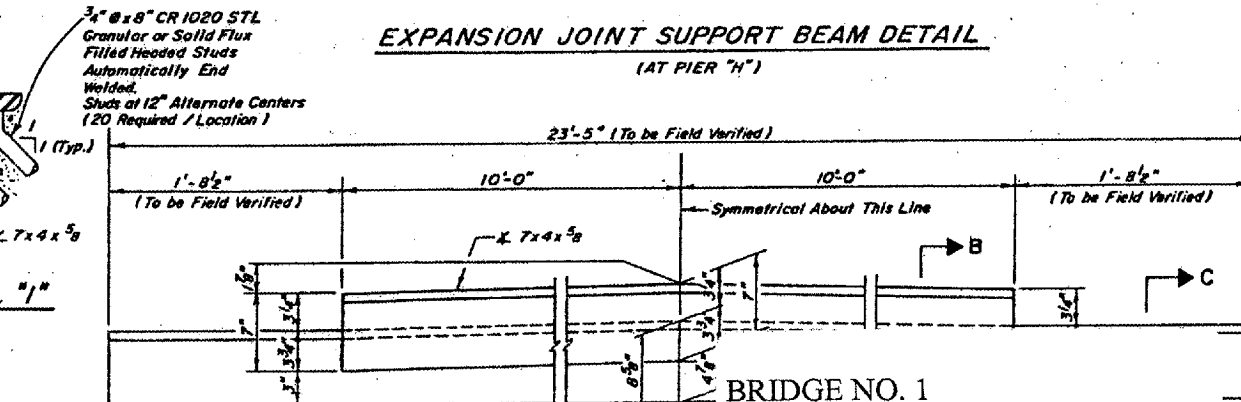
SECTION D-D



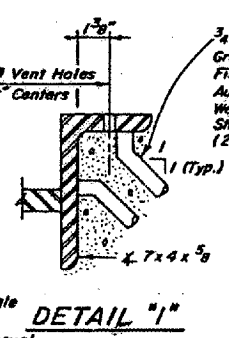
SECTION E-E



EXPANSION JOINT SUPPORT BEAM DETAIL
(AT PIER "H")



EXPANSION JOINT SUPP
(TYPICAL EXCEPT AT)



DETAIL "1"

DESIGNED	<i>[Signature]</i>
CHECKED	R.F.C.
DRAWN	<i>[Signature]</i> - C.F.C.
CHECKED	R.F.C. - F.S.

BRIDGE NO. 1
STRUCTURE 002-005
FOR INFORMATION ONLY

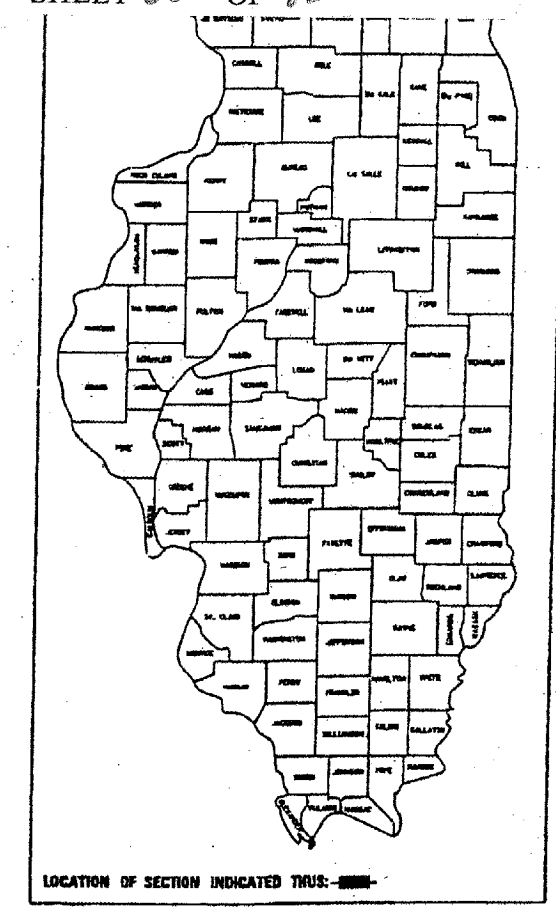
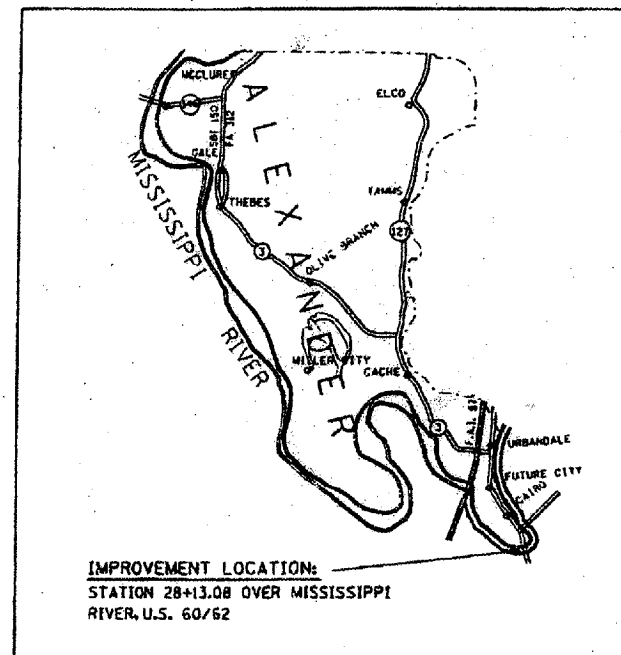
EXPANSION JOINT DETAILS
CONCRETE FLOOR ALTERNATE
F.A.U.S. Rte. 9811 (U.S. 50 & 62)
S.B.I. 150 SECTION 138D-BR
ALEXANDER CO., IL. MISSISSIPPI CO., MO.
STATION 28+13.08

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
 PROJECT NO. ~~956903~~**
93G901

CONTRACT 98939
 U.S. RTE. 60 & U.S. RTE. 62
 (138D-BR) P-1
 ALEXANDER COUNTY
 SHEET 66 OF 85

SHEET NO. A

ROUTE: U.S. 60 /62
 COUNTY: ALEXANDER
 SECTION: 138D-BR
 STRUCTURE NO: 002-0005



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1A	INDEX OF SHEETS; STANDARDS; SUMMARY OF QUANTITIES
1	GENERAL PLAN AND ELEVATION
2	GENERAL NOTES; GIRDER REPAIR SCHEDULE; BILL OF MATERIALS
3-4	APPROACH GIRDER REPAIRS
5	BRIDGE SPAN STRENGTH REPAIRS

STANDARDS

2238-8
2299-12
2300-3
2309-8
2303-4

SUMMARY OF QUANTITIES

CODE	ITEM	UNIT	QUANTITY
50700400	F & E STRUCT. STEEL	POUND	5890
64800100	TRAF. CONT. & PROT. 2303	L. SUM	1
65003100	MOBILIZATION	L. SUM	1

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

PREPARED BY Bill Hunt, Jr.
 DISTRICT OPERATIONS ENGINEER

EXAMINED BY Bob Probst
 DISTRICT PROGRAM DEVELOPMENT ENGINEER

EXAMINED BY Bob Ziska
 DISTRICT PROJECT IMPLEMENTATION ENGINEER

APPROVED Aug 22 1974
W. H. Johnson
 DISTRICT ENGINEER

BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

JULIE 1-800-892-0123

688-549-271
 CENTREX 192-4554
 688-549-271
 CENTREX 192-4554
 688-549-271
 CENTREX 192-4554

Repair Schedule - Missouri Approach Girders											
SPAN #	PIER #	GRID #	DESCRIPTION	SPURCE PL. DIMENS (ft)				FILL PL. DIMENS (in)			
				A	B	C	n	n1	A	B	F
18N	18N	G2	Type 1 Repair (Bottom of Web)	17.250	15.500	0.250	5	4	14.375	12.625	0.625
18N	18N	G3	Type 1 Repair (Bottom of Web)	17.250	15.500	0.250	5	4	14.375	12.625	0.625
18N	18N	G1	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
18N	18N	G2	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
18N	18N	G3	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
14N	14N	G3	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
13N	13N	G4	Type 1 Repair (Bottom of Web)	20.250	15.500	0.250	8	4	17.375	12.625	0.625
8N	8N	G1	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
8N	8N	G3	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
6N	6N	G3	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
1N	1N	G2	Type 1 Repair (Bottom of Web)	17.250	15.500	0.250	5	4	14.375	12.625	0.625

Repair Schedule - Missouri Approach Girders											
SPAN #	PIER #	GRID #	DESCRIPTION	SPURCE PL. DIMENS (ft)				FILL PL. DIMENS (in)			
				A	B	C	n	n1	A	B	F
12S	12S	G2	Type 2A Repair (Top of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
11S	11S	G4	Type 1A Repair (Bottom of Web)	17.250	15.500	0.250	5	4	14.375	12.625	0.625
10S	10S	G1	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
10S	10S	G2	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
10S	10S	G2	Type 2A Repair (Top of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
7S	7S	G1	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
7S	7S	G2	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
7S	7S	G3	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
7S	7S	G4	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
6S	6S	G1	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
5S	5S	G1	Type 1A Repair (Bottom of Web)	16.375	16.000	0.250	5	4	13.625	12.125	0.625
5S	5S	G2	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
5S	5S	G2	Type 2A Repair (Top of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
4S	4S	G1	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
4S	4S	G1	Type 2A Repair (Top of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
4S	4S	G2	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
4S	4S	G3	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
4S	4S	G3	Type 3 Repair Hole near 1st Stiffener								
3S	3S	G1	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
3S	3S	G2	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
3S	3S	G3	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
2S	2S	G1	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
2S	2S	G2	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
2S	2S	G2	Type 2A Repair (Top of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
2S	2S	G3	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
2S	2S	G4	Type 2 Repair (Top of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
2S	1S	G1	Type 1A Repair (Bottom of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
2S	1S	G3	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
2S	1S	G4	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
1S	1S	G1	Type 2A Repair (Top of Web)	13.625	16.000	0.250	4	4	10.750	13.125	0.625
1S	1S	G3	Type 1 Repair (Bottom of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625
1S	1S	G4	Type 2 Repair (Top of Web)	14.250	15.500	0.250	4	4	11.375	12.625	0.625

Type 3 Repair

NOTE 2.1: 2 SPLICE PLATES AND 2 FILL PLATES ARE REQUIRED AT EACH TYPE 1, TYPE 1A, TYPE 2 AND TYPE 2A REPAIR LOCATION.
 NOTE 2.2: DRILL OUT 6 PLUG WELDED RIVET HOLES IN THE LOWER FLANGE AND WEB ANGLES AND REPLACE WITH 7/8" DIAMETER BOLTS.

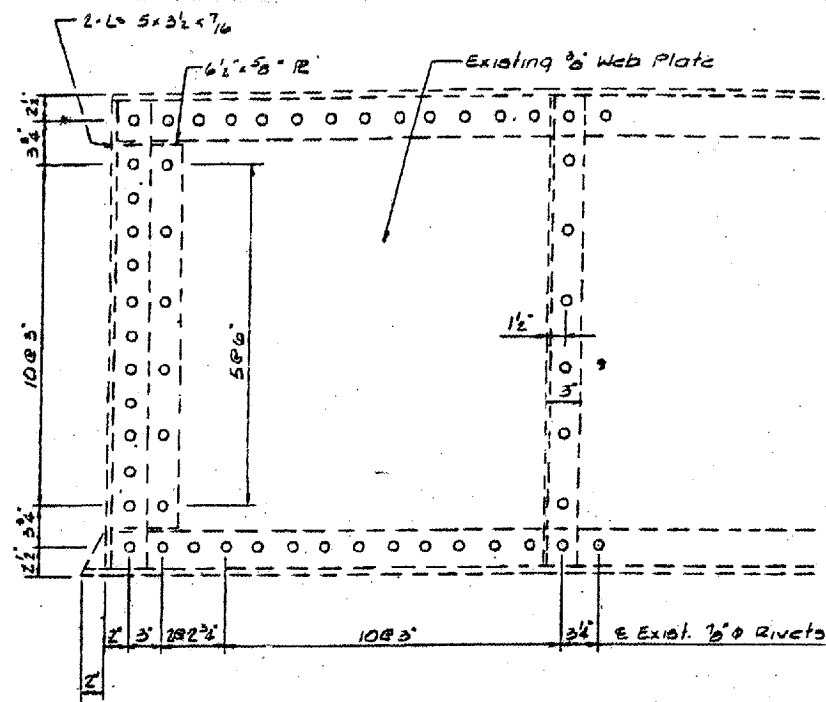
GENERAL NOTES

- ALL NEW FASTENERS SHALL BE HIGH STRENGTH BOLTS. HOLES SHALL BE SUBPUNCHED OR SUBDRILLED 13/16" DIAMETER AND REAMED IN THE FIELD TO 15/16" DIAMETER FOR 7/8" DIAMETER HIGH STRENGTH BOLTS AFTER NEW STRUCTURAL STEEL SECTIONS ARE PROPERLY FITTED INTO POSITION.
- THE INORGANIC ZINC-SILICATE / ACRYLIC / ACRYLIC PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF NEW STRUCTURAL STEEL EXCEPT WHERE OTHERWISE NOTED. THE COLOR OF THE FINISH SHALL MATCH THE EXISTING PAINT. SEE SPECIAL PROVISIONS.
- 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.
- TRAFFIC CONTROL SHALL BE DETERMINED BY THE DISTRICT. TRAFFIC SHALL BE REMOVED FROM THE LANE OVER THE REPAIR WORK.

BILL OF MATERIAL

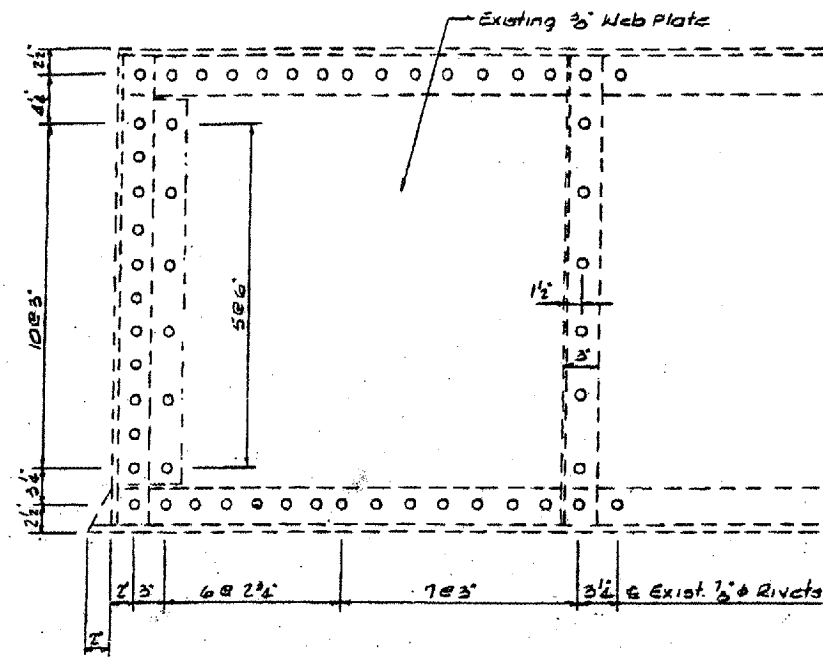
ITEM	UNIT	TOTAL
Furnishing & Erecting Structural Steel	Lbs.	5890

BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY



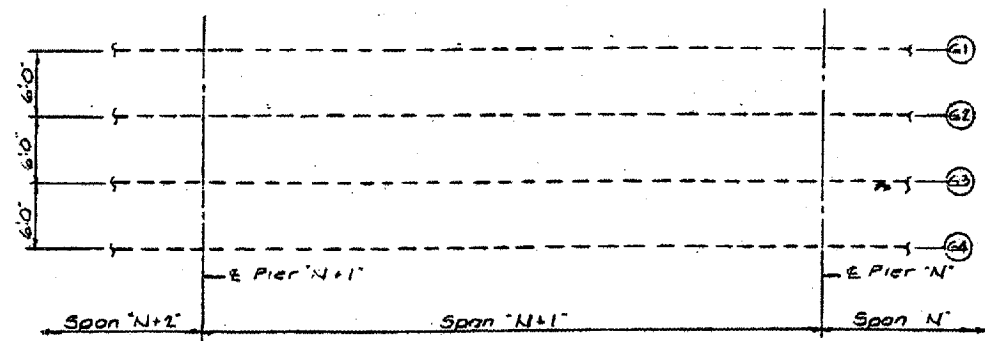
TYPICAL GIRDER ELEVATION AT BEARING

ILL. APPROACH GIRDERS G1, G2, G3, G4
 MO. APPROACH GIRDERS G3 & G4

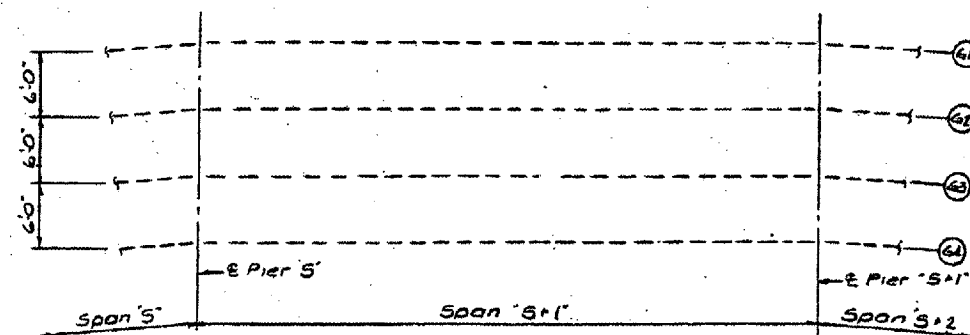


TYPICAL GIRDER ELEVATION AT BEARING

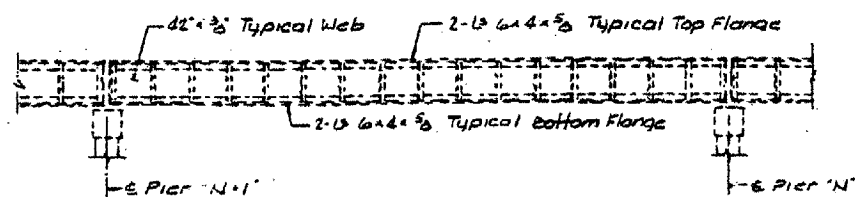
MO. APPROACH GIRDERS G1 & G2



TYPICAL EXISTING GIRDER LAYOUT

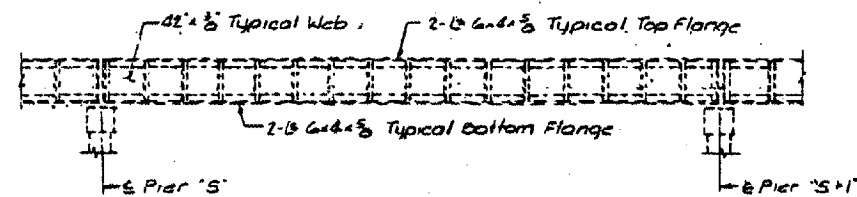


TYPICAL EXISTING GIRDER LAYOUT



GIRDER ELEVATION

ILLINOIS APPROACH GIRDERS



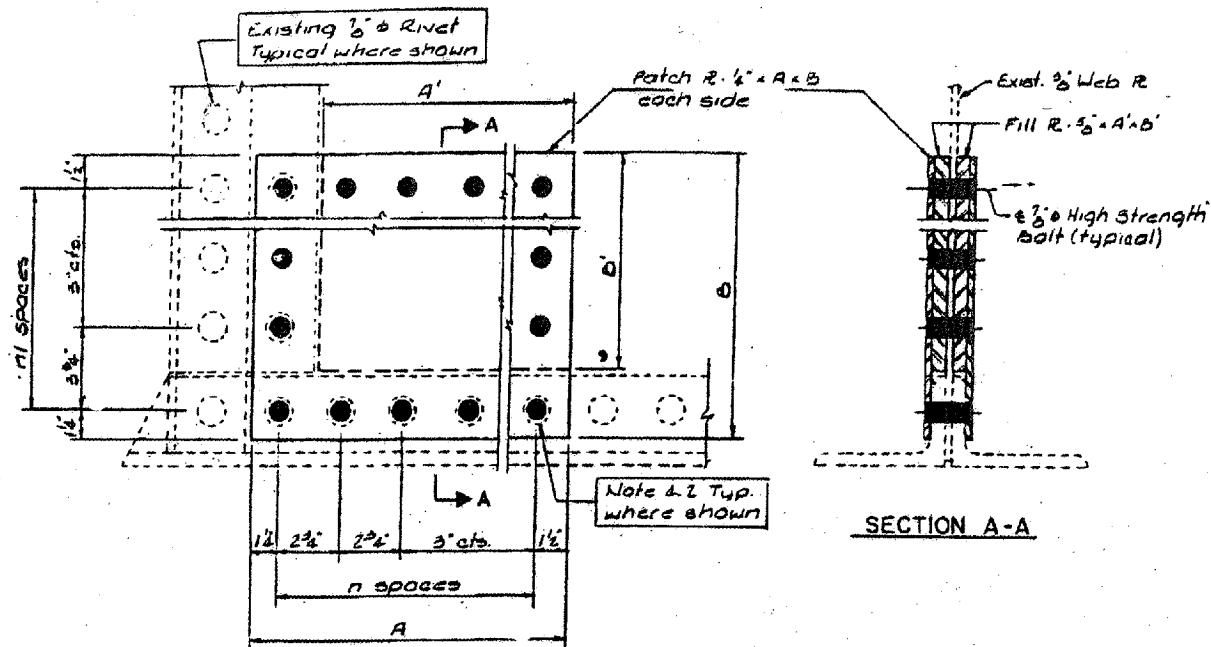
GIRDER ELEVATION

MISSOURI APPROACH GIRDERS

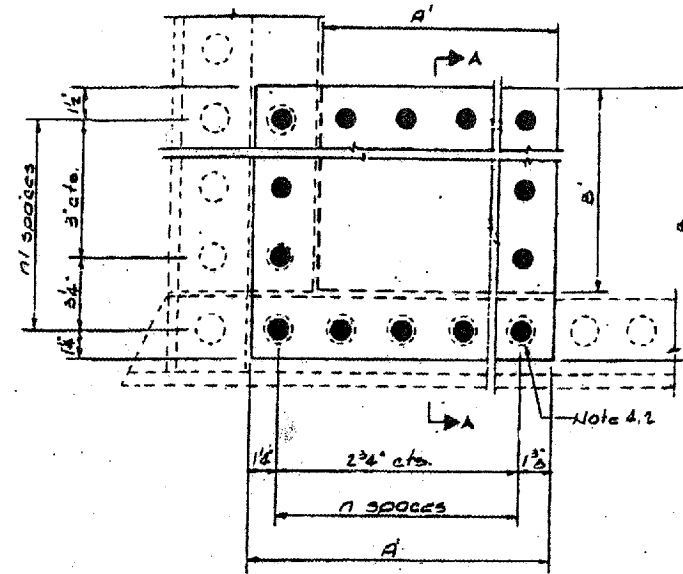
BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

May 4 1974
 EXAMINED [Signature]
 PASSED [Signature]
 ENGINEER OF BRIDGES AND STRUCTURES

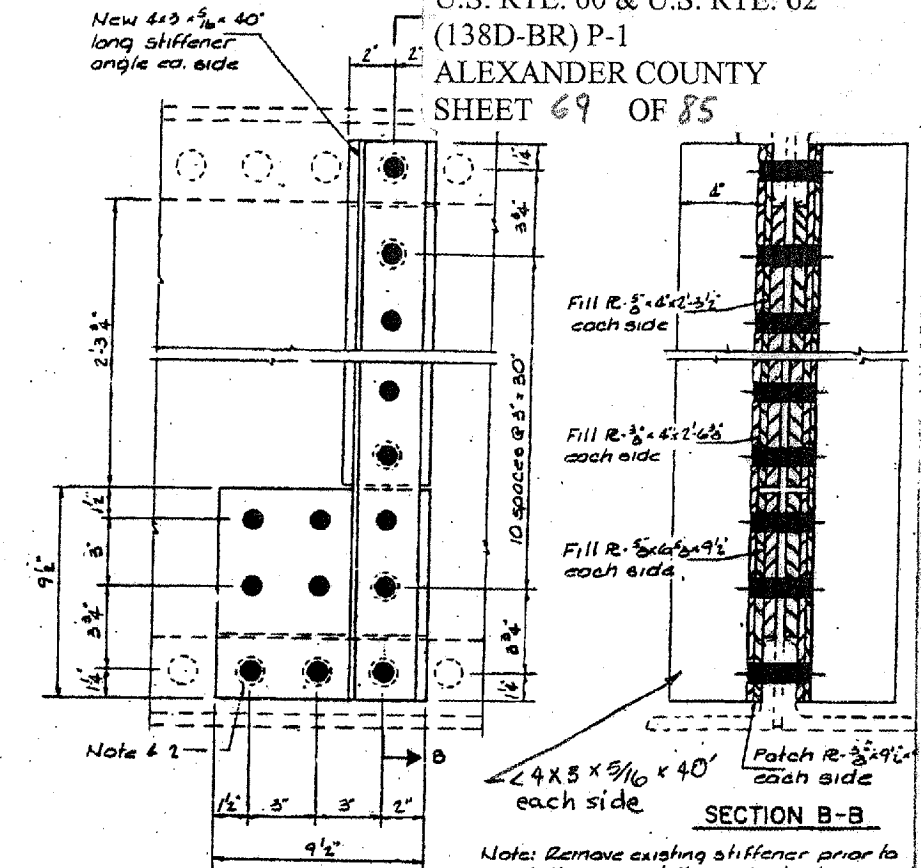
ILLINOIS DEPARTMENT OF TRANSPORTATION
 APPROACH GIRDER REPAIRS
 THE OLD CAIRO BRIDGE
 OVER MISSISSIPPI RIVER
 BRIDGE REPAIRS
 F.A.U.S. RTE. 9811 (U.S. 60 & 62)
 S.B.L. 150 SECTION 1300-BR
 ALEXANDER CO. IL. MISSISSIPPI CO. MO.
 STATION 28+13.08
 STRUCTURE NO. 002-0005



REPAIR DETAIL - TYPE 1

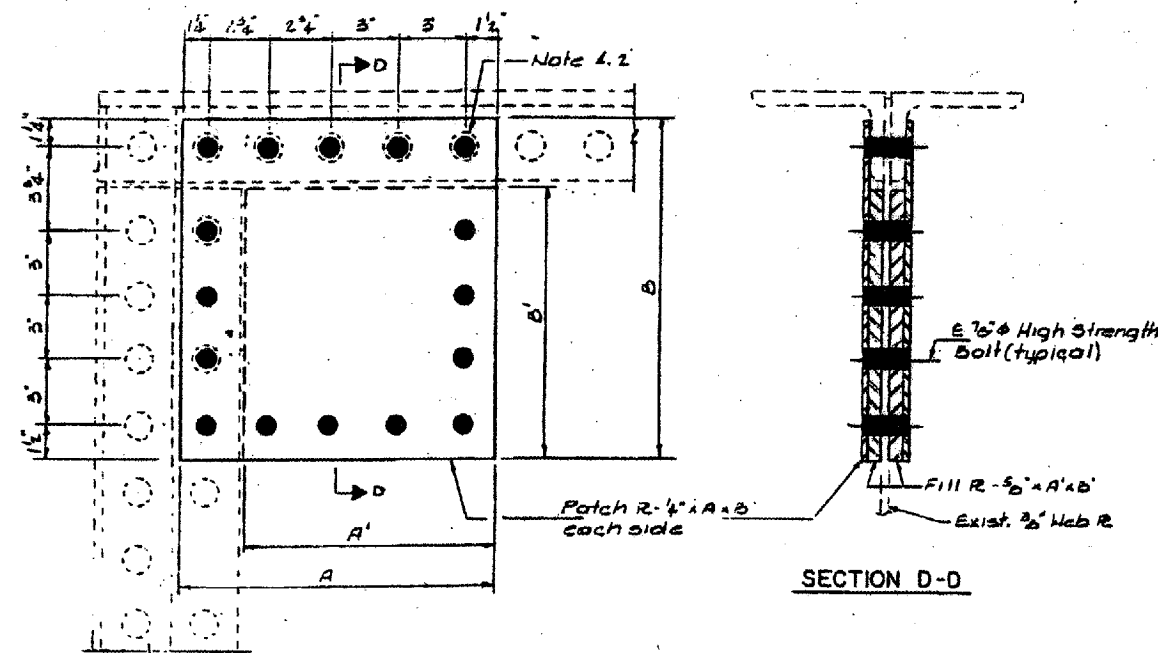


REPAIR DETAIL - TYPE 1A

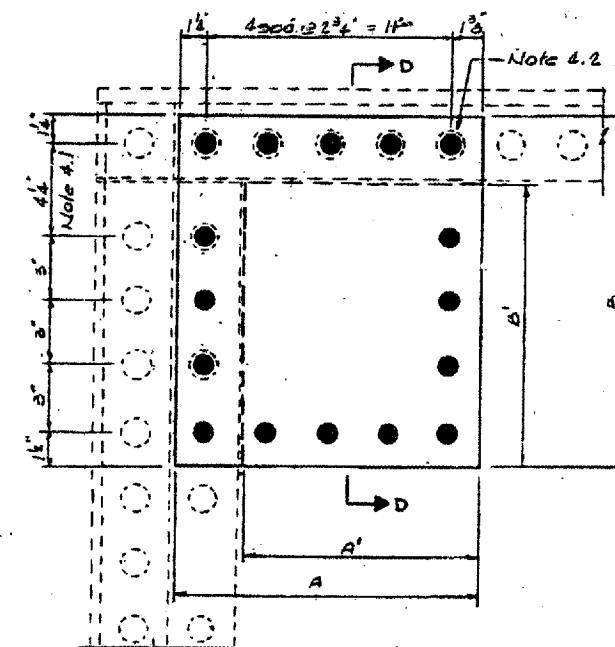


REPAIR DETAIL - TYPE 3

Note: Remove existing stiffener prior to installing new stiffener. Cost of removal shall be incidental to Furnishing & Erecting Structural Steel.



REPAIR DETAIL - TYPE 2



REPAIR DETAIL - TYPE 2A

NOTES:

- 4.1 Contractor to field verify this dimension prior to fabrication.
- 4.2 Remove existing 1/2 inch rivets and replace with 3/8 inch high strength bolts. Typical where shown. Cost of removal shall be incidental to Furnishing & Erecting Structural Steel.
- 4.3 All new bolts shall be 3/8 inch high strength bolts.

May 7 1994
 EXAMINED *John E. Adams*
 ENGINEER OF STRUCTURAL DIVISION
 PASSED
 DIVISION OF HIGHWAYS AND STRUCTURES

BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 APPROACH GIRDER REPAIRS
 THE OLD CAIRO BRIDGE
 OVER MISSISSIPPI RIVER
 BRIDGE REPAIRS
 F.A.U.S. RTE. 9811 (U.S. 60 & 62)
 S.B.I. 150 SECTION 1380-BR
 ALEXANDER CO. IL. MISSISSIPPI CO. MO.
 STATION 28+13.08
 STRUCTURE NO. 002-0005

4-29-05 Letting, Item 075

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAS ROUTE 944 (US 60 & 62)
SECTION (138D-BR)I-5

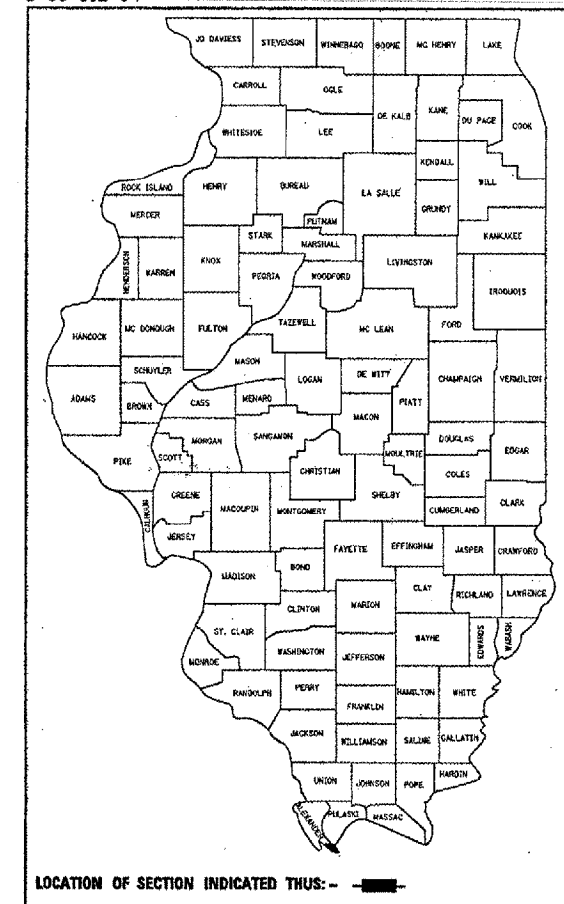
ALEXANDER COUNTY, IL & MISSISSIPPI COUNTY, MO

C-99-023-05

BRIDGE REPAIRS ON US 60 & 62
OVER MISSISSIPPI RIVER

CONTRACT 98939
U.S. RTE. 60 & U.S. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 70 OF 85

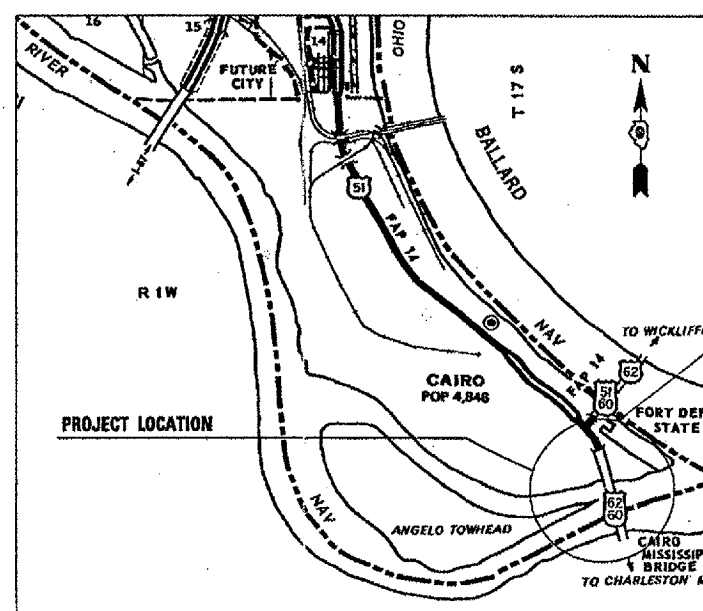
D-99-012-04



LOCATION OF SECTION INDICATED THUS: - ■ -

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 2

US 60 & 62 TRAFFIC DATA
2003 ADT = 4450
26% TRUCKS
POSTED SPEED = 55 MPH



PROPOSED JOINT RECONSTRUCTIONS AND
STRUCTURAL STEEL REPAIRS ON SN 002-0005
WHICH CARRIES US 60 & 62 OVER THE
MISSISSIPPI RIVER

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

NET LENGTH OF BRIDGE = 5181'-5"

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 2-10-05 20

May C. Farni
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 25, 20 05
Mike Nene
ENGINEER OF DESIGN AND ENVIRONMENT

March 25, 20 05
Victor Mader
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

TOWNSHIP: CAIRO
PLAN DRAWING ARE NOT TO SCALE

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-392-0123

CONTRACT NO. 98640

SECTION: (138D-BR)I-5 COUNTY: ALEXANDER ROUTE: US 60 & 62

PROJECT ENGINEER: DAVID PICHE PHONE NO. (618) 549-2171
DESIGNER: MIKE STEPHENSON CENTREX NO. 782-4554

GENERAL NOTES

CONSTRUCTION PLANS CAN BE MADE AVAILABLE FOR REVIEW AT THE DISTRICT 9 OFFICE.

COMMITMENTS: NONE AS OF FEBRUARY 11, 2005. REFER TO COMMITMENT FILE AFTER THIS DATE.

SUMMARY OF QUANTITIES

CODE NO	ITEM DESCRIPTION	UNIT	CONSTRUCTION TYPE CODE SFTY-2A		TOTAL QUANTITIES
			100% ILLINOIS	100% MISSOURI	
50102400	CONCRETE REMOVAL	CU YD	9.35	9.35	18.7
50300165	NEOPRENE EXPANSION JOINT 6 1/2 "	FOOT	85.5	85.5	171
50300255	CONCRETE SUPERSTRUCTURE	CU YD	7.8	7.8	15.6
50300260	BRIDGE DECK GROOVING	SQ YD	14.5	14.5	29.0
50501130	STRUCTURAL STEEL REPAIR	POUND	3610	3610	7220
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	305	305	610
67000400	ENGINEERS FIELD OFFICE, TYPE A	CAL MO	1.5	1.5	3
67100100	MOBILIZATION	LUMP SUM	0.5	0.5	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	LUMP SUM	0.5	0.5	1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	LUMP SUM	0.5	0.5	1
X0301424	SILICONE JOINT SEALER	FOOT	352	352	704
X0322390	STRAIGHTEN BENT MEMBERS	LUMP SUM	0.5	0.5	1
X7015000	CHANGEABLE MESSAGE SIGN	CAL MO	2.5	2.5	5
Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	8	8	16

INDEX OF SHEETS

SHT NO	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, INDEX OF SHEETS, STANDARDS, SUMMARY OF QUANTITIES
3	ROAD CLOSURE DETOUR PLAN
4	BRIDGE GENERAL ELEVATION & PLAN; GENERAL NOTES; TOTAL BILL OF MATERIAL
5-6	BRIDGE PARTIAL ELEVATION & PLAN WITH LOCATION OF REPAIRS
7-9	JOINT RECONSTRUCTION DETAILS
10	STRINGER/GIRDER WEB REPAIR DETAILS
11	STRINGER/GIRDER & FLOORBEAM WEB REPAIR DETAILS
12	FLOORBEAM WEB REPAIR & LOWER CHORD REPAIR DETAILS
13	BOTTOM FLANGE REPAIR & STRINGER CONNECTOR ANGLE REPLACEMENT DETAILS
14	RIVET/MISSING BOLT/SAFETY LOOP/HORIZONTAL STRUT REPLACEMENT DETAILS
15	WELD REPAIR/FILL PLATE REPAIR/GUSSET PLATE REPLACEMENT DETAILS
16	GRINDING & STRAIGHTENING MEMBER DETAILS

STANDARDS

000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701006-01	OFF-ROAD OPERATIONS, 2L 2W, 15' TO 24" OFF ROAD, FOR SPEEDS > 45 MPH
701201-01	LANE CLOSURE, 2L 2W, DAY ONLY, ON ROAD TO 24" OFF ROAD, FOR SPEEDS > 45 MPH
701301-01	LANE CLOSURE, 2L 2W, SHORT TIME OPERATIONS
702001-04	TRAFFIC CONTROL DEVICES
BLR 21-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

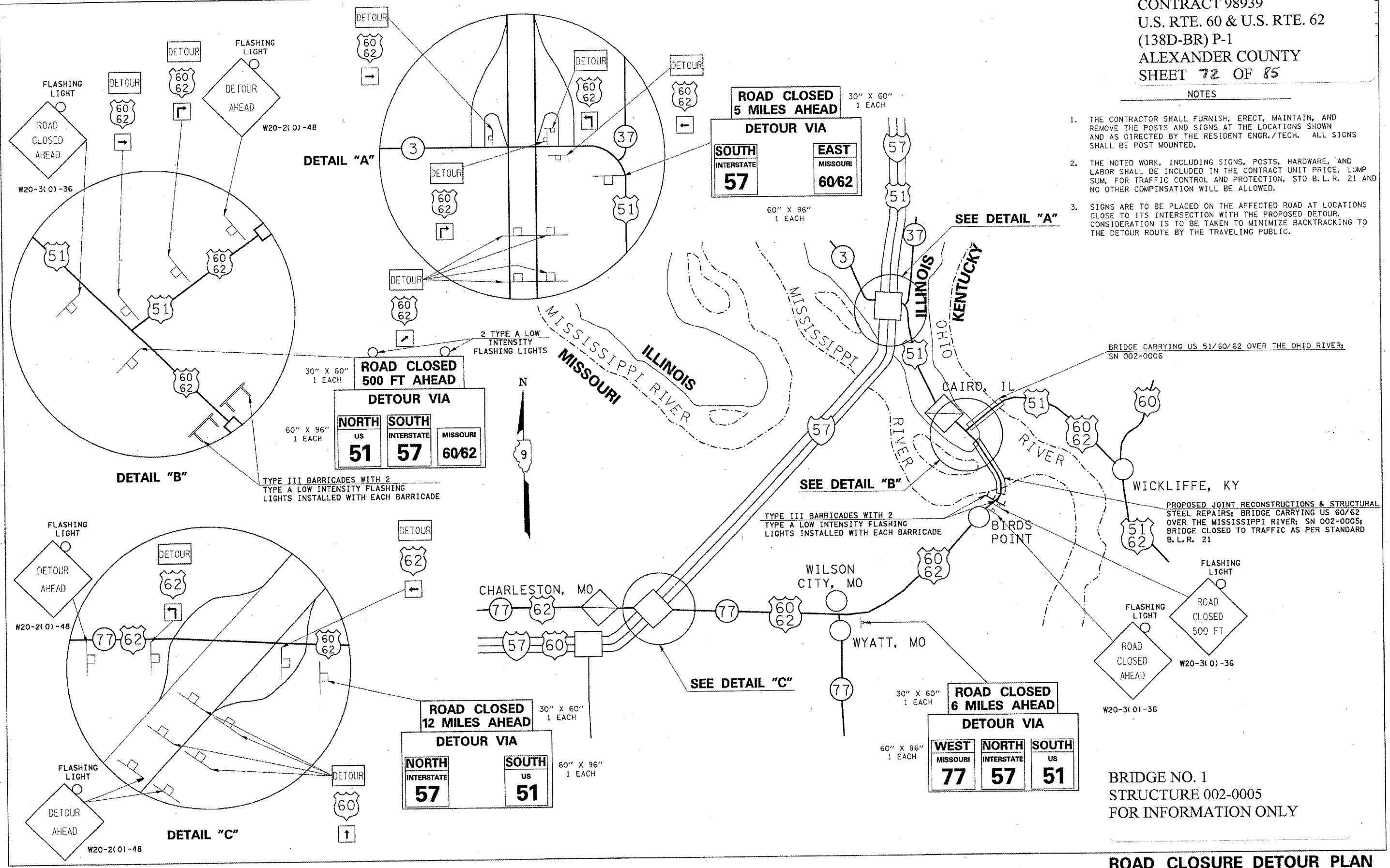
BRIDGE NO. 1
 STRUCTURE 002-0005
 FOR INFORMATION ONLY

Prepared By: *Joe Z. [Signature]*
 DISTRICT STUDIES & PLANS ENGINEER
 Examined By: *James Harris Emery*
 DISTRICT LAND ACQUISITION ENGINEER
 Examined By: _____
 DISTRICT PROGRAM DEVELOPMENT ENGINEER
 Examined By: *Shirley D. [Signature]*
 DISTRICT OPERATIONS ENGINEER
 Examined By: *Joseph [Signature]*
 DISTRICT CONSTRUCTION ENGINEER
 Examined By: *Bruce [Signature]*
 DISTRICT MATERIALS ENGINEER
 Examined By: _____
 DISTRICT PROJECT IMPLEMENTATION ENGINEER
 Approved By: *Mark C. [Signature]*
 DEPUTY DIRECTOR OF HIGHWAYS,
 REGION ENGINEER

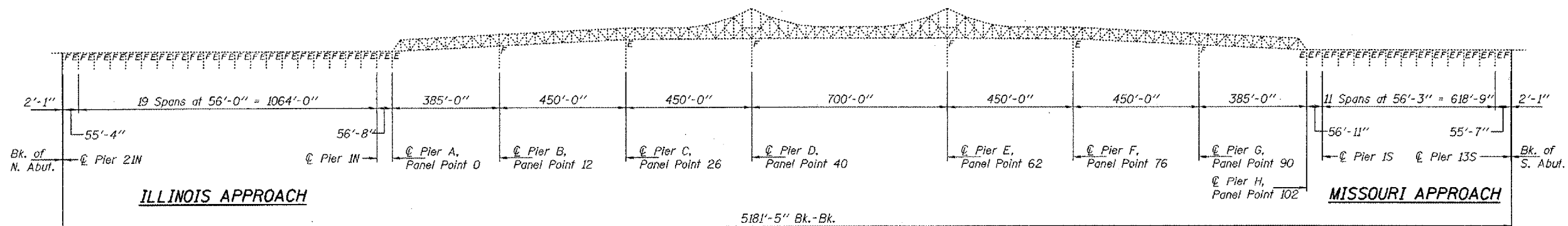
CONTRACT 98939
 U.S. RTE. 60 & U.S. RTE. 62
 (138D-BR) P-1
 ALEXANDER COUNTY
 SHEET 72 OF 85

NOTES

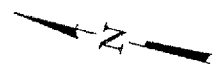
1. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN, AND REMOVE THE POSTS AND SIGNS AT THE LOCATIONS SHOWN AND AS DIRECTED BY THE RESIDENT ENGR./TECH. ALL SIGNS SHALL BE POST MOUNTED.
2. THE NOTED WORK, INCLUDING SIGNS, POSTS, HARDWARE, AND LABOR SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE, LUMP SUM, FOR TRAFFIC CONTROL AND PROTECTION, STD B.L.R. 21 AND NO OTHER COMPENSATION WILL BE ALLOWED.
3. SIGNS ARE TO BE PLACED ON THE AFFECTED ROAD AT LOCATIONS CLOSE TO ITS INTERSECTION WITH THE PROPOSED DETOUR. CONSIDERATION IS TO BE TAKEN TO MINIMIZE BACKTRACKING TO THE DETOUR ROUTE BY THE TRAVELING PUBLIC.



ROAD CLOSURE DETOUR PLAN



GENERAL ELEVATION



GENERAL PLAN

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
Fasteners shall be high strength bolts. Bolts $\frac{7}{8}$ " ϕ , open holes $\frac{5}{16}$ " ϕ , unless otherwise noted.
The Contractor shall grind all cracked welds parallel to the direction of the existing weld and not perpendicular to the weld.
Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.
Prior to pouring the new concrete deck, all loose rust, loose mill scale and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.
Existing reinforcement extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included with Concrete Removal.

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.
Cost of removal and/or re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included in the cost of Furnishing and Erecting Structural Steel.
The inorganic zinc rich primer/acrylic/acrylic paint system shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the acrylic finish coat shall be Interstate Green, Munsell No. 7.5G 4/8. See Special Provision "Cleaning and Painting New Metal Structures".
The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project. Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".
Joint plates and attached bars shall be shop painted with the inorganic zinc rich primer.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Neoprene Expansion Joint 6 1/2"	Foot	171
Structural Steel Repair	Pound	7220
Reinforcement Bars, Epoxy Coated	Pound	610
Bridge Deck Grooving	Sq. Yd.	29.0
Concrete Removal	Cu. Yd.	18.7
Concrete Superstructure	Cu. Yd.	15.6
Silicone Joint Sealer	Foot	704
Temporary Shoring and Cribbing	Each	16
Straighten Bent Members	LS	1

DESIGNED	<i>David A. Polin</i>
CHECKED	<i>John S. Baker</i>
DRAWN	ballva
CHECKED	<i>DAB JSB</i>

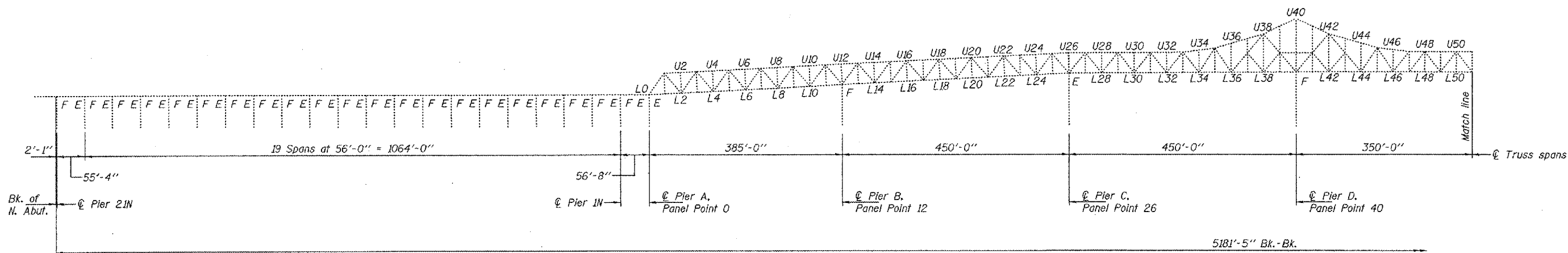
MARCH 14, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Bert E. Adams*
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2006

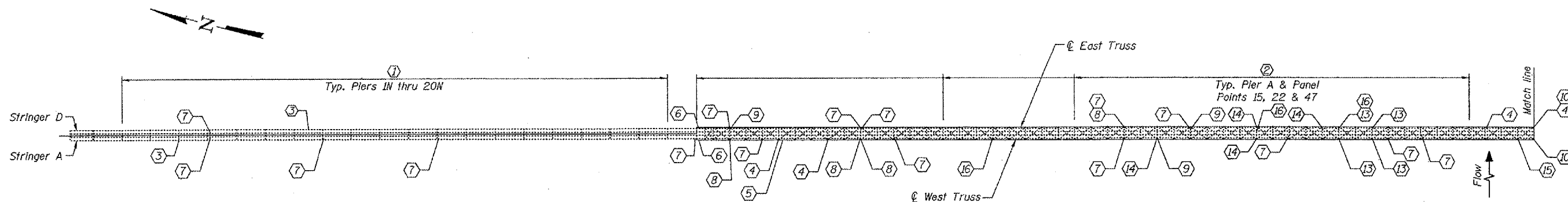
BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)1-5
ALEXANDER COUNTY
SN 002-0005



ILLINOIS APPROACH

PARTIAL ELEVATION



PARTIAL PLAN

- ① - Replace existing 2 1/2" PJS with 1 3/4" Silicone Joint Sealer. See sheet 5 of 13.
- ② - Replace existing Silicone Joint Sealer with Neoprene Expansion Joints, 6 1/2". See sheets 4 thru 6 of 13.
- ③ - Bottom flange repair. See sheet 10 of 13.
- ④ - Remove broken rivets & replace with HS Bolts. See notes, sheet 11 of 13.
- ⑤ - Replace missing bolts with new HS Bolts. See notes, sheet 11 of 13.
- ⑥ - Lower chord repair. See sheet 9 of 13.
- ⑦ - Stringer/girder web repair. See sheets 7 & 8 of 13.
- ⑧ - Remove & replace stringer connector angle. See sheet 10 of 13.
- ⑨ - Floor beam web repair. See sheets 8 & 9 of 13.
- ⑩ - Remove & replace safety loop. See sheet 11 of 13.
- ⑪ - Remove & replace horizontal strut. See sheet 11 of 13.
- ⑫ - Weld repair. See sheet 12 of 13.
- ⑬ - Fill plate repair. See sheet 12 of 13.
- ⑭ - Remove & replace gusset plate. See sheet 12 of 13.
- ⑮ - Grind. See sheet 13 of 13.
- ⑯ - Straighten member & grind. See sheet 13 of 13.

DESIGNED	DAB
CHECKED	JSB
DRAWN	baliva
CHECKED	DAB JSB

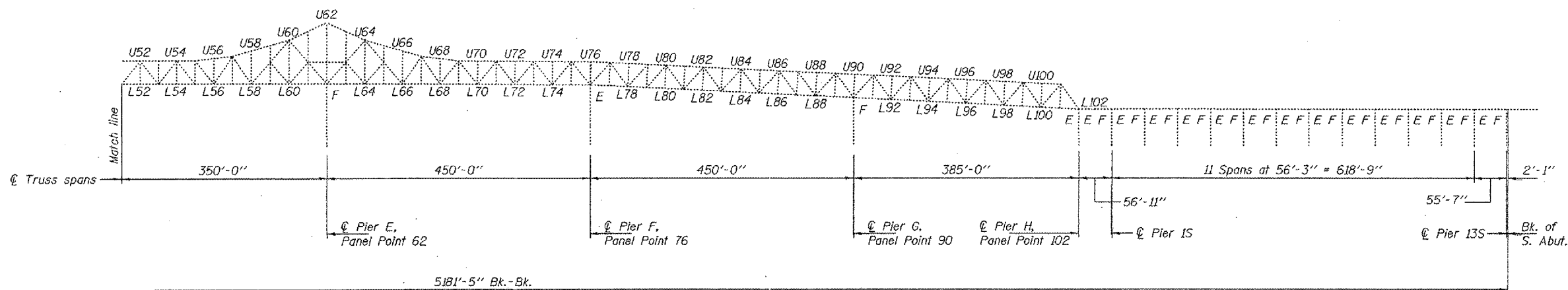
MARCH 11, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)I-5
ALEXANDER COUNTY
SN 002-0005

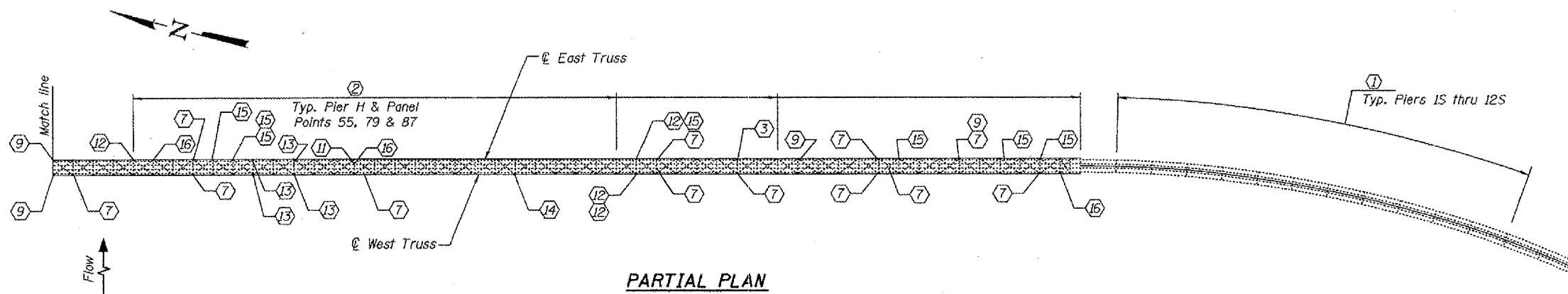
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT 98939
U.S. RTE. 60 & U.S. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 75 OF 85



MISSOURI APPROACH

PARTIAL ELEVATION



PARTIAL PLAN

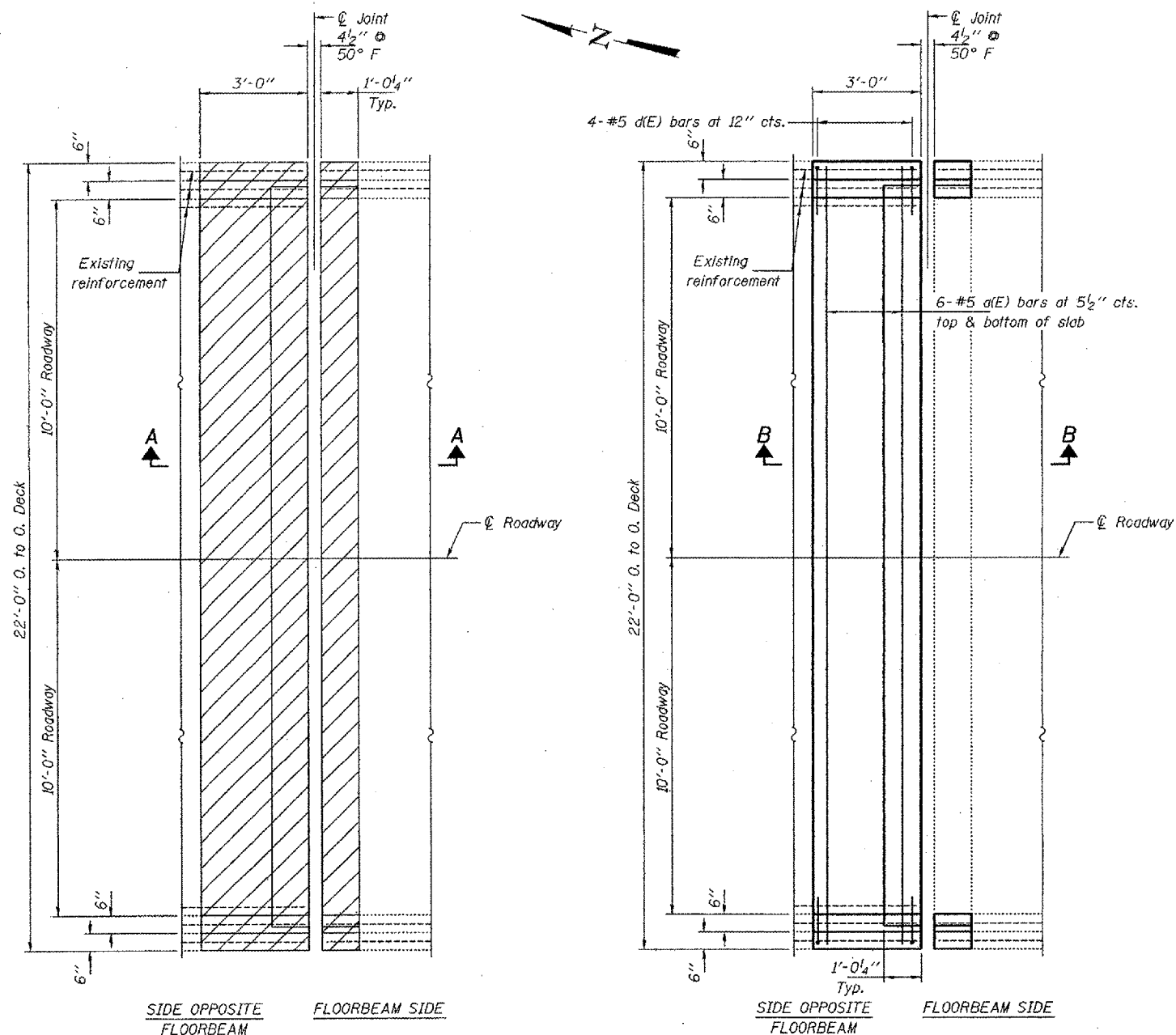
- ① - Replace existing 2 1/2" PJS with 1 3/4" Silicone Joint Sealer. See sheet 5 of 13.
- ② - Replace existing Silicone Joint Sealer with Neoprene Expansion Joints, 6 1/2". See sheets 4 thru 6 of 13.
- ③ - Bottom flange repair. See sheet 10 of 13.
- ④ - Remove broken rivets & replace with HS Bolts. See notes, sheet 11 of 13.
- ⑤ - Replace missing bolts with new HS Bolts. See notes, sheet 11 of 13.
- ⑥ - Lower chord repair. See sheet 9 of 13.
- ⑦ - Stringer/girder web repair. See sheets 7 & 8 of 13.
- ⑧ - Remove & replace stringer connector angle. See sheet 10 of 13.
- ⑨ - Floorbeam web repair. See sheets 8 & 9 of 13.
- ⑩ - Remove & replace safety loop. See sheet 11 of 13.
- ⑪ - Remove & replace horizontal strut. See sheet 11 of 13.
- ⑫ - Weld repair. See sheet 12 of 13.
- ⑬ - Fill plate repair. See sheet 12 of 13.
- ⑭ - Remove & replace gusset plate. See sheet 12 of 13.
- ⑮ - Grind. See sheet 13 of 13.
- ⑯ - Straighten member & grind. See sheet 13 of 13.

DESIGNED	DAB
CHECKED	JSB
DRAWN	baiva
CHECKED	DAB JSB

MARCH 4, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)1-5
ALEXANDER COUNTY
SN 002-0005



SIDE OPPOSITE FLOORBEAM FLOORBEAM SIDE

**PARTIAL PLAN
SHOWING CONCRETE REMOVAL**

REPAIR 2

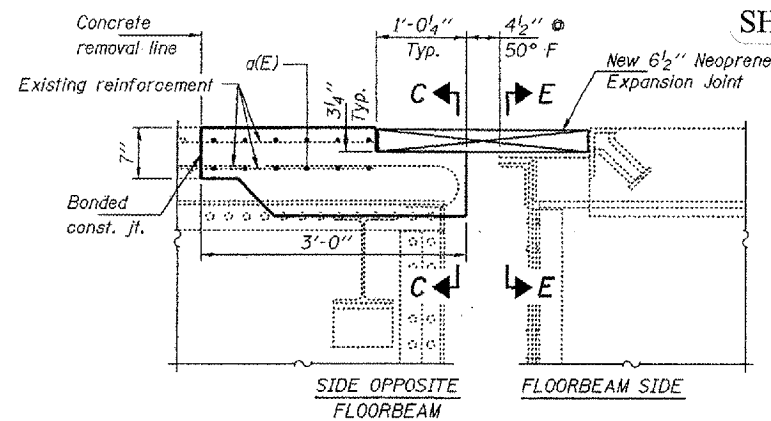
SIDE OPPOSITE FLOORBEAM FLOORBEAM SIDE

**PARTIAL PLAN
SHOWING CONCRETE REPLACEMENT**

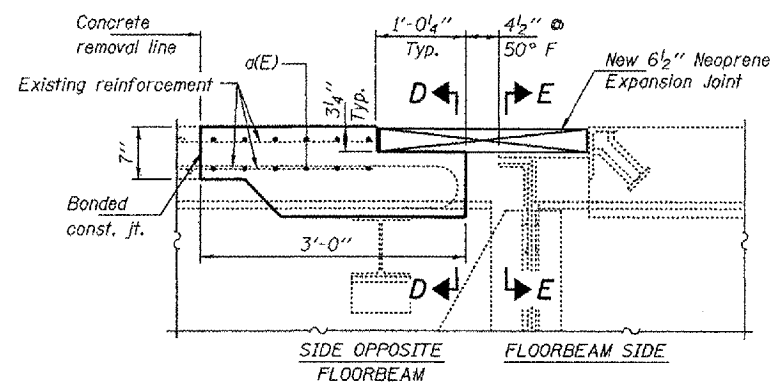
(Pier A & Panel Points 15, 47 & 79 shown.
Pier H & Panel Points 23, 55 & 87 similar by rotation)

**BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY**

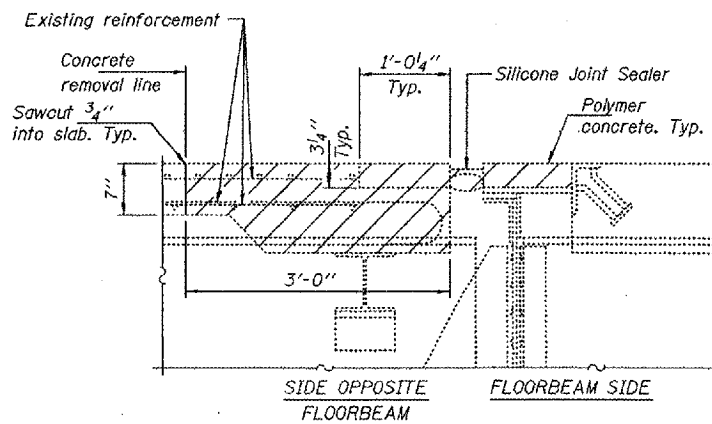
Notes:
For Sections C-C, D-D & E-E, see sheet 5 of 13.
Hatched areas indicate
Concrete removal.



**SECTION B-B
AT PIERS A & H**
(Pier A shown. Pier H similar by rotation)



**SECTION B-B
AT PANEL POINTS 15, 23, 47, 55, 79 & 87**
(Panel Points 15, 47 & 79 shown.
Panel Points 23, 55 & 87 similar by rotation)



**SECTION A-A
AT PIERS A & H, & PANEL POINTS 15, 23, 47, 55, 79 & 87**
(Pier A & Panel Points 15, 47 & 79 shown.
Pier H & Panel Points 23, 55 & 87 similar by rotation)

BILL OF MATERIAL

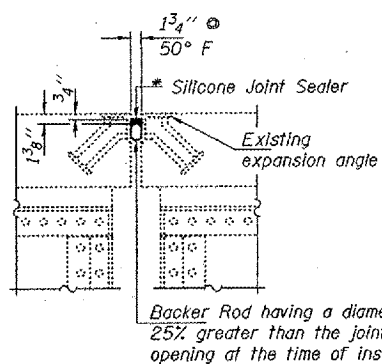
Bar	No.	Size	Length	Shape	
a(E)	24	#5	21'-8"	—	
d(E)	16	#5	3'-10"	△	
Reinforcement Bars, Epoxy Coated				Pound	610
Concrete Superstructure				Cu. Yd.	15.6
Concrete Removal				Cu. Yd.	18.7

Reinforcement bars designated (E) shall be epoxy coated.

**BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)I-5
ALEXANDER COUNTY
SN 002-0005**

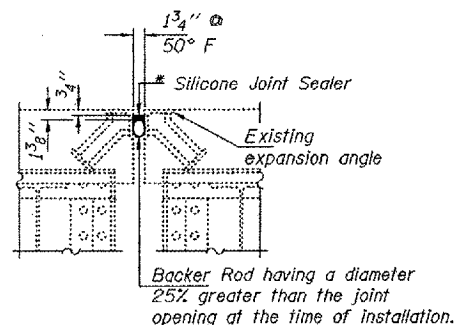
DESIGNED	DAB
CHECKED	JSB
DRAWN	ballva
CHECKED	DAB JSB

MARCH 14, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES



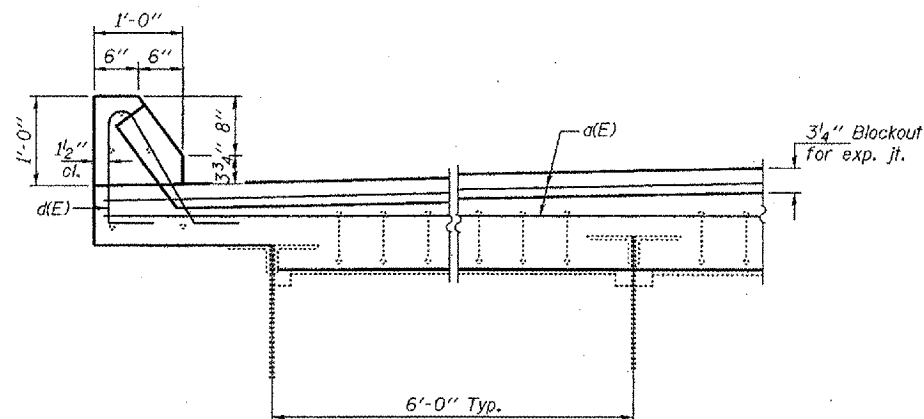
**SECTION AT PIERS 19N & 20N
& PIERS 1S THRU 12S**

REPAIR 1

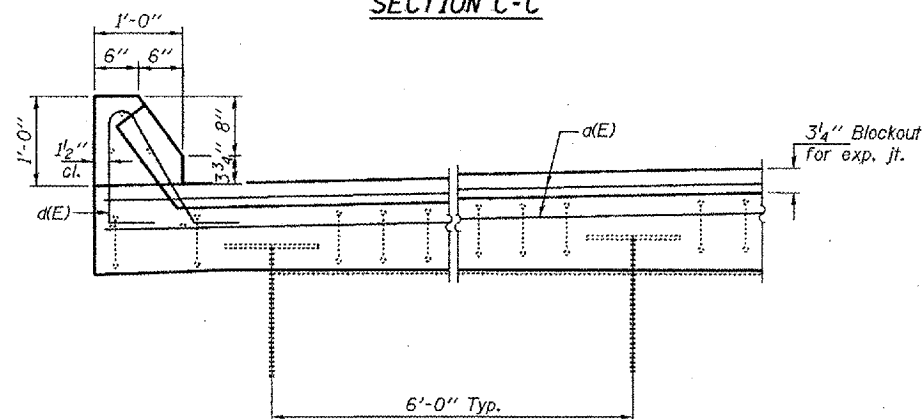


SECTION AT PIERS IN THRU 18N

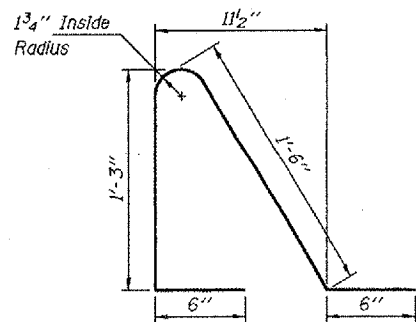
* Remove existing PJS, & replace with Silicone Joint Sealer as shown.



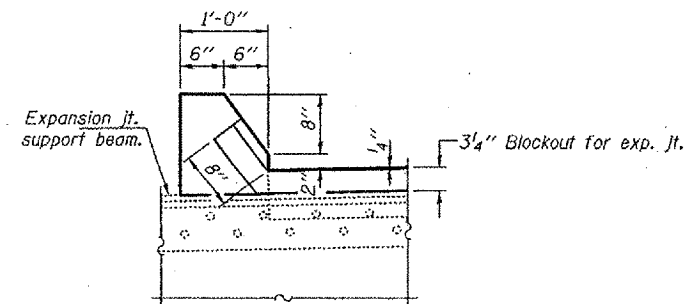
SECTION C-C



SECTION D-D



BAR d(E)



SECTION E-E

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

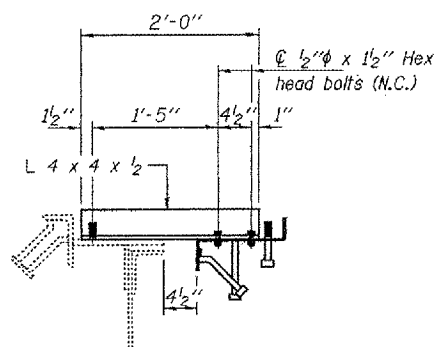
**BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)1-5
ALEXANDER COUNTY
SN 002-0005**

DESIGNED	DAB
CHECKED	JSB
DRAWN	ballva
CHECKED	DAB JSB

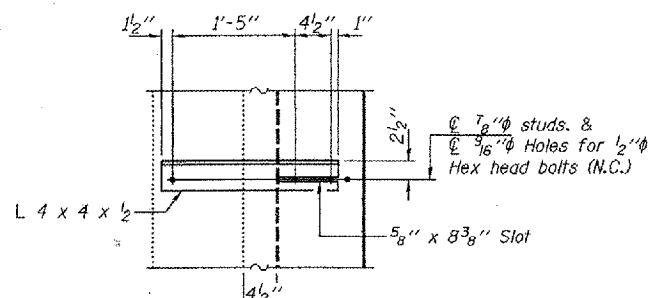
MARCH 14, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT 98939
U.S. RTE. 60 & U.S. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 78 OF 85



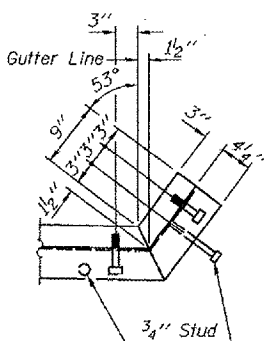
CROSS SECTION



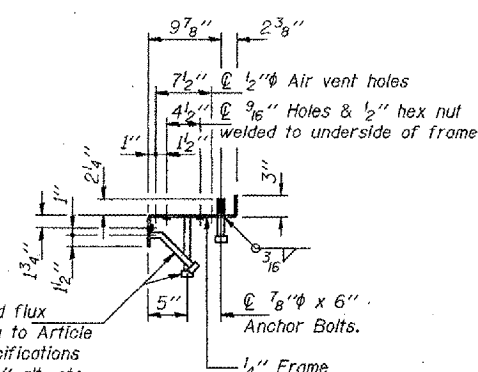
PLAN

ALIGNMENT ANGLE DETAIL

Note: Alignment System shall be in place prior to the deck pour and remain until the concrete has cured.

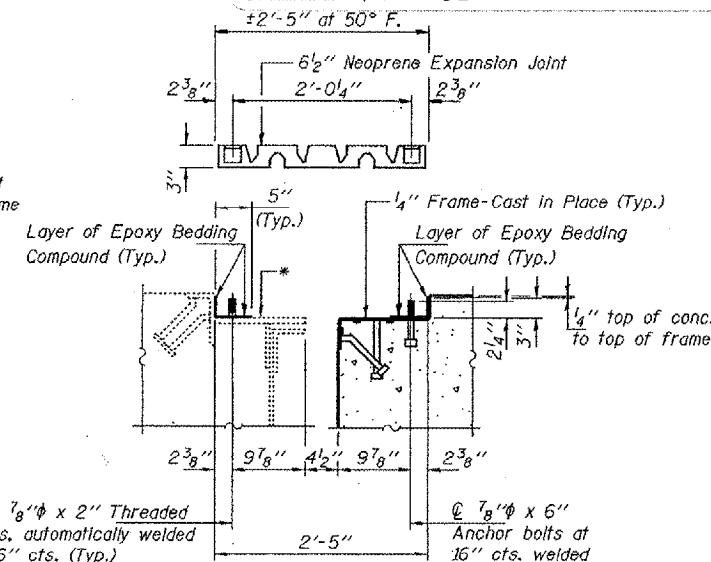


END FRAME TREATMENT



SIDE OPPOSITE
FLOORBEAM
FRAME DETAIL

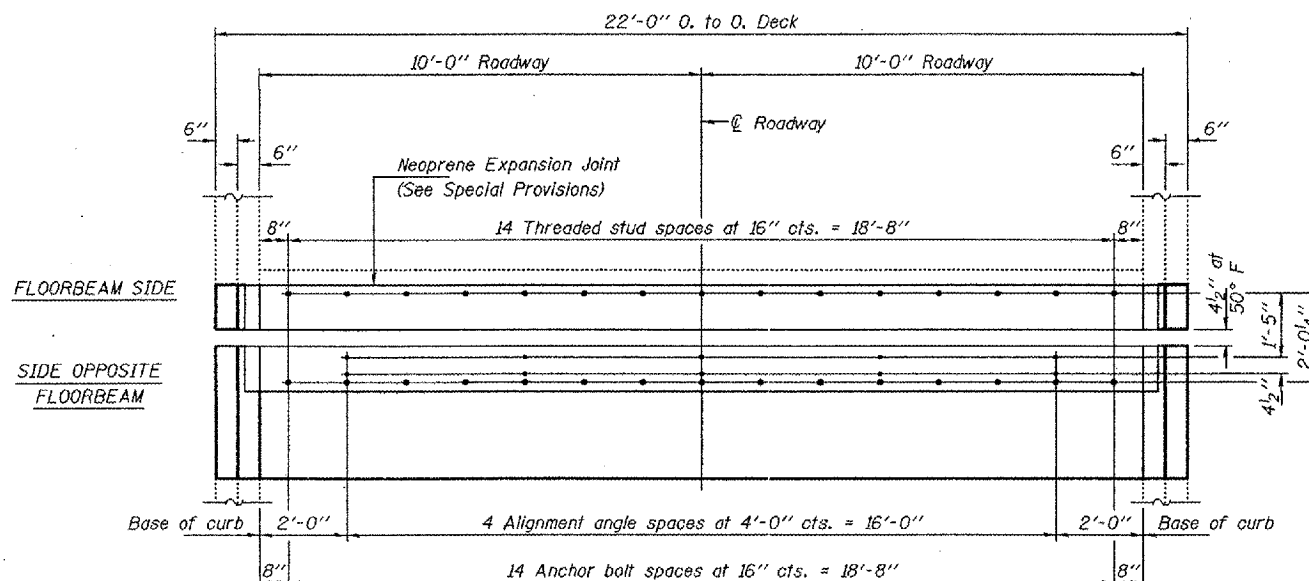
Cost of Frame is included with Neoprene Expansion Joint (6 1/2'')



FLOORBEAM SIDE SIDE OPPOSITE
FLOORBEAM

**SECTION THRU NEOPRENE
EXPANSION JOINT (6 1/2'')**
(TRANSFLEX MODEL 650)

* After removal of the existing polymer concrete, all existing threaded studs welded to the top flange shall be removed, and the remaining weld shall be ground smooth. The steel surface shall be blast cleaned according to SSPC-SP10 and primed with organic zinc rich paint. Cost included with Neoprene Expansion Joint, 6 1/2'.



PLAN NEOPRENE EXPANSION JOINT

(Looking south at Pier A & Panel Points 15, 47 & 79.
Pier H & Panel Points 23, 55 & 87 similar by rotation)

DESIGNED	DAB
CHECKED	JSB
DRAWN	baliva
CHECKED	DAB JSB

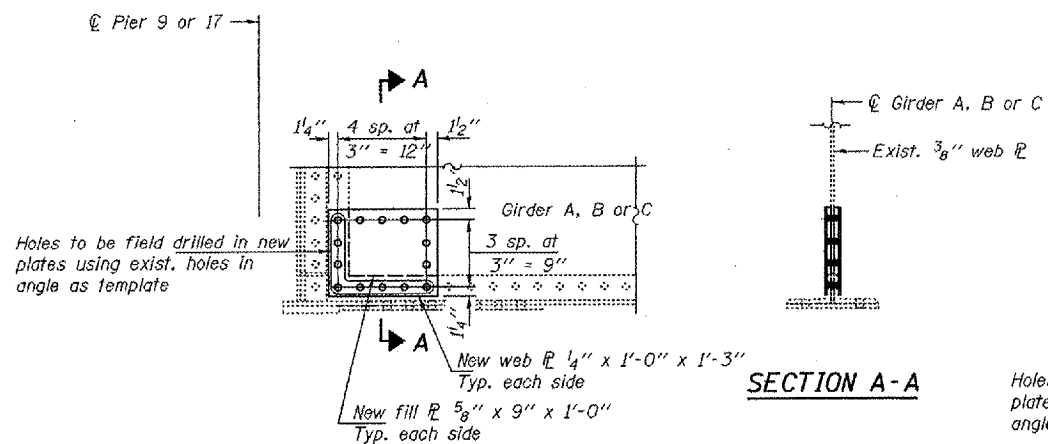
MARCH 14, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)I-5
ALEXANDER COUNTY
SN 002-0005

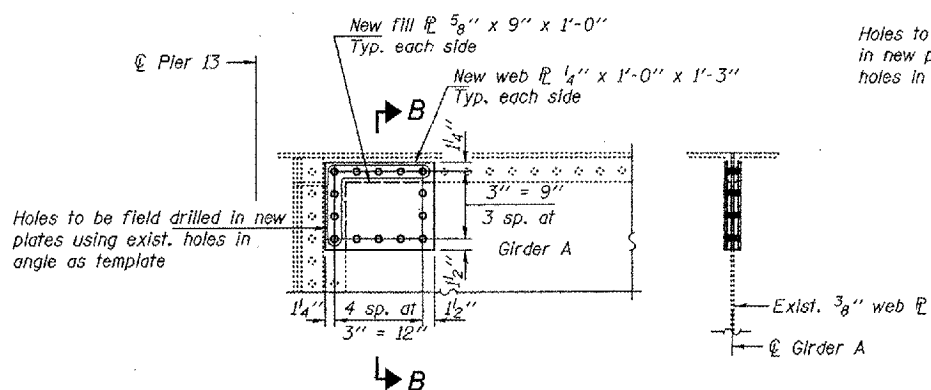
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT 98939
U.S. RTE. 60 & U.S. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 79 OF 85



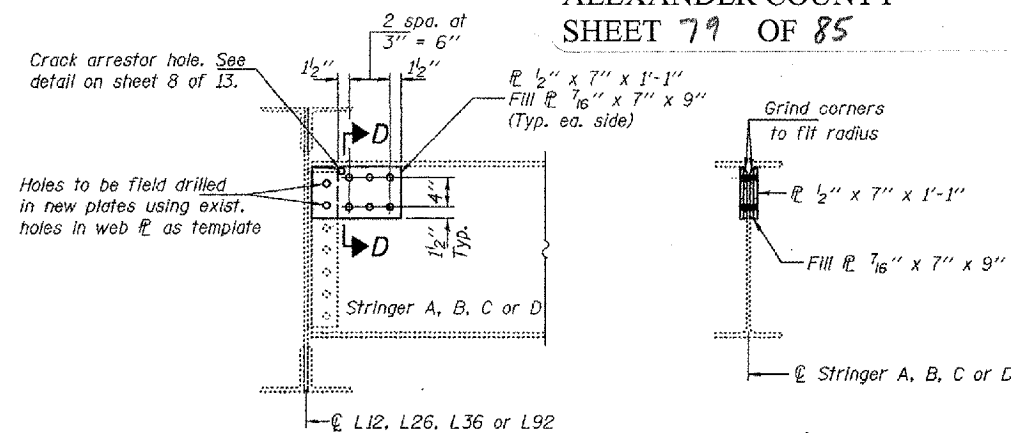
ELEVATION
Looking east

REPAIR 7
Pier 9, Girder B
Pier 17, Girders B & C



ELEVATION
Looking east

REPAIR 7

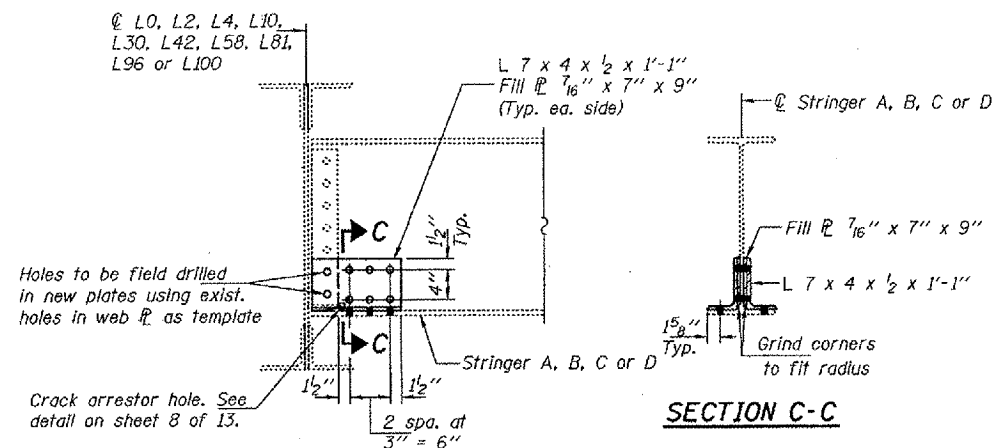


ELEVATION - STRINGER END

L12, looking west
L26, Stringer A, looking west
L26, Stringer D, looking east
L36, looking east
L92, looking west

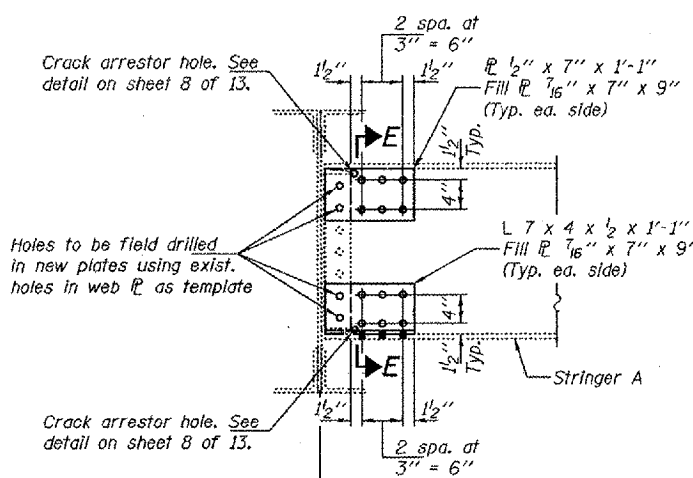
SECTION D-D

REPAIR 7
L12, Stringer B
L26, Stringers A & D
L36, Stringer A
L92 Stringers C & D



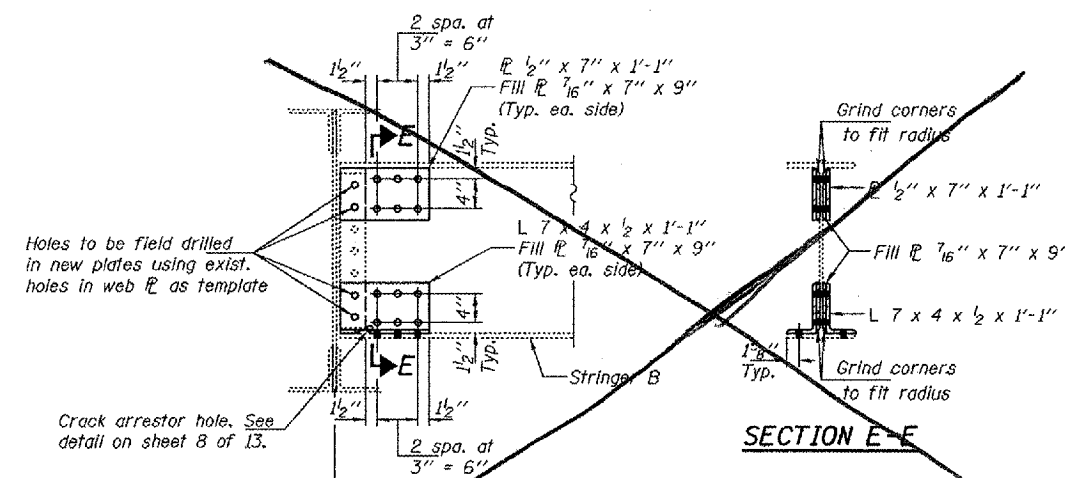
ELEVATION - STRINGER END
REPAIR 7

Looking east except as noted:
L4, looking west
L10, Stringer A, looking west
L10, Stringer D, looking east



ELEVATION - STRINGER END
(Looking west)

REPAIR 7



ELEVATION - STRINGER END
(Looking west)

REPAIR 7

Note:
Temporary shoring & cribbing will not be required provided that upper & lower repairs are not done simultaneously.

DESIGNED	DAB
CHECKED	JSB
DRAWN	ballva
CHECKED	DAB JSB

MARCH 14, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

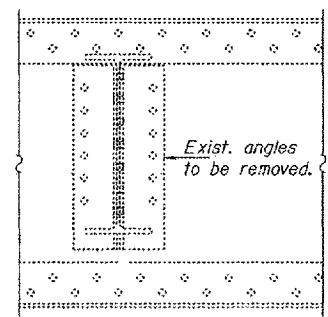
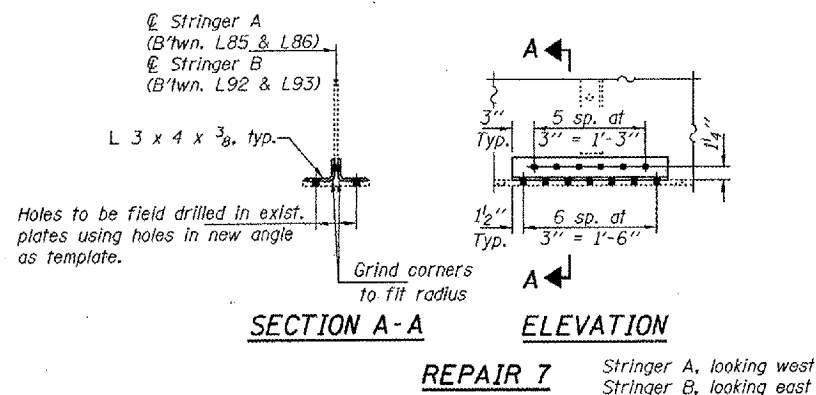
BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)I-5
ALEXANDER COUNTY
SN 002-0005

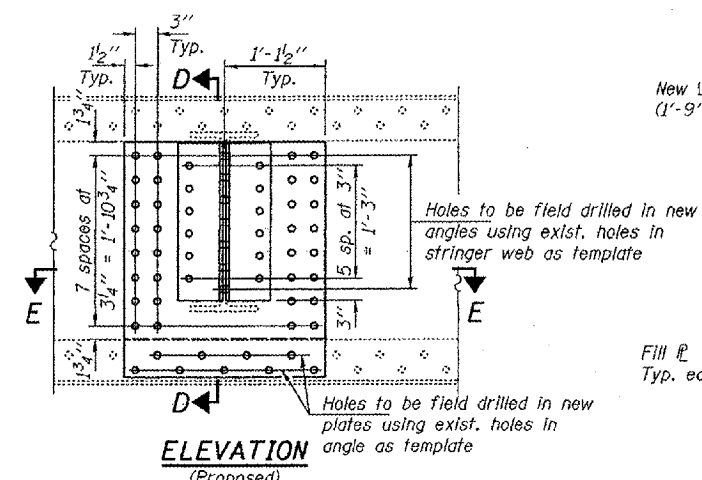
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT 98939
U.S. RTE. 60 & U.S. RTE. 62
(138D-BR) P-1

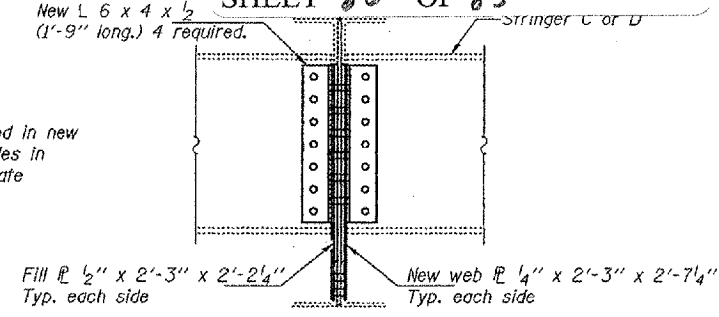
ALEXANDER COUNTY
SHEET 80 OF 85



ELEVATION
(Existing)

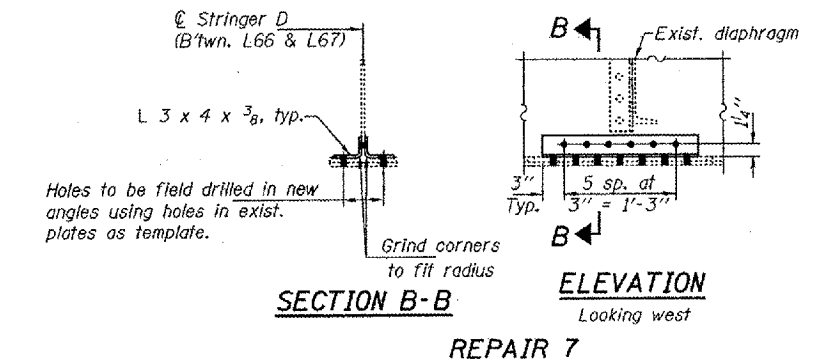


ELEVATION
(Proposed)



SECTION D-D

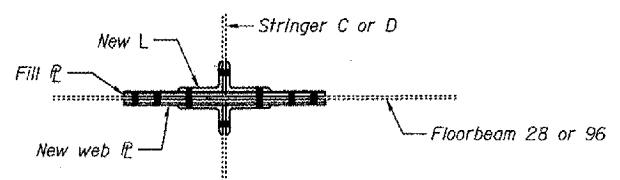
Note:
Temporary shoring & cribbing
of stringer end is required.



SECTION B-B

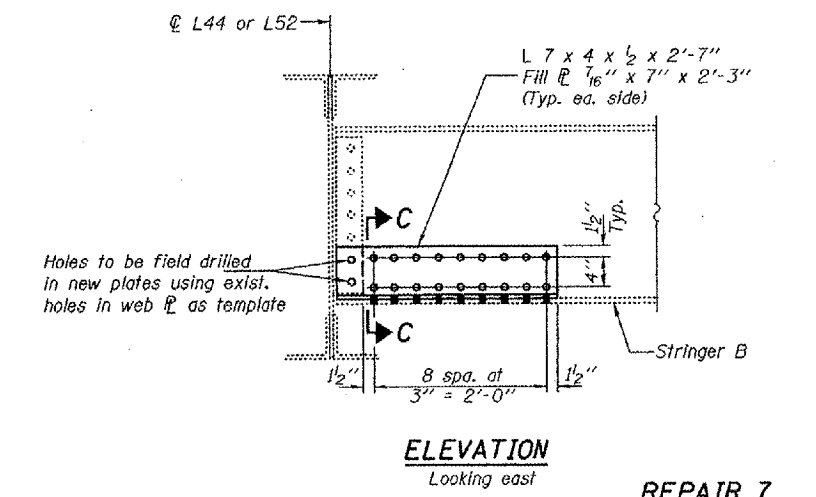
ELEVATION

REPAIR 7



SECTION E-E

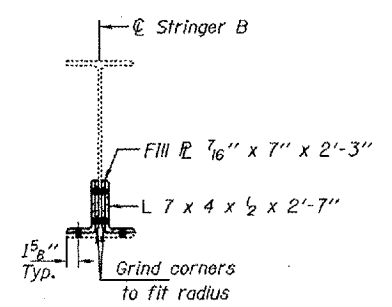
REPAIR 9



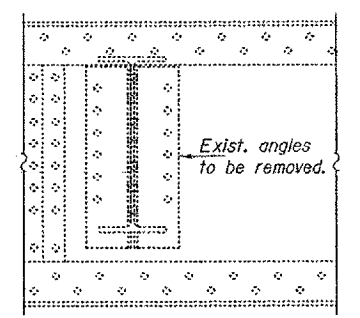
ELEVATION

Looking east

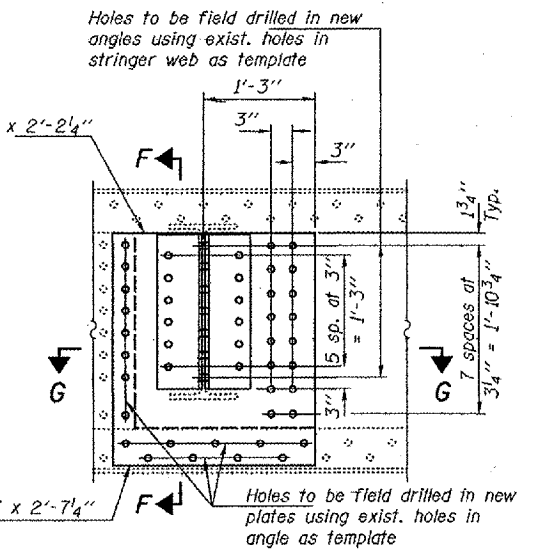
REPAIR 7



SECTION C-C



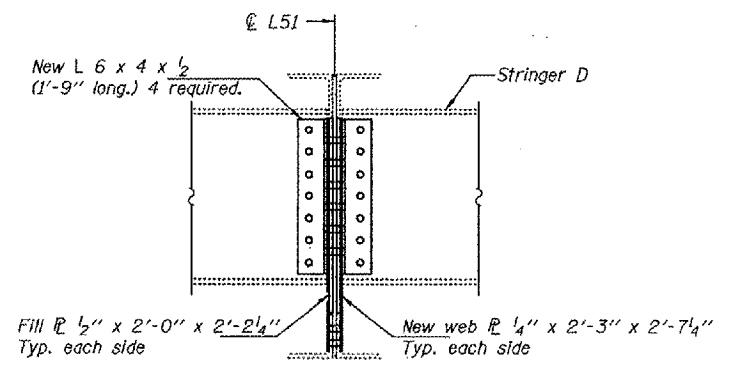
ELEVATION
(Existing)



ELEVATION
(Proposed)

SECTION G-G

REPAIR 9



SECTION F-F

Note:
Temporary shoring & cribbing
of stringer end is required.

DESIGNED	DAB
CHECKED	JSB
DRAWN	baliva
CHECKED	DAB JSB

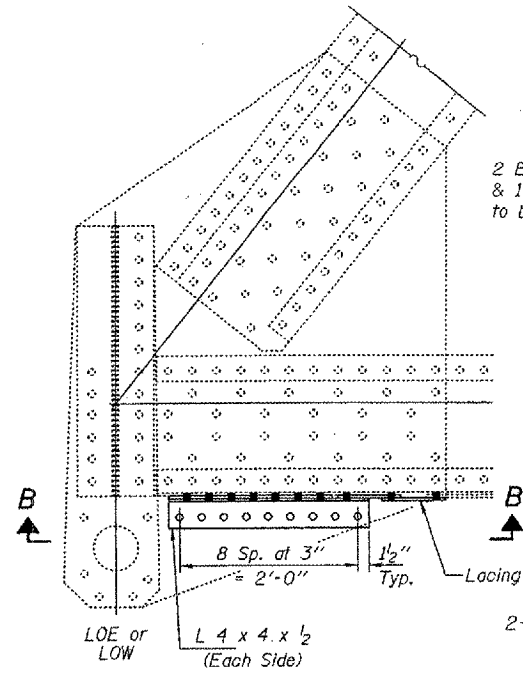
MARCH 14, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)I-5
ALEXANDER COUNTY
SN 002-0005

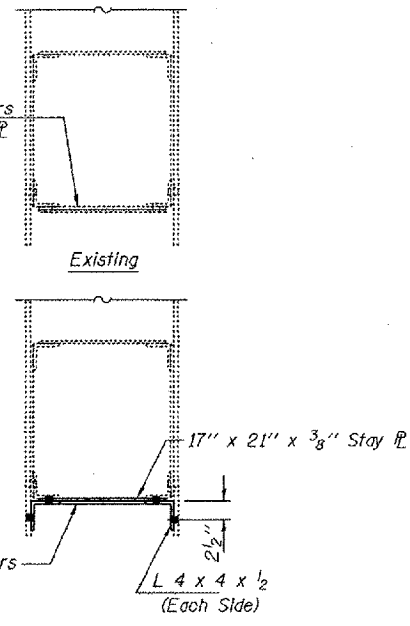
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT 98939
U.S. RTE. 60 & U.S. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 81 OF 85

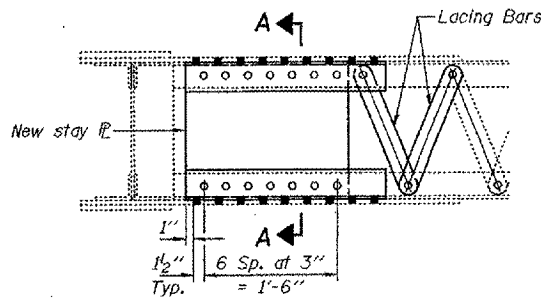


ELEVATION LOWER CHORD REPAIR

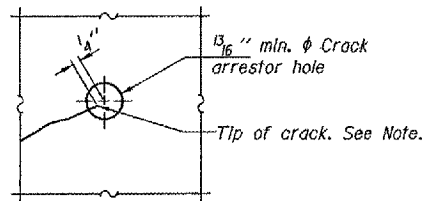
REPAIR 6



SECTION A-A



VIEW B-B



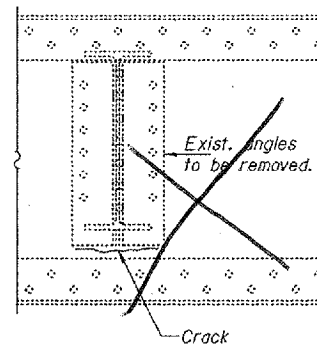
CRACK ARRESTOR HOLE DETAIL

Notes:
Locate crack tip using liquid dye penetrant or magnetic
particle testing. Drill $\frac{13}{16}$ " min. ϕ crack
arrestor hole at the crack tip. After crack
arrestor hole has been drilled,
dye penetrant or magnetic particle testing shall be used
to verify that the drilled hole has captured the crack tip.
Cost shall be included with Structural Steel Repair.

DESIGNED	DAB
CHECKED	JSB
DRAWN	balva
CHECKED	DAB JSB

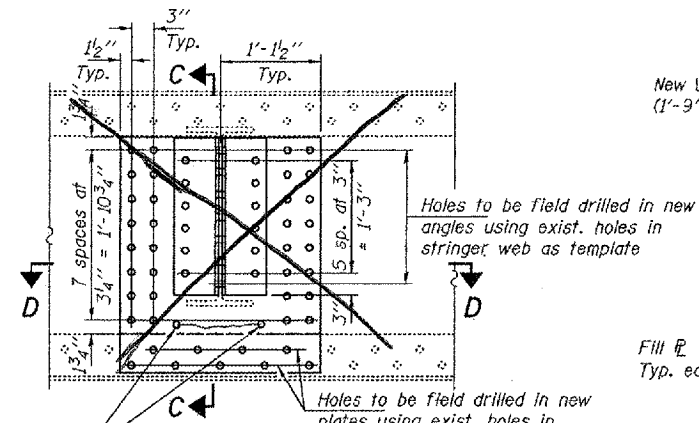
MARCH 14, 2005
EXAMINED *John A. Morie*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

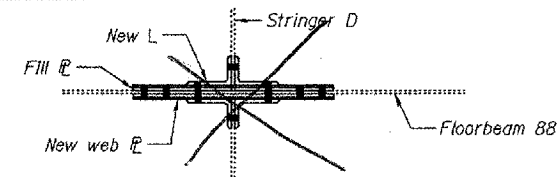


ELEVATION
(Existing)

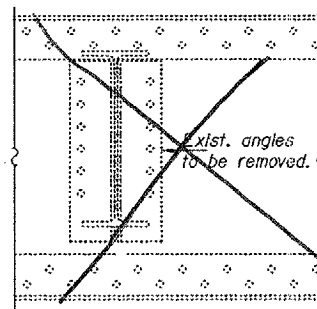
REPAIR 9
Crack arrestor hole
See detail.



ELEVATION
(Proposed)

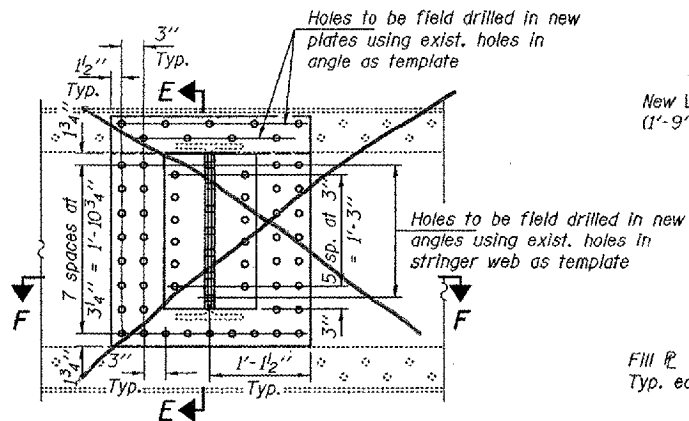


SECTION D-D

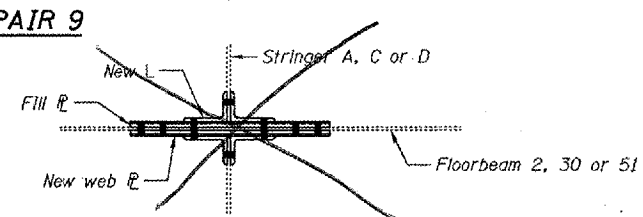


ELEVATION
(Existing)

REPAIR 9

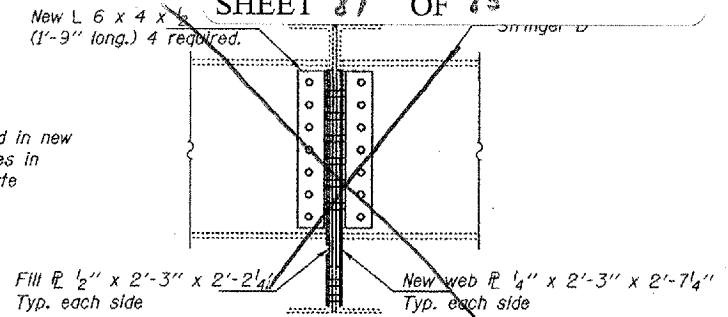


ELEVATION
(Proposed)



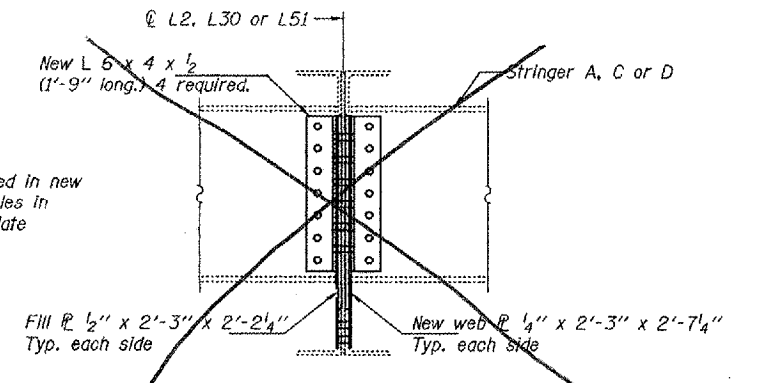
SECTION F-F

Floorbeam 2, Stringer D
Floorbeam 30, Stringer C
Floorbeam 51, Stringer A



SECTION C-C

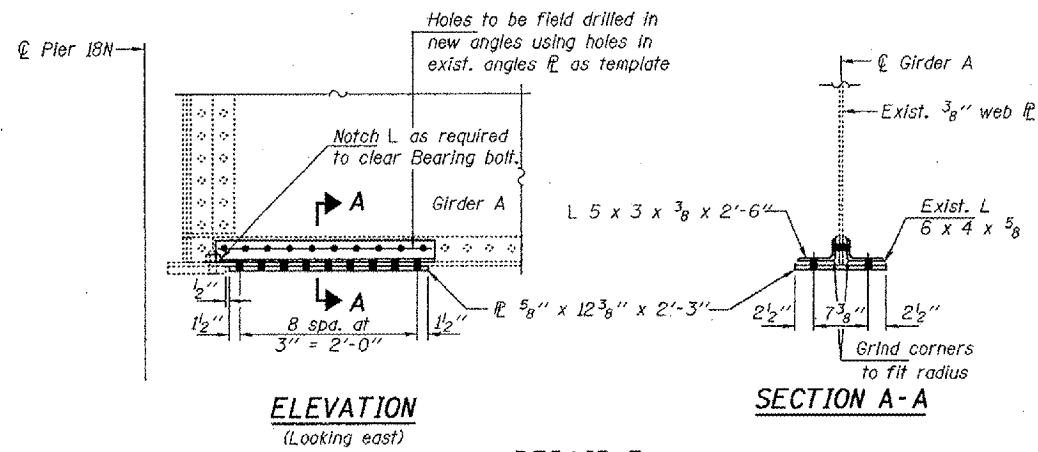
Note:
Temporary shoring & cribbing
of stringer end is required.



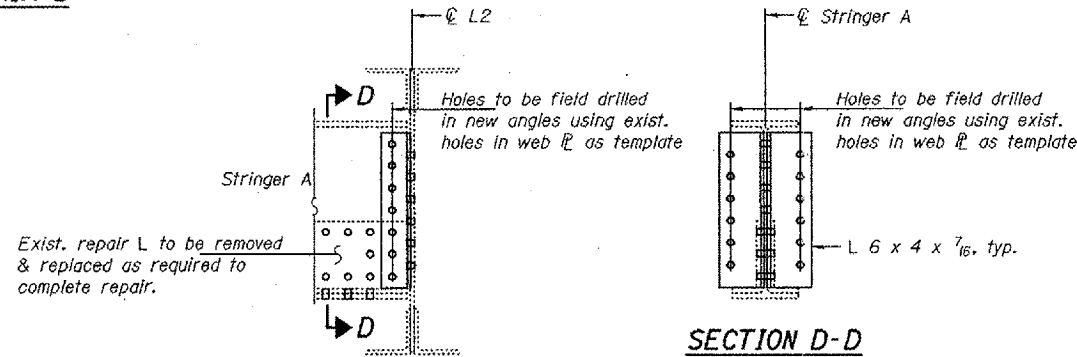
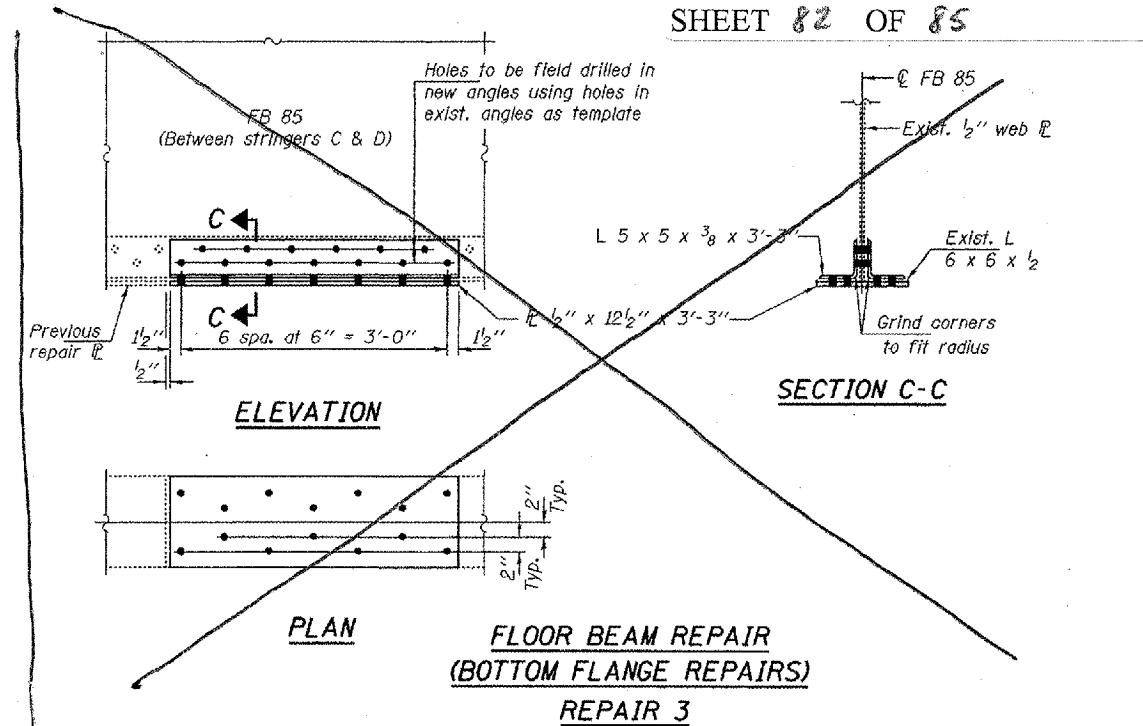
SECTION E-E

Note:
Temporary shoring & cribbing
of stringer end is required.

BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)I-5
ALEXANDER COUNTY
SN 002-0005

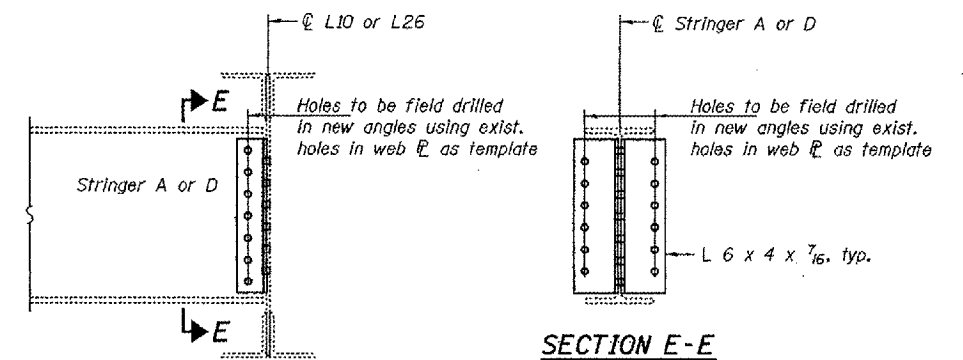


REPAIR 3



REPAIR 8

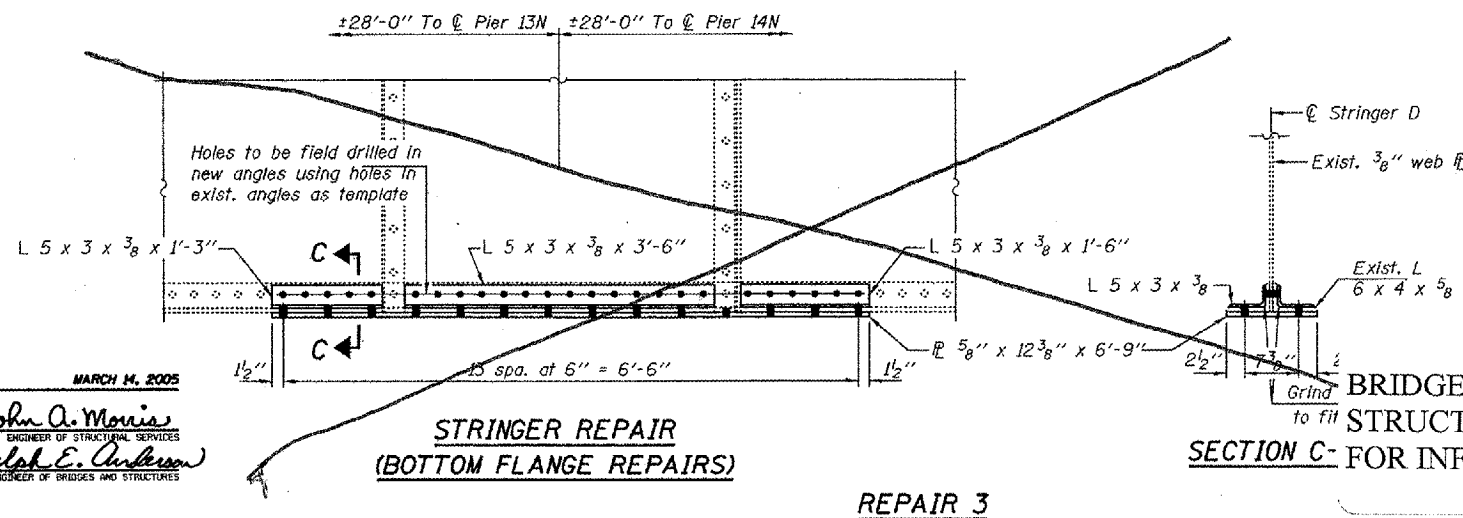
Note:
Temporary shoring & cribbing
of stringer end is required.



REPAIR 8

L10, Stringers A & D
L26, Stringer D

Note:
Temporary shoring & cribbing
of stringer end is required.

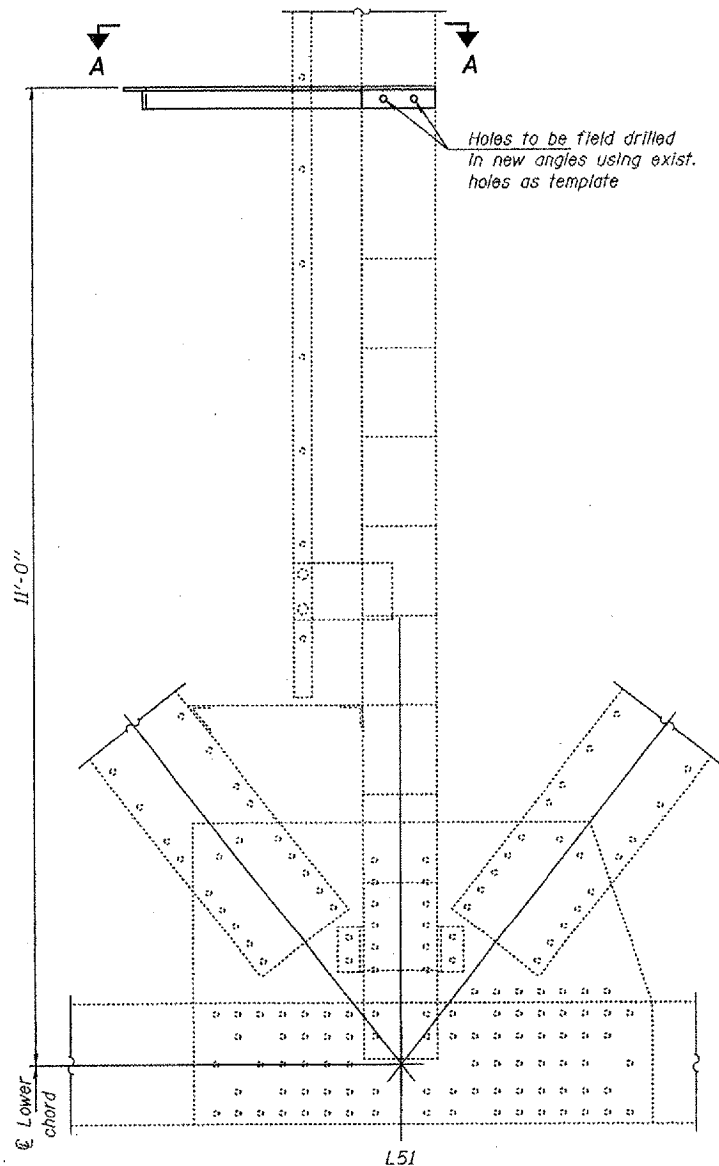


**BRIDGE NO. 1
STRUCTURE 002-0005
SECTION C- FOR INFORMATION ONLY**

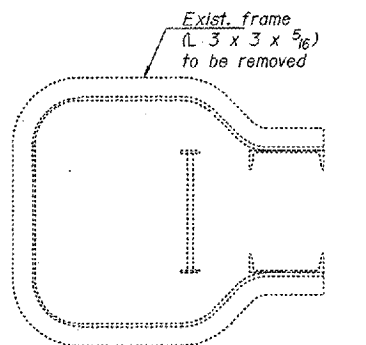
**BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)1-5
ALEXANDER COUNTY
SN 002-0005**

DESIGNED	DAB
CHECKED	JSB
DRAWN	ballva
CHECKED	DAB JSB

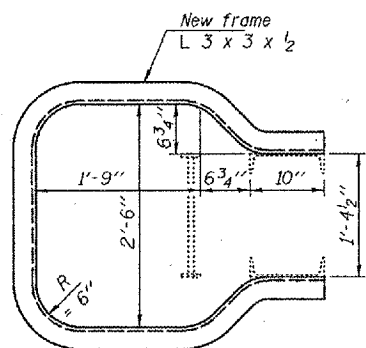
MARCH 14, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES



REPAIR 10
SAFETY LOOP ANGLE REPAIR
Typ. each truss

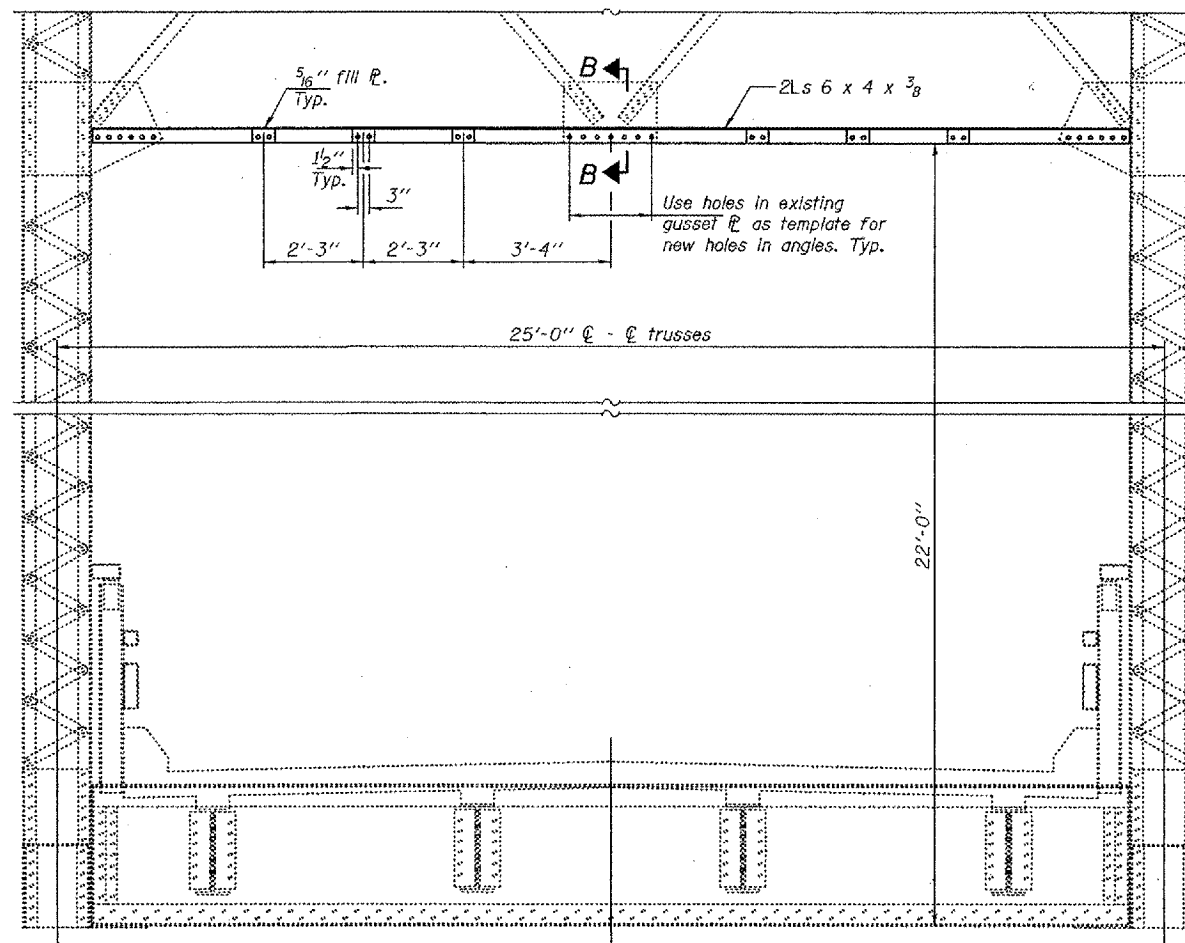


Existing

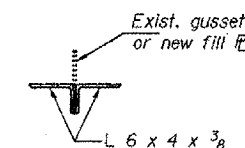


Proposed

SECTION A-A



REPAIR 11
CROSS SECTION
STRUT REPAIR AT PANEL POINT 66



SECTION B-B

REPAIR 4

Broken/Missing rivets at the following locations shall be replaced with 3/4" φ HS bolts.
Location/No. required:
Stringer A-FB 5 connection angle/2
West truss, floorbeam 8 conn. C/14
Stringer D-FB 48 connection angle/1
East truss, floorbeam 51 conn. C/8
Cost included with Structural Steel Repair.

REPAIR 5

The 2 missing bolts at the rail post connection, on the West truss, between panel points 5 & 6 shall be replaced with 1/2" φ x 6" round head bolts with locknuts and flat washers.
Cost included with Structural Steel Repair.

DESIGNED	DAB
CHECKED	JSB
DRAWN	ballva
CHECKED	DAB JSB

MARCH 14, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

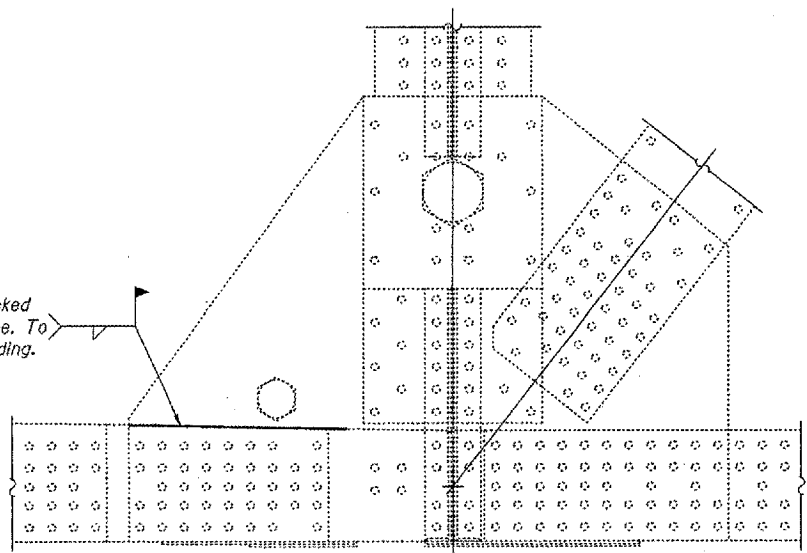
BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)I-5
ALEXANDER COUNTY
SN 002-0005

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

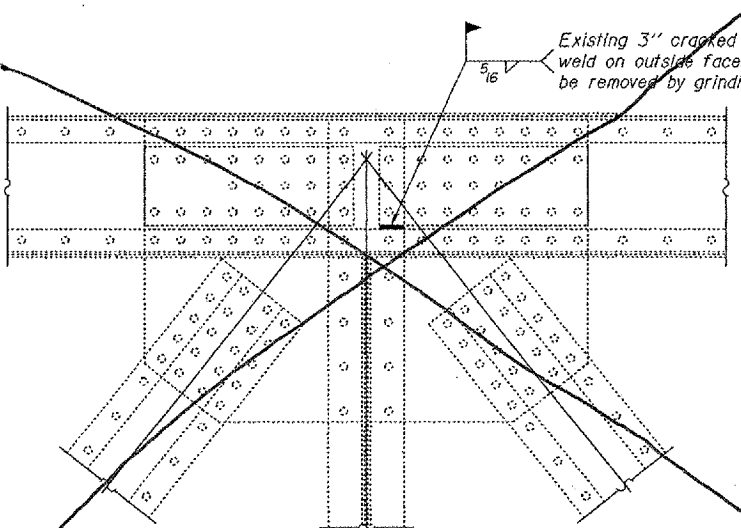
CONTRACT 98939
U.S. RTE. 60 & U.E. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 84 OF 85

Existing 2 9/16" cracked
weld on outside face. To
be removed by grinding.



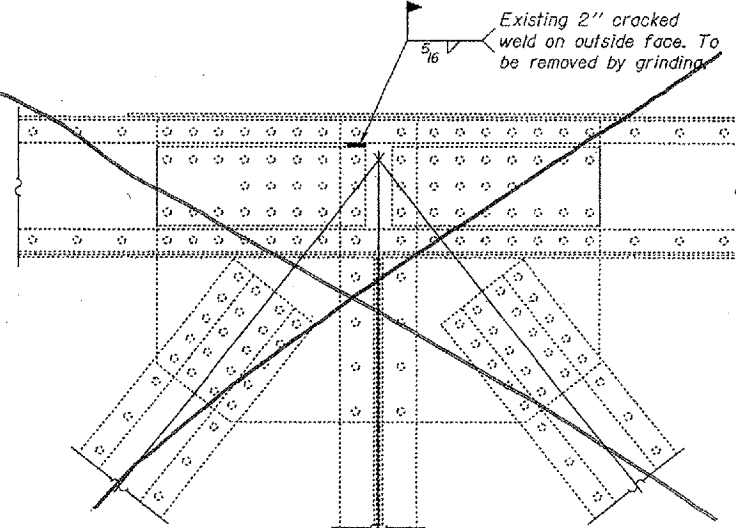
L55
REPAIR 12

Existing 3" cracked
weld on outside face. To
be removed by grinding.



U80W
INSIDE FACE

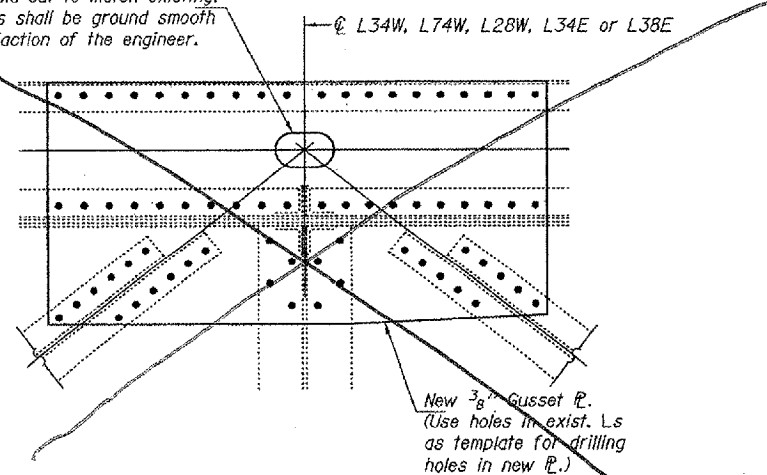
Existing 2" cracked
weld on outside face. To
be removed by grinding.



REPAIR 12
OUTSIDE FACE

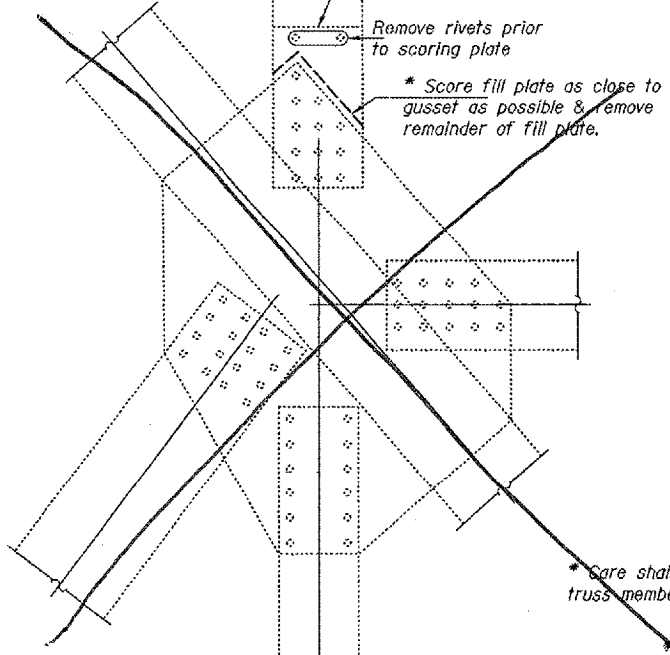
Note:
The cost of weld removal &
field welding is included with
Structural Steel Repair.

Handhole. Field cut to match existing.
All cut edges shall be ground smooth
to the satisfaction of the engineer.



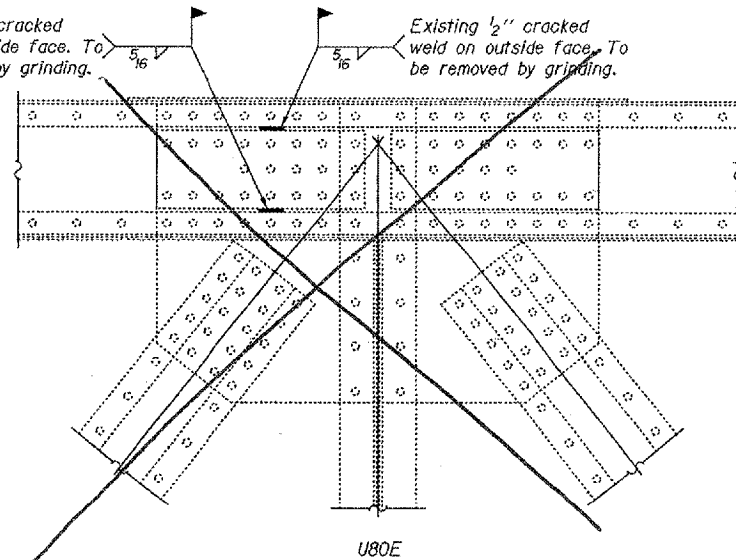
GUSSET PLATE REPAIR
REPAIR 14

Existing
fill p.
Remove rivets prior
to scoring plate
* Score fill plate as close to
gusset as possible & remove
remainder of fill plate.



U39E-L39E, U39W-L39W,
U41E-L41E, U41W-L41W,
U61E-L61E, U61W-L61W,
U63W-L63W or U63E-L63E
REPAIR 13

Existing 4" cracked
weld on outside face. To
be removed by grinding.



U80E
INSIDE FACE
REPAIR 12

Existing 1/2" cracked
weld on outside face. To
be removed by grinding.

* Care shall be taken not to damage any
truss members during the removal process.

DESIGNED	DAB
CHECKED	JSB
DRAWN	ballva
CHECKED	DAB JSB

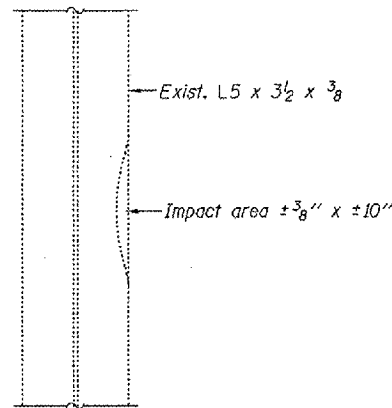
MARCH 14, 2005
EXAMINED *John A. Moris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

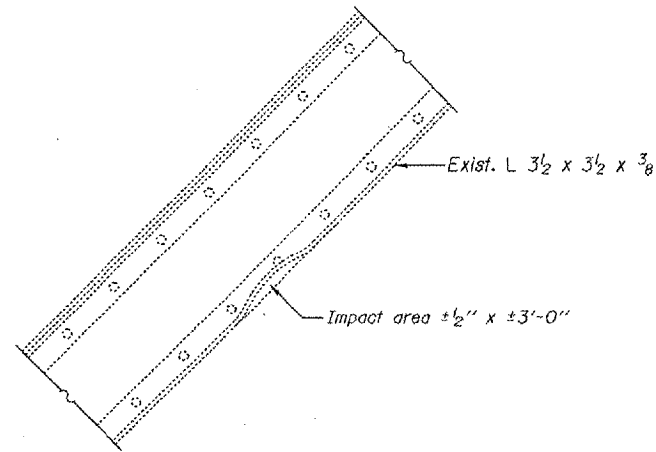
BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)I-5
ALEXANDER COUNTY
SN 002-0005

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

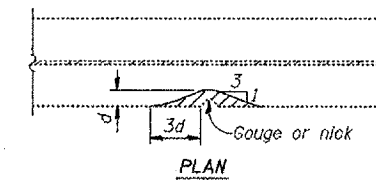
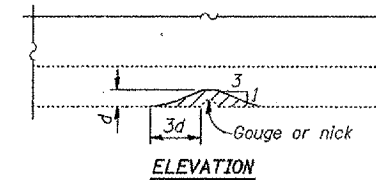
CONTRACT 98939
U.S. RTE. 60 & U.E. RTE. 62
(138D-BR) P-1
ALEXANDER COUNTY
SHEET 85 OF 85



REPAIR 16
L18W-U18W, looking west

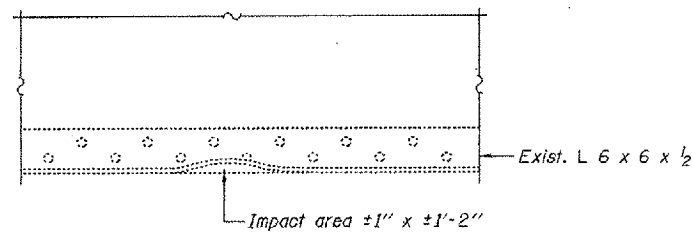


REPAIR 16
L101W-U102W, looking west

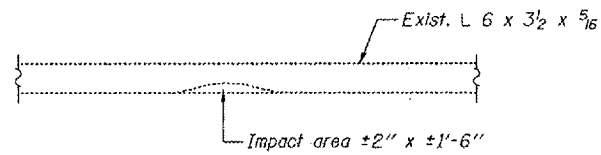


GRINDING DETAIL
REPAIR 15 & 16

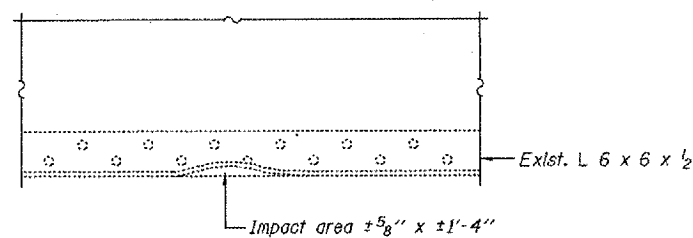
Grind existing nicks, gouges and shallow cracks in the damaged areas as detailed. Ground surfaces shall be inspected for cracks using magnetic particle testing prior to initiating any straightening operations. Cost included with Structural Steel Repair. Any cracks that cannot be removed by grinding approximately 1/4\"/>



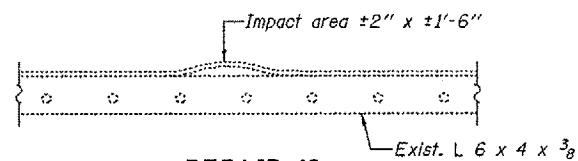
REPAIR 16
FB34, looking north



REPAIR 16
Horiz. sway brace @ PP 39, looking north



REPAIR 16
FB56, looking north



REPAIR 16
Horiz. sway brace between PP 66 & PP 67, looking south

Impacted areas shall be straightened.
See special provision Straighten Bent Members.
Cost included with Straighten Bent Members.
Typical for repair 16.

STRUCTURAL STEEL REPAIR				
Repair #	Member	Location	Description	Action
15	L50W-U50W	8' above deck	Nicks	Grind
15	L59E-U59E	7' above deck	Minor Impact damage	Grind
15	L60E-U60E	8' above deck	Gouge	Grind
15	L60E-U61E	10' above deck	Gouge	Grind
15	L80E-U80E	6' above deck	Minor Impact damage	Grind
15	L92E-U93E	6' above deck	Gouge	Grind
15	L98E-U99E	10' above deck	Gouge	Grind
15	L100E-U101E	10' above deck	Gouge	Grind
16	FB 34	B'twn. Str. B & C	Bent bottom flange	Straighten & grind
16	L18W-U18W	8' above deck	Damaged angle	Straighten & grind
16	Horiz. sway brace	PP 39	Damaged angle	Straighten & grind
16	FB 56	12' from E. truss	Damaged angle	Straighten & grind
16	Horiz. sway brace	B'twn. PP 66 & 67	Damaged angle	Straighten & grind
16	L102W-U101W	6' above deck	Damaged angle	Straighten & grind

Notes:
Repair 15 paid for as Structural Steel Repair.
Repair 16 paid for as Straighten Bent Members.

DESIGNED	DAB
CHECKED	JSB
DRAWN	baliva
CHECKED	DAB JSB

MARCH 14, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

BRIDGE NO. 1
STRUCTURE 002-0005
FOR INFORMATION ONLY

BRIDGE REPAIRS
OLD CAIRO BRIDGE OVER MISSISSIPPI RIVER
FAS RTE. 944 (US 60 & 62)
SEC. (138D-BR)1-5
ALEXANDER COUNTY
SN 002-0005