

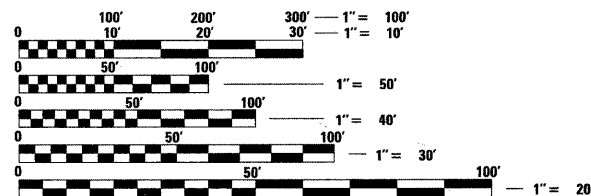
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
270	60B-1-8	MADISON	49	1
		ILLINOIS	CONTRACT NO. 76A92	

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- 2 GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 GUARDRAIL REPAIR
- 5 TRAFFIC CONTROL PLAN - TYPICAL SECTIONS
- 6 LANE CLOSURES SCHEDULE
- 7 TRAFFIC CONTROL PLAN - STAGE 1-1
- 8 TRAFFIC CONTROL PLAN - STAGE 1-2
- 9 TRAFFIC CONTROL PLAN - STAGE 1-3
- 10 TRAFFIC CONTROL PLAN - STAGE 2-1
- 11 TRAFFIC CONTROL PLAN - STAGE 2-2
- 12 TRAFFIC CONTROL PLAN - STAGE 2-3
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- 631033-04 TRAFFIC BARRIER TERMINAL, TYPE 6B
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- 780001-02 TYPICAL PAVEMENT MARKINGS



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
 1-800-892-0123  
 OR 811

# STATE OF ILLINOIS

## DEPARTMENT OF TRANSPORTATION

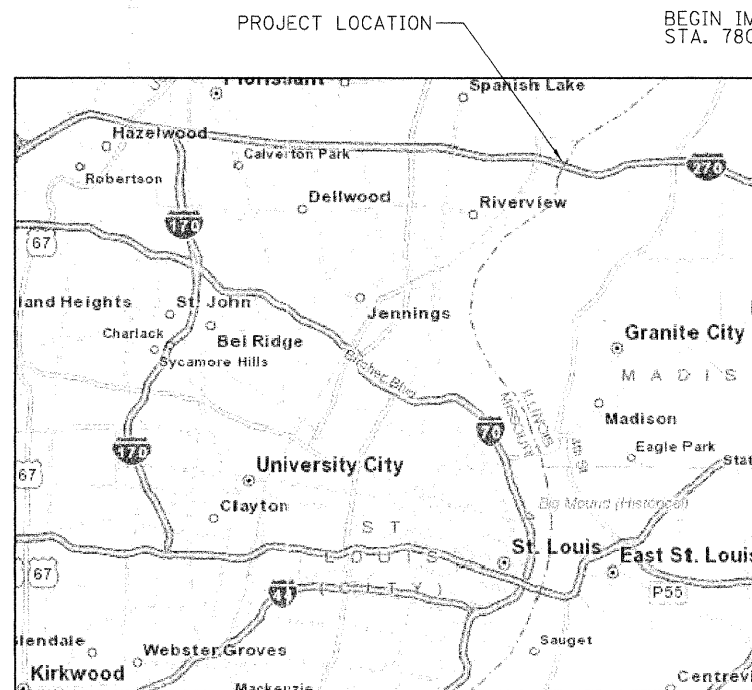
### DIVISION OF HIGHWAYS

# PROPOSED HIGHWAY PLANS

## FAI ROUTE 270 (I-270) SECTION 60 B-1-8

### REHABILITATION OF BRIDGE OVER MISSISSIPPI RIVER MADISON COUNTY

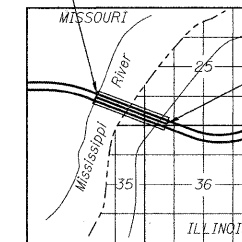
C-98-069-07



**LOCATION MAP**

(NOT TO SCALE)  
 GROSS LENGTH = 5411 FT. = 1.02 MILES  
 NET LENGTH = 5411 FT. = 1.02 MILES

BEGIN IMPROVEMENTS  
 STA. 780+00.25



END IMPROVEMENTS  
 STA. 834+11.25

**LOCATION SKETCH**



*Ricardo A. Mantay Jr.*  
 SIGNATURE

3/23/2011  
 DATE

LICENSE EXPIRES 11-30-2011

PROJECT ENGINEER - PATTI LeBEAU, P.E. (618) 346-3179  
 PROJECT MANAGER - ART MUEHLFELD (618) 346-3209

CONTRACT NO. 76A92

△ REVISED 6-6-11



**PARSONS**  
 400 WOODS MILL RD. SOUTH, SUITE 330  
 CHESTERFIELD, MO. 63017  
 PHONE: 314-434-2900

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED March 24 20 11

*Mary C. Jame*  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

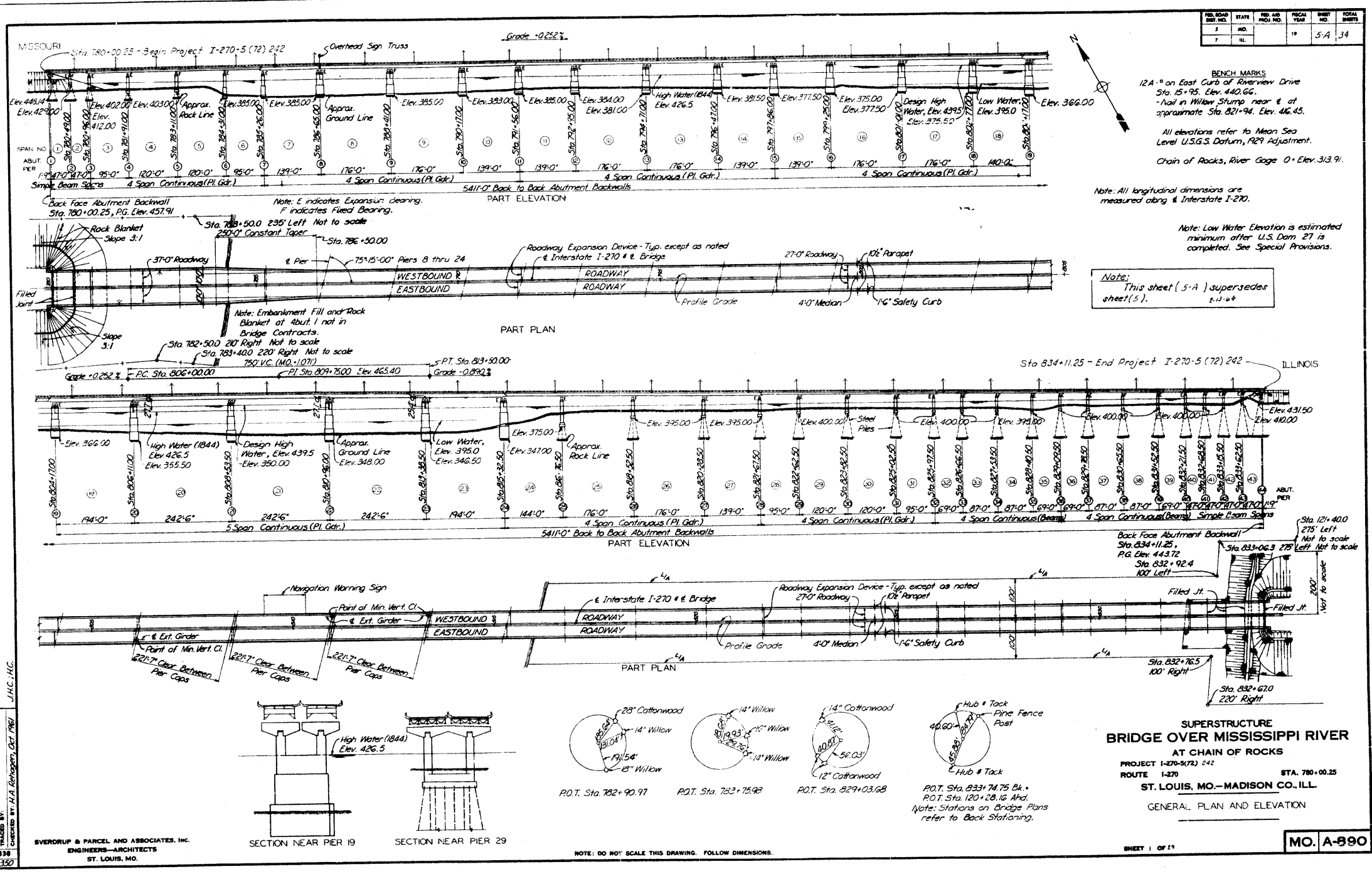
May 13 20 11

*Scott E. Stitt, P.E.*  
 acting ENGINEER OF DESIGN AND ENVIRONMENT

May 13 20 11

*Christina M. Rosel*  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

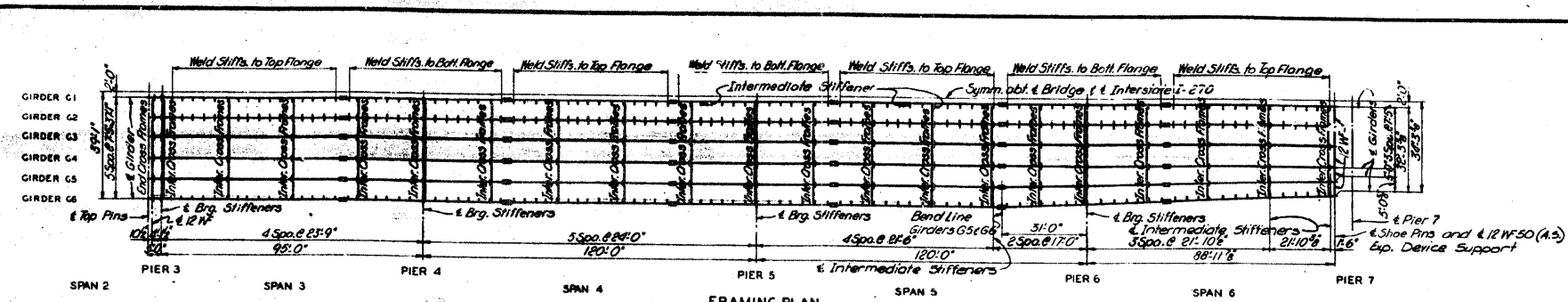


**FOR INFORMATION ONLY**

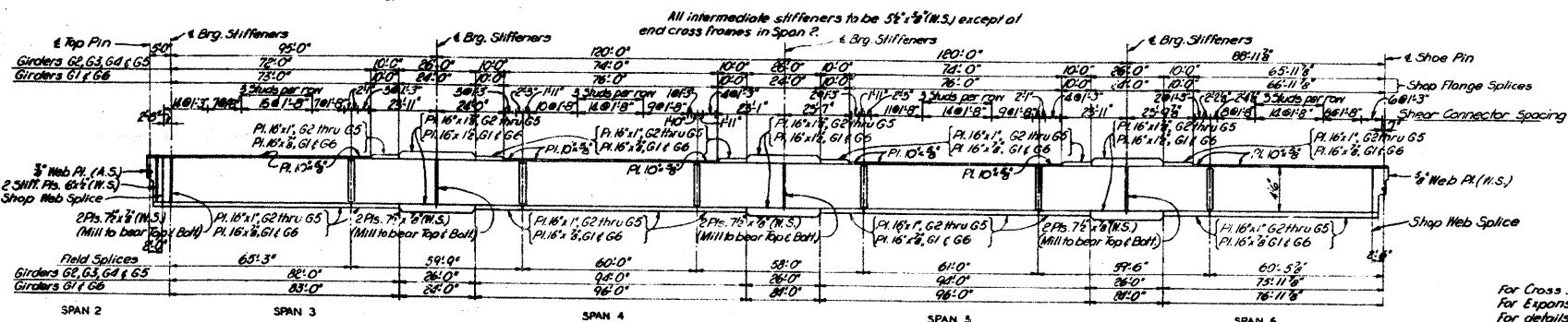
▲ SHEET ADDED 6-6-11

FILE NAME =	USER NAME = challandeske	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	EXISTING STRUCTURE PLANS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pwwork\pwwid\challandeske\cd0159504	msc\of\sheet.dgn	DRAWN -	REVISED -			270	60B-1-8	MADISON	49	49A	
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PLOT DATE = 5/31/2011		DATE	REVISED -			SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO
						FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

REV. NO.	DATE	BY	CHKD.	APP'D.	REASON
1	10-1-80	J.P.	J.P.	J.P.	PRELIMINARY
2	10-1-80	J.P.	J.P.	J.P.	REVISED
3	10-1-80	J.P.	J.P.	J.P.	REVISED
4	10-1-80	J.P.	J.P.	J.P.	REVISED
5	10-1-80	J.P.	J.P.	J.P.	REVISED
6	10-1-80	J.P.	J.P.	J.P.	REVISED
7	10-1-80	J.P.	J.P.	J.P.	REVISED



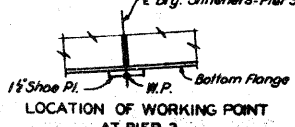
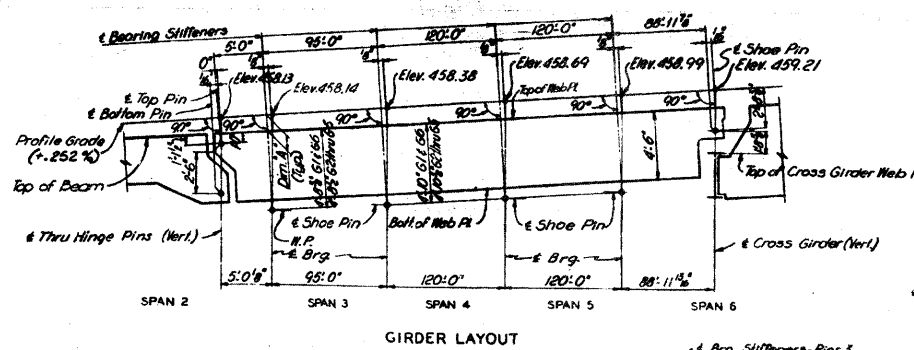
**FRAMING PLAN**  
 Note: Location of intermediate stiffeners for Girders G3, G4 & G5 same as shown for G2.



**GIRDER ELEVATION**  
 Web p.l.s. are 1/2" (W.S.) except as otherwise shown at each end of girder. All flange plate material to be (W.S.).

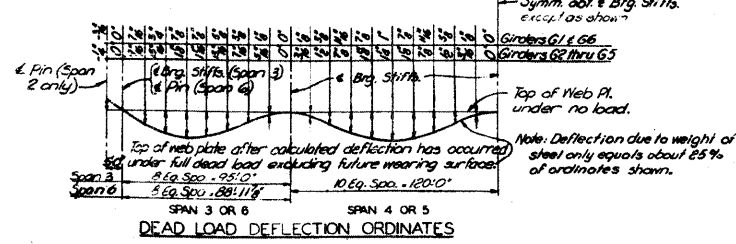
Note: For shear connectors use 4 studs per row unless otherwise noted.

**NOTES**  
 For Cross Sections and Girder Details see Sheet 8.  
 For Expansion Devices, see Sheets 23 & 24.  
 For details of shoes, see Sheet 9.  
 For Hinge Details and Wind Transfer Device, see Sheet 22.



GIRDER DIM. #	ELEVATIONS OF SHOE PINS OR W.P.			
	PIER 3	PIER 4	PIER 5	PIER 6
G1	452.70	452.80	453.10	453.41
G2	452.61	452.70	453.00	453.30
G3	452.53	452.61	452.92	453.22
G4	452.46	452.54	452.84	453.15
G5	452.37	452.46	452.76	453.06
G6	452.31	452.42	452.72	453.02

Note: Dimension #1 is true only at Brg. Stiffeners or Pins. At other points the dead load deflection must be added.



**BRIDGE OVER MISSISSIPPI RIVER**  
 AT CHAIN OF ROCKS  
 PROJECT 1-270-S  
 ROUTE 1-270  
 ST. LOUIS, MO.-MADISON CO., ILL.  
 GIRDER FRAMING PLAN - SPANS 3 TO 6

DRAWN BY: J.P. HART, M.S.Y. (1961)  
 CHECKED BY: C.C. LITTLE, M.S.Y. (1961)  
 1658  
 425777

OVERDUP & PANCEL AND ASSOCIATES, INC.  
 ENGINEERS-ARCHITECTS  
 ST. LOUIS, MO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET 6 OF 37

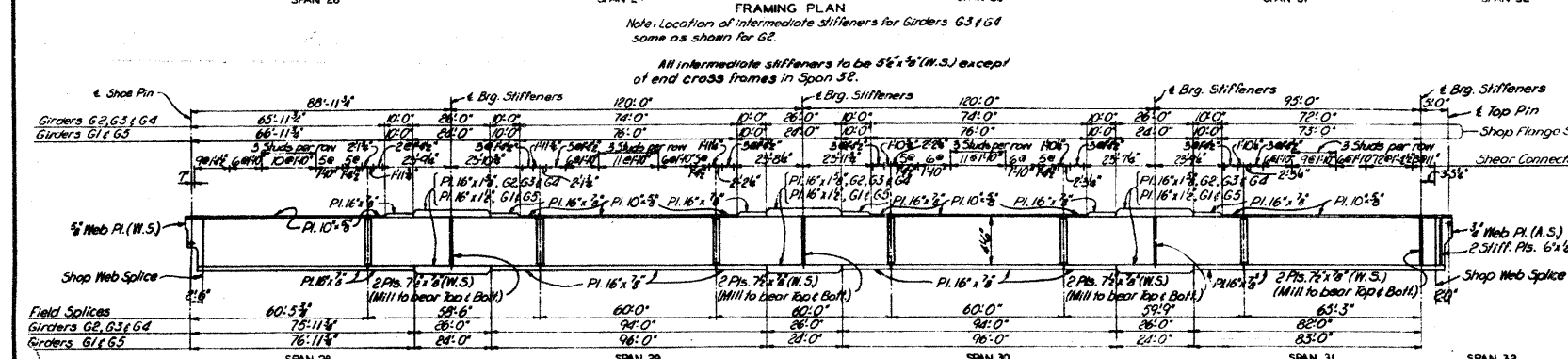
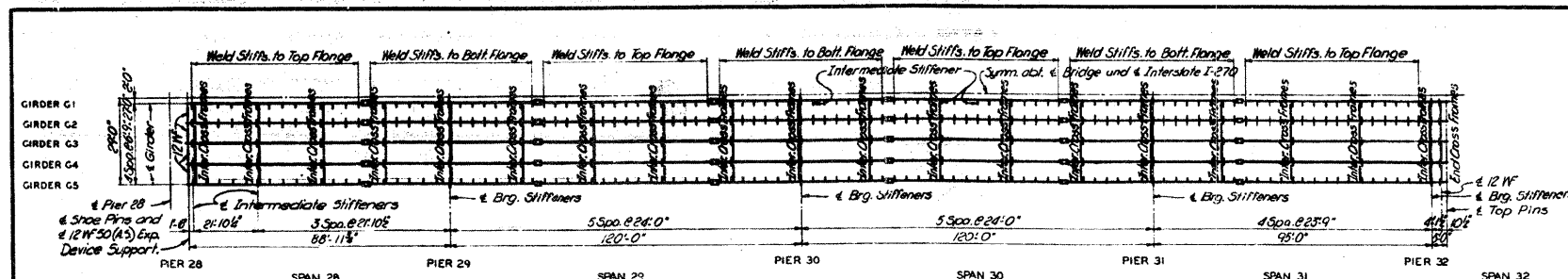
MO. A-990

**FOR INFORMATION ONLY**

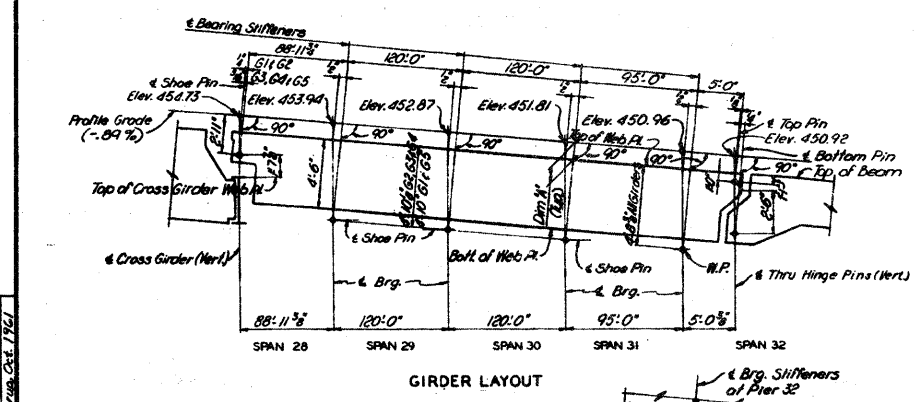
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CONTRACT NO. 76A92	PLOT SCALE = 5/8" = 1'-0"	DRAWN -	REVISED -			SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS	FED. AID PROJECT
	PLOT DATE = 5/31/2011	CHECKED -	REVISED -							
		DATE	REVISED -							

△ SHEET ADDED 6-6-11

DESIGN NO.	DATE	REV.	BY	TOTAL SHEETS
7	11-27-8			34
7	11-27-8			34



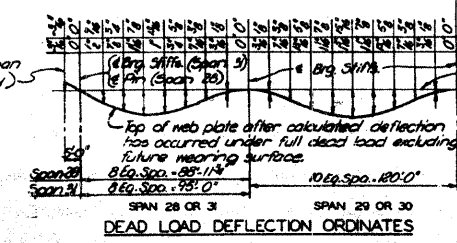
**NOTES**  
 For Cross Sections and Girder Details, see Sheet 8.  
 For Expansion Devices, see Sheets 23 & 24.  
 For details of shoes, see Sheet 2.  
 For Hinge Details and Wind Transfer Device see Sheet 22.



**TABLE OF VARIABLES**

GIRDER DIM. W.	ELEVATIONS OF SHOE PINS OR W.			
	PIER 29	PIER 30	PIER 31	PIER 32
G1 9"	448.36	447.99	448.22	445.31
G2 9"	448.21	447.84	448.07	445.16
G3 10"	448.20	447.83	448.06	445.15
G4 11"	448.14	447.77	448.00	445.10
G5 10"	448.08	447.71	447.94	445.04

Note: Dimension "a" is true only at bearing stiffeners or pin. At other points the dead load deflection must be added.



**BRIDGE OVER MISSISSIPPI RIVER**  
 AT CHAIN OF ROCKS  
 PROJECT 1-270-S  
 ROUTE 1-270  
 ST. LOUIS, MO.-MADISON CO. ILL.  
 GIRDER FRAMING PLAN-  
 SPANS 28 TO 31

DRAWN BY: F. P. HARRIS, M.S.C.E. (1961)  
 CHECKED BY: C. W. HARRIS, M.S.C.E. (1961)  
 1984  
 125173

SPENDRUP & PARCEL, AND ASSOCIATES, INC.  
 ENGINEERS-ARCHITECTS  
 ST. LOUIS, MO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

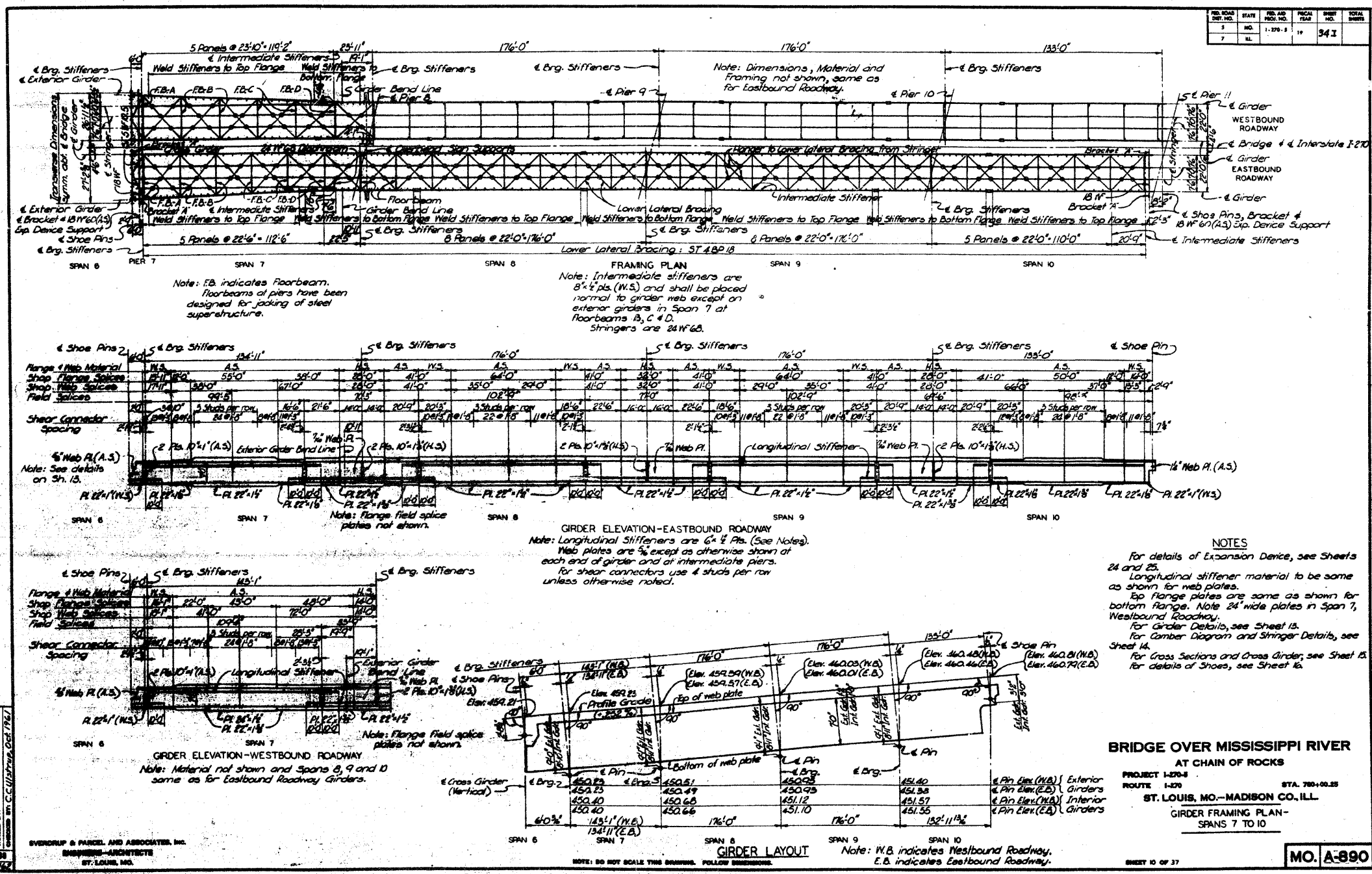
SHEET 7 OF 37

MO. A-990

**FOR INFORMATION ONLY**

▲ SHEET ADDED 6-6-11

FILE NAME =	USER NAME = chollandeske	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT DATE = 5/31/2011		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

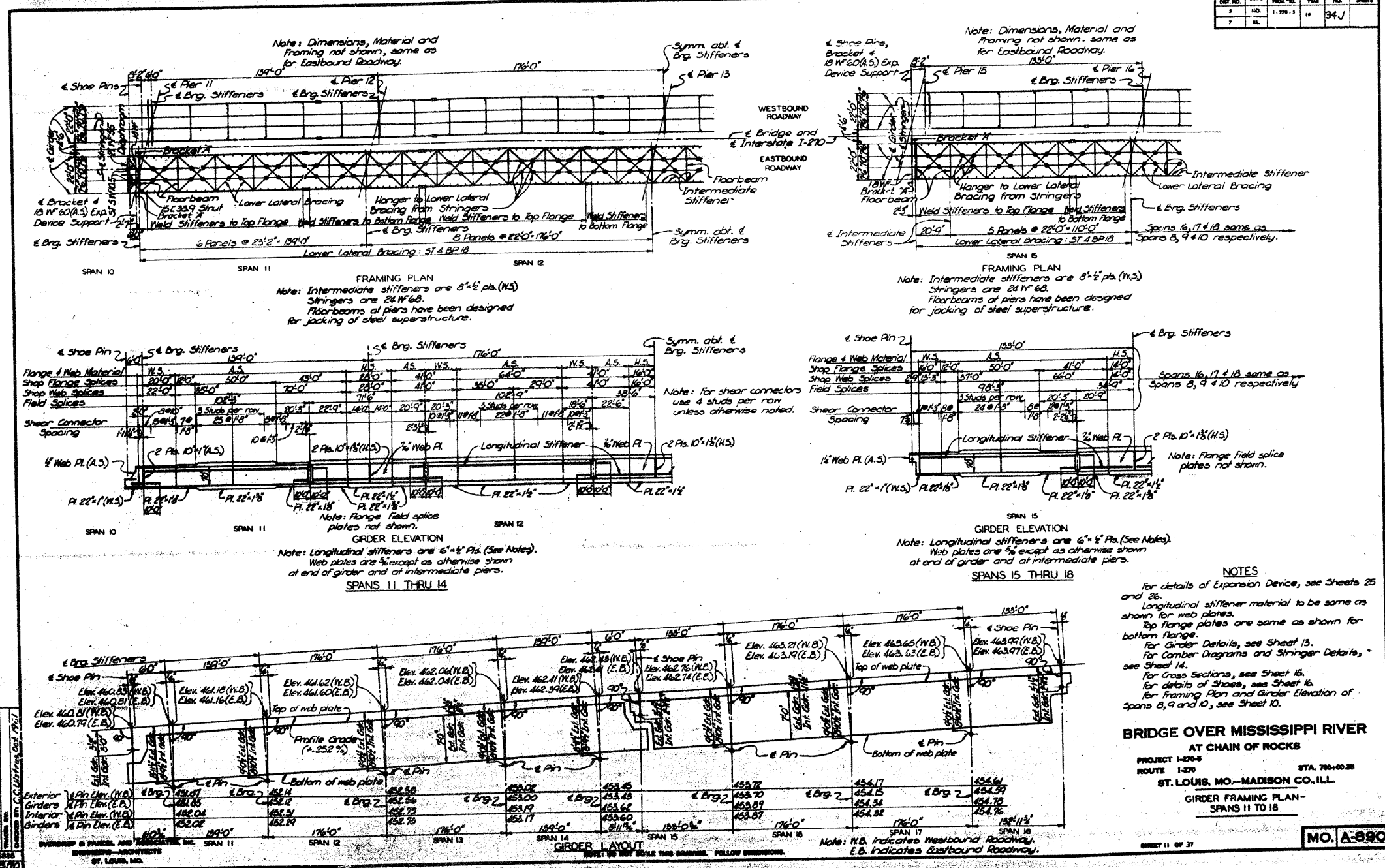


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PLOT DATE = 5/31/2011		DATE	REVISED -					ILLINOIS FED. AID PROJECT				
				SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO STA.			

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SCALE	DATE	TOTAL SHEETS
7	ILL.	1-270-5	11	34J	



**NOTES**

For details of Expansion Device, see Sheets 25 and 26.  
 Longitudinal stiffener material to be same as shown for web plates.  
 Top flange plates are same as shown for bottom flange.  
 For Girder Details, see Sheet 13.  
 For Camber Diagrams and Stringer Details, see Sheet 14.  
 For Cross Sections, see Sheet 15.  
 For details of Shoes, see Sheet 16.  
 For Framing Plan and Girder Elevation of Spans 8, 9 and 10, see Sheet 10.

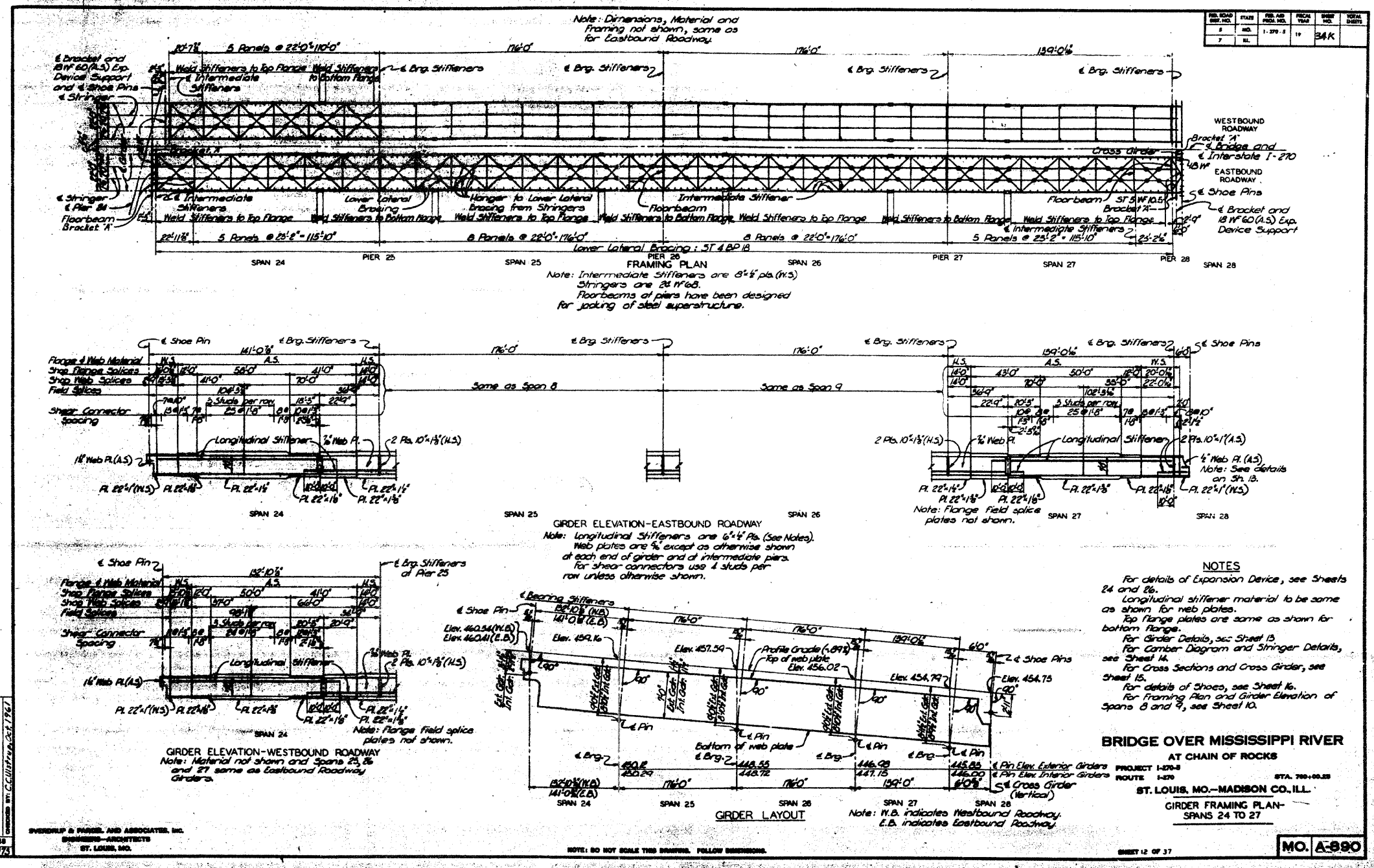
**BRIDGE OVER MISSISSIPPI RIVER**  
 AT CHAIN OF ROCKS  
 PROJECT 1-270-5  
 ROUTE 1-270  
 ST. LOUIS, MO.-MADISON CO., ILL.  
 GIRDER FRAMING PLAN - SPANS 11 TO 18

MO. A-890

**FOR INFORMATION ONLY**

△ SHEET ADDED 6-6-11

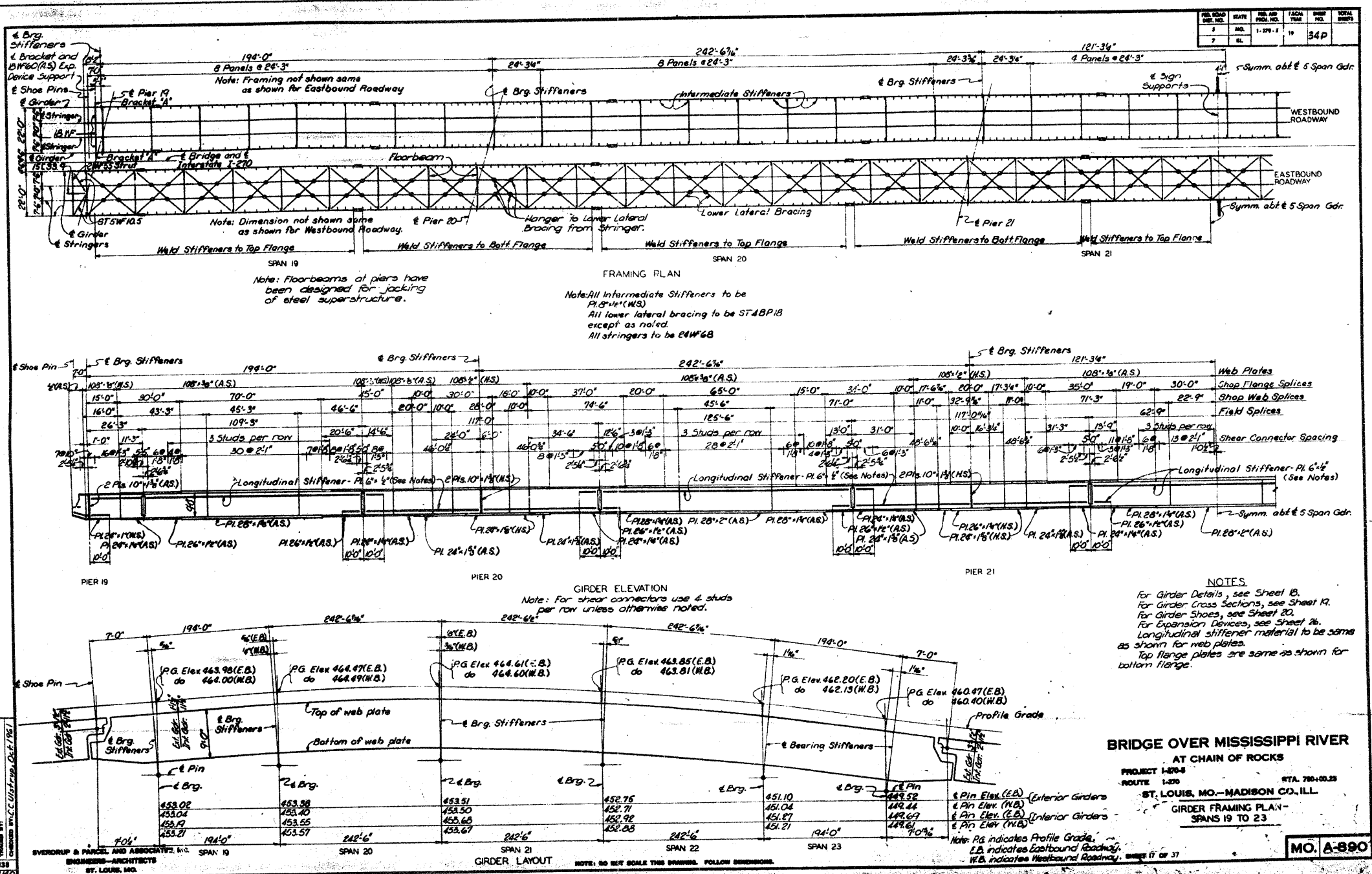
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PLOT DATE = 5/31/2011		DATE -	REVISED -							CONTRACT NO. 76A92



**FOR  
INFORMATION  
ONLY**

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FILE NAME =	USER NAME = chellandeske	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING STRUCTURE PLANS</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT DATE = 5/31/2011		DATE	REVISED -			SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		



REV.	DATE	BY	CHK.	SCALE	SHEET NO.	TOTAL SHEETS
1	1-27-11				34P	
2						

**NOTES**  
 For Girder Details, see Sheet 18.  
 For Girder Cross Sections, see Sheet 19.  
 For Girder Shoes, see Sheet 20.  
 For Expansion Devices, see Sheet 26.  
 Longitudinal stiffener material to be same as shown for web plates.  
 Top flange plates are same as shown for bottom flange.

**BRIDGE OVER MISSISSIPPI RIVER**  
 AT CHAIN OF ROCKS  
 PROJECT 1-270-8 STA. 760+00.00  
 ROUTE 1-270 ST. LOUIS, MO.—MADISON CO., ILL.  
**GIRDER FRAMING PLAN—**  
 SPANS 19 TO 23  
**MO. A-890**

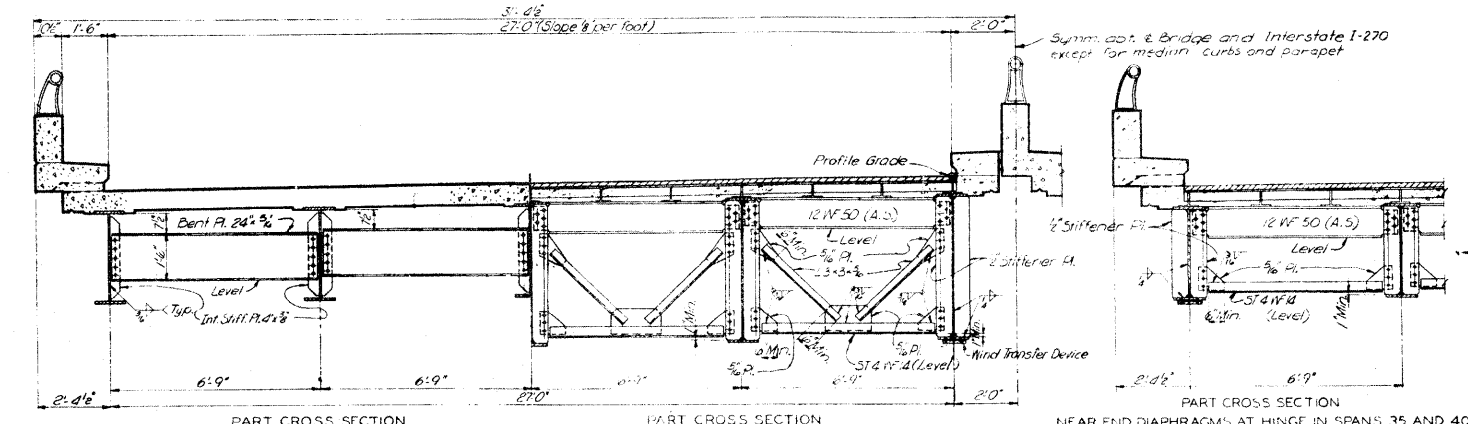
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		DATE -	REVISED -			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT				



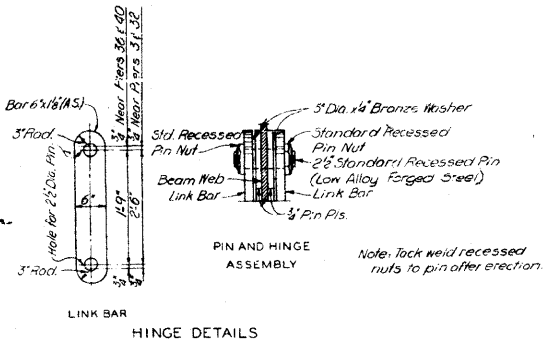
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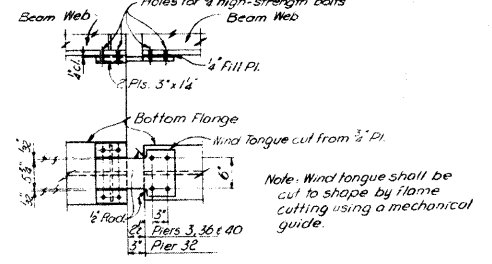
PART CROSS SECTION NEAR INTERMEDIATE DIAPHRAGMS  
Intermediate diaphragms of piers same except for bearing stiffeners. See Sheet 21 for detail of bearing stiffener.  
Note: Connect diaphragms with 1/2" high-strength bolts.

PART CROSS SECTION NEAR CROSS FRAMES AT HINGE IN SPAN 32  
Note: Use 3/4" high-strength bolts for all 3/8" PL connections.

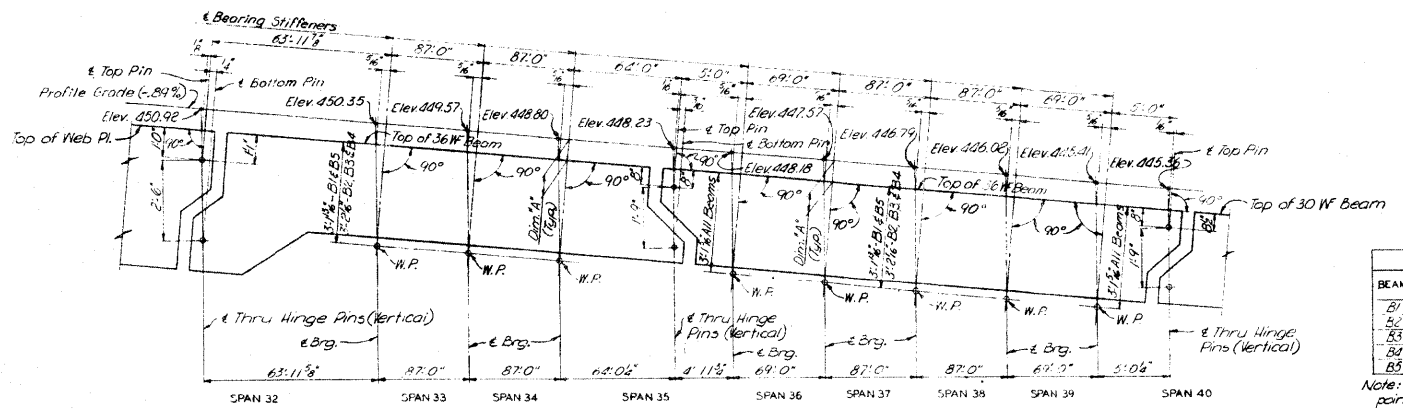
PART CROSS SECTION NEAR END DIAPHRAGMS AT HINGE IN SPANS 35 AND 40  
Note: Use 3/4" high-strength bolts for all 3/8" PL connections.



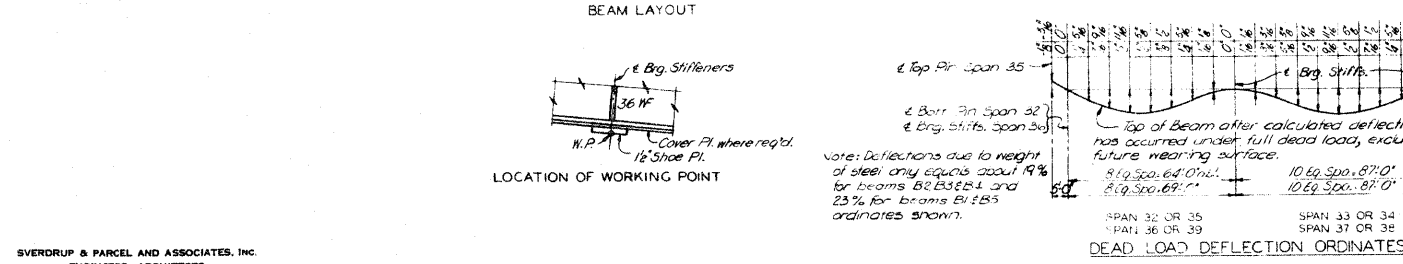
HINGE DETAILS



WIND TRANSFER DEVICE  
Note: Wind Transfer Device of Piers 32, 36 and 40 to be on Beams B1 & B5 only. At Pier 3 on Beams B1 & B5 only.  
Wind Transfer Device shown in normal position at 60°F.



ROADWAY CROSS SECTION SPANS 32 THRU 39



BEAM LAYOUT

LOCATION OF WORKING POINT

BEAM	DIM. IN'	ELEVATIONS OF WORKING POINT							
		PIER 33	PIER 34	PIER 35	PIER 36	PIER 37	PIER 38	PIER 39	PIER 40
B1	8"	446.53	447.75	448.98	449.40	449.75	449.97	449.20	449.63
B2	8"	446.43	447.66	448.88	449.33	449.66	449.88	449.11	449.55
B3	9"	446.56	447.55	448.81	449.26	449.58	449.81	449.03	449.48
B4	10"	446.30	447.52	448.75	449.20	449.52	449.75	448.97	449.42
B5	11"	446.24	447.47	448.70	449.12	449.47	449.69	448.92	449.35

Note: Dimension A is true only at 1/2" Brg. Stiffeners or 1/2" Pins. At other points the dead load deflection must be added.

NOTES  
For Framing Plan, see Sheet 21.  
For Structural Steel Notes, see Sheet 4.

**BRIDGE OVER MISSISSIPPI RIVER**  
AT CHAIN OF ROCKS  
PROJECT 1-270-S(72) 242  
ROUTE 1-270  
ST. LOUIS, MO.—MADISON CO., ILL.  
BEAM DETAILS—  
SPANS 32 THRU 39

Note: This sheet (34-UJ) supersedes sheet (34-U).

SHEET 22 OF 37

MO. A-890

**FOR INFORMATION ONLY**

▲ SHEET ADDED 6-6-11

FILE NAME =	USER NAME = chollandske	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 5/31/2011		DATE -	REVISED -			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			