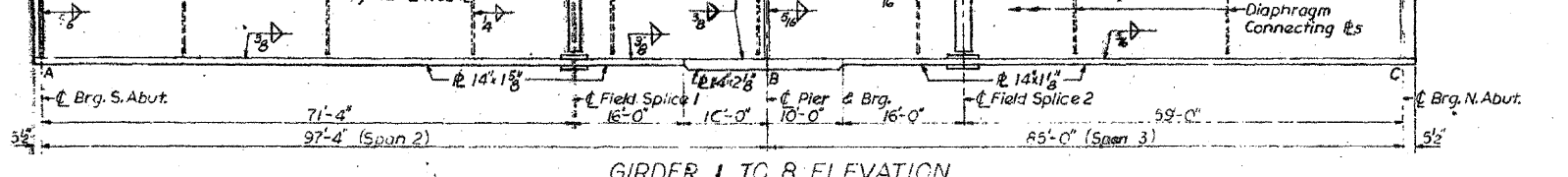
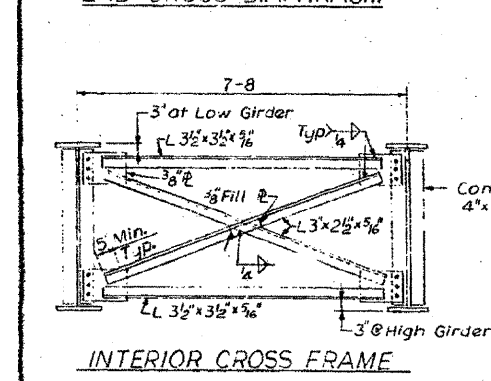
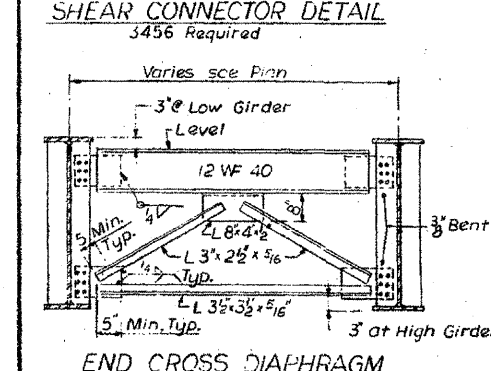
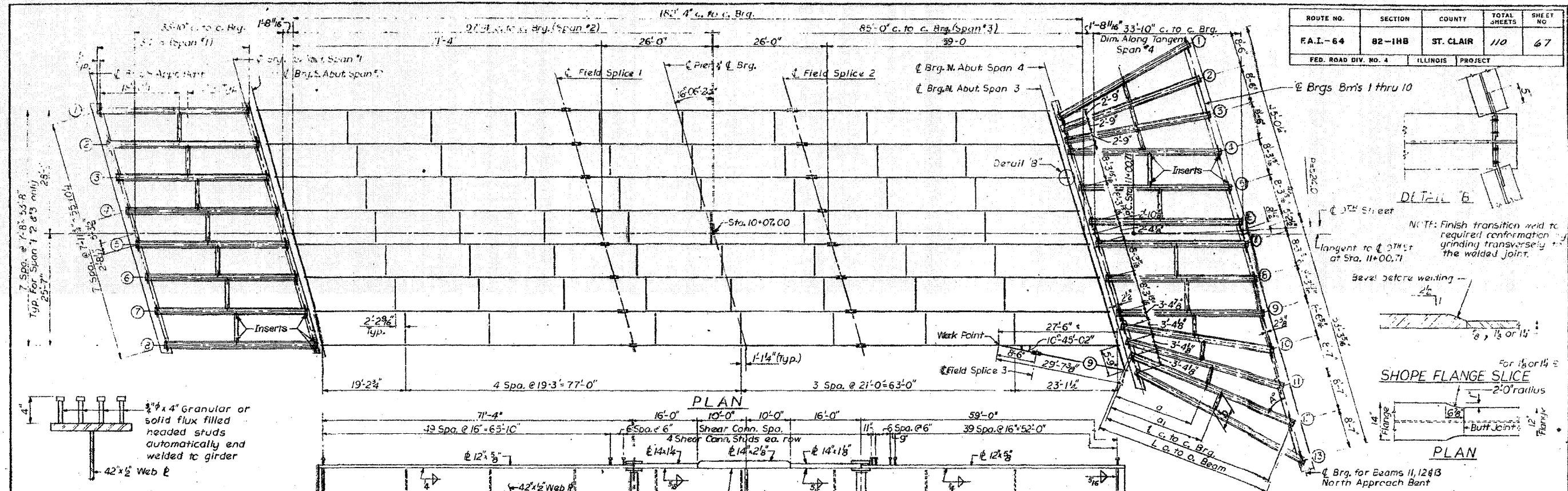


FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-64	82-1HB	ST. CLAIR	110	67
FED. ROAD DIV. NO. 4		ILLINOIS PROJECT		



**TABLE OF MOMENTS AND REACTIONS-INTERIOR BEAMS**

LOADS	SPAN 1 & 4		SPAN 2 & 3							
	Moment (Ft.k)	Shear (kips)	Moment (Ft. kip)		Reaction (kips)			Shear @ Pier		
	Span	Abutment	Span 2	Pier	Span 3	Abut.	Pier	NAbut.	Vea	Vbc
D.L.	186	20.4	625	-1226	334	35.0	115.1	25.5	60.3	54.8
S.D.L.	47	5.5	268	-319	174	13.8	38.7	11.5	20.2	18.5
L.L.	238	36.4	864	-601	725	44.4	68.9	43.6	47.0	46.5
Imp.	71	10.8	192	-140	173	9.9	15.9	10.3	10.5	11.0
Total	542	73.1		-2286	103.2	238.6	91.0	138.1	131.0	

**TOP OF GIRDER WEB ELEVATIONS FOR FABRICATION (DEFLECTION NOT INCLUDED)**

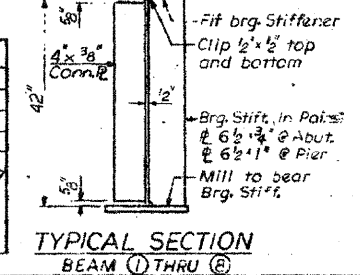
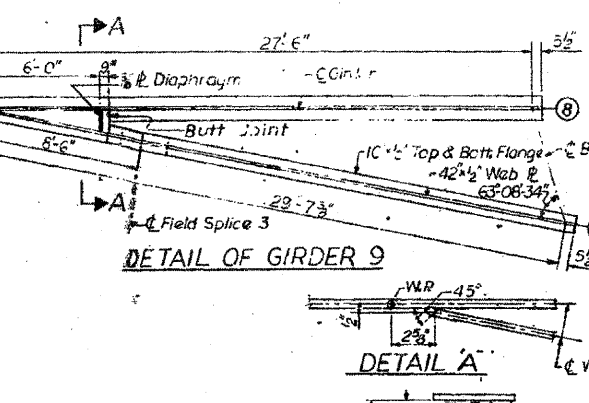
Location	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9
Brig. S. Abut.	417.34	418.15	418.36	418.53	418.62	418.54	418.44	418.32	
Splice 1	418.86	418.96	419.11	419.24	419.26	419.14	418.97	418.80	
Brig. Pier	418.75	418.84	418.98	419.10	419.12	418.99	418.82	418.65	
Splice 2	418.64	418.72	418.85	418.96	418.98	418.84	418.67	418.50	
Brig. N. Abut.	418.32	418.47	418.62	418.73	418.76	418.63	418.47	418.30	418.18
S.I. 3								418.36	418.36

**GIRDER PROPERTIES**

Location	Span 2	Span 3	Pier
<b>STEEL SECTION</b>			
I <sub>s</sub>	15,115	13,070	32,067
S <sub>rs</sub>	336	509	1387
S <sub>bs</sub>	941	724	1387
<b>COMPOSITE SECTION</b>			
I <sub>c</sub>	2,096	39,124	
S <sub>yc</sub>	5,472	5,905	
S <sub>bc</sub>	4,356	1,054	

**SPAN 4 BEAM SCHEDULE**

Beam	L	l	a	a <sub>1</sub>	D	A <sup>2</sup>
1	34'-3 3/4"	33'-5 1/4"		16'-8 3/8"	5'-7 1/2"	103'-36'-00"
2	33'-4 1/2"	32'-6 7/8"	16'-3 1/2"	16'-3 1/2"	5'-7 1/2"	93'-43'-15"
3	33'-6 1/2"	32'-8 1/2"	16'-4 1/2"	16'-4 1/2"	5'-7 1/2"	83'-37'-02"
4	34'-8"	33'-10"	16'-11"	18'-0 3/8"	8'-0"	73'-53'-36"
5	34'-8"	33'-10"	15'-9 3/8"	18'-0 3/8"	8'-0"	73'-53'-36"
6	34'-8"	33'-10"	15'-9 3/8"	18'-0 3/8"	8'-0"	73'-53'-36"
7	34'-8"	33'-10"		18'-0 3/8"	8'-0"	73'-53'-36"
8	34'-8"	33'-10"	15'-9 3/8"	18'-0 3/8"	8'-0"	73'-53'-36"
9	34'-8"	33'-10"	15'-9 3/8"	17'-3 3/8"	5'-6 3/8"	73'-53'-36"
10	36'-0 1/2"	35'-2 3/8"	16'-6"	18'-6 3/8"	5'-6 3/8"	65'-40'-4 1/2"
11	38'-6 3/8"	37'-8 3/8"	17'-4"	20'-1 3/8"	5'-2 3/8"	58'-24'-06"
12	41'-6 1/2"	40'-8 1/2"	18'-6"	21'-9 3/8"	4'-10 1/2"	52'-06'-15"
13	44'-11 1/8"	44'-1 1/8"	19'-10"		4'-6"	46'-43'-27"



DESIGNED BY: H. N.  
DRAWN BY: V. B.  
CHECKED BY: H. N.

STATE OF ILLINOIS  
DIVISION OF HIGHWAYS  
**FRAMING PLAN**  
F. A. ROUTE 12 (9TH STREET)  
OVER F. A. ROUTE 64  
STATION 55+62.20  
F. A. I. RT. 64 ST. CLAIR COUNTY SECTION 82-1HB

H. W. LOCHNER, INC.  
ENGINEERS  
CHICAGO, ILLINOIS

SHEET 9 of 18