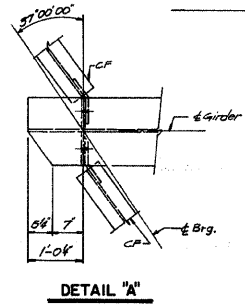
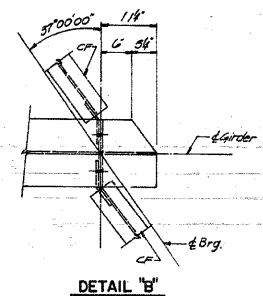
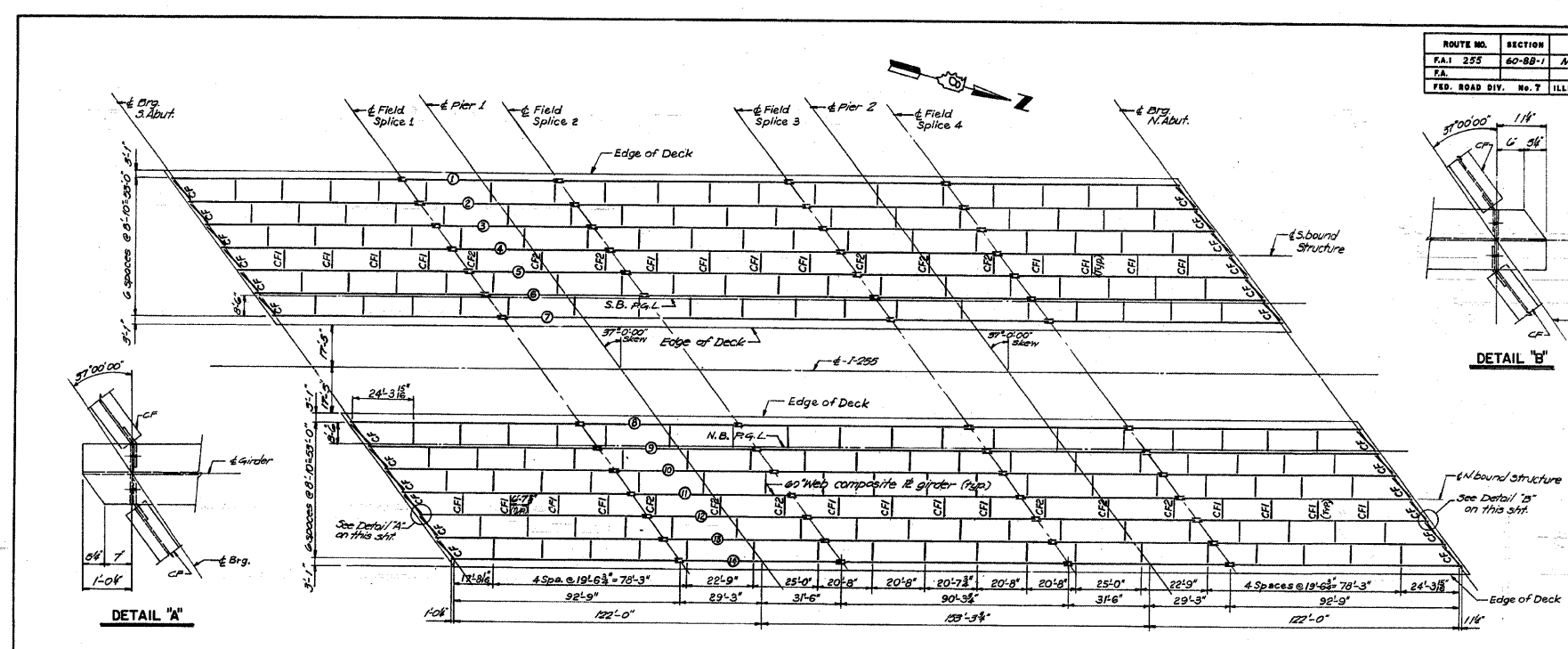


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 255	60-88-1	MADISON	47	32
FED. ROAD DIV. No. 7 ILLINOIS PROJECT				

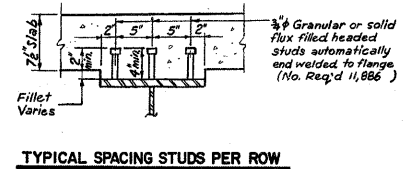
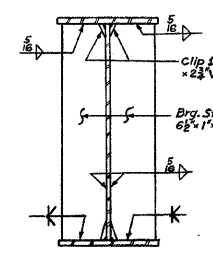


**FRAMING PLAN**

	N. ABUT. & S. ABUT.	PIER #1 & PIER #2
R @ (K)	62.3	217.4
R L (K)	57.4	106.5
IMR (K)	10.8	19.9
R Total (K)	130.5	343.8

	0.4 SP. 1 OR 0.6 SP. 3	PIER 1 OR 2	0.5 SP. 2
I <sub>s</sub> (in <sup>4</sup> )	32,845	60,398	32,845
I <sub>c</sub> (in <sup>4</sup> )	77,655	77,655	77,655
S <sub>s</sub> (in <sup>3</sup> )	1,120	1,895	1,120
S <sub>c</sub> (in <sup>3</sup> )	1,535	1,535	1,535
Q (K/1)	1.04	1.49	1.04
M @ (K)	1,010	2,798	934
S @ (K/1)	0.340	0.340	0.340
M <sub>s</sub> @ (K)	376	420	420
M L (K)	1,301	1,270	1,405
M Imp. (K)	263	243	253
S <sub>2</sub> (M L + I) (K)	2,607	2,333	2,763
M <sub>e</sub> (K)	5,191	6,933	5,352
M <sub>u</sub> (K)	7,886	7,886	7,886
f <sub>s</sub> @ (Comp.) (k.s.i.)	10.22	17.72	10.22
f <sub>s</sub> @ (Comp.) (k.s.i.)	2.80	3.24	3.24
f <sub>s</sub> S <sub>2</sub> (k + I) (k.s.i.)	20.02	16.05	21.52
f <sub>s</sub> (Overload) (k.s.i.)	33.86	33.77	34.56
f <sub>s</sub> (Total) (k.s.i.)	44.0	43.50	44.9
VR (K)	68.7	63.9	63.9

**LEGEND:**  
 I<sub>s</sub> and S<sub>s</sub> are the moment of Inertia and Section Modulus of the steel section used in computing f<sub>s</sub> (Total and Overload).  
 I<sub>c</sub> and S<sub>c</sub> are the moment of Inertia and Section Modulus of the composite section used in computing f<sub>s</sub> (Total and Overload).  
 VR is the maximum  $\frac{1}{2}$  Impact shear range in Span.  
 M<sub>e</sub> (Applied Moment) = 1.3[M @ + M<sub>s</sub> @ +  $\frac{1}{2}$ (M L + I)]  
 M<sub>u</sub> - Full moment capacity.  
 f<sub>s</sub> - (Total) is the sum of the stresses due to 1.3[M @ +  $\frac{1}{2}$ (M L + I)]  
 f<sub>s</sub> - (Overload) is the sum of the stresses due to M @ +  $\frac{1}{2}$ (M L + I).



STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
**STEEL DETAILS I**  
 F.A.I. 255 OVER  
 CAHOKIA CANAL  
 SECTION 60-88-1  
 MADISON COUNTY  
 H. W. LOCHNER, INC.  
 ENGINEERS  
 CHICAGO, ILL.

FOR INFORMATION ONLY

FILE NAME = cr\projects\ed08386\plan\pin86386.dgn	USER NAME = harbaughrd	DESIGNED - R.W.C.	REVISD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS	F.A.I. RTE. 255	SECTION 60-88-11	COUNTY MADISON	TOTAL SHEETS 42	SHEET NO. 41	
	PLOT SCALE = 50.0000' / IN.	DRAWN - S.K.L./B.A.J.	REVISD -			SCALE:	SHEET NO. 39 OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. ILLINOIS	FED. AID PROJECT
	PLOT DATE = 11/28/2007	CHECKED - J.W.H.	REVISD -			CONTRACT NO. 76A25					
		CHECKED - J.M.R.	REVISD -								