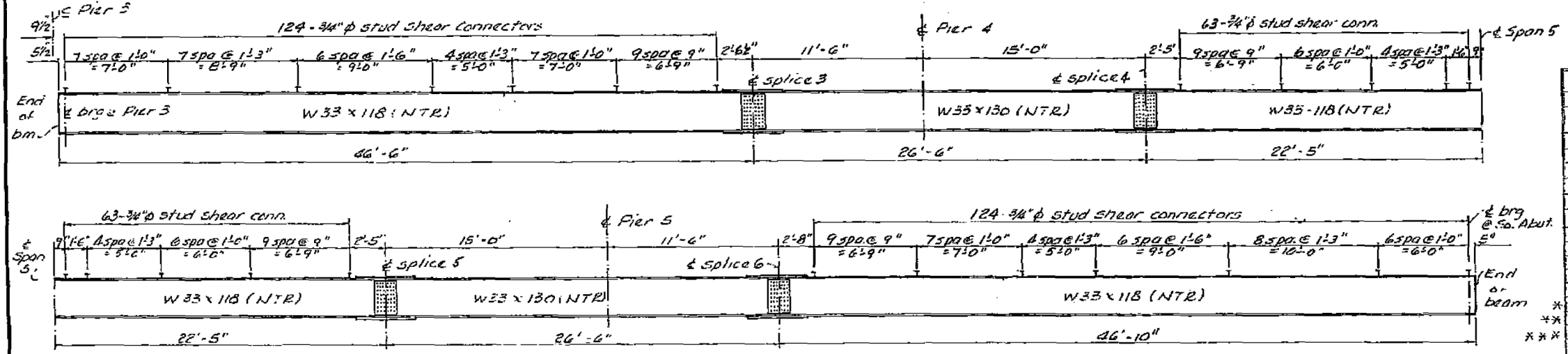
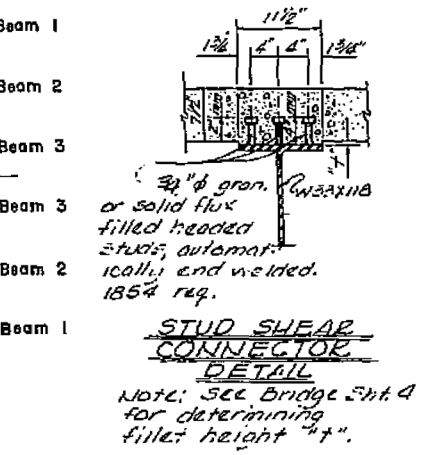
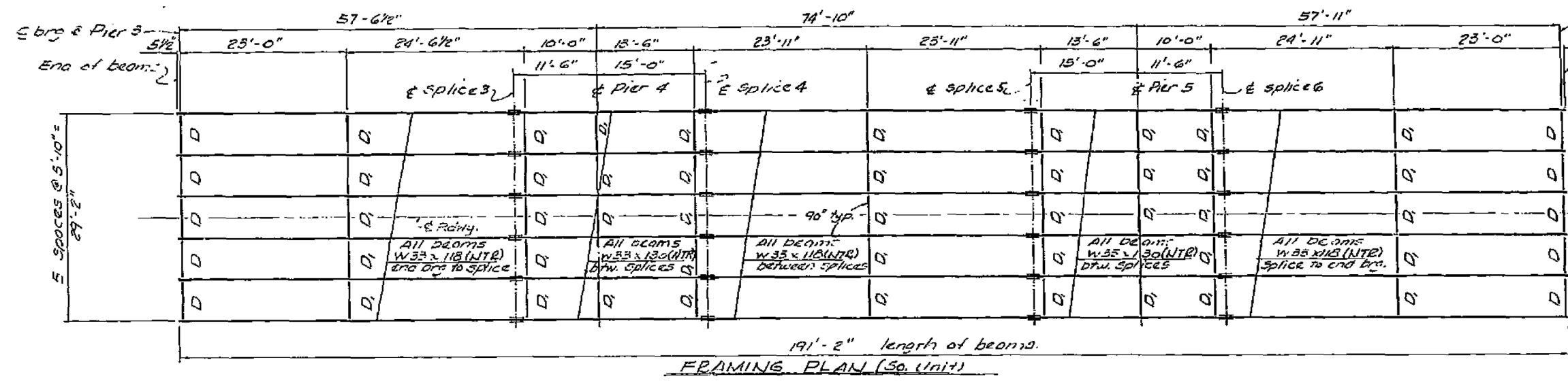


028-0034

Route	Section	County	Tot. Sp.	Sh. No.
St. 57	11B-11DE	Franklin	27	20
Station 255+66.90				
FHWA Reg. 4 Illinois PROJ. SN. 05-05201				
Bridges Sheet 9 of 15 sheets				



DESIGN DATA TABLE - SO. UNIT

Beam Properties

	@ 1/4 pt	@	@ 1/5 pt
	End Support	Support	Cent. Sp.
I of beam only (in <sup>4</sup> )	5900	6710	5900
I Composite beam (in <sup>4</sup> )	15414	-	15414
Sec. Mod. beam only (in <sup>3</sup> )	359	406	359
Sec. Mod. comp. beam (in <sup>3</sup> )	527.7	-	527.7
Elastic Sec. Modulus (in <sup>3</sup> )	-	467	-

Interior Beam Moment Table

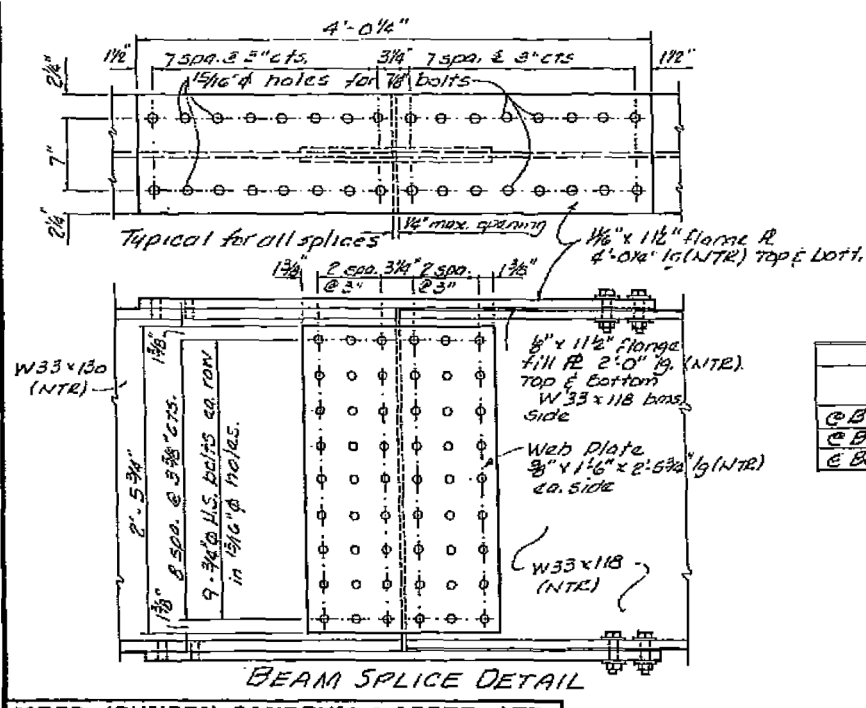
	(K/ft)	0.689	0.689	0.689
Initial ID	(K/ft)	0.185	0.185	0.185
Superimposed ID	(K-ft)	144.0	335.4	151.1
Initial ID Moment	(K-ft)	40.4	71.9	49.0
Superimposed ID Moment	(K-ft)	439.9	294.8	480.8
U + I Moment	(K-ft)	27.8	30.1	29.7
U for max. design M (KSI)	(K)	22.5	19.4	24.5
U for overload (K)	(K)	38.9	-	35.6

Interior Beam Reaction Table

	(K)	14.3 @ Pier 3 & 5	51.9 @ Pier 4 & 5
R for initial ID	(K)	3.9	13.4
R for superimposed ID	(K)	31.1	39.6
R for U	(K)	8.5	10.4
R for Impact	(K)	57.8	115.3

N.T.R. indicates Not a Toughness Requirement.

\* & \*\* : See Sht 5  
 \*\*\* : For determining shear connector spacing



TOP OF BEAM ELEVATIONS (FOR FABRICATION ONLY)

	@ @ brg - Pier 3	@ @ Splice 3	@ @ brg - Pier 4	@ @ Splice 4	@ @ Splice 5	@ @ brg - Pier 5	@ @ Splice 6	@ @ brg - So. Abut.
	Elev. Top of slab	Elev. Top of beam	Elev. Top of slab	Elev. Top of beam	Elev. Top of slab	Elev. Top of beam	Elev. Top of slab	Elev. Top of beam
@ Beam 1	390.66	389.99	390.63	389.87	390.58	389.84	390.52	389.80
@ Beam 2	390.78	390.11	390.75	389.99	390.70	389.95	390.64	389.91
@ Beam 3	390.88	390.21	390.85	390.09	390.80	390.05	390.74	390.01

Note: Top of beam elevations @ splices are top of W33x130 beams.

FRAMING PLAN - SO. UNIT

PROJECT 54-05-055(18)  
 RTE. 561, Rte. 37  
 SECTION 11B-1-DE OVER  
 Middle Fork of Big Muddy R.  
 COUNTY Franklin  
 STATION 255+66.90

FOR INFORMATION ONLY