

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 70	#	FAYETTE	60	29
SHEET NO. 17 29 SHEETS				

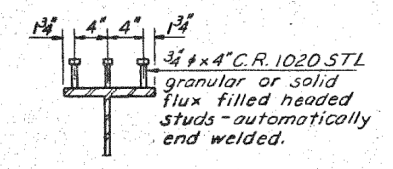
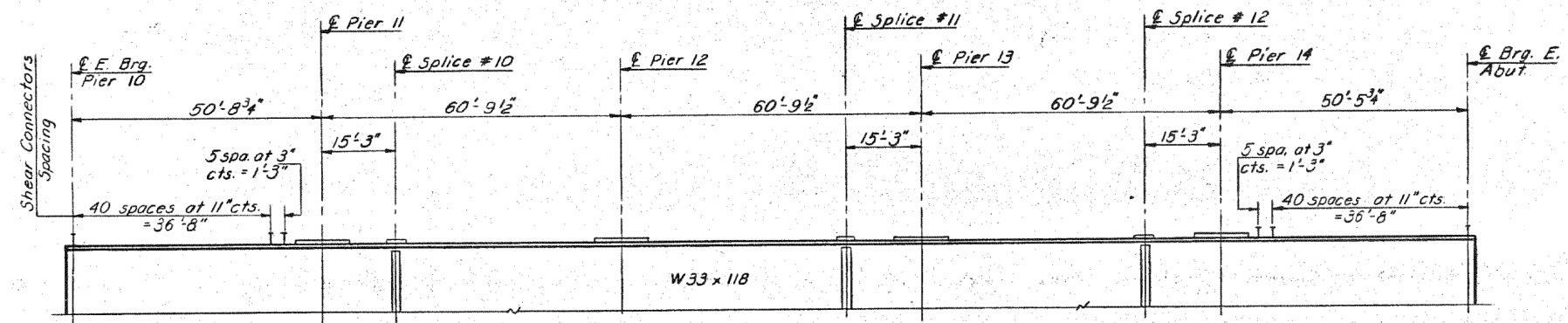
INTERIOR BEAM MOMENT TABLE

	0.4 Sp. 11	Pier 11	0.5 Sp. 12	Pier 12	0.5 Sp. 13
$I_s$ (in <sup>4</sup> )	5900	8446	5900	8446	5900
$I_c$ (in <sup>4</sup> )	15933				
$S_s$ (in <sup>3</sup> )	359	514	359	514	359
$S_c$ (in <sup>3</sup> )	530				
$Q$ (1/1)	0.863	1.317	1.317	1.317	1.317
$M_p$ (1K)	157	431	181	425	183
$F_s Q$ (KSI)	5.3	10.1	6.1	9.9	6.1
$S Q$ (1/1)	0.454				
$M_s p$ (1K)	90				
$M_k$ (1K)	366	273	310	307	318
$M_{imp}$ (1K)	104	76	83	83	85
TOTAL (1K)	560	349	393	390	403
$F_s k + s p$ (KSI)	12.7	8.2	13.2	9.1	13.5
$F_s TOTAL$ (KSI)	18.0	18.3	19.3	19.0	19.6
VR (K)	54.6				

INTERIOR BEAM REACTION TABLE

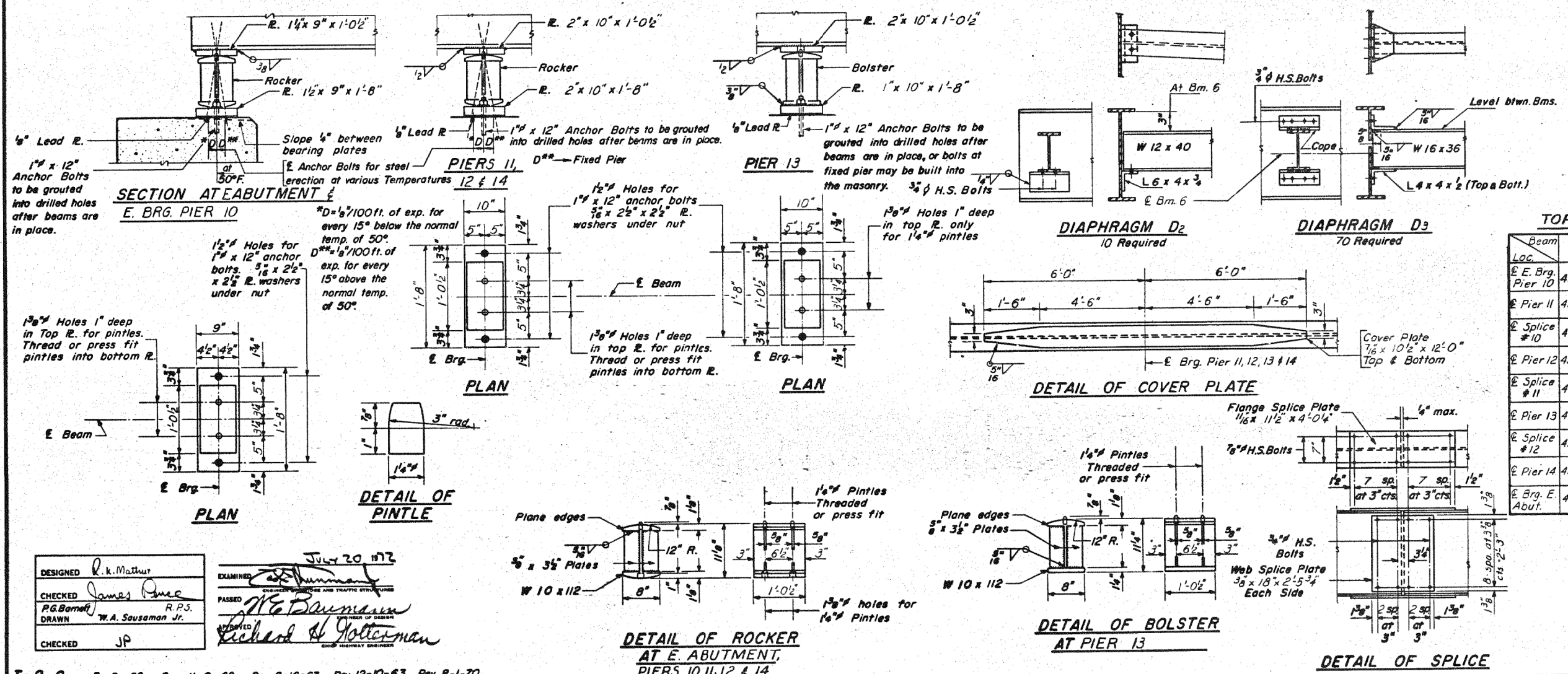
	Pier 10	Pier 11	Pier 12
$R_p$ (K)	25.5	82.4	79.9
$R_k$ (K)	37.4	45.5	46.4
Imp. (K)	10.6	12.6	12.5
$R_{TOTAL}$ (K)	73.5	140.5	138.8

$I_s$  and  $S_s$  are the moment of inertia and section modulus of the steel section.  
 $I_c$  and  $S_c$  are the moment of inertia and section modulus of the composite section used in computing  $f_s$ .  
VR is the maximum  $k +$  Impact shear range in span.



**SHEAR CONNECTORS**  
276 Req'd. Each Beam

**ELEVATION**



TOP OF FLANGE ELEVATIONS

Beam Loc.	1	2	3	4	5	6
E. Brg. Pier 10	497.229	497.364	497.477	497.415	497.299	497.150
Pier 11	497.001	497.135	497.249	497.187	497.071	496.922
Splice #10	496.933	497.067	497.181	497.119	497.003	496.854
Pier 12	496.726	496.860	496.973	496.912	496.796	496.647
Splice #11	496.519	496.653	496.767	496.705	496.590	496.441
Pier 13	496.440	496.574	496.687	496.626	496.511	496.362
Splice #12	496.204	496.338	496.452	496.391	496.275	496.126
Pier 14	496.124	496.259	496.373	496.311	496.196	496.047
E. Brg. Abut.	495.865	496.000	496.114	496.052	495.937	495.788

**STRUCTURAL STEEL**  
SPANS 11, 12, 13, 14 & 15  
F.A.I. RT.70 SEC.26-3B-1(3)E.B.L.  
FAYETTE COUNTY  
STATION 543A+92.91

DESIGNED: R. K. Mathur  
CHECKED: James P. Rouse  
DRAWN: W. A. Sausaman Jr.  
EXAMINED: [Signature]  
PASSED: [Signature]  
APPROVED: [Signature]

I-2-C 7-2-62 Rev. 11-9-62 Rev. 8-16-63 Rev. 12-10-63 Rev. 8-1-70



USER NAME = has	DESIGNED - ELH	REVISED -
ESCA PROJECT NO. 1000.05	DRAWN - HAS	REVISED -
PLOT SCALE = 0.1667' / IN.	CHECKED - RDP	REVISED -
PLOT DATE = 1/29/2014	DATE - 08/13	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 026-0085 EXISTING BRIDGE PLANS  
EB - FOR INFORMATION ONLY

SCALE: SHEET NO. 11 OF 23 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	(26-3B-1, 3B-1(3))BR	FAYETTE	277	232
CONTRACT NO. 74175				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				