

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-70	*	FAYETTE	60	27
SHEET NO. 15				
29 SHEETS				

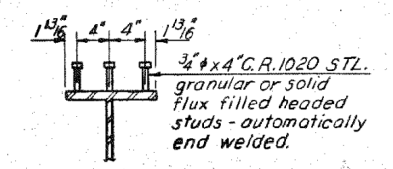
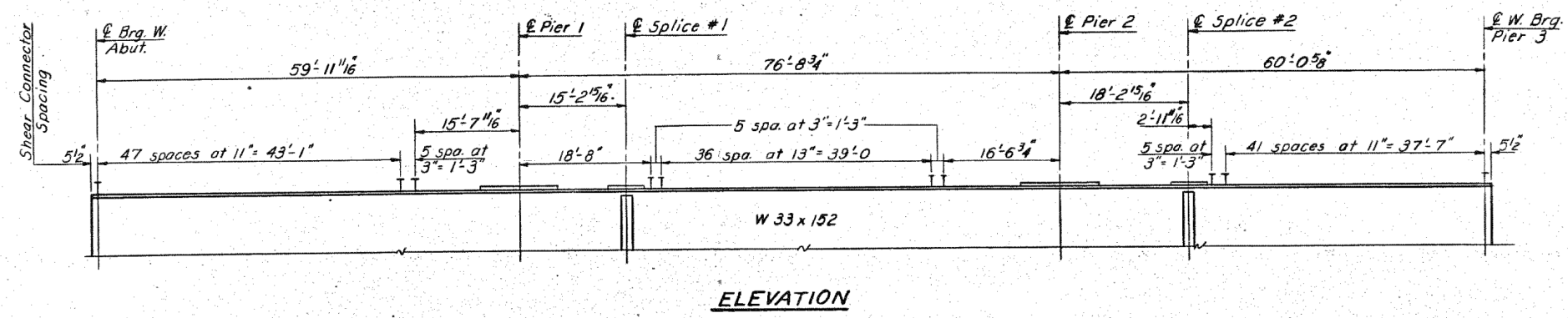
**INTERIOR BEAM MOMENT TABLE**

	0.4 Sp. 1	Pier	0.5 Sp. 2
$I_s$ (in <sup>4</sup> )	8160	11231	8160
$I_c$ (in <sup>4</sup> )	20238		20238
$S_s$ (in <sup>3</sup> )	487	651	487
$S_c$ (in <sup>3</sup> )	689		689
$Q$ (K/ft)	.901	1.355	.901
$M_q$ (K)	217	643	211
$f_{sQ}$ (KSI)	5.5	11.8	5.2
$S_Q$ (K/ft)	.454		.454
$M_{sQ}$ (K)	122		149
$M_q$ (K)	455	308	506
$M_{imp}$ (K)	116	81	127
TOTAL (K)	693	389	782
$f_{sQ+imp}$ (KSI)	12.1	7.2	13.6
$f_{sTOTAL}$ (KSI)	17.6	19.0	18.8
VR (K)	54.0		37.0

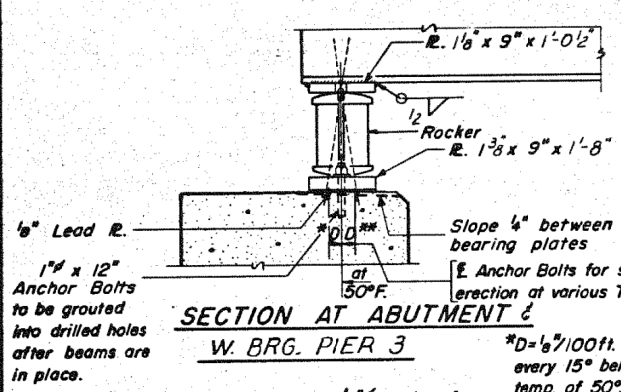
**INTERIOR BEAM REACTION TABLE**

	Abut.	Pier 1
$R_q$ (K)	30.6	103.9
$R_q$ (K)	38.7	50.2
Imp. (K)	10.3	12.9
$R_{TOTAL}$ (K)	79.6	167.0

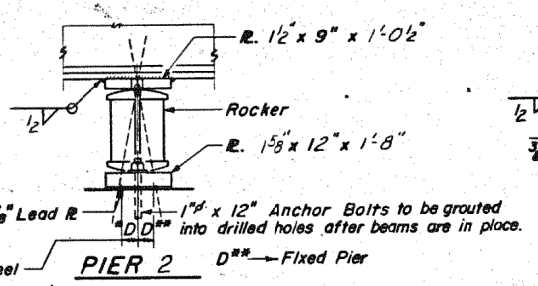
$I_s$  and  $S_s$  are the moment of inertia and section modulus of the steel section.  
 $I_c$  and  $S_c$  are the moment of inertia and section modulus of the composite section used in computing  $f_s$ .  
VR is the maximum  $1/4$  Impact shear range.  
Allowable stresses are lower due to horizontal curve in beams.



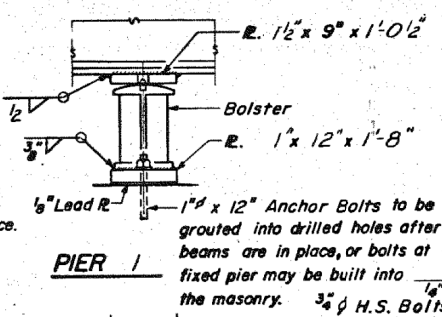
**SHEAR CONNECTORS**  
441 Req'd. Each Beam



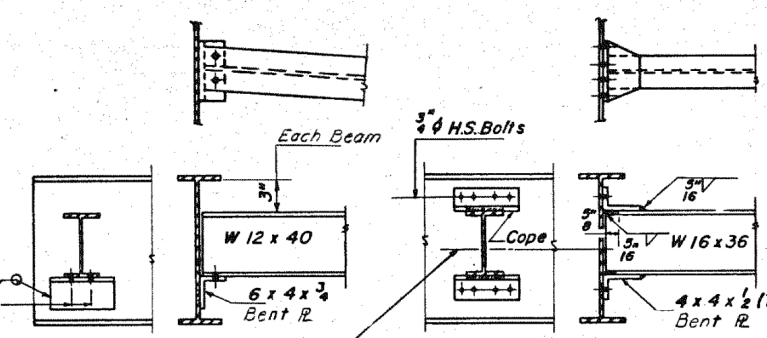
**SECTION AT ABUTMENT**  
W. BRG. PIER 3



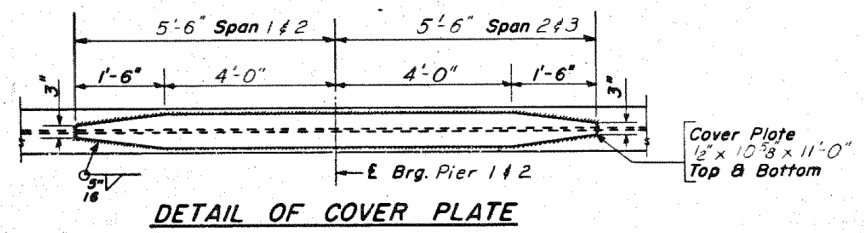
**PIER 2** D\*\* - Fixed Pier



**PIER 1**



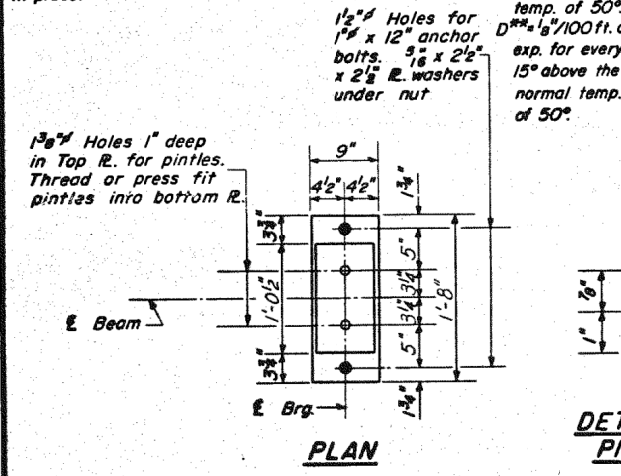
**DIAPHRAGM D** 10 Required  
**DIAPHRAGM D1** 45 Required



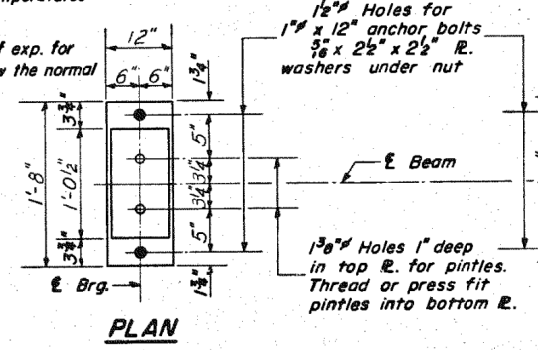
**DETAIL OF COVER PLATE**

**TOP OF FLANGE ELEVATIONS**

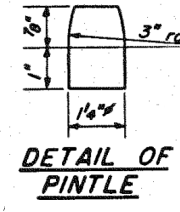
Beam Loc.	1	2	3	4	5	6
W. Brg. W. Abut.	496.543	496.832	497.121	497.410	497.699	497.988
W. Brg. Pier 1	496.732	497.021	497.309	497.598	497.887	498.175
W. Brg. Splice #1	496.780	497.069	497.357	497.646	497.935	498.223
W. Brg. Pier 2	496.970	497.258	497.546	497.835	498.123	498.412
W. Brg. Splice #2	497.026	497.314	497.602	497.891	498.179	498.467
W. Brg. Pier 3	497.195	497.479	497.771	498.059	498.347	498.636



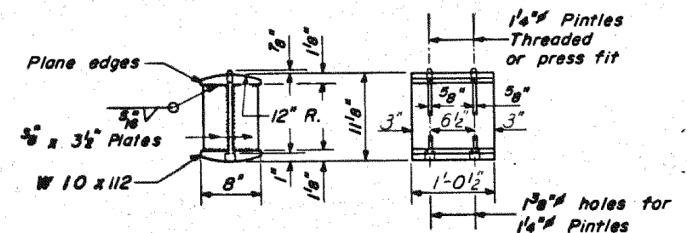
**PLAN**



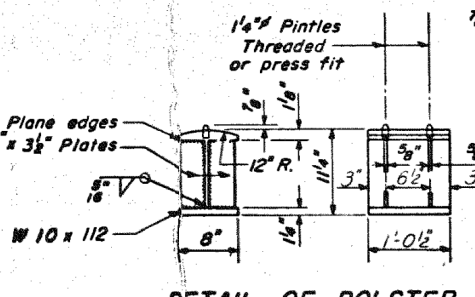
**PLAN**



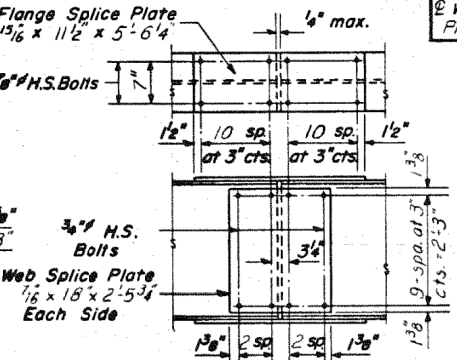
**DETAIL OF PINTLE**



**DETAIL OF ROCKER AT ABUT. + PIER 2 & 3**



**DETAIL OF BOLSTER AT PIER 1**



**DETAIL OF SPLICE**

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

**STRUCTURAL STEEL**  
SPANS 1, 2, & 3  
F.A.I. RT. 70 SEC. 26-3B-1(3) E.B.L.  
FAYETTE COUNTY  
STATION 543A+92.91

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. 9 OF 23 SHEETS STA. TO STA.

F.A.I. RT. 70	SECTION (26-3B-1, 3B-1(3))BR	COUNTY FAYETTE	TOTAL SHEETS 277	SHEET NO. 230
CONTRACT NO. 74175			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	