

NOTES:  
 1. C BRG AT EACH ELEMENT OF SUBSTRUCTURE & SPLICES TO BE PERPENDICULAR TO BRIDGE TANGENT.  
 2. DIAPHRAGMS D TO BE SET IN LINE IN RADIAL FACE 'ON', AS SHOWN.  
 3. NTR INDICATES NOTCH TOUGHNESS REQUIREMENT.

TOP OF BEAM ELEVATIONS\*

BEAM	C BRG EAST ABUT	C BRG PIER #1	C SPLICE #1	C BRG PIER #2	C SPLICE #2	C BRG WEST ABUT
A	432.88	433.06	433.11	433.21	433.23	433.29
B	432.52	432.70	432.75	432.85	432.87	432.92
C	432.15	432.33	432.38	432.48	432.50	432.56
D	431.79	431.97	432.02	432.12	432.14	432.20
E	431.13	431.31	431.36	431.46	431.48	431.54

\*FOR FABRICATION ONLY

BEAM COORDINATES  
(VALUES IN FT SEE DIAGRAM BELOW)

BEAM	COORD	C BRG EAST ABUT	C BRG PIER #1	C SPLICE #1	C BRG PIER #2	C SPLICE #2	C BRG WEST ABUT
A	X	-84.000	-31.000	-17.500	31.000	43.500	84.000
A	Y	13.285	14.335	14.447	14.335	14.174	3.285
B	X	-84.000	-31.000	-17.500	31.000	43.500	84.000
B	Y	6.032	7.084	7.97	7.084	6.923	6.032
C	X	-84.000	-31.000	-17.500	31.000	43.500	84.000
C	Y	7.222	0.166	-0.053	0.166	0.322	1.222
D	X	-84.000	-31.000	-17.500	31.000	43.500	84.000
D	Y	8.475	7.417	7.303	7.417	7.578	8.475
E	X	-84.000	-31.000	-17.500	31.000	43.500	84.000
E	Y	-15.726	-14.667	-14.553	-14.667	-14.829	-15.726

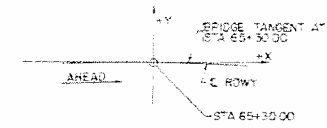
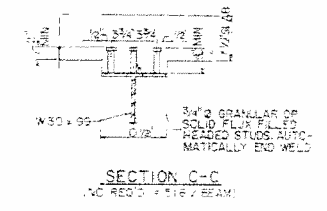
INTERIOR BEAM MOMENT TABLE

	0.4 SPAN 1	PIERS	0.5 SPAN 2
I <sub>xx</sub> (in <sup>4</sup> )	3990	3990	3990
I <sub>yy</sub> (in <sup>4</sup> )	12435	12435	12435
S <sub>x</sub> (in <sup>3</sup> )	269	269	269
S <sub>y</sub> (in <sup>3</sup> )	429	429	429
Q (in <sup>2</sup> )	810	1155	810
I <sub>xx</sub> (k)	2153	4981	1571
I <sub>yy</sub> (k)	960	2222	701
S <sub>x</sub> (k)	345	345	345
S <sub>y</sub> (k)	918	918	918
M <sub>xx</sub> (k)	7838	4770	7911
M <sub>yy</sub> (k)	2195	1310	2076
TOTAL (k)	10951	6080	10156
f <sub>s</sub> COMP (ksi)	3063	2712	2841
f <sub>s</sub> TOTAL (ksi)	4023	4934	3542
VR (k)	332	---	411

INTERIOR BEAM REACTION TABLE

	ABUT.	PIER
R <sub>x</sub> (k)	254	736
R <sub>y</sub> (k)	375	505
IMP (k)	105	411
R <sub>TOTAL</sub> (k)	714	1382

I<sub>xx</sub> & S<sub>x</sub> ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE STEEL SECTION USED IN COMPUTING I<sub>s</sub> TOTAL.  
 I<sub>yy</sub> & S<sub>y</sub> ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE COMPOSITE SECTION USED IN COMPUTING I<sub>s</sub> TOTAL.  
 VR IS THE MAXIMUM V + IMPACT SHEAR RANGE IN SPAN.  
 THE LOAD FACTOR (1.3D + 5%L + IMP) IS USED IN COMPUTING MOMENTS AND STRESSES.



NO.	DESCRIPTION	DATE
1	BRIDGE OFFICE REVIEW	10/24/13
2	BRIDGE OFFICE REVIEW	10/24/13

STRUCTURAL STEEL

Checked by:	BRIDGE OVER FOX RIVER	SCALE
Drawn by:	SEC. 5BR, S.B.I. ROUTE 12	1/8" = 1'-0"
Checked by:	RICHLAND COUNTY	DATE: 10/24/13
Drawn by:	STA. 68+35	PROJECT NO: 080-0022

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 PRESSURE  
 CONW & ASSOCIATES, INC.  
 ENGINEERS & CONSULTANTS