

## EPOXY REINFORCING STEEL-TWO BARRIER RAILS

BRIDGE LENGTH				70'-0			80'-0			90'-0			100'-0			110'-0			120'-0			130'-0			140'-0			150'-0		
SECTION	BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT			
STANDARD SECTION	5g1	VERTICAL	A	136	5'-11	839	156	5'-11	963	176	5'-11	1086	196	5'-11	1210	216	5'-11	1333	236	5'-11	1456	256	5'-11	1580	276	5'-11	1703	296	5'-11	1827
	5g2	VERTICAL	B	136	6'-10	969	156	6'-11	1125	176	7'-1	1300	196	7'-4	1499	216	7'-6	1690	236	7'-9	1908	256	7'-11	2114	276	8'-2	2351	296	8'-5	2598
	5f1	LONGITUDINAL	C	36	35'-1	1317	54	27'-5	1544	54	30'-9	1732	54	34'-1	1920	54	37'-5	2107	72	31'-2	2340	72	33'-8	2528	72	36'-2	2716	72	38'-8	2904
	4 END SECTIONS @ 458 LBS.						1832			1832			1832			1832			1832			1832			1832			1832		
(INCLUDE WITH SUPERSTRUCTURE REINFORCING)				TOTAL (LBS.)	4957	TOTAL (LBS.)	5464	TOTAL (LBS.)	5950	TOTAL (LBS.)	6461	TOTAL (LBS.)	6962	TOTAL (LBS.)	7536	TOTAL (LBS.)	8054	TOTAL (LBS.)	8602	TOTAL (LBS.)	9161									

REINFORCING QUANTITIES SHOWN ARE BASED ON 45° SKEW BID LENGTHS.

### BENT BAR DETAILS

**5g1**

**5g2**

5g2 BARS

BRIDGE	"a"	LENGTH
70'	1'-2	6'-10
80'	1'-2 1/2	6'-11
90'	1'-3 1/4	7'-1
100'	1'-5	7'-4
110'	1'-6	7'-6
120'	1'-7 1/2	7'-9
130'	1'-8 3/4	7'-11
140'	1'-10	8'-2
150'	1'-11 1/2	8'-5

NOTE: ALL DIMENSIONS ARE OUT TO OUT.  
"D" = PIN DIAMETER.

### CONCRETE PLACEMENT SUMMARY

BRIDGE LENGTH		70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0
STANDARD SECTION *	2 x B @ 0.1052 CU. YDS. PER FT.	14.4	16.5	18.6	20.7	22.8	24.9	27.0	29.1	31.2
END SECTION	4 @ 0.65 CU. YDS.	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
TOTAL (CU. YDS.)		17.0	19.1	21.2	23.3	25.4	27.5	29.6	31.7	33.8

\* SEE J30-40-06 FOR DIMENSION "B".  
CONCRETE QUANTITIES SHOWN ARE  
BASED ON 45° SKEW BID LENGTHS.

### CONCRETE BARRIER RAIL QUANTITIES

BRIDGE LENGTH		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0
CONCRETE BARRIER RAILING	0° SKEW	L.F.	162.0	182.0	202.0	222.0	242.0	262.0	282.0	302.0	322.0
CONCRETE BARRIER RAILING	15° SKEW	L.F.	162.2	182.2	202.2	222.2	242.2	262.2	282.2	302.2	322.2
CONCRETE BARRIER RAILING	30° SKEW	L.F.	162.9	182.9	202.9	222.9	242.9	262.9	282.9	302.9	322.9
CONCRETE BARRIER RAILING	45° SKEW	L.F.	164.5	184.5	204.5	224.5	244.5	264.5	284.5	304.5	324.5

REVISED 07-2009; WEIGHT OF END SECTIONS CHANGED AND IS REFLECTED IN TOTAL WEIGHT.  
REVISED 09-2020; UPDATED BRIDGE ENGINEER SIGNATURE.

09-2020 LATEST REVISION DATE	APPROVED BY BRIDGE ENGINEER	STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES <b>CONTINUOUS CONCRETE SLAB BRIDGES</b> NOVEMBER, 2006
<b>BARRIER RAIL DETAILS</b>		<b>J30-41-06</b>