

REVISED 07-2009; OPEN RAIL REINF. QTY'S CHANGED WHICH CHANGED TOTAL REINF. QTY'S.
REVISED 09-2020; UPDATED BRIDGE ENGINEER SIGNATURE. CHANGED PAVING BLOCK LIFTING HOOP BAR MARK. WAS 5X11.

BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 80' BRIDGE

LOCATION	SKEW	SHAPE	0°				15°				30°				45°			
			BAR NO.	LENGTH	WEIGHT		BAR NO.	LENGTH	WEIGHT		BAR NO.	LENGTH	WEIGHT		BAR NO.	LENGTH	WEIGHT	
SLAB LONGITUDINAL BOTTOM			8a1	39	18'-3	1901	39	18'-3	1901	39	18'-3	1901	39	18'-3	1901	39	18'-3	1901
SLAB LONGITUDINAL BOTTOM			8a2	39	27'-0	2812	39	27'-0	2812	39	27'-0	2812	39	27'-0	2812	39	27'-0	2812
SLAB LONGITUDINAL BOTTOM			8a3	39	28'-0	2916	39	28'-0	2916	39	28'-0	2916	39	28'-0	2916	39	28'-0	2916
SLAB LONGITUDINAL BOTTOM			7a4	40	23'-0	1881	40	23'-0	1881	40	23'-0	1881	40	23'-0	1881	40	23'-0	1881
SLAB LONGITUDINAL BOTTOM			7a5	20	24'-6	1002	20	24'-6	1002	20	24'-6	1002	20	24'-6	1002	20	24'-6	1002
SLAB LONGITUDINAL BOTTOM, AT RAIL			7a6	8	28'-9	471	8	28'-9	471	8	28'-9	471	8	28'-9	471	8	28'-9	471
SLAB LONGITUDINAL BOTTOM, AT RAIL			7a7	4	29'-4	240	4	29'-4	240	4	29'-4	240	4	29'-4	240	4	29'-4	240
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a8	8	20'-9	444	8	20'-9	444	8	20'-9	444	8	20'-9	444	8	20'-9	444
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a9	4	25'-6	273	4	25'-6	273	4	25'-6	273	4	25'-6	273	4	25'-6	273
SLAB LONGITUDINAL TOP			6b1	39	19'-6	1143	39	19'-6	1143	39	19'-6	1143	39	19'-6	1143	39	19'-6	1143
SLAB LONGITUDINAL TOP			9b2	39	21'-9	2885	39	21'-9	2885	39	21'-9	2885	39	21'-9	2885	39	21'-9	2885
SLAB LONGITUDINAL TOP			9b3	39	32'-0	4244	39	32'-0	4244	39	32'-0	4244	39	32'-0	4244	39	32'-0	4244
SLAB LONGITUDINAL TOP			6b4	40	7'-6	451	40	7'-6	451	40	7'-6	451	40	7'-6	451	40	7'-6	451
SLAB LONGITUDINAL TOP			8b5	40	21'-3	2270	40	21'-3	2270	40	21'-3	2270	40	21'-3	2270	40	21'-3	2270
SLAB LONGITUDINAL TOP			6b6	20	16'-4	491	20	16'-4	491	20	16'-4	491	20	16'-4	491	20	16'-4	491
SLAB LONGITUDINAL TOP, AT RAIL			6b8	8	25'-6	307	8	25'-6	307	8	25'-6	307	8	25'-6	307	8	25'-6	307
SLAB LONGITUDINAL TOP, AT RAIL			9b9	8	23'-6	640	8	23'-6	640	8	23'-6	640	8	23'-6	640	8	23'-6	640
SLAB LONGITUDINAL TOP, AT RAIL			8b10	8	34'-0	727	8	34'-0	727	8	34'-0	727	8	34'-0	727	8	34'-0	727
SLAB TRANSVERSE, BOTTOM			6c1	77	32'-10	3798	77	34'-0	3933	64	32'-10	3157	50	32'-10	2466			
SLAB TRANSVERSE ENDS, BOTTOM			6c2	-	-	-	-	-	-	30	VARIES	797	56	VARIES	1486			
SLAB TRANSVERSE, TOP			77	32'-10	2637	77	34'-0	2731	64	32'-10	2192	50	32'-10	1713				
SLAB TRANSVERSE ENDS, TOP			5d2	-	-	-	-	-	-	30	VARIES	553	56	VARIES	1032			
SLAB, TRANSVERSE AT ABUTMENT			8e1	18	32'-10	1578	-	-	-	-	-	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT			8e2	-	-	-	18	33'-11	1631	18	37'-6	1803	18	45'-4	2179			
SLAB, HAIRPINS, AT ABUTMENT			6e3	72	5'-0	541	72	5'-1	550	72	5'-5	586	72	6'-1	658			
SLAB, DIAGONALS, AT ABUTMENT			6e4	72	5'-11	640	72	5'-11	640	72	5'-11	640	72	5'-11	640			
PIER CAP HOOPS			5h1	48	7'-1	355	48	7'-1	355	60	7'-1	444	72	7'-1	532			
PIER CAP ENDS			8h2	4	14'-5	154	4	14'-5	154	4	14'-5	154	4	14'-5	154			
PIER CAP, BOTTOM LONGITUDINAL			8h3	8	29'-10	638	8	30'-11	661	8	34'-5	736	8	42'-2	901			
PIER CAP, TOP LONGITUDINAL			8h4	4	32'-10	351	4	34'-0	364	4	37'-11	405	4	46'-6	497			
TOP OF SLAB, TRANSVERSE, AT RAIL			5j1	152	8'-6	1348	152	8'-6	1348	152	8'-6	1348	150	8'-6	1330			
WING, VERTICAL			5m1	40	4'-5	185	40	4'-5	185	40	4'-5	185	40	4'-5	185			
WING, HORIZONTAL BACK FACE			5n1	24	6'-8	167	24	6'-8	167	24	6'-8	167	24	6'-8	167			
WING, HORIZONTAL TRAFFIC FACE			5n3	24	6'-9	169	24	6'-9	169	24	6'-9	169	24	6'-9	169			
** PAVING BLOCK LIFTING HOOPS			5z1	10	2'-10	30	10	2'-10	30	10	2'-10	30	10	2'-10	30			
SUB TOTAL - LBS.						37,689			38,016			38,464			39,237			
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06						5464			5464			5464			5464			
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06						5799			5799			5799			5799			
TOTAL - LBS.						43,153			43,480			43,928			44,701			
WITH MONOLITHIC PIER CAP						43,488			43,815			44,263			45,036			
TOTAL - LBS.						41,655			41,946			42,189			42,617			
SAME AS ABOVE EXCEPT ALL "H" BARS DELETED						41,990			42,281			42,524			42,952			

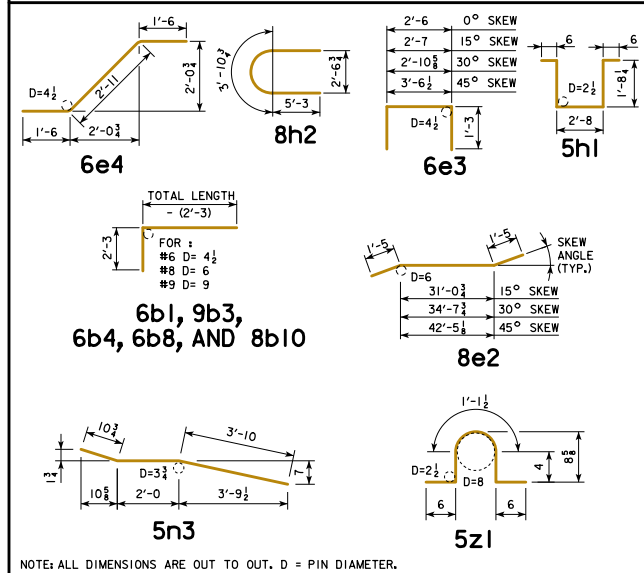
** BARS MAY BE NON-COATED AT CONTRACTOR'S OPTION.

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 80' BRIDGE

ITEM	SKEW	WITH MONOLITHIC PIER CAP				WITH NON-MONOLITHIC PIER CAP			
		0°	15°	30°	45°	0°	15°	30°	45°
WITH STRUCTURAL CONCRETE (BRIDGE) C.Y.		152.0	152.8	155.6	161.6	147.4	148.0	150.4	155.3
BARRIER RAIL REINFORCING STEEL EPOXY COATED LBS.		43,153	43,480	43,928	44,701	41,655	41,946	42,189	42,617
CONCRETE BARRIER OR OPEN RAIL LIN. FT.		182.0	182.2	182.9	184.5	182.0	182.2	182.9	184.5
WITH STRUCTURAL CONCRETE (BRIDGE) C.Y.		151.8	152.6	155.5	161.5	147.2	147.8	150.2	155.1
OPEN RAIL REINFORCING STEEL EPOXY COATED LBS.		43,488	43,815	44,263	45,036	41,990	42,281	42,524	42,952

* INCLUDES 4 WINGS @ 0.68 C.Y. EACH AND 2 TEMPORARY PAVING BLOCKS; EXCLUDES RAIL CONCRETE.

BENT BAR DETAILS



08-2020 LATEST REVISION DATE APPROVED BY BRIDGE ENGINEER	
	STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES CONTINUOUS CONCRETE SLAB BRIDGES NOVEMBER, 2006
	SUPERSTRUCTURE DETAILS 80'-0 BRIDGE

J30-05E-06

EPOXY COATED REINFORCING