

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

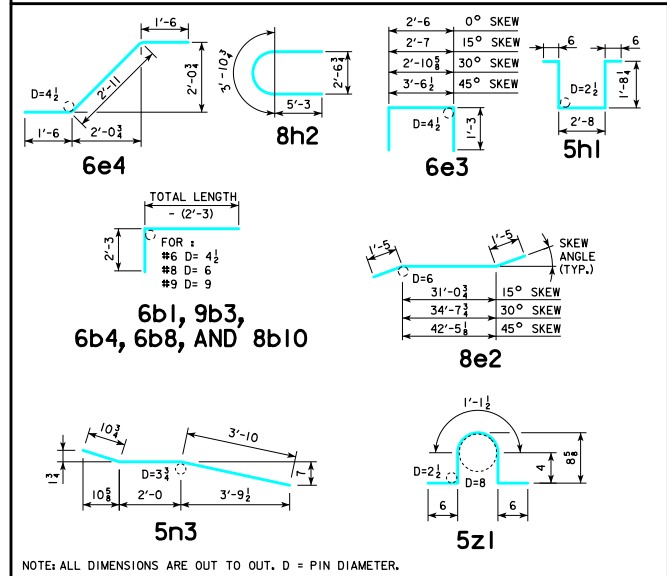
LOCATION	SKEW	SHAPE	0°				15°				30°				45°			
			BAR	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT
SLAB LONGITUDINAL BOTTOM			8a1	39	17'-3	1797	39	17'-3	1797	39	17'-3	1797	39	17'-3	1797	39	17'-3	1797
SLAB LONGITUDINAL BOTTOM			8a2	39	25'-0	2604	39	25'-0	2604	39	25'-0	2604	39	25'-0	2604	39	25'-0	2604
SLAB LONGITUDINAL BOTTOM			8a3	39	27'-0	2812	39	27'-0	2812	39	27'-0	2812	39	27'-0	2812	39	27'-0	2812
SLAB LONGITUDINAL BOTTOM			7a4	40	22'-3	1820	40	22'-3	1820	40	22'-3	1820	40	22'-3	1820	40	22'-3	1820
SLAB LONGITUDINAL BOTTOM			7a5	20	23'-0	941	20	23'-0	941	20	23'-0	941	20	23'-0	941	20	23'-0	941
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	27'-4	224	4	27'-4	224	4	27'-4	224	4	27'-4	224	4	27'-4	224
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a8	8	19'-9	422	8	19'-9	422	8	19'-9	422	8	19'-9	422	8	19'-9	422
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a9	4	23'-6	251	4	23'-6	251	4	23'-6	251	4	23'-6	251	4	23'-6	251
SLAB LONGITUDINAL TOP			6b1	39	19'-3	1128	39	19'-3	1128	39	19'-3	1128	39	19'-3	1128	39	19'-3	1128
SLAB LONGITUDINAL TOP			9b2	39	20'-3	2686	39	20'-3	2686	39	20'-3	2686	39	20'-3	2686	39	20'-3	2686
SLAB LONGITUDINAL TOP			9b3	39	31'-2	4133	39	31'-2	4133	39	31'-2	4133	39	31'-2	4133	39	31'-2	4133
SLAB LONGITUDINAL TOP			6b4	40	7'-3	436	40	7'-3	436	40	7'-3	436	40	7'-3	436	40	7'-3	436
SLAB LONGITUDINAL TOP			8b5	40	20'-3	2163	40	20'-3	2163	40	20'-3	2163	40	20'-3	2163	40	20'-3	2163
SLAB LONGITUDINAL TOP			6b6	20	16'-6	496	20	16'-6	496	20	16'-6	496	20	16'-6	496	20	16'-6	496
SLAB LONGITUDINAL TOP, AT RAIL			6b8	8	25'-9	310	8	25'-9	310	8	25'-9	310	8	25'-9	310	8	25'-9	310
SLAB LONGITUDINAL TOP, AT RAIL			9b9	8	22'-2	603	8	22'-2	603	8	22'-2	603	8	22'-2	603	8	22'-2	603
SLAB LONGITUDINAL TOP, AT RAIL			8b10	8	33'-6	716	8	33'-6	716	8	33'-6	716	8	33'-6	716	8	33'-6	716
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			5d1	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.						36,604			36,931			37,379			38,152			
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.			WITH MONOLITHIC PIER CAP	WITH BARRIER RAIL		42,068			42,395			42,843			43,616			
			WITH OPEN RAIL			42,403			42,730			43,178			43,951			
TOTAL - LBS.			WITH NON-MONOLITHIC PIER CAP	WITH BARRIER RAIL		40,570			40,861			41,104			41,532			
SAME AS ABOVE EXCEPT ALL "H" BARS DELETED			WITH OPEN RAIL			40,905			41,196			41,439			41,867			

### 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 LBS.		42,068	42,395	42,843	43,616	40,570	40,861	41,104	41,532
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	147.9	150.2	155.1
OPEN RAIL REINFORCING STEEL LBS.		42,403	42,730	43,178	43,951	40,905	41,196	41,439	41,867

\* 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

**J30-05B-06**

**SUPERSTRUCTURE DETAILS**  
80'-0 BRIDGE

NON-EPOXY COATED REINFORCING