

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 SK1.

BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 110' 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	24'-3	2526	39	24'-3	2526	39	24'-3	2526	39	24'-3	2526	39	24'-3	2526
SLAB LONGITUDINAL BOTTOM			9a2	39	38'-3	5072	39	38'-3	5072	39	38'-3	5072	39	38'-3	5072	39	38'-3	5072
SLAB LONGITUDINAL BOTTOM			8a3	39	34'-3	3567	39	34'-3	3567	39	34'-3	3567	39	34'-3	3567	39	34'-3	3567
SLAB LONGITUDINAL BOTTOM			9a4	40	31'-9	4318	40	31'-9	4318	40	31'-9	4318	40	31'-9	4318	40	31'-9	4318
SLAB LONGITUDINAL BOTTOM			8a5	20	41'-0	2190	20	41'-0	2190	20	41'-0	2190	20	41'-0	2190	20	41'-0	2190
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a6	8	39'-3	1068	8	39'-3	1068	8	39'-3	1068	8	39'-3	1068	8	39'-3	1068
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a7	4	42'-8	581	4	42'-8	581	4	42'-8	581	4	42'-8	581	4	42'-8	581
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a8	8	23'-9	508	8	23'-9	508	8	23'-9	508	8	23'-9	508	8	23'-9	508
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a9	4	24'-0	257	4	24'-0	257	4	24'-0	257	4	24'-0	257	4	24'-0	257
SLAB LONGITUDINAL TOP			8b1	39	13'-0	1354	39	13'-0	1354	39	13'-0	1354	39	13'-0	1354	39	13'-0	1354
SLAB LONGITUDINAL TOP			10b2	39	28'-4	4755	39	28'-4	4755	39	28'-4	4755	39	28'-4	4755	39	28'-4	4755
SLAB LONGITUDINAL TOP			10b3	39	25'-7	4294	39	25'-7	4294	39	25'-7	4294	39	25'-7	4294	39	25'-7	4294
SLAB LONGITUDINAL TOP			7b4	39	21'-5	1708	39	21'-5	1708	39	21'-5	1708	39	21'-5	1708	39	21'-5	1708
SLAB LONGITUDINAL TOP			10b5	40	26'-6	4562	40	26'-6	4562	40	26'-6	4562	40	26'-6	4562	40	26'-6	4562
SLAB LONGITUDINAL TOP			6b6	20	27'-4	822	20	27'-4	822	20	27'-4	822	20	27'-4	822	20	27'-4	822
SLAB LONGITUDINAL TOP, AT RAIL			6b8	8	26'-9	322	8	26'-9	322	8	26'-9	322	8	26'-9	322	8	26'-9	322
SLAB LONGITUDINAL TOP, AT RAIL			10b9	8	27'-3	939	8	27'-3	939	8	27'-3	939	8	27'-3	939	8	27'-3	939
SLAB LONGITUDINAL TOP, AT RAIL			6b10	4	21'-0	127	4	21'-0	127	4	21'-0	127	4	21'-0	127	4	21'-0	127
SLAB LONGITUDINAL TOP, AT RAIL			6b11	8	30'-3	364	8	30'-3	364	8	30'-3	364	8	30'-3	364	8	30'-3	364
SLAB LONGITUDINAL TOP, AT RAIL			10b12	8	19'-6	672	8	19'-6	672	8	19'-6	672	8	19'-6	672	8	19'-6	672
SLAB TRANSVERSE, BOTTOM			6c1	107	32'-10	5277	107	34'-0	5465	94	32'-10	4636	80	32'-10	3946			
SLAB TRANSVERSE ENDS, BOTTOM			6c2	-	-	-	-	-	-	30	VARIES	797	56	VARIES	1486			
SLAB TRANSVERSE, TOP			5d1	107	32'-10	3665	107	34'-0	3795	94	32'-10	3220	80	32'-10	2740			
SLAB TRANSVERSE ENDS, TOP			5d2	-	-	-	-	-	-	30	VARIES	553	56	VARIES	1032			
SLAB, TRANSVERSE AT ABUTMENT			8e1	18	32'-10	1578	-	-	-	18	37'-6	1803	18	45'-4	2179			
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	5'-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	54	7'-7	428	54	7'-7	428	54	7'-7	428	72	7'-7	570			
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	212	8'-6	1880	212	8'-6	1880	212	8'-6	1880	210	8'-6	1862			
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.						55,709			56,125			56,395			57,222			
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06						6962			6962			6962			6962			
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06						7261			7261			7261			7261			
TOTAL - LBS.			WITH MONOLITHIC PIER CAP			62,671			63,087			63,357			64,184			
			WITH OPEN RAIL			62,970			63,386			63,656			64,483			
TOTAL - LBS.			WITH NON-MONOLITHIC PIER CAP			61,100			61,480			61,634			62,062			
SAME AS ABOVE EXCEPT ALL "H" BARS DELETED			WITH OPEN RAIL			61,399			61,779			61,933			62,361			

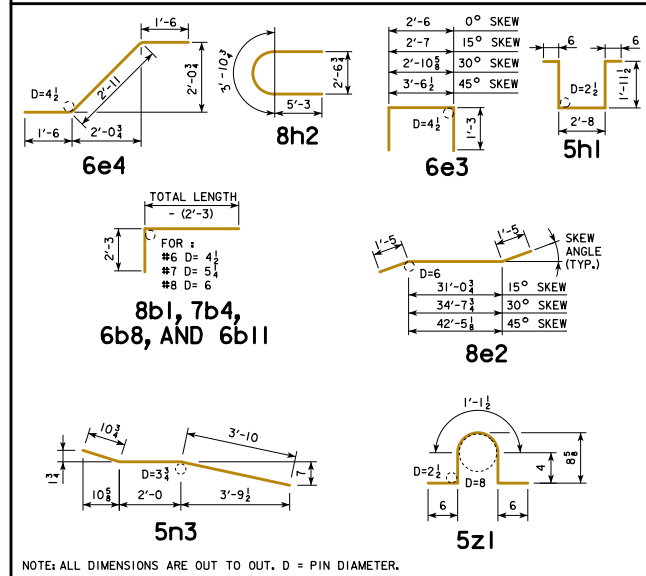
** BARS MAY BE NON-COATED AT CONTRACTOR'S OPTION.

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 110' 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.		234.5	235.2	238.0	243.7	229.9	230.5	232.7	237.3
BARRIER RAIL REINFORCING STEEL EPOXY COATED LBS.		62,671	63,087	63,357	64,184	61,100	61,480	61,634	62,062
CONCRETE BARRIER OR OPEN RAIL LIN. FT.		242.0	242.2	242.9	244.5	242.0	242.2	242.9	244.5
WITH STRUCTURAL CONCRETE (BRIDGE) C.Y.		234.3	235.0	237.8	243.5	229.7	230.3	232.5	237.1
OPEN RAIL REINFORCING STEEL EPOXY COATED LBS.		62,970	63,386	63,656	64,483	61,399	61,779	61,933	62,361

* 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

J30-11E-06

SUPERSTRUCTURE DETAILS
110'-0 BRIDGE

EPOXY COATED REINFORCING

J30-11E-06