

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 SK11.

BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 120' 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			9a1	39	27'-0	3581	39	27'-0	3581	39	27'-0	3581	39	27'-0	3581	39	27'-0	3581
SLAB LONGITUDINAL BOTTOM			9a2	39	41'-3	5470	39	41'-3	5470	39	41'-3	5470	39	41'-3	5470	39	41'-3	5470
SLAB LONGITUDINAL BOTTOM			9a3	39	38'-9	5139	39	38'-9	5139	39	38'-9	5139	39	38'-9	5139	39	38'-9	5139
SLAB LONGITUDINAL BOTTOM			8a4	40	29'-3	3124	40	29'-3	3124	40	29'-3	3124	40	29'-3	3124	40	29'-3	3124
SLAB LONGITUDINAL BOTTOM			9a5	20	36'-6	2482	20	36'-6	2482	20	36'-6	2482	20	36'-6	2482	20	36'-6	2482
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a6	8	36'-1	982	8	36'-1	982	8	36'-1	982	8	36'-1	982	8	36'-1	982
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a7	8	12'-0	327	8	12'-0	327	8	12'-0	327	8	12'-0	327	8	12'-0	327
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a8	4	45'-8	622	4	45'-8	622	4	45'-8	622	4	45'-8	622	4	45'-8	622
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a9	8	25'-6	545	8	25'-6	545	8	25'-6	545	8	25'-6	545	8	25'-6	545
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a10	4	25'-6	273	4	25'-6	273	4	25'-6	273	4	25'-6	273	4	25'-6	273
SLAB LONGITUDINAL TOP			7b1	39	9'-0	718	39	9'-0	718	39	9'-0	718	39	9'-0	718	39	9'-0	718
SLAB LONGITUDINAL TOP			10b2	39	29'-6	4951	39	29'-6	4951	39	29'-6	4951	39	29'-6	4951	39	29'-6	4951
SLAB LONGITUDINAL TOP			10b3	39	26'-9	4490	39	26'-9	4490	39	26'-9	4490	39	26'-9	4490	39	26'-9	4490
SLAB LONGITUDINAL TOP			7b4	39	23'-3	1854	39	23'-3	1854	39	23'-3	1854	39	23'-3	1854	39	23'-3	1854
SLAB LONGITUDINAL TOP			11b5	40	30'-3	6429	40	30'-3	6429	40	30'-3	6429	40	30'-3	6429	40	30'-3	6429
SLAB LONGITUDINAL TOP			6b6	20	28'-4	852	20	28'-4	852	20	28'-4	852	20	28'-4	852	20	28'-4	852
SLAB LONGITUDINAL TOP, AT RAIL			6b8	8	29'-0	349	8	29'-0	349	8	29'-0	349	8	29'-0	349	8	29'-0	349
SLAB LONGITUDINAL TOP, AT RAIL			10b9	8	29'-0	999	8	29'-0	999	8	29'-0	999	8	29'-0	999	8	29'-0	999
SLAB LONGITUDINAL TOP, AT RAIL			6b10	4	23'-0	139	4	23'-0	139	4	23'-0	139	4	23'-0	139	4	23'-0	139
SLAB LONGITUDINAL TOP, AT RAIL			6b11	8	31'-6	379	8	31'-6	379	8	31'-6	379	8	31'-6	379	8	31'-6	379
SLAB LONGITUDINAL TOP, AT RAIL			11b12	8	23'-0	978	8	23'-0	978	8	23'-0	978	8	23'-0	978	8	23'-0	978
SLAB TRANSVERSE, BOTTOM			6c1	117	32'-10	5770	117	34'-0	5975	104	32'-10	5129	90	32'-10	4439			
SLAB TRANSVERSE ENDS, BOTTOM			6c2	-	-	-	-	-	-	30	VARIABLES	797	56	VARIABLES	1486			
SLAB TRANSVERSE, TOP			5d1	117	32'-10	4007	117	34'-0	4150	104	32'-10	3562	90	32'-10	3083			
SLAB TRANSVERSE ENDS, TOP			5d2	-	-	-	-	-	-	30	VARIABLES	553	56	VARIABLES	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	40	7'-10	327	40	7'-10	327	60	7'-10	491	60	7'-10	491			
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	232	8'-6	2057	232	8'-6	2057	232	8'-6	2057	230	8'-6	2040			
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.					61,297			61,743			62,147			62,834				
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06					7536			7536			7536			7536				
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06					8061			8061			8061			8061				
TOTAL - LBS.			WITH MONOLITHIC PIER CAP		68,833			69,279			69,683			70,370				
			WITH OPEN RAIL		69,358			69,804			70,208			70,895				
TOTAL - LBS.			WITH NON-MONOLITHIC PIER CAP		67,363			67,773			67,897			68,327				
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED			WITH OPEN RAIL		67,888			68,298			68,422			68,852				

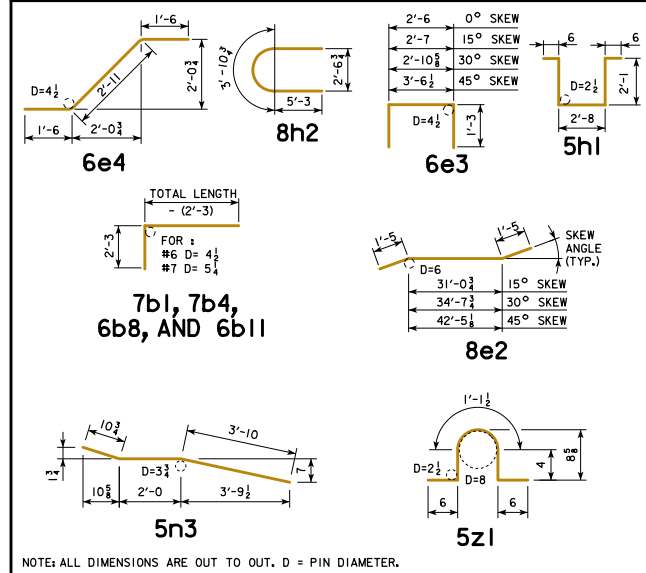
** BARS MAY BE NON-COATED AT CONTRACTOR'S OPTION.

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 120' 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.		271.4	272.1	274.8	280.4	266.8	267.4	269.6	274.1
BARRIER RAIL REINFORCING STEEL EPOXY COATED LBS.		68,833	69,279	69,683	70,370	67,363	67,773	67,897	68,327
CONCRETE BARRIER OR OPEN RAIL LIN. FT.		262.0	262.2	262.9	264.5	262.0	262.2	262.9	264.5
WITH STRUCTURAL CONCRETE (BRIDGE) C.Y.		271.2	271.9	274.6	280.2	266.6	267.1	269.3	273.8
OPEN RAIL REINFORCING STEEL EPOXY COATED LBS.		69,358	69,804	70,208	70,895	67,888	68,298	68,422	68,852

* 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

J30-13E-06

SUPERSTRUCTURE DETAILS
120'-0 BRIDGE

EPOXY COATED REINFORCING