

**BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 130' 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	28'-9	3813	39	28'-9	3813	39	28'-9	3813	39	28'-9	3813	39	28'-9	3813
SLAB LONGITUDINAL BOTTOM			9a2	39	44'-6	5901	39	44'-6	5901	39	44'-6	5901	39	44'-6	5901	39	44'-6	5901
SLAB LONGITUDINAL BOTTOM			9a3	39	41'-3	5470	39	41'-3	5470	39	41'-3	5470	39	41'-3	5470	39	41'-3	5470
SLAB LONGITUDINAL BOTTOM			9a4	40	32'-9	4454	40	32'-9	4454	40	32'-9	4454	40	32'-9	4454	40	32'-9	4454
SLAB LONGITUDINAL BOTTOM			10a5	20	41'-0	3529	20	41'-0	3529	20	41'-0	3529	20	41'-0	3529	20	41'-0	3529
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a6	8	38'-7	1050	8	38'-7	1050	8	38'-7	1050	8	38'-7	1050	8	38'-7	1050
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a7	8	13'-0	354	8	13'-0	354	8	13'-0	354	8	13'-0	354	8	13'-0	354
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a8	4	48'-8	662	4	48'-8	662	4	48'-8	662	4	48'-8	662	4	48'-8	662
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a9	8	31'-3	668	8	31'-3	668	8	31'-3	668	8	31'-3	668	8	31'-3	668
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a10	4	29'-0	395	4	29'-0	395	4	29'-0	395	4	29'-0	395	4	29'-0	395
SLAB LONGITUDINAL TOP			6b1	39	7'-9	454	39	7'-9	454	39	7'-9	454	39	7'-9	454	39	7'-9	454
SLAB LONGITUDINAL TOP			11b2	39	28'-9	5958	39	28'-9	5958	39	28'-9	5958	39	28'-9	5958	39	28'-9	5958
SLAB LONGITUDINAL TOP			11b3	39	30'-6	6320	39	30'-6	6320	39	30'-6	6320	39	30'-6	6320	39	30'-6	6320
SLAB LONGITUDINAL TOP			7b4	39	23'-9	1894	39	23'-9	1894	39	23'-9	1894	39	23'-9	1894	39	23'-9	1894
SLAB LONGITUDINAL TOP			10b5	40	25'-6	4390	40	25'-6	4390	40	25'-6	4390	40	25'-6	4390	40	25'-6	4390
SLAB LONGITUDINAL TOP			6b6	20	34'-4	1032	20	34'-4	1032	20	34'-4	1032	20	34'-4	1032	20	34'-4	1032
SLAB LONGITUDINAL TOP, AT RAIL			6b8	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			11b9	8	32'-9	1393	8	32'-9	1393	8	32'-9	1393	8	32'-9	1393	8	32'-9	1393
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			7b11	8	35'-6	581	8	35'-6	581	8	35'-6	581	8	35'-6	581	8	35'-6	581
SLAB LONGITUDINAL TOP, AT RAIL			11b12	8	23'-9	1010	8	23'-9	1010	8	23'-9	1010	8	23'-9	1010	8	23'-9	1010
SLAB TRANSVERSE, BOTTOM			6c1	127	32'-10	6264	127	34'-0	6486	114	32'-10	5622	100	32'-10	4932			
SLAB TRANSVERSE ENDS, BOTTOM			6c2	-	-	-	-	-	-	30	VARIABLES	797	56	VARIABLES	1486			
SLAB TRANSVERSE, TOP			5d1	127	32'-10	4350	127	34'-0	4504	114	32'-10	3904	100	32'-10	3425			
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	44	8'-1	371	44	8'-1	371	44	8'-1	371	44	8'-1	371	66	8'-1	557
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	252	8'-6	2235	252	8'-6	2235	252	8'-6	2235	250	8'-6	2217			
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			5x1	10	2'-10	30	10	2'-10	30	10	2'-10	30	10	2'-10	30			
SUB TOTAL - LBS.						67,504			67,978			68,188			69,060			
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06						7974			7974			7974			7974			
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06						8654			8654			8654			8654			
TOTAL - LBS.		WITH MONOLITHIC PIER CAP	WITH BARRIER RAIL			75,478			75,952			76,162			77,034			
		WITH OPEN RAIL				76,158			76,632			76,842			77,714			
TOTAL - LBS.		WITH NON-MONOLITHIC PIER CAP	WITH BARRIER RAIL			73,964			74,402			74,496			74,925			
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED		WITH OPEN RAIL				74,644			75,082			75,176			75,605			

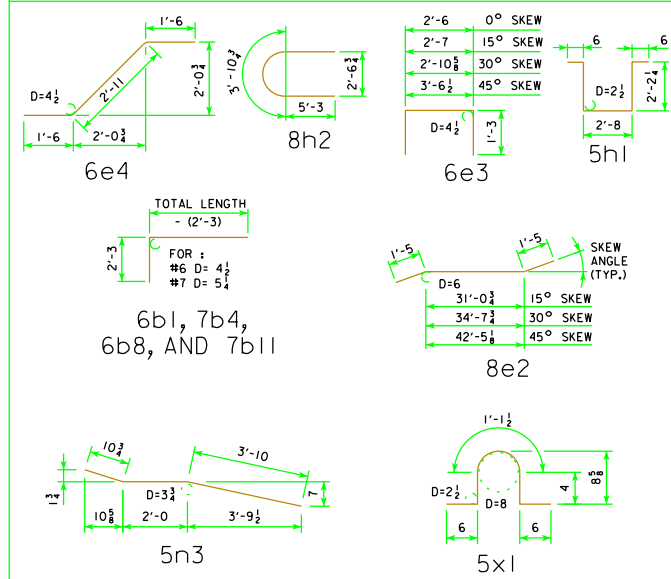
\*\* BARS MAY BE NON-COATED AT CONTRACTOR'S OPTION.

**ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 130' 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.		308.1	308.9	311.5	317.0	303.5	304.1	306.2	310.7
BARRIER RAIL REINFORCING STEEL EPOXY COATED LBS.		75,478	75,952	76,162	77,034	73,964	74,402	74,496	74,925
CONCRETE BARRIER OR OPEN RAIL LIN. FT.		282.0	282.2	282.9	284.5	282.0	282.2	282.9	284.5
WITH *STRUCTURAL CONCRETE (BRIDGE) C.Y.		307.9	308.6	311.3	316.8	303.3	303.9	306.0	310.5
OPEN RAIL REINFORCING STEEL EPOXY COATED LBS.		76,158	76,632	76,842	77,714	74,644	75,082	75,176	75,605

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

**BENT BAR DETAILS**



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

REVISED 12-08 - REVISED SHEET FOR NEW PAVING NOTCH  
REVISED 12-07 - OPEN RAIL REINFORCING QUANTITY CHANGED

12-08 LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 <b>Iowa Department of Transportation</b> Highway Division
		STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES <b>CONTINUOUS CONCRETE</b> <b>SLAB BRIDGES</b> NOVEMBER, 2006
		SUPERSTRUCTURE DETAILS 130'-0 BRIDGE
EPOXY COATED REINFORCING		