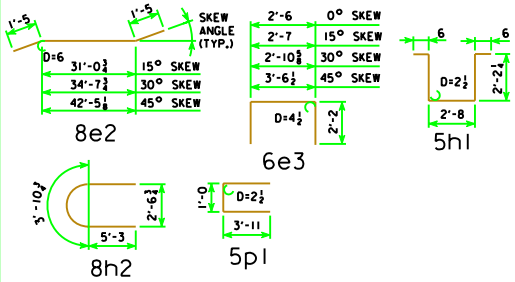
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 130' BRIDGE

LOCATION \ SKEW	SHAPE	BAR	0° NO.	0° LENGTH	0° WEIGHT	15° NO.	15° LENGTH	15° WEIGHT	30° NO.	30° LENGTH	30° WEIGHT	45° NO.	45° LENGTH	45° WEIGHT
SLAB LONGITUDINAL BOTTOM		9a1	39	29'-10	3956	39	29'-10	3956	39	29'-10	3956	39	29'-10	3956
SLAB LONGITUDINAL BOTTOM		9a2	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
SLAB LONGITUDINAL BOTTOM		9a4	40	33'-10	4602	40	33'-10	4602	40	33'-10	4602	40	33'-10	4602
SLAB LONGITUDINAL BOTTOM		10a5	20	41'-0	3529	20	41'-0	3529	20	41'-0	3529	20	41'-0	3529
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a6	8	39'-8	1079	8	39'-8	1079	8	39'-8	1079	8	39'-8	1079
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a7	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
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a9	8	32'-4	691	8	32'-4	691	8	32'-4	691	8	32'-4	691
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a10	4	29'-0	395	4	29'-0	395	4	29'-0	395	4	29'-0	395
SLAB LONGITUDINAL TOP		6b1	39	6'-7	386	39	6'-7	386	39	6'-7	386	39	6'-7	386
SLAB LONGITUDINAL TOP		11b2	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
SLAB LONGITUDINAL TOP		7b4	39	22'-7	1801	39	22'-7	1801	39	22'-7	1801	39	22'-7	1801
SLAB LONGITUDINAL TOP		10b5	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
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	29'-1	350	8	29'-1	350	8	29'-1	350	8	29'-1	350
SLAB LONGITUDINAL TOP, AT RAIL		11b9	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
SLAB LONGITUDINAL TOP, AT RAIL		7b11	8	34'-4	562	8	34'-4	562	8	34'-4	562	8	34'-4	562
SLAB LONGITUDINAL TOP, AT RAIL		11b12	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	116	32'-10	5721	104	32'-10	5129
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	28	VARIES	800	52	VARIES	1426
SLAB TRANSVERSE, TOP		5d1	127	32'-10	4350	127	34'-0	4504	116	32'-10	3973	104	32'-10	3562
SLAB TRANSVERSE ENDS, TOP		5d2	-	-	-	-	-	-	28	VARIES	555	52	VARIES	990
SLAB, TRANSVERSE AT ABUTMENT		8e1	20	32'-10	1754	-	-	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT		8e2	-	-	-	20	33'-11	1812	20	37'-6	2003	20	45'-4	2421
SLAB, HAIRPINS, AT ABUTMENT		6e3	72	6'-10	739	72	6'-11	748	72	7'-3	785	72	7'-11	857
PIER CAP HOOPS		5h1	40	8'-1	338	40	8'-1	338	60	8'-1	506	60	8'-1	506
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		5m1-4	32	SHOWN	117	32	SHOWN	117	32	SHOWN	117	32	SHOWN	117
WING, HORIZONTAL		5n1	24	6'-8	167	24	6'-8	167	24	6'-8	167	24	6'-8	167
PAVING SUPPORT, TRANSVERSE		5p1	30	8'-10	277	32	8'-10	295	34	8'-10	314	42	8'-10	387
PAVING SUPPORT LONGITUDINAL		5p3	6	30'-2	189	6	31'-3	196	6	34'-10	218	6	42'-7	267
SUB TOTAL - LBS.					67,553			68,057			68,669			69,578
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06					7746			7746			7746			7746
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06					7764			7764			7764			7764
TOTAL - LBS. WITH MONOLITHIC PIER CAP		WITH BARRIER RAIL			75,299			75,803			76,415			77,324
		WITH OPEN RAIL			75,317			75,821			76,433			77,342
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP		WITH BARRIER RAIL			73,818			74,286			74,614			75,266
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED		WITH OPEN RAIL			73,836			74,304			74,632			75,284

BENT BAR DETAILS



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

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 130' BRIDGE

ITEM	SKEW	WITH MONOLITHIC PIER CAP 0°	15°	30°	45°	WITH NON-MONOLITHIC PIER CAP 0°	15°	30°	45°
WITH BARRIER RAIL	*STRUCTURAL CONCRETE (BRIDGE) C.Y.	314.8	315.8	319.2	326.6	309.9	310.7	313.6	319.7
	REINFORCING STEEL EPOXY COATED LBS.	75,299	75,803	76,415	77,324	73,818	74,286	74,614	75,266
CONCRETE BARRIER OR OPEN RAIL	LIN. FT.	282.0	282.2	282.9	284.5	282.0	282.2	282.9	284.5
WITH OPEN RAIL	*STRUCTURAL CONCRETE (BRIDGE) C.Y.	314.6	315.6	319.0	326.3	309.6	310.5	313.3	319.5
	REINFORCING STEEL EPOXY COATED LBS.	75,317	75,821	76,433	77,342	73,836	74,304	74,632	75,284

* INCLUDES 4 WINGS @ 0.71 C.Y. EACH; EXCLUDES RAIL CONCRETE.

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES

CONTINUOUS CONCRETE SLAB BRIDGES

NOVEMBER, 2006

SUPERSTRUCTURE DETAILS
130'-0 BRIDGE

EPOXY COATED REINFORCING

J30-15E-06