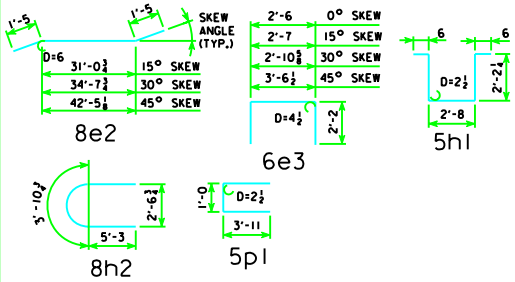
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 130' BRIDGE

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	28'-7	3791	39	28'-7	3791	39	28'-7	3791	39	28'-7	3791
SLAB LONGITUDINAL BOTTOM		9a2	39	42'-0	5570	39	42'-0	5570	39	42'-0	5570	39	42'-0	5570
SLAB LONGITUDINAL BOTTOM		9a3	39	38'-9	5139	39	38'-9	5139	39	38'-9	5139	39	38'-9	5139
SLAB LONGITUDINAL BOTTOM		9a4	40	32'-7	4432	40	32'-7	4432	40	32'-7	4432	40	32'-7	4432
SLAB LONGITUDINAL BOTTOM		10a5	20	38'-0	3271	20	38'-0	3271	20	38'-0	3271	20	38'-0	3271
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a6	8	37'-11	1032	8	37'-11	1032	8	37'-11	1032	8	37'-11	1032
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	45'-2	615	4	45'-2	615	4	45'-2	615	4	45'-2	615
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a9	8	31'-4	670	8	31'-4	670	8	31'-4	670	8	31'-4	670
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a10	4	26'-4	359	4	26'-4	359	4	26'-4	359	4	26'-4	359
SLAB LONGITUDINAL TOP		6b1	39	6'-4	371	39	6'-4	371	39	6'-4	371	39	6'-4	371
SLAB LONGITUDINAL TOP		11b2	39	26'-3	5440	39	26'-3	5440	39	26'-3	5440	39	26'-3	5440
SLAB LONGITUDINAL TOP		11b3	39	28'-0	5802	39	28'-0	5802	39	28'-0	5802	39	28'-0	5802
SLAB LONGITUDINAL TOP		7b4	39	23'-0	1834	39	23'-0	1834	39	23'-0	1834	39	23'-0	1834
SLAB LONGITUDINAL TOP		10b5	40	23'-6	4045	40	23'-6	4045	40	23'-6	4045	40	23'-6	4045
SLAB LONGITUDINAL TOP		6b6	20	35'-6	1067	20	35'-6	1067	20	35'-6	1067	20	35'-6	1067
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	29'-9	358	8	29'-9	358	8	29'-9	358	8	29'-9	358
SLAB LONGITUDINAL TOP, AT RAIL		11b9	8	30'-3	1286	8	30'-3	1286	8	30'-3	1286	8	30'-3	1286
SLAB LONGITUDINAL TOP, AT RAIL		6b10	4	24'-4	147	4	24'-4	147	4	24'-4	147	4	24'-4	147
SLAB LONGITUDINAL TOP, AT RAIL		7b11	8	34'-9	569	8	34'-9	569	8	34'-9	569	8	34'-9	569
SLAB LONGITUDINAL TOP, AT RAIL		11b12	8	21'-3	904	8	21'-3	904	8	21'-3	904	8	21'-3	904
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.					64,629			65,133			65,745			66,654
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			72,375			72,879			73,491			74,400
		WITH OPEN RAIL			72,393			72,897			73,509			74,418
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP		WITH BARRIER RAIL			70,894			71,362			71,690			72,342
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED		WITH OPEN RAIL			70,912			71,380			71,708			72,360

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	LBS.	72,375	72,879	73,491	74,400	70,894	71,362	71,690	72,342
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	LBS.	72,393	72,897	73,509	74,418	70,912	71,380	71,708	72,360

* 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

NON-EPOXY COATED REINFORCING

J30-15B-06