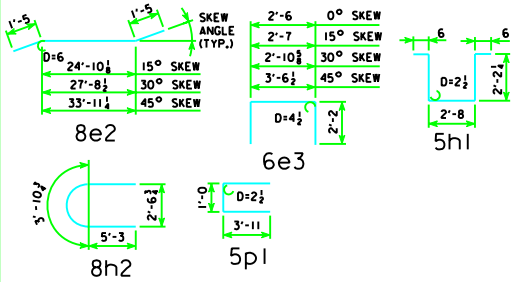
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 130' BRIDGE

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	31	28'-7	3013	31	28'-7	3013	31	28'-7	3013	31	28'-7	3013
SLAB LONGITUDINAL BOTTOM		9a2	31	42'-0	4427	31	42'-0	4427	31	42'-0	4427	31	42'-0	4427
SLAB LONGITUDINAL BOTTOM		9a3	31	38'-9	4085	31	38'-9	4085	31	38'-9	4085	31	38'-9	4085
SLAB LONGITUDINAL BOTTOM		9a4	32	32'-7	3546	32	32'-7	3546	32	32'-7	3546	32	32'-7	3546
SLAB LONGITUDINAL BOTTOM		10a5	16	38'-0	2617	16	38'-0	2617	16	38'-0	2617	16	38'-0	2617
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	31	6'-4	295	31	6'-4	295	31	6'-4	295	31	6'-4	295
SLAB LONGITUDINAL TOP		11b2	31	26'-3	4324	31	26'-3	4324	31	26'-3	4324	31	26'-3	4324
SLAB LONGITUDINAL TOP		11b3	31	28'-0	4612	31	28'-0	4612	31	28'-0	4612	31	28'-0	4612
SLAB LONGITUDINAL TOP		7b4	31	23'-0	1458	31	23'-0	1458	31	23'-0	1458	31	23'-0	1458
SLAB LONGITUDINAL TOP		10b5	32	23'-6	3236	32	23'-6	3236	32	23'-6	3236	32	23'-6	3236
SLAB LONGITUDINAL TOP		6b6	16	35'-6	854	16	35'-6	854	16	35'-6	854	16	35'-6	854
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	26'-10	5119	127	27'-9	5294	120	26'-10	4837	110	26'-10	4434
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	20	VARIES	494	40	VARIES	916
SLAB TRANSVERSE, TOP		5d1	127	26'-10	3555	127	27'-9	3676	120	26'-10	3359	110	26'-10	3079
SLAB TRANSVERSE ENDS, TOP		5d2	-	-	-	-	-	-	20	VARIES	343	40	VARIES	636
SLAB, TRANSVERSE AT ABUTMENT		8e1	20	26'-10	1433	-	-	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT		8e2	-	-	-	20	27'-8	1478	20	30'-7	1634	20	36'-9	1963
SLAB, HAIRPINS, AT ABUTMENT		6e3	60	6'-10	616	60	6'-11	624	60	7'-3	654	60	7'-11	714
PIER CAP HOOPS		5h1	36	8'-1	304	36	8'-1	304	36	8'-1	304	54	8'-1	456
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	23'-10	510	8	24'-8	527	8	27'-6	588	8	33'-8	720
PIER CAP, TOP LONGITUDINAL		8h4	4	26'-10	287	4	27'-9	297	4	30'-11	331	4	37'-11	405
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	24	8'-10	222	26	8'-10	240	28	8'-10	258	34	8'-10	314
PAVING SUPPORT LONGITUDINAL		5p3	6	24'-2	152	6	25'-0	157	6	27'-11	175	6	34'-1	214
SUB TOTAL - LBS.					53,632			54,031			54,411			55,267
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06					7764			7764			7764			7764
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					61,396			61,795			62,175			63,031
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL SAME AS ABOVE EXCEPT ALL "h" BARS DELETED					60,141			60,513			60,798			61,296

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°
OPEN RAIL	*STRUCTURAL CONCRETE (BRIDGE)	C.Y.	258.0	258.8	261.6	267.5	253.8	254.5	256.7	261.7
	REINFORCING STEEL	LBS.	61,396	61,795	62,175	63,031	60,141	60,513	60,798	61,296
OPEN RAIL		LIN. FT.	282.0	282.2	282.9	284.5	282.0	282.2	282.9	284.5

* 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 - 24' ROADWAY, 3 SPAN BRIDGES

CONTINUOUS CONCRETE SLAB BRIDGES

NOVEMBER, 2006

SUPERSTRUCTURE DETAILS
130'-0 BRIDGE

J24-15-06