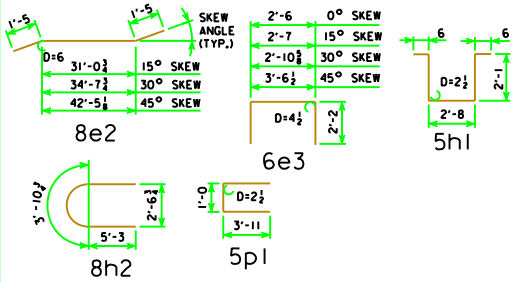
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 120' BRIDGE

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'-1	3724	39	28'-1	3724	39	28'-1	3724	39	28'-1	3724
SLAB LONGITUDINAL BOTTOM		9a2	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
SLAB LONGITUDINAL BOTTOM		8a4	40	30'-4	3240	40	30'-4	3240	40	30'-4	3240	40	30'-4	3240
SLAB LONGITUDINAL BOTTOM		9a5	20	36'-6	2482	20	36'-6	2482	20	36'-6	2482	20	36'-6	2482
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a6	8	37'-2	1011	8	37'-2	1011	8	37'-2	1011	8	37'-2	1011
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a7	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
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a9	8	26'-7	568	8	26'-7	568	8	26'-7	568	8	26'-7	568
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a10	4	25'-6	273	4	25'-6	273	4	25'-6	273	4	25'-6	273
SLAB LONGITUDINAL TOP		7b1	39	7'-10	625	39	7'-10	625	39	7'-10	625	39	7'-10	625
SLAB LONGITUDINAL TOP		10b2	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
SLAB LONGITUDINAL TOP		7b4	39	22'-1	1761	39	22'-1	1761	39	22'-1	1761	39	22'-1	1761
SLAB LONGITUDINAL TOP		11b5	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
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	27'-10	335	8	27'-10	335	8	27'-10	335	8	27'-10	335
SLAB LONGITUDINAL TOP, AT RAIL		10b9	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
SLAB LONGITUDINAL TOP, AT RAIL		6b11	8	30'-4	365	8	30'-4	365	8	30'-4	365	8	30'-4	365
SLAB LONGITUDINAL TOP, AT RAIL		11b12	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	106	32'-10	5228	94	32'-10	4636
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	28	VARIES	800	52	VARIES	1426
SLAB TRANSVERSE, TOP		5d1	117	32'-10	4007	117	34'-0	4150	106	32'-10	3630	94	32'-10	3220
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	54	7'-10	442	54	7'-10	442	54	7'-10	442	72	7'-10	589
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		5m1-4	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.					61,442			61,918			62,391			63,449
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06					7228			7228			7228			7228
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06					7340			7340			7340			7340
TOTAL - LBS. WITH MONOLITHIC PIER CAP		WITH BARRIER RAIL			68,670			69,146			69,619			70,677
		WITH OPEN RAIL			68,782			69,258			69,731			70,789
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP		WITH BARRIER RAIL			67,085			67,525			67,882			68,536
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED		WITH OPEN RAIL			67,197			67,637			67,994			68,648

BENT BAR DETAILS



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

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 120' 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.	278.1	279.1	282.5	290.0	273.1	274.0	276.9	283.1
	REINFORCING STEEL EPOXY COATED LBS.	68,670	69,146	69,619	70,677	67,085	67,525	67,882	68,536
CONCRETE BARRIER OR OPEN RAIL	LIN. FT.	262.0	262.2	262.9	264.5	262.0	262.2	262.9	264.5
WITH OPEN RAIL	*STRUCTURAL CONCRETE (BRIDGE) C.Y.	277.9	278.9	282.3	289.8	272.9	273.8	276.6	282.9
	REINFORCING STEEL EPOXY COATED LBS.	68,782	69,258	69,731	70,789	67,197	67,637	67,994	68,648

* 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
120'-0 BRIDGE

EPOXY COATED REINFORCING

J30-13E-06