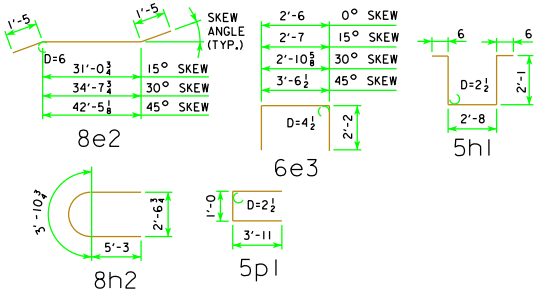
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 120' BRIDGE

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	5138	39	38'-9	5138	39	38'-9	5138	39	38'-9	5138
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	326	8	12'-0	326	8	12'-0	326	8	12'-0	326
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a8	4	45'-8	621	4	45'-8	621	4	45'-8	621	4	45'-8	621
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	272	4	25'-6	272	4	25'-6	272	4	25'-6	272
SLAB LONGITUDINAL TOP		7b1	39	7'-10	624	39	7'-10	624	39	7'-10	624	39	7'-10	624
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	4489	39	26'-9	4489	39	26'-9	4489	39	26'-9	4489
SLAB LONGITUDINAL TOP		7b4	39	22'-1	1760	39	22'-1	1760	39	22'-0	1760	39	22'-1	1760
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	851	20	28'-4	851	20	28'-4	851	20	28'-4	851
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	27'-10	334	8	27'-10	334	8	27'-10	334	8	27'-10	334
SLAB LONGITUDINAL TOP, AT RAIL		10b9	8	29'-0	998	8	29'-0	998	8	29'-0	998	8	29'-0	998
SLAB LONGITUDINAL TOP, AT RAIL		6b10	4	23'-0	138	4	23'-0	138	4	23'-0	138	4	23'-0	138
SLAB LONGITUDINAL TOP, AT RAIL		6b11	8	30'-4	364	8	30'-4	364	8	30'-4	364	8	30'-4	364
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	5227	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	4149	106	32'-10	3630	94	32'-10	3219
SLAB TRANSVERSE ENDS, TOP		5d2	-	-	-	-	-	-	28	VARIES	555	52	VARIES	990
SLAB, TRANSVERSE AT ABUTMENT		8e1	20	32'-10	1753	-	-	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT		8e2	-	-	-	20	33'-11	1811	20	37'-6	2003	20	45'-4	2421
SLAB, HAIRPINS, AT ABUTMENT		6e3	72	6'-10	739	72	6'-11	748	72	7'-3	784	72	7'-11	856
PIER CAP HOOPS		5h1	54	7'-10	441	54	7'-10	441	54	7'-10	441	72	7'-10	588
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	637	8	30'-11	660	8	34'-5	735	8	42'-2	901
PIER CAP, TOP LONGITUDINAL		8h4	4	32'-10	351	4	34'-0	363	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	2039
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	276	32	8'-10	295	34	8'-10	313	42	8'-10	387
PAVING SUPPORT LONGITUDINAL		5p3	6	30'-2	189	6	31'-3	196	6	34'-10	218	6	42'-7	266
SUB TOTAL - LBS.					61,426			61,901			62,374			63,432
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06					7228			7228			7228			7228
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06					7638			7638			7638			7638
TOTAL - LBS. WITH MONOLITHIC PIER CAP		WITH BARRIER RAIL			68,654			69,129			69,602			70,660
		WITH OPEN RAIL			69,064			69,539			70,012			71,070
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP		WITH BARRIER RAIL			67,071			67,511			67,867			68,520
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED		WITH OPEN RAIL			67,481			67,921			68,277			68,930

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.	68,654	69,129	69,602	70,660	67,071	67,511	67,867	68,520
	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.	69,064	69,539	70,012	71,070	67,481	67,921	68,277	68,930

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

REVISED 12-07 - OPEN RAIL REINFORCING QUANTITY CHANGED

12-07
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