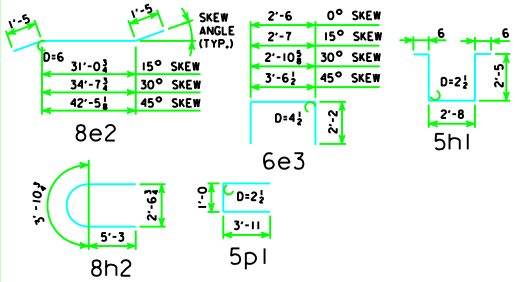
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 150' BRIDGE

LOCATION	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		10a1	39	32'-4	5427	39	32'-4	5427	39	32'-4	5427	39	32'-4	5427
SLAB LONGITUDINAL BOTTOM		10a2	39	48'-4	8112	39	48'-4	8112	39	48'-4	8112	39	48'-4	8112
SLAB LONGITUDINAL BOTTOM		10a3	39	45'-4	7608	39	45'-4	7608	39	45'-4	7608	39	45'-4	7608
SLAB LONGITUDINAL BOTTOM		9a4	40	36'-1	4908	40	36'-1	4908	40	36'-1	4908	40	36'-1	4908
SLAB LONGITUDINAL BOTTOM		9a5	20	42'-6	2890	20	42'-6	2890	20	42'-6	2890	20	42'-6	2890
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a6	8	43'-11	1195	8	43'-11	1195	8	43'-11	1195	8	43'-11	1195
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	53'-2	724	4	53'-2	724	4	53'-2	724	4	53'-2	724
SLAB LONGITUDINAL BOTTOM, AT RAIL		10a9	8	37'-1	1277	8	37'-1	1277	8	37'-1	1277	8	37'-1	1277
SLAB LONGITUDINAL BOTTOM, AT RAIL		10a10	4	32'-0	551	4	32'-0	551	4	32'-0	551	4	32'-0	551
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	30'-3	6269	39	30'-3	6269	39	30'-3	6269	39	30'-3	6269
SLAB LONGITUDINAL TOP		11b3	39	26'-0	5388	39	26'-0	5388	39	26'-0	5388	39	26'-0	5388
SLAB LONGITUDINAL TOP		8b4	39	32'-2	3350	39	32'-2	3350	39	32'-2	3350	39	32'-2	3350
SLAB LONGITUDINAL TOP		11b5	40	27'-6	5845	40	27'-6	5845	40	27'-6	5845	40	27'-6	5845
SLAB LONGITUDINAL TOP		6b6	20	39'-0	1172	20	39'-0	1172	20	39'-0	1172	20	39'-0	1172
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	34'-6	415	8	34'-6	415	8	34'-6	415	8	34'-6	415
SLAB LONGITUDINAL TOP, AT RAIL		11b9	8	33'-0	1403	8	33'-0	1403	8	33'-0	1403	8	33'-0	1403
SLAB LONGITUDINAL TOP, AT RAIL		6b10	4	29'-4	177	4	29'-4	177	4	29'-4	177	4	29'-4	177
SLAB LONGITUDINAL TOP, AT RAIL		7b11	8	40'-0	655	8	40'-0	655	8	40'-0	655	8	40'-0	655
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	147	32'-10	7250	147	34'-0	7507	136	32'-10	6707	124	32'-10	6116
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	28	VARIES	800	52	VARIES	1426
SLAB TRANSVERSE, TOP		5d1	147	32'-10	5035	147	34'-0	5213	136	32'-10	4658	124	32'-10	4247
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	44	8'-6	391	44	8'-6	391	44	8'-6	391	66	8'-6	586
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	292	8'-6	2589	292	8'-6	2589	292	8'-6	2589	290	8'-6	2571
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.					78,720			79,283			79,668			80,773
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06					8853			8853			8853			8853
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06					8675			8675			8675			8675
TOTAL - LBS. WITH MONOLITHIC PIER CAP		WITH BARRIER RAIL			87,573			88,136			88,521			89,626
		WITH OPEN RAIL			87,395			87,958			88,343			89,448
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP		WITH BARRIER RAIL			86,039			86,566			86,835			87,488
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED		WITH OPEN RAIL			85,861			86,388			86,657			87,310

BENT BAR DETAILS



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

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 150' 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.	399.8	400.7	404.0	411.2	394.8	395.6	398.4	404.3
	REINFORCING STEEL	LBS.	87,573	88,136	88,521	89,626	86,039	86,566	86,835	87,488
CONCRETE BARRIER OR OPEN RAIL		LIN. FT.	322.0	322.2	322.9	324.5	322.0	322.2	322.9	324.5
WITH OPEN RAIL	*STRUCTURAL CONCRETE (BRIDGE)	C.Y.	399.5	400.5	403.8	410.9	394.5	395.3	398.1	404.0
	REINFORCING STEEL	LBS.	87,395	87,958	88,343	89,448	85,861	86,388	86,657	87,310

* 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
150'-0 BRIDGE

NON-EPOXY COATED REINFORCING

J30-19B-06