BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 100' BRIDGE

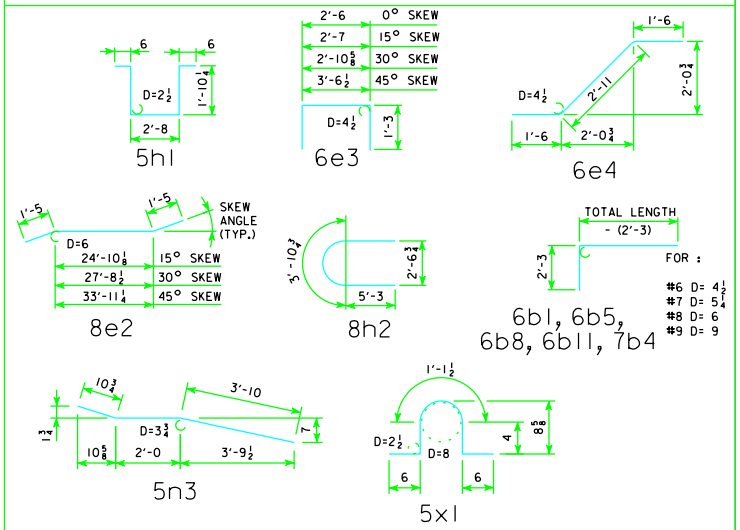
LOCATION \ SKEW	SHAPE	BAR	0° NO.	0° LENGTH	0° WEIGHT	15° NO.	15° LENGTH	15° WEIGHT	30° NO.	30° LENGTH	30° WEIGHT	45° NO.	45° LENGTH	45° WEIGHT
SLAB LONGITUDINAL BOTTOM		8a1	31	21'-3	1759	31	21'-3	1759	31	21'-3	1759	31	21'-3	1759
SLAB LONGITUDINAL BOTTOM		8a2	31	31'-5	2601	31	31'-5	2601	31	31'-5	2601	31	31'-5	2601
SLAB LONGITUDINAL BOTTOM		8a3	31	29'-6	2442	31	29'-6	2442	31	29'-6	2442	31	29'-6	2442
SLAB LONGITUDINAL BOTTOM		9a4	32	27'-6	2992	32	27'-6	2992	32	27'-6	2992	32	27'-6	2992
SLAB LONGITUDINAL BOTTOM		9a5	16	29'-6	1605	16	29'-6	1605	16	29'-6	1605	16	29'-6	1605
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a6	8	35'-9	764	8	35'-9	764	8	35'-9	764	8	35'-9	764
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a7	4	34'-8	371	4	34'-8	371	4	34'-8	371	4	34'-8	371
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a8	8	24'-0	513	8	24'-0	513	8	24'-0	513	8	24'-0	513
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a9	4	20'-6	219	4	20'-6	219	4	20'-6	219	4	20'-6	219
SLAB LONGITUDINAL TOP		6b1	31	6'-9	315	31	6'-9	315	31	6'-9	315	31	6'-9	315
SLAB LONGITUDINAL TOP		10b2	31	24'-9	3302	31	24'-9	3302	31	24'-9	3302	31	24'-9	3302
SLAB LONGITUDINAL TOP		10b3	31	25'-6	3402	31	25'-6	3402	31	25'-6	3402	31	25'-6	3402
SLAB LONGITUDINAL TOP		7b4	31	16'-8	1057	31	16'-8	1057	31	16'-8	1057	31	16'-8	1057
SLAB LONGITUDINAL TOP		6b5	32	13'-6	649	32	13'-6	649	32	13'-6	649	32	13'-6	649
SLAB LONGITUDINAL TOP		9b6	32	21'-3	2312	32	21'-3	2312	32	21'-3	2312	32	21'-3	2312
SLAB LONGITUDINAL TOP		6b7	16	27'-6	661	16	27'-6	661	16	27'-6	661	16	27'-6	661
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	25'-8	309	8	25'-8	309	8	25'-8	309	8	25'-8	309
SLAB LONGITUDINAL TOP, AT RAIL		9b9	8	22'-0	599	8	22'-0	599	8	22'-0	599	8	22'-0	599
SLAB LONGITUDINAL TOP, AT RAIL		6b10	4	21'-4	129	4	21'-4	129	4	21'-4	129	4	21'-4	129
SLAB LONGITUDINAL TOP, AT RAIL		6b11	8	27'-11	336	8	27'-11	336	8	27'-11	336	8	27'-11	336
SLAB LONGITUDINAL TOP, AT RAIL		10b12	8	17'-0	586	8	17'-0	586	8	17'-0	586	8	17'-0	586
SLAB TRANSVERSE, BOTTOM		6c1	97	26'-10	3910	97	27'-9	4044	86	26'-10	3467	76	26'-10	3064
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	24	VARIES	579	44	VARIES	970
SLAB TRANSVERSE, TOP		5d1	97	26'-10	2715	97	27'-9	2808	86	26'-10	2407	76	26'-10	2128
SLAB TRANSVERSE ENDS, TOP		5d2	-	-	-	-	-	-	24	VARIES	402	44	VARIES	674
SLAB, TRANSVERSE AT ABUTMENT		8e1	18	26'-10	1290	-	-	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT		8e2	-	-	-	18	27'-8	1330	18	30'-7	1470	18	36'-9	1767
SLAB, HAIRPINS, AT ABUTMENT		6e3	60	5'-0	451	60	5'-1	459	60	5'-5	489	60	6'-1	549
SLAB, DIAGONALS, AT ABUTMENT		6e4	60	5'-11	534	60	5'-11	534	60	5'-11	534	60	5'-11	534
PIER CAP HOOPS		5h1	42	7'-5	325	42	7'-5	325	42	7'-5	325	56	7'-5	434
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	192	8'-6	1703	192	8'-6	1703	192	8'-6	1703	190	8'-6	1685
WING, VERTICAL		5m1	40	4'-5	185	40	4'-5	185	40	4'-5	185	40	4'-5	185
WING, HORIZONTAL BACK FACE		5n1	24	6'-8	167	24	6'-8	167	24	6'-8	167	24	6'-8	167
WING, HORIZONTAL TRAFFIC FACE		5n3	24	6'-9	169	24	6'-9	169	24	6'-9	169	24	6'-9	169
PAVING BLOCK LIFTING HOOPS		5x1	8	2'-10	24	8	2'-10	24	8	2'-10	24	8	2'-10	24
SUB TOTAL - LBS.					39,347			39,649			39,917			40,552
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06					6794			6794			6794			6794
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					46,141			46,443			46,711			47,346
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL SAME AS ABOVE EXCEPT ALL "h" BARS DELETED					44,865			45,140			45,313			45,633

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 100' 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.	168.6	169.2	171.6	176.3	164.4	164.9	166.7	170.5
	REINFORCING STEEL	LBS.	46,141	46,443	46,711	47,346	44,865	45,140	45,313	45,633
OPEN RAIL		LIN. FT.	222.0	222.2	222.9	224.5	222.0	222.2	222.9	224.5

* INCLUDES 4 WINGS @ 0.68 C.Y. EACH AND 2 TEMPORARY PAVING BLOCKS; EXCLUDES RAIL CONCRETE.

BENT BAR DETAILS



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

REVISED 07-09 -- OPEN RAIL REINF. QTYS. CHANGED WHICH CHANGED TOTAL REINF. QTYS.

07-09
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
100'-0 BRIDGE

J24-09-06