BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 100' BRIDGE

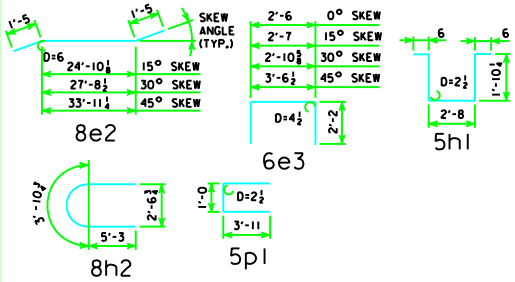
LOCATION \ SKEW	SHAPE	BAR	0° NO.	0° LENGTH	0° WEIGHT	15° NO.	15° LENGTH	15° WEIGHT	30° NO.	30° LENGTH	30° WEIGHT	45° NO.	45° LENGTH	45° WEIGHT
SLAB LONGITUDINAL BOTTOM		8a1	31	22'-4	1849	31	22'-4	1849	31	22'-4	1849	31	22'-4	1849
SLAB LONGITUDINAL BOTTOM		8a2	31	31'-5	2601	31	31'-5	2601	31	31'-5	2601	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	28'-7	3110	32	28'-7	3110	32	28'-7	3110	32	28'-7	3110
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	36'-10	787	8	36'-10	787	8	36'-10	787	8	36'-10	787
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	25'-1	536	8	25'-1	536	8	25'-1	536	8	25'-1	536
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	5'-7	260	31	5'-7	260	31	5'-7	260	31	5'-7	260
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	15'-6	983	31	15'-6	983	31	15'-6	983	31	15'-6	983
SLAB LONGITUDINAL TOP		6b5	32	12'-4	593	32	12'-4	593	32	12'-4	593	32	12'-4	593
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	24'-6	295	8	24'-6	295	8	24'-6	295	8	24'-6	295
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	26'-9	322	8	26'-9	322	8	26'-9	322	8	26'-9	322
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	90	26'-10	3628	80	26'-10	3225
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	20	VARIES	494	40	VARIES	916
SLAB TRANSVERSE, TOP		5d1	97	26'-10	2715	97	27'-9	2808	90	26'-10	2519	80	26'-10	2239
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	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		5m1-4	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.					39,275			39,605			40,054			40,867
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06					6182			6182			6182			6182
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					45,457			45,787			46,236			47,049
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL SAME AS ABOVE EXCEPT ALL "h" BARS DELETED					44,181			44,484			44,838			45,336

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.	174.0	174.9	177.8	184.0	169.8	170.5	172.9	178.2
	REINFORCING STEEL	LBS.	45,457	45,787	46,236	47,049	44,181	44,484	44,838	45,336
OPEN RAIL		LIN. FT.	222.0	222.2	222.9	224.5	222.0	222.2	222.9	224.5

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

BENT BAR DETAILS



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

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