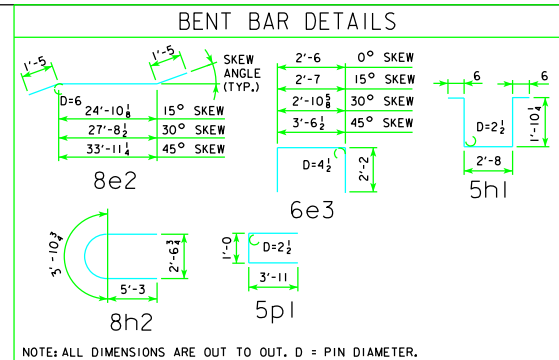


REVISED 12-07 - OPEN RAIL REINFORCING QUANTITY CHANGED

BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 100' BRIDGE													
LOCATION		SKEW	SHAPE	BAR	NO.	0°	15°	30°	45°				
						LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT
SLAB LONGITUDINAL BOTTOM				8a1	31	22'-4	1849	31	22'-4	1849	31	22'-4	1849
SLAB LONGITUDINAL BOTTOM				8a2	31	31'-5	2600	31	31'-5	2600	31	31'-5	2600
SLAB LONGITUDINAL BOTTOM				8a3	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
SLAB LONGITUDINAL BOTTOM				9a5	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
SLAB LONGITUDINAL BOTTOM, AT RAIL				8a7	4	34'-8	370	4	34'-8	370	4	34'-8	370
SLAB LONGITUDINAL BOTTOM, AT RAIL				8a8	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
SLAB LONGITUDINAL TOP				6b1	31	5'-7	260	31	5'-7	260	31	5'-7	260
SLAB LONGITUDINAL TOP				10b2	31	24'-9	3301	31	24'-9	3301	31	24'-9	3301
SLAB LONGITUDINAL TOP				10b3	31	25'-6	3402	31	25'-6	3402	31	25'-6	3402
SLAB LONGITUDINAL TOP				7b4	31	15'-6	982	31	15'-6	982	31	15'-6	982
SLAB LONGITUDINAL TOP				6b5	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
SLAB LONGITUDINAL TOP				6b7	16	27'-6	661	16	27'-6	661	16	27'-6	661
SLAB LONGITUDINAL TOP, AT RAIL				6b8	8	24'-6	294	8	24'-6	294	8	24'-6	294
SLAB LONGITUDINAL TOP, AT RAIL				9b9	8	22'-0	598	8	22'-0	598	8	22'-0	598
SLAB LONGITUDINAL TOP, AT RAIL				6b10	4	21'-4	128	4	21'-4	128	4	21'-4	128
SLAB LONGITUDINAL TOP, AT RAIL				6b11	8	26'-9	321	8	26'-9	321	8	26'-9	321
SLAB LONGITUDINAL TOP, AT RAIL				10b12	8	17'-0	585	8	17'-0	585	8	17'-0	585
SLAB TRANSVERSE, BOTTOM				6c1	97	26'-10	3909	97	27'-9	4043	90	26'-10	3627
SLAB TRANSVERSE ENDS, BOTTOM				6c2	-	-	-	-	-	20 VARIES	494	40 VARIES	916
SLAB TRANSVERSE, TOP				5d1	97	26'-10	2715	97	27'-9	2807	90	26'-10	2519
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	1477	20	30'-7	1633
SLAB, HAIRPINS, AT ABUTMENT				6e3	60	6'-10	616	60	6'-11	623	60	7'-3	653
PIER CAP HOOPS				5h1	42	7'-5	325	42	7'-5	325	42	7'-5	325
PIER CAP ENDS				8h2	4	14'-5	154	4	14'-5	154	4	14'-5	154
PIER CAP, BOTTOM LONGITUDINAL				8h3	8	23'-10	509	8	24'-8	527	8	27'-6	587
PIER CAP, TOP LONGITUDINAL				8h4	4	26'-10	287	4	27'-9	296	4	30'-11	330
TOP OF SLAB, TRANSVERSE, AT RAIL				5j1	192	8'-6	1702	192	8'-6	1702	192	8'-6	1702
WING, VERTICAL				5m1-4	32	SHOWN	117	32	SHOWN	117	32	SHOWN	117
WING, HORIZONTAL				5n1	24	6'-8	167	24	6'-8	167	24	6'-8	167
PAVING SUPPORT, TRANSVERSE				5p1	24	8'-10	221	26	8'-10	240	28	8'-10	258
PAVING SUPPORT LONGITUDINAL				5p3	6	24'-2	151	6	25'-0	156	6	27'-11	175
SUB TOTAL - LBS.							39,261		39,589		40,039		40,850
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06							6371		6371		6371		6371
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL							45,632		45,960		46,410		47,221
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL							44,357		44,658		45,014		45,510
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED													

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 100' BRIDGE													
ITEM		SKEW	WITH MONOLITHIC PIER CAP				WITH NON-MONOLITHIC PIER CAP						
			0°	15°	30°	45°	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.		45,632	45,960	46,410	47,221	44,357	44,658	45,014	45,510			
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.



12-07 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