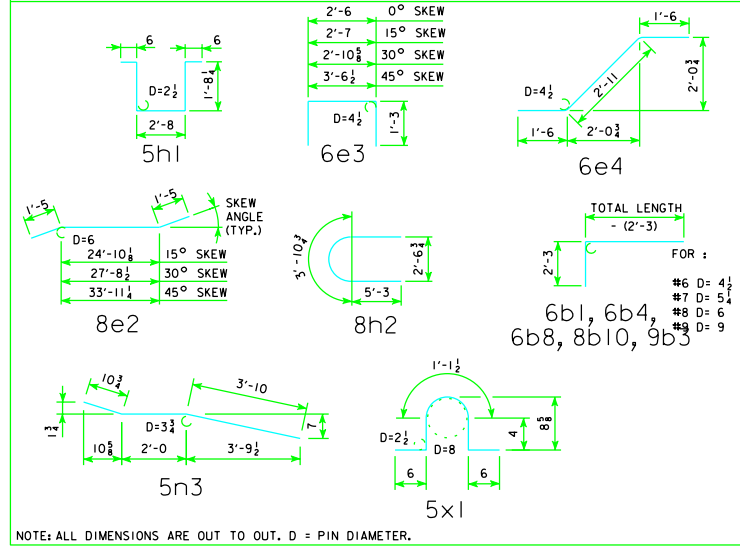


BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 80' BRIDGE

LOCATION	SKEW	SHAPE	BAR NO.	0°		15°		30°		45°					
				LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	
SLAB LONGITUDINAL BOTTOM			8a1	31	17'-3	1428	31	17'-3	1428	31	17'-3	1428	31	17'-3	1428
SLAB LONGITUDINAL BOTTOM			8a2	31	25'-0	2070	31	25'-0	2070	31	25'-0	2070	31	25'-0	2070
SLAB LONGITUDINAL BOTTOM			8a3	31	27'-0	2235	31	27'-0	2235	31	27'-0	2235	31	27'-0	2235
SLAB LONGITUDINAL BOTTOM			7a4	32	22'-3	1456	32	22'-3	1456	32	22'-3	1456	32	22'-3	1456
SLAB LONGITUDINAL BOTTOM			7a5	16	23'-0	753	16	23'-0	753	16	23'-0	753	16	23'-0	753
SLAB LONGITUDINAL BOTTOM, AT RAIL			7a6	8	28'-9	471	8	28'-9	471	8	28'-9	471	8	28'-9	471
SLAB LONGITUDINAL BOTTOM, AT RAIL			7a7	4	27'-4	224	4	27'-4	224	4	27'-4	224	4	27'-4	224
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a8	8	19'-9	422	8	19'-9	422	8	19'-9	422	8	19'-9	422
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a9	4	23'-6	251	4	23'-6	251	4	23'-6	251	4	23'-6	251
SLAB LONGITUDINAL TOP			6b1	31	19'-3	897	31	19'-3	897	31	19'-3	897	31	19'-3	897
SLAB LONGITUDINAL TOP			9b2	31	20'-3	2135	31	20'-3	2135	31	20'-3	2135	31	20'-3	2135
SLAB LONGITUDINAL TOP			9b3	31	31'-2	3285	31	31'-2	3285	31	31'-2	3285	31	31'-2	3285
SLAB LONGITUDINAL TOP			6b4	32	7'-3	349	32	7'-3	349	32	7'-3	349	32	7'-3	349
SLAB LONGITUDINAL TOP			8b5	32	20'-3	1731	32	20'-3	1731	32	20'-3	1731	32	20'-3	1731
SLAB LONGITUDINAL TOP			6b6	16	16'-6	397	16	16'-6	397	16	16'-6	397	16	16'-6	397
SLAB LONGITUDINAL TOP, AT RAIL			6b8	8	25'-9	310	8	25'-9	310	8	25'-9	310	8	25'-9	310
SLAB LONGITUDINAL TOP, AT RAIL			9b9	8	22'-2	603	8	22'-2	603	8	22'-2	603	8	22'-2	603
SLAB LONGITUDINAL TOP, AT RAIL			8b10	8	33'-6	716	8	33'-6	716	8	33'-6	716	8	33'-6	716
SLAB TRANSVERSE, BOTTOM			6c1	77	26'-10	3104	77	27'-9	3210	66	26'-10	2661	56	26'-10	2258
SLAB TRANSVERSE ENDS, BOTTOM			6c2	-	-	-	-	-	24	VARIES	579	44	VARIES	970	-
SLAB TRANSVERSE, TOP			5d1	77	26'-10	2156	77	27'-9	2229	66	26'-10	1848	56	26'-10	1568
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	40	7'-1	296	40	7'-1	296	50	7'-1	370	60	7'-1	444
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	152	8'-6	1348	152	8'-6	1348	152	8'-6	1348	150	8'-6	1330
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.						30,408		30,662		31,052		31,651			
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06						5799		5799		5799		5799			
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL						36,207		36,461		36,851		37,450			
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL						34,960		35,187		35,408		35,727			
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED															

BENT BAR DETAILS



ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 80' 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.	124.7	125.4	127.8	132.7	120.5	121.0	123.0	126.9
OPEN RAIL	REINFORCING STEEL LBS.	36,207	36,461	36,851	37,450	34,960	35,187	35,408	35,727
OPEN RAIL	LIN. FT.	182.0	182.2	182.9	184.5	182.0	182.2	182.9	184.5

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

07-09 LATEST REVISION DATE	APPROVED BY BRIDGE ENGINEER <i>Thomas C. McQuinn</i>	Iowa Department of Transportation Highway Division	STANDARD DESIGN - 24' ROADWAY, 3 SPAN BRIDGES	
			CONTINUOUS CONCRETE SLAB BRIDGES NOVEMBER, 2006	
SUPERSTRUCTURE DETAILS 80'-0 BRIDGE		J24-05-06		

REVISED 07-09 - OPEN RAIL REINF. QTY'S. CHANGED WHICH CHANGED TOTAL REINF. QTY'S.