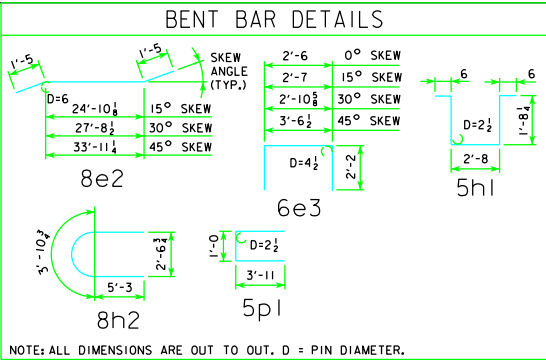


REVISED 12-07 - OPEN RAIL REINFORCING QUANTITY CHANGED

BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 80' BRIDGE													
LOCATION	SKEW	SHAPE	BAR	0°		15°		30°		45°		BAR	NO.
				LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT		
SLAB LONGITUDINAL BOTTOM			8a1	31	18'-4	1517	31	18'-4	1517	31	18'-4	1517	31
SLAB LONGITUDINAL BOTTOM			8a2	31	25'-0	2069	31	25'-0	2069	31	25'-0	2069	31
SLAB LONGITUDINAL BOTTOM			8a3	31	28'-1	2324	31	28'-1	2324	31	28'-1	2324	31
SLAB LONGITUDINAL BOTTOM			7a4	32	23'-4	1526	32	23'-4	1526	32	23'-4	1526	32
SLAB LONGITUDINAL BOTTOM			7a5	16	23'-0	752	16	23'-0	752	16	23'-0	752	16
SLAB LONGITUDINAL BOTTOM, AT RAIL			7a6	8	29'-10	488	8	29'-10	488	8	29'-10	488	8
SLAB LONGITUDINAL BOTTOM, AT RAIL			7a7	4	27'-4	223	4	27'-4	223	4	27'-4	223	4
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a8	8	20'-10	445	8	20'-10	445	8	20'-10	445	8
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a9	4	23'-6	251	4	23'-6	251	4	23'-6	251	4
SLAB LONGITUDINAL TOP			6b1	31	18'-1	842	31	18'-1	842	31	18'-1	842	31
SLAB LONGITUDINAL TOP			9b2	31	20'-3	2134	31	20'-3	2134	31	20'-3	2134	31
SLAB LONGITUDINAL TOP			9b3	31	30'-0	3162	31	30'-0	3162	31	30'-0	3162	31
SLAB LONGITUDINAL TOP			6b4	32	6'-1	292	32	6'-1	292	32	6'-1	292	32
SLAB LONGITUDINAL TOP			8b5	32	20'-3	1730	32	20'-3	1730	32	20'-3	1730	32
SLAB LONGITUDINAL TOP			6b6	16	16'-6	397	16	16'-6	397	16	16'-6	397	16
SLAB LONGITUDINAL TOP, AT RAIL			6b8	8	24'-7	295	8	24'-7	295	8	24'-7	295	8
SLAB LONGITUDINAL TOP, AT RAIL			9b9	8	22'-2	603	8	22'-2	603	8	22'-2	603	8
SLAB LONGITUDINAL TOP, AT RAIL			8b10	8	32'-4	691	8	32'-4	691	8	32'-4	691	8
SLAB TRANSVERSE, BOTTOM			6c1	77	26'-10	3103	77	27'-9	3209	70	26'-10	2821	60
SLAB TRANSVERSE ENDS, BOTTOM			6c2	-	-	-	-	-	20	VARIES	494	40	VARIES
SLAB TRANSVERSE, TOP			5d1	77	26'-10	2155	77	27'-9	2229	70	26'-10	1959	60
SLAB TRANSVERSE ENDS, TOP			5d2	-	-	-	-	-	20	VARIES	343	40	VARIES
SLAB, TRANSVERSE AT ABUTMENT			8e1	20	26'-10	1433	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT			8e2	-	-	-	20	27'-8	1477	20	30'-7	1633	20
SLAB, HAIRPINS, AT ABUTMENT			6e3	60	6'-10	616	60	6'-11	623	60	7'-3	653	60
PIER CAP HOOPS			5h1	40	7'-1	296	40	7'-1	296	50	7'-1	369	60
PIER CAP ENDS			8h2	4	14'-5	154	4	14'-5	154	4	14'-5	154	4
PIER CAP, BOTTOM LONGITUDINAL			8h3	8	23'-10	509	8	24'-8	527	8	27'-6	587	8
PIER CAP, TOP LONGITUDINAL			8h4	4	26'-10	287	4	27'-9	296	4	30'-11	330	4
TOP OF SLAB, TRANSVERSE, AT RAIL			5j1	152	8'-6	1348	152	8'-6	1348	152	8'-6	1348	150
WING VERTICAL			5m1-4	32	SHOWN	117	32	SHOWN	117	32	SHOWN	117	32
WING, HORIZONTAL			5n1	24	6'-8	167	24	6'-8	167	24	6'-8	167	24
PAVING SUPPORT, TRANSVERSE			5p1	24	8'-10	221	26	8'-10	240	28	8'-10	258	34
PAVING SUPPORT LONGITUDINAL			5p3	6	24'-2	151	6	25'-0	156	6	27'-11	175	6
SUB TOTAL - LBS.					30,298		30,580		31,149		31,926		
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06					5376		5376		5376		5376		
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					35,674		35,956		36,525		37,302		
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL					34,428		34,683		35,085		35,581		
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED													

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 80' BRIDGE											
ITEM	SKEW	WITH MONOLITHIC PIER CAP				WITH NON-MONOLITHIC PIER CAP				C.Y.	LBS.
		0°	15°	30°	45°	0°	15°	30°	45°		
OPEN RAIL	*STRUCTURAL CONCRETE (BRIDGE)	130.2	131.0	134.0	140.3	126.0	126.7	129.2	134.5		
	REINFORCING STEEL	35,674	35,956	36,525	37,302	34,428	34,683	35,085	35,581		
OPEN RAIL	LIN. FT.	182.0	182.2	182.9	184.5	182.0	182.2	182.9	184.5		
* INCLUDES 4 WINGS @ 0.71 C.Y. EACH; EXCLUDES RAIL CONCRETE.											



12-07 LATEST REVISION DATE	APPROVED BY BRIDGE ENGINEER <i>Harmon E. 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