

BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 70' BRIDGE

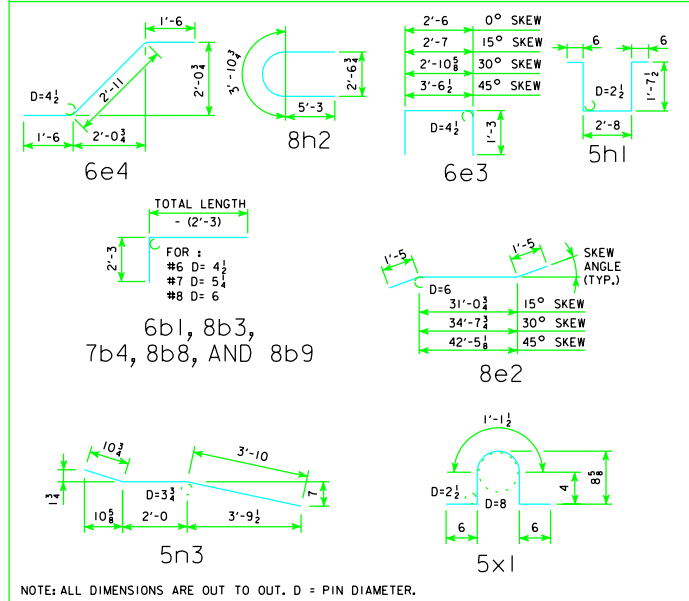
LOCATION	SKEW	SHAPE	0°				15°				30°				45°			
			BAR NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	
SLAB LONGITUDINAL BOTTOM			7a1	39	15'-3	1216	39	15'-3	1216	39	15'-3	1216	39	15'-3	1216	39	15'-3	1216
SLAB LONGITUDINAL BOTTOM			8a2	39	23'-0	2395	39	23'-0	2395	39	23'-0	2395	39	23'-0	2395	39	23'-0	2395
SLAB LONGITUDINAL BOTTOM			7a3	39	23'-6	1874	39	23'-6	1874	39	23'-6	1874	39	23'-6	1874	39	23'-6	1874
SLAB LONGITUDINAL BOTTOM			8a4	40	19'-9	2110	40	19'-9	2110	40	19'-9	2110	40	19'-9	2110	40	19'-9	2110
SLAB LONGITUDINAL BOTTOM			7a5	20	20'-6	839	20	20'-6	839	20	20'-6	839	20	20'-6	839	20	20'-6	839
SLAB LONGITUDINAL BOTTOM, AT RAIL			7a6	8	24'-9	405	8	24'-9	405	8	24'-9	405	8	24'-9	405	8	24'-9	405
SLAB LONGITUDINAL BOTTOM, AT RAIL			7a7	4	25'-4	208	4	25'-4	208	4	25'-4	208	4	25'-4	208	4	25'-4	208
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a8	8	17'-3	369	8	17'-3	369	8	17'-3	369	8	17'-3	369	8	17'-3	369
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a9	4	21'-6	230	4	21'-6	230	4	21'-6	230	4	21'-6	230	4	21'-6	230
SLAB LONGITUDINAL TOP			6b1	39	8'-9	513	39	8'-9	513	39	8'-9	513	39	8'-9	513	39	8'-9	513
SLAB LONGITUDINAL TOP			8b2	39	17'-3	1797	39	17'-3	1797	39	17'-3	1797	39	17'-3	1797	39	17'-3	1797
SLAB LONGITUDINAL TOP			8b3	39	26'-10	2795	39	26'-10	2795	39	26'-10	2795	39	26'-10	2795	39	26'-10	2795
SLAB LONGITUDINAL TOP			7b4	40	22'-2	1813	40	22'-2	1813	40	22'-2	1813	40	22'-2	1813	40	22'-2	1813
SLAB LONGITUDINAL TOP			8b5	40	11'-4	1211	40	11'-4	1211	40	11'-4	1211	40	11'-4	1211	40	11'-4	1211
SLAB LONGITUDINAL TOP			6b6	20	20'-6	616	20	20'-6	616	20	20'-6	616	20	20'-6	616	20	20'-6	616
SLAB LONGITUDINAL TOP, AT RAIL			8b8	8	39'-6	844	8	39'-6	844	8	39'-6	844	8	39'-6	844	8	39'-6	844
SLAB LONGITUDINAL TOP, AT RAIL			8b9	8	29'-6	631	8	29'-6	631	8	29'-6	631	8	29'-6	631	8	29'-6	631
SLAB TRANSVERSE, BOTTOM			6c1	67	32'-10	3305	67	34'-0	3422	54	32'-10	2664	40	32'-10	1973			
SLAB TRANSVERSE ENDS, BOTTOM			6c2	-	-	-	-	-	-	30	VARIABLES	797	56	VARIABLES	1486			
SLAB TRANSVERSE, TOP			5d1	67	32'-10	2295	67	34'-0	2376	54	32'-10	1850	40	32'-10	1370			
SLAB TRANSVERSE ENDS, TOP			5d2	-	-	-	-	-	-	30	VARIABLES	553	56	VARIABLES	1032			
SLAB, TRANSVERSE AT ABUTMENT			8e1	18	32'-10	1578	-	-	-	-	-	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT			8e2	-	-	-	18	33'-11	1631	18	37'-6	1803	18	45'-4	2179			
SLAB, HAIRPINS, AT ABUTMENT			6e3	72	5'-0	541	72	5'-1	550	72	5'-5	586	72	6'-1	658			
SLAB, DIAGONALS, AT ABUTMENT			6e4	72	5'-11	640	72	5'-11	640	72	5'-11	640	72	5'-11	640			
PIER CAP HOOPS			5h1	48	6'-11	347	48	6'-11	347	60	6'-11	433	72	6'-11	520			
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	29'-10	638	8	30'-11	661	8	34'-5	736	8	42'-2	901			
PIER CAP, TOP LONGITUDINAL			8h4	4	32'-10	351	4	34'-0	364	4	37'-11	405	4	46'-6	497			
TOP OF SLAB, TRANSVERSE, AT RAIL			5j1	132	8'-6	1171	132	8'-6	1171	132	8'-6	1171	130	8'-6	1153			
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	10	2'-10	30	10	2'-10	30	10	2'-10	30	10	2'-10	30			
SUB TOTAL - LBS.						31,437			31,733			32,209			32,980			
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06						4957			4957			4957			4957			
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06						5100			5100			5100			5100			
TOTAL - LBS.						36,394			36,690			37,166			37,937			
WITH MONOLITHIC PIER CAP						36,537			36,833			37,309			38,080			
TOTAL - LBS.						34,904			35,164			35,438			35,865			
WITH NON-MONOLITHIC PIER CAP						35,047			35,307			35,581			36,008			
SAME AS ABOVE EXCEPT ALL "H" BARS DELETED																		

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 70' BRIDGE

ITEM	SKEW	WITH MONOLITHIC PIER CAP				WITH NON-MONOLITHIC PIER CAP			
		0°	15°	30°	45°	0°	15°	30°	45°
WITH STRUCTURAL CONCRETE (BRIDGE)	C.Y.	131.2	132.0	134.9	141.0	126.6	127.3	129.6	134.6
BARRIER RAIL REINFORCING STEEL	LBS.	36,394	36,690	37,166	37,937	34,904	35,164	35,438	35,865
CONCRETE BARRIER OR OPEN RAIL	LIN. FT.	162.0	162.2	162.9	164.5	162.0	162.2	162.9	164.5
WITH STRUCTURAL CONCRETE (BRIDGE)	C.Y.	131.1	131.9	134.8	140.8	126.5	127.1	129.5	134.5
OPEN RAIL REINFORCING STEEL	LBS.	36,537	36,833	37,309	38,080	35,047	35,307	35,581	36,008

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

BENT BAR DETAILS



07-09 LATEST REVISION DATE	M. C. McQuinn APPROVED BY BRIDGE ENGINEER	<p>Iowa Department of Transportation Highway Division</p>
		STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES CONTINUOUS CONCRETE SLAB BRIDGES NOVEMBER, 2006
		SUPERSTRUCTURE DETAILS 70'-0 BRIDGE
NON-EPOXY COATED REINFORCING		

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