



CAP

REINFORCING STEEL	ABUT. BEARINGS		138'-10		151'-4		163'-10		176'-4		188'-10		201'-4		213'-10		226'-4		243'-0						
	BAR	LENGTH	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT		
Q1	57'-8		8	9	1569	8	9	1569	8	9	1569	8	10	1985	8	10	1985	8	11	2451	8	11	2451		
Q2	57'-8		8	8	1232	8	9	1569	8	9	1569	8	9	1569	8	10	1985	8	10	1985	8	10	1985		
6o3	57'-8		6	6	520	6	6	520	6	6	520	6	6	520	6	6	520	6	6	520	6	6	520		
6o4	VARIES		8	6	538	8	6	538	8	6	538	8	6	538	8	6	538	8	6	538	8	6	538		
8b1	30'-3		8	8	646	8	8	646	8	8	646	8	8	646	8	8	646	8	8	646	8	8	646		
5c1	18'-2		30	5	568	30	5	568	30	5	568	30	5	568	30	5	568	30	5	568	30	5	568		
5c2	VARIES		20	5	361	20	5	361	20	5	361	20	5	361	20	5	361	20	5	361	20	5	361		
5c3	VARIES		48	5	688	48	5	688	48	5	688	48	5	688	48	5	688	48	5	688	48	5	688		
5c4	7'-2		24	5	179	24	5	179	24	5	179	24	5	179	24	5	179	24	5	179	24	5	179		
TOTAL (LB.)					6301			6638			6638			7054			7054			7615			7615		
STRUCTURAL CONCRETE (CY)					44.9			44.9			44.9			44.9			44.9			44.9			44.9		

COLUMN

H IN FEET	COLUMN HEIGHT	STRUCTURAL CONCRETE (CY)	REINFORCING STEEL												TOTAL WEIGHT (LB.)
			d1 BAR				4e1 BAR				4e2 BAR				
			NO.	SIZE	LENGTH	WEIGHT	NO.	SIZE	LENGTH	WEIGHT	NO.	SIZE	LENGTH	WEIGHT	
16	5'-6	14.9	58	10	9'-0	2246	12	4	13'-4	107	30	4	17'-6	351	2704
17	6'-6	17.6	58	10	10'-0	2496	14	4	13'-4	125	35	4	17'-6	409	3030
18	7'-6	20.3	58	10	11'-0	2745	16	4	13'-4	143	40	4	17'-6	468	3356
19	8'-6	23.0	58	10	12'-0	2995	18	4	13'-4	160	45	4	17'-6	526	3681
20	9'-6	25.7	58	10	13'-0	3244	20	4	13'-4	178	50	4	17'-6	585	4007
21	10'-6	28.4	58	10	14'-0	3494	22	4	13'-4	196	55	4	17'-6	643	4333
22	11'-6	31.1	58	10	15'-0	3744	24	4	13'-4	214	60	4	17'-6	701	4659
23	12'-6	33.8	58	10	16'-0	3993	26	4	13'-4	232	65	4	17'-6	760	4985
24	13'-6	36.5	58	10	17'-0	4243	28	4	13'-4	249	70	4	17'-6	818	5310
25	14'-0	37.9	58	10	17'-6	4368	30	4	13'-4	267	75	4	17'-6	877	5512
26	15'-0	40.6	58	10	18'-6	4617	32	4	13'-4	285	80	4	17'-6	935	5837
27	16'-0	43.3	58	10	19'-6	4867	34	4	13'-4	303	85	4	17'-6	994	6164
28	17'-0	46.0	58	10	20'-6	5116	36	4	13'-4	321	90	4	17'-6	1052	6489
29	18'-0	48.7	58	10	21'-6	5366	38	4	13'-4	338	95	4	17'-6	1111	6815
30	19'-0	51.4	58	10	22'-6	5615	40	4	13'-4	356	100	4	17'-6	1169	7140
31	20'-0	54.1	58	10	23'-6	5865	42	4	13'-4	374	105	4	17'-6	1227	7466
32	21'-0	56.8	58	10	24'-6	6115	44	4	13'-4	392	110	4	17'-6	1286	7793
33	22'-0	59.5	58	10	25'-6	6364	46	4	13'-4	410	115	4	17'-6	1344	8118
34	23'-0	62.2	58	10	26'-6	6614	48	4	13'-4	428	120	4	17'-6	1403	8445
35	24'-0	64.9	58	10	27'-6	6863	50	4	13'-4	445	125	4	17'-6	1461	8769
36	25'-0	67.7	58	10	28'-6	7113	52	4	13'-4	463	130	4	17'-6	1520	9096
37	26'-0	70.4	58	10	29'-6	7362	54	4	13'-4	481	135	4	17'-6	1578	9421
38	27'-0	73.1	58	10	30'-6	7612	56	4	13'-4	499	140	4	17'-6	1637	9748
39	28'-0	75.8	58	10	31'-6	7862	58	4	13'-4	517	145	4	17'-6	1695	10074
40	29'-0	78.5	58	10	32'-6	8111	60	4	13'-4	534	150	4	17'-6	1754	10399

① SEE SHEET H40-31-06 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.

01-10 LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 Iowa Department of Transportation Highway Division STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES AUGUST, 2009
TEE PIER CAP AND COLUMN 45° SKEW		H40-82-06