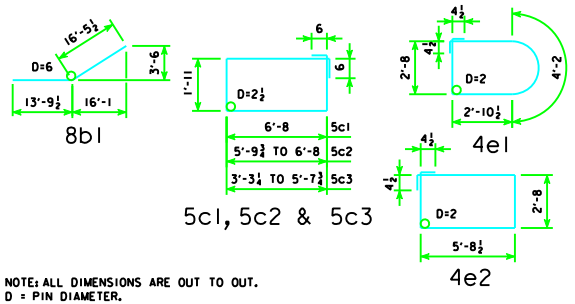
BENT BAR DETAILS



NOTE: ALL DIMENSIONS ARE OUT TO OUT.
D = PIN DIAMETER.

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	SHAPE	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	57'-8		8	9	1569	8	9	1569	8	9	1569	8	10	1985	8	10	1985	8	10	1985	8	10	1985	8	11	2451	8	11	2451
a2	57'-8		8	9	1569	8	9	1569	8	9	1569	8	9	1569	8	9	1569	8	10	1985	8	10	1985	8	10	1985	8	10	1985
6a3	57'-8		6	6	520	6	6	520	6	6	520	6	6	520	6	6	520	6	6	520	6	6	520	6	6	520	6	6	520
6a4	VARIES		8	6	538	8	6	538	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	8	8	646	8	8	646
5c1	18'-2		36	5	682	36	5	682	36	5	682	36	5	682	36	5	682	36	5	682	36	5	682	36	5	682	36	5	682
5c2	VARIES		16	5	289	16	5	289	20	5	361	20	5	361	20	5	361	28	5	506	28	5	506	28	5	506	28	5	506
5c3	VARIES		36	5	516	36	5	516	36	5	516	36	5	516	36	5	516	36	5	516	48	5	688	48	5	688	48	5	688
① TOTAL (LB.)			6329			6329			6401			6817			6817			7378			7550			8016			8016		
STRUCTURAL CONCRETE (CY)			44.9			44.9			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

PIER NOTES:

SEE "TEE PIER NOTES" ON H40-01-06 FOR NOTES REGARDING APPLICATION OF THESE PIER STANDARDS.

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

ELIMINATE 2x8 BEVELED KEYWAY ON TOP OF CAP FOR EXPANSION PIERS.

SEE SHEET H40-29-06 FOR "U" DIMENSION.

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

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

HL93 SUPERSTRUCTURE DECEMBER, 2006 HS25 SUBSTRUCTURE

TEE PIER
CAP AND COLUMN
45° SKEW

H40-72-06