

PILE BENT NOTES:

THESE PIER BENTS ARE DESIGNED FOR USE IN LOCATIONS WHERE ICE AND DRIFT CONDITIONS ARE NOT SEVERE.

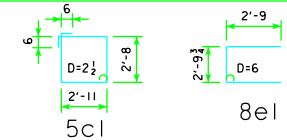
FOR DETAILS OF TRESTLE PILES, TYPES 1, 2 AND 3, SEE STANDARD PIOL.

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

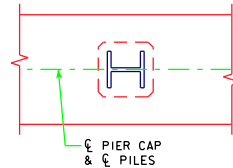
REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

			7 PILE BENT			8 PILE BENT			9 PILE BENT			10 PILE BENT			11 PILE BENT			12 PILE BENT			13 PILE BENT			14 PILE BENT		
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
a1	35'-8"		8	9	970	6	9	728	6	9	728	6	9	728	6	9	728	6	9	728	6	9	728	6	9	728
a2	35'-8"		4	8	381	4	8	381	4	8	381	4	8	381	4	8	381	4	8	381	4	8	381	4	8	381
b1	35'-8"		4	9	485	4	9	485	4	9	485	4	9	485	4	9	485	4	9	485	4	9	485	4	8	381
5c1	12'-2"		32	5	406	30	5	381	34	5	431	38	5	482	42	5	533	35	5	444	38	5	482	28	5	355
8e1	8'-4"		4	8	89	4	8	89	4	8	89	4	8	89	4	8	89	4	8	89	4	8	89	4	8	89
① REINFORCING STEEL (LB.)			2331			2064			2114			2165			2216			2127			2061			1934		
② PILE TYPE			-----			-----			13.3			13.3			13.2			13.2			13.1			13.1		
STRUCTURAL CONCRETE (CY)			-----			13.7			13.7			13.7			13.7			13.7			-----			-----		

BENT BAR DETAILS



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



PILE ORIENTATION DETAIL FOR
TYPE 3 TRESTLE BENT PILES

℄-℄ ABUTMENT BEARING	FRICTION BEARING PILING					FRICTION OR POINT BEARING PILING			
	PIOL TYPE 1 OR 2					PIOL TYPE 3			
	NUMBER OF TRESTLE PILES	③ "K" (INCHES)	④ DES. PILE BRG. (TONS)	⑤ LRFD DES. BRG. (KIPS)		NUMBER OF TRESTLE PILES	PILE SIZE	④ DES. PILE BRG. (TONS)	⑤ LRFD DES. BRG. (KIPS)
138'-10	11	14	30	88		7	HP10x57	48	138
	9	16	37	107		8	HP12x53	42	121
151'-4	11	14	32	92		7	HP10x57	50	145
	10	16	35	101		8	HP12x53	44	127
163'-10	12	14	32	92		8	HP10x57	47	137
	11	16	34	100		9	HP12x53	42	122
176'-4	13	14	30	88		8	HP10x57	50	144
	11	16	36	104		9	HP12x53	44	128
188'-10	13	14	32	92		9	HP10x57	46	133
	11	16	38	109		9	HP12x53	46	133
201'-4	13	16	35	103		10	HP10x57	46	134
						10	HP12x53	46	134
213'-10	13	16	37	108		10	HP10x57	48	140
						11	HP12x53	44	128
226'-4	14	16	36	105		11	HP10x57	46	134
						11	HP12x53	46	134
243'-0	-----	--	--	--		11	HP10x57	49	141
						12	HP12x53	45	129

① SEE SHEET H30-24-06 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.

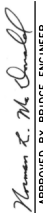
② CONCRETE QUANTITIES SHOWN HAVE HAD THE VOLUME OF EMBEDDED PILES DEDUCTED FOR TYPES 1 AND 2 BASED ON 0.8 FT³ PER FOOT OF EMBEDMENT. THE CONCRETE QUANTITIES FOR TYPE 3 PILES DO NOT REQUIRE REDUCTION FOR PILE EMBEDMENT.

③ SEE STANDARD PIOL FOR "K" DIMENSION.

④ FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.

⑤ FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.

NOTE: FRICTION BEARING INCLUDES SIDE FRICTION AND END BEARING IN SOIL.
POINT BEARING INCLUDES SIDE FRICTION AND POINT BEARING IN ROCK.

07-10 LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 Iowa Department of Transportation Highway Division	
		STANDARD DESIGN - 30° ROADWAY, THREE SPAN BRIDGES PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES DECEMBER, 2006	
		PILE BENT PIERS 30° SKEW	H30-52-06