

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.

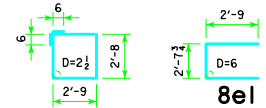
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

PIER PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.

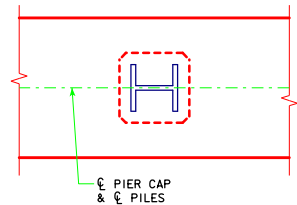
REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

BAR	LENGTH	SHAPE	9 PILE BENT			10 PILE BENT			11 PILE BENT			12 PILE BENT			13 PILE BENT			14 PILE BENT			15 PILE BENT			16 PILE BENT		
			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	42'-8"	⎓	6	9	870	6	9	870	6	9	870	6	9	870	6	9	870	6	9	870	4	9	580	4	9	580
a2	42'-8"	⎓	4	8	456	4	8	456	4	8	456	4	8	456	4	8	456	4	8	456	4	8	456	4	8	456
b1	42'-8"	⎓	4	9	580	4	9	580	4	9	580	4	9	580	4	9	580	4	9	580	4	8	456	4	8	456
5c1	11'-10"	⎓	34	5	420	38	5	469	42	5	518	46	5	568	50	5	617	54	5	666	30	5	370	47	5	580
8e1	8'-2"	⎓	4	8	87	4	8	87	4	8	87	4	8	87	4	8	87	4	8	87	4	8	87	4	8	87
① REINFORCING STEEL (LB.)			2413			2462			2511			2561			2610			2659			1949			2159		
STRUCTURAL ② PILE TYPE			1, 2			-----			15.2			15.2			15.2			15.1			15.1			15.0		
CONCRETE (CY)			3			15.7			15.7			15.7			15.7			15.7			15.7			-----		

BENT BAR DETAILS



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



PILE ORIENTATION DETAIL FOR TYPE 3 TRESTLE BENT PILES

E-E 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 LRFD PU, STRENGTH I DES. LOAD (KIPS)	NUMBER OF TRESTLE PILES	PILE SIZE	④ LRFD PU, STRENGTH I DES. LOAD (KIPS)
138'-10	13	14	92	9	HP10x57	133
	11	16	109	9	HP12x53	133
151'-4	14	14	90	9	HP10x57	140
	12	16	105	10	HP12x53	126
163'-10	---	---	---	10	HP10x57	136
	13	16	105	11	HP12x53	124
176'-4	---	---	---	10	HP10x57	143
	---	---	---	11	HP12x53	130
188'-10	---	---	---	11	HP10x57	135
	---	---	---	12	HP12x53	124
201'-4	---	---	---	12	HP10x57	138
	---	---	---	13	HP12x53	127
213'-10	---	---	---	12	HP10x57	145
	---	---	---	13	HP12x53	134
226'-4	---	---	---	13	HP10x57	141
	---	---	---	14	HP12x53	131
243'-0	---	---	---	14	HP10x57	137
	---	---	---	15	HP12x53	128

- ① SEE SHEET H40-17-06 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 NOTE: PU, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.

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

REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.

05-13 LATEST REVISION DATE APPROVED BY BRIDGE ENGINEER	 STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES AUGUST, 2009
	PILE BENT PIERS
	15° SKEW
H40-49-06	