

**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**

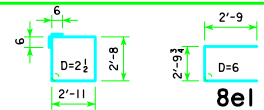
BAR	LENGTH	SHAPE	10 PILE BENT			12 PILE BENT			14 PILE BENT			16 PILE BENT			18 PILE BENT			19 PILE BENT		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	51'-8"		8	9	1405	8	9	1405	8	9	1405	6	9	1054	6	9	1054	6	9	1054
a2	51'-8"		4	8	552	4	8	552	4	8	552	4	8	552	4	8	552	4	8	552
b1	51'-8"		4	9	703	4	9	703	4	9	703	4	8	552	4	8	552	4	8	552
5c1	12'-2"		47	5	596	46	5	584	67	5	850	62	5	787	53	5	673	56	5	711
8e1	8'-4"		4	8	89	4	8	89	4	8	89	4	8	89	4	8	89	4	8	89
① REINFORCING STEEL (L.B.)			3345			3333			3599			3185			2920			2958		
② STRUCTURAL CONCRETE (CY)			1, 2			19.8			19.7			19.7			19.6			19.5		
			3			20.4			20.4			20.4			20.4			19.5		

NOTE: THE REINFORCING STEEL QUANTITY IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

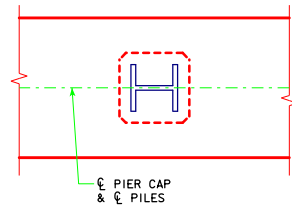
NOTE: THE CONCRETE QUANTITY IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

NOTE: THE NUMBER OF PILES AND THE PILE TYPE ARE TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

**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. BRG. (KIPS)	NUMBER OF TRESTLE PILES	PILE SIZE	④ LRFD PU, STRENGTH I DES. BRG. (KIPS)
138'-10	14	14	92	10	HP10x57	129
	12	16	107	10	HP12x53	129
	16	14	85	10	HP10x57	135
151'-4	14	16	97	12	HP12x53	113
	16	14	92	12	HP10x57	122
163'-10	14	16	105	12	HP12x53	122
	----	--	--	12	HP10x57	128
176'-4	----	--	--	12	HP12x53	128
188'-10	----	--	--	12	HP10x57	134
	----	--	--	12	HP12x53	134
201'-4	----	--	--	14	HP10x57	128
	----	--	--	14	HP12x53	128
213'-10	----	--	--	14	HP10x57	134
	----	--	--	16	HP12x53	118
226'-4	----	--	--	14	HP10x57	141
	----	--	--	16	HP12x53	124
243'-0	----	--	--	16	HP10x57	130
	----	--	--	16	HP12x53	130

- ① SEE SHEET H44-24-14 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 FT<sup>3</sup> 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.

LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 STANDARD DESIGN - 44' ROADWAY, THREE SPAN BRIDGE <b>PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES</b> SEPTEMBER, 2014	
		<b>PILE BENT PIERS</b> 30° SKEW	<b>H44-47-14</b>