

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.

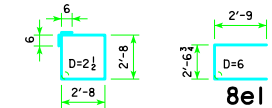
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

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

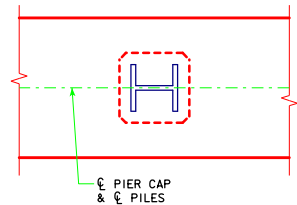
REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

BAR	LENGTH	SHAPE	11 PILE BENT			13 PILE BENT			15 PILE BENT			17 PILE BENT			19 PILE BENT			21 PILE BENT			23 PILE BENT		
			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	6	9	1176	6	9	1176	4	9	784	4	9	784
a2	57'-8		4	8	616	4	8	616	4	8	616	4	8	616	4	8	616	4	8	616	4	8	616
b1	57'-8		4	9	784	4	9	784	4	9	784	4	9	784	4	9	784	4	9	784	4	9	784
5c1	11'-8		72	5	876	86	5	1046	100	5	1217	98	5	1192	92	5	1119	82	5	998	68	5	827
8e1	8'-1		4	8	86	4	8	86	4	8	86	4	8	86	4	8	86	4	8	86	4	8	86
① REINFORCING STEEL (LB.)			3931			4101			4272			3854			3781			3268			3097		
② PILE TYPE																							
STRUCTURAL CONCRETE (CY)			1, 2			20.4			20.3			20.2			20.1			20.0			19.9		
			3			20.9			20.9			20.9			20.9			20.9			20.9		

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 P _u STRENGTH I, DES. LOAD (KIPS)	NUMBER OF TRESTLE PILES	PILE SIZE	④ LRFD P _u STRENGTH I, DES. LOAD (KIPS)
160'-0	13	14	94	11	HP10x57	112
	13	16	94	11	HP12x53	112
180'-0	15	14	89	11	HP10x57	122
	13	16	103	11	HP12x53	122
200'-0	17	14	85	11	HP10x57	131
	15	16	96	11	HP12x53	131
220'-0	17	14	93	11	HP10x57	143
	15	16	105	13	HP12x53	121
240'-0	19	14	91	13	HP10x57	133
	17	16	101	13	HP12x53	133
260'-0	--	--	--	13	HP10x57	143
	--	--	--	15	HP12x53	124
280'-0	--	--	--	15	HP10x57	133
	--	--	--	15	HP12x53	133
300'-0	--	--	--	15	HP10x57	143
	--	--	--	17	HP12x53	126
320'-0	--	--	--	17	HP10x57	135
	--	--	--	19	HP12x53	120
340'-0	--	--	--	17	HP10x57	142
	--	--	--	19	HP12x53	127

- ① SEE SHEET RS40-169-10 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: P_u, 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, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES JUNE, 2010
	<div style="width: 45%;"> PILE BENT PIERS 45° SKEW </div> <div style="width: 45%; text-align: right;"> RS40-113-10 </div>