

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.

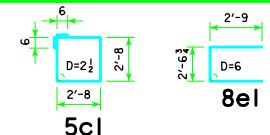
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

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

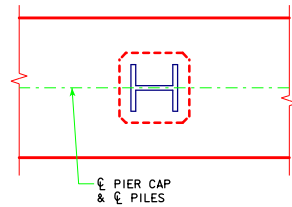
REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

BAR	LENGTH	SHAPE	9 PILE BENT			11 PILE BENT			13 PILE BENT			15 PILE BENT			17 PILE BENT		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	43'-8"		6	9	891	6	9	891	6	9	891	6	9	891	6	9	891
a2	43'-8"		4	8	466	4	8	466	4	8	466	4	8	466	4	8	466
b1	43'-8"		4	9	594	4	9	594	4	9	594	4	9	594	4	9	594
5c1	11'-8"		42	5	511	52	5	633	50	5	608	58	5	706	50	5	608
8e1	8'-1"		4	8	86	4	8	86	4	8	86	4	8	86	4	8	86
① REINFORCING STEEL (LB.)			2548			2670			2645			2743			2645		
STRUCTURAL ② PILE TYPE			-----			15.2			15.1			15.0			14.9		
CONCRETE (CY)			3			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

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	93	9	HP10x57	134
	11	16	109	9	HP12x53	134
180'-0"	15	14	88	11	HP10x57	119
	13	16	101	11	HP12x53	119
200'-0"	15	14	95	11	HP10x57	129
	13	16	109	11	HP12x53	129
220'-0"	--	--	--	11	HP10x57	141
	--	--	--	13	HP12x53	120
240'-0"	--	--	--	13	HP10x57	131
	--	--	--	13	HP12x53	131
260'-0"	--	--	--	13	HP10x57	142
	--	--	--	15	HP12x53	123
280'-0"	--	--	--	15	HP10x57	132
	--	--	--	15	HP12x53	132
300'-0"	--	--	--	15	HP10x57	142
	--	--	--	17	HP12x53	125
320'-0"	--	--	--	17	HP10x57	133
	--	--	--	17	HP12x53	133
340'-0"	--	--	--	17	HP10x57	140

- ① SEE SHEET RS40-167-10 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.

LATEST REVISION DATE 05-13	APPROVED BY BRIDGE ENGINEER <i>Thomas E. Mc Donnell</i>		
		STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES JUNE, 2010	
		PILE BENT PIERS 20° SKEW	RS40-105-10