

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, SEE STANDARD PIOL.

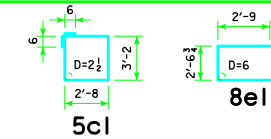
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

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

REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

BAR	LENGTH	SHAPE	7 PILE BENT			8 PILE BENT			9 PILE BENT			10 PILE BENT			11 PILE BENT			12 PILE BENT			13 PILE BENT		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	43'-8"		8	9	1188	8	9	1188	8	9	1188	8	9	1188	8	9	1188	8	9	1188	8	9	1188
a2	43'-8"		4	8	466	4	8	466	4	8	466	4	8	466	4	8	466	4	8	466	4	8	466
b1	43'-8"		4	10	752	4	10	752	4	10	752	4	10	752	4	9	594	4	9	594	4	9	594
5c1	12'-8"		42	5	555	49	5	647	56	5	740	65	5	859	72	5	951	57	5	753	62	5	819
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.)			3047			3139			3232			3351			3443			3087			3153		
STRUCTURAL PILE TYPE																							
CONCRETE (CY)			3			18.1			18.1			18.1			18.1			18.1			18.1		

BENT BAR DETAILS



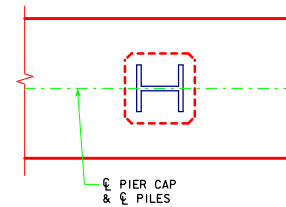
NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER.

FRICION OR POINT BEARING PILING

ABUTMENT BEARING	PIOL TYPE 3		
	NUMBER OF TRESTLE PILES	PILE SIZE	② LRFD P _u STRENGTH I ₁ DES. LOAD (KIPS)
160'-0"	7	HP14x73	174
180'-0"	7	HP14x89	174
200'-0"	8	HP14x73	166
220'-0"	7	HP14x89	189
240'-0"	8	HP14x73	179
260'-0"	7	HP14x89	205
280'-0"	9	HP14x73	174
300'-0"	7	HP14x89	224
320'-0"	10	HP14x73	171
340'-0"	8	HP14x89	214
360'-0"	10	HP14x73	185
380'-0"	9	HP14x89	206
400'-0"	11	HP14x73	181
420'-0"	9	HP14x89	221
440'-0"	12	HP14x73	178
460'-0"	10	HP14x89	214
480'-0"	13	HP14x73	175
500'-0"	11	HP14x89	207
520'-0"	13	HP14x73	184
540'-0"	11	HP14x89	218

① SEE SHEET RS40-167-10 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.

② NOTE: P_u STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.



PILE ORIENTATION DETAIL FOR TYPE 3 TRESTLE BENT 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 <i>Norman E. Mc Donald</i> APPROVED BY BRIDGE ENGINEER	Iowa Department of Transportation Highway Division	
	STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES JUNE, 2010	
	PILE BENT PIERS HP14 PILES 20° SKEW	RS40-107-10