

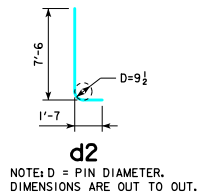
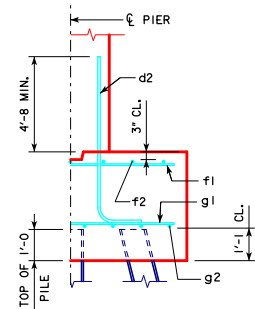
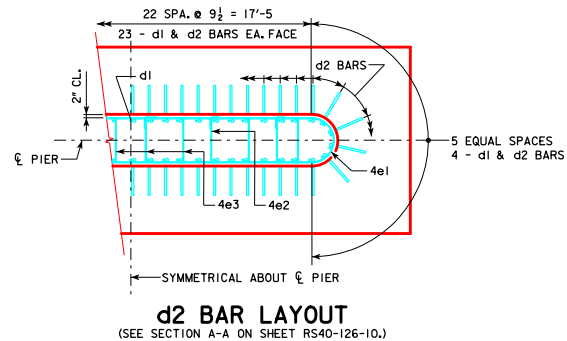
REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.
REVISED 10-2016 - CHANGED VERTICAL CLEARANCE OF REBAR "f2" TO TOP OF PIER FOOTING TO 3" WAS 2".

H IN FT.	C - C ABUT. BRG.	PILING (HP10x57)		FOOTING SIZE
		NO. & LAYOUT	① LRFD P _u STRENGTH I, DES. LOAD (KIPS)	
16 TO 18	160'-0	16A	139	4' x 9' x 24'
	180'-0	17A	144	4' x 10' x 26'
	200'-0	18A	145	4' x 10' x 24'
	220'-0	18D	144	4' x 11' x 28'
	240'-0	20A	144	4' x 11' x 30'
	260'-0	21B	143	4' x 11' x 30'
	280'-0	23A	143	4' x 12' x 32'
	300'-0	23B	146	4' x 12' x 32'
	320'-0	25A	144	4' x 14' x 32'
	340'-0	26A	146	4' x 14' x 32'
19 TO 21	160'-0	16B	142	4' x 10' x 24'
	180'-0	17B	146	4' x 10' x 26'
	200'-0	18B	146	4' x 10' x 26'
	220'-0	19A	143	4' x 11' x 28'
	240'-0	21A	143	4' x 11' x 28'
	260'-0	21B	146	4' x 11' x 30'
	280'-0	23A	146	4' x 12' x 32'
	300'-0	24B	143	4' x 12' x 32'
	320'-0	25A	147	4' x 14' x 32'
	340'-0	26B	142	4' x 14' x 32'
22 TO 24	160'-0	16C	143	4' x 10' x 26'
	180'-0	17C	147	4' x 10' x 26'
	200'-0	18D	140	4' x 11' x 28'
	220'-0	19A	146	4' x 11' x 28'
	240'-0	21A	146	4' x 11' x 28'
	260'-0	22A	143	4' x 11' x 30'
	280'-0	23B	143	4' x 12' x 32'
	300'-0	24B	145	4' x 12' x 32'
	320'-0	25B	143	4' x 14' x 32'
	340'-0	26B	144	4' x 14' x 32'
25 TO 27	160'-0	16D	145	4' x 11' x 26'
	180'-0	18C	143	4' x 11' x 26'
	200'-0	18D	143	4' x 11' x 28'
	220'-0	20A	143	4' x 11' x 28'
	240'-0	21B	142	4' x 11' x 30'
	260'-0	22A	146	4' x 11' x 30'
	280'-0	23B	145	4' x 12' x 32'
	300'-0	25A	144	4' x 12' x 32'
	320'-0	25B	145	4' x 14' x 32'
	340'-0	26B	146	4' x 14' x 32'
28 TO 30	160'-0	17D	143	4' x 11' x 26'
	180'-0	18C	146	4' x 11' x 26'
	200'-0	18D	146	4' x 11' x 28'
	220'-0	20A	146	4' x 11' x 28'
	240'-0	21B	145	4' x 11' x 30'
	260'-0	23A	144	4' x 11' x 30'
	280'-0	24B	141	4' x 12' x 32'
	300'-0	25A	145	4' x 12' x 32'
	320'-0	26B	142	4' x 14' x 32'
	340'-0	27A	144	4' x 14' x 32'
31 TO 33	160'-0	17D	146	4' x 11' x 26'
	180'-0	18D	141	4' x 11' x 26'
	200'-0	19A	144	4' x 11' x 28'
	220'-0	21A	144	4' x 11' x 28'
	240'-0	22A	141	4' x 11' x 30'
	260'-0	23A	146	4' x 11' x 30'
	280'-0	24B	143	4' x 12' x 32'
	300'-0	26A	143	4' x 12' x 32'
	320'-0	26B	143	4' x 14' x 32'
	340'-0	27A	146	4' x 14' x 32'
34 TO 36	160'-0	17E	144	4' x 11' x 26'
	180'-0	18D	144	4' x 11' x 28'
	200'-0	19A	147	4' x 11' x 28'
	220'-0	21A	146	4' x 11' x 28'
	240'-0	22A	144	4' x 11' x 30'
	260'-0	24A	144	4' x 11' x 30'
	280'-0	24B	145	4' x 12' x 32'
	300'-0	26A	145	4' x 12' x 32'
	320'-0	26B	145	4' x 14' x 32'
	340'-0	28A	143	4' x 14' x 32'

H IN FT.	C - C ABUT. BRG.	PILING (HP10x57)		FOOTING SIZE
		NO. & LAYOUT	① LRFD P _u STRENGTH I, DES. LOAD (KIPS)	
37 TO 40	160'-0	18D	139	4' x 11' x 28'
	180'-0	19A	142	4' x 11' x 28'
	200'-0	20A	144	4' x 11' x 28'
	220'-0	21B	142	4' x 11' x 28'
	240'-0	22A	146	4' x 11' x 30'
	260'-0	24A	147	4' x 11' x 30'
	280'-0	25A	143	4' x 12' x 32'
	300'-0	26A	147	4' x 12' x 32'
	320'-0	26B	147	4' x 14' x 32'
	340'-0	28A	145	4' x 14' x 32'

FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)				TOTAL WEIGHT (L.B.)	STRUCTURAL CONCRETE (CY)
	BAR	NO., SIZE & SPACING	LENGTH	WEIGHT (L.B.)		
4' x 9' x 24'	d2	54 - #9 AS SHOWN	9'-1	1668	2818	32.0
	f1	24 - #5 @ 1'-0	8'-8	217		
	f2	9 - #5 @ 1'-0	23'-8	222		
	g1	30 - #6 @ 0'-9 1/2	8'-8	391		
	g2	9 - #6 @ 1'-0	23'-8	320		
	d2	54 - #9 AS SHOWN	9'-1	1668		
f1	24 - #5 @ 1'-0	9'-8	242			
f2	10 - #5 @ 1'-0	23'-8	247			
g1	29 - #7 @ 0'-10	9'-8	573			
g2	10 - #6 @ 1'-0	23'-8	355			
d2	54 - #9 AS SHOWN	9'-1	1668	3453	38.5	
f1	26 - #5 @ 1'-0	9'-8	262			
f2	10 - #5 @ 1'-0	25'-8	268			
g1	29 - #7 @ 0'-10 1/2	9'-8	573			
g2	13 - #7 @ 0'-9 1/2	25'-8	682			
d2	54 - #9 AS SHOWN	9'-1	1668			3702
f1	26 - #5 @ 1'-0	10'-8	289			
f2	11 - #5 @ 1'-0	25'-8	294			
g1	27 - #8 @ 0'-11 1/2	10'-8	769			
g2	13 - #7 @ 0'-10 1/2	25'-8	682			
d2	54 - #9 AS SHOWN	9'-1	1668	4288	45.6	
f1	28 - #5 @ 1'-0	10'-8	312			
f2	11 - #5 @ 1'-0	27'-8	317			
g1	31 - #8 @ 0'-11	10'-8	883			
g2	15 - #8 @ 0'-9	27'-8	1108			
d2	54 - #9 AS SHOWN	9'-1	1668			4842
f1	30 - #5 @ 1'-0	10'-8	334			
f2	11 - #5 @ 1'-0	29'-8	340			
g1	30 - #9 @ 1'-0	10'-8	1088			
g2	14 - #9 @ 0'-9 1/2	29'-8	1412			
d2	54 - #9 AS SHOWN	9'-1	1668	6004	56.9	
f1	32 - #5 @ 1'-0	11'-8	389			
f2	12 - #5 @ 1'-0	31'-8	396			
g1	38 - #9 @ 0'-10	11'-8	1507			
g2	15 - #10 @ 0'-9 1/2	31'-8	2044			
d2	54 - #9 AS SHOWN	9'-1	1668			6987
f1	32 - #5 @ 1'-0	13'-8	456			
f2	14 - #5 @ 1'-0	31'-8	462			
g1	39 - #9 @ 0'-9 1/2	13'-8	1812			
g2	19 - #10 @ 0'-9	31'-8	2589			

① NOTE: P_u STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.



FOOTING NOTES:

THESE FOOTINGS ARE DESIGNED AND DETAILED TO BE USED WITH THE CAP AND COLUMN DETAILS OF THE TEE PIERS AS SHOWN ON SHEET RS40-126-10.

BATTER PILES IN EXTERIOR ROWS 1-4 IN THE DIRECTION SHOWN.

STEEL PILING USED AS POINT BEARING SHALL HAVE A MINIMUM DISTANCE OF APPROXIMATELY 10 FEET FROM BOTTOM OF FOOTING TO TOP OF BEARING ROCK. THE PILE LAYOUTS ARE SUCH THAT THE DISTANCE CENTER TO CENTER OF ADJACENT PILING SHALL NOT EXCEED 8'-0.

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

10-2016 LATEST REVISION DATE <i>Thomas E. McQuinn</i> APPROVED BY BRIDGE ENGINEER	
	STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES JUNE, 2010
TEE PIER-HP10x57 SRL-1 STEEL PILE FOOTINGS 10° SKEW - SHEET 1	RS40-128-10