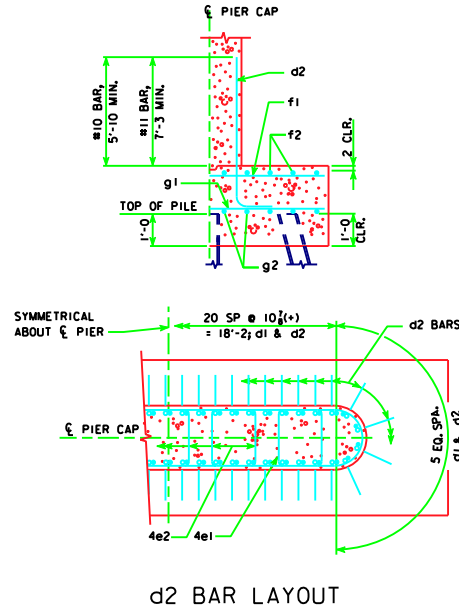


℄-℄ ABUT. BEARING	HEIGHT (FT)	PILING		FTG. SIZE	STRUCTURAL CONCRETE (C.Y.)
		NO. & LAYOUT	DES. BRG. (TONS)		
160 ft	16	16B	36	4' x 7' x 25'	25.9
	19	16B	37		
	22	18D	35		
	25	18D	36		
	28	19A	36		
	31	20C	37	4' x 8' x 25'	29.6
	34	20C	37		
	37	20B	36		
	40	20B	37		
	43	20B	37		
180 ft	16	18D	36	4' x 7' x 25'	25.9
	19	18D	37		
	22	18C	37		
	25	19A	37		
	28	20C	37		
	31	20B	36	4' x 9' x 25'	33.3
	34	20B	37		
	37	22B	36		
	40	23A	37		
	43	23A	37		
200 ft	16	18C	37	4' x 7' x 25'	25.9
	19	19A	36		
	22	20C	37		
	25	20C	37		
	28	22C	36		
	31	22B	36	4' x 9' x 25'	33.3
	34	22B	37		
	37	24B	37		
	40	24A	35		
	43	24A	35		
220 ft	16	20D	37	4' x 8' x 25'	29.6
	19	20D	37		
	22	22C	36		
	25	22C	37		
	28	22B	37		
	31	24A	34	4' x 10' x 25'	37.0
	34	24A	35		
	37	24A	36		
	40	25A	37		
	43	25A	37		
240 ft	16	22C	36	4' x 9' x 25'	33.3
	19	22C	37		
	22	22B	37		
	25	23A	37		
	28	24B	37		
	31	24A	36	4' x 10' x 25'	37.0
	34	24A	37		
	37	26B	37		
	40	26A	37		
	43	26A	37		
260 ft	16	23A	37	4' x 11' x 26'	42.4
	19	24B	36		
	22	24B	37		
	25	24A	36		
	28	24A	37		
	31	25A	37	4' x 10' x 25'	37.0
	34	26A	37		
	37	28A	37		
	40	30B	36		
	43	30B	36		
280 ft	16	24A	37	4' x 12' x 26'	46.2
	19	24A	37		
	22	25A	37		
	25	25A	37		
	28	26B	37		
	31	27A	37	4' x 11' x 26'	42.4
	34	30B	36		
	37	30B	37		
	40	32A	35		
	43	32A	35		
300 ft	16	26B	36	4' x 12' x 26'	46.2
	19	26B	37		
	22	26B	37		
	25	27A	37		
	28	28A	37		
	31	30A	35	4' x 12' x 28'	49.8
	34	30A	36		
	37	32A	36		
	40	32A	37		
	43	32A	37		

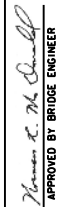
REINFORCING STEEL (ONE FOOTING)					
FTG. SIZE	BAR	NO. SIZE & SPC.	LENGTH	WEIGHT LB.	TOTAL WEIGHT LB.
4' x 7' x 25'	d2	SEE NOTE	--	--	831
	f1	25 #5 @ 1'-0"	6'-8"	174	
	f2	7 #5 @ 1'-0"	24'-8"	180	
	g1	26 #5 @ 11"	6'-8"	181	
	g2	8 #6 @ 11"	24'-8"	296	
	d2	SEE NOTE	--	--	
	f1	25 #5 @ 1'-0"	7'-8"	200	
	f2	8 #5 @ 1'-0"	24'-8"	206	
	g1	25 #6 @ 1'-0"	7'-8"	288	
	g2	12 #6 @ 8"	24'-8"	445	
4' x 8' x 25'	d2	SEE NOTE	--	--	1139
	f1	25 #5 @ 1'-0"	7'-8"	200	
	f2	8 #5 @ 1'-0"	24'-8"	206	
	g1	25 #6 @ 1'-0"	7'-8"	288	
	g2	12 #6 @ 8"	24'-8"	445	
	d2	SEE NOTE	--	--	
	f1	25 #5 @ 1'-0"	8'-8"	226	
	f2	9 #5 @ 1'-0"	24'-8"	232	
	g1	25 #8 @ 1'-0"	8'-8"	579	
	g2	12 #6 @ 9"	24'-8"	445	
4' x 9' x 25'	d2	SEE NOTE	--	--	1482
	f1	25 #5 @ 1'-0"	8'-8"	226	
	f2	9 #5 @ 1'-0"	24'-8"	232	
	g1	25 #8 @ 1'-0"	8'-8"	579	
	g2	12 #6 @ 9"	24'-8"	445	
	d2	SEE NOTE	--	--	
	f1	25 #5 @ 1'-0"	9'-8"	252	
	f2	10 #5 @ 1'-0"	24'-8"	257	
	g1	25 #9 @ 1'-0"	9'-8"	822	
	g2	12 #6 @ 10"	24'-8"	445	
4' x 10' x 25'	d2	SEE NOTE	--	--	1776
	f1	25 #5 @ 1'-0"	9'-8"	252	
	f2	10 #5 @ 1'-0"	24'-8"	257	
	g1	25 #9 @ 1'-0"	9'-8"	822	
	g2	12 #6 @ 10"	24'-8"	445	
	d2	SEE NOTE	--	--	
	f1	26 #5 @ 1'-0"	10'-8"	289	
	f2	11 #5 @ 1'-0"	25'-8"	294	
	g1	31 #9 @ 10"	10'-8"	1124	
	g2	13 #8 @ 10"	25'-8"	891	
4' x 11' x 26'	d2	SEE NOTE	--	--	2598
	f1	26 #5 @ 1'-0"	11'-8"	316	
	f2	12 #5 @ 1'-0"	25'-8"	321	
	g1	37 #9 @ 8 1/2"	11'-8"	1468	
	g2	13 #8 @ 11"	25'-8"	891	
	d2	SEE NOTE	--	--	
	f1	28 #5 @ 1'-0"	11'-8"	341	
	f2	12 #5 @ 1'-0"	27'-8"	346	
	g1	42 #9 @ 8"	11'-8"	1666	
	g2	17 #9 @ 8 1/2"	27'-8"	1599	
4' x 12' x 26'	d2	SEE NOTE	--	--	2996
	f1	28 #5 @ 1'-0"	11'-8"	341	
	f2	12 #5 @ 1'-0"	27'-8"	346	
	g1	42 #9 @ 8"	11'-8"	1666	
	g2	17 #9 @ 8 1/2"	27'-8"	1599	
	d2	SEE NOTE	--	--	
	f1	28 #5 @ 1'-0"	11'-8"	341	
	f2	12 #5 @ 1'-0"	27'-8"	346	
	g1	42 #9 @ 8"	11'-8"	1666	
	g2	17 #9 @ 8 1/2"	27'-8"	1599	
4' x 12' x 28'	d2	SEE NOTE	--	--	3952
	f1	28 #5 @ 1'-0"	11'-8"	341	
	f2	12 #5 @ 1'-0"	27'-8"	346	
	g1	42 #9 @ 8"	11'-8"	1666	
	g2	17 #9 @ 8 1/2"	27'-8"	1599	
	d2	SEE NOTE	--	--	
	f1	28 #5 @ 1'-0"	11'-8"	341	
	f2	12 #5 @ 1'-0"	27'-8"	346	
	g1	42 #9 @ 8"	11'-8"	1666	
	g2	17 #9 @ 8 1/2"	27'-8"	1599	

NOTE: SEE RS40-09-04 FOR DETAILS.



FOOTING NOTES :

1. THESE FOOTINGS ARE DESIGNED AND DETAILED TO BE USED WITH RS40-09-04.
2. PIER PILES (HP10x42) ARE TO BE DRIVEN TO THE DESIGN BEARING VALUE.
3. STEEL PILING USED AS POINT BEARING SHALL HAVE A MINIMUM DISTANCE OF APPROXIMATELY 10 FEET FROM BOTTOM OF FOOTING TO TOP OF BEARING ROCK. BATTER PILES IN EXTERIOR ROWS 1:4 IN THE DIRECTION SHOWN.

03-07 LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 Iowa Department of Transportation Highway Division	
		STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES FEBRUARY, 2004	
		T PIER 10° SKEW STEEL PILE FOOTINGS SHEET 1 OF 3	RS40-10-04