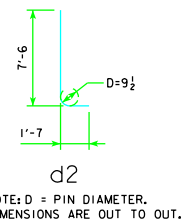


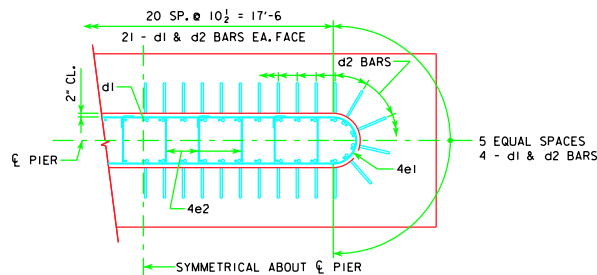
H IN FT.	CL - CL ABUT. BRG.	PILING (HP10x57)			FOOTING SIZE
		NO. & LAYOUT	DES. BRG. (TONS)	LRFD DES. BRG. (KIPS)	
16 TO 18	160'-0"	10A	71	206	4' x 8' x 25'
	180'-0"	11A	72	208	
	200'-0"	12A	71	204	
	220'-0"	13A	71	205	
	240'-0"	14A	71	204	
	260'-0"	14A	75	218	
	280'-0"	16A	74	213	
	300'-0"	16C	75	218	
	320'-0"	17A	74	215	
	340'-0"	17B	74	213	
19 TO 21	160'-0"	10A	74	213	4' x 8' x 25'
	180'-0"	11A	74	215	
	200'-0"	12A	73	211	
	220'-0"	13A	73	211	
	240'-0"	14A	73	210	
	260'-0"	15A	74	215	
	280'-0"	16B	74	214	
	300'-0"	16D	75	220	
	320'-0"	17B	72	208	
	340'-0"	17B	75	217	
22 TO 24	160'-0"	10B	74	215	4' x 9' x 25'
	180'-0"	11B	75	216	
	200'-0"	12B	73	212	
	220'-0"	13B	73	212	
	240'-0"	14B	73	210	
	260'-0"	15B	74	215	
	280'-0"	16B	75	218	
	300'-0"	16F	72	209	
	320'-0"	17B	73	212	
	340'-0"	18A	73	211	
25 TO 27	160'-0"	10C	75	218	4' x 10' x 25'
	180'-0"	11C	75	218	
	200'-0"	12C	74	213	
	220'-0"	13C	74	213	
	240'-0"	14C	73	211	
	260'-0"	15C	74	215	
	280'-0"	16C	75	217	
	300'-0"	16F	74	212	
	320'-0"	17B	74	215	
	340'-0"	18A	74	214	
28 TO 30	160'-0"	11C	73	210	4' x 10' x 25'
	180'-0"	12C	71	206	
	200'-0"	12C	75	218	
	220'-0"	13C	75	217	
	240'-0"	14C	74	214	
	260'-0"	15C	75	218	
	280'-0"	16D	75	217	
	300'-0"	16F	74	215	
	320'-0"	17B	75	217	
	340'-0"	18A	75	216	
31 TO 33	160'-0"	11D	73	212	4' x 11' x 25'
	180'-0"	12D	72	207	
	200'-0"	12D	75	219	
	220'-0"	13D	75	218	
	240'-0"	14D	74	215	
	260'-0"	15D	75	218	
	280'-0"	16E	75	216	
	300'-0"	16F	75	217	
	320'-0"	17B	75	219	
	340'-0"	18A	75	218	
34 TO 36	160'-0"	11E	74	213	4' x 11' x 27'
	180'-0"	12E	72	209	
	200'-0"	13E	71	204	
	220'-0"	13E	75	218	
	240'-0"	14E	74	215	
	260'-0"	15E	75	218	
	280'-0"	16F	72	208	
	300'-0"	16F	75	220	
	320'-0"	18A	73	211	
	340'-0"	19A	74	213	

H IN FT.	CL - CL ABUT. BRG.	PILING (HP10x57)			FOOTING SIZE
		NO. & LAYOUT	DES. BRG. (TONS)	LRFD DES. BRG. (KIPS)	
37 TO 40	160'-0"	12F	69	200	4' x 12' x 27'
	180'-0"	12F	73	211	
	200'-0"	13F	73	212	
	220'-0"	14F	74	214	
	240'-0"	15F	70	201	
	260'-0"	15F	74	213	
	280'-0"	16F	73	211	
	300'-0"	17B	74	214	
	320'-0"	18A	75	215	
	340'-0"	19A	75	218	

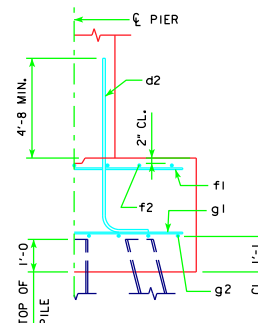


FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)					STRUCTURAL CONCRETE (CY)
	BAR	NO., SIZE & SPACING	LENGTH	WEIGHT (LB.)	TOTAL WEIGHT (LB.)	
4' x 8' x 25'	d2	50 - #9 AS SHOWN	9'-1	1544	3017	29.6
	f1	25 - #5 @ 1'-0	7'-8	200		
	f2	8 - #5 @ 1'-0	24'-8	206		
	g1	27 - #6 @ 0'-11	7'-8	311		
	g2	15 - #7 @ 0'-6	24'-8	756		
	d2	50 - #9 AS SHOWN	9'-1	1544		
	f1	25 - #5 @ 1'-0	8'-8	226		
	f2	9 - #5 @ 1'-0	24'-8	232		
	g1	28 - #7 @ 0'-10 1/2	8'-8	496		
	g2	15 - #7 @ 0'-7	24'-8	756		
4' x 9' x 25'	d2	50 - #9 AS SHOWN	9'-1	1544	3254	33.3
	f1	25 - #5 @ 1'-0	9'-8	252		
	f2	10 - #5 @ 1'-0	24'-8	257		
	g1	28 - #8 @ 0'-10 1/2	9'-8	723		
	g2	15 - #7 @ 0'-8	24'-8	756		
	d2	50 - #9 AS SHOWN	9'-1	1544		
	f1	25 - #5 @ 1'-0	10'-8	278		
	f2	11 - #5 @ 1'-0	24'-8	283		
	g1	27 - #9 @ 0'-11	10'-8	979		
	g2	12 - #8 @ 0'-11	24'-8	790		
4' x 10' x 25'	d2	50 - #9 AS SHOWN	9'-1	1544	3532	37.0
	f1	25 - #5 @ 1'-0	10'-8	278		
	f2	10 - #5 @ 1'-0	24'-8	257		
	g1	28 - #8 @ 0'-10 1/2	9'-8	723		
	g2	15 - #7 @ 0'-8	24'-8	756		
	d2	50 - #9 AS SHOWN	9'-1	1544		
	f1	25 - #5 @ 1'-0	10'-8	278		
	f2	11 - #5 @ 1'-0	24'-8	283		
	g1	27 - #9 @ 0'-11	10'-8	979		
	g2	12 - #8 @ 0'-11	24'-8	790		
4' x 11' x 25'	d2	50 - #9 AS SHOWN	9'-1	1544	3874	40.7
	f1	25 - #5 @ 1'-0	10'-8	278		
	f2	11 - #5 @ 1'-0	24'-8	283		
	g1	27 - #9 @ 0'-11	10'-8	979		
	g2	12 - #8 @ 0'-11	24'-8	790		
	d2	50 - #9 AS SHOWN	9'-1	1544		
	f1	27 - #5 @ 1'-0	10'-8	306		
	g1	34 - #8 @ 0'-9 1/2	10'-8	968		
	g2	14 - #9 @ 0'-9 1/2	26'-8	1269		
	d2	50 - #9 AS SHOWN	9'-1	1544		
4' x 11' x 27'	f1	27 - #5 @ 1'-0	11'-8	329	4387	44.0
	f2	12 - #5 @ 1'-0	26'-8	334		
	g1	33 - #9 @ 0'-9 1/2	11'-8	1309		
	g2	15 - #9 @ 0'-9 1/2	26'-8	1360		
4' x 12' x 25'	d2	50 - #9 AS SHOWN	9'-1	1544	4876	48.0
	f1	27 - #5 @ 1'-0	11'-8	329		
	f2	12 - #5 @ 1'-0	26'-8	334		
	g1	33 - #9 @ 0'-9 1/2	11'-8	1309		
	g2	15 - #9 @ 0'-9 1/2	26'-8	1360		

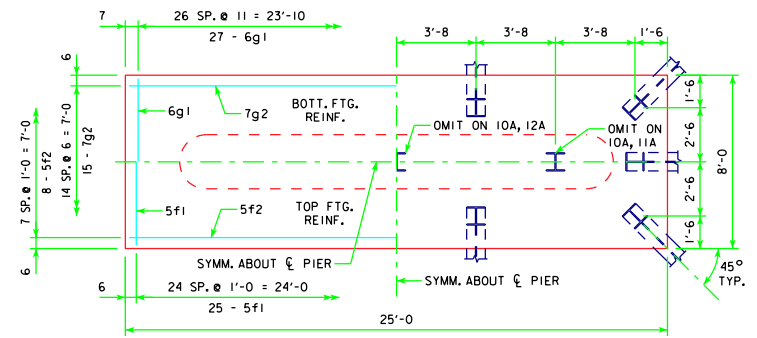
- FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
- FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.



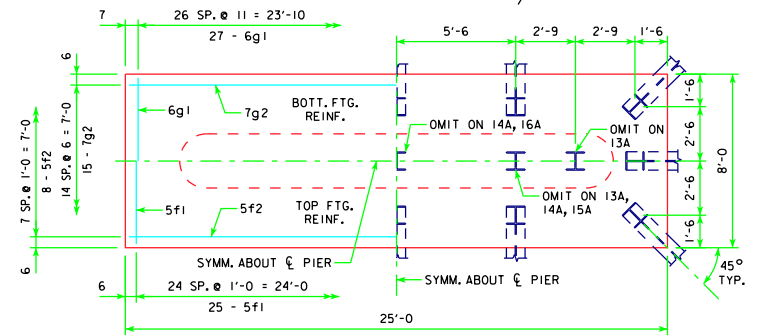
d2 BAR LAYOUT
(SEE SECTION A-A ON SHEET RS40-116-10.)



TYPICAL SECTION



4'-0 x 8'-0 x 25'-0 FOR 10A, 11A & 12A



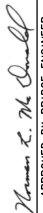
4'-0 x 8'-0 x 25'-0 FOR 13A, 14A, 15A & 16A

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 RS40-116-10.

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.

LATEST REVISION DATE		 Iowa Department of Transportation Highway Division	
		STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES	
		JUNE, 2010	
		TEE PIER - 75 TON STEEL PILE FOOTINGS 0° SKEW - SHEET I	RS40-121-10