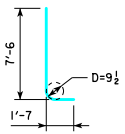
H IN FT.	℄ - ℄ ABUT. BRG.	PILING (HP10x57) NO. & LAYOUT	① LRFD Pu, STRENGTH I, DES. LOAD (KIPS)	FOOTING SIZE
16 TO 18	160'-0	10A	209	4' x 8' x 25'
	180'-0	11A	211	
	200'-0	12A	206	
	220'-0	13A	208	
	240'-0	14A	206	
	260'-0	14B	216	4' x 9' x 25'
	280'-0	16A	211	
	300'-0	16D	214	4' x 11' x 27'
	320'-0	16E	215	4' x 12' x 27'
	340'-0	17B	216	
19 TO 21	160'-0	10A	216	4' x 8' x 25'
	180'-0	11A	218	
	200'-0	12A	213	
	220'-0	13A	214	
	240'-0	14A	212	
	260'-0	15A	213	4' x 9' x 25'
	280'-0	16A	217	
	300'-0	16D	219	4' x 11' x 27'
	320'-0	16E	219	4' x 12' x 27'
	340'-0	18A	210	
22 TO 24	160'-0	10B	218	4' x 9' x 25'
	180'-0	12B	202	
	200'-0	12B	214	
	220'-0	13B	216	
	240'-0	14B	213	
	260'-0	15A	218	
	280'-0	16B	217	4' x 10' x 25'
	300'-0	16E	212	4' x 12' x 27'
	320'-0	17B	215	
	340'-0	18A	214	
25 TO 27	160'-0	11C	209	4' x 10' x 25'
	180'-0	12C	204	
	200'-0	12C	216	
	220'-0	13C	217	
	240'-0	14C	214	
	260'-0	15B	218	
	280'-0	16C	218	4' x 11' x 25'
	300'-0	16E	215	4' x 12' x 27'
	320'-0	17B	218	
	340'-0	18A	217	
28 TO 30	160'-0	11C	214	4' x 10' x 25'
	180'-0	12C	209	
	200'-0	13C	206	
	220'-0	14C	204	
	240'-0	14C	218	
	260'-0	15C	216	4' x 11' x 27'
	280'-0	16D	218	
	300'-0	16E	218	4' x 12' x 27'
	320'-0	18A	210	
	340'-0	18A	219	
31 TO 33	160'-0	12D	198	4' x 11' x 25'
	180'-0	12D	211	
	200'-0	13D	208	
	220'-0	14D	205	
	240'-0	14D	219	
	260'-0	15C	219	4' x 11' x 27'
	280'-0	16E	209	4' x 12' x 27'
	300'-0	17B	212	
	320'-0	18A	213	
	340'-0	19A	214	
34 TO 36	160'-0	12E	200	4' x 11' x 27'
	180'-0	12E	212	
	200'-0	13E	208	
	220'-0	14E	205	
	240'-0	14E	219	
	260'-0	15D	214	4' x 12' x 27'
	280'-0	16E	212	
	300'-0	17B	215	
	320'-0	18A	215	
	340'-0	19A	216	

H IN FT.	℄ - ℄ ABUT. BRG.	PILING (HP10x57) NO. & LAYOUT	① LRFD Pu, STRENGTH I, DES. LOAD (KIPS)	FOOTING SIZE
37 TO 40	160'-0	12F	203	4' x 12' x 27'
	180'-0	12F	215	
	200'-0	13F	215	
	220'-0	14F	217	
	240'-0	15D	205	
	260'-0	15D	217	
	280'-0	16E	215	
	300'-0	17B	218	
	320'-0	18A	218	
	340'-0	19A	219	

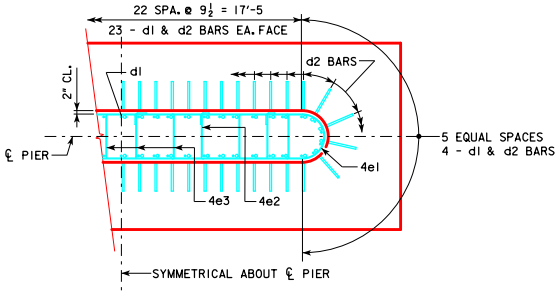


d2

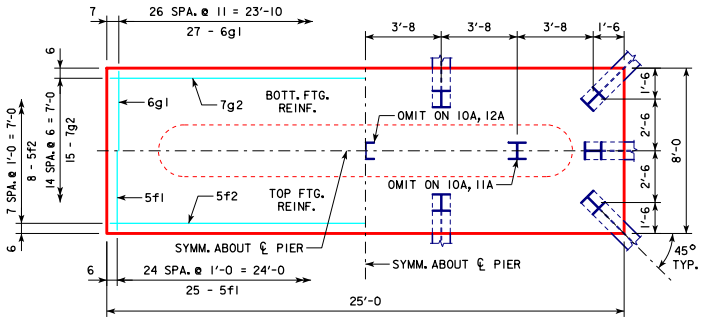
NOTE: D = PIN DIAMETER.
DIMENSIONS ARE OUT TO OUT.

FOOTING SIZE	REINFORCING STEEL (ONE FOOTING) BAR	NO., SIZE & SPACING	LENGTH	WEIGHT (LB.)	TOTAL WEIGHT (LB.)	STRUCTURAL CONCRETE (CY)
4' x 8' x 25'	d2	54 - #9 AS SHOWN	9'-1	1668	3141	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		
4' x 9' x 25'	d2	54 - #9 AS SHOWN	9'-1	1668	3378	33.3
	f1	25 - #5 @ 1'-0	8'-8	226		
	f2	9 - #5 @ 1'-0	24'-8	232		
	g1	28 - #7 @ 0'-10½	8'-8	496		
	g2	15 - #7 @ 0'-7	24'-8	756		
4' x 10' x 25'	d2	54 - #9 AS SHOWN	9'-1	1668	3656	37.0
	f1	25 - #5 @ 1'-0	9'-8	252		
	f2	10 - #5 @ 1'-0	24'-8	257		
	g1	28 - #8 @ 0'-10½	9'-8	723		
	g2	15 - #7 @ 0'-8	24'-8	756		
4' x 11' x 25'	d2	54 - #9 AS SHOWN	9'-1	1668	3998	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		
4' x 11' x 27'	d2	54 - #9 AS SHOWN	9'-1	1668	4511	44.0
	f1	27 - #5 @ 1'-0	10'-8	300		
	f2	11 - #5 @ 1'-0	26'-8	306		
	g1	34 - #8 @ 0'-9½	10'-8	968		
	g2	14 - #9 @ 0'-9½	26'-8	1269		
4' x 12' x 27'	d2	54 - #9 AS SHOWN	9'-1	1668	5000	48.0
	f1	27 - #5 @ 1'-0	11'-8	329		
	f2	12 - #5 @ 1'-0	26'-8	334		
	g1	33 - #9 @ 0'-9½	11'-8	1309		
	g2	15 - #9 @ 0'-9½	26'-8	1360		

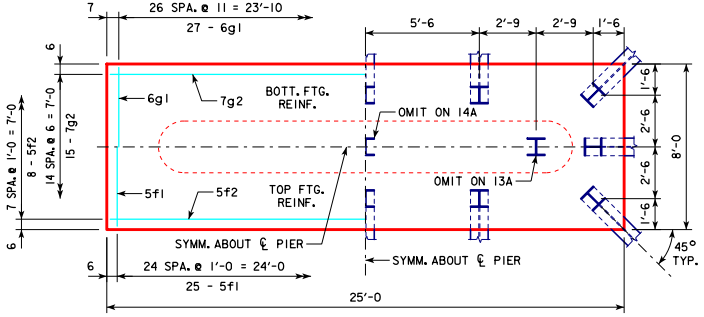
① NOTE: PU, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.



d2 BAR LAYOUT
(SEE SECTION A-A ON SHEET RS40-126-14.)



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

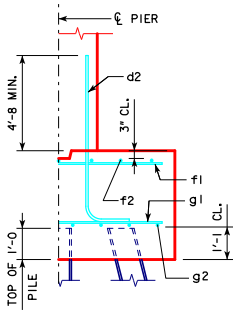


4'-0 x 8'-0 x 25'-0 FOR 13A & 14A

NOTE: THE REINFORCING STEEL QUANTITY IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

NOTE: THE CONCRETE QUANTITY IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

NOTE: THE PILE TYPE IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.



TYPICAL SECTION

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 RS40-126-14.

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.

REVISED 02-2017 - CHANGED VERTICAL CLEARANCE OF REBAR "f2" TO TOP OF PIER FOOTING TO 3" (WAS 2").

02-2017
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

IOWADOT Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES

ROLLED STEEL BEAM BRIDGES

OCTOBER, 2014

TEE PIER-HP10x57 SRL-2
STEEL PILE FOOTINGS
10° SKEW - SHEET 1

RS40-131-14