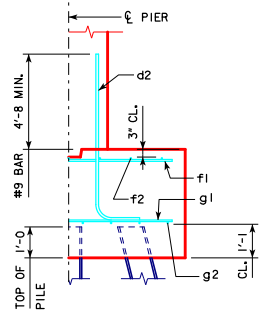


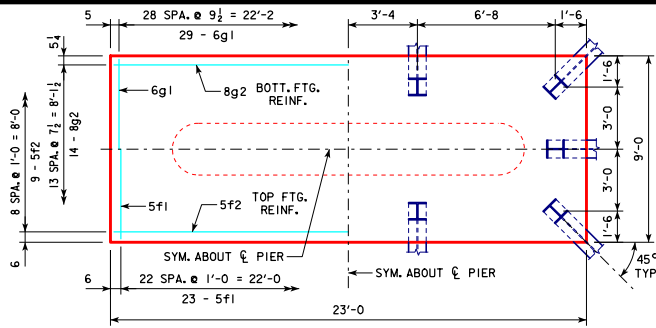
REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.  
REVISED 09-2016 - CHANGED VERTICAL CLEARANCE OF REBAR "f2" TO TOP OF PIER FOOTING TO 3" (WAS 2").



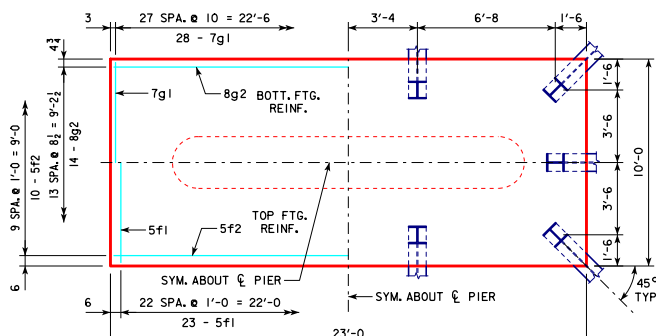
**TYPICAL SECTION**

H FT.	CL. ABUT. FT.	PILING (HP10x57)		FOOTING SIZE
		NO. & LAYOUT	① LRFD P <sub>u</sub> STRENGTH I, DES. LOAD (KIPS)	
201'-4	TO 21	10B	180	4' x 9' x 23'
213'-10	TO 25	10B	186	
226'-4	TO 29	10B	194	
243'-0	TO 33	10B	200	
201'-4	TO 21	10B	187	4' x 9' x 23'
213'-10	TO 25	10B	193	
226'-4	TO 29	10B	200	
243'-0	TO 33	10B	207	
201'-4	TO 21	10C	192	4' x 10' x 23'
213'-10	TO 25	10C	196	
226'-4	TO 29	10C	202	
243'-0	TO 33	10C	209	
201'-4	TO 21	10D	198	4' x 12' x 23'
213'-10	TO 25	10D	202	
226'-4	TO 29	10D	206	
243'-0	TO 33	10D	211	
201'-4	TO 21	10E	205	4' x 12' x 25'
213'-10	TO 25	10E	209	
226'-4	TO 29	10E	213	
243'-0	TO 33	10E	217	

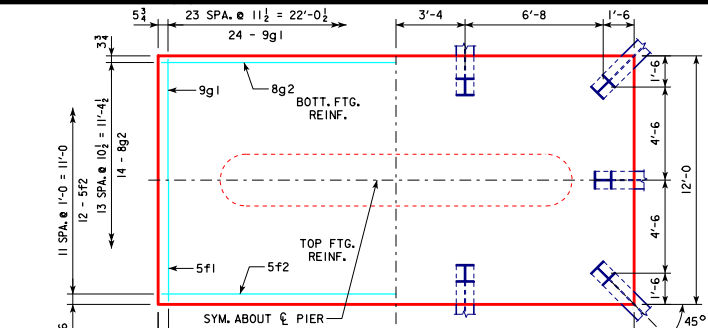
FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)				STRUCTURAL CONCRETE (CY)	
	BAR	NO., SIZE & SPACING	LENGTH	WEIGHT (LB.)		
4' x 9' x 23'	d2	44 - #9 AS SHOWN	9'-1	1359	3005	30.7
	f1	23 - #5 @ 1'-0	8'-8	208		
	f2	9 - #5 @ 1'-0	22'-8	213		
	g1	29 - #6 @ 0'-9 1/2	8'-8	378		
	g2	14 - #8 @ 0'-7 1/2	22'-8	847		
4' x 10' x 23'	d2	44 - #9 AS SHOWN	9'-1	1359	3227	34.1
	f1	23 - #5 @ 1'-0	9'-8	232		
	f2	10 - #5 @ 1'-0	22'-8	236		
	g1	28 - #7 @ 0'-10	9'-8	553		
	g2	14 - #8 @ 0'-8 1/2	22'-8	847		
4' x 12' x 23'	d2	44 - #9 AS SHOWN	9'-1	1359	3722	40.9
	f1	23 - #5 @ 1'-0	11'-8	280		
	f2	12 - #5 @ 1'-0	22'-8	284		
	g1	24 - #9 @ 0'-11 1/2	11'-8	952		
	g2	14 - #8 @ 0'-10 1/2	22'-8	847		
4' x 12' x 25'	d2	44 - #9 AS SHOWN	9'-1	1359	4344	44.4
	f1	25 - #5 @ 1'-0	11'-8	304		
	f2	12 - #5 @ 1'-0	24'-8	309		
	g1	25 - #9 @ 1'-0	11'-8	992		
	g2	13 - #10 @ 0'-11 1/2	24'-8	1380		



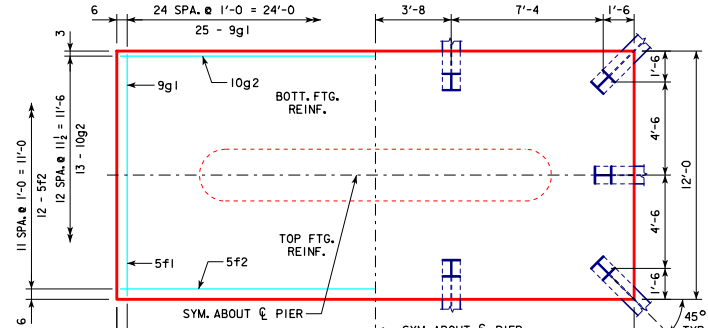
**4'-0 x 9'-0 x 23'-0 FOR 10B**



**4'-0 x 10'-0 x 23'-0 FOR 10C**



**4'-0 x 12'-0 x 23'-0 FOR 10D**



**4'-0 x 12'-0 x 25'-0 FOR 10E**

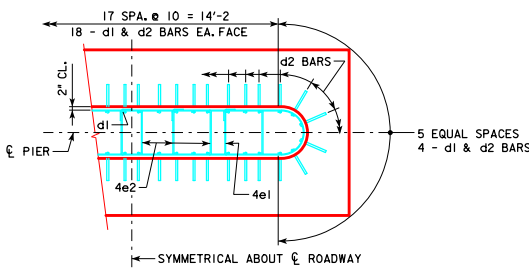
**FOOTING NOTES:**

THESE FOOTINGS ARE DESIGNED AND DETAILED TO BE USED WITH THE CAP AND COLUMN DETAILS OF THE TEE PIERS AS SHOWN ON SHEET H24-50-06.

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.

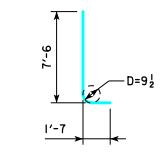
PIER PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.



**d2 BAR LAYOUT**

(SEE SECTION A-A ON SHEET H24-50-06.)

① NOTE: P<sub>u</sub> STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.



**d2**

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

09-2016  
LATEST REVISION DATE  
*Thomas E. McQuill*  
APPROVED BY BRIDGE ENGINEER

**Iowa Department of Transportation**  
Highway Division

STANDARD DESIGN - 24' ROADWAY, THREE SPAN BRIDGE

**PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES**

DECEMBER, 2006

**TEE PIER-HP10x57 SRL-2 STEEL PILE FOOTINGS**

0° SKEW - H=25' TO 40'

**H24-54-06**