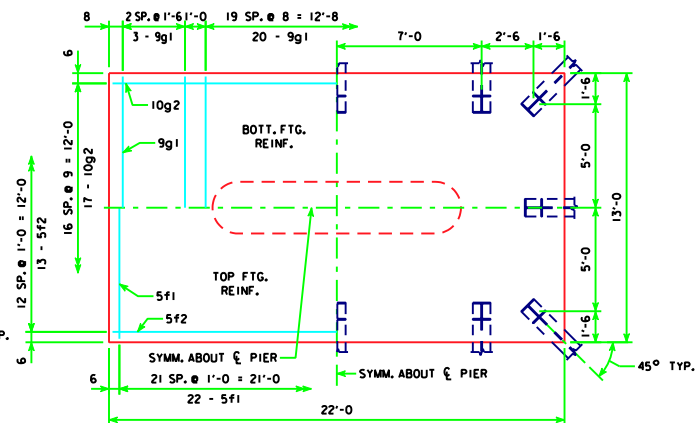
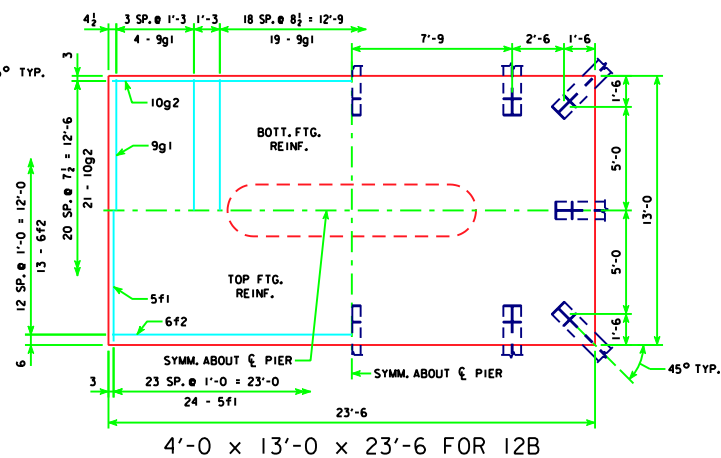
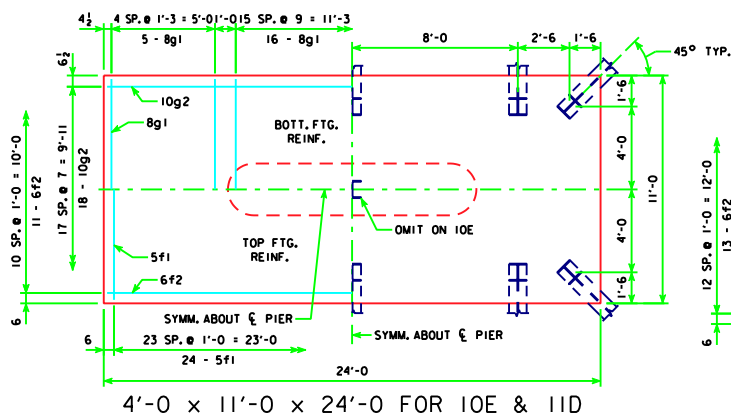


Figure 10.10 is a detailed plan view of a rectangular pier with a central oval opening. The overall dimensions are 4'-0" x 10'-0" x 22'-0" for 10D & 11C. The plan shows reinforcement details including top and bottom reinforcement (5f1, 5f2, 10g2, 8g1, 13 SP, 9 SP), and symmetrical reinforcement about the pier centerline. Dimensions include overall width (22'-0"), overall depth (10'-0"), and various offsets and clearances. A 45-degree angle is indicated for the corner reinforcement.



H IN FT.	E - E ABUT. BURG.	PILING		FOOTING SIZE
		NO. & LAYOUT	DES. BRG. (TONS)	
0 TO 21	201'-4	10D	48	4' x 10' x 22'
	213'-10	10D	49	
	226'-4	11C	47	
	243'-0	11C	48	
25 TO 30	201'-4	10E	49	4' x 11' x 24'
	213'-10	10E	50	
	226'-4	11D	48	
	243'-0	11D	50	
32 TO 35	201'-4	10E	50	4' x 11' x 24'
	213'-10	11D	48	
	226'-4	11D	49	
	243'-0	11D	50	
36 TO 40	201'-4	12A	45	4' x 13' x 22'
	213'-10	12A	46	
	226'-4	12A	46	
	243'-0	12A	47	
41 TO 45	201'-4	12B	45	4' x 13' x 23'-6
	213'-10	12B	46	
	226'-4	12B	47	
	243'-0	12B	48	

FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)				TOTAL WEIGHT (LB.)	STRUCTURAL CONCRETE (CY)
	BAR	NO., SIZE & SPACING	LENGTH	WEIGHT (LB.)		
4' x 10' x 22'	d2	30 - #5 AS SHOWN	9'-1	926	3154	32.6
	f1	22 - #8 @ 1'-0	9'-8	222		
	f2	10 - #5 @ 1'-0	21'-8	268		
	g1	22 - #8 AS SHOWN	9'-8	526		
	d2	30 - #10 @ 0'-9	21'-8	1212		
4' x 11' x 24'	d2	30 - #9 AS SHOWN	9'-1	926	4157	39.1
	f1	24 - #5 @ 1'-0	10'-8	267		
	f2	11 - #6 @ 1'-0	23'-8	391		
	g1	26 - #8 AS SHOWN	10'-8	740		
	g2	18 - #10 @ 0'-7	23'-8	1833		
4' x 13' x 22'	d2	30 - #9 AS SHOWN	9'-1	926	4216	42.4
	f1	22 - #5 @ 1'-0	12'-8	291		
	f2	13 - #5 @ 1'-0	21'-8	294		
	g1	26 - #9 AS SHOWN	12'-8	1120		
	g2	17 - #10 @ 0'-9	21'-8	1585		
4' x 13' x 23'-6	d2	30 - #10 AS SHOWN	10'-6	1355	5380	45.3
	f1	24 - #5 @ 1'-0	12'-8	317		
	f2	13 - #6 @ 1'-0	23'-2	452		
	g1	27 - #9 AS SHOWN	12'-8	1163		
	g2	21 - #10 @ 0'-7 1/2	23'-2	2093		



10 SPA. ϕ 11' 9" 2

d2 BARS

11 - d1 & d2 BARS EA. FACE

5 EQUAL SPACES
4 - d1 & d2 BARS

SYMMETRICAL ABOUT C ROADWAY

d2 BAR LAYOUT

(SEE SECTION A-A ON SHEET H24-51-06.)

NOTE:
SEE SHEET H24-52-06 FOR FOOTING NOTES.

LATEST REVISION DATE <i>Thomas E. Mc Donnell</i> APPROVED BY BRIDGE ENGINEER	 Iowa Department of Transportation Highway Division	
	STANDARD DESIGN - 24' ROADWAY, THREE SPAN BRIDGE PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES	
	HL93 SUPERSTRUCTURE	DECEMBER, 2006
TEE PIER - STEEL PILE FOOTINGS, H=25' TO 40' 15° SKEW		HS25 SUBSTRUCTURE H24-53-06