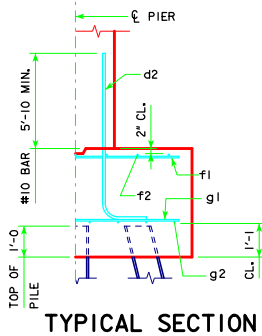
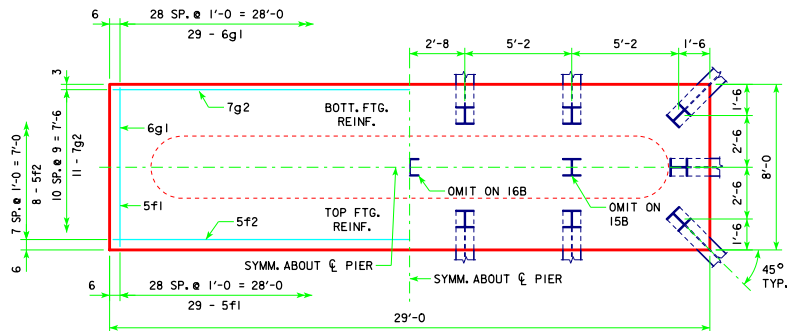


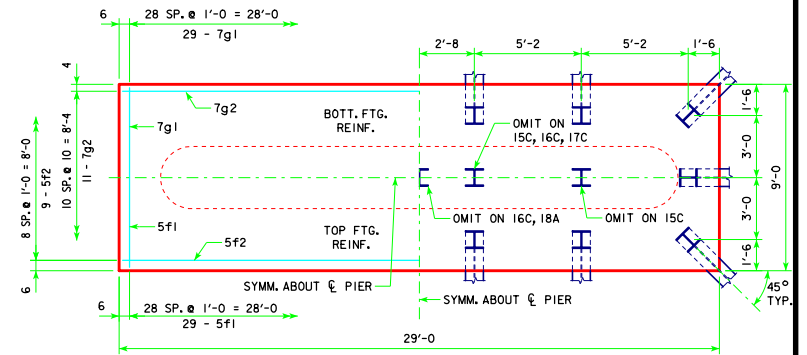
REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.



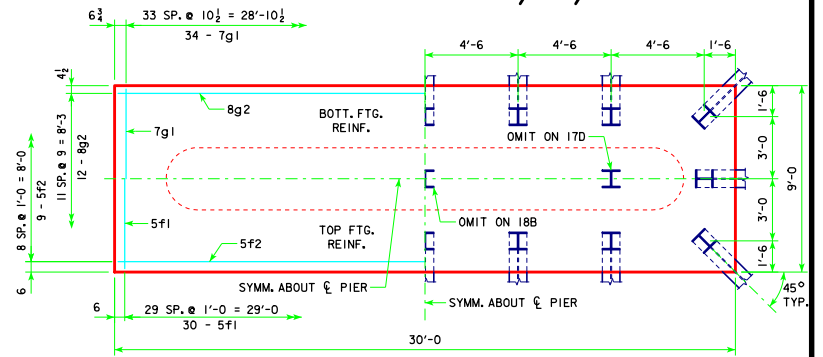
TYPICAL SECTION



4'-0 x 8'-0 x 29'-0 FOR 15B, 16B & 17B



4'-0 x 9'-0 x 29'-0 FOR 15C, 16C, 17C & 18A



4'-0 x 9'-0 x 30'-0 FOR 17D & 18B

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 H40-81-06.

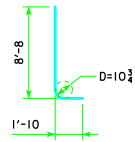
BATTER PILES IN EXTERIOR ROWS 1/4 IN THE DIRECTION SHOWN.

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.

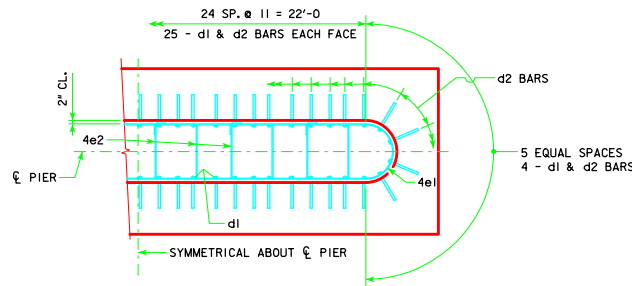
H IN FT.	CL. - ABUT. BRG.	CL. - P. BRG.	PILING (HP10x57)		FOOTING SIZE
			NO. & LAYOUT	(1) LRFD PU, STRENGTH I DES. LOAD (KIPS)	
27 TO 30	201'-4	15B	217	4' x 8' x 29'	
			210		
			219		
			219		
30 TO 33	201'-4	16C	206	4' x 9' x 29'	
			213		
			213		
			213		
33 TO 36	201'-4	16C	210	4' x 9' x 29'	
			217		
			218		
			217		
36 TO 39	201'-4	17D	203	4' x 9' x 30'	
			209		
			218		
			211		
39 TO 42	201'-4	17D	208	4' x 9' x 30'	
			215		
			211		
			217		

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



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

FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)			TOTAL WEIGHT (LB.)	STRUCTURAL CONCRETE (CY)
	BAR NO., SIZE & SPACING	LENGTH	WEIGHT (LB.)		
4' x 8' x 29'	d2 58 - #10 AS SHOWN	10'-6	2621	4071	34.4
	f1 29 - #5 @ 1'-0	7'-8	232		
	f2 8 - #5 @ 1'-0	28'-8	339		
	g1 29 - #6 @ 1'-0	7'-8	334		
	g2 11 - #7 @ 0'-9	28'-8	645		
4' x 9' x 29'	d2 58 - #10 AS SHOWN	10'-6	2621	4311	38.7
	f1 29 - #5 @ 1'-0	8'-8	262		
	f2 9 - #5 @ 1'-0	28'-8	519		
	g1 29 - #7 @ 1'-0	8'-8	514		
	g2 11 - #7 @ 0'-10	28'-8	645		
4' x 9' x 30'	d2 58 - #10 AS SHOWN	10'-6	2621	4723	40.0
	f1 30 - #5 @ 1'-0	8'-8	271		
	f2 9 - #5 @ 1'-0	29'-8	278		
	g1 34 - #7 @ 0'-10 1/2	8'-8	602		
	g2 12 - #8 @ 0'-9	29'-8	951		



d2 LAYOUT
(SEE SECTION A-A ON SHEET H40-81-06.)

LATEST REVISION DATE
05-13
APPROVED BY BRIDGE ENGINEER
Thomas E. Mc Donnell

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES
AUGUST, 2009

TEE PIER-HP10x57 SRL-2 STEEL PILE FOOTINGS
45° SKEW - H=25' TO 40'
H40-86-06