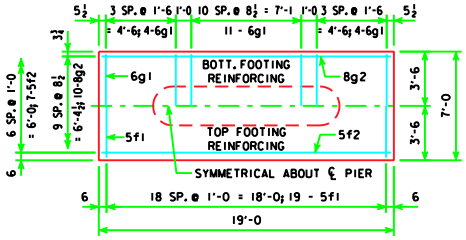
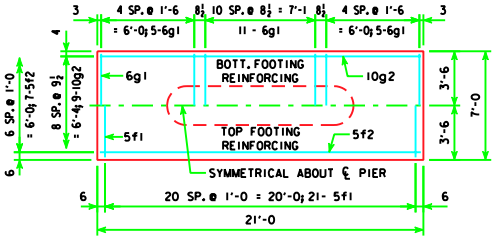
H IN FT.	℄ - ℄ ABUT. BRG.	MIN. BRG. (TSF)	FOOTING SIZE
16 TO 18	138'-10	4	3'-6 x 7' x 19'
	151'-4		
	163'-10	5	
	176'-4		
	188'-10		
	201'-4		
	213'-10		
	226'-4		
	243'-0		
19 TO 21	138'-10	4	3'-6 x 7' x 21'
	151'-4		
	163'-10	5	
	176'-4		
	188'-10		
	201'-4		
	213'-10		
	226'-4		
	243'-0		
22 TO 24	138'-10	4	3'-6 x 7' x 23'
	151'-4		
	163'-10	5	
	176'-4		
	188'-10		
	201'-4		
	213'-10		
	226'-4		
	243'-0		

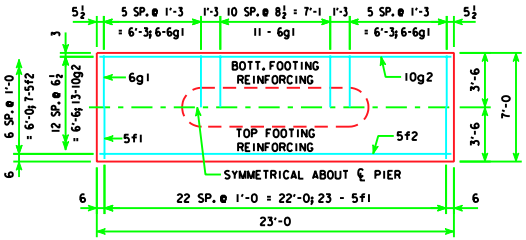
FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)					TOTAL WEIGHT (LB.)	STRUCTURAL CONCRETE (CY)
	BAR	NO., SIZE & SPACING	LENGTH	WEIGHT (LB.)			
3'-6 x 7' x 19'	d2	30 - #9 AS SHOWN	9'-5	961		1917	17.2
	f1	19 - #5 @ 1'-0	6'-8	132			
	f2	7 - #5 @ 1'-0	18'-8	136			
	g1	19 - #6 AS SHOWN	6'-8	190			
	g2	10 - #8 @ 0'-8½	18'-8	498			
3'-6 x 7' x 21'	d2	30 - #9 AS SHOWN	9'-5	961		2268	19.1
	f1	21 - #5 @ 1'-0	6'-8	146			
	f2	7 - #5 @ 1'-0	20'-8	151			
	g1	21 - #6 AS SHOWN	6'-8	210			
	g2	9 - #10 @ 0'-9½	20'-8	800			
3'-6 x 7' x 23'	d2	30 - #9 AS SHOWN	9'-5	961		2784	20.9
	f1	23 - #5 @ 1'-0	6'-8	160			
	f2	7 - #5 @ 1'-0	22'-8	165			
	g1	23 - #6 AS SHOWN	6'-8	230			
	g2	13 - #10 @ 0'-6½	22'-8	1268			



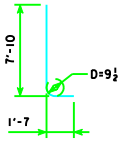
3'-6 x 7'-0 x 19'-0



3'-6 x 7'-0 x 21'-0

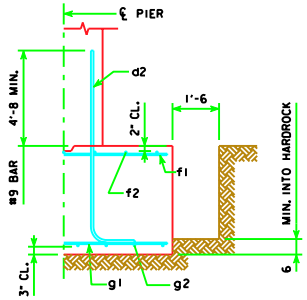


3'-6 x 7'-0 x 23'-0

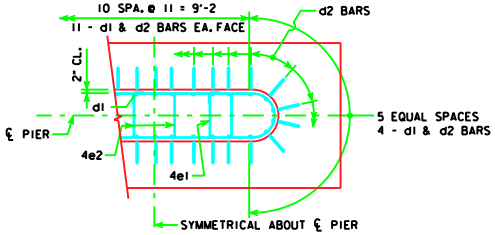


d2

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



TYPICAL SECTION



d2 BAR LAYOUT
(SEE SECTION A-A ON SHEET H24-51-06.)

FOOTING NOTES:

THESE SPREAD FOOTINGS ARE DESIGNED AND DETAILED TO BE USED WITH THE CAP AND COLUMN DETAILS OF THE TEE PIERS AS SHOWN ON SHEET H24-51-06.

THESE SPREAD FOOTINGS SHALL EXTEND AT LEAST 6 INCHES INTO SUITABLE FOUNDATION ROCK AND THE LAST 6 INCHES OF ROCK EXCAVATION SHALL BE TO NEAT LINES OF MASONRY. SEE TABLE FOR MINIMUM ALLOWABLE BEARING VALUE REQUIRED FOR THE FOUNDATION ROCK.

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN STANDARD FOR THREE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

HL93 SUPERSTRUCTURE DECEMBER 2006 HS25 SUBSTRUCTURE

TEE PIER - SPREAD FOOTINGS, H=16' TO 24'
15° SKEW

H24-54-06