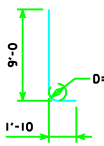
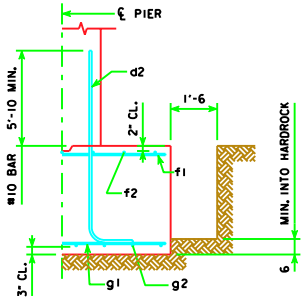
| H IN FT. | ℄ - ℄ ABUT. BRG. | MIN. BRG. (TSF) | FOOTING SIZE |
|---|---|---|---|
| 16 TO 18 | 138'-10<br>151'-4 | 5 | 3'-6 x 7' x 18' |
| | 163'-10<br>176'-4<br>188'-10<br>201'-4<br>213'-10<br>226'-4 | 5 | 3'-6 x 7' x 20' |
| | 243'-0 | 5 | 3'-6 x 8' x 20' |
| 19 TO 21 | 138'-10<br>151'-4<br>163'-10 | 5 | 3'-6 x 7' x 20' |
| | 176'-4<br>188'-10<br>201'-4<br>213'-10<br>226'-4<br>243'-0 | 5 | 3'-6 x 8' x 20' |
| 22 TO 24 | 138'-10<br>151'-4<br>163'-10 | 4 | 3'-6 x 9' x 20' |
| | 176'-4<br>188'-10<br>201'-4<br>213'-10<br>226'-4<br>243'-0 | 5 | |

| FOOTING SIZE | REINFORCING STEEL (ONE FOOTING) | | | | | TOTAL WEIGHT (LB.) | STRUCTURAL CONCRETE (CY) |
|---|---|---|---|---|---|---|---|
| | BAR | NO., SIZE & SPACING | LENGTH | WEIGHT (LB.) | | | |
| 3'-6 x 7' x 18' | d2 | 30 - #10 AS SHOWN | 10'-10 | 1398 | | 2209 | 16.3 |
| | f1 | 18 - #5 @ 1'-0 | 6'-8 | 125 | | | |
| | f2 | 7 - #5 @ 1'-0 | 17'-8 | 129 | | | |
| | g1 | 18 - #6 AS SHOWN | 6'-8 | 180 | | | |
| | g2 | 8 - #8 @ 0'-11 | 17'-8 | 377 | | | |
| 3'-6 x 7' x 20' | d2 | 30 - #10 AS SHOWN | 10'-10 | 1398 | | 2416 | 18.1 |
| | f1 | 20 - #5 @ 1'-0 | 6'-8 | 139 | | | |
| | f2 | 7 - #5 @ 1'-0 | 19'-8 | 144 | | | |
| | g1 | 20 - #6 AS SHOWN | 6'-8 | 200 | | | |
| | g2 | 8 - #9 @ 0'-11 | 19'-8 | 535 | | | |
| 3'-6 x 8' x 20' | d2 | 30 - #10 AS SHOWN | 10'-10 | 1398 | | 2665 | 20.7 |
| | f1 | 20 - #5 @ 1'-0 | 7'-8 | 160 | | | |
| | f2 | 8 - #5 @ 1'-0 | 19'-8 | 164 | | | |
| | g1 | 20 - #7 AS SHOWN | 7'-8 | 313 | | | |
| | g2 | 12 - #8 @ 0'-8 | 19'-8 | 630 | | | |
| 3'-6 x 9' x 20' | d2 | 30 - #10 AS SHOWN | 10'-10 | 1398 | | 2857 | 23.3 |
| | f1 | 20 - #5 @ 1'-0 | 8'-8 | 181 | | | |
| | f2 | 9 - #5 @ 1'-0 | 19'-8 | 185 | | | |
| | g1 | 20 - #8 AS SHOWN | 8'-8 | 463 | | | |
| | g2 | 12 - #8 @ 0'-9 | 19'-8 | 630 | | | |

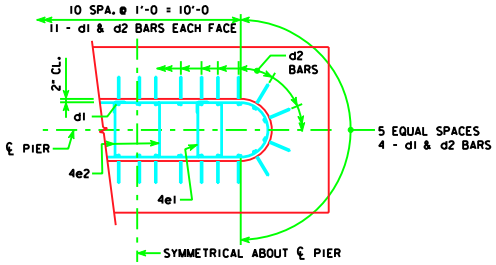



d2

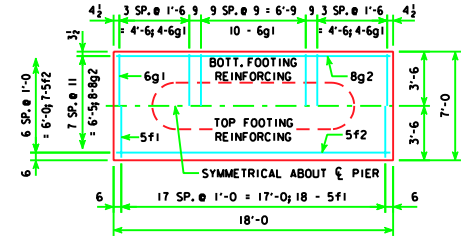
NOTE: D = PIN DIAMETER.
DIMENSIONS ARE OUT TO OUT.



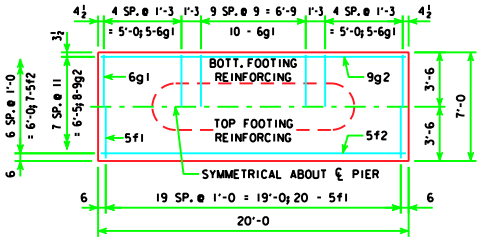

TYPICAL SECTION



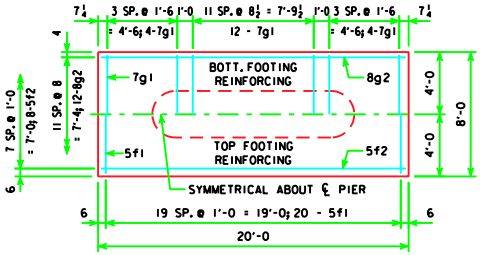

d2 BAR LAYOUT
(SEE SECTION A-A ON SHEET H24-56-06.)



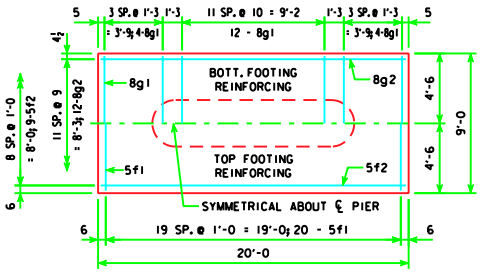

3'-6 x 7'-0 x 18'-0




3'-6 x 7'-0 x 20'-0




3'-6 x 8'-0 x 20'-0




3'-6 x 9'-0 x 20'-0

## 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 H24-56-06.

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'
30° SKEW

H24-59-06