

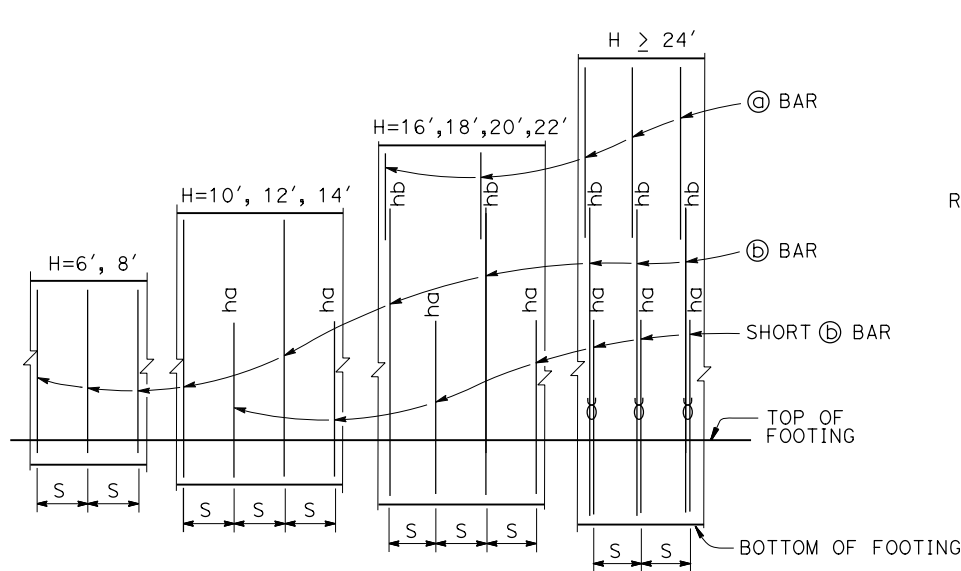
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE			No.		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.			CIVIL		
The Registered Civil Engineer for the project is responsible for the selection and proper application of the component design and any modifications shown.					

TABLE OF REINFORCING STEEL DIMENSIONS AND DATA														
DESIGN H	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'
W	8'- 3"	8'- 6"	9'- 0"	9'- 6"	10'- 0"	10'- 9"	11'- 3"	12'- 0"	13'- 3"	14'- 3"	15'- 9"	16'- 9"	18'- 0"	19'- 9"
C	2'- 9"	2'- 9"	3'- 0"	3'- 3"	3'- 4"	3'- 6"	3'- 9"	4'- 0"	4'- 3"	4'- 9"	5'- 3"	5'- 6"	5'- 9"	6'- 7"
B	5'- 6"	5'- 9"	6'- 0"	6'- 3"	6'- 8"	7'- 3"	7'- 6"	8'- 0"	9'- 0"	9'- 6"	10'- 6"	11'- 3"	12'- 3"	13'- 2"
F PILE FOOTING	1'- 6"	1'- 6"	1'- 6"	1'- 6"	1'- 9"	2'- 0"	2'- 0"	2'- 6"	2'- 9"	2'- 9"	3'- 0"	3'- 3"	3'- 9"	4'- 0"
M	1'- 3"	1'- 3"	1'- 6"	1'- 9"	1'- 10"	2'- 0"	2'- 3"	2'- 6"	2'- 9"	3'- 3"	3'- 9"	4'- 0"	4'- 3"	5'- 1"
N	4'- 0"	4'- 3"	4'- 6"	4'- 9"	5'- 2"	5'- 9"	6'- 0"	6'- 6"	7'- 6"	8'-0"	9'- 0"	9'- 9"	10'- 9"	11'- 8"
ROW 1 SPACING	12'- 3"	10'- 3"	8'- 9"	7'- 6"	6'- 3"	5'- 3"	4'- 9"	4'- 0"	3'- 9"	3'- 9"	4'- 0"	3'- 9"	3'- 9"	3'- 9"
ROW 2 SPACING	14'- 0"	12'- 9"	11'- 6"	10'- 3"	9'- 3"	8'- 3"	7'- 9"	6'- 6"	7'- 6"	6'- 0"	4'- 0"	4'- 0"	3'- 9"	3'- 9"
ROW 3 SPACING									6'- 0"	5'- 3"	5'- 0"	4'- 0"	6'- 0"	4'- 0"
ROW 4 SPACING													3'- 9"	3'- 9"
BATTER	0	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	5/8:12	5/8:12	5/8:12	3/4:12	3/4:12	7/8:12	1:12	1:12
Ⓐ BARS						#7 @ 15	#7 @ 12	#7 @ 12	#8 @ 12	#6 @ 6	#6 @ 6	#6 @ 6	#8 @ 9	#9 @ 9
Ⓑ BARS	#8 @ 12	#7 @ 9	#7 @ 6	#7 @ 6	#7 @ 6	#9 @ 7.5	#9 @ 6	#10 @ 6	#10 @ 6	#8 @ 6 ⌘	#8 @ 6 ⌘	#8 @ 6 ⌘	#10 @ 9 ⌘	#11 @ 9 ⌘
ha			5'- 0"	6'- 0"	7'- 0"	7'- 0"	6'- 0"	7'- 0"	7'- 0"	7'- 6"	8'- 6"	9'- 3"	15'- 0"	11'- 3"
hb						11'- 6"	12'- 0"	13'- 3"	16'- 0"	15'- 6"	17'- 6"	18'- 9"	21'- 0"	20'- 9"
Ⓒ BARS	#6 @ 12	#6 @ 9	#5 @ 6	#6 @ 6	#6 @ 6	#8 @ 7.5	#8 @ 6	#9 @ 6	#9 @ 6	#10 @ 6	#10 @ 6	#11 @ 6	#10 @ 9 ⌘	#10 @ 9 ⌘
Ⓓ BARS	#5 @ 12	#5 @ 9	#5 @ 12	#5 @ 12	#5 @ 12	#6 @ 15	#5 @ 12	#5 @ 12	#6 @ 12	#6 @ 12	#6 @ 12	#7 @ 12	#6 @ 9	#9 @ 9
Ⓔ BARS	10-#7 @ 6	8-#7 @ 7	10-#6 @ 6	8-#6 @ 6	6-#6 @ 12	6-#5 @ 12	6-#5 @ 12	6-#5 @ 15	#5 @ 15	#5 @ 15	#5 @ 15	#5 @ 15	#5 @ 15	#5 @ 15
Ⓕ BARS	10-#8 @ 7	10-#8 @ 6	10-#7 @ 8	12-#6 @ 7	8-#7 @ 11	8-#6 @ 13	8-#6 @ 12	8-#5 @ 15	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18

NOTE:  
Total Ⓐ bars and Ⓕ bars shown are total number of top and bottom bars combined.

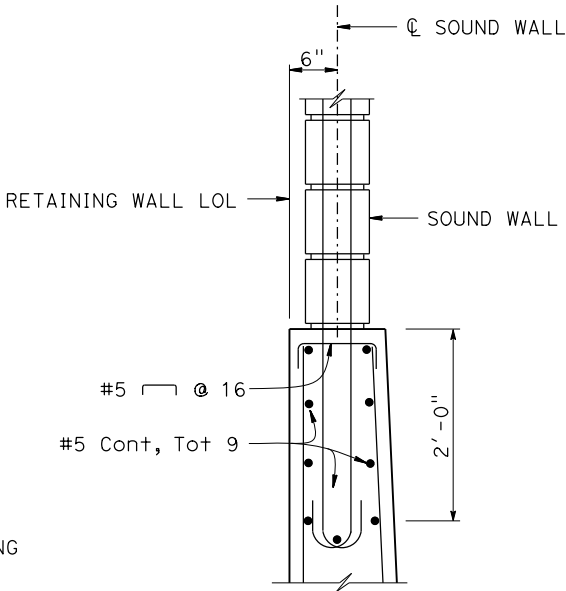
LEGEND:  
⌘ : 2 bar bundle

- NOTES:
- All piles are class 90 concrete piles.
  - Pile batter shown are 1:3.
  - Minimum distance between center of pile and edge of footing is 1'-6".
  - Lateral resistance of each pile:  
30 kip for strength limit states.  
40 kip for extreme limit states.  
Pile group reduction factors are not applied, unless soil passive resistance on footing is included.
  - Maximum spacing between piles is shown in the table. Reduce to suit the length of footing.
  - Minimum distance between any two piles is 3'-0". Reduce to suit the length of footing.
  - For sound wall and retaining wall architectural finish or texture, see details elsewhere in Project Plans.
  - For details not shown and drainage notes, see (B3-5).
  - Footing cover, 1'-6" minimum.
  - For sound wall and reinforcements see "SOUND WALL - MASONRY BLOCK ON RETAINING WALL" sheets.



ELEVATION  
NO SCALE

NOTES:  
"ha" and "hb" above Ⓑ bars indicate distance from top of footing to upper end of Ⓑ bars, see table.  
"S" is Ⓑ bar spacing, see table.  
⌘ : 2 bar bundle



DETAIL A  
1" = 1'-0"

DESIGN DATA

Design: AASHTO LRFD Bridge Design Specifications, 4th edition with California Amendments

WS: 33 psf on sound wall  
LS: Varied surcharge on level ground surface

EQE: Mononabe-Okabe Method  
K<sub>h</sub> = 0.3  
K<sub>v</sub> = 0.0

Soil: φ = 34°  
γ = 120 pcf

Reinforced Concrete: f'c = 3600 psi  
fy = 60,000 psi

Load Combinations and Limit States

Service I Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS

Service II Q=1.00DC+1.00EV+1.00EH+1.00WS

Strength I Q=aDC+BEV+1.50EH+1.75LS  
Q=1.25DC + 1.35EV + 0.90EH + 1.75LS (for piles at heel)

Strength III Q=aDC+BEV+1.50EH+1.40WS

Strength V Q=aDC+BEV+1.50EH+1.35LS+0.40WS

Extreme I Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE

Where:

Q: Force Effects  
a: 1.25 or 0.90, Which ever Controls Design  
B: 1.35 or 1.00, which ever Controls Design  
DC: Dead Load of Structure Components  
EV: Vertical Earth Fill Pressure  
LS: Live Load Surcharge  
EQE: Seismic Earth Pressure  
EQD: Soil and Structure Components Inertia.  
Soil inertia ignored for stem design  
WS: Wind Load on Sound Wall and Barrier