

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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REGISTERED CIVIL ENGINEER DATE _____

PLANS APPROVAL DATE _____

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.

The Registered Civil Engineer for the project is responsible for the selection and proper application of the component design and any modifications shown.



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
 $K_h = 0.3$
 $K_v = 0.0$

Soil: $\phi = 34^\circ$
 $\gamma = 120$ pcf

Reinforced Concrete: $f'_c = 3600$ psi
 $f_y = 60,000$ 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 $Q=aDC+\beta EV+1.50EH+1.75LS$

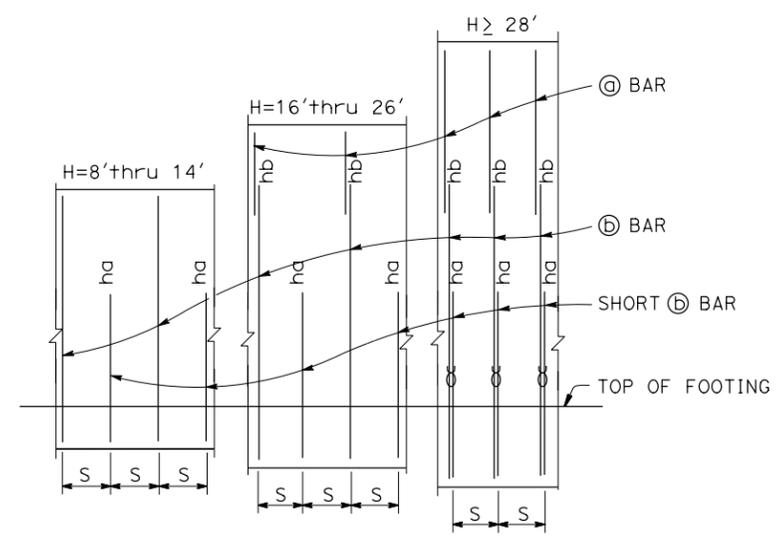
Strength III $Q=aDC+\beta EV+1.50EH+1.40WS$

Strength V $Q=aDC+\beta EV+1.50EH+1.35LS+0.40WS$

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

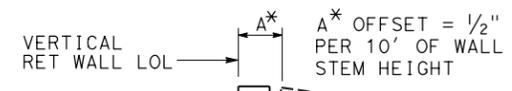
Where: Q: Force Effects
a: 1.25 or 0.90, which ever Controls Design
 β : 1.35 or 1.00, which ever Controls Design
DC: Dead Load of Structure Components
EV: Vertical Earth Fill Pressure
LS: Live Load Surcharge
EQE: Seismic Earth Pressure
EQD: Soil and Structure Components Inertia
Soil inertia ignored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

- NOTES:
- All piles are class 90 concrete piles.
 - Pile batter shown are 1:3.
 - Minimum distance between center 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**. Substitution of geocomposite drain for pervious backfill material is not permitted.
 - Footing cover, 2'-0" minimum.
 - For sound wall and reinforcements see "SOUND WALL - MASONRY BLOCK ON RETAINING WALL" sheets.



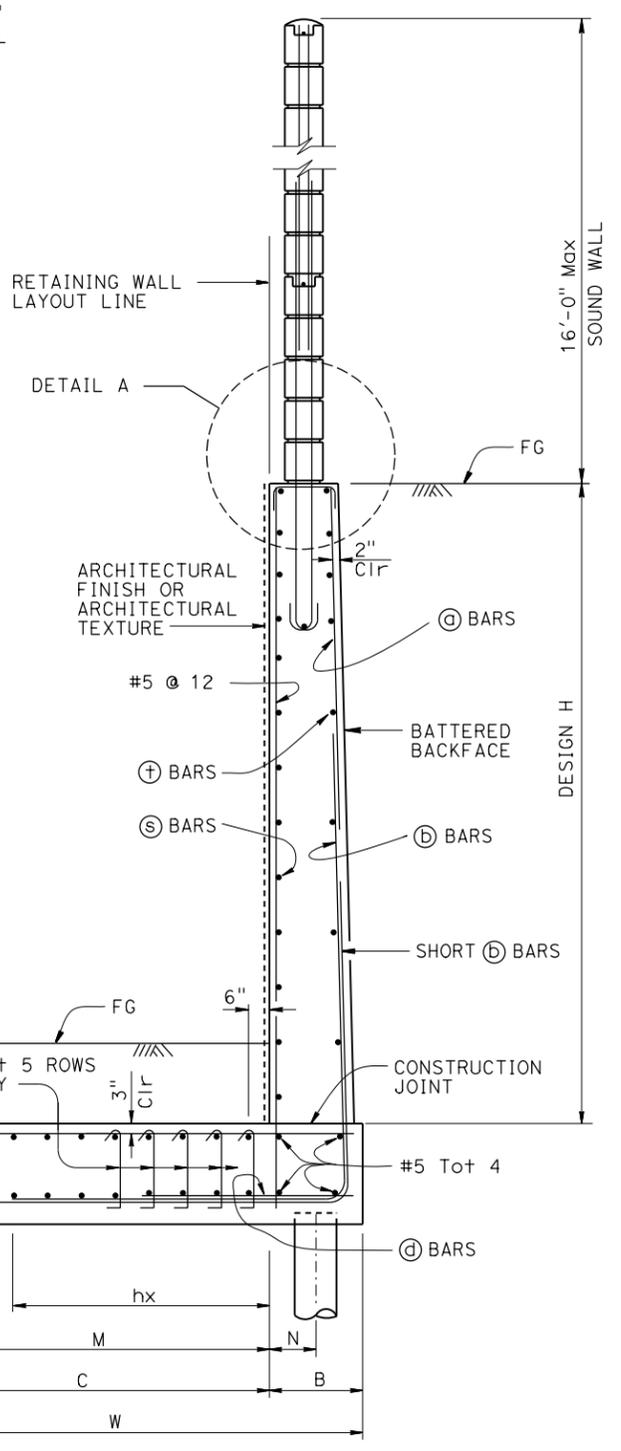
ELEVATION
NO SCALE

NOTES:
"ha", "hb" above (D) bars indicate distance from top of footing to upper end of (D) bars, see table.
"S" is (D) bar spacing, see table.

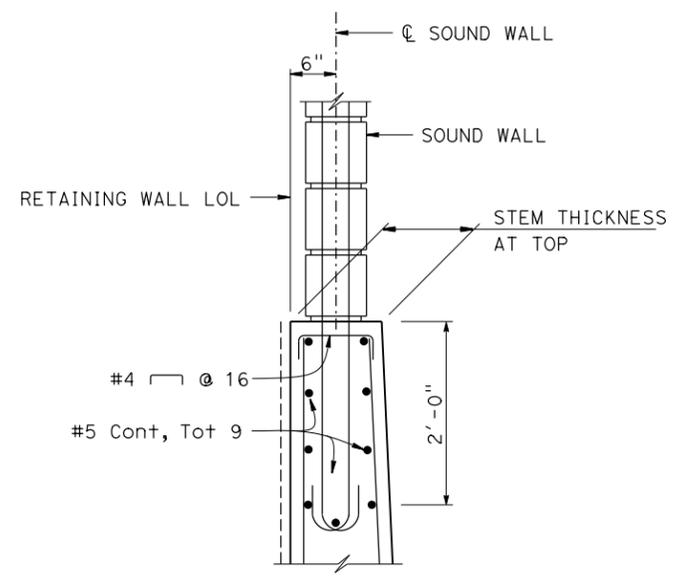


WALL OFFSET
NO SCALE

Values for offsetting forms to be determined by the engineer



PILE FOOTING SECTION
NO SCALE



DETAIL A
1" = 1'-0"

For sound wall reinforcement, see "SOUND WALL - MASONRY BLOCK ON RETAINING WALL" sheet

BRIDGE STANDARD DETAILS		The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California.	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO.	RETAINING WALL TYPE 7SWP - DETAILS No.1
xs14-400-1 FILE NO.	October 2014 APPROVAL DATE				POST MILE	
Refer to: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html		FILE => xs14-400-1.dgn USERNAME => s136236	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	UNIT: PROJECT NUMBER & PHASE:	CONTRACT NO.:	DISREGARD PRINTS BEARING EARLIER REVISION DATES
		TIME PLOTTED => 10:39	DATE PLOTTED => 18-JUL-2016	REVISION DATES 6-19-14 8-6-14 8-20-15 7-14-16		SHEET OF