

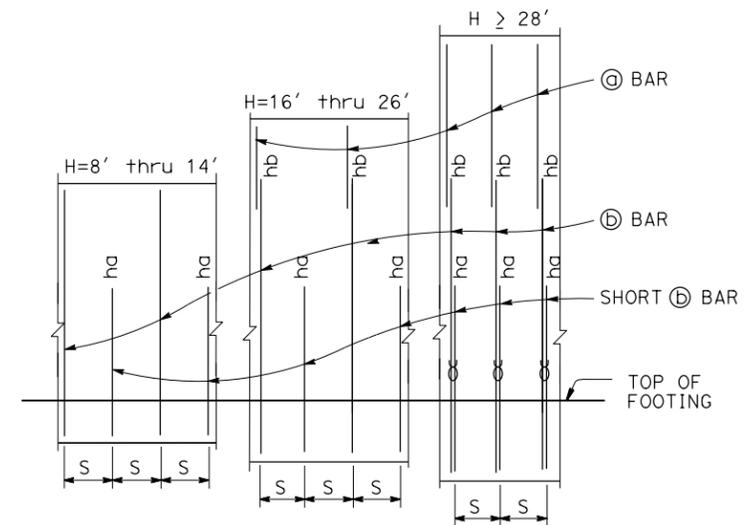
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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REGISTERED CIVIL ENGINEER DATE \_\_\_\_\_

PLANS APPROVAL DATE \_\_\_\_\_

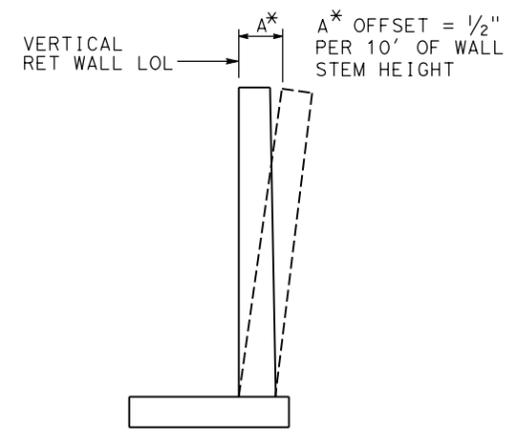
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The Registered Civil Engineer for the project is responsible for the selection and proper application of the component design and any modifications shown.



**ELEVATION**  
NO SCALE

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



**WALL OFFSET**  
NO SCALE

Values for offsetting forms to be determined by the Engineer.

**DESIGN DATA**

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

WS: 33 psf on Sound wall and Barrier

LS: Varied surcharge on level ground surface

CT: 54 kip maximum traffic impact loading evenly distributed over 10 feet at top of the barrier and 1:1 distribution down and outward

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  $Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS+Td$

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

Strength I  $Q=aDC+\beta EV+1.50EH+1.75LS+Td$

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

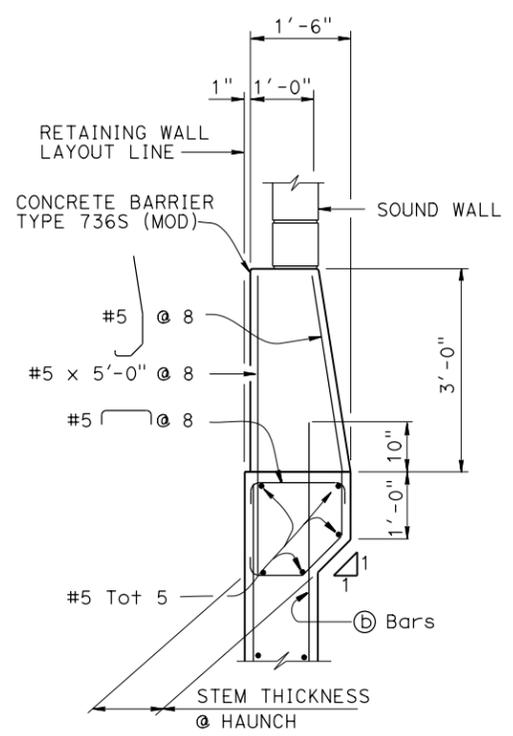
Strength V  $Q=aDC+\beta EV+1.50EH+1.35LS+0.40WS+Td$

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

Extreme II  $Q=1.00DC+1.00EV+1.00EH+1.00CT+Td$

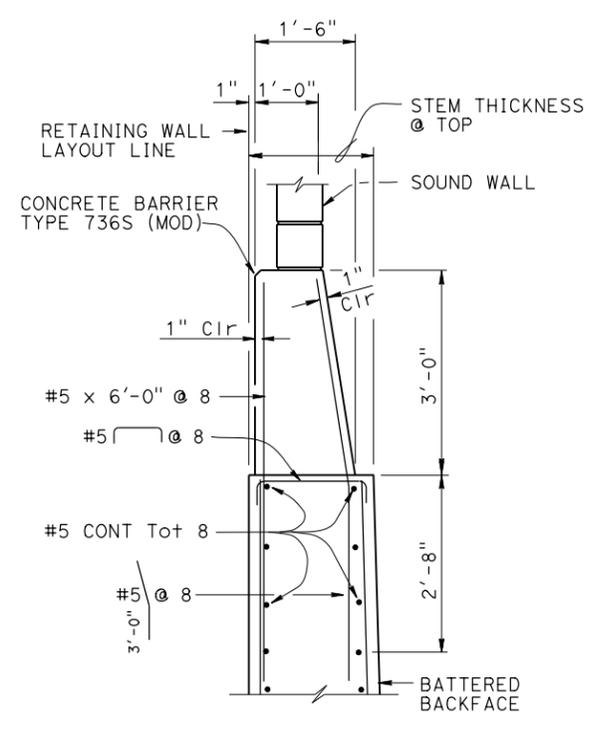
Where: Q: Force Effects  
 a: 1.25 or 0.90, which ever Controls Design  
 B: 1.35 or 1.00, which ever Controls Design  
 DC: Dead Load of Structure Components  
 EV: Vertical Earth Fill Pressure  
 LS: Live Load Surcharge  
 EQE: Seismic Earth Pressure  
 EQD: Soil and Structure Components Inertia. Soil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

- NOTES:
- 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 barrier reinforcement details, see "SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL" sheet.
  - For H=6' through 14', extend B bars into Barrier for stem with haunch.
  - Shift B bars and @ bars as required to clear formed hole for ground anchor.
  - Footing is designed to resist 1.33 Td assuming the maximum anchor spacing shown in the table.

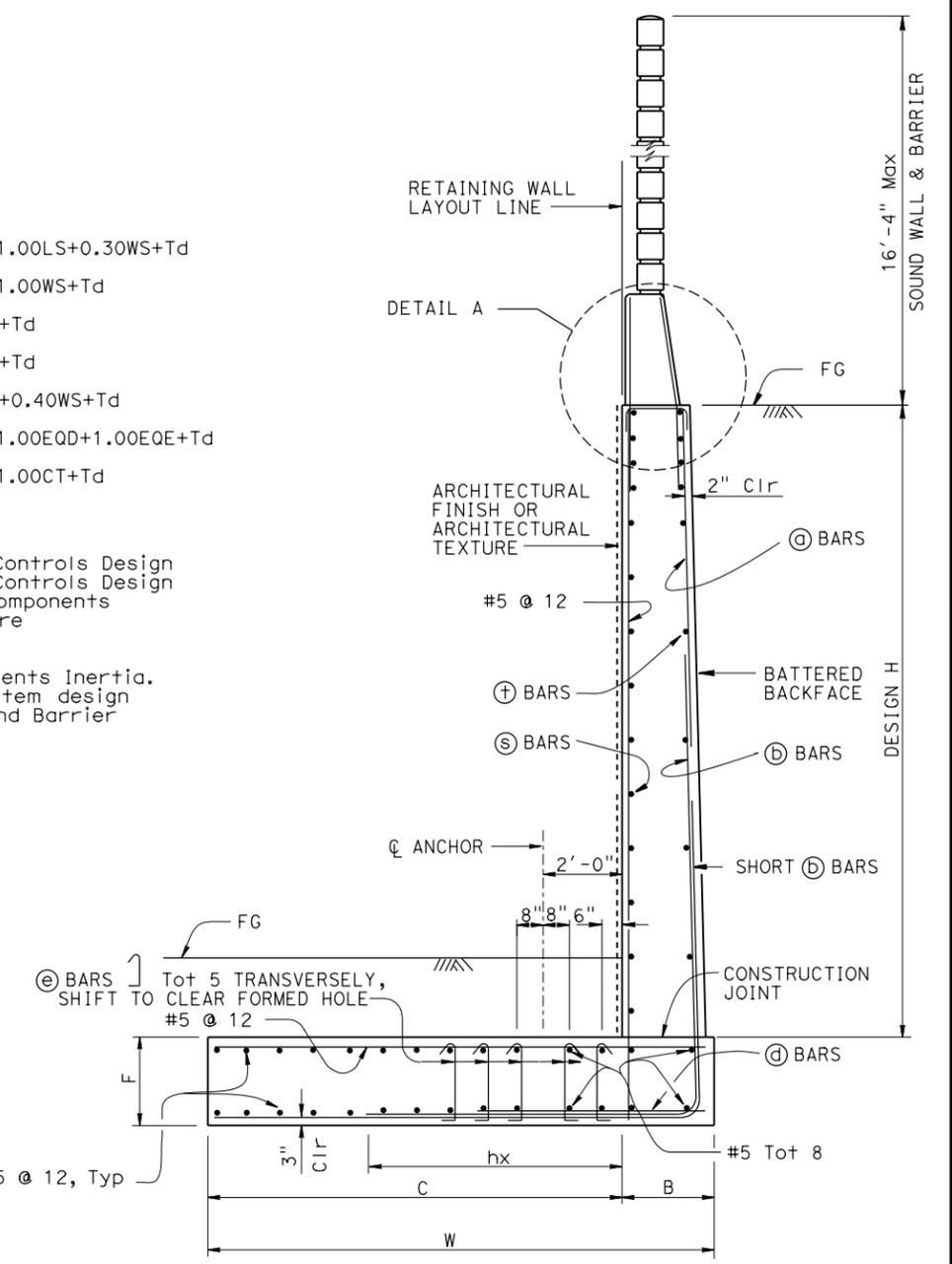


**DETAIL A - WITH HAUNCH**  
NO SCALE

For Details not shown, see "DETAIL A - WITHOUT HAUNCH"



**DETAIL A - WITHOUT HAUNCH**  
NO SCALE



**SPREAD FOOTING SECTION**  
NO SCALE

BRIDGE STANDARD DETAILS		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO.	RETAINING WALL TYPE 7SWB - DETAILS No.1
xs14-390-1 FILE NO.	July 2014 APPROVAL DATE			POST MILE	
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.		UNIT: PROJECT NUMBER & PHASE:		CONTRACT NO.:	DISREGARD PRINTS BEARING EARLIER REVISION DATES
Refer to: <a href="http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html">http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html</a>		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	REVISION DATES	SHEET OF
FILE => xs14-390-1.dgn	USERNAME => s136236	TIME PLOTTED => 10:38	DATE PLOTTED => 18-JUL-2016	6-19-14 8-20-15 7-14-16	