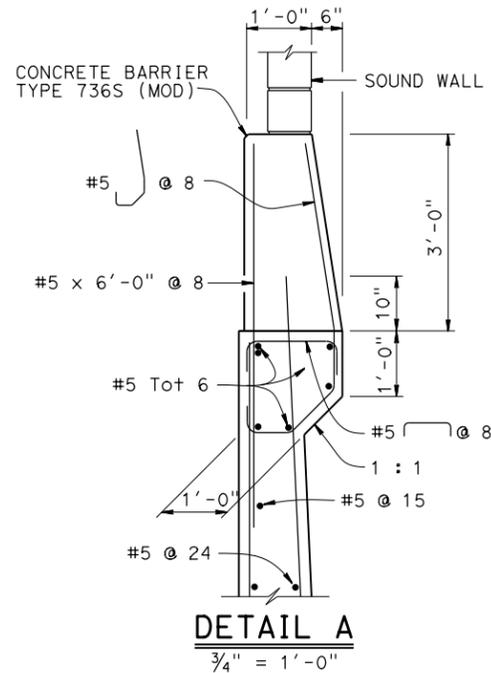
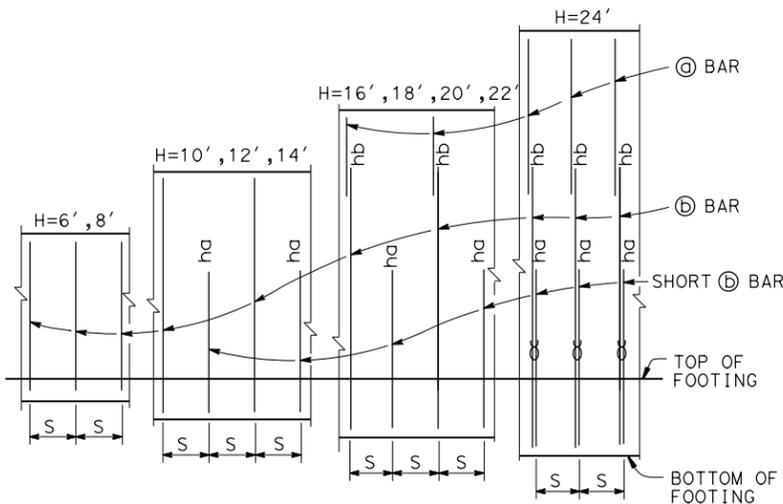


**PLAN**  
NO SCALE

NOTES:  
Only circled bars shown  
"S" is circled bar spacing, see table  
⊗ : 2 bar bundle

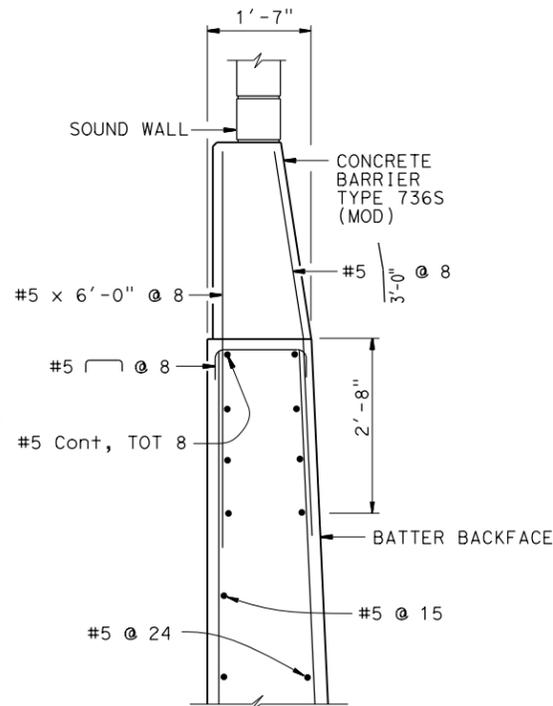


**DETAIL A**  
3/4" = 1'-0"



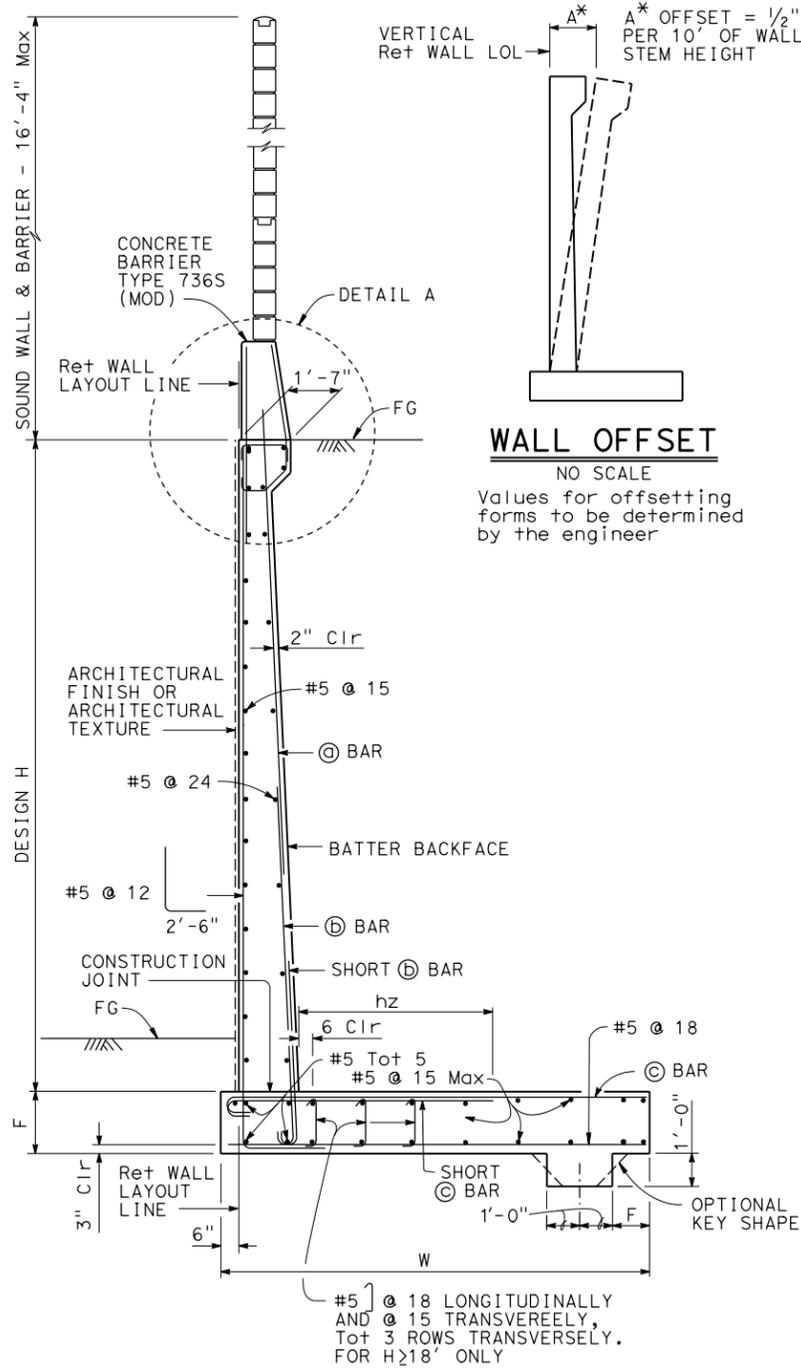
**ELEVATION**  
NO SCALE

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



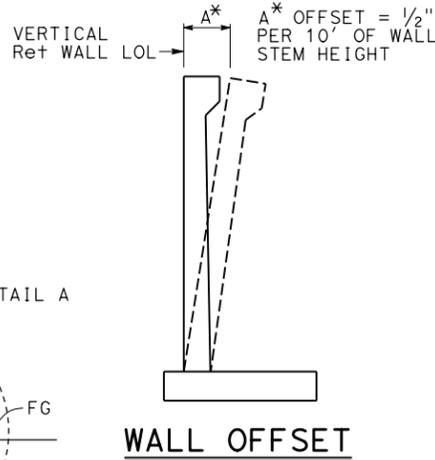
**OPTIONAL DETAIL A**  
3/4" = 1'-0"

For Details not shown, see "DETAIL A"



**SPREAD FOOTING SECTION**  
3/8" = 1'-0"

NOTES:  
1. For sound wall and retaining wall Architectural finish or texture see Details elsewhere in Project Plans  
2. For Details not shown and Drainage Notes see B3-5  
3. Footing cover, 1'-6" minimum.



**WALL OFFSET**

NO SCALE  
Values for offsetting forms to be determined by the engineer

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
X	X	X	X	X	X

REGISTERED CIVIL ENGINEER DATE X

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER  
No. X  
Exp. X  
CIVIL  
STATE OF CALIFORNIA

**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: Mononobe-Okabe Method  
K<sub>h</sub> = 0.3  
K<sub>v</sub> = 0.0

Soil: φ = 34°  
γ = 120 pcf

Reinforced Concrete: f'<sub>c</sub> = 3600 psi  
f<sub>y</sub> = 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+βEV+1.50EH+1.75LS  
Strength III Q=aDC+βEV+1.50EH+1.40WS  
Strength V Q=aDC+βEV+1.50EH+1.35LS+0.40WS  
Extreme I Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE  
Extreme II Q=1.00DC+1.00EV+1.00EH+1.00CT

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 and Barrier  
CT: Vehicular Collision Force

- For sound wall and barrier reinforcement details, see "SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL" sheet.
- For H=6' through 14', extend circled bars into Barrier for stem with haunch.
- For H>16', extend circled bars into Barrier for stem with haunch.
- For H>8', provide additional #6 @ 12" circled bar over a distance of 8'-0" measured from all expansion joints, begin wall and end wall locations.

STANDARD DRAWING	
FILE NO. <b>xs14-350-1</b>	APPROVAL DATE <u>October 2014</u>

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO.	X
POST MILE	X

RETAINING WALL TYPE 5SWB-DETAILS No. 1

DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. (02-02-11)) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: X PROJECT NUMBER & PHASE: X CONTRACT NO.: X

REVISION DATES SHEET OF

6-19-14	8-6-14	X	X
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DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES SHEET OF

USERNAME => s136236 DATE PLOTTED => 02-OCT-2014 TIME PLOTTED => 12:00