

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN:
AASHTO LRFD Bridge Design Specifications,
2007 edition with California Amendments

DEAD LOAD:
2" Concrete Surface Texture added to stem (DC)

WIND LOADING:
0.033 ksf on Sound Wall (WS)

LIVE LOADING:
Varied surcharge on level ground surface (LS)

SEISMIC LOADING (EQE)
 $K_h = 0.3$

SOIL PARAMETERS (BACKFILL):
 $\phi = 34^\circ$
 $\gamma = 0.120 \text{ kcf}$

REINFORCED CONCRETE:
 $f_y = 60 \text{ ksi}$
 $f'_c = 3.6 \text{ ksi}$

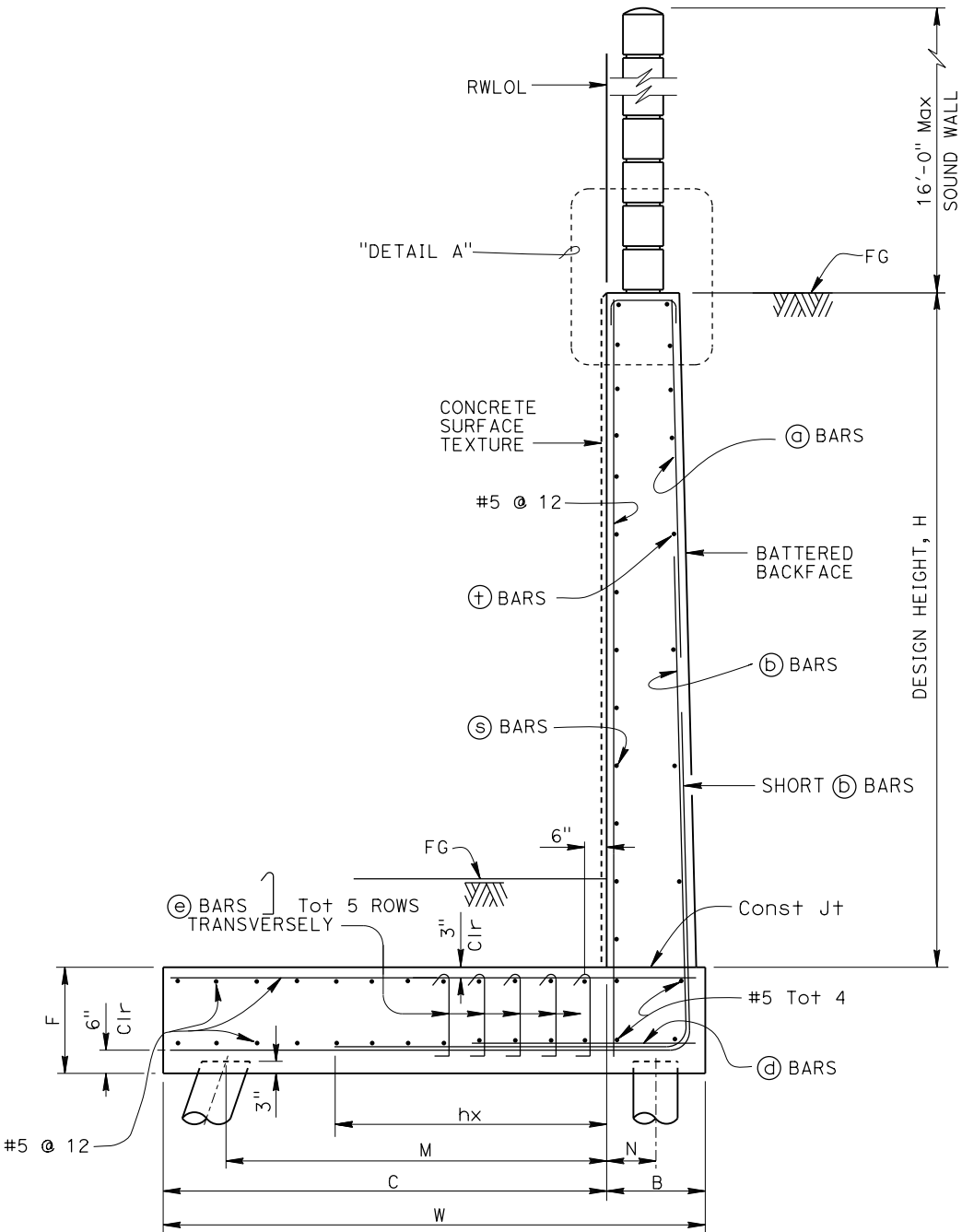
LOAD COMBINATIONS AND LIMIT STATES

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	$Q=aDC+bEV+1.50EH+1.75LS$
Strength III	$Q=aDC+bEV+1.50EH+1.40WS$
Strength V	$Q=aDC+bEV+1.50EH+1.35LS+0.40WS$
Extreme I	$Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE$

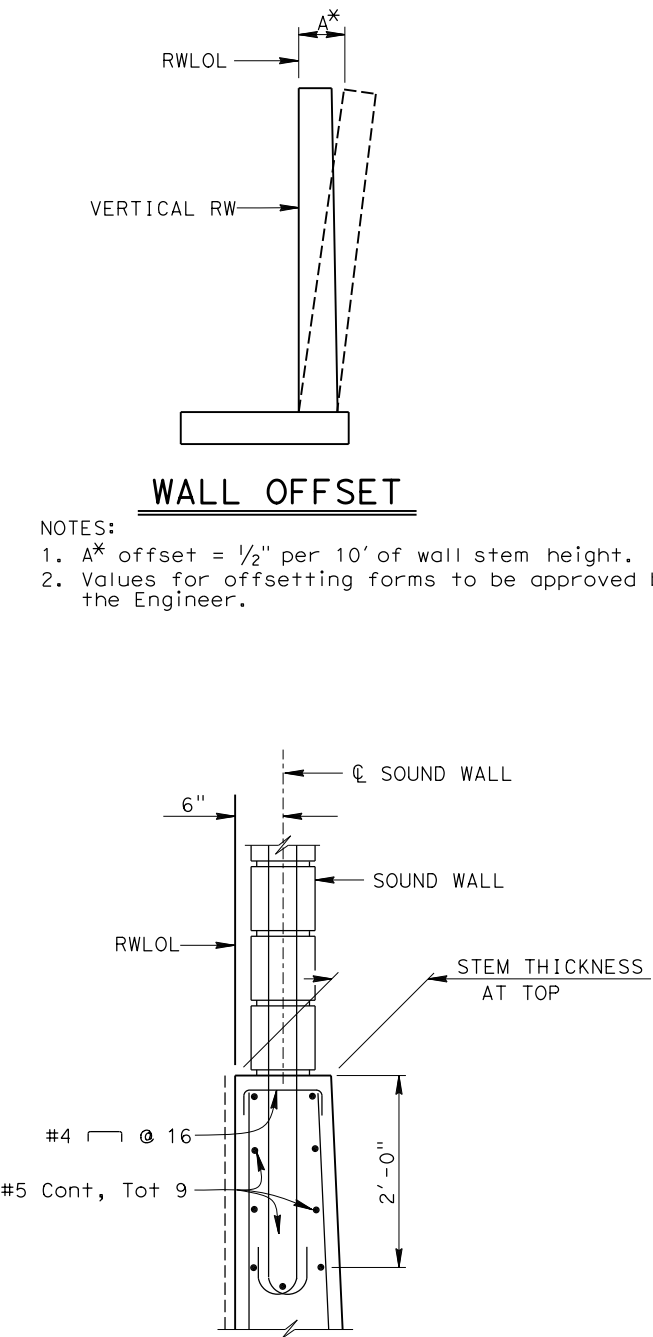
WHERE:

Q: Force Effects
a: 1.25 or 0.90, Whichever Controls Design
b: 1.35 or 1.00, Whichever Controls Design
DC: Dead Load of Structural Components
EV: Vertical Earth Fill Pressure
EH: Horizontal 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:
- For reinforcement layout details, see "RETAINING WALL (TYPE 7SWP) DETAILS No. 2" sheet.
 - For Sound Wall and Retaining Wall Concrete Surface Texture, see "ARCHITECTURAL DETAILS" sheet.
 - For Retaining Wall details not shown and drainage notes, see Standard Plan B0-3 and B3-5.
 - Footing cover, 2'-0" minimum.
 - For Sound Wall reinforcement and details, see "SOUND WALL MASONRY BLOCK ON RETAINING WALL DETAILS No. 1" and "SOUND WALL MASONRY BLOCK ON RETAINING WALL DETAILS No. 2" sheets.



TYPICAL SECTION



DETAIL A

WALL OFFSET

- NOTES:
- A^* offset = $\frac{1}{2}$ " per 10' of wall stem height.
 - Values for offsetting forms to be approved by the Engineer.

NO SCALE

BRIDGE STANDARD DETAILS		DESIGN	BY	CHECKED	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE No.	X					
xs14-400-1 FILE NO.	August 2026 APPROVAL DATE	DETAILS	BY	CHECKED			XX-XXXX	RETAINING WALL (TYPE 7SWP) DETAILS No. 1					
		QUANTITIES	BY	CHECKED			X.X						
Refer to: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html				DATE PLOTTED => 31-AUG-2026 FILE => xs14-400-1.dgn		TIME PLOTTED => 14:12 USERNAME => s136247		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0	1	2	3
				UNIT: XXXX PROJECT NUMBER & PHASE: XXXXXXXXXX1		COUNTY/ROUTE/ZONE: XXX/XXX/X CONTRACT No.: XX-XXXXX4		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES		SHEET	OF
												X	X