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 and Barrier (WS)

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

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

SEISMIC LOADING (EQE)
K_h = 0.3

SOIL PARAMETERS (BACKFILL):
Ø = 34°
γ = 0.120 kcf

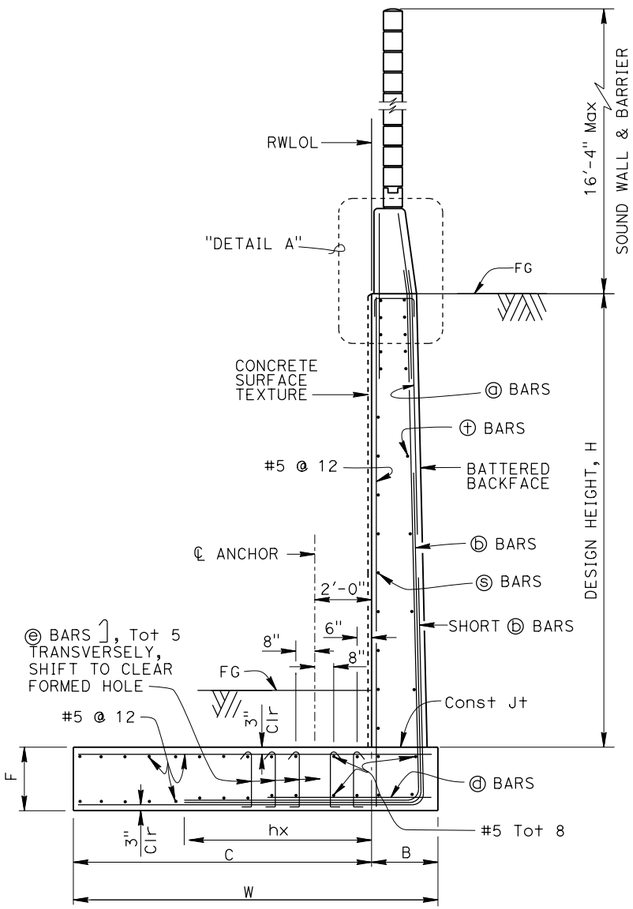
REINFORCED CONCRETE:
f_y = 60 ksi
f'_c = 3.6 ksi

LOAD COMBINATIONS AND LIMIT STATES

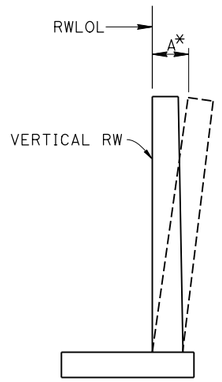
Service I	Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS+Td
Service II	Q=1.00DC+1.00EV+1.00EH+1.00WS+Td
Strength I	Q=αDC+βEV+1.50EH+1.75LS+Td
Strength III	Q=αDC+βEV+1.50EH+1.40WS+Td
Strength V	Q=αDC+βEV+1.50EH+1.35LS+0.40WS+Td
Extreme I	Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE+Td
Extreme II	Q=1.00DC+1.00EV+1.00EH+1.00CT+Td

WHERE:

Q:	Force Effects
α:	1.25 or 0.90, Whichever Controls Design
β:	1.35 or 1.00, Whichever 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

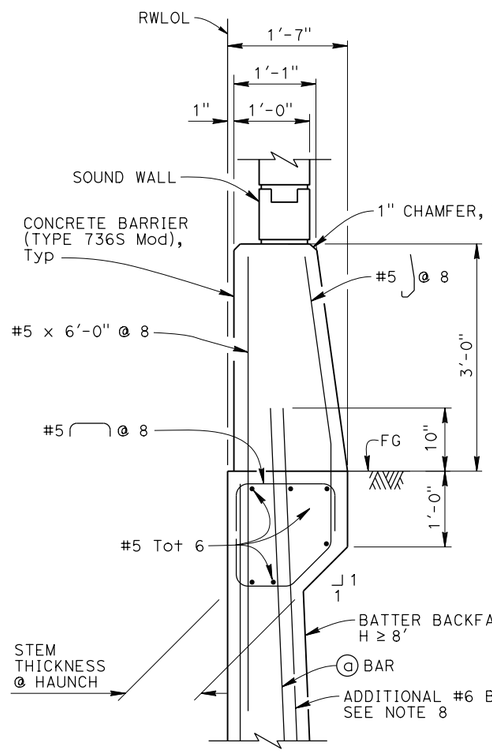


TYPICAL SECTION

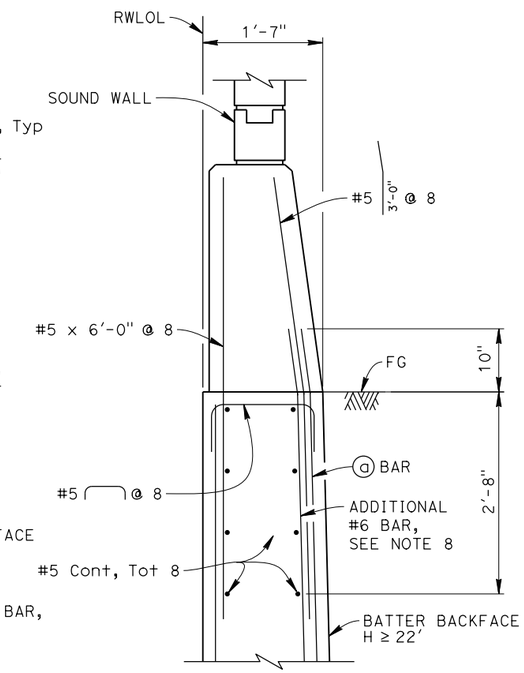


NOTES:
1. A* offset = ½" per 10' of wall stem height.
2. Values for offsetting forms to be approved by the Engineer.

WALL OFFSET



WALL STEM WITH HAUNCH



WALL STEM WITH NO HAUNCH

DETAIL A

NOTE:
For details not shown, see "WALL STEM WITH HAUNCH".

NOTES:
1. For reinforcement layout details, see "RETAINING WALL (TYPE 7SWB) DETAILS No. 2" sheet.
2. For Sound Wall and Retaining Wall Concrete Surface Texture, see "ARCHITECTURAL DETAILS" sheet.
3. For Retaining Wall details not shown and drainage notes, see Standard Plan B0-3 and B3-5. Substitution of geocomposite drain for pervious backfill material is not permitted.
4. Footing cover, 2'-0" minimum.
5. For H = 6' to 14', extend ⓑ bars into barrier for stem with haunch.
6. Shift ⓑ bars and ⓓ bars as required to clear formed hole for ground anchor.
7. For Sound Wall reinforcement details, see "SOUND WALL MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS No. 1" ,"SOUND WALL MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS No. 2" and "SOUND WALL MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS No. 3" sheets.
8. Provide additional #6 x 18'-0" @ 6 vertical bars over a distance of 8'-0" measured from all expansion joints, begin wall and end wall locations. For H ≤ 14', hook the additional #6 bars into footing and reduce bar length as needed to maintain minimum clear cover.

NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER — X — DATE

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

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.

BRIDGE STANDARD DETAILS							
xs14-390-1 (FILE NO.)	August 2026 (APPROVAL DATE)	DESIGN	BY X	CHECKED X	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE No. XX-XXXX
		DETAILS	BY X	CHECKED X			POST MILE X.X
		QUANTITIES	BY X	CHECKED X			X
							RETAINING WALL (TYPE 7SWB) DETAILS No. 1

Refer to: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html

DATE PLOTTED => 31-AUG-2026 TIME PLOTTED => 14:11
FILE => xs14-390-1.dgn USERNAME => s136247
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: XXXX COUNTY/ROUTE/ZONE: XXX/XXX/X
PROJECT NUMBER & PHASE: XXXXXXXXXX1 CONTRACT No.: XX-XXXX4

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
				X	X