

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

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

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):
 $K_h = 0.2$

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

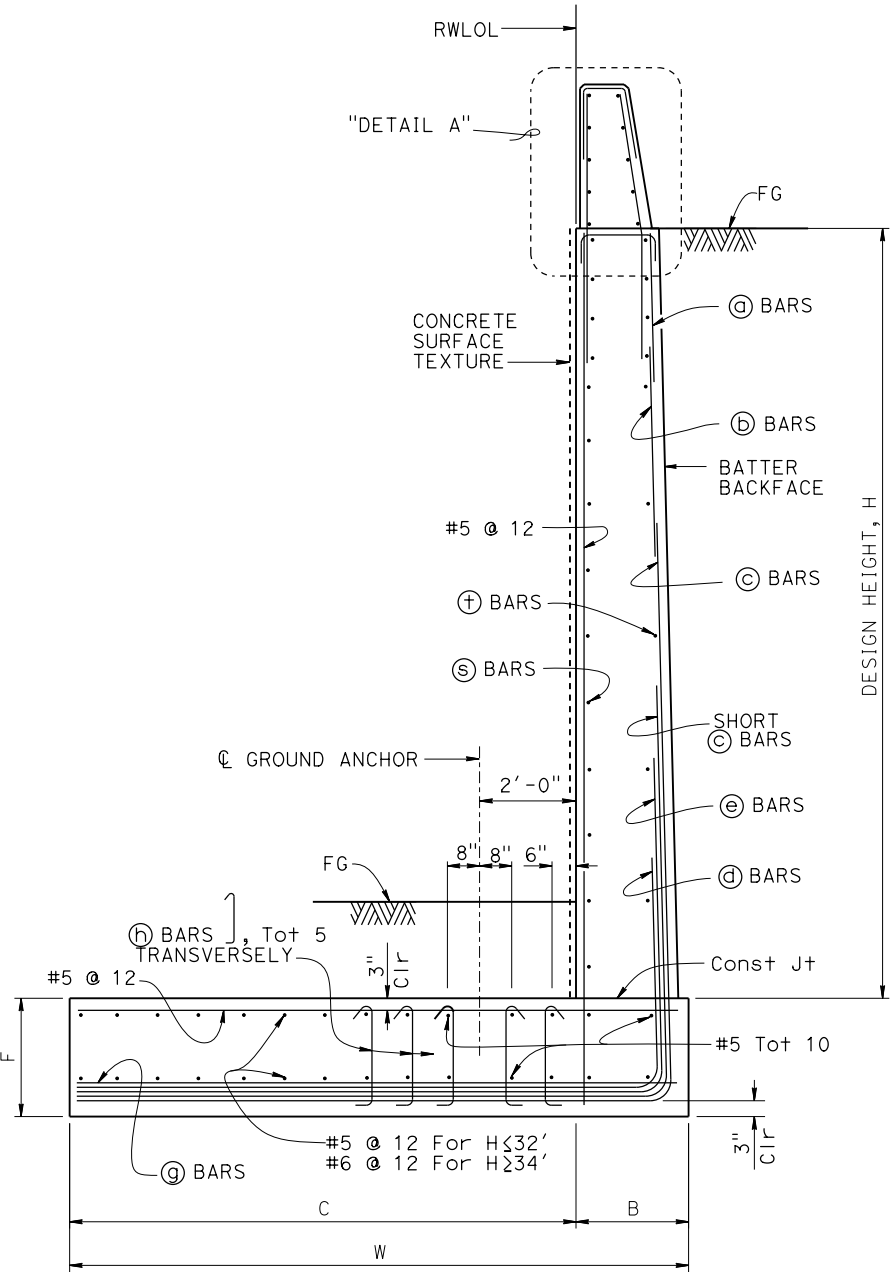
Service I	$Q=1.00DC+1.00EV+1.00EH+1.00LS+Td$
Strength I	$Q=aDC+\beta EV+1.50EH+1.75LS+Td$
Extreme I	$Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE+Td$
Extreme II	$Q=1.00DC+1.00EV+1.00EH+1.00CT+Td$

WHERE:

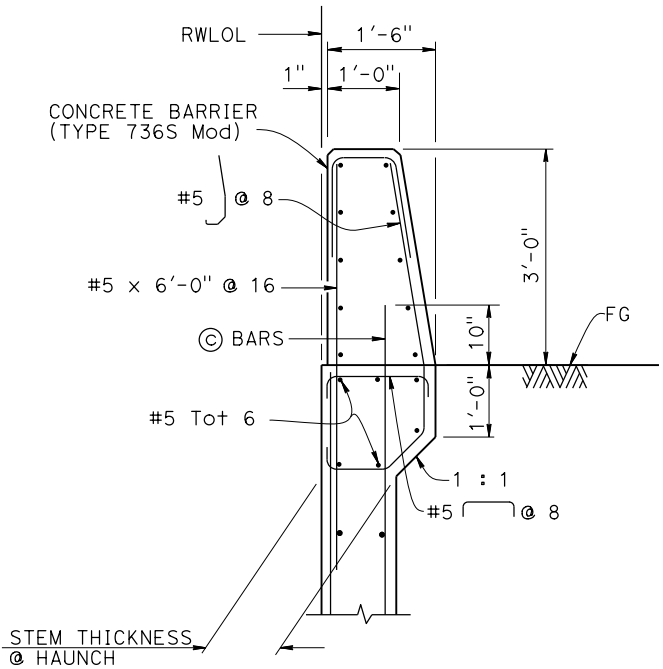
- Q: Force Effects
- a: 1.25 or 0.90, Whichever Controls Design
- b: 1.35 or 1.00, Whichever Controls Design
- DC: Dead Load of Structure Components
- EV: Vertical Earth Fill Pressure
- LS: Live Load Surcharge
- EQE: Seismic Earth Pressure
- EQD: Soil and Structure Components Inertia
(Soil inertia ignored for stem design)
- CT: Vehicular Collision Force
- Td: Anchor Design Load

NOTES:

1. For reinforcement layout details, see "RETAINING WALL (TYPE 7B) DETAILS No. 2" sheet.
2. For Retaining Wall Concrete Surface Texture, see "ARCHITECTURAL DETAILS" sheet.
3. For Retaining Wall details not shown and drainage notes, 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 $10'$, extend © bars into barrier for stem with haunch.
6. Shift © bars, ⓐ bars and ⓔ bars as required to clear formed hole for ground anchor.
7. Dimensions may vary with roadway cross slope and with certain thickness of surfacing.
8. Provide #6 ⓐ x 16'-0" @ 12 vertical bar over a distance of 8'-0" measured from all expansion joints begin wall and end wall locations. For $H \leq 14'$ hook the additional #6 bars into footing and reduce bar length as needed to maintain minimum clear cover.

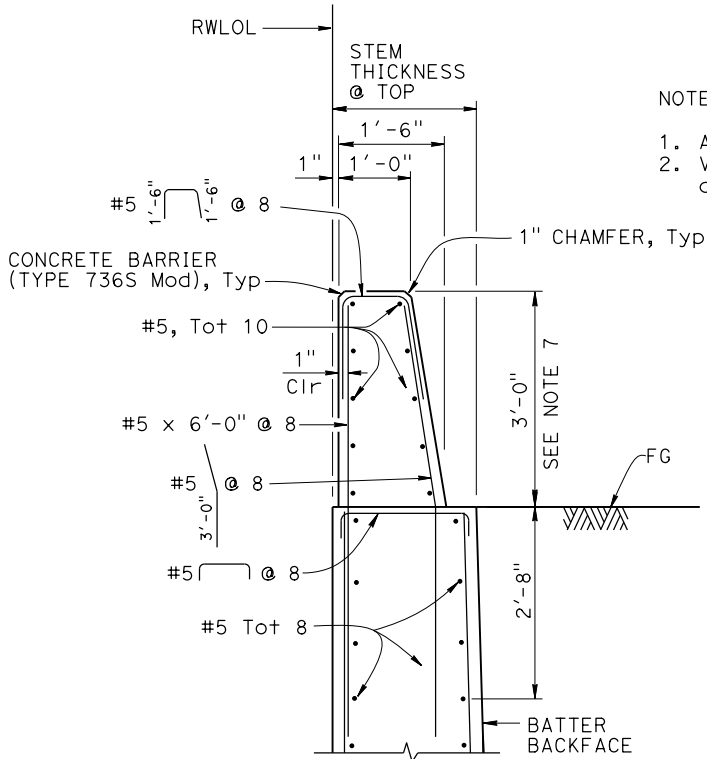


TYPICAL SECTION



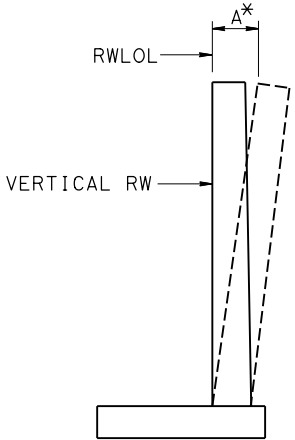
WALL STEM WITH HAUNCH

NOTE:
For details not shown, see
"WALL STEM WITH NO HAUNCH".



WALL STEM WITH NO HAUNCH

DETAIL A



WALL OFFSET

NOTES:

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

NO SCALE

BRIDGE STANDARD DETAILS		DESIGN	BY X	CHECKED X	STATE OF CALIFORNIA				DIVISION OF ENGINEERING SERVICES		BRIDGE No.	X										
xs14-375-1		DETAILS	BY X	CHECKED X	DEPARTMENT OF TRANSPORTATION						XX-XXXX	RETAINING WALL (TYPE 7B) DETAILS No. 1										
FILE NO.		QUANTITIES	BY X	CHECKED X							POST MILE											
											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		TIME PLOTTED => 14:11		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: XXXX		COUNTY/ROUTE/ZONE: XXX/XXX/X		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES		SHEET		OF	
FILE => xs14-375-1.dgn					USERNAME => 136247		0		1		2		3		PROJECT NUMBER & PHASE: XXXXXXXXXX1		CONTRACT No.: XX-XXXXX4		X		X	