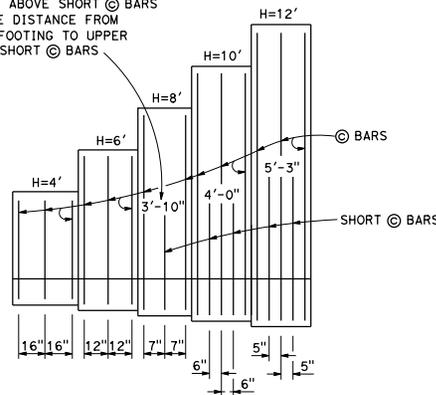


SPREAD FOOTING SECTION

Place concrete in toe against undisturbed material, except as permitted by the Engineer.

NUMBERS ABOVE SHORT © BARS INDICATE DISTANCE FROM TOP OF FOOTING TO UPPER END OF SHORT © BARS



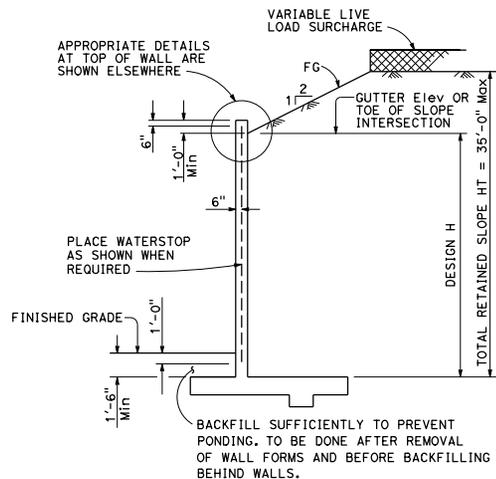
ELEVATION

SYMBOLS:

- Ser - service limit state I
- Str - strength limit state I
- Ext - extreme event limit state I
- B' - effective footing width (ft)
- q₀ - net bearing stress (ksf), OG assumed to be FG at toe
- q_o - gross uniform bearing stress (ksf)

TABLE OF REINFORCING STEEL, DIMENSIONS AND DATA

DESIGN H	4'	6'	8'	10'	12'
W	5'-10"	7'-7"	9'-0"	11'-0"	12'-5"
C	2'-4"	2'-7"	3'-0"	3'-6"	4'-0"
B	3'-6"	5'-0"	6'-0"	7'-6"	8'-5"
F	1'-4"	1'-7"	1'-7"	1'-9"	1'-9"
© BARS	#5 @ 16	#5 @ 12	#5 @ 7	#6 @ 6	#7 @ 5
© BARS	#5 @ 16	#5 @ 12	#5 @ 7	#6 @ 6	#7 @ 5
Ser: B', q ₀	4.0, 0.8	5.6, 1.0	8.8, 1.1	10.6, 1.3	12.0, 1.6
Str: B', q ₀	1.9, 2.0	3.5, 2.1	4.5, 2.3	6.5, 2.3	7.7, 2.5
Ext: B', q ₀	2.8, 2.3	3.3, 3.3	3.9, 3.9	5.3, 4.1	5.9, 4.5



DESIGN SECTION

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

Gary Wong
REGISTERED CIVIL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

Gary Wong
No. C58238
Exp. 6-30-16
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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.

DESIGN CONDITIONS:

Design H may be exceeded by 6" before going to the next size. Special footing design is required where foundation material is incapable of supporting bearing stress listed in the table.

DESIGN NOTES:

- DESIGN: AASHTO LRFD Bridge Design Specifications, 4th Edition with California Amendments
- LS: Varied surcharge on level ground surface
- DC: Stem Architectural Treatment of thickness up to 6" of concrete (75 psf) considered
- SEISMIC: k_h = 0.2
k_v = 0.0
- SOIL: φ = 34°
γ = 120 pcf
- REINFORCED CONCRETE: f'c = 3,600 psi
fy = 60,000 psi
- LOAD COMBINATIONS AND LIMIT STATES:
Service I Q = 1.00DC+1.00EV+1.00EH+1.00LS
Strength I Q = αDC+βEV+γEH+1.75LS
Extreme I Q = 1.00DC+1.00EV+1.00EH+1.00EOD+1.00EQE
- Where:
Q: Force Effects
α: 1.25 or 0.90, Whichever Controls Design
β: 1.35 or 1.00, Whichever Controls Design
γ: 1.50 or 0.90, Whichever Controls Design
DC: Dead Load of Structure Components
EH: Horizontal Earth Fill Pressure
EV: Vertical Earth Pressure from Earth Fill Weight
LS: Live Load Surcharge
EQE: Seismic Earth Pressure
EOD: Soil and Structural and Nonstructural Components Inertia

NOTES:

1. For details not shown and drainage notes see B3-5
2. For wall stem joint details see B0-3/3-3 and B0-3/3-4
3. At © and short © bars:
H ≤ 6', no splices are allowed within 1'-8" above the top of footing.
H > 6', no splices are allowed within H/4 above the top of footing.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
RETAINING WALL TYPE 1A (CASE 2)

NO SCALE

B3-3B