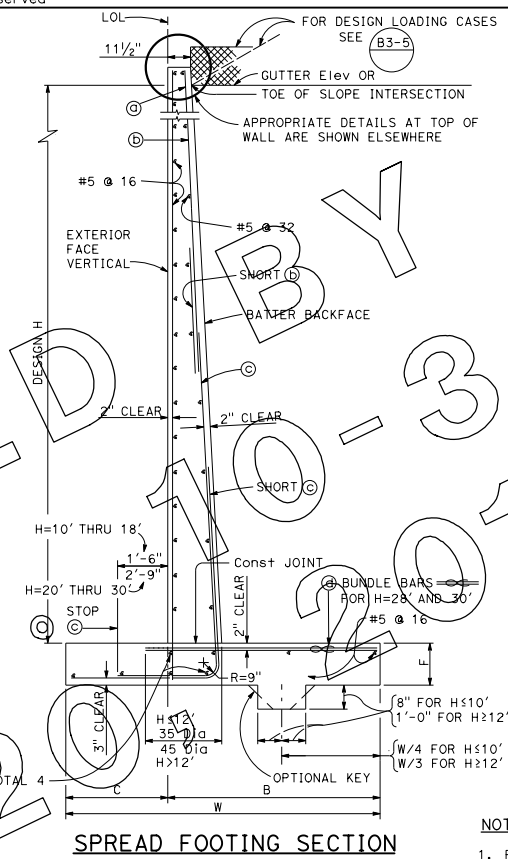
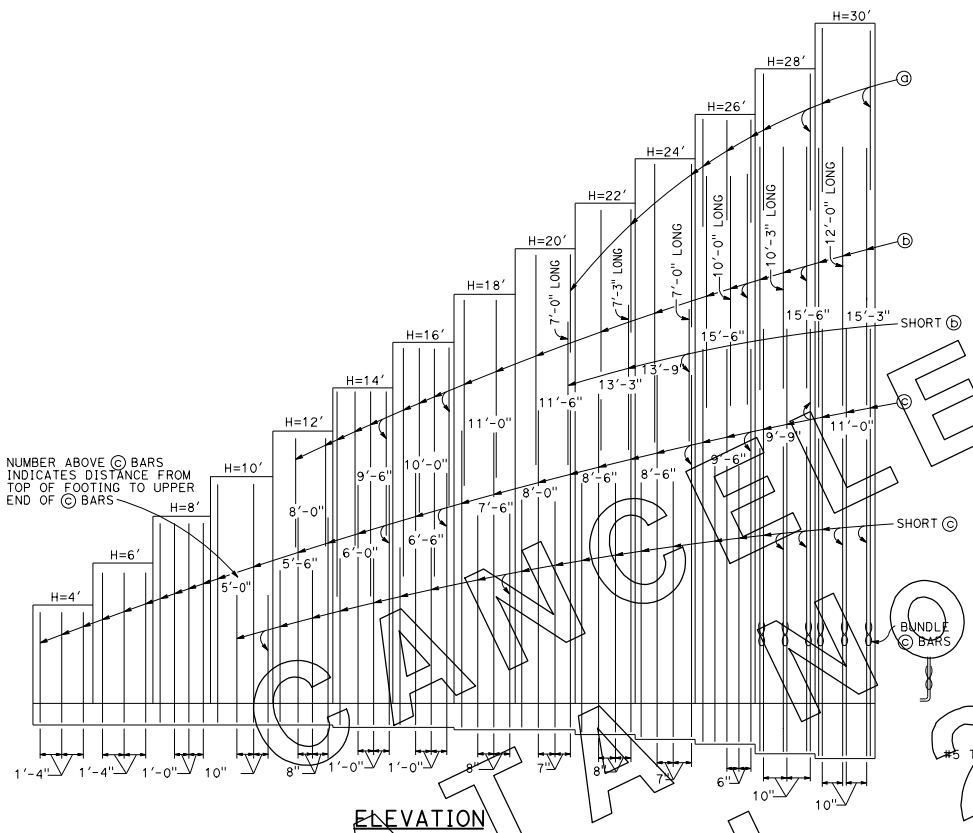


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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Gary Wong
 REGISTERED CIVIL ENGINEER
 No. C58238
 Exp. 6-30-12
 CIVIL

May 20, 2011
 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.

DESIGN CONDITIONS:
 Design H may be exceeded by 6' before going to the next size. Special footing design is required where foundation materials incapable of supporting bearing stresses listed in table.

DESIGN NOTES:
 DESIGN: AASHTO LRFD Bridge Design Specifications, 4th edition with California Amendments
 LIVE LOAD: Surcharge on level ground surface
 SOIL: $\phi = 34^\circ$
 $\gamma = 120$ pcf
 REINFORCED CONCRETE: $f_y = 60,000$ psi
 $f'_c = 3,600$ psi
 $n = 8$

- NOTES:**
- For details not shown and drainage notes see (B3-5)
 - For wall stem joint details see (B0-3/3-3) and (B0-3/3-4)
 - At (C) and Short (C) bars:
 $H \leq 6'$, 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.

SYMBOLS:

Ser - service limit state 1
 Str - strength limit state 1
 B' - effective footing width (ft)
 q_0 - net bearing stress (ksf)
 q_0 - gross uniform bearing stress (ksf)
 γ - Denotes a bundle of 2 bars

TABLE OF REINFORCING STEEL DIMENSIONS AND DATA

DESIGN H	4'	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'
W	4'-9"	5'-9"	6'-6"	7'-6"	9'-6"	12'-8"	13'-6"	14'-6"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"
B'	3'-4"	4'-0"	4'-6"	5'-3"	6'-9"	8'-6"	10'-0"	10'-6"	10'-8"	11'-6"	12'-0"	12'-9"	13'-6"	14'-0"
F	1'-8"	1'-4"	1'-4"	1'-4"	1'-4"	1'-8"	1'-8"	1'-8"	1'-8"	2'-3"	2'-5"	2'-5"	2'-8"	3'-0"
BATTER	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	5/8:12	3/4:12	3/4:12	7/8:12	7/8:12
(C) BARS	#5 @ 16	#5 @ 16	#5 @ 12	#6 @ 10	#6 @ 8	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 10	#5 @ 10
(C) BARS	#5 @ 16	#5 @ 16	#5 @ 12	#6 @ 10	#6 @ 8	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 10	#5 @ 10
LOADING Ser: B', q_0	4.4, 0.7	5.1, 0.9	5.4, 1.2	6.2, 1.4	8.5, 1.4	11.8, 1.6	12.8, 1.7	13.8, 1.8	13.9, 2.0	14.6, 2.3	15.2, 2.5	15.9, 2.8	16.5, 3.1	17.2, 3.3
CASE I Str: B', q_0	4.3, 1.5	4.9, 1.9	5.1, 2.2	5.8, 2.5	8.2, 2.6	11.5, 2.6	12.4, 3.0	13.3, 3.1	13.4, 3.4	14.0, 3.8	14.5, 4.2	15.1, 4.6	15.7, 5.1	16.3, 5.5
LOADING Ser: B', q_0	4.8, 0.5	5.7, 0.7	6.2, 1.0	6.9, 1.3	9.1, 1.5	12.3, 1.8	13.1, 2.1	14.0, 2.3	14.2, 2.6	14.0, 3.0	15.4, 3.3	16.0, 3.7	16.6, 4.1	17.3, 4.4
CASE II Str: B', q_0	4.7, 1.1	5.6, 1.4	6.0, 1.8	6.7, 2.3	8.8, 2.6	12.0, 3.1	12.8, 3.4	13.6, 3.7	13.7, 4.2	14.3, 4.7	14.8, 5.3	15.4, 5.9	15.9, 6.5	16.5, 7.0
LOADING Ser: B', q_0	4.3, 0.7	4.5, 1.0	4.7, 1.4	5.1, 1.7	6.8, 1.8	8.7, 2.3	9.6, 2.4	10.5, 2.6	10.5, 2.9	11.2, 3.2	11.7, 3.5	12.4, 3.9	13.1, 4.2	13.7, 4.4
CASE III Str: B', q_0	4.1, 1.4	4.5, 1.8	4.5, 2.4	4.7, 3.0	6.3, 3.2	8.0, 4.0	9.0, 4.2	9.9, 4.4	9.7, 4.9	10.5, 5.4	10.9, 5.9	11.6, 6.4	12.2, 6.9	12.7, 7.4

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**RETAINING WALL
 TYPE 1
 H=4' THROUGH 30'**
 NO SCALE

B3-1

2010 STANDARD PLAN B3-1