

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
X	X	X	X	X	X

X
DATE

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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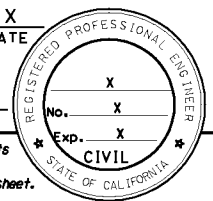


TABLE 1: TABLE OF DIMENSIONS AND DATA

Design H	STEM WITH HAUNCH						STEM WITHOUT HAUNCH							
	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'	
W	7'-6"	8'-0"	9'-3"	10'-9"	12'-3"	13'-9"	15'-3"	16'-9"	18'-3"	19'-6"	21'-0"	22'-6"	24'-0"	
C	6'-0"	6'-6"	7'-6"	9'-0"	10'-3"	11'-6"	13'-0"	14'-3"	15'-3"	16'-6"	17'-6"	18'-6"	20'-0"	
B	1'-6"	1'-6"	1'-9"	1'-9"	2'-0"	2'-3"	2'-3"	2'-6"	3'-0"	3'-0"	3'-6"	4'-0"	4'-0"	
F	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	3'-0"	3'-3"	3'-3"	3'-9"	4'-0"	4'-0"	4'-3"	
D (Footing Key Depth)	1'-0"	1'-0"	1'-0"	1'-6"	1'-9"	2'-0"	2'-3"	2'-3"	2'-9"	3'-0"	3'-0"	3'-0"	3'-0"	
E	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-6"	1'-6"	1'-6"	1'-6"	1'-9"	1'-9"	1'-9"	1'-9"	
Stem Thickness @ Top							1'-9"	2'-0"	2'-0"	2'-0"	2'-0"	2'-3"	2'-3"	
Stem Thickness @ Haunch	1'-0"	1'-0"	1'-3"	1'-3"	1'-6"	1'-9"								
Batter	0	0	0	0	0	0	0	0	1/4:12	1/4:12	1/2:12	1/2:12	1/2:12	
G (Minimum)	7'-6"	7'-6"	7'-6"	8'-6"	9'-3"	10'-3"	11'-0"	12'-0"	13'-0"	14'-0"	15'-6"	15'-9"	16'-3"	
⊙ Bars			#7@18	#5@6	#9@18	#9@18	#9@12	#9@12	#7@6	#7@6	#10@12	#10@12	#11@12	
X			Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	
Y			5'-6"	5'-6"	8'-6"	8'-9"	8'-9"	9'-0"	9'-9"	11'-3"	13'-3"	14'-3"	15'-3"	
⊖ Bars	#5@9	#6@9	#7@18	#5@6	#9@18	#9@18	#9@12	#9@12	#7@6	#7@6	#10@12	#10@12	#11@12	
X	Cont	Cont	3'-6"	2'-6"	6'-3"	7'-9"	6'-9"	7'-9"	8'-6"	8'-0"	12'-6"	13'-6"	14'-9"	
Y	Cont	Cont	Cont	Cont	12'-0"	13'-6"	14'-0"	15'-9"	17'-9"	20'-3"	22'-3"	24'-9"	24'-9"	
Placement, ○			(A)	(B)	(A)	(A)	(A)	(A)	(B)	(B)	(B)	(B)	(A)	
⊙ Bars					#8@18	#8@18	#8@12	#8@12	#6@6	#6@6	#9@12	#9@12	#10@12	
Placement, ○					(C)	(C)	(C)	(C)	(C)	(C)	(C)	(C)	(C)	
⊙ Bars	#5@18	#5@18	#5@18	#5@18	#5@18	#5@18	#5@18	#5@18	#5@18	#5@18	#5@18	#5@18	#5@18	
⊖ Bars							#5@18	#5@18	#5@18	#5@18	#5@18	#5@18	#5@18	
X							5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	7'-6"	
Placement, ○							(D)	(D)	(D)	(D)	(D)	(D)	(D)	
⊖ Bars					#9@18	#9@18	#9@18	#9@18	#9@6	#7@6	#10@6	#10@6	#11@6	
X					3'-9"	6'-0"	5'-0"	6'-0"	5'-3"	5'-3"	6'-6"	8'-3"	8'-9"	
⊙ Bars									#4@15	#4@15	#4@15	#4@12	#4@12	
U									7'-6"	7'-6"	8'-9"	9'-9"	11'-9"	
Tie Down Design Force (T) k/ft	0	0	3	3	3	8	8	14	14	21	25	29	34	
Tie Down Maximum Spacing (S) ft	0	0	32	32	32	20	20	12	12	9	9	8	7	
Ultimate Bearing Capacity Required (ksf)	3.75	4.25	5.50	6.00	5.75	5.25	6.25	6.00	7.75	6.75	7.75	7.75	8.00	
H _D	Group 1 k/m (k/ft)	2.21 (8.1)	3.09 (8.74)	4.51 (9.69)	5.29 (11.6)	6.77 (14.44)	8.44 (17.77)	10.29 (21.08)	12.57 (26)	14.55 (29.25)	17.23 (34.66)	20.40 (42.24)	23.25 (47.66)	26.26 (52.42)
	Group 2 k/m (k/ft)	4.54 (10.06)	5.9 (11.16)	7.15 (12.66)	8.9 (15.46)	11.46 (19.38)	15 (24.15)	17.59 (28.77)	23.4 (35.24)	25.6 (40.14)	32.12 (47.36)	38.55 (57.31)	40.96 (64.9)	45.89 (71.93)

LEGEND FOR BAR PLACEMENT:

- (A) : Alternate placement of (a) bars and (b) bars
- (B) : Bundle (a) bars and (b) bars
- (C) : Splice (c) bars to (b) bars
- (D) : Bundle (d) bars and (e) bars
- H_D : Horizontal driving force
- (N) : Sum of vertical forces
- Cont : Continuous

STANDARD DRAWING	FILE NO. xs14-390-2x	APPROVAL DATE <u>July 2011</u>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. X POST MILE X	X
			RETAINING WALL TYPE 7SWB - DETAILS NO. 2			
DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. [02-02-11])			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: X PROJECT NUMBER & PHASE: X	
			CONTRACT NO.: X		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
			0 1 2 3		REVISION DATES SHEET OF X X	

DATE PLOTTED => \$DATE USERNAME => \$USER