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

REGISTERED ENGINEER - CIVIL

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

TABLE 1: TABLE OF DIMENSIONS AND DATA

	STEM WITH HAUNCH						STEM WITHOUT HAUNCH						
Design H	2400	3000	3600	4200	4800	5500	6100	6700	7300	7900	8500	9100	9800
W	2300	2450	2800	3300	3700	4200	4650	5100	5550	5950	6400	6850	7300
C	1850	2000	2300	2800	3100	3500	3950	4350	4650	5050	5350	5650	6100
B	450	450	500	500	600	700	700	750	900	900	1050	1200	1200
F	750	750	750	750	750	750	900	1000	1000	1150	1200	1200	1300
D (Footing Key Depth)	305	305	305	450	550	600	700	700	850	900	900	900	900
E	400	400	400	400	400	450	450	450	450	550	550	550	550
Stem Thickness @ Top							550	600	600	600	600	685	685
Stem Thickness @ Haunch	305	305	400	400	450	550							
Batter	0	0	0	0	0	0	0	0	100:2	100:2	100:4	100:4	100:4
G (Minimum)	2300	2300	2300	2600	2800	3100	3350	3650	3950	4250	4700	4800	4950
ⓐ Bars			#22@450	#16@150	#29@450	#29@450	#29@300	#29@300	#22@150	#22@150	#32@300	#32@300	#36@300
X			Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont
Y			1700	1700	2600	2650	2650	2750	2950	3450	4050	4350	4650
ⓑ Bars	#16@225	#19@225	#22@450	#16@150	#29@450	#29@450	#29@300	#29@300	#22@150	#22@150	#32@300	#32@300	#36@300
X	Cont	Cont	2150	2150	2450	2900	3050	3500	3800	4400	4700	4900	5350
Y	Cont	Cont	Cont	Cont	3650	4100	4250	4800	5400	6150	6800	7550	7550
Placement, ○			Ⓐ	Ⓑ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓑ	Ⓑ	Ⓑ	Ⓑ	Ⓐ
ⓒ Bars					#25@450	#25@450	#25@300	#25@300	#19@150	#19@150	#29@300	#29@300	#32@300
Placement, ○					Ⓒ	Ⓒ	Ⓒ	Ⓒ	Ⓒ	Ⓒ	Ⓒ	Ⓒ	Ⓒ
ⓓ Bars	#16@450	#16@450	#16@450	#16@450	#16@450	#16@450	#16@450	#16@450	#16@450	#16@450	#16@450	#16@450	#16@450
ⓔ Bars							#16@450	#16@450	#16@450	#16@450	#16@450	#16@450	#16@450
X							1500	1700	1850	2000	2150	2300	2300
Placement, ○							Ⓓ	Ⓓ	Ⓓ	Ⓓ	Ⓓ	Ⓓ	Ⓓ
ⓕ Bars					#29@450	#29@450	#29@450	#29@450	#29@150	#22@150	#32@150	#32@150	#36@150
X					1150	1850	1500	1850	1600	1600	2000	2500	2650
ⓖ Bars									#13@380	#13@380	#13@380	#13@300	#13@300
U									2280	2280	2660	3000	3600
Tie Down Design Force (T) kN/m	0	0	44	44	44	117	117	205	205	308	366	425	498
Tie Down Maximum Spacing (S) mm			7300	7300	7300	6100	6100	3600	3600	2750	2750	2450	2150
Ultimate Bearing Capacity Required (KPa)	180	200	260	290	280	250	300	290	370	320	370	370	380
H_D (N) Group 1 kN/m	32.25 (118.21)	45.09 (127.55)	65.82 (141.41)	77.20 (169.29)	98.80 (210.74)	123.17 (259.33)	150.17 (307.64)	183.44 (379.44)	212.34 (426.87)	251.45 (505.82)	297.72 (616.45)	339.31 (695.54)	383.24 (765.01)
H_D (N) Group 2 kN/m	66.26 (146.81)	86.10 (162.86)	104.34 (184.76)	129.88 (225.62)	167.25 (282.83)	218.91 (352.44)	256.71 (419.87)	341.50 (514.29)	373.60 (585.80)	468.76 (691.17)	562.59 (836.38)	597.77 (947.14)	669.71 (1049.74)

LEGEND FOR BAR PLACEMENT:

Ⓐ : Alternate placement of ⓐ bars and ⓑ bars

Ⓑ : Bundle ⓐ bars and ⓑ bars

Ⓒ : Splice ⓒ bars to ⓑ bars

Ⓓ : Bundle ⓓ bars and ⓔ bars

H_D : Horizontal driving force

(N) : Sum of vertical forces

Cont : Continuous

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

STANDARD DRAWING

RELEASE DATE 7/17/03	DESIGN BY Madon Sah	CHECKED Lisa Tanaka	RELEASED BY
FILE NO. xs14-390-2	DETAILS BY M Slayton	CHECKED Overcomer Hor	OFFICE CHIEF
	SUBMITTED BY Overcomer Hor	DRAWING DATE 2/94	

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO.

KILOMETER POST

RETAINING WALL TYPE 7SWB - DETAIL NO. 2

DS OSD 2147A (METRIC) (REV. X/XX/XX)

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100

CU
EA

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY) SHEET OF

USERNAME => jsanchez

xs14-390-2.dgn

DATE PLOTTED => 16-JAN-2004 TIME PLOTTED => 14:48