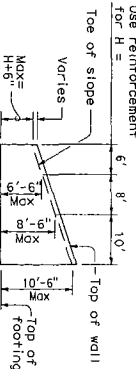
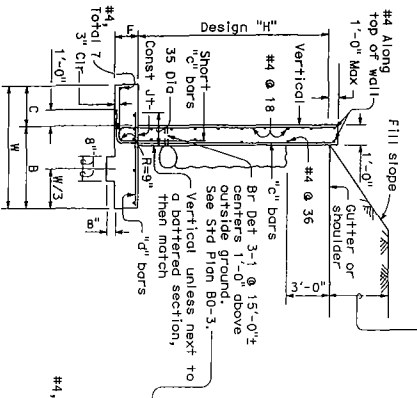


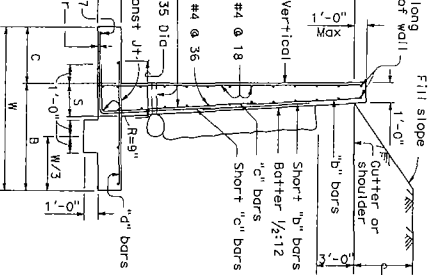
RC PIPE DETAILS



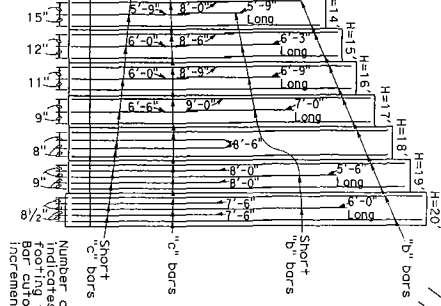
5'-0" Max for 1 1/2:1 fill slopes, unlimited for slopes flatter than 1 1/2:1



TYPICAL SECTION H=4' THRU 12'

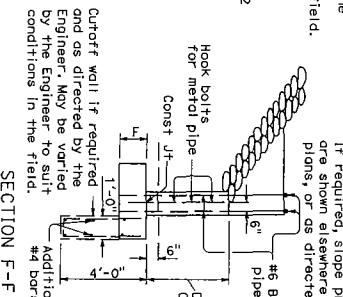


TYPICAL SECTION H=13' THRU 20'

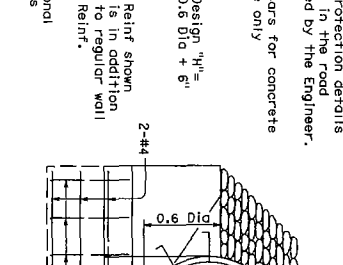


SECTION E-E

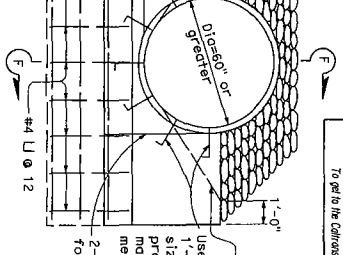
Number above "b" and "c" bars indicates distance from top of footing to upper end of bar cutoffs may be varied in increments of 6".



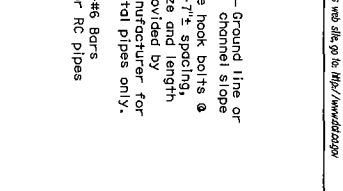
SECTION B-B



SECTION C-C



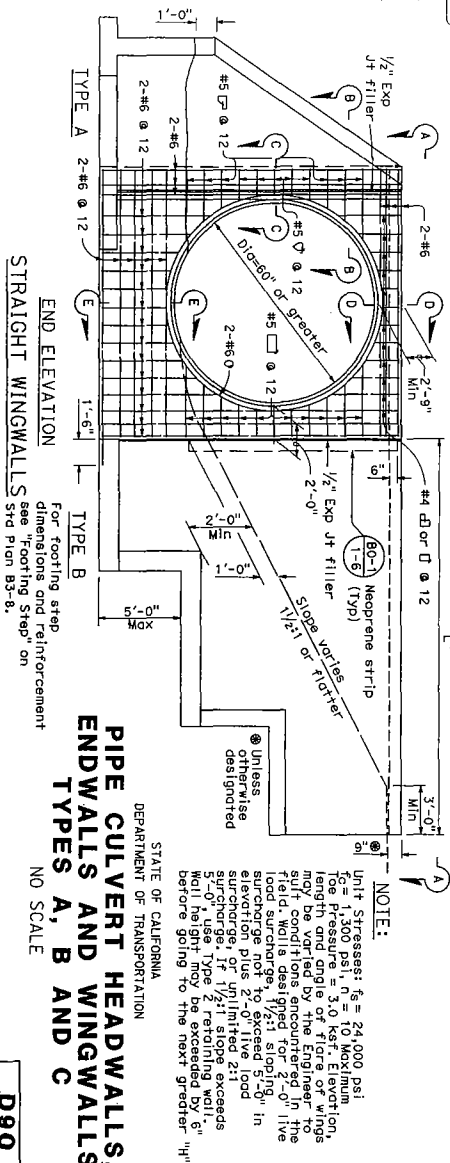
SECTION D-D



TYPE C WALL

REINFORCED CONCRETE WINGWALLS

Design	"b" bars	"c" bars	"d" bars	Concrete	Reinforcement
4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"
4'-6"	4'-6"	4'-6"	4'-6"	4'-6"	4'-6"
5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"
5'-6"	5'-6"	5'-6"	5'-6"	5'-6"	5'-6"
6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"
6'-6"	6'-6"	6'-6"	6'-6"	6'-6"	6'-6"
7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"
7'-6"	7'-6"	7'-6"	7'-6"	7'-6"	7'-6"
8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
8'-6"	8'-6"	8'-6"	8'-6"	8'-6"	8'-6"
9'-0"	9'-0"	9'-0"	9'-0"	9'-0"	9'-0"
9'-6"	9'-6"	9'-6"	9'-6"	9'-6"	9'-6"
10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
10'-6"	10'-6"	10'-6"	10'-6"	10'-6"	10'-6"
11'-0"	11'-0"	11'-0"	11'-0"	11'-0"	11'-0"
11'-6"	11'-6"	11'-6"	11'-6"	11'-6"	11'-6"
12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
12'-6"	12'-6"	12'-6"	12'-6"	12'-6"	12'-6"
13'-0"	13'-0"	13'-0"	13'-0"	13'-0"	13'-0"
13'-6"	13'-6"	13'-6"	13'-6"	13'-6"	13'-6"
14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"
14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"
15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"
15'-6"	15'-6"	15'-6"	15'-6"	15'-6"	15'-6"
16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"
16'-6"	16'-6"	16'-6"	16'-6"	16'-6"	16'-6"
17'-0"	17'-0"	17'-0"	17'-0"	17'-0"	17'-0"
17'-6"	17'-6"	17'-6"	17'-6"	17'-6"	17'-6"
18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"
18'-6"	18'-6"	18'-6"	18'-6"	18'-6"	18'-6"
19'-0"	19'-0"	19'-0"	19'-0"	19'-0"	19'-0"
19'-6"	19'-6"	19'-6"	19'-6"	19'-6"	19'-6"
20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"
20'-6"	20'-6"	20'-6"	20'-6"	20'-6"	20'-6"
21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"
21'-6"	21'-6"	21'-6"	21'-6"	21'-6"	21'-6"
22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"
22'-6"	22'-6"	22'-6"	22'-6"	22'-6"	22'-6"
23'-0"	23'-0"	23'-0"	23'-0"	23'-0"	23'-0"
23'-6"	23'-6"	23'-6"	23'-6"	23'-6"	23'-6"
24'-0"	24'-0"	24'-0"	24'-0"	24'-0"	24'-0"
24'-6"	24'-6"	24'-6"	24'-6"	24'-6"	24'-6"
25'-0"	25'-0"	25'-0"	25'-0"	25'-0"	25'-0"
25'-6"	25'-6"	25'-6"	25'-6"	25'-6"	25'-6"
26'-0"	26'-0"	26'-0"	26'-0"	26'-0"	26'-0"
26'-6"	26'-6"	26'-6"	26'-6"	26'-6"	26'-6"
27'-0"	27'-0"	27'-0"	27'-0"	27'-0"	27'-0"
27'-6"	27'-6"	27'-6"	27'-6"	27'-6"	27'-6"
28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"
28'-6"	28'-6"	28'-6"	28'-6"	28'-6"	28'-6"
29'-0"	29'-0"	29'-0"	29'-0"	29'-0"	29'-0"
29'-6"	29'-6"	29'-6"	29'-6"	29'-6"	29'-6"
30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"
30'-6"	30'-6"	30'-6"	30'-6"	30'-6"	30'-6"
31'-0"	31'-0"	31'-0"	31'-0"	31'-0"	31'-0"
31'-6"	31'-6"	31'-6"	31'-6"	31'-6"	31'-6"
32'-0"	32'-0"	32'-0"	32'-0"	32'-0"	32'-0"
32'-6"	32'-6"	32'-6"	32'-6"	32'-6"	32'-6"
33'-0"	33'-0"	33'-0"	33'-0"	33'-0"	33'-0"
33'-6"	33'-6"	33'-6"	33'-6"	33'-6"	33'-6"
34'-0"	34'-0"	34'-0"	34'-0"	34'-0"	34'-0"
34'-6"	34'-6"	34'-6"	34'-6"	34'-6"	34'-6"
35'-0"	35'-0"	35'-0"	35'-0"	35'-0"	35'-0"
35'-6"	35'-6"	35'-6"	35'-6"	35'-6"	35'-6"
36'-0"	36'-0"	36'-0"	36'-0"	36'-0"	36'-0"
36'-6"	36'-6"	36'-6"	36'-6"	36'-6"	36'-6"
37'-0"	37'-0"	37'-0"	37'-0"	37'-0"	37'-0"
37'-6"	37'-6"	37'-6"	37'-6"	37'-6"	37'-6"
38'-0"	38'-0"	38'-0"	38'-0"	38'-0"	38'-0"
38'-6"	38'-6"	38'-6"	38'-6"	38'-6"	38'-6"
39'-0"	39'-0"	39'-0"	39'-0"	39'-0"	39'-0"
39'-6"	39'-6"	39'-6"	39'-6"	39'-6"	39'-6"
40'-0"	40'-0"	40'-0"	40'-0"	40'-0"	40'-0"
40'-6"	40'-6"	40'-6"	40'-6"	40'-6"	40'-6"



STRAIGHT WINGWALLS END ELEVATION

PIPE CULVERT HEADWALLS, ENDWALLS AND WINGWALLS TYPES A, B AND C NO SCALE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

UNIT STRESSSES: $f_c = 24,000$ psi
 $f_s = 100,000$ psi
The Pressure = 3.0 ksf. Elevation
length and angle of flare of wings
may be varied by the Engineer. To
field wall is designed for 2'-0" live
load surcharge, 1 1/2:1 sloping. In
surcharge not to exceed 5'-0" in
elevation plus 111.14 lbs/ft² live
surcharge, if 1 1/2:1 slope exceeds
5'-0" use Type 2 retaining wall.
Wall height may be exceeded by 6"
before going to the next greater "

01ST COUNTY ROUTE DISTRICT TOTAL PROJECT SHEET NO. SHEETS

REGISTERED CIVIL ENGINEER
NOV. 1, 2006
ENGINEER

REGISTERED PROFESSIONAL ENGINEER
NO. 13175
EXPIRES 12-31-11
STATE OF CALIFORNIA

To get to the Office and site go to 1991/1991/1991/1991/1991