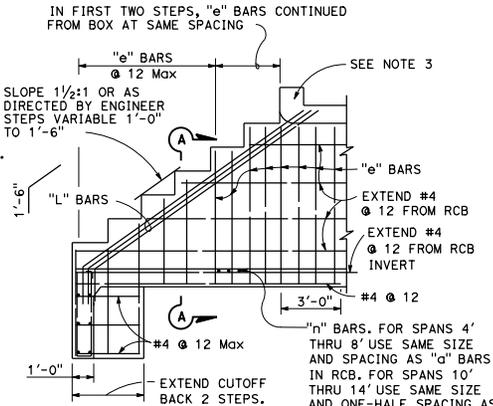
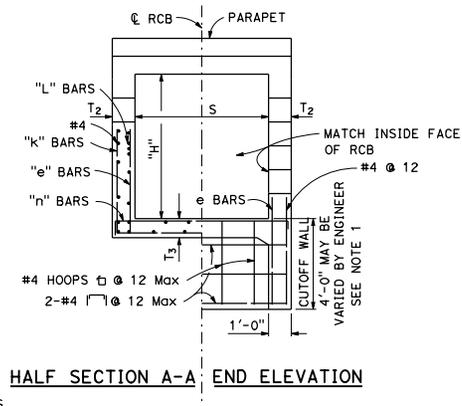


LONGITUDINAL SECTION
Showing reinforcement in outside face



LONGITUDINAL SECTION
Showing reinforcement in inside face

TYPE "E" STEPPED WINGWALL (SINGLE BOX CULVERT)

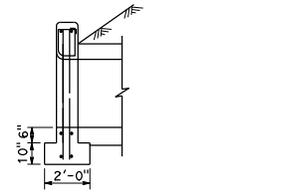


HALF SECTION A-A END ELEVATION
Dimensions S and T₃ to be same as adjacent RCB.
T₂ = Same as adjacent RCB (8" Min).

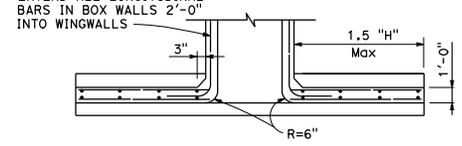
D16+	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER
Carl M. Duon
 No. C59976
 Exp. 6-30-16
 CIVIL ENGINEER
 STATE OF CALIFORNIA

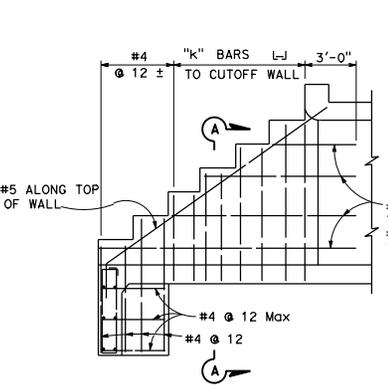
October 30, 2015
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



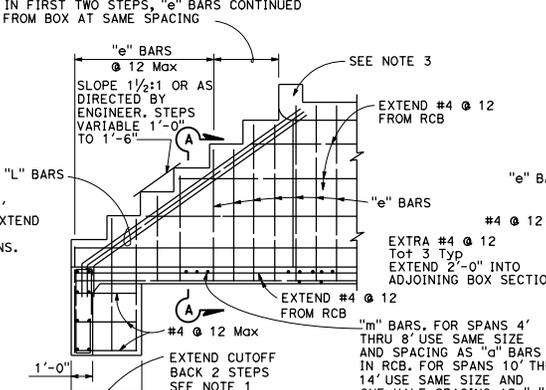
SECTION B-B



SECTION C-C

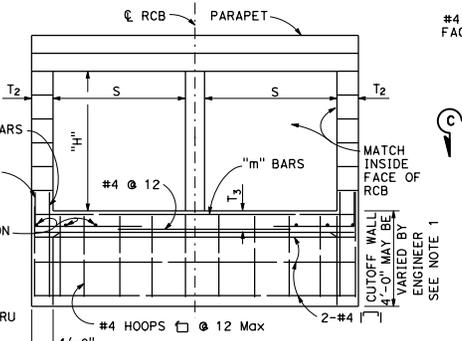


LONGITUDINAL SECTION
Showing reinforcement in outside face

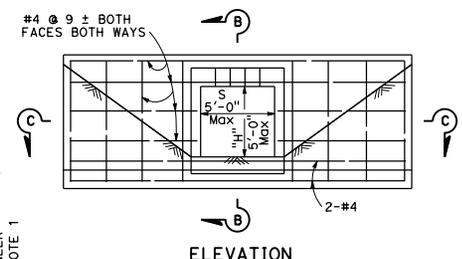


LONGITUDINAL SECTION
Showing reinforcement in inside face

TYPE "E" STEPPED WINGWALL (MULTIPLE BOX CULVERT)



END ELEVATION
Dimensions S and T₃ to be same as adjacent RCB.
T₂ = Same as adjacent RCB (8" Min).



ELEVATION
TYPE "D" STRAIGHT WINGWALL
Details similar for multiple span boxes. See Note 3.

DETAIL OF DESIGN LOADING CASES - TYPE "D" STRAIGHT WINGWALL

- Case I Level + 240 psf surcharge
- Case II 2:1 sloping ground with no surcharge
- Case III 1 1/2:1 limited slope (5'-0" Max height) + 240 psf surcharge

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**BOX CULVERT WINGWALLS
TYPES D AND E**

NO SCALE

- NOTES:**
- Eliminate cutoff walls if adjacent channel is paved.
 - For "h" not shown use reinforcement for next greater height.
 - For parapet details not shown see Standard Plan D82.

TABLE OF REINFORCEMENT FOR TYPE "E" WINGWALLS									
"H" (SEE NOTE 2)	3'	4'	5'	6'	7'	8'	10'	12'	14'
"k" BARS	BAR No. #4	#4	#5	#5	#5	#5	#5	#5	#5
"k" BARS	SPACING @ 12	@ 12	@ 12	@ 10	@ 9	@ 8	@ 7	@ 5	@ 4
"L" BARS	BAR No. #5	#5	#6	#6	#7	#7	#7	#7	#7
"L" BARS	NUMBER EACH WALL	2	2	3	3	3	3	3	3