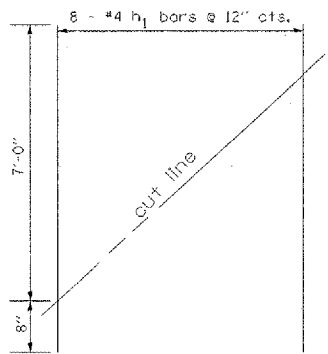
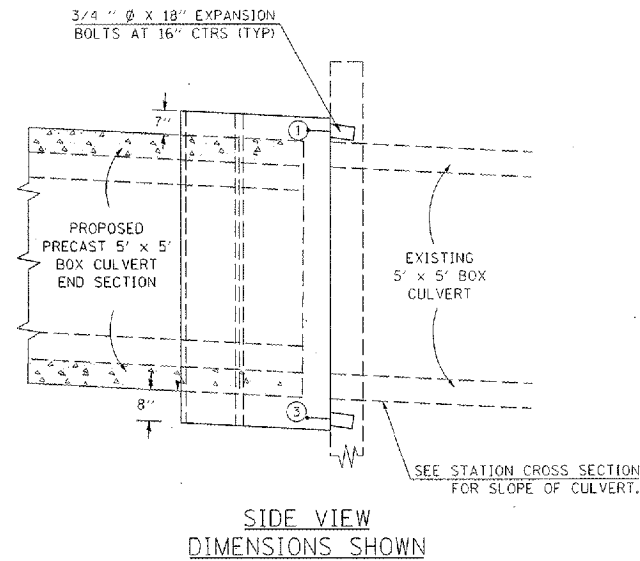
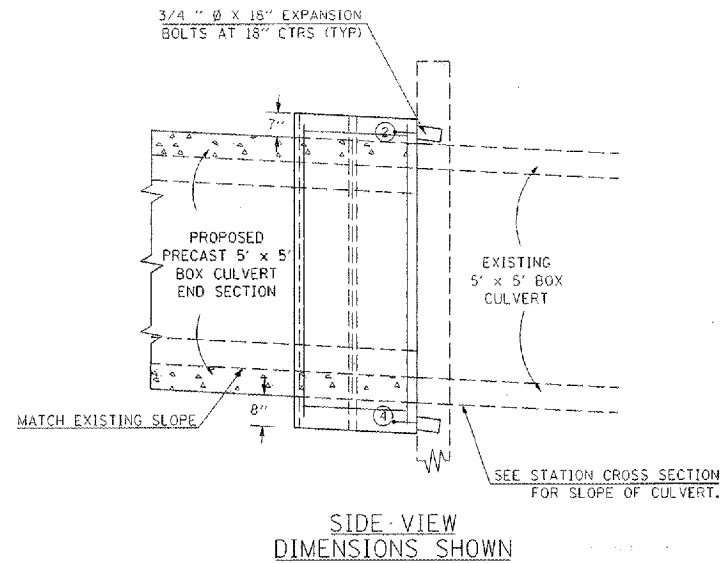


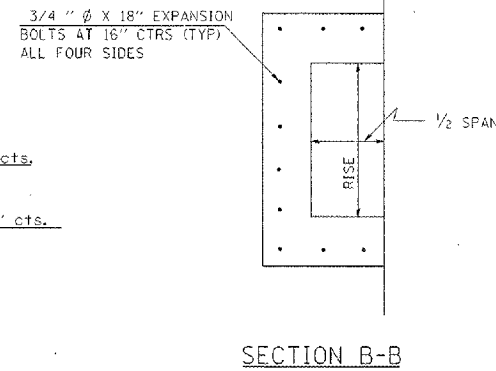
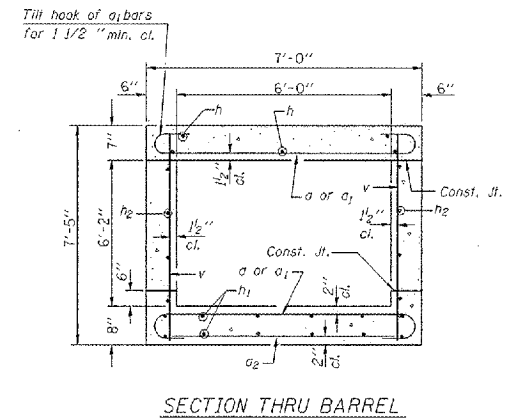
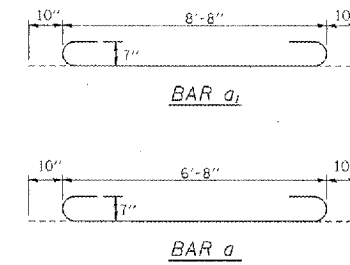
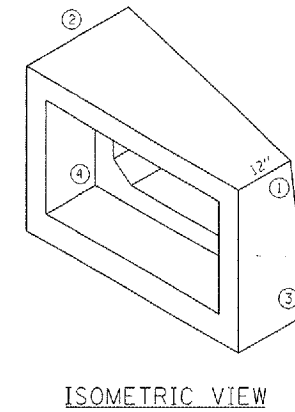
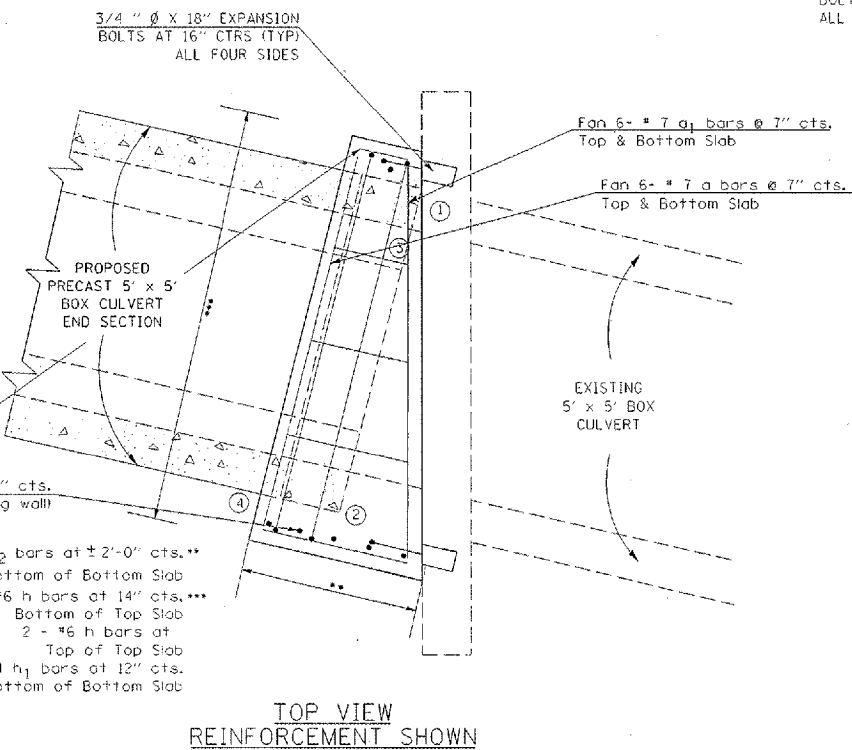
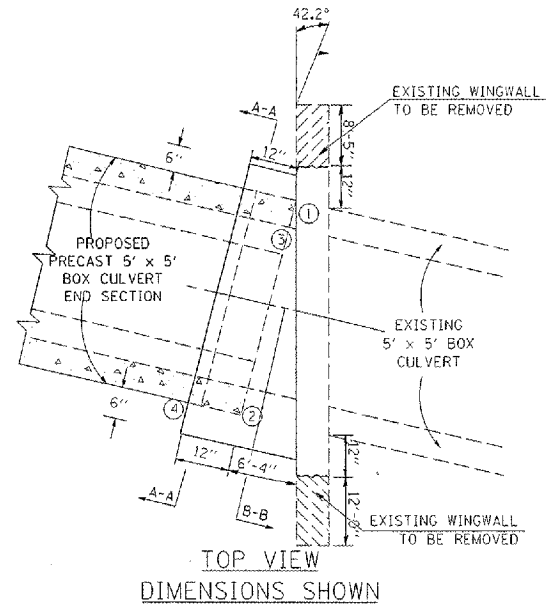
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR		VARIOUS	23	11

\*D-9 CONT. MAINT. FY 06-3

### CONCRETE COLLAR FOR PRECAST BOX CULVERTS STA. 752+51 LT SIDE



**FIELD CUTTING DIAGRAM**  
Order  $h_1$  bars full length. Cut as shown and use remainder of bars in opposite face.



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a	12	#7	8'-4"	
a1	12	#7	10'-4"	
a2	5	#4	9'-0"	
h	9	#7	7'-0"	—
h1	8	#4	7'-5"	—
h2	8	#5	7'-8"	—
v	13	#4	7'-1"	—
Expansion Bolts 3/4"		Each	18	
Concrete Box Culverts		Cu. Yd.	4.82	
Reinforcement Bars		Pound	697	

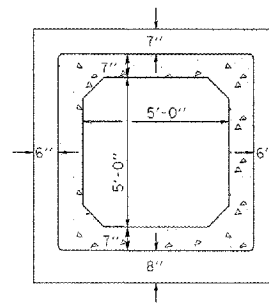
Cut  $a_2$ ,  $h_1$ , and  $h_2$  bars in the field to fit.

**NOTES:**

ANCHOR BOLTS, MEETING THE REQUIREMENTS OF ARTICLE 1006.09 OF THE STANDARD SPECIFICATIONS, SHALL EXTEND A MINIMUM OF 9 INCHES INTO THE NEW CONCRETE. EXPANSION SHIELDS SHALL PROVIDE A MINIMUM CERTIFIED PROOF LOAD OF 4080 POUNDS.

THE REMOVAL OF SUCH PORTIONS OF THE EXISTING HEADWALLS AND WINGWALLS AS MAY BE REQUIRED SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PRECAST CONCRETE BOX CULVERTS. CLASS S1 CONCRETE SHALL BE USED THROUGHOUT.

PROPOSED PRECAST BOX CULVERT END SECTION SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF THE CAST-IN-PLACE CONCRETE COLLAR.



**SECTION A-A**

PLOT DATE : 2/2/2006  
FILE NAME : c:\pwworkspace\98924\98924.dwg  
PLOT SCALE : 1/8"=1'-0"  
USER : eclemm