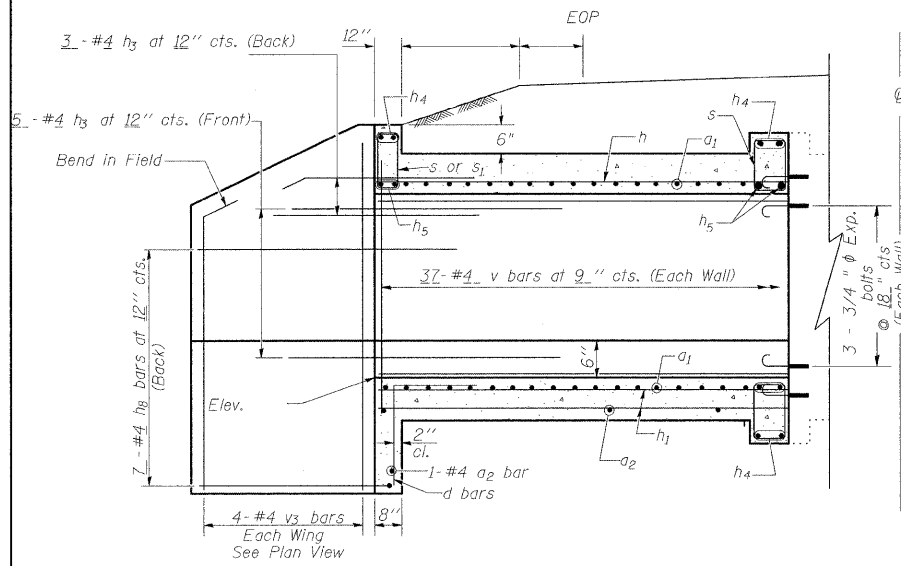
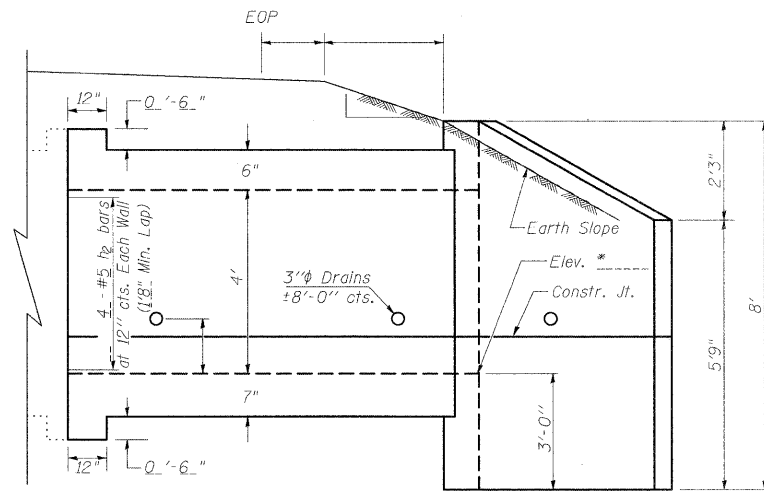


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

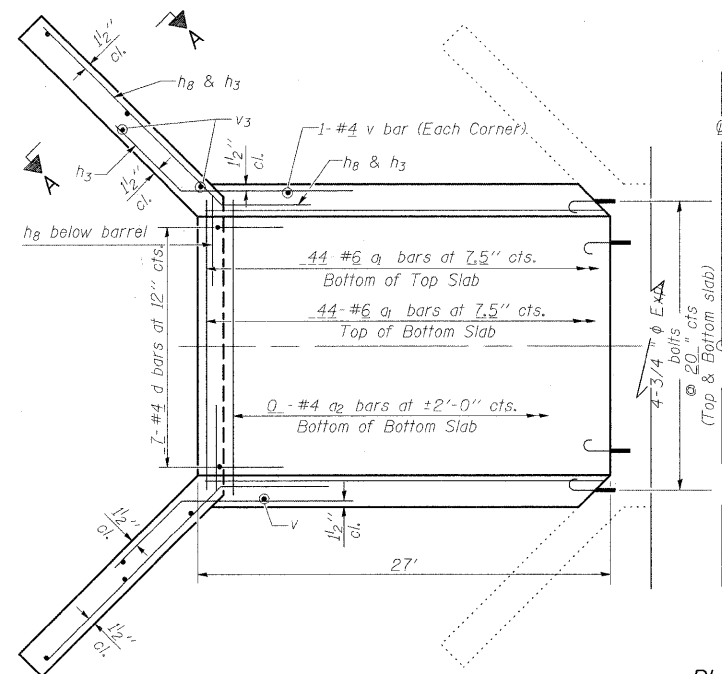
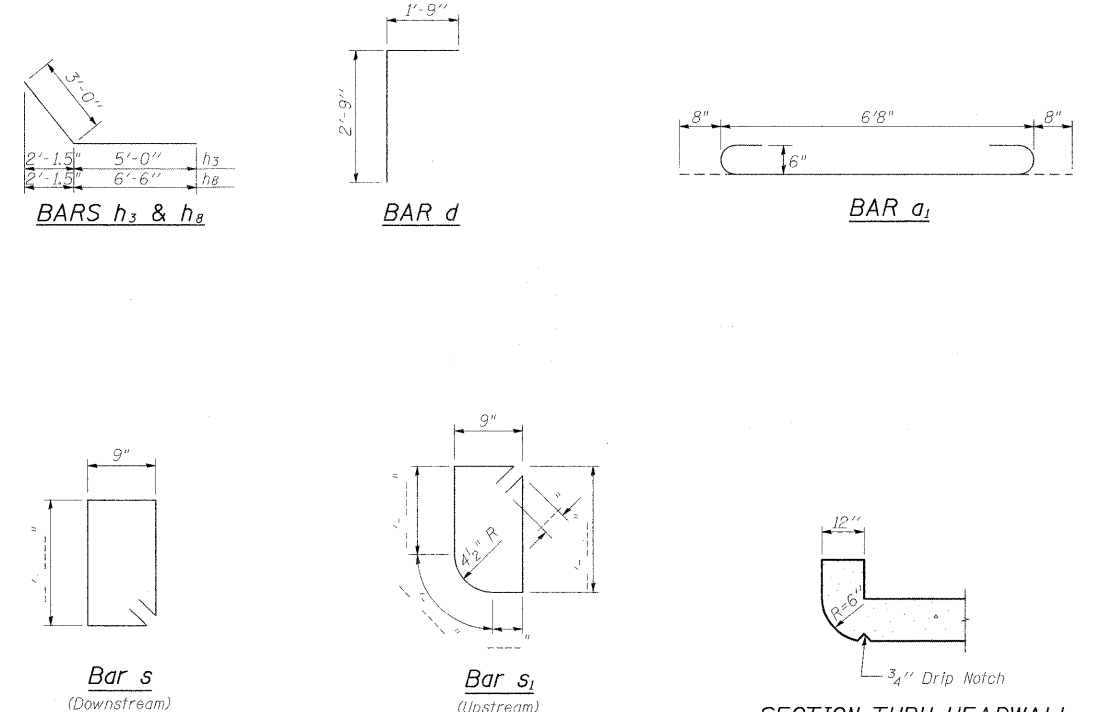


ELEVATION

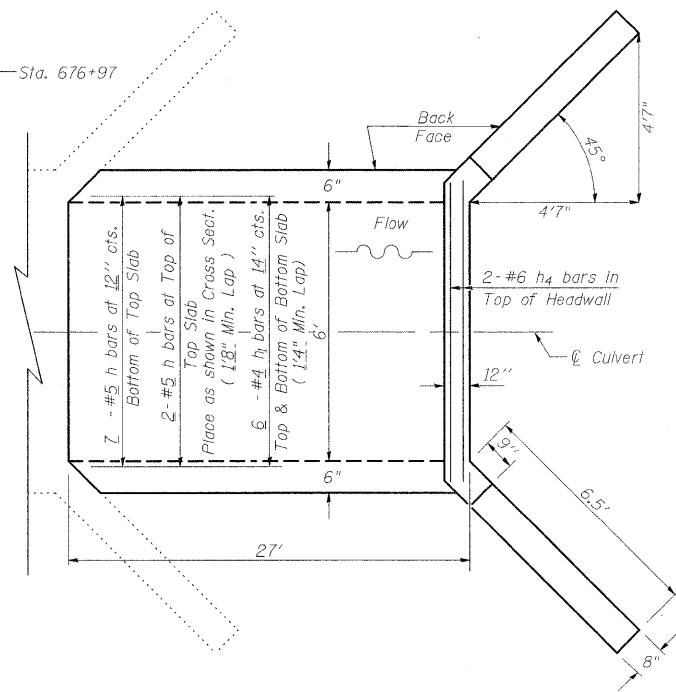
Dimensions at Rt. L's to ϕ Roadway



* DSFL 449.51 (EB IL 13)



PLAN



NOTES

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.

All construction joints shall be bonded.

Expansion bolts shall be $\frac{3}{4}$ " ϕ x 12" hooked bolts. Hooked bolts shall extend a minimum of 9" into new concrete and have a minimum certified proof load of 4,080 lbs.

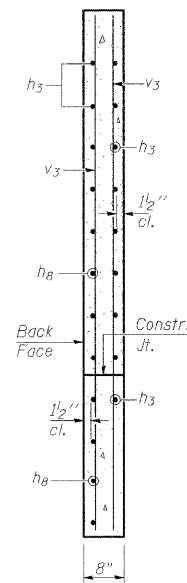
DESIGN STRESSES

$f_y = 60,000$ psi
 $f'_c = 3,500$ psi

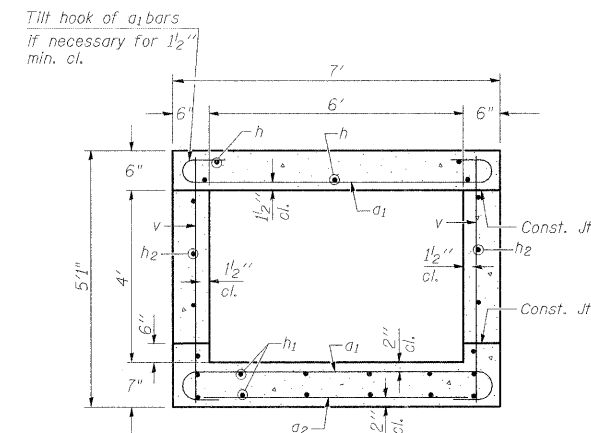
LOADING HS 20-44 & ALT.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_1	88	#6	8'-0"	
a_2	0	#4		
d	7	#4	4'-6"	
h	9	#5	26'-9"	
h_1	12	#4	26'-9"	
h_2	8	#5	26'-9"	
h_3	16	#4	8'-0"	
h_4	6	#6	6'-9"	
h_5	4	#6	6'-9"	
h_8	14	#4	9'-6"	
s	0	#4		
s_1	0	#4		
v	76	#4	4'-9"	
v_3	8	#4	7'-9"	
			Cu. Yd.	14.4
			Reinforcement Bars	2350
			$\frac{3}{4}$ " Expansion bolts	Each 14



SECTION A-A



SECTION THRU BARREL

REVISIONS

DRAWN	2-04
REVISED	5-09 SHT CELL
REVISED	
REVISED	

BASED ON: **SSB-H-0** 6-1-2000

FILE NAME =	USER NAME = shepardgd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BOX CULVERT EXTENSION STATION 676+97 RT 6' X 4', SKEW 0° EXTEND 27'-0"	F.A.P. RTE. 331	SECTION (1-2)N-2,R(1X-1)N-3,R-2	COUNTY WILLIAMSON	TOTAL SHEETS 202	SHEET NO. 102		
ct:\pw\work\pwwdot\shepardgd\dms47338\Festum13-sht-culvert.dgn	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -			SCALE: _____	SHEET NO. _____ OF _____ SHEETS	STA. _____ TO STA. _____	CONTRACT NO. 98857			
	PLOT DATE = 10/14/2003	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT						
		DATE -	REVISED -									