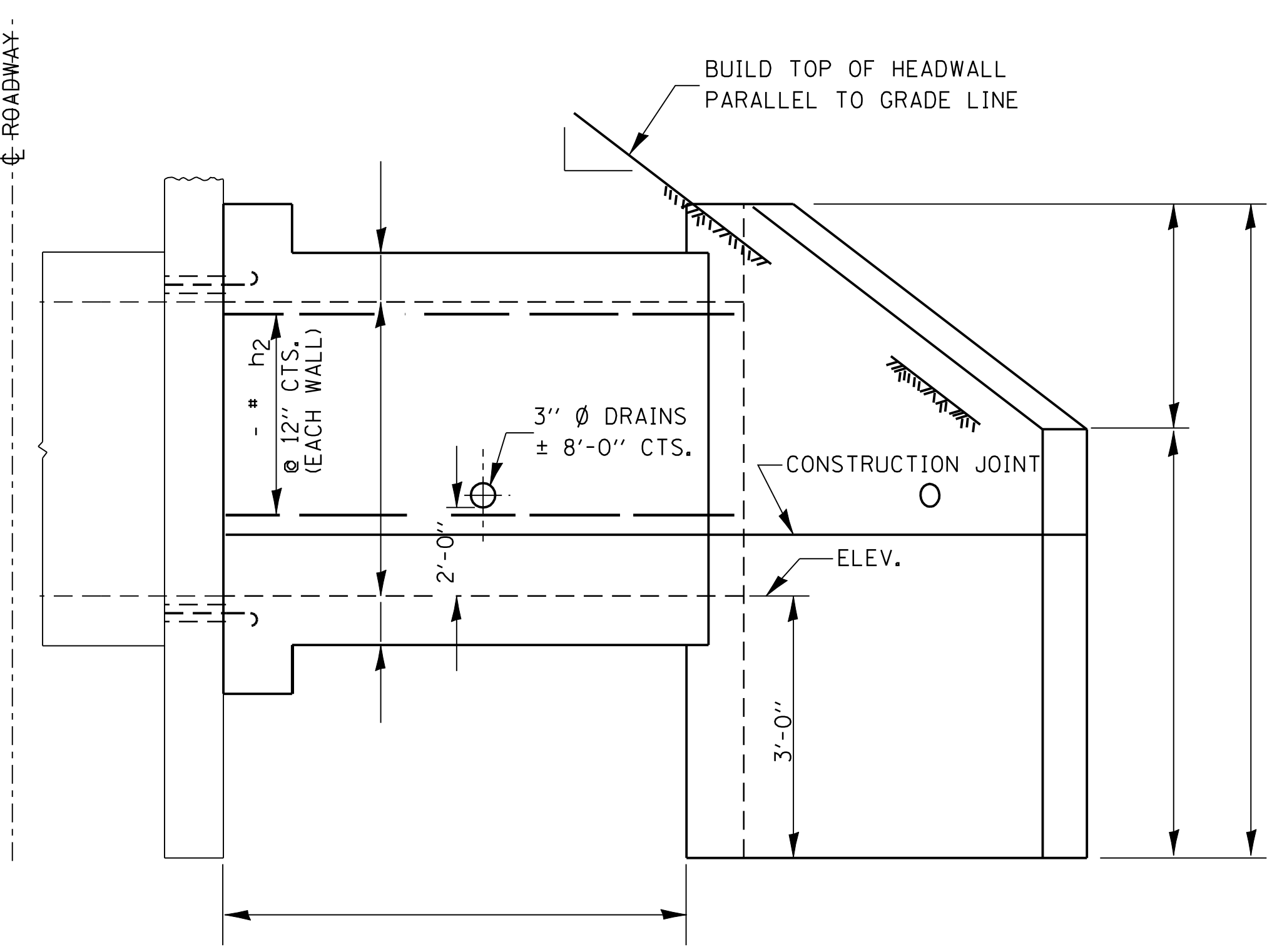
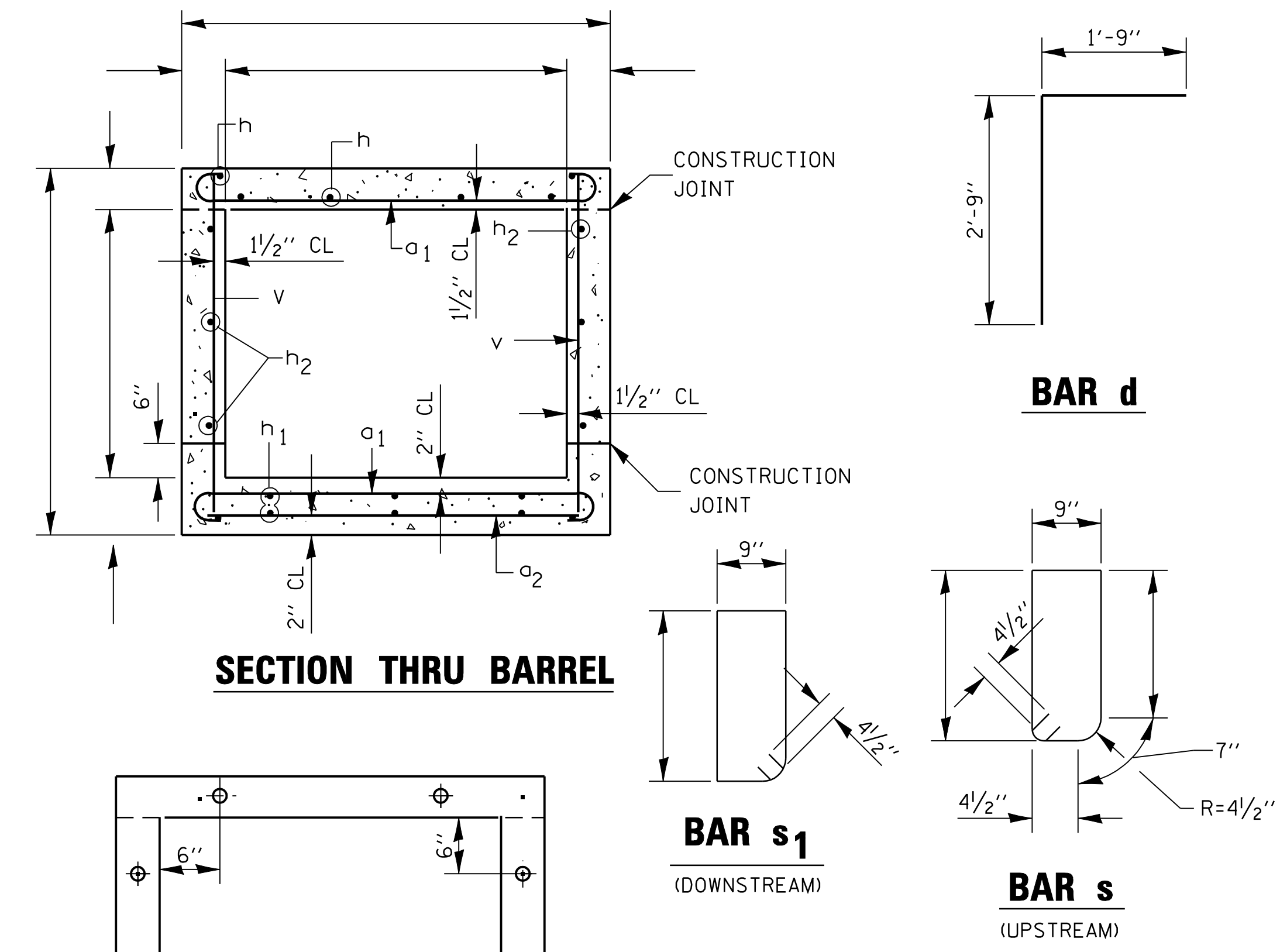


HALF LONG SECTION



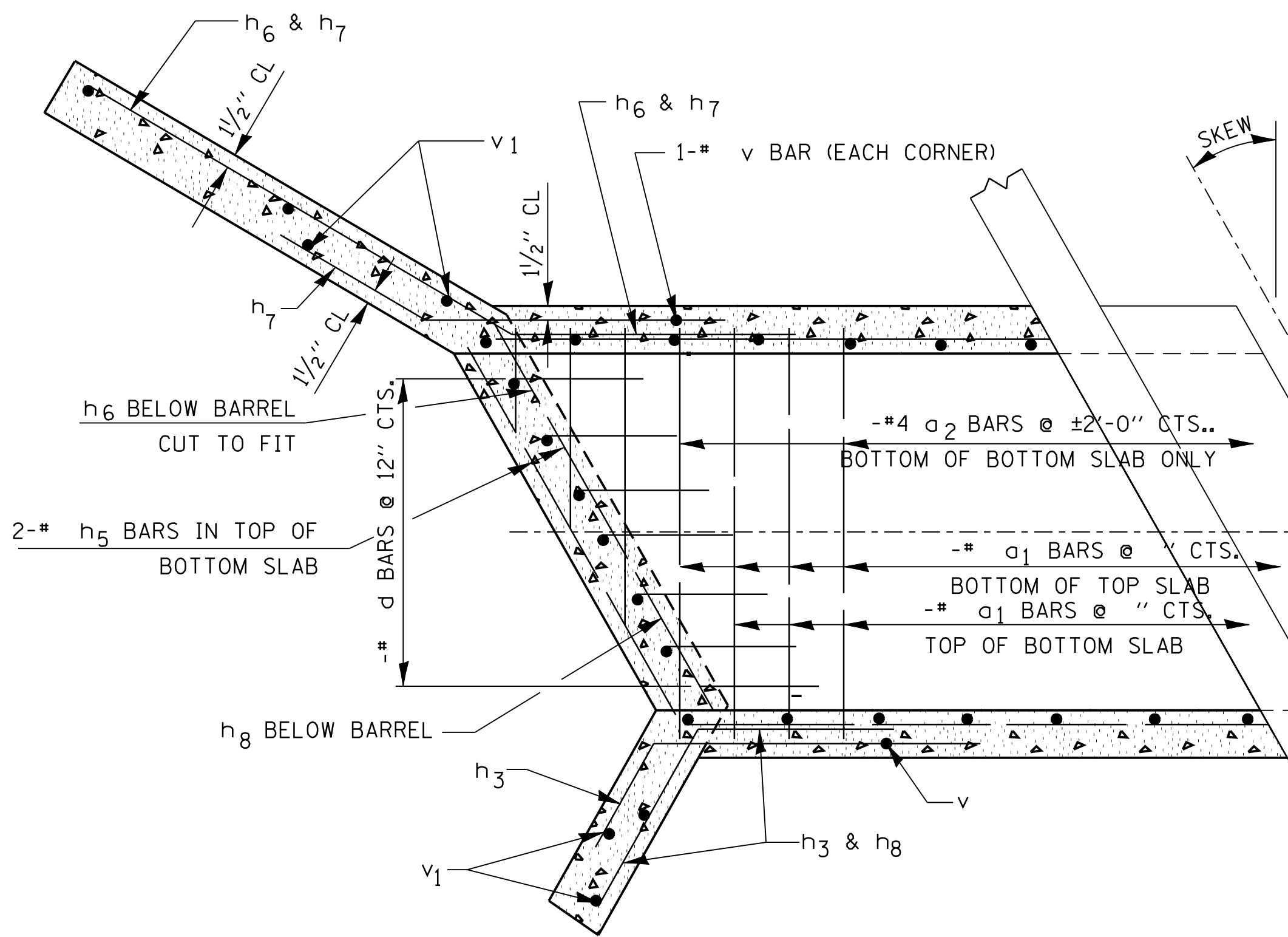
HALF ELEVATION



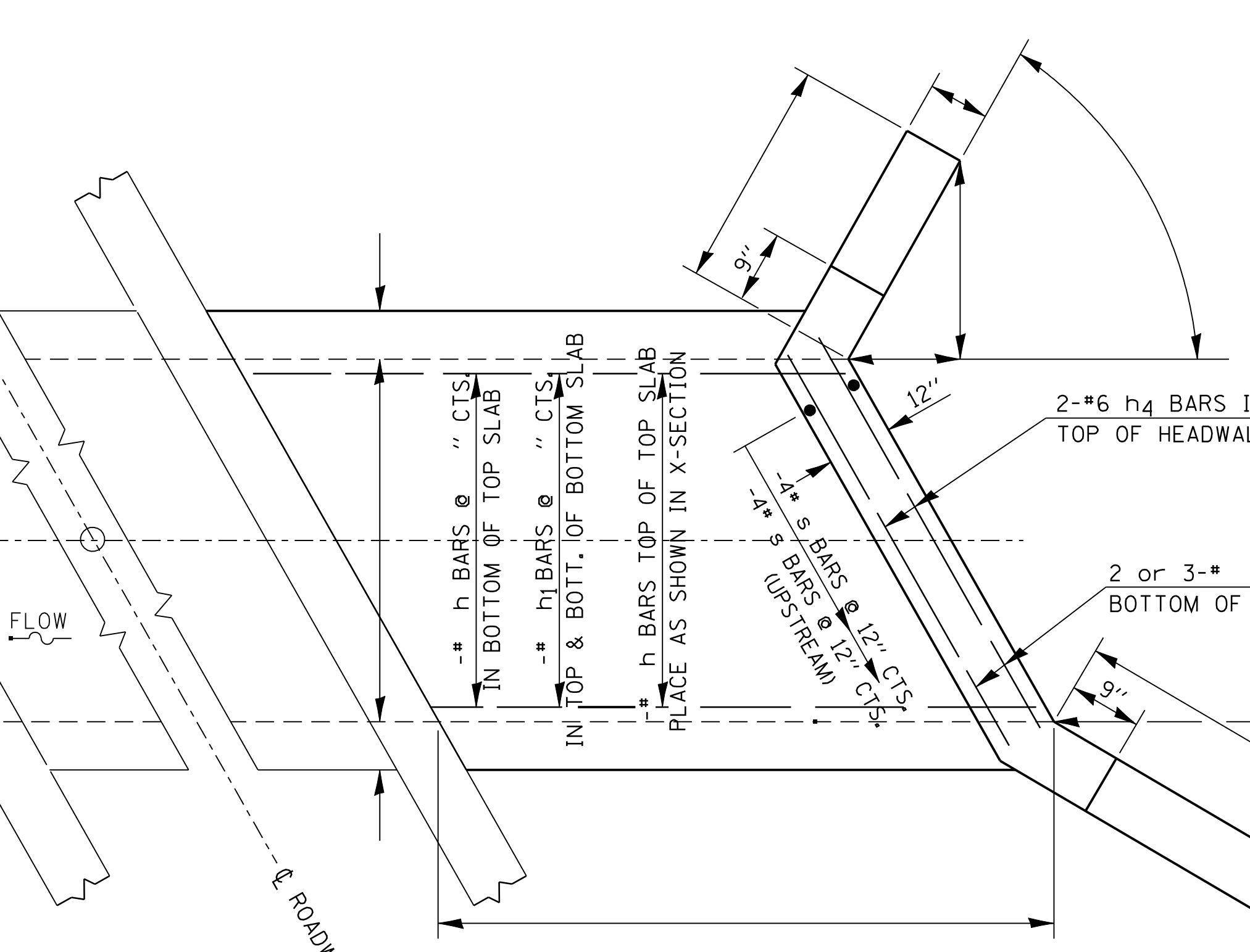
SECTION THRU BARREL

EXPANSION BOLT LOCATION

NOTE: EXPANSION BOLTS SHALL CONSIST OF SELF DRILL EXPANSION SHIELDS AND 3/4" DIAMETER HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS.

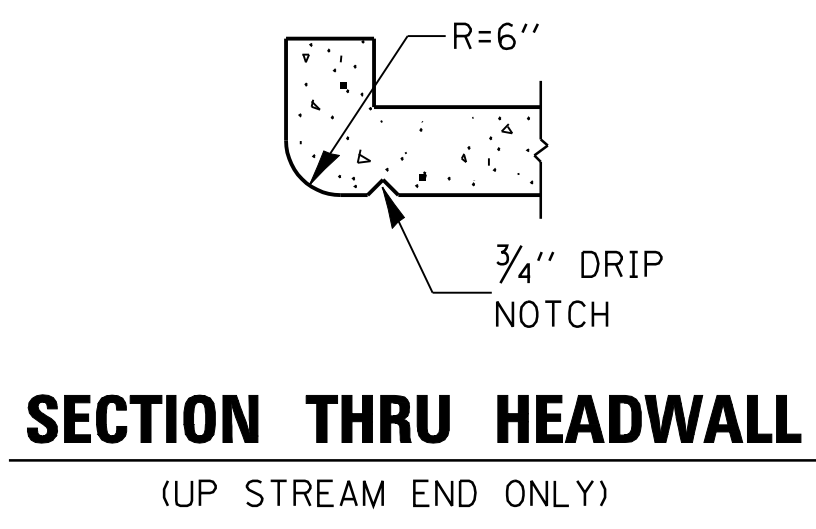


SHOWING REINFORCEMENT



PLAN

SHOWING OUTLINES



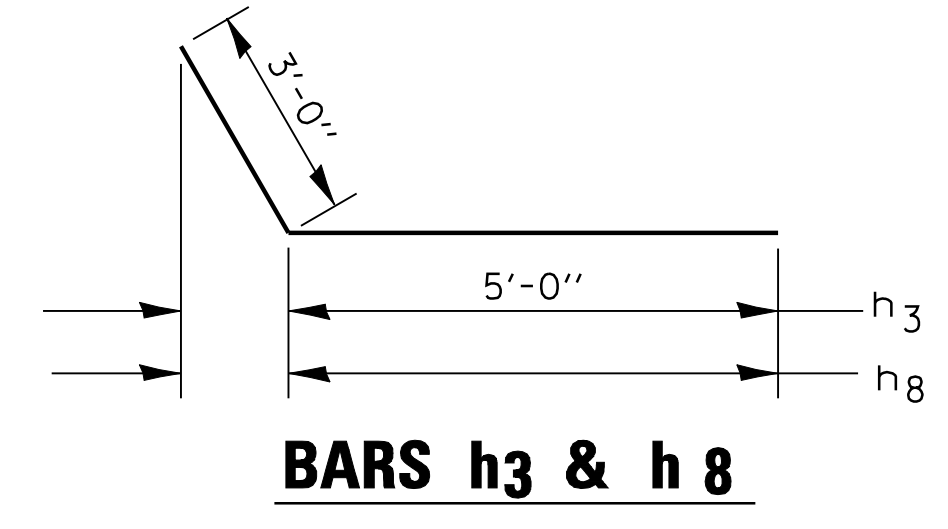
GENERAL NOTES

CLASS SI CONCRETE SHALL BE USED THROUGHOUT. AT LEAST SIX FEET OF BARREL SHALL BE POURED MONOLITHICALLY WITH WINGWALLS. EXPOSED EDGES SHALL BE BEVELED 3/4". FOR BACKFILING AND EMBANKMENTS SEE STANDARD SPECIFICATIONS. TILT HOOK OF a_1 BARS, IF NECESSARY, TO OBTAIN 1/2" MINIMUM CLEARANCE AT THE TOP OF HOOK. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42 OR M-53, GRADE 60.

DESIGN STRESSES

$f_y = 60,000$ P.S.I.
 $f_c = 3,500$ P.S.I.

LOADING HS 20-44 & ALT.



BILL OF MATERIALS

BAR	NUMBER	SIZE	LENGTH
a_1			
a_2		#4	
d			
h			
h_1			
h_2			
h_3			
h_4		#6	
h_5			
h_6			
h_7			
h_8			
v			
v_1			
s		#4	
s_1		#4	
CONC. BOX CULV.		CU. YDS.	
REINFORCEMENT BARS		LBS.	
EXPANSION BOLTS		EACH	