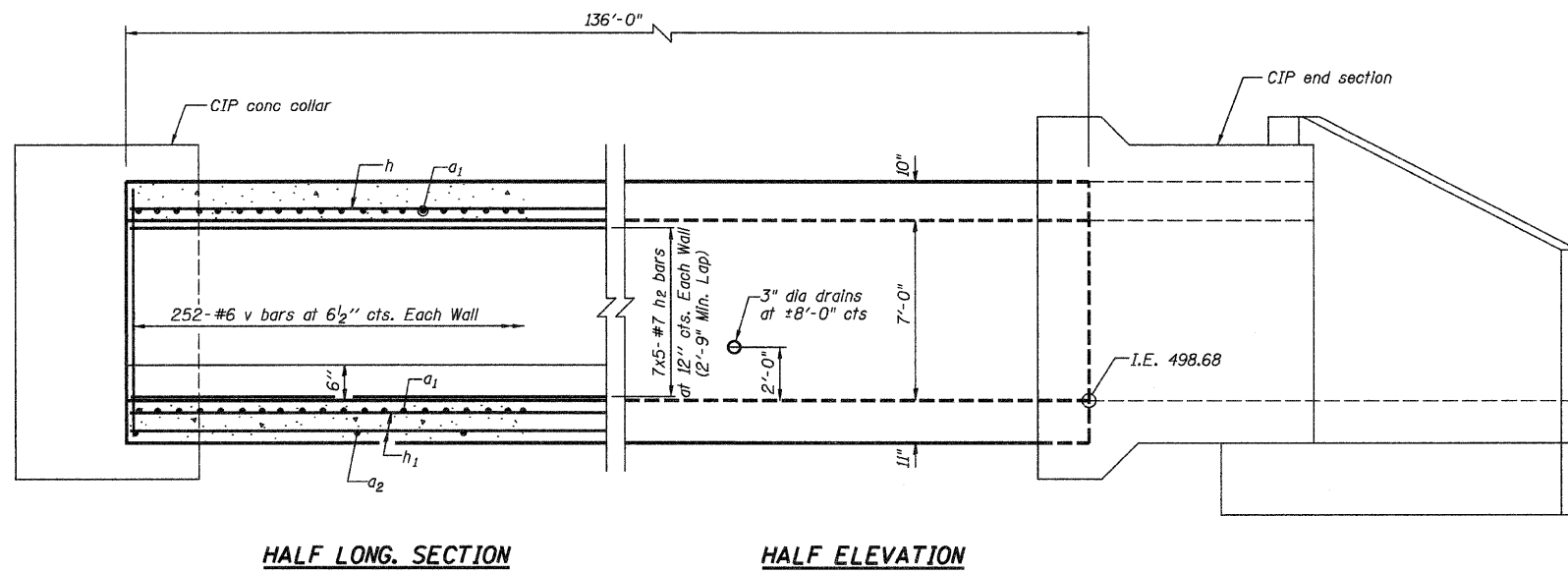


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



HALF LONG SECTION

HALF ELEVATION

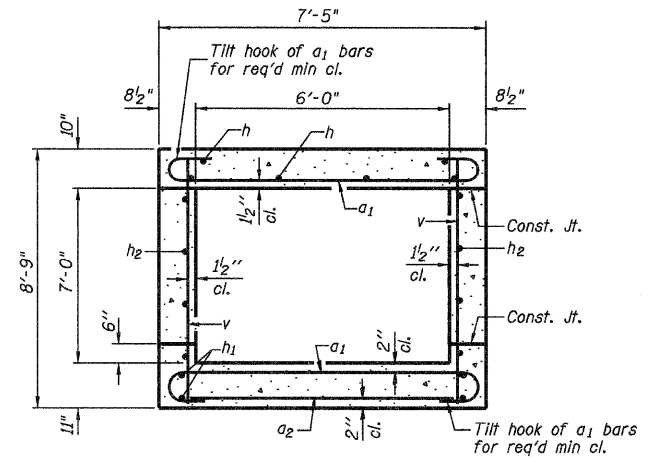
**DESIGN SPECIFICATIONS**  
2002 AASHTO 17th Edition

**DESIGN STRESSES**  
 $f_y = 60,000 \text{ psi}$   
 $f'_c = 3,500 \text{ psi}$

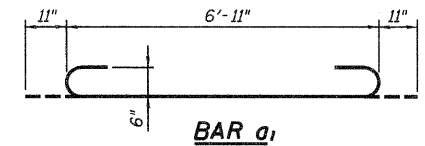
**LOADING HS 20-44**  
Allow 50 lb/sq. ft. for future wearing surface.

**INDEX OF SHEETS**

- 1 DOWNSTREAM 6'x7' BOX CULVERT EXTENSION
- 2 DOWNSTREAM 6'x7' END SECTION DETAILS
- 3 DOWNSTREAM 6'x7' SETTLEMENT COLLAR DETAILS



SECTION THRU BARREL



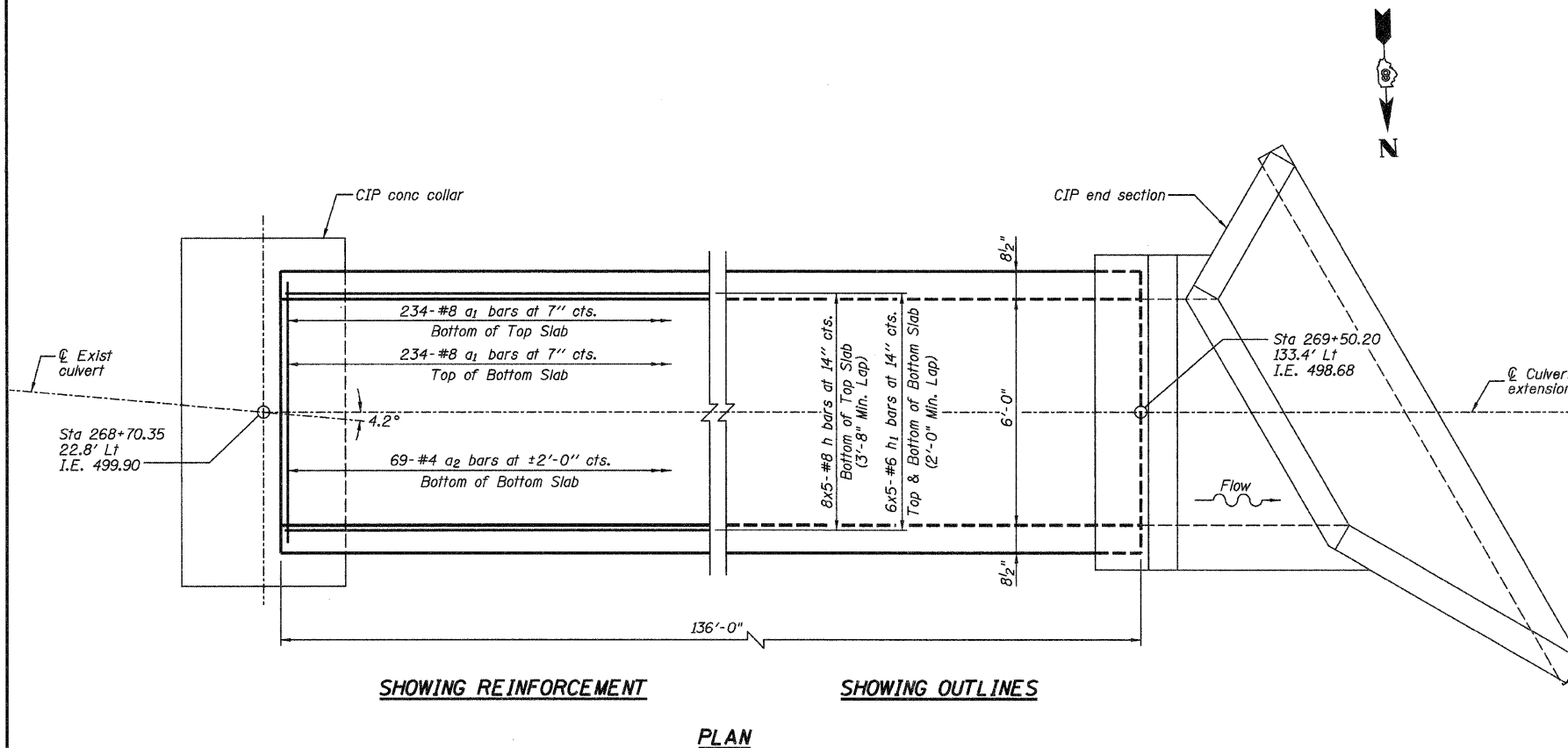
BAR a1

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a1	468	#8	8'-9"	
a2	69	#4	6'-3"	
h	40	#8	30'-1"	
h1	60	#6	28'-9"	
h2	70	#7	29'-4"	
v	504	#6	8'-5"	
Concrete Box Culverts				Cu. Yd. 115.4
Reinforcement Bars				Pound 27,310

**NOTES**

Reinforcement Bars shall conform to the requirements of ASTM A706 Gr 60 (IL Modified) See Special Provisions.  
Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.  
All construction joints shall be bonded.



SHOWING REINFORCEMENT

SHOWING OUTLINES

PLAN

DESIGNED -	JMB
CHECKED -	YES
DRAWN -	R KING
CHECKED -	YES

**HOMER L. CHASTAIN & ASSOCIATES, LLP**  
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CHICAGO (773) 714-0050  
ROCKFORD (815) 489-0050  
184-001397



Jeremy Buening, P.E., SE  
Date 3-3-10  
Exp 11-20-10

**STATION 268+54.00 LT**  
**DOWNSTREAM 6'x7'**  
**BOX CULVERT EXTENSION**  
**FAP ROUTE 310 (US 67)**  
**SECTION 60-16-1-1B**  
**MADISON COUNTY**

SHEET NO. 1 OF 3 SHEETS	F.A.P. RTE. 310	SECTION 60-16-1-1B	COUNTY MADISON	TOTAL SHEETS 481	SHEET NO. 155
	FAP ROUTE 310 (US 67)		CONTRACT NO. 76318		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			