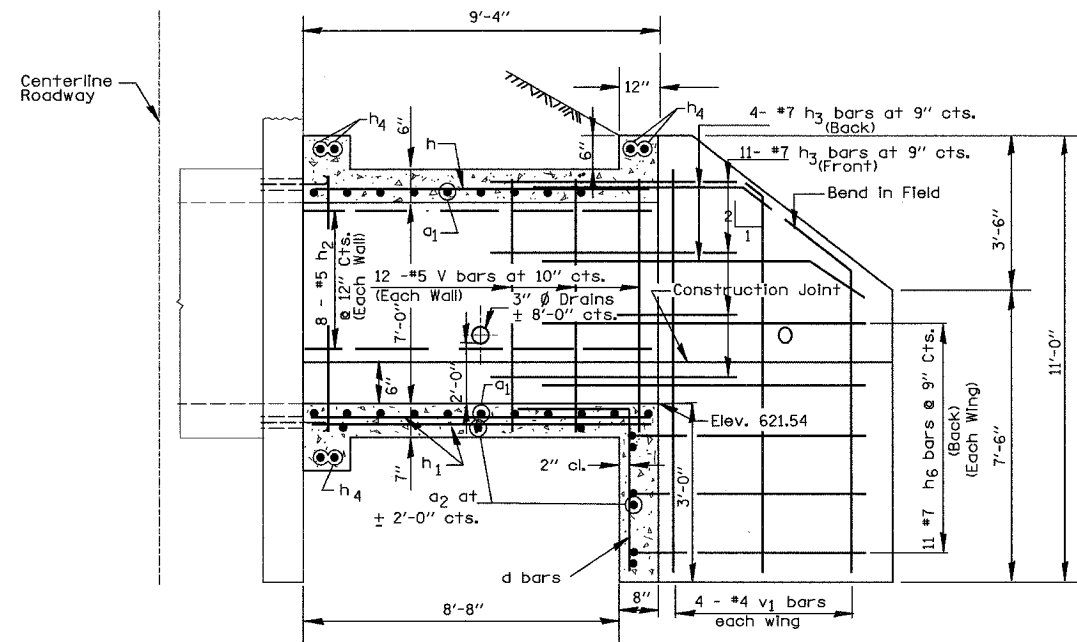
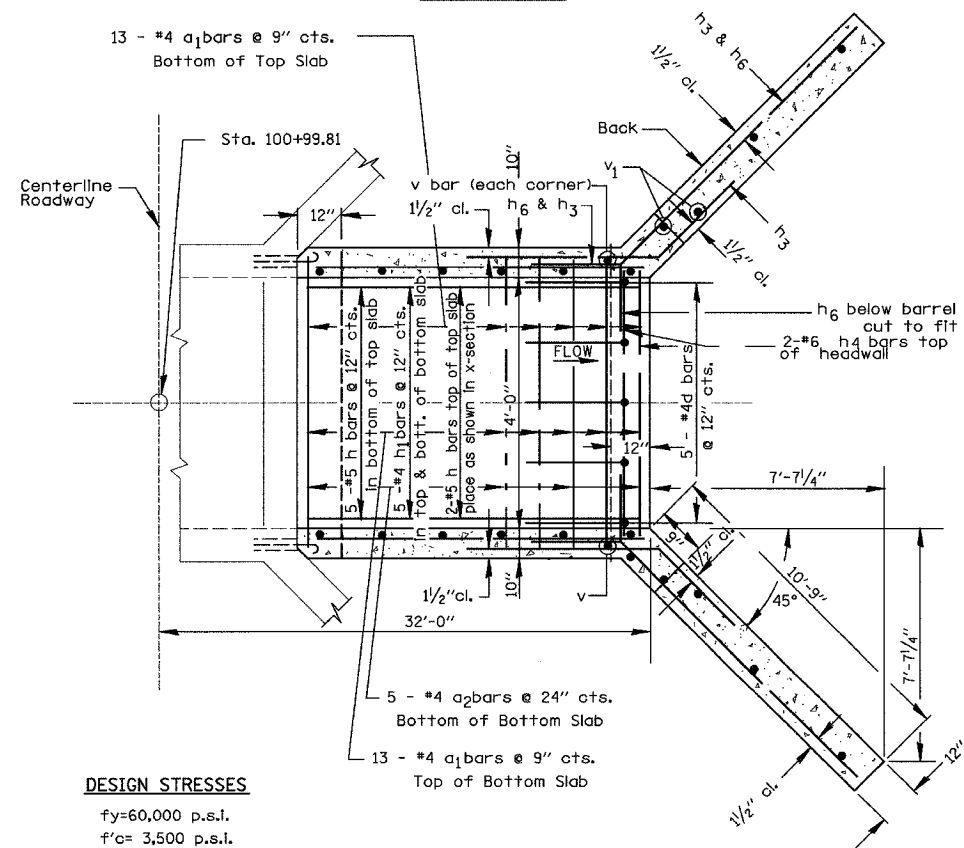


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CONTRACT NO. 64938			
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
2247	13X-BR-1	BUREAU	51 40
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		



ELEVATION

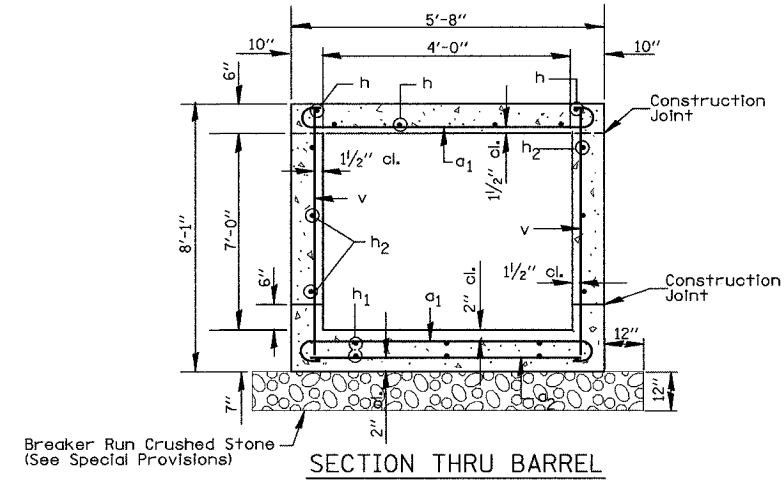


PLAN

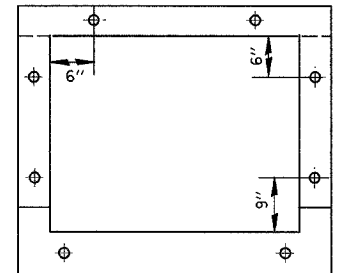
DESIGN STRESSES

$f_y = 60,000$  p.s.i.  
 $f'_c = 3,500$  p.s.i.

LOADING HS 20-44



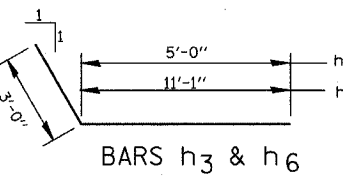
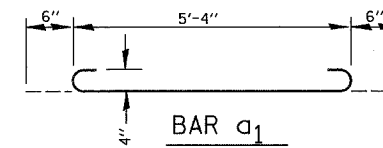
SECTION THRU BARREL



Top & Bottom . . . 3 @ 18" Cts.  
Sidewalls . . . . . 5 @ 18" Cts.

EXPANSION BOLT LOCATION

Note: Expansion bolts shall consist of self drilling expansion shield and 3/4" diameter hooked bolts. Hooked bolts shall extend a minimum of 9" into new concrete.  
Minimum Certified Proof Load = 4,080 lbs



BILL OF MATERIALS

Bar	Number	Size	Length
a1	26	#4	6'-4"
a2	7	#4	5'-5"
d	5	#4	4'-6"
h	7	#5	9'-1"
h1	10	#4	9'-1"
h2	16	#5	9'-1"
h3	30	#7	8'-0"
h4	6	#6	5'-5"
h6	22	#7	14'-1"
v	26	#5	7'-10"
v1	8	#4	10'-9"
Concrete Box Culverts	Cu. Yds.	13.9	
Reinforcement Bars	Lbs.	1870	
Expansion Bolts 3/4" Each	Each	16	
Breaker Run Crushed Stone	Ton	5	

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 backfilling and embankments see Standard Specifications.  
Tilt hook of a1 bars, if necessary, to obtain 1/2" minimum clearance at top of hook.  
Reinforcement Bars shall conform to the requirements of AASHTO M-31, or M-322, Grade 60.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
BOX CULVERT EXTENSION DETAILS  
FAS ROUTE 2247 (U.S. 6)  
OVER BRUSH CREEK  
SECTION 13X-BR-1  
BUREAU COUNTY

SCALE: VERT. HORIZ.  
DATE 07/06  
DRAWN BY NO  
CHECKED BY JDA

PLT DATE = 4/96  
FILE NAME = 208983DULY  
PLOT SCALE = 1" = 8'  
USER NAME = ARR