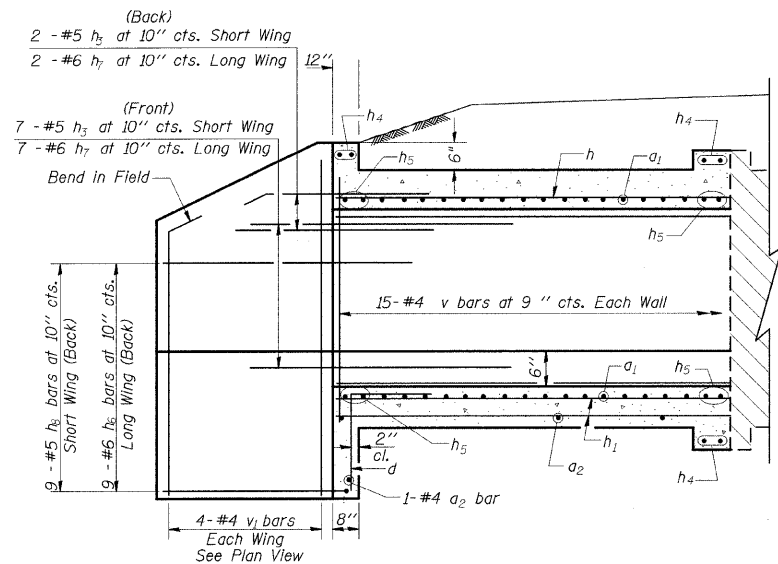
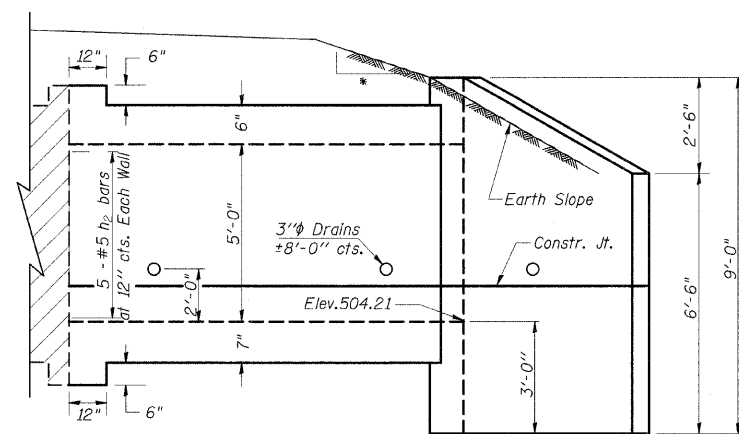


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
932	(8,9,11)W,RS-1	•	401	162
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• JOHNSON/POPE				

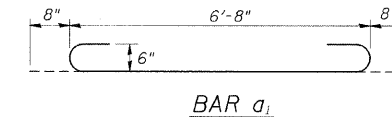
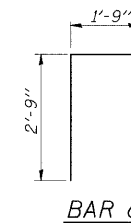
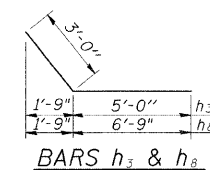


HALF LONG. SECTION



HALF ELEVATION

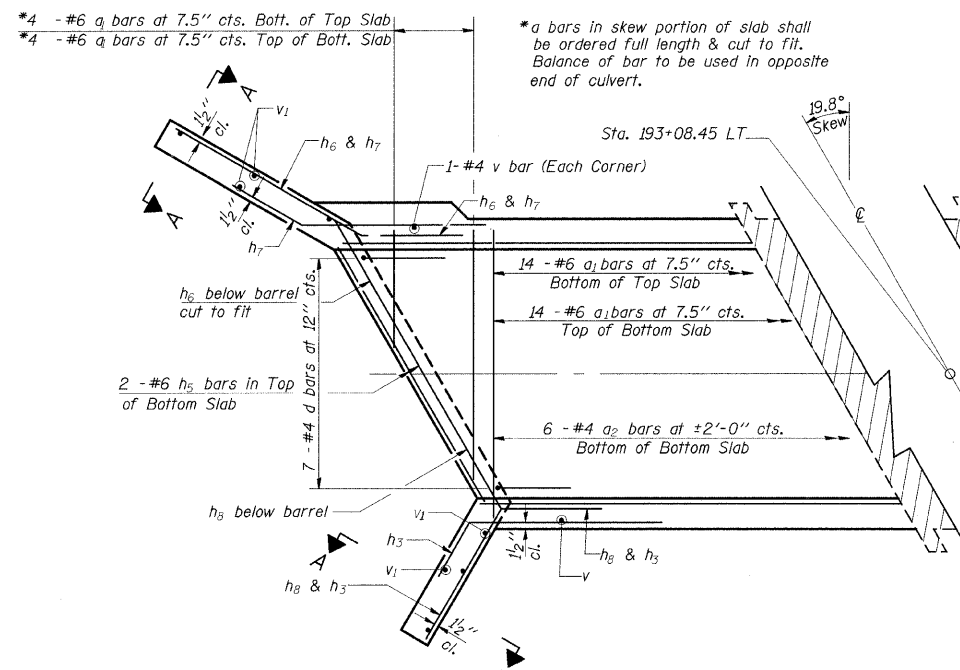
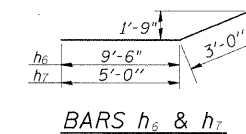
- 4:1 TO CLEAR ZONE
- 3:1 AFTER CLEAR ZONE



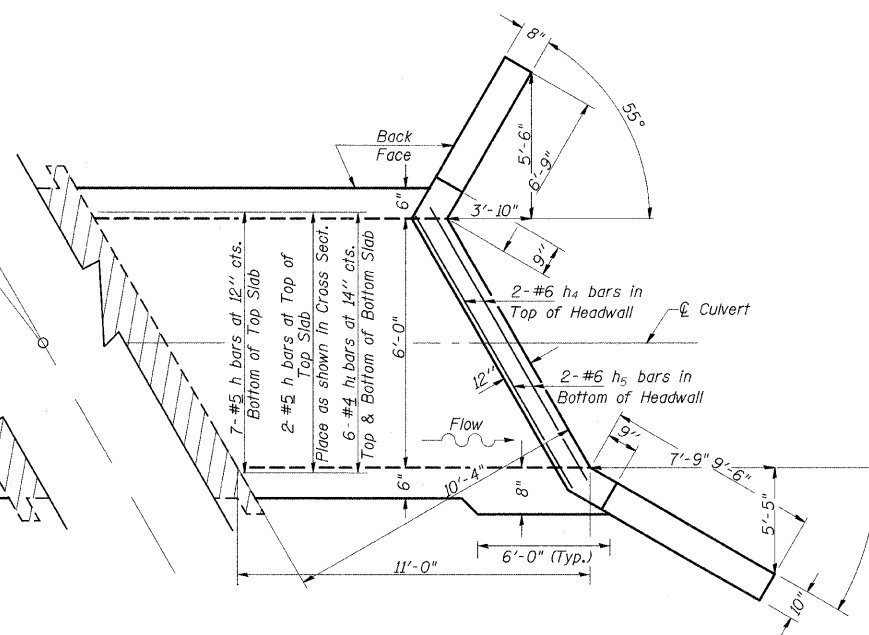
DESIGN STRESSES

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

LOADING HS 20-44 & ALT.



SHOWING REINFORCEMENT

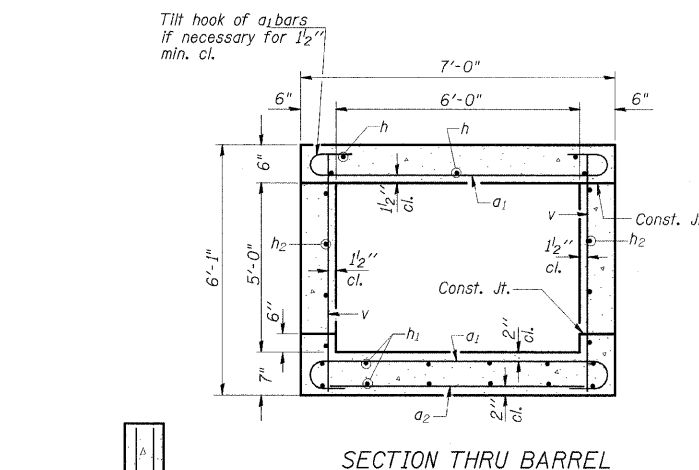


SHOWING OUTLINES

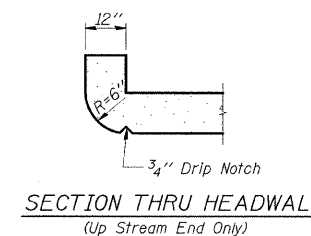
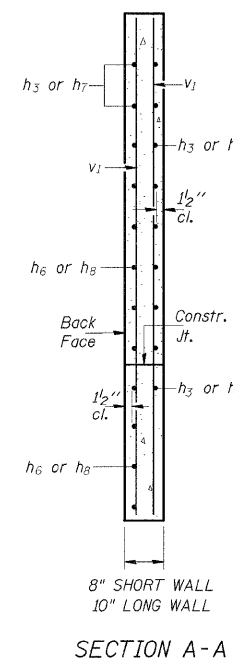
PLAN

NOTES

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.  
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.  
All construction joints shall be bonded.



SECTION THRU BARREL



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$a_1$	36	#6	8'-0"	U
$a_2$	7	#4	6'-3"	U
d	7	#4	4'-6"	L
h	9	#5	10'-9"	—
$h_1$	12	#4	10'-9"	—
$h_2$	10	#5	10'-9"	—
$h_3$	9	#5	8'-0"	—
$h_4$	6	#6	6'-8"	—
$h_5$	8	#6	7'-1"	—
$h_6$	9	#6	12'-6"	—
$h_7$	9	#6	8'-0"	—
$h_8$	9	#5	9'-9"	—
v	32	#4	5'-9"	—
$v_1$	8	#4	8'-6"	—
Expansion Bolts 3/4"				Each 20
Concrete Box Culverts				Cu. Yd. 10.3
Reinforcement Bars				Pound 1540

PRECAST OPTION NOT ALLOWED

ILLINOIS DEPARTMENT OF TRANSPORTATION  
BOX CULVERT EXTENSION  
STATION 193+08.45 LT.  
6' X 5', SKEW 19.8° LT. AH.  
EXTEND 11'-0"