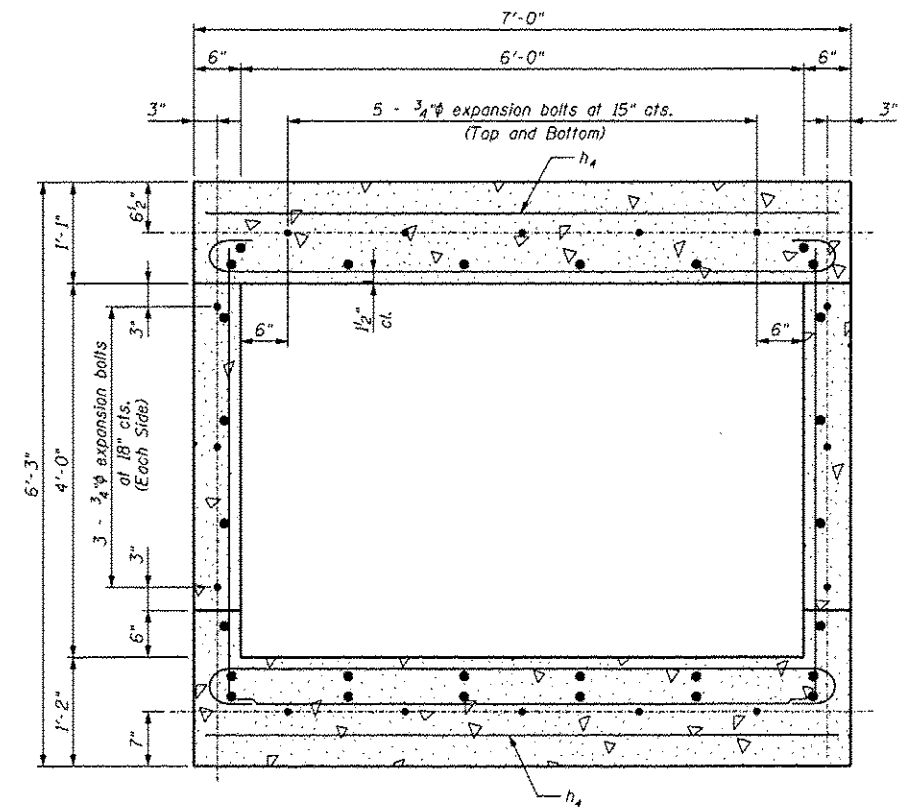
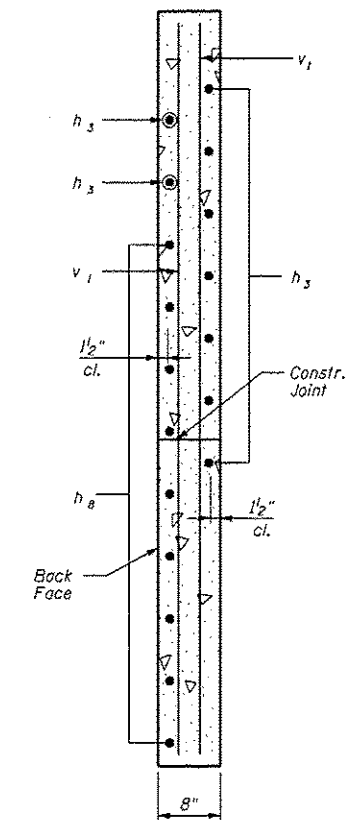


SECTION THRU BARREL



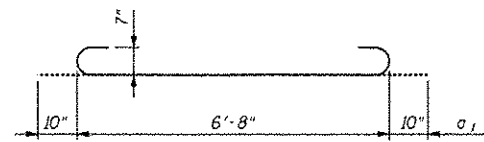
SECTION B-B

Expansion Bolt Locations  
Section Shown Without Skew

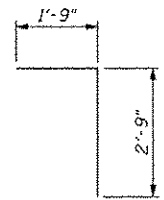


SECTION A-A

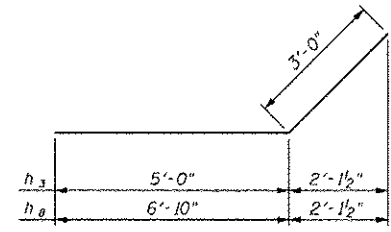
Wing Wall



a BARS



d BAR

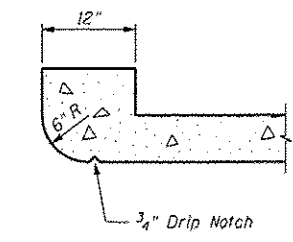


h BARS

BAR BEND DETAILS

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a <sub>1</sub>	52	7	8'-4"	
a <sub>2</sub>	9	4	6'-3"	
d	7	4	4'-6"	
h	8	6	15'-0"	
h <sub>1</sub>	14	4	15'-0"	
h <sub>2</sub>	8	5	15'-0"	
h <sub>3</sub>	18	4	8'-0"	
h <sub>4</sub>	6	6	6'-0"	
h <sub>5</sub>	18	4	9'-10"	
v	44	4	4'-11"	
v <sub>1</sub>	8	4	7'-10"	
3/4" Expansion Bolts			Each	16
Concrete Box Culverts			Cu. Yd.	10.4
Reinforcement Bars			Pound	1860
Granular Culvert Backfill			Cu. Yd.	4.1



SECTION THRU HEADWALL

(UPSTREAM END ONLY)