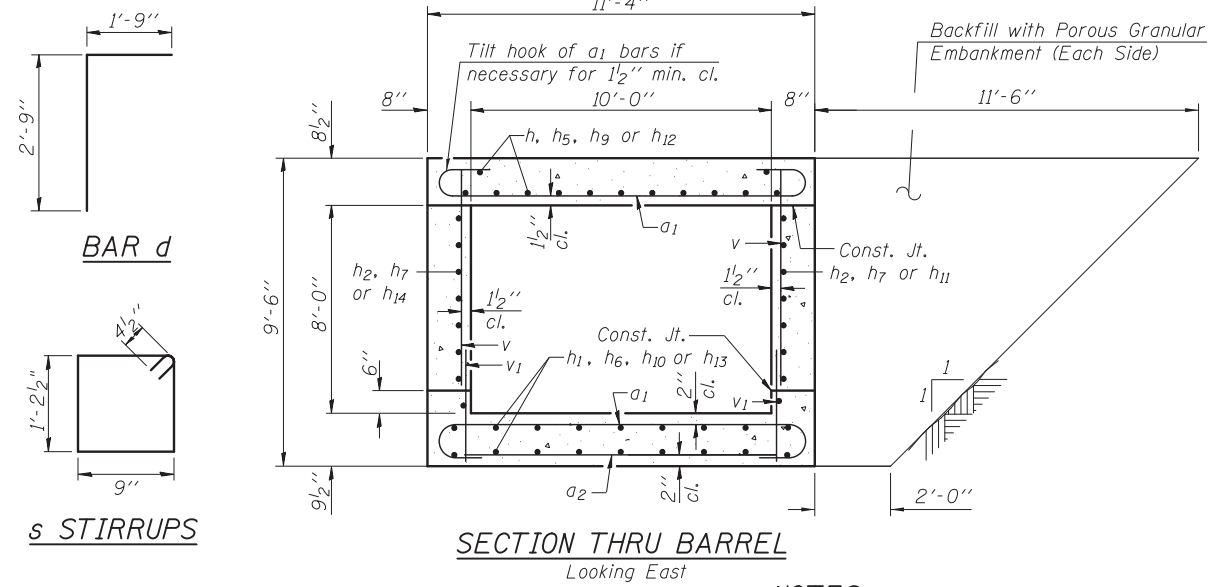


HALF LONG SECTION

HALF ELEVATION

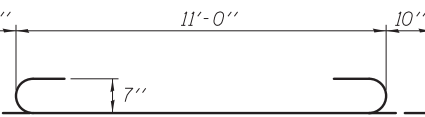
\* a bars in skew portion of slab shall be ordered full length & cut to fit.



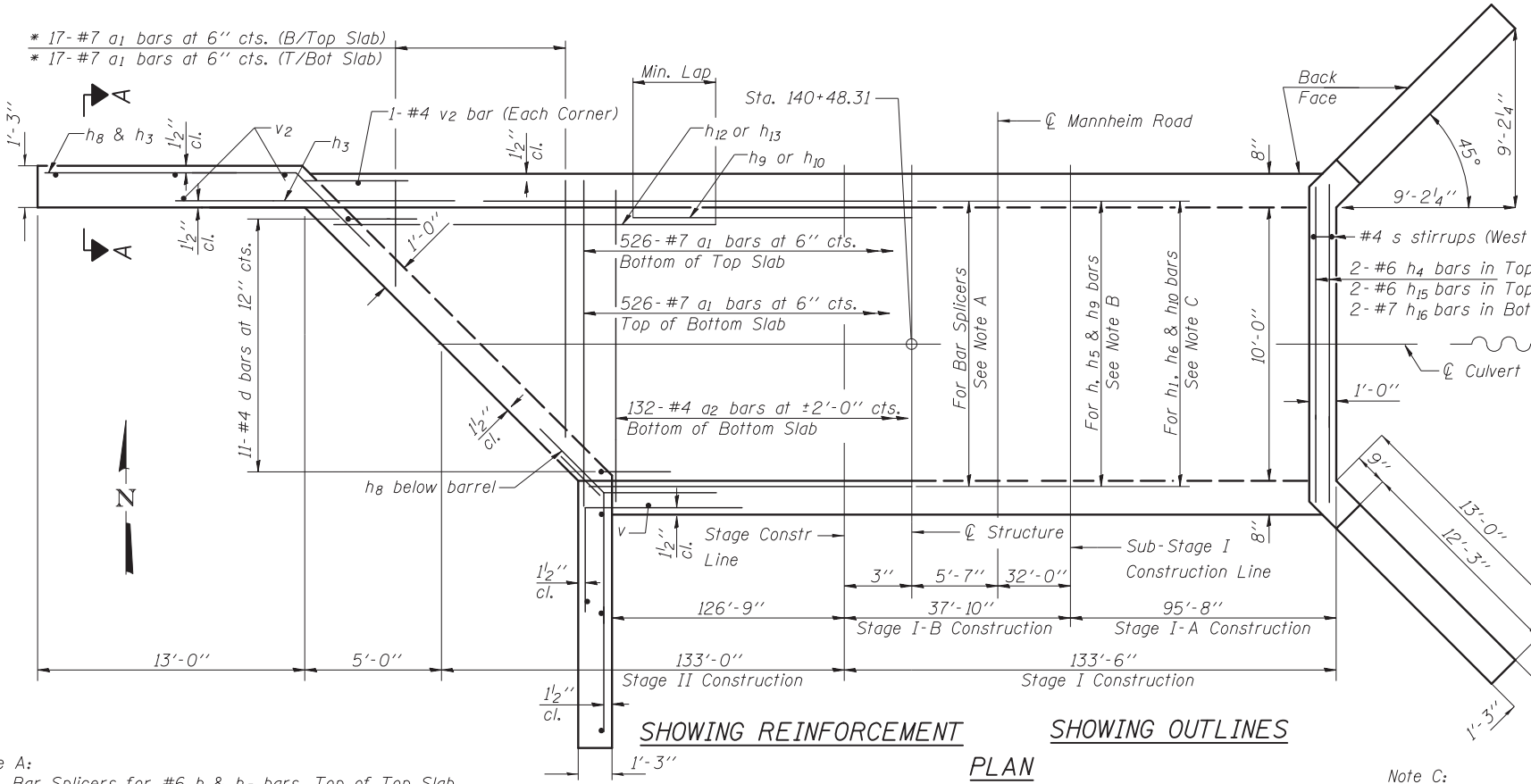
SECTION THRU BARREL  
Looking East

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 ASTM A 706 Gr 60. See Special Provisions.  
Bars indicated thus 11 x 5-#6 etc. indicates 11 lines of bars with 5 lengths per line.  
All construction joints shall be bonded.  
Precast concrete culvert alternate will not be allowed.



BAR a1



SHOWING REINFORCEMENT

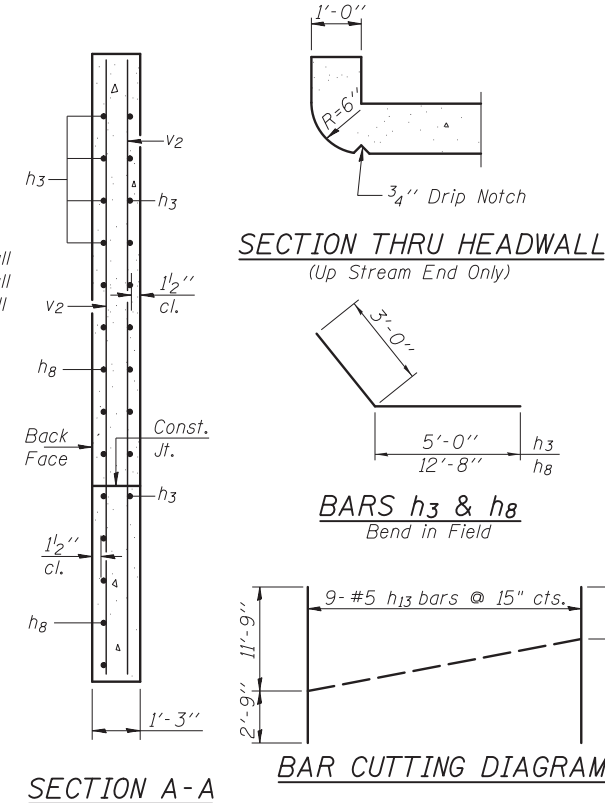
SHOWING OUTLINES

Note A:  
2 - Bar Splicers for #6 h & h5 bars, Top of Top Slab  
11 - Bar Splicers for #6 h & h5 bars, Bottom of Top Slab  
9 - Bar Splicers for #5 h1 bars & h6 bars, Top of Bottom Slab  
9 - Bar Splicers for #5 h1 bars & h6 bars, Bottom of Bottom Slab  
2 - Bar Splicers for #6 h5 & h9 bars, Top of Top Slab  
11 - Bar Splicers for #6 h5 & h9 bars, Bottom of Top Slab  
9 - Bar Splicers for #5 h6 bars & h10 bars, Top of Bottom Slab  
9 - Bar Splicers for #5 h6 bars & h10 bars, Bottom of Bottom Slab  
8 - Bar Splicers for #6 h2 bars & h7 bars, Each Wall  
8 - Bar Splicers for #6 h7 bars & h11 bars, Each Wall

Note B:  
11x3-#6 h bars @ 12" cts. Bottom of Top Slab. 2'-1" Min. Lap. Stage I-A  
2x3-#6 h bars at Top of Top Slab. Place as shown in Cross sect. Stage I-A  
11x2-#6 h5 bars @ 12" cts. Bottom of Top Slab. 2'-1" Min. Lap. Stage I-B  
2x2-#6 h5 bars at Top of Top Slab. Place as shown in Cross sect. Stage I-B  
11x5-#6 h9 bars @ 12" cts. Bottom of Top Slab. 2'-1" Min. Lap. Stage II  
2x5-#6 h9 bars at Top of Top Slab. Place as shown in Cross sect. Stage II  
11-#6 h12 bars @ 12" cts. Bottom of Top Slab. 2'-1" Min. Lap. Stage II  
2-#6 h12 bars at Top of Top Slab. Place as shown in Cross sect. Stage II

Note C:  
18x3-#5 h1 bars @ 15" cts. Top & Bottom of Bottom Slab. 1'-9" Min. Lap. Stage I-A  
18x2-#5 h6 bars @ 15" cts. Top & Bottom of Bottom Slab. 1'-9" Min. Lap. Stage I-B  
18x5-#5 h10 bars @ 15" cts. Top & Bottom of Bottom Slab. 1'-9" Min. Lap. Stage II  
18-#5 h13 bars @ 15" cts. Top & Bottom of Bottom Slab. 1'-9" Min. Lap. Stage II

Note D:  
8x3-#6 h2 bars @ 12" cts. Each Wall. 2'-1" Min. Lap. Stage I-A  
8x2-#6 h7 bars @ 12" cts. Each Wall. 2'-1" Min. Lap. Stage I-B  
8x5-#6 h11 bars @ 12" cts. Each Wall. 2'-1" Min. Lap. Stage II South Wall  
8x6-#6 h14 bars @ 12" cts. Each Wall. 2'-1" Min. Lap. Stage II North Wall



SECTION THRU HEADWALL  
(Up Stream End Only)

BARS h3 & h8  
Bend in Field

SECTION A-A

BAR CUTTING DIAGRAM

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	1086	#7	12'-8"	C
a2	134	#4	11'-0"	—
d	22	#4	4'-6"	L
h	39	#6	33'-2"	—
h1	54	#5	33'-0"	—
h2	48	#6	33'-3"	—
h3	56	#8	8'-0"	—
h4	2	#6	11'-0"	—
h5	26	#6	19'-10"	—
h6	36	#5	19'-8"	—
h7	32	#6	19'-11"	—
h8	40	#8	16'-0"	—
h9	65	#6	27'-0"	—
h10	90	#5	26'-9"	—
h11	40	#6	27'-3"	—
h12	13	#6	12'-1"	—
h13	9	#5	14'-6"	—
h14	48	#6	24'-8"	—
h15	2	#6	15'-2"	—
h16	2	#7	15'-2"	—
s	16	#4	4'-8"	—
v	707	#5	8'-0"	—
v1	707	#5	2'-3"	—
v2	20	#4	12'-2"	—
z	8	#6	9'-0"	—
Bar Splicers			Each	94
Reinforcement Bars			Pound	60,530
Concrete Box Culverts			Cu. Yd.	304.9