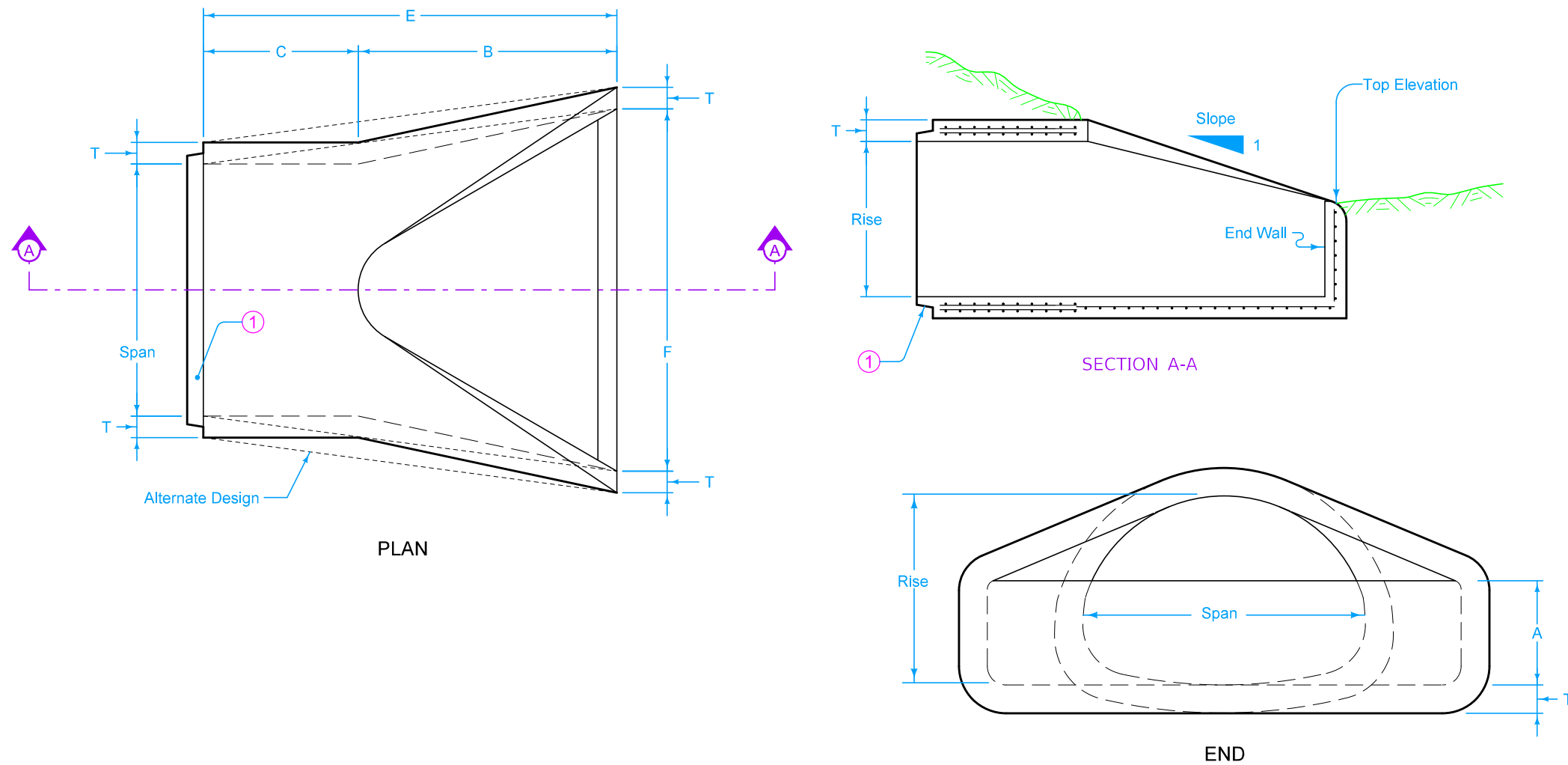


# DESIGNER INFORMATION



Comply with AASHTO M 206 for Apron Reinforcement.

Dimension "E" shown is minimum and is considered the design length. Appropriately adjust for any difference between the actual length of concrete apron installed and the length indicated hereon for the length of concrete culvert pipe furnished.

Install connected pipe joints as shown on DR-121.

Slight variations in both shape and dimensions from those shown may be accepted if approved by the engineer.

① Tongue end on inlet end section. Groove end on outlet end section. Inlet end section shown.

NOMINAL DIMENSIONS SPAN X RISE Inches	EQUIVALENT DIAMETER Inches	SPAN Inches	RISE Inches	SLOPE	APPROXIMATE DIMENSIONS					
					Inches					
					T	A	B	C	E	F
22 X 14	18	22	13 1/2	3:1	2 1/2	7	27	45	72	36 *
29 X 18	24	28 1/2	18	3:1	3	8 1/2	39	33	72	48
37 X 23	30	36 1/4	22 1/2	3:1	3 1/2	9 1/2	50	46	96	60
44 X 27	36	43 3/8	26 5/8	3:1	4	11 1/8	60	36	96	72
52 X 32	42	51 1/8	31 5/16	3:1	4 1/2	15 13/16	60	36	96	78
59 X 36	48	58 1/2	36	3:1	5	21	60	36	96	84
65 X 40	54	65	40	3:1	5 1/2	25 1/2	60	36	96	90
73 X 45	60	73	45	3:1	6	31	60	36	96	96
88 X 54	72	88	54	2:1	7	31	60	39	99	120
102 X 62	84	102	62	2:1	8	21 1/2	83	19	102	144

Possible Contract Item:  
Low Clearance Concrete Pipe Aprons

Possible Tabulations:  
104-3  
104-4

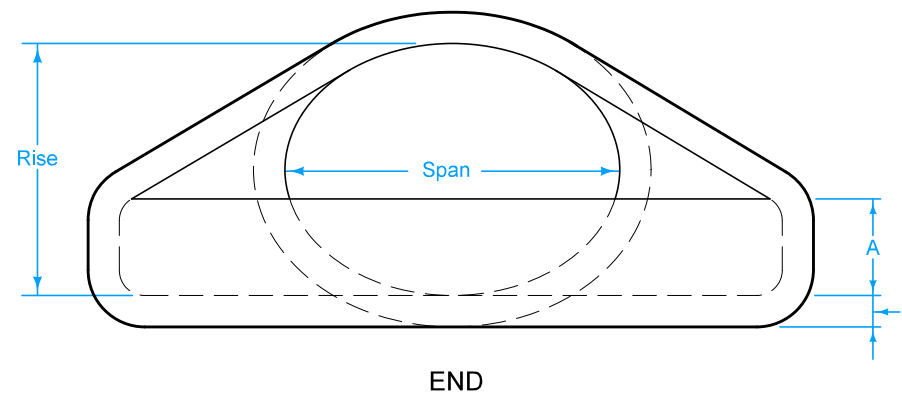
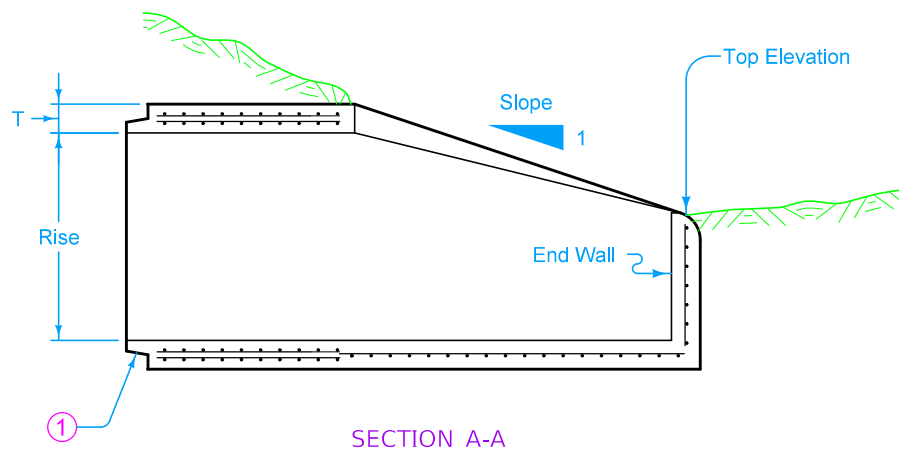
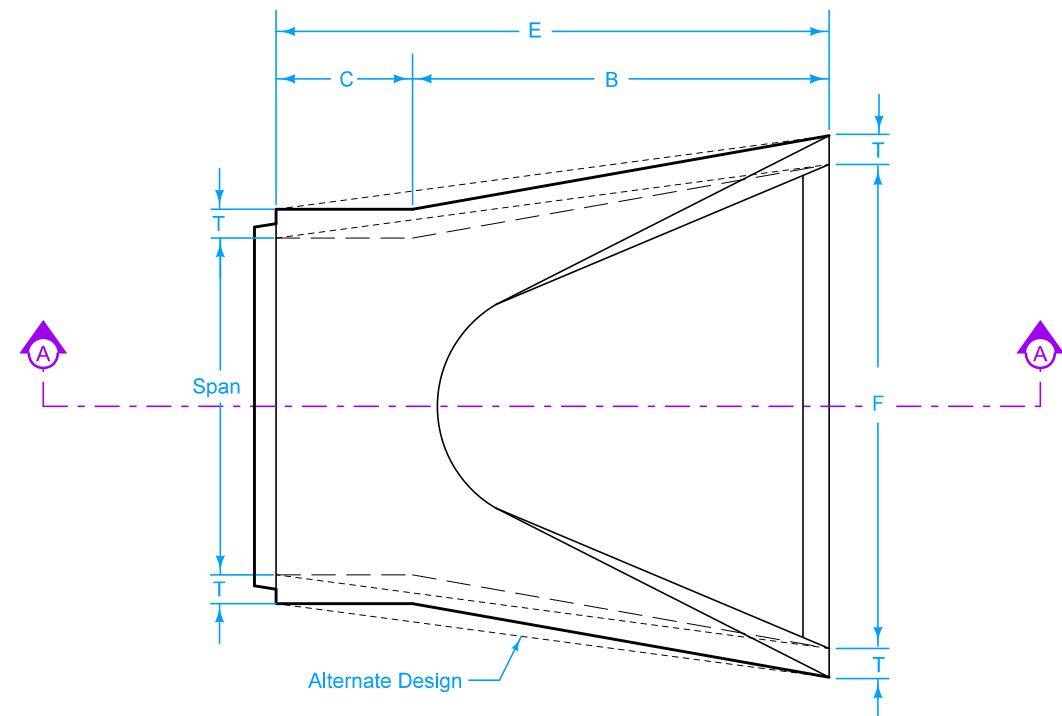
 <b>STANDARD ROAD PLAN</b>	REVISION	
	2	10-17-23
	<b>DR-206</b> SHEET 1 of 2	

REVISIONS: Added note about dimension and shape.

*Steve Miller*  
APPROVED BY DESIGN METHODS ENGINEER

**LOW CLEARANCE CONCRETE  
PIPE APRON WITH END WALL**

ARCH PIPE



Comply with AASHTO M 207 for Apron Reinforcement.

Dimension "E" shown is minimum and is considered the design length. Appropriately adjust for any difference between the actual length of concrete apron installed and the length indicated hereon for the length of concrete culvert pipe furnished.

Install connected pipe joints as shown on DR-121.

Slight variations in both shape and dimensions from those shown may be accepted if approved by the engineer.

① Tongue end on inlet end section. Groove end on outlet end section. Inlet end section shown.

EQUIVALENT DIAMETER Inches	SPAN Inches	RISE Inches	SLOPE	APPROXIMATE DIMENSIONS Inches * Maximum					
				T	A	B	C	E	F
18	23	14	3:1	2 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>2</sub>	27	45	72	36 *
24	30	19	3:1	3 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>2</sub>	39	33	72	48
30	38	24	3:1	3 <sup>3</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>2</sub>	54	18	72	60
36	45	29	2.5 to 1	4 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>8</sub>	60	24	84	72
42	53	34	2.5 to 1	5	15 <sup>3</sup> / <sub>4</sub>	60	36	96	78
48	60	38	2.5 to 1	5 <sup>1</sup> / <sub>2</sub>	21	60	36	96	84
54	68	43	2.5 to 1	6	25 <sup>1</sup> / <sub>2</sub>	60	36	96	90
60	76	48	2.5 to 1	6 <sup>1</sup> / <sub>2</sub>	30	60	36	96	96
72	91	58	2.5 to 1	7 <sup>1</sup> / <sub>2</sub>	36	63	33	96	108
90	113	72	1.6 to 1	9	36 <sup>1</sup> / <sub>2</sub>	58	38	96	113

ELLIPTICAL PIPE

 <b>STANDARD ROAD PLAN</b>	REVISION	
	2	10-17-23
	<b>DR-206</b>	
SHEET 2 of 2		

REVISIONS: Added note about dimension and shape.

*Steve Miller*  
APPROVED BY DESIGN METHODS ENGINEER

**LOW CLEARANCE CONCRETE  
PIPE APRON WITH END WALL**