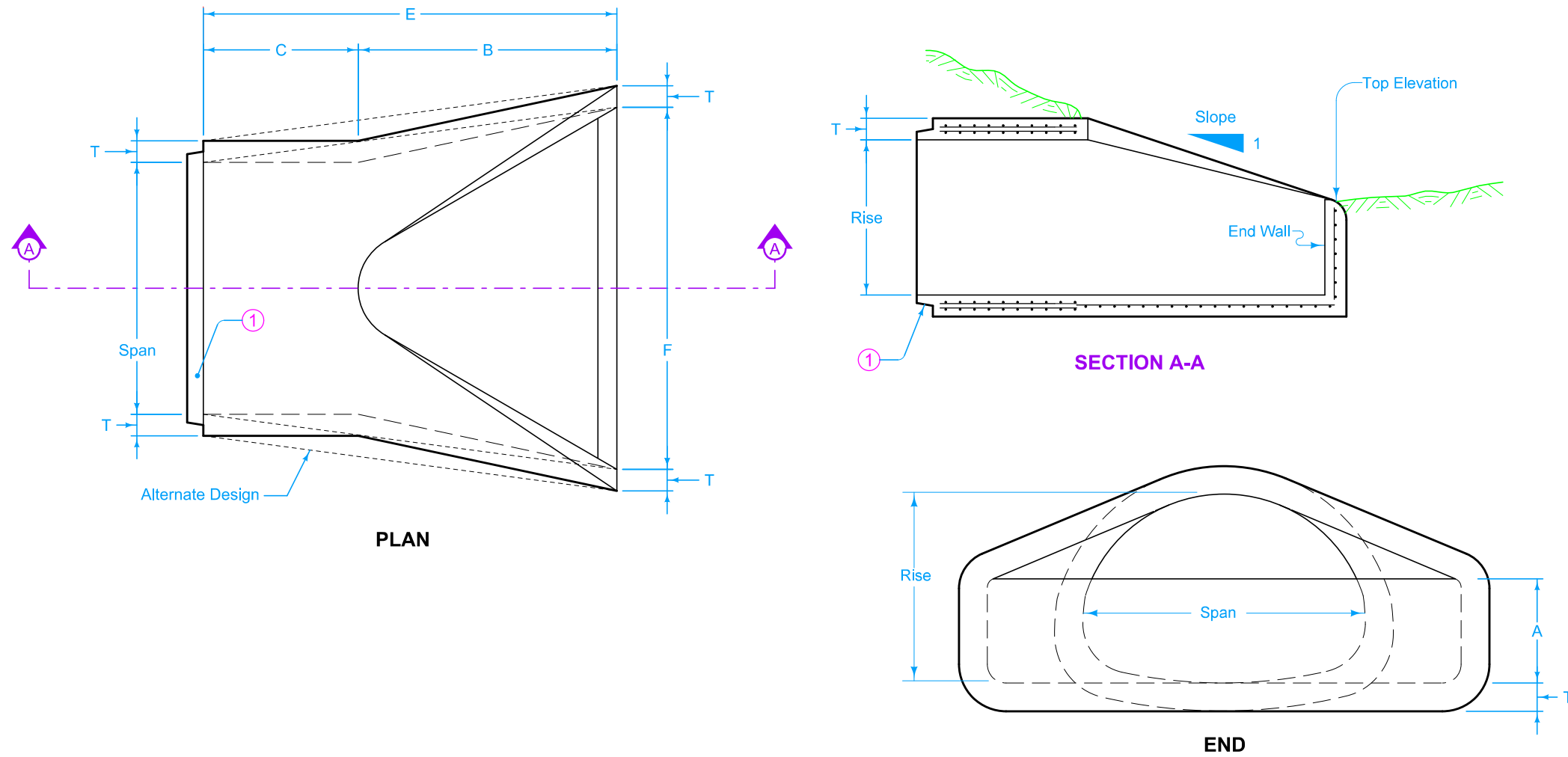


# DESIGNER INFORMATION



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.

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

Possible Contract Item:  
Low Clearance Concrete Pipe Aprons

Possible Tabulations:  
104-3  
104-4

NOMINAL DIMENSIONS SPAN X RISE Inches	EQUIVALENT DIAMETER Inches	SPAN Inches	RISE Inches	SLOPE	APPROXIMATE DIMENSIONS Inches					
					Ⓣ	Ⓐ	Ⓑ	Ⓒ	Ⓔ	Ⓕ
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

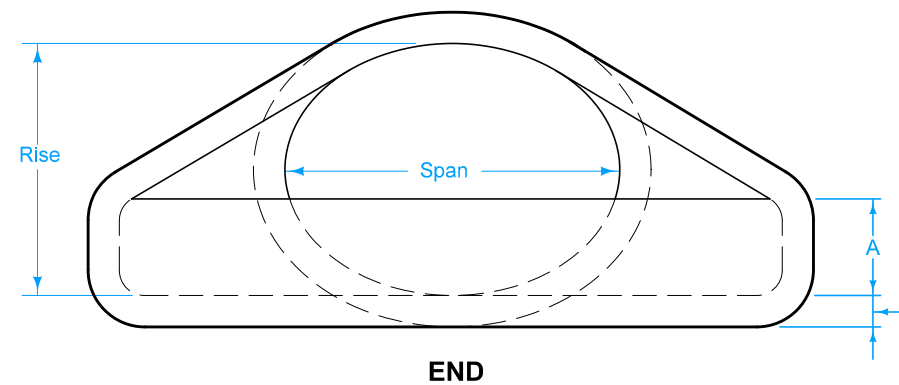
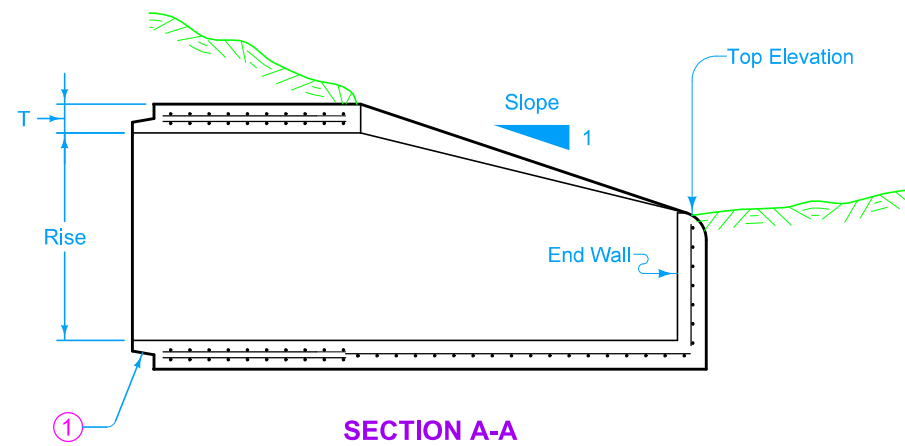
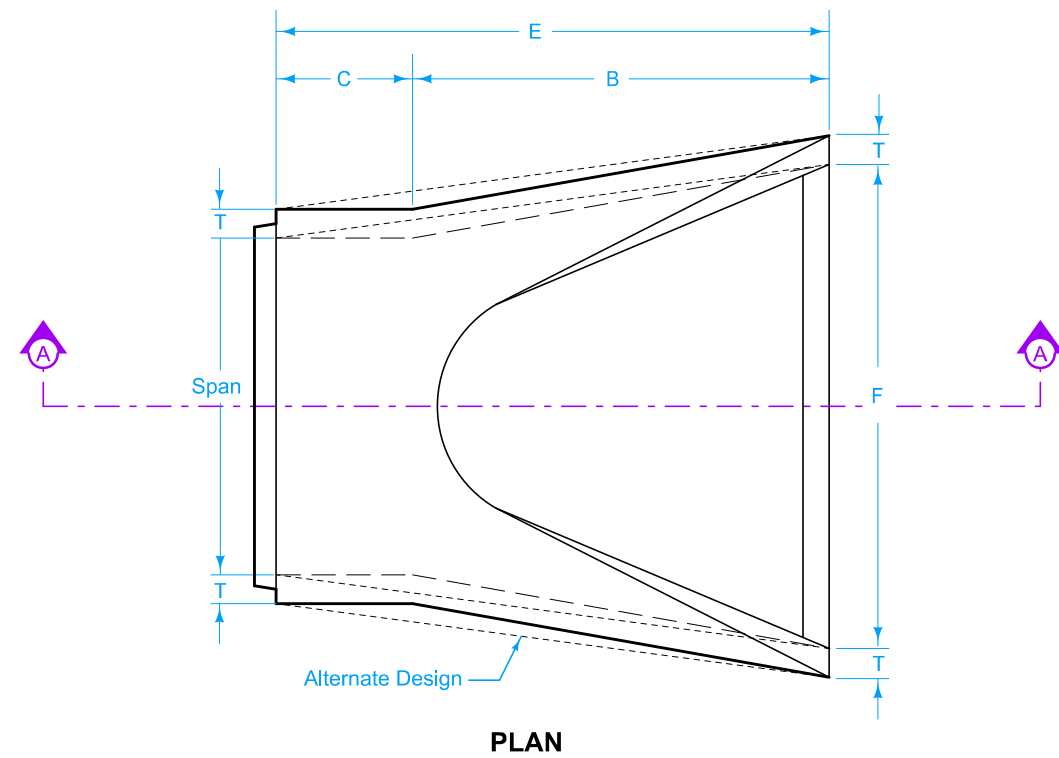
ARCH PIPE

	REVISION	
	1	04-21-20
<b>STANDARD ROAD PLAN</b>		<b>DR-206</b>
		SHEET 1 of 2

REVISIONS: Added Designer Info button.

*Shawn Miller*  
APPROVED BY DESIGN METHODS ENGINEER

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



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.

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					
				Ⓣ	Ⓐ	Ⓑ	Ⓒ	Ⓔ	Ⓕ
				18	23	14	3:1	2 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>2</sub>
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

	REVISION	
	1	04-21-20
STANDARD ROAD PLAN		DR-206
		SHEET 2 of 2

REVISIONS: Added Designer Info button.

*Steve Miller*  
APPROVED BY DESIGN METHODS ENGINEER

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