





SIDE ELEVATION

CORRUGATED METAL PIPE										
NOMINAL DIMENSIONS OF PIPE ARCH		DIMENSIONS FOR ONE DOUBLE ENDWALL			CUBIC YARDS CONCRETE					
SPAN	RISE	М	G	L	ONE DOUBLE ENDWALL	INCREASE FOR EACH ADDITIONAL PIPE ARCH	а	b		
17"	13"	2'-6"	2'-2"	6'-10''	0.402	0.138	0'-2"	0'-1/4"		
21"	15"	2'-10"	2'-7"	8'-0"	0.487	0.159	0'-21/2"	0'-1/2"		
24"	18"	3'-1"	3'-1"	9'-3"	0.913	0.277	0'-3"	0'-2"		
28"	20"	3'-5"	3'-6"	10'-5"	1.182	0.348	0'-3"	0'-2"		
35"	24"	4'-0''	4'-3"	12'-6"	1.900	0.529	0'-4"	0'-21/2"		
42" * 40"	29" 31"	4'-10"	5'-2"	15'-2"	2.852	0.780	0'-41/2"	0'-3"		
49" * 46"	33" 36"	5'-7"	6'-0"	17'-7"	3.455	0.924	0'-51/2"	0'-31/2"		
57" * 53"	38" 41"	6'-6"	6'-11"	20'-4"	4.664	1.237	0'-6"	0'-4"		

*3" X 1" AND 5" X 1" CORRUGATION DIMENSIONS.

NOTES:

- 1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
- 2. REFER TO STANDARD EW-9, SHEET 101.22, FOR ALL DIMENSIONS NOT GIVEN IN TABLE.
- 3. ON SHALLOW FILLS, WHERE ENDWALLS ARE 1' OR LESS BELOW SHOULDER LINE, THE TOP OF THE ENDWALL SHALL BE CONSTRUCTED PARALLEL TO THE GRADE OF ROAD.
- 4. ALL CAST IN PLACE CONCRETE TO BE CLASS A3. FOR PRECAST SEE SHEET 101.25.
- IN NO CASE SHALL TOP OF ENDWALL PROJECT ABOVE FILL SLOPE, DITCH SLOPE, OR SHOULDER.
- 6. HEADWALL TO BE BEVELED IN ALL AREAS EXCEPT WHERE A CONFLICT WITH INVERT AND WINGWALLS OCCUR.
- 7. BEVEL EDGE IS REQUIRED ON THE HEADWALL AT THE INLET END OF THE CULVERT (WHERE THE FLOW ENTERS THE CULVERT). HEADWALL AT THE OUTLET END OF THE CULVERT MAY BE EITHER SQUARE EDGE OR BEVEL EDGE.
- 8. 3/4" CHAMFER MAY BE PROVIDED ON ALL EDGES AT MANUFACTURER'S OPTION.

V DOT								
ROAD AN	D BRIDGE	STANDARDS						
SHEET 1	OF 1 RE	EVISION DATE						

101.24

STANDARD ENDWALLS FOR MULTIPLE PIPE ARCHES

13" - 38" RISE

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION	Ν
REFERENCE	

105 302