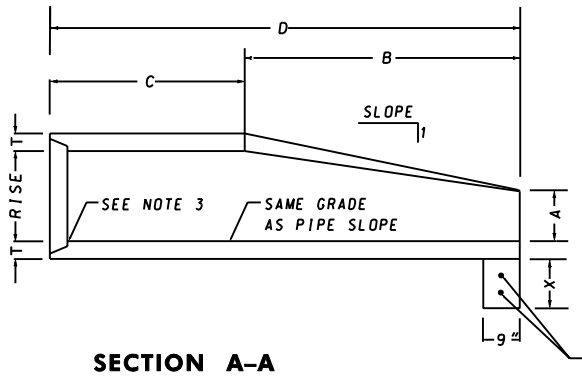


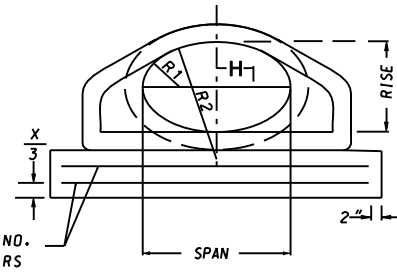
**PLANS**

**NOTES:**

1. END SECTIONS SHALL BE REINFORCED TO CONFORM TO ASTM - CLASS IV REINFORCED CONCRETE PIPE.
2. CONCRETE FOOTER SHALL BE USED WHEN SPECIFIED ON THE PLANS. COST OF THE FOOTER TO BE INCLUDED IN PRICE OF THE END SECTION. THE CONCRETE SHALL BE MIX #2 AND THE REINFORCEMENT IS TO BE #3 BARS.
3. INVERT ELEVATION TO BE AT THE PIPE END OF THE STANDARD END SECTION. ELEVATIONS TO BE NOTED ON THE CONSTRUCTION PLANS.



**SECTION A-A**



**END VIEW**

QUANTITIES FOR ESTIMATING PURPOSES ONLY

HERCP				CONCRETE END SECTION										CONCRETE FOOTER			
RISE	SPAN	EQUIV. DIA.	APPR. SLOPE	WALL T	A	B	C	D	E	H	R	R1	R2	W	X	CONC. (CY)	REINF. (LBS.)
14"	23"	18"	3.1:1	2 3/4"	8"	2'-3"	3'-9"	6'-0"	3'-5"	5 3/8"	6"	6"	1'-8"	4'-5"	12"	0.12	3.07
19"	30"	24"	2.8:1	3 1/4"	8 1/2"	3'-3"	2'-9"	6'-0"	4'-6"	6 7/8"	7"	8 1/4"	2'-2 1/4"	5'-6"	15"	0.19	3.86
22"	34"	27"	2.9:1	3 1/2"	9"	4'-0"	2'-0"	6'-0"	5'-1"	7 3/4"	8"	9 1/4"	2'-5 1/4"	6'-1"	15"	0.21	4.32
24"	38"	30"	2.9:1	3 3/4"	9 1/2"	4'-6"	1'-6"	6'-0"	5'-8"	8 5/8"	9"	10 1/4"	2'-8 3/4"	6'-8"	15"	0.23	4.76
29"	45"	36"	2.7:1	4 1/2"	11 1/4"	5'-0"	3'-0"	8'-0"	6'-9"	10 1/2"	12"	12 1/4"	3'-3 1/4"	8'-0"	15"	0.28	5.76

SPECIFICATION <b>305</b>	CATEGORY CODE ITEMS
APPROVED	<i>Kate G. McCall</i> DIRECTOR - OFFICE OF HIGHWAY DEVELOPMENT
	APPROVAL • SHA REVISIONS
	APPROVAL • FEDERAL HIGHWAY ADMINISTRATION
	APPROVAL 7-14-08
	APPROVAL 01-09-08
REVISSED 7-1-09	REVISSED 7-27-09
REVISSED	REVISSED
REVISSED	REVISSED

**Maryland Department of Transportation**  
**STATE HIGHWAY ADMINISTRATION**  
 STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES  
**STANDARD CONCRETE END SECTION**  
**HORIZONTAL ELLIPTICAL PIPE**

**STANDARD NO. MD 369.00**