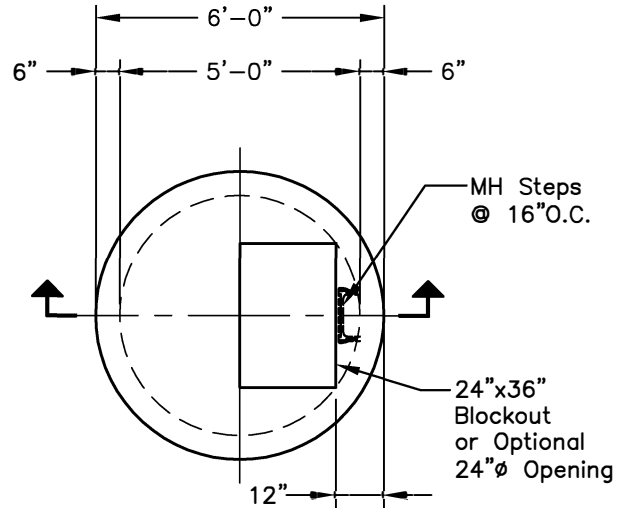


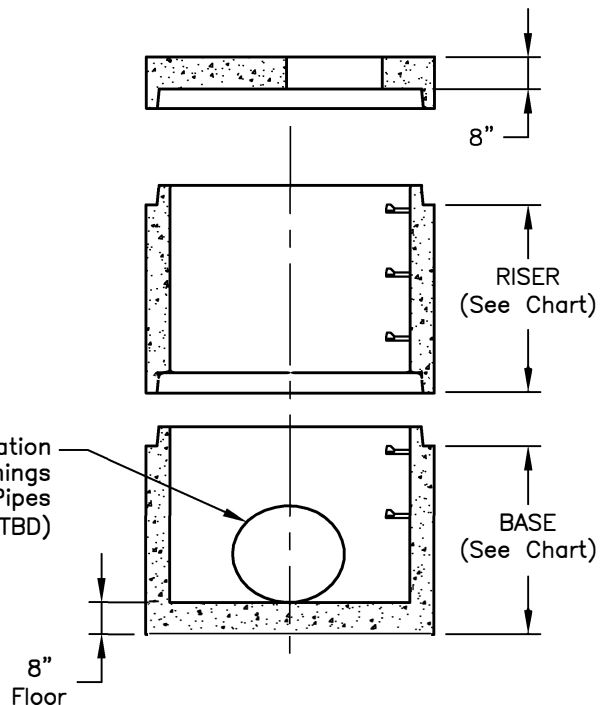


NOTES:

1. Precast Manholes are Fabricated to meet or Exceed the Following Specifications:
 - Manhole: ASTM C-478 Latest AASHTO M-199,
 - Wall: ASTM A-185,
 - Base: ASTM 615, Grade 60.
2. Concrete Compressive Strength = 4,000psi.
3. Precast Meets ASTM C913.
4. All Manhole Sections are Designed for HS20 Loading (NCDOT #840.52).
5. Limit Depth of Fill to 30'-0" from Finish Grade to Top of Inside Floor.
6. All Joints Conform to ASTM C990.
7. Joint Sealant: By Others.
8. Co-Polymer Polypropylene Steel Reinforced Steps meet ASTM-C478 Latest.
9. Flat Top Reinforcing #4@8"O.C. Both Ways (1" Cover). Reinforcing: ASTM A-615, Grade 60.
10. Wall Reinforcing (ASTM A-185) Minimum SQ IN. per Linear Foot:
 - Circumferential = 0.15,
 - Longitudinal = 0.12.
11. Manhole Base Reinforced Both Ways with a Minimum Area of 0.12 SQ IN. per Linear Foot each Way.
12. All Cast Holes are Additionally Reinforced with #4 Rebar Grade 60.
13. All Pipe Openings to be no Greater than 3" Larger than Outside Diameter of Pipe and Additionally Reinforced with a Minimum of 0.20 SQ IN. of Steel at 90 Degrees. Additional Reinforcing not Required for Cored Openings.



PLAN VIEW



SECTION VIEW

ITEM	HEIGHT	WT (LBS)
FLAT TOP		3,030
RISER	16"	1,700
	32"	3,420
	48"	5,120
	64"	6,820
BASE	36"	5,790
	48"	7,070
	64"	8,770

**5' DIA STORM
MANHOLE (FLAT TOP)**

DATE: Apr 2011 REV: ** SCALE: 1/4"=1'-0"