



**General Notes**

1. Concrete:  $f_c = 4,000$  psi @ 28 Days Minimum, Type III Cement
2. HS-20 Design Loading Conforms to Latest Specifications  
ASTM C478, AASHTO M199 Precast Reinforced Concrete Manhole Sections
3. Steel Reinforcement Conforms to Latest ASTM Specification:  
ASTM A-615, Grade 60 Black Deformed Bars  
ASTM A-185 Welded Wire Fabric  
0.24 Sq. In./Lineal Ft. And 0.12 Sq. In.(Both Ways) Base Bottom
4. Butyl Rubber Joint Sealant Provided Conforms to ASTM C-990  
And Federal Spec SS-S-210A
5. 377 Gallons/VF
6. Holes & Elevations TBD
7. Sections Available in Increments of 6"
8. Booted Pipe Connections (If Used) Conform to ASTM C-923.  
Maximum Booted Connection Pipe Size is 48" RCP
9. Maximum Pipe OD is 79" (66" RCP)
10. Plastic Manhole Steps (If Required) are Steel Reinforced  
Conforming to ASTM C-478
11. Asphaltic Exterior Coating Available

Floor is Cast in Place  
By Others  
After Setting Manhole

Mortar Joint  
By Others

**Est Weights:**

Top Slab: 11,650 Lbs  
Wt/VF: 3,040 Lbs

Phoenix  
Precast  
Products

8' Diameter  
Sanitary Manhole  
Doghouse