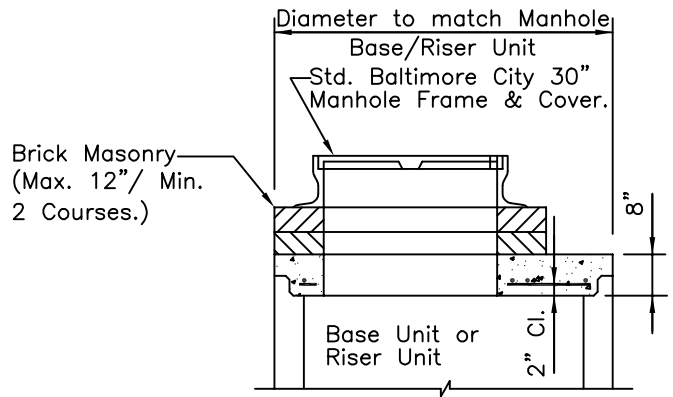
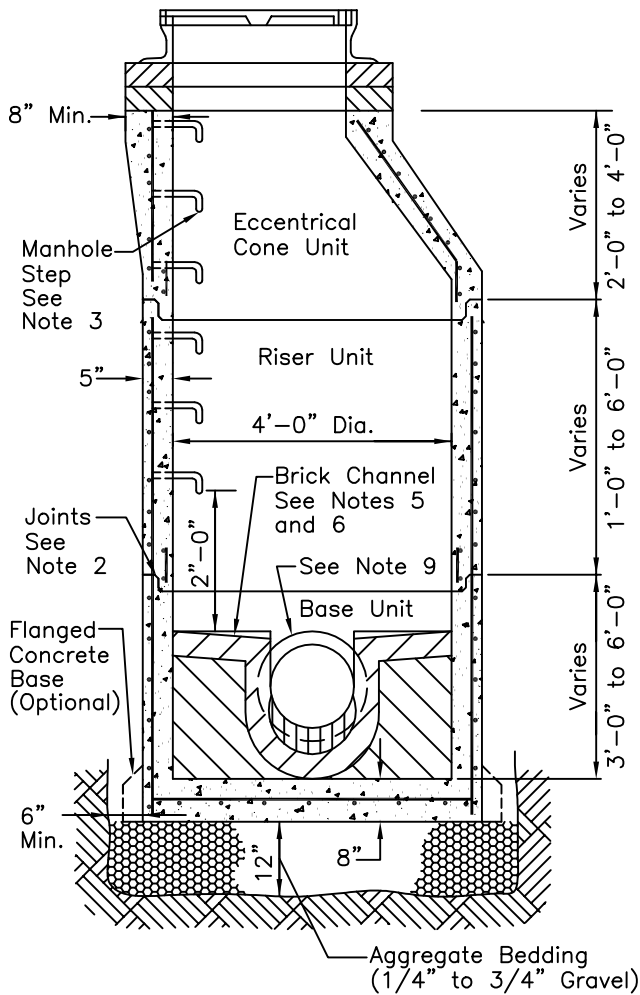


**OPTIONAL FLAT TOP SLAB**

(Shown without manhole frame and cover)  
See Note 7

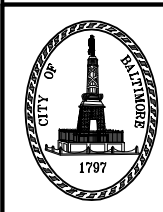


**SECTION-A-A**



**NOTES:**

1. Manhole design specifications shall conform to "Precast Reinforced Concrete Manhole Section A.S.T.M. designation C-478, latest revisions".
2. The manufacturer shall form male and female ends of joints using their own design. The joints shall be sealed by the contractor and made water tight using 'O' ring rubber gaskets meeting A.S.T.M. C-443 and C-361. Any excessive openings within the joints shall be filled using a non-shrinking grout filler.
3. Manhole steps shall be installed by the manufacturer in vertical alignment at 1'-0" typical c/c. Manhole steps shall be incidental to the cost of the manhole.
4. Lift holes or eyes shall be provided in each section for handling. When directed by the Engineer, these holes shall be plugged with water tight stoppers or a non-shrinking grout after installation.
5. Bench and channel to be constructed of one course of sewer brick on edge. Bench to slope a minimum of 1" per foot towards channel.
6. Bench height above outgoing pipe invert to be equal to the diameter of the outgoing pipe or as directed by the Engineer.
7. Use flat top slab when manhole length is not sufficient for eccentric cone unit.
8. Vertical measurement for payment shall be from the invert of the outgoing pipe to the bottom of the manhole frame.
9. The pipe shall be sealed at manhole using an "A-Lok" gasket as manufactured by A-LOK Products Inc. or an approved equal meeting A.S.T.M. C-923, cast integrally in the manhole wall.



APPROVED:  
*[Signature]*  
HEAD, BUREAU OF WATER AND WASTEWATER  
*[Signature]*  
DIRECTOR, DEPARTMENT OF PUBLIC WORKS

**CITY OF BALTIMORE  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF WATER AND WASTEWATER**

**48" DIAMETER PRECAST  
SANITARY MANHOLE FOR PIPE  
DIAMETERS UP TO 24"**

ISSUED	REVISED	REVISED
3 / 2008		
<b>STANDARD NO. BC 831.04</b>		
SCALE : NONE		SHEET 1 OF 1