

SPECIFICATIONS:

1. **STRUCTURAL DESIGN:** The pre-cast oil/grit separator shall be designed to remain watertight and structurally sound without cracking under the maximum cover height of eight (8) feet of cover on a traffic rated trap. Also the traps baffle shall be poured monolithically with the bottom of the trap. Oil/grit separators shall be top seamed unless otherwise approved by Control Authority. The design must show that watertight integrity is achieved through the use of quality concrete rather than through an impervious barrier. Use of interior or exterior coatings is not acceptable as a primary watertightness system.

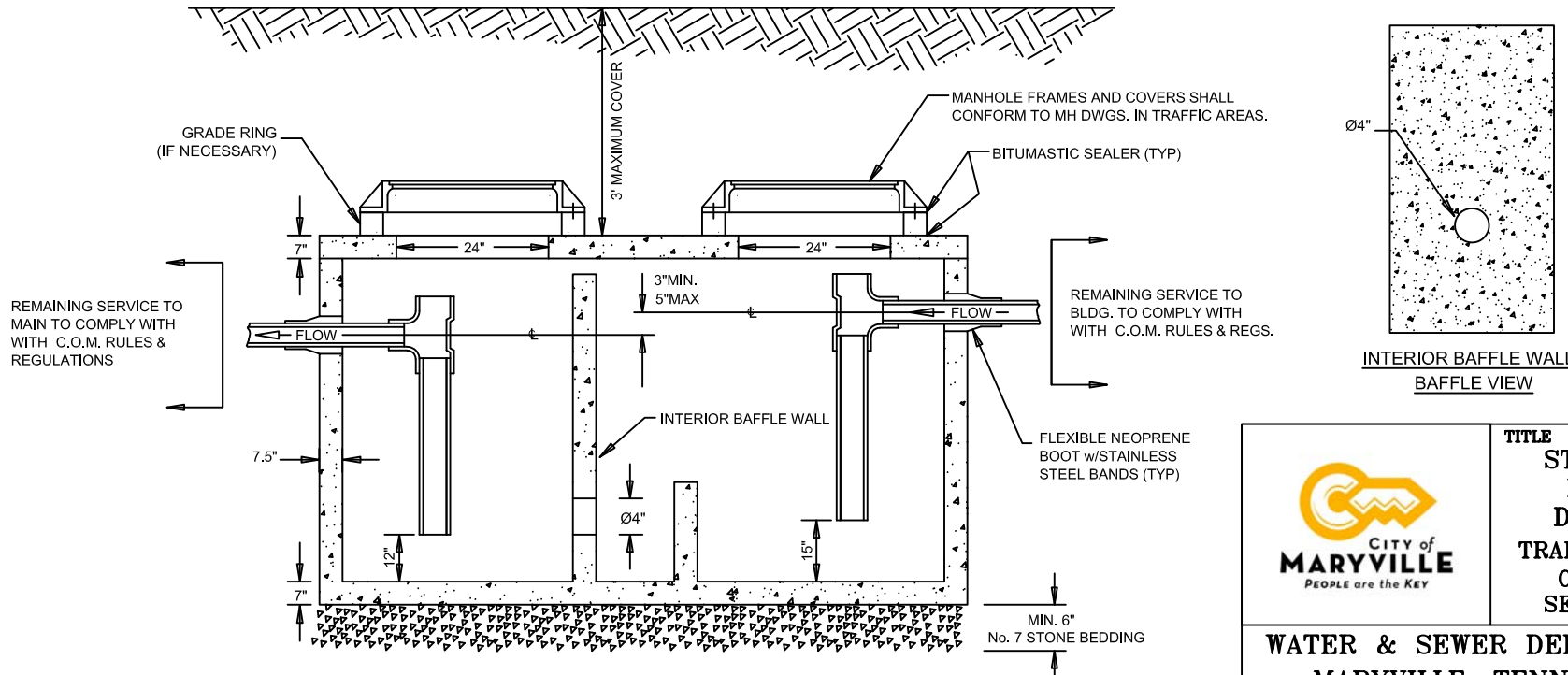
2. **INTERNAL PLUMBING:** Neoprene boots with stainless steel locking bands shall be used on all inlet and outlet pipes to ensure a watertight seal between the tank wall and the inlet and outlet pipes. Minimum pipe size and tees shall be four (4) inch schedule 40 (ASTM D-2665).

3. **GRADE RINGS, MANHOLE FRAME, AND LIDS:** When the elevation of the top of the oil/grit separator manhole frames and lids needs to be raised, concrete grade rings shall be used and sealed with bitumastic sealer between them. Also all grade rings shall be coated with bituminous roofing material. All lids shall be non vented and be labeled grit.

4. **MINIMUM REQUIREMENTS:** Pre-cast oil/grit separators shall have a minimum wall thickness seven and a half (7.5) inches and a minimum thickness of seven (7) inches for the bottom and seven (7) inches for the top. The cement shall be Portland cement conforming to the current ASTM specification C-150, type I Portland, normal, grey color. Type III Portland, Grey color shall be used where high early strength concrete is specified. Pre-cast oil/grit separator shall be cured for a minimum of 24 hrs. The maximum water-to-cement ratio shall be 0.45. Minimum pre-cast oil/grit separator size shall be 1000 gallons.

5. **TEST FOR WATERTIGHT INTEGRITY:** The Control Authority shall vacuum test oil/grit separator for water tightness at the contractor's expense. Test shall be performed upon installation prior to final backfilling. The intent of the test is to ensure a watertight oil/grit separator under groundwater conditions. The vacuum test shall consist of testing the separator with all grade rings, if, necessary, to the top of the manhole ring and lid at the time of testing. Testing pressure will be 4 psi for 5 minutes.

6. **INSTALLATION REQUIREMENTS:** Oil/grit separators shall be buried no more than eight (8) feet deep unless prior approval is given by the Control Authority. The Control Authority shall inspect the separator to insure that separator is level before it is backfilled. The oil/grit separator shall have a minimum fall of three (3) inches and maximum fall of five (5) inches through the separator. Bitumastic sealer shall be used to seal all tank joints. The separator shall be bedded with a minimum of 6-inches of No.7 crushed stone. Separator located in traffic areas shall be completely backfilled with clean crushed stone.



OIL/GRIT SEPERATOR DETAIL (TRAFFIC RATED)

 <p>CITY of MARYVILLE PEOPLE are the KEY</p>	<p>TITLE STANDARD DETAIL DRAWING TRAFFIC RATED OIL/GRIT SEPERATOR</p>	
	<p>WATER & SEWER DEPARTMENT MARYVILLE, TENNESSEE</p>	
<p>DRAWN BY: GEF APP'D BY: _____ DATE: _____</p>	<p>REV BY: _____ APP'D BY: _____ DATE: _____</p>	<p>SCALE: NONE SHEET 1 of 1</p>