

## Notes:

- 1. Concrete strength shall be 35 MPA with 6% air entrainment.
- 2. Reinforcing bars to have a minimum of 50 mm concrete cover.
- 3. Precast sections to be as per OPSS 1351.
- 4. Base concrete strength shall not be less than 30 MPa.
- 5. All mortar mix to be 1:3.
- 6. All joints and lift holes in chamber sections to be filled with mortar and pointed before backfilling.
- 7. Solid aluminum steps as per OPSD 405.020 at 300 mm centre to centre with first step to be 300 mm below frame.
- 8. Polyethylene bond breaker to be used between concrete and fittings. An approved flexible sealant shall be used where the pipe goes through the chamber wall. Installation of pipe seal shall conform to manufacturer's directions.
- 9. All exterior and interior brick work and frame adjustment rings to be parged to a minimum 15 mm thickness.
- 10. Floor to slope to sump. Sump to be positioned in either corner on the front side of the detector assembly.
- 11. Circular cover in three piece frame and cover shall be positioned immediately adjacent to the wall in front of the meter directly over the 900 mm clear space in front of the meter.
- 12. Reinforced concrete design shall be adequate for chamber dimensions shown under H-20 loading.
- 13. The three piece chamber frame and cover shall be as per OPSD 402.030.
- 14. No other piping or fittings shall be installed in the chamber that may interfere with the clear space in front of the water meter or the operation of the double check detector that may obstruct the double check detector in any way.
- 15. Detector assembly shall be installed with a minimum 900 mm unobstructed clearance in front of detector assembly meter to nearest wall.
- 16. The working space in front of the detector assembly shall have a minimum of 2 m unobstructed head clearance.
- 17. All piping shall be fully supported from the floor and such support shall be suitable for that purpose and shall be supplied and installed by the property owner at the time of the installation of the detector assembly. The pipe immediately adjacent to the meter, not the meter, shall be fully supported from the floor.
- 18. All valves, bends and tees shall be flanged or solder type. Acid core type solder is not permitted.
- 19. All pipe shall be either type "L" copper pipe (certified to ASTM B88) or cement lined ductile iron pipe (pipe to comply with ANSI/AWWA C115/A21.15 or ANSI/AWWA C151/A21.51; cement lining to comply with ANSI/AWWA C104/A21.4; fittings to comply with ANSI/AWWA C110/A21.10), or stainless steel pipe rated to a minimum working pressure of 1035 kPa. All pipe flanges shall be threaded or welded to the pipe. Galvanized, polyethylene, PVC and other plastic pipe and fittings shall not be permitted.

M Toronto	ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING	REV 0	APR 2013
	DOUBLE CHECK DETECTOR CHAMBER	T-1108.01-3	
		NTS	SH 2 of 3

- 20. All meter and detector assembly installations shall conform to the manufacturer's installation instructions.
- 21. Any insulation placed on or around any water meter shall be easily removable and replaceable and shall not contain asbestos or any other toxic or hazardous materials. Such insulation shall not cover or obstruct the water meter register(s). The City shall not be responsible for any damage to such insulation during any removal or replacement of such insulation.
- 22. The private water service pipe shall be flushed prior to and after the installation of the water meter.
- 23. For remote readout device wire and conduit installation, refer to City of Toronto specifications.

DA TORONTO	ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING DOUBLE CHECK DETECTOR CHAMBER	REV 0	APR 2013
		T-1108.01-3	
		NTS	SH 3 of 3