


SPECIFICATIONS

1. If the building site is more than 1000 feet (305m) from a major water source (large cistern, dry hydrant, etc.), a small cistern is required. The cistern shall be sited between 50 and 100 feet (15 - 30m) from the building site.
2. The minimum cistern capacity must be 2,500 CAN (3000 US) gallons (11,350 L).
3. Prefabricated concrete storage tanks will be considered. The design of the cistern should be submitted to the Approving Officer or his designate for approval prior to construction. Plans should identify siting location.
4. Cast-in-place concrete must achieve a 28-day strength of 3000 psi (20,700 kpa). It must be placed with a minimum of 4-in. (10 cm) slump and vibrated to remove any voids.
5. Piping must be schedule 40 steel.
6. The initial suction connection must be 6 in. NST hose thread. The final connection must be 2 1/2 in. NST hose thread. It must be capped.
7. The entire cistern must be completed and inspected before any backfilling is done. Granular native backfill may be used and must be compacted in 12 in. (300mm) layers.

8. Bedding for the cistern must consist of a minimum thickness of 12 in of 3/4 to 1 1/2 inch pit run gravel, compacted to a minimum 95% standard proctor density.
9. Tankage must be designed so that the cistern will not float when empty.
10. After backfilling, top of tank must be protected by large rocks or bollards spaced to prevent entry from vehicles. Pumper truck must be able to park within 10 feet (3m) of suction connection.
11. Pitch of shoulder and vehicle pad from edge of pavement to pumper suction connection shall be from 1 to 6% grade.
12. Shoulder and vehicle pad must be of sufficient length to permit convenient access to suction component.
13. All horizontal suction piping should slope at 1% away from pumper connection.
14. Installer is responsible for completely filling cistern with water immediately after acceptance by municipality.

Revised: April 1, 2001 by MK

 <p>HIGHLANDS FIRE DEPT.</p>	<p>HIGHLANDS FIRE DEPT. 1564 Millstream Road Victoria, B.C. V9E 1G6 E. Hall (250) 479-1814 * W. Hall (250) 474-2633 Fax (250) 474-3677</p>	<p>TITLE: FD-1 Water Storage Tank Detail SMALL CISTERN PLAN</p>
<p>DATE:</p>	<p>16 July 2000</p>	<p>SCALE: NTS</p>
<p>DRAWN:</p>	<p>M. Kristiansen</p>	<p>APPROVED:</p>