

Chief Joe Stefano

# LEBANON FIRE-EMS DEPARTMENT

3 Upper Cross Road Lebanon, Maine 04027 Phone: (207) 457-6556 Fax: (207) 457-6006



Deputy Chief Seth Wentworth S.Wentworth@Lebanonfireems.org

### Fire Protection: Sub-division / new construction requirements.

Origin date: April 16, 2021 Revised date: 03/14/2024

J.Stefano@Lebanonfireems.org

- Any subdivision, as dictated by the rules of Town of Lebanon Subdivision Regulations, with more than three lots shall cause to be installed a reliable water supply for firefighting.
- If public fire hydrants are not available within 0.5 mile of each lot, the subdivider shall be responsible for providing adequate fire protection water supply. Subdivisions shall provide adequate fire protection water supply in accordance with \*NFPA 1231.
- Acceptable methods include, but are not limited to, fire ponds with an approved dry hydrant, underground cisterns with an approved dry hydrant or approved residential automatic sprinkler systems in each principal building according to \*\*NFPA 13D and are subject to review and approval by the Lebanon Fire Chief
- Individual property owners and/or homeowner associations shall be responsible for the maintenance of the fire protection system.
- If fire hydrants are not provided and the Planning Board determines that a fire protection water supply is needed, a cistern with a minimum storage capacity of 10,000 gallons plus additional storage of 2,000 gallons per lot or principal building or such other amount as required by the Fire Chief shall be provided. For one- and two-family dwellings (i.e., a house), the minimum fire flow cannot be less than 500gpm.
- All storage facilities will be warranted for a period of 5 years.
- Where fire ponds are proposed for water storage, the capacity of the pond shall be calculated based on the lowest projected water level, less an equivalent of three feet of ice.
- A detailed plan of the required pond, dry hydrant, piping, and/or access road shall be submitted as part of the planning application.
- The Town Code Enforcement Officer and Fire Chief shall approve the design of all storage facilities and ponds and is subject to the review and approval by the Lebanon Code Enforcement Officer and Fire Chief.
- \*NFPA 1231: Standard on Water Supplies for Suburban and Rural Fire Fighting
- \*\*NFPA 13D: Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Home.

#### Underground Fire Storage Tank Requirements:

All developers/installers must meet with the Lebanon Code Enforcement and Fire Chief prior to beginning any installation of dry hydrants and/or holding tanks to cover the required criteria.



Chief Joe Stefano J.Stefano@Lebanonfireems.org

## LEBANON FIRE-EMS DEPARTMENT

3 Upper Cross Road Lebanon, Maine 04027 Phone: (207) 457-6556 Fax: (207) 457-6006



Deputy Chief Seth Wentworth S.Wentworth@Lebanonfireems.org

**1.** The minimum size accepted will be 10,000 gallons. (This is subject to change based on number of buildings in each sub-division) More than (1) tank may be required.

**2.** <u>Construction</u>: Construction must be designed to safely withstand the service to which they are subjected. This includes pressure of the earth or pavement above the tank.

3. <u>Materials</u>: Suitable materials include concrete, stainless steel, fiberglass, or lined concrete.

**4.** <u>Installation</u>: Tanks should be set on firm foundations and surrounded with soft sand, well compacted into place. Tanks must be anchored or weighted to prevent floating in locations where the water table is high or may rise. Underground tanks must be protected against damaging loads.

**5.** <u>Hardware</u>: Each tank will be provided with a 4.5" National standard male thread Fire Department connection with 2.5" NST cap and chain. This connection will be located within 6 feet from hot top or hard surface suitable for support of fire apparatus. The center -to -cap elevation shall be 30" from final grade. An appropriate vent must be provided for normal operation (1000 GPM) of any tank to permit filling and emptying and for the maximum expansion or contraction of the tank contents with changes in temperature. A screen shall be provided to prevent clogged vents, which may result in the rupturing of tanks from the internal pressure or collapse due to internal vacuum. Inadequately sized vents may have the same result. The vent shall be a minimum of 6" in circumference (schedule 80 PVC pipe) and terminate a minimum 6 feet above grade. Pipe materials that are resistant to corrosion and have adequate strength to withstand the maximum service pressure shall be used.

**6.** <u>Tank Fill</u>: A tank fill assembly shall be included in the vent pipe, 18" above final grade. It shall consist of a 6" schedule 80 PVC wye socket, 45-degree street elbow spigot & socket, and 6" x 4" Storz hydrant adaptor with cap and chain.

**7. The installer, owner, and/or responsible party** for the project shall insure in writing to the Planning Board and the Fire Chief that the water in the tank and vertical lift of the hydrant will be protected from freezing. The water in the tank will rise in the hydrant connection exactly to the water level in the tank, and the water in the vertical lift in all cases must not be subject to freezing.

8. The owner or contractor shall be responsible for all maintenance for a five-year period.

**9**. An inspection cover shall be provided that will allow any required maintenance to be done from the inside. **10**. Two tanks may be connected, or the connection of several tanks to hold the required gallons is allowed if approved by the Town Code Enforcement Officer and Fire Chief. There shall be 3 (8") cross connections at the bottom of the tanks of (8") schedule 80 PVC pipe. There shall be 2 top cross connection vents of 6") schedule 80 PVC pipe.

**11.** The piping for the Fire Department connection MUST be constructed so that it comes through the interior of the tank, not through the end or underside.

**12**. There must be 6' of level ground around the Fire Department connection.

13. Protective bollards shall be installed and approved by the Fire Department.

**14.** The suction pipe inside the tank must be 6" Schedule 80 PVC to the top of the water level, then minimum Schedule 40 6" ID iron pipe from the top of the tank to the fire department connection.



Chief Joe Stefano J.Stefano@Lebanonfireems.org

## LEBANON FIRE-EMS DEPARTMENT

3 Upper Cross Road Lebanon, Maine 04027 Phone: (207) 457-6556 Fax: (207) 457-6006



Deputy Chief Seth Wentworth S.Wentworth@Lebanonfireems.org

15. Threaded or welded connections are acceptable.

**16.** Tanks are required to be re -inspected internally 30 days after installation.

**17.** The developer will be responsible for pumping any existing water, to totally remove any foreign material of any kind, i.e. gasket material, dirt, leaves, concrete dust, etc., prior to on-site inspection by the Fire Department.

18. The developer will be responsible for filling the tank under Fire Department supervision.

19. A 24" concrete collar around the Fire Department connection shall be poured into place. Note: Please see the attached drawings regarding placement requirements of a public or private way and design specifics.
20. All Fees must be paid prior to issuing the first building permit being issued.

**21**. Adequate access must be provided for Fire Department apparatus to connect to the fire department connection in emergencies and during annual testing.

Respectfully,

Joseph M. Stefano Fire Chief Lebanon Fire-EMS 3 Upper Cross Rd, Lebanon ME, 04027 Station: (207) 457-6556 Email: J.Stefano@Lebanonfireems.org