

TOWN OF CHILMARK
FIRE DEPARTMENT

Fire Tank and Hydrant Specifications

LOCATION OF SYSTEM: The system and its associated components are to be located as shown on the accompanying plan. (Middle Line Fire Tank Plan, July 7, 2011, 3 sheets)

TANK: The tank is a Flowtite SWT D-6 20,000 gallon fiberglass tank currently stored at the site. The tank and its components must be installed according with the manufactures installation instructions and the plans and specifications provided by the Town.

The tank is to be installed so the elevation of the top of the tank is the same elevation or lower than the parking surface where the pumper truck will park when drawing water.

SUCTION PIPE / HYDRANT: The suction pipe shall be 6" steel. The pipe shall extend down into the tank and end 3" above the bottom of the tank. The pipe shall be one piece construction from the bottom to the hydrant coupling at the top. This will eliminate any possible air leaks at joints. The top elbow and 6" extension shall be welded. The extension shall be finished off with a Hydrant fitting specified and approved by the Local Fire Chief. The elevation of the hydrant shall be 1 ft. above the earth mound covering the tank and 4 ½ ft. higher than the parking surface. Where the pipe enters the ground there shall be a poured in place concrete collar, flush with grade, 3 ft. in diameter and 4 in. thick, to give the pipe stiffness and prevent strain at the connection with the tank.

VENT / FILL PIPE: The vent pipe shall be 6" schedule 80 P.V.C. pipe. At the top of the pipe there shall be 2 elbows so the end of the vent points down. The opening shall be covered with stainless screen or mesh to prevent the entry of small animals etc. At the base of the vent there shall be a ½" drain pipe running from the base of the vent to a drywell or daylight. This pipe will allow the vent pipe to drain down to the top of the tank after the tank has been filled to overflowing.

MANHOLE: The manhole shall be extended to about 1 ft. above grade and fitted with a lockable steel cover.

WELL: The well has been installed at the site.

PUMP: A 1 horsepower submersible well pump capable of pumping 30 gallons per minute at a head of 100' shall be installed in the existing well. There shall be no check valves in the pump.

WATER LINE: A 1 ¼" IPS pipe shall be installed from the well to the tank. The pittless and all fittings shall be stainless steel. The water line shall be buried a minimum of 4 ft. or covered with 2 in. of polystyrene insulation and buried a minimum of 2 ft. The water line shall run from the well to the top of the tank. There will not be any drop pipe into the tank for the fill. The water line shall be laid without humps or sags so as to drain completely when the pump is off. No check valves should be used.

CONTROLS: All wiring to be in accordance with current electrical codes and regulations. The wire to the pump shall not be less than 10 gauge. There shall be an all weather, lockable control cabinet mounted on posts at the location on the plan. The cabinet shall be mounted on ¾" Wolmanized plywood attached to 6"X6" Wolmanized posts. The posts shall be installed to a depth of 4 ft. below grade and

backfilled with compacted hardener. The pump shall be operated manually with one switch clearly marked on and off. There shall be a 110 V outlet installed inside the cabinet.

OUTDOOR LIGHT: A 2 in. X 12 ft. high galvanized pole with 2 flood lights shall be attached to the control cabinet frame. The lights shall be turned on and off with a clearly marked switch inside the control cabinet.

PARKING AND TURNING AREA: The parking and turning areas are to have a minimum of 6" of compacted road base material topped with a minimum of 3" of blue stone or rap material. (to be specified by the town). The parking and turning areas are to be graded and sloped slightly so as to shed excess water into the low area east of the facility. Care must be taken not to create a puddle where men will be working and trucks will be loading and turning around.

MOUND: The tank shall be covered with a minimum of 3 ft. of earth. The surface shall be loamed and hydro seeded.

RETAINING WALL: The stone retaining wall may be built to suit in the field.