

Section A - Introduction and General Description

This specification describes the requirements only with STEP (septic tank effluent pumping) sewer systems. For requirements not contained in this specification, the Standard Sewer Specifications of Lincoln County shall apply.

Each property owner will be required to complete and submit an application from Lincoln County as a condition of connection to the public sewer system.

It is the policy of Lincoln County that all sewer system components located on private property are the ownership, including maintenance and replacement, of the property owner. The isolation and check valve box located at the property right-of-way (ROW) boundary is the point of connection to and are part of the public sewer system.

Each septic tank location will be required to be accessible year-round by maintenance vehicles for the purpose of inspection and maintenance including the periodic pumping of septic tanks. The septic tank, alarm/pump panel, and sewer clean-out locations shall be approved as part of the inspection process. The installation of all on-site facilities shall be inspected and approved by Lincoln County prior to connection to the wastewater system.

All conveyance lines, forcemains, pump stations, and facilities located within the ROW or on public property are to be part of the public sewer system, whose ownership, operation, maintenance, and replacement are the responsibility of Lincoln County. All gravity sewers, including manholes, shall be part of the public system. It is the policy of Lincoln County that all pumping stations serving multiple parcels shall be owned, operated, and maintained by Lincoln County.

It shall be the responsibility of the property owner to provide all wiring to the pump control panel. The property owner will supply a 115-volt single-phase service utilizing separate circuit, dual element fuses or circuit breakers at the distribution panel. The property owner will be responsible for the monthly electric bill for the on-site components.

The property owner shall be responsible for scheduling inspections with Lincoln County for the installation of all on-site sewer facilities. The following inspections are required:

The property owner is responsible for submitting the following information for review and approval by Lincoln County prior to installation:

- a. A completed application for installation of on-site sewer facilities.
- b. Site sketch showing the location of the building(s), septic tank, piping, conduit, and alarm/pump panel.
- c. STEP component information and the pump curve for the pump to be provided.
- d. Datasheet on the septic tank.
- e. Product information on all piping, valves and appurtenances.

Section B – Materials and Installation

The building sewer is the line between the building(s) served and the septic tank. Pipe materials and installation of the building sewer shall meet all the requirements of the Uniform Plumbing Code and Lincoln County Standard Sewer Specifications (or those of FPU).

This section describes the septic tank as required for all single-family residential services. For all other classifications of service, consult with Lincoln County. In general, multi-family (duplex) and small commercial connections require the use of duplex pumps. All food service establishments shall also include a grease trap upstream of the septic tank. Larger water usage customers

Lincoln County, Tennessee
Standard Specifications for On-Site STEP Systems – FACT SHEET

(defined as greater than 10,000 gallons per month usage) and food service establishments shall be reviewed on a case-by-case basis and require engineering approval.

The septic tank shall be a nominal 1,500-gallon, two-compartment baffled style septic tank as shown on the standard details. The tank shall be precast concrete, and shall have the floor and walls of the tank monolithically poured. The inlet to the primary septic tank from the building sewer line shall penetrate 18-inches into the liquid from the inlet flow line.

Two outlet risers shall be provided for each tank. Risers shall be at least 12-inches high, shall have a minimum nominal diameter of 24-inches.

All septic tank locations are to be a minimum of 10-feet from the dwelling or other structures.

The concrete septic tanks shall be tested with water for leakage.

The effluent pump shall be of the submersible type capable of delivering a flow and total dynamic head (TDH) sufficient to pump effluent to the public sewer system. Pump shall be specifically designed and rated to pump sewage effluent into pressure wastewater collection systems. The pump TDH shall be 140 feet of water (60 psi) at 10 gallons per minute (GPM).

Pump discharge check valves shall be true-union PVC ball check valves designed for wastewater effluent pump applications and rated for 150 psi, 1-inch minimum diameter.

All pump vault and screen assemblies systems shall be on the Lincoln County approved list of suppliers. Installation shall be in accordance with these standard specifications and drawings and in accordance with the manufacturers instructions.

External Splice boxes shall be provided where necessary for installation on existing buildings and structures or as required. Splice boxes shall be external to and attached to the riser, watertight, and suitably sized. Splice boxes internal to the risers are not allowed.

The sewer service lateral shall be 1-inch PVC Type 1, Grade 1, and Schedule 40. Fittings shall be PVC Type 1, Schedule 40 solvent weld fittings and comply with ASTM D2466. The sewer service lateral shall be installed in a trench. A minimum of 30-inches cover is required for pipe installed under improved surfaces. A minimum of 18-inches of cover is required where the pipe is installed under unimproved surfaces. When installed parallel to waterlines, sewer lines shall maintain a 10-foot separation between the water and sewer lines. The trench bottom shall be smooth and uniform. PVC sewer service lateral shall be tested with water for leakage. Test pressure shall be 90 psi. Test duration shall be one hour. Any pressure loss over the one-hour period is unacceptable.