



www.CalumetSTEP.com

November 10th, 2022

In conjunction with the Lake County Board of Commissioners, VS Engineering, Inc. is working on the design of a new sanitary sewer system for the elimination of your current septic system. This Septic Tank Elimination Project (STEP) will provide sanitary sewer main pipe in your roadway and a service connection to your home at a specified location. The connection may also include installation of a grinder pump to aid in the conveyance of your sanitary waste. The connection and all associated costs with installed equipment will be paid for by the Lake County Board of Commissioners as part of the STEP.

Septic systems are underground treatment structures that treat wastewater from individual homes. Septic systems eventually fail and when they do, human waste can leach into groundwater, backyards, neighborhood ditches and streams. Septic systems are linked to high E. coli bacteria in neighborhood ditches during dry weather, when children are most likely to play in them. Some septic tank owners get their drinking water from private wells, which can be vulnerable to contamination by E. coli bacteria.

To protect area residents, Lake County is implementing STEP to protect public health, preserve valuable water resources. And maintain economic vitality and growth in your community. Major benefits of the STEP facilities are:

Public Health Benefits: STEP reduces the risk of disease transmission and human exposure to pathogens, which can occur through drinking water and surface water.

Environmental Benefits: STEP removes pollution from surface water and recharge groundwater.

Economic Benefits: Elimination of septic systems by constructing gravity or low pressure sewer systems promote land use and community growth, allowing overall economic benefits to the community.

If you have not completed a questionnaire already, please navigate to the www.CalumetSTEP.com project website to complete and submit the form. If you have any questions, please contact us at the project website.

Respectfully,
Lake County Board of Commissioners

Septic System



Please note: Septic systems vary. Diagram is not to scale.

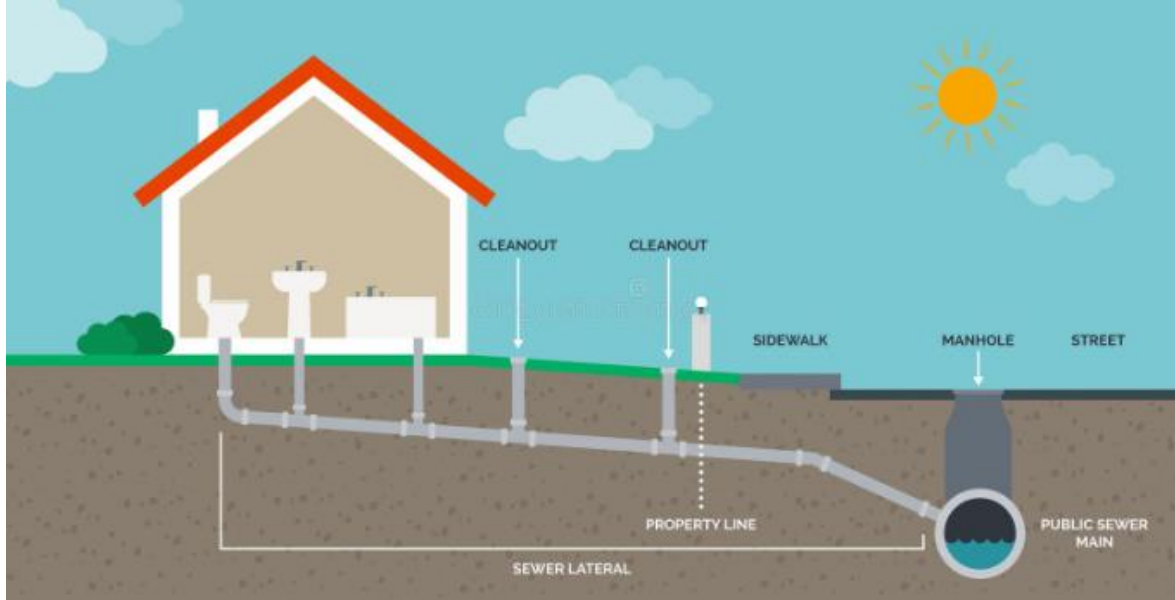
Conventional Septic System



Septic Tank

Septic systems are underground treatment structures that treat wastewater from individual homes and businesses. Septic systems eventually fail and when they do, human waste can leach into groundwater, backyards, neighborhood ditches and streams.

Gravity Sewer System



Cleanout



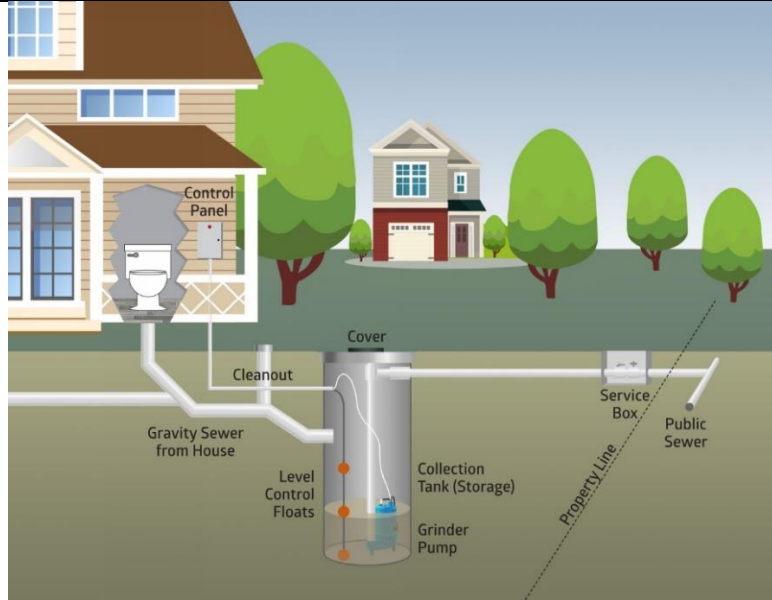
Manhole



Gravity Main and Lateral Connection

The most common system is gravity sanitary sewer. Typically, a sanitary sewer main is installed within a Right-of-Way and lateral or service connections are installed from the main to the property. Gravity sanitary sewers are typically installed by open-cut installation methods. Open-cut installation is necessary because it is very important to install the gravity sanitary sewer system at the correct slope in order to ensure that sediment build up and backups do not occur. Construction costs are higher on gravity systems due to open-cut installations result in impact to other infrastructure, but operations and maintenance costs are minimal once installed.

Low Pressure Sewer System (LPS)



Installed Control Panel



Service Box/Valve Pit



Grinder Pump Station

A LPS system moves sewage through pipe by using Grinder Pump Stations (GPS) at each customer connection to force the sewage through the lateral pipe and main pipe. A LPS allows for specific type of trenchless installation called horizontal directional drilling, or HDD. HDD uses a bore machine to pull the pipe through the soil without disturbing the surface, except at each end of the pipe where a pit is excavated to connect the pipe.