Winter 2019

Zoning & Permitting | Land Development | Mapping & GIS | Conservation | Septic Systems | Housing Programs

COMPASS POINTS

THE IMPORTANCE OF FLOOD INSURANCE

RISK

- Flooding is unpredictable and can impact anyone. Properties in high-risk areas known as a Special Flood Hazard Area (SFHA) have at least a one-in-four chance of flooding during a 30-year mortgage.
- You do not need to live near water to experience flooding.
- Twenty percent of all flood insurance claims come from properties outside of the high-risk flood areas.
- Floods are caused by storms, melting snow, water backup due to inadequate or overloaded drainage systems, and broken water mains.
- In the past several years, about 75 percent of all declared disasters involved flooding.

PREPARE

- You can't control the weather but you can prepare for it. Buy flood insurance before a flood happens; otherwise you won't be covered.
- Flood insurance policies typically take 30 days to go into effect. If you wait to purchase a policy until after a flood event threatens or occurs, your property won't be protected from the damage caused by that flood event.
- Most renters' and homeowners' insurance policies do not cover flood damage, and flood insurance policies don't automatically renew.
- Flood insurance is an investment in the well-being and resiliency of your family.
- About 80 percent of households impacted by hurricanes in 2017 did not have flood insurance.
- Insured survivors are able to recover faster and more fully from a flood than their uninsured neighbors.

VALUE

- Floods are the most common and costly natural disaster in the U.S.
- The average property owner can purchase flood insurance for less than $2 a day.
- One inch of water in a home could cause more than $25,000 in flood damage.
- In 2016, the average flood insurance claim to policyholders in the U.S. was $62,000.
- The average FEMA disaster assistance grant is less than $5,000.

PROTECT

- Protect the life you've built by purchasing flood insurance today.
- Contact your insurance agent or visit floodsmart.gov to learn more about your flood risk and flood insurance options.
- If you are interested in purchasing flood insurance, your homeowners, renters, or business insurance agent may be able to help you.

You can also reach the National Flood Insurance Program (NFIP) Help Center for questions about flood insurance at 1-800-427-4661. To view the Special Flood Hazard Maps for your property, visit the Kenosha County interactive mapping website located at http://www.kenoshacounty.org/656/Planning-and-Development.

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Planning & Development Calendar 2019	
March	
13	Planning, Development & Extension Education Committee, Public Hearing Room, 6 p.m.
21	Zoning Board of Adjustments Hearing, Room A, 6 p.m.
April	
10	Planning, Development & Extension Education Committee, Public Hearing Room, 6 p.m.
18	Zoning Board of Adjustments Hearing, Room A, 6 p.m.
May	
8	Planning, Development & Extension Education Committee, Public Hearing Room, 6 p.m.
16	Zoning Board of Adjustments Hearing, Room A, 6 p.m.

LIFE TIME COMPARISON BETWEEN PRIVATE ON-SITE WASTEWATER TREATMENT SYSTEMS (POWTS)

IN-GROUND GRAVITY SYSTEMS

Stone and Pipe Systems
There are two primary groups of in-ground gravity private on-site wastewater treatment systems (POWTS). One group utilizes washed stone to support and raise the perforated piping network within the POWTS cell. Stone and pipe systems are not being installed due to the limited availability and reliability of clean washed stone. The stone, if not properly washed, will retain excess amounts of clay, silt and very fine sand that can clog existing available soil pore space. The in-ground gravity system will be installed where a State of Wisconsin certified soil tester has determined that the existing soils can meet the standards set forth for this system type.

Stone-Free Systems
The most common type of stone-free system is the leaching chamber, which consists of lengths of half-pipe, connected end-to-end sitting on native soil in a trench excavation. The top of these units are solid synthetic material and the sides are louvered to allow the flow of wastewater out of the chamber. Although systems with this product are slightly more expensive than the stone and pipe systems, they are highly efficient and eliminate the trucking and handling of washed stone to a site. Leaching chambers can also be used in mounds and other pressurized systems.

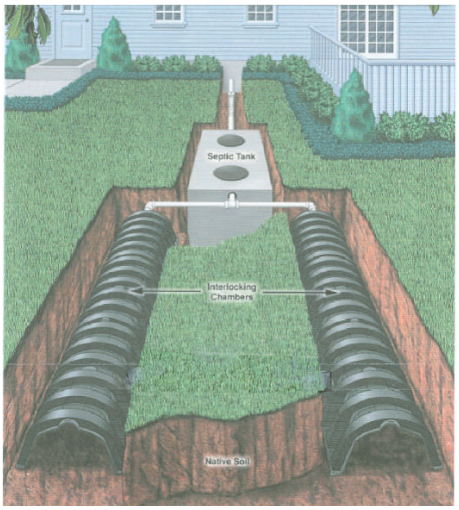

Figure 1: Stone-Free Systems

PRESSURIZED SYSTEMS

Pressurized Private On-site Wastewater Treatment Systems (POWTS)
All pressurized POWTS are designed to have wastewater distributed through small-diameter holes that are drilled into the piping network at a specified size and distance apart from one another. Through the pressurization process, the predetermined wastewater dose volume is sent throughout the pressurized piping network to be distributed throughout the entire POWTS cell.

Reasons for Pressurized POWTS
A pressurized POWTS is designed and installed due to a limiting site, such as a small lot size, or soil feature. There are several soil features that require a POWTS to be pressurized. They would be limitations due to soil texture, soil structure, or natural soil wetness. Any one of these specific soil features, or combination of, will cause a particular POWTS design requirement, and these requirements will change based on the soil limitations of each parcel of land soil tested.

Most Common Pressurized POWTS
Most common pressurized POWTS include: a mound, an at-grade, or an in-ground pressurized system. A mound system is most often used where the most limiting soil features are found on a given site. Soil limitation is due to a seasonal high groundwater table. Water does not necessarily have to be observed at the time that the soil test is being completed. The soil tester will look for soil features that are left behind when seasonal water has been present, called “redoximorphic features,” or soil mottling. The degree and extent of this mottling as well as its vertical orientation in the soil boring that the soil tester is evaluating will determine what type of POWTS the site may be suitable for.

Mound System
Approximately two-thirds of Kenosha County’s lower soil strata (layers) is of a clay type texture which results in a very slow infiltration rate. This slow infiltration rate means that the water that is in the soil stays there for extended periods of time. It is during this extended time frame and several additional factors that the redoximorphic features (soil) will be created. Where mottles exist at less than 36 inches below the soil surface, a mound system will be the type of POWTS installed. A long, narrow design of mound POWTS and at-grade POWTS are preferred in lieu of a short, wide design due to the slow percolation rate previously discussed. The reason for the long narrow design is to reduce the gallons of wastewater distributed per lineal foot of system area.

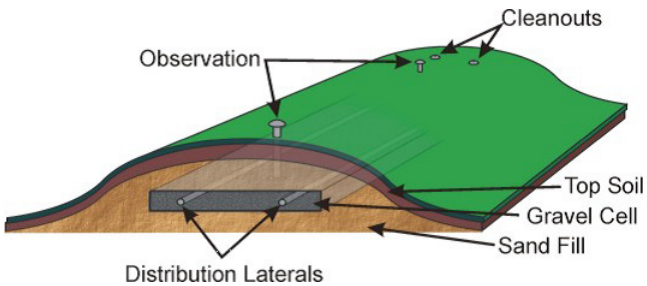

Figure 2: Mound System

LIFETIME COMPARISON BETWEEN PRIVATE ON-SITE WASTEWATER TREATMENT SYSTEMS (POWTS) CONTINUED

At-Grade System

You will find that the design of the at-grade POWTS differs from the mound POWTS in that the at-grade will not have any additional sand material trucked to the site for use under the pressurized pipe distribution system as mound systems do. The at-grade POWTS is used on sites where the soil redoximorphic features exists from 36 inches - 45 inches below the natural ground surface. There are very few at-grade POWTS in Kenosha County due to the extent of redoximorphic features that exist in the soils of this county.

At-Grade System

Figure 3: At-grade system

In-Ground System

The last of the pressurized POWTS is the in-ground pressure system. The in-ground pressure system is installed where redoximorphic features exist at more than 45 inches below the natural ground surface and where soil texture or soil structure is of concern. With exception to the redoximorphic features and the pressurized portion of the POWTS, the design and construction of the system is the same as the gravity in-ground system.

PRETREATMENT SYSTEMS

Primary Purpose

The primary purpose of a pretreatment system is to reduce the high levels of organic matter contained in wastewater. This type of POWTS has some type of pretreatment unit added to the standard components. For example, a standard mound POWTS will always consist of the following components: a septic tank, a dose tank (pump chamber) and the mound (absorption cell). A pretreatment unit may be added downstream of the septic tank, thus improving the quality of the wastewater and allowing reduction in system sizing, or overcoming poor soil conditions.

Pretreatment Service Frequency

There are different types of products on the market that can perform this function. Some will require a service provider to come to the property to do regular service maintenance on the pretreatment device. The type of device installed will determine the service frequency required. Some devices will require maintenance every 6 months and some once a year. A service contract is required between the licensed service provider and the owner of the pretreatment unit. Included in that contract will be the cost of the service provided, service frequency of the unit, duration of contract period and any other additional services provided.

Reasons for Pretreatment

There are several reasons that a pretreatment unit may be used. They would include small lot size, reduction of absorption cell size, i.e. length, width and possibly height, impedance of clogging mat formation, restoration of a failing POWTS and high-strength waste level reductions. If you have a failing POWTS and you want to try to restore it by adding a pretreatment device to your existing POWTS, it may be possible.

POWTS Restoration and Replacement

The restoration by the aerobic unit will be a slow process and may require some reduction of wastewater generation by the homeowner and intensive monitoring by the POWTS maintainer. Installing a pretreatment unit with your POWTS will extend the normal life of your POWTS. Maintenance of your system is the key to system longevity. A pretreatment device should also be installed when an existing residence being served by a POWTS is failing and a replacement POWTS is being sought. Due to lot size limitation, a pretreatment device could be used to reduce the overall size of the POWTS cell area and forgo the installation of a holding tank as the replacement POWTS. A pretreatment device can also reduce the separation distance needed from the soil surface to a limitation such as bedrock or groundwater. In some applications this can result in being able to install a different system type.

Commercial Pretreatment

Commercial operations such as restaurants, taverns, banquet halls and other facilities that generate high-strength wastewater are required to utilize pretreatment units in order to improve the quality of the wastewater before final disposal to the soil.

STAY INFORMED BY SUBSCRIBING TO KENOSHA COUNTY ELECTRONIC NOTIFICATIONS

Kenosha County's website provides many great tools and features to its users. For those interested in staying informed regarding news and meeting agendas from County departments, subscribe to the site's **Notify Me** feature.

Below is a subset of newsletter, news flash and meeting agenda notifications relating to planning and development. Users can opt-out at any time. To view an all-inclusive list of the notification options available to users and to sign-up for e-mail and/or text message notifications relating to your own topics of interest visit http://www.kenoshacounty.org/list.aspx.

Kenosha County Planning & Development Compass Points Newsletter
Sign up to receive the Kenosha County Planning & Development's quarterly newsletter.

Planning & Development News
Information regarding pertinent planning and development related news in the county. This includes Compass Points, tree program information and key developments related to zoning, sanitation, conservation and mapping in the department.

Committees—Multi-Jurisdictional Advisory Committee
Select this category to receive upcoming meeting agendas for the Kenosha County Multi-Jurisdictional Comprehensive Plan Advisory Committee, including annual reports.

Committees—Planning, Development & Extension Education Committee
Select this category to receive upcoming meeting agendas for the Kenosha County Planning, Development & Extension Education Committee, including land development applications as well as UW-Extension educational programs.

Committees—Public Works / Facilities Committee
Select this category to receive upcoming meeting agendas for the Kenosha County Public Works / Facilities Committee.

Committees—Zoning Board of Adjustments
Select this category to receive upcoming meeting agendas for the Kenosha County Zoning Board of Adjustments, including variance applications and temporary-use permit applications

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It is the mission of the Kenosha County Division of Planning and Development to provide professional, customer-centered services to residents and organizations pursuing individual and community development goals while ensuring the balance of our community's economic advancement with protection of the natural environment. The Division provides services that; encourage the use of natural resources in a planned and orderly manner, utilize technology to ensure the efficient/accurate communication of technical land-use information, improve our local economy and advance the common good of the citizens of Kenosha County.