



PHENIX CITY

Alabama

Phase II Storm Water Program

Summer 2026

Home Drainage: Swales, Ditches, & Drains

What is Drainage?

- Drainage can be defined as the removal of surplus water or liquid waste. Drainage prevents water from pooling and remaining stagnant for too long. Stagnant water can impact your home's foundation and serve as a breeding ground for mosquitos and insects. Proper drainage protects your home from water damage and you from costly repairs.

Different forms of Drainage:

- Drainage can be achieved through multiple ways, both through natural earth formations and man-made means. Hills naturally move water downhill with gravity. Man made drainage ditches and swales direct water in one direction using gravity as well. Natural formations and drainage ditches/ swales can help move water while only needing shovels and a form of coverage like sod, grass seed, and/or straw.

Home Improvements:

- *Traditional French Drains*
 - A French drain uses gravity to carry water through pipes to be emptied into the nearest water drainage system (often your street's gutters or a stormwater system when permitted). To install, a trench is dug with a width and depth to allow your pipe to be properly surrounded with gravel or rock when placed in the trench. A layer of geotextile or filter fabric is laid in the trench to protect the soil from erosion with enough to cover all sides of the trench as well as the opened top. A layer of gravel or rock is placed, followed by your pipe (a perforated pipe). Catch Basins can be used in places where water pools to improve drainage and enhance your French drain system.
- *Channel Drains*
 - Unlike with traditional French Drains, channel drains consist of a rectangular channel to carry water. The top is a grate instead of being covered with top soil. Where French drains often are used over short to long distances, channel drains are usually only used over short distances. Channel drains can be used where there is concrete, brick, and/or stonework involved.
- *Drainage Ditch/ Swale*
 - Drainage ditches and swales are "V" shaped channels that carry water with gravity. They consist of a soil layer draped in filter fabric, topped with more soil, and stabilized by covering in sod, grass seed, or rock. *See Spring 2026 News Letter for more info.*

French drains and channel drains can be used in tandem. A channel drain can deliver water that would run over driveways or sidewalks to a French drain system. The French drains can carry water to your streets gutter or even a drainage ditch/ swale. By properly using the natural lay of the land and man-

made additions, your home can properly drain and prevent water from pooling leading to constantly wet lawns, breeding grounds for mosquitoes, and unpleasant odors.

Diagrams of Drainage Systems

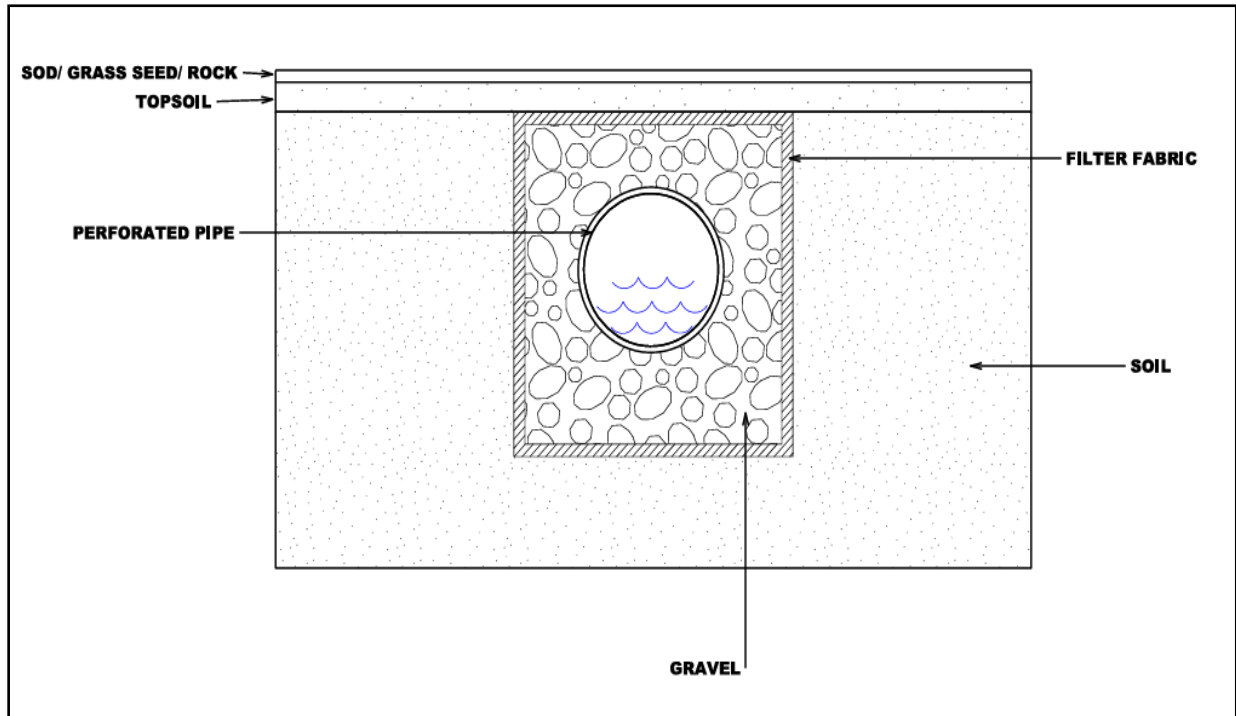


Diagram of a French Drain

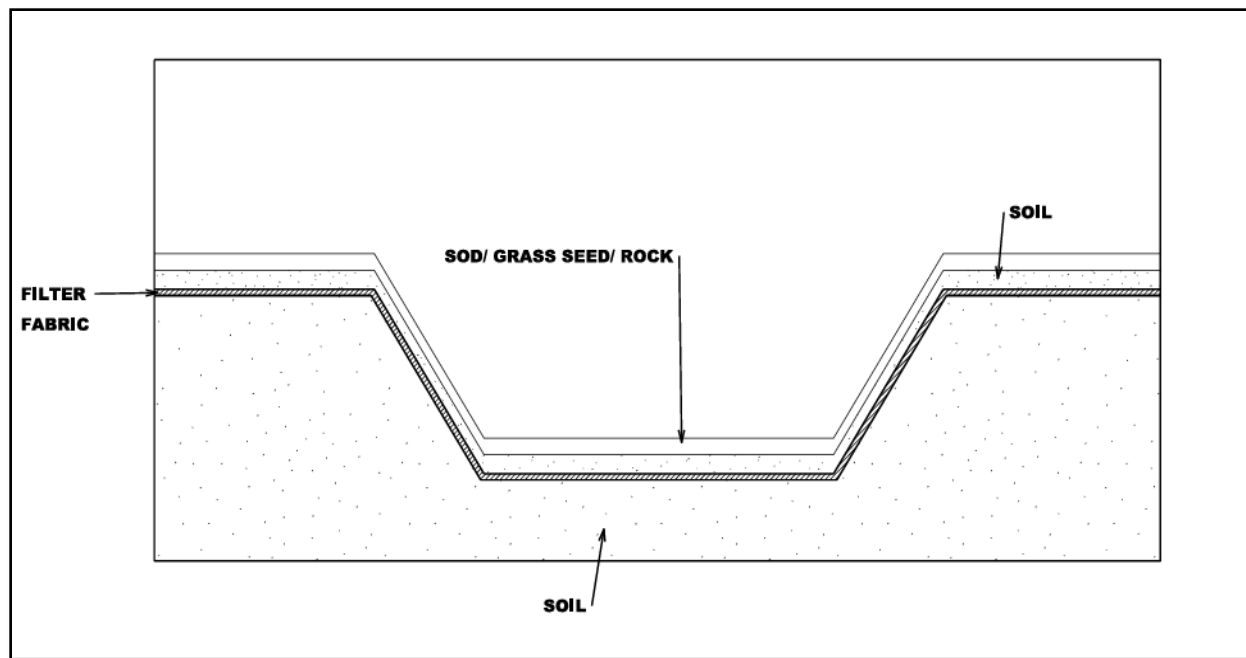


Diagram of a Drainage Swale/Ditch