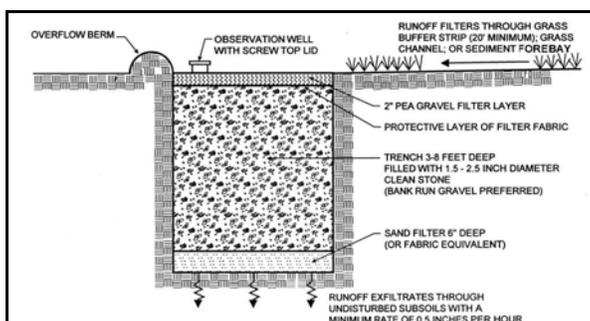

INFILTRATION TRENCHES

Maximizing the Benefits To Your Home & The Environment

Infiltration trenches are among **THE** most effective measures for keeping stormwater pollution out of nearby waterways. Unlike the infiltration trench pictured to the right, most are covered with grass and are pretty much invisible.



Infiltration Trench With Exposed Stone



Side View of an Infiltration Trench

As illustrated to the left, a trench is excavated four feet or more into permeable (sandy, low-clay) soils, filled with two-inch stone, covered with a layer of filter cloth, and a thick growth of grass is established on the surface. Many infiltration trenches have an observation well or two made of white, four- to six-inch plastic pipe, like that pictured to the right.



Observation Well

The amount of pollution washed by rain from a residential or commercial area can be two- to twenty-times greater than that from a forest. Runoff from rooftops, streets, parking lots and other impervious surfaces enters the trench by either flowing into the surface or by way of a buried storm drain pipe. The air spaces within the stone reservoir store runoff until it can soak (infiltrate) into the adjoining soils. As runoff percolates through the soil, 80% to 95% of the pollutants washed from streets and other impervious surfaces are filtered out.

Over time sediment and other material can accumulate within the stone reservoir, depleting the area needed to store runoff until it can infiltrate adjacent soil. For trenches receiving surface runoff, the flow of stormwater should pass through 20 feet or so of thick grass to reduce sediment entry. Some trenches even have a sediment deposition area known as a forebay. Most trenches are designed to treat the first inch of runoff from the rooftops, streets and other impervious surfaces they service. The trench should drain completely within 48 hours following the end of runoff.

KEEPING INFILTRATION TRENCHES HEALTHY IS EASY

1. If soil is exposed to erosive forces within the area draining to an infiltration trench, then the soil should be mulched-seeded as quickly as possible and runoff diverted away from the trench in the meantime.
2. An infiltration trench probably needs maintenance if:
 - a. Cattails or other wetland vegetation are present;
 - b. Water remains in an observation well more than 48 hours following a storm, or
 - c. The trench overflows with runoff when less than an inch of rain falls in a 24-hour period.
3. To report a maintenance issue Google the name of your county or city and “stormwater inspection” or contact CEDS.