

# Let The Land Work For You

Now you've met all the main options—except one. The way water behaves on your property and that of your neighbor will affect how your home drainage system performs. For this reason, the contour of the land (in particular, the degree of slope) and the percent of the land that's covered by **impervious surfaces** are considered the final elements of a home drainage system.

**A moderate degree of slope** will allow rainwater to flow gently, reducing the chances for troublesome puddles and ponds and erosion.

That's why the ground around your home should slope gradually away from the foundation for a distance of at least five—and preferably ten—feet. This will keep water away from your home, where it might otherwise get into its crawl space or come up through the floor. A good slope should drop down at least three inches for every five linear feet.

Along (parallel to) your home, the ground should drop down at least three inches for every ten linear feet. And where the land slopes toward a building, a way must be found to redirect the flow around the house.

Swales are gently sloping depressions in the land's surface. By creating swales, water can be moved away from your home and onto another part of your property. Then French drains, drywells or other constructed drainage systems can eliminate the problem altogether.

Of course it's important to make your swales large enough to carry the volume of water that will drain into it. The larger the swale, the more water will be redirected away. Grass or other plants that grow in the swale will help keep soil and the nutrients it contains from being carried away. A series of smaller ridges, called berms, can be used to direct water into and through the swale.

When constructing berms and swales, let common sense be your guide. Avoid directing the water to a place where it wouldn't flow naturally. Don't redirect the flow in a way that causes problems for somebody else. And never create new ponds without drainage outlets on your property.

To fill in low areas during grading, use the most free-draining soils available. Save the topsoil and spread it over the newly filled and graded areas to help establish plantings.

**Impervious surfaces** include streets, sidewalks, driveways and roofs and anything else that prevents rainwater from seeping into the ground. As a general rule, the volume of water that flows off an impervious surface is four times greater than the volume that flows off your lawn.

There are many materials that are as durable as concrete but can let rain water through. When planning any new patios, paths or driveways, think about using *gravel*, *paving blocks*, *porous asphalt* or other water-friendly materials instead of concrete.

## Wait! We Want That Clean Water

Why is it important for some water to seep into the ground? Why can't it just flow away? Simple. Replenishing underground sources of water (called groundwater) is important.

Many streams are sustained by groundwater—especially during seasons when surface water is in short supply. If their groundwater sources are depleted, the streams will dry up.

The City and some residents also depend on groundwater from wells for drinking, so problems could arise if water is prevented from seeping into the ground. The wells of individual property owners could run dry.

