



**Foundation Drainage &  
DIY Drainage Swale Design and Installation**

## Foundation Drainage – How to Install a Foundation Drainage Swale

Help lessen the need for foundation repairs with a drainage swale or vegetated swale. Drainage swales are easy to install shallow ditches that drain excess water away from foundations. Often over looked and under used, drainage swales are simple and inexpensive foundation maintenance option that Advanced Foundation Repair, a foundation repair company in located in Dallas Texas, often recommends.

A drainage swale, also known as a vegetated swale or grass swale, is just a fancy term for a wide shallow ditch that is designed to carry away run-off water from rain, sprinklers, and so on. From a landscaping perspective, swales are barely noticeable because they are both wide and shallow. Drainage swales are often the easiest drainage system to install and can help prevent the possible need for expensive foundation repairs.



The first place to start is to see if a drainage swale is needed. One easy test is to check one hour after a rain fall. Look to see if there is a standing pool of water no more than 10 feet from the house foundation. This excessive moisture causes soil to expand which can cause undo pressure on the foundation. Excess pressure on the foundation may cause foundation damage that requires expensive foundation repair.

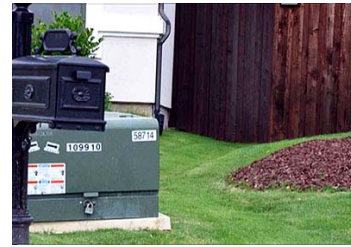
Once installed, drainage swales are virtually maintenance free as they blend in with the grass and are easy to mow.

Here are a few swale design tips for DIY homeowners looking to install a drainage swale:

- Because swales must slope downhill, on flat lawns, they should be deeper as they get longer. Swales must slope at least 1 inch for every 10 feet of length. With this in mind, map out where drainage is needed by marking the ground along where the center of the swale will run.
- Use a shovel and cut a trench along where the center of the swale will be. Dig the trench so that the bottom slopes down at least 1 inch for every 10 feet of length. If sod will be placed in the swale, lower the entire trench 2 to 3 inches.
- Next, mark the edges of the swale. The goal in locating the edges of the swale is to keep the sides of the swale sloped gently enough to keep the swale from being noticeable.
- Using a shovel, gently lift the up the grass in the swale.
- Set the grass pieces aside.
- Using a shovel, gently lift the grass up.
- Wet down the grass pieces and set them aside.
- Check on the pieces often while working to ensure they are stay moist. Water them if needed.
- Dig a trench in the marked area. The trench should be a shallow V shape leading away from the foundation to an adequate run off point such as a French drain or street.



- To keep the swale from being too noticeable, it should gradually widen as it approaches the final drainage point.



- Wet the soil in the swale.

- Place the grass pieces back into the dampened swale by laying them smoothly out and pressing firmly back into the damp soil.

- Make sure the grass is thoroughly watered.

- Make sure that nothing is blocking water flow as it moves out to the street or to a drain.



Advanced Foundation Repair offers home repairs from the foundation up including foundation repair, plumbing and general construction services. Advanced Foundation Repair has specialized in foundation repair needs of Texas homeowners for over 100 years. Advanced Foundation Repair specialists' reputations for prompt and honest service assure customers reliable service. Find additional home owner tips and DYI white papers at <http://www.foundationrepairs.com>.