

## Trench Drain

Trench drains may be utilized in many situations to help absorb water into the ground and convey water away. It consists of a perforated pipe, typically 4" in diameter, in a gravel-filled trench. Usually soil covers the trench so that grass may be planted above it, or it may be left as exposed gravel. The trench and or pipe itself should be lined with a geotextile fabric to help keep soil from clogging the system. Please note that a trench drain cannot entirely replace a swale because they cannot accommodate large storms adequately. An above ground path for the storm water still needs to be present for water to travel through your property .



## Storm Water Run-off Reduction

Storm water run-off is rain or melted snow that is not absorbed into the ground, used by plants, or evaporated into the atmosphere. The water travels over land to a downstream body of water. Storm water run-off can be erosive, get trapped in low areas and become mosquito breeding grounds, or carry pollutants like fertilizers and herbicides into creeks and rivers. Inside this brochure you will find several practices to use to help eliminate the amount of storm water run-off, including Rain Barrels, Rain Gardens, Permeable Pavers, and Trench Drains.



City of Loveland  
120 W. Loveland Ave.  
Loveland, Ohio 45140



City of Loveland  
120 W. Loveland Ave.  
Loveland, Ohio 45140  
Ph: (513) 683-0150  
[www.lovelandoh.com](http://www.lovelandoh.com)

## Rain Barrels

A rain barrel collects rain water from down spouts and stores it for later non-potable use. A garden hose attached to the rain barrel can help you water your landscaping or wash your car, which would help reduce your water bills during the summer. Rain barrels should have screens to keep mosquitoes out and an overflow device should they fill up. Rain barrels can be purchased from County Conservation or Storm Water Departments, on-line sources, or easily assembled from supplies bought at a retail home improvement or landscaping store

For more information on rain barrels you can visit the following websites: <http://www.rainbarrelguide.com/> or <http://www.wcconservation.net/programs/-quality/rain-barrels/>.



## Rain Garden

A rain garden is a landscaped area of deep-rooted native plants placed in a depression that allows rain water run-off to flow into it and be absorbed into the ground or used by the plants. The rain garden should hold the rainwater for up to two days while it percolates into the ground. This should kill mosquito eggs, attract birds and butterflies, and reduce the amount of water flowing through your yard. Visit <http://www.raingardennetwork.com/> or <http://www.millcreekwatershed.org/rain-gardens.html> for more information.



A rain Garden, as shown above, provides for beautiful landscaping, while also helping you manage your storm water run-off.

## Permeable Pavers

Permeable pavers are building materials that can be used to make paths, drives, walks, and patios. They allow for water to percolate through them and be absorbed into the ground, rather than a traditional pavement which would direct the water downstream. An underdrain can be installed a couple feet below the pavers to capture and convey any storm water not absorbed by the ground. For more information on permeable pavers you can visit <http://pavestone.com/features/>

