

Montgomery County Stormwater Management Facility Guidelines

In order to function properly, all stormwater management facilities require maintenance. Maintenance requirements and frequencies may vary from site to site and between types of facilities. The following information is designed to provide general information about facility types and maintenance requirements. For specific guidance on stormwater management facility maintenance, contact:

The Montgomery County Department of Environmental Protection (MCDEP) at 240-777-7770.

Note: Special equipment may be required for any person entering an enclosed space. Contact MCDEP for guidance prior to attempting to enter into any enclosed space.

Facilities applicable to this As-Built Record Drawing are marked with an “X” below:

___ Dry Detention Pond

A dry detention pond serves to protect downstream properties and receiving streams from excessive erosion and flooding. It does this by temporarily storing water during a large storm event, and releasing it at a controlled rate through a low flow orifice. Routine maintenance for dry ponds includes regular mowing of the pond and embankment, and checking to ensure that the low flow orifice and trash grate does not become clogged with debris. This pond is not designed to hold a permanent pool of water. Standing water may indicate that the low flow orifice has become clogged and is in need of maintenance.

___ Wet Retention Pond

A wet retention pond serves to protect downstream properties and receiving streams from excessive erosion and flooding. It does this by temporarily storing water during a large storm event, and releasing it at a controlled rate through a low flow orifice. In addition, the pond provides a measure of water quality by retaining a permanent pool of water. Routine maintenance for these ponds includes regular mowing of the pond slopes and embankment, and checking to ensure that the low flow orifice does not become clogged with debris. A metal hood or elbow that extends below the permanent water surface elevation typically protects the low flow orifice on these ponds. If this hood or elbow is completely submerged below the surface of the pond, the orifice is likely clogged and in need of maintenance.

___ Underground Storage

This structure consists of underground storage pipes designed to temporarily detain stormwater runoff and release it at a controlled rate through a low flow orifice. Routine maintenance consists of inspecting the orifice to ensure that it does not become clogged with debris. Note: Special equipment may be required for any person entering an enclosed space. Contact MCDEP for guidance prior to attempting to enter into any enclosed space.

___ Montgomery County Sand Filter

The purpose of the sand filter is to intercept and treat stormwater runoff to improve the quality of water leaving the development. Water flows onto the filter and slowly seeps through it, where it is collected by an underdrain pipe and directed to an outfall. This movement of the water through the sand media filters out many of the pollutants. The sand filter should usually dry up within 48 hours. If water stands on the filter for longer periods of time, maintenance is required.

Because the sand acts as a filter, it will eventually clog. Clogging generally effects the topmost portion of the sand, leaving underlying sand unclogged. To increase the life of the filter, the top layer should be raked on a regular basis in order to break up any surface clogging that may occur. Eventually the top 3” – 4” of sand will likely require removal and replacement with new, clean material. If the sand filter is provided with a gravel top layer, routine raking will not be possible.

___ Infiltration Trench

An infiltration trench is an underground stone reservoir which collects storm runoff and allows it to slowly seep back into the ground. On top of the trench is a layer of gravel, under which is a layer of filter fabric. The infiltration trench should appear dry within 12-24 hours after a storm event. If standing water is observed on the facility, it may indicate that the filter fabric is in need of removal and replacement. The purpose of the filter fabric is to trap small particles that might otherwise enter the facility and cause the bottom of the trench to fail.

___ Bio Filter

The purpose of Bio Filtration is to intercept and treat stormwater to improve water leaving the development. Water flows into the facility and slowly seeps through it, where it is collected by an underdrain pipe and directed to an outfall. This movement of the water through the media filters out many of the pollutants. The Bio Filtration area should usually dry up within 48 hours. If water stands on the filter for longer periods of time, maintenance is required.

Maintenance of this type of facility generally includes replacement of dead or diseased plant material and replenishment of the mulch layer as required. In addition, it may be necessary to rake the surface of the sand “window” to encourage proper drainage. The Bio Filter is intended to be an actively maintained landscape area.

___ Flow Splitter

Many of the stormwater management facilities in Montgomery County receive drainage via a device which is designed to divert only the first and dirtiest flush of stormwater runoff to the water quality treatment facility. This increases the efficiency of pollutant removal. Larger flows are diverted around the facility to preserve efficiency. Flow splitter pipes and trash grates should be checked periodically to ensure that they are not clogged with debris. Note: Special equipment may be required for any person entering an enclosed space. Contact MCDEP for guidance prior to attempting to enter into any enclosed space.

___ Stormfilter

The Stormfilter is a proprietary device in which water flows through a filter media to remove pollutants. The filter media will require periodic replacement, per the manufacturer’s recommendations. In addition to filter media replacement, the structure should be checked periodically to ensure that it is not clogged with debris.

___ Stormceptor, Bay Saver, Vortech, or other Hydrodynamic Structure

These proprietary structures are essentially manholes that serve to separate sediments from floatable pollutants, such as oil. The oils and sediments are trapped within the facility. These structures should be inspected periodically to ensure that the pipes are not clogged by debris. In addition, the pollutant build-up within the facility must be monitored regularly and the trapped materials removed once the storage capacity of the device has been reached. A licensed contractor must remove the materials from the facility.

___ Other Facility – Described below:
