



Memo

Date: May 6, 2019

To: Facility Managers

From: John Schiavone, Director of Real Estate Development, Catholic Construction Services, Inc.

Re: Stormwater Basin Maintenance

Detention and retention ponds are an important part of the parish landscape. They are designed to collect and slowly release stormwater runoff from impervious surfaces such as parking lots, driveways, and rooftops. By assisting with the release of runoff at a predetermined rate, these basins can:

- prevent localized flooding
- reduce stream bank erosion downstream
- provide water quality benefits

With the right planning, preparation, and maintenance, detention and retention ponds can also create opportunities to observe nature, engage in recreation, and just enjoy the view as they fulfill their main role in managing the community's stormwater system.

DETENTION PONDS

Detention ponds, also called dry basins, are designed to release all captured runoff water over time and do not allow for the permanent pooling of water. This means that, in some instances, these areas may serve a dual purpose as sports fields and additional green space. Basins like this can have attractive and natural looking features and appear to be an extension of the surrounding landscape and facility.

Maintenance

- Regular Service
 - Maintain grass cover at all times; mow on a regular basis
 - Remove undesirable vegetation (tree and shrubbery saplings, vines, and briars) from the basin early and often
 - Remove trash, debris, tree limbs, and other flow obstructions from the basin, outlet structures, and pipes following large storms

- Fill eroded gullies, ruts, and animal burrows and compact soil as they appear
- Yearly Service
 - Repaint and lubricate metal components to reduce rust and malfunction
 - Remove accumulated sediment to keep pond at designed volume
 - Remove vegetation from spillways/outlet structure cracks and seal with mastic joint filler
 - Reseed grass as needed to retain vegetative cover

RETENTION PONDS

Retention ponds, also called wet basins, are also designed to release captured runoff water over time, however, these basins retain a specified amount of water permanently. This allows them to assist with water quality improvement, groundwater recharge, flood protection, and aesthetic improvements of the facility. A retention pond is designed to blend into the landscape and can be viewed as an amenity or even a wildlife habitat.

Maintenance

- Regular Service
 - Remove vegetation when original open water surface area is reduced by 50%
 - Remove trash, debris, tree limbs, and other flow obstructions from the pond, outlet structures, and pipes following large storms
 - Fill eroded gullies, ruts and compact soil as they appear on embankments and side slopes
- Yearly Service
 - Repaint and lubricate metal components to reduce rust and malfunction
 - Remove accumulated sediment from pond to keep pond at designed volume
 - Remove and/or replace dead and diseased vegetation to maintain bio-filtration status
 - Remove vegetation from flow control structure cracks and seal with mastic joint filler

Stormwater detention and retention are an essential part of the urban landscape. When maintained as required, they provide needed flood and erosion control, water quality improvements, and even spaces for recreation, relaxation, and nature.

If you have any additional questions about your retention or detention pond maintenance, please contact your CCSI project manager directly, or the CCSI office at CCSIoffice@archatl.com.

Detention Pond Examples



Retention Pond Examples

