

Phase II Storm Water Program

Summer 2022

Why Does Your Apartment or Subdivision Have a Pond?

Chances are your subdivision or apartment complex has a storm water pond. There are two types of ponds generally seen in residential settings. The first pond type discussed here is called a "detention pond." This type of pond detains the runoff water from your streets and yards for a short time (Figure 1). The pond discharges the water from the pond at a controlled rate to mimic the discharge rate of this particular piece of land before your subdivision was built. The second pond type is called a "retention pond." This retention pond retains the water for a longer period of time and at a larger volume than the detention pond (Figure 2). These retention ponds have outlet structures, but have been primarily designed to discharge this water into the atmosphere through evaporation or by percolation through soil under and around the pond. These ponds are generally less cost-effective than the detention ponds and can allow issues such as mosquito, snake, and alligator infestations. See Figure 3 on Page 2 for a schematic of a retention pond from the EPA's "Stormwater Wet Pond and Wetland Management Guidebook, 2009."

Why do some subdivisions not have ponds? Some subdivisions were built before ordinances and regulations required them. Other subdivisions have been shown on paper not to have a higher runoff rate than preconstruction rates. For Phenix City, every new subdivision is required to have a storm water detention or retention pond to control the storm water discharge rate.

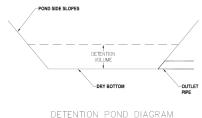


Figure 1. Detention Pond Diagram

What does the City of Phenix require of storm water ponds?

- All outlet structures must be properly maintained and in good operation throughout the life of the ponds.
- All detention and retention ponds must hold the volume of water they were designed to hold. If this is not the case, these ponds must be maintained and in good operation after remediation.
- All storm water ponds in new commercial and residential developments are required to submit calculations showing that post-construction runoff rates will be equal to or less than pre-construction runoff rates.



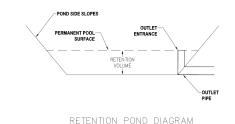


Figure 2. Retention Pond Diagram

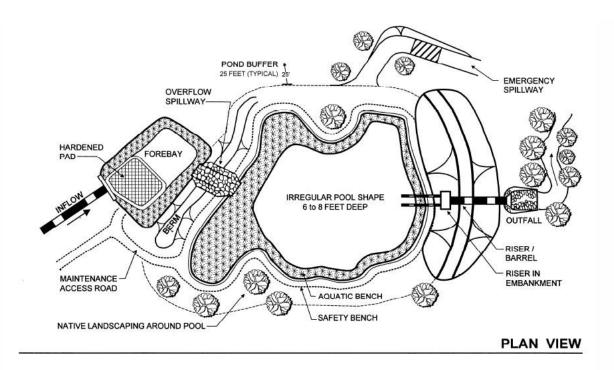




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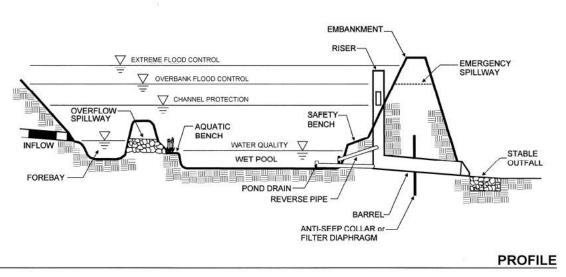


Figure 3. Stormwater Pond Schematic