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COUNTY AUDITOR  
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# **MAINTENANCE MANUAL**

**CAMBRIDGE KNOLL and  
CAMBRIDGE KNOLL FIRST ADDITION**

**Stormwater Retention/Detention Ponds**

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A&C Project No. 94-001

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# **MAINTENANCE MANUAL**

## **GENERAL**

Cambridge Knoll and Cambridge Knoll First Addition stormwater detention/retention ponds are to be maintained by a Homeowners' Association. The purpose of this manual is to outline the maintenance requirements to insure their proper operation. Problems should be addressed immediately.

The east pond is a retention pond. It is designed to contain a 100-year storm event's runoff, while drywells discharge the runoff into the ground. The overflow weir is sized to allow another 100-year storm event to flow into the hatch Road right-of-way.

The west pond is a detention pond. This pond slows the runoff onto the State right-of-way to a rate equal to the pre-development conditions. (This rate is achieved by means of a flow restrictor.) The bottom of the pond is large enough to contain the 2-year storm event. The overflow in the restrictor structure is designed to discharge a 100-year storm event

## **East Retention Pond and West Detention Pond**

These ponds should be inspected for damage at the beginning of the rainy season and after each significant storm. Attention should be paid to the following items:

1. Embankment
  - A. Is there significant erosion?
  - B. Are the pipe ends open and unobstructed?
2. Outlet Works
  - A. Is there debris clogging grates or pipes?
3. Emergency Spillway
  - A. Is there significant erosion?
  - B. Is there debris clogging the weir or overflow pipe?
4. Inlet Works
  - A. Is there significant erosion?
  - B. Are the pipe ends open and unobstructed?

## **Sediment Removal from Ponds**

The ponds will collect sediment deposits over time. The depth of the sediment should be monitored. The bottom of the retention pond should be six inches (6") below the grate of the drywells. Sediment should not be allowed to flow into these drywells. The detention pond should have one foot (1') between the pipe inverts and the bottom of the pond.

The sediment deposits can be removed during the dry season.

### **Drywells**

The drywells need to be inspected for grate obstructions and possible sediment clogging. If the discharge rate of a drywell falls below 0.25 cfs, another triple depth drywell will need to be installed. Reserve drywell locations are shown on the plans.

### **Gravel Filter Dike of the Retention Pond**

This dike is intended to filter the sediment from the runoff before entering the drywells. If this dike becomes clogged with sediment, it should be replaced with gravel as shown on the plans.

### **General Housekeeping**

The facility should be kept in a clean and well-maintained appearance. Debris and trash removal and regular mowing of the grass around the ponds should be done as needed or at least four times a year.

### Maintenance Checklist

<i>Item</i>	<i>Significant Storm</i>	<i>Quarterly</i>	<i>Annual</i>
Detention/Retention Ponds	x		x
Sediment Removal			x
Drywells	x		x
Gravel Filter Dike			x
General Housekeeping		x	