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AC
Adams & Clark, Inc.

MAINTENANCE MANUAL

CAMBRIDGE KNOLL FIRST ADDITION

Stormwater Retention & Detention Ponds

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A&C Project No. 97-133

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MAINTENANCE MANUAL

GENERAL

Cambridge Knoll First Addition stormwater detention and 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 northwest pond is a retention pond. It is designed to contain a 100-year storm event's runoff. The overflow pipe is sized to allow another 100-year storm event to flow into the ditch along State Road 395.

The west pond is a detention pond. This pond discharges the stormwater runoff into the ditch of State Road 395 equal to the pre-development runoff rate. This rate is achieved by means of a flow restriction orifice. The bottom of the pond is large enough to contain the 2-year storm event. The overflow in the restriction structure is designed to discharge a 100-year storm event.

Northwest Retention and West Detention Ponds

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. Sediment accumulation in this pond will decrease the amount of water it will hold. The bottom of the northwest retention pond should be 12 inches below the invert of the overflow pipe. The west detention pond should have 12 inches between the pipe inverts and the bottom of the pond.

The sediment deposits can be removed during the dry season. Extra care should be taken to prevent damage to the PVC liner in the dike of the west detention pond.

General Housekeeping

The facility should be kept in a clean and well-maintained appearance. Debris and trash removal and regular mowing of the grass and weeds 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
General Housekeeping		x	