# STORMWATER OPERATION AND MAINTENANCE AGREEMENT AND SECURITY

Project Name:			
Town Project Number:			
Town BMP ID:			
PIN Number:			
Mail after recording to:	Town of Morrisville Engineering Departmen 100 Town Hall Drive Morrisville, NC 27560	t	
NORTH CAROLINA			
WAKE COUNTY			
This STORMWATER (	OPERATION AND MA	INTENANCE AGREEM	ENT AND SECURITY,
made this day	_ of	, 20	
by			
	is		

with, to, and for the benefit of the Town of Morrisville, a municipal corporation of the State of North Carolina, whose address is 100 Town Hall Drive, Morrisville, North Carolina 27560.

### **BayFilter with Underground Detention Operation and Maintenance Agreement**

I will keep a maintenance record on this BMP. This maintenance record will be kept in a log in a known set location. Any deficient BMP elements noted in the inspection will be corrected, repaired, or replaced immediately. These deficiencies can affect the integrity of structures, safety of the public, and the removal efficiency of the BMP.

Important operation and maintenance procedures:

- The drainage area will be carefully managed to reduce the sediment load to the BayFilter.
- The sedimentation chamber or forebay will be cleaned out whenever sediment depth exceeds six inches.
- Once a year the underground facility will be thoroughly inspected for structural issues.
- Sediment must be removed from the pipe/vault system when the sediment accumulation depth is 4 inches or greater at any point within the storage pipe/vault.

The BayFilter system with underground detention will be inspected **quarterly**. Records of operation and maintenance will be kept in a known set location and will be available upon request.

Inspection activities shall be performed as follows. Any problems that are found shall be repaired immediately.

BMP element:	Potential problem:	How I will remediate the problem:	
Entire BMP	Trash/debris is present.	Remove the trash/debris.	
Adjacent pavement (if applicable)	Sediment is present on the pavement surface.	Sweep or vacuum the sediment as soon as possible.	
Flow diversion structure	The structure is clogged.	Unclog the conveyance and dispose of any sediment offsite.	
	The structure is damaged.	Make any necessary repairs or replace if damage is too large for repair.	
The Inlet Device	The inlet pipe is clogged.	Unclog the pipe. Dispose of the sediment off-site.	
	The pipe is cracked or otherwise damaged (if applicable).	Replace the pipe.	
	The structure is damaged.	Make any necessary repairs or replace if damage is too large for repair.	
BayFilter Cartridges	Cartridges not performing as designed – see ADS I&M Manual to determine if cartridge maintenance is required.	Replace cartridges per manufacturer's recommendations.	
Underground vaults/pipes	Sediment accumulation of four inches or more at any point within the storage pipe/vault.	Remove sediment.	
	Significant seepage or settlement accompanied by cracking within a small area of the vault/pipe system. Interior wall of pipe/vault shows signs of improper joint alignment (sagging), elongation and displacement of joints, cracks	Retain assistance of a civil or geotechnical engineer qualified in the design of underground detention systems. Retain assistance of a civil or geotechnical engineer qualified in the design of underground detention systems.	
	displacement of joints, cracks, leaks, surface water, surface wear, loss of protective coating, corrosion and blocking.		

Outlet device	Clogging has occurred.	Clean out the outlet device. Dispose of the sediment offsite.
	The outlet device is damaged	Repair or replace the outlet device.
	The outflow pipe is clogged.	Provide additional erosion protection such as reinforced turf matting or riprap if needed to prevent future erosion problems.
	The outflow pipe is damaged.	Repair or replace the pipe.
Receiving water	Erosion or other signs of damage have occurred at the outlet.	Contact the Stormwater Division of the Town of Morrisville Engineering
		Department at 919-463-7025.

All other operation and maintenance activities should be in accordance with ADS's **BayFilter Inspection and Maintenance Manual**. Any problems that are found shall be repaired immediately.

## **BMP Operation and Maintenance Security**

#### Performance Security

The Town of Morrisville requires the submittal of a performance security prior to issuance of a permit in order to ensure that the *structural BMP*s are

- 1. installed by the permit holder as required by the approved stormwater management plan, and/or
- 2. maintained by the *owner* as required by the operation and maintenance agreement.

#### Installation Amount

The amount of an installation performance security shall be the total estimated construction cost of the BMPs approved under the permit, plus 25%.

#### General Requirements

- 1. This agreement grants to the Town of Morrisville a right of entry to inspect, monitor, maintain, repair, and reconstruct *structural BMPs*.
- 2. The Town of Morrisville is authorized to recover from the property owner and/or association and its members, any and all costs the Town of Morrisville expends to maintain or repair the *structural BMPs* or to correct any operational deficiencies. Failure to pay the Town of Morrisville all of its expended costs, after forty-five days written notice, shall constitute a breach of the agreement. The Town of Morrisville shall thereafter be entitled to bring an action against the property owner and/or association and its members to pay, or foreclose upon the lien hereby authorized by the agreement against the property, or both, in case of a deficiency. Interest, collection costs, and attorney fees shall be added to the recovery.
- 3. This agreement shall not obligate the Town of Morrisville to maintain or repair any *structural BMPs*, and the Town of Morrisville shall not be liable to any person for the condition or operation of *structural BMPs*.
- 4. This agreement shall not in any way diminish, limit, or restrict the right of the Town of Morrisville to enforce any of its ordinances as authorized by law.
- 5. The property owner and/or association and its members indemnifies and holds harmless the Town of Morrisville for any costs and injuries arising from or related to the structural BMP, unless the Town of Morrisville has agreed in writing to assume the maintenance responsibility for the BMP and has accepted dedication of any and all rights necessary to carry out that maintenance.
- 6. The property owner and/or association shall continuously operate and maintain the stormwater control and management facilities.

#### Uses of Performance Security

1. Forfeiture Provisions

The performance security shall contain forfeiture provisions for failure, after proper notice, to complete work within the time specified, or to initiate or maintain any actions which may be required of the applicant or *owner* in accordance with this ordinance, approvals issued

pursuant to this ordinance, or an operation and maintenance agreement established pursuant to this ordinance.

2. Default

Upon default of the *owner* to construct and, if necessary, reconstruct any *structural BMP* in accordance with the applicable permit, the Stormwater Administrator shall obtain and use all or any portion of the security to make necessary improvements based on an engineering estimate. Such expenditure of funds shall only be made after requesting the *owner* to comply with the permit.

3. Costs in Excess of Performance Security

If the Town of Morrisville takes action upon such failure by the applicant or *owner*, the Town of Morrisville may collect from the applicant or *owner* for the difference should the amount of the reasonable cost of such action exceed the amount of the security held.

4. Refund

After the Town's final approval of record drawings, as-builts and certifications, the installation performance security shall be refunded to the applicant or terminated, in accordance with the Town of Morrisville Unified Development Ordinance (UDO) and Engineering Design and Construction Manual (EDCM).

I acknowledge and agree by my signature below that I am responsible for the performance of the maintenance procedures listed above and have received and understand ADS's **BayFilter Inspection and Maintenance Manual**. I agree to notify the Town of Morrisville of any problems with the system or prior to any changes to the system or responsible party.

Project name:		
BMP drainage area number:		
-		
Print name:		
Title:		
Address:		
Phone:		
Signature:		
Date:		

Note: The legally responsible party should not be a homeowners association unless more than 50% of the lots have been sold and a resident of the subdivision has been named the president.

I,	, a Notary Public for the				he State	State of		
				-		_		

\_\_\_\_\_, County of \_\_\_\_\_\_, do hereby certify that

\_\_\_\_\_ personally appeared before me this \_\_\_\_\_

day of \_\_\_\_\_\_, \_\_\_\_, and acknowledge the due execution of the

forgoing bioretention maintenance requirements. Witness my hand and official seal,



SEAL

My commission expires\_\_\_\_\_

### Town of Morrisville, North Carolina

Signature:	

Print Name:

Title:

Acknowledgment of Town of Morrisville:

Wake County, North Carolina

I certify that the following person personally appeared before me this day and acknowledged to

me that he or she executed the foregoing document on behalf of the Town of Morrisville in the

capacity indicated with his or her signature: \_\_\_\_\_\_.

Notary Public

Printed/Typed Name:

My Commission Expires: