

Dry Extended Detention Basin 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.

The dry extended detention basin system is defined as the dry detention basin, outlet structure, pretreatment including forebays and the vegetated filter if one is provided.

This system (check one):

does **does not** **incorporate a vegetated filter at the outlet.**

This system (check one):

does **does not** **incorporate pretreatment other than a forebay.**

Important maintenance procedures:

- The drainage area will be managed to reduce the sediment load to the dry extended detention basin.
- Immediately after the dry extended detention basin is established, the vegetation will be watered twice weekly if needed until the plants become established (commonly six weeks).
- No portion of the dry extended detention pond will be fertilized after the first initial fertilization that is required to establish the vegetation.
- I will maintain the vegetation in and around the basin at a height of approximately six inches.
- Once a year, a dam safety expert will inspect the embankment.

After the dry extended detention basin is established, it will be inspected **once a quarter and within 24 hours after every storm event greater than 1.0 inches (or 1.5 inches if in a Coastal County)**. 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:
The entire BMP	Trash/debris is present.	Remove the trash/debris.
The perimeter of the dry extended detention basin	Areas of bare soil and/or erosive gullies have formed.	Regrade the soil if necessary to remove the gully, and then plant a ground cover and water until it is established. Provide lime and a one-time fertilizer application.

BMP element:	Potential problem:	How I will remediate the problem:
The inlet device: pipe or swale	The pipe is clogged (if applicable).	Unclog the pipe. Dispose of the sediment off-site.
	The pipe is cracked or otherwise damaged (if applicable).	Replace the pipe.
	Erosion is occurring in the swale (if applicable).	Regrade the swale if necessary to smooth it over and provide erosion control devices such as reinforced turf matting or riprap to avoid future problems with erosion.
The forebay	Sediment has accumulated and reduced the depth to 75% of the original design depth (see diagram below).	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the BMP.
	Erosion has occurred or riprap is displaced.	Provide additional erosion protection such as reinforced turf matting or riprap if needed to prevent future erosion problems.
	Weeds are present.	Remove the weeds, preferably by hand. If pesticides are used, wipe them on the plants rather than spraying.
The main treatment area	Sediment has accumulated and reduced the depth to 75% of the original design depth (see diagram below).	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the BMP. Revegetate disturbed areas immediately with sod (preferred) or seed protected with securely staked erosion mat.
	Water is standing more than 5 days after a storm event.	Check outlet structure for clogging. If it is a design issue, consult an appropriate professional.
	Weeds and noxious plants are growing in the main treatment area.	Remove the plants by hand or by wiping them with pesticide (do not spray).

BMP element:	Potential problem:	How I will remediate the problem:
The embankment	Shrubs or trees have started to grow on the embankment.	Remove shrubs or trees immediately.
	Grass cover is unhealthy or eroding.	Restore the health of the grass cover - consult a professional if necessary.
	Signs of seepage on the downstream face.	Consult a professional.
	Evidence of muskrat or beaver activity is present.	Use traps to remove muskrats and consult a professional to remove beavers.
	An annual inspection by an appropriate professional shows that the embankment needs repair.	Make all needed repairs.
The outlet device	Clogging has occurred.	Clean out the outlet device. Dispose of the sediment off-site.
	The outlet device is damaged	Repair or replace the outlet device.
The receiving water	Erosion or other signs of damage have occurred at the outlet.	Contact the NC Division of Water Quality 401 Oversight Unit at 919-733-1786.

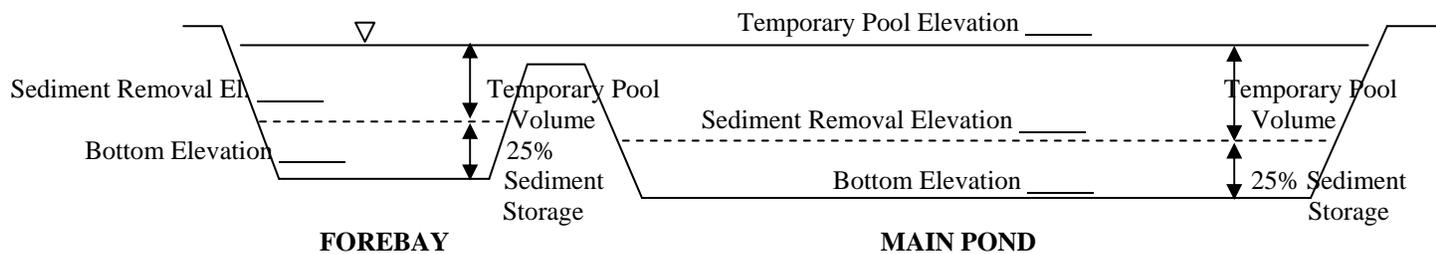
The measuring device used to determine the sediment elevation shall be such that it will give an accurate depth reading and not readily penetrate into accumulated sediments.

When the basin depth reads _____ feet in the main pond, the sediment shall be removed.

When the basin depth reads _____ feet in the forebay, the sediment shall be removed.

BASIN DIAGRAM

(fill in the blanks)



Permit Number: _____
(to be provided by The City of Winston-Salem)

I acknowledge and agree by my signature below that I am responsible for the performance of the maintenance procedures listed above. I agree to notify The City of Winston-Salem's Stormwater Division 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: _____

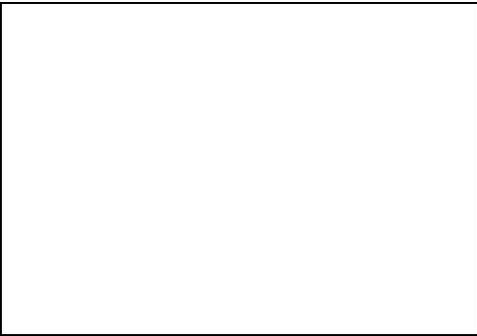
Phone: _____

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 State of _____, County of _____, do hereby certify that _____ personally appeared before me this _____ day of _____, _____, and acknowledge the due execution of the forgoing dry detention basin maintenance requirements. Witness my hand and official seal,



SEAL

My commission expires _____