

**LONG TERM MAINTENANCE PLAN
FOR POST CONSTRUCTION STORM WATER QUALITY BEST
MANAGEMENT PRACTICES (BMPS)**

SITE NAME:

LOCATION OF WATER QUALITY PRACTICE (CITY/VILLAGE/TOWNSHIP):

DISCHARGE MS4 OPERATOR (WHO OPERATES/MAINTAINS THE STORM SYSTEM THE PRACTICE DISCHARGES TO):

OEPA NPDES PERMIT #

_____ shall be responsible for the long-term maintenance of the water quality practice(s) listed below.

They shall follow this plan and any other requirements of the City/Village/Township and OEPA to the greatest extent possible to meet all NPDES Permit requirements and the local Storm Water Quality Regulations.

Water Quality Practices on this site:

- 1.
- 2.
- 3.
- 4.

Name of Post Construction Maintenance Contact: _____

Contact Email Address: _____

Contact Phone Number: _____

I verify that I have read and understand the long term maintenance responsibilities as listed in this report.

Owner/Responsible Party signature: _____

Date: _____

Note: If the selected Water Quality practice is an underground structure (Aqua Swirl, Underground Detention, etc.) Owner must submit a copy of the inspection report(s) to both the MS4 Community and Stark Soil & Water on a yearly basis.

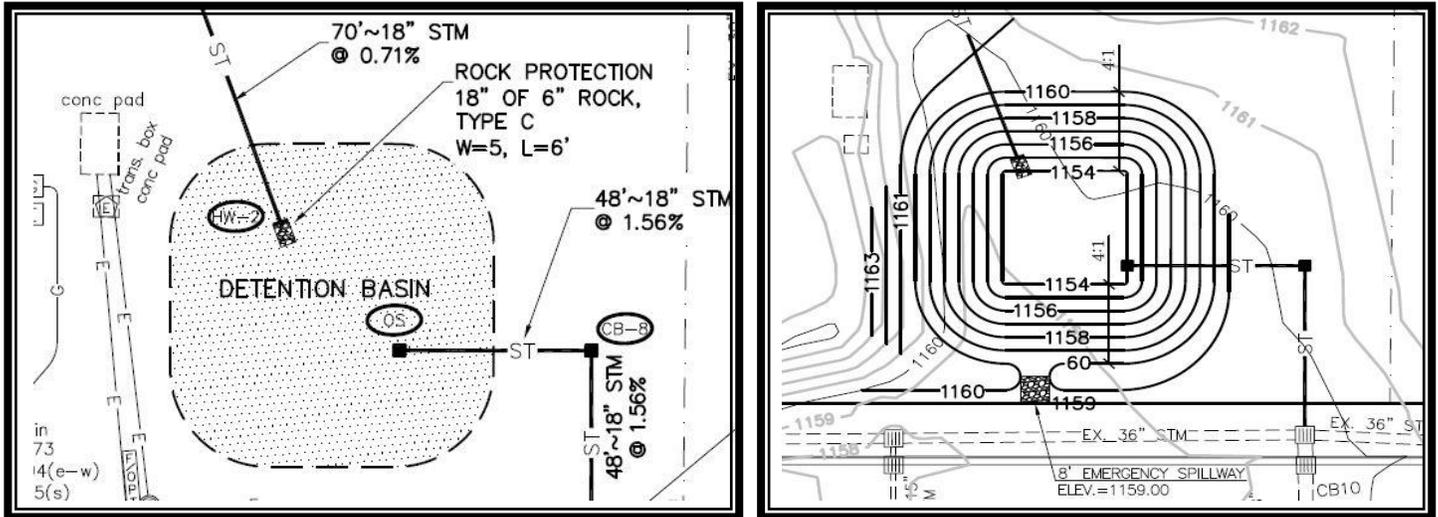
Post-Construction Maintenance and Inspection Requirements For:

SITE NAME

Street Name

City, State Zip

Detention Basin / Retention Basin



The embankment slopes should be inspected for adequate ground cover, erosion and rodent holes. If the existing ground cover is not adequate (a minimum of 80 % coverage), additional seeding and the necessary amendments (lime, fertilizer, etc.) should be applied. If erosion is evident, the MS4 community should be informed. If the condition is critical, the services of a specialist in erosion and sediment control may be contacted, the animals removed and the holes filled and compacted.

Principal Spillway:

Spillway structures should be cleared of debris periodically and after any major rainfall event where inspection reveals a significant blockage.

During low water conditions, concrete spillway structures should be inspected for water passing through any joints or other structure contacts and to identify any cracks, spalling, broken or loose sections. If any of these are present during inspection, they should be cleaned and refilled with an appropriate concrete patching material.

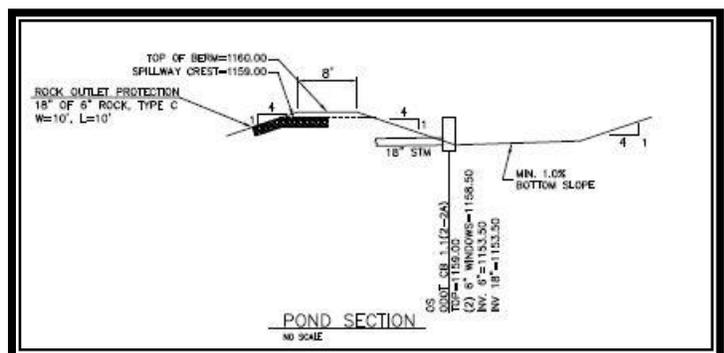
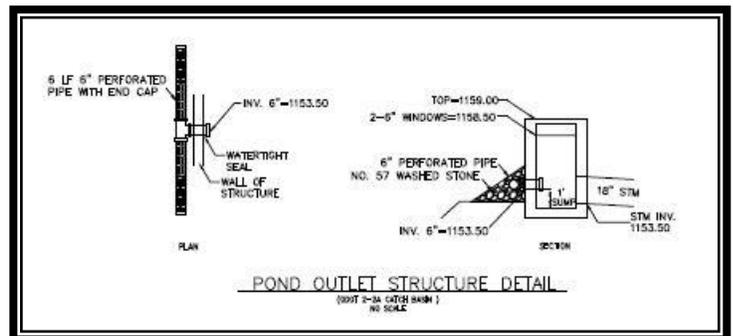
Outlet protection and discharge channels should be cleared of brush at least once a year.

Trash racks and locking mechanisms should be inspected and tested periodically.

Emergency Spillway:

The emergency spillway should be inspected along with the embankment. The spillway and both flanking revetments should be inspected for obstructions and erosion or back cutting. Obstructions should be removed as soon as discovered. Erosion or back cutting should be brought to the attention of the MS4 community and the design engineer.

Emergency spillway stabilized with riprap should be inspected for the displacement of rock, for undercutting, and for the migration of soil through the rocks. Displacement should be corrected by returning the displaced stone to its original position. If displacement continues, larger rock may be required. Undercutting and soil migration indicated inadequate or damaged filter material under the rock. This material should be inspected and replaced as necessary.



Emergency spillways stabilized with permanent turf reinforcement should be inspected at least monthly until vegetation is securely established. Additional over-seeding may be required to ensure full coverage. If erosion is evident, it is generally the result of torn or otherwise damaged reinforcement material. Torn or damaged sections should be repaired per the manufacturer's instructions.

Vegetation Maintenance:

All disturbed areas will be permanently seeded and mulched once final elevations are achieved. Areas should be mowed at least once a year or as needed. More frequent mowing may be necessary in residential areas for aesthetic purposes. This applies to the bottom of the detention (dry) basin also.

Specific plant communities require different levels of maintenance. Upland and floodplain terrace areas require very little maintenance, while aquatic or emergent vegetation may need periodic thinning or reinforcement planting. After the first growing season it should be obvious if reinforcement planting is needed. If they are, they should be installed at the onset of the second growing season after construction.

Debris and Litter Removal:

Debris and litter will accumulate near the inflow points and around the outlet control structure. Such material should be removed periodically. Significant accumulation can clog the low-flow outlet and the upper control opening.

Sediment Removal:

Sediment deposition should be continually monitored in the basin. Removal of accumulated sediment is extremely important, however, before any sediment is removed from the basin bottom or channel, the MS4 community should be contacted. A significant accumulation of sediment impairs the pollutant removal capabilities of the basin by reducing the available storage for water quality volume and / or reducing the available volume for the shallow marsh.

Because this basin will function as a floodplain, most sediment will be deposited in the vegetated areas. It is anticipated that accumulated sediment will need to be removed from the basin every 5 to 15 years. More frequent cleaning of the area around the low-flow orifice may be required. **During maintenance procedures, ensure that any pumping of standing water or dewatering of dredged sediments complies with state and local requirements.**

NOTE: Owner, operators, and maintenance authorities should be aware that significant concentrations of heavy metals (e.g. lead, zinc and cadmium) and some organics, such as pesticides, may be expected to accumulate at the bottom of the basin. Testing of sediment, especially near points of inflow, should be conducted regularly and **before disposal** to find the leaching potential and level of accumulation of hazardous materials. Disposal methods must comply with the health department requirements of the MS4 community.

Safety Measures:

Any safety measures (safety fence, etc.) deemed appropriate and installed by the developer at the time of construction must be inspected and maintained as necessary to ensure their continued function.

General inspections:

In addition to frequencies stated above, basins and their components should be inspected annually to ensure that they operate in the manner intended. If possible, inspections should be conducted during wet weather to determine if the extended-detention time is being achieved. Inspections should be conducted by a qualified individual following the provided checklist

POST CONSTRUCTION INSPECTION SCHEDULE

Practice Item	Frequency	Notes
General Inspections	Annually	See above information
Embankment	Every 6 Months	For the first 2 years following construction, then annually
Principle Spillway, Emergency Spillway	Annually	
Sediment Removal	As Needed	Contact MS4 before removing sediment
Vegetation	As Needed	Mow as needed
Debris & Litter	As Needed	

At the end of LTMP, All supporting documentation (SWP3, plan sheets which include design information of selected Post Construction BMP's, and Water Quality Calculations should be Attached in 11x17 format.