Standard Guidelines for Operation and Maintenance of Stormwater BMPs

FEBRUARY 2019
Standard Guidelines for Operation and Maintenance of Stormwater BMPs

DNREC
Sediment and Stormwater Program
PREAMBLE

This guidance document consists of material extracted from the Post Construction Stormwater BMP Standards & Specifications. All of the material contained in the document has been reviewed and approved by DNREC staff and by the Regulatory Advisory Committee (RAC). The distinction between mandatory and voluntary language has been made pursuant to the ruling of the Court in *Baker v. DNREC*. Pursuant to the Court’s ruling, all standards and criteria and other provisions of the former Technical Guidance Document that mandate compliance have been incorporated into the official Regulations. These provisions appear in **bold** font here for the convenience of users, together with the supporting advisory materials in regular font.
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1.0 Infiltration Practices

Typical Maintenance Items and Frequency for Infiltration Practices

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Maintenance Items</th>
</tr>
</thead>
</table>
| As needed        | • Replace topsoil and top surface filter fabric (when clogged).  
                   • Mow vegetated filter strips as necessary and remove the clippings.                                                                    |
| Quarterly        | • Ensure that the contributing drainage area, inlets, and facility surface are clear of debris.  
                   • Ensure that the contributing drainage area is stabilized. Perform spot-reseeding if where needed.  
                   • Remove sediment and oil/grease from inlets, pretreatment devices, flow diversion structures, and overflow structures.  
                   • Repair undercut and eroded areas at inflow and outflow structures.                                                                         |
| Semi-annual      | • Check inspection ports 3 days after a storm event in excess of 1/2 inch in depth. Standing water observed in the observation port after three days is a clear indication of clogging.  
                   • Inspect pretreatment devices and diversion structures for sediment build-up and structural damage.  
                   • Remove trees that start to grow in the vicinity of the infiltration facility that may drop leaf litter, fruits and other vegetative materials that could clog the infiltration device. |
| Annually         | • Clean out accumulated sediments from the pretreatment cell.                                                                                   |
## 2.0 Bioretention

### Typical Maintenance Items and Frequency for Bioretention

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Maintenance Items</th>
</tr>
</thead>
</table>
| **During establishment, as needed (first year)** | • Inspect the site after storm event that exceeds 0.5 inches of rainfall.  
• Stabilize any bare or eroding areas in the contributing drainage area including the bioretention perimeter area  
• Fertilizer application should be kept to a minimum during establishment. **Supplemental fertilizer applications shall consist of a 0% phosphorus formulation only as needed to maintain plant vigor.**  
• Water trees and shrubs planted in the bioretention planting bed during the first growing season. In general, water every 3 days for first month, and then weekly during the remainder of the first growing season (April - October), depending on rainfall. |
| **Quarterly or after major storms (>1 inch of rainfall)** | • Remove debris and blockages  
• Repair undercut, eroded, and bare soil areas |
| **Twice a year** | • Mowing of the bioretention vegetated perimeter area and banks (as directed in approved O&M plan) |
| **Annually** | • Cleanup to remove trash, debris and floatables  
• A full maintenance review  
• Check condition of outlet structure  
• Repair broken mechanical components, if needed |
| **One time – during the second year following construction** | • Bioretention planting bed replacement/reinforcement plantings |
| **Every 5 to 7 years** | • Forebay sediment removal (as applicable)  
• Flush underdrain system (as applicable) |
| **From 5 to 25 years** | • Repair pipes, outlet structure and spillway, as needed  
• Remove any accumulated sediment within facility, as needed |

**Effective February 2019**
### 3.0 Permeable Pavement

Typical Maintenance Items and Frequency for Permeable Pavement

<table>
<thead>
<tr>
<th>Frequency¹</th>
<th>Maintenance Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>After installation</td>
<td>- For the first 6 months following construction, the practice and CDA should be inspected at least twice and after storm events that exceed 1/2 inch of rainfall. Conduct any needed repairs or stabilization.</td>
</tr>
<tr>
<td>As needed during the growing season</td>
<td>- Mow grass in grid paver applications</td>
</tr>
</tbody>
</table>
| As needed | - Stabilize the contributing drainage area to prevent erosion  
- Remove any soil or sediment deposited on pavement.  
- Replace or repair any necessary pavement surface areas that are degenerating or spalling |
| 2-4 times per year (depending on use) | - Vacuum pavement with a standard street sweeper to prevent clogging |
| Annually | - Conduct a maintenance inspection  
- Spot weeding of grass applications |
| Once every 2 to 3 years | - Remove any accumulated sediment in pretreatment cells and inflow points |
| If clogged | - Conduct maintenance using a regenerative street sweeper  
- Replace any necessary joint material |
| As needed | - Locate snow storage piles in adjacent grassy areas so that sediments and pollutants in snowmelt are deposited before they reach the permeable pavement |
| As needed | - Do not apply sand or cinders over permeable pavement drainage area |

¹ Required frequency of maintenance will depend on pavement use, traffic loads, and surrounding land use.
## 4.0 Vegetated Roofs

Typical Maintenance Items and Frequency for Vegetated Roofs

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Maintenance Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Needed</td>
<td>• Water to promote plant growth and survival.</td>
</tr>
<tr>
<td></td>
<td>• Replace dead or dying vegetation (may include transplantation, new plant installation, or distribution of seed or cuttings.)</td>
</tr>
<tr>
<td>Semi-Annually</td>
<td>• Inspect the waterproof membrane flashings for leaking or cracks.</td>
</tr>
<tr>
<td></td>
<td>• Fertilization (annually, or semi-annually, based on soil test.</td>
</tr>
<tr>
<td></td>
<td>• Hand weeding to remove invasive plants (no digging or using pointed tools).</td>
</tr>
<tr>
<td></td>
<td>• Check roof drains, scuppers and gutters to ensure they are not overgrown or have organic matter deposits. Remove any accumulated organic matter or debris.</td>
</tr>
<tr>
<td></td>
<td>• Replace any dead or dying vegetation.</td>
</tr>
</tbody>
</table>
## 5.0 Rainwater Harvesting

Typical Maintenance Items and Frequency for Rainwater Harvesting

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Maintenance Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twice a year</td>
<td>• Keep gutters, downspouts, and conveyance pipes free of leaves and other debris</td>
</tr>
<tr>
<td>Four times a year</td>
<td>• Inspect and clean pretreatment devices</td>
</tr>
<tr>
<td>Once a year</td>
<td>• Inspect and clean cistern lids, paying special attention to vents and screens on inflow and outflow spigots.</td>
</tr>
<tr>
<td></td>
<td>• Check mosquito screens and patch holes or gaps immediately</td>
</tr>
<tr>
<td>Once a year</td>
<td>• Inspect condition of overflow pipes, overflow filter path and/or secondary stormwater treatment practices</td>
</tr>
<tr>
<td>Every third year</td>
<td>• Inspect cistern for sediment buildup</td>
</tr>
<tr>
<td>Every third year</td>
<td>• Check integrity of backflow preventer</td>
</tr>
<tr>
<td>Every third year</td>
<td>• Inspect structural integrity of cistern, pump, pipe and electrical system</td>
</tr>
<tr>
<td>As needed</td>
<td>• Replace damaged or defective system components</td>
</tr>
<tr>
<td>As needed</td>
<td>• Clear overhanging vegetation and trees over impervious surface</td>
</tr>
</tbody>
</table>

Effective February 2019
6.0 Restoration Practices

Maintenance of Restoration Practices varies depending on the site conditions, vegetation and other design factors. Projects including Restoration Practices typically include a site specific Operations and Maintenance Plan. The DNREC Sediment & Stormwater Program should be contacted for further guidance in cases where an O&M Plan was not developed.
7.0 Rooftop Disconnection

Maintenance of Rooftop Disconnection areas involves the regular lawn or landscaping maintenance in the filter path from the rooftop to the street. In some cases, runoff from a Rooftop Disconnection may be directed to a more natural, undisturbed setting (i.e., where lot grading and clearing is “fingerprinted” and the proposed filter path is protected).

The rooftop disconnection area shall be maintained in a stabilized vegetative condition.
Ensure that downspouts remain disconnected and pervious filtering/infiltrating areas are not converted to impervious surface.
8.0 Vegetated Channels

Typical Maintenance Items and Frequency for Vegetated Channels

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Maintenance Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>As needed</td>
<td>• Mow vegetated channels during the growing season to maintain minimum grass height of 4&quot;.</td>
</tr>
<tr>
<td>Quarterly</td>
<td>• Ensure that the contributing drainage area, inlets, and facility surface are clear of debris.</td>
</tr>
<tr>
<td></td>
<td>• Ensure that the contributing drainage area is stabilized. Perform spot-reseeding if and where needed.</td>
</tr>
<tr>
<td></td>
<td>• Remove accumulated sediment and oil/grease from inlets, pretreatment devices, flow diversion structures, and overflow structures.</td>
</tr>
<tr>
<td></td>
<td>• Repair undercut and eroded areas at inflow and outflow structures.</td>
</tr>
<tr>
<td>Annual inspection</td>
<td>• Add reinforcement planting to maintain 90% vegetative cover. Reseed any salt-killed vegetation.</td>
</tr>
<tr>
<td></td>
<td>• Remove any accumulated sand or sediment deposits behind check dams.</td>
</tr>
<tr>
<td></td>
<td>• Inspect upstream and downstream of check dams for evidence of undercutting or erosion and remove trash or blockages at weep holes.</td>
</tr>
<tr>
<td></td>
<td>• Examine channel bottom for evidence of erosion, braiding, excessive ponding, or dead grass.</td>
</tr>
<tr>
<td></td>
<td>• Check inflow points for clogging and remove any sediment.</td>
</tr>
<tr>
<td></td>
<td>• Inspect side slopes and pretreatment areas for evidence of any rill or gully erosion and repair.</td>
</tr>
<tr>
<td></td>
<td>• Look for any bare soil or sediment sources in the contributing drainage area and stabilize immediately.</td>
</tr>
</tbody>
</table>
Typical Maintenance Items and Frequency for Sheet Flow to Filter Strips or Open Space

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Maintenance Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>During establishment, as needed</td>
<td>• Inspect the site after storm event that exceeds 0.5 inches of rainfall.</td>
</tr>
<tr>
<td>(first year)</td>
<td>• Stabilize any bare or eroding areas</td>
</tr>
<tr>
<td></td>
<td>• Water trees and shrubs during the first growing season. In general, water every 3 days for first month, and then weekly during the remainder of the first growing season (April - October), depending on rainfall.</td>
</tr>
<tr>
<td>Quarterly or after major storms</td>
<td>• Repair-eroded, and/or bare soil areas</td>
</tr>
<tr>
<td>(&gt;1 inch of rainfall)</td>
<td></td>
</tr>
<tr>
<td>Twice a year</td>
<td>• Mowing of the grassed filter strip or grassed open space</td>
</tr>
<tr>
<td></td>
<td>• Inspect and treat for invasive species as needed</td>
</tr>
<tr>
<td>Annually</td>
<td>• Remove trash and debris</td>
</tr>
<tr>
<td></td>
<td>• A full maintenance review</td>
</tr>
</tbody>
</table>
10.0 Detention Practices

Typical Maintenance Items and Frequency for Detention Practices

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Maintenance Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>During establishment, as needed</td>
<td>• Water Dry Detention Pond and Dry ED Basin side slopes and bottom area to promote vegetation growth and survival</td>
</tr>
<tr>
<td>(first year)</td>
<td></td>
</tr>
<tr>
<td>Quarterly or after major storms</td>
<td>• Remove sediment and oil/grease from inlets, pre-treatment devices, flow diversion structures, storage practices and overflow structures.</td>
</tr>
<tr>
<td>(&gt;1 inch of rainfall)</td>
<td>• Ensure that the contributing drainage area, inlets, and facility surface are clear of debris.</td>
</tr>
<tr>
<td></td>
<td>• Ensure that the contributing drainage area is stabilized. Perform spot-reseeding where needed.</td>
</tr>
<tr>
<td></td>
<td>• Repair undercut and eroded areas at inflow and outflow structures.</td>
</tr>
<tr>
<td>Annually</td>
<td>• Measure sediment accumulation levels in forebay. Remove sediment when 50% of the forebay capacity has been lost.</td>
</tr>
<tr>
<td></td>
<td>• Inspect the condition of stormwater inlets for material damage, erosion or undercutting. Repair as necessary.</td>
</tr>
<tr>
<td></td>
<td>• Inspect the banks of upstream and downstream channels for evidence of sloughing, animal burrows, boggy areas, woody growth, or gully erosion that may undermine pond embankment integrity.</td>
</tr>
<tr>
<td></td>
<td>• Inspect outfall channels for erosion, undercutting, rip-rap displacement, woody growth, etc.</td>
</tr>
<tr>
<td></td>
<td>• Inspect condition of principal spillway and riser for evidence of spalling, joint failure, leakage, corrosion, etc.</td>
</tr>
<tr>
<td></td>
<td>• Inspect condition of all trash racks, flashboard risers, and other appurtenances for evidence of clogging, leakage, debris accumulation, etc.</td>
</tr>
<tr>
<td></td>
<td>• Inspect maintenance access to ensure it is free of debris or woody vegetation, and check to see whether valves, manholes and locks can be opened and operated.</td>
</tr>
<tr>
<td></td>
<td>• Inspect internal and external side slopes of Dry Detention Ponds for evidence of sparse vegetative cover, erosion, or slumping, and make needed repairs immediately.</td>
</tr>
<tr>
<td></td>
<td>• Monitor the growth of trees and shrubs planted in Dry Detention Ponds. Remove invasive species and replant vegetation where necessary to ensure dense coverage.</td>
</tr>
</tbody>
</table>
11.0 Stormwater Filtering Systems

Typical Maintenance Items and Frequency for Stormwater Filtering Systems

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Maintenance Items</th>
</tr>
</thead>
</table>
| During establishment, as needed (first year) | • Inspect the site after storm event that exceeds 0.5 inches of rainfall.  
• Stabilize any bare or eroding areas in the contributing drainage area including the Stormwater Filtering System perimeter area |
| Quarterly or after major storms (>1 inch of rainfall) | • Remove debris and blockages  
• Repair undercut, eroded, and bare soil area |
| Twice a year                 | • Mowing of the Stormwater Filtering System vegetated perimeter area as applicable |
| Annually                     | • Cleanup to remove trash, debris and floatables  
• A full maintenance review  
• Review condition of structural components  
• Repair broken mechanical components, if needed |
| Every 5 to 7 years           | • Forebay sediment removal (as applicable)  
• Flush underdrain system (as applicable) |
| From 5 to 25 years           | • Repair pipes and structural components as needed  
• Remove any accumulated sediment within facility, as needed |
## 12.0 Constructed Wetlands

Typical Maintenance Items and Frequency for Constructed Wetlands

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Maintenance Items</th>
</tr>
</thead>
</table>
| During establishment, as needed  (first year) | • Stabilize any bare or eroding areas in the contributing drainage area, wetland buffer and in wetland cells.  
• Water trees and shrubs planted in the buffer and on wetland islands during the first growing season. In general, water every 3 days for first month, and then weekly during the remainder of the first growing season (April - October), depending on rainfall.  
• Provide reinforcement plantings as needed.  
• Noxious plants and undesired invasive plants should be dealt with as soon as they begin to colonize the wetland. As a general rule, control of noxious weeds and undesirable invasive species (e.g., cattails and Phragmites) should commence as soon as they are spotted and before their coverage exceeds more than 5% of a wetland cell area. Herbicides must be applied by a Certified aquatic pesticide applicator through the Department of Agriculture and be aquatic safe (i.e., Glyphosate-based products). Extended periods of dewatering may also work because early manual removal provides only short-term relief from invasive species. |
| Annually, On-Going | • Regular mowing operations only need to occur along maintenance access ways and should occur at minimum twice a year.  
• Reference the Landscape Plan for additional requirements; some upland meadow areas may also require occasional mowing. |
| Every 2 years | • Remove woody species on or near the embankment, structural components such as inflow and outflow pipes, and maintenance access areas |
| Every 5 to 7 years | • Thinning or harvesting of excess forest growth will be needed periodically to guide the forested wetland into a more mature state and prevent it from becoming overgrown.  
• **Sediment removal in the pretreatment forebays occur when 50% of total forebay capacity has been lost.**  
• **The Department or the Delegated Agency shall be notified before a Constructed Wetland is drained.** |
Typical Maintenance Items and Frequency for Wet Ponds

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Maintenance Items</th>
</tr>
</thead>
</table>
| During establishment, as needed (first year) | • Inspect the site after storm event that exceeds 0.5 inches of rainfall.  
• Stabilize any bare or eroding areas in the contributing drainage area including the Wet Pond perimeter area  
• Water trees and shrubs planted in the Wet Pond vegetated perimeter area during the first growing season. In general, water every 3 days for first month, and then weekly during the remainder of the first growing season (April - October), depending on rainfall. |
| Quarterly or after major storms (>1 inch of rainfall) | • Remove debris, trash and blockages  
• Repair undercut, eroded, and bare soil areas |
| Twice a year                   | • Mowing of the Wet Pond vegetated perimeter area and embankment                  |
| Annually                       | • Shoreline cleanup to remove trash, debris and floatables  
• A full maintenance review  
  ▪ Open up the riser to access and test the valves  
  ▪ Repair broken mechanical components, if needed |
| Every 5 to 7 years             | • Forebay sediment removal                                                        |
| From 5 to 25 years             | • Repair pipes, riser, spillway, and embankment as needed  
• Remove sediment from Wet Pond area outside of forebays |
## 14.0 Soil Amendments

### Typical Maintenance Items and Frequency for Soil Amendments

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Maintenance Items</th>
</tr>
</thead>
</table>
| During establishment, as needed (first year)| • Inspect the site after storm event that exceeds 0.5 inches of rainfall.  
• Stabilize any bare or eroding areas in the contributing drainage area and the Soil Amendment area.  
• Water trees and shrubs planted in the Soil Amendment area. In general, water every 3 days for first month, and then weekly during the remainder of the first growing season (April - October), depending on rainfall.  
• Conduct weed and invasive plant control   |
| Quarterly or after major storms (>1 inch of rainfall) | • Repair eroded and bare soil areas  
• Conduct weed and invasive plant control |

Effective February 2019
15.0 Proprietary Practices

In order to ensure effective and long-term performance of a Proprietary Practice, regular maintenance tasks and inspections are recommended. All Proprietary Practices shall be inspected and maintained in accordance with the manufacturer’s instructions and recommendations.
16.0 Source Controls

The Delaware Nutrient Management Law requires any person who owns, leases, or otherwise controls 10 acres to which nutrients are applied to develop a nutrient management plan for those lands. Nutrient management plans must be updated every three years or when significant alterations to the nutrient application occurs. In addition the Law requires anyone who applies nutrients to lands or water in excess of 10 acres to have certification endorsed by the Delaware Nutrient Management Commission. **To receive nutrient management pollutant reduction performance credits, sites must fully comply with the requirements of the Delaware Nutrient Management Law through implementation of a nutrient management plan.**

The ability of Street Sweeping to measurably reduce pollutant loadings is highly dependent on its frequency. The assumption is that there is a nitrogen, phosphorus, and sediment reduction when the same section of a street is swept approximately every two weeks, or 25 times a year. When a street is swept periodically and less than every two weeks, the accumulated matter can be mobilized and moved into the stream system with any rainfall.
## 17.0 Afforestation

### Typical Maintenance Items and Frequency for Afforestation

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Maintenance Items</th>
</tr>
</thead>
</table>
| During establishment, Year 1 | • Conduct weed and invasive plant control prior to planting  
• Mow once during first year; twice second year  
• Assess monthly for watering need during growing season  
• Assess survivability during September 1 – September 30  
• Perform reinforcement planting the following Spring if survival rate falls below 65% |
| Year 2                | • Mow twice to control weeds and competing undergrowth  
• Assess to determine if target 200 live trees per acre 6” or higher has been achieved  
• Perform reinforcement planting the following Spring if target has not been met |
| Annually, after Year 2 | • Mow as needed to control weeds and competing undergrowth  
• Control invasive plants using appropriate methods |
| Year 7                | • Assess to determine if target 100 trees per acre with 50% having 2” DBH has been achieved  
• If target has not been met, use adaptive management techniques to maximize survivability of existing trees and add reinforcement plantings as needed |
| Year 15               | • Assess to determine if target 100 trees per acre with 2” DBH has been achieved  
• If target has not been met, re-evaluate afforestation plan and adjust as needed |

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Maintenance Review Checklists

NOTE: Fillable PDF Forms are available for all Maintenance Review Checklists. Contact DNREC, Sediment & Stormwater Program for additional information.
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1.0 Infiltration Practices

**Project ID** ________________  **County** ________________

**Site name:** ____________________________________________________________

**General Location of BMP** ______________________________________________

**Ownership:**
- [ ] Private
- [ ] Public

**BMP Variant:**
- [ ] Basin
- [ ] Trench

**Type of Site:**
- [ ] Residential
- [ ] Commercial
- [ ] Industrial
- [ ] State

**Other site notes:**

---

**Review date** ____________  **Review time** ____________  **Reviewer** ________________

**Post Construction Verification Docs available:**  [ ] Y  [ ] N  **Date of last review** ________________

---

### Nature of Problem

<table>
<thead>
<tr>
<th>Nature of Problem</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control of erosion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upland drainage area</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>Trench basin area</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>BMP outlet</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>BMP bottom</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
</tbody>
</table>

**Other Notes:**

---

### Nature of Problem

<table>
<thead>
<tr>
<th>Nature of Problem</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control of sediment accumulation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forebay /Pretreatment inlet areas</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>Forebay /Pretreatment inlet pipes</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>Trench/Basin area</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>Condition of the riprap at BMP outlet</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
</tbody>
</table>

**Other Notes:**
Noxious weeds/unwanted trees

☐ None
☐ Phragmites % coverage _____
☐ Cattail % coverage _____
☐ Trees % coverage _____
☐ Other % coverage _____

Other Notes:

Trash & litter in BMP?
☐ No
☐ Yes (where):

Is seeding required?
☐ No
☐ Yes (where):

Is the mowing height too low?
☐ No
☐ Yes (where):

Recommended mowing height

Forebay /Pretreatment area trapping sediment?
☐ No
☐ Yes

Forebay >50% of storage volume remaining?
☐ No
☐ Yes

Surface of aggregate clean?
☐ No
☐ Yes

Trench dewatering between storms?
☐ No
☐ Yes
☐ Undetermined
Overall BMP Condition

Good ☐  Fair ☐  Poor ☐

**Required** Corrective Action(s) Compiled from the notes within the report:

Action To Be Completed By (Date): ____________________________

Reviewer’s Signature: ____________________________
2.0 Bioretention

Project ID ___________________________     County ___________________________

Site name: ________________________________

General Location of BMP ________________________________

Ownership:     BMP Variant:     Configuration:     Type of Site:     

- Private     Traditional Bioretention     Underdrain     Residential
- Public     In-Situ (Rain Garden)     Infiltrating     Commercial
- Stormwater Planter
- Other: ___________________________

Other site notes: ________________________________

Review date ______________    Review time ______________    Reviewer ___________________________

Post Construction Verification Docs available:  □ Y  □ N    Date of last review ______________

____________________________________________________________________________________________

Nature of Problem     Good    Fair    Poor    Notes

- Drainage Area to Bioretention Cell
  - Control of Trash / Debris
  - Condition of Vegetation
  - Control of Erosion
  - Condition of Inflow Pipes
  - Condition of Outlet
  - Condition of Underdrain and Cleanouts

Other Notes: ________________________________

____________________________________________________________________________________________

Nature of Problem     Good    Fair    Poor    Notes

- Control of the Pretreatment Practices
  - Stone Diaphragm Level
  - Stone Diaphragm clogged
  - Grass filter Strip Erosion
  - Evidence of Short Circuiting, rills/gullies

Other Notes: ________________________________
Trash & litter in BMP

☐ No
☐ Yes (where):

Plant composition according to plans

☐ No
☐ Yes
☐ Undetermined

Additional Plantings required

☐ No
☐ Yes (where):

Mulched as per the Plan?

☐ No
☐ Yes

Ponding more than 2 days after rain

☐ No
☐ Yes
☐ Undetermined

Other Notes:

Note: A qualified professional must treat disease plants. Deficient stakes or wires must be replaced. Dead plants or plants beyond treatment must be replaced by plants meeting original specifications. New plants must be watered every day for the first 14 days after planting

Noxious weeds/unwanted trees

☐ None
☐ Phragmites % coverage _____ Notes
☐ Cattail % coverage _____
☐ Trees % coverage _____
☐ Other % coverage _____

Other Notes:
Overall BMP Condition

<table>
<thead>
<tr>
<th></th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
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</table>

Required Corrective Action(s) Compiled from the notes within the report:

Action To Be Completed By (Date): __________________________

Reviewer’s Signature: __________________________
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3.0 Permeable Pavement Systems

Project ID ______________________________ County ______________________________

Site name: ________________________________________________________________

General Location of BMP ______________________________________________________

Ownership:                                                                

☐ Private
☐ Public

BMP Variant:                                                             

☐ Porous Asphalt
☐ Pervious Concrete
☐ Interlocking Concrete Pavers
☐ Concrete Grid Pavers
☐ Plastic Grid Pavers

Type of Site:

☐ Residential
☐ Commercial
☐ Industrial
☐ State

Other site notes:

Review date ___________ Review time ___________ Reviewer ______________________

Post Construction Verification Docs available: ☐ Y ☐ N Date of last review ___________

Erosion and sedimentation

Control of erosion entering permeable surface ☐ ☐ ☐ _________________
Stabilization of surrounding area ☐ ☐ ☐ _________________
Control of sediment at pre-treatment cells ☐ ☐ ☐ _________________
General condition of surface due to sweeping ☐ ☐ ☐ _________________

Control/Condition of Vegetation

Vegetation control for non-vegetated practices ☐ ☐ ☐ _________________
Condition of vegetation for vegetated practices ☐ ☐ ☐ _________________
Grass filter strip erosion ☐ ☐ ☐ _________________

Underdrains and cleanouts (if applicable)

Evidence of subsurface clogging? ____________________________________________
Condition of observation ports and observations of ponding water: ________________

Overflow (if applicable)

Type of device: _____________________________________________________________
Condition of device: _______________________________________________________

Other Observations:
Check each box below that applies and provide observations for each.

Evidence of:
- Sealing products applied to the permeable surface
- Power washing
- Storage of materials on the surface, ie, soils, plowed snow, sand, mulch
- Any type of construction staging on the surface
- Re-surfacing over the permeable surface
- General wear of the surface
- Areas of water ponding
- Excessive petroleum products
- Other ________________________________

Other Observations:

Overall BMP Condition

<table>
<thead>
<tr>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
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</table>

**Required** Corrective Action(s) Compiled from the notes within the report:

Action To Be Completed By (Date): ____________________________

Reviewer’s Signature: ____________________________

Effective February 2019
### 4.0 Vegetated Roofs

**Project ID** __________________________ **County** __________________________

**Site name:** __________________________

**General Location of BMP** __________________________

---

**Ownership:**

- [ ] Private
- [ ] Public

**BMP Variant:**

- [ ] Shallow growing (Extensive)
- [ ] Deep growing (Intensive)

**Type of Site:**

- [ ] Residential
- [ ] Commercial
- [ ] Industrial
- [ ] State

---

**Other site notes:**

---

**Review date** __________ **Review time** __________ **Reviewer** ________________

**Post Construction Verification Docs available:** [ ] Y  [ ] N **Date of last review** ________________

---

<table>
<thead>
<tr>
<th>Nature of Problem</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof Drains</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control of organic deposits in drains</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gutters are clear of debris/trash/overgrowth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General condition of plantings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control of weeds/invasive species</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant composition consistent with the Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil media depth consistent with the Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof Membrane</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Evidence of subsurface clogging</td>
<td></td>
<td></td>
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**Other Notes:**

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Effective February 2019
### Overall BMP Condition

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**Required** Corrective Action(s) Compiled from the notes within the report:

---

Action To Be Completed By (Date): __________________________

Reviewer’s Signature: ________________________________
## 5.0 Rainwater Harvesting

Project ID ______________________________  County ______________________________

Site name: ______________________________

General Location of BMP ______________________________

### Ownership:
- [ ] Private
- [ ] Public

### BMP Variant:
- [ ] Seasonal System
- [ ] Continuous Use

### Location:
- [ ] Above ground
- [ ] Below ground

### Type of Site:
- [ ] Residential
- [ ] Commercial
- [ ] Industrial
- [ ] State

**Other site notes:**

Review date ____________  Review time ____________  Reviewer ______________

Post Construction Verification Docs available: [ ] Y  [ ] N  Date of last review ______________

---

### Nature of Problem

<table>
<thead>
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<th>Nature of Problem</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rooftop conveyance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conveyance free of debris</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>Condition of gutters/downspouts</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>Integrity of the tank top, spigots, screens, and vents</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>General integrity of the tank, pump, pipe</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
</tbody>
</table>

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**Other Notes:**

- Sediment in tank (if accessible) ______________________________
- Presence of overhanging trees over the rooftop ______________________________
These proprietary systems generally require a qualified inspector as determined by the manufacturer. The following observations compile the limitations of this review. The owner is responsible for the system maintenance review of all the components conducted at the frequency prescribed by the manufacturer. The maintenance review conducted by a qualified inspector must be submitted to the local Delegated Agency and/or DNREC.

Observations:

<table>
<thead>
<tr>
<th>Overall BMP Condition</th>
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**Required** Corrective Action(s) Compiled from the notes within the report: The observations section cites the limits of this maintenance review.

Action To Be Completed By (Date): ________________________________

Reviewer’s Signature: _________________________________________

Effective February 2019
7.0 Rooftop Disconnection

Project ID ___________________________ County ___________________________

Site name: ___________________________

General Location of BMP ___________________________

Ownership: Type of Site:

☐ Private
☐ Residential
☐ Public
☐ Commercial
☐ Industrial
☐ State

Other site notes:

Review date ____________ Review time ____________ Reviewer _______________________

Post Construction Verification Docs available: ☐ Y ☐ N Date of last review ____________

Nature of Problem Good Fair Poor Notes

• Erosion control ☐ ☐ ☐ _______________________
• Condition of vegetation ☐ ☐ ☐ _______________________
• Control of compaction ☐ ☐ ☐ _______________________

Other Notes:

• Seeding Required?
  ☐ No
  ☐ Yes (where)

• Ponding evident in the infiltration/filtration area?
  ☐ No
  ☐ Yes (where)

• Unauthorized impervious area located inside the rooftop disconnection BMP?
  ☐ No
  ☐ Yes (where)

Additional Notes:

Effective February 2019
Overall BMP Condition

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<tr>
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**Required** Corrective Action(s) Compiled from the notes and observations within the report:

Action To Be Completed By (Date): ____________________________

Reviewer’s Signature: _________________________________
8.0 Vegetated Channels

Project ID ___________________________    County ___________________________

Site name: _____________________________

General Location of BMP _____________________________

Ownership:          BMP Variant:          Type of Site:

☐ Private            ☐ Bioswale              ☐ Residential
☐ Public             ☐ Grassed Channel        ☐ Commercial

Other site notes:

Review date ___________    Review time ___________    Reviewer ___________________________

Post Construction Verification Docs available: ☐ Y ☐ N    Date of last review ___________________________

Nature of Problem

☐ Erosion Control

Good      Fair      Poor      Notes
☐ ☐ ☐ ___________________________

Other Notes:

☐ Condition of Vegetation

Good      Fair      Poor      Notes
☐ ☐ ☐ ___________________________

Other Notes:

☐ Seeding Required?

☐ No
☐ Yes (where):__________________________

Recommended species:__________________________

☐ Ponding evident in channel?

☐ No
☐ Yes (where):__________________________

☐ Presence of Trash/debris?

☐ No
☐ Yes (where):__________________________
• Mowing height too low?
  □ No
  □ Yes (where):__________________________________________

  Recommended mowing height:____________________________________

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<tr>
<th>Overall BMP Condition</th>
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<th>Fair</th>
<th>Poor</th>
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**Required** Corrective Action(s) Compiled from the notes and observations within the report:

Action To Be Completed By (Date): ________________________________

Reviewer’s Signature: __________________________________________
### 9.0 Sheet Flow to Filter Strip or Open Space

**Project ID** ___________________________  **County** ___________________________

**Site name:** ________________________________________________________________

**General Location of BMP** __________________________________________________

<table>
<thead>
<tr>
<th>Ownership:</th>
<th>BMP Variant:</th>
<th>Vegetation Type:</th>
<th>Type of Site:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Private</td>
<td>☐ Filter Strip</td>
<td>☐ Grassed</td>
<td>☐ Residential</td>
</tr>
<tr>
<td>☐ Public</td>
<td>☐ Open Space</td>
<td>☐ Afforested</td>
<td>☐ Commercial</td>
</tr>
</tbody>
</table>

**Other site notes:**

**Review date** ________  **Review time** ________  **Reviewer** _______________________

**Post Construction Verification Docs available:** ☐ Y  ☐ N  **Date of last review** ____________

---

#### Nature of Problem

- Erosion Control

<table>
<thead>
<tr>
<th>Good</th>
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<th>Poor</th>
<th>Notes</th>
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<td>☐</td>
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**Other Notes:**

- Condition of Vegetation

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<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Notes</th>
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</table>

**Other Notes:**

- Seeding Required?
  - ☐ No
  - ☐ Yes (where): ___________________________________________________________________

**Recommended species:** ___________________________________________________________________

- Ponding evident?
  - ☐ No
  - ☐ Yes (where): ___________________________________________________________________

- Presence of Trash/debris?
  - ☐ No
  - ☐ Yes (where): ___________________________________________________________________
- Mowing height too low?
  - ☐ No
  - ☐ Yes (where): ________________________________

  Recommended mowing height: __________________________

<table>
<thead>
<tr>
<th>Overall BMP Condition</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
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**Required** Corrective Action(s) Compiled from the notes and observations within the report:

Action To Be Completed By (Date): ________________________________

Reviewer’s Signature: ________________________________
10.0 Detention Practices

Project ID ____________________________  County ____________________________

Site name: ____________________________

General Location of BMP ____________________________

Ownership:  
☐ Private  ☐ Public

BMP Variant:  
☐ Dry Detention Pond  ☐ Dry Extended Detention Pond  ☐ Underground Detention Facility

Pond Code 378 Type:  
☐ Embankment  ☐ Combination  ☐ N/A

Type of Site:  
☐ Residential  ☐ Commercial  ☐ Industrial  ☐ State

Other site notes:

Review date ___________  Review time ___________  Reviewer ____________________________

Post Construction Verification Docs available:  ☐ Y  ☐ N  Date of last review ____________

Nature of Problem

- Access
  - Min. 10’ access to facility (condition)  ☐  ☐  ☐  ____________________________
  - Access to inlets/outlets  ☐  ☐  ☐  ____________________________
  - Sediment set aside area  ☐  ☐  ☐  ____________________________

Other Notes:

Control of erosion

- Top of slope  ☐  ☐  ☐  ____________________________
- Side slope and buffer  ☐  ☐  ☐  ____________________________
- Inlet structures or channels  ☐  ☐  ☐  ____________________________
- Outlet channel  ☐  ☐  ☐  ____________________________
- Emergency spillway  ☐  ☐  ☐  ____________________________

Other Notes:
### Control of sediment accumulation

<table>
<thead>
<tr>
<th></th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pond bottom</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Forebay</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Inlet structures or channels</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Outlet structures or channels</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Side slope and buffers</td>
<td>☐</td>
<td>☐</td>
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</table>

**Other Notes:**

### Control of riprap

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<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Outlet channel</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Inlet channel</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Other locations</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</table>

**Concrete riser and trash rack (if applicable)**

<table>
<thead>
<tr>
<th></th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Spalling/Cracking</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Exposed reinforcing</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Debris deposit on trash rack</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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**Metal riser and trash rack (if applicable)**

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<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Rusting</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Leaking joint(s)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Debris deposit on trash rack</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
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</tbody>
</table>

**Other Notes:**

Trash & litter in BMP

- ☐ No
- ☐ Yes (where):

Additional vegetative stabilization needed

- ☐ No
- ☐ Yes (where):

Animal burrows or trees creating potential stability problems

- ☐ No
- ☐ Yes (where):

Effective February 2019
Buffer being maintained (if applicable)

- No
- Yes

Other Notes:

- Noxious weeds/unwanted trees
  - None
  - Phragmites % coverage ___ Notes
  - Cattail % coverage ___
  - Trees % coverage ___
  - Other % coverage ___

Other Notes:

Embankment Ponds Only

- Condition of embankment
  - No issues
  - Longitudinal cracks
  - Transverse cracks
  - Local depression or bulges
  - Settlement
  - Misalignment
  - Seepage at toe of slope
  - Boils at toe of slope

Other Notes:
## Underground Detention Practices Only

<table>
<thead>
<tr>
<th></th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Acess</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manholes/Catch basins</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Access to upstream catch basins/manholes</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
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</tbody>
</table>

### Other Notes:

- Structural issues related to catch basin/weir, manhole, chambers, headers or observation ports

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## Sediment/trash/debris accumulation

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<th>Good</th>
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<th>Poor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catch basin(s)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Manhole(s)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Isolator row or similar structure</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Accumulation in observation ports</td>
<td>☐</td>
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### Other Notes:

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Effective February 2019
## Overall BMP Condition

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**Required** Corrective Action(s) Compiled from the notes within the report:

---

Action To Be Completed By (Date): ___________________________

Reviewer’s Signature: _________________________________

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Effective February 2019
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11.0 Stormwater Filtering Systems

Project ID ____________________________  County ____________________________

Site name: __________________________________________________________________________

General Location of BMP __________________________________________________________________________

Ownership:  BMP Variant:  Type of Site:

☐ Private  ☐ Non-Structural Sand Filter  ☐ Residential
☐ Public  ☐ Surface Sand Filter  ☐ Commercial
  ☐ 3 Chamber Underground Sand Filter  ☐ Industrial
  ☐ Perimeter (inc. Delaware Modular) Sand Filter  ☐ State

Other site notes:

Review date ___________  Review time ___________  Reviewer ____________________________

Post Construction Verification Docs available:  ☐ Y  ☐ N  Date of last review _________________

Nature of Problem

• Erosion control
  Drainage area to sand filter  ☐  ☐  ☐ __________________________

• Control of sediment accumulation
  Outlet/overflow spillway  ☐  ☐  ☐ __________________________

• Control of trash & litter in BMP
  ☐ No
  ☐ Yes (where):

Other Notes:

Sedimentation Chamber

Water at normal pool level
  ☐ No  Observations: __________________________________________
  ☐ Yes

Evidence of cracks or spawls?
  ☐ No
  ☐ Yes  Observations: __________________________________________

Depth of sediment is__________ (Maintenance if > ½ full)  Maintenance required?
  ☐ No
  ☐ Yes  Observations: __________________________________________

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Evidence of mosquito breeding?
□ No
□ Yes Observations: ________________________________

Grates need replacement?
□ No
□ Yes Observations: ________________________________

Sand Bed

Depth of sand discoloration _____________

Evidence of clogging?
□ No
□ Yes (where): ________________________________

Oil or grease present?
□ No
□ Yes (where): ________________________________

Ponded water on sand bed?
□ No
□ Yes (where): ________________________________

Cracks or spalls present?
□ No
□ Yes (where): ________________________________

Overall BMP Condition

<table>
<thead>
<tr>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
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Required: Corrective Action(s) Compiled from the notes and observations within the report:

Action To Be Completed By (Date): ________________________________
Reviewer’s Signature: ________________________________
## 12.0 Constructed Wetlands

<table>
<thead>
<tr>
<th>Nature of Problem</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Inlets and drainage area stabilization</td>
<td></td>
<td></td>
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<tr>
<td>Condition of inlets</td>
<td>☐</td>
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<td>☐</td>
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<tr>
<td>Control of erosion in drainage area</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
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<tr>
<td>Control of trash/debris accumulation</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
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<tr>
<td>• Structural components (if applicable)</td>
<td></td>
<td></td>
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<tr>
<td>Condition of outlet/overflow device</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Control of trash/debris accumulation</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tbody>
</table>

Other Notes:
- Facility function
  - Condition of vegetation
  - Control of surface erosion
  - Control of trash/debris accumulation
  - General appearance of the water level

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<thead>
<tr>
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<tbody>
<tr>
<td><strong>Other Notes:</strong></td>
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*Required* Corrective Action(s) Compiled from the notes and observations within the report:

Action To Be Completed By (Date): __________________________

Reviewer's Signature: __________________________
13.0 Wet Ponds

Project ID __________________________  County __________________________

Site name: __________________________

General Location of BMP __________________________

Ownership:  
- Private  
- Public

BMP Variant:  
- Wet Quantity Management Pond  
- Wet Extended Detention Pond

Pond Code 378 Type:  
- Embankment  
- Combination  
- Excavated

Type of Site:  
- Residential  
- Commercial  
- Industrial  
- State

Other site notes:

Review date __________  Review time ____________  Reviewer _______________

Post Construction Verification Docs available:  
- Y  
- N

Date of last review _______________

Nature of Problem

**Good**  **Fair**  **Poor**  **Notes**

- Acess
  - Min. 10’ access to facility (condition)
  - Access to inlets/outlets
  - Sediment set aside area

Other Notes:

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</table>

- Control of erosion
  - Top of slope
  - Side slope and buffer
  - Inlet structures or channels
  - Outlet channel
  - Emergency spillway

Other Notes:

Effective February 2019
- Control of sediment accumulation
  - Pond bottom
    | Good | Fair | Poor | Notes |
    |      |      |      |       |
  - Forebay
    | Good | Fair | Poor | Notes |
    |      |      |      |       |
  - Inlet structures or channels
    | Good | Fair | Poor | Notes |
    |      |      |      |       |
  - Outlet structures or channels
    | Good | Fair | Poor | Notes |
    |      |      |      |       |
  - Side slope and buffers
    | Good | Fair | Poor | Notes |
    |      |      |      |       |

Other Notes:

- Control of riprap
  - Outlet channel
    | Good | Fair | Poor | Notes |
    |      |      |      |       |
  - Inlet channel
    | Good | Fair | Poor | Notes |
    |      |      |      |       |
  - Other locations
    | Good | Fair | Poor | Notes |
    |      |      |      |       |

- Concrete riser and trash rack (if applicable)
  - Spalling/Cracking
    | Good | Fair | Poor | Notes |
    |      |      |      |       |
  - Exposed reinforcing
    | Good | Fair | Poor | Notes |
    |      |      |      |       |
  - Debris deposit on trash rack
    | Good | Fair | Poor | Notes |
    |      |      |      |       |

- Metal riser and trash rack (if applicable)
  - Rusting
    | Good | Fair | Poor | Notes |
    |      |      |      |       |
  - Leaking joint(s)
    | Good | Fair | Poor | Notes |
    |      |      |      |       |
  - Debris deposit on trash rack
    | Good | Fair | Poor | Notes |
    |      |      |      |       |

Other Notes:

Trash & litter in BMP
  - No
  - Yes (where):

Additional vegetative stabilization needed
  - No
  - Yes (where):

Animal burrows or trees creating potential stability problems
  - No
  - Yes (where):
Buffer being maintained (if applicable)

☐ No
☐ Yes

Other Notes:

- Noxious weeds/unwanted trees
  - None
  - Phragmites
    - % coverage _____
  - Cattail
    - % coverage _____
  - Trees
    - % coverage _____
  - Other
    - % coverage _____

Other Notes:

**Embankment Ponds Only**

- Condition of embankment
  - No Issues
  - Transverse cracks
  - Local depression or bulges
  - Settlement
  - Misalignment
  - Seepate at toe of slope
  - Boils at toe of slope

Other Notes:
Overall BMP Condition

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Effective February 2019