OPERATION AND MAINTENANCE SCHEDULES
FOR PRIVATELY OWNED AND MAINTAINED
ESD PRACTICES

GREEN ROOF (A-1)
1. A newly installed roof should be irrigated during the first growing season at least once a week. Typically, eighteen months are needed to establish adequate initial growth. After vegetation is established, irrigation may be required periodically during dry periods.
2. Replace dead/diseased plant material when the failed plant area exceeds five percent (5%) of the roof area.
3. Remove unwanted plant material on an annual basis.
4. The application of a slow-release fertilizer in the spring is recommended on an annual basis.
5. After each significant rainfall event:
   a. Inspect downspouts or drainage channels/courses for clogs.
   b. Inspect the Green Roof for leaks.

PERMEABLE PAVEMENTS (A-2)
1. Pavement surfaces should be swept and vacuumed (porous concrete and porous asphalt) to reduce sediment accumulation and ensure continued surface porosity. Sweeping should be performed at least twice a year with a commercial cleaning unit. Washing or compressed air units should not be used to perform surface cleaning. Please note that porous paving surfaces are especially susceptible to clogging in the fall due to leaf litter.
2. Drainage pipes, inlets, stone edge drains and other structures within or draining to the subbase should be cleaned out at regular intervals.
3. Deicers should be used in moderation. Deicers should be non-toxic and be applied either as calcium magnesium acetate or as pretreated salt. Snow plowing should be done carefully with blades set one-inch above the surface. Plowed snow piles and snowmelt should not be directed to permeable pavement.
4. Sign(s) should be posted indicating that the surface is permeable/porous and as a result, abrasives should NOT be used and the surface should NOT be sealed or resurfaced.

SUBMERGED GRAVEL WETLANDS (M-2)
1. During the first year of operation, inspections should be conducted after every major storm and poorly established areas vegetated.
2. Sediment accumulation in the pretreatment areas should be removed as necessary.
3. Signs of uneven flow within the wetland may mean that the gravel or underdrain is clogged. The gravel and/or underdrain shall be removed, cleaned, and replaced, as needed.
4. A dense stand of wetland vegetation should be maintained throughout the life of the facility and vegetation replaced as needed.
5. All structures within the facility as well as flow splitters should be inspected after every significant rainfall event to make sure they are free from debris and functional.
6. Erosion at inflow points should be repaired.

DRY WELLS (M-5)
1. Dry wells shall be inspected and cleaned twice a year and after every large storm event. This includes pipes, gutters, downspouts and all filters.
2. Ponding, standing water or algal growth on the top of a dry well may indicate failure due to sedimentation in the gravel media. If water ponds for more than 48 hours after a major storm or more than six inches of sediment has accumulated, the gravel media should be excavated and replaced.

MICRO-BIORETENTION PRACTICE (M-6)
1. The top few inches of filter media (mulch layer) should be inspected each spring. Once every 2 to 3 years, remove previous mulch layer and apply new 2 to 3 inch mulch layer.
2. Silts and sediment should be removed from the surface of the filter bed when accumulation exceeds one (1) inch. Check for dewatering within 48 hours.
3. Plant inspection shall be scheduled twice a year in spring and fall. This inspection will include removal and replacement of dead, diseased and excessive vegetation considered beyond treatment. Tree stakes and wires shall be removed after trees have become established. If specific plants are not surviving, more appropriate species should be used. Watering may be required during prolonged dry periods.
4. Soil erosion and flow blockages to be addressed on an as needed basis with a minimum of once per month and after heavy storms inspections. Inspect clean outs and observation wells along with overflow inlets and outfall/exit pipes at least once a month and after heavy storms.

SWALES (M-8)
Grass Swales:
1. Regular mowing (monthly) is critical in order to reduce competition from weeds. Irrigation may be needed during dry weather to establish vegetation. Sparsely vegetated areas need to be re-seeded to maintain dense coverage.
2. If water does not drain within 48 hours, the bottom soil should be tilled and revegetated.
3. Inspections should be performed twice a year to assess slope integrity, vegetative health, soil stability, compaction, erosion, ponding, and sedimentation. Periodic removal of sediment, litter, or obstructions should be done as needed. Eroded side slopes and the swale bottom should be repaired and stabilized where needed.

Bio-Swales:
1. The top few inches of filter media (mulch layer) should be inspected each spring. Once every 2 to 3 years, remove previous mulch layer and apply new 2 to 3 inch layer. Irrigation may be needed during dry weather to establish vegetation. Sparsely vegetated areas need to be re-seeded to maintain dense coverage.
2. Silts and sediment should be removed from the surface of the filter bed when accumulation exceeds one (1) inch. Check for dewatering within 48 hours.
3. Inspections should be performed twice a year to assess slope integrity, vegetative health, soil stability, compaction, erosion, ponding, and sedimentation. Periodic removal of sediment, litter, or obstructions should be done as needed. Eroded side slopes and the swale bottom should be repaired and stabilized where needed.

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