Operations and Maintenance Plan

Basins / Ponds

Facility Description. A basin is a densely planted, gently sloping depression. It receives runoff from a pipe or curb cut. Some basins include an overflow to a drywell or storm sewer. They should infiltrate within 24 hrs. Ponds have greater capacity than basins to treat and manage the volume of runoff. Wet ponds have a permanent pool of water and dry ponds drain over a number of hours to an approved disposal point. Most ponds have a pipe for an inlet and a grated overflow to storm sewer. Some ponds have forebays that trap sediment near the inlet to confine the accumulation of sediment and protect plants from sediment loading.

What To Look For	What To Do
Structural Components, including the inlets and outlets/overflows, shall freely convey stormwater.	
➢ Clogged inlets or outlets ➢ Cracked drain pipes	➢ Remove sediment and debris to maintain at least 50% conveyance capacity at all times. ➢ Repair with grout or replace when cracks are greater than 1”.
Vegetation, including all plants on the Portland Plant List, shall cover 90% of the facility.	
➢ Dead or strained vegetation ➢ Tall Grass or overgrown shrubs ➢ Weeds	➢ Replant per planting plan or from the plant list in the Stormwater Management Manual. Plants should consist of 50% grasses or grass-like plants. ➢ Irrigate as needed. Do not apply fertilizers. ➢ Prune to prevent plants from “lying down” and decaying which decreases infiltration rates. ➢ Manually remove weeds. Do not use herbicides. Remove all plant debris.
Growing/Filter Medium, including soil, pea gravel, or similar material, shall sustain healthy plant cover.	
➢ Exposed soil ➢ Erosion ➢ Slope slippage ➢ Ponding	➢ Cover with plants. ➢ Fill, lightly compact, and place rock or plant vegetation to disperse flow and prevent erosion. ➢ Stabilize 3:1 slopes with plantings from Portland Plant List. ➢ Remove top 2-4” of sediment. Till and/or amend soil with a 3-way soil mix to restore infiltration rates.

Maintenance Schedule:
Summer. Make necessary structural repairs. Clear inlets and drains. Irrigate as needed.
Fall. Replant exposed soil and replace dead plants. Remove sediment and plant debris.
Winter. Monitor infiltration/flow through rates.
Spring. Remove sediment and plant debris. Weed and prune as needed. Replant exposed soil and replace dead plants.

Maintenance Records. Record date, description, and contractor (if applicable) for all structural repairs, landscape maintenance, and facility cleanout activities.

Monitoring Log.
Access. Maintenance equipment and labor shall have safe access to facilities at all times.
Pollution Prevention. All sites should implement best management practices to prevent contaminating stormwater. Contact Spill Control at 503-823-7180 for immediate assistance responding to spills. Record the nature and extent of a spill and the response if it impacts stormwater.
Vectors (mosquitoes & rodents). Stormwater facilities shall not harbor mosquito larvae or rats that pose a threat to public health or that undermine the facility structure. Monitor standing water for mosquito larvae. Fill holes/burrows in and around facilities. Call Multnomah County Vector Control at 503-988-3464 for immediate assistance to eradicate vectors. Record the nature and extent of vector activity if observed.