

Contained Planters

Operations & Maintenance Plan

Contained planters are designed to intercept rainfall that would normally fall on impervious surfaces. In this respect contained planters convert impervious surfaces to pervious ones, decreasing the amount of stormwater runoff from a site. Water should drain through the planter within 3-4 hours after a storm event. All facility components and vegetation shall be inspected for proper operations and structural stability. These inspections shall occur, at a minimum, quarterly for the first 2 years from the date of installation and 2 times per year thereafter. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities. The following items shall be inspected and maintained as stated:

Filter Media consisting of sand or topsoil shall allow stormwater to percolate uniformly through the planter.

- The planter shall be excavated and cleaned, and gravel or soil shall be replaced to correct low infiltration rates.
- Holes that are not consistent with the design and allow water to flow directly through the planter to the ground shall be plugged.
- Litter and debris shall be removed routinely (e.g., no less than quarterly) and upon discovery.

Planter shall contain filter media and vegetation.

- Structural deficiencies in the planter including rot, cracks, and failure shall be repaired.

Planter Reservoir receives and detains storm water prior to infiltration. If water does not drain from reservoir within 3-4 hours of storm event, sources of clogging shall be identified and corrected. Topsoil may need to be amended with sand or replaced all together.

Vegetation shall be healthy and dense enough to provide filtering while protecting underlying soils from erosion.

- Mulch shall be replenished at least annually.
- Planter vegetation shall be irrigated to ensure survival.
- Vegetation, large shrubs or trees that limit access or interfere with planter operation shall be pruned or removed.
- Fallen leaves and debris from deciduous plant foliage shall be raked and removed.
- Nuisance and prohibited vegetation from the Eugene Plant List shall be removed when discovered. Invasive vegetation contributing up to 25% of vegetation of all species (measured in a 10 x 10 foot plot) shall be removed and replaced.
- Dead vegetation shall be removed to maintain less than 10% of area coverage or when planter function is impaired. Vegetation shall be replaced within a specific timeframe, e.g., 3 months, or immediately if required to maintain cover density and control erosion where soils are exposed.

Training and/or written guidance information for operating and maintaining planters shall be provided to all property owners and tenants. A copy of the O&M Plan shall be provided to all property owners and tenants.

Access to the stormwater planter shall be safe and efficient. Egress and ingress routes shall be maintained to design standards. Roadways shall be maintained to accommodate size and weight of vehicles, if applicable.

- Obstacles preventing maintenance personnel and/or equipment access to the stormwater planter shall be removed.
- Gravel or ground cover shall be added if erosion occurs, e.g., due to vehicular or pedestrian traffic.

Insects & Rodents shall not be harbored at the stormwater planter. Pest control measures shall be taken when insects/rodents are found to be present.

- Standing water creating an environment for development of insect larvae shall be eliminated.
- If a complaint is received or an inspection reveals that a stormwater facility is significantly infested with mosquitoes or other vectors, the property owner/owners or their designee may be required to eliminate the infestation at the City inspector's discretion. Control of the infestation shall be attempted by using first non-chemical methods and secondly, only those chemical methods specifically approved by the City's inspector. Acceptable methods include but are not limited to the following:
 - i) Installation of predacious bird or bat nesting boxes.
 - ii) Alterations of pond water levels approximately every four days in order to disrupt mosquito larval development cycles.
 - iii) Stocking ponds and other permanent water facilities with fish or other predatory species.
 - iv) If non-chemical methods have proved unsuccessful, contact the City inspector prior to use of chemical methods such as the mosquito larvicides *Bacillus thurengensis* var. *israeliensis* or other approved larvicides. These materials may only be used with City inspector approval if evidence can be provided that these materials will not migrate off-site or enter the public stormwater system. Chemical larvicides shall be applied by a licensed individual or contractor.
- Holes in the ground located in and around the stormwater planter shall be filled and compacted.

Debris and Litter shall be removed to maintain soil health and to prevent interference with plant growth.