



CITY OF RICHMOND
DEPARTMENT OF PUBLIC UTILITIES



Submit report to:
City of Richmond Stormwater Utility
730 East Broad St., 6th Floor
Richmond, VA 23219
Attn: Credit Applications

City of Richmond Stormwater Utility
Annual BMP Operation & Maintenance Inspection for Grass Channels
Due Every August 1st

Owner Name:	
Property Address: Street: City: Zip code:	
Date BMP placed in service:	As-built plans available: Y N
Site plan/permit number:	Date of Last Inspection:
Date of Inspection:	Email address:
Phone Number:	
Type of pretreatment facility: <input type="checkbox"/> Sediment forebay <input type="checkbox"/> Check dam <input type="checkbox"/> Grass filter strip <input type="checkbox"/> Stone diaphragm <input type="checkbox"/> other	

Checklist—Virginia Stormwater Management Handbook, chapter 9

BMP Element	Frequency	Problem	Yes or No?	Corrective Action
Contributing Drainage Area	On-going	Excessive trash/debris		
		Bare exposed soil		
		Evidence of erosion		
		Excessive landscape waste/yard clippings		
Pretreatment	On-going	Maintenance access to pretreatment facility		
		Excessive trash/debris/sediment		
		Dead vegetation/exposed soil		
		Evidence of erosion		
Inlets	On-going	Inlets provide stable conveyance into system		
Diaphragm	Twice per year	Excessive trash/debris/sediment accumulation at inlet		
		Evidence of erosion at/around inlet		
		Element is clogged		Manually remove debris.
Underdrain	On-going	Broken/clogged		

Checklist—Virginia Stormwater Management Handbook, chapter 9

BMP Element	Frequency	Problem	Yes or No?	Corrective Action
Vegetation	Monthly	Unhealthy or dead grass cover, evidence of erosion, braiding, or excessive ponding, in the channel bottom, bare soil or sediment sources in the contributing drainage area.		Add reinforcement planting to maintain 90% turf cover. Reseed any salt killed vegetation and stabilize immediately. Keep the grass in a healthy, vigorous condition at all times, since it is the primary erosion protection for the channel.
		Unwanted plant species, fallen leaves, and debris from deciduous plant foliage are present		Vegetation, large shrubs or trees that interfere with landscape swale operation shall be pruned. Nuisance/prohibited vegetation shall be removed. Invasive vegetation contributing up to 25% shall be removed.
		Native soil is exposed or erosion channels are forming.		Sediment accumulation to be removed with minimum damage to vegetation. Use proper E&S controls. Sediment must be removed if it is more than 4 " thick or so thick as to damage or kill vegetation.
		Grass height does not reach standards		Grass channels shall be moved to keep grass 4" to 9". Remove grass clippings after mowing.
		Vegetation requires fertilizer		Fertilize per specification. If possible, use compost instead of synthetic fertilizer.
		Plant composition consistent with approved plans		
		Presence of invasive species		
		Dead vegetation/exposed soil		
Side Slopes	Twice per year	Side slopes do not prevent erosion, and introduce sediment into the swale		Repair erosion after heavy storms. Slopes shall be stabilized and planted using appropriate erosion control measures when native soil is exposed or erosion channels are forming. Inspect side slopes and grass filter strips for evidence of any rill or gully erosion and repair immediately.
Check Dams/ Flow Spreader	Twice per year	Practice is not evenly controlling and distributing flow		Remove any accumulated sand or sediment deposits behind check dams. Inspect upstream and downstream for evidence of undercutting or erosion, and remove trash or blockages at weep holes. Causes for altered water flow/channelization shall be identified, and obstructions cleared/repared upon discovery. Causes for obstructions shall be identified and repaired.
		Condition		

Checklist—Virginia Stormwater Management Handbook, chapter 9

BMP Element	Frequency	Problem	Yes or No?	Corrective Action
Swale Bottom	Twice per year	Soil/sand has become compacted. Practice does not draw down within 48 hours after a rain event.		Dethatch and aerate swale bottom. Scrape swale bottom and remove sediment to restore original cross section and infiltration rate. Remove sediment buildup within the bottom of the swale once it has reached 25% of the original design volume. Remove all significant sediment accumulations to maintain the designed carrying capacity.
Swale Outlet	Twice per year	Outlet does not maintain sheet flow of water exiting swale (unless a collection drain is used).		Source of erosion damage must be identified and controlled when native soil is exposed or erosion channels are forming. Check the channel outlet and all road crossings for bank stability and evidence of piping or scour holes.
		Outlets provide stable conveyance out of facility.		
		Excessive trash/debris/sediment accumulation at inlet		
		Evidence of erosion at/around inlet		
Inflow forebay	Twice per year	Inlet is not maintaining a calm flow of water entering the swale, conveyance capacity is clogged.		Remove trash and sediment accumulated in the inflow. Sources of sediment and debris shall be identified and corrected. Rock splash pads shall be replenished to prevent erosion.
Pest Control	Twice per year	Minimize standing water and mosquito habitat		Pest control measures shall be taken when insects/rodents are found to be present. If sprays are considered, than a mosquito larvicide, such as Bacillus thurendensis or Altoside formulations can be applied only if absolutely necessary. Holes in the ground located in and around the swale shall be filled.
Overall	On-going	Maintenance access to facility		
		Sediment Accumulation		
		Evidence of erosion		
		Evidence of oil/chemical accumulation		
		Evidence of standing water: ponding, noticeable odors, water stains, presence of algae or floating aquatic vegetation		
Miscellaneous	On-going	Complaints from local residents		
		Mosquito proliferation		
		Encroachment on facility or easement by buildings or other structures		