Appendix C

MDOT Best Management Practices

MDOT-Approved BMPs

Selected BMPs are identified as structural of non-structural. Non-structural BMPs are further divided between operational and vegetative. BMPs are used during the construction phase to minimize soils erosion and sedimentation.

Structural BMPs

Structural BMPs are physically constructed controls that may remove pollutants from runoff or limit the rate of runoff from MDOT right-of-way (ROW) and other facilities. Structural BMPs include temporary and permanent BMPs. The following is a table of the structural BMPs approved by MDOT as appropriate for its activities. Structural BMPs listed in the table below are not a reflection of those currently listed in the drainage manual. As a part of the update to the drainage manual, the following table will be used.

BMP	Typical Use	Duration	
		Temporary	**Permanent**
Austin Sand Filter	Pollutant removal		X
Biofilters	Pollutant removal		X
Bioretention/ Rain Garden	Sediment and pollutant removal		X
Bioslope	Pollutant removal		X
Bottomless Catch Basin	Peak rate control		X
Catch Basin Sump-Deep	Pre-treatment for other structural BMPs/sediment removal		X
Delaware Sand Filter	Pollutant removal		X
Detention Basin (Dry Bottom)	Sediment and pollutant removal		X
Detention Basin (Wet Bottom)	Sediment and pollutant removal		X
First Flush Basin	Sediment and pollutant removal		X
Hydrodynamic Separator	Pollutant removal		X
Infiltration Basin	Sediment and pollutant removal		X
Infiltration Trench with Perforated Pipe	Pollutant removal, peak rate control		X
Inlet Structural Device	Peak rate control		X
In-Line Structural Device	Peak rate control		X
Oil Water Separator	Removal oil and suspended solids		X
Permeable Pavement/Permeable Friction Course	Sediment and pollutant removal		X
Roadside Bioswale	Sediment and pollutant removal		X
Roadside Infiltration Trench	Sediment and pollutant removal		X
Sediment Basin	Sediment removal		X

Sediment Trap	Sediment removal		X
Underground Detention System (Pipe, Tank/Vault)	Pollutant removal, peak rate control		X
Vegetated Filter Strip	Sediment and pollutant removal		X
Vegetated Swale-Dry	Sediment and pollutant removal		X

Non-Structural BMPs

Non-structural BMPs are preventative actions that involve managerial planning and source controls. The approved non-structural BMPs are described below and are further divided into operational and vegetative BMPs: (Additional details are discussed in Chapter 9 of the Drainage Manual.)

Operational BMPs

BMP	Typical Use	Duration	
		Temporary	Permanent
BMP Inspection and Maintenance Plan	Necessary maintenance to keep BMPs working correctly		X
Clean and Maintain Storm Inlet and Catch Basins	Remove contaminated sediments	X	X
Clean and Maintain Storm Inlet and Catch Basins	Remove contaminated sediments	X	X
Dewatering by Filter Bag/Sediment Basin	Filter sediment laden water	X	
Dust Control	Minimize dust from the construction zone	X	
Employee Training	Education	X	X
Litter Control (Maintenance)	Environmental Improvement		X
Materials Management Plan	Environmental Improvement		X
Minimizing Effects of Highway De-icing (Maintenance)	Minimize amount of de-icing material in the stormwater		X
Slope Roughening and Scarification	Reduce wind and water erosion	X	X
Street Sweeping (Maintenance)	Removal of street dirt and liter		X
Used Oil Recycling Program	Environmental protection		X

Vegetative BMPs

BMP	Typical Use	Duration	
		Temporary	Permanent
Mulch Blankets and High Velocity Mulch Blankets	Soil stabilization, promote growth of vegetation to protect surface	X	
Mulching and Mulch Anchoring	Soil stabilization, promote growth of vegetation to protect surface	X	
Permanent/Temporary Seeding	Soil stabilization, promote growth of vegetation to protect surface	X	X
Sodding	Soil stabilization, promote growth of vegetation to protect surface		X
Trees, Shrubs, Vines, and Ground Cover	Soil stabilization and aesthetic goals		X
Vegetated Buffer at Watercourse	Sediment and pollutant filtering and reduction of sheet flow velocities	X	
Vegetative Buffer Strips	Reduction of sheet flow velocities and prevent rilling and gulling		X