SECTION 4

BEST MANAGEMENT PRACTICES

SECTION 4.1

INTRODUCTION

DISCUSSION OF BMPS

SIX MINIMUM CONTROL MEASURES

PE – Public Education and Outreach:
Public education programs or outreach activities must be implemented to educate the community on the impacts of stormwater runoff and the methods to reduce pollutants in stormwater runoff.

PI – Public Involvement and Participation:
The public should be included in developing, implementing, and reviewing the stormwater management program.

ID – Illicit Discharge Detection and Elimination:
A program to detect and eliminate illicit discharges must be developed and implemented.

CS – Construction Site Stormwater Runoff Control:
A program must be developed, implemented and enforced to reduce pollutants from construction activities that result in land disturbance activities of one acre or greater (including projects less than one acre that are part of a larger plan).

PS – Post Construction Stormwater Management in New Development and Redevelopment
A program must be developed, implemented and enforced to reduce stormwater runoff from new development and redevelopment sites of one acre or greater (including projects less than one acre that are part of a larger plan).

PP – Pollution Prevention and Good Housekeeping for Municipal Operations:
An operation and maintenance program must be developed (including training) to reduce pollutant runoff from municipal operations.

Illicit Discharge Detection and Elimination, Construction Site Runoff Controls, and Post Construction Site Runoff Controls shall only be discussed for the purposes of this manual. The BMP's for these three minimum control measures are detailed in Section 4.3, BMP Profiles and Design Standards.

SECTION 4.2

BMP SELECTION GUIDE

BMP SELECTION GUIDE

Construction Considerations	Site Condition	Best Management Practice
Municipal		Model Ordinances Ordinance for Post Const. Runoff Zoning
Developer	Design Considerations	Alternative Turnarounds Bioretention Catch Basins / Inserts Conservation Easements Eliminating Curbs & Gutters Green Parking In-Line Storage Infrastructure Planning Manufactured Products for Stormwater Inlets Narrower Residential Streets On-Lot Treatment Open Space Design Sand & Organic Filters Stream Crossing (Permanent) Urban Forestry
Contractor	Required	BMP Inspection and Maintenance Construction Reviewer Contractor Certification & Inspector Training General Construction Site Waste Management Spill Prevention & Control Plans
	Recommended	Vehicle Maintenance & Washing
Sequence	All disturbed areas	Construction Sequence

Construction Considerations	Site Condition	Best Management Practice
Installing Access Routes, Slope Runoff Control	Land Slopes < 5%	Construction Entrance / Exit Construction Road Stabilization Diversion Dust Control Filter Berms Grassed Filter Strips Land Grading Mulching Sediment Basin Silt Fence Storm Drain Inlet Protection Straw Bale Barrier Stream Crossing Surface Roughening Temporary Seeding Tree Preservation Trees & Shrubs Topsoiling Vegetated Buffer Water Bar
	5 – 12%	(same as above plus) Check Dam Geotextiles Gradient Terrances Lined Waterway or Outlet
Clearing and Grading	Disturbed Areas	Brush Barriers Buffer Zone Chemical Stabilization Diversion Dust Control Grassed Waterway Grassed Filter Strips Land Grading Lined Waterway or Outlet Sediment Basin Silt Fence Straw Bale Barrier Vegetated Buffer

Construction Considerations	Site Condition	Best Management Practice
Sediment Retention (Measures to be installed before major land disturbance begins)	Disturbed Areas < 2 acres	Silt Fence Straw Bale Barrier
	2 – 5 acres	(same as above plus) Check Dam Diversion Sediment Basin
	> 5 acres	(same as above plus) Grade Stabilization Structure Slope Drains
Borrow and Waste Disposal Topsoil Stockpiling	All Disturbed Areas	Diversion Mulching Permanent Seeding Sediment Basin Sediment Filters Sediment Trap Silt Fence Soil Retention Temporary Seeding Topsoiling Trees and Shrubs Vegetated Buffer
Stabilizing Streambanks	Design Velocity < 5 ft/sec	Geotextiles Grassed Waterway Mulching Permanent Seeding Rip-Rap Rock Outlet Protection Vegetative Streambank Stabilize
	> 5 ft/sec	Detention Basin Geotextiles Paved Flume Rip-Rap Retention Ponds Rock Outlet Protection

Construction Considerations	Site Condition	Best Management Practice
Runoff Control	Drainage Area < 5 acres	Check Dam Concrete Grid & Modular Pave Diversion Infiltration Trench Grassed Waterway Land Grading Level Spreader Lined Waterway or Outlet Mulching Parking Lot Storage Paved Flume Rock Outlet Protection Slope Drains Storm Drain Inlet Protection Temporary Seeding Topsoiling
	> 5 acres	(same as above plus) Detention Basin Grade Stabilization Structure Infiltration Basin
Special Site Problems	Seepage Area or High Water Table	Subsurface Drain
	Polluted Runoff Water	Constructed Wetlands Stormwater Retention Basin Underdrains and Stormwater Filtration Systems
	Illicit Discharges	Failing Septic Systems Illegal Dumping Industrial / Business Discharges Recreational Sewage Sanitary Sewer Overflow Wastewater Connection to Storm Drain System
	Consistent Strong Winds	Wind & Sand Fences Vegetative Dune Stabilization

Construction Considerations	Site Condition	Best Management Practice
Utilities and Building Construction	Disturbed Areas	Diversion Mulching Permanent Seeding Silt Fence Sodding Temporary Seeding Topsoiling