



# GENERAL MAINTENANCE CARD

## Stormwater Coalition of Albany County

Facility: Infiltration - Infiltration Basin (I-2)

Funding for This Project Provided by the  
New York State Department of Environmental Conservation  
Environmental Protection Fund

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November 2009

### MAJOR AREAS OF PRACTICE

- |                            |                            |                       |
|----------------------------|----------------------------|-----------------------|
| A. Maintenance Accessway   | E. Grass Channel           | H. Outlet Structure   |
| B. Inlet Structure         | F. Infiltration Basin Area | I. Outfall            |
| C. Stilling Basin          | G. Underdrain              | J. Emergency Spillway |
| D. Concrete Level Spreader |                            |                       |

### PURPOSE AND FUNCTION

An infiltration practice that stores the water quality volume in a shallow depression, before it is infiltrated into the ground.

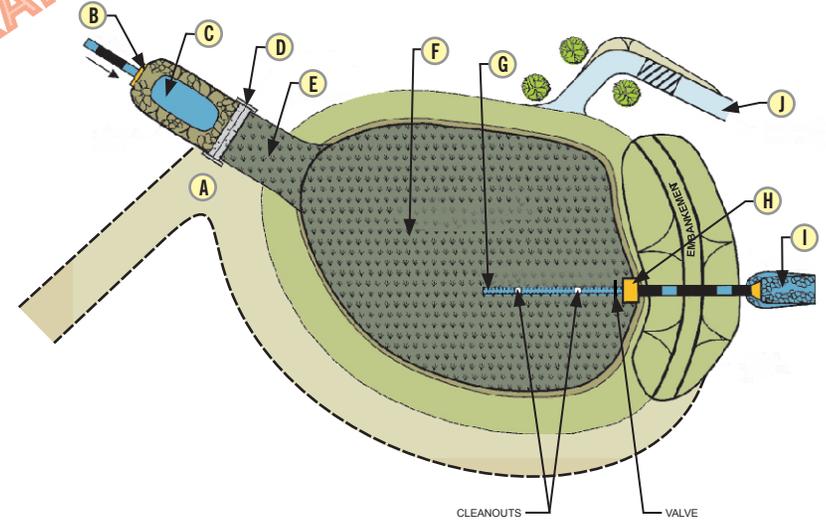
### SHORT-TERM MEASURES (FREQUENCY: AT LEAST ONCE A MONTH)

#### Drainage Issues:

- Maintain contributing drainage area.**
  - Remove trash and debris and dispose off-site, as required.
  - Stabilize and mow area as required. Remove clippings.
  - Ensure that activities in the drainage area minimize oil/grease and sediment entry to the system.
- Inspect the inlet structure (Location B) and pretreatment devices, such as stilling basin (Location C), concrete level spreader (Location D), and grass channel (Location E).**
  - Remove debris manually and dispose off-site, as required.
  - Note any channels, soil exposure, or other evidence of erosion.
  - Note any cracks in pipe, headwall/concrete pipe collar, and concrete level spreader.
  - Note any displaced field stone.
- Inspect the outlet structure (such as riser box at Location H).**
  - Riser Box**
    - Remove debris manually and dispose off-site, as required.
    - Note any cracks/damage to concrete riser box.
  - Outfall (Location I)**
    - Remove accumulated debris/floatables near the outfall spillway approach and discharge channels manually or by other approved means; as required. Dispose of debris off-site.
    - Note any displaced field stone.
- Inspect infiltration basin (Location F).**
  - Remove debris manually and dispose off-site, as required.
  - Note dewatering time. Facility should drain completely within 24-48 hours of a storm event.
- Inspect the emergency spillway (Location J).**
  - Vegetated emergency spillway channels should be mowed and should not be cut to less than 6 to 8 inches in height.
  - The emergency spillway approach and discharge channels should be cleared of brush and other woody growth.

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SIDE A



- After any flow has passed through the emergency spillway, the spillway crest (control section) and exit channel should be inspected for erosion. Note location of any eroded areas.
- Inspect adjacent catch basin grates and manhole covers.**
    - Remove accumulated debris; dispose off-site.

#### Landscaping:

- Inspect overall condition of vegetation onsite.**
  - Remove vegetative invasives manually, ensuring root removal, to the extent possible. Note any significant establishment for future removal/maintenance.
  - Relocate rodents and/or provide exclusion devices, as required.
  - Trim shrubs and cut grass along street frontages, as required. Dispose of clippings off-site.
  - Mow grassed areas as required. Mow only when surface is dry to avoid rutting. Dispose of clippings off-site.

#### Perimeter Treatment:

- Inspect overall condition of the perimeter treatment items.**
  - Remove accumulated litter/debris by hand, dispose off-site.
  - Secure gates, guiderails, signs, and boulders, as required.

### MEDIUM-TERM MEASURES (FREQUENCY: ONCE EVERY SIX MONTHS)

#### Drainage Issues:

- Inspect the inlet structure (Location B), and pretreatment devices, such as stilling basin (Location C), concrete level spreader (Location D), and grass channel (Location E).**
  - Repair/reinforce eroded areas, as required.
  - Repair cracks/damaged stones on headwall, as required.
  - Repair cracks in pipe, concrete pipe collar, or concrete level spreader, as required.
  - Replace displaced field stone, as required.

## 2. Inspect the outlet structure (Location H).

- Repair cracks/damage to concrete riser box, as required.
- Replace displaced field stone, as required.

## 3. Inspect the emergency spillway (Location J).

- Repair and stabilize eroded areas in the exit channel as required.

## 4. Inspect for unstable embankments.

- Repair/reinforce unstable embankments using field stone, plantings, etc.

### Landscaping:

## 5. Inspect for plant mortality.

- Remove dead plants by hand; dispose off-site; replant as required.
- Remove trees that start to grow in the vicinity of the basin (Location F), and dispose off-site, as required.
- Note any bare areas. Cultivate soil and revegetate as required. Introduce alternative plantings, as required.

## 6. Inspect for significant establishment of invasives and develop an area-wide plan for removal.

## 7. Inspect for herbivore damage.

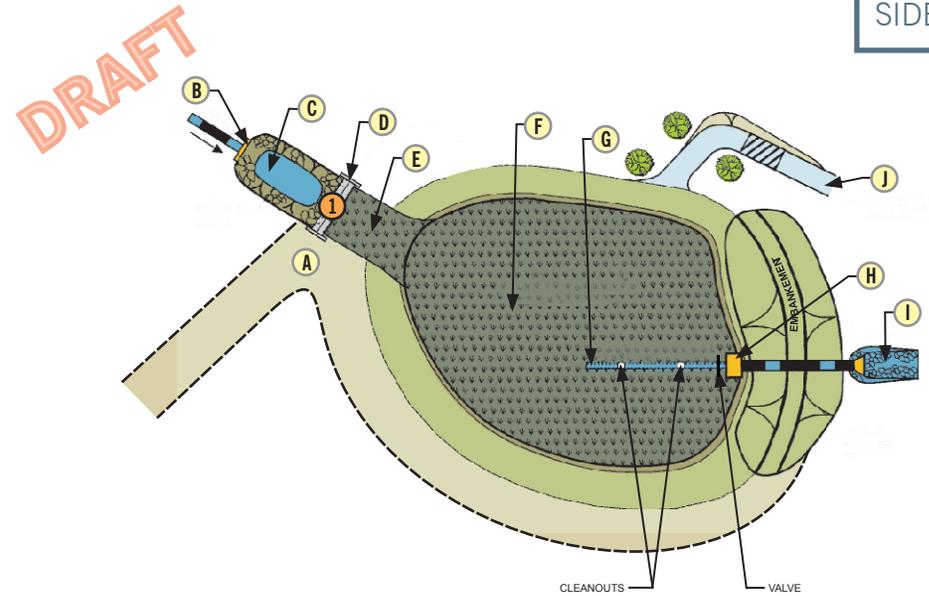
- Repair burrows/damage created by rodents, as required.
- Introduce alternative plantings, as required.

### Perimeter Treatment

## 8. Lubricate locks and hinges on gates, as required.

## 9. Refurbish accessway with wood chips or other appropriate material, as required.

## 10. Inspect and repair damaged sidewalks, fencing, guiderail, and signs, as required.



### LONG-TERM MEASURES (FREQUENCY: ONCE EVERY YEAR)

## 1. Remove sediment from stilling basin and adjacent catch basins; vactoring recommended.

## 2. Inspect infiltration basin area (Location F).

- If water remains 24-48 hours following a storm event, cleanout underdrain (Location G) and cultivate soils, as required:
  - Close valve at end of underdrain pipe, near riser box.
  - Attach a standard compressor and fitting to first cleanout and run compressed air through pipe. Repeat for all remaining connections until grass turf above underdrain is sufficiently broken up.
  - Remove compressor hose and fitting. Restore valve to original setting.
  - Till and revegetate disturbed soil.
- Note sediment accumulation. Remove sediment manually when sediment is dry (visible cracks) and readily separates from basin floor. Till and revegetate remaining soil.
- Replace plantings or cultivate soils to ensure adequate filtration, as required.

### DEWATERING PROCEDURE AT PRETREATMENT DEVICE

The stilling basin or other pretreatment device must be dewatered before proceeding with vactoring operations.

#### Methodology:

1. Park the vactor truck along the maintenance accessway near the inlet (Location A). The boom should be extended in the direction of the stilling basin.
2. Ensure clear access for a two-person crew down the slope near the stilling basin (Location C).
3. Pump out the water from the stilling basin to the grass channel (Location E) downstream.
4. Proceed with vactoring operations.

### VACTORING PROCEDURE AT PRETREATMENT DEVICE

#### Methodology:

1. Connect the vactor truck to an approved nearby source of clean water for vactoring purposes.
2. Unwind the water jet hose reel and place it down the slope of the stilling basin (Location C). Use hose to loosen the accumulated sediment.
3. Place the flexible suction hose into the stilling basin (Location C).
4. Perform vactoring operations by simultaneously using the suction arm and water jet hose to remove slurry until the rip-rap base is reached.
5. Continue slurry removal until capacity of vactor truck is reached.
6. Stop vactoring work. Dispose of slurry off-site.
7. Repeat Steps 1-6 until all the sediment has been removed.
8. After vactoring work is complete, carefully remove the flexible suction hose and the water jet hose from stilling basin, and transport them back to the truck.
9. Inspect the accessway and adjacent area for damage, such as dislodged field stone, wood chips, etc., and refurbish as required.

**Note:** Secure locks on gates as necessary prior to exiting site.

#### Maintenance Considerations During Design

- Erosion and Sediment Control
  - Inlet/Outlet Protection
  - Sediment Removal
- Pretreatment Devices
- Landscaping
- Mechanical Issues
  - Riser/Barrel Outlet Structure
- Maintenance Access
- Cold Climate Considerations