

New Jersey's Municipal Separate Storm Sewer System (MS4) Permit

September 17, 2025

Hamilton Township Municipal Training



RUTGERS UNIVERSITY

Water Resources Program

New Jersey Agricultural Experiment Station



Rutgers Cooperative Extension Water Resources Program
Christopher C. Obropta, Ph.D., P.E.

Summary of MS4 Requirements (January 1, 2023)

Section A: Stormwater Management Program

- Overview of MS4 Permit and SPPP

Section B: Minimum Standards for Public Involvement

- Public participation and published information of stormwater website

Section C: Minimum Standards for Local Public Education

- Complete 12 points of educational stormwater activities annually

Section D: Minimum Standards for Construction Site Stormwater Runoff

- Construction runoff covered by separate permit

Summary of MS4 Requirements

Section E: Minimum Standards for Post Construction Stormwater Management in New Development and Redevelopment

- Sets forth review requirements of development plans for stormwater management

Section F: Minimum Standards for Pollution Prevention/ Good Housekeeping for Municipal Operators

- Ordinances, community measures, inspection of stormwater facilities, maintain logs, municipal maintenance yards, trainings

Section G: Minimum Standards for MS4 Mapping, and Scouring, and Illicit Discharge Detection and Elimination

- Mapping requirements, stream scour inspection, illicit discharge detection and elimination from outfalls

Summary of MS4 Requirements

Section H: Watershed Improvement Plan

- Three phase document: Watershed Inventory Report (3rd year), Watershed Assessment Report (4th year), Watershed Improvement Plan Report (EDPA + 59 months)

Section I: Additional Measures and Optional Measures

- Allows additional measures/limits if desired

Section J: Recordkeeping

- Retain records of the permit for 5 years available on request

Section K: Annual Report and Certification

- Submit annual report to summarize compliance by May 1st annually

Section A: Stormwater Management Program

Overview of MS4 Permit and SPPP

The permittee shall develop, update, implement and enforce an MS4 stormwater program. A primary objective of the MS4 stormwater program shall be to implement best management practices and other measures that are designed to reduce the discharge of pollutants from the permittee's MS4, municipal maintenance yards and other ancillary operations, to the maximum extent practicable, to protect water quality, and to satisfy the applicable water quality requirements of the Clean Water Act.

Permittee shall ...

- develop, update, implement and maintain a Stormwater Pollution Prevention Plan (SPPP)
- designate a Stormwater Program Coordinator (SPC)
- ensure the MS4 Program and the SPPP is consistent with the Municipal Stormwater Management Plan (MSWMP)
- ensure the MSWMP is a component of the municipal master plan
- shall modify and update applicable ordinances and plan to reflect the MS4 Program including the Stormwater Control Ordinance

Stormwater Pollution Prevention Plan

Township of Hamilton

Mercer County

NJG0150258

Annual Review Date: September 13, 2024

Stormwater Program Coordinator:

Samantha Brown, P.E.



Hamilton Department of Water Pollution Control

Hamilton Fall Leaf Collection Program

Hamilton's Environmental Commission

How Do I Get Rid of It Guide to Proper Recycling & Disposal

Solid Waste Ordinance

Stormwater Ordinances

Yard Waste Collection



Home > Departments > Community & Economic Development > Engineering > Stormwater Management Efforts

Stormwater Management Efforts

What is stormwater and why does it matter? It's important because it affects our drinking water, fish and marine life and our environment. When it rains (or even after snow melts), most residents are primarily concerned that the water flows down roadside drains so our streets do not flood.



But that is just the start of stormwater management.

Because after flowing down roadside drains or other collection basins, the majority of that water is **not** treated and/or cleaned in any way. Rather, it flows directly to local rivers, lakes and streams - and eventually, the same water supplies that provide us with the water that we drink or use for bathing.

Although water utilities treat, or clean, that water before it reaches consumers again - the quality of our water supplies makes a big difference in terms of how difficult and costly that cleaning our drinking water is, how healthy that water is for the fish and marine life that humans rely upon and what the overall impact is our local environment.

That is why towns like Hamilton Township are required to perform a great deal of work when it comes to stormwater management.

Per the annual MS4 permit, all municipalities are required to meet current NJDEP regulations, including standards for privately owned storm drains. Please check with NJDEP regulations prior to your next re-paving, resurfacing, or similar alterations to ensure compliance, and please contact the Township Engineering Division with any questions or concerns.

Contact Us

Engineering

Physical Address

2090 Greenwood Avenue
Hamilton, NJ 08609

Phone: [609-890-3636](tel:609-890-3636)

Fax: 609-890-3548

Related Documents

- [2021 Rain Garden Educational Presentation \(PDF\)](#)
- [Public Works Road Division Street Sweeping Efforts \(PDF\)](#)

Quick Links

- [NJ Department of Environmental Protection - Stormwater in NJ](#)
- [State Pesticide Publications](#)

[View All](#)

Form 1 – Team Members

Stormwater Program Coordinator (SPC)			
Name and Title		Samantha Brown, Municipal Engineer	
Phone	(609) 890-3636	Email	SaBrown@hamiltonnj.com
Individual(s) Responsible for Major Development Project Stormwater Management Review			
Name and Title		Samantha Brown, PE/ Municipal Engineer	
Phone	(609) 890-3636	Email	SaBrown@hamiltonnj.com
Name and Title		Douglas Johnson, PE /Senior Associate/Remington & Vernick Eng.	
Phone		Email	
Name and Title		Doug White, PE/ Group Manager/ T&M	
Phone		Email	
Name and Title		Jeff Richter, PE/ ACT Engineers Director of Engineering	
Phone		Email	
Other Municipal Stormwater Team Members			
Name and Title		Chuck Thomas/Director of Public Works/Township of Hamilton	
Phone	(609) 890-3568	Email	
Name and Title		Carrie Feuer/Director of Water Pollution/Township of Hamilton	
Phone	(609) 890-4139	Email	
Name and Title		Kathleen Fitzgerald/Director of Health/Township of Hamilton	

Section B: Minimum Standards for Public Involvement and Participation

- Comply with applicable State and local public notice requirements
- Develop a municipal stormwater webpage
- Stormwater Pollution Prevention Plan (SPPP) (excluding inspection logs and other recordkeeping documents)
- Municipal Stormwater Management Plan (MSWMP)
- Stormwater Control Ordinance (SCO)
- Pet Waste Ordinance
- Wildlife Feeding Ordinance
- Litter Control Ordinance
- Improper Disposal of Waste Ordinance
- Containerized Yard Waste/Yard Waste Collection Program Ordinances
- Private Storm Drain Inlet Retrofitting Ordinance
- Illicit Connection Ordinance
- Tree Removal/Replacement Ordinance
- Privately-Owned Salt Storage Ordinance
- MS4 Outfall Pipe Map
- MS4 Infrastructure Map
- Watershed Improvement Plan



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Home > Departments > Community & Economic Development > Engineering > Stormwater Management Efforts

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- [State Pesticide Publications](#)

View All

Section C Further Details: Minimum Standards for Local Public Education

Implement a Public Education and Outreach Program

- Earn 12+ points each year from three of the five categories



Points system for public education and outreach activities

Category 1: General Public Outreach

- Social Media (3)
- Newspaper Ad (1)
- Radio/Television (2)
- Green Infrastructure Signage (5)
- Mural (2)
- Billboard/Sign (2)
- Stormwater Facility Signage (5)

Category 2: Targeted Audiences Outreach

- Stormwater Display (1)
- Promotional Item (2)
- Private Stormwater Facilities Education (3)
- Mailing or e-mailing Campaign (2)
- Ordinance Education (3)

Category 3: School/Youth Education and Activities

- School Presentations (5)
- Water Education Workshops (2)
- Storm Drain Labeling (3)
- Educational Contest for Schools (3)
- AmeriCorps Event (4)
- Clean-up (3)

Category 4: Watershed/Regional Collaboration

- Regional Stormwater Collaboration (3)
- Green Infrastructure Workshop (3)
- Community Activity (3)

Category 5: Community Involvement Activities

- Volunteer Stormwater Assessment or Stream Monitoring (3)
- Rain Barrel Workshop (3)
- Rain Garden Workshop (3)
- Community Event (3)
- Community Involvement (5)

Section D: Minimum Standards for Construction Site Stormwater Runoff

Permit for construction site stormwater runoff activities

- A General NJPDES Permit NJ0088323: Stormwater Discharge Master General Permit (from NJDEP)
- Soil Erosion and Sediment Control Permit (from local Soil Conservation District)

**Section E: Minimum Standards for
Post Construction Stormwater
Management in New Development and
Redevelopment**

N.J.A.C. 7:8 - Stormwater Management Regulations

Goal is to minimize the adverse impact of stormwater runoff on water quality and water quantity and loss of groundwater recharge in receiving water bodies.

New Jersey Stormwater Management Rules

Rules apply to any “Major Development” defined as a project disturbing more than 1 acre or increasing impervious surfaces by $\frac{1}{4}$ acre or more

Design and Performance Standards established in NJAC 7:8-5, for:

- Stormwater Quantity

- Groundwater Recharge

- Stormwater Quality

- Stormwater Maintenance Plan

Water Quantity Performance Standards

- Demonstrate that post-development 2, 10, and 100-year storm event hydrographs do not exceed pre-development hydrographs
or
- Demonstrate that hydrograph peaks will not increase and that increase in volume or change in timing won't increase flood damage downstream
or
- Design BMPs so that 2, 10, and 100-year pre-development hydrographs are reduced to 50%, 75%, and 80%, respectively
 - ✓ 2-year rainfall
 - ✓ 10-year rainfall
 - ✓ 100-year rainfall

Groundwater Recharge Performance Standards

- Maintain 100% of average annual groundwater recharge volume

or

- Infiltrate increase in the post development runoff volume for the 2-year storm

Water Quality Performance Standards

- Install BMPs to reduce at least 80% of total suspended solids (TSS) loads
- Install BMPs to provide nutrient removal to maximum extent feasible

<u>BMP</u>	<u>TSS Removal Rate</u>
Bioretention	90%
Constructed Wetlands	90%
Forested Buffers	70%
Extended Detention Basin	40-60%
Infiltration Structure	80%
Sand Filter	80%
Vegetative Filter Strip	50%
Wet Pond	60-90%

SOURCE: NJ Stormwater Management Rules
and BMP Manual

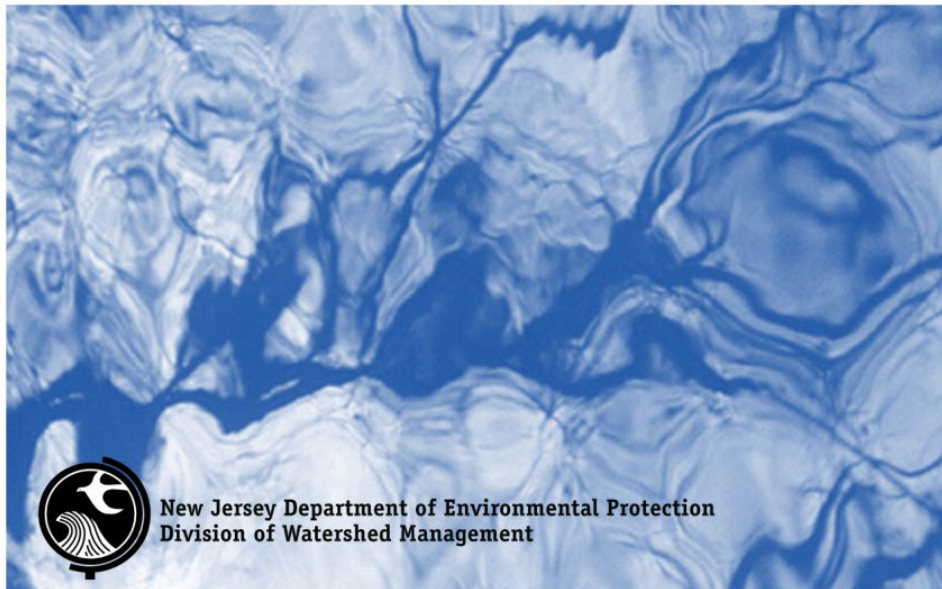
NJ Stormwater Guidance



New Jersey

Stormwater

Best Management Practices Manual



New Jersey Department of Environmental Protection
Division of Watershed Management

2019 Revisions

1. The current requirement that major developments incorporate nonstructural stormwater management strategies to the “maximum extent practical” to meet groundwater recharge standards, stormwater runoff quantity standards, and stormwater runoff quality standards, with a requirement that green infrastructure be utilized to meet these same standards
2. Total suspended solids (TSS) removal only applies to runoff from motor vehicle surfaces

NJDEP Green Infrastructure Definition

A stormwater management measure that manages stormwater close to its source by:

1. Treating stormwater runoff through infiltration into subsoil
2. Treating stormwater runoff through filtration by vegetation or soil
3. Storing stormwater runoff for reuse



Green Infrastructure Standard

- Green infrastructure best management practices (BMP) must be used to satisfy recharge, quantity, and quality
- Three tables identifying the performance of each BMP in meeting the three standards
 - ✓ Water Quality & Recharge – BMPs in Table 1
 - ✓ Quantity – BMPs in Table 1 or Table 2
 - ✓ If received a variance – BMPs in Table 1, Table 2, or Table 3
- Maintain existing ability to propose an alternative stormwater design
 - ✓ Alternative design must meet green infrastructure definition and must meet drainage area limitation if similar to BMP with limit

Table 1

Best Management Practice	Quality TSS removal rate (%)	Quantity	Recharge	Minimum separation from seasonal high-water table (ft)
Bioretention Systems	80 or 90	Yes	Yes	2
			No	1
Cisterns	0	Yes	No	-
Dry Wells	0	No	Yes	2
Grass Swales	50 or less	No	No	2
Green Roofs	0	Yes	No	-
Infiltration Basins	80	Yes	Yes	2
Manufactured Treatment Device	50 or 80	No	No	Dependent upon the device
Pervious Paving Systems	80	Yes	Yes	2
			No	1
Sand Filters	80	Yes	Yes	2
Vegetative Filter Strips	60-80	No	No	-

- Table 1 BMPs shall be used for recharge, quantity, and quality
- Drainage area limitation applies to bioretention basins, dry wells, infiltration basins, manufactured treatment devices, and sand filters

Table 2

Best Management Practice	Quality TSS removal rate (%)	Quantity	Recharge	Minimum separation from seasonal high water table (ft)
Bioretention Systems	80 or 90	Yes	Yes	2
			No	1
Infiltration Basins	80	Yes	Yes	2
Standard Constructed Wetlands	90	Yes	No	N/A
Wet Ponds	50-90	Yes	No	N/A

Table 2 BMPs may only be used for quantity

Table 3

Best Management Practice	Quality TSS removal rate (%)	Quantity	Recharge	Minimum separation from seasonal high water table (ft)
Blue Roofs	0	Yes	No	N/A
Extended Detention Basins	40-60	Yes	No	1
Manufactured Treatment Device	50 or 80	No	No	Dependent upon the device
Sand Filters	80	Yes	No	1
Subsurface Gravel Wetlands	90	No	No	1
Wet ponds	50-90	Yes	No	N/A

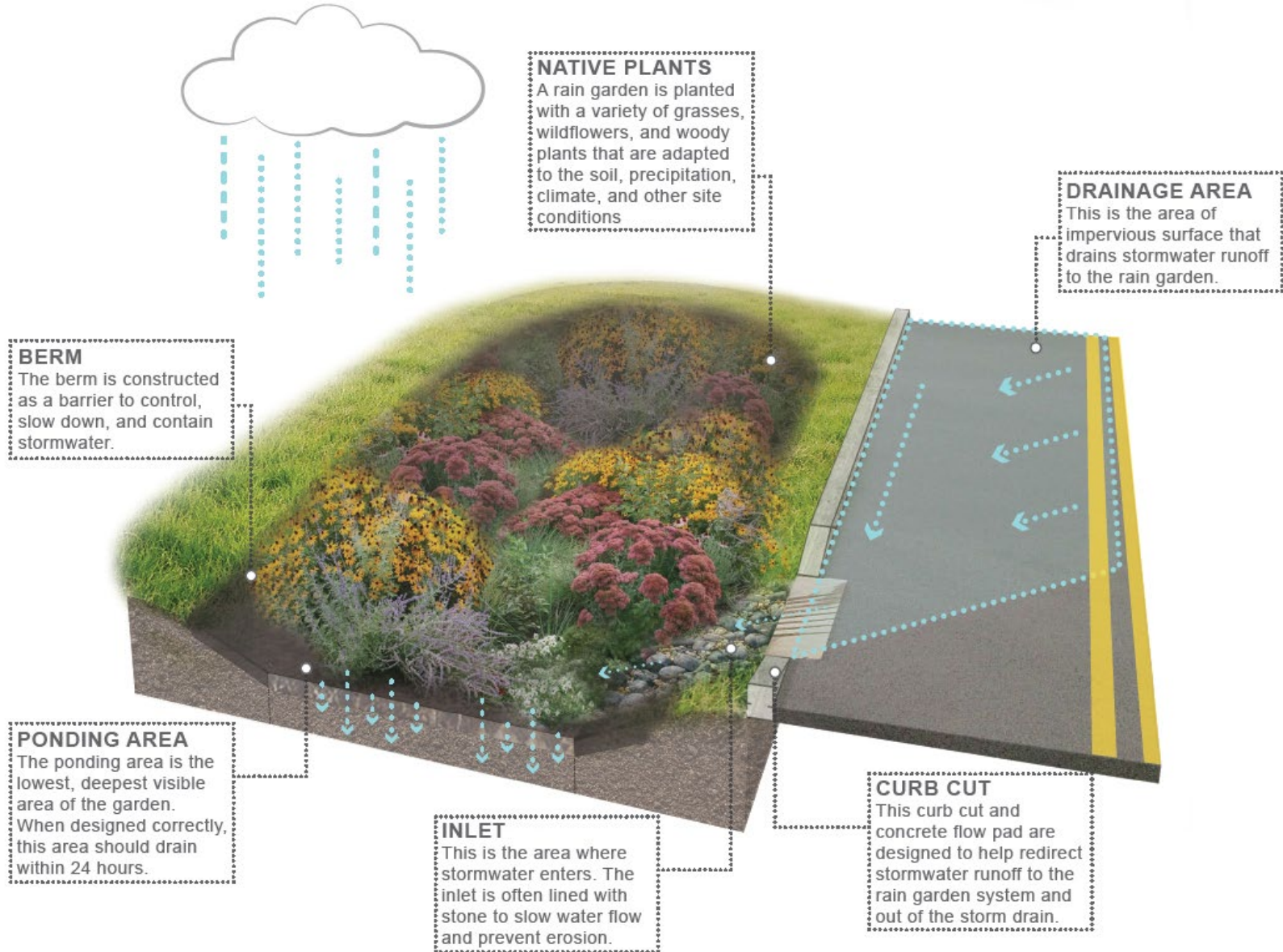
Table 3 BMPs may only be used if a variance is granted

**Let's talk about the practicality of these
new regulations**

Table 1

Best Management Practice	Quality TSS removal rate (%)	Quantity	Recharge	Minimum separation from seasonal high-water table (ft)
Bioretention Systems	80 or 90	Yes	Yes	2
			No	1
Cisterns	0	Yes	No	-
Dry Wells	0	No	Yes	2
Grass Swales	50 or less	No	No	2
Green Roofs	0	Yes	No	-
Infiltration Basins	80	Yes	Yes	2
Manufactured Treatment Device	50 or 80	No	No	Dependent upon the device
Pervious Paving Systems	80	Yes	Yes	2
			No	1
Sand Filters	80	Yes	Yes	2
Vegetative Filter Strips	60-80	No	No	-

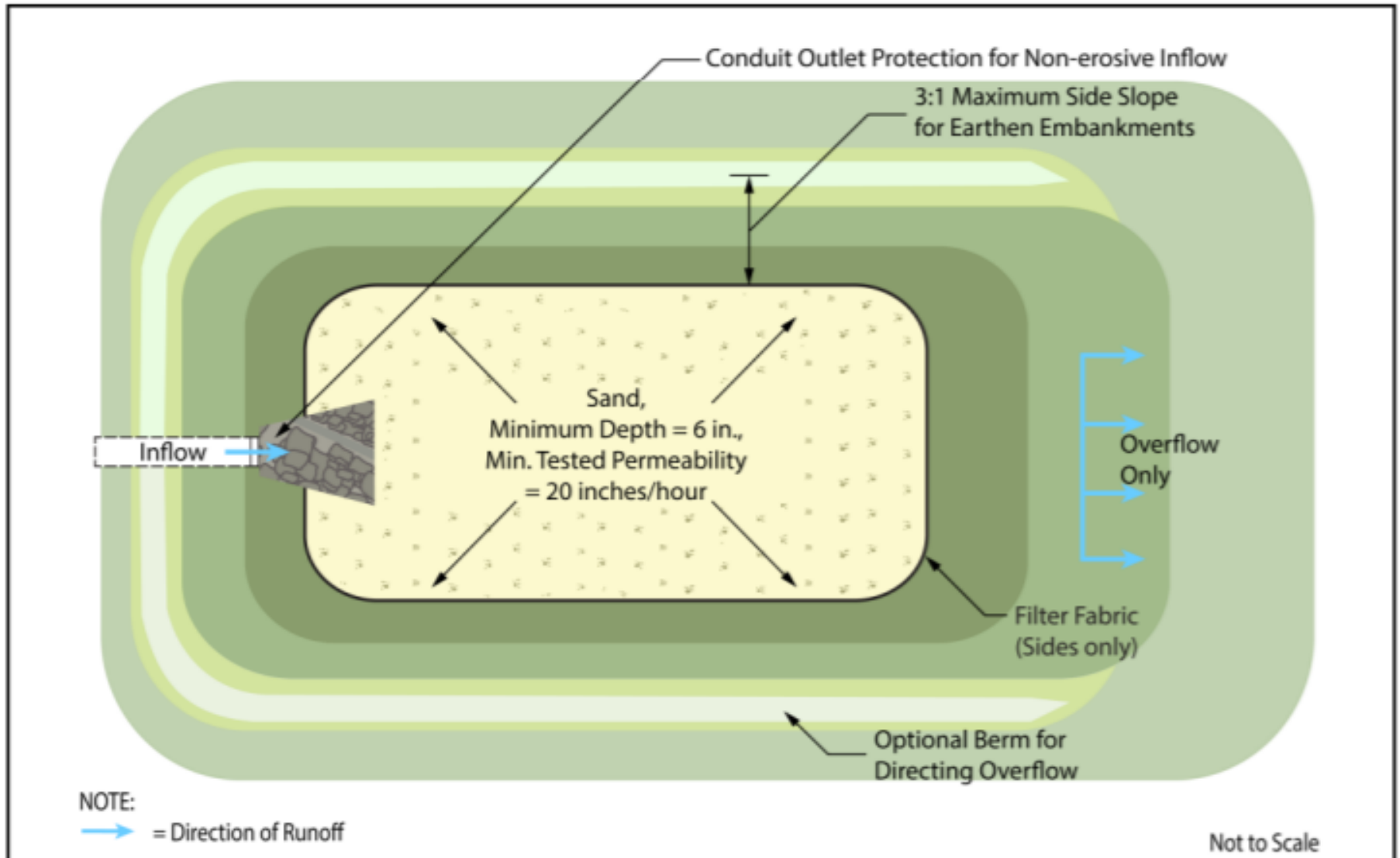
Bioretention Systems



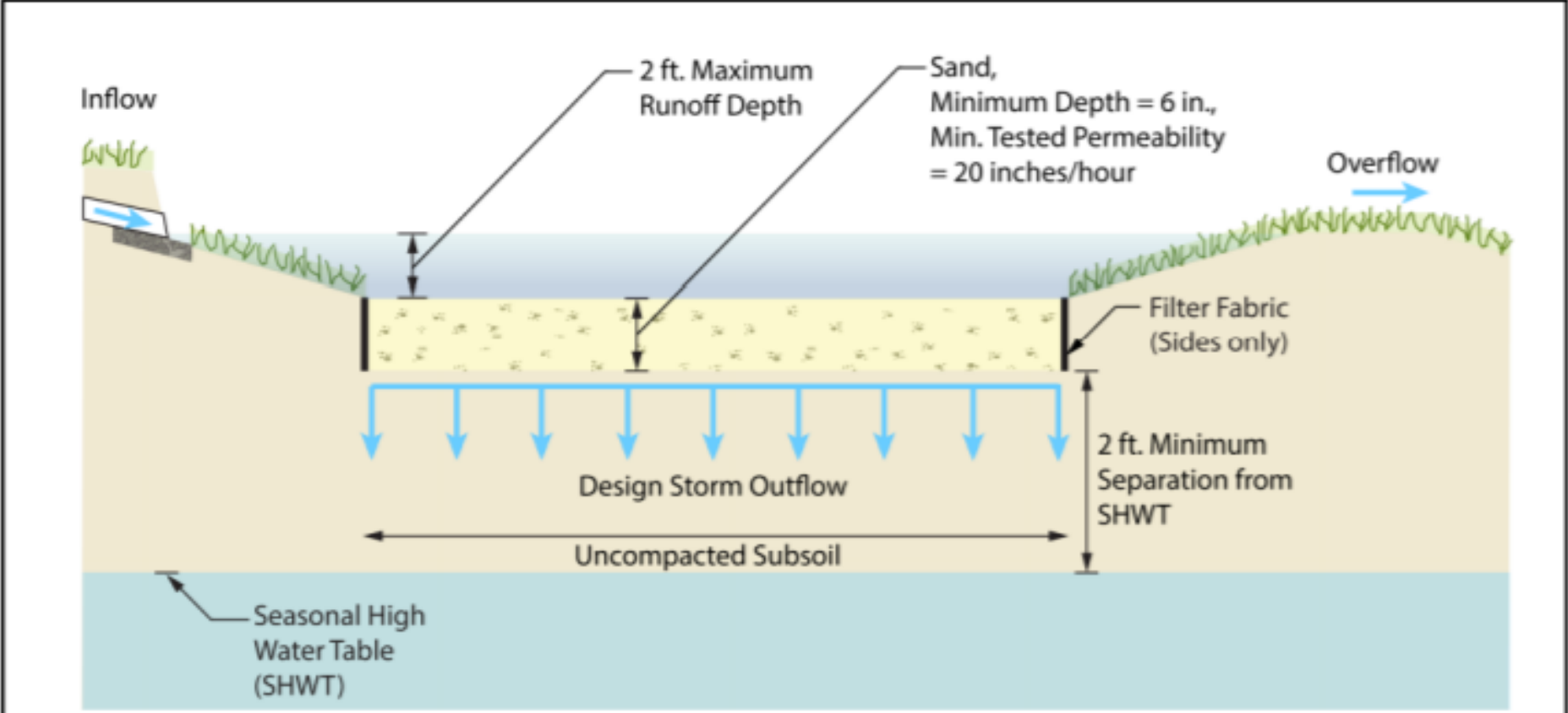


Infiltration Systems

Surface Infiltration Basin – Plan View



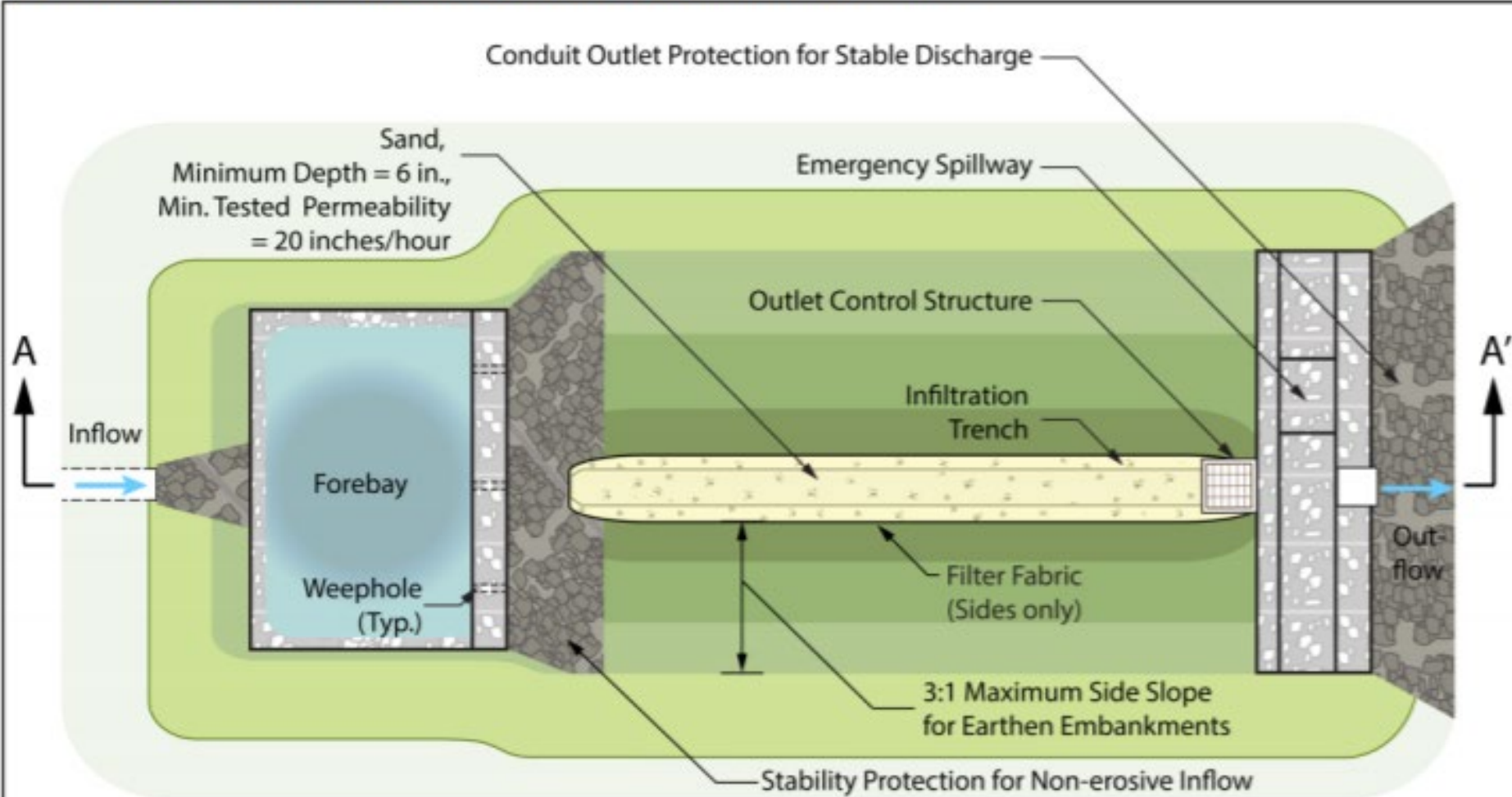
Surface Infiltration Basin – Profile View



NOTE:
→ = Direction of Runoff

Not to Scale

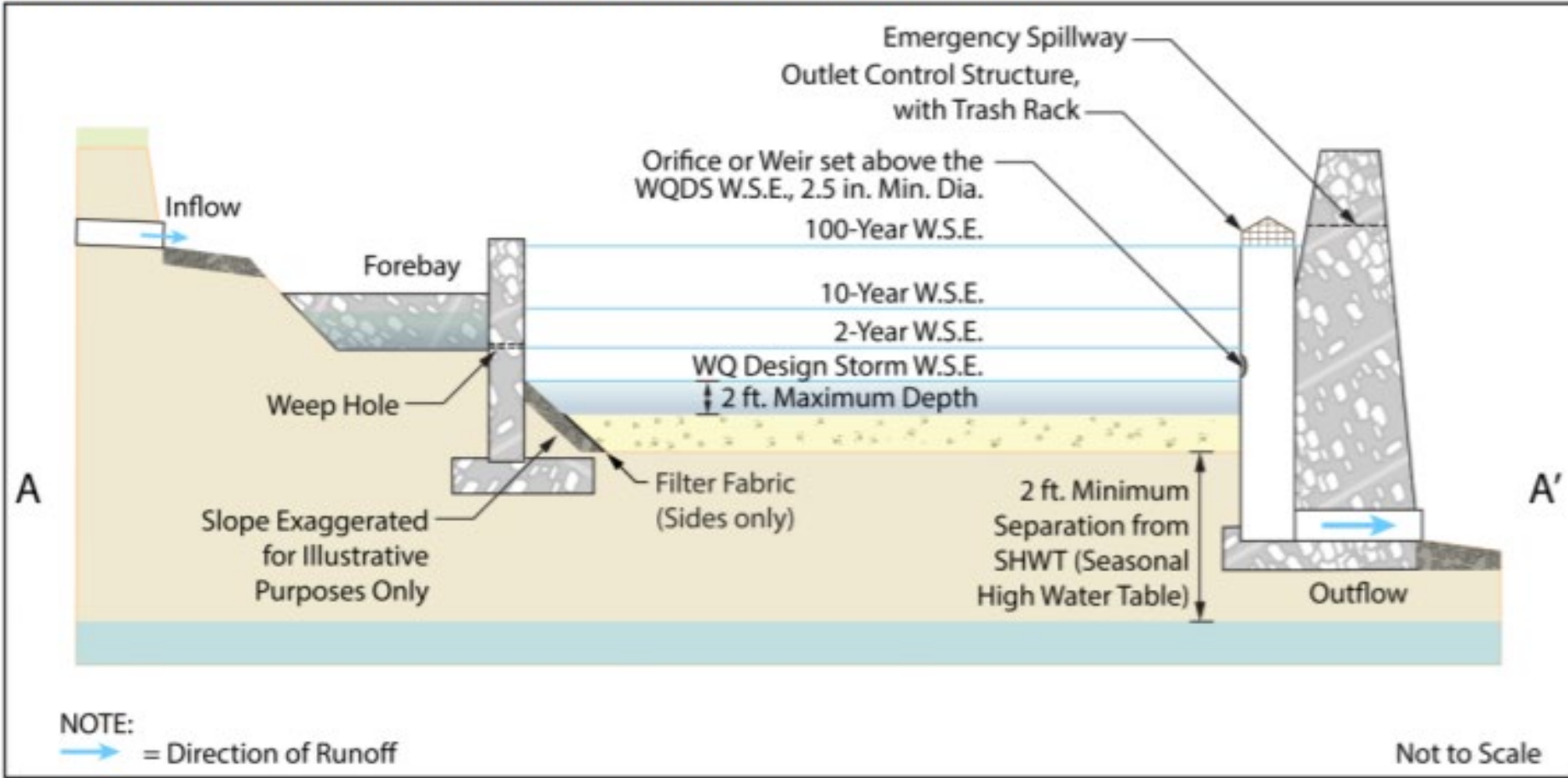
Infiltration - Extended Detention Basin: Plan View



NOTE:
→ = Direction of Runoff

Not to Scale

Infiltration – Extended Detention Basin: Profile View



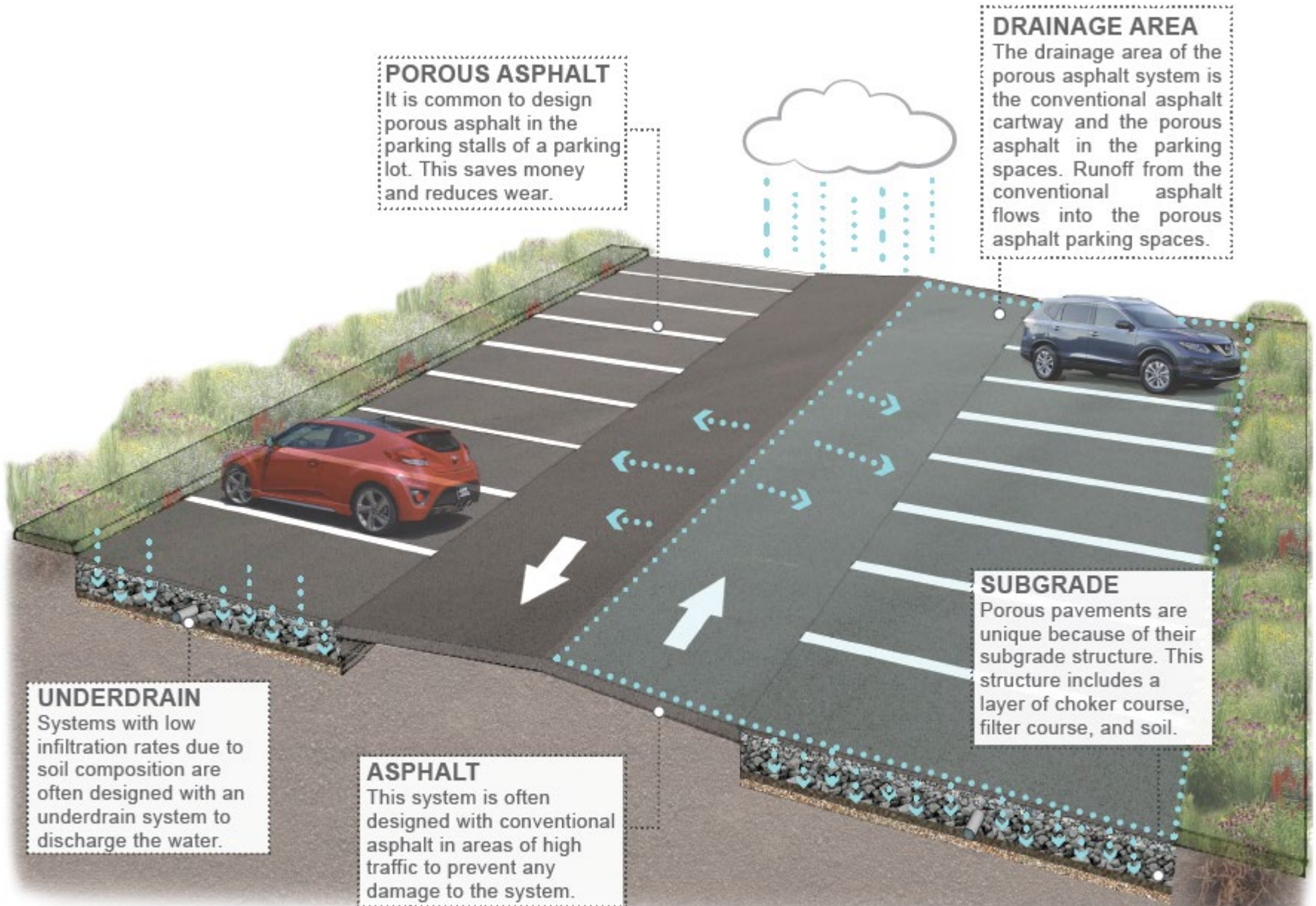
Pervious Paving Systems

POROUS ASPHALT

It is common to design porous asphalt in the parking stalls of a parking lot. This saves money and reduces wear.

DRAINAGE AREA

The drainage area of the porous asphalt system is the conventional asphalt cartway and the porous asphalt in the parking spaces. Runoff from the conventional asphalt flows into the porous asphalt parking spaces.



UNDERDRAIN

Systems with low infiltration rates due to soil composition are often designed with an underdrain system to discharge the water.

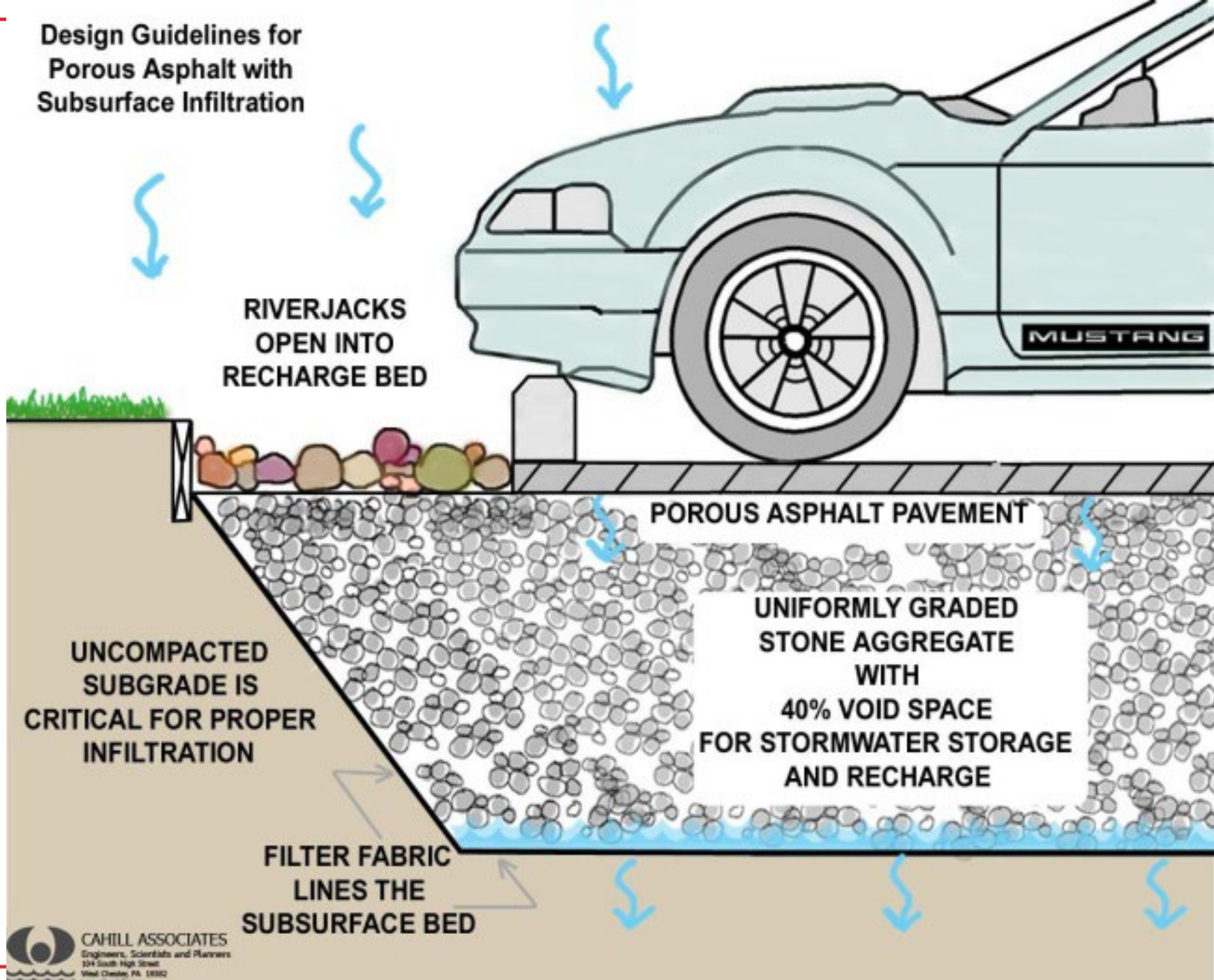
ASPHALT

This system is often designed with conventional asphalt in areas of high traffic to prevent any damage to the system.

SUBGRADE

Porous pavements are unique because of their subgrade structure. This structure includes a layer of choker course, filter course, and soil.

Design Guidelines for Porous Asphalt with Subsurface Infiltration



RIVERJACKS
OPEN INTO
RECHARGE BED

POROUS ASPHALT PAVEMENT

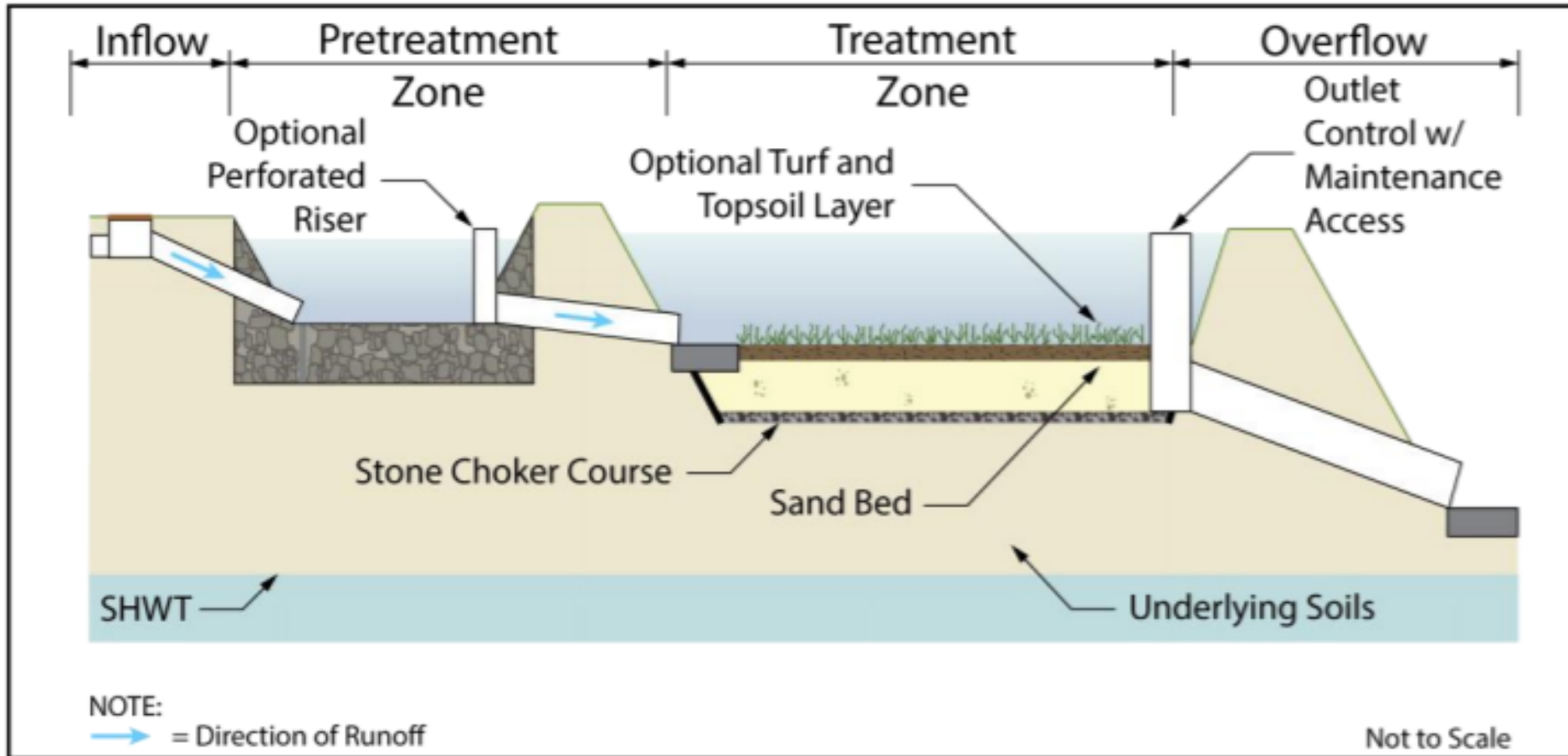
UNIFORMLY GRADED
STONE AGGREGATE
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UNCOMPACTED
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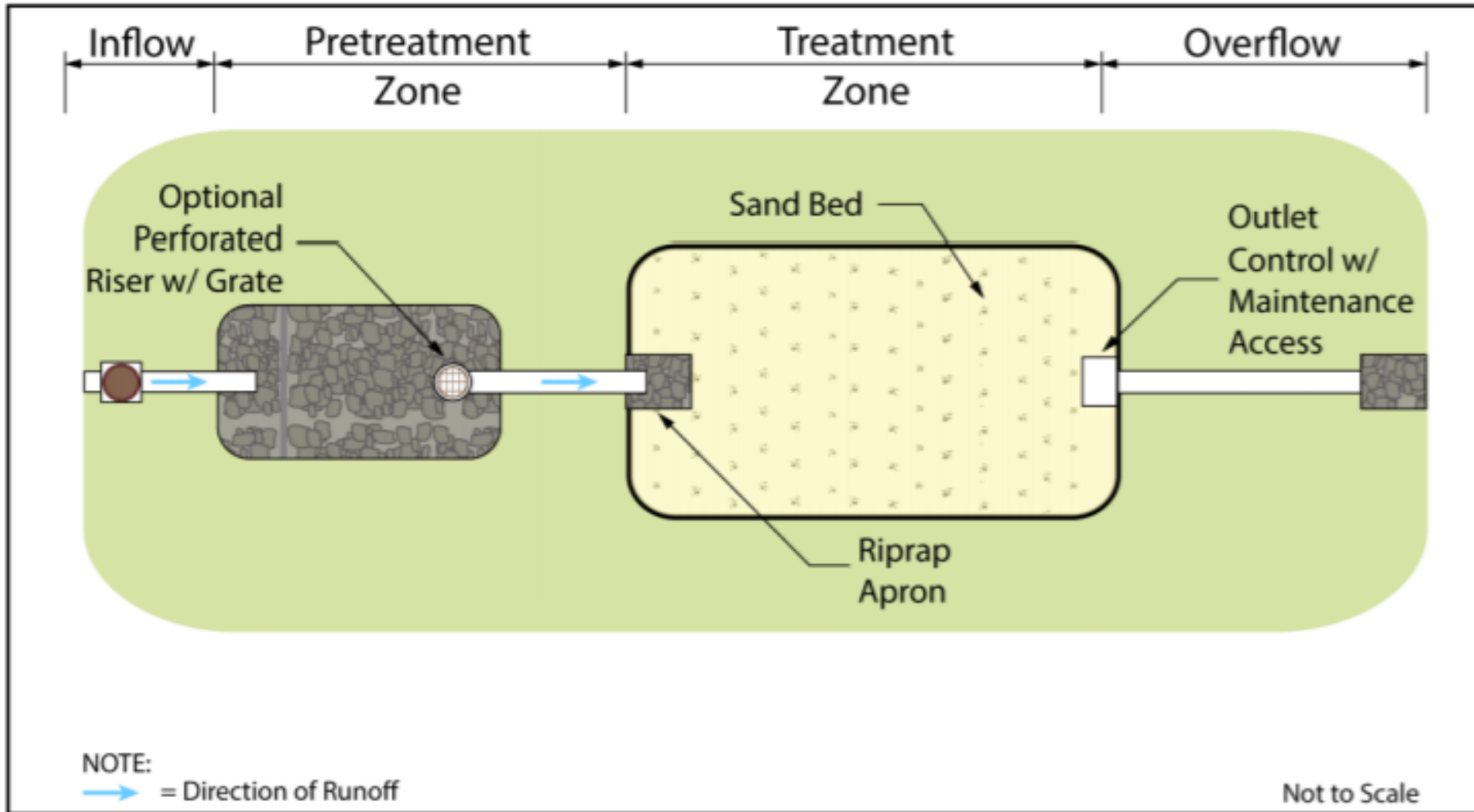
FILTER FABRIC
LINES THE
SUBSURFACE BED

Sand Filter

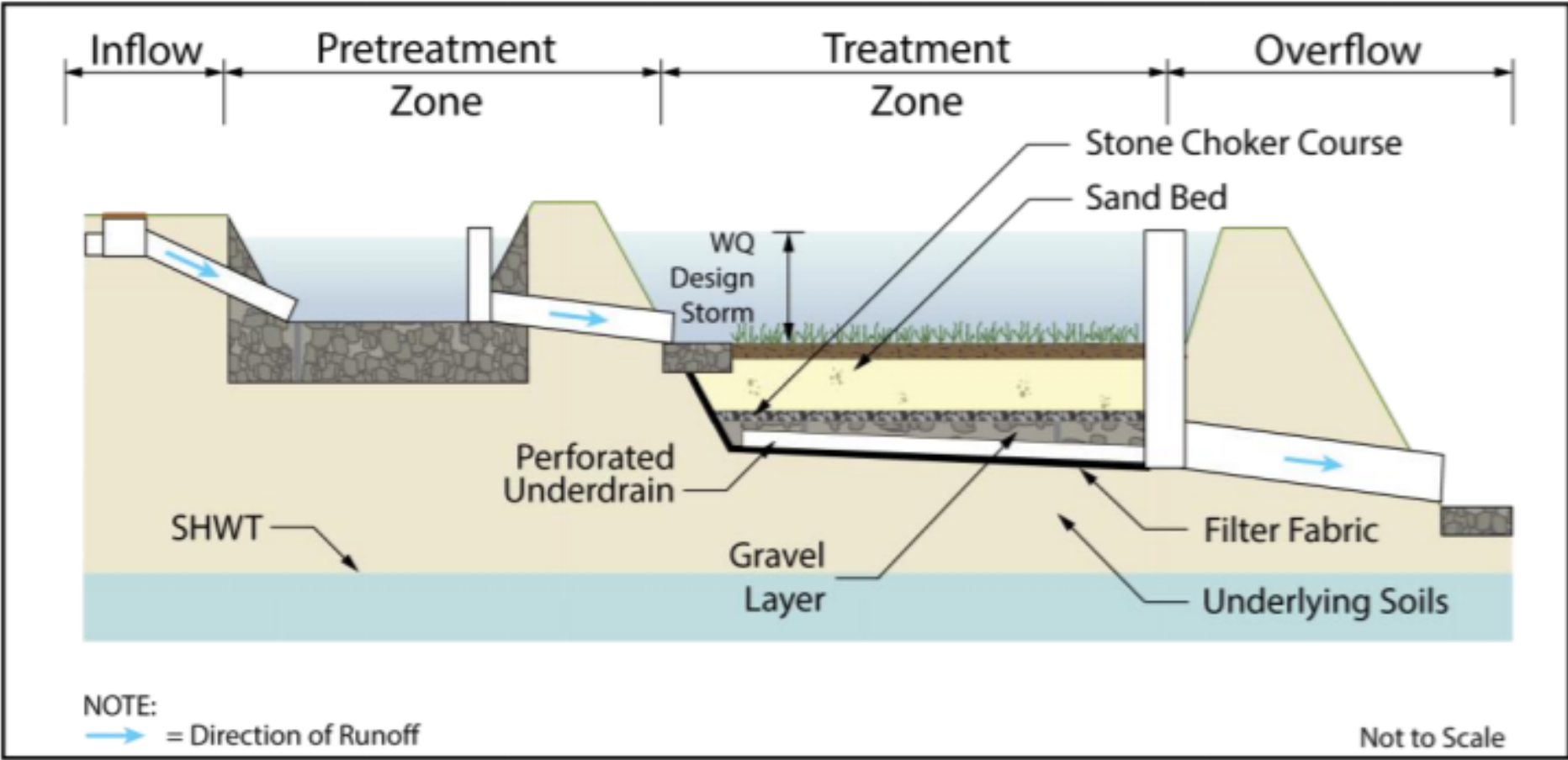
Profile View – Sand Filter Basics



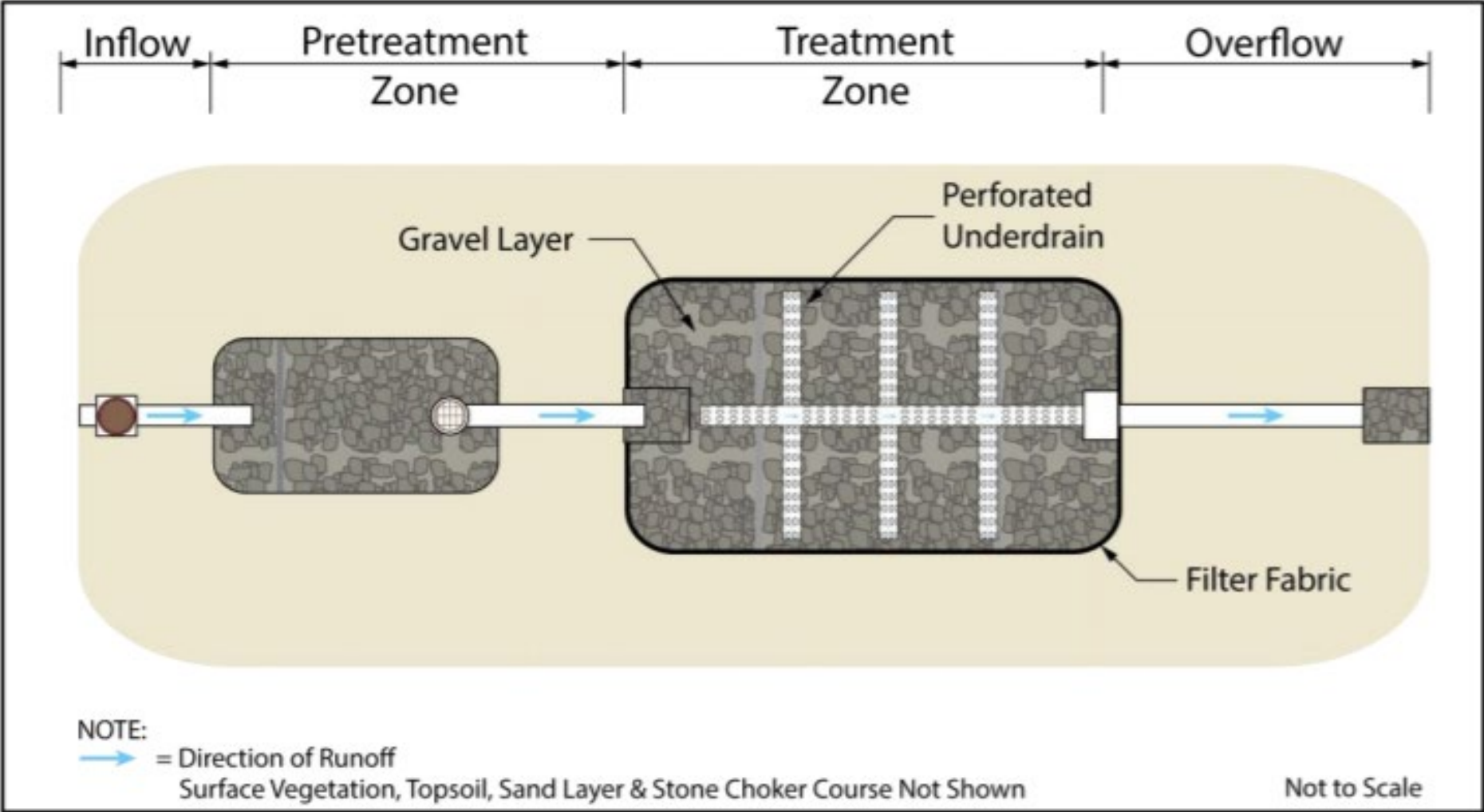
Plan View – Sand Filter Basics



Profile View – Sand Filter with Underdrain



Plan View – Sand Filter with Underdrain



**On July 17, 2023, NJDEP revised
Stormwater Management Rules
Flood Hazard Area Control Act
Rules**

2100 Projection

Future Precipitation Change Factors

County	2-year Design	10-year Design	100-year Design
	Storm	Storm	Storm
Atlantic	1.22	1.24	1.39
Bergen	1.20	1.23	1.37
Burlington	1.17	1.18	1.32
Camden	1.18	1.22	1.39
Cape May	1.21	1.24	1.32
Cumberland	1.20	1.21	1.39
Essex	1.19	1.22	1.33
Gloucester	1.19	1.23	1.41
Hudson	1.19	1.19	1.23
Hunterdon	1.19	1.23	1.42
Mercer	1.16	1.17	1.36

Future Precipitation Change Factors

County	2-year Design	10-year Design	100-year Design
	Storm	Storm	Storm
Middlesex	1.19	1.21	1.33
Monmouth	1.19	1.19	1.26
Morris	1.23	1.28	1.46
Ocean	1.18	1.19	1.24
Passaic	1.21	1.27	1.50
Salem	1.20	1.23	1.32
Somerset	1.19	1.24	1.48
Sussex	1.24	1.29	1.50
Union	1.20	1.23	1.35
Warren	1.20	1.25	1.37

2020 Projection

Current Precipitation Adjustment Factors			
County	2-year	10-year	100-year
Atlantic	1.01	1.02	1.03
Bergen	1.01	1.03	1.06
Burlington	0.99	1.01	1.04
Camden	1.03	1.04	1.05
Cape May	1.03	1.03	1.04
Cumberland	1.03	1.03	1.01
Essex	1.01	1.03	1.06
Gloucester	1.05	1.06	1.06
Hudson	1.03	1.05	1.09
Hunterdon	1.02	1.05	1.13
Mercer	1.01	1.02	1.04

Current Precipitation Adjustment Factors			
County	2-year	10-year	100-year
Middlesex	1.00	1.01	1.03
Monmouth	1.00	1.01	1.02
Morris	1.01	1.03	1.06
Ocean	1.00	1.01	1.03
Passaic	1.00	1.02	1.05
Salem	1.02	1.03	1.03
Somerset	1.00	1.03	1.09
Sussex	1.03	1.04	1.07
Union	1.01	1.03	1.06
Warren	1.02	1.07	1.15

Section F Further Details: Minimum Standards for Pollution Prevention/ Good Housekeeping for Municipal Operators

1. Community-wide Ordinances

- Pet Waste, Wildlife Feeding, Litter Control, Improper Waste Disposal, Yard Waste, Private Inlet Retrofitting (existing)
- Privately-Owned Salt Storage, Tree Removal/Replacement (EDPA + 12 months)

2. Community-wide Measures

- Street Sweeping (triannual w/ inlets, annual w/o inlets)
- Storm drain labeling and retrofitting
- Herbicide Management (don't apply near storm drains or steep ground)
- Excess De-Icing Material (remove within 72 hours excess salt piles)
- Roadside Vegetative Waste management (proper disposal of yard waste)
- Roadside Erosion Control (inspect municipal roads annually for erosion)

3. Inspection and Maintenance of Stormwater Facilities Owned and Operated

- See future slides

4. Inspection and Maintenance of Stormwater Facilities Not Owned and Operated

- Certify annually that facilities not owned or operated by the town constructed after February 7, 1984 are adequately cleaned and maintained

Section F Further Details

5. Municipal Maintenance Yards

- Many requirements in this section that should be reviewed. Focus on identifying possible sources of contamination to stormwater discharge on maintenance yards and how materials are stored.

6-10. Trainings

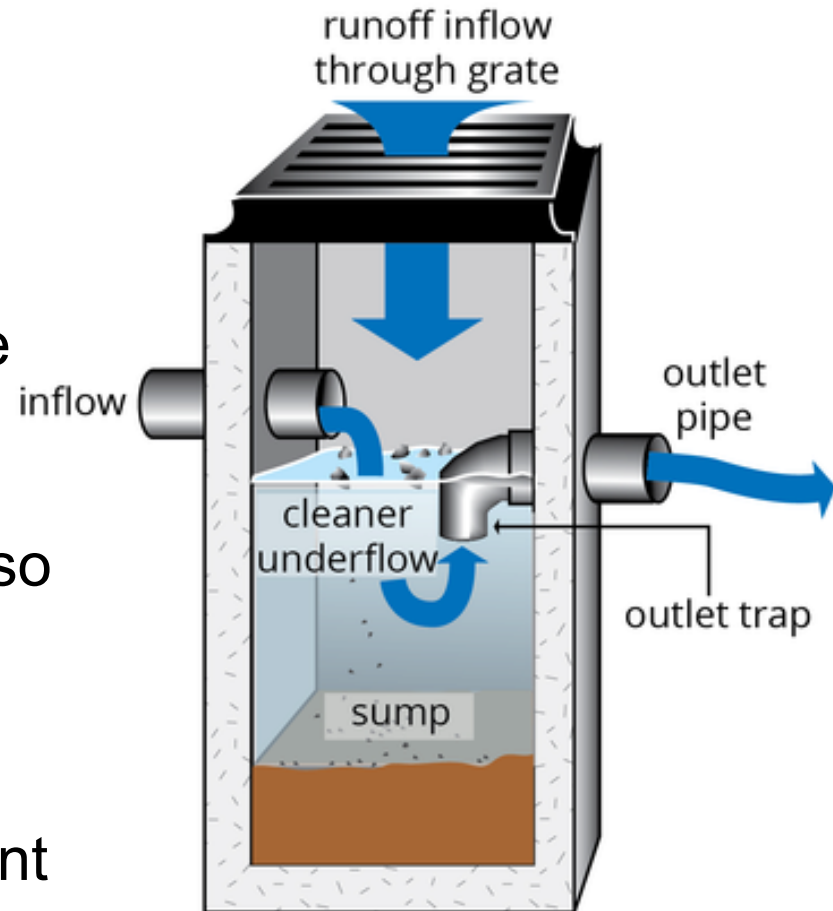
6. Stormwater Program Coordinator Training (participate in Department free training webinar within EDPA + 36 months and once per permit cycle thereafter)
7. Annual Employee Training (individual responsible for implementation of MS4 permit receive annual training, i.e. governing body members, municipal employees in public works, engineering, etc.)
8. Stormwater Management Design Review Training (those that review and approve stormwater management designs for major development complete required Department Training, once every 5 years)
9. Stormwater Management Rule Amendment Training (if permit amended complete training as require within a year of adoption)
10. Municipal Board and Governing Body Member Training (Complete “Asking the Right Question” Tool, to be completed once per term of service)

Section F: Inspection and Maintenance of Stormwater Facilities Owned and Operated by Permittee

- i. Storm drain inlet inspection
- ii. Storm drain inlet cleaning and maintenance
- iii. Catch basin inspection
- iv. Catch basin cleaning
- v. MS4 conveyance inspection and cleaning
- vi. Stormwater infrastructure inspection
- vii. Stormwater infrastructure maintenance
- viii. Inspection and maintenance logs
- ix. Annual report

Tier A MS4 Permit Definitions

- "Catch Basin" means a cistern, vault, chamber or well that is typically built along a street and below an inlet grate as part of the storm sewer system that is designed to capture and retain sediment, debris, and pollutants so those particles do pass on to the stormwater sewer system.
- "Storm drain inlet" means the point of entry into the storm drain system and is, where a catch basin is present, the uppermost portion (or cover) of a catch basin.



Summary of MS4 Requirements

Inspect storm drain inlets once per year

- Clean and maintain as frequently as necessary

Inspect catch basins once every 5 years

- Clean catch basins as needed, about 1/3 of basin filled with sediment

Inspect conveyance structures

- Clean and maintain on an as needed basis

Summary of MS4 Requirements

Stormwater infrastructure inspected according to approved maintenance plan

- Stormwater basins and other structures, i.e. underground storage systems, green stormwater infrastructure
- Maintain as needed according to maintenance plan
- If there is no approved maintenance plan, inspect at least 4 times per year and after each rainstorm exceeding 1 inch of total rainfall

Summary of MS4 Requirements

For Stormwater infrastructure not owned and operated by the Permittee:

- The permittee shall develop, update, implement and enforce a program to ensure adequate long-term cleaning, operation and maintenance of stormwater facilities not owned or operated by the permittee.

Summary of MS4 Requirements

- Log activities to show compliance
- Correct maintenance and repairs within 90 day of discovery, unless authorized by DEP
- Certify in the MSRP Annual Report if facilities have been inspected, maintained, and properly function

Section F: Municipal Maintenance Yards

- a. Document best management practices
- b. Site inspections
- c. Inventory list
- d. Container labels
- e. Spill kits
- f. Bulk liquid storage
- g. Fueling operations
- h. Discharge of stormwater from secondary containment
- i. Vehicle/Equipment maintenance and/or repair
- j. Wash wastewater containment
- k. Salt and other granular de-icing material storage and handling

Section F: Municipal Maintenance Yards

- l. Aggregate material, wood chips, and finished leaf compost storage
- m. Cold patch asphalt storage
- n. Street sweeping and storm sewer clean out material storage
- o. Construction and demolition waste, wood waste, and yard trimming storage
- p. Scrap tires
- q. Inoperable vehicle or equipment
- r. Outdoor refuse containers and dumpsters

Section F: Training

- Stormwater Program Coordinator (SPC) Training
(once per permit cycle)



Annual Employee Training

- i. SPPP
- ii. Construction Site Stormwater Runoff
- iii. Post-Construction Stormwater Management in New Development and Redevelopment
- iv. Community-wide Ordinances
- v. Community-wide Measures
- vi. Stormwater Facility Maintenance
- vii. Municipal Maintenance Yard Operations and other ancillary operations
- viii. MS4 Mapping
- ix. Outfall stream scouring detection and control
- x. Illicit Connection Elimination
- xi. Watershed Improvement Plan

Section F: Training

- Stormwater Management Design Review Training (once per permit cycle)
- Stormwater Management Rule Amendment Training (within one year after rule amendment)
- Municipal Board and Governing Body Member Training (once per term)

Section G: MS4 Mapping, and Scouring, and Illicit Discharge Detection Elimination

- MS4 Mapping including:
 - i. MS4 outfalls
 - ii. MS4 groundwater discharge points
 - iii. MS4 interconnections
 - iv. Storm drain inlets
 - v. MS4 manholes
 - vi. MS4 conveyance
 - vii. MS4 pump stations
 - viii. Stormwater facilities
 - ix. Property boundaries of maintenance yards
- Stream Scouring (inspect each outfall once every five years)

Section G: MS4 Mapping, and Scouring, and Illicit Discharge Detection Elimination

- Illicit Discharge Detection and Elimination (dry weather inspections once every five years)
 - i. Detect source within 30-days
 - ii. Eliminate within one year

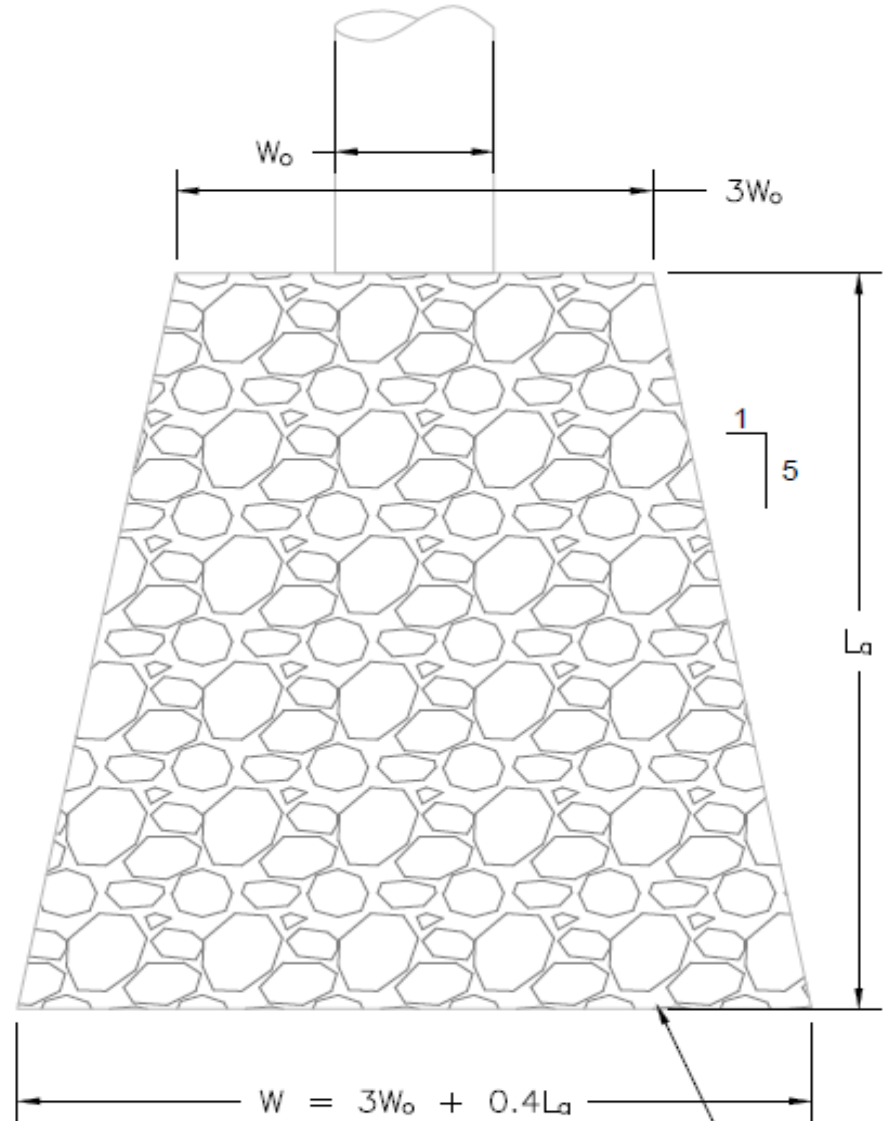


Riprap Apron

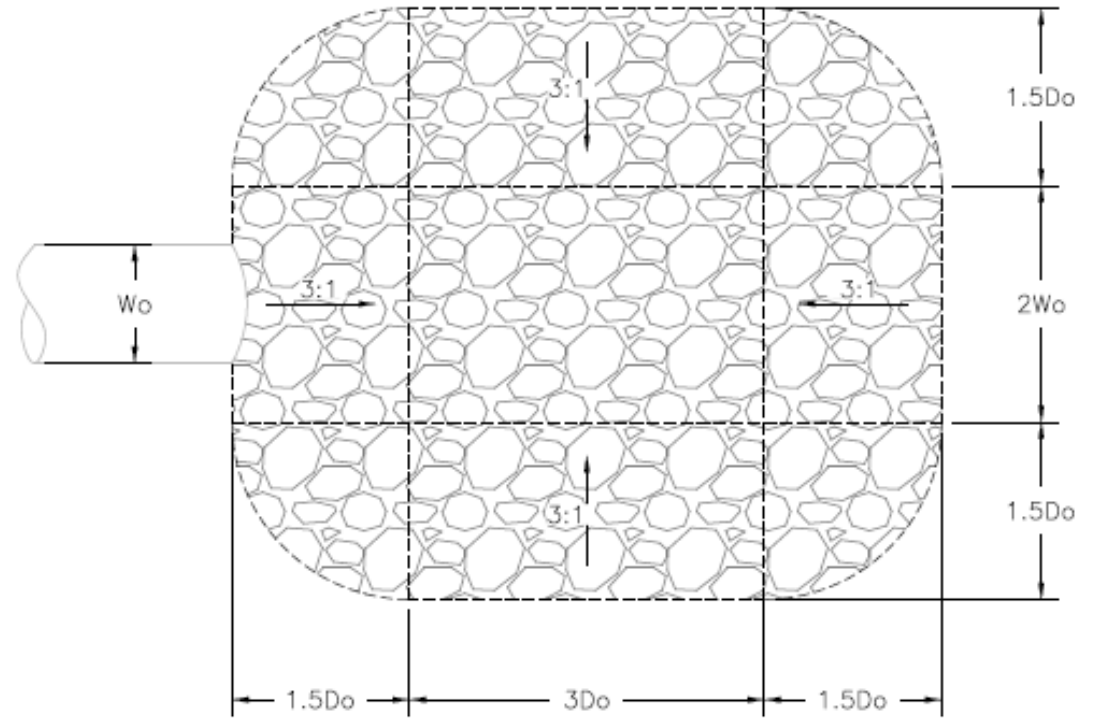
TAILWATER $\geq 0.5 D_o$

$$L_a = 1.8(q / D_o^{0.5}) + 7D_o$$

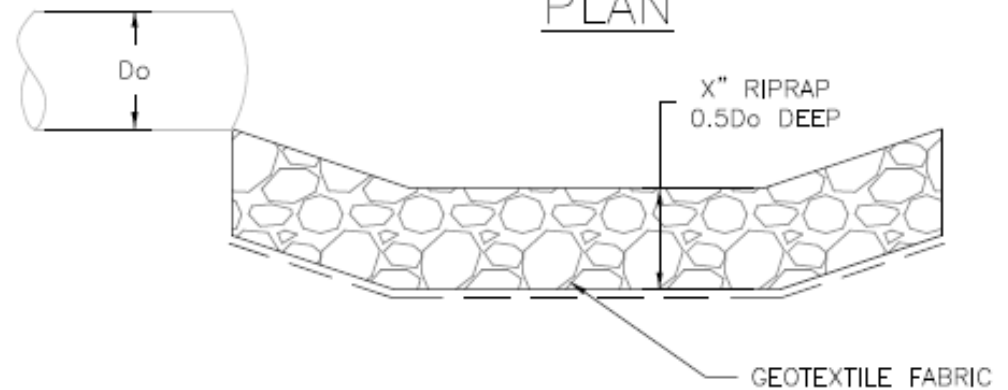
$$q = Q/W_o$$



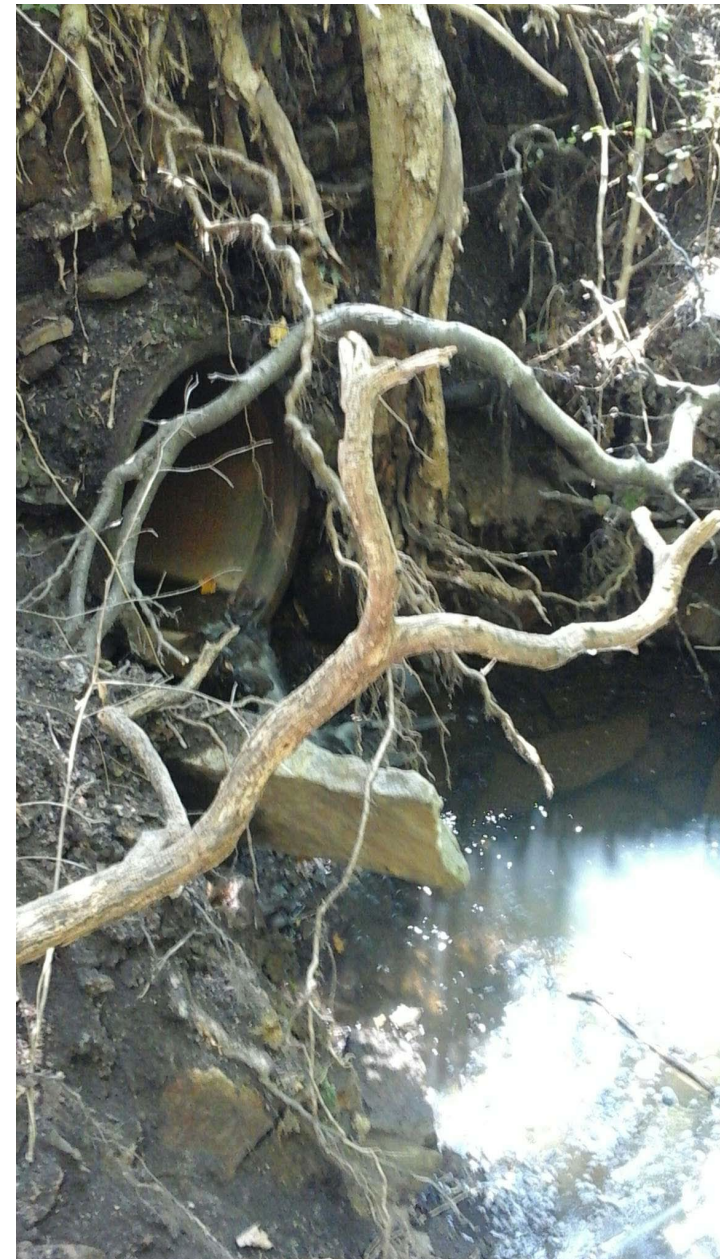
Scour Hole



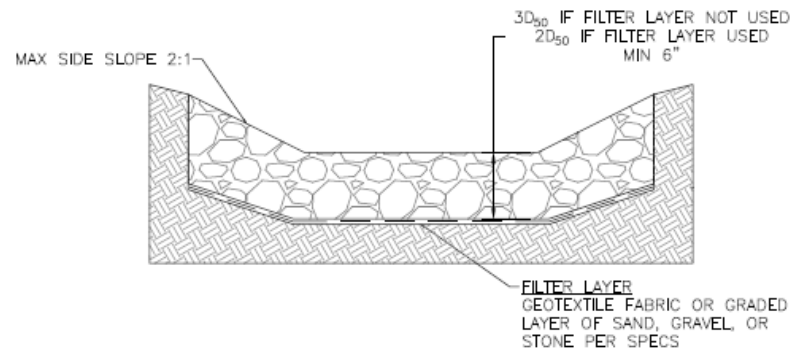
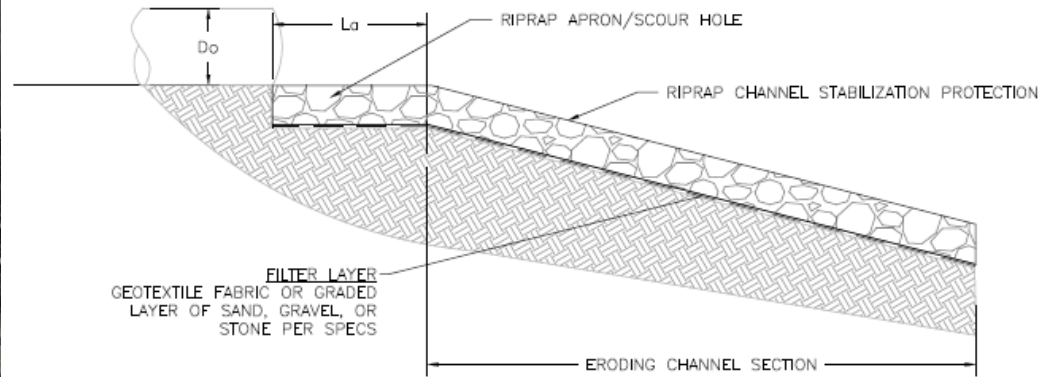
PLAN



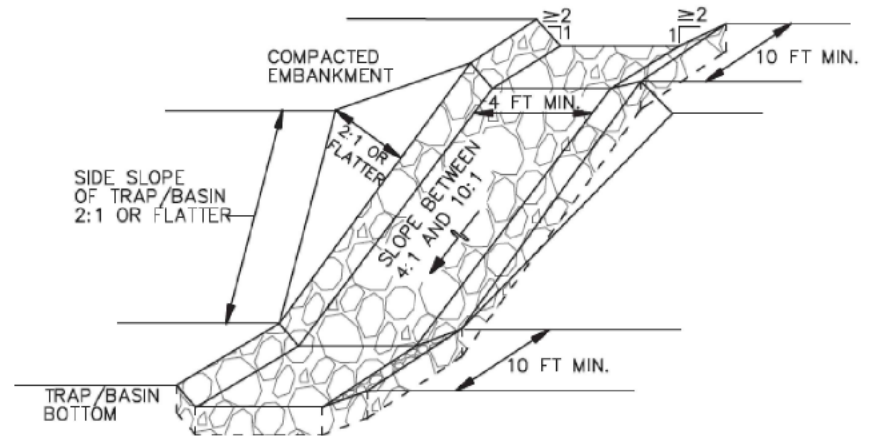
SECTION



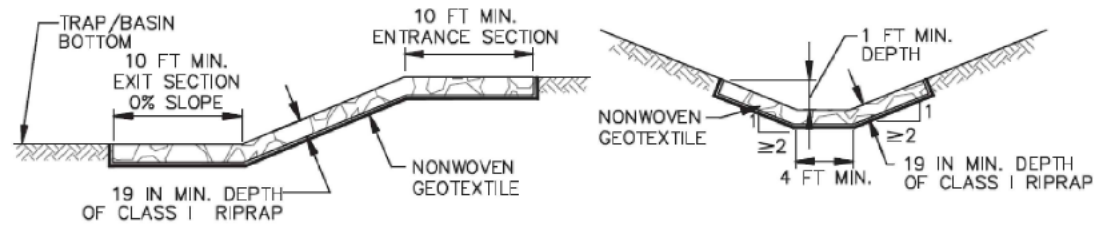
Riprap Channel



Rock/Gabion Flume



ISOMETRIC VIEW

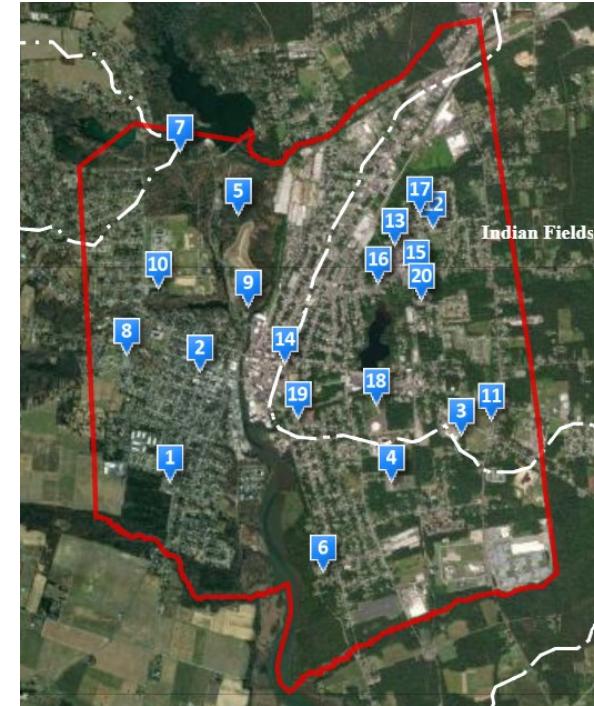


PROFILE ALONG CENTERLINE

CROSS SECTION

Watershed Improvement Plan

- Designed to improve water quality problems
- Focused on reducing the MS4 contribution of pollutants to waterbodies with listed impairments and TMDLs
- Reducing or eliminating flooding with priority given based on human health and safety, environmental impacts, and frequency of occurrence
- Plan shall be developed with input from residents, businesses, neighboring towns, other dischargers



Three phases of watershed improvement plans

Phase 1 – Prepare and submit the Watershed Inventory Report; conduct outreach (*EDPA + 36 mo.*)

- Summarize/map required information, some is available from the Department's GIS database

Phase 2 – Prepare and submit the Watershed Assessment Report; conduct outreach (*EDPA + 48 mo.*)

- Assess potential projects with estimates of the reduction in pollutant loading & funding need

Phase 3 – Prepare and submit the Watershed Improvement Plan Report; conduct outreach (*EDPA + 59 mo.*)

- Summarize proposed projects with improvement expected, comments received, costs, coordination with other regulatory programs, and implementation schedule

QUESTIONS?

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