#### THE TOWN OF FARMINGTON

INCORPORATED 1645



TOWN HALL

1 MONTEITH DRIVE FARMINGTON, CONNECTICUT 06032-1053

INFORMATION (860) 675-2300 FAX (860) 675-7140 "BULLETIN BOARD" (860) 675-2301

January 7, 2012

State of Connecticut
Department of Environmental Protection

Bureau of Water Management 79 Elm Street Hartford, CT 06106-5127

Attn: Stormwater Permit Coordinator

RE: Annual Report on Municipal Storm Sewers for 2012

Town of Farmington

Sir or Madame:

Enclosed with this letter, we are transmitting the Annual Report on Municipal Storm Sewers covering our activities performed during the calendar year 2012 as required under subsection 6(i)(2) of the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 General Permit). As noted previously, I am currently the primary contact for departmental correspondence and inquires. The stormwater monitoring data and sample locations for 2012 have been obtained based on the alternative sampling plan that the Commissioner approved in February 2007, the results of which can be found in Attachments B and C. A check for the municipal plan review fee, in the amount of \$187.50, was recently mailed to the Accounts Receivable Department at the CTDEEP.

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.

Sincerely,

Russell M. Arnold, Jr., P.E. Director/Town Engineer Department of Public Works

Town of Farmington

enclosures



## **2012 ANNUAL REPORT**

## **Municipal Separate Storm Sewer System**

**FARMINGTON, CT** 

## Prepared by

TOWN OF FARMINGTON
DEPARTMENT OF PUBLIC WORKS
Engineering Division
1 Monteith Drive
Farmington, CT 06032

December 2012

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#### 1. PURPOSE AND SCOPE

This Annual Report is required by subsection 6(i)(2) of the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 General Permit). The MS4 General Permit was issued by the Connecticut Department of Energy and Environmental Protection (CTDEEP) on January 9, 2004 and it is applicable to storm sewer facilities owned or operated by the Town of Farmington. The permit was extended "as-is" until January 8, 2013. The municipal storm sewer facilities owned by the Town of Farmington were registered by the filing of Part A and Part B of the required registration forms. This report is the vehicle by which the Town of Farmington is required to annually report to the CTDEEP Stormwater Permit Coordinator on the status of compliance with the MS4 General Permit and to submit the stormwater monitoring data collected and analyzed during the year.

The stormwater monitoring data can be found in Attachment A, and mapping of the locations where the stormwater discharge samples were collected can be found in Attachment B.

The alternative sampling plan that was filed as part of the 2006 Annual Report was approved by the Department of Environmental Protection Stormwater Permit Coordinator on February 27, 2007.

The certification required under subsection 7(e) of the MS4 General Permit is presented in Section 3 of this report.

## 2.2 Public Participation

The Town of Farmington has collaborated with other local non-profit organizations in an attempt to involve the public in environmentally friendly projects. While the events were planned to perform certain tasks, one of the key goals was to involve the public to educate them of the surrounding environment and the possible negative effects of their everyday lifestyles. It is the hope of these organizations that the public becomes aware of the environment and works to change their ways and encourage them to educate their friends and families.

On April 28, 2012 the Annual Farmington Town-Wide Clean-Up Day was conducted. This event is sponsored each year by local organizations and businesses in an effort to clean many areas around Town, and promote the importance of protecting the environment.

On April 28, 2012 the Town of Farmington Conservation Commission and Green Efforts Committee sponsored, with the support of The Metropolitan District Commission, an annual Household Hazardous Waste Collection and Electronics Recycling Program. As noted above, the public was made aware of these activities through the *Farmington Town Letter*.

On September 29, 2012 the Farmington River Watershed Association and several local Businesses sponsored a Farmington River Clean-Up Day. This effort involved the public in cleaning up the banks of the Farmington River.

## 2.3 Illicit Discharge Detection & Elimination

The mapping of municipal storm sewer outfalls within the Town of Farmington has been completed, and continues to be updated, as necessary. The Town of Farmington continues to map all public, institutional and private storm sewers and outfalls as they are installed or modified. The mapping of outfalls greater than 12 inches owned or maintained by the Town of Farmington has been completed, and storm sewer outfall mapping will continue to be updated as necessary. The above described mapping is used to assist with determining any non-point or point source discharges that directly affect surface water quality and discharges conveyed by storm sewers or other types of stormwater conveyance. The Town relies heavily on the use of the State Building Code to establish and enforce a required local review and approval of new storm sewer connections to municipal, institutional, private and state-owned storm sewers and, in addition, the construction of new privately owned storm sewer outfalls.

An Illicit Discharge and Connection Ordinance was approved by the Farmington Town Council, on July 12, 2011, and is included as Attachment C. The ordinance was developed to forbid any future illicit discharges or connections, and gives the Town authority to inspect any possible

applicant understands the obligation to maintain those controls, are being included in the zoning approval. Where post construction maintenance of storm sewer systems by private owners is necessary to ensure continuous effective operation and the avoidance of adverse water pollution impacts, the submission of maintenance programs is being required as a function of the approval process. In many cases, these programs are included in the Homeowners Association Documents. The Town has developed a "Declaration of Covenants for Maintenance of Storm and Surface Water Facility", which is signed by the Town and Owners. The document requires the owners to maintain the stormwater management system as approved by the Town. It also grants the Town the right to access the property for inspection purposes to insure that the system is being properly maintained and is continuing to perform in an adequate manner. Should the Owners fail to maintain or correct any deficiencies, the Town is authorized to enter the property and make the required maintenance or improvements, and assess the property owner for all costs associated with the work.

The Town of Farmington decided that in addition to mapping the publicly owned storm sewers, it would be beneficial to map and maintain an inventory of privately owned storm sewers, though not required by the permit. This has been completed and is continually being updated as necessary.

## 2.6 Good Housekeeping

Training of Town employees is through on-the-job instruction and training by supervisors, consultants, and through employee's attending University of Connecticut Technology Transfer training programs. The primary focus of the training continues to be the cross training of existing employees within the divisions that make up the Department of Public Works, aimed at ensuring a broader understanding of the roles of each member of the staff assigned specific stormwater management responsibilities and how those activities are integrated to meet the obligations of the stormwater general permit.

The practice of sweeping paved streets as soon as practical after snowmelt has been implemented. The Town has also converted from the use of a sand and salt mixture as ice control, to a commercial salt mixture. This operational change has significantly reduced the volume of sand that needs to be collected by street sweeping. The elimination of sand should improve the environmental health of the small and medium sized streams within the Town of Farmington, which have characteristically developed abnormal bottom deposits dominated by the erosion of sand from roadways. ConnDOT adopted a similar program in 2005 opting to use a liquid mixture in lieu of sand and salt.

Batterson Park Pond area (R-4 and R-5) and the Lake Garda area (R-16) are all previously sampled locations. The Town performed sampling at these locations to review the results against previous rounds of sampling. Sample Location R-29 was a new sampling location, chosen because it consists of relatively new homes, and also drains into the Batterson Park area. The sample location for the Farmington River (R-27) was chosen as a new sampling location, to determine the runoff from a relatively new development. The sample location for the Scott Swamp Brook (R-28) was chosen as a new sampling location, to determine the runoff from an older development.

Outlet R-4 discharges upland of Batterson Park Pond, along the northerly section of Batterson Park Road. The drainage area is comprised of mainly residential lots zoned R-12 (12,000 ft<sup>2</sup>), and discharges upland of Batterson Park Pond. The only abnormality was the increased presence of Escherichia Coliform compared to the 2006 sampling of this same outlet location. The area is serviced with public water and sanitary sewer. The Town will review the area, to determine the condition of the storm sewers, to ascertain if any cleaning is required.

Outlet R-5 discharges at the northwest corner of a bridge abutment, along the easterly portion of Batterson Park Pond. The outfall drains to a tributary of Bass Brook below the outlet of Batterson Park Pond. The drainage area is comprised of mainly residential lots zoned R-12 (12,000 ft<sup>2</sup>). The only abnormality was a small increase in the presence of Escherichia Coliform compared to the 2006 sampling of this same outlet location. The area is also serviced with public water and sanitary sewer. The Town will also review the area, to determine the condition of the storm sewers, and clean the storm sewer if necessary.

Outlet R-29 was taken from an outlet pipe at the southerly end of Garden Gate. The drainage area is comprised of mainly residential lots zoned R-40 (40,000 ft<sup>2</sup>). The outfall drains to a tributary of Bass Brook below the R-5 sampling location. The development consists of relatively newer homes, all built within the last 10 years. The area is serviced with public water and sanitary sewer. Sampling parameters were within normal levels.

Sample R-16 was taken from a 24" RCP that drains to Lake Garda. The drainage area is comprised of mainly residential lots zoned R-9 (9,000 ft<sup>2</sup>). The lake is approximately 48 acres, and this sample location accounts for only a small portion of the lakes drainage area. The results indicated an elevated level of Escherichia Coliform compared to the 2010 sampling of this same outlet location. The outlet was also tested in 2008, where the results indicated a higher level of Escherichia Coliform than 2010 and 2012. The results indicate a large variable between 2008 and 2010. The area is serviced with public water and sanitary sewer; however the lake is used

#### 3. CERTIFICATION

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.

Russell M. Arnold, Jr., P.E.

Director/Town Engineer

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Department of Public Works

## ATTACHMENT A

**Stormwater Monitoring Report Forms** 



## Stormwater Monitoring Report Form

## **PERMITTEE INFORMATION**

Town:	Town of Farmington	
Mailing Address: 1 Monteith Drive, Farmington CT 06032		
Contact Person: Russell M. Arnold, Jr. P.E. Title: DPW Director Phone: 860-675-2305		
Permit Registration #GSM		

## **SAMPLING INFORMATION**

Discharge Location (Lat/Long or other description): R-4_10-19-12:Lat41-42-55.982, Long72-47-15.334			
Located on Batterson Park Road 500ft south of Two Mile Road near Entrance to Batterson Park Pond			
Please circle the appropriate area description: Industrial, Commercial, o Residential			
Receiving Water (name, basin): Bass Brook, 4401-00-1-L1			
Time of Start of Discharge: 0500 hrs			
Date/Time Collected: October 19, 2012/0937 hrs Water Temperature: 50°F			
Person Collecting Sample: Bruce Cyr & Stephen Doyon			
Storm Magnitude (inches): 1.77 Storm Duration (hours): 13(approx)			
Date of Previous Storm Event: October 15, 2012			

## **MONITORING RESULTS**

Parameter	Method	Results (units)	Laboratory
Sample pH	SM19 4500H+B	7.3	Averill Environmental Lab #AEL12006329
Rain pH	SM19 4500H+B	5.3	· · · · · · · · · · · · · · · · · · ·
Hardness	SM 2340 B	46.8 mg/L CaO3	Averill Environmental Lab #AEL12006329
Conductivity	SM19 2510B	120 micromhos/cm	Averill Environmental Lab #AEL12006329
Oil & Grease	EPA 1664A	<1.8 mg/L	Averill Environmental Lab #AEL12006329
COD	EPA 410.4	50 mg/L	Averill Environmental Lab #AEL12006329
Turbidity	EPA 180.1	12 NTU	Averill Environmental Lab #AEL12006329
TSS	SM19 2540D	5.3 mg/L	Averill Environmental Lab #AEL12006329
TP	SM19 4500PE	0.189 mg/L as P	Averill Environmental Lab #AEL12006329
Ammonia	SM19 4500NHD	<0.50 mg/L	Averill Environmental Lab #AEL12006329
TKN	SM194500NH3F	2.1 mg/L	Averill Environmental Lab #AEL12006329
NO <sub>3</sub> +NO <sub>2</sub>	EPA 300.0	1.12 mg/L	Averill Environmental Lab #AEL12006329
E. coli	SM 9222 B	17,000 per 100 mL	Averill Environmental Lab #AEL12006329

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.				
Authorized Official:	Russell M. Arnold, Jr., P.E.	Director of Public Works/Town Engineer		
Signature:	Russel M L Al	Date: <u>December 21, 2012</u>		



## Stormwater Monitoring Report Form

## **PERMITTEE INFORMATION**

Town: Town of Farmington			
Mailing Address: 1 Monteith Drive, Farmington CT 06032			
Contact Person: Russell M. Arnold, Jr. P.E. Title: DPW Director Phone: 860-675-2305			
Permit Registration #GSM			

## **SAMPLING INFORMATION**

Discharge Location (Lat/Long or other description): R-5_10-19-12:Lat41-42-53.845, Long72-46-52.549				
Located on Batterson Park Road, south of Berkshire Dr., on the NW wingwall of Bridge# 51-006				
Please circle the appropriate area description: Industrial, Commercial, of Residential				
Receiving Water (name, basin): Bass Brook, 4401-00-1-L2				
Time of Start of Discharge:0500 hrs				
Date/Time Collected: October 19, 2012/0915 hrs Water Temperature: 50°F				
Person Collecting Sample: Bruce Cyr & Stephen Doyon				
Storm Magnitude (inches): 1.77 Storm Duration (hours): 13(approx)				
Date of Previous Storm Event: October 15, 2012				

## **MONITORING RESULTS**

Parameter	Method	Results (units)	Laboratory
Sample pH	SM19 4500H+B	7.4	Averill Environmental Lab #AEL12006330
Rain pH	SM19 4500H+B	5.3	
Hardness	SM 2340 B	21.8 mg/L CaO3	Averill Environmental Lab #AEL12006330
Conductivity	SM19 2510B	70 micromhos/cm	Averill Environmental Lab #AEL12006330
Oil & Grease	EPA 1664A	<1.6 mg/L	Averill Environmental Lab #AEL12006330
COD	EPA 410.4	32 mg/L	Averill Environmental Lab #AEL12006330
Turbidity	EPA 180.1	21 NTU	Averill Environmental Lab #AEL12006330
TSS	SM19 2540D	9.2 mg/L	Averill Environmental Lab #AEL12006330
TP	SM19 4500PE	0.221 mg/L as P	Averill Environmental Lab #AEL12006330
Ammonia	SM19 4500NHD	<0.50 mg/L	Averill Environmental Lab #AEL12006330
TKN	SM194500NH3F	1.3 mg/L	Averill Environmental Lab #AEL12006330
NO <sub>3</sub> +NO <sub>2</sub>	EPA 300.0	1.12 mg/L	Averill Environmental Lab #AEL12006330
E. coli	SM 9222 B	17,000 per 100 mL	Averill Environmental Lab #AEL12006330

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.				
Authorized Official: Russell M. Arnold, Jr. Director of Public Works/Town Engineer				
Signature:	Runell M / afr	Date: <u>December 21, 2012</u>		



## Stormwater Monitoring Report Form

## **PERMITTEE INFORMATION**

Town:	Town of Farmington			
Mailing Addre	Mailing Address: 1 Monteith Drive, Farmington CT 06032			
Contact Person: Russell M. Jr. Arnold, P.E. Title: DPW Director Phone: 860-675-2305				
Permit Registration #GSM000090				

## **SAMPLING INFORMATION**

Discharge Location (Lat/Long or other description): R-16 10-19-12:Lat41-44-31.283,Long72-54-03.748				
Located on the west side of Lido Road, to the rear of #97 (outfall to lake)				
Please circle the appropriate area description: Industrial, Commercial, or Residential				
Receiving Water (name, basin): Farmington River 4300-20-1-L2				
Time of Start of Discharge: 0500 hrs				
Date/Time Collected: October 19, 2012/0900 hrs Water Temperature: 50°F				
Person Collecting Sample: Bruce Cyr & Stephen Doyon				
Storm Magnitude (inches): 1.77 Storm Duration (hours): 13(approx)				
Date of Previous Storm Event: October 15, 2012				

## **MONITORING RESULTS**

Parameter	Method	Results (units)	Laboratory
Sample pH	SM19 4500H+B	7.0	Averill Environmental Lab #AEL12006331
Rain pH	SM19 4500H+B	5.3	Averill Environmental Lab #AEL12006331
Hardness	SM 2340 B	5.1 mg/L CaO3	Averill Environmental Lab #AEL12006331
Conductivity	SM19 2510B	18 micromhos/cm	Averill Environmental Lab #AEL12006331
Oil & Grease	EPA 1664A	<1.7 mg/L	Averill Environmental Lab #AEL12006331
COD	EPA 410.4	23 mg/L	Averill Environmental Lab #AEL12006331
Turbidity	EPA 180.1	3.5 NTU	Averill Environmental Lab #AEL12006331
TSS	SM19 2540D	2.4 mg/L	Averill Environmental Lab #AEL12006331
TP	SM19 4500PE	0.107 mg/L as P	Averill Environmental Lab #AEL12006331
Ammonia	SM19 4500NHD	<0.50 mg/L	Averill Environmental Lab #AEL12006331
TKN	SM194500NH3F	1.3 mg/L	Averill Environmental Lab #AEL12006331
NO <sub>3</sub> +NO <sub>2</sub>	EPA 300.0	<0.46 mg/L	Averill Environmental Lab #AEL12006331
E. coli	SM 9222 B	3,600 MPN/100 mL	Averill Environmental Lab #AEL12006331

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.				
Authorized Official:	Russell M. Arnold, Jr., P.E.,	Director of Public Works/Town Engineer		
Signature:	Runel M Alf	Date: December 21, 2012		



## Stormwater Monitoring Report Form

## **PERMITTEE INFORMATION**

Town: _	Town of Farmington		
Mailing A	Address: 1 Monteith Drive, Farmington CT 06032		
Contact Person: Russell M. Jr. Arnold, P.E. Title: DPW Director Phone: 860-675-2305			
Permit R	egistration #GSM000090		

## **SAMPLING INFORMATION**

Discharge Location (Lat/Long or other description): R-27 10-19-12:Lat 41-45-31.23, Long 72-53-48.38				
Located on the north side of Hendrickson Lane at the intersection of River Road				
Please circle the appropriate area description: Industrial, Commercial, of Residential				
Receiving Water (name, basin): Farmington River 4300-00-4+R15				
Time of Start of Discharge:0500 hrs				
Date/Time Collected: October 19, 2012/0845 hrs Water Temperature: 50°F				
Person Collecting Sample: Bruce Cyr & Stephen Doyon				
Storm Magnitude (inches): 1.77 Storm Duration (hours): 13(approx)				
Date of Previous Storm Event: October 15, 2012				

## **MONITORING RESULTS**

Parameter	Method	Results (units)	Laboratory
Sample pH	SM19 4500H+B	7.1	Averill Environmental Lab #AEL12006332
Rain pH	SM19 4500H+B	5.3	Averill Environmental Lab #AEL12006332
Hardness	SM 2340 B	7.7 mg/L CaO3	Averill Environmental Lab #AEL12006332
Conductivity	SM19 2510B	24 micromhos/cm	Averill Environmental Lab #AEL12006332
Oil & Grease	EPA 1664A	<1.8 mg/L	Averill Environmental Lab #AEL12006332
COD	EPA 410.4	21 mg/L	Averill Environmental Lab #AEL12006332
Turbidity	EPA 180.1	1.8 NTU	Averill Environmental Lab #AEL12006332
TSS	SM19 2540D	<2.0 mg/L	Averill Environmental Lab #AEL12006332
TP	SM19 4500PE	0.045 mg/L as P	Averill Environmental Lab #AEL12006332
Ammonia	SM19 4500NHD	<0.50 mg/L	Averill Environmental Lab #AEL12006332
TKN	SM194500NH3F	1.4 mg/L	Averill Environmental Lab #AEL12006332
NO <sub>3</sub> +NO <sub>2</sub>	EPA 300.0	<0.46 mg/L	Averill Environmental Lab #AEL12006332
E. coli	SM 9222 B	150 MPN/100 mL	Averill Environmental Lab #AEL12006332

## STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.				
Authorized Official:	Authorized Official:Russell M. Arnold, Jr., P.E., Director of Public Works/Town Engineer			
Signature:	Russel M Laffe	Date: December 21, 2012		

1 of 1



## Stormwater Monitoring Report Form

## PERMITTEE INFORMATION

Town: Town of Farmington				
Mailing Address: 1 Monteith Drive, Farmington CT 06032				
Contact Person: Russell M. Jr. Arnold, P.E. Title: DPW Director Phone: 860-675-2305				
Permit Registration #GSM000090				

#### **SAMPLING INFORMATION**

Discharge Location (Lat/Long or other description): R-28 10-19-12:Lat 41-42-28.50, Long 72-53-02.44				
Located at the end of Brookshire Lane to the rear of #25				
Please circle the appropriate area description: Industrial, Commercial, or Residential				
Receiving Water (name, basin): Pequabuck River 4315-13-1-L1				
Time of Start of Discharge: 0500 hrs				
Date/Time Collected: October 19, 2012/0950 hrs Water Temperature: 50°F				
Person Collecting Sample: Bruce Cyr & Stephen Doyon				
Storm Magnitude (inches): 1.77 Storm Duration (hours): 13(approx)				
Date of Previous Storm Event: October 15, 2012				

## **MONITORING RESULTS**

Parameter	Method	Results (units)	Laboratory
Sample pH	SM19 4500H+B	7.4	Averill Environmental Lab #AEL12006333
Rain pH	SM19 4500H+B	5.3	Averill Environmental Lab #AEL12006333
Hardness	SM 2340 B	5.1 mg/L CaO3	Averill Environmental Lab #AEL12006333
Conductivity	SM19 2510B	63 micromhos/cm	Averill Environmental Lab #AEL12006333
Oil & Grease	EPA 1664A	<1.6 mg/L	Averill Environmental Lab #AEL12006333
COD	EPA 410.4	21 mg/L	Averill Environmental Lab #AEL12006333
Turbidity	EPA 180.1	9.7 NTU	Averill Environmental Lab #AEL12006333
TSS	SM19 2540D	4.4 mg/L	Averill Environmental Lab #AEL12006333
TP	SM19 4500PE	0.203 mg/L as P	Averill Environmental Lab #AEL12006333
Ammonia	SM19 4500NHD	<0.50 mg/L	Averill Environmental Lab #AEL12006333
TKN	SM194500NH3F	1.6 mg/L	Averill Environmental Lab #AEL12006333
NO <sub>3</sub> +NO <sub>2</sub>	EPA 300.0	0.53 mg/L	Averill Environmental Lab #AEL12006333
E. coli	SM 9222 B	<50 MPN/100 mL	Averill Environmental Lab #AEL12006333

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.				
Authorized Official:	Rusself M. Arnold, Jr., P.E., D	Director of Public Works/Town Engineer		
Signature:	finel M L fly	Date: December 21, 2012		



## Stormwater Monitoring Report Form

## **PERMITTEE INFORMATION**

Fown:Town of Farmington			
Mailing Address: 1 Monteith Drive, Farmington CT 06032			
Contact Person: Russell M. Jr. Arnold, P.E. Title: DPW Director Phone: 860-675-2305			
Permit Registration #GSM000090			

## **SAMPLING INFORMATION**

Discharge Location (Lat/Long or other description): R-29 10-19-12:Lat 41-43-03.57, Long 72-46-38.48				
Located at the end of Garden Gate between #52 and #56				
Please circle the appropriate area description: Industrial, Commercial, of Residential				
Receiving Water (name, basin): Bass Brook 4401-00-1-L2				
Time of Start of Discharge: 0500 hrs				
Date/Time Collected: October 19, 2012/0926 hrs Water Temperature: 50°F				
Person Collecting Sample: Bruce Cyr & Stephen Doyon				
Storm Magnitude (inches): 1.77 Storm Duration (hours): 13(approx)				
Date of Previous Storm Event: October 15, 2012				

## **MONITORING RESULTS**

Parameter	Method	Results (units)	Laboratory
Sample pH	SM19 4500H+B	7.6	Averill Environmental Lab #AEL12006334
Rain pH	SM19 4500H+B	5.3	Averill Environmental Lab #AEL12006334
Hardness	SM 2340 B	47.4 mg/L CaO3	Averill Environmental Lab #AEL12006334
Conductivity	SM19 2510B	140 micromhos/cm	Averill Environmental Lab #AEL12006334
Oil & Grease	EPA 1664A	<1.7 mg/L	Averill Environmental Lab #AEL12006334
COD	EPA 410.4	37 mg/L	Averill Environmental Lab #AEL12006334
Turbidity	EPA 180.1	4.1 NTU	Averill Environmental Lab #AEL12006334
TSS	SM19 2540D	2.8 mg/ <b>L</b>	Averill Environmental Lab #AEL12006334
TP	SM19 4500PE	0.108 mg/L as P	Averill Environmental Lab #AEL12006334
Ammonia	SM19 4500NHD	<0.50 mg/L	Averill Environmental Lab #AEL12006334
TKN	SM194500NH3F	1.1 mg/L	Averill Environmental Lab #AEL12006334
NO <sub>3</sub> +NO <sub>2</sub>	EPA 300.0	1.55 mg/L	Averill Environmental Lab #AEL12006334
E. coli	SM 9222 B	3500 MPN/100 mL	Averill Environmental Lab #AEL12006334

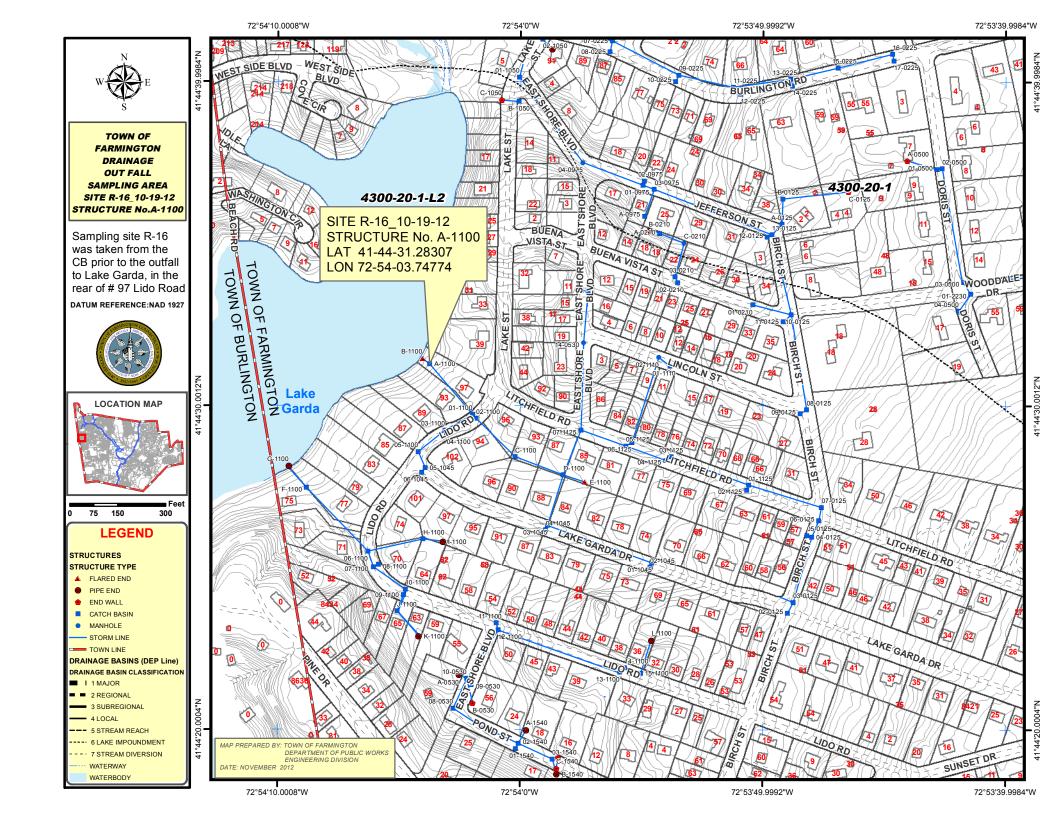
## STATEMENT OF ACKNOWLEDGMENT

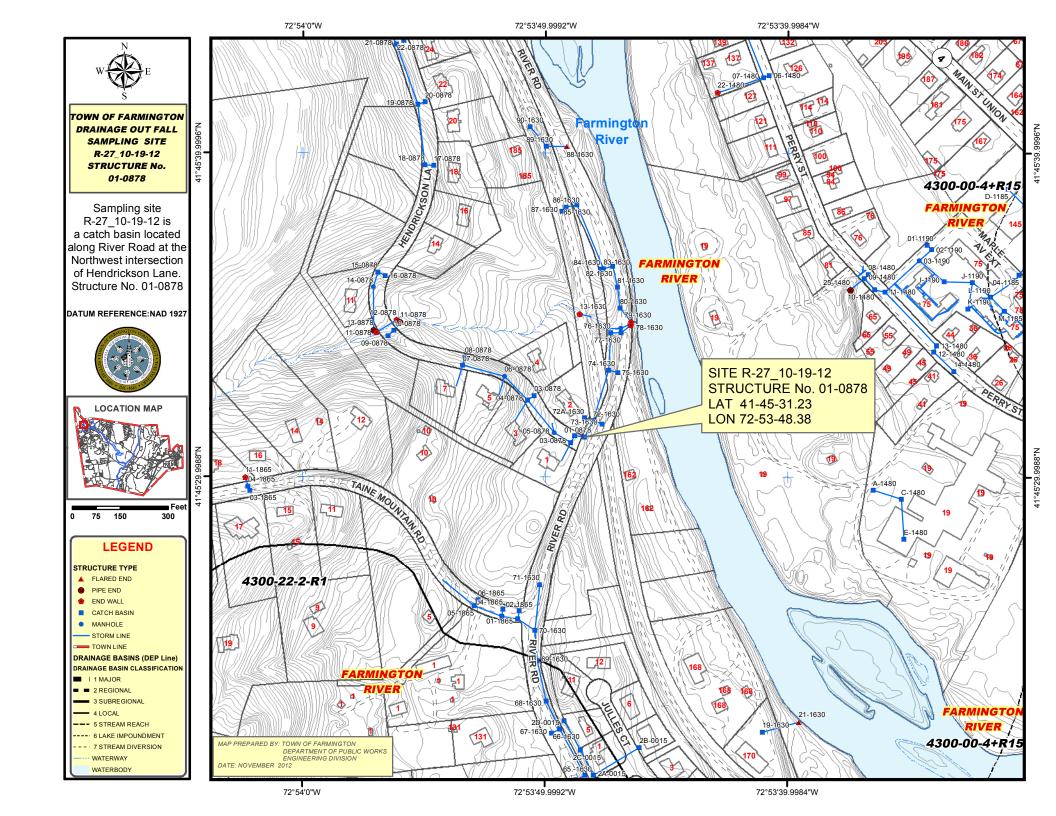
I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.						
Authorized Official: Russell M. Arnold, Jr., P.E., Director of Public Works/Town Engineer						
Signature:	Russel to Late	Date: <u>December 21, 2012</u>				

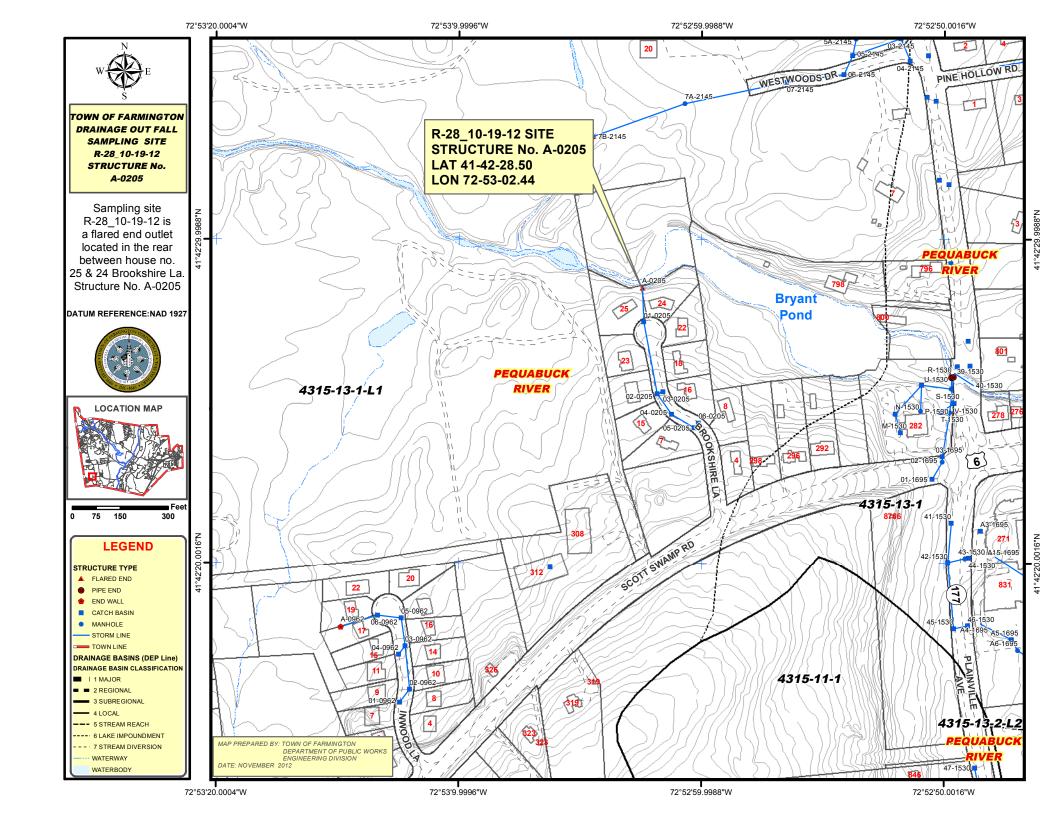
1 of 1

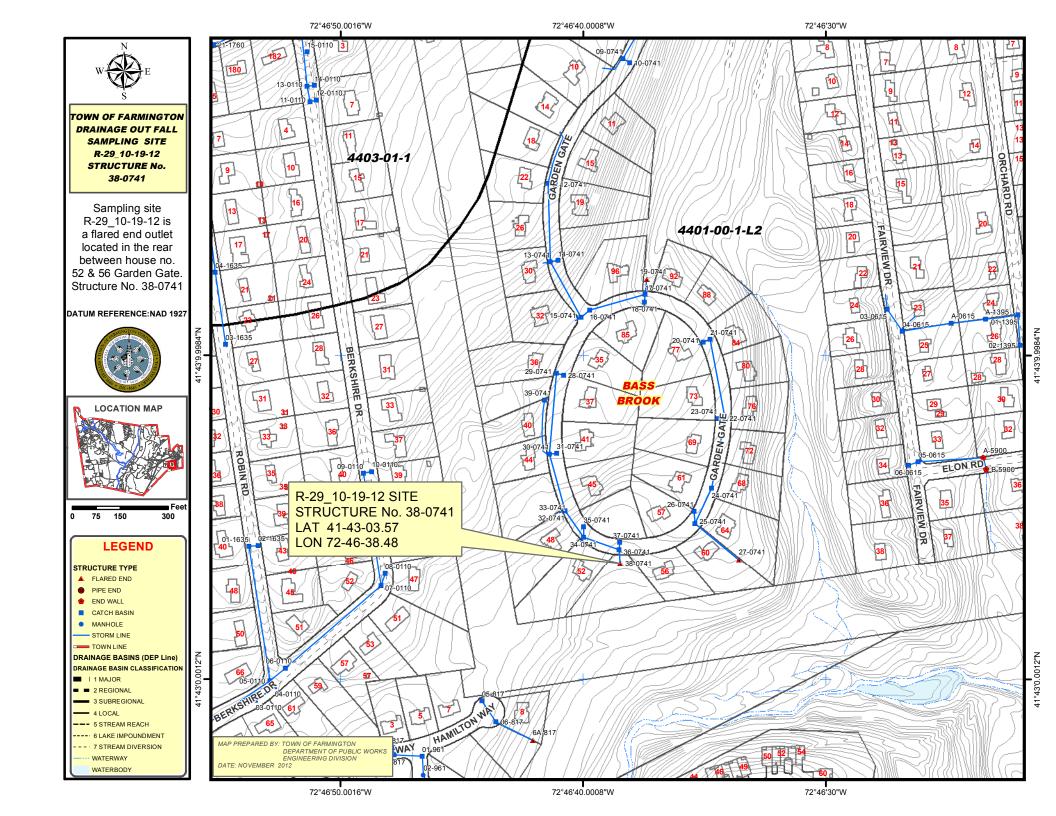
## ATTACHMENT B

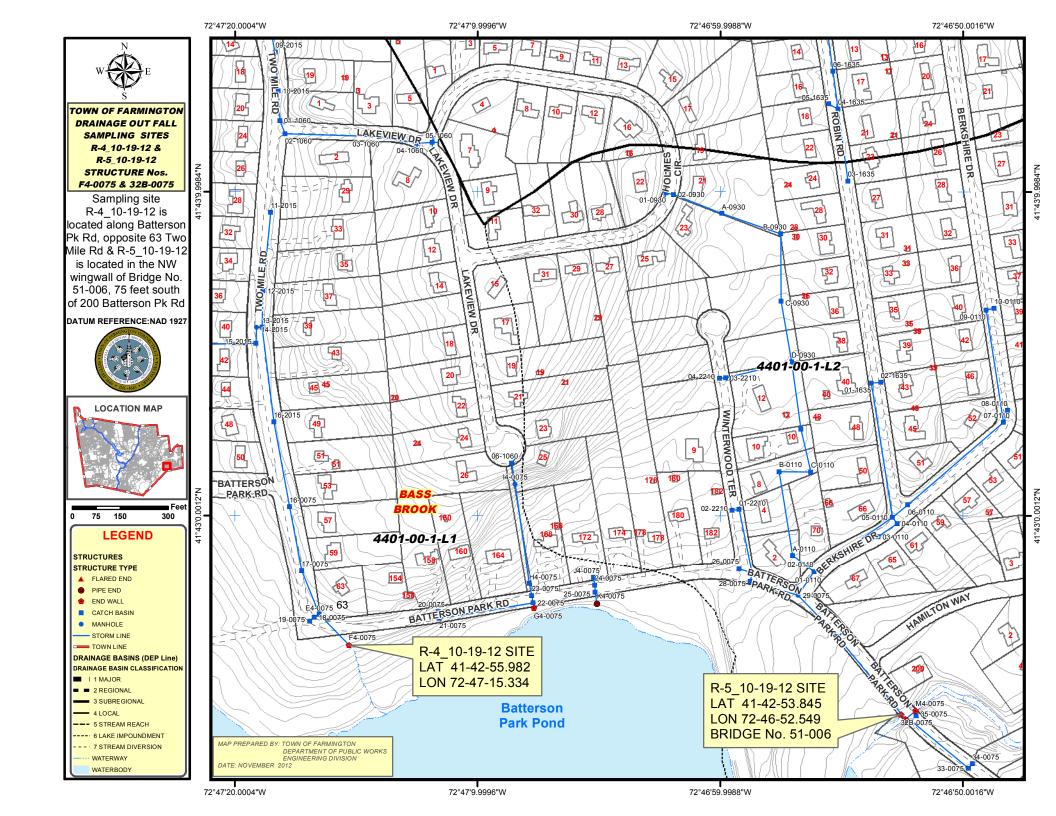
**Monitoring Site Location Mapping** 











## ATTACHMENT C

Illicit Discharge and Connections Ordinance

#### Illicit Discharges and Connections

#### Sec 1. - Intent and Purpose

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of Farmington through the regulation of non-stormwater discharges to the storm drainage system. This ordinance establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this ordinance are:

- 1. To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user.
- 2. To prohibit Illicit Discharges and Connections to the municipal separate storm sewer system.
- 3. To establish legal authority to carry out all inspection, surveillance, monitoring and enforcement procedures necessary to ensure compliance with this ordinance.

#### Sec. 2 - Applicability

This ordinance shall apply to all water entering the storm drainage system generated on any developed or undeveloped lands unless explicitly exempted by the Town Engineer.

#### Sec. 3 - Designation of Ordinance Administrator

The Town Engineer is hereby appointed to administer, implement, and enforce the provisions of this ordinance.

#### Sec. 4 – Definitions

## Best Management Practices (BMPs)

Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practice to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Construction Activity Activities subject to NPDES Construction Permits, CT DEP Construction Permits or Town of Farmington Erosion & Sediment Control Permits. These include construction projects resulting in land disturbance of 0.5-acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

CT DEP

Connecticut Department of Environmental Protection.

Hazardous Materials Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Illegal Discharge

Any direct or indirect non-stormwater discharge to the storm drainage system, except as exempted in Section 5 of this ordinance.

**Illicit Connections** 

An illicit connection is defined as either of the following:

- (a) Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drainage system including but not limited to any conveyances that allow any non-stormwater discharge including sewage, process wastewater, and wash water to enter the storm drainage system and any connections to the storm drainage system from indoor drains and sinks, regardless of whether said drain or connection has been previously allowed, permitted, or approved by the Town; or
- (b) Any drain or conveyance connected from a commercial or industrial land use to the storm drainage system which has not been documented in plans, maps, or equivalent records and approved by the Town.

**Industrial Activity** 

Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26(b)(14).

MS4

Municipal separate storm sewer system.

National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit A permit issued by EPA (or by a State under authority delegated pursuant to 33 U.S.C. §1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

## Non-Stormwater Discharge

Any discharge to the storm drainage system that is not composed entirely of stormwater.

#### Person

"Person" means, except to the extent exempted from this ordinance, any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, city, county or other political subdivision of the State, any interstate body or any other legal entity.

#### Pollutant

Anything which causes or contributes to pollution of air, water or soil. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard waste; refuse, rubbish, garbage, litter, or other discarded or abandoned objects and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

#### Premises

Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

## Professional Engineer

A professional engineer licensed in the State of Connecticut.

## Storm Drainage System

Publicly-owned facilities by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and man-made or altered drainage channels, reservoirs, and other drainage structures.

#### Stormwater

Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation and resulting from such precipitation. Stormwater Runoff That portion of the precipitation (excess rainfall, snow melt or

irrigation) on a drainage area that is discharged from the area in the

form of flow across the surface of the ground.

Stormwater Pollution
Prevention Plan ac

A document which describes Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the

maximum extent practicable.

**Town Engineer** The Town of Farmington Town Engineer or his/her designee.

Town Manager The Town of Farmington Town Manager or his/her designee.

Wastewater Any water or other liquid, other than uncontaminated stormwater,

discharged from a facility.

Watercourse A permanent or intermittent stream or other body of water,

either natural or man-made, which gathers or carries surface water. This includes, but is not limited to lakes, ponds, rivers, and streams.

## Sec. 5 - Discharges Prohibitions

(a) Prohibition of Illegal Discharges

No person shall discharge or cause to be discharged into the municipal storm drainage system or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than stormwater. The commencement, conduct or continuance of any illegal discharge to the storm drainage system is prohibited except as described below:

- 1. The following discharges are exempt from discharge prohibitions established by this ordinance:
  - a. Naturally occurring discharges such as rising groundwaters, uncontaminated groundwater infiltration [as defined at 40 CFR 35.2005(20)], springs, diverted stream flows, and natural riparian habitat or wetland flows;
  - b. Uncontaminated pumped ground water, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps;
  - c. Water line flushing;
  - d. Landscape irrigation; and

- e. Fire fighting activities.
- 2. Discharges specified in writing by the Town Engineer as being necessary to protect health and safety.
- 3. Dye testing is an allowable discharge, but requires a verbal notification to the Town Engineer prior to the time of the test.
- 4. The prohibition shall not apply to any non-stormwater discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency or CT DEP, provided that the discharge is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drainage system.

#### (b) Prohibition of Illegal Connections

- 1. The construction, use, maintenance or continued existence of Illicit Connections to the storm drainage system is prohibited.
- 2. This prohibition expressly includes, without limitation, Illicit Connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- 3. A person is considered to be in violation of this ordinance if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

## Sec. 6 - Suspension of MS4 Access

(a) Suspension due to Illicit Discharges in Emergency Situations

The Town Engineer may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or Waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the Town Engineer may take such steps as deemed necessary to prevent or minimize damage to the MS4 or Water of the United States, or to minimize danger to persons.

(b) Suspension due to the Detection of Illicit Discharge

Any person discharging to the MS4 in violation of this ordinance may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The Town Engineer will notify a violator of the proposed termination of its MS4 access. The violator may petition the Town Engineer for a reconsideration and hearing.

A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior written approval of the Town Engineer.

## Sec. 7 - Industrial or Construction Activity Discharges

Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the Town Engineer prior to the allowing of discharges to the MS4.

#### Sec. 8 - Monitoring of Damages

#### (a) Applicability

This section applies to all premises that have stormwater discharges associated with industrial and/or construction activities.

#### (b) Access to Premises

- 1. The Town Engineer shall be permitted to enter and inspect premises subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. If a discharge has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the Town Engineer.
- 2. Persons shall allow the Town Engineer ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge stormwater, and the performance of any additional duties as defined by state and federal law.
- 3. The Town Engineer shall have the right to set up on any premise such devices as are necessary in the opinion of the Town Engineer to conduct monitoring and/or sampling of the premise's stormwater discharge.
- 4. The Town Engineer has the right to require the discharger to install monitoring equipment as necessary. The premise's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
- 5. Any temporary or permanent obstruction to safe and easy access to the premise to be inspected and/or sampled shall be promptly removed by the person responsible for maintaining the premise at the written or oral request of the Town Engineer and shall not be replaced. The costs of clearing such access shall be borne by the person responsible for maintaining the premise.

- 6. Unreasonable delays in allowing the Town Engineer access to a premise is a violation of a stormwater discharge permit and of this ordinance. A person who is the operator of a premise with a NPDES permit to discharge stormwater associated with industrial activity commits an offense if the person denies the Town Engineer reasonable access to the premise for the purpose of conducting any activity authorized or required by this ordinance.
- 7. If the Town Engineer has been refused access to any part of the premise from which stormwater is discharged, and he is able to demonstrate probable cause to believe that there may be a violation of this ordinance; or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder; or to protect the overall public health, safety, and welfare of the community, then the Town Engineer may seek issuance of a search warrant from any court of competent jurisdiction.

## Sec. 9 – Requirement to Prevent, Control, and Reduce Stormwater Pollutants by the Use of Best Management Practices

The Town Engineer will implement requirements identifying Best Management Practices for any activity, operation, or facility which may cause or contribute to pollution or contamination of stormwater, the storm drainage system, or waters of the United States. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drainage system or watercourses through the use of these structural and non-structural BMPs. Further, any person responsible for a property or premise which is or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed in compliance with the provisions of this section. These BMPs shall be part of a stormwater pollution prevention plan (SWPPP) as necessary for compliance with the requirements of the NPDES permit.

#### Sec. 10 – Watercourse Protection

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

#### Sec. 11 - Notification of Spills

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into stormwater, the storm drainage system, or water of the United States; said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence. Additionally, in the event of a release of hazardous and/or non-hazardous materials, said person shall notify the Town Engineer in person or by phone no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the Town Engineer within three business days of the phone notice. If the discharge of prohibited materials emanates from commercial or industrial activities, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

#### Sec. 12 - Enforcement

#### (a) Notice of Violation

Whenever the Town Engineer finds that a person has violated a prohibition or failed to meet a requirement of this ordinance he shall order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- 1. The performance of monitoring, analyses, and reporting;
- 2. The elimination of Illicit Discharges or Connections;
- 3. That violating discharges, practices, or operations shall cease and desist;
- 4. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property; and
- 5. The implementation of source control or treatment BMPs.

If abatement of a violation and/or restoration of affected property are required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

#### (b) Procedure for Issuance of Citations

1. The Town Manager shall issue a written notice to any person who violates any provision of this ordinance. No written notice may be issued against the State or

any State official or employee acting within the scope of his/her employment.

Such written notice shall explain the nature of the violation and the steps required for compliance, and shall allow a seventy-two (72) hour period within which to correct the violation or within which a written plan for correction shall be submitted to the Town Manager, setting forth a reasonable time period for correction of the violation as agreed upon by the Town Manager. A written notice issued pursuant to this subsection shall be served: 1) by hand delivery, at which time the seventy-two (72) hour period shall begin; or 2) by certified mail return receipt requested and by regular first class mail. Three (3) business days shall be allowed for mail delivery of the notice prior to the commencement of the seventy-two (72) hour period.

- 2. Within two (2) business days after the period for correction established in subsection (a) expires, the Town Engineer shall re-inspect the subject property to determine compliance.
- 3. If the violations set forth in the written notice have not been corrected at the time of re-inspection, the Town Manager, in his/her capacity as chief executive officer, shall issue a citation and fine in the amount of \$250.00 for each violation by hand, by certified mail return receipt requested, by leaving a true and attested copy of the citation at the usual place of abode or residence of the person in violation, or in the case of a corporate or business entity, delivery to the business address or the address of the statutory agent of said entity. No such fine shall be levied against the State or any State Official or State employee acting within the scope of his/her employment. All citations issued pursuant to this Section shall state the violation for which the citation is being issued, the fine imposed for the violation, the time period within which the fine must be paid, and an address for remittance of the fine.

#### (c) Compliance Periods After Citation

- 1. Any violation for which a citation is issued and which is not corrected within the time period specified in Section 12(b) shall be a new violation of this ordinance, and every twenty-four (24) hour period thereafter in which the violation is not corrected shall constitute a new violation. The citation shall include a notice to the alleged violator that each 24 hour period of noncompliance after the time period specified in Section 12(b) shall constitute a new violation and a new fine of \$250.00.
- 2. The Town Manager shall not be responsible for a daily re-inspection. Rather the person to whom the citation has been issued shall be responsible for reporting subsequent compliance by way of written report to the Town Manager. The Town Manager shall re-inspect to confirm compliance within one (1) business day of receipt of such report.

#### (d) Payment of Fines

1. All fines imposed under this Article which are uncontested shall be made payable to the Town of Farmington and shall be received by the Town Manager

within ten (10) business days from receipt of the citation. All fines collected by the Town Manager shall be directed to the Town Finance Director to be deposited into the Town of Farmington General Fund.

2. If no payment is received for any fine imposed under this Article within the time allowed for payment, then the Town Manager shall act in accordance with the procedures established in Chapter 91, of the Code of the Town of Farmington.

#### (e) Remedies Not Exclusive

The remedies listed in this ordinance are not exclusive of any other remedies available under any applicable federal, state, or local law and it is within the discretion of the Town Engineer to seek cumulative remedies.

#### Sec. 13 - Hearing procedure for a citation

The procedure for admitting liability to a violation under this Article, and the hearing procedure for any citation issued pursuant to this Article shall be in accordance with the provisions set forth in Chapter 91 of the Code of the Town of Farmington.

## Sec. 14 - Appeals

Any person or entity aggrieved by a finding, determination, notice order or action taken under the provisions of this ordinance may appeal and shall be advised of his/her right to appeal in accordance with the provisions set forth in Chapter 91 of the Code of the Town of Farmington.

#### Sec. 15 - Miscellaneous

The penalties established by this ordinance shall not be exclusive of any other enforcement remedy which may be imposed by the Town Manager, or his/her designee, for violations of this ordinance, as authorized by any state statute, Town Ordinance, or the Inland Wetlands and Watercourses Regulations, of the Town of Farmington or otherwise any other penalty that may be imposed by any local, state or federal agency.

#### Sec. 16 - Savings Clause

The enactment of this ordinance shall not operate as an abatement of any action or proceeding previously taken, now pending, or taken prior to the effective date of this ordinance. All said actions and proceedings are hereby ratified to be continued.

## Sec. 17 - Severability

All provisions of the <u>Town Code</u> in conflict herewith are hereby repealed and that if for any reason, any word, clause, paragraph, or section of this ordinance shall be held to make the same unconstitutional, this ordinance shall not hereby be invalidated and the remainder of the ordinance shall continue in effect. Any provision herein which is in conflict with the

Connecticut General Statutes is hereby repealed, it being understood that said statutes shall take precedence over this ordinance.

## Sec. 18 - Statutory Authorization

The Legislature of the State of Connecticut has in Title 7, Chapter 98, Section 7-148(c)(7) of the General Statutes delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

## Sec. 19 - Effective Date

This ordinance shall become effective ten (10) days after publication in a newspaper having a circulation in Farmington.

TOWN OF FARMINGTON 1 MONTIETH DR **FARMINGTON, CT 06032-1082**  1707 SHUND. 11121

Client #: 994043 Invoice #: DEP213182 Invoice Date: 11/03/2012 Payment Due Date: 01/01/2013 Invoice Amount: \$187.50

Terms: Net 30 @ 15.00%: Initial Penalty: 10.00%; Minimum Penalty: \$18.75;

#### **Billing Details**

Rev. ID	Reference#	Description	Fee Amount	Disc./Adj.	Amount Due
713	Permit #: GSM000090	Stormwater Permits - Plan Review, GSM, Stormwater Plan For MS4 (Due Every January), NPDES	187.50	0.00	\$187.50
		FARMINGTON, TOWN OF, MS4 PERMIT, FARMINGTON, CT 06032 STORMWATER MS4 ANNUAL PLAN REVIEW FEE		Current Charges:	\$187.50

Client Outstanding Balance Owed to DEEP (prior to currrent invoice): \$23.55

Please contact DEEP Accounts Receivable Office at (860) 424-4004 to request a detailed Statement of outstanding charges.

Invoice #: DEP213182

Printed On: 11/05/2012