RHODE ISLAND DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
Office of Water Resources

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RIPDES SMALL MS4 ANNUAL REPORT

GENERAL INFORMATION PAGE

CITY OF WOONSOCKET, RI
RECEIVED
MAR 10 2006
ENGINEERING DIVISION
PUBLIC WORKS DEPARTMENT

RIPDES PERMIT # RIR040016

REPORTING PERIOD (check one):

☐ **YEAR 1** March 04-Dec 04 ☒ **YEAR 2** Jan 05-Dec 05 ☐ **YEAR 3** Jan 06-Dec 06 ☐ **YEAR 4** Jan 07-Dec 07 ☐ **YEAR 5** Jan 08-Dec 08

OPERATOR OF MS4

Name: **CITY OF WOONSOCKET**			
Mailing Address: **169 MAIN STREET**			
City: **WOONSOCKET**	State: **RI**	Zip: **02895**	Phone: **(401) 767-9205**
Contact Person: **MICHAEL DELROSSI**	Title: **CITY ENGINEER**		

Legal status (circle one):
PRI - Private (PUB - Public) BPP - Public/Private STA - State FED – Federal
Other (please specify):

OWNER OF MS4 (if different from OPERATOR)

Name:			
Mailing Address:			
City:	State:	Zip:	Phone: ( )
Contact Person:	Title:		

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name **SUSAN D. MENARD**

Print Title **CITY MAYOR**

Signature Susan D. Menard Date 3.10.06

MINIMUM CONTROL MEASURE #1:
PUBLIC EDUCATION AND OUTREACH (Part IV.B.1 General Permit)

I. MEASURABLE GOALS:

Permit ID#	BMP ID	List Measurable Goal	Was goal met? YES	NO	ON-TRK	If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective? YES	NO	TMDL? YES	NO
A. REQUIRED MEASURABLE GOALS:										
IV.B.1.b.2	1	Strategies on how to inform the community on how to become involved in the storm water program and how operators will utilize partnerships with governmental and non-governmental entities (1st year)	☒				☒			
IV.B.1.b.4	2	Strategies to list target pollutant sources the public education program is designed to address (1st year)	☒				☒			
B. ADDITIONAL MEASURABLE GOALS:										
IV.B.1.b.1 and 5	3	Distribute Storm Water Awareness Package (Neighbor to Neighbor)			☒	The City has reviewed educational materials included in or referenced to in the SWMPP.				
IV.B.1.b.1 and 5	4	Distribute storm water flyer to residents.			☒	The City will choose the educational materials to send to the residents in Year 3.				
IV.B.1.b.1 and 5	5	Continue school programs and meet with local school officials annually to identify past activities and upcoming curriculum.			☒	The local schools continue to teach the curriculum listed in the SWMPP.				
IV.B.1.b.1 and 5	6	Make the Storm Water Management Plan available to the General Public	☒				☒			

II. OVERALL EVALUATION:

A. GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:

(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals)

1. This measurable goal was completed in the SWMPP development process. Details regarding this are included in Section 4.0 of the SWMPP. The City currently provides a link on the municipal website to "ZAP the Blackstone," which goal is to preserve the historic and environmental elements of the river. The City is currently formalizing a list of contacts for neighboring communities and non-governmental agencies that may be needed for storm water emergencies/non-emergencies. The Storm Water Committee, DPW-Engineering Division, and hired consultant were responsible for the completion of this goal.
2. This measurable goal was completed in the SWMPP development process. Details regarding this are included in Section 4.3.3 of the SWMPP. The Storm Water Committee and hired consultant were responsible for the completion of this goal.
3. The City has reviewed materials and will develop this package using educational materials included in or referenced to in the SWMPP. The Storm Water Committee is responsible for progress of this goal.
4. The City will evaluate the educational materials included in or referenced to in the SWMPP and determine an appropriate message for a flyer based on target audience and pollutant(s). The City distributed a pamphlet on March 24, 2004 entitled "Detention Basin Maintenance" to basin property owners (homeowners' associations and businesses) (see attached pamphlet). There are five (5) privately owned basins in the City and all owners were mailed a copy of this pamphlet along with a letter from the City listing deficiencies of their basin. The City will also be including storm water education in future editions of the City's newsletter, "City News on the Move". The Storm Water Committee, particularly the Engineering Division members, is responsible for progress of this goal.
5. Reportedly, the local schools continue to teach the curriculum and support the extracurricular clubs and activities listed in the SWMPP including Woonsocket High School's River Club and a Blackstone River Studies class. See Section 4.0 of the SWMPP for additional detail. The Storm Water Committee is responsible for progress of this goal.
6. This measurable goal was completed in the SWMPP development process prior to RIDEM submittal. There were no requests to review the SWMPP. The City is investigating posting the SWMPP on their website.

Other: The Blackstone Valley Tourism Council sends out a weekly newsletter to subscribers via email which notifies the public of events and provides education with the goal of preserving the Blackstone River Corridor. The City's website includes information on trash and recycling schedules and resources. The City is a member of the Rhode Island Public Works Association, which offers free educational training to DPW employees on various issues. In Year 2, five (5) DPW employees attended Public Works Association training. The City Engineer and other DPW officials attended Phase II workshops provided by RIDEM and MADEP.

B. APPROPRIATENESS AND EFFECTIVENESS:

1. This goal was appropriate to inform the public about storm water and their impact on it. Evaluating all areas of the City's educational system including but not limited to schools and non-profit organization should prove to increased coordination, awareness, and overall effectiveness.
2. This goal was appropriate to direct educational materials to actual pollutants of concern in the City. The goal assisted in targeting the City's storm water program and future educational expenditures.
3. The appropriateness and effectiveness of this measure are yet to be determined.
4. The City believes reviewing materials to find a flyer for a target audience and/or pollutant will increase its appropriateness and effectiveness. The effectiveness of this measure is yet to be determined.
5. This goal is appropriate to educating a large population of the City including students, parents, and the community in general. Educating school age children is an effective way of promoting environmental and storm water issues.
6. This goal was appropriate. This goal was effective in meeting requirements of the permit.

MINIMUM CONTROL MEASURE #2:
PUBLIC INVOLVEMENT/PARTICIPATION (Part IV.B.2 General Permit)

I. MEASURABLE GOALS:

Permit ID#	BMP ID	List Measurable Goal	Was goal met? YES	NO	ON-TRK	If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective? YES	NO	TMDL? YES	NO
A. REQUIRED MEASURABLE GOALS:										
IV.B.2.b.2.i	1	Strategies to identify the target audiences of the public involvement program and description of the groups engaged (1st year)	☒				☒			
IV.B.2.b.2.ii	2	Strategies to describe types of public involvement activities in the program (1st year)	☒				☒			
IV.B.2.b.2.iii	3	The operator must provide adequate public notice of the draft annual report and provide the opportunity for public comment (annually)	☒				☒			
B. ADDITIONAL MEASURABLE GOALS:										
IV.B.2.b.2.ii	4	Develop local storm water committee to continue to develop and implement the Plan.	☒				☒			
IV.B.2.b.2.ii	5	Conduct annual Storm Water Plan meeting for the public.	☒					☒		
IV.B.2.b.2.ii	6	Develop storm drain stenciling program in urbanized areas.			☒	The City is looking into teaming with local groups and school groups to plan stenciling.				
IV.B.2.b.2.ii	7	Continue to sponsor and support cleanup projects.			☒	This is an ongoing goal that will continue throughout the permit term.				

II. OVERALL EVALUATION:

A. GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:
(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals)

1. This measurable goal was completed in the SWMPP development process. Details regarding this are included in Section 4.3.2 of the SWMPP. The Storm Water Committee and hired consultant were responsible for the completion of this goal.
2. This measurable goal was completed in the SWMPP development process. Details regarding this are included in Section 5.2 of the SWMPP. Many community groups were contacted to determine their involvement in storm water related activities. In Year 2, residents participated in Earth Day activities, Zap the Blackstone, tours with the Park Rangers of the Blackstone River Corridor, the Blackstone River Greenway Challenge. The Storm Water Committee and hired consultant were responsible for the completion of this goal.
3. The annual report was public noticed in The Call on March 4, 2006. It was available to the public at the DPW for review and comment. The DPW - Engineering Division was responsible for submitting the public notice.
4. The Storm Water Committee was developed during the SWMPP development process. The Storm Water Committee currently includes the following members: City Engineer, Construction Manager, Highway Superintendent, Building Official, City Planner, and Coordinator for Watershed Wide Volunteer Water Quality Monitoring Program. This group met once during Year 1. Portions of the group met in Year 2 to discuss certain aspects of the plan, but the group did not meet as a whole in Year 2.
5. A public meeting was not held in Year 2 due to the lack of requests. The Storm Water Committee, DPW-Engineering Division, and hired consultant were responsible for the completion of this goal.
6. The Town is looking at teaming with local Boy Scout troops and school groups to start stenciling storm drains. Although not in Year 2, the Blackstone River Tourism Council stenciled storm drains in 2002 that still exist in the Town. The Storm Water Committee, particularly the DPW has been involved in keeping this goal on target. Local groups will be responsible for the actual stenciling.
7. The City plans to continue cleanup projects throughout the term of this permit. These cleanups are in coordination with local groups as well as daily roadway and public area upkeep by City staff. In Year 2, clean up events by local groups were organized by "ZAP the Blackstone" and Earth Day activities coordinators. The Storm Water Committee, particularly the DPW has been involved in keeping this goal on track.

B. APPROPRIATENESS AND EFFECTIVENESS:

1. This goal was appropriate to target efforts and specific groups that have the potential to impact water quality. The goal assisted in targeting the City's public participation/involvement requirements.
2. This goal was appropriate to determine the current efforts of the City and community groups. Evaluating and coordinating all areas of the City's public involvement including, but not limited to, schools and non-profit organizations through the Storm Water Committee should prove to increased collaboration, awareness, and overall effectiveness.
3. This goal is appropriate to inform the public of the annual report. Completing this annual goal is effective in meeting permit requirements. The City did not have any residents review the SWMPP after it was public noticed on 3/4/2006 (see attached Press Release) and made available at the DPW.
4. This goal was appropriate to develop relationships among different departments and between the City and local groups. These relationships are valuable for the development and implementation of a successful program. The Storm Water Committee is an effective forum for cooperation, sharing of knowledge, and the general promotion of the Phase II effort.
5. This goal was thought to be appropriate to educate the public. This, however, will be reevaluated based on the low turn out at the first public meeting and lack of requests for the second public meeting. Labor and funds may be spent more wisely in other areas. The City will continue this annual goal until a more appropriate goal is determined or a more effective existing goal requires increased resources. This goal could have been an effective tool had the public attended. The City will continue this annual goal until a more appropriate goal is determined or a more effective existing goal requires increased resources.
6. This goal will be appropriate to deter residents, visitors, and businesses from disposing of pollutants in the City's MS4. The City hopes that the current level of stenciling has an impact. It is difficult to definitively determine the effectiveness.
7. This goal was appropriate to remove litter and other floatables from the City's waterways. Litter is removed from the City's waterways annually through cleanup efforts (daily maintenance by City staff and local group events).

MINIMUM CONTROL MEASURE #3:
ILLICIT DISCHARGE DETECTION AND ELIMINATION (Part IV.B.3 General Permit)

I. MEASURABLE GOALS:

A. REQUIRED MEASURABLE GOALS:

Permit ID#	BMP ID	List Measurable Goal	Was goal met? YES	NO	ON-TRK	If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective? YES	NO	TMDL? YES	NO
IV.B.3.b.1	1	Development of an outfall map showing the location of all outfalls and names of receiving waters (3rd year)			☒	The City has mapping and plans to update annually to meet the permit deadline.				
IV.B.3.b.2	2	Strategies for tagging outfall pipes if GIS maps are not being developed(1st year)				NOT APPLICABLE				
IV.B.3.b.4	3	Introduction of an ordinance to prohibit and enforce illicit discharges to the MS4 (1st year)	☒							
		Ordinance adoption (2nd year)	☒							
IV.B.3.b.5.i	4	Strategies for locating priority areas (1st year)	☒				☒			
IV.B.3.b.5.ii	5	Procedures for receipt and consideration of complaints (1st year)	☒				☒			
IV.B.3.b.5.iii	6	Procedures for tracing the source of an illicit discharge (1st year)	☒				☒			
IV.B.3.b.5.iv	7	Procedures for removing the source of the illicit discharge (1st year)	☒				☒			
IV.B.3.b.5.v	8	Procedures for program evaluation and assessment (1st year)	☒				☒			
IV.B.3.b.5.vi	9	Procedures for inspection of all catch basins and manholes for illicit connections and non-storm water discharges (1st year)	☒				☒			
		Inspections taking place at least once (4th year)			☒	The City is on track to inspect all structures by the end of Year 4.				
IV.B.3.b.5.vii	10	Procedures for conducting a minimum of two dry weather surveys, one between Jan 1st and April 30th and one between July 1st and Oct 31st. (Sanitary sewers- bacteria sampling is only required once between July 1st and Oct 31st (1st year)	☒							
		Two dry weather surveys to be completed (4th year)			☒	The City is assessing the resources needed and available to complete this task on target.				
IV.B.3.b.6	11	Procedures for coordinating with physically interconnected MS4s, including state and federal owned or operated MS4s, when illicit discharges are detected or reported (1st year)	☒							
IV.B.3.b.7	12	Procedures for referral to RIDEM of non-storm water discharges not authorized by this permit or a pre-existing permit (1st year)	☒							

IV.B.3.b.9	13	Procedures for tracking and recording actions to detect/address illicit discharges (1st year)	☒							

ILLICIT DISCHARGE DETECTION AND ELIMINATION cont'd

B. ADDITIONAL MEASURABLE GOALS:										
IV.B.3.b.9	14	Public education and municipal employee training programs will inform about hazards associated with illegal discharges and improper disposal of waste. Coordinate with Minimum Measure #1 and 6.			☒	The City will update the operator training program as necessary.				

II. OVERALL EVALUATION:

A.GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:
(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals)

1. The City is evaluating current mapping and determining future needs to meet the deadline. The City obtained an aerial fly over of the City and plans to incorporate the aerial with GIS mapping (with GPS location) established for the entire municipality. The City currently has the storm drains and catch basins mapped and uses the mapping on a grid system for maintenance plans. The City continues to evaluate the need for additional information to be added to the mapping system according to Section 6.4.1 of the SWMPP and the *Response to Comments*, dated August 29, 2005, which is attached. The City has obtained proposals to map and track the outfalls, which is planned for the summer of Year 3. At present, the mapping shows that there are 2,840 catch basins and 1,430 drain manholes, approximately 70 miles of storm pipe, and 262 mapped outfalls. The Engineering Division updates the City Storm Water Grids annually. The DPW is primarily responsible for the completion of this goal.
2. Not applicable. If the City continues with the current plan to develop GIS mapping with GPS locations, this goal will not be necessary.
3. The ordinance was adopted in Year 2, a copy of the ordinance is attached.
4. This measurable goal was completed in the SWMPP development process. Details regarding this are included in Section 6.4 of the SWMPP. The Storm Water Committee, DPW, and hired consultant were responsible for the completion of this goal.
5. This measurable goal was completed in the SWMPP development process. Details regarding this are included in the executive summary of the SWMPP. In addition to that which is listed in the SWMPP, the Engineering Division has a 24-hr pager number for all complaints and a complaint form. Residents are informed of this number when they reach the Department's voice mail and on the City's web page. The City Engineer and Construction Manager are responsible for the complaints. A website form is being implemented, and the DPW is in the process of implementing the complaint tracking system. There were approximately 10 complaints related to storm water systems received in Year 2. One of the complaints was for a barrel that had discharged into the storm drain system. The local hazardous materials coordinator was contacted to provide emergency response and oversee remediation of the waste. Other complaints resulted from surcharging catch basins. The DPW is responsible for receiving and addressing complaints.
6. This measurable goal was completed in the SWMPP development process. Details regarding this are included in Section 6.4.3 of the SWMPP. The City purchased a camera to assist with investigation of pipeline problems in Year 2. The City plans to implement the illicit discharge detection program in the spring of Year 3 and has received proposals from consultants to administer the program. The Highway Department will report to the Engineering Division any illicit discharges they witness while performing catch basin and drain manhole cleaning. The Engineering Division will follow up by tracing the discharge and taking appropriate action(s). The DPW is responsible for implementation of the program.
7. The procedure for removal of illicit discharges involves requiring the responsible party to cease discharging and address the situation within seven to ten days (depending on the type of discharge). If the illicit discharges are not addressed by the responsible party, the City has the authority to perform repairs and charge the responsible party for the cost and fines that may have incurred. The removal of the discharge will be assessed on a case-by-case basis, to be determined by the DPW. A general procedure is included in Section 6.4.3 of the SWMPP. The Storm Water Committee and DPW were responsible for the completion of this goal.
8. This measurable goal was completed in the SWMPP development process. Details regarding this are included in the executive summary of the SWMPP. The Storm Water Committee, DPW, and hired consultant were responsible for the completion of this goal.
9. The procedure portion of this measurable goal was completed in the SWMPP development process. Details regarding this are included in the executive summary of the SWMPP. Catch basins are cleaned and inspected using City's grid maps. The overall City mapping is divided into a grid, which is used for scheduling routine maintenance. The grid maps identify roads and stormwater structures. The City cleaned approximately 50 catch basins in Year 2 (10 based on complaints received). At this time, the City is in the process of developing an inspection sheet for the Highway Department workers to use when they clean each structure. After completion, this form will be sent to the Engineering Division and recorded in a database. The Storm Water Committee, DPW, and hired consultant were responsible for procedure development and the DPW will be responsible for inspections and recordkeeping.
10. The procedure portion of this measurable goal was completed in the SWMPP development process. Details regarding this are included in Section 6.4.3 of the SWMPP and the *Response to Comments*. The City has obtained a proposal to partner with a consultant to do the dry weather surveys using a form similar to the IDDE field checklist attached. The Storm Water Committee, DPW, and hired consultant were responsible for procedure development and the DPW will be responsible for surveys.
11. This measurable goal was completed in the SWMPP development process. Details regarding this are included in the executive summary of the SWMPP. For ease of communication, the City is formalizing a list of contacts for neighboring communities and non-governmental agencies that may be needed for storm water emergencies/non-emergencies. The City currently maintains relationships with neighboring communities and provides equipment and resources for pipeline maintenance and cleaning. The Storm Water Committee and hired consultant were responsible for the completion of this goal.

A.GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS (Continued):

12. This measurable goal was completed in the SWMPP development process. Details regarding this are included in the executive summary of the SWMPP. The Storm Water Committee and hired consultant were responsible for the completion of this goal.
13. This measurable goal was completed in the SWMPP development process. Details regarding this are included in the executive summary of the SWMPP. The City is developing a field checklist and a tracking form to assist with the catch basin and outfall inspections that are planned for Year 3. The Storm Water Committee, DPW, and hired consultant were responsible for the completion of this goal.
14. New employees are trained in the use of jetting and camera equipment in the field, as necessary. New equipment training is provided when necessary. The City will continue to update the municipal employee training as necessary to meet this measurable goal. The City teams with Fuss & O'Neill, Inc. to provide training to Highway workers that includes storm water structures and other water quality related topics. The Storm Water Committee and DPW are responsible for this goal.

B. APPROPRIATENESS AND EFFECTIVENESS:

1. It will be appropriate to include outfall information on the GIS mapping that will occur City-wide. The existing mapping has been effective in creating a grid system on which maintenance and inspections are based. The effectiveness of the outfall map is yet to be determined.
2. This measure is appropriate and effective in meeting the requirements of the permit. The City believes it will be more appropriate to GPS the outfall than to physically tag them. GPS location of outfalls should prove to be effective for identification and system mapping.
3. The ordinance is appropriate to provide a means to remove illicit discharges. Adoption of the ordinance is effective in meeting this required goal.
4. It is appropriate to target the City's efforts in the area(s) of the municipality with pollutants of concern that can be improved through the IDDE program. However, the City has a City-wide grid set up to perform routine maintenance that will be more effective for annual inspections and maintenance.
5. The public complaint system is appropriate for the City to address concerns. Public complaints that have been received have been effective to identify illicit discharges and other problems with the storm drain system.
6. This goal is appropriate to find illicit discharges into the MS4. This goal is necessary to complete this minimum measure of illicit discharge detection and elimination. Many of the components of the written procedures are used, but the written procedures have not been as effective as developing procedures in the field for the specific situation.
7. It is appropriate to have a mechanism to require responsible parties to address illicit discharges. This goal is effective in completing this minimum measure of illicit discharge detection and elimination.
8. During the annual assessment of the entire Phase II program, the City's IDDE program will be evaluated. This is an appropriate goal to complete this measure and the permit requirement. The program should be evaluated annually to confirm effectiveness and any necessary alterations to improve results.
9. It is appropriate to inspect catch basins in conjunction with catch basin maintenance and cleaning. This will minimize the amount of labor and equipment required, thus, reducing cost. The effectiveness of this measure is yet to be determined.
10. The appropriateness and effectiveness of this measure are yet to be determined.
11. The City has not had to refer discharges to neighboring communities to date, therefore, the appropriateness and effectiveness of this measure are yet to be determined.
12. The City has not had to cooperate with RIDEM to report any unauthorized non-storm water discharges to date, therefore, the appropriateness and effectiveness of this measure are yet to be determined.
13. The reporting system is appropriate to ensure that all violations are investigated and corrective measures are taken. This will reduce pollution to receiving waterbodies. The effectiveness of this measure is yet to be determined.
14. It has been appropriate and effective to train authorized personnel as needed.

MINIMUM CONTROL MEASURE #4:
CONSTRUCTION SITE STORM WATER RUNOFF CONTROL (Part IV.B.4 General Permit)

I. MEASURABLE GOALS:

A. REQUIRED MEASURABLE GOALS:

Permit ID#	BMP ID	List Measurable Goal	Was goal met? YES	NO	ON-TRK	If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective? YES	NO	TMDL? YES	NO
IV.B.4.b.1	1	Development and introduction of a mechanism to require erosion and sediment control, control of other wastes, and sanctions to ensure compliance (1st year)	☒				☒			
		Mechanism adoption (2nd year)	☒				☒			
IV.B.4.b.2	2	Procedures for issuing permits and implementing policies and procedures for all construction projects disturbing ≥1 acre (2nd year)	☒				☒			
		Implementation of procedures (end of 2nd year)								
IV.B.4.b.4	3	Implementation of program to review 100% of plans and SWPPPs for construction projects ≥ 1 acre not reviewed by other State Programs (2nd year)	☒				☒			
IV.B.4.b.5	4	Procedures for coordination of site plan and SWPPP review when relying on State program reviews of construction activity (2nd year)	☒				☒			
		Implementation of procedures (end of 2nd year)								
IV.B.4.b.7	5	Inspect 100% of all construction projects within the regulated area that discharge or have the potential to discharge to the MS4 (2nd year)	☒				☒			
IV.B.4.b.8	6	Procedures for referral to the State of non-compliant construction site operators (2nd year)	☒							

B. ADDITIONAL MEASURABLE GOALS:

II. OVERALL EVALUATION:

A. GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:

(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals)

1. The City adopted a soil erosion and sediment control ordinance (using the model contained in the RI Soil Erosion and Sediment Control Handbook) on September 20, 1993 (Woonsocket Code of Ordinances Chapter 7 ½ - Erosion and Sediment Control provided in Year 1 Annual Report). The control of construction wastes is included in the illicit discharge ordinance that was adopted in Year 2. A copy of the ordinance section (Section 16-17, Article 1) is attached. The Storm Water Committee, Building Official, and DPW - Engineering Division were responsible for this goal.
2. The procedures were evaluated as part of the SWMPP development process. Details regarding this are included in Section 7.2 and Section 7.3 of the SWMPP. The City developed a Permit Manual that is available on the City website (http://www.ci.woonsocket.ri.us/Woonsocket%20Permit%20Manual%20for%20web%20site.pdf) or at the Engineering Department, which describes the permitting procedures, required submissions, and inspection process for engineering permits. A checklist is available to applicants for land development permits (attached). The Engineering Division issues and tracks all permits pertaining to storm water utilities and in-ground structures regardless the size of the lot or disturbance. The City has added a requirement to the permit process that identifies a contact who is responsible for addressing deficiencies that are reported from field inspections. The Storm Water Committee, Building Official, and DPW - Engineering Division are responsible for this goal.
3. The Engineering Division reviews all site plans containing storm water utilities and/or in-ground storm water structures (e.g., catch basins, vortechs units) regardless of the size of the lot or disturbance. A sign-off sheet and a technical review checklist that are used by the City are attached. In Year 2, the City reviewed approximately 150 site plans. Current procedures for SWPPP review are being evaluated and formalized. The City currently requires that all developers first receive any necessary RIDEM permits prior to City permitting. Any site plans that the Engineering Division reviews that need approval from RIDEM are commented as such and the requirement is made known to the applicant. The City uses a form letter to inform the applicant of deficiencies (attached). Approval is not given by the Engineering Division until confirmation is received from RIDEM. Additional details regarding plan review and coordination are included in Section 7.3 and Section 7.4 of the SWMPP. The Storm Water Committee, DPW, and City Council are responsible for this goal. A copy of the form used to review plans is attached.
4. The City does not rely on other state programs for review, but requires that applicable sites obtain the required state permits before the City will issue the building permit. The Storm Water Committee, DPW, and City Council are responsible for this goal. The Engineering Department and Building Official are responsible for issuing permits.
5. All construction sites are inspected during several stages of construction. The City is in the process of updating the inspection tracking mechanism. Enforcement of the Soil Erosion and Sediment Control Ordinance is through the Building Inspection Office, but all construction sites are inspected by both the Building Inspection Office and the Engineering Division. The Building Inspection and Engineering Division personnel are all aware of the City's SESC ordinance and cooperate to see that it is enforced. The number of inspections at an individual site varies depending on the magnitude of the job site. The Engineering Division issued approximately 700 permits (including small items such as sidewalk blockages) in Year 2, and all were inspected. Currently, DPW-Engineering staff is on site whenever any work is being done pertaining to the storm water utilities and/or in-ground storm water structures (e.g., catch basins, vortechs units). However, presently the Engineering Division only sporadically inspects a site after completion. The City will complete final inspections starting construction season 2006. Any erosion issues are addressed immediately through informal notification. Formal enforcement actions are taken if necessary. There were no enforcement measures taken in Year 2. Additionally, the mechanisms for inspections were evaluated as part of the SWMPP development process. Details regarding this are included in Section 7.3 and Section 7.4 of the SWMPP. The Storm Water Committee, Engineering Division, and Building Inspection Office are responsible for this goal.
6. Any site problems found by Engineering Division staff are directed to the City Engineer and/or the Construction Manager for enforcement. The Engineering Division can close down and retract issued permits for any construction site found to be non-complaint. The Engineering Division has a list of State personnel that can be contacted for assistance with any non-compliant construction site operators. The Engineering Division is responsible for this goal.

B. APPROPRIATENESS AND EFFECTIVENESS:

1. The ordinance is appropriate for requiring soil erosion and sediment control plans for construction sites discharges to the City's MS4. Adoption of the ordinance is effective in meeting the requirements of the permit.
2. The procedures in place to issue permits are appropriate and effective in requiring runoff control.
3. Review of plans has been appropriate to identify the City's expectations before construction starts. The Engineering Division's review process is effective for identifying proper BMPs for construction projects.
4. The appropriateness and effectiveness of this measure are acceptable to the City.
5. Inspections have proven to be an appropriate means to increase compliance. The inspections have been effective in and requiring the site operators to correct problems. Current inspection rates have increased SESC compliance.
6. No non-compliant contractors have had to be referred to date, therefore, the appropriateness and effectiveness of this measure are yet to be determined.

MINIMUM CONTROL MEASURE #5:
POST CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT
(Part IV.B.5 General Permit)

I. MEASURABLE GOALS:

A. REQUIRED MEASURABLE GOALS:

Permit ID#	BMP ID	List Measurable Goal	Was goal met? YES	NO	ON-TRK	If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective? YES	NO	TMDL? YES	NO
IV.B.5.b.2	1	Description of how the program is consistent with the State of Rhode Island Storm Water Design and Installation Manual and will be tailored for the community/facility, minimize water quality impacts, and maintain pre-development runoff conditions (2nd year)	☒				☒			
IV.B.5.b.3	2	Procedures for pre-application meetings (2nd year)	☒				☒			
IV.B.5.b.4	3	Implementation of program to review 100% of plans for development projects one or more acres not reviewed by other State Programs (2nd year)	☒				☒			
IV.B.5.b.5	4	Description of how the program will coordinate with existing State programs requiring post-construction storm water management (2nd year)	☒				☒			
IV.B.5.b.6	5	Procedures for referral of new discharges of storm water associated with industrial activity (2nd year)	☒				☒			
IV.B.5.b.9	6	Develop and introduce regulatory mechanism to address post-construction runoff (1st year)	☒				☒			
		Mechanism adoption (2nd year)	☒				☒			
IV.B.5.b.10	7	Procedures for post-construction inspections of BMPs and inspect 100% of all development ≥ 1 acre within the regulated area that discharges to the MS4 (2nd year)			☒	Procedures will be implemented at the start of the 2006 construction season.				
		Implementation of procedures (end of 2nd year)								
IV.B.5.b.12	8	Development of a program to identify existing structural BMPs (2nd year)	☒							

B. ADDITIONAL MEASURABLE GOALS:

IV.B.5.b.7	9	When the City's Comprehensive Plan of Development is updated, opportunities for smart growth such as in-fill development, direct growth to identified areas, and protect sensitive areas will be identified. Additionally, non-structural BMPs as described in the State of Rhode Island Stormwater Design and Installation Manual (as amended) will be considered. Public education will include discussion of ways to limit runoff.			☒	The City's Comprehensive Plan of Development was not been updated in Year 2.				

II. OVERALL EVALUATION:

A. GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:

(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals)

1. The City adopted an ordinance that requires site plans to be consistent with the *Rhode Island Stormwater Design and Installation Standards Manual*, as well as additional requirements set forth in the ordinance. The City is waiting for the publishing of the upcoming edition and will evaluate the need to include additional sections, BMPs, etc. The Storm Water Committee, City Planner, and City Council will be responsible for the integration of the new manual, once published, into the City's regulations and requirements.
2. Pre-application meetings and checklists are provided for applicants of sites over one acre. The land surveyor and/or engineer and/or developer and/or contractor can request a meeting with representatives from the Engineering Division at any time to review a proposed project. The City Planner and DPW - Engineering Division are responsible for revising the procedures for pre-application meetings as necessary. A copy of the checklist issued upon request is attached.
3. Currently, the Engineering Division has developed a system to perform thorough site plan reviews on all projects containing storm water utilities and/or in-ground storm water structures (e.g., catch basins, vortechs units) (see attached "Plan Review Sign Off Sheet"). All site plans that include storm water provisions are reviewed by the Engineering Division. Each project's plan(s) and status are recorded in Microsoft Outlook for quick reference by any City official. The Storm Water Committee, City Planner, DPW Engineering Division, and City Council will be responsible for updating the review procedures in the City's regulations and/or requirements.
4. The City requires that applicants receive state approvals before packages will be accepted and approved. The City does not plan on relying on state approvals and will continue to review plans for storm water management. The Engineering Division and the Building Official are responsible for requiring state reviews when applicable.
5. The Town Engineer requires new applicants to obtain state permits prior to approving new industrial discharges. Details regarding this are included in the executive summary of the SWMPP. The Storm Water Committee, DPW, and City Council are responsible for this goal.
6. An ordinance was adopted Year 2 (Post Construction – Storm Water Control Ordinance), which is attached. The Engineering Division requires and reviews a maintenance plan for all storm water structures as part of the plan review process. The Storm Water Committee and City Council are responsible for this goal.
7. Procedures have been developed and most of the sites are inspected post-construction. The City is in the process of formalizing the tracking procedures, which will include identification of sites that need to be inspected after completion. The City plans to implement post-construction inspections during the 2006 construction season. During Year 2, all construction projects were inspected at least once by the Building Official and/or the Engineering Division. The Building Department and DPW-Engineering Division are responsible for implementing the inspection procedures and including in the City's regulations and/or requirements.
8. The existing BMPs have been identified, and new BMPs are added as the City takes ownership. The municipal storm water BMP mapping will be updated as part of this program.
9. The City's Comprehensive Plan of Development was not been updated in Year 2 (last updated 2003), therefore, there has been no progress on this measurable goal. The Storm Water Committee, City Planner, DPW, and City Council will be responsible for the completion of this goal.

B. APPROPRIATENESS AND EFFECTIVENESS:

1. It is appropriate to reference and incorporate the Rhode Island Storm Water Design and Installation Manual. Incorporation of the manual is effective to provide minimum measures that increase water quality and pre-development runoff conditions.
2. Pre-application meetings are appropriate and effective for providing the applicant with the permit process requirements.
3. It is appropriate for the City to review plans not reviewed by other state programs. Review of plans has been effective.
4. It is appropriate to determine how plan review will account for state program review. Reviewing plans and referring applicants to the state when required has been effective.
5. It is appropriate and effective to refer new industrial discharges to the state. No new industrial discharges were reported in Year 2, so the effectiveness is yet to be determined.
6. It is appropriate to adopt a regulatory mechanism for post-construction runoff. The mechanism is effective in requiring applicants to address runoff.
7. It is appropriate to inspect BMPs once constructed. The effectiveness of this measure is yet to be determined.
8. It has been appropriate and effective to identify and add new structural BMPs to the list.
9. The appropriateness and effectiveness of this measure are yet to be determined.

MINIMUM CONTROL MEASURE #6:
POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS (Part IV.B.6 General Permit)

I. MEASURABLE GOALS:

A. REQUIRED MEASURABLE GOALS:

Permit ID#	BMP ID	List Measurable Goal	Was goal met? YES	NO	ON-TRK	If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective? YES	NO	TMDL? YES	NO
IV.B.6.b.1.i	1	Procedures for identifying, locating and describing all municipally owned structural BMPs (1st year)	☒				☒			
IV.B.6.b.1.ii	2	Procedures for inspecting and cleaning BMPs (1st year)	☒				☒			
IV.B.6.b.1.iii	3	Procedures for an annual catch basin inspection and cleaning program (1st year)	☒				☒			
		Implementation of program (3rd year)			☒	The City is teaming with a consultant to inspect and document catch basins.				
IV.B.6.b.1.iv	4	Procedures to minimize erosion of road side shoulders and ditches (1st year)	☒				☒			
IV.B.6.b.1.v	5	Procedures to identify and report annually the known discharges causing scouring at outfall pipes or outfalls with excessive sedimentation (1st year)	☒							
IV.B.6.b.1.vi	6	Procedures for a road sweeping program that includes sweeping all streets and roads within the regulated area annually (1st year)	☒				☒			
		Implementing the program to occur annually (3rd year)	☒				☒			
IV.B.6.b.1.vii	7	Description of maintenance activities, schedules and long-term inspection procedures for controls to reduce floatables (1st year)	☒							
IV.B.6.b.1.viii	8	Procedures for the proper disposal of removed waste from the MS4 (1st year)	☒				☒			
IV.B.6.b.2	9	Operator must report and describe all operations under legal control that may have the potential to introduce pollutants into storm water runoff (1st year)	☒				☒			
IV.B.6.b.4	10	Procedures for the development of an O&M and good housekeeping program for non-industrial facilities with the potential to introduce pollutants to their storm water discharges with the goal of minimizing or eliminating pollutant runoff (1st year)	☒				☒			
		All recommended BMPs to be implemented by 4th year			☒	BMPs are being implemented as funds and/or labor becomes available.				
IV.B.6.b.7	11	Procedures for assessment of flow management projects (1st year)	☒				☒			

IV.B.6.b.8	12	Procedures for implementing proper erosion and sediment and water quality control for construction projects (1st year)	☒				☒			

POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS

B. ADDITIONAL MEASURABLE GOALS:										
IV.B.6.b.6	13	Incorporate storm water awareness training into existing training for equipment operators and mechanics (Health & Safety, Right to Know)			☒	The City will of update the operator training program as necessary.				

II. OVERALL EVALUATION:

A.GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:
(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals)

1. This measurable goal was completed in the SWMPP development process. Details regarding this are included in Section 9.2.2 of the SWMPP. The DPW has identified structural BMPs and adds new BMPs when the City takes ownership. The Storm Water Committee and DPW were responsible for the completion and implementation of this goal.
2. This measurable goal was completed in the SWMPP development process. Details regarding this are included in Section 9.2.2 of the SWMPP. The Engineering Division inspects all detention/retention basins in the City, both public and privately owned. A pamphlet was also developed and mailed to the owners of the basins in Year 1. City owned basins are cleaned and/or repaired by the Highway Division as necessary. The Storm Water Committee and DPW were responsible for the completion of this goal.
3. The procedures portion of this measurable goal was completed in the SWMPP development process. Details regarding this are included in Section 9.2.2 of the SWMPP. The Highway Division cleaned approximately 50 City catch basins during Year 2, based on resident complaints or municipal employee reports. The City will formalize and implement the IDDE inspection procedures and checklist in Year 3. The City is reviewing proposals from Fuss and O'Neill to start implementing catch basin inspections and mapping identification. The City plans to start inspections in Year 3. The City has previously performed annual catch basin cleaning and plans to resume in Year 3. The Storm Water Committee and DPW were responsible for the completion of this goal.
4. This measurable goal was completed in the SWMPP development process. Details regarding this are included in the executive summary of the SWMPP. In the City, most of the roadways are curbed and have sidewalks. Any roadway with a shoulder or ditch in need of repair is immediately addressed. It is usually a property owner or municipal employee that notifies the DPW of a problem and the Highway Division addresses it. The Storm Water Committee and DPW were responsible for the completion of this goal. Less than 10 roadside erosion situations were repaired in Year 2.
5. The City plans to implement a regular outfall inspection program after outfalls have been mapped in Year 3. The mapping will include initial inspection of the outfalls to create a priority list for future years. Currently outfalls are maintained or repaired when resident complaints are received. The Storm Water Committee and DPW will be responsible for the completion of this goal.
6. The City committed to the measurable goal of sweeping all municipal streets in the submitted SWMPP. Presently, all City streets are cleaned at least once a year based on the grid system. The DPW was responsible for the completion of this goal. The City has swept over 100 curb miles.
7. The City currently requires that all new and redevelopment projects include installation of catch basin hoods. The City evaluates the need for retrofits as funds become available and targets priority areas. About 10 catch basins were retrofitted with hoods to control floatables in Year 2. Catch basin inlet grates are cleaned when catch basins are inspected or when municipal employees report a need for cleaning. The planned program to clean catch basins annually will include removal of floatables. The need for additional cleaning will be documented on inspection forms. Floatables are also collected by Highway Department laborers during daily litter pickup activities. Trash cans are provided at frequented pedestrian areas including Main Street and the RIPTA bus stops. These trash cans are empted daily Monday through Friday. Catch basin grates are inspected for debris after heavy wind and/or rain by Highway personnel. Less than 5 catch basins were repaired in Year 2. A tracking system is being developed for cleaning and repairs. There were no bypass flows eliminated in Year 2. The DPW is responsible for the completion of this goal.

A.GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS (Continued):

8. This measurable goal was completed in the SWMPP development process. Details regarding this are included in the executive summary of the SWMPP. The City met with the Solid Waste Recycling Advisory Committee that was developed in Year 2. The City hired a consultant to increase city-wide recycling. The DPW and hired consultant were responsible for the completion of this goal. The DPW and Fire Department are responsible for continued recordkeeping.
9. This measurable goal was completed in the SWMPP development process. Details regarding this are included in Section 9.0 of the SWMPP. The Storm Water Committee, DPW, and hired consultant were responsible for the completion of this goal.
10. An O&M and good housekeeping program was developed during the SWMPP development process. Details regarding this are included in Section 9.0 of the SWMPP. During Year 2, the City hired a consultant to update the SPCC plan for the DPW garage. The plan is currently being reviewed by the City prior to the final version that will be issued in Year 3. The Storm Water Committee, DPW, and hired consultant were responsible for the completion of this goal and the DPW is responsible for the implementation of BMPs. BMPs are being implemented as funds and or labor becomes available.
11. Currently, flow management is addressed during the site plan review process as part of the drainage review for proposed projects. The City evaluates the incorporation of flow management projects during the planning and design stages of municipal projects. The Storm Water Committee and DPW are responsible for the completion of this goal.
12. Currently, large municipal projects are contracted out and erosion, sediment and water quality controls are addressed through bid packages, written by the City's consultants. Smaller projects are handled through the Engineering Division under the supervision of the City Engineer (who is a licensed Rhode Island Professional Engineer). The Storm Water Committee and DPW were responsible for the completion of this goal.
13. The City is in the process of updating the municipal employee training as necessary to meet this measurable goal. The current program was evaluated as part of the SWMPP development process. Details regarding this are included in Section 9.0 of the SWMPP and the Response to Comments. The City is teaming with Fuss & O'Neill, Inc. to provide training to equipment operators and mechanics that includes storm water awareness. Additionally, the City is a member of the Rhode Island Public Works Association, which offers free training to DPW employees on various issues. In Year 2, five DPW employees attended Public Works Association training, including Phase II stormwater workshops. The Storm Water Committee and DPW are responsible for this goal.

B. APPROPRIATENESS AND EFFECTIVENESS:

1. Identifying, locating and describing all municipally owned structural BMPs assisted in the efficient operation and maintenance of these structures. The list will be effective during future operation and maintenance activities.
2. It is appropriate to prepare inspection and cleaning procedures so that sediments and floatables are sufficiently removed from the MS4. Current inspection and maintenance frequency are adequate to ensure BMP function.
3. It is appropriate to have effective procedures for the cleaning and maintenance of catch basins. Given the unfunded nature of this program, the City will need to be as financially conscience as possible to complete all of the requirements of this program. Significant amounts of sediment are removed from the MS4 through the City's current program. The City will record the specific amount removed in future permit years.
4. Inspections during road work by municipal employees is an appropriate way of observing any erosion of road side shoulders and ditches. Erosive conditions that are found are treated with rip-rap or vegetative stabilization. Erosive conditions are currently corrected when discovered, which is effective in preventing further erosion.
5. It is appropriate to identify outfalls that cause scouring or excessive sedimentation. The effectiveness of this measure is yet to be determined.
6. It is appropriate to have effective procedures for the sweeping of City streets. This goal is already being implemented in the City. This measurable goal removes a significant amount of pollutants including, but not limited to, sediments, metal, and bacteria.
7. It is appropriate to remove floatables when catch basins are being maintained. Floatables are primary removed by way of litter clean ups, street sweeping and catch basin cleaning. These activities are already being performed by the City. These programs (non-structural) are effective to remove floatables from the MS4.
8. It is appropriate to dispose of municipal wastes in a lawful manner. The City will continue to dispose of wastes in accordance with applicable State requirements. The proper disposal of waste continues to be an effective way of removing wastes from municipal areas.
9. The City has included a list of operations under legal control that may have the potential to introduce pollutants into storm water runoff in the submitted SWMPP. This assessment is appropriate to assess the potential risks under the City's control. The list of operations is effective at targeting limited funds on developing programs and implementing BMPs in high risk areas.
10. The City assessed the non-industrial facilities with the potential to introduce pollutants to their storm water discharges during the SWMPP development process. Many possible BMPs were identified. These BMPs will be implemented throughout the term of this permit as funds and/or labor become available. This assessment during the SWMPP process has given the City a good starting point for the implementation of the O&M and pollution prevention program at non-industrial facilities under the City's control.
11. It is appropriate and effective to assess flow management projects during planning stages of municipal projects.
12. Implementing proper erosion and sediment and water quality control is appropriate and effective.
13. It is appropriate to train municipal employees. The effectiveness of this measure is yet to be determined. Training that has been provided is chosen because it is appropriate for the application, which has been effective.

PART III: ADDITIONAL ANNUAL REPORT REQUIREMENTS

SECTION I. Please provide an assessment of the progress towards meeting the requirements for the control of storm water identified in an approved TMDL (Part IV.G.2.d).

There are currently no finalized TMDLs for waterbodies within the City.

SECTION 2. Public Notice Information (IV.G.2.h and IV.G.2.i) *Note: attach copy of public notice

Date of Public Notice: March 4, 2006	How public was notified: Newspaper - The Call
Was public meeting held? YES (NO)	
Date: NA	Where: NA
Summary of public comments received: None received	
Planned responses or changes to the program: No comments received	

SECTION 3. Note any planned municipal construction projects/opportunities to incorporate water quality BMPs, low impact development, or activities to promote infiltration and recharge (Part IV.G.2.j)

The City plans to develop a water quality improvement project for the sand storage area and municipal employee parking lot.

SECTION 4. Interconnections (Part IV.G.2.k and IV.G.2.l)

Interconnection:	Date Found:	Location:	Connectee:	Originating Source:	Planned and Coordinated Efforts and Activities with Connectee:
None found					

SECTION 5. Illicit Discharge Inspections to Date (Part IV.G.2.m)

Total Illicit Discharges Identified: 1	# of Complaints Received: 1
# of Violations Issued: 0	# of Unresolved Violations Referred to RIDEM: 0
Summary of Enforcement Actions: The Highway Department identified a drum that had been dumped that was discharging to the storm system. The hazardous material coordinator for the City oversaw the removal and cleanup of the drum and associated release.	
Extent to which the MS4 system has been mapped: All of the pipes and catch basins have been mapped. Additional mapping that includes descriptions of the outfalls is planned for Year 3. This process will include integration of GIS.	

SECTION 6. Plan and SWPPP Reviews

# of Construction Reviews completed: approx. 150	# of Post-Construction Reviews completed: approx. 150
Summary of Reviews and Findings: All plans include at least some soil erosion and sediment controls and stormwater controls; however, the City may require additional or modified controls, or variation of design of the stormwater controls. The City typically has comments that need to be addressed prior to permit approval, which are provided to applicant in writing, who is often required to resubmit revised plans. Revised plans are reviewed until comments have been addressed to the satisfaction of the City.	Summary of Reviews and Finding: Most of the plans submitted to the City include permanent stormwater controls that address water quality and quantity. Typically, the City has comments that must be addressed by the applicant prior to approval, which are provided to applicant in writing, who is often required to resubmit revised plans. Revised plans are reviewed until comments have been addressed to the satisfaction of the City.

SECTION 7. Erosion and Sediment Control Inspections (Part IV.G.2.n)

# of Site Inspections: approx. 50	# of Complaints Received: 10-15 (for same construction project)
# of Violations Issued: None	# of Unresolved Violations Referred to RIDEM: None
Summary of Enforcement Actions: Contractor was required to install proper erosion and sediment controls to prevent discharges to roadways and storm sewers. Additional inspections are performed by the Building Official and Engineering Department to ensure that controls are maintained.	

SECTION 8. Post Construction Inspections: Proper Installation of Structural BMPs (Part IV.G.2.o)

# of Site Inspections: Approx. 30	# of Complaints Received: approx. None
# of Violations Issued: None	# of Unresolved Violations Referred to RIDEM: None
Summary of Enforcement Actions: N/A	

SECTION 9. Post Construction Inspections: Proper Operation and Maintenance of Structural BMPs (Part IV.G.2.p)

# of Site Inspections: at least 2	# of Complaints Received: None
# of Violations Issued: None	# of Unresolved Violations Referred to RIDEM: None
Summary of Enforcement Actions: N/A	

SECTION 10. Structural BMPs (Part IV.B.6.b.1.i)

BMP ID:	Location:	Name of BMP Owner/Operator:	Description of BMP:
56-15	PARK EAST DR / CVS DRIVE (LOT 56-15)	CITY OF WOONSOCKET	DETENTION POND
52-6	WALMART (LOT 52-6)	WALMART STORES 702 SOUTHWEST 8TH ST BENTONVILLE AR 72716	DETENTION POND
52-20	LOWES (LOT 52-20)	114 DIAMOND HILL RD II LLC 1 PROVIDENCE WASHINGTON PLACE 9TH FL PROVIDENCE RI 02903	DETENTION POND

58-31	BROOKHEAVEN POND (LOT 56-31)	DONNA JEAN 1305 BROOKHAVEN LANE WOONSOCKET RI 02895	DETENTION POND
58-37	TARA LANE/ LEDGEWOOD DR. (LOT 58-37)	CITY OF WOONSOCKET	DETENTION POND
57-88	EAST WOONSOCKET (LOT 57-88)	CITY OF WOONSOCKET	DETENTION POND
55-203	HOLLY SPRINGS (LOT 55-203)	WILFRED DESROSIERS 306 HOLLY LANE WOONSOCKET RI 02895	DETENTION POND
59-2	OREGON AVE (LOT 59-2)	CITY OF WOONSOCKET	DETENTION POND
53-5	DIAMONDHILL RD (LOT 53-5)	CITY OF WOONSOCKET	DETENTION POND
36-136	ROBINSON STREET POTHIER SCHOOL (LOT 36-136)	CITY OF WOONSOCKET	DETENTION POND
41-29	PARK DRIVE & HARTFORD AVE (LOT 41-29)	OAKLAND GROVE ASSOC. 560 CUMBERLAND HILL RD WOONSOCKET RI 02895	DETENTION POND
50-51	300 PARK EAST DRIVE (LOT 50-51)	TECHNIC INC.	DETENTION POND
50-211	500 PARK EAST DRIVE (LOT 50-211)	RI INDUSTRIAL FACILITIES CORP	DETENTION POND
31-68/69	BETWEEN 89 & 100 MARAIN LANE	CITY OF WOONSOCKET	SILTATION CHAMBER
7/33	943 RIVER ST	CITY OF WOONSOCKET	SILTATION CHAMBER

SECTION 11. Discharges Causing Scouring or Excessive Sedimentation (Part IV.B.6.b.1.v)

Outfall ID:	Location:	Description of Problem:	Description of Remediation Taken:	Receiving Water Body Name/Description:
None Identified				

SECTION 12. Please include a summary of results of any other information that has been collected and analyzed. This includes any type of data (Part IV.G.2.e).

The City is in the process of closing their landfill, which is approximately four million dollars into the job. This project that will help to reduce pollutants from stormwater.
The City has purchased the following items to assist in upcoming tasks and general maintenance of City owned structures:
Pipeline camera - $100,000
Pipeline jetting equipment - $150,000
Bypass pump - $50,000

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sold for non payment at North Main Self-Storage located at 750 Winter St., Woonsocket, RI.

Jordan, Dana
Unit# A005
Beaudreault, Pamela
Unit# C047
Jolin, Mary Unit# 0015
Darveau, Sylvain
Unit# B033
Marzini, Paulette
Unit# 0013
Patenaude, Michael
Unit# C032

NORTH SMITHFIELD SCHOOL COMMITTEE

NOTICE OF SPECIAL MEETING TO BE HELD ON: March 6, 2006

Kendall-Dean Auditorium

A G E N D A

Open Session: 7:00p.m.

hearing impaired must call RI Relay 1-800-745-5555 forty-eight hours in advance of the meeting date(s).

For the North Smithfield School Committee,
Gary S. Ezovski
Chairman

POLICE OFFICER

The Woonsocket Police Department will be accepting applications for partment and on line at **woonsocketpolice.com. There is a $50.00 non-refundable charge to take the written exam. The completed application, along with the $50.00 fee, must be turned into the personnel division. Please check our web site for requirements and physical agility test events.**

CITY OF WOONSOCKET
169 MAIN STREET
WOONSOCKET, RI 02895

E OF DRAFT PHASE II STORM WATER ANNUAL REPORT PREPARED IN WITH THE RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION ES) PROGRAM GENERAL PERMIT FOR STORM WATER DISCHARGES L MUNICIPAL SEPARATE STORM SEWER SYSTEMS AND FROM CTIVITY AT ELIGIBLE FACILITIES OPERATED BY REGULATED SMALL

ICE: March 4, 2006
IT NUMBER: RIR040016
ILING ADDRESS OF SMALL MS4 OPERATOR:
cet

02895

requirements established in the Rhode Island Pollutant Discharge Elimination 3) General Permit for Storm Water Discharge from Small MS4s and from ty at Eligible Facilities Operated by Regulated Small MS4s (General Permit). The cket submitted an application package, including Notice of Intent and Storm Water ogram Plan (SWMPP) to the Rhode Island Department of Environmental IDEM) for authorization of the storm water discharges from the City of 4. In accordance with Part IV.E of the General Permit, the operator must annually npliance of the SWMPP with the conditions of the permit, as well as the appropriected Best Management Practices and efforts towards achieving the Measurable report prepared in accordance with Part IV.G of the general permit must be sub-I by March 10th for each year after the permit is issued. Notice is hereby given of eive public comment and to hold a public meeting, if requested, on the City of e II Storm Water Annual Report.

RMATION ABOUT THE DRAFT ANNUAL REPORT

ase II Storm Water Annual Report may be obtained at no cost by writing or calling as noted below:

Michael A. Del Rossi, P.E., City Engineer
City of Woonsocket
Public Works and Engineering
169 Main Street
Woonsocket, RI 02895
(401) 767-9213

ve record containing all documents is on file and may be inspected, by appoint-Works between 8:30 AM and 4:00 PM, Monday through Friday, except holidays.

ENT AND REQUEST FOR PUBLIC MEETING:

equirements of the Phase II Small MS4 General Permit, a public meeting has been luled to consider the City of Woonsocket Phase II Storm Water Annual Report, if sts for a Public Meeting must be submitted in writing to the attention of

SON at the address indicated above. Notice should be taken that if the City of ives a request from twenty-five (25) people, a governmental agency or subdivi-iation having no less that twenty-five (25) members on or before 4:00 PM, *March* c meeting will be held at the following time and place:

March 9, 2006 at 6:00 pm
Woonsocket City Hall
3 rd Floor – Harris Hall
169 Main Street
Woonsocket, RI

is should contact the City of Woonsocket in advance to confirm if a meeting will e and location noted above.

may submit comments on the draft Annual Report and amendments to the administrative record to the address above by the close of the public comment ls 4:00 PM *March 24, 2006*. Commenters may request a longer comment period if

announcements 105-112

106 Lost and Found

FREE-OF-CHARGE
THE CALL will publish FREE-OF-CHARGE, for PRIVATE PARTIES ONLY, advertisements for FOUND ITEMS (excluding pets) Phone 766-3400, Monday thru Friday, 7:30 a.m.-5:00 p.m., Saturday 7:30 a.m.-3:30 p.m. for this Public Service or further information.

111 Special Notices

Notice To Our Readers

Companies that do business by phone can't ask you to pay for credit before you get it. For more information, call toll free 1-877-FTC-HELP. A public service message from The Call and the federal Trade Commission.

vehicles 113-136

123 Autos For Sale

FINANCING available $700 down, '96, Olds, Cutlass Ciera, 6 cyl., low miles, inspected, loaded, runs & looks new, $2550. License #2, 401-762-0618

HONDA Accord, '91, 2 door, auto, runs & drives good. $800. 401-568-5319

First time ever in Franklin, MA local car Dealership to hold "Dawg" sale.

Truly a bargain hunter's dream!
(SEE PAGE A6)

116 Auto Financing

AAAutos, trucks & scrap metals, immediate removal, 7 days. 401-765-4432, 508-369-8312 cell

AA JUNK CARS WANTED!! MA/RI $25 - $75 FREE SAME DAY REMOVAL (401)413-5747

JUNK Cars & Trucks wanted, cash paid, free removal. 401-965-8949

business services 140-199

144 Attorneys

BANKRUPTCY: Debt relief agency, helping people file per code, www.law-ri.com, Atty. John Simonian, 401-467-7798

employment 200-210

204 General Help Wanted

ACTIVITIES ASSISTANT: Part-time to work in nursing home setting. Experience preferred. Apply at: The Holiday, 30 Sayles Hill Rd., Lincoln, RI 02838

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August 29, 2005

Mr. Eric A. Beck, PE, Supervising Engineer
Rhode Island Department of Environmental Management
Office of Water Resources
295 Promenade Street
Providence, Rhode Island 02908

Dear Mr. Beck:

Woonsocket has received the Rhode Island Department of Environmental Management (RIDEM) comments on the *City of Woonsocket Phase II Storm Water Management Plan* (WSWMP). In accordance with the requirement to submit amendments within 45 days, we are providing you with the following response, which was prepared on our behalf by Fuss & O'Neill.

If you need further information, please contact me at 767-9218.

Sincerely,

Michael Del Rossi, Assistant Director
Woonsocket Public Works, Engineering Division

City of Woonsocket
Phase II Storm Water Management Plan
Response to DEM Comments
August 29, 2005

Comment:
A description of how recording of additional elements for those portions of system investigated (e.g., catch basins, manholes and pipes within the system, and location of identified physical interconnections with other MS4s), will be completed.

Response:
Section IV.B.3.a.1 of the Rhode Island Stormwater Phase II Regulations requires:

> If not already existing, the operator must develop an outfall map. The map must show the location of all outfalls and the names of all waters that receive discharges from those outfalls. At a minimum recording of additional elements, such as, location of catch basins, manholes, pipes within the system, must be completed for those portions of the system that are associated with the investigation and tracing of illicit discharges detected from the dry weather survey of outfalls, municipal construction activity projects, and catch basin inspections.

Woonsocket has previously mapped its storm water outfalls as indicated in section 6.4.1 of the WSWMP. Woonsocket has committed to updating this map using GPS. Currently, the city is in the process of doing a fly-over, which will identify outfalls manholes and catch basins. The city plans to locate pipes and interconnections in the field. Notwithstanding, item 8 has been added to page 54. Item 8 reads:

> During the course of investigation, catch basins, manholes and pipes within the system, and location of identified physical interconnections with other MS4s will be reviewed against Woonsocket's storm water system mapping. The mapping will then be updated as appropriate.

Comment:
Describe how the system map will be updated on an on-going basis for new MS4 construction project or when any changes are made to the system.

Response:
Section IV.B.3.b.3 of the Rhode Island Stormwater Phase II Regulations requires:

> Recording of additional elements, such as, location of catch basins, manholes and pipes within the system will be coordinated with…new MS4 construction projects.

Therefore, the following sentence has been added to section 6.4.1:

> Whenever MS4 construction, repair or retrofitting is conducted, Woonsocket will update its mapping to incorporate any alterations to the system.

Comment:
The plan must contain a description of how the [city] plans to address illegal dumping, hazardous waste/material pills and [individual sewage disposal system (ISDS)] (if applicable).

Response:
Section IV.B.3.b.5 of the Rhode Island Stormwater Phase II Regulations requires:

> Standard Operating Procedures (SOP) to detect and address the illicit discharges to the system including discharges from illegal dumping, spills and individual sewage disposal systems (ISDS) when applicable.

Woonsocket has addressed illicit discharge detection and elimination in the "Illicit Discharge Detection and Elimination" section of the WSWMP (p. 51-55). This section of the plan includes an extensive description of testing that is needed to identify occurrence and track sources of illicit discharges such as hazardous waste dumping and illicit ISDS connections.

As indicated in the last paragraphs of page 55, Woonsocket also intends to address this requirement through the public participation and public education and outreach sections of the WSWMP. The city anticipates that public participation and education efforts will greatly reduce, if not entirely eliminate, incidence of illegal dumping.

Comment:
*The plan states that **to the extent possible** [emphasis added] the precipitation conditions of no less than 72 hours after the last rainfall of 0.1 inches or more will precede the weather surveys. The permittee is required by the MS4 general permit to meet these conditions.*

Response:
Section IV.B.3.b.5.vii of the Rhode Island Stormwater Phase II Regulations states:

> Dry weather surveys must be conducted no less than 72 hours after the last rain fall of 0.10 inches or more.

Therefore, the seventh block of text on page 52 is amended as follows:

> At least 72 hours of dry weather will precede any fieldwork associated with this program.

Comment(s):

1. *The plan contains a limited description of procedures and protocols that will be followed when implementing the dry weather survey. The plan must include a*

description of the visual observations that will be noted by the [city] when conducting the dry weather surveys, this description must be consistent with the requirements described in the permit for the completion of dry weather surveys.

2. *The plan must state that additional sampling and analysis for any other parameters that may be helpful in the identification of the source of the illicit discharge will be performed as warranted.*

Response:
Section IV.B.3.b.5.vii of the Rhode Island Stormwater Phase II Regulations states:

> Visual observations must include but not be limited to the following: odors, sheen, stressed vegetation, coloration/staining, algae growth, sedimentation and/or scouring in the vicinity of the outfalls. If visual observations indicate the presence of illicit discharges additional sampling and analysis for any other parameters that may be useful in the identification of the illicit discharge must be performed as warranted.

Therefore, Woonsocket's inspection protocol on page 52 is amended as follows:

- Inspect each outfall location (subject to the City's ability to arrange for or provide access across private property as required) to document the following information on an outfall inspection report:
    - Observed dry weather flow (a digital photograph will be taken of each outfall),
    - Outfall size, material and condition,
    - Approximate height of outfall above receiving watercourse,
    - Outfall receiving watercourse,
    - Coordinate location as determined by GPS,
    - Any additional outfalls observed during the outfall inspections, and
    - Any other observations of the outfall and/or surrounding area including, but not necessarily limited to, odors, sheen, stressed vegetation, coloration/staining, algae growth, sedimentation and/or scouring
    - Other parameters, such as flow measurements, as warranted.

Comment:
Although the plan contains a measurable goal of completing ***two dry weather surveys*** *of all outfalls by the fourth year of the permit, procedures don't state that these are to be conducted on between January 1st - April 30th and one between July 1st – October 31st.*

Response:
Section IV.B.3.b.5.vii of the Rhode Island Stormwater Phase II Regulations states:

> The operator must include a measurable goal of performing a minimum of two surveys, one to be conducted between January 1st - April 30th and one between July 1st - October 31st by the fourth year of the program.

The plan indicates that two surveys will be conducted as stipulated in the general permit; however, for clarity, the WSWMP executive summary (p. 4 of 11), column 2, row 5 is amended as follows:

> Perform a minimum of two surveys in accordance with standards stipulated in the General Permit. One will be conducted between January 1st - April 30th and one between July 1st - October 31st by the fourth year of the program.

Comment:
A measurable goal of developing[,] in the first year[,] procedures for coordination with other physically interconnected[MS4s,] when illicit discharges are detected or reported[,] must be included in the plan. A description of these procedures must have been submitted to the Department in March of 2005.

Response:
Section IV.B.3.b.7 of the Rhode Island Stormwater Phase II Regulations states that, at submission or by the end of the first year, plans must include:

> Procedures for coordinating with other physically interconnected MS4s, including State and federal[ly] owned or operated MS4s, when illicit discharges are detected or reported.

The WSWMP, as originally submitted March 2004, includes such a procedure and states that "if illicit discharges are detected from other physically interconnected MS4s, the city will report the finding to the owner of the illicit discharge." Please refer to page 4 of 11 of the executive summary. The city will begin to implement this process as of December 2006.

Comment:
Page 49 refers to section 4.4, it should be 6.4.

Response:
Several other incorrect references to chapter 4 were found. Incorrect references to chapter 4 (i.e., 4.x) have been changed to chapter 6 (i.e., 6.x).

Comment:
The SWMPP must refer to RIPDES not USEPA/NPDES regulations.

Response:
Inappropriate references to USEPA/NPDES have been changed. In making this revision it was also noted that EPA's list of allowable discharges was provided, erroneously, in

place of RIDEM's list. As these lists differ, page 48 of the WSWMP is amended as follows:

> The DEM regulations allow several categories of non-storm water discharges to an MS4 if they are not identified as significant contributors of pollutants in the system. <u>This list is as follows:</u>
>
> > Discharges which result from the washdown of vehicles at retail dealers selling new and used automobiles where no detergents are used and individual residential car washing.
> > External building washdown where no detergents are used.
> > The use of water to control dust, fire fighting activities, fire hydrant flushings and natural springs.
> > Uncontaminated groundwater.
> > Dechlorinated pool discharges.
> > Air conditioning condensate.
> > Lawn watering.
> > Potable water sources including waterline flushings.
> > Irrigation drainage.
> > Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents are not used.
> > Discharges from foundation or footing drains where flows are not contaminated with process materials such as solvents, or contaminated by contact with soils where spills or leaks of toxic or hazardous materials have occurred.
> > Uncontaminated utility vault dewatering.
> > Dechlorinated water line testing water.
> > Hydrostatic test water that does not contain any treatment chemicals and is not contaminated with process chemicals.

Comment(s):

1. *The SWMPPP [sic] has an extensive description of BMPs and measurable goals listed under "the following potential alternatives." The SWMPP must describe which BMPs and measurable goals the [city] is committed to implement to meet the requirements of the permit. This also applies to the last item of this section [of] the proposed activities for addressing illicit discharges under the public education and outreach minimum measure [that] are presented as alternatives and resources available to the [city], it is not clear what activities the [city] is committed to implement.*

2. *Include a description of how this plan will be coordinated with the public education minimum measure and the pollution prevention/good housekeeping minimum measure programs.*

Response:

Section IV.B.3.b.9 of the Rhode Island Stormwater Phase II Regulations states that plans must include:

> Plans on how to inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste as well as allowable non-storm water discharges identified as significant contributors of pollutants.

The WSWMP, as originally submitted March 2004, includes a number of strategies for informing public employees, businesses and the general public of the hazards associated with illegal discharges, etc. Educational strategies are discussed in section 4.4 of the plan. As indicated in the last item on page 4 of 11 of the executive summary of the WSWMP, Woonsocket has committed to commencing distribution of illicit discharge educational materials to its employees and the public by December 2007. Page 30 discusses that the specific strategies to be used will depend on a number of factors that are in flux and, at least to some extent, outside of the city's control. Notwithstanding, for clarity, the last paragraph of section 4.4 on page 30 of the WSWMP has been revised as follows:

> While a number of resources are available to Woonsocket for a future public education program on stormwater quality, work still needs to be completed in actually organizing and implementing a formal program. To ensure efficacious use of resources, it is the city's strategy to select specific educational approaches and implement them as appropriate as part of the implementation process. As required by the general permit, the annual report will discuss strategy selection and implementation. This will include public education for the pollution prevention/good housekeeping minimum measure programs. The following…

Comment(s):
The Department recommends that protocols used for the collection of outfall location data be consistent with protocols recommended by RIDEM (please refer to information provided during the December 6, 2004, IDDE workshop). During the same workshop the Department distributed field survey forms and excel tables for the collection of outfall location data and during the implementation of the required dry weather surveys.

Please be aware that a draft IDDE ordinance was also distributed during the December 6, 2004 workshop.

Response:
The city appreciates DEM's assistance in developing field forms and IDDE ordinance; however, these materials were not available at the time when the WSWMP was submitted—March 2004 (per requirement). The city will consider the use of the forms and model ordinance and amendment to the program as appropriate at a future time.

Comment:

Page 52 indicates that two outfalls will be investigated during the initial phase. It is not clear what the timeframe for the initial phase is and if the proposed detection and elimination of illicit discharges will comply with the permit.

Response:
This is a reference to a pilot study. The city is committed to complying with all requirements of the general permit. To eliminate confusion the plan is revised as follows:

> If the results of these analyses indicate that a potential illicit discharge exists, the up-gradient drainage system will be examined to identify the extent of the system where that dry weather flow exists. Two outfalls will be investigated in this manner, as a pilot study, prior to completion of the complete citywide survey. The citywide survey will be completed in compliance with all DEM standards including schedule.

Comment:
Replace references to waters of the US.

Response:
Two such references were found on pages 47 and 51 and are now deleted.

Comment:
*The permittee must start the issuance of permits for **all** construction projects that result in land disturbance of 1 or more acres during calendar year 2005 (in accordance to Part IV.B.4.b.2 of the general permit[)].*

Response:
Section IV.B.4.b.2 of the Rhode Island Stormwater Phase II Regulations states:

> The operator must include a measurable goal of issuing permits or implementing policies and procedures for all construction projects resulting in land disturbance of greater than 1 acre, by the second year of the program.

The proposed measurable goal is to implement permitting by December 2005; however, for clarity, the proposed schedule for this item on page 6 of 11 of the executive summary is changed to "issue permits for all affected projects by: 12/2005."

Comment:
The permittee must start the review of 100% of SWPPPs and plans for construction projects that result in land disturbance of one or more acres during 2005 (in accordance to Part IV.B.4.b.4 of the general permit).

Response:
Section IV.B.4.b.4 of the Rhode Island Stormwater Phase II Regulations states:

> The operator must include a measurable goal of reviewing 100% of plans and SWPPPs for construction projects resulting in land disturbance of 1-5 acres, not reviewed by other State programs (Wetlands, RIPDES, Water Quality Certification, CRMC) by the second year of the program [and] within the second year of the program as a measurable goal.

Therefore, the proposed schedule for this item on page 6 of 11 of the executive summary has been changed to "100% review by: 12/2005."

Comment:
The plan ***recommends*** *an extensive number of BMPs and measurable goals, however, it is not clear which of the listed BMPs and measurable goals the [city] has committed to implementing to meet the requirements of the permit.*

Response:
The city is committed to all measurable goals on the proposed schedule as described in the executive summary.

Comment:
Procedures for identification of structural BMPs owned or operator by the small MS4 operator. ***Required measurable Goals Identify and list location and description of all structural BMPs in the SWPPP [sic] at the time of application and update information annually (in the annual report).*** *Noted totals but not individual BMPs.*

Response:
Section IV.B.6.b.1 of the Rhode Island Stormwater Phase II Regulations states:

> The description of the operation and maintenance program must include procedures for identification of structural BMPs owned or operated by the small MS4 operator. The operator must identify and list the specific location and a description of all structural BMPs in the SWMPP at the time of application and update the information in the Annual Report.

Individual BMPs are listed in the WSWMP Annual Report (see section 9—Structural BMPs). In compliance with the general permit, the city will continue to update this list as part of its annual reporting.

Comment:
A measurable goal of developing[,] in the first year[,] procedures to coordinate these inspections with the inspections required under Illicit Discharge Detection and Elimination minimum measure must be included in the plan. A description of these procedures must have been submitted to the Department in March of 2005.

Response:
Section IV.B.6.b.1.iii of the Rhode Island Stormwater Phase II Regulations states:

> The program must also include the inspection and cleaning of other elements in the system, such as manholes, when catch basins in the system are found to be overfilled or failing. Describe coordination of inspection of catch basins for maintenance and inspection for illicit discharge detection and when recording additional elements of the MS4.

Therefore, the fifth block of text on page 52 is amended to add the following text at the end:

> Illicit discharge detection is generally more accurate and reliable following the cleaning of catch basins for blockages and sediments. Therefore, to the extent practicable, outfall inspection will immediately follow catch basin cleaning.

Comment(s):

1. *Describe coordination of inspection of catch basins for maintenance and inspection for illicit discharge detection and when mapping additional elements of the MS4.* ***Required Measurable Goals. If not already addressed, develop strategies and procedures to coordinate maintenance and IDDE inspections within the first year.***

2. *A measurable goal of developing in the first year procedures to identify and report known discharges causing scouring or excessive sedimentation must be included in the plan. A description of these procedures must be submitted to the department in March of 2005. In addition, a measurable goal of reporting annually to the department known discharges causing scoring a outfall pipes or outfalls with excessive sedimentation as part of annual report must also be included in the plan. A description of these procedures must have been submitted to the department in March of 2005.*

Response:

The following bullet has been added to page 96 under item a:

> Modify storm drain outfall inspection protocol to include inspection for soil erosion whenever outfalls are inspected. The DPW will also inspect in response to complaints by a resident and employee observed problems. The DPW will retain records of the dates when outfalls and catch basins were inspected.

Comment:

The Storm Water Phase II Regulations required facilities discharging storm water associated with industrial activities that are owned or operated by municipalities with populations of less than 100,000 to seek permit authorization by March 10, 2003. RIDEM provide municipalities with the option of applying for permit coverage of these discharges under the same general permit that would authorize discharges form the MS4. Amongst the facilities that would be RIPDES regulated industrial facilities for their storm water discharges are: wastewater treatment facility, some recycling and disposal facilities, and DPW garages that meet the description of the regulated transportation

municipality is seeking permit coverage for these facilities under the MS4 general permit, the discharges need to be identified as industrial in the Notice Intent. The SWMPP must when addressing the requirements of Part IV.B.6.b.5 of the General Permit. If the municipality determines that these and other facilities do not meet the definition of regulated storm water associated with industrial activities the SWMPP must address these measurable goal of implementing all recommended O&M and good housekeeping BMPs at non-industrial facilities by the fourth year of the program. If the operator of the MS4 determines that a facility meets the definition of a RIPDES regulated industrial facility yet there are no materials or activities exposed to storm water, the operator must complete and submit to the Department a "no exposure" certification for its conditional exclusion for the program.

Response:
The plan addresses this comment. All industrial activities are listed in the NOI. A measure for operation and maintenance and good housekeeping of municipal operations is included on page 11 of 11 in the executive summary. A proposed implementation time of March 2006 is also included.

Comment:
Employee training: "not addressed."

Response:
Section IV.B.6.b.6 of the Rhode Island Storm Water Phase II Regulations requires information on the following:

> [An] all[-]employee training program that will be used to prevent and reduce storm water pollution form activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance. Description of how training programs will be coordinated with the outreach programs developed for the public information minimum measure and the illicit discharge minimum measure.

The WSWMP discusses the current level of training on pages 88, 91, 92, 93 and 94. Recommendations are included on page 96, 97 and 99.

The fourth minimum control measure on page 11 of 11 in the executive summary is:

> Incorporate storm water awareness training into existing training for equipment operators and mechanics.

Page 55 of the plan states that Woonsocket will "inform public employees…of hazards associated with illegal discharges and improper disposal of waste."

Although Woonsocket believes its plan addresses this measure, for clarity, the following text is now incorporated:

1. At the end of the aforementioned paragraph on page 99, "employee training will be coordinated with public information and illicit discharge minimum measures by distributing public materials to public employees and making employees aware of outreach program to be conducted."
2. At the end of the fourth control measure on page 11 of the executive summary, "storm water awareness materials used in the public outreach and illicit discharge minimum measures will also be made available to all public employees."

Comment:
A measurable goal of developing[,] in the first year[,] procedures to ensure that design and construction of new elements of the MS4 and repairs of existing elements of the MS4 undertaken by the operator are assessed for potential water quality impacts and incorporation of additional water quality protection devices of practices must be included in the plan. A description of these procedures must have been submitted to the Department in March of 2005.

Response:
Section IV.B.6.b.7 of the Rhode Island Storm Water Phase II Regulations requires within the first year that:

> Procedures to ensure that new flow management projects undertaken by the operator are assessed for potential water quality impacts and existing projects are assessed for incorporation additional water quality protection devices or practices.

In its SWMP, Woonsocket originally proposed a completion date of December 2007. In response to the comment, the words "develop procedures to" is now removed from the BMP description column. The measurable goal is now changed to "number of opportunities identified." Woonsocket has also added Item g to page 99, which reads as follows:

> Consider opportunities for water quality improvement whenever undertaking a flow management project. Assessment of opportunity will include, but not necessarily be limited to, the following:
>
> > Availability of town-owned land at end of pipe.
> > Depth to groundwater.
> > Noted pollutants of concern in TMDLs.
> > Risk of pollution form local land use based on available mapping.
> > Probable size of catchment and percent imperviousness based on existing storm water and land-use mapping.

The text under completion date is changed to "to be provided in each annual report beginning December 2005."

Comment:

1. *Procedures for implementing proper erosion and sediment and water quality controls for all construction projects undertaken by the operator including roadway re-paving and flood control projects. The plan must identify all planned major capital improvements and opportunities to improve storm water quality management for municipal new development and re-development projects.* ***Required Measurable Goals: If not already addressed, develop strategies and procedures for*** *implementing proper erosion and sediment and water quality controls for all construction projects within the first year.*

2. *The proposed schedule for the development of these procedures (12/06) is non-compliant with the permit requirement "within the first" or 12/04.*

Response:
In its SWMP, Woonsocket originally proposed to do this by December 2006. In response to this comment the BMP description in the executive summary is changed to "implement proper erosion and sediment and water quality controls for all construction projects undertaken by the city."

The measurable goal is changed to "number of projects with BMPs implemented."

Woonsocket has also added item i to page 99, which reads as follows:

> The city will list all its major capital improvement projects and assessment of opportunities for water quality improvement. The assessment will consider the following items:
>
> > Availability of city-owned land at end of pipe,
> > Depth to groundwater.
> > Noted pollutants of concern in TMDLs.
> > Risk of pollution form local land use based on available mapping.
> > Probable size of catchment and percent imperviousness based on existing storm water and land-use mapping.
>
> In addition, whenever undertaking a construction project (including repaving and flood control), the city will implement proper soil erosion and sediment control as well as other appropriate water quality controls."

Comment:
The plan must identify how records will be kept and the Program will be evaluated annually.

Response:
Requirements for program evaluation, record keeping and reporting are made in section IV.E-G of the Rhode Island Storm Water Phase II Regulations. In part, these sections require:

All records required by this permit must be kept for a period of five years.

Record keeping and program evaluation are discussed in chapter 12 of the WSWMP. In accordance with the general permit, the first sentence of record keeping has been revised as follows:

All records required by this permit will be kept for a period of five years.

No other changes are required.

Sec. 16-17. Illicit discharge detection and elimination ordinance.

Article I

Section 1. Illicit Discharges

Illicit discharges to the municipal storm sewer system are comprised of non-storm water discharges that are expressly prohibited from the municipal storm sewer system unless the discharges have received all required federal, state and local permits including the Rhode Island Pollutant Discharge Elimination System (RIPDES) or is included in one of the following categories of discharges: discharges which result from the washdown of vehicles at retail dealers selling new and used automobiles where no detergents are used and individual residential car washing; external building washdown where no detergents are used; the use of water to control dust; fire fighting activities; fire hydrant flushing; natural springs; uncontaminated groundwater; dechlorinated pool discharges; air conditioning condensate; lawn watering; ptable water sources including waterline flushing; irrigation drainage; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents are not used; discharges from foundation or footing drains whee flows are not contaminated with process materials such as solvents, or contaminated by contact with soils where spills or leaks of toxic or hazardous materials have occurred; uncontaminated utility vault dewatering; dechlorinated water line testing water; hydrostatic test water that does not contain any treatment chemicals and is not contaminated with process chemicals.

Section 2 Right of Entry

To the extent permitted by State law, or if authorized by the owner or other party in control of the property, the Director of Public Works and/or his/her designated representative may enter upon privately owned property for the purpose of performing their duties under this ordinance and may make or cause to be made such examinations, surveys or sampling as the City deems reasonably necessary.

Section 3 Notification of Spills

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has any known or suspected release of materials which are resulting or may result in unauthorized discharges or pollutant discharging into storm water, the storm drain system, or waters of the State from said facility, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of a hazardous material said person shall immediately notify emergency response officials of the occurrence via emergency dispatch services (911). In the event of a release of non-hazardous materials, said person shall notify the authorized enforcement

agency no later than the next business day. Notifications in person or by phone call shall be confirmed by written notice addressed and mailed to the authorized enforcement agency with five (5) business days of the phone notice. If the discharge of the prohibited materials emanates from a commerical or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the action taken to prevent its recurrent. Such records shall be retained for at least three years. Nothing in this section shall preclude any owner/lessee from compliance with relevant provisions of the Rhode Island Clean Water Act, R.I.G.L. 46-12-1, et seq. or other applicable laws or regulations.

Section 4 Enforcement

1. If an illicit discharge to the municipal storm sewer system is detected, the owner shall cease the discharge. If the discharge does not cease within seven (7) calendar days, the owner may be fine seventy-five ($75) per calendar day that the violation goes un-repaired and the City of Woonsocket shall have the rights to take whatever action it deems necessary to correct the violations and to assess a lien on the subject property in an amount equal to the cost of the remedial actions. The lien shall be enforced in the manner provided or authorized by law for the enforcement of common law liens on personal property. The lien shall be recorded in the land evidence records of the City of Woonsocket and shall incur legal interest from the date of the recording. The imposition of any penalty shall not exempt the offendor from compliance with the provisions of this ordinance, including revocation of the Permit Bond or assessment of a lien on the property.

2. Any individual or other party is prohibited from discharging waste, including construction waste, building material, truck washout, chemicals, litter, sanitary wastes or other waste into the City Right of Way, storm drain, or other city property. If such a violation occurs the city may fine the violator two hundred ($200) and required removal of the waste within ten (10) calendar days at the violator's expense. The City may charge the violator any costs associated with removal or repair of damage resulting from the violation.

(Rev. Ords. 1928, Ch. 40, Secs. 39, 40; Ch. No. 6730, Sec. 1, 6-5-00; Ch. 7192, Sec. 1-3, 3-21-05)

05 C031

MICHAEL ANNARUMMO
DIRECTOR

SUSAN D. MENARD
MAYOR

CITY OF WOONSOCKET
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

CITY HALL - 169 MAIN STREET - WOONSOCKET, RI 02895 - TEL 401-762-6400 - EXT. 213 - FAX 401-766-7876

March 1, 2005

The Honorable City Council
Legislation Chambers
City Hall – 169 Main Street
Woonsocket, RI 02895

Subject: Post Construction – Storm Water Control Ordinance

Dear Councillors:

Pursuit to the requirements established in the Rhode Island Pollutant Discharge Elimination System (RIPDES) General Permit for Storm Water Discharge from Small Municipal Separate Storm Sewer System (MS4), the City of Woonsocket is required to adopt an 'Post Construction – Storm Water Control Ordinance' by March 10, 2005.

Unmitigated storm water from areas altered by development may pose public health and safety threats. Potential contaminants in storm water runoff to the City's storm water system may include suspended solids, nitrogen, phosphorus, hydrocarbons, heavy metals, pathogenic organisms (bacteria and viruses), and road salts.

The attached ordinance has been developed by the Engineering Division along with our engineering consultants, Fuss & O'Neill Engineering Company, and meets the criteria set forth by Rhode Island Department of Environmental Management.

Sincerely,

Michael Annarummo
Director of Public Works

POST CONSTRUCTION - STORM WATER CONTROL ORDINANCE

ARTICLE I

Section 1. Purpose

Unmitigated storm water from areas altered by development may pose public health and safety threats. Potential contaminants in storm water runoff to the City's storm water system may include suspended solids, nitrogen, phosphorus, hydrocarbons, heavy metals, pathogenic organisms (bacteria and viruses), and road salts.

This ordinance establishes the administrative mechanisms necessary for Woonsocket to ensure proper storm water management. The ordinance is written to work in conjunction with current state regulations.

This ordinance is meant to coincide with the City of Woonsocket Erosion and Sediment Control Ordinance Chapter 7 ½.

Section 2. Applicability

This ordinance shall apply to all development occurring within Woonsocket. No person shall engage in land development activities without receiving approval from the Woonsocket Planning Board and/or permitted through the Department of Public Works, Engineering Division and/or the Building Inspection Office, unless specifically exempted by Article I Section 3 of this ordinance.

Section 3. Exemptions

The following activities do not require written approval pursuant to this ordinance:

A. Construction, alternation or use of any additions to existing single family or duplex homes or related structures, provided the grounds coverage of such addition is less than one thousand (1,000) square feet.

B. Grading, as a maintenance measure or for landscaping, on contiguous areas of developed land, parcels and lots, which in aggregate do not exceed one thousand (1,000) square feet.

Section 4. Variance

The Director of Public Works or the City Engineer reviewing an application under this ordinance may:

A. Vary requirements of this ordinance when strict implementation of the requirements of this ordinance create an unnecessary hardship or are not feasible.

B. Allow use of an innovative management practice where strict adherence to existing criteria would be costly or of negligible environmental benefit.

Section 5. Submissions and Approvals

In accordance with this ordinance, all persons must obtain approval from the Woonsocket Planning Board and/or permitted through the Department of Public Works, Engineering Division and/or the Building Inspection Office, prior to engaging in any land development activities, unless exempted by Article 1 Section 3 of this ordinance. To obtain approval applicants must demonstrate compliance with all policy, standards and requirements of this ordinance to the satisfaction of the Director of Public Works or the City Engineer. Applicants may demonstrate compliance via submission of materials and documentation including but not limited to a Storm Water Management Plan, site plan, maintenance agreement, and Permit Bond in accordance with this Ordinance. Plans will be reviewed in conjunction with site plan review by the Engineering Division.

ARTICLE II

Section 1. Technical Standards

All applicants are required to develop and submit a Storm Water Management Plan. All Storm Water Management Plans must address storm water management on a site-by-site basis and all requirements of this ordinance. All storm water management practices shall be consistent with the *Rhode Island Stormwater Design and Installation Standards Manual* and the *Rhode Island Soil Erosion and Sediment Control Handbook*, as amended.

A. Performance Standards

Storm Water Management Plans shall incorporate best management practices for water quality control, which in combination are demonstrated to reduce the average annual total suspended solids in postdevelopment runoff by eighty percent (80%). Development in drinking water supply watersheds may be held to higher standards.

B. Disallowed Storm Water Best Management Practices

The placement of detention basins and other storm water structures within a floodplain shall be avoided. If there is no alternative, the applicant must show what effects, if any, the tailwaters created by the floodplain will have on the outflow and effective storage capacity of the detention facility.

C. Facilitation of Maintenance

Facilities that require maintenance shall be designed to minimize the need for regular maintenance, facilitate required maintenance, and ensure accessibility of components that require maintenance. At a minimum, all Storm Water Management Plans must

incorporate best management practices with appropriate maintenance design in accordance with the *Rhode Island Stormwater Design and Installation Standards Manual*, as amended; or the *Rhode Island Soil Erosion and Sediment Control Handbook*, as amended.

D. Flood Protection

Storm Water Management Plans shall demonstrate that a proposed project provides for protection of life and property from flooding and flood flows. Water quantities must be controlled in accordance with the *Rhode Island Stormwater Design and Installation Standards Manual*, as amended, or a municipally approved regional Storm Water Management Plan for the watershed in which the development site is located. Storm Water Management Plans shall demonstrate incorporation of the following standards into the proposed project:

1. Control and maintenance of postdevelopment peak discharge rates from the 2-year, 10-year, 25-year, and 100-year storm events and predevelopment levels.

2. Downstream analysis of the 100-year storm event and control of the peak discharge rate for the 100-year storm to mitigate significant downstream impacts.

3. Discharge from any storm water facility must be conveyed through properly constructed conveyance system to provide for nonerosive flows during all storm events. The proposed storm water conveyance system consisting of open channels, pipes, and other conveyance devices shall at a minimum accommodate the runoff from a 25-year storm event. The storm water conveyance system must provide for nonerosive flows to receiving waters.

E. Surface Water and Groundwater

Storm Water Management Plans shall demonstrate that during develop and postdevelopment, all receiving waters will be recharged in a manner closely resembling predevelopment conditions and that the developed site will retain hydrological conditions that closely resemble of those prior to disturbance.

ARTICLE III

Section 1. Maintenance Requirements for Best Management Practices

A. Routine Maintenance and Repair Procedures

Preventative maintenance procedures are required to maintain the intended operation and safe condition of the storm water management facility by greatly reducing the occurrence

of problems and malfunctions. To be effective, preventative maintenance shall be performed on a regular basis and include such routine procedures as training of staff, periodic inspections, grass cutting elimination of mosquito breeding habitats, and pond maintenance. Disposal of sediment and debris must occur on a regular basis (unless otherwise specified within an approved plan), at suitable disposal sites or recycling sites and comply with applicable local, state and federal regulations.

Corrective maintenance procedures are required to correct a problem or malfunction at a storm water management facility and to restore the facility's intended operation and safe condition. Based upon the severity of the problem, corrective maintenance must be performed on an as-needed or emergency basis and include such procedures as structural repairs, removal of debris, sediment and trash removal which threaten discharge capacity, erosion repair, snow and ice removal, fence repair, mosquito extermination, and restoration of vegetated and nonvegetated linings.

B. General Maintenance Standards for Storm Water Best Management Practices.

Maintenance design and maintenance procedures for all storm water best management practices shall be in accordance *Rhode Island Stormwater Design and Installation Standards Manual*, as amended; or the *Rhode Island Soil Erosion and Sediment Control Handbook*, as amended. Storm Water Management Plans shall demonstrate appropriate maintenance design and procedures for each proposed best management practice. The following policies and standards for maintenance must be incorporated into Storm Water Management Plans, as applicable.

1. A maintenance schedule for each type of BMP must be included in the Storm Water Management Plan. These schedules shall list the frequency and type of maintenance operations necessary along with the legally responsible party's name, address, and telephone number. The Engineering Division shall be notified if the property changes ownership along with the new responsible party's name, address, and telephone number. If the storm water drainage system is to be deeded to the local municipality the applicant must obtain a letter from the municipality acknowledging maintenance responsibility and intent of ownership after approval from the City Council.

ARTICLE IV

Section 1. Storm Water Management Plans

A. Calculations

In addition to the information required for Storm Water Management Plans the following information must also be included with the application, where applicable.

1. The area of each subbasin as identified on final site plans.

2. The area of pervious and impervious surfaces (including all roads, driveways, rooftops, sidewalks, etc.) for each subbasin as identified in the *Rhode Island Stormwater Design and Installation Standards Manual*, as amended.

3. Weighted curve numbers, (CN) as determined by the SCS TR-55 method, for each subbasin as identified in the *Rhode Island Stormwater Design and Installation Standards Manual*, as amended.

4. Invert elevations for all applicable BMPs. In addition, the elevations for permanent and/or flood pool stages, including peak discharge rates for each stage, within all basins are required.

5. The total volume capacity for all flood control and water quality BMPs (e.g., infiltration basin, detention basins, wet ponds, etc.). Volumes must be segregated into permanent and flood pool stage volumes where applicable. Furthermore, the volumes of all sediment storage (basins, forebays, etc.) areas must also be shown.

6. Predevelopment and postdevelopment peak discharge rates and runoff volumes for the 2-year, 10-year, 25-year, and 100-year frequency storm events for each subwatershed. The water quality volume must also be calculated for each subwatershed. All relevant variables such as curve numbers and time of concentration, along with the supporting computations and worksheets must be included.

B. Narrative Description

As part of the Storm Water Management Plan, the applicant shall include a discussion of the protection of environmental resource functions and values. The following outline is provided as guidance for preparing a narrative description for the Storm Water Management Plan. Depending on the size and scope of the proposed project, the amount of information required by the Engineering Division may vary, therefore, it is advised to consult the appropriate permitting agency for specific requirements.

1. Site description – general topography, soil types, current vegetative composition and relative abundance, existing infrastructure, and/or adjacent properties, identification of major resources (e.g., wetlands, groundwater, surface waters, etc.), name of receiving water(s), potential water quality and/or hydrologic impacts on resources.

2. Site input data – watershed characteristics, area of all pervious and impervious surfaces, total area of site, annual mean rainfall, runoff coefficients, curve numbers for various land uses, peak discharge rates.

3. Land use planning and source control plan.

4. Best Management Practices – identify the type of BMP(s) employed both during and post construction and justification for selection, including any deviation from the *Rhode Island Stormwater Design and Installation Standards Manual*, as amended, and the potential effect on pollutant removal efficiency.

5. Technical feasibility – of BMPs including sizing, location, hydraulic and environmental impacts. Alternatives, which were considered but determined not to be feasible, should also be discussed.

6. Maintenance schedule – of BMPs to be used, both during and post construction including frequency of inspection and maintenance.

Section 2. Maintenance Agreements

Maintenance agreements shall provide written, contractual documentation, which demonstrates compliance with this ordinance and legal arrangements for the upkeep of storm water facilities to assure their functionality and safety in accordance with this ordinance.

Maintenance agreements, which describe all maintenance schedules and requirements, must be developed for each storm water management facility unless the facility is dedicated to and accepted by the City of Woonsocket.

A. Recognition of Municipal Inspection Requirements

Maintenance agreements shall include a reasonable and regular schedule for the City of Woonsocket, or designee, to conduct on-site inspection of the functionality and safety of storm water management facilities. Inspection schedules shall be based on the complexity and frequency of maintenance needs and shall be subject to the approval of City of Woonsocket. At a minimum, maintenance frequency should be in accordance with the *Rhode Island Stormwater Design and Installation Standards Manual*, as amended.

B. Record Keeping for Maintenance Activities

Maintenance agreements shall include provisions for maintenance record keeping. All activities conducted in accordance with a maintenance agreement must be recorded in a work order and inspection log. Timely updates of the log shall be the responsibility of the storm water management facility owner or other responsible party pursuant to this ordinance. Review of the maintenance and inspection log shall be completed by the City of Woonsocket, or designee, to determine the effectiveness of operation, maintenance and

safety activities. Reviews shall occur as part of each on-site inspection. Additional reviews may be made as deemed appropriate by the City of Woonsocket or designee.

C. Responsibility for Maintenance to Assure Functionality and Safety

Appropriate maintenance to assure functionality and safety of storm water management facilities shall be the responsibility the owner or may be assumed by another party via a written contractual arrangement in accordance with this ordinance.

D. Alterations to Maintenance Agreements

Any alterations in maintenance responsibility or alterations to maintenance agreements must be reviewed and approved by the Director of Public Works and or the City Engineer. If portions of the land serviced by a storm water management facility are to be sold, written contractual arrangements shall be made to pass all responsibility of the maintenance agreement to the purchaser and shall be subject to review and approval of the Director of Public Works and or the City Engineer. All alterations to maintenance agreements shall be recorded in accordance with this ordinance.

E. Recordation of Maintenance Agreements

All maintenance agreements and alterations to maintenance agreements shall be recorded in the land evidence records of the City of Woonsocket. Copies of all maintenance agreements and alterations to maintenance agreements shall be included in Storm Water Management Plans. Recordation of maintenance agreements in accordance with this ordinance shall be the responsibility of the owner.

Section 4 Application Fees

The City of Woonsocket shall be empowered to collect fees from permit applicants, which are commensurate with the cost of administering this ordinance.

ARTICLE V

Section 1. Enforcement

The City of Woonsocket shall have the authority and discretion to invoke penalties and/or impose a lien, whenever a storm water management facility is not implemented, operated, and/or maintained in accordance with its approval and this ordinance. Any penalty invoked shall be in accordance with this Section.

A. Notification of Violation

In the event that the storm water management facility becomes a danger to public safety or public health, in need of maintenance, or otherwise fails to comply with the provisions of this ordinance, the City of Woonsocket shall so notify the property owner in writing by

certified mail. Upon receipt of that notice, the property owner shall have five (5) calendar days to temporarily correct the violation and thirty (30) calendar days from the receipt of notice to permanently correct the violation. If the property owner fails or refuses to perform such maintenance and repair, the municipality may immediately proceed to do so and shall bill the cost thereof to the property owner or proceed with redeeming the Permit Bond. If the storm water management facility is of imminent danger to public safety, the City shall have the right to correct the problem without delay and shall bill the cost thereof to the property owner or proceed with redeeming the Permit Bond.

B. Enforcement of Penalties and Liens

Should the applicant/owner fail to take the corrective actions, the City of Woonsocket shall then have the right to take whatever actions it deems necessary to correct the violations including fining the owner seventy-five ($75) per calendar day that the violation goes un-repaired and to assert a lien on the subject property in an amount equal to the costs of remedial actions. The lien shall be enforced in the manner provided or authorized by law for the enforcement of common law liens on personal property. The lien shall be recorded in the land evidence records of the City of Woonsocket, and shall incur legal interest from the date of recording. The imposition of any penalty shall not exempt the offender from compliance with the provisions of this ordinance, including assessment of a lien on the property.

C. Hearing

Any owner or responsible party, receiving a written notice of violation, shall be given an opportunity, within a reasonable time frame, for a hearing before the Municipal Court to state their case. If evidence indicates that a violation has not occurred, the Municipal Court shall revoke the notice of violation.

ARTICLE VI

Section 1. Implementation

This ordinance shall take effect upon final passage and approval by the City Council as appropriate.

CITY OF WOONSOCKET, RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
Utility Permit Site Plan Completion Check List

Plan Title: Checked By :

Plan Date: Review Date:

TITLE BLOCK REQUIREMENTS

( ) Type of Plan
( ) Assessor's Plat and Lot
( ) Zoning District
( ) Street Name, Town and State
( ) Date (note revisions, if any)
( ) Scale and Graphic Scale Bar
( ) Firm or Surveyor's Name and Address

PLAN REQUIREMENTS

UTILITIES WORK -

( ) **Existing** Location and size of existing overhead and underground utilities based on the best available physical and/or record evidence, including but not limited to water, sewer, storm drain, gas, etc. wherever applicable.

( ) **Proposed** Location and size of proposed overhead and underground utilities based on the best available physical and/or record evidence, including but not limited to water, sewer, storm drain, gas, etc. wherever applicable. A Rhode Island Professional Engineer's (P.E.) stamp is required to certify the conformance of the following items :

( ) Materials ( ) Size ( ) Utility Connections
( ) Details ( ) Depth ( ) Other [see attached]

( ) Sewer service invert elevations at foundation and at sewer main, as well as elevations of the inverts and rims of existing manholes upstream and downstream from the proposed connection. Use existing "wye" connection wherever available.

SITE WORK -

( ) Location of existing or proposed buildings, including their sill elevation and usage.
( ) Bench mark and Datum used. (Woonsocket Sewer Datum, if lot is served by sewers).
( ) Existing and proposed contours lines at a minimum of two (2') intervals with ten (10') contours lines to be highlighted, neat and easy to discern.
( ) Minimum lettering size shall be 1/8" high to insure legibility when reproduced.
( ) North Arrow and Reference (true, grid, magnetic, assumed, etc.)
( ) Evidence of occupation, if any (i.e. shrubs, fences, etc.)
( ) Legend with all abbreviations explained.
( ) Street names, easements and usage, width, status (i.e. public, platted, unclassified)
( ) Highway or Railroad stationing, plat or plan reference and date (where applicable).
( ) Property boundaries shall be clearly defined and a Classification Statement of the plan and survey as defined by the ***Procedural and Technical Standards for the Practice of Land Surveying in the State of Rhode Island, (April, 1994), Class III - Data Accumulation Surveys and Site Plans, which require a Land Surveyor's Stamp.***
( ) Stamp and signature of the surveyor and/or engineer. (Plans seeking Zoning Board of Appeals approval must be prepared by a Professional Land Surveyor)
( ) Vicinity Map or approximate distance to nearest intersection

NOTE!

The foregoing check list is for review purposes only and additional information may be required by the Engineering Division as conditions dictate.

The items checked above were found to be lacking or inadequate.

( ) Area of the parcel defined
( ) Vicinity Map or approximate distance to nearest intersection

The items checked above were found to be lacking or inadequate as required by the ***Procedural and Technical Standards for the Practice of Land Surveying in the State of Rhode Island, latest revision.***

_____

Section 01.00 Classes of Surveys / Tables

Section 01.01 Identification of Survey Classes and Relationship To Survey Services.

The types of surveying services listed below shall be performed so as to meet or exceed the criteria established for these CLASSES of surveys.

Class of Survey	Type of Survey Services
CLASS I	High Accuracy Surveys

Surveys of developed (or soon to be developed) commercial and residential property, performed to a high degree of positional accuracy. Most urban and suburban boundary surveys, large-scale construction projects, title surveys, and subdivisions of land should be performed to this standard.

CLASS II Moderate Accuracy Surveys

COMBINE LOTS

Surveys of undeveloped or less developed property, such as rural parcels, farmland, marshlands, and low-density residential areas, performed to a moderate degree of accuracy. While in all other respects these surveys are comparable to those described in CLASS I, they may employ instruments, methods, and measurement procedures which render their positions with somewhat less accuracy. While these surveys are reliable and cost-effective, their use should generally be limited to those areas where such a moderate level of accuracy is sufficient.

CLASS III Data Accumulation Surveys

Surveys designed to collect and report data, typically for the purpose of evaluation of existing conditions and/or design of future improvements. Such surveys and plans tend to measure and show the relative positions or locations of physical features to a stated graphical scale which is suited to the purpose for which the survey is to be used. This classification includes topographic surveys, photogrammetric surveys, site plans, utility plans, etc. To the extent that property lines are reflected on such plans, they are to be regarded as pictorial only, unless such boundaries are also certified to a CLASS I , CLASS II or CLASS IV standard.

CLASS IV Compilation Maps

Types of plan or report compiled from other maps, deeds, and/or other sources of information. Such a plan may or may not be a product of limited field investigations, but in any case is subject to such changes as an accurate field survey may disclose. Such a map is never suitable as a boundary survey, but may be used for the purposes of compilation maps, conceptual and preliminary plans, feasibility studies, tax maps, overlay maps, mortgage loan inspections, etc.

All plans prepared under this class shall carry the following statement which shall be clearly visible on the plan and/or report:

"This plan/report is substantially correct in accordance with a CLASS IV Standard as adopted by the Rhode Island Board of Registration for Professional Land Surveyors. This plan is not to be construed as an accurate boundary survey and is subject to such changes as an accurate boundary survey may disclose."

CLASS V Control Surveys

Surveys of extremely high order accuracy, typically required by Federal, State or municipal agencies for the purposes of large-scale geodetic control, or extremely high accuracy construction projects, such as bridges and tunnels. The complexity of such surveys, their high cost, and the likelihood that they will be of only marginal additional value to a property owner, are all factors which make them generally unsuitable for ordinary boundary surveys.

CITY OF WOONSOCKET
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

PLAN REVIEW SIGN OFF SHEET

PLAN BEING REVIEWED:

SITE
STREET/AVENUE
ENGINEER/SURVEYOR

PETITIONS RECEIVED and APPROVED ☐

	INITIAL	DATE	CHECK BOX FOR COMMENTS
MICHAEL DEL ROSSI			☐
MICHAEL DEBROISSE			☐
GERRY GREENOUGH			☐
SCOTT SANFORD			☐
BOB DOIRE			☐
LARRY ENRIGHT			☐

***ATTACH A SEPARATE SHEET FOR COMMENTS**

	INITIAL	DATE
PLANS FOR WATER SENT TO WATER DIVISION		
SITE INSPECTION		
FINAL REVIEW BY CITY ENGINEER		

PLAN APPROVED ☐ **YES** ☐ **NO**

APPROVED BY: _____ **DATE APPROVED:** _____
Director of Public Works

POST CONSTRUCTION INSPECTION		

Created on 3/10/2006 9:01:40 AM

MICHAEL ANNARUMMO
DIRECTOR

SUSAN D. MENARD
MAYOR

CITY OF WOONSOCKET
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

CITY HALL - 169 MAIN STREET - WOONSOCKET, RI 02895 - TEL 401-762-6400 - EXT. 213 - FAX 401-766-7876

Date

Engineer
Street/Avenue
Woonsocket, RI. 02895

REFERENCE:PLAN OF :
FOR: **(DATE OF PLAN)**
MAP , LOT , STREET
WOONSOCKET, R.I

Dear Sir/Madam:

The Engineering Division of the Public Works Department has reviewed the above referenced site plans that were submitted to our office on (date). The following comments have been generated upon our review of the plans:

If you should have any questions feel free to contact me at 767-9213

Sincerely,

Michael A. Del Rossi, Division Engineer/Assistant Director of Public Works

cc:Donald Gagnon, Building Inspector

Attachments if necessary

Building Plan Check List

New Construction
Residential-Commercial-Industrial

A completed Building Plan Checklist must accompany every building permit application for new residential, commercial and industrial construction.

Four, (4) sets of site plans and building plans must be submitted to the Fire Marshall for review in accordance with the RI State Fire Code.

Three, (3) sets of plans, indicating approval by the Fire Marshall, must be submitted to the Office of Building Inspection for review.

All non-residential development located in either a C-1, C-2, MU-1, MU-2 zone, as identified on the official Zoning map for the City of Woonsocket, shall submit three, (3) sets of plans for review by the Design Review Commission.

Name:_____
Address:_____
Plat:____ Lot:____
Zoning District:_____
Tele:#_____

Building plans to include:

Front Elevation [ ]
Left Elevation [ ]
Right Elevation [ ]
Rear Elevation [ ]

Design criteria

Wind Loads [100 mph]
Floor Loads [40/30 psf]
Roof Loads [20 live psf 30 snow psf]
List of all design loads for the bldg.
Soil analysis
Signed and sealed plans and structural calculation

Elevation to include:

window sizes, [ ]
roof pitch, [ ]
attached decks, [ ]
stairs. [ ]

All Plans to include:

Basement plan, [ ]
foundation walls, [ ]
size of footings, [ ]
columns, [ ]
beam size, [ ]
dimension sizes, [ ]
spacing of structural members. [ ]

Floor plans to include:

sizes and dimensions of all rooms, [ ]
partitions, [ ]
living, [ ]
bedrooms, [ ]
dining, [ ]
bathrooms, [ ]
closet, [ ]
doors, [ ]
windows, [ ]
stairs, [ ]
chimney/ fireplace. [ ]
other, [ ]

Structural drawings/ sections to include:

all sizes of footings, [ ]
foundation size [ ]
anchor bolt, size and spacing, [ ]
column size and spacing, [ ]
beam/ girder size, [ ]
floor joist size and spacing. [ ]
Foundation Damproof or Waterproofing and perimeter insulation [ ]
See Note 1: [ ]

Wall Sections to include:

stud size and spacing, [ ]
header size, [ ]
door and window size. [ ]

Roof section to include:
ceiling joist and rafter size. [ ]
Attic ventilation type. [ ]
See note 1: [ ]

All stairs to include:
sizes of riser, [ ]
tread, [ ]
stairway width, [ ]
landings, [ ]
headroom dimension, [ ]
handrail, [ ]
guardrail, [ ]
baluster spacing. [ ]
Footing [ ]

sizes of floor joist, [ ]
columns, [ ]
footings, [ ]
fastening method of
deck to house, [ ]
railings, [ ]
guardrails, stairs, [ ]

Note 1:If trusses are used then a copy of the truss drawing is to be submitted.

The above information for a plan review is a minimum that is required. Additional information may be required for complex projects and as the Building Official may deem necessary.

Decks to include:

CITY OF WOONSOCKET
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

BUILDING PERMIT SITE PLAN CHECK LIST

TITLE BLOCK

() Type of plan
() Assessors plat and lot
() Zoning District
() Street name
() Town
() State
() Date, revisions if any
() Scale
() Firm or Surveyor's-Engineer's name and address

PLAN

Utilities

() Existing overhead and underground utilities, size and approximate location based on best available physical and record evidence, including but not limited to gas, water, sewer, storm drains, where applicable
() Proposed overhead and underground utilities (requires Engineer's Stamp) including sewer, water, storm drains, gas, etc.

Proper
() Materials
() Size
() Depth
() Connections
() Details
() Other (See Attached)

() Sewer service inverts at foundation and sewer main as well as rim and inverts of manholes up station and down station of connection (use existing wye as available).

Site

Professional Land Surveyors shall comply with The Procedural and Technical Standards for the Practice of Land Surveying in the State of RI (April, 1994)*

() Buildings on site, existing and proposed, including proposed usage and sill elevation
() Bench Mark and datum used (shall be based on Woonsocket Sewer Datum if lot to be served by sewer).
() Contours, existing and proposed at minimum two foot (2') intervals with ten foot (10') contours highlighted, lines to be neat and easy to discern
() Min. lettering size 1/8" to insure legibility when reproduced. Must be neat and legible.
() North arrow and reference (true, grid, magnetic or assumed)
() Evidence of occupation, if any, (i.e., shrubs, fences, etc.)
() Legend with all abbreviations explained
() Streets, easements of record/usage, width (public, private, R.O.W.), Sewer, Highway or Railroad stationing, plat or plan reference, and date where applicable, Assessor's Plat and Lot, and zoning district.
() If property boundaries are defined, classification statement of the survey and plan as defined by The Procedural and Technical Standards for the Practice of Land Surveying in the State of RI (April, 1994), Class III - Data Accumulation Surveys, Site Plans (Requires Land Surveyor's Stamp)*
() Stamp and signature of the surveyor or engineer. (Plans seeking Zoning Board of Appeals approval must be prepared by a Professional Land Surveyor.)*
() Vicinity map

Note: The foregoing checklist is for review purposes, additional information may be required by the Engineering Division as conditions dictate.

Appendix D: Site Stormwater Management Plan Checklist

1. Applicant/Site Information

- ☐ Applicant name, legal address, telephone/fax numbers
- ☐ Common address and legal description of site
- ☐ Site locus map

2. Project Narrative

- ☐ Project description and purpose (for existing and proposed conditions)
  - ❑ Natural and manmade features at the site, at a minimum, wetlands, watercourses, floodplains, and development (roads, buildings, and other structures)
  - ❑ Site topography, drainage patterns, flow paths, and ground cover
  - ❑ Impervious area and runoff coefficient
  - ❑ Site soils as defined by USDA soil surveys including soil names, map unit, erodibility, permeability, depth, texture, and soil structure
  - ❑ Stormwater discharges from the site, including quality and known sources of pollutants and sediment loadings
  - ❑ Critical areas, buffers, and setbacks established by the local, state, and federal regulatory authorities
  - ❑ Water quality classification of on-site and adjacent waterbodies
  - ❑ Identification of any on-site or adjacent waterbodies included on the Connecticut 303(d) list of impaired waters
- ☐ Potential stormwater impacts
  - ❑ Potential pollution sources (e.g., erosive soils, steep slopes, vehicle fueling, vehicle washing)
  - ❑ Types of anticipated stormwater pollutants and the relative or calculated load of each pollutant
  - ❑ Summary of calculated pre- and post-development peak flows
  - ❑ Summary of calculated pre- and post-development groundwater recharge
- ☐ Critical on-site resources
  - ❑ Wells, aquifers
  - ❑ Wetlands, streams, ponds
  - ❑ Public drinking water supplies
- ☐ Critical off-site (adjacent to or downstream of site) resources
  - ❑ Neighboring land uses
  - ❑ Wells, aquifers
  - ❑ Wetlands, streams, ponds
  - ❑ Public drinking water supplies
- ☐ Proposed stormwater management practices
  - ❑ Source controls and pollution prevention
  - ❑ Alternative site planning and design
  - ❑ Stormwater treatment practices
  - ❑ Flood control and peak runoff attenuation management practices
- ☐ Site plan (for existing and proposed conditions) (see Item 4. below for appropriate format)
  - ❑ Topography, drainage patterns, drainage boundaries, and flow paths
  - ❑ Locations of stormwater discharges
  - ❑ Perennial and intermittent streams
  - ❑ USDA soil types
  - ❑ Proposed borehole investigations
  - ❑ Vegetation and proposed limits of clearing and disturbance
  - ❑ Resource protection areas such as wetlands, lakes, ponds, and other setbacks (stream buffers, drinking water well setbacks, septic setbacks, etc.)
  - ❑ Roads, buildings, and other structures
  - ❑ Utilities and easements
  - ❑ Temporary and permanent conveyance systems (grass channels, swales, ditches, storm drains, etc.) including grades, dimensions, and direction of flow
  - ❑ Location of floodplain and floodway limits and relationship of site to upstream and downstream properties and drainage systems

- ❑ Location, size, maintenance access, and limits of disturbance of proposed structural stormwater management practices (treatment practices, flood control facilities, stormwater diversion structures, etc.)
- ❑ Final landscaping plans for structural stormwater management practices and site revegetation
- ❑ Locations of non-structural stormwater management practices (i.e., source controls)

☐ Construction Schedule

3. Calculations

☐ Pollutant Reduction
- ❑ Water Quality Volume (WQV)
- ❑ Water Quality Flow (WQF)
- ❑ Pollutant Loads

☐ Groundwater Recharge
- ❑ Groundwater Recharge Volume (GRV)

☐ Runoff Capture (for new stormwater discharges to tidal wetlands)
- ❑ Runoff Capture Volume

☐ Peak Flow Control
- ❑ Hydrologic and hydraulic design calculations (pre- and post-development conditions)
  - Description of the design storm frequency, intensity, and duration
  - Watershed map with locations of design points and watershed areas (acres) for runoff calculations
  - Time of concentration (and associated flow paths)
  - Imperviousness of the entire site and each watershed area
  - NRCS runoff curve numbers or volumetric runoff coefficients
  - Peak runoff rates, volumes, and velocities for each watershed area (24-hour storm)
    - ➢ Stream Channel Protection: 2-year frequency ("over-control" of 2-year storm)
    - ➢ Conveyance Protection: 10-year frequency
    - ➢ Peak Runoff Attenuation: 10-year, 25-year, and 100-year frequency (other as required by local review authority)
    - ➢ Emergency Outlet Sizing: safely pass the 100-year frequency or larger storm.
  - Hydrograph routing calculations
  - Culvert capacities
  - Infiltration rates, where applicable
  - Dam breach analysis, where applicable
  - Documentation of sources for all computation methods and field test results
- ❑ Downstream analysis, where detention is proposed
- ❑ Drainage systems and structures

4. Design Drawings and Specifications

☐ Recommended size (no larger than 24" x 36" and no smaller than 8-1/2" x 11")

☐ Recommended scale (maximum scale of 1" = 40', larger scales up to 1" = 100' may be used to represent overall site development plans or for conceptual plans)

☐ Design details (cross-sections, elevation views, and profiles as necessary)

☐ Specifications
- ❑ Construction materials
- ❑ Stormwater control product designations (if applicable)
- ❑ Methods of installation
- ❑ Reference to applicable material and construction standards

☐ Cover sheet with sheet index

☐ Title block

☐ Legend

☐ North arrow

- ☐ Property boundary of subject property (including parcels, or portions thereof, of abutting land and roadways within one hundred feet of the property boundary)
- ☐ Site locus map (recommended scale 1" = 1,000') with a north arrow
- ☐ Seals of a licensed professionals (original design plans, calculations, and reports)
- ☐ Survey plans
  - ☐ Prepared according to the *Minimum Standards for Surveys and Maps in Connecticut*
  - ☐ The class of survey represented on the plan
  - ☐ Stamped by a professional land surveyor
  - ☐ Depict topography at contour intervals of two feet
  - ☐ The referenced or assumed elevation datum
  - ☐ Two (2) benchmarks on the site within one hundred feet of the proposed construction
  - ☐ Outside limits of disturbances
  - ☐ Plan references

5. Construction Erosion and Sediment Controls

- ☐ Erosion and sediment control plan that complies with the requirements of the current version of *Connecticut Guidelines for Soil Erosion and Sediment Control, DEP Bulletin 34.*

6. Supporting Documents and Studies

Provide other sources of information used in the design of construction and post-construction stormwater controls for the site development, as applicable:

- ☐ Soil maps, borings/test pits
- ☐ Infiltration test results
- ☐ Groundwater impacts for proposed infiltration structures
- ☐ Reports on wetlands and other surface waters (including available information such as Maximum Contaminant Levels [MCLs], Total Maximum Daily Loads [TMDLs], 303(d) or 305(b) listings, etc.)
- ☐ Water quality impacts to receiving waters and biological/ecological studies
- ☐ Flood study/calculations

7. Other Required Permits

- ☐ Evidence of acquisition of all applicable federal, state, and local permits or approvals (e.g., copies of DEP permit registration certificates, DEP Dam Safety Registration certificate for stormwater impoundments, DPH approval letter for stormwater discharges within 100 feet of a watercourse within a public water supply watershed or aquifer protection area, local approval letters, etc.)

8. Operation and Maintenance

- ☐ Detailed inspection and maintenance requirements/tasks
- ☐ Inspection and maintenance schedules
- ☐ Parties legally responsible for maintenance (name, address, and telephone number)
- ☐ Provisions for financing of operation and maintenance activities
- ☐ As-built plans of completed structures
- ☐ Letter of compliance from designer
- ☐ Post-construction documentation to demonstrate compliance with maintenance activities.

Roadway Catch Basin Inspection / Illicit Detection Form

Roadway Name: _____ CB ID: _____ Type: _____

Receiving Body: _____

Weather.: _____ Temperature: _____ Date: _____

Description: _____

Location: _____

Latitude: _____ Longitude: _____

Flow: _____ Inlet Cond: _____

High Stage Problems: _____ Outlet Cond: _____

General Remarks:

Visual Observations for Illicit Detection During Dry Conditions

Visual Observations: Photo Taken: ☐ Yes ☐ No if "Yes", roll(s) & photo number(s): _____

Odor: ☐ None ☐ Musty ☐ Sewage ☐ Rotten Eggs ☐ Sour Milk ☐ Other _____

Color: ☐ Clear ☐ Red ☐ Yellow ☐ Brown ☐ Green ☐ Gray ☐ Other _____

Clarity: ☐ Clear ☐ Cloudy ☐ Opaque ☐ Suspended Solids

Floatables: ☐ None ☐ Oily Sheen ☐ Garbage/Sewage ☐ Debris ☐ Other _____

Deposits/Stains: ☐ None ☐ Oily ☐ Sediments ☐ Other _____

Vegetation Condition: ☐ None ☐ Normal ☐ Excessive Growth ☐ Dead or Discolored

Biological: ☐ Mosquito Larvae ☐ Algae ☐ Other _____

Note: If illicits are observed follow up with field screening investigation procedures

Inspector's Name:

Maintenance:

☐ Scheduled for Maintenance

☐ Maintenance Performed

ILLICIT DISCHARGE FIELD SCREENING PROGRAM
Data Collection Form

OUTFALL #: _____ **Date:** _____ **Time:** _____

TIME SINCE LAST RAIN: ≥72 hours <72 hours

QUANTITY OF LAST RAIN: ≥0.1 inches <0.1 inches

INSPECTION TEAM: _____

_____

SITE DESCRIPTION:

LOCATION (Narrative Description): _____

_____

STRUCTURE TYPE: OPEN CHANNEL MANHOLE OUTFALL OTHER: _____

DOMINANT WATERSHED LAND USES: INDUSTRIAL COMMERCIAL RESIDENTIAL UNKNOWN

OTHER: _____

FLOW ESTIMATION:

WAS FLOW OBSERVED? NO YES IF YES, PLEASE ANSWER a. - d. BELOW.

a. WIDTH OF WATER SURFACE (feet): _____

b. APPROXIMATE DEPTH OF WATER (feet): _____

c. APPROXIMATE FLOW VELOCITY (feet per second): _____

d. FLOW RATE (cubic feet per second) = a x b x c = _____

VISUAL OBSERVATIONS:

WAS A PHOTO TAKEN? NO YES (Roll and Photo Number: _____)

ODOR: NONE MUSTY SEWAGE ROTTEN EGGS SOUR MILK OTHER: _____

COLOR: CLEAR RED YELLOW BROWN GREEN GREY OTHER: _____

CLARITY: CLEAR CLOUDY OPAQUE

FLOATABLES: NONE OILY SHEEN GARBAGE/SEWAGE OTHER: _____

DEPOSITS/STAINS: NONE SEDIMENTS OILY OTHER: _____

VEGETATION CONDITION: NONE NORMAL EXCESSIVE GROWTH INHIBITED GROWTH

STRUCTURAL CONDITION: NORMAL CONCRETE CRACKING METAL CORROSION OTHER: _____

BIOLOGICAL: MOSQUITO LARVAE BACTERIA/ALGAE OTHER: _____

FIELD ANALYSIS:

WATER TEMP:	_____	°F / °C	CHLORINE (Total):	_____	mg/l
pH:	_____		COPPER:	_____	mg/l
PHENOL:	_____	mg/l	DETERGENTS:	_____	mg/l

WAS A LABORATORY SAMPLE COLLECTED? NO YES

(if yes attach copy of chain-of-custody record)

COMMENTS: _____

_____

_____

DATA SHEET FILLED OUT BY: (signature): _____ DATE: _____

(print name): _____

This form was modified from *Municipal Urban Runoff Program: A How-To Guide For Developing Urban Runoff Programs for Small Municipalities*, by the City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, and Central Coast Regional Water Quality Control Board, 1998.

Illicit Discharge Inspection Quarterly Summary Report

Municipality: _____

Contact Name: _____

Reporting Period: January – March April – June July – September October – December

Year: 20___

I. Field Activities

1. *Describe field surveys.*

	Industrial Areas	Commercial Areas	Residential Areas	Other (describe)
Number of screening points				
Channel Miles				

2. *List how many discharges were identified by the following methods.* Include only discharges that could have been prevented by BMPs. Do not include fluid releases associated with minor traffic accidents.

   a. During field surveys at defined screening points:
   - _____ identified by maintenance crews
   - _____ identified by illicit discharge inspectors

   b. Calls from:
   - _____ maintenance crews
   - _____ other agencies
   - _____ public

3. *List he number of times the following materials were identified.*
   - _____ Paint
   - _____ Concrete
   - _____ Construction Debris
   - _____ Medical Wastes
   - _____ Food Wastes
   - _____ Industrial Wastes (solvents, metals, corrosives, cooling tower blowdown, etc.)
   - _____ Concrete Cutting Slurry/Washwaters
   - _____ Vehicle Cleaning Washwaters
   - _____ Building/Sidewalk Washwaters
   - _____ Other Washwaters
   - _____ Sewage
   - _____ Automotive Fluids (antifreeze, used motor oil, fuels, etc.)
   - _____ Other (describe): _____

II. Follow-up Activities

1. *Describe whether sources of discharges were identified.*
   - _____ Number of sources that were identified
   - _____ Number of incidents when source of discharge was not identified

2. *Describe whether discharges were abated.*
   - _____ Number of discharge incidents that were abated.
   - _____ Number of new discharge incidents where discharge is continuing, as of the end of the reporting period. (ATTACH INSPECTION REPORT)
   - _____ Number of continuing discharges that have already been reported in previous quarter(s).

3. *Describe enforcement activities conducted.*
   - _____ Verbal Notice
   - _____ Administrative Action
   - _____ Legal Notice
   - _____ Warning Notice
   - _____ Administrative Action w/ Penalty and/or Fine

This form was modified from *Municipal Urban Runoff Program: A How-To Guide For Developing Urban Runoff Programs for Small Municipalities,* by the City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, and Central Coast Regional Water Quality Control Board, 1998.

Appendix E: Maintenance Inspection Checklist
Stormwater Ponds and Wetlands

Project/Location: _____

"As Built" Plans Available? _____

Date/Time: _____

Days Since Previous Rainfall and Rainfall Amount: _____

Inspector: _____

Maintenance Item	Satisfactory	Unsatisfactory	Comments
1. Embankment and Emergency Spillway			
• Vegetation and ground cover adequate			
• Embankment erosion			
• Animal burrows			
• Unauthorized planting			
• Cracking, bulging, or sliding of embankment/dam			
a. Upstream face			
b. Downstream face			
c. At or beyond toe			
d. Emergency spillway			
• Pond, toe & chimney drains clear and functioning			
• Seeps/leaks on downstream face			
• Slope protection or riprap failure			
• Vertical/horizontal alignment of top of dam "As-Built"			
• Emergency spillway clear of obstructions and debris			
• Other (specify)			
2. Riser and Principal Spillway			
• Low flow orifice obstructed			
• Low flow trash rack obstructed with debris			
• Weir trash rack obstructed with debris			
• Excessive sediment accumulation insider riser			
• Concrete/masonry condition riser and barrels			
a. Cracks or displacement			
b. Minor spalling (<1")			
c. Major spalling (rebars exposed)			
d. Joint failures			
e. Water tightness			
• Metal pipe condition			
• Control valve			
a. Operational/exercised			

Maintenance Item	Satisfactory	Unsatisfactory	Comments
b. Chained and locked			
• Pond drain valve			
a. Operational/exercised			
b. Chained and locked			
• Outfall channels functioning			
• Other (specify)			
3. Permanent Pool (Wet Ponds)			
• Undesirable vegetative growth			
• Floating or floatable debris removal required			
• Visible pollution			
• Shoreline problem			
• Other (specify)			
4. Sediment Forebay			
• Sedimentation noted			
• Greater than 50% of storage volume remaining			
5. Dry Pond Areas			
• Vegetation coverage adequate			
• Undesirable vegetative growth			
• Undesirable woody vegetation			
• Low flow channels clear of obstructions			
• Standing water or wet spots			
• Sediment and/or trash accumulation			
• Other (specify)			
6. Condition of Outfalls			
• Riprap failures			
• Slope erosion			
• Storm drain pipes			
• Endwalls/Headwalls			
• Other (specify)			
7. Other			
• Complaints from residents (odors, insects, other)			
• Aesthetics (graffiti, algae, other)			
• Conditions of maintenance access routes			
• Signs of hydrocarbon build-up			
• Any public hazards (specify)			
8. Wetland Vegetation			
• Vegetation healthy and growing			
• Wetland maintaining 50% surface area coverage of wetland plants after the second growing season. (If unsatisfactory, reinforcement plantings needed)			
• Survival of desired wetland plant species distribution according to landscaping plan?			
• Evidence of invasive species			

Maintenance Item	Satisfactory	Unsatisfactory	Comments
• Maintenance of adequate water depths for desired wetland plant species.			
• Harvesting of emergent plantings needed			
• Have sediment accumulations reduced pool volume significantly or are plants "choked with sediment.			
• Other (specify)			
Actions to Be Taken: **To Be Completed By (Date):**			

Source: Adapted from Watershed Management Institute, Inc. 1997. *Operation, Maintenance, and Management of Stormwater Management Systems.* In cooperation with U.S. Environmental Protection Agency, Office of Water. Washington, D.C.

Appendix E: Maintenance Inspection Checklist
Infiltration Basins and Trenches

Project/Location: _____

"As Built" Plans Available? _____

Date/Time: _____

Days Since Previous Rainfall and Rainfall Amount: _____

Inspector: _____

Maintenance Item	Satisfactory	Unsatisfactory	Comments
1. Debris Cleanout			
• Basin bottom or trench surface clear of debris			
• Inlet/Inflow pipes clear of debris			
• Overflow spillway clear of debris			
• Outlet clear of debris			
2. Sediment Traps or Forebays			
• Sedimentation noted			
• Greater than 50% of storage volume remaining			
3. Vegetation (Basins)			
• Mowing performed as necessary			
• No evidence of erosion			
4. Dewatering			
• Basin/Trench dewaters between storms			
• Drawdown time does not exceed 36 to 48 hours			
5. Sediment Accumulation			
• Approximate depth of accumulated sediment			
6. Inlets			
• Good condition			
• No evidence of erosion			
7. Outlet/Overflow Spillway			
• Good condition, no need for repair			
• No evidence of erosion			
8. Aggregate Repairs (Trench)			
• Surface of aggregate clean			
• Top layer of stone does not need replacement			
• Trench does not need rehabilitation			
9. Structural Repairs			
• Embankment in good repair			
• Site slopes are stable			
• No evidence of erosion			

Maintenance Item	Satisfactory	Unsatisfactory	Comments
10. Fences/Access Repairs			
• Fences in good condition			
• No damage which would allow undesired entry			
• Access point in good condition			
• Locks and gate function property			
Actions to Be Taken: **To Be Completed By (Date):**			

Source: Adapted from Watershed Management Institute, Inc. 1997. *Operation, Maintenance, and Management of Stormwater Management Systems.* In cooperation with U.S. Environmental Protection Agency, Office of Water. Washington, D.C.

Appendix E: Maintenance Inspection Checklist
Filtering Practices – Sand and Organic Filters

Project/Location: _____

"As Built" Plans Available? _____

Date/Time: _____

Days Since Previous Rainfall and Rainfall Amount: _____

Inspector: _____

Maintenance Item	Satisfactory	Unsatisfactory	Comments
1. Debris Cleanout			
• Filtration facility clean of debris			
• Inlet and outlets clear of debris			
2. Oil and Grease			
• No evidence of filter surface clogging			
• Activities in drainage area minimize oil and grease entry			
3. Vegetation			
• Contributing drainage area stabilized			
• No evidence of erosion			
• Area mowed and clipping removed			
4. Water Retention			
• Water holding chambers at normal pool			
• Filter chamber dewaters between storms			
• No evidence of leakage			
5. Sediment Accumulation			
• Approximate depth of accumulated sediment			
• Depth of sediment in forebay or sump should not be more than 12 inches or 10 percent of the pretreatment volume			
• Sediment accumulation on filter bed does not exceed 1" or drawdown time does not exceed 36 to 48 hours			
6. Structural Components			
• No evidence of structural deterioration			
• Grates are in good condition			
• No evidence of spalling or cracking of structural parts			
7. Outlet/Overflow Spillway			
• Good condition, no need for repairs			
• No evidence of erosion (if draining into a natural channel)			
8. Overall Function of Facility			
• No evidence of flow bypassing facility			
• No noticeable odors outside facility			

Actions to Be Taken: **To Be Completed By (Date):**			

Source: Adapted from Watershed Management Institute, Inc. 1997. *Operation, Maintenance, and Management of Stormwater Management Systems.* In cooperation with U.S. Environmental Protection Agency, Office of Water. Washington, D.C.

Appendix E: Maintenance Inspection Checklist
Filtering Practices - Bioretention

Project/Location: _____

"As Built" Plans Available? _____

Date/Time: _____

Days Since Previous Rainfall and Rainfall Amount: _____

Inspector: _____

Maintenance Item	Satisfactory	Unsatisfactory	Comments
1. Debris Cleanout			
• Bioretention and contributing areas clean of debris			
• No dumping of yard wastes into practice			
• Litter (branches, etc.) has been removed			
2. Vegetation			
• Plant height not less than design water depth			
• Fertilized per specifications			
• Plant composition according to approved plans			
• No placement of inappropriate plants			
• Grass height not greater than 6 inches			
• No evidence of erosion			
3. Check Dams/Energy Dissipaters/Sumps			
• No evidence of sediment buildup			
• No evidence of erosion at downstream toe of drop structure			
4. Dewatering			
• Dewaters between storms			
• No evidence of standing water			
5. Sediment Accumulation			
• Approximate depth of accumulated sediment			
• Depth of sediment in forebay or sump should not be more than 12 inches or 10 percent of the pretreatment volume			
• Sediment accumulation on filter bed does not exceed 1" or drawdown time does not exceed 36 to 48 hours			
6. Outlet/Overflow Spillway			
• Good condition, no need for repair			
• No evidence of erosion			
• No evidence of any blockages			
7. Integrity of Filter Bed			
• Filter bed has not been blocked or filled inappropriately			
Actions to Be Taken:			

To Be Completed By (Date):

Source: Adapted from Watershed Management Institute, Inc. 1997. *Operation, Maintenance, and Management of Stormwater Management Systems.* In cooperation with U.S. Environmental Protection Agency, Office of Water. Washington, D.C.

Appendix E: Maintenance Inspection Checklist
Water Quality Swales

Project/Location: _____

"As Built" Plans Available? _____

Date/Time: _____

Days Since Previous Rainfall and Rainfall Amount: _____

Inspector: _____

Maintenance Item	Satisfactory	Unsatisfactory	Comments
1. Debris Cleanout			
• No excessive trash and debris in contributing areas, forebay, or channel			
2. Check Dams or Energy Dissipators			
• No evidence of flow going around structures			
• No evidence of erosion at downstream toe			
3. Vegetation			
• Mowing performed as necessary (to maintain grass height of 4 to 6 inches during growing season)			
• No evidence of erosion (channel bottom or side slopes)			
• Fertilized per specification			
4. Dewatering			
• Dewaters between storms (dry swales)			
5. Sediment Accumulation			
• Approximate depth of accumulated sediment			
• Sediment accumulation is less than 25% of forebay or channel capacity (cleaning recommended otherwise)			
6. Outlet/Overflow Spillway			
• Good condition, no need for repairs			
• No evidence of erosion			

Actions to Be Taken:

To Be Completed By (Date):

Source: Adapted from Watershed Management Institute, Inc. 1997. *Operation, Maintenance, and Management of Stormwater Management Systems.* In cooperation with U.S. Environmental Protection Agency, Office of Water. Washington, D.C.

MUNICIPAL INSPECTION CHECKLIST
FOR A CONSTRUCTION ACTIVITY SUBJECT TO NPDES REQUIREMENTS

Pollution Prevention Plan:

- [ ] The plan is on site
- [ ] Required revisions attached to plan
- [ ] Inspection reports attached to plan

Comments:

Discharge Locations:

- [ ] Outlet free of obstructions
- [ ] Absence of sediment build-up
- [ ] Absence of undermining of structure
- [ ] Erosion controls installed properly
- [ ] Turbidity level acceptable
- [ ] Turbidity barrier functioning

Comments:

Disturbed Areas (stabilization measures):

Grading -
- [ ] Graded areas free of debris (rocks, roots, trash, etc.)
- [ ] Rough grading temporarily seeded/Final grading seeded or sodded

Hay Bales -
- [ ] installed per design & specifications
- [ ] free of accumulated sediments
- [ ] trenched in, back filled and compacted
- [ ] replaced where rotten or saturated
- [ ] installed without gaps between bales

Silt Fence -
- [ ] installed per design & specifications (fabric, wire, stakes, spacing, etc.)
- [ ] bottom trenched in a minimum of 4 inches
- [ ] free of splicing between sections
- [ ] secured adequately (cannot be pulled out with one hand)
- [ ] free of accumulated sediments
- [ ] fabric and stakes in good condition

Swales -
- [ ] stabilized
- [ ] free of sediment or debris
- [ ] free of ponding
- [ ] constructed at design elevation

Comments:

Materials Storage Areas:

- [ ] Debris and stock piles maintained properly
- [ ] Materials stored properly
- [ ] No evidence of spills
- [ ] Secondary containment of on-site fueling tanks
- [ ] Spill response equipment and materials on site

Comments:

Structural Control Devices:

- [ ] Sediment traps used and installed properly
- [ ] Stormwater Basins constructed to proper elevation and side slopes
- [ ] Flooding absent around or within inlet
- [ ] Inlet free of erosion
- [ ] Inlet free of debris and/or sediment
- [ ] Inlet at design elevation
- [ ] All hardware and equipment installed per design
- [ ] Perimeter berm at design elevation
- [ ] Perimeter berm compacted and stabilized

Comments:

Vehicle Ingress/Egress Locations:

- [ ] Built per design, specifications and stabilized
- [ ] Maintenance is being performed (raking, adding more stone, etc.)
- [ ] Use of wash rack and proper discharge of wash water
- [ ] Affected street(s) swept to remove excess stones and sediments

Comments:

Other:

- [ ] Dewatering operation per plan and discharge free of turbidity
- [ ] Sanitary facilities maintained properly
- [ ] Original permitted plans implemented without major change(s)
- [ ] Offsite area(s) free of impact(s) due to construction
- [ ] Litter control

Comments:

MUNICIPAL INSPECTION CHECKLIST
FOR A CONSTRUCTION ACTIVITY SUBJECT TO NPDES REQUIREMENTS

Pollution Prevention Plan:

- [ ] The plan is on site
- [ ] Required revisions attached to plan
- [ ] Inspection reports attached to plan

Comments:

Discharge Locations:

- [ ] Outlet free of obstructions
- [ ] Absence of sediment build-up
- [ ] Absence of undermining of structure
- [ ] Erosion controls installed properly
- [ ] Turbidity level acceptable
- [ ] Turbidity barrier functioning

Comments:

Disturbed Areas (stabilization measures):

Grading -
- [ ] Graded areas free of debris (rocks, roots, trash, etc.)
- [ ] Rough grading temporarily seeded/Final grading seeded or sodded

Hay Bales -
- [ ] installed per design & specifications
- [ ] free of accumulated sediments
- [ ] trenched in, back filled and compacted
- [ ] replaced where rotten or saturated
- [ ] installed without gaps between bales

Silt Fence -
- [ ] installed per design & specifications (fabric, wire, stakes, spacing, etc.)
- [ ] bottom trenched in a minimum of 4 inches
- [ ] free of splicing between sections
- [ ] secured adequately (cannot be pulled out with one hand)
- [ ] free of accumulated sediments
- [ ] fabric and stakes in good condition

Swales -
- [ ] stabilized
- [ ] free of sediment or debris
- [ ] free of ponding
- [ ] constructed at design elevation

Comments:

Materials Storage Areas:

- [ ] Debris and stock piles maintained properly
- [ ] Materials stored properly
- [ ] No evidence of spills
- [ ] Secondary containment of on-site fueling tanks
- [ ] Spill response equipment and materials on site

Comments:

Structural Control Devices:

- [ ] Sediment traps used and installed properly
- [ ] Stormwater Basins constructed to proper elevation and side slopes
- [ ] Flooding absent around or within inlet
- [ ] Inlet free of erosion
- [ ] Inlet free of debris and/or sediment
- [ ] Inlet at design elevation
- [ ] All hardware and equipment installed per design
- [ ] Perimeter berm at design elevation
- [ ] Perimeter berm compacted and stabilized

Comments:

Vehicle Ingress/Egress Locations:

- [ ] Built per design, specifications and stabilized
- [ ] Maintenance is being performed (raking, adding more stone, etc.)
- [ ] Use of wash rack and proper discharge of wash water
- [ ] Affected street(s) swept to remove excess stones and sediments

Comments:

Other:

- [ ] Dewatering operation per plan and discharge free of turbidity
- [ ] Sanitary facilities maintained properly
- [ ] Original permitted plans implemented without major change(s)
- [ ] Offsite area(s) free of impact(s) due to construction
- [ ] Litter control

Comments:

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.): Last 24 hours:	Last 48 hours:	
Latitutde:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☐ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?