4/26/11

CITY OF MANCHESTER, NEW HAMPSHIRE

Stormwater Management Program

Annual Report

May 1, 2010 through April 30, 2011

Kevin A. Sheppard, P.E.
Public Works Director

Timothy J. Clougherty
Deputy Public Works Director

Frederick J. McNeill, P.E.
Chief Engineer

Commission
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CITY OF MANCHESTER

Highway Department
Environmental Protection Division

April 21, 2011
#11-15-EPC

Ms. Glenda Velez
USEPA – Region 1
5 Post Office Square, Suite 100
Mail Code OEP06-01
Boston, MA 02109-3912

Re: **NPDES Phase II Small MS4 General Permit Annual Report**
EPA NPDES Permit Number: NHR041017

Dear Ms. Velez:

The City of Manchester respectfully submits the Stormwater Management Program Annual Report for the year ending April 30, 2011. This document completes the annual program reporting requirements for the eighth year of the program.

Included are updates and new information regarding the Six Minimum Controls and the Best Management Practices as required in the approved program.

Attached is a sheet with each task description, the status of the BMP and the completion date if applicable. All the required tasks as outlined in the original program have been implemented.

This annual report requires an assessment of the BMPs to determine the degree of effectiveness. This information is contained throughout the report.

If you have any questions in regards to this report, please give our Stormwater Program Coordinator, Robert Robinson, a call at (603) 665-6899.

Sincerely,

Kevin A. Sheppard, P.E.
Public Works Director

Cc: Jeff Andrews – NHDES
Frederick J. McNeill, P.E. – EPD
Robert Robinson, P.E. – EPD

Manchester's Stormwater Management Program Summary

BMP Task Listing and Current Status for 2011

BMP#	Description	Develop	Implement	End Date	Priority	Completed
1-1	Assign SW Coordinator	8/1/2003	5/17/2003	7/30/2004	Completed	5/17/2003
1-2	Add SW Info to City's Website	10/1/2004	Ongoing	3/21/2004	Completed	10/7/2003
1-3	Outreach with Local watershed groups	10/1/2004	Ongoing	7/30/2004	Completed	Ongoing
1-4	Brochures available DPW & library	7/1/2004	Summer 2004	7/1/2006	Completed	Summer 2004/ Ongoing
1-5	Signage @ Urban Ponds (Reposted as Needed)	9/1/2003		3/21/2004	Completed	9/25/2003
1-6	Pet Waste Brochure & Signage	7/30/2004	Draft done 3/2004	7/1/2006	Completed	1/28/2005
2-1	Comply with State Public Notice	Complied with Ordinance and Regulations Notices				City Protocol
2-2	Annual Household Haz-waste Day	Yearly - Info provided by Recycling Coordinator			Completed	May 8 & Oct 9
2-3	Collect Used Oil, batteries & tires	Yearly - Info provided by Recycling Coordinator			Completed	12/31/2010
2-4	Urban Forestation "Green Street Program" Mike Baer	Ongoing - 68 trees for year 2010			Completed	12/31/2010
2-5	Stormwater & Combined Sewer Hotline **665-6899**	9/1/2003	7/30/2004	ASAP	Completed	8/26/2003
3-1	Present Draft Storm Sewer Ordinance Adpoted	12/1/2003	7/30/2005	7/30/2006	Completed	8/2/2006
3-2	Dry weather screening of outfalls 2X/5yrs	4/1/2004	Summer 2004	9/30/2005	Completed	Completed / Ongoing
3-3	Develop & Implement Illicit Discharge Protocol	1/1/2004	Ongoing	7/30/2008	Completed	8/1/2003
3-4	Map Outfalls & Receiving Waters	Ongoing updates of City's GIS			Completed	12/12/2005
4-1	Ordinance - Erosion, Sediment & Construction Material	12/1/2003	Adopted Ordinance & Regulations		Completed	8/2/2006 - 12/5/2006
4-2	Develop Procedure for Public Comment	9/1/2003	Outline City Protocol for SWMP		Completed	8/1/2003
4-3	Check Erosion & Construction Material Onsite	(Developed winter of 2003) List used at inspections			Completed	In Use
5-1	Ordinance for Runoff Controls for Developments	12/1/2003	Adopted Ordinance & Regulations		Completed	8/2/2006 - 12/5/2006
5-2	Recommend BMP Manual for Planners & Developers	8/1/2003	Outlined in Regulations - 6(A), 1-4		Completed	12/5/2006
6-1	Install Silt Fence Around Snow Dump	9/30/2003	11/1/2005	Annually	Completed	11/14/2006
6-2	Track CB Cleaning Program, Priority Basins Annually	8/1/2003	9/15/2003	Ongoing	Completed	12/31/2010
6-3	Sweep Streets 3X Annually	9/1/2003	Before Phase II	Ongoing	Completed	Min 3X/yr.
6-4	SOPs for Disposal of CB and Street Sweeping Residuals	8/1/2003	Visit 6/26/2003	In Practice	Completed	Ongoing
6-5	Minimize Salt Usage, Maintain Cover Over Salt Storage	12/1/2003 (1)	11/1/2005	Ongoing	Completed	12/31/2010
6-6	Program to Clean Pond Inlets and Trash Racks	8/15/2003	Tank Inspections	Annually	Completed	4/1/2006
6-7	Develop/Implement Employee Education Program	9/1/2003		Ongoing	Completed	3/22/2006
6-8	Design & Construct Pond Specific P2 Projects	8/31/2003	Nutts Pond / Tannery Brook	10/15/2010	Completed	10/15/2010
6-9	BMPs for Derryfield Country Club	12/31/2003	Spring / Summer 2004	7/30/2006	Completed	8/1/2004

(1) Although the City covers salt piles, calibrates sander/salt spreaders and provides snow fence around snow dumping areas, there is no formal salt reduction program. Salt is applied as needed and completely weather dependant. The City has done a pilot study in the Nutts Pond sub watershed to determine sand and salt application rates and what can be done to reduce this impact. A pollutant-load watershed model was developed for this watershed. The Nutts Pond Watershed Sediment Loading Reduction brochure was developed and was sent to all the commercial property owners to try and reduce the loadings to Nutts Pond. A follow-up survey was conducted to determine the effectiveness of the program. A one page informational brochure was developed to provide residents with additional information on how they can protect the pond. This informational brochure is posted at the kiosk.

City of Manchester, New Hampshire
Stormwater Management Program Annual Report
May 1, 2010 through April 30, 2011

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Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my 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, 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.

_____ Date: 4-21-11

Kevin A. Sheppard, P.E.
Public Works Director

BMP #1 Public Education and Outreach

1-1, Assign Stormwater Coordinator – (BMP Completed)

Current Status: The City of Manchester hired the stormwater coordinator on May 17, 2003. The title for this position is Environmental Permits Coordinator.

BMP Effectiveness Evaluation: The Coordinator position allows the City to review, implement and enforce requirements of the stormwater program effectively. The responsibility of the position meets, but in many cases exceeds the level of expectations of the regulatory agencies. The hiring of the Coordinator has fulfilled all the requirements of the five-year program, one year ahead of schedule.

Future Goals: To continue to carry out the requirements of the stormwater program. To expand the program through implementation of stormwater practices that goes beyond the five-year program requirements.

The Coordinator believes that the continued development of inter-departmental cooperation between the Planning, Building, Parks & Recreation, Health and Highway Departments can expand to enhance the existing stormwater program.

To utilize the City's engineering inspection staff to a greater degree when they do construction site inspections related to infrastructure. Each year they learn more about the stormwater program and implementation of BMPs for erosion and sediment control. Training was conducted on April 14th and 15th.

1-2, Add Stormwater Information to the City's Website – (BMP Completed)

Current Status: The City of Manchester uploaded the initial stormwater website on October 7, 2003 consisting of four pages. Since then the website has expanded considerably. The total number of pages accessible within the stormwater site is well over fifty, which includes outside pages, related to stormwater, and associated PDF files.

The Urban Pond website is a site linked and referenced throughout the stormwater website. The stormwater website is also linked through the Urban Pond website. The Urban Pond site is an example of how stormwater controls can improve and enhance the quality of local ponds and lakes. The websites for stormwater and urban ponds were updated this reporting year.

BMP Effectiveness Evaluation: This BMP continues to be a highly effective means of providing stormwater information for public access. Several cities and towns within New Hampshire and New England have reviewed and commented on the extensiveness and material included in Manchester's website.

Future Goals: To update the websites for changes to the stormwater program based on the next MS4 permit requirements. More pages will be added to inform the public of the status of the required tasks as outlined in the program.

 # 1-3, Conduct Outreach with Local Watershed Organizations – (BMP Implemented & Ongoing)

Current Status: The City has provided funds for kiosk maintenance supplies for 10 kiosks, equipment, and water analyses for the two watershed organizations (Crystal Lake Preservation Association – CLPA and the Pine Island Pond Environmental Society – PIPES) and the part-time acting coordinator of the Manchester Urban Ponds Restoration Program (Jen Drociak). This commitment will continue through the ninth year of the Stormwater Program.

The formal, full-time City-funded Urban Pond Restoration Program Coordinator position was terminated in February of 2005 and was carried within the Planning Department through December 2005 when it was subsequently eliminated. There is no longer anyone assigned to coordinate these activities.

Without a formal full-time Urban Pond Restoration Program Coordinator, outreach has continued through the Environmental Permits Coordinator and also the acting coordinator, who works on a seasonal, part-time basis with funding through the Environmental Protection Division.

The acting coordinator performs website and outreach material updates, annual kiosk maintenance at 10 kiosks, coordinates pond cleanups twice per year, and monitors water quality at four ponds three times during the summer. Please see the attached link for the cleanup events this year.

http://www.manchesternh.gov/website/Departments/EnvironmentalProtection/SEPP/PondRestoration/CleanUpEvents/tabid/1034/Default.aspx

The City has budgeted for total phosphorus analysis, while all other sampling is performed in the field and / or analyzed at no cost at the NHDES Limnology Center under the umbrella of the NH Volunteer Lake Assessment Program (VLAP). The level of sampling and analysis that was done when the Urban Pond Coordinator was with the City has remained the same. This work is being completed by members of the watershed organizations along with the Environmental Permits Coordinator and the Urban Ponds Restoration Program acting coordinator.

The acting coordinator updates the Urban Pond Restoration Program website and posts the results of the sampling on the City's website for the public to view. Please see below the attached link.

http://www.manchesternh.gov/website/LinkClick.aspx?fileticket=_Kt1qR3olKI%3d&tabid=1035

BMP Effectiveness Evaluation: The outreach was highly effective. The City's Environmental Permits Coordinator, the acting coordinator and Conservation Commission will continue various aspects of the Urban Pond Program in the absence of the Urban Pond Coordinator. This program continues sufficiently to be effective for the City of Manchester.

Future Goals: To continue the support for the watershed organizations and the acting coordinator, support the sampling and analyses efforts, and continue to update the website.

 # 1-4, Make Brochures Available at the DPW and Public Libraries – (BMP Completed)

Current Status: The City has a limited number of previously developed brochures that are still available. These will be used for the continued education of the public. These brochures will be targeted toward individuals/groups that would best benefit from this information.

The City continues to stock a moderate supply of bookmarks, EPA children's crossword place mats, rulers with 10 "Earth Care Tips" and pencils. These are distributed at Earth Day events and other environmental days.

The City has developed and printed brochures explaining the "Wastewater Treatment Process" (provided in the first stormwater report), when visiting classrooms to teach students. These will continue to be given during classroom educational sessions.

BMP Effectiveness Evaluation: There have been no surveys or feedback forms developed to gauge the effectiveness of this BMP. The department has received limited feedback from its citizens.

Future Goals: To continue the outreach to the students. The City will continue to provide tours of the WWTP and training with students on wastewater and stormwater from the three different high schools in Manchester. This program was started in 2007 and has become an annual event. We also had sessions with students from Hesser College and with some middle school students. The EPD has also participated in the Science Fair judging with the Manchester Water Works.

To develop and provide informational brochures that can be mailed with the 24,000 customer accounts during the ninth year of the program. The mailer will advertise the website, stormwater hotline, and places where information can be obtained.

 # 1-5, Develop, Install & Maintain Signage at Urban Ponds – (BMP Completed)

Current Status: The signage information that was presented in the first report is still applicable. There are issues with vandalism, but these signs are repaired in the spring when the Parks & Recreation department begins to prepare the Urban Pond areas for

public usage. During the 2008 spring and summer seasons the signs at the ponds were replaced. Some new informational signs were added. The Plexiglas was replaced with some new Lexan which is more durable and will stand up to vandalism better. The kiosks were repainted. A kiosk at Nutts Pond was vandalized in the spring of 2009, 2010, and again in 2011 and each time the kiosk was repaired.

BMP Effectiveness Evaluation: It is difficult to gauge the effectiveness of this BMP. The signs are only effective if read. The kiosks are at the popular entrance areas of each pond and are easily accessible. The individuals who frequent the area most will probably maintain more of the sign's information through subconscious familiarity. The renewed kiosks will be more effective getting the message across.

Future Goals: The goal is to maintain these signs in serviceable and readable condition. The kiosks will be updated, repaired, and painted as needed to help get information to the residents that are using the ponds. They are inspected on an annual basis for the maintenance that needs to be performed.

 # 1-6, Distribute Pet Waste Brochures with Dog Licenses & Increase Signage at Parks – (BMP Completed)

Current Status: There are signs for "No Fouling By Pet Waste" erected at the entrances of the urban ponds and also at City Parks. These signs reference the City ordinance that enforces this law.

In 2005, 10,500 brochures were mailed to all registered dog owners within the City of Manchester. The City Clerk has additional brochures that are given to all newly registered dogs. Residents who are renewing their dog licenses do not receive an additional brochure.

There is also signage at the ponds that indicate it is improper to feed ducks. This will help prevent geese and birds from fouling the shores of the ponds that the residents frequent.

BMP Effectiveness Evaluation: Studies have been undertaken in several metropolitan areas to determine the effectiveness of "Pet Waste" brochures. It has been determined that approximately 65 percent of the dog owners will clean up after their pets regardless of whether or not they have been informed via a brochure. Twenty percent of dog owners can be encouraged to pick up after their pets where they didn't previously through the encouragement of informational brochures. There will always be 15 percent of dog owners who will continue to ignore the law even if provide information on a continuing basis.

Manchester is hoping that the original brochures encouraged the uninformed 20 percent (approximately 2,000 dog owners to clean up after their pets) where they hadn't before.

Our department continues to be encouraged and hopeful that dog owners are responding as there has been little evidence of animal waste during our shoreline surveys for illicit discharges and the pond cleanups.

Future Goals: To keep residents informed in regards to their obligations handling their pet waste. Resupply the City Clerk's office with brochures when requested. Continue visual field observations for problem areas when higher amounts of pet waste are noted. Review kennels and animal shelters for compliance with pet waste disposal practices

BMP #2 Public Participation

 # 2-1, Comply with State Public Notification Laws – (BMP Implemented & Ongoing)

Current Status: The City of Manchester continues to comply with all Public Notification Laws regarding the Stormwater Management Program process. The meetings that EPD scheduled in the early stages of ordinance development, with the Planning Board, and the Highway Commission, were announced on the weekly agenda for those perspective meetings, posted at City Hall, the Highway Department, and posted on the City's website.

Examples of public announcements announced in the local newspaper were included in previous year's reports.

Manchester went beyond the newspaper public notice and mailed agendas and draft documents to developers, contractors and engineering firms that usually do business within the City. The City incorporated many of the comments into the draft Ordinance and the Regulations.

In addition to the Public Notification Law, the City of Manchester has a guide that all departments, boards, committees and the Mayor and Aldermen must abide by. It references the rules on Meetings, the Formation of Committees, and Rules for Ordinances, Resolutions and Orders, Access to Public Records and Meetings, and Minutes and Records Available for Public Inspection. These Rules comply with the State of New Hampshire Public Notification Laws as outlined in RSA 47:6, and RSA 91-A:1 through RSA 91-A:6. This guidebook is available in all departments for reference should questions arise in regards to the implementation of Public Notice Law regulations.

Future Goals: To continue the public notification policy whenever any changes are made to the ordinance, or when substantial changes are made to the Regulations.

 # 2-2, Hold Annual Household Hazardous Waste Day – (BMP Implemented & Ongoing)

Current Status: The City of Manchester held two Household Hazardous Waste Days in Manchester during 2010. These dates have always fallen on the second Saturday of May and the second Saturday of October. The first collection was held on May 8, 2010 and the second was held on October 9, 2010. The date of collection is mentioned on the City's website, announced on flyers at the Highway Department, and various other kiosks throughout the City, and also announced in the newspaper the week of the collection. On the City's website is an alternative household products list. This list was included in the 2009 Annual Report.

The City also sends out residential yard waste curbside collection schedules via sewer and /or water billing. It is also posted on the City's website. This helps prevent residents disposing of their leaves and yard wastes in brooks, streams and wetlands. The City provides information on yard waste and composting on the City's website. This information was included in last year's report.

The following amounts of wastes were collected during 2010:

Waste Description	**Quantity Collected**
Universal Waste (TVs, CRTs, and computer peripherals)	209.7 Tons
Refrigerators	218
Air Conditioning Units	372

Spring HHW Collection: Hazardous materials consisting of the following components:

Waste Description	**Quantity Collected (Pounds)**
Waste Paint Related Material (Oil Based Paints)	6,750
Non DOT Regulated Material (Latex Paint)	3,150
Waste Aerosols	600
Waste Flammable Liquids	4,200
Waste Oxidizing Solid	50
Waste Pesticides Solid	320
Waste Pesticides Liquid	1,200
Waste Corrosive Liquids	100
Waste Corrosive Liquid, Acidic, Organic	40
Waste Caustic Alkali Liquids	300
Waste Mercury	75
Waste Ammonia Solutions	150
Batteries	100
Universal Waste (CFL)	80
Non DOT Regulated Material (Fluorescent Light Bulbs)	400
Total	**17,515**

Fall HHW Collection: Hazardous materials consisting of the following components:

Waste Description	Quantity Collected (Pounds)
Waste Paint Related Material (Oil Based Paints)	16,000
Non DOT Regulated Material (Latex Paint)	6,400
Waste Lithium Battery	10
Waste Aerosols	450
Waste Flammable Liquids	4,800
Waste Oxidizing Solid	85
Waste Pesticides Solid	1,000
Waste Pesticides Liquid	1,200
Waste Corrosive Liquids	200
Waste Corrosive Liquid, Acidic, Organic	100
Waste Caustic Alkali Liquids	250
Waste Mercury	15
Waste Ammonia Solutions	30
Batteries	20
Universal Waste (CFL)	80
Non DOT Regulated Material (Fluorescent Light Bulbs)	300
Total	**30,940**

BMP Effectiveness Evaluation: The collection of universal wastes this reporting year has increased by 92.4 Tons compared to last year's report.

The household hazardous waste collection is possibly the most successful environmental program conducted semi-annually throughout Manchester. This program recovers a huge waste stream that could potentially be dumped in off road areas near brooks and ponds.

The City notifies all residents who receive a sewer bill regarding the pick up of yard waste and spring clean ups. It is also posted on the City's website. This notification should help in the prevention of people dumping leaves and grass-clippings along roadsides and brooks, which help reduce nutrients that move into the Merrimack River from the tributary streams.

Future Goals: Manchester will hold two hazardous waste collection days during the 2011 calendar year. The first one will be held on May 14th and the other on October 8th.

 # 2-3, Continue Regular Used Oil, Battery and Tire Collection – (BMP Ongoing)

Current Status: The City of Manchester continues to collect used oil, batteries, and tires. These are collected during normal business hours. These wastes are not reserved for the Household Hazardous Waste Days. The amount of wastes that were collected and shipped is listed in the next table. Please note that batteries were collected in 2010, but they were not shipped out.

The City collected the following amounts of wastes during 2010:

Waste Description	Quantity Collected
Tires	93.1 Tons
Used Motor Oil	1,860 Gallons

Future Goals: Continue the same level of accessibility and collection hours as currently established.

 # 2-4, Continue Urban Forestation through "Green Streets" Program – (BMP Ongoing)

Current Status: The City of Manchester, through the Parks and Recreation "Green Streets Program," sold and installed 68 trees during 2010. There were eleven fewer trees planted this year than in the previous year. This was the same reduction in the number of trees planted as we experienced last year. We expect this trend to continue based on the current economy.

A Green Roof was installed in September of 2007 on the roof at City Hall using the GreenGrid system. The plants were sampled for heavy metals as a baseline to help determine uptake. The only metal that was detected was zinc. This is due to the zinc orthophosphate in the drinking water used for corrosion control. The plants were sampled on October 25, 2010 for heavy metals. There were three metals that were detected during this sampling event. In 2009 there were nine metals that were detected. Please see the table below. In 2010 there was very little rainfall and the plants were stressed. The reduction in rainfall would explain the reduction in the metal uptake that we experienced.

GREEN ROOF SAMPLING RESULTS

Parameter	2008 Results in ug/g	2009 Results in ug/g	2010 Results in ug/g
Antimony	BDL	1.3	BDL
Arsenic	BDL	4.0	2.1
Beryllium	BDL	0.3	BDL
Cadmium	BDL	0.8	BDL
Chromium	BDL	12	BDL
Copper	BDL	35	BDL
Lead	2.5	2400	2.9
Mercury	BDL	BDL	BDL
Nickel	BDL	7	BDL
Selenium	BDL	BDL	BDL
Silver	BDL	BDL	BDL
Thallium	BDL	BDL	BDL
Zinc	38	460	30

BDL = Below Detectable Limits

Future Goals: To continue the program as currently established. Assure the public is aware of the availability of this service through the City of Manchester. The City will continue to sample the plants on the Green Roof for metal uptake on an annual basis.

 # 2-5, Publicize & Maintain Stormwater & Combined Sewer Hotline – (BMP Ongoing)

Current Status: The City established the Stormwater / CSO Hotline on August 26, 2003. The phone number is (603) 665-6899. The City previously sent envelope stuffers with the 24,000 bills (residential, commercial and industrial customers) informing these users of the storm water hotline and how it can be used to address environmental concerns. Information on the hotline will be provided anytime a stormwater flyer is mailed with the residential billing. The hotline number is also provided on the City's stormwater website and on the Environmental Permits Coordinator's business cards. The hotline is the Environmental Permits Coordinator's main phone number.

BMP Effectiveness Evaluation: This BMP is effective after the residents receive a flyer in the mail. The impact of the flyer drops significantly a few weeks after receipt. Staff that answers the phones provides the stormwater hotline phone number or a direct transfer when a concern is received by any citizen. By having the hotline number as the Environmental Permits Coordinator's main phone number this should help with the overall effectiveness of the hotline.

Future Goals: To continue using the website, flyers, brochures and other methods to inform the public of the stormwater hotline.

BMP #3 Illicit Discharge Detection and Elimination

 # 3-1, Develop & Present Draft Storm Sewer Ordinance – (BMP Completed)

Current Status: The presentation of the Stormwater Ordinance was done October 4, 2005. Comments were received, reviewed and where appropriate, incorporated. The Ordinance was approved by the Board of Mayor and Aldermen on August 1, 2006.

BMP Effectiveness Evaluation: The adoption of the ordinance and regulations has given the City the ability to cite codified references for enforcement actions.

Future Goals: To continue to make full use of the Ordinance and Regulations to assure that the Stormwater Program is being enforced and managed properly. To review and update the ordinance when the stormwater utility is implemented and for changes made to EPA and DES regulations.

 # 3-2, Continue Dry Weather Screening of Outfalls – (BMP Completed)

Current Status: The requirement of two inspections during the five-year program was completed.

The ponds were sampled for phosphorous, alkalinity, conductivity, pH, turbidity, temperature, dissolved oxygen, and zooplankton / phytoplankton as part of the VLAP (Volunteer Lake Assessment Program).

The ponds and sections of the rivers are sampled each week during the summer months by the City of Manchester Health Department for recreational purposes. When the water results are greater than 88 E-Coli per 100 milliliters of water the area is usually posted and it may get closed for swimming depending on the location in accordance with NH RSA 485-A, Class B waters.

The Merrimack River was sampled for aluminum four times a month for a year. The sampling program was completed. A wet weather response for the aluminum concentrations has been observed.

The outfalls at the Wastewater Treatment Facility and at the Drop-Off Facility have been monitored according to the Multi Sector General Permit (MSGP).

BMP Effectiveness Evaluation: The City has catalogued observable outfalls along the Merrimack and Piscataquog River along with the ponds. The City has collected samples from outfalls that run in dry weather (usually the result of small streams), has tested them and has found that only background levels of bacteria are present. During the rare occasion of elevated bacteria counts follow-up sampling and investigations were conducted.

The urban ponds, being more environmentally sensitive, have several pollutants tested during the course of the summer. Please refer to the list of pollutants above.

Future Goals: The City will conduct dry weather screening per the requirements in the next permit. The new numbering system for our collection system as outlined in BMP # 3-4 will be used for the outfall identification when conducting the screening.

Continue sampling the urban ponds during the course of the summer for the pollutants listed above. Sample the outfalls at the Wastewater Treatment Facility and the Drop-Off Facility according to the MSGP.

 # 3-3, Develop and Implement System for Detection & Elimination of Illicit Discharges – (BMP Completed)

Current Status: This program was developed and submitted with the first year's report. The program has been a good baseline document for detecting illicit discharges. The New Hampshire Seacoast Coalition developed a document entitled "Guidelines and Standard Operating Procedures" for IDDE. Manchester did review this manual and included some of the procedures and suggestions into our developed Illicit Discharge Program.

BMP Effectiveness Evaluation: This BMP is effective in providing guidance when trying to determine the source of an illicit discharge that proves to be a difficult source to locate.

Future Goals: Our goal is to continue to aggressively respond to illicit discharges as they are found. The City will conduct illicit discharge investigation and monitor the outfalls per the requirements in the next permit.

 # 3-4, Map Outfalls and Receiving Waters – (BMP Completed)

Current Status: The City's engineer mapped the outfalls from earlier engineering studies in 2001. An extensive GIS mapping system was developed for the City to include both sewage and drainage systems. This mapping has been extended to include tax maps, City assessing information and the water department's infrastructure.

The City's engineering department inputs all the new growth and sewer extension updates into the GIS to assure it is a dynamic mapping system rather than a dated static system. The City's engineering department or our consultant does periodic updates of the GIS from work that has been completed by City crews, City projects, and our CMOM program.

Errors to the developed GIS system continue to be found in the field. The discrepancies are noted and brought to the City's engineering staff so the GIS information can be updated and corrected.

A new numbering system for the collection system features was instituted during the previous reporting year. The new numbering system links to the old numbering system.

BMP Effectiveness Evaluation: This tool has proven invaluable to our Stormwater Management Program. It is being used to track cleaning of lines, location of baffle tanks, sectioning off catch basin cleaning areas, and for review to determine potential locations for illicit discharges.

Future Goals: The department is taking advantage of more of the capabilities available with the GIS system. The GIS system is being populated by our consultant with information from system maintenance, system inspections, and other vital information. We plan to implement an Asset Management system this year as part of our CMOM program. This system will be used to track the condition and maintenance of the system.

The staff will continue to review the existing aerial photographs before a construction project is started and reference these against the construction as it progresses. A complete flyover of Manchester was completed in April of 2010. The GIS system was updated with the new aerials.

BMP #4 Construction Site Runoff Controls

 # 4-1, Develop & Present Ordinance to Require Erosion & Sediment Control Plan (to include construction material management plan and plan review for sites disturbing more than one acre) – (BMP Completed)

Current Status: The Ordinance was drafted, reviewed, modified and adopted on August 1, 2006. A copy of the booklet containing both the Ordinance and Regulations is at the end of section three. The Board of Mayor and Aldermen authorized the Director of Public Works to develop a set of Regulations to expand upon and detail the content of the Ordinance. These Regulations were adopted by the Director of Public Works with approval by the Highway Commission on December 5, 2006.

BMP Effectiveness Evaluation: Manchester was possibly the first City in New England, and certainly New Hampshire that has adopted a specific Stormwater Ordinance and supporting Regulations. These documents will promote compliance at construction sites with subsequent enforcement capability should the contractor neglect Stormwater Pollution Prevention Plan requirements.

Future Goals: The same goal would apply here as that outlined in BMP # 3-1.

 # 4-2, Develop Procedure for Receipt and Consideration of Public Comment – (BMP Completed)

Current Status: The attachments outlined in BMP # 2-1 illustrate how the City processes public comment. All comments are taken seriously, the citizens are contacted, the issues discussed and if the suggestion is sound, incorporated into the stormwater management program.

Manchester will continue to receive suggestions via the website, phoned comments, statements made at hearings, and by letter.

BMP Effectiveness Evaluation: The process used during the public hearing regarding the Stormwater Ordinance was well received and most of the comments were incorporated into the adopted Ordinance (August 1, 2006). This process is working well.

Future Goals: The goal is to continue following the City's protocol with any future changes to the adopted Stormwater Ordinance or the approved Regulations.

 # 4-3, Check Erosion Control Measures and Construction Material Management, Onsite Inspection – (BMP Implemented and Ongoing)

Current Status: The City developed an inspection checklist for site visits. This inspection sheet has proven to be a comprehensive document when referring back to conditions that existed at a particular time during project development.

The inspection sheet includes information regarding the site, weather conditions since the last inspection, and the conditions of BMPs.

The inspection of BMPs is gauged against the Erosion and Sediment Control Plan and SWPPP that was submitted by the developer during the site plan approval process. Any deviance from the plan is noted and a clean typed copy is made from the field inspection notes. The clean copy is signed by the inspector and delivered to the contractor for action. Pictures taken at the site are referenced by link on the sheet and can be easily retrieved in the computer to evaluate the current findings with those from previous reports. An example of a completed site inspection form is included as Attachment A.

Since the adoption of the Ordinance, the City has developed a two-part "Notice of Violation" that can be used in the enforcement process. An example of this report was included in the 2007 Annual Report. The inspection report serves as the first notice to the contractor that they need to come in compliance with their Stormwater Pollution Prevention Plan or Best Management Practices for site disturbances. A time frame for correction is outlined in the inspection report.

If the non-compliance has not been corrected at the time of the second inspection, a "Notice of Violation" is prepared and sent via certified mail, return receipt requested. A copy of the notice is presented to the site superintendent. More stringent time limitations are included for compliance.

If upon reinspection, the site non-compliance has not been corrected, the enforcement actions proceed, with associated fines and penalties, as outlined in the Ordinance.

BMP Effectiveness Evaluation: The field inspection checklist, "Notice of Violation," Regulations and Ordinance provide the City with all the tools needed for compliance and enforcement regarding the Stormwater Program. The compliance at the construction sites has been well above average. Some violations were noted during this past year. Contractors and developers have been quick to correct issues found. If they are present during the inspection I will show them the violations so that they can correct them right away.

Future Goals: The future goal is to make use of the tools available for inspection and enforcement. Also, to follow up on minor enforcement actions to assure that these issues are corrected. Without follow up, the process of escalating enforcement would not be possible. The sites will be inspected each month during the year. We are finding that with the climate changes that more sites are active year round. This requires inspection during the winter months that were traditionally non – active months.

ATTACHMENT A

Report # 9

Project Name: Hayward Elderly Housing

Inspection and Maintenance Report

Week Ending: 8/27/2010 **Date of Inspection:** 8/23/2010

Name of Inspector: Robert Robinson **Inspector Title:** Env. Permits Coord

Weather Summary: Rainy, low 60s.

Date of Last Rain Event: 8/23/10 **Amount of Precipitation:** .38"

Reason of Inspection

- ☐ **Normal Conditions** - Inspection required once every 7 days
- ☐ **Rainfall Event > 0.5"** - Inspection required after every 1/2" rainfall
- ☒ **Routine** - General City inspection outside the requirements of the Stormwater Pollution Prevention Plan
- ☐ **Compliance** - Follow up to check on compliance with previous violations (Citizen Complaint)

Condition of Construction Site Exit(s)

Location	Is Off-Site Tracking Occurring	Is Entrance Apron Clean?	Are There Other Exits?
Hayward Street	No tracking observed.	Yes	No

Perimeter Controls

Location	Measure Properly Installed	Sediment Depth	Measure Effective
Site	The silt fence was properly installed.	None	Yes

Stabilization of Slopes

Location	Is Grading Still Occurring	What BMP is Implemented	BMP Effective?
Site	No	A swale and berm was loamed and seeded. The grass was growing.	Yes

Catch Basin Inlet Protection

Location	Inlet Protection Installed?	Is BMP Effective?	Can Inlet Collect H20?
Site	N/A	N/A	N/A

Sedimentation Basins

Location	Is Detention Basin Completed?	Basin Slopes Stabil?	Depth of Sediment / Any Bypass?
Site	A swale and small detention area was constructed.	Yes	Some material was observed.

Other BMP Measures

Location	TYPE	Field Observations & Notes
Site	Grass swale	

Maintenance Action Required on Above Items: Working inside the building. Landscaping is done. A berm, swale, and small detention area were constructed and stabilized with grass. Porous pavement is done. Loam was spread out and hydroseeded. The sitework is done till a future phase. The site is stabilized.

Inspector's Certification

I certify that I have completed this Inspection & Maintenance Report and that it is based on actual field observations that I have made on this day. I have documented any and all observable deficiencies associated with the Stormwater Pollution Prevention Plan and have identified, to the best of my ability, all BMP areas that require maintenance action or repair.

Inspector's Signature: Robert Robinson **Date:** 8/23/10

BMP #5 Post-Construction Stormwater Management in New Development & Redevelopment

 # 5-1, Develop Ordinance to Require Runoff Controls for New & Re-Development for Projects Disturbing > One Acre – (BMP Completed)

Current Status: This requirement is incorporated in the approved Ordinance and adopted Regulations.

Post construction consists of maintaining BMPs and structures that have been installed within a development after the contractor has left. The City spent many hours reviewing documents that required long-term maintenance for installed BMPs.

The department developed a "Long-Term Maintenance Agreement" to be signed by any new developments that are completed within the City. This will assure that the structures that are installed are maintained. The maintenance of structures after the construction was completed has always been the achielles heel throughout the country. Manchester will register this document with the Hillsboro County Registry of Deeds to be part of an Associations' covenants that will assure that these structures are being maintained. An example of a Long-Term Maintenance Agreement was included in the 2009 Annual Report.

BMP Effectiveness: It is early to determine the effectiveness of this document. If it is signed, registered, and carried by the Association it should prove to be a highly effective means of assuring maintenance of BMPs long after the development is completed.

Future Goals: To assure that this agreement is signed by the owner and registered by the City before issuing the final certificate of occupancy for all future developments within the City of Manchester. The Coordinator will follow up on the agreements to ensure the maintenance is being performed. This will include an annual report to the City documenting that the maintenance was done, followed up by an inspection by City staff to verify that the maintenance was done.

 # 5-2, Recommend BMP Manual for Use by Planners and Developers – (BMP Completed)

Current Status: The suggested manuals referenced are outlined in the approved Regulations. These manuals are:

- New Hampshire Department of Environmental Services Sediment and Erosion Control Manual, (Rockingham County "Stormwater Management and Erosion Control Handbook for Urban and Developing Areas");

- Manchester's "Standard Specifications for Road, Drain & Sewer Construction";

- Innovative Stormwater Treatment Technologies BMP Manual, NHDES, May 2003;

- New Hampshire DOT Guidelines for Temporary Erosion and Sediment Control and Stormwater Management – NHDOT Bureau of Construction.

Other reference manuals and materials are mentioned on the website. These have not been incorporated into the Regulations, but warrant a mention on the website. The listing of references mentioned on the website is listed below:

EPA's BMPs for Stormwater Phase II
State of New Hampshire BMPs
International Stormwater BMP Database
California Stormwater Quality Associations' Handbook for Construction Site BMPs
U.S. DOT Guide to BMPs
EPA Guide to Developing a SWPPP
Overview of Minnesota's Construction Stormwater Permit
National Resource Defense Council Stormwater Fact Sheet

BMP Effectiveness: These references are voluntary guidance. The manuals can be an effective approach as most New Hampshire contractors are familiar with the contents of these manuals and refer to these guidelines when developing their sediment and erosion control plans.

Future Goals: Continue to review other manuals to determine if these would be suitable for reference within the Stormwater Regulations. The NHDES has developed a three volume Stormwater Manual. This manual will be added during the next revision.

BMP #6 Pollution Prevention / Good Housekeeping for Municipal Operations

 # 6-1, Install Silt Fence Around Snow Dump Area – (BMP Ongoing)

Current Status: Silt fences continue to be erected around the snow dumping areas in Manchester. The erection of these fences is verified during the month of November and early December.

In the spring after the snow has melted, any accumulated trash, debris and the silt fence is removed from the site until the next season.

During the previous years the City used a snow-melter to reduce the congestion caused by accumulating snow. This practice helped in reducing the spring peak runoff as the snow was melted during the colder days.

BMP Effectiveness: The silt fence keeps the trash and sand that is collected with the plowed snow from entering the waterways.

Future Goals: Continue with the existing program and assure silt fence is erected in areas where first time snow dump areas are set up.

 # 6-2, Catch Basin Cleaning Program, Including Priority Catch Basins – (BMP Ongoing)

Current Status: The City's catch basin cleaning program was on a high priority listing before the Stormwater Phase II program was initiated. The City contracts annually to have catch basins cleaned by a private company. The amount of funding dedicated to catch basin cleaning during Fiscal Year 2011 was $45,000. The number of basins cleaned depends on the per basin cost bid. We cleaned 1,193 catch basins over this reporting year. The catch basins were cleaned by the CB cleaning contractor or by the City's crews. An estimate of 0.4 cubic yards of material per basin is assumed. That would equate to 477 cubic yards of material that was removed from catch basins over the reporting year. The listing of catch basins cleaned is included as Attachment B.

During this reporting year we had issues with truck number 567. This is our oldest truck. Truck number 567 was down for a total of 46 working days. A new truck was purchased last year to replace truck number 521. That was our oldest truck at the time.

This year we also had to bid out the catch basin cleaning services. We had difficulty signing a contract with the low bidder and had to award the contract to the second lowest bidder. This delay caused us to miss our fall catch basin cleaning window. The number of catch basins cleaned should increase for next year's report.

There is a listing of priority catch basins adjacent to the Urban Ponds in the City that must be inspected annually, it maybe twice if the condition warrants. City personnel inspect these in the spring and City equipment cleans these at least once during the reporting year. If additional cleaning is needed, a City crew is dispatched to clean these basins more frequently. These were all cleaned at least once during 2010 by City of Manchester personnel. The priority status for these basins assures that a significantly reduced pollutant load enters the ponds. The Urban Pond Priority CB Inspection and the Urban Pond Priority CB Cleaning List are included as Attachments C and D respectively. The catch basins surrounding the urban ponds receive top priority.

Sewer calls are tracked to determine if roots, grease or other maintenance issues are the cause of the blockages. The log of sewer back-up calls and the investigative findings are included as Attachment E.

BMP Effectiveness: This process continues to work well. The current schedule of CB cleaning is helping to minimize the pollutants getting to the ponds. The ongoing development of the problem areas listing sheet allows the City to trend areas that need more attention and response.

The sewer problem areas are noted and inspected on a minimum of an annual basis and sometimes more frequently, depending on the type and/or frequency of the problem. Approximately 60 percent of the City's sewer system is combined. Heavy rains will cause sewer problems beyond maintenance issues. The sewer problem areas' listing is included as Attachment F.

The City continues to inspect our sewer manholes in the combined areas through our CMOM program. We are also inspecting combined sewer lines using CCTV and zoom camera technologies. The City started negotiations with the EPA on our CSO Long Term Control Plan; this plan outlines our future separation efforts. The first portion of the of the Phase II program as proposed by Manchester will cost $165 million over 20 years and remove 70 percent of the CSO quantity from the system.

Future Goals: To continue designation of the urban pond catch basins as a priority for cleaning. To reinforce to the City the need to finance the private contractor to clean additional catch basins within the City. Increase the number of catch basins cleaned by our crews. To address sewer problems through our CMOM program that the City is in the process of implementing.

 # 6-3, Sweep Streets Three Times Annually – (BMP Ongoing)

Current Status: The City continues to follow a schedule of street sweeping presented in the first year's report. This year's winter was a typical winter with little sweeping performed during this season. The City has two vacuum and three mechanical sweepers.

Most of the sand found on City streets comes from winter sanding and some small amounts of sediment from erosion on residential lawns. Sand is applied to sidewalks and

schoolyards during snowstorms. Salt is applied to the highways during snowstorms. A sand / salt mix is used during icing conditions or ice storms.

The amount of sand applied varies yearly. It is all weather dependent. The sweepers will pick up aluminum cans, cigarette butts, leaves, paper cups, plastics, and articles of discarded clothes, footwear, and a host of material that is not sand related. When sand is mostly absent from the streets these items make up the bulk of the material collected by the sweeper. When sand is present it may make up the bulk of the material.

Most of the sand is collected off the streets during the first few neighborhood runs immediately after the winter storm season. Otherwise, most of the material collected is what is listed above. Therefore, it would be difficult to determine the amount of sand collected.

BMP Effectiveness: This BMP continues to be quite effective as some sections of the inner City business district are swept three times per week and others are swept twice a week. Some other sections of the City are swept once a month. The current sweeping schedule assures all City streets are swept more than three times annually. A copy of the schedule was included in the 2009 Annual Report.

Future Goals: To continue the street sweeping program at its current rate.

 # 6-4, Continue to Follow SOPs for Disposal of Catch Basin Cleaning and Street Sweeping Residuals – (BMP Ongoing)

Current Status: The City continues to place street sweeping debris and catch basin debris up in the rear lot of the recycling facility. The street sweepings are placed on a concrete pad with three-sided cement block walls. These sweepings are dried out, mixed with the gravel / asphalt pile and eventually ground up to make road base for streets and sidewalks.

The catch basin waste is piled across from the street sweeping debris in a compacted depression. This catch basin waste is allowed to evaporate to a certain extent then it is also mixed with the gravel / asphalt pile and eventually ground up to also make road base for streets and sidewalks.

During 2010 the catch basin cleanings were tested for RCRA 8 Metals, Poly Aromatic Hydrocarbons (PAHs), and Volatile Organic Carbons (VOCs) according to NHDES Management of Street Wastes fact sheet WMD-SW-32. The material met the requirements to be reused in the production of base and sub-base aggregate except for the arsenic result being slightly over. The material is being resampled.

BMP Effectiveness: This BMP is effective as designed and provides a reuse for the material collected that would otherwise be sent to landfill.

Future Goals: Monitor the catch basin disposal area for evidence of pollution to the surrounding area. Take any BMP measures necessary to assure pollution is contained. Continue annual testing of the catch basin cleanings as required by WMD-SW-32.

 # 6-5, Minimize Salt Usage and Maintain Cover over Salt Storage Area – (BMP Ongoing)

Current Status: The majority of the salt the City uses for highway treatment in the winter is kept under cover at the Highway Garage. There is also a satellite location up at Dunbarton Road that is active during the winter period. This salt pile is covered with a tarp.

All salting trucks are calibrated once annually before the winter sand/salt application season begins to assure the greatest efficiency and minimal salt use during spreading. The amount of salt added in any season is dependent to the number of snowstorms, the amount of freezing rain received and the nightly refreeze conditions of early spring. The State of New Hampshire is leading an effort to control salt application in the area of Interstate 93. On January 22, 2009 the NHDOT received approval from the EPA on four TMDL studies. The State also has a Salt Reduction Workgroup to ensure that the recommendations of the TMDL are implemented. There are other factors playing a role in the full implementation of this BMP.

The State of New Hampshire is working with communities along the Interstate 93 corridor to reduce the use of salt. They are signing salt reduction agreements with these communities.

The State of New Hampshire brought forward HB 1676 – FN during this legislative session. This bill would have required the certification of commercial road salt applicators. The bill was referred to an interim study. It never moved forward.

The State of New Hampshire brought forward HB 202 during this legislative session. This bill would have required the certification of commercial road salt applicators. This bill was voted down by the Resources, Recreation and Development Committee of the House. This bill would have helped reduce the amount of chlorides being applied at commercial parking lots.

The certification will continue through the UNH Technology Transfer program (similar to their Road Scholars program). They will continue to provide trainings to both municipalities and private contractors at a minimal cost. They will provide and track the certification and will have decals for the participant's trucks. Although this is voluntary, the NHDES will promote this by highlighting cost savings through reduction of salt use, emphasizing the certified operators to parking lot owners and that this certification will be what would be required in future legislation.

The postings for the trainings will be at: http://www.t2.unh.edu/. The first training session is scheduled for April 26, 2011 in Derry, NH.

Manchester undertook a sub-watershed review around the Nutts Pond area for salting and sanding reduction. This pilot study used a model to see what improvements can be made to reduce the sand and salt application in this area and quantify the success. A sand reduction program was developed and distributed to the commercial property owners in the watershed.

BMP Effectiveness: Salt usage is weather dependent and it is hard to gauge effectiveness. Manchester can compare the current chloride analyses taken at the urban ponds and compare those to past years to determine if there is a reduction. The unknown factor is the number of homes around any pond that have water-softening units, which contribute chlorides to the water table.

A survey was conducted to gauge the effectiveness of the sand reduction program around Nutts Pond. Of the 50 commercial property owners that received copies of the sand reduction program and were asked to complete an online survey, only 2.5 surveys were completed. One facility only completed half of the survey.

The Nutts Pond Stormwater Management Plan and modeling was completed in January, 2010. A copy of the plan was included in last year's report.

Future Goals: Implement recommendations in the Nutts Pond Stormwater Management Plan.

 # 6-6, Develop / Implement Program for Cleaning Pond Inlets & Trash Racks – (BMP Ongoing)

Current Status: The project at Nutts Pond was completed in 2007. The new structures have been added to the maintenance logs. The modification to the structure at the North Inlet allows the isolation of the structure from the pond by using the installed gates. This will allow the removal of sediment from the structure. During the retrofit 20 cubic yards were removed from this structure. A repair was made this past year in the wetlands at the East Inlet. One of the channels had some erosion. The channel was repaired and seeded. It was inspected this spring and the repair has held.

The City of Manchester completed another project in the Nutts Pond watershed. The project was referred to as the Woodgate Court Drainage Project. It was named this because the project starts at the end of Woodgate Court. A section of Tannery Brook at the end of Woodgate Court upstream of Nutts Pond was dredged and stabilized using natural vegetation, erosion control fabric, biologs, rock cross vanes, and natural seed mixes. Approximately 4,500 cubic yards of sediment were dredged from this channel. To protect this area from silting up again in the future a deep sump catch basin and a ten foot diameter deep sump drain manhole were installed. These two structures were added to the inspection list. They will be inspected twice per year and cleaned at least once per year.

The dredging and stabilization of this channel should help reduce the loadings to the Nutts Pond East Inlet Forebay. The majority of the sediment that has been dredged from this forebay in the past originated from this channel and not from winter sanding operations.

The three, three-chamber baffle tanks at Dorrs Pond, the one, three-chamber baffle tank at Crystal Lake and the Vortechnics swirl concentrator at Douglas street have all been inspected. The City added a swirl concentrator to the listing in 2007 that was in the Hooksett Plaza.

The City continues to use the checklist for the spring and fall inspections of these units to assure they are cleaned when they begin to get filled with sediment. A Copy of the inspection forms are included as Attachment G.

There is a StormTreat™ System at Crystal Lake that the City is currently operating. It was restarted in May of 2005. The City cleaned the lines, retrofitted the baffle tank and now has the unit on the semi-annual inspection checklist. The system worked fine during 2009.

The work that was done at Crystal Lake was recognized by the EPA as a Nonpoint Source Program Success Story. Crystal Lake and Crystal Lake Beach are no longer listed as impaired for primary or secondary contact recreation for sedimentation / siltation. A copy of this article was included in the 2009 Annual Report.

BMP Effectiveness: The amounts of sediment that are removed from the various structures indicate that the program is highly effective.

Future Goals: To assure that the structures continue to be checked on a semi-annual basis and they are cleaned when they are partially full. The lilies will be checked each year and replaced as necessary.

The City of Manchester submitted a 319 Grant application in 2010 to continue to do work in the Nutts Pond watershed. The grant was approved by the NHDES. We are awaiting approval from the EPA. The grant was for work in the West Inlet sub-watershed and in the East Inlet sub-watershed.

 # 6-7, Develop / Implement Employee Education Program – (BMP Ongoing)

Current Status: The City continues to provide training to the staff who are involved with any aspect of stormwater management. A PowerPoint presentation on Best Management Practices (BMPs) and Low Impact Development (LID) Techniques and another PowerPoint on BMP Selection was conducted with the Engineering Group and the Sewer Crew on April 14th and the 15th of 2011.The training logs are included as Attachment H.

The training this year included a field presentation and a tour of the Woodgate Court Drainage Project. Copies of the field presentation information are included in the enclosed CD.

The City took part in the second annual New Hampshire Watershed Manager's Roundtable meeting held on October 7, 2010. The City of Manchester was not required to make a presentation during this meeting, but we did take part in the roundtable discussion and the tours. The roundtable meeting format this year with the discussions and the tours was a success and the NHDES plans to hold future roundtable meetings. Everybody recommend that they continue to use this format. We will plan on taking part in the future meetings and will make presentations on projects when we are asked.

The SEPP funding has ended for the Merrimack River "MATTERS" Program. Our department will continue to make presentations at the schools in spite of the reduced program activity that results from the cutbacks. The Amoskeag Fishways also greatly reduced their involvement with the "MATTERS" Program.

To continue the outreach to the students. The City will continue to provide tours of the WWTP and training with students on wastewater and stormwater from the three different high schools in Manchester. This program was started in 2007 and has become an annual event. We also in the past had a session with a class from Hesser College and with some middle school students. This will also continue in the future.

We also participate in the Science Fair judging with the Manchester Water Works on an annual basis. The amount of funding dedicated to student outreach to promote the successful SEPP programs during Fiscal Year 2011 was $10,000.

Manchester structures a training module for stormwater coordinators in surrounding communities during the coalition meetings. The latest meeting was held on March 15, 2011. Copies of the minutes and agendas of previous meetings and examples of the training are included in the enclosed CD.

We did some storm drain stenciling on May 8, 2010 with the Parkside School. We also did some native plantings with the SCA at Nutt Pond on June 5, 2010.

BMP Effectiveness: This BMP continues to grow, and with previous experience, is more effective with each passing year. The only area that will see a decrease in training is the work with the middle school students. The high school students are now receiving training. Employees who work in the field and inspect construction sites are more familiar with the requirements of the Manchester's Stormwater Program.

Future Goals: To continue the outreach to the students and provide training on wastewater and stormwater. The EPD also participates in the Science Fair judging with the Manchester Water Works.

Continue the training of City staff regarding the stormwater program. Continue hosting the regional S.W.A.T. (Stormwater Assessment Team) meetings.

On May 3, 2011 we are scheduled to do a presentation on the following topic: Using Public Input with Developing our CSO Long-Term Control Plan. The City will continue to make presentations at other seminars.

Work with the SCA or other student groups to complete more environmental projects around the urban ponds.

 # 6-8, Design & Construct Pond Specific Pollution Prevention Projects – (BMP Completed)

Current Status: All pond specific pollution projects have been designed in accordance with the five-year program and the Supplemental Environmental Projects Programs requirements. This is a completed task.

BMP Effectiveness: Many of the benefits of these pond specific projects are outlined in BMP # 6-6. These structures have removed several hundred cubic yards of material from the river and ponds that would have otherwise entered these water bodies.

Future Goals: Continue the upkeep and inspections of these structures. Please refer to BMP # 6-6.

 # 6-9, Best Management Practices for Derryfield Country Club – (BMP Completed)

Current Status: This BMP was completed. The asphalt cart path has held up well and has almost eliminated erosion in a location that was previously heavily eroded.

BMP Effectiveness: This BMP reduces the amount of sediment contributed from the second hole at the Country Club. Each year approximately 10 to 15 cubic yards of fill was brought in to repair the erosion caused by the winter snowmelt in this area. Since the installation of the asphalt cart path this has not been necessary.

Future Goals: There are no future goals regarding this BMP.

Stormwater Catch Basin Cleaning Program

Program year May 2010 through April 2011

In accordance with the City of Manchester's Stormwater Management Program, the City is required, under BMP #6-2, to track the catch basins that are cleaned. This is a listing of the streets where catch basins have been cleaned throughout the City. During this reporting year over 1,193 catch basins (477 cubic yards of material) were cleaned in the below listed streets by the private contractor and by the City of Manchester personnel. Manchester is using .4 cubic yards as an estimate for each basin cleaned for material removed. Additional basins are being cleaned this spring and will be included in next year's report.

During this reporting year we had issues with one of our trucks. A new truck was purchased as seen on the cover and we now have two good trucks to clean catch basins with. The number of catch basins cleaned should increase for next year's report.

It is important to note that not all catch basins on the named streets may have been cleaned. If a vehicle is parked over a catch basin that particular catch basin is skipped. An outside contractor cleaned most of the catch basins on the listed streets below. City of Manchester personnel cleaned all the catch basins around the ponds and additional basins in certain areas in the City.

The listing of streets that were cleaned during the contract period of April 1, 2010 through December 31, 2010.

East Side of the Merrimack River in the City of Manchester

- Pine Street
- Pennacook Street
- Chestnut Street
- Bell Street
- Green Street
- Wilson Street
- Summer Street
- Lincoln Street
- Manchester Street
- Beech Street
- Union Street
- Blodget Street
- Harrison Street
- Salmon Street
- Pearl Street
- North Adams Street
- Appleton Street
- Morrison Street
- Ashland Street
- Linden Street

- Russell Street
- Oak Street
- Ash Street
- North Street
- Liberty Street
- Union Street East Back
- Walnut Street
- Walnut Street East Back
- Arlington Street
- Warren Street
- Orange Street
- Myrtle Street
- Prospect Street
- Pine Street East Back
- Chestnut Street East Back
- Brook Street
- Beech Street East Back
- Lodge Street
- North Bay Street
- Ray Street
- Smyth Road
- Perley Street
- Peak Street
- Bay Street
- Sagamore Street
- Esty Avenue
- Litchfield Lane
- Central Street
- Carnegie Street

The following is a listing of streets, the were determined to be priority streets in the Phase I Malcolm-Pirnie study, around the City of Manchester's Urban Ponds. City personnel inspect these in the spring and City equipment cleans these at least once during the reporting year. If additional cleaning is needed, a City crew is dispatched to clean these basins more frequently. These were all cleaned at least once during 2010 by City of Manchester personnel.

Stevens Pond

- Pennsylvania Avenue
- Delaware Avenue
- Beaver Street (to Bridge Street)
- Maplehurst Street (to Bridge Street)
- Ohio Avenue

Maxwell Pond (Black Brook)

- English Village Road
- Garden Road
- Greeley Street (CB 3950 to CB 3948)

Dorrs Pond

- Apple Court
- Hooksett Road (CB 1277 to 1272)
- Poplar Street
- Juniper Street
- Shady Lane
- Campbell Street (Shady Lane to Poplar Street)
- Bicentennial Drive (CB 1289 to CB 1284)
- Crosbie Street (Pickering Street to Hooksett Road)
- Day Street (Fairfield Street to Hooksett Road)
- Pickering Street (Barrett Street to Crosbie)
- Livingston Park / Pool lots

McQuestan Pond

- South Main Street (Intersection of Second Street to Oneida Street)
- South Main Street (Newgate Circle to Balch Ave.)
- Erie Street

Nutts Pond

- Driving Park Road
- Leclerc Circle
- March Avenue (from Gold Street to John E. Devine Drive)
- John E. Devine (From South Willow Street)
- McGrail Circle
- Bradley Street
- Beech Hill Ave. (Beech Hill Street to Bradley Street)
- Beech Hill Drive (To Bradley Street)
- Titus Ave. (east from South Beech Street)
- Mystic Street (From Ruggles Street to Fowler Street)
- Ruggles Street
- Fowler Street

Pine Island Pond

- Goffs Falls Road (Gosselin Road to Pond Drive)
- Pond Drive
- Kennedy Street

Crystal Lake

- Corning Road (CB 3053 to 3049)
- Corning Road (Intersection of Bryant Road up toward Bodwell Road)
- West Shore Avenue

ATTACHMENT C

Urban Pond Priority CB Inspection

Nutts Pond - Map 4G
March Avenue - 11 CBs
Driving Park Road - 8 CBs
John E. Devine - 8 CBs

April, 20010 Date Work Completed

Name of Crew: Inspected, clean in the fall.

Crystal Lake - Map 6H
Corning Road - 9 CBs

April, 2010 Date Work Completed

Name of Crew: Inspected, clean in the fall.

Dorrs Pond - Map - 4C
Juniper Street - 7 CBs
Poplar Street - 14 CBs
Arah Street - 20 CBs
Bicentential Drive - 6 CBs
Day Street - 8 CBs
Crosbie Street - 6 CBs
Hooksett Road - 6 CBs

October, 2010 Date Work Completed

Name of Crew: Inspected, already cleaned in June.

Pine Island Pond - Map 4I
Goffs Falls Road - 11 CBs
Kennedy Street - 2 CBs
Pond Drive - 10 CBs

October, 2010 Date Work Completed

Name of Crew: Inspected, already cleaned in May.

Maxwell Pond - Map 2D
(Black Brook)
Garden Drive - 9 CBs
English Village Road - 11 CBs
Greeley Street - 2 CBs

October, 2010 Date Work Completed

Name of Crew: Inspected, already cleaned in May.

McQuesten Pond - Map 2G
Erie Street - 10 CBs
South Main Street - 18 CBs (Newgate to Ann Ave)
South Main Street - 10 CBs (Second to Oneida)

April, 2010 Date Work Completed

Name of Crew: Inspected, clean in the fall.

Stevens Pond - Map 5E & 6E
Maplehurst Avenue - 5 CBs
Beaver Street - 3 CBs
Bridge Street - 4 CBs
Pennsylvania Avenue - 5 CBs
Deleware Avenue - 5 CBs

April, 2010 Date Work Completed

Name of Crew: Inspected, clean in the fall.

ATTACHMENT D

Urban Pond Priority CB Cleaning List

Nutts Pond - Map 4G
March Avenue - 11 CBs
Driving Park Road - 8 CBs
John E. Devine - 8 CBs

September, 2010 Date Work Completed
Name of Crew: V-701

Crystal Lake - Map 6H
Corning Road - 9 CBs

November, 2010 Date Work Completed
Name of Crew: V-567

Dorrs Pond - Map - 4C
Juniper Street - 7 CBs
Poplar Street - 14 CBs
Arah Street - 20 CBs
Bicentential Drive - 6 CBs
Day Street - 8 CBs
Crosbie Street - 6 CBs
Hooksett Road - 6 CBs

June, 2010 Date Work Completed
Name of Crew: V-701

Pine Island Pond - Map 4I
Goffs Falls Road - 11 CBs
Kennedy Street - 2 CBs
Pond Drive - 10 CBs

May, 2010 Date Work Completed
Name of Crew: V-567

Maxwell Pond - Map 2D
(Black Brook)
Garden Drive - 9 CBs
English Village Road - 11 CBs
Greeley Street - 2 CBs

May, 2010 Date Work Completed
Name of Crew: V-701

McQuesten Pond - Map 2G
Erie Street - 10 CBs
South Main Street - 18 CBs (Newgate to Ann Ave)
South Main Street - 10 CBs (Second to Oneida)

October, 2010 Date Work Completed
Name of Crew: V-701

Stevens Pond - Map 5E & 6E
Maplehurst Avenue - 5 CBs
Beaver Street - 3 CBs
Bridge Street - 4 CBs
Pennsylvania Avenue - 5 CBs
Deleware Avenue - 5 CBs

November, 2010 Date Work Completed
Name of Crew: V-567

ATTACHMENT E

2010 (1st Qtr) Sewer Back Up Listing Jan. - Mar.

Date	Address	Problem	Findings
1/2/2010	344 Belmont St.	Sewer Back-up	No back-up, main jetrodded 350'
1/5/2010	59 W. Rosedale Ave.	Sewer Back-up	No back-up, main jetrodded
1/6/2010	245 Maple St.	Sewer Back-up	No back-up ,30" main running good
1/7/2010	184 Green Acres Dr.	Sewer Back-up	No back-up, house connection in SMH
1/7/2010	54 Pickering St.	Sewer Back-up	No back-up
1/10/2010	335 Mast Rd.	Sewer Back-up	No back-up, main jetrodded 100'
1/11/2010	183 Blaine St.	Sewer Back-up	No back-up, main jetrodded ref to slip for more info
1/13/2010	50 Mc Cauley St.	Sewer Back-up	No back-up, connection into SMH cleaned with hose
1/14/2010	133 Harrison St.	Sewer Back-up	No back-up, main jetrodded
1/16/2010	243 Oak St.	Sewer Back-up	No back-up, main jetrodded
1/20/2010	138 Pasture Dr.	Sewer Back-up	No back-up, main jetrodded
1/24/2010	414 Mast Rd.	Sewer Back-up	No back-up, main jetrodded 500'
1/25/2010	68 Oak St.	Sewer Back-up	No back-up, CB complaint
1/25/2010	370 Westwood Dr.	Sewer Back-up	No back-up, CB complaint
1/29/2010	63 Crawford St.	Sewer Back-up	No back-up, jetrodded 325' some roots
1/29/2010	191 Hackett Hill Rd.	Sewer Back-up	No back-up, connection into SMH
1/29/2010	27 Priscilla Cir.	Sewer Back-up	No back-up, jetrodded 250'
2/1/2010	10 Prince St.	Sewer Back-up	No back-up, jetrodded 250' on Prince & Boynton Sts.
2/1/2010	65 Massabesic St.	Sewer Back-up	No back-up, jetrodded line dirty
2/4/2010	82 Arlington St.	Sewer Back-up	No back-up jetrodded 155'
2/6/2010	19&21 Billings St.	Sewer Back-up	No back-up jetrodded line dirty
2/8/2010	21 Seams Dr.	Sewer Back-up	No back-up, jetrodded sewer
2/11/2010	19 Mapleton Rd.	Sewer Back-up	No back-up, jetrodded 253'
2/12/2010	79 Chad Rd.	Sewer Back-up	No back-up, jetrodded 200'
2/15/2010	Demers St. nr Precourt St.	Sewer Back-up	Main backed-up, jetrodded cleared roots
2/17/2010	890 So.Willow St.	Sewer Back-up	Main backed-up, jetrodded 600' & 105' cleared
2/22/2010	199 Taylor St.	Sewer Back-up	No back-up, jetrodded 400'
2/23/2010	250 River Rd	Sewer Back-up	Backed-up, jetrodded cleared
2/25/2010	211 Maryland Ave.	Sewer Back-up	No back-up, jetrodded
2/25/2010	52 Caron St.	Sewer Back-up	No back-up, CB complaint
2/25/2010	663 Pickering St.	Sewer Back-up	No back-up, jetrodded 250'
2/26/2010	464 Walnut St.	Sewer Back-up	No back-up, flooding problem from storm BF talked to homeowner
2/26/2010	95 Cilley Rd.	Sewer Back-up	Main backed -up, jetrodded cleared from rain storm
2/26/2010	360 Maple St.	Sewer Back-up	No back-up, jetrodded 220'
3/1/2010	80 Woodbine Ave.	Sewer Back-up	No back-up,main jetrodded
3/2/2010	44 Rockwell St.	Sewer Back-up	Main backed -up, jetrodded cleared
3/2/2010	596 Montgomery St,	Sewer Back-up	No back-up, main jetrodded
3/3/2010	5 Waldo St.	Sewer Back-up	Main plugged, jetrodded 275' cleared
3/7/2010	46 Flint St.	Sewer Back-up	Main backed-up, jetrodded 500' grease
3/8/2010	118 Gray St.	Sewer Back-up	Main backed-up, jetrodded cleared
3/11/2010	280 Laurel St.	Sewer Back-up	Main backed-up, jetrodded cleared roots
3/14/2010	155 Deleware Ave..	Sewer Back-up	No back-up, street flooding
3/14/2010	35 Oakwood Ave	Sewer Back-up	No back-up, jetrodded
3/14/2010	31 Woodland Ave.	Sewer Back-up	Main backed-up, jetrodded cleared roots
3/15/2010	316 Normand St.	Sewer Back-up	Main backed-up on Medford St., jetrodded cleared
3/15/2010	801River Rd.	Sewer Back-up	No back-up deadend main, jetrodded cleaned
3/15/2010	41Alpheus St.	Sewer Back-up	Main backed-up, root cut, rags and piece of garden hose in main
3/16/2010	1147 Belmont St.	Sewer Back-up	No back-up, jetrodded 200'
3/16/2010	45 Westland Ave	Sewer Back-up	No back-up, jetrodded 150'
3/16/2010	277 Calef Rd.	Sewer Back-up	No back-up, main jetrodded
3/17/2010	25 Donahoe St.	Sewer Back-up	Main backed-up, jetrodded cleared
3/18/2010	35 Dutton St.	Sewer Back-up	No back-up, main jetrodded
3/22/2010	48 Henriette St.	Sewer Back-up	No back-up, main jetrodded
3/22/2010	456 Resevoir Ave,	Sewer Back-up	Main backed-up, jetrodded cleared rags & paper towels
3/22/2010	19 Simone St.	Sewer Back-up	No back-up, main jetrodded 245'
3/30/2010	162 Lancelot Ave.	Sewer Back-up	No back-up, main jetrodded
3/30/2010	68 Alpheus St	Sewer Back-up	Main backed-up, jetrodded 300' cleared
3/31/2010	229 Gabrielle St.	Sewer Back-up	Main sewer restricted down stream, jetrodded relieved
3/31/2010	162 Lancelot Ave.	Sewer Back-up	No back-up, jetrodded 500'

ATTACHMENT E

2010 (2nd Qtr) Sewer Back Up Listing Apr. - Jun.

Date	Address	Problem	Findings
4/5/2010	48 Henriette St.	Sewer Back-up	No back-up, main sewer ok BF
4/6/2010	S.Main St.	Sewer Back-up	Main backed-up, jetrodded cleared 82'
4/7/2010	42 Celeste St.	Sewer Back-up	No back-up, main jetrodded
4/17/2010	815 Howe St.	Sewer Back-up	No back-up, jetrodded 212'
4/19/2010	46 Clough St.	Sewer Back-up	No back-up, main jetrodded
4/19/2010	71 Omega St.	Sewer Back-up	No back-up, main jetrodded
4/19/2010	12 Ray St.	Sewer Back-up	No back-up, main jetrodded
4/20/2010	36 B St.	Sewer Back-up	No back-up, jetrodded deadend line
4/23/2010	250 Elm St.	Sewer Back-up	No back-up, main ok
4/27/2010	275 Cilley Rd.	Sewer Back-up	No back-up, jetrodded 175'
4/28/2010	327 Trolley St.	Sewer Back-up	No back-up, jetrodded 250' & 100'.
4/30/2010	30 Arizona St.	Sewer Back-up	Main backed-up, jetrodded 150' cleared
4/30/2010	109 Salem St.	Sewer Back-up	No back-up, sewer odor, main jetrodded
5/1/2010	44 Champlain St.	Sewer Back-up	Main backed-up, jetrodded cleared roots and dirt
5/2/2010	90 Pinard St.	Sewer Back-up	No back-up, jetrodded BF
5/6/2010	274 Central St.	Sewer Back-up	No back-up, main jetrodded
5/12/2010	860 Clay St.	Sewer Back-up	No back-up, main jetrodded
5/14/2010	155 Porter St.	Sewer Back-up	No back-up, main jetrodded
5/17/2010	51 So. Cypress	Sewer Back-up	Main backed-up, jetrodded and rootcut cleared roots
5/20/2010	88 So. Wilson St.	Sewer Back-up	No back-up, main jetrodded
5/27/2010	95 Cilley Rd.	Sewer Back-up	Main backed-up, jetrodded cleared rags
5/27/2010	1889 Elm St	Sewer Back-up	No back up, dirt and pieces of pipe, to be camered
5/27/2010	352 Cedar St.	Sewer Back-up	Main backed up, jetrodded cleared rags
5/28/2010	527 Shasta St.	Sewer Back-up	No back-up, main jetrodded
6/2/2010	220 Beech Hll Ave.	Sewer Back-up	Main backed-up, jetrodded cleared grease
6/4/2010	692 Front St.	Sewer Back-up	No back-up, jetrodded 300'
6/6/2010	183 Young St.	Sewer Back-up	No back-up, jetrodded 195'
6/16/2010	Hooksett Rd. & Campbell St.	Sewer Back-up	Main backed-up, jetrodded cleared grease
6/17/2010	303 Ash St.	Sewer Back-up	No back-up, main jetrodded
6/18/2010	627 Cilley Rd.	Sewer Back-up	No back-up, main jetrodded
6/20/2010	50 Cranwell Dr.	Sewer Back-up	No back-up, main jetrodded
6/22/2010	285 Walnut St.	Sewer Back-up	No back-up
6/24/2010	459 E. Industrial Pk Dr.	Sewer Back-up	No back-up, jetrodded 500'
6/25/2010	Harvell St.Wolf Pk	Sewer Back-up	No back-up, jetrodded 280'
6/25/2010	13 Dunbar St.	Sewer Back-up	No back-up, jetrodded 200'
6/25/2010	289 Fremont St.	Sewer Back-up	No back-up, jetrodded
6/28/2010	66 Seventh Ave.	Sewer Back-up	No back-up, jetrodded

ATTACHMENT E

2010 (3rd Qtr) Sewer Back Up Listing Jul. - Sept.

Date	Address	Problem	Findings
7/3/2010	Londonderry Ln.	Sewer Back-up	No back-up, sinkhole camered main ok
7/7/2010	6 Alexander Dr.	Sewer Back-up	No back-up, jetrodded 200'
7/7/2010	Mast Rd. & College Ave.	Flooding	Heavy Rain
7/21/2010	135 Greenwood Ct.	Sewer Back-up	No back-up, forced main ref to EPD
7/27/2010	155 Eastern Ave.	Sewer Back-up	Main backed-up, jetrodded cleared
7/29/2010	20 Appleton St.	Sewer Back-up	No back-up main, jetrodded
8/2/2010	70 Champlain St.	Sewer Back-up	Main backed up, jetrodded cleared dead end line
8/3/2010	253-255 Prospect St.	Sewer Back-up	No back-up, main jetrodded
8/6/2010	160 Harrington Ave.	Sewer Back-up	Heavy rain Citywide flooding. No back-up mains checked T # 701
8/6/2010	27 Bridge St	Sewer Back-up	Heavy rain Citywide flooding. No back-up mains checked
8/6/2010	9 No.Acres Dr.	Sewer Back-up	Heavy rain Citywide flooding. No back-up mains checked
8/7/2010	29 Lancaster Ave.	Sewer Back-up	No back-up, main jetrodded 200'
8/9/2010	260 Gray St	Sewer Back-up	No back-up, jetrodded 120'
8/10/2010	1150 Hall St.	Sewer Back-up	No back-up, main jetrodded
8/10/2010	65 Dunbarton Rd.	Sewer Back-up	Main backed-up, root cut cleared
8/22/2010	136 Hall St.	Sewer Back-up	No back-up, main jetrodded 250'
8/25/2010	92 Vinton St.	Sewer Back-up	Heavy rain full pipe
8/26/2010	596 Central St.	Sewer Back-up	Main backed-up, jetrodded 145' cleared
9/7/2010	324 St.Marie St.	Sewer Back-up	No back-up, T # 701
9/29/2010	55 Webster St	Sewer Back-up	No back-up, T # 701 put on camera list
9/29/2010	459 E. Industrial Pk. Dr.	Sewer Back-up	Main backed-up, jetrodded 251' cleared

ATTACHMENT E

2010 (4th Qtr) Sewer Back Up Listing Oct. - Dec.

Date	Address	Problem	Findings
10/2/2010	13 Jane St.	Sewer Back-up	No back-up, jetrodded 200'
10/3/2010	289 Fremont St.	Sewer Back-up	No back-up, jetrodded 400'
10/4/2010	94 Gordon St.	Sewer Back-up	No back-up, main jetrodded, some dirt in main cleared
10/7/2010	80 Omega St.	Sewer Back-up	No back-up, house connection in SMH
10/10/2010	50 Edward Roy Dr.	Sewer Back-up	No back-up T # 701 DR
10/11/2010	265 Applecrest Rd.	Sewer Back-up	No back-up, jetrodded 300'
10/12/2010	385 Youville St.	Sewer Back-up	No back-up, main jetrodded
10/13/2010	321 Laxson St.	Sewer Back-up	No back-up in main, opened SMH
10/13/2010	270 Central St.	Sewer Back-up	Possible back-up, main dirty, jetrodded 200' cleaned
10/13/2010	62 Vernon St.	Sewer Back-up	Main backed-up, jetrodded cleared camered & rootcut
10/15/2010	159 N.Bend Dr.	Sewer Back-up	No back-up, main jetrodded
10/19/2010	100 Cahill Ave.	Sewer Back-up	Main backed-up, jetrodded cleared
10/19/2010	62 Clinton St.	Sewer Back-up	No back-up, jetrodded
10/21/2010	173 Lois St.	Sewer Back-up	No back-up, main jetrodded 300'
10/23/2010	43 Highcrest St.	Sewer Back-up	Main backed-up, jetrodded and cleared grease
10/25/2010	432 Webster St.	Sewer Back-up	No back-up, main jetrodded
11/2/2010	51-53 S.Elm St.	Sewer Back-up	Main backed-up, jetrodded 200' cleared
11/2/2010	39 Ashland St.	Sewer Back-up	No back-up, main jetrodded
11/3/2010	661 Auburn St	Sewer Back-up	No back-up, main jetrodded
11/4/2010	850 Permiter Rd.	Sewer Back-up	Main backed-up, jetrodded and cleared. Put on special cleaning list
11/5/2010	834 Elm St.	Sewer Back-up	No back-up, main jetrodded
11/8/2010	280 Manning St.	Sewer Back-up	No back-up, main jetrodded
11/8/2010	1013 Sommerville St.	Sewer Back-up	Main backed-up, jetrodded 450' cleared
11/8/2010	161 N. Adams St.	Sewer Back-up	No back-up, main jetrodded 150'
11/12/2010	Notre Dame Ave @ Walsh St.	Sewer Back-up	Main backed-up, jetrodded SMH collasped. Replaced SMH.
11/18/2010	152 Elgin Ave.	Sewer Back-up	No back-up, 24" main
11/18/2010	134 Purdue St.	Sewer Back-up	No back-up, main jetrodded 300'
11/19/2010	2220Glenwood Ave	Sewer Back-up	No back-up, main jetrodded 156'
11/20/2010	152 Elgin Ave.	Sewer Back-up	No back-up, main jetrodded 350' (camered)
11/22/2010	62 St. James Ave.	Sewer Back-up	Main backed-up, jetrodded 400' cleared roots
11/24/2010	267 N. Gate Rd	Sewer Back-up	No back-up, connection in SMH
11/26/2010	97 Sunnyside St.	Sewer Back-up	Main backed-up, jetrodded 200' cleared
11/28/2010	28 Witt Ave	Sewer Back-up	No back-up, main jetrodded 230'
12/4/2010	267 North St.	Sewer Back-up	No back-up, main ok
12/6/2010	146 Pearl St.	Sewer Back-up	Main running slow, jetrodded 250' and 350' now ok
12/6/2010	2985 Brown Ave	Sewer Back-up	No back-up, main jetrodded 100'
12/10/2010	525 Wilson St.	Sewer Back-up	No back-up, main jetrodded 125'
12/11/2010	659 Hall St.	Sewer Back-up	Main backed-up, jetrodded and cleared grease
12/13/2010	195 Waverly St.	Sewer Back-up	No back-up, main jetrodded
12/14/2010	207 Bartlett St.	Sewer Back-up	No back-up, jetrodded ties into stub @ SMH
12/18/2010	118 Cumberland St.	Sewer Back-up	No back-up, jetrodded 100'
12/18/2010	422 Lake Ave.	Sewer Back-up	No back-up, jetrodded
12/19/2010	475 Rimmon St.	Sewer Back-up	No back-up, main jetrodded
12/20/2010	134 Brunelle Ave.	Sewer Back-up	Main backed-up, jetrodded and root-cut, cleared the line
12/20/2010	34 Alpheus St.	Sewer Back-up	No back-up, jetrodded 100' & 170'
12/20/2010	131 Orange St.	Sewer Back-up	Main backed-up, jetrodded 400' and cleared
12/25/2010	457 Westwood Dr.	Sewer Back-up	Main backed-up, jetrodded and cleared
12/26/2010	457 Westwood Dr.	Sewer Back-up	Follow-up root cut behind Highland Goffs Falls school
12/28/2010	3526 Brown Ave.	Sewer Back-up	No back-up, main jetrodded
12/28/2010	223 Brown Ave.	Sewer Back-up	Main backed-up, jetrodded and cleared
12/28/2010	272 Webster St.	Sewer Back-up	No back-up, main jetrodded

City of Manchester Department of Highways
Sewer Problem Areas 2011

SOUTH

1. Miami Court – Houses #6 through #73 (roots)
2. Porter Street – House #120 (routine maintenance)
3. Slade Street – House #7 (routine maintenance)
4. Purchase Avenue – House #67 (routine maintenance)
5. Beech Hill Avenue – Houses #193 through #220 (grease)
6. Harrington Street – Houses #62 through #87 (roots)
7. Mitchell Street – From Calef Road to South Beech Street (routine maintenance)
8. South Gray Street – From Cilley Road intersection in the southerly direction (roots)
9. South Lincoln Street – Houses #85 through #177 (roots)
10. South Taylor Street – Houses #150 through #317 (routine maintenance)
11. Vinton Street – House #36 (cross-country, roots)
12. Weston Road – House #239 through #589 (routine maintenance)
13. Lois Street – House #34 through #144 (routine maintenance)
14. Maurice Street – House #39 (routine maintenance)
15. Mystic Street – Calef Road to South Beech Street (flat line)
16. South Beech Street – House #161 area (roots, flat line)
17. Westland Ave House #21, House # 130 & House #457 (routine maintenance)
18. Huse Road – Overpass to Mooresville Road (line to pump station)
19. South Beech Street – Houses #680 through 700 (routine maintenance)
20. South Willow Street – Rear of Bickfords Restaurant to So. Jewett Street (cross-country, roots)
21. South Willow Street – Gabrielle St (clean south for two manholes) (flat line)
22. Lennox Avenue – Dead End to South Beech Street (cross-country, roots)
23. Pepperidge Drive – House #135 (flat line)
24. Murphy Street – House #99 to Kevin Street (routine maintenance)
25. Armand Street – Mitchell Street to Cross-Country (cross-country)
26. Morey Street - #173 to Lincoln Street (routine maintenance)
27. Westwood Drive - # 335 Roots (cross-country)

SIPHONS

1. South Mammoth Street at Bodwell Road
2. Goffs Falls Road (opposite Post Office in the woods)
3. Cohas Brook Estates Siphon

NORTH

1. Dave Street at Lindahl (routine maintenance)
2. McCarthy Street (Edgar Street Westerly) (routine maintenance)
3. Andrew Street (River Road at the dead end) (dead end)
4. 656 Chestnut Street – Jet Pennacook Street to the Back (roots)
5. Coral Avenue – House # 198 (routine maintenance)

6. Harold Street – Houses #64 through #81 (cross-country, roots)
7. HillHaven Road – Dead Ends at House #12 and Dead End at House #60 (dead ends)
8. Webster Street – House #345 area that drains to North Street (cross-country, roots)
9. Oak Street – Houses #99 through #280 (roots)
10. Chestnut Street – House #999 (roots)
11. North Bay Street – House #443 (dead end to Theodore Street) (roots, flat line)
12. Hooksett Road – Intersection with Campbell Street (grease)

CENTRAL

1. Walnut Street – Houses #346 through #500 (routine maintenance)
2. Walnut Street – House #422 (Rear manhole that goes to 953 Union) (roots)
3. Union Street – Houses #781 through #880 (routine maintenance)
4. Liberty Street – House #35 (roots)
5. Pine Street W. Back – House #748 (do the line that goes out back) (routine maintenance)
6. Maple Street – Clean from Silver to Dave Street (low flow, grease)
7. Sommerville Street – Houses #263 through #270 (routine maintenance)
8. Cilley Road – Beech Street to Maple Street (routine maintenance)
9. Green Street – West side of street (Green Street to Union Street) (routine maintenance)
10. Auburn Street – So. Back (Auburn Street to Beech Street) (grease / school)
11. Laurel Street – Houses #418 through #448 (routine maintenance)
12. Central Street – Houses #533 through #596 (routine maintenance)
13. Pearl Street – Houses #133 through #234 (routine maintenance)
14. Merrill Street – House #15 (Jail problem cups, etc.)
15. Beacon St. – Spruce St. to Lake Ave. (roots)

EAST

1. Hanover Street – House #751 (routine maintenance)
2. Portsmouth Avenue – House #25 through #200 (roots)
3. Woodland Avenue – House #44 through #225 (routine maintenance)
4. Lovering Street – House #329 (routine maintenance)
5. Delaware Avenue – Hanover Street to London Street (roots)
6. Maplehurst Avenue – House #152 through #312 (routine maintenance)
7. Maryland Avenue – House #43 through #200 (dead end)
8. Anthony Street – House #178 (routine maintenance)
9. Freemont Street – Hayward Street to #387 Fremont Street (routine maintenance)
10. Hamblet Street – House #60 (roots, flat line)
11. Clay Street – House #509 to Dead End (dead end)
12. Normand Street – House #315 through House #422 (routine maintenance)
13. Melrose Street – House #178 through #180 (routine maintenance)
14. Valley Street – Street both ways in the 1100 block area (dead end)
15. Johnson Street – Porter Street to Gray Street (line sag)
16. Hospital Avenue – House #21 through #41 (roots)
17. Jones Street – House #45 to Benton Street (roots)
18. Page Street – Hanover Street to Angelos (grease)

19. Bridge Street – Mission Ave to Morse Road (low flow, flat line)
20. Hanover Street – # 907 Hanover Street (grease)

WEST

1. Rose Terrace – House #30 (dead end)
2. Kingston Street – Houses #30 through #70 (dead end)
3. Youville Street – East side back in the #300 House area (roots)
4. Warner Street – Houses #82 through 172 (routine maintenance)
5. Dennis Street – The Dead End (dead end)
6. Lenz Street – The Dead End (dead end)
7. Dubuque Street – Houses #167 through #250 & Sullivan St. Dead End (dead end)
8. Dunbarton Road – Houses #65 through #158 (roots)
9. Garden Drive – Entire Street (grease)
10. Wilkins Street – House # 133 and Houses #172 through #250 (line sag)
11. Anne Avenue – Houses #25 through #78 (dead end)
12. Westside Interceptor – Rear of Sullivan Tire Southerly to under the on ramp (flat line)
13. Chapleau Street – Clean at Kimball Street (dead end)
14. Parker Street – House #104 to the Dead End (dead end)
15. Brock Street – Charleston Street to Brockton Street (routine maintenance)
16. Hancock Street – Dartmouth Street easterly (grease)
17. Saint Marie Street – House at #237 (routine maintenance)
18. Front Street – Metering Station Manhole to the first manhole north (routine maintenance)
19. Bismark Street – House #229 to the Dead End (dead end)
20. Front Street to Garden Drive cross-country sewer (roots, grease, cross-country)
21. Frederick Street – Wheelock Street to Dartmouth Street (dead end)

ATTACHMENT G

Tank Name Dorrs Pond - KFC - 16' - Site 5 Date: 07/30/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

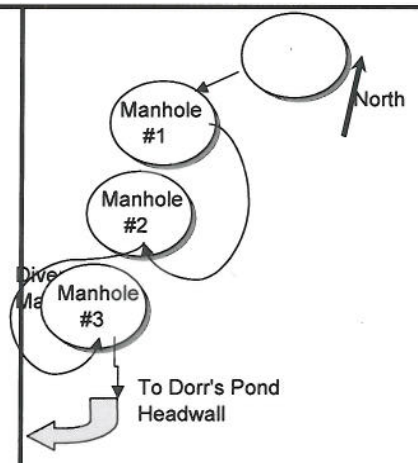
Inspect Diversion Manhole Sand Depth [X]<6" [ ]<12" [ ]Full
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

1st Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [X] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [ ] Moderate [X] Heavy

2nd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [X] 4"- 6" [ ] 7"- 9"] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [ ] Moderate [X] Heavy

3rd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [X] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [ ] Moderate [X] Heavy
Recommendations: Clean the third chamber.

If cleaned, how much sand/grit was removed? 0.0 Cubic Yards



Semi-Annual Baffle Tank Inspection Form

Tank Name Dorrs Pond - Headwall - 12' - Site 6 Date: 07/30/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

Inspect Diversion Manhole Sand Depth [X]<6" [ ]<12" [ ]Full
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

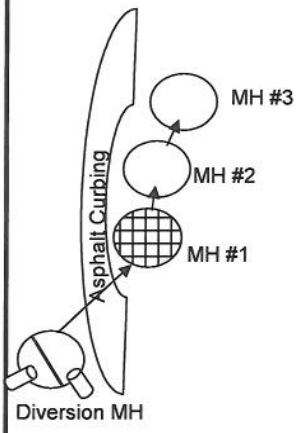
1st Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [X] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [X] None [ ] Little [ ] Moderate [ ] Heavy

2nd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [X] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

3rd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [X] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

Recommendations: Clean the first and third chambers.

If cleaned, how much sand/grit was removed? 0.0 Cubic Yards



ATTACHMENT G

Tank Name Dorrs Pond - Opp Papa Gino's - Site 4 Date: 07/30/10 **17' 5"**
Inspector(s): Rob Robinson & Jean Paul Gilbert

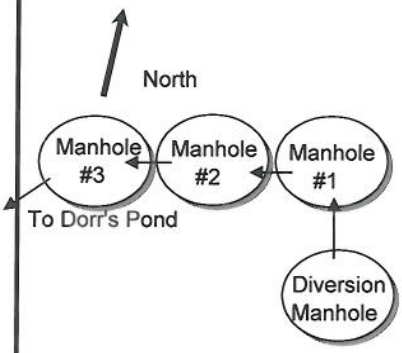
Inspect Diversion Manhole Sand Depth [X]<6" [ ]<12" [ ]Full
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

1st Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [X] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [X] Moderate [ ] Heavy

2nd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [X] Moderate [ ] Heavy

3rd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [X] Moderate [ ] Heavy
Recommendations: Clean the first chamber.

If cleaned, how much sand/grit was removed? 0.0 Cubic Yards



Semi-Annual Baffle Tank Inspection Form

Tank Name Hooksett Plaza- across from State Liquor Store Date: 07/30/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

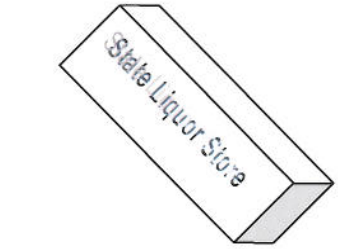
1st Inspection Port Information - Inspection Port over Swirl Concentrator
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy

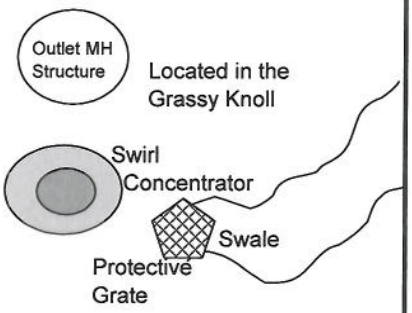
2nd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [X] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

3rd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [ ] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

Recommendations: Clean the structure. Remove the oil and grease.

If cleaned, how much sand/grit was removed? 0.0 Cubic Yards





Tank Name - Crystal Lake STS Date: 07/30/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

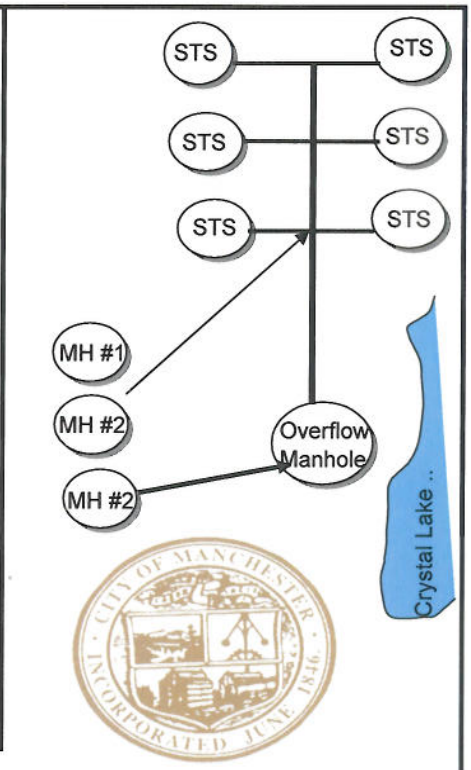
1st Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. - 1 - 2 ft
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [X] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [ ] YES [X] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy

2nd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 1 - 2 ft
Depth of sand: [ ] 1"- 3" [X] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [ ] YES [X] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

3rd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [ ] H20 depth/in.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [?] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

Recommendations: Clean both chambers.

If cleaned, how much sand/grit was removed? 0.0 Cubic Yards



Tank Name Corning Road Date: 7/30/2010

Inspector(s): Rob Robinson & Jean Paul Gilbert

1st Inspection Port Information Elev. To rim 12.ft
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 ft
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [X] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [X] None [ ] Little [ ] Moderate [ ] Heavy

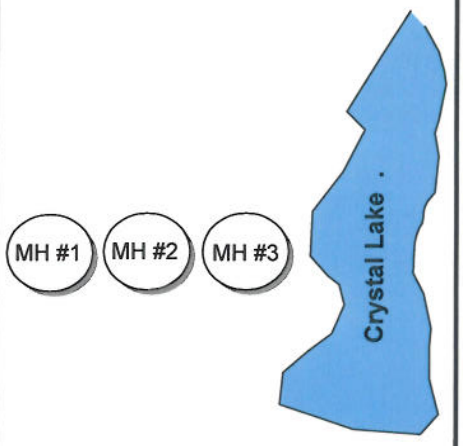
2nd Inspection Port Information Elev. To rim 11.5 ft.
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 ft.
Depth of sand: [ ] 1"- 3" [X] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

3rd Inspection Port Information Elev. To rim 11 ft.
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [ ] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

Recommendations: Clean the first two chambers.

If cleaned, how much sand/grit was removed? 0.0 Cubic Yard

Semi-Annual Baffle Tank Inspection Form



ATTACHMENT G

Tank Name Douglas St. - Vortechnics Date: 07/30/10 **17' 5"**
Inspector(s): Rob Robinson & Jean Paul Gilbert

Inspect Diversion Manhole Sand Depth [X]<6" [ ]<12" [ ]Full
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

1st Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy

2nd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy

3rd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy
Recommendations: Okay till fall.

If cleaned, how much sand/grit was removed? 0.0 Cubic Yards

ATTACHMENT G

Tank Name Nutts Pond South Inlet Date: 07/30/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

Baffle Tank
Water Appearance: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [X] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy

Recommendations: The floatables need to be cleaned. The structure cannot be fully cleaned because it cannot be isolated from the pond. The Henry's / South Inlet Forebay will capture the solids.

If cleaned, how much sand/grit was removed? N/A Cubic Yards

Semi-Annual Baffle Tank Inspection Form

Tank Name Nutts Pond North Inlet Date: 07/30/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

Baffle Tank
Water Appearance: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 3 - 4 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [X] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [ ] YES [X] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [X] None [ ] Little [ ] Moderate [ ] Heavy

Recommendations: The sediment and floatables are in the first chamber. The rod needs to be straightened again. It was damaged again. We will try a sleeve around it.

If cleaned, how much sand/grit was removed? 0.0 Cubic Yards

Tank Name Nutts Pond East Inlet Forebay Date: 6/29/2010 & 7/30/10
Inspector(s): Rob Robinson, Rob Robinson & Jean Paul Gilbert

Forebay
Water Appearance: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 3 - 4 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [X] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the forebay bottom? [ ] YES [X] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [ ] Moderate [X] Heavy

Recommendations: The forebay needs to be cleaned. The forebay was cleaned on 7/2/10. The secondary forebay needs to be cleaned. The primary forebay could use some further cleaning.

If cleaned, how much sand/grit was removed? 20 Cubic Yards

Semi-Annual Forebay Inspection Form

Tank Name Nutts Pond Henry's / South Inlet Fo Date: 07/30/10
Inspector(s): Rob Robinson, Rob Robinson & Jean Paul Gilbert

Forebay
Water Appearance: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 3 - 4 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the forebay bottom? [ ] YES [X] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [X] None [ ] Little [ ] Moderate [ ] Heavy

Recommendations: The forebay needs to be cleaned. The sediment is concentrated to the far end.

If cleaned, how much sand/grit was removed? Cubic Yards

ATTACHMENT G

Tank Name Dorrs Pond - KFC - 16' - Site 5 Date: 11/12/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

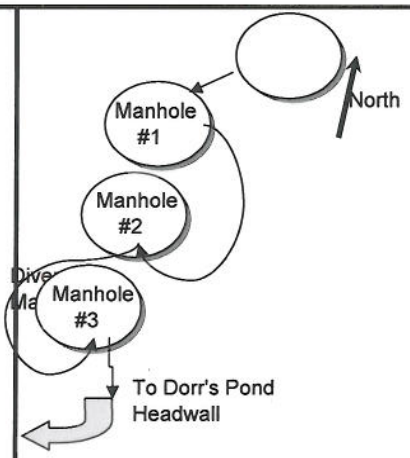
Inspect Diversion Manhole Sand Depth [X]<6" [ ]<12" [ ]Full
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

1st Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [X] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [ ] Moderate [X] Heavy

2nd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [X] 4"- 6" [ ] 7"- 9"] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [ ] Moderate [X] Heavy

3rd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [X] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [ ] Moderate [X] Heavy
Recommendations: Clean the first and third chamber.

If cleaned, how much sand/grit was removed? 0.0 Cubic Yards



Semi-Annual Baffle Tank Inspection Form

Tank Name Dorrs Pond - Headwall - 12' - Site 6 Date: 11/12/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

Inspect Diversion Manhole Sand Depth [X]<6" [ ]<12" [ ]Full
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

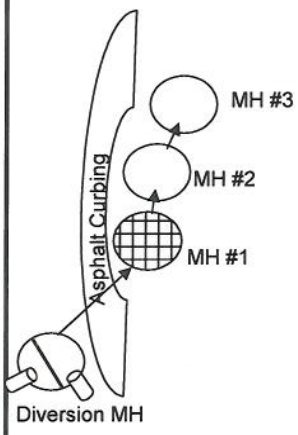
1st Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [X] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [X] None [ ] Little [ ] Moderate [ ] Heavy

2nd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [X] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

3rd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [X] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

Recommendations: All three chambers were cleaned.

If cleaned, how much sand/grit was removed? 3.0 Cubic Yards



Tank Name Dorrs Pond - Opp Papa Gino's - Site 4 Date: 11/12/10 **17' 5"**
Inspector(s): Rob Robinson & Jean Paul Gilbert

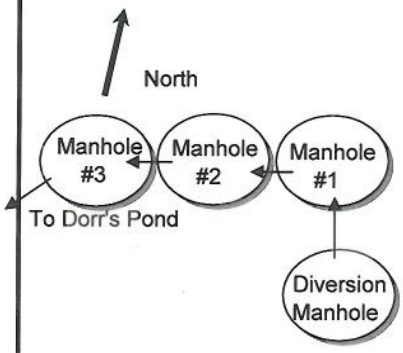
Inspect Diversion Manhole Sand Depth [X]<6" [ ]<12" [ ]Full
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

1st Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [X] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [X] Moderate [ ] Heavy

2nd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [X] Moderate [ ] Heavy

3rd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [X] Moderate [ ] Heavy
Recommendations: The first chamber was cleaned.

If cleaned, how much sand/grit was removed? 1.0 Cubic Yards



Semi-Annual Baffle Tank Inspection Form

Tank Name Hooksett Plaza- across from State Liquor Store Date: 11/12/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

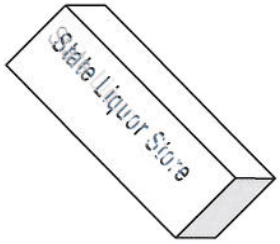
1st Inspection Port Information - Inspection Port over Swirl Concentrator
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy

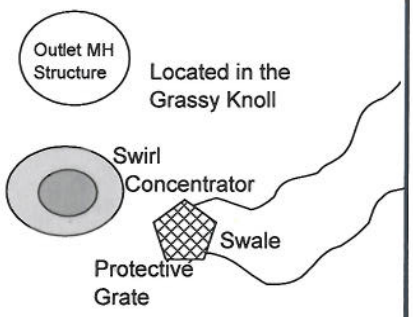
2nd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [X] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

3rd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [ ] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

Recommendations: Clean the structure. Remove the oil and grease. The structure was cleaned.

If cleaned, how much sand/grit was removed? 0.0 Cubic Yards





Tank Name - Crystal Lake STS Date: 11/10/10
Inspector(s): Tim Perkins & Paul Merserve

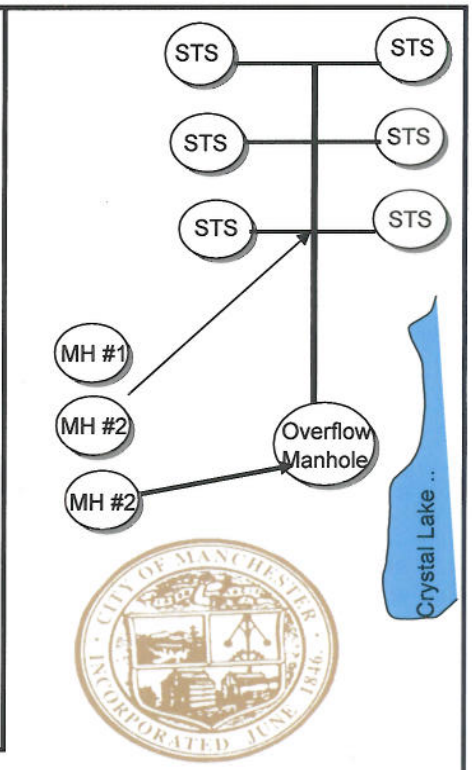
1st Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. - 1 - 2 ft
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [X] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [ ] YES [X] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy

2nd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 1 - 2 ft
Depth of sand: [ ] 1"- 3" [X] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [ ] YES [X] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

3rd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [ ] H20 depth/in.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [?] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

Recommendations: Cleaned on 11/10/10 and removed 3.0 cubic yards.

If cleaned, how much sand/grit was removed? 3.0 Cubic Yards



Tank Name Corning Road Date: 11/10/2010

Inspector(s): Tim Perkins & Paul Merserve

1st Inspection Port Information Elev. To rim 12.ft
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 ft
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [X] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [X] None [ ] Little [ ] Moderate [ ] Heavy

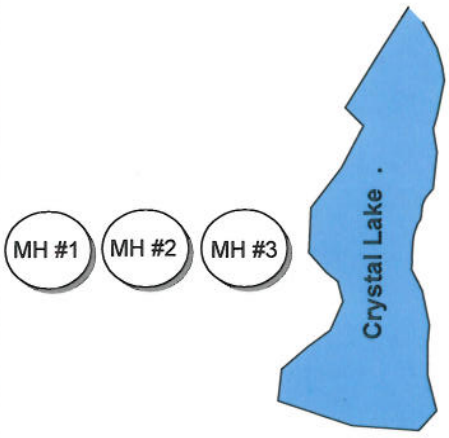
2nd Inspection Port Information Elev. To rim 11.5 ft.
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 ft.
Depth of sand: [ ] 1"- 3" [X] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

3rd Inspection Port Information Elev. To rim 11 ft.
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [ ] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

Recommendations: Cleaned on 11/10/10 and removed 1.0 cubic yards.

If cleaned, how much sand/grit was removed? 1.0 Cubic Yard

Semi-Annual Baffle Tank Inspection Form



Tank Name Douglas St. - Vortechnics Date: 11/12/10 **17' 5"**
Inspector(s): Rob Robinson & Jean Paul Gilbert

Inspect Diversion Manhole Sand Depth [X]<6" [ ]<12" [ ]Full
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair

1st Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [X] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy

2nd Inspection Port Information

Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.

Depth of sand: [ ] 1"- 3" [X] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy

3rd Inspection Port Information
Water Appearance in 1st Port: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [X] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy
Recommendations: The first two chambers were cleaned.

If cleaned, how much sand/grit was removed? 2.0 Cubic Yards

Semi-Annual Vortechnics Inspection Form

Tank Name Nutts Pond South Inlet Date: 11/12/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

Baffle Tank
Water Appearance: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [X] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy

Recommendations: The floatables need to be cleaned. The structure cannot be fully cleaned because it cannot be isolated from the pond. The Henry's / South Inlet Forebay will capture the solids.

If cleaned, how much sand/grit was removed? N/A Cubic Yards

Semi-Annual Baffle Tank Inspection Form

Tank Name Nutts Pond North Inlet Date: 11/12/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

Baffle Tank
Water Appearance: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 3 - 4 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [X] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [ ] YES [X] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [X] None [ ] Little [ ] Moderate [ ] Heavy

Recommendations: The sediment and floatables are in the first chamber. The rod needs to be straightened again. It was damaged again. We will try a sleeve around it.

If cleaned, how much sand/grit was removed? 0.0 Cubic Yards

Tank Name Nutts Pond East Inlet Forebay Date: 11/12/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

Forebay
Water Appearance: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 3 - 4 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [X] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the forebay bottom? [ ] YES [X] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [ ] Little [ ] Moderate [X] Heavy

Recommendations: The forebay needs to be cleaned. The forebay was cleaned on 7/2/10. The secondary forebay needs to be cleaned. The primary forebay could use some further cleaning.

If cleaned, how much sand/grit was removed? 0 Cubic Yards

Semi-Annual Forebay Inspection Form

Tank Name Nutts Pond Henry's / South Inlet Fo Date: 11/12/10
Inspector(s): Rob Robinson & Jean Paul Gilbert

Forebay
Water Appearance: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 3 - 4 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the forebay bottom? [ ] YES [X] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [X] None [ ] Little [ ] Moderate [ ] Heavy

Recommendations: The forebay needs to be cleaned. The sediment is concentrated to the far end.

If cleaned, how much sand/grit was removed? 0 Cubic Yards

ATTACHMENT G

Tank Name Woodgate Court 10' Dia. DMH Date: 11/12/10
Inspector(s): Tim Perkins & Paul Merserve

Baffle Tank
Water Appearance: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 2 - 3 ft.
Depth of sand: [ ] 1"- 3" [ ] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [X] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [X] YES [ ] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [ ] None [X] Little [ ] Moderate [ ] Heavy

Recommendations: Cleaned the DMH and removed approximately 4.0 cubic yards. This is a new structure and this material flushed from the drain line.

If cleaned, how much sand/grit was removed? 4.0 Cubic Yards

Semi-Annual Inspection Form

Tank Name Woodgate Court DS CB Date: 11/12/10
Inspector(s): Tim Perkins & Paul Merserve

Baffle Tank
Water Appearance: [ ] dry [ ] odor [ ] oily [X] H20 depth/in. 3 - 4 ft.
Depth of sand: [ ] 1"- 3" [X] 4"- 6" [ ] 7"- 9" [ ] 10"- 12" [ ] 1 - 2 feet [ ] > 2ft.
Does the sand seem to be evenly distributed throughout the tank bottom? [ ] YES [X] NO
Structural Condition: [X] Excellent [ ] Very Good [ ] Good [ ] Fair [ ] Poor [ ] Repair
Weed/brush growth around tank: [X] None [ ] Little [ ] Moderate [ ] Heavy

Recommendations: The CB is fine and can be checked and cleaned in the spring. This is a new structure.

If cleaned, how much sand/grit was removed? 0.0 Cubic Yards

ATTACHMENT H

1 hour

Stormwater Training Program
Sewer Crew and Engineering Staff

1. **Woodgate Court Drainage Project;**
2. **Woodgate Court Drainage Project BMP Maintenance;**
3. **Tour of Woodgate Court Drainage Project;**
4. **Wrap Up**

Date	Day	Time	Location
(1) 4/14/2011	**Thursday**	**8:30 AM**	**Woodgate Court**
(2) 4/15/2011	Friday	8:30 AM	Woodgate Court

Training Session # Year 8 - Training

Name of People Attending:

Robert Robinson		
Marc Montville	Tom Moran	
Dan Richards		
Rick Philbert	Mike Dekk	
Jeff Marcoux	Phil Dorgan	
Jean Cullen	Rick LeBlanc	
Norm Pomerleau		

ATTACHMENT H

1 hour

Stormwater Training Program
Sewer Crew and Engineering Staff

1. **Woodgate Court Drainage Project;**
2. **Woodgate Court Drainage Project BMP Maintenance;**
3. **Tour of Woodgate Court Drainage Project;**
4. **Wrap Up**

Date	Day	Time	Location
(1) 4/14/2011	Thursday	8:30 AM	Woodgate Court
(2) 4/15/2011	**Friday**	**8:30 AM**	**Woodgate Court**

Training Session # Year 8 - Training

Name of People Attending: Robert Robitaille, Dennis Austin, Carl Messina, David Winslow, Jay Wadleigh, Tom Cronin, Brian Fitzpatrick