

NH Public Works Association

COMMUNITY PROFILE:

Rochester, NH

Submitted by Kürt Blomquist, DPW Director, Keene

The City of Rochester is a community of 29,757 residents and approximately 48 square miles in size. Rochester, known as the "Lilac City," is located in southeastern New Hampshire.

It is the largest city in the seacoast and fourth largest city in the state. The City has a City Council/City Manger form of government.



The Rochester Public Works Department is responsible for snow removal, construction and repair of city streets, sidewalks, sewer and storm water systems, water and wastewater treatment, engineering and construction management of City projects, vehicle and equipment maintenance, and buildings and grounds maintenance. The department has eight divisions with 53 full-time and three part-time employees. The department's five-year operating budget is \$14M. The five-year capital improvement program is \$58M.

Rochester has several large projects managed by the Public Works Department. These activities are under the watchful eyes of Melodie Esterberg, public works director and Tom Willis, city engineer. The projects include a seven million inflow and infiltration sewer program, and a seven million reconstruction project that will enhance and replace aging infrastructure under South Main Street.

WHAT'S WRONG WITH THIS PHOTO?



Section 2C.41 Nonvehicular Signs of the MUTCD states that "Standard: When used at the crossing, Nonvehicular signs shall be supplemented with a diagonal downward pointing arrow (W16-7p) plaque showing the location of the crossing." In addition, section 2A.16 of the MUTCD explains the posting of signs on individual posts.

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PRESIDENT'S MESSAGE

Summer has ended. We are now preoccupied with completing construction and other maintenance projects before winter. We have begun to monitor the weather more closely.

I hope to see everyone at the LGC Annual Conference. On Thursday, November 16th, NHPWA will be sponsoring sessions on storm water with speakers from EPA Region 1 and dam safety with speakers from NHDES.

As 2006 comes to an end, I say it was another memorial year in Public Works. Floods tested the Public Works Mutual Aid system, and again communities rose to the challenge by providing essential services to their neighbors and fellow citizens. Construction projects continue around the State and I am always amazed how much work is occurring.

I want to thank the NHPWA Board members for their hard work and leadership. I want to especially thank, Kathy DesRoches from the UNH Technology Transfer Center, because she is always willing to volunteer when asked for help. Bob Barry, NHDOT, retired in July. Bob has assisted many of us in Public Works over the years. I want to wish him the best and thank him for his service on the board.

If you have an idea for a technical session or seminar, please approach one of the board members. Better yet, help coordinate the session. Many of the programs that are offered for the Public Works community are organized and run by volunteers. So step out of your comfort zone and experience the great aspects of the Public Works community.

Kürt Blomquist, President

MEET PETER CAPANO

*Peter Capano, Chief Inspector, Manchester
Submitted by Dave Lent, Deputy Public Works Director,
Merrimack*

Peter Capano is the Manchester Highway Department's chief inspector. He's held this position for nineteen years. Previously, he worked for a Manchester firm performing infiltration and inflow studies on sanitary sewer collection systems and with an engineering firm inspecting sewer construction. He jokes that he knows the sewer business "inside and out."



Currently, Peter's staff includes two utility inspectors, one sewer inspector, and one subdivision inspector. They monitor about 800 excavation permits each year. Peter's favorite projects include rehabilitation of Gill Stadium where the NH Fisher Cats play, the closing of Manchester's landfill, gunite lining of a one hundred year old "egg-shaped" brick sewer, and several intersection reconstruction projects.

Peter graduated from the University of Maine, and has been known to tease the UNH alumni in his office when the Black Bears overpower the Wildcats on the ice.

Peter was named Cubmaster of the Year in 1996. He served as Mayor's Designate to the Manchester Planning Board for the last three mayors. Peter coached recreational and travel soccer teams for ten years. He is in his third year of calling high school soccer games on Manchester's local access cable station.

Peter and his wife, Sue, have two children. Their son works at Manchester-Boston Regional Airport and their daughter is a senior at Central High School. Sue plans to retire from her teaching position at Concord High School next June.

Peter is serving his first term on the NHPWA Board of Directors.

MANCHESTER IMPLEMENTS STORMWATER TREATMENT

Submitted By: Peter Capano

Written By: Rick Cantu and Frederick J. McNeill, P.E.

The City of Manchester's Environmental Protection Division has a ten-year \$50 million combined sewer overflow (CSO) abatement program. In many of Manchester's older areas, drainage and sewer run in the same pipeline. During heavy rain, pipe capacity may be exceeded and excess water (sometimes containing sewage), is discharged into the Piscataquog River. To eliminate this, the CSOs on the west side were closed during the first phase of the project. The program is about 75% completed. Construction is scheduled to end in 2009. The City will then begin Phase II, which will focus on problem areas on the east side.

As part of this project, many drainage infrastructure improvements on piping, catch basins, and earthen swales were installed. New and innovative technologies such as baffle tanks, deep sump basins, and treatment systems were also installed. The City installed three baffle tanks around Dorr's Pond and one at Crystal Lake. Deep sump basins at Nutts Pond will be installed To control sediment build-up .

In 2004, the City installed a Vortechinics stormwater treatment unit on Douglas Street to address non-point pollutants generated by stormwater runoff. The system is a three chamber pre-cast concrete unit with an energy dispersing grit chamber, to remove settable materials. An aluminum hydraulic separator retains floatables, oil, and grease from stormwater.

The grit chamber has two baffle walls to reduce the velocity of the incoming water, which causes debris to drop out. Openings in the first baffle wall allow the flow to exit while passing from the grit chamber. This results in a swirling motion in the second chamber. The swirling allows flow to proceed into the third chamber and pushes the floating pollutants to the center of the circular aluminum separator, which traps the debris. The circular baffle also acts as an en-

ergy dissipater, allowing discharge to flow from the unit to the area outfall.

The Vortechinics unit measures L16 ft x W10 ft x D6 ft and was installed at about 1.5 feet below grade. Manchester's system can treat nine cubic feet per second, a six month rain event. A bypass pipe was installed around the unit to handle rain if a larger event occurs. This criteria was chosen because most stormwater pollutants are contained in the runoff during the early stages of a rain event. During a lengthy event, stormwater becomes less polluted.

Manchester's unit was installed in May of 2004. It was cleaned six months later. At that time, a 55-gallon trash bag of floatable materials and about 3.5 cubic yards of sand were removed. The City plans to use a Vactor truck to clean the unit every six months. As the city wraps up Phase I of their CSO program, and begins planning for Phase II, they will continue to utilize new and innovative stormwater systems to address non-point pollution and to protect our local waterways.



The unit holds captured debris for recycling.

NHPWA
c/o LGC
PO Box 617
Concord NH 03302

CALENDAR

► **NHPWA board meeting:** Friday, December 15, 2006 @ 9am

NH Public Works
Association

This is a quarterly publication. For submissions, contact:

Kathryn Myers
Educational Program Assistant
UNH Technology Transfer Center
33 College Road
Durham NH 03824
(603) 862-1362
kclaytor@unh.edu

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Individual Membership \$25.00

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Membership term expires June 30, 2007.

Detach and mail this form along with payment to:

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