

Minutes of the Regular Monthly Meeting of the  
Suffield Water Pollution Control Authority  
Suffield Water Pollution Treatment Facility  
844 East St. South, Suffield, CT 06078  
October 11, 2016

**MEMBERS PRESENT:** Chairman Bruce Remington, Wallace Rodger, Kris Barthelmeess, Roger Ives, Janet Davis, John P Murphy, Charles Roumas

**ALSO PRESENT:** Superintendent Shane McCannon, Business Administrator Julie Nigro, Assistant Business Administrator Kira Kilosky, Attorney Michael Lanza, Charlie Rinaldi, Mark O'Neil

**CALL TO ORDER:** Chairman Bruce Remington called the Regular Monthly Meeting for October 11, 2016 to order at 7:00 p.m., and requested that Julie Nigro read the Roll Call. Ms. Nigro noted the presence of Chairman Bruce Remington, Commissioners Wallace Rodger, Kris Barthelmeess, Janet Davis, Roger Ives, and John P Murphy arrived at 7:15 p.m. and Charles Roumas arrived at 7:20 p.m. Also present, Superintendent Shane McCannon, Assistant Business Administrator Kira Kilosky, and herself, Business Administrator Julie Nigro, as well as Attorney Michael Lanza and Charlie Rinaldi of Hickory Street Partners, and Mark O'Neil of Hamlet Homes arrived at 7:50 p.m.

**APPROVAL OF MINUTES:** Wallace Rodger made a motion to approve the Regular Meeting Minutes of September 13, 2016. Kris Barthelmeess seconded the motion; it passed unanimously.

**CITIZEN INPUT:** None

**CHANGES TO THE AGENDA:** Wallace Rodger made a motion to add to the agenda an Executive Session to discuss Personnel issues. Kris Barthelmeess seconded the motion; it passed unanimously.

**TREASURER'S REPORT:** Wallace Rodger moved to disperse from the Administration Fund for Accounts Payable for 2015/2016 \$836.51. Kris Barthelmeess seconded the motion. It passed unanimously. Wallace Rodger moved to disperse from the Administration Fund for Accounts Payable for 2016/2017 \$82,485.10. Kris Barthelmeess seconded the motion. Mr. Rodger went over the expenses over \$1,000. It passed unanimously. Wallace Rodger moved to disperse from the RCM fund for 2015/2016 \$10,761.07. Kris Barthelmeess seconded the motion. Mr. Rodger went over the expenses over \$1,000. It passed unanimously. Wallace Rodger moved to disperse from the Administration Fund \$86,073.46, for September payroll. Kris Barthelmeess seconded the motion; it passed unanimously.

**COMMITTEE REPORTS:** *Planning Committee* – Nothing to report

**SUPERINTENDENT'S REPORT:** Superintendent Shane McCannon reported as follows:  
Plant flow for September averaged 0.87 mgd. Of that flow, 0.272 mgd was from the Prison and 72,688 gpd was from HOOD.

BOD & TSS removal were both 99%.

Nitrogen – The plant averaged 15 lbs. /day for September and the limit is 45 lbs. /day. The total nitrogen concentration (TN) was 2.1 mg/L.

**MISC.:** Shane McCannon stated that the Prison's flow meter was running 5% low and their flow meter was recalibrated.

**\*PLEASE SEE ATTACHED SUPERINTENDENT'S REPORT\***

**BUSINESS ADMINISTRATOR'S REPORT:** Julie Nigro went over the August financials. Ms. Nigro provided two variance reports. One showing all actual expenses through the end of August versus the budget, this variance report shows we are 84% unexpended versus 83% expected at this time. The other variance report shows accrued expenses taking into consideration all the front loaded expenses, this variance report shows we are 87% unexpended versus 83% expected at this time. Ms. Nigro stated she billed the prison their first quarter bill in

the amount of \$162,181.73. The auditors will be in November 8<sup>th</sup> and 9<sup>th</sup> to go over the 2015/2016 fiscal period. Regarding the delinquent accounts, Kira Kilosky stated that we received a little over \$3,900 or a little more than 15.3%. Two accounts paid in full in September. Attorney Michael Lanza stated that he feels the WPCA's collection rate is pretty normal compared to most other Towns. He suggested that right now we should begin reviewing delinquent accounts on an annual basis instead of waiting the three years. He stated that the more homeowners get behind the harder it is for them to pay.

**CORRESPONDENCE:** None

**OLD BUSINESS:** a. Ongoing Capital Projects –

- Stony Brook Erosion Repairs – Shane McCannon stated that the survey was completed October 10, 2016. Now, Woodard and Curran will be able to make their final design modifications and hopefully at the second Conservation Commission meeting of October we will have our project approved. We should start construction by November 1, 2016. Shane McCannon explained that we also need to come up with a design for repair to the original damaged piers. Army Corp. of Engineers was owed that design by July; we explained why we are late on our submission.
- Instrumentation/Control and Process Equipment Upgrade – Shane McCannon stated that we are 90% complete at this time. The final systems are being brought online, and should be done by the end of October.

b. Capital Projects Update – Spreadsheet – Shane McCannon stated that Julie Nigro and he are working on a spreadsheet of all the Capital Projects showing percentage completed and costs. It is not complete at this time, but the spreadsheet will be emailed to the Commission before November's meeting.

c. Route 75 Interceptor Pipe Update – Shane McCannon stated that the WPCA ended up paying for a small portion of the project. This was in order to protect our manholes. The first phase of the project is nearly complete.

d. Update – Hickory Street LPSS – Charlie Rinaldi stated that the installation of sewer pipe on Hickory Street will begin this month. There is a meeting scheduled for October 18, 2016 with Shane McCannon as well as the contractors for this project. Bruce Remington asked Mr. Rinaldi who his contractors are. Mr. Rinaldi stated that he is working with Suburban Sanitation Service out of Canton, CT. Charlie Rinaldi stated that he would like to inquire on how the Benefit Assessment amount is determined for abutters to the pipeline he is installing. Julie Nigro stated that she looked into some old Minutes and in 2002 there was a situation on Halladay Ave. where a resident proposed the same. In that situation the homeowners paid the full Benefit Assessment at that time. Ms. Nigro continued stating that there was another issue on Prospect St. in 2002, and that one was the opposite. The homeowners paid the Developer's rate. However, Ms. Nigro is unsure of the circumstances in each case. Whether the developer recovered anything from the homeowner, she's not sure since it is not stated anywhere. Julie Nigro explained that we will be having a rate study conducted, and by the time these properties have to connect to the sewer the rate structure may be completely different. Charlie Rinaldi explained that he is installing the sewer pipe and the "T's" for the abutting properties to connect. He feels that since he is paying for the cost of the sewer pipe that a portion of the Benefit Assessment should go to him - the Developer. Bruce Remington asked Mr. Rinaldi if the Commission can hold off on an answer until we can get all the details including the new rates. Mr. Rinaldi agreed.

**NEW BUSINESS:** a. JK Muir – Renewable Energy and Anaerobic Digestion Evaluation – Shane McCannon stated that a Commission member inquired about renewable energy projects that had potential for this facility. JK Muir is a company that focuses on energy projects. Jen Muir was asked to put together a proposal for comparing renewable energy alternatives that will best suit this facility. Mr. McCannon stated that the proposal will be emailed to the Commission members.

b. Personnel Files – HR – Julie Nigro stated that the issue has been resolved with the advice of our attorney. The new hire signed a release for a copy of his Personnel file to be released to the WPCA.

c. Personnel – Vacation Time Accrual Policy for Union and Non-Union Employees – Shane McCannon stated that one of the WPCA employees has 45 accrued vacation days. That time has been carried over from year to year. The policy from 2002 states that a maximum of five (5) days can be carried over. There is a payout option or we can ask the employee to use all accrued vacation time. Julie Nigro stated that we should either adjust the policy or we need to budget for such instances. Ms. Nigro read the current policy from 2002 set by the WPCA. Bruce Remington stated that it is up to Mr. McCannon on whether to pay out the vacation time or allow the employee to use accrued vacation time by June 30, 2017. Kris Barthelness stated that in this case it is fair to pay him out because some of the vacation time this employee was unable to take due to him being needed at the WPCA. Attorney Michael Lanza suggested having each employee sign a statement stating that no one is allowed to accrue more than five (5) days of vacation time per year. Julie Nigro stated that the understanding is that this employee is to be paid out or take his vacation time, as determined by Shane McCannon and the employee, and this is to be done by June 30, 2017. Bruce Remington stated that any time taken off has to be at the discretion of the Superintendent.

**APPLICATION REQUESTS – OLD:** a. Fiddlehead Fields – Approval and Developer's Agreement – Shane McCannon stated that Fiddlehead Fields resubmitted their Planning Application with the one detail corrected. Kris Barthelness made a motion to accept the Planning Application for Fiddlehead Fields and approve the Developer's Agreement. Wallace Rodger seconded the motion; it passed unanimously.

b. Suffield Academy – Planning Applications – Shane McCannon stated that Suffield Academy resubmitted their Planning Applications with the details corrected. Kris Barthelness made a motion to accept the Planning Applications from Suffield Academy. Wallace Rodger seconded the motion; it passed unanimously.

c. Broad Brook Brewery – Planning Application - Shane McCannon stated that the WPCA received a Planning Application for the Broad Brook Brewery at the Mach One site on Route 75. Julie Nigro, Jim Rusczyk and he took a tour of the facility in Broad Brook. Mr. McCannon stated that he was originally concerned about the load to the facility, and has since done a lot of research. Also, sampling of what is leaving that processing plant was sampled by us here at the WPCA - which ended up being lower than expected and the flows are within capacity of the pipes. Shane McCannon recommended the Commission approve the Planning Application. Kris Barthelness made a motion to approve the Planning Application for Broad Brook Brewery. Charles Roumas seconded the motion; it passed unanimously.

**EXECUTIVE SESSION:** Kris Barthelness made a motion to enter Executive Session to discuss Personnel issues with Commission members present only at 8:45 p.m. Wallace Rodger seconded the motion; it passed unanimously. Kris Barthelness made a motion to close Executive Session and reopen the Regular Monthly Meeting at 8:52 p.m. Charles Roumas seconded the motion; it passed unanimously.

**ADJOURNMENT:** Wallace Rodger made a motion to adjourn the Regular Meeting of October 11, 2016 at 8:52 p.m. Kris Barthelness seconded the motion; it passed unanimously. Kris Barthelness made a motion to reopen the Regular Meeting at 8:52 p.m. in order to discuss the rate study. Charles Roumas seconded the motion; it passed unanimously.

**CHANGES TO AGENDA:** Wallace Rodger made a motion to add to the agenda discussion of Rate Study. Kris Barthelness seconded the motion; it passed unanimously.

**NEW BUSINESS:** Rate Study – Shane McCannon explained the Facilities Plan that was delayed will be approached differently, it included a financial analysis. A financial analysis will look at our fees, our rate structures as they apply to industrial/commercial/residential accounts, benefit assessments, connection charges, etc. Mr. McCannon stated that he gave three (3)

qualifying engineering firms the same scope for which they could bid on. We are going to receive a model created for our WPCA, simplified in Microsoft Excel for us to use the analysis and adjust as needed as certain factors may change. We received three (3) prices; the highest price was \$19,500 from Woodard and Curran, the lowest price was \$16,700 from Fuss and O'Neill. Lastly, in the middle was Tighe and Bond with a price of \$19,100. Kris Barthelmess suggested having a copy of each engineering company's rate study proposal send to the Commission members for review. Janet Davis suggested a Special Meeting to discuss the rate study proposal, since they will be sent out and able to be reviewed by the Commission before making a decision. Kris Barthelmess made a motion to hold a Special Meeting on October 18, 2016 at 7:00 p.m. to discuss the rate study. Wallace Rodger seconded the motion; it passed unanimously.

**ADJOURNMENT:** Kris Barthelmess made a motion to adjourn the Regular Meeting of October 11, 2016 at 9:20 p.m. Wallace Rodger seconded the motion; it passed unanimously.

Respectfully submitted,



Kira Kilosky, Assistant Business Administrator

Suffield Water Pollution Control Authority

Monthly Operations Report – October 2016

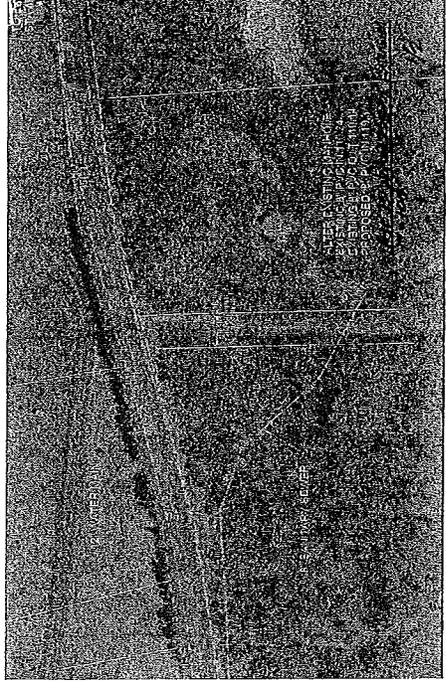


Manhole on the Route 75 Easement for new Interceptor



Above – New Easement for Route 75 Interceptor, Oct. 2016

Below – Abbreviated Route 75 Interceptor plan (aerial view)



### Staffing/Technical Training

Mike Koczera was hired to fill the vacant Maintainer position. His first day will be October, 3, 2016. Karen Ziembra (Town of Suffield H.R. Director) will provide the initial orientation/registration for Mike on his first day, and the WPCA will continue that effort in October. The WPCA is working with Karin to develop a standard training checklist for WPCA new hires. Mike will be the first employee to go through the new process.

### Environmental Health and Safety

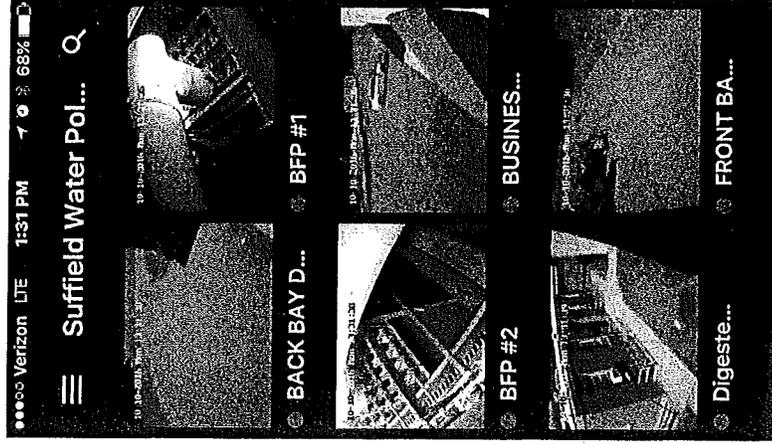
There were no safety incidents or near misses to report in September, 2016.

Mike Koczera, our newly hired employee, completed his introductory Confined Space Training on October 8, 2016. The training program was provided by Safety Priority Consultant LLC.

Staff reviewed the safety training folders of all employees and compiled a list to determine where we may need to strengthen our safety training needs. We will use this list to identify any employees who may not have had certain training programs and bring them up to par along with our new hire. For some topics, we will reach out to Town departments to see if they would like to participate in any "in-house" training sessions to spread the training over a larger group, if possible. This will also help with the training cost

The new CCTV system was installed by COX Business Security in late September. COX was selected due to the low cost, quality of the system, and long term cost and maintenance concerns. The maintenance of the system and the server will belong to COX for a small monthly fee included in the service cost. That will be the most efficient way to keep the lifecycle cost down. A picture of the camera view from one of the facilities smart phone is below. The camera system can be accessed from any computer in the facility as well as

any smart phone that is set up for the application. There are three security access levels, and the application was also shared with the Police Department so they can monitor the facility from the station along with all other Town Buildings which have similar systems.



### Visitors

The facility has several visitors in September. Most were related to the ongoing Capital Projects and various projects in Planning.

### Facility Tours

There was one facility tour in October, 2016. Brian Armet, P.E., Shane's previous boss from Mattabassett District (2000 - 2012), toured

the facility on September 9, 2016. He was very impressed with the appearance and condition of the facility.

Shane McCannon (Plant Superintendent), Julie Nigro (Business Administrator), and Wally Roger (WPCA commissioner), attended a tour and luncheon provided by the Suffield Economic Development Commission on September 21, 2016.

#### Correspondence -

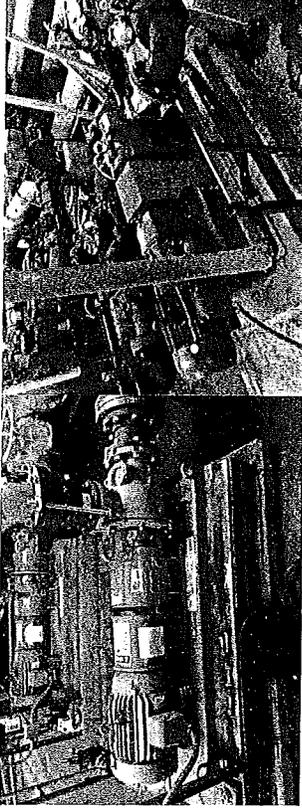
A member of the Windsor Locks Canal conservation group stopped in to update staff on the status of some of his ideas for how to improve the canal. This very informal discussion included many "out of the box ideas" from both sides of the table which included energy conservation and treated plant water re-use and conservation.

#### Capital Projects (Plant)

The following plant and collection system projects are in progress or in the planning stages:

#### In Progress -

- 1) New SCADA System - Replace antiquated and poorly designed SCADA system (>15 years old) to improve process reliability, reduce corrective maintenance related to unplanned failures, improve facility energy efficiency, resource use efficiency, and reduce manually run operations of several processes. Reduces several risk factors both short and long term.
- 2) Equipment Upgrade/Energy Project - Phase one projects include replacing core process equipment: Return Activated Sludge Pumps (RAS), Waste Activated Sludge Pumps (WAS), Plant Water System Pumps (PWS), Belt Filter Press Sludge Pumps (BFP), Plant Water Strainer.



Above - New RAS pump (left) and new WAS pump (right)

- 3) CCTV security system - improve security and monitoring of the facility and operations.
- 4) Stony Brook erosion control - Repair erosion to Stony Brook banks near WPCA critical infrastructure. Survey of abutting property owners to be completed in October. Work will resume once approved by Suffield Conservation commission.

\*\*\* The requested list of Capital Projects with costs and projections will be distributed at the October WPCA meeting.

#### In Planning Stages-

- 1) Install new Bar Rack to improve removal of large solids (rags/sticks/etc.) entering the facility which is a major cause of mechanical failure in the plant.
- 2) Repair/Replace Aeration tank Mechanical Aerator's - Core equipment is among the most critical of all assets and most energy intensive process. Will be combined with Phase 2 Energy/Capital improvements.
- 3) HVAC Improvements - Replace 30 year old Boiler and controls with new and efficient system (Phase 2 Energy Project).
- 4) Replace Sludge Storage Blowers (Phase 2 Energy Project)

5) Phase 2 SCADA replacements – to eliminate old and antiquated equipment and increase monitoring capability.

### Septage Receiving

The facility received 22,775 gallons of Septage in September 2016.

There was a small decrease in Septage received since the new system was implemented and we will track the causes and effects over the next several months.

### Plant Operations

The treatment plant is running well, but the equipment replacement projects have created some challenges during construction. Staff has handled them well and their help and attention to detail has been excellent. Most projects will create various obstacles and this is just one example of where our staff shows their value. We are optimistic that the projects will be completed by the end of October, just in time to start a new round of Projects heading into the New Year.

As a reminder, last August we had an issue with our Ultraviolet disinfection system and process which caused a fecal coliform bacteria permit limit violation. The final corrective action will be completed when the new method of controlling the aeration project is completed. It will provide for increased system capability to accommodate high strength loads; such as Hood.

Our ability to collect flow proportional samples with our automatic effluent sampler failed in early September. The NPDES permit requires that we collect most permit related samples in a using flow proportional method. We found that the circuit board was not receiving its flow signal from the plant effluent flow meter, so we immediately reported the issue to DEEP once we identified it, and placed the sampler in “time” mode as required. The sampler is over 25 years old. We ordered a new one and will improve it monitoring

capabilities through SCADA. The laboratory operator and shift supervisor also attended a class to improve knowledge of this testing procedure.

The monthly Discharge Monitoring report and Nutrient Analysis Reports were submitted to DEEP as required. The monthly total nitrogen concentration (TN) was 2.1 mg/l. Our ability to remove nitrogen has been impacted due to the ongoing SCADA system improvements. Most systems related to its control have been in manual for several months but that will soon be corrected. A performance trend is attached.

Staff completed the quarterly inspection of the Storm water discharge as required by the General Permit. As a reminder, staff took over this responsibility from the contractor hired through DPW.

We removed 99% of both BOD and Suspended solids, again this month.

Hood BOD loading was 2097 lbs. /day. They were 44% of the plants BOD load. They were 8.8% of the flow again.

All coliform levels were well within the permit limits. We removed the system from service on October 1; as required by the permit.

### Laboratory Operations

The Kent Farms community wastewater disposal site was tested in August, and the results were submitted to DEEP in September.

Staff completed the 2016 laboratory proficiency test and submitted it as required prior to the August deadline. One parameter, biochemical oxygen demand, was reported as not acceptable to DEEP. This test can be very complicated in various ways, and we determined that the “seed” we used for the test was not reliable. We purchased a new test and a standard and reliable “seed” mixture. The results of the re-test

were acceptable and we will include the new procedure in our Standard Procedures for the future.

### Plant Flows

Plant flows remained low due to dry conditions. The average daily flow was again 0.87MGD. The prison contributed 0.272MGD, and 72,688 gpd was from Hood. The prison flow meter was calibrated in late September, 2016. It was found to be reading approximately 5% lower than it should be, which is the cause of the reduced flow values we noticed on the trend. This meter is calibrated twice a year.

### Sludge Dewatering and Disposal

The plant transported 612,040 pounds of sludge cake which was transported to MDC. The average sludge cake concentration was 14%.

### Maintenance

There were several maintenance items completed in October. Staff spent a majority of their time working with contractors on the equipment installations.

- 1) The Prison Interceptor was cleaned by McVac Environmental. The line was partially plugged for several months and our efforts to clean it were not working so we called in a contractor that had better equipment. The line was cleaned and we also did CCTV on the line to verify the condition.
- 2) Staff replaced the Air compressor which failed due to age.
- 3) A wide variety of preventive maintenance tasks were completed, including generators, clarifiers, battery checks, belt filter presses, and plant grounds.
- 4) CT water replaced one of our water meters. They noted that the valves on the water meter pit needed to be replaced. They replaced the

meters due to age, but also due to the dramatic decrease in our water use which was not a meter issue. We are projecting an 80- 90% reduction in potable water use from 2015 – 2016 due to staff efforts.

- 5) Staff pumped out all electrical access manholes. We found them full of water, including the main incoming power lines! This will be added to the preventive maintenance list.

### Energy

The Energy Use graph is attached for review.

In September or early October, Ovivo Inc. (our aerator system designer) will be on site to inspect the #1 Aerator which has exhibited severe signs of wear. The impeller will most likely be replaced. A picture of the tank and impeller is below.



### Collection System and Pump Stations

- Staff inspected one new sewer connection.
  - Several "Call before you Dig" requests were completed by staff.
- 3) Steve Marquis completed an emergency repair of one manhole cover on East Halliday Street.
- 4) Staff called in Alternative Generator to repair a generator issue at pump station 11,

### Customer Complaints

There were 2 customer complaints to address in October, 2016.

- 1) For the second year in a row, a resident on South Main Street resident called to complain of a sewage smell in her home. We have yet to find the source of the smell. We are working with the resident to identify this "fugitive odor".
- 2) A resident on Juniper lane called to report a sewer odor. Staff responded and found the source was internal.

### Facility Odor Complaints:

There were no odor complaints from the facility to report in September, 2016.

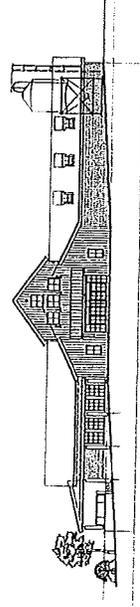
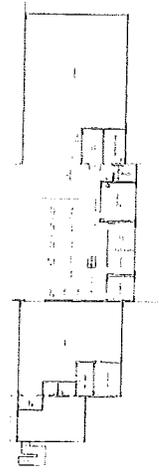
### Call out/Call back:

There were 3 after hour's emergency call-in incidents. They were all related to pump station power failures.

### Sewer Development:

- The Fiddlehead Fields Low pressure sewer project was approved from a technical perspective and a developer's

- agreement was created. Once we receive all of the deliverables, a sewer extension permit will be issued.
- The Suffield Academy sewer modification was reviewed and approved by staff.
  - Roes Hill development – The main sewer is installed but the remainders of the connections to the sewer are not complete. We will inspect them as they are installed.
  - The Town funded Route 75 sewer expansion (abbreviated version as pictured on the cover) is almost completed. The WPCA requested some changes to the manhole construction to improve long term maintenance and access.
  - The Hickory Street Low pressure sewer project is fully approved and "shovel ready". We are just waiting on a start date from the developer.
  - Staff attended a tour of the Broad brook Brewery to view their process. They are planning to move to Suffield and expand their operation. We wanted to make sure we were able to make the most appropriate decision on the planning application. Brewery wastewater can have a significant impact on treatment. The concept drawing is attached. It will be located in the Suffield Industrial Area on Route 75 near the airport. A picture is below.



PROPOSED FRONT ELEVATION (EAST)