### **TOWN OF WAYLAND - TOWN CLERK'S OFFICE**

## NOTICE OF MEETINGS OF TOWN BOARDS/COMMITTEES/COMMISSIONS

Posted in accordance with the provisions of the Open Meeting Law

NAME OF BOARD/COMM: Wayland Wastewater Management District Commission

FILED By: Jane Capasso

DATE OF MEETING: Wednesday, 8 Nov 2017

TIME OF MEETING: 7:30 PM

PLACE OF MEETING: Wayland Town Building

#### PROPOSED AGENDA

Note: Items may not be discussed in the order listed or at the specific time. Times are approximate.

- 7:30 1. Call to order
- 7:31 2. Public comment
- 7:35 3. Welcome to new WWMDC member, Uday Virkud. Uday was appointed by the Selectmen on 30 Oct 2017 after he expressed interest in joining. The chair appreciates his volunteering to serve.
- 4. Presentation of memo from Town Engineer Paul Brinkman indicating feasibility of adding 5,250 gpd of Title V design flow. Chair proposes motion: that the WWMDC approve an additional 5,250 gpd of Title V design flow for a 150-seat restaurant at 60 66 Andrew Ave, that the WWMDC require privilege fee of 150 seats \* 35 gpd/seat \* \$65.07/gpd = \$341,617.50 to be paid, that all approvals be obtained by National Development utilizing the application in place, and that operational fees be collected starting on 8 Nov 2017.

With the additional allocation of design flow, the aggregate Title V design flow for the entire system is about 77,000+5250 = 82,250 gpd. If the actual new flow from this restaurant is half the design flow (the usual assumption), then the aggregate actual flow will be about 28,000 to 29,000 gpd. This is well below the trigger level of 41,600 gpd designated by DEP to force us to design a separate leaching field at the Town Building. This level is so far below the trigger level that more design flow could be added in the future. Indeed, National Development would also like to add 500 gpd for another medical office. In December 2017, we will consider this request.

- Preparation for joint meeting with Board of Public Works concerning need for continued support from Town Engineer, Paul Brinkman on 28 Nov 2017.
- 8:20 6. Status of the land and design flow acquisition from Wayland Meadows.
- 8:25 7. Update from Paul Brinkman below, Town Engineer:
  - A. Tata & Howard is doing the design and engineering for a new water main on Boston Post Road. The project requires a number of borings as part of the design process. Paul completed mark-outs for the proposed borings. 5 were within or near the existing sewer. 4 were not near the existing sewer. The borings were delayed until later this month due to the need to be completed during the overnight hours a condition of the MassDOT permit.
  - B. Status of hiring DigSafe, a company to do mark-outs and system maintenance and a contractor for emergencies. This is awaiting the designation of funds at Special Town Meeting. Paul has been working with the Water Department to get notified of mark-out requests that are requested currently. Once the process is set up Paul can provide interim services for non-emergency mark-out requests.

- C. Treatment Plant Capital Items:
  - SCADA System and Security Cameras Paul met with the SCADA Contractor for the Water Department at the Treatment Plant and he is willing to assist. He received a budget for the work, which was forwarded to the Board. A back-up of the SCADA programming and computer licenses have been received from the equipment manufacturer.
  - HVAC System, PM Filter and Air Valves The Town HVAC Contractor is to provide a quote for remaining HVAC issues and maintenance on the boiler.
- D. Second Pump Station Researched the ownership of the property and determined responsible party. Assessor's Office has been called. It is the condo associations' responsibility, and have a contact for them. Seeking advice as to continue the process.
- E. Obtained CADD record drawings from Weston & Sampson for the original sewer system construction. Working with Brendan Decker Town GIS to get the information placed in the Town GIS system and better field located to assist with mark-outs.
- F. Met with Wayland Foreign Motors owner regarding the potential connection to the system.
- G. Infiltration/Inflow Control Plan. MassDEP requirement from all sewer system owners due 12/31/17. Requires analysis of flow data and submittal of a plan. There is no waiver allowed.
- 8:35 8. Administrative items:
  - A. Connection Application Approve changes.
  - B. 25 Lillian Way Connection Application approval.
  - C. FY18 Q1 Billing mailed October 31, 2017. Bill for 5 Concord Road/Library.
  - D. Signature on Betterment Apportionments letters.
  - E. Net DMR Report for November Uday will be added to the distribution list and Sam Porter will be removed. Paul Brinkman will review the report and Jane will sign and submit to the EPA.
- 9. Wastewater Rules and Regulations Further comments from Rick
- 8:50 10. Approve minutes from previous meetings–18 Oct 2017.
- 8:55 11. Pay Bills, monthly budget update, year-to-date finances, and monthly commitments.
- 9:08 12. Topics not reasonably anticipated by Chair 48 hours in advance of meeting.
- 9:10 13. Website status: recent postings and organization.
- 9:12 14. Calendar: upcoming meetings and events, including hearings.
- 9:14 15. Public Comment
- 9:20 16. Adjourn

# Agenda item 4. Discussion: Capacity Opinion Memo from Paul Brinkman

To: Fred Knight, Chair Wastewater Management District Commission

From: Paul Brinkman, Town Engineer

Date: October 30, 2017

Subject: Wastewater Treatment Plant Capacity

The Wastewater Management District Commission (WWMDC) is responsible for the operation and maintenance of a Town-owned municipal wastewater treatment plant (WWTP) that discharges treated wastewater to the Sudbury River under a National Pollutant Discharge Elimination System (NPDES) permit number MA0039853. The permit authorizes the WWMDC to discharge a 12-month rolling average flow of 52,000 gallons per day (gpd). This office was asked to review permits, policies and regulations regarding the capacity of the wastewater treatment plant and the potential to introduce more wastewater. The following represents my understanding of the management of flow to the WWTP and the potential to allow for additional volumes of wastewater to be discharged to the WWTP.

- 1. The 12-month rolling average flow is reported to the MassDEP and EPA on a monthly basis. Over the last 6 months the flow has been 24,000 to 25,000 gpd.
- 2. The NPDES permit allows for the discharge of 52,000 gpd on a 12-month rolling average. This value is more than double the current flow being discharged by the WWTP.
- 3. Original design flow allocations to connected users were made on the basis of Title V estimates. Title V 310 CMR 15 contains a table that is used to size on-site sub-surface wastewater disposal systems. It is common industry practice to use these flows as preliminary estimates of potential volumes that may be discharged from a wastewater generating facility/residence. The Title V table produces very conservative flow estimates, generally two or more times greater than the actual flow.
- 4. The Title V allocations were also used to distribute the capital construction costs of the recently constructed WWTP through betterments. This also is a common industry practice.
- 5. Approximately 75,000 gpd of design flow was assigned, using the Title V tables, to all the WWMDC users. Currently all but about 6,000 gpd of WWMDC users are connected to the system. The WWTP has been in operation for a few years and as indicated above the 12-month rolling average flow is averaging 25,000 gpd of actual flow, which is approximately one third the Title V table flow estimate.
- 6. The WWTP was constructed to manage a flow greater than 52,000 gpd. According to preliminary design documents, the WWTP was constructed to be able to treat nearly 80,000 gpd of sustained flow, and as much as 135,000 gpd in one 24-hour period
- 7. The NPDES permit for the WWTP is under renewal. The WWMDC has requested a 50 percent expansion of the permit to increase the allowed discharge volume to 78,000 gpd. The renewal is pending coordination from the MassDEP, EPA, and the WWMDC.
- 8. An Administrative Consent Order (ACO) was issued to the WWMDC requiring the construction of an additional treated wastewater disposal facility to be located on the fields adjacent to the Town Building. The ACO requires that when the actual flow from the WWTP reaches 80 percent of permitted flow over a 3-month averaging period, the WWMDC must begin the process to implement the additional treated wastewater disposal facility. The ACO trigger of actual flow is 41,600 gpd, still significantly above the current average of 24,000 to 25,000 gpd.
- 9. The existing WWMDC service base is stable and significant increases in discharge through the NPDES permitted discharge point are not anticipated.

- 10. Regulations regarding MassDEP over the flows discharged to wastewater systems were recently modified significantly. The modification to 314 CMR 7 and 314 CMR 12 removed the MassDEP approval over additions to a sewer system and allows the local regulatory entity, the WWMDC in this case, to manage the flows to the WWTP. The regulations require the WWMDC to track and control the volumes to ensure that they are in compliance with the NPDES permit and that the wastewater is appropriately conveyed in the collection system. Additionally, this office and the WWMDC had communications with the MassDEP, who confirmed this understanding.
- 11. An entity has proposed a 150-seat restaurant to be located within an existing improved section of Town Center. The facility would utilize an existing connection to the wastewater system. Using Title V estimates as a preliminary basis of flow, the restaurant would generate approximately 5,250 gpd of flow based upon the Title V table and more likely less than 2,500 gpd of actual flow based upon WWMDC usage rates. The additional restaurant would result in the aggregate actual flows at the WWTP to be still less than 27,000 to 28,000 gpd.

#### Findings:

- The total actual flow from the new restaurant will not result in the WWMDC exceeding any flow threshold

   NPDES permit, ACO or otherwise. The value is considerably less than permitted values and allows for sufficient reserve for changes or existing commitments.
- 2. The WWTP and collection system have adequate capacity to manage the increased flow from the additional restaurant.

In its newly revised Rules and Regulations, the WWMDC developed and is implementing a policy regarding requests for modified/new discharges to the WWMDC. The policy identifies the available design flow for changes in discharges and instructs the WWMDC to limit the total new flows to that allocation. The allocation takes into account the existing commitments to non-discharging facilities as well as reserve to account for changes in existing uses.

This analysis is based upon a review of the regulatory and technical considerations associated with the WWTP and NPDES permit.