# Town of Richmond
# Meeting of Water and Sewer Commission
# Minutes of February 5, 2024

**Members Present:** Bard Hill, David Sander, Erin Farr, Jay Furr, Morgan Wolaver

**Members Absent:** None

**Staff Present:** Josh Arneson, Town Manager; Duncan Wardwell, Assistant to the Town Manager; Connie Bona, Finance Director

**Others Present:** The meeting was recorded for MMCTV, Amy DeCola, Jon Olin, Kirstin DiPietro Worden

**MMCTV Video:** https://youtu.be/HFO7qqtjITw?si=lIFOlXBm2WGEm7mF

**Call to Order: 6:01 pm**

**Welcome:** Wolaver

**Public Comment:** None

**Additions or Deletions to the Agenda:** None

**Approval of Minutes, Warrants and Purchase Orders**

**Minutes:**

*Furr moved to approve the Minutes of 1/16/24 meeting as presented. Sander seconded.*
*Roll Call Vote: Farr, Furr, Hill, Sander, Wolaver in favor. Motion approved.*

**Purchase Orders:**

*Furr moved to approve PO# 4771 to All Seasons Excavating and Landscaping for Repair of Crushed Sewer Pipe over Bridge as a result of Dec 18, 2023, flood not to exceed $51,125.82. Sander seconded.*
*Roll Call Vote: Farr, Furr, Hill, Sander, Wolaver in favor. Motion approved.*

*Furr moved to approve Purchase Order 4815 to the Town of Richmond for Water Sewer Administrative Support not to exceed $41,500.00. Sander seconded.*
*Roll Call Vote: Farr, Furr, Hill, Sander, Wolaver in favor. Motion approved.*

**Warrants:**

*Furr moved to approve the 2/5/24 Warrants as presented. Sander seconded.*
*Roll Call Vote: Farr, Furr, Hill, Sander, Wolaver in favor. Motion approved.*

**Items for Presentation or Discussion with those present**

**Review of 90% report of 20 Year Wastewater Evaluation**

Timestamp: 0:05

https://www.richmondvt.gov/fileadmin/files/Water_Sewer_Commission/Meetings/2024/02/4a_Richmond_WWTF_20_Year_Evaluation_-_90__Submittal_-_01.29.2024_-_Reduced.pdf

DiPietro Worden: Amy DeCola, John Olin, and I are going to run through the Hoyle Tanner plan. We just finished the 20-year evaluation report on your wastewater treatment facilities which include your collection system, your pump station and the wastewater treatment plant. We're just going to discuss our recommended project and go over the total project cost and next steps.

The plant is operating at about 33% of its capacity right now but sees extremely high fluid when there's a wet weather event. The December wet weather event pushed 2.3 million gallons through the plant and that one pump kept up. Our new design criteria, I showed an example of how I would arrange those three pumps. The newer pumps will have VFDs controlled by using level sensors in the wet well. Under local conditions, it would be one pump and under high flow conditions, it would be two pumps, the State of Vermont has redundancy requirements. Using a variable frequency drive, I can decrease the hertz and the pumps will pump at a more efficient point.

We're recommending that a new headworks building be built over the existing well. We like to see screening removal that protects the pump from ragging to rocks, anything that comes down. And that's been a huge problem. The existing headworks building would convert to just grit removal which is important to protect the rest of the plant.

The biological treatment anoxic selectors will be replaced with a compressed gas mixing system. You have pretty high organic loadings coming into the plant. We would do a structural assessment of the concrete when in design, generally the concrete mostly is in good shape. The reason there is a lot of BOD is that you are accepting a lot of septage. You're seeing high organic loadings coming from your municipal influent.

Hill: We're contemplating investments based on the loads that we have to charge the people responsible for that load.

DiPietro Worden: I would recommend more discrete sampling on the pure influent and press 8 coming off of the septage. Amy created a biological model that looked at your existing tankage understanding that you have zero room to expand this plant in a floodplain. We proposed design criteria for all your organic loading based on the limits. You have room to treat what's coming down the municipal input and you can treat septage but there might be a point 20-30 years to look at a biological upgrade that has some kind of fixed film or membrane process.

DeCola: The good news is that you can treat everything that's coming in right now but if somebody built a 500-house subdivision, we would have to look at your capacity and it might mean that you don't accept as much septage.

DiPietro Worden: The age-related equipment replacements include the coagulant chemical feed and storage, return activated sludge system, waste activated sludge system,

filtration, UV disinfection system, effluent flow measurement, effluent pumping & outfall, septage receiving facilities (at 13 million gallons of septage every day, five days a week would add almost eight cents a gallon at 13 million gallons, $975,000 a year vs. FY22 expenses of $250,000 in biosolid disposals). Your septage receiving unit is about $400,000 and that needs to be replaced or you're not going to be accepting any septage.

Hill: Those unique septage costs need to be charged a percentage and the rest of the plant that also served septage needs to be cost allocated to septic as well.

Arneson: For instance, what percentage of the press goes towards septage.

DiPietro Worden: We can look at septage operation and maintenance costs. There are septage grants as the State's extremely interested in Richmond staying a septage acceptance facility.

Arneson: This is the minimum we have to do to stay in business and if we do that, we will have an increased capacity.

DiPietro Worden: Upgrades need to happen to the holding tanks, and this would have to happen regardless if you decided to take more septage. The mixing in all of the holding tanks needs to be upgraded. If you wanted to expand your septage then you would need to add to the dewatering facilities. Our proposal is to upgrade this building to separate that trailer bay because there's a lot of odors associated with that. The flood mitigation in an upgrade, the State would require you to be ready for a 500-year flood. Those flood doors work for that if you're watching the weather. PLC and SCADA instrumentation needs to be upgraded as it is outdated. There is a significant need for HVAC upgrades. The report also looked at your collection system and 15 manholes were identified for cleaning and six were identified for minor maintenance. The Bridge St pump station needs to be completely replaced with a submersible type of pump or where everything is up high. I projected a construction bid opening date of April 2027 with an anticipated 18 months to 2 years of construction. The next steps include an influent pump purchase in interim until full upgrade, PER Amendment for the Bridge St pump replacement alternatives, State Review of 90% Report, public outreach, funding assistance and Step II design phase.

**Consideration of rescheduling the second Water and Sewer Commission meeting in February due to the Presidents' Day holiday falling on the third Monday of the month**

*Hill moved to hold the second February Water and Sewer Commission meeting on Tuesday, February 20, 2024, in honor of the Presidents' Day Holiday on Monday, February 19, 2024. Farr seconded.*
*Roll Call Vote: Farr, Furr, Hill, Sander, Wolaver in favor. Motion approved.*

**Update on water service line inventory and on water meters**

Arneson: I got final paperwork from Zenner and then finalize the numbers for RFP for installation.

**TABLED - Review of list of water and wastewater items to be repaired or replaced, including status of new fluoride pump**
https://www.richmondvt.gov/fileadmin/files/Water_Sewer_Commission/Meetings/2024/02/4b_Water_and_Wastewater_Items_to_be_Repaired_or_Replaced_2-1-24.pdf

**TABLED - Review of FY24 Q2 financial reports**
https://www.richmondvt.gov/fileadmin/files/Water_Sewer_Commission/Meetings/2024/02/4c1_QTR_2_FY24_Budget_Status_Water.pdf
https://www.richmondvt.gov/fileadmin/files/Water_Sewer_Commission/Meetings/2024/02/4c2_QTR_2_FY24_Budget_Status_Sewer.pdf
https://www.richmondvt.gov/fileadmin/files/Water_Sewer_Commission/Meetings/2024/02/4c3_FY24_QTR_2_Water_Sewer_Septage_Financials.pdf
https://www.richmondvt.gov/fileadmin/files/Water_Sewer_Commission/Meetings/2024/02/4c4_Debt_Schedule.xlsx
https://www.richmondvt.gov/fileadmin/files/Water_Sewer_Commission/Meetings/2024/02/4c5_QTR_2_FY24_Trial_Balance_Water.pdf
https://www.richmondvt.gov/fileadmin/files/Water_Sewer_Commission/Meetings/2024/02/4c6_QTR_2_FY24_Trial_Balance_Sewer.pdf

**TABLED - Review of January water data**
https://www.richmondvt.gov/fileadmin/files/Water_Sewer_Commission/Meetings/2024/02/4d_Monthly_Water_Report_for_January_2024.pdf

**Discuss Items for Next Agenda:**
*Tabled agenda items
*Upgrade updates
*Gateway updates

**Adjournment**

*Furr moved to adjourn. Sander seconded.*
*Roll Call Vote: Farr, Furr, Hill, Sander, Wolaver in favor. Motion approved.*

Meeting adjourned at: 6:56 pm

**Chat file from Zoom:** None