



**Town of Ridgefield  
Water Pollution Control Authority**

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**Date:** March 18, 2025  
**To:** Board of Finance  
**cc:** File  
**From:** Water Pollution Control Authority  
**Subject:** Draft Wastewater Facilities Upgrades Status Update

The following information has been prepared to provide the Town of Ridgefield's Board of Finance with an update regarding the Town's South Street and Route 7 Wastewater Treatment Facilities Projects. It includes both project background and current status for the Board's reference. The Town's Water Pollution Control Authority (WPCA) and its technical team have worked diligently with the project contractors to provide the Town with new facilities that are working well and meeting today's stringent permit requirements.

## **PROJECT BACKGROUND**

As these complex projects have occurred over a lengthy timeframe, the following provides a review of key milestones and project drivers along the way.

- **Design Drivers:** Beginning in mid-2017 and continuing into early 2019, the Town's South St. Wastewater Treatment Facility (WWTF) Upgrades and the Route 7 Pump Station, Force Main and WWTF Decommissioning projects were designed in tandem based on the 2017 Wastewater Facilities Plan recommendations to:
  - o Address aging infrastructure
  - o Meet new and very stringent CTDEEP effluent permit requirements
  - o Provide more energy efficient systems and operational efficiency

The project was bid as two contracts: the South St WWTF Upgrade Project and the Route 7 Pump Station, Force Main and WWTF Decommissioning Project.

- **Sewer Rate Model:** In anticipation of the need to fund these two projects, as well as future wastewater infrastructure projects (future needed pump station upgrades), in 2017 the WPCA developed a rate model to review the sewer rate structures in light of these planned capital expenses, current and projected operating expenses, and revenue streams including sewer rates, sewer hookup fees, and septage disposal tipping fees. This work helped the WPCA look at various scenarios given the projects timelines and the uncertainty that comes with any major construction project.

This model, which has been reviewed and updated over time, included a sewer rate increase in 2019 to \$750 per sewer use unit, followed by planned 4% increases in the sewer rates until 2024 (\$844 per sewer use unit) and then a planned 2% sewer rate increase per year going forward. The rate increases that have been made each year by the WPCA have not deviated from the 2017 plan. There are no current plans to modify the planned future sewer rate increases as a result of the current projects.

- **Budget Referendum Driver:** In order to meet the CTDEEP's phosphorus grant program deadline, the WPCA had to go to voter referendum early for the project – before the design was 100% complete. The 2018 estimated project cost of \$48 million was prepared when the project was at the 60% design completion level. This project cost estimate was prepared much earlier than typical on a project of this magnitude; however, the benefit of qualifying for the phosphorus grant outweighed waiting until later – said grant contributed a 50% reimbursement for qualifying project elements. The November 2018 referendum approval allowed the Town to meet the 7/1/19 grant deadline to award the South Street construction contract. Of the \$48 million, \$8 million was contributed by the Town since the projects benefit the entire Town, \$11.5 million was anticipated from CTDEEP grants, and the balance was planned from the WPCA's capital funds, which are funded through sewer usage fees and septage fees.
- **Project Bids, Costs, and WPCA Fund Balance**
  - o The South Street WWTF Upgrade construction bids received in May 2019 were higher than the 2018 estimate. Factors influencing this included the number of WWTF projects that were being bid at the same time in Connecticut to meet the CTDEEP's 50% phosphorus grant funding coupled with early development of the cost estimate to meet that grant deadline.
  - o The Rt. 7 project bids were received in May 2021 and were also higher than the 2018 estimate. Factors influencing this included the early development of the cost estimate as well as COVID-19, supply chain issues, and material and labor cost inflation. Construction projects across the state had similar experiences in this timeframe, seeing costs frequently unexpectedly higher and difficult to estimate. In order to address the increased construction costs, scope reduction efforts were negotiated with the Contractor, M&O Construction. A portion of the Town's American Rescue Plan Act (ARPA) funding received for COVID mitigation was allocated to the project (approximately \$2.9 million), thus helping manage the impact to the Town's sewer rate payers.
  - o While the scope of the projects and contractors' budgets have remained as anticipated/contracted during construction of both projects, the project completion schedules have extended. This resulted in additional costs to operate the Route 7 WWTF longer as well as engineering budget being required to support the projects. It is critical to have appropriate construction project oversight and inspection to make sure the new facilities are meeting the standards and performance expected by the Town, and to manage the contractors through completion.
  - o To minimize the impacts to the Town and the sewer rate payers, the WPCA has used its fund balance, as well as the deferral of other planned capital improvement projects, to manage the costs resulting from the projects' extended timelines. \$5.8 million has been applied over time to the projects to help manage the impacts of a changing construction climate as well as the schedule since the project inception.

Throughout the project, the WPCA, and our engineering consultant AECOM Inc., have been carefully monitoring the performance of the South Street WWTF project Contractor (Spectraserv, Inc.) and the Route 7 project Contractor (M&O Construction Co.) and have been pressing them to complete the project to the extent allowed by the contract documents in consultation with the Town's Attorney. On public construction projects, the Contractor is responsible for construction means, methods, sequencing, and scheduling. The WPCA and the engineer are not

permitted by the contract to direct the construction means, methods, and scheduling as to do so shifts the risk and liability of meeting schedules and project costs away from the Contractor.

## **SOUTH STREET WWTF UPGRADE PROJECT STATUS**

Here are some key points for the South Street WWTF Upgrade project:

- Substantial completion achieved in late December 2024.
- New permit limits have been met or even bettered for phosphorus and nitrogen removal since the Summer of 2024. It should be noted that the phosphorus effluent limit for the South Street WWTF is the most stringent in Connecticut that the WPCA is aware of.
- Septage receiving restarted in Fall 2024, again providing this valuable service to the Town residents who are served by onsite septic systems.
- While the construction duration has been longer than desired, the percent of change orders relative to the bid cost on the project (2.5%) has been significantly less than industry standards (5% or less).

Approximately 95.3% of the budget has been expended through the end of February, however additional costs remain. While the project is substantially complete the WPCA is holding the maximum retainage of 5% on payments allowed by the contract (approximately \$1.7 million) from the Contractor. Construction completion is anticipated in early summer.

The project has received additional funding assistance in excess of what was originally anticipated. The South St. project was originally anticipated receive a CTDEEP Clean Water Fund Grant of \$10.6 million (Summer 2018) while the current grant amount was increased to \$12.35 million (an increase of \$1.75 million). This additional funding will be applied to the project.

## **ROUTE 7 PUMP STATION, FORCE MAIN, WWTF DECOMMISSIONING PROJECT STATUS**

Here are some key points for the Route Pump Station Force Main and Decommissioning project:

- Substantial completion for pump station and force main was achieved in Mid-August 2024 and these new facilities have been providing uninterrupted wastewater conveyance to the South Street WWTF since.
- Substantial completion for the Route 7 WWTF decommissioning achieved substantial completion in October 2024 and the former plant site is now available for other uses.
- While the construction duration has been longer than desired, the percent of change orders relative to the bid cost on the project (-4.2%) has been significantly less than industry standards (5% or less). The change orders resulted in a net cost reduction due to scope reductions for relocation the force main off the road and into the shoulder on Route 7 proposed by the Contractor and tank cleaning efforts at the WWTF by the WPCA's contract operator Veolia.

Approximately 89.4% of the budget has been expended through the end of February, however additional costs remain. While the project is substantially complete the WPCA is holding the maximum retainage on payments (5%) allowed by the contract (approximately \$360,000) from the Contractor. Construction completion is anticipated in late Spring 2025.

The project has also received additional grant funding in excess of what was originally anticipated. The project was anticipated to receive a Clean Water Fund Grant of \$0.9 million (Summer 2018) while the current grant amount was increased to \$1.46 million (an increase of \$0.56 million). This additional funding will be applied to the project.

## **PROJECTED FINAL PROJECT COSTS**

As noted above the overall project costs remain within the current budget, however the final costs of the projects are currently not well defined and are difficult to forecast accurately. Some items that may impact the final costs include:

- Uncertain contractor projected completion dates of both projects and the potential for additional short-term interest and engineering costs.
- Liquidated damages from both Contractors as both contracts have exceeded their contract time.
- Unknown reimbursement to the WPCA for project costs from the potential sale of the Route 7 WWTF property.
- Undefined legal fees.

The WPCA is pleased to have brought these highly technical, energy efficient, and needed wastewater infrastructure upgrades to substantial completion as they are critical elements to protect public health and the environment. These projects will allow Ridgefield to maintain itself as a desirable place to live and conduct business for the benefit of the community. The WPCA, AECOM, Veolia, and the Town's Attorney will continue to diligently work on the Town's behalf to close the projects in a fiscally responsible manner.

## South Street Wastewater Treatment Facility Upgrade



Aerial View of the Site



Septage Receiving Building and Odor Control No. 1



Influent Building (left) and Chemical Control Building (right)



Influent Building Showing the Influent Screen and Washpress



Chemical Building



Aeration Tank No. 1 with Blower Building Maintenance Garage Behind



Blower Building and Maintenance Garage



Operations Building



Operations Building Pump Gallery



Operations Building Tertiary Phosphorus Removal Filter Room



UV Disinfection / Reaeration Building



Electrical Building

## Route 7 Force Main, Pump Station, and Wastewater Treatment Facility Decommissioning



Pump Station Looking Southeast



Pump Station Site



Pump Station Looking Northwest



Decommissioned WWTF Site