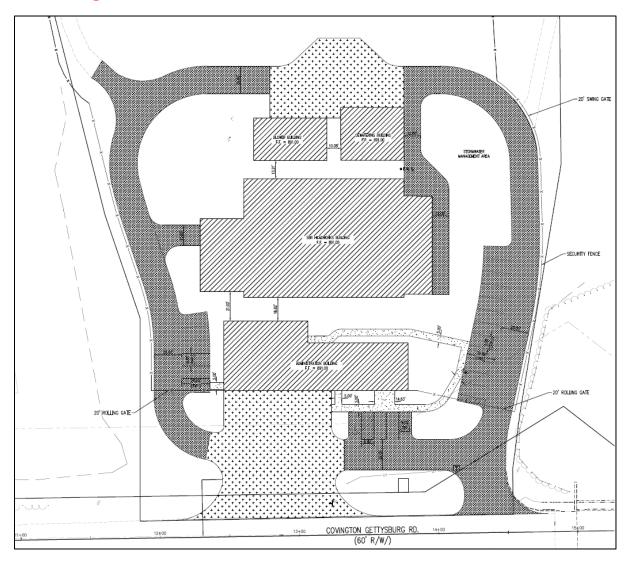
New Wastewater Treatment Facility

Village of Covington, Ohio

Plant Type

The sequencing batch reactor (SBR) is a fill-and draw activated sludge system for wastewater treatment. In this system, wastewater is added to a single "batch" reactor, treated to remove undesirable components, and then discharged. Equalization, aeration, and clarification can all be achieved using a single batch reactor. To optimize the performance of the system, two or more batch reactors are used in a predetermined sequence of operations. SBR systems have been successfully used to treat both municipal and industrial wastewater. They are uniquely suited for wastewater treatment applications characterized by low or intermittent flow conditions.

Site Design



The site includes multiple buildings that serve multiple functions. The administration building has the lab, employee rooms, and vehicle storage. The headworks building which includes the primary SBR function is above the blower and dewatering buildings. The site is complete surrounded by fencing and rolling gates to restrict access.

Estimated Cost and Proposed Funding

Engineer's Estimated Cost for Project - \$18,000,000

- Includes the design and construction of the proposed facility
- Inflation adjusted from original estimate, which added roughly \$4,900,000.

Village Sewer (Fund 52) Budget - Generally

Revenue from collection fees: ~\$600,000
Expenses: ~\$420,000
Net: ~\$180,000

Proposed Funding

Reserve Funds Utilized:

o ARPA Funds: \$284,000

Village Sewer Funds: \$100,000

o Total: \$384,000

Estimated Loan Cost minus reserves: \$17,616,000

• WPCLF Loan Forgiveness: \$4,000,000

WPCLF Loan Amount Necessary after forgiveness: \$13,616,000

o ~\$5,500,000 @ 0% - Nutrient Reduction Credit

o ~\$8,100,000 @ 1% - Hardship Community Credit

Estimated Annual Loan Payment: ~\$498,000

Future Revenue and Expenditures

Revenue

• Collection Fee revenues have increased 3% from 2022 and are anticipated to be ~\$600,000 in 2023 unless there is a modification to the rate structures

Expenditures

- Current Sewer Fund Budget (\$420,000) Includes:
 - ~\$200,000 Salaries / Benefits
 - ~\$160,000 Operations / Maintenance
 - ~\$60,000 Debt Service
- New Sewer Fund Budget will increase substantially:
 - No changes to Salaries / Benefits
 - Potential reduction in O/M costs, but not guaranteed
 - Increase in debt service to \$560,000 annually
- Anticipated annual expenditures of \$920,000 in future years with debt added

Net

- Current (2023) Anticipated Revenue: \$600,000
- Anticipated Annual Expenditures after debt: \$920,000
- Net: Loss of \$320,000 / year

Rate Increases

A rate increase is required to cover that net loss.