



State Revolving Fund Loan Program

an Indiana Finance Authority Environmental Program

100 North Senate Avenue, Room 1275
Indianapolis, Indiana 46204
www.srf.in.gov

MEMORANDUM

TO: Project File, Town of Chalmers, Wastewater System Improvements Project,
SRF Project # WW17 12 91 02

FROM: Jack Fisher

DATE: July 11, 2018

RE: Green Project Reserve (GPR), Business Case

Summary:

- Chalmers operates a 0.155 million gallon per day package type extended aeration treatment facility with fine bubble diffusers, flow equalization with fine bubble diffusers, influent flow monitoring, screening, surge tank with coarse bubble diffusers, secondary clarifier, post aeration, single-stage nitrification, and effluent chlorination and dechlorination facilities followed by effluent flow monitoring. Sludge is treated in a sludge holding tank with coarse bubble diffusers and aerobic digestion. Sludge is disposed by a licensed hauler (Merrell Brothers). The collection system is comprised of a 100% gravity sewer system ranging in sizes from 8 to 12-inches, and one main duplex lift station with each pump rated at 240 gallons per minute each.
- The proposed project includes the following for the collection system: lining all or approximately 19,658 feet of gravity sewers with cured-in-place pipe (CIPP); lining approximately 67 manholes using polyurethane; and replacing the backup generator at the main lift station.
- The proposed project includes the following for the WWTP: replacing the fine screen, replacing the flow diversion weir, replacing the blowers, replacing the chlorine disinfection system with an ultra-violet disinfection system, repairing the liner for the flow equalization basin as well as adding a berm, and making minor repairs to the concrete process tanks.
- The estimated Total Project Cost is \$1,383,740.
- Estimated State Revolving Fund Loan Amount is \$733,740. The remaining amount will be funded by an Office of Community Rural Affairs grant of \$650,000.
- This project qualifies under the category of **Energy Efficiency**. The GPR construction cost for rehabilitating the sewers and manholes is **\$616,148**, while the GPR engineering cost is **\$75,000** producing a total cost of **\$691,148**.

Conclusions

- Rehabilitating the gravity sewers and manholes will yield and **annual savings of \$19,380** towards energy costs.