



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 Bargersville, Wastewater Treatment Plant Improvements
SRF Project # WW 18 29 49 01

FROM: Ethel L. Morgan

DATE: May 23, 2019 (Final)

RE: Green Project Reserve, Business Case

Summary

1. The Bargersville project provides for improved treatment facilities and Biological Phosphorous Removal (BPR) with Chemical Phosphorous Removal (CPR) backup. The project will also increase the plant capacity from 1.5 MGD to 2.0 MGD.
2. The energy efficient component is the installation and use of recycled materials during construction. The recycled materials include ductile iron pipe and reuse of flyash in concrete. The use of these products in manufacture represents a total savings of \$22,584, or approximately 35% of the estimated cost of non-recycled materials. Therefore, the energy usage reduction exceeds the 20% reduction GPR requirement for categorical projects. The estimated construction cost for these components was \$1,596,000. **The actual bid cost for this item is \$1,580,678.**
3. The environmentally innovative component is the BPR. BPR reduces the amount of chemical needed to precipitate the sludge and results in a lower sludge production. The 20-year net present worth savings of using BPR is \$2,389,000. The estimated construction cost of this component was \$722,000. **The actual bid cost for the BPR is \$978,971.**
4. The total GPR component amount for the WWTP Improvements project was estimated at \$2,550,000, including 10% contingency, with engineering cost of \$268,000 for a total estimated GPR cost of \$2,818,000. **The total as-bid GPR for the loan is \$2,559,649 with planning and design costs of \$268,000 for a total GPR component of \$2,827,649.** Bargersville closed a loan with the SRF program in the amount of \$9,845,000 on December 14, 2018.

Conclusions

1. The business case was reviewed by internal staff and found to be in accordance with meeting the GPR requirements for energy efficiency and environmentally innovative.

