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: Official Loan File

FROM: Amanda Rickard

DATE: January 5, 2018

RE: Green Project Reserve (GPR) Business Case
Eastern Bartholomew Water Corporation Drinking Water Treatment Plant Project
SRF Project DW 16 04 03 01

Eastern Bartholomew Water Corporation (EBWC) will construct a new 3.0 MGD drinking water treatment plant, including iron and manganese removal process equipment, 500,000-gallon clear well, and storage building. The project will replace the existing deteriorated water treatment plants, allowing adequate supply to meet current and future demand. The project will also provide adequate volume of finished water to the distribution system and provide operational flexibility for maintenance and reliability.

High service pumps equipped with high efficiency motors and VFDs will limit power consumption at times of reduced load. The total consumption with VFDs is significantly less than without VFDs, and equates to approximately $119,000 in annual energy savings. The business case developed by Banning Engineering was reviewed and found to meet the GPR requirements for the energy efficiency category.

Ductile iron pipe material for the plant process and yard piping is considered to be green material. The pipe supplier certifies that their ductile iron pipe contains as much as 93 percent recycled content. The business case developed by Banning Engineering was reviewed and found to meet the GPR requirements for the environmentally innovative category.

A storm water infiltration system will eliminate the need for pumping the new water treatment plant site storm water into the local sanitary system. The system will capture and infiltrate a 100-year storm event. The system will reduce the amount of waste to be treated at the wastewater treatment plant. The business case developed by Banning Engineering was reviewed and found to meet the GPR requirements for the green infrastructure category.

The total GPR cost is $1,170,210. Of this, the construction cost based on bids is $246,000 (energy efficiency components), $793,010 (environmentally innovative components), and $131,000 (green infrastructure components). Engineering costs were not included as GPR. EBWC closed an SRF loan in the amount of $7,412,000 on December 14, 2017.