State Revolving Fund Loan Program
an Indiana Finance Authority Environmental Program

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Indianapolis, Indiana 46204
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MEMORANDUM

TO: Project File, Lebanon Utilities
Water Distribution System and Treatment Improvements Phase I
SRF Project #DW 18 13 06 01

FROM: Tracey R. Trimpe

DATE: February 15, 2019

RE: Green Project Reserve Summary

The Lebanon Utilities Water Distribution System and Treatment Improvements Phase I includes improvements to the distribution system and to the electrical system at the treatment plan, described as follows:

- **Phase I – Indianapolis Avenue Phase II Water Main Project** – This project includes the open-cut installation of approximately 3,250 feet of water main and approximately 26 gate valves/boxes, and the removal and replacement of approximately 6 hydrants and approximately 18 water meters, along with associated appurtenances. Ductile iron piping utilized in the water main construction is a **GPR** component.

- **Phase I – Sugar Creek WTP – Well Line Loop and 12kV Power System Electrical Improvements Project:**

  - Well Line Loop – This project includes the open-cut installation of approximately 2,450 feet of raw water main, 3,000 feet of directionally-drilled raw water main, approximately 17 gate valves/boxes, one (1) automatic flushing hydrant, and associated appurtenances. Ductile iron piping utilized in the water main construction is a **GPR** component. This project provides redundancy for conveying raw water from the existing raw water main to the Sugar Creek WTP.

  - 12kV Power System Electrical Improvements

    This project involves the replacement of the existing 4kV power system with a new 12 kV power system, including a single 12 kV 3-phase electrical line from the Sugar Creek WTP to power Wells 2, 3, 4, and 5, one (1) 480 V to 12 kV step-up transformer, and one (1) 12 kV transformer. Well 1 will be powered from a new 480 V electrical line powered from Well 2. An electrical loop will be formed around the wellfield by use of two (2) 3-way switches that will allow three wells to remain operational should

there be a failure in the lines or at one of the wells. Feed-through transformers with parking stands will allow smaller sections of the electrical line to be isolated for repair or replacement. In addition, this project includes the installation of a new trailer mounted generator, one manual (at Well 1) and one automatic (at Well 2) transfer switch, starters at Well 1, 2, & 4, miscellaneous cables, and cabinets; the construction of a carport at the Sugar Creek WTP site for the generator and associated appurtenances.

Conclusions:

A Business Case, for the project listed above, was reviewed by internal staff and found to be in accordance with the SRF GPR requirements for the Environmentally Innovative category. Ductile iron pipe material utilized in the water main construction is considered to be green under the environmentally innovative category, as the pipe and fitting utilized are made of recycled scrap iron and are themselves 100% recyclable.

Total GPR for Phase I is in the post-bid amounts of approximately $1,018,618.00 ($91,505.00 Engineering + $927,113.00 Construction). This project will soon be under construction and disbursement requests submitted to SRF for review/approval.