

TASK ORDER NO. 16 TO CONTINUING PROFESSIONAL SERVICES AGREEMENT Between City of Greenfield (Owner) and Donohue & Associates, Inc. (Donohue) Date of Original Executed Agreement: June 9, 2020

TASK ORDER NAME/DESCRIPTION

WATER MASTER PLAN UPDATE AND NEW SOUTH WATER TREATMENT PLANT PRELIMINARY ENGINEERING REPORT

The purpose of this Task Order is to prepare an update of the 2019 Water Mater Plan and prepare a Preliminary Engineering Report (PER) according to the Indiana Finance Authority State Revolving Fund guidelines. The PER will be developed partially based on the updated Water Master Plan.

The PER will include the New South Water Treatment Plant.

A. SCOPE OF SERVICES

Donohue's proposed task under this scope of services are as follows:

- 1. Project Management
 - 1.1. Assign a Project Manager who will coordinate Project activities and will be the principal liaison between the Owner and Donohue.
 - 1.2. Draft a Project plan that addresses the Project background and location; the Project purpose and description; Owner and Project team member information and roles; a work outline; Project schedule; Project budget by work task; and additional information that may be appropriate.
 - 1.3. Provide monthly progress reports to Owner to document services performed and schedule status. This is typically performed as part of the monthly Project invoicing routine.
 - 1.4. Prepare for and attend a Kickoff Meeting to discuss the Project needs, goals, and schedule.
- 2. Master Plan Update
 - 2.1. Request and receive available utility information from the Owner including:
 - GIS data of water assets
 - Parcel information with address cross reference

- Land planning studies
- Comprehensive plans
- Fire hydrant testing reports
- Customer usage for a minimum of two (2) years in electronic format
- Current facility operations data
- Repair and maintenance records
- Water supply and demand forecasting data
- Condition assessments and reports for water treatment, storage, and supply assets
- 2.2. Gather and review additional water system infrastructure information, reports, studies, and other relevant documents from various sources that may include:
 - Regulatory and water quality information
 - Industry standards regarding water usage parameters based on land use types
 - Historical and future growth projections from US Census Bureau
 - Future residential, commercial, and industrial development data from Owner sources
- 2.3. Update current system and potential future system data analyses, to include:
 - 2.3.1. Water Demand Projections
 - Review and update historical water usage data, monthly operating reports, existing service population records, available water demand information by user class and existing projected water flow demand data to estimate probable 20-year water demands.
 - Review and update Owner land areas and land use classifications to assist in developing projected demand flow rates per acre for residential, commercial, and industrial areas.
 - Identify and update the potential growth areas from planning and zoning information, comprehensive plans and other available sources.
 - Update planning area population growth projections based on available data, locally developed information, and discussions with Owner for the 20-year planning period.
 - Determine from Owner where future large users may be anticipated within the planning area and their impact on usage projections.
 - Compare current flows determined from information provided, and adjust as needed to prepare demand graphs and figures to illustrate infrastructure improvement phasing, timing, and budgeting needs.

2.3.2. Infrastructure condition assessments

- Update the infrastructure condition assessments developed in 2024 Asset Management Plan.
- 2.3.3. Distribution System Modeling

- Input historical and projected distribution system demands (i.e. flows and pressures) into the model for the 5-, 10-, 15-, and 20-year planning period intervals.
- Perform four (4) computer based hydraulic modeling scenarios of the water system model at the 5-, 10-, 15-, and 20-year planning period intervals to identify anticipated distribution system improvements that allow the Utility to meet the projected 20-year growth and fire flow demands.
- As part of modeling work, perform computerized modeling of water age for approximating distribution system water quality as a function of residence time within the system.
- Summarize the scenario analyses and findings with figures and output summary tables for inclusion in the Master Plan report and appendices.
- Incorporate prioritized major distribution system improvements into the draft master Plan over the 20-year planning period.
- 2.4. Develop Capital Improvement Project Scenarios
 - Evaluate and update general upgrades and modifications to wellfields and treatment plants to meet projected water supply and treatment capacity requirements over the 20-year planning period.
 - Update the prioritized list of water storage and major distribution system improvements regarding tanks, booster stations, valve vaults and major water mains, to meet projected water conveyance requirements over the 20-year planning period.
 - Identify and update the CIP List for the water supply, treatment, storage, and major distribution system improvements over the 20-year planning period.
 - Prioritize the recommended Cip List for 5-, 10-, 15-, and 20-year interval planning phases.
 - Develop high level budgetary capital cost opinions of the phased capital improvements on the CIP List.
 - Collaborate with Owner and Owner's rate consultant for rate consultant to develop potential rate increase scenarios resulting from the phased improvement program over the 20-year planning period, and then compare these rate increases against similar Indiana utilities.
- 2.5. Update the 2019 Water Utility Master to incorporate the information and analyses generated above.
- 2.6. Perform an internal quality review of the draft Water Master Plan, and submit up to three (3) hard copies and one (1) electronic copy for review.
- 2.7. Prepare for and conduct the Draft Master Plan Review Workshop with the Owner to determine necessary revisions to the draft document.
- 2.8. Based on Owner review comments, generate and submit up to three (3) hard copies and one (1) electronic copy for future use and reference.

3. PER Preparation

- 3.1. Prepare a Drinking Water State Revolving Fund (DWSRF) application for the Owner to submit to Indiana SRF.
- 3.2. The PER will be prepared in accordance with the requirements of the Indiana Drinking Water SRF Program, as it is administered by the Indiana Finance Authority (IFA). The PER will be developed in accordance with the "Preliminary Engineering Report Requirements", as they are stipulated by the IFA's Drinking Water State Revolving Fund (DWSRF) Loan Program guidance document (most recent edition, June 2023). The PER will include the following and be based on the information developed in the Master Plan Update in Item 2 of this Scope of Services:
 - 3.2.1. Chapter 1 Current Conditions
 - 3.2.2. Chapter 2 Utility Needs
 - 3.2.3. Chapter 3 Evaluation of Alternatives
 - 3.2.4. Chapter 4 Proposed Project
 - 3.2.5. Chapter 5 Evaluation of Environmental Impacts
 - 3.2.6. Chapter 6 Public Participation and Legal, Financial and Managerial Capabilities
 - 3.2.7. Prepare an Executive Summary of the PER.
 - 3.2.8. Prepare appendices to the PER, including:
 - Signatory Authorization Resolution
 - PER Acceptance Resolution
 - Financial Information Form
 - Public Notice
 - Indiana SRF Green Project Reserve Sustainability Incentive Checklist
 - Asset Management Certification Form
- 3.3. Other services associated with the PER will include the following activities:
 - 3.3.1. Attend a preplanning meeting with Indiana SRF and Owner representatives to prepare a PER. Attend any other coordination meetings with Indiana SRF as required for approval of PER.
 - 3.3.2. Update the model prepared with the 2018 Water Master Plan to confirm water tower and water main sizing.
 - 3.3.3. Conduct a workshop with the Owner to review drafted chapters 1-5.

- 3.3.4. Assist the Owner with scheduling, advertising for and conducting a public hearing for the prepared PER. The Owner shall pay the cost for publishing the public hearing notice in a local newspaper and prepare the minutes or transcript for the public hearing.
- 3.3.5. Prepare a transmittal letter for signature by the Owner to submit the prepared PER to Indiana SRF. Submit the signed transmittal and PER copies to Indiana SRF for review and respond to review comments. Four (4) copies of the completed PER will be printed for distribution of two (2) copies to the Owner and two (2) copies to Indiana SRF. An electronic PDF copy of the completed PER will also be submitted to the Owner and Indiana SRF if requested.
- 3.3.6. Respond to review comments from Indiana SRF for the submitted PER and revise the PER based for revisions requested by Indiana SRF.

B. PROJECT SCOPE ASSUMPTIONS

- 1. Scope of services does not include ancillary consultation services, including:
 - 1.1. Distribution system flow monitoring, hydrant testing or flushing, or field capacity testing.
 - 1.2. Survey and/or field verification of topographic or utility features or elevations.
 - 1.3. Financial and/or Legal services
 - 1.4. Property acquisition services
 - 1.5. Design, Bidding or Construction Phase services

C. KEY STAFF

ENGINEER shall include all subconsultants relevant to the scope of services in this task order. ENGINEER may not remove or otherwise substitute subconsultants indicated on without consent of OWNER. A failure by ENGINEER to provide the subconsultants as required by this Article shall be considered a material breach of the Agreement.

Donohue & Associates:

Emily Wehmeyer, PE Chris Safford, PE Susan Wojtkiewicz, PE Chase Benton, PE Jeremy Farrer, PE Andrew Dow, PE

Note: Donohue reserves the right to assign additional staff as needed to complete Work of the Project.

No subconsultants are planned to complete the Scope of Services for this Task Order.

D. PROJECT TIMING

Task Order shall be completed by the ENGINEER and delivered to the GREENFIELD DEPARTMENT OF ENGINEERING (OWNER) according to the schedule below.

- Master Plan Update
 - o Draft Master Plan: 14 weeks following execution of this Task Order
 - Final Master Plan: 4 weeks of receipt of comments from Owner regarding the Draft Master Plan
- Preliminary Engineering Report
 - o Submittal of SRF Application: 12 weeks after Execution of Task Order
 - Submittal of Draft Chapters 1 5: 11 weeks after Execution of Task Order
 - o Submittal of Public Hearing PER: 2 weeks review comments are received from the Owner.
 - Final PER Submission to IFA: 2 weeks after the Public Hearing

E. COMPENSATION

Compensation for the work as defined in the Scope of Services of this Task Order shall be a based on the following lump sum amounts:

- Master Plan Update \$108,000
- Preliminary Engineering Report \$41,000

APPROVED FOR OWNER	APPROVED FOR DONOHUE
Ву:	By: my Carlingh
Printed Name:	Printed Name: <u>Jeremy Roschyk, PE</u>
Title:	Title: Vice President
Date:	Date: November 1, 2024