



**TASK ORDER FOR
ENGINEER-OWNER AGREEMENT**

Exhibit A – Task Order No. 12

Task Order No. 12 is entered into and authorized by City of Republic, Missouri this 18th day of March 2021, by and between City of Republic, Missouri (hereinafter called OWNER) and Burns & McDonnell Engineering Company, Inc. (hereinafter called ENGINEER).

The parties agree that the ENGINEER shall perform the following Services in accordance with the terms of the Engineer-Owner Agreement dated January 2, 2018:

Scope of Services:

- A. Services for the 2021 Water and Wastewater Master Plan Updates are set out more fully in the attached Exhibit B.

Compensation:

- A. Amount of Payment:
1. For Services performed, OWNER shall pay ENGINEER the lump sum amount of One Hundred Dollars Thousand Dollars (\$100,000.00).
 2. For additional, reduced, or changed Scope of Services, the amount of payment shall be adjusted on a mutually agreeable lump sum basis.
- B. Statements:
1. Monthly statements will be submitted by ENGINEER to OWNER. Statements will be based on ENGINEER's estimated percent of Services completed at the end of the preceding month.

Time of Service:

- A. ENGINEER will proceed with providing the services set forth herein within approximately 10 days of the execution of this Task Order. It is anticipated that these services will be completed within approximately 90 days of the execution of this Task Order.
- B. Completing the services within the above time frame is contingent upon timely receipt of required information, approval, and/or reviews.

Other Terms:

- A. The terms of this Task Order supersede any contrary terms of the Engineer-Owner Agreement.

IN WITNESS WHEREOF, the parties have made and executed this TASK ORDER as of the day and year first above written.

OWNER: City of Republic, Missouri

ENGINEER: Burns & McDonnell
Engineering Company, Inc.

By:

By:

Name:

Name:

Breck R. Washam, P.E.

Title:

Title:

Vice President



Exhibit B – Task Order No. 12

City of Republic, Missouri 2021 Water and Wastewater Master Plan Updates

Scope of Services:

1. Project Management

- a. Conduct a project kickoff meeting with OWNER to include project goals, scope, schedule, required data, and other pertinent items.
- b. Prepare a list of required information for the OWNER to provide to the ENGINEER.
- c. Provide project management and quality-assurance/quality-control through the duration of the project.
- d. Project meetings with OWNERs staff in Republic, Missouri for the major tasks is listed below:
 - i. Water Master Plan Update: attend two meetings including ENGINEER's project manager and project engineer.

2. Water Master Plan Update

- a. Water Demand Projection:
 - i. Update water demand history since the 2019 Water Master Plan, prepared by ENGINEER and hereinafter called 2019 WMP, including water sales, nonrevenue water, average day demand, and maximum day demand.
 - ii. Review historical trending of water usage and determine if an update is needed based on recent historical data paired with customer and land use classification for short term development areas.
 - iii. Estimate water demands for new developments based on population-based water usage or customer class and land use classification if data is available. Update the 5-year and 20-year water demand projection from the 2019 WMP.
 - iv. Review large user projections with OWNER in terms of applicability, demand, and timing.
- b. Water Master Planning Update:
 - i. Update population weighting by development area where applicable and determine if land use and customer class can be used to supplement anticipated commercial
 - ii. Short-term growth shall represent a 5-year planning period for developments identified by OWNER within the existing water service area. Work with OWNER to determine any changes or updates to other 5-year growth areas identified in the 2019 WMP. Summarize the projected water demand allocation by growth area.
 - iii. Work with OWNER to determine any changes or updates to the 20-year growth areas identified in the 2019 WMP. Summarize the projected water demand allocation by growth area.

- c. Water Supply Planning Update
 - i. Update the 50-year water supply plan based on updated water demand projections, current water supply capacity, and OWNER's position on the Tri-State planning effort.
 - d. Hydraulic Modelling:
 - i. Update the hydraulic model prepared by ENGINEER for the 2019 WMP with water main, pumping, and/or storage projects installed since 2018.
 - ii. Update water main capital improvement projects (CIPs) in the model to reflect the updated 5-year growth plan and transcribe associated water demand projection updates.
 - iii. Update the 20-year CIPs in the model to integrate with the 5-year growth plan where required and transcribe associated water demand projection updates.
 - iv. Evaluate the following demand conditions for the 5-year and 20-year model scenarios: maximum day, peak hour on the maximum day, minimum hour on the maximum day, and maximum day plus the fire flow requirement. Update the capital improvements needed to deliver the projected water demands, pumping and system pressure, fire flow requirements, and storage requirements.
 - e. Prepare opinions of probable cost for the proposed capital improvements. Improvements are categorized as hydraulic, development, and fire flow and arranged by planning period.
 - f. Deliver the draft report to OWNER for review and comment. Address all comments and prepare the final report.
3. Wastewater Master Plan Update
- a. Population & Wastewater Loading Update
 - i. Estimate Wastewater loadings based on new developments based on population-based water usage and land use classification if data is available. Update the 5-year and 20-year population and wastewater loadings from 2019 Wastewater Master Plan prepared by ENGINEER and hereinafter called 2019 WWMP.
 - b. Wastewater Master Planning Update:
 - i. Review the existing population and wastewater loadings for the current, 5-year and 20-year modeling scenarios.
 - ii. Update population distribution within the hydraulic model where applicable and determine if land use and customer class can be used to supplement or replace significant water users.
 - iii. Short-term growth shall represent a 5-year planning period for developments identified by OWNER within the existing service area. Work with OWNER to determine any changes or updates to other 5-year growth areas identified in the 2019 WWMP.
 - iv. Work with OWNER to determine any changes or updates to the 20-year growth areas identified in the 2019 WWMP.

- c. Hydraulic Modelling:
 - i. Update the current condition hydraulic model prepared by ENGINEER for the 2019 WWMP with pump station improvements and other wastewater collection system improvements installed since 2018.
 - ii. Evaluate existing wastewater collection system capital improvement projects (CIPs) based on the updated 5-year wastewater loadings within the hydraulic model.
 - iii. Evaluate existing wastewater collection system capital improvement projects (CIPs) based on the updated 20-year wastewater loadings within the hydraulic model.
 - iv. Evaluate by confirming sizing and time-phasing of CIPs identified for both the 5-year and 20-year growth projections. Update the capital improvements needed to deliver the projected wastewater loadings.
 - d. Prepare revised opinions of probable cost, where applicable, for the proposed capital improvements.
 - e. Deliver the draft report to OWNER for review and comment. Address all comments and prepare the final report.
4. Wastewater Treatment Plant Evaluation Update:
- a. Update the biological model prepared by ENGINEER for the 2019 WWMP with new projected flows and loadings based on developments identified by OWNER.
 - b. Prepare a technical memorandum that evaluates capacity of each unit process and ability to accommodate the developments.

Responsibilities of OWNER:

- 1. Attend project meetings.
- 2. Review and provide comments on the draft report.
- 3. Respond to requests for information submitted by ENGINEER in a timely manner.