



1500 County Road 269
Leander, TX 78641

P.O. Box 2029
Leander, TX 78646-2029

EXHIBIT A

Statement of Work (SOW) No. 15

TO MASTER SERVICES AGREEMENT

Statement of Work No. 15 to the Master Services Agreement between the City of Manor, Texas, as CITY, and George Butler Associates, Inc., as ENGINEER, dated October 7, 2022.

Through this SOW, CITY hereby authorizes ENGINEER to undertake the work assignment described in the following, said assignment to be performed within the terms and conditions defined in said Master Services Agreement, except as modified herein.

ASSIGNMENT: Professional Engineering Services to provide services and costs for updating the comprehensive master plan for the City of Manor's (CITY) water distribution system. The existing master plan was last updated in July of 2010. This study included the evaluation of the water system to meet existing regulatory requirements and accommodate anticipated growth within the system. The plan was intended to project long-term water distribution needs for the CITY and develop a 10-year capital improvements plan. Growth within the CITY over the intervening period has been faster than anticipated for a number of years due to the substantial growth in the Central Texas area. The growth has increased dramatically and is fast outpacing growth projections from the prior study, hence the need to update the existing study and project flows for a 10-year period ending in 2033. The projection for ultimate population capacity has nearly doubled since the previous study was performed.

GBA will prepare an update to the existing water master plan reviewing: water system performance, existing facilities, areas of potential growth, new regulatory requirements, long-term wholesale supply source options, and develop a prioritized capital improvement project plan.

SCOPE OF SERVICES:

TASK 100: PROJECT ADMINISTRATION AND MANAGEMENT

SUBTASK 1: Conduct Kickoff Meeting. Arrange and provide agendas for kickoff meetings with CITY's Engineering and Public Works staff, and others as appropriate for the project. Discussions shall be held to review and confirm the project goals, planning intervals, and objectives, to evaluate primary concerns regarding the implementation of the project(s), and to confirm the scope of work, schedule, and deliverables. Minutes of the meeting will be generated and submitted to the City for project records.

SUBTASK 2: Conduct Progress and Review Meetings (2 meetings). Arrange, provide agendas and conduct progress and submittal review meetings with CITY staff. Minutes of the meetings will be generated and submitted to the City for project records.

SUBTASK 3: Administration. Provide project administration by coordinating work with CITY and making assignments to ENGINEER's staff and maintaining the schedule. Provide monthly billings and progress reports to CITY accompanied by a schedule of completion and description of work completed associated with the billing.

TASK 200: COLLECT AVAILABLE DATA

SUBTASK 1: Define and Establish Water Service Study Area. Work with the CITY to define the study area boundaries and gather documents related to current and future land use and population projections for areas within the service area. Documents considered in the plan will be the 2021 CIF Update for land uses and CIP projects, the current Comprehensive Plan Update for population projections, and the 2010 Master Water Plan for the status of previously identified CIP projects.

SUBTASK 2: Collect Records. Data will be collected from the CITY that will include but is not limited to previous reports, previous land development studies, record drawings, booster pump station information, system operations and controls, SCADA data, pressure recordings, operational records (work orders, pipe breaks, etc.), GIS data, mapping, water use data, preliminary plats or relevant information for proposed developments, and population projection data for the project.

SUBTASK 3: Perform field investigation of existing facilities including pumping and storage facilities, well site, and meter vaults.

SUBTASK 4: Establish Design Criteria. CITY and ENGINEER will discuss and establish desired design criteria relative to TCEQ Rules for water distribution based on expected water demands, modeling, and capacity requirements. If design criteria vary from previous master plans, impacts of design criteria modification will be considered relative to existing data and projections.

SUBTASK 5: Review data. Review the collected data and established criteria, identifying any data gaps and noting any necessary assumptions.

SUBTASK 6: Data Collection Technical Memorandum. Issue technical memorandum documenting the Water Service Study Area, current and future land uses and population projections, collected records, outstanding records or data gaps, and selected design criteria.

TASK 300: REVIEW OF EXISTING WATER DISTRIBUTION SYSTEM

SUBTASK 1: Review proposed infrastructure improvements proposed in the City of Manor 2010 Water Master Plan and the 2021 CIF Update.

SUBTASK 2: Provide general status (pending, under construction, complete) of each proposed infrastructure improvement from the City of Manor 2010 Water Master Plan and the 2021 CIF Update.

SUBTASK 3: Establish Understanding of Existing System. Review and understand current capacities and future projected requirements of the existing infrastructure of the water distribution system.

SUBTASK 4: Evaluate existing water system facilities to meet regulatory requirements and accommodate growth projections.

TASK 400: REVIEW OF WATER SUPPLY NEEDS

SUBTASK 1: Evaluate existing water supply sources for affordability and ability to meet the long-term needs for the City.

SUBTASK 2: Hold one (1) meeting with two (2) potential wholesale suppliers to review feasibility, affordability, and available capacity.

TASK 500: HYDRAULIC MODELING

SUBTASK 1: Update the City's computerized hydraulic water model based on new water demand data and recently constructed improvements.

SUBTASK 2: Identify areas with high probability of near-term growth and develop water supply projections.

SUBTASK 3: Hydraulic Model Calibration. Using data collected by the City, hydraulic model will be calibrated for accuracy of results. City shall provide pressure recordings and fire hydrant testing at locations determined by the Engineer.

SUBTASK 4: Hydraulic Model Scenarios of the existing system and the proposed future system will include:

- Existing Conditions
- Ability to support projected growth.
- Interim Future Growth Conditions (5-years)
- 10-year Future Growth Conditions
- Long-term Growth Conditions (20-years)

The levels of growth to include in the model runs will be based on an estimated percent development in identified growth areas. The established level of growth (percent developed) in each growth area will be for the 5, 10, and 20-year time horizon. Water demand scenarios shall include: average day, maximum day, and peak hour.

SUBTASK 5: Evaluate hydraulic modeling results to identify regulatory or level of service concerns. Develop recommendations of water system improvements to meet growth projections, fire flow needs, and regulatory requirements.

TASK 600: REPORTING

SUBTASK 1: Summarize Work Completed. The work completed will be summarized into report form.

SUBTASK 2: Develop Recommendations. Recommendations and opinions of probably for improvements to the water distribution system will be provided. Included with the recommendations will be conceptual-level cost estimates.

SUBTASK 3: Phasing Plan. A phasing plan will be developed. Projects will be prioritized based on the size of the project and costs. Review of model runs for existing conditions, interim (5-year), 10-year, and 20-year growth will also assist in establishing project phases.

SUBTASK 4: Prepare Draft Report. A draft report will be prepared that summarizes and presents results. The report will be submitted to CITY and a review meeting will be scheduled to discuss comments.

SUBTASK 4: Present Draft Report. Hold workshop meeting with CITY staff to review the preliminary report and findings. Discuss comments or proposed changes.

SUBTASK 6: Prepare Final Report. A final report will address any comments from the draft report review meeting. A final submittal will include a hard copy and digital version of the final report.

SUBTASK 7: Present Final Report. Coordinate with Owners' staff and attend a meeting for the purposes of presenting report findings to the City Council.

SUBTASK 8: Data Submittal. The following submittals will be provided at the end of the project:

- Inventory data in a format that can be imported into a GIS database. (To be coordinated with Manor Staff).

CITY PROVIDED ASSUMPTIONS:

- Historical Water Use Data – Sales, Purchases, water lost, customer meter data, etc.
- SCADA Data – Water storage tank levels, pump station discharge pressures and flow rates, master meter flow rates.
- Model Calibration Data – Pressure recordings and fire hydrant flow tests.
- Wholesale Supplier information – water rates, water purchase agreements, available capacities. Source water quality reports.
- GIS Data
- Distribution System Documents – Work Orders, as constructed drawings, operating reports, and pump curves or tags.
- Population Projection Documents – Previous land development studies, Population projection reports, preliminary plats or relevant information for the proposed developments, and Economic development plans.

ADDITIONAL SERVICES:

Services specifically excluded under this Agreement include:

1. Any designs, reports or studies not specifically listed.
2. Additional meetings and site visits not specifically listed.
3. Any other service not specifically listed.
4. Development of land use and land development scenarios.

COMPENSATION:

TASK 100 FEE:	\$	5,700
TASK 200 FEE:	\$	19,800
TASK 300 FEE:	\$	13,400
TASK 400 FEE:	\$	9,600
TASK 500 FEE:	\$	45,400
TASK 600 FEE:	\$	44,900

TOTAL: \$ **138,800**

CITY OF MANOR, TEXAS

GEORGE BUTLER ASSOCIATES, INC.

By: _____

Frank T. Phelon
By: _____

Date: _____

Date: 8/30/2022