TASK ORDER FORM

This is Task Order No. 104241,
consisting of 3 pages,
dated _____.

KSA Project Number: 104241
Owner Project (or Purchase Order) Number:

Project Name: City of Sanger - Water site studies

In accordance with paragraph 1.01 of the Standard Form of Agreement Between Owner and Engineer for Professional Services – Task Order Edition, dated September 8, 2020 ("Agreement"), Owner and Engineer agree as follows:

1. **Specific Project Data**

   A. Owner: City of Sanger, Texas

   B. Title: City of Sanger - Water site studies

   C. Description: Groundwater resource evaluation, water storage and pumping site modeling, preparation of conceptual design documents.

2. **Services of Engineer:**
   Engineer shall provide, or cause to be provided, the following services:

   Groundwater resource evaluation, water storage and pumping site modeling, preparation of conceptual design documents as detailed in Attachment A.

3. **Owner's Responsibilities**
   Owner shall have those responsibilities set forth in Article 2 and in Exhibit B, except as modified by this Task Order.

4. **Times for Rendering Services**

   Engineer shall complete its services in accordance with the following schedule:

   Final report and conceptual design to be submitted within 120 days of Notice to Proceed from the city. A detailed schedule is provided in the attached scope of work.

5. **Payments to Engineer**

   Owner shall pay Engineer for services rendered as follows:

   $112,150 Lump Sum. A detailed breakdown of the task fees is included in Attachment A.

6. **Hourly Rates and Reimbursable Expenses Schedule**

Rates for hourly work and reimbursable expenses effective on the date of this Agreement are:

Principal	$370.00/hour
Senior Aviation Planner	$260.00/hour
Aviation Planner	$185.00/hour
Electrical Engineer	$225.00/hour
Electrical Design Engineer	$160.00/hour
Senior Project Manager	$310.00/hour
Project Manager	$235.00/hour
Senior Project Engineer	$200.00/hour
Project Engineer	$180.00/hour
Senior Design Engineer	$160.00/hour
Design Engineer	$140.00/hour
Senior Project Architect	$285.00/hour
Project Architect	$145.00/hour
Design Architect	$110.00/hour
Senior Engineering Technician	$230.00/hour
Engineering Technician	$125.00/hour
Senior Design Technician	$160.00/hour
Design Technician	$100.00/hour
Safety Manager	$145.00/hour
Safety Specialist	$105.00/hour
Regulation Compliance Specialist	$135.00/hour
Project Assistant	$100.00/hour
Senior CAD Technician	$115.00/hour
CAD Technician	$ 90.00/hour
Senior Project Representative	$130.00/hour
Project Representative	$110.00/hour
Graphic Designer	$ 85.00/hour
Administrative Assistant	$100.00/hour
Secretary	$ 60.00/hour
Three-Man Survey Crew	$235.00/hour
Two-Man Survey Crew	$190.00/hour
Senior Registered Surveyor	$215.00/hour
Registered Surveyor	$175.00/hour
Senior Survey Technician	$125.00/hour
Survey Technician	$110.00/hour
Mileage	$ 0.70/mile
ATV (4-Wheeler)	$100.00/day
GPS	$100.00/day

Reimbursable Expenses (Travel, Lodging, Copies, Printing)	Actual Cost
Outside Consultants	Cost + 15%

NOTE: The Standard Hourly Rates and Reimbursable Expenses Schedule shall be adjusted annually as of January to reflect equitable changes in the compensation payable to Engineer.

7. Terms and Conditions: Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effective Date of this Task Order is _____.

OWNER: City of Sanger, Texas	ENGINEER: KSA Engineers, Inc.
By: _____	By: _____
Name: John Noblitt	Name: John Reidy, P.E.
Title: City Manager	Title: Managing Principal, Water Resources
Date Signed: _____	Date Signed: 7/1/2025
	Engineer License or Firm's Certificate No. F-1356
	State of: Texas

DESIGNATED REPRESENTATIVE FOR TASK ORDER:	DESIGNATED REPRESENTATIVE FOR TASK ORDER:
Name: Jim Bolz	Name: Shriram Manivannan, P.E.
Title: Public Works Director	Title: Municipal Team Leader
Address: 502 Elm Street Sanger, TX 76266	Address: 140 E. Tyler Street Suite 600 Longview, TX 75601
E-Mail Address: jbolz@sangertexas.org	E-Mail Address: smanivannan@ksaeng.com
Phone: 940.458.7930	Phone: 972.542.2995
Fax: _____	Fax: 888.224.9418

Scope of work – Proposed South-East Water Wells

INTRODUCTION & BACKGROUND

The City of Sanger is anticipating significant residential growth in large parcels of land in the southeastern portion of the city, where recent development proposals indicate construction of approximately 3,500 single-family homes. This area, located south of McReynolds Drive and east of Rector Road, currently lacks the water infrastructure necessary to support such development.

In late 2024 the city engaged KSA Engineers to evaluate water servicing strategies and infrastructure requirements. The scope of this effort included updating the City's 2020 WaterCAD model, identifying strategic locations for water supply and treatment facilities, and determining the pumping and storage capacities needed to meet TCEQ requirements.

The proposed water system will include groundwater wells, a pump station, treatment systems, and both ground and elevated storage tanks.

- Two (2) to Four (4) potential wells spread across south-east portion of city to deliver water to a central water storage and pumping site
- Two (2) Ground storage tanks with total capacity of 400,000 gallons
- One (1) Elevated storage tank with total capacity of 350,000 gallons
- Pump station with a pumping capacity of up to 2,500 gpm
- Chlorine and potentially polyphosphate treatment
- Pump station building housing pump and chemical treatment equipment
- Standby Generator for the Storage and pump station facility

This scope of work outlines the conceptual phase engineering services (Part A) required to implement the groundwater supply and distribution system for the development in southeast Sanger.

KSA proposes to complete the project in two parts.

Part A scope of work includes:
1) Groundwater resource evaluation and prepare summary report.
2) Water distribution modeling & Conceptual design

Part B scope of work includes: (not included in current scope of work)
1) Preliminary Engineering Design
2) Final Engineering Design
3) Bid Phase Services
4) Construction Phase Services

Part A - Scope of work

1. Groundwater resource evaluation and prepare summary report

1.1 Data Gathering – Review and analyze the information obtained from subsurface data in the immediate vicinity of the designated area. This will include any documentation on water well construction, geophysical logs, aquifer tests, and other water quality data. The information gathered will be used to detail the hydrogeologic characteristics of the available aquifers.

1.2 Perform an analysis of the hydrogeologic properties of the area including reviewing previous reports and literature on the area, the Desired Future Conditions (DFC) and the Texas Water Development Board's (TWDB) determination of the Modeled Groundwater Availability (MAG) values. Groundwater Conservation District (GCD) rules and regulations will be reviewed against

project specific water supply requirements. The information gathered will provide an overview of the regulatory issues, in addition to discussing the recharge and long-term sustainability of production wells.

1.3 Determine the target aquifer or formation within an aquifer and provide an estimated well yield and water quality and the best location(s) to target future well drilling activities to meet project specific water supply needs. Well spacing and preliminary construction design/costs for the well(s) will be provided. Note: GCD Permits/approvals are excluded from the scope of work and would be sought under the future Part B scope of services.

1.4 Prepare a Report to summarize the findings and provide a calculation of the maximum sustainable production capacity for wells within the target area. The electronic report will be signed and sealed by a licensed Geoscientist.

2. **Water distribution modeling & conceptual design to determine pumping and storage requirements for new water servicing site**

2.1 Prepare Water System Model: KSA will prepare WaterCAD models for the phased development based on available planning (preliminary development plans in the south-east) and survey information.

2.2 Develop and Integrate development plans with existing city water infrastructure: KSA will utilize TCEQ requirements and water usage from similar developments to determine per capita water usage, commercial usage and peaking factors. KSA will estimate demands for various operating conditions including average day, maximum day, and peak flow conditions and integrate it into the existing Sanger water model and run for the 5-, 10- and 20-year city baseline developmental plans.

2.3 Distribute estimated water demands for Phased development scenarios: KSA will allocate estimated water demand data to the hydraulic model and conduct model calibration by adjusting peaking values and demand allocation distribution.

2.4 Capacity Analysis - KSA will perform a cursory analysis of the water system capacities and identify required line sizes, pumping and storage requirements for the proposed new water servicing site and the development.

2.5 Conceptual design of the central water servicing site to include –

- Identifying preliminary permitting, zoning, land use and phasing considerations
- Defining design criteria for water demand, storage volume (number, size, type), pumping capacity (pump definition)
- Identifying space needs for pumps, controls, electrical, HVAC, chemical treatment and prepare a conceptual layout and orientation on site.

2.6 Prepare a draft and final report to summarize the pumping and storage site requirements and prepare Class 5 cost (Preliminary Opinion of Probable Construction Cost) estimates for Phased development plans. A review period of 2 weeks is assumed between the draft and final report submission, with comments received from the city within a week of draft report submission.

PROJECT SCHEDULE

Milestone/Deliverable	Calendar days from NTP
Part A SOW	
Background review	10
Groundwater resource evaluation and prepare summary report	45
Water distribution system modelling	45
Conceptual design site plans	90
Part A Summary Draft Report	110
Part A Summary Final Report	124

PROJECT COST

	Cost
Part A SOW	
Groundwater resource evaluation and prepare summary report	$34,250
Water distribution system modelling	$37,400
Conceptual design	$31,500
Part A – Summary Report	$9,000
Part A SOW Total	**$112,150**