

EXHIBIT B - WORK ORDER

MAPS # 2023-0606

MAPS DATE: May 14, 2024

Pursuant to and subject to the referenced Master Agreement for Professional Services (MAPS), between the Town of Little Elm, Texas ("Owner"), and **Freese and Nichols, Inc.** ("Consultant"), Owner hereby requests that Consultant perform, and Consultant agrees to perform, the work described below upon the terms set forth in said MAPS and in this Work Order:

Work
Order # _____

Project
Name: Mustang SUD Emergency Water Interconnection

OWNER PROVIDED INFORMATION:

Work Site:	Consultant offices unless otherwise stated
Work to be Performed:	All work shall be in accordance with the scope of work listed below and as listed in the Master Agreement for Professional Services
Drawings/Plans are/are not attached:	Not attached
Specifications are/are not attached:	Not attached
Date and Time to Commence:	Upon receipt of Purchase Order and executed Work Order
Date and Time to Complete:	Consultant will complete reporting and final design service services within nine (9) months from receipt of notice to proceed from the Owner. TCEQ review window may impact schedule.
Equipment, vehicles, tools, materials, supplies to be furnished or obtained through third parties by Owner:	N/A
Billing Period:	Monthly-Through the end of each month, billed by the 10th of the following month.
Invoice Mailing Instructions:	Mail to: Town of Little Elm Accounts Payable 100 W. Eldorado Pkwy. Little Elm, TX 75068 Email to: accounts.payable@littleelm.org Include work order number, PO number, billing period, and project name,
Other Requirements or Variance from MSA (if any):	N/A

CONSULTANT PROVIDED INFORMATION:

Compensation: The Consultant will provide Professional Services as outlined in the scope of work with an estimate to complete the work as follows:

<u>Basic Services:</u>	<u>Cost</u>
A. TCEQ Interconnection Report	✓ \$ 43,385
B. Interconnection Design Phase	✓ \$ 52,155
D. Bid Phase	✓ \$ 10,735
E. Construction Phase	✓ \$ 21,775
Subtotal Basic Services (LS)	✓ \$ 128,050
<u>Special Services:</u>	
A. Topographical Survey	✓ \$ 11,890
B. Easement Documents	✓ \$ 9,765
C. SUE	✓ \$ 19,605
Subtotal Special Services (CPM)	✓ \$ 41,260
Total Compensation	✓ \$ 169,310

* Technology and expense charges included in above service tasks.

Scope of Work:

Project Description

An interlocal agreement was recently completed for an emergency treated water supply interconnection between the Mustang Special Utility District (Mustang) and the Town of Little Elm (Owner). This project will include the coordination and preparation of an interconnection report for submittal and review by TCEQ. Upon TCEQ approval, design and construction services will be provided for an emergency interconnection between Mustang and the Owner. The proposed interconnection will be made from an existing Little Elm 12-inch pipeline along the Oak Grove Parkway (FM 720W), north of Cottonwood Trail, to Mustang's existing 12-inch pipeline (near Linden Court). The proposed interconnection vault will include isolation valves, backflow prevention and flow meter. The interconnection flow meter will be a stand-alone remote type providing local display. No secondary display/instrumentation or remote communication to a SCADA system is included under this scope. The pipeline length for the primary interconnection option is approximately 825-linear feet.

It is anticipated this project will be constructed as a single construction contract and conventional design-bid-build delivery method.

Project Assumptions:

- The Owner will coordinate the interconnection agreement with Mustang.
- The interconnection is contingent upon TCEQ approval of the Interconnection Report.
- The proposed interconnection includes a precast vault, isolation valves, manually operated control valve (or equal), Octave flow meter, sample taps, and interconnecting piping only.
- The primary interconnection between the Mustang and Owner's water systems will be along the east side of Oak Grove Parkway (FM 720W). A second route alternatives is considered with this work order, with a maximum routing of 1,150 LF, see Figure 1.

- No electrical service is to be provided since the proposed Octave flow meter is battery powered and it is assumed isolation and control valving will be manually operated.
- No geotechnical or environmental services will be provided.
- No system modeling efforts are to be provided. Consultant will be dependent on the Owner and Mustang to provide pertinent system information (i.e. storage, pumping, service connection, HGL, etc.) for the TCEQ interconnection coordination and reporting, including required sampling and chemical analysis testing.

Basic Services

Consultant shall render the following professional services in connection with the development of the Project:

- A. TCEQ Interconnection Report - Consultant shall provide professional services in this phase as follows:
- a. Conduct kickoff meeting to review scope, schedule, and budget; determine any special conditions that may affect design and/or construction; discuss administrative requirements of Owner; and to develop design criteria.
 - b. Gather existing data on Owner and Mustang existing infrastructure, including record drawings, historical pumping records and tank levels.
 - c. Consultant will evaluate the Owner and Mustang systems for compliance with the TCEQ Chapter 290 regulations. Consultant will analyze pumping capacity, hydraulic grade lines, elevated storage capacity, and total storage capacity determine if any deficiencies exist as well as document estimated TCEQ required pumping and storage needs.
 - d. Consultant will follow the TCEQ "Interconnection between Two Public Water Systems Checklist" and provide an Engineering Report for submittal and review by TCEQ. This will include limited desktop level review of system hydraulics and water quality analysis for incorporation into report. Texas Drinking Water Watch data will be used for water quality analysis in lieu of collecting new water samples. Consultant will coordinate with Owner and Mustang to collect necessary data for inclusion in Engineering Report.
 - e. Conduct one (1) review meeting with the Owner to present the report and finalize accordingly.
 - f. Deliverables include the following:
 - i. Engineering Report
- B. Interconnection Design - After approval from both the Owner, Mustang and TCEQ, Consultant shall provide professional services in this phase as follows:
- a. Review Owner's front end documents, including bid documents, general conditions, and special conditions for construction. Meet with the Owner and Mustang to resolve review comments, and revise documents accordingly.
 - b. Manage efforts of internal design team and sub-consultants on the Project and perform Quality Control review of all deliverables.
 - c. Prepare revised opinion of probable construction cost at the 60% and 90% submittals.
 - d. Consultant will develop plan and profile sheets for a maximum routing of 1,150 LF of 12" water line for the proposed connection.

- e. Design submittals shall be provided by Consultant to the Owner and Mustang at 60%, and 90%. A total of five (5) paper sets (with half size drawings) will be submitted to the Owner and Mustang at each submittal. Electronic files will be submitted in Half Size (11" x 17") format. Five (5) full sets of specifications will be provided at the 60% and 90% submittal as described in the applicable paragraphs below.
 - i. 60% submittal will include all design work for the piping connection and include a full set of specifications.
 - ii. Based on comments from the 60% Review meeting, Consultant will incorporate the Owner's and Mustang's comments and produce bid documents of approximately 90% complete.
 - iii. 90% Submittal will include the 60% submittal with any comments incorporated in a package suitable for bidding.
 - iv. Based on comments from the 90% Review meeting, Consultant will incorporate the comments and produce a set of sealed bid documents for submittal to TCEQ.
- f. Prepare meeting agendas and minutes and attend the following meetings:
 - i. Attend two (2) meetings with third parties, including City of Oak Point.
 - ii. Attend two (2) workshops for review of milestone design submittals.
- g. Consultant will submit plans and specifications to the TCEQ for review, along with necessary coordination with TxDOT for potential roadway crossing permits.
- h. Deliverables for the Final Design Phase include:
 - i. Front end documents for construction and equipment packages
 - ii. Routine Permit Applications (Road Crossing and TCEQ Approval)
 - iii. OPCC at 60% and 90% submittals
 - iv. 60% review submittal of Plans and Specifications
 - v. 90% review submittal of Plans and Specifications
 - vi. Final "Sealed" Plans and Specifications

C. Bid Phase - Upon completion of the design services, approval of "Final" drawings and specifications by the Owner and TCEQ, Consultant will proceed with the performance of services in this phase as follows:

- a. Assist Owner in securing bids. Issue a Notice to Bidders to prospective contractors and vendors listed in Consultant's database of prospective bidders, and to selected plan rooms. Provide a copy of the notice to bidders for Owner to use in notifying construction news publications and publishing appropriate legal notice. The cost for publications shall be paid by Owner.
- b. Submit electronic copies of plans, specifications and bidding documents to the Owner. The Owner shall maintain information on entities that have been issued a set of bid documents and will distribute information on plan holders to interested contractors and vendors on request.
- c. Assist Owner by responding to questions and interpreting bid documents.
- d. Assist the Owner in conducting a pre-bid conference for the construction projects and coordinate responses with Owner. Response to the pre-bid conference will be in the form of addenda issued after the conference. Attend the tour of the project site after

the pre-bid conference.

- e. At Owner request, Consultant will assist Owner in the opening, tabulating, and analyzing the bids received. Review the qualification information provided by the apparent low bidder to determine if, based on the information available, they appear to be qualified to construct the project. Recommend award of contracts or other actions as appropriate to be taken by Owner.
- f. Assist Owner in the preparation of Construction Contract Documents for construction contracts. Provide ten (10) sets of Construction Contract Documents which include information from the selected bidders' bid documents, legal documents, and addenda bound in the documents for execution by the Owner and construction contractor. Distribute five (5) copies of these documents to the contractor with a notice of award that includes directions for the execution of these documents by the construction contractor. Provide Owner with the remaining five (5) copies of these documents for use during construction. Additional sets of documents can be provided as an additional service. In addition, provide a PDF of the conformed contract documents to the TOWN and construction contractor.

Entity	Specifications		Plan Size	
	Executed	Conformed	Full (22x34)	Half (11x17)
Contractor	2	2	2	3
TOWN	3	3	1	4
Total	5	5	3	7

- g. Furnish contractor copies of the drawings and specifications for construction pursuant to the General Conditions of the Construction Contract.
- h. Deliverables for the Bid or Negotiation Phase include:
 - i. Notice to Bidders
 - ii. Electronic copies of plans, specifications, bidding documents, and addenda
 - iii. Recommendation of Award with tabulation of bids
 - iv. Notice of award to selected bidder
 - v. Conformed contract documents for execution
 - vi. Copies of conformed contract documents for Contractor and Owner

D. Construction Phase Support Services - Upon completion of the bid or negotiation phase services, Consultant will proceed with the performance of construction phase support services as described below. Consultant will endeavor to protect Owner in providing these services however, it is understood that Consultant does not guarantee the Contractor's performance, nor is Consultant responsible for supervision of the Contractor's operation and employees. Consultant shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor, or any safety precautions and programs relating in any way to the condition of the premises, the work of the Contractor or any Subcontractor. Consultant shall not be responsible for the acts or omissions of any person (except its own employees or agents) at the Project site or otherwise performing any of the work of the Project.

The Owner agrees to include provisions in the construction contract documents that will require the construction contractor to include Consultant and their subconsultants on this project to be listed as an additional insured on contractor's insurance policies.

- a. Assist Owner in conducting pre-construction conference(s) with the Contractor(s), review construction schedules prepared by the Contractor(s) pursuant to the requirements of the construction contract and prepare a proposed estimate of monthly

cash requirements of the Project from information provided by the Construction Contractor.

- b. Establish communication procedures with the Owner and contractor. Establish and maintain a project documentation system consistent with the requirements of the construction contract documents. Monitor the processing of contractor's submittals and provide for filing and retrieval of project documentation. Produce monthly reports indicating the status of all submittals in the review process. Review contractor's submittals, including requests for information, modification requests, shop drawings, schedules, and other submittals in accordance with the requirements of the construction contract documents for the projects. Monitor the progress of the contractor in sending and processing submittals to see that documentation is being processed in accordance with schedules.
- c. Based on Consultant's observations as an experienced and qualified design professional and review of the Payment Requests and supporting documentation submitted by Contractor, determine the amount that Consultant recommends Contractor be paid on monthly and final estimates, pursuant to the General Conditions of the Construction Contract.
- d. Make periodic visits (up to a total of 2) appropriate to the stage of construction to the site (as distinguished from the continuous services of a Resident Project Representative) to observe the progress and the quality of work and to attempt to determine in general if the work is proceeding in accordance with the Construction Contract Documents. In this effort Consultant will endeavor to protect the Owner against defects and deficiencies in the work of Contractors and will report any observed deficiencies to Owner. Visits to the site in excess of the specified number are an additional service.
- e. Notify the contractor of non-conforming work observed on site visits. Review quality related documents provided by the contractor such as test reports, equipment installation reports or other documentation required by the Construction contract documents.
- f. Coordinate the work of testing laboratories and inspection bureaus required for the testing or inspection of materials, witnessed tests, factory testing, etc. for quality control of the Project. The cost of such quality control shall be paid by Owner and is not included in the services to be performed by Consultant.
- g. Interpret the drawings and specifications for Owner and Contractor(s). Investigations, analyses, and studies requested by the Contractor(s) and approved by Owner, for substitutions of equipment and/or materials or deviations from the drawings and specifications is an additional service.
- h. Establish procedures for administering constructive changes to the construction contracts. Process contract modifications and negotiate with the contractor on behalf of the Owner to determine the cost and time impacts of these changes. Prepare change order documentation for approved changes for execution by the Owner. Documentation of field orders, where cost to Owner is not impacted, will also be prepared. Investigations, analyses, studies or design for substitutions of equipment or materials, corrections of defective or deficient work of the contractor or other deviations from the construction contract documents requested by the contractor and approved by the Owner are an additional service. Substitutions of materials or equipment or design modifications requested by the Owner are an additional service.
- i. Prepare documentation for contract modifications required to implement modifications in the design of the project. Receive and evaluate notices of contractor claims and make recommendations to the Owner on the merit and value of the claim on the basis

of information submitted by the contractor or available in project documentation. Endeavor to negotiate a settlement value with the Contractor on behalf of the Owner if appropriate. Providing these services to review or evaluate construction contractor(s) claim(s), supported by causes not within the control of Consultant are an additional service.

- j. Conduct, in company with Owner's representative, a final review of the Project for conformance with the design concept of the Project and general compliance with the Construction Contract Documents. Prepare a list of deficiencies to be corrected by the contractor before recommendation of final payment. Assist the Owner in obtaining legal releases, permits, warranties, spare parts, and keys from the contractor. Review and comment on the certificate of completion and the recommendation for final payment to the Contractor(s). Visiting the site to review completed work in excess of two (2) trips are an additional service.
- k. Revise the construction drawings in accordance with the information furnished by construction Contractor(s) reflecting changes in the Project made during construction. Two (2) sets of prints of "Record Drawings" shall be provided by Consultant to Owner.

Special Services

Special Services to be performed by Consultant include the following:

- A. Topographical Survey - Upon written notice to proceed, Consultant shall retain (as a subconsultant) and monitor the services of a surveying firm to perform surveying services for the project. Project limits will encompass both potential alignments shown in Figure 1. The following survey shall be provided:
 - a. Establish project control using Global Positioning System (GPS) methodology. Horizontal values will be based on the Texas State Plane Coordinate System, North American Datum of 1983, North Central Zone (4202) and scaled to surface coordinates. The vertical values will be based on GPS derived ellipsoid heights and adjusted to North American Vertical Datum of 1988 (NAVD88) elevations using Geoid 12B. Control Points will also be tied into the Town of Prosper control monuments.
 - b. Research current property Districts and obtain copies of subdivision plats, Districtship deeds, and existing easements within the project area.
 - c. Locate existing property corners and right-of-way corners to establish property lines and street rights-of-way.
 - d. Design survey to include pavement edges, curb and gutter, buildings, driveways, culverts, fences and gates, signs, mailboxes, tops and toes of slopes, spot elevations, trees six (6) inches and greater, surface locations of utilities and flowline elevations of sanitary and storm sewer manholes where accessible, and other surface features.
 - e. Provide a digital design survey drawing in AutoCAD (.dwg) format prepared to Consultant standards showing visible surface features located, an ASCII point file, and a copy of field notes and field sketches.
- B. Easement Documents - Upon written notice to proceed, Consultant shall retain (as a subconsultant) and monitor the services of a surveying firm to perform surveying services for the project. The following survey shall be provided:
 - a. Prepare up to three (3) parcel exhibits with legal descriptions for permanent easements, signed and sealed by a Registered Professional Land Surveyor.
 - b. Prepare up to three (3) parcel exhibits with legal descriptions for temporary easements, signed and sealed by a Registered Professional Land Surveyor.

- C. Subsurface Utility Engineering (SUE) - Consultant shall retain (as a subconsultant) and monitor subsurface utility engineering (SUE) services. SUE work required for this project in general accordance with the recommended practices and procedures described in ASCE Publication CI/ASCE 38-02 (Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data):
- a. As described in the mentioned ASCE publication, four levels have been established to describe the quality of utility location and attribute information used on plans. The four quality levels are as follows:
 - i. Quality Level D (QL "D") – Information derived from existing records.
 - ii. Quality Level C (QL "C") – QL "D" information supplemented with information obtained by surveying visible above-ground utility features (i.e. valves, hydrants, meters, manhole covers, etc.).
 - iii. Quality Level B (QL "B") – Two-dimensional (x, y) information obtained through the application and interpretation of non-destructive surface geophysical methods. Also known as "designating" this quality level provides the horizontal position of subsurface utilities within approximately one foot.
 - iv. Quality Level A (QL "A") – Also known as "locating", this quality level provides precise three-dimensional (x, y, z) information at critical locations by exposing specific utilities. Non-destructive vacuum excavation equipment is used to expose the utilities at specific points which are then tied down by survey.
 - b. For this project, QL's "B" and "A" SUE, as previously defined, will be provided. The QL "B" will include the proposed alignment along Oak Ridge Parkway (approximately 700 LF), see Figure 1.
 - c. The QL "A" will consist of up to four (4) test holes, along the proposed water line alignment.
 - d. Consultant and Sub-consultant will attempt to place the test holes outside the paved areas wherever possible. However, some test holes may need to be placed in paved areas that may require traffic control measures to be implemented. Sub-consultant will establish routine/ordinary traffic control (cones and free-standing signage, etc.) whenever required as part of this scope. If non-routine traffic control measures are required (barricades, flag person, changeable message board, etc.) these services will be additional to the contract.

Additional Services

Additional Services to be performed by Consultant, if authorized by Owner, which are not included in the above-described basic services, are described as follows:

- A. Additional water quality analysis effort if TCEQ requires additional water samples for water quality analysis.
- B. Providing services to investigate existing conditions or facilities, or to make measured drawings thereof, or to verify the accuracy of drawings or other information furnished by Owner.
- C. Providing renderings, model, and mock-ups requested by the Owner.
- D. Making revisions to drawings, specifications or other documents when such revisions are 1) not consistent with approvals or instructions previously given by Owner or 2) due to other causes not solely within the control of Consultant.

- E. Providing consultation concerning the replacement of any Work damaged by fire or other cause during the construction and providing services as may be required in connection with the replacement of such Work. Performing investigations, studies, and analysis of work proposed by construction contractors to correct defective work. Any services required as a result of default of the contractor(s) or the failure, for any reason, of the contractor(s) to complete the work within the contract time. Providing services after the completion of the construction phase not specifically listed in Article II. Visits to the site in excess of the number of trips included in Article II for periodic site visits, coordination meetings, or contract completion activities. Providing services made necessary because of unforeseen, concealed, or differing site conditions or due to the presence of hazardous substances in any form. Providing services to review or evaluate construction contractor(s) claim(s), provided said claims are supported by causes not within the control of Consultant. Providing value engineering studies or reviews of cost savings proposed by construction contractors after bids have been submitted. Provide follow-up professional services during Contractor's warranty period.
- F. Investigations involving consideration of operation, maintenance and overhead expenses, and the preparation of rate schedules, earnings and expense statements, feasibility studies, appraisals, evaluations, assessment schedules, and material audits or inventories required for certification of force account construction performed by Owner.
- G. Preparing applications and supporting documents for government grants, loans, or planning advances and providing data for detailed applications.
- H. Preparing Operation and Maintenance Manuals or conducting operator training.
- I. Preparing data and reports for assistance to Owner in preparation for hearings before regulatory agencies, courts, arbitration panels or any mediator, giving testimony, personally or by deposition, and preparations therefore before any regulatory agency, court, arbitration panel or mediator.
- J. Furnishing the services of a Construction Manager or Resident Project Representative to act as Owner's on-site representative during the Construction Phase. The Resident Project Representative will act as directed by Consultant in order to provide more extensive representation at the Project site during the Construction Phase. Through more extensive on-site observations of the work in progress and field checks of materials and equipment by the Resident Project Representative and assistants, Consultant shall endeavor to provide further protection for Owner against defects and deficiencies in the work. Furnishing the services of a Resident Project Representative is subject to the provisions of Article I, D and Attachment RPR.

If Owner provides personnel to support the activities of the Resident Project Representative who is Consultant or Consultant's agent or employee, the duties, responsibilities and limitations of authority of such personnel will be set forth in an Attachment attached to and made a part of this Agreement before the services of such personnel are begun. It is understood and agreed that such personnel will work under the direction of and be responsible to the Resident Project Representative. Owner agrees that whenever Consultant informs him in writing that any such personnel provided by the Owner are, in his opinion, incompetent, unfaithful or disorderly, such personnel shall be replaced.

- K. Assisting Owner in preparing for, or appearing at litigation, mediation, arbitration, dispute review boards, or other legal and/or administrative proceedings in the defense or prosecution of claims disputes with Contractor(s).
- L. Performing investigations, studies and analyses of substitutions of equipment and/or materials or deviations from the drawings and specifications.
- M. Assisting Owner in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this Agreement. Such services, if any, shall be furnished by Consultant on

a fee basis negotiated by the respective parties outside of and in addition to this Agreement.

- N. Providing environmental support services including the design and implementation of ecological baseline studies, environmental monitoring, impact assessment and analyses, permitting assistance, and other assistance required to address environmental issues.
- O. Design, contract modifications, studies or analysis required to comply with local, State, Federal or other regulatory agencies that become effective after the date of this agreement.
- P. Services required to resolve bid protests or to rebid the projects for any reason.
- Q. Providing basic or additional services on an accelerated time schedule. The scope of this service include cost for overtime wages of employees and consultants, inefficiencies in work sequence and plotting or reproduction costs directly attributable to an accelerated time schedule directed by the Owner.
- R. Provide Geotechnical investigations, studies and reports.

ACCEPTANCE:

This Work Order is accepted on the terms set forth herein and in the MAPS referenced above, as indicated by the signatures below.

TOWN OF LITTLE ELM

FREESE AND NICHOLS, INC.

Matthew Mueller, Town Manager



Clayton Barnard, Principal/ Vice President

Printed Name & Title

Date

July 12, 2024

Date

FIGURE 1
TOWN OF LITTLE ELM
MUSTANG EMERGENCY CONNECTION

LEGEND

- Manhole
- 10" and Smaller Wastewater Line
- 10" and Smaller Water Line
- 12" and Larger Wastewater Line
- 12" and Larger Water Line
- Force Main

FREESE AND NICHOLS

