

PROFESSIONAL SERVICES AGREEMENT

This Agreement is made this the 16th day of March 2026, between the City of Seguin, Texas (“City”), 205 North River Street, Seguin, Texas 78155 and Freese and Nichols, Inc. (“Consultant” or “FNI”), 10431 Morado Cir Suite 300, Austin, TX 78759 [Consultant’s address] for the provision of professional services in accordance with the attached Scope of Services, attached hereto as **Exhibit “A”** (collectively the “Project”).

ARTICLE 1 CONSULTANT’S SERVICES AND RESPONSIBILITIES

1.1 STANDARDS OF PERFORMANCE

1.1.1 The Consultant will be responsible for completing the work set forth in accepted Scope of Services and the deliverables all described in the Scope of Services. The Scope of Services shall serve as the primary document setting forth the expectations of the Parties. Work shall progress in accordance with the Completion Schedule attached to this Agreement as **“Exhibit C”**.

1.1.2 The performance of all services by the Consultant in connection with this Agreement will be by persons appropriately licensed or registered under State, local and Federal laws governing their respective consulting disciplines. In performing all services under this Agreement, the Consultant will follow the Statutory Standard of Care, Tex. Civ. Prac. & Rem. Code § 130.0021(b)(1).

1.1.3 No work under this Agreement will be subcontracted by the Consultant without prior written approval from the City. Any work or services subcontracted under this Agreement will be specified by separate written Agreement and will be subject to each provision of this Agreement. Persons hired by the Consultant or its subcontractors shall not be employees of or have any contractual interest with the City.

1.1.4 Any provisions in this Agreement pertaining to the City’s review, approval or acceptance of written materials prepared by the Consultant or its subconsultants, contractors, and subcontractors in connection with this Agreement will not diminish the Consultant’s responsibility for the services set forth herein.

1.1.5 Consultant will perform all of its services in coordination with the City. The Consultant will advise the City of data and information the Consultant needs to perform its services and the Consultant will meet with City representatives at mutually convenient times to assemble this data and information.

ARTICLE 2 THE CITY’S RESPONSIBILITIES

The City will:

2.1 Provide full information to the Consultant regarding the City’s requirements for the Consultant’s services under this Agreement. The City will furnish the Consultant with access to city facilities or

private property and all other data and information in the City's possession needed by the Consultant at the Consultant's request.

2.2 The City will designate the Senior Utilities Engineer, Terri Lynn Ruckstuhl, or her designee as she deems appropriate, as the City's Project Manager and authorized representative to act on the City's behalf with respect to this Agreement. Additionally, the City may designate another director as its representative to assist with access to, and collection of data from, the relevant City systems, such as utility systems. The City will examine the documents and information submitted by the Consultant and promptly render responses to the Consultant on issues requiring a decision by the City during the Project.

2.3 Provide access to and make all necessary provisions for the Consultant to enter public and private property as required for the Consultant to perform its services under this Agreement.

2.4 Bear all costs incidental to this Article.

ARTICLE 3 PAYMENTS TO THE CONSULTANT

3.1 **PAYMENTS ON ACCOUNT OF BASIC SERVICES.** Payments for Basic Services will be made to Consultant monthly following receipt by City of Consultant's invoices and appropriate payment requisitions. The amounts of these invoices will be based upon the extent of work completed by the Consultant on a percentage basis within each phase of services, less any disputed amounts, pending resolution thereof. Total payment under this contract shall not exceed the amount agreed upon when Consultant accepts the Scope of Services that will be attached to this Agreement as Exhibit "A" and as set out in the Payment and Fee Schedule attached hereto as **Exhibit B.**

3.2 **ADDITIONAL SERVICES.** If additional services are needed, said services must be approved by the City prior to performance. If the sum of the additional services exceeds \$50,000.00 said sum must be approved by the Seguin City Council prior to undertaking the additional work.

ARTICLE 4 CONSULTANT'S RECORDS

4.1 All expense records of Consultant will be kept on a recognized accounting basis acceptable to the City and will be available to the City at mutually convenient times.

4.2 The City, its auditors, federal auditors, and state agencies that have monitoring or auditing responsibilities for this Agreement will have access to any books, documents, papers and records of the Engineer which are directly pertinent to this Agreement for the purpose of making audit, examination, excerpts, copying and transcriptions.

4.3 The Consultant will furnish to the City at such time and in such form as the City may require, financial statements including audited financial statements, records, reports, data and information, as the City may request pertaining to the matters covered by this Agreement.

**ARTICLE 5
OWNERSHIP AND USE OF DOCUMENTS**

5.1 All documents prepared by Consultant in connection with this Agreement will become the property of the City. City agrees such documents are not intended or represented to be suitable for reuse for another project by City or others. Any such reuse by City or those who obtained said documents from City without written verification or adaptation by the Consultant will be without liability or legal exposure to the Consultant. Consultant shall have and retain the ownership, title, and property rights, including copyright, patent, intellectual property, and common law rights, in any design elements (including but not limited to standard details, drawings, plans, specifications, methodologies, and computations) used in the documents, but developed by Consultant previous to or independent of this Agreement (“Previously/Independently Created Works”).

5.2 The Consultant will retain all of its records and supporting documentation relating to this Agreement, and not delivered to the City, for a period of three years except in the event that the Consultant goes out of business during that period, it will turn over, to the City, all of its records relating to the Project for retention by the City.

**ARTICLE 6
TERM; TERMINATION OF AGREEMENT**

6.1 The term of this Agreement begins on the latter of the effective date established in the first paragraph of the Agreement or on the date that the Scope of Services is accepted by the Parties; and, will end upon the Consultant’s completion, and the City’s acceptance of all services described in this Agreement unless this Agreement is terminated under Sections 6.2 or 6.3 below.

6.2 This Agreement may be terminated by either party upon 30 calendar days prior written notice should the other party fail substantially to perform in accordance with its terms through no fault of the party initiating the termination.

6.3 This Agreement may be terminated at will by the City upon at least 30 calendar days prior written notice to the Consultant.

6.4 In the event of termination as provided in this Article, the Consultant will be compensated for all services performed to termination date which are deemed by the City to be in accordance with this Agreement. This amount will be paid by the City upon the Consultant’s delivering to the City all information and materials developed or accumulated by the Consultant in performing the services described in this Agreement, whether completed or in progress. The expense of reproduction of these items will be borne by the City.

**ARTICLE 7
INSURANCE AND INDEMNITY**

THE CONSULTANT WILL INDEMNIFY AND HOLD HARMLESS THE CITY AND ITS EMPLOYEES, AGENTS, OFFICERS AND SERVANTS FROM ANY AND ALL LAWSUITS, CLAIMS, DEMANDS AND CAUSES OF ACTION OF ANY KIND TO THE EXTENT ARISING FROM THE NEGLIGENT OR INTENTIONAL ACTS OR OMISSIONS OF THE CONSULTANT, ITS OFFICERS, EMPLOYEES OR AGENTS. THIS WILL INCLUDE, BUT NOT BE LIMITED TO, THE AMOUNTS OF JUDGMENTS, PENALTIES, INTEREST, COURT COSTS, REASONABLE LEGAL FEES, AND ALL OTHER EXPENSES INCURRED BY THE CITY ARISING IN FAVOR OF ANY PARTY, INCLUDING THE AMOUNTS OF ANY DAMAGES OR AWARDS RESULTING FROM CLAIMS DEMANDS AND CAUSES OF ACTION FOR PERSONAL INJURIES, DEATH OR DAMAGES TO PROPERTY

ALLEGED OR ACTUAL INFRINGEMENT OF PATENTS, COPYRIGHTS, AND TRADEMARKS AND WITHOUT LIMITATION BY ENUMERATION, ALL OTHER CLAIMS, DEMANDS, OR CAUSES OF ACTION OF EVERY CHARACTER OCCURRING, RESULTING, OR ARISING FROM ANY NEGLIGENT OR INTENTIONAL WRONGFUL ACT, ERROR OR OMISSION OF THE CONSULTANT AND/OR ITS AGENTS AND/OR EMPLOYEES. This obligation by Consultant will not be limited by reason of the specification of any particular insurance coverage in this Agreement. City agrees that to the extent Defense coverage is available under any applicable insurance policy maintained by Consultant, and such policy provides a Defense to additional insureds, City shall be entitled to such Defense as an additional insured under the policy, in accordance with the terms, conditions, and limitations of said policy, which shall satisfy any defense obligation as identified in this contract.

7.1 The Consultant will procure and maintain at Consultant's expense insurance with insurance companies authorized to do business in the State of Texas, covering all operations under this Agreement, whether performed by Consultant or Consultant's agents, subcontractors or employees. Before commencing the work the Consultant will furnish to the City a certificate or certificates in form satisfactory to the City, showing that Consultant has complied with this paragraph. All certificates will provide that the policy will not be changed or canceled until at least 30 calendar days written notice will have been given to the City, and 10 days for non-payment of premium. Commercial general liability insurance and motor vehicle insurance will be written with the City of Seguin, Texas as an additional insured and will be endorsed to provide a waiver of the carrier's right of subrogation against the City. The kinds and amounts of insurance required are as follows:

Workers' Compensation Insurance: In accordance with the provisions of the Workers' Compensation Act of the State of Texas.

Liability Insurance: (1) Commercial general liability insurance with a combined single limit of \$1,000,000 for each occurrence and \$2,000,000.00 in the aggregate, (2) Motor Vehicle liability insurance in an amount not less than \$1,000,000 combined single limit per incident (3) professional liability coverage to cover lawful claims arising in connection with this Project in the combined single limit amount of at least \$1,000,000.00 and \$2,000,000 in the aggregate.

The stated limits of insurance required by this Paragraph are **minimum only**—they do not limit the Consultant's indemnity obligation, and it will be the Consultant's responsibility to determine what limits are adequate. These limits may be basic policy limits or any combination of basic limits and umbrella limits. The City's acceptance of Certificates of Insurance that do not comply with these requirements in any respect does not release the Consultant from compliance with these requirements.

7.2 Depending on the nature of the work involved the Scope of Services may require other insurance be purchased by the Consultant,

ARTICLE 8 CLAIMS AND DISPUTES

MEDIATION

8.1 Any claim, dispute or other matter in question arising out of or related to this Agreement shall be subject to mediation at the sole option of the City as a condition precedent to the commencement of litigation. If such matter relates to or is the subject of a lien arising out of the Consultant's services, the Consultant may proceed in accordance with applicable law to comply with the lien notice or filing deadlines prior to resolution of the matter by mediation.

8.2 If the City elects to mediate, the City and Consultant shall endeavor to resolve claims, disputes and other matters in question between them by non-binding mediation. The Parties shall mutually agree to a mediator and the mediation shall be held at a mutually agreeable time and place. A request for mediation shall be made in writing, delivered to the other party to the Agreement, and filed with the person or entity administering the mediation.

8.3 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon.

8.4 If the parties do not resolve a dispute through mediation pursuant to this Section 8.2, the dispute may be resolved through litigation in a state court of competent jurisdiction.

ARTICLE 9 FEDERAL FUNDING REQUIRED ASSURANCES UNDER TITLE II AND VI

9.1 The Consultant will comply with the Acts and the Regulations relative to Nondiscrimination in applicable Federally assisted programs of the U.S. Department of Transportation, the Federal Highway Administration, or other Federal agency, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

9.2 The Consultant, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Consultant will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

9.3 In all solicitations, either by competitive bidding, or negotiation made by the Consultant for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Consultant of the Consultant's obligations under this contract and the Acts and the Regulations relative to Nondiscrimination on the grounds of race, color, or national origin.

9.4 The Consultant will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration, or other Federal Agency providing funding for this Agreement, to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of the Consultant is in the exclusive possession of another who fails or refuses to furnish the information, the Consultant will so certify to the Recipient or the City, as appropriate, and will set forth what efforts it has made to obtain the information.

9.5 In the event of a Consultant's noncompliance with the Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

- a. withholding payments to the Consultant under the Agreement until the Consultant complies; and/or
- b. cancelling, terminating, or suspending an Agreement, in whole or in part.

9.6 The Consultant will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Consultant will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Consultant becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

ARTICLE 10 MISCELLANEOUS PROVISIONS

10.1 This Agreement is governed by and will be construed under the laws of the State of Texas. All obligations of both parties are performable and exclusive venue for any dispute arising under this Agreement is in Guadalupe County, Texas.

10.2 As to all acts or failures to act by either party to this Agreement, any applicable statute of limitations will commence to run and any alleged cause of action will be deemed to have accrued when the party commencing the cause of action knew or should have known of the existence of the subject act(s) or failure(s) to act.

10.3 The Consultant will not use funds received by it directly or indirectly under the terms of this Agreement for any partisan political activity or to further the election or defeat of any candidate for public office.

10.4 The Consultant hereby affirms that Consultant and Consultant's firm have not made or agreed to make any valuable gift whether in the form of service, loan, thing, or promise to any person or any of his/her immediate family, having the duty to recommend, the right to vote upon, or any other direct influence on the selection of Consultant to provide professional services to the City within the two years preceding the execution of this Agreement. A campaign contribution, as defined by the Texas Election Code or the Seguin City Code will not be considered as a valuable gift for the purposes of this Agreement.

10.5 In performing the services required under this Agreement, the Consultant will not discriminate against any person on the basis of race, color, religion, sex, national origin, age, disability or ancestry. The Consultant agrees not to engage in employment practices which have the purpose or effect of discriminating against employees or prospective employees because of race, color, sex, religion, national origin, age, disability or ancestry. A breach of this covenant may be regarded as a default by the Consultant of the Agreement.

10.6 All references in this Agreement to any particular gender are for convenience only and will be construed and interpreted to be of the appropriate gender. The term “will” is mandatory in this Agreement.

10.7 Should any provision in this Agreement be found or deemed to be invalid, this Agreement will be construed as not containing the provision, and all other provisions which are otherwise lawful will remain in full force and effect, and to this end the provisions of this Agreement are declared to be severable.

10.8 All services provided pursuant to this Agreement are for the exclusive use and benefit of the City.

10.9 In performing all services under this Agreement, the Consultant, its subcontractors, successors and assigns will comply with all local, state and federal laws.

10.10 The City’s execution and performance under this Agreement will not act as a waiver by the City of any immunity from suit to which it is entitled under applicable law. The parties acknowledge that the City, in executing and performing this Agreement, is a governmental entity acting in a governmental capacity.

10.11 The City of Seguin is governed by the Texas Public Information Act (the “Act”), Chapter 552 of the Texas Government Code. This Agreement and all written information generated under this agreement may be subject to release under the Act. The Consultant will not make any reports, information, data, etc. generated under this Agreement available to any individual or organization without the written approval of the City.

10.12 The captions or headings included in this Agreement are for convenience only and in no way define, limit or describe the scope or intent of any provisions, articles, or sections of this Agreement.

10.13 In the event that the performance by either the City or the Consultant of any of its obligations under this Agreement is interrupted or delayed by events outside of their control such as acts of God, war, riot or civil commotion, then the party is excused from such performance for the period of time reasonably necessary to remedy the effects of such events.

10.14 In the event of a default or breach of this Agreement by the Consultant, the City reserves the right to choose among the remedies for the default or breach available to the City. These remedies may be used in conjunction with one another or separately, and together with any other statutory or common law remedies available to the City. Any failure by the City to enforce this Agreement with respect to one or more defaults by the Consultant will not waive the City’s ability to enforce the Agreement after that time.

ARTICLE 11 SUCCESSORS AND ASSIGNS

11.1 The City and the Consultant, respectively, bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representatives of such other party with respect to all covenants of this Agreement.

The City and the Consultant will not assign, sublet or transfer any interest in this Agreement without the prior written consent of the other.

11.2 The Consultant will notify the City, in writing, of any change in its partnership/ownership within 30 calendar days of such change.

ARTICLE 12 EXTENT OF AGREEMENT

12.1 This Agreement, including appendices and referenced attachments represents the entire and integrated Agreement between the City and the Consultant and supersedes all prior proposals, negotiations, representations or agreements either written or oral between the parties. The Consultant's expenses for travel, office, production and other expenses associated directly or indirectly with this Agreement are included as part of the total fee. Except as to a change in the scope of services, the compensation for which does not exceed \$50,000.00, this Agreement may be amended only by separate written instrument approved by the City's governing body and signed by both the City and the Consultant.

12.2 Any exhibits and/or attachments attached to this Agreement are incorporated by reference into this Agreement as though included verbatim herein.

12.3 In the event of any conflict between the Agreement and the provisions of any exhibit or attachment to this Agreement, such provision shall be construed in the following order of precedence: (1) this Agreement; (2) Scope of Services; and (3) additional specific contractual documents. In the case of an irreconcilable conflict as to scope of services the more specific provision shall prevail over the more general provision.

ARTICLE 13 NOTICES

13.1 Notices required under this Agreement will be provided by the parties to one another by certified mail, return receipt requested, or by confirmed facsimile transmission, to the following addresses:

To the City:

Steve Parker
City Manager
205 N. River Street
Seguin, Texas 78155
sparker@seguintexas.gov

To the Consultant:

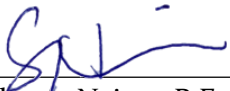
Ethan Shires, P.E.
Project Manager
10431 Morado Cir Suite 300
Austin, TX 78759
ethan.shires@freese.com

Each of the persons executing this Agreement represents that he or she has full power and authority to execute this Agreement on behalf of the party that person represents. This Agreement will be effective as of the day and year established in the first paragraph of this Agreement.

City of Seguin

Freese and Nichols, Inc.

Steve Parker, City Manager



Stephanie Neises, P.E.
Principal/Vice President

DATE _____

DATE 3/16/26

EXHIBIT A
SCOPE OF WORK

EXHIBIT A
City of Seguin
Scope of Work: Water and Wastewater Master Plans Update
March 16, 2026

PROJECT UNDERSTANDING

Freese and Nichols, Inc. (FNI) understands that the City of Seguin (City) is seeking professional engineering assistance to prepare an update to the City's existing Water and Wastewater Master Plans, completed in 2022. Significant changes have occurred in the systems since the previous plans, namely the pending water CCN transfer, which warrant updating the Master Plans to continue the City's history of proactive utility management. The updated Master Plans will include updating the City's existing hydraulic models with new infrastructure information and to the latest software. FNI will evaluate recent development trends in coordination with the City's Planning Department, including projected buildout conditions. FNI will develop comprehensive Water and Wastewater Capital Improvement Plans and the results of this study will be summarized in Water and Wastewater Master Plan Reports.

PROJECT OUTLINE

Task A: Project Management and Data Collection

Task B: Water Model Development and Calibration

Task C: Wastewater Model Development and Calibration

Task D: Growth Projections

Task E: Hydraulic Analysis and System Evaluation

Task F: Capital Improvement Plans and Master Plan Reports

Summary of Deliverables

Summary of Meetings

Project Schedule

Compensation

TASK A: PROJECT MANAGEMENT AND DATA COLLECTION

A1. Project Kickoff Meeting (In-Person)

FNI will conduct an in-person project kickoff meeting with the City and project team to discuss the project scope and schedule. A data request memorandum will be presented and discussed. The project team will also discuss available water and wastewater system data, including recent field inspection data and status of ongoing capital projects.

A2. Data Collection and Review

FNI will prepare a data request memorandum summarizing data needs for the project. This includes but is not limited to the following:

- Previous Master Plan Reports, Rate Studies, Comprehensive Plans, or other planning documents
- GIS Information
- As-built record drawings
- Utility water billing meter data
- Historical water production and wastewater treatment data
- SCADA and other operational data
- Facility inventories
- Facility/pipeline inspection results
- Existing and future land-use mapping and/or anticipated developments
- Current 5-year CIP

A3. Project Management

FNI will perform project management duties, including preparing and updating the project schedule, monthly invoicing, development of monthly progress reports, written summaries of meetings (minutes), and any informal project collaboration.

TASK B: WATER MODEL DEVELOPMENT AND CALIBRATION

B1. Evaluate Smart Meter (AMI) Data

The City will provide up to two years of smart meter or advanced metering infrastructure (AMI) data from the water billing database for evaluation. FNI will process the AMI data in a dynamic software package, such as Microsoft Power BI. FNI will analyze the data for high consumption customers, diurnal patterns, and seasonal trends. FNI will geocode the smart meter locations for the most recent year for use in distributing water and wastewater customers. Water customers transferred from Springs Hill Special Utility District (SHSUD) will be evaluated with the smart meter data if the meters are integrated into the City's AMI system. City wastewater customers that remain SHSUD water customers will not be included in the smart meter evaluation. Two years of standard water billing data will be requested from SHSUD for use in evaluating and distributing these wastewater customers.

B2. Update Hydraulic Water Distribution System Model

FNI will convert the City's existing water distribution system model to the latest software (Autodesk's InfoWater Pro). FNI will utilize GIS, as-built drawings, and available survey data to update the water model with all water lines and facilities where pertinent data is available.

B3. Allocate Water Demands

FNI will utilize the City's geocoded customer billing data to locate and distribute water customer demands throughout the distribution system.

B4. Pressure Plane Delineation

FNI will review and update pressure plane delineation using available system data and ground contour mapping. Pressure Plans will include areas maintained by pressure reducing valves.

B5. Conduct Temporary Pressure Testing

FNI will identify locations for field testing based on model calibration needs and areas of concern from the City. Up to twenty (20) pressure recorders will be provided by FNI. Procedures for field testing will be prepared showing proposed location of testing, duration of testing, and assistance from water utility department. The City will be responsible for installing and removing the pressure recorders on the designated fire hydrants. The pressure recorders will be installed for a minimum of one week or up to two weeks.

B6. Obtain and Evaluate SCADA for Water Facilities

FNI will obtain water system SCADA (Supervisory Control and Data Acquisition) records for the temporary pressure testing period. SCADA will be used for system operations planning and to assist in model calibration. Requested SCADA records may include pump station flow and pressure, storage tank level, and system pressure where available.

B7. Conduct EPS Water Model Calibration

FNI will conduct a 24-hour extended period simulation (EPS) model calibration by adjusting c-factors, peaking factors, diurnal curves, and demand distribution until modeling results match the field pressure measurements and pump/tank operations. FNI will provide comparison graphs and mapping to document model calibration results.

TASK C: WASTEWATER MODEL DEVELOPMENT AND CALIBRATION

C1. Meeting with City to Discuss Flow Monitoring and CCTV Locations (Virtual)

FNI will virtually meet with the City to discuss the proposed temporary flow monitoring sites and scope of the wastewater main closed-circuit television inspection (CCTV). FNI will prepare mapping showing the proposed locations to present to the City. FNI will update the mapping based on City comments before submitting to the flow monitoring and inspection subconsultant(s).

C2. Temporary Flow Monitor Installation, Calibration, and Data Collection

Install and calibrate sixteen (16) temporary velocity/depth type flow meters and two (2) rainfall gauges at the agreed upon locations. Temporary flow meters shall remain in place for a minimum of sixty (60) days. Based on weather conditions and the quality of recorded data, the flow monitoring period may be extended in thirty (30) day increments for an additional fee to a maximum of one hundred and twenty (120) days. Flow monitoring period is targeted for April/May of 2026.

C3. Flow Monitoring Data Analysis and Evaluation

Reduce raw field monitoring data and tabulate 15-minute flow data for the entire flow monitoring period. Prepare flow hydrographs and scattergraphs for the flow monitoring period. Flow data will be analyzed for average dry weather flow, peak dry weather flow, and wet weather peak flow rates. Flow data will be compared with rainfall data to determine the amount of inflow/infiltration (I/I) experienced for up to six (6) selected storm events.

Observed I/I will also be compared to the I/I observed during the previous 2022 Wastewater Master Plan where applicable. A summary of the observed flow monitoring data and the results of the I/I analysis will be presented in a technical memorandum. FNI will also prioritize flow monitoring locations based on the evaluation results and identify up to eight (8) locations for potential permanent flow monitoring.

C4. Wastewater Main CCTV and Manhole Inspection

FNI will perform CCTV inspection of up to 100,000 linear feet of wastewater gravity mains that are missing elevation data critical for the wastewater model update and have not been recently inspected. All inspections will be reviewed and coded per NASSCO PACP guidelines and provided to the City for integration into the City's inspection database.

FNI will also perform 360-degree camera condition inspection of up to 500 manholes connected to the inspected wastewater mains. All manhole inspections will be reviewed and coded per NASSCO MACP level 2 guidelines and provided to the City for integration into the City's inspection database. Manhole inspections will include survey of pipeline penetrations into the manhole to identify pipeline inverts and diameter. FNI will utilize the inspection data to update the invert elevations of the modeled gravity mains and provide to the City for integration into the City's GIS geodatabase.

FNI will determine the locations of the pipeline and manhole inspections based on a review of the City's existing GIS geodatabase, historical City inspection data, and coordination with City Staff. Inspection effort will vary based on identified pipeline diameter, condition, and access. Inspections will only be conducted on lines that are located within the street, easement, or accessible by large truck. CCTV inspection will include light cleaning of the lines as needed and may include limited heavy cleaning or reverse inspections. Limited light traffic control may be included as needed. Correction, repairs, or extractions due to existing structural defects or failures are not included. City Operations Staff may be needed to access bolted manholes. Up to a total of \$727,073 is allocated for inspection efforts, but actual inspection effort will reflect the actual inspection quantities achieved.

C5. Update Hydraulic Wastewater Collection System Model

FNI will convert the City's existing wastewater collection system model to the latest software (Autodesk's InfoWorks ICM). FNI will utilize GIS, as-built drawings, and available survey data to update the wastewater model with all wastewater lines and facilities where pertinent data is available.

C6. Wastewater Basin Delineation

FNI will review and update the wastewater basin delineation using GIS data and ground contour mapping. FNI will develop wastewater subbasin delineation representing major geographical areas and/or lift stations within each wastewater basin.

C7. Allocate Wastewater Flows

FNI shall utilize the City's geocoded customer billing data to locate and distribute wastewater customer flows throughout the collection system. FNI shall create subcatchments to delineate areas in which flows enter the wastewater system.

C8. Obtain and Evaluate SCADA for Wastewater Facilities

FNI will obtain available wastewater system SCADA records for the temporary flow monitoring period. SCADA will be used for system operations planning and model calibration. Requested SCADA records may include lift station operations, dynamic infrastructure, and treatment plant hydraulics where available.

C9. Gauge Adjusted Radar Rainfall

Using readily available National Weather Service data and rain gauge data from the temporary flow monitoring period, FNI will generate specific, localized gauge adjusted radar rainfall (GARR) for up to two observed storm events.

C10. Conduct EPS Dry Weather Calibration

FNI shall perform a dry weather calibration for a selected seven-day dry weather flow period by adjusting antecedent conditions, roughness coefficients, per capita flows, diurnal curves, dry weather infiltration, and flow distribution. Lift station parameters shall be adjusted based on the system response observed during the calibration event using SCADA records and flow monitor observations. FNI shall prepare charts at selected calibration points showing monitored vs. modeled dry weather flows to document the model calibration results.

C11. Conduct EPS Wet Weather Calibration

FNI shall perform a wet weather calibration to up to two (2) storm events captured during the temporary flow monitoring period. Model parameters, such as lift station operations, inflow and infiltration volume, timing of flow response, and runoff area, will be adjusted to match observed flow conditions. FNI shall prepare charts at selected calibration points showing monitored vs. modeled wet weather flows to document the model calibration results.

C12. Meeting with City to Review Model Development and Calibration (In-Person)

FNI will conduct an in-person meeting with the City to review and discuss the water and wastewater models development, pressure testing, flow monitoring, and calibration.

TASK D: GROWTH PROJECTIONS

D1. Meeting with City Planning Department (Virtual)

FNI will meet virtually with City Planning Department Staff to discuss land use assumptions, projected growth rates, and potential redevelopment areas. Future service areas for the existing, 5-year, 10-year, 25-year, and buildout planning periods will also be discussed. The City will provide available demographic data in tabular or GIS format.

D2. Estimate and Distribute Anticipated Growth

FNI will develop updated growth estimates and projections and allocate the projections across the water and wastewater service areas for the 5-year, 10-year, 25-year, and buildout planning periods. FNI will utilize the growth projections from the previous Master Plans, Impact Fee Study, and Fiscal Year CIP Updates as a starting point for the updated projections. Anticipated buildout conditions will be based on existing development densities for developable areas throughout the water and wastewater service areas.

D3. Develop Water Demand Projections

FNI will evaluate the historical water production data from the City to estimate water system growth, per-capita usage, and peaking factors. Based on the review of historical water production data, FNI will review existing demand projection methodologies and provide recommendations to update the design criteria for demand projections. FNI will utilize the updated water demand design criteria to allocate future customer demand. FNI will allocate demand projections across the water service area for each planning period.

D4. Develop Wastewater Flow Projections

FNI will evaluate the historical wastewater flow data from the City to estimate wastewater system growth, per-capita flows, and peaking factors. Based on the review of historical wastewater flow data, FNI will review existing

flow projection methodologies and provide recommendations to update the design criteria for flow projections. FNI will utilize the updated wastewater flow design criteria to allocate future customer flows. FNI will allocate flow projections across the wastewater service area for each planning period.

D5. Meeting to Discuss Growth Projections (In-Person)

FNI will attend an in-person meeting with City Staff to discuss the results of growth projections. FNI will solicit comments on the distribution of the growth data as well as the water demand and wastewater flow projections.

TASK E: HYDRAULIC ANALYSES

E1. Evaluate Water System Capacity Requirements

FNI shall evaluate existing and future pumping, storage, and production capacity based on the design criteria for demand projections, desired level of service, and minimum system requirements. Existing system deficiencies and future improvements will be identified and recommended for each criteria component. FNI will update the existing and future system evaluation using the updated model and projections based on the design criteria recommended in the 2022 Water Master Plan. Hydraulic analysis and system evaluation will include average day demands, maximum day demands, fire flow analysis, and compliance with TCEQ Chapter 290 requirements.

E2. Existing Water System Evaluation

FNI will conduct EPS modeling of the existing water system for maximum day operating conditions to determine capacity and deficiencies within the existing water system. FNI will conduct a steady-state fire flow model run under existing maximum day demand conditions. Mapping and model results showing minimum pressures and available fire flow will be prepared to document the analyses.

E3. Develop Water System Improvements Alternatives for Future Planning Periods

FNI shall utilize the water model to evaluate system transmission, elevated and ground storage, and pumping capacities needed to serve anticipated buildout demands throughout each pressure zone according to the determined criteria. FNI will provide improvement recommendations to rectify identified capacity deficiencies. FNI will also conduct a steady-state fire flow model run under projected buildout maximum day demand conditions. FNI shall develop interim model runs for the 5-year, 10-year, and 25-year planning periods to determine phasing of recommended improvements. System improvements will include recommendations for system production, conveyance, storage, and pumping.

E4. Evaluate Wastewater System Capacity Criteria

FNI shall evaluate existing and future gravity conveyance, lift station pumping, and wastewater treatment capacity based on the design criteria for flow projections, desired level of service, and minimum system requirements. Existing system deficiencies and future improvements will be identified and recommended for each criteria component. FNI will update the existing and future system evaluation using the updated model and projections based on the design criteria recommended in the 2022 Water Master Plan.

E5. Design Storm Development

FNI shall develop a design storm to be used for wastewater system evaluation based on NOAA Atlas 14 data for Texas. FNI will coordinate with City staff to select the desired storm duration and return period based on readily available historical storm data.

E6. Existing Wastewater System Evaluation

FNI will conduct EPS modeling of the existing wastewater system for average day and peak wet weather operating conditions to determine capacity and deficiencies within the existing wastewater system. Mapping and model results showing projected capacity restrictions and surcharging will be prepared to document the analysis.

E7. Meeting to Discuss Existing System Evaluation (Virtual)

FNI will conduct a virtual meeting with City Staff to discuss the results of the existing water and wastewater system evaluations. FNI will solicit comments on the capacity criteria and design storm development, as well as verify that the results of the existing system assess are consistent with the City's experience.

E8. Develop Wastewater System Improvements Alternatives for Future Planning Periods

FNI shall utilize the wastewater model to evaluate system capacities needed to serve anticipated buildout flow according to the determined criteria. FNI will provide improvement recommendations to rectify identified capacity deficiencies. FNI shall develop interim model runs for the 5-year, 10-year, and 25-year planning periods to determine phasing of recommended improvements.

E9. Lift Station Inventory and Available Capacity

FNI will compile and summarize all provided data on wastewater lift stations into a facility inventory. FNI will utilize the lift station inventory and wastewater model to evaluate and compare lift station capacities to delineated service areas and determine available capacity for potential future customers. Lift stations will be evaluated by phase, including projected peak flow, pumping capacity availability/deficiency, available wet well storage volume, force main velocity, and recommended capacity expansion.

E10. Treatment Plant Capacity Evaluation

FNI will evaluate existing water supply, surface water treatment, and permitted wastewater treatment plant capacity to handle the developed demand/flow projections. Water supply and surface water treatment capacity will be assessed under average and maximum day demand conditions. Wastewater treatment plant capacity will be evaluated according to the 75/90 rule per TCEQ Chapter 305.126.

E11. System Analyses and Improvements Alternatives Workshops (In-Person)

FNI will conduct up to two (2) in-person workshops with City Staff presenting results of the system evaluations, including mapping and modeling results. The workshops will enable FNI and City Staff to evaluate system deficiencies, the impact of recommended system improvements, and develop potential system improvement alternatives. FNI will model and further evaluate the system improvement alternatives developed during the workshops. FNI will further refine alternatives to address system deficiencies.

TASK F: CAPITAL IMPROVEMENTS PLAN AND MASTER PLAN REPORTS

F1. Develop Draft Capital Improvement Plan (CIP) Costs, Schedule, and Mapping

FNI will develop a comprehensive Capital Improvements Plan based on growth and capacity needs. Costs for each proposed project will be developed in 2026 dollars, including engineering and contingencies. Large-scale system-wide maps will be produced showing proposed projects, costs, and recommended in-service dates of proposed projects. FNI will also prepare a one-page summary for each project, including but not limited to a detailed description, driver, cost, and phasing. FNI will also develop a CIP scheduling of projects by fiscal year for the 5-year planning period to be incorporated into the City's annual budget process.

F2. Funding Evaluation

FNI will provide information on available funding programs based on the recommended Capital Improvements Plan. Information will include program requirements, application deadlines, and available funding.

F3. Meeting to Review Draft Capital Improvement Plan (In-Person)

FNI will meet in-person with the City to discuss the draft CIP, project phasing, and analyze alternative completion dates as necessary.

F4. Prepare Draft Water and Wastewater Master Plan Reports

FNI will prepare draft Water Master Plan and Wastewater Master Plan Reports summarizing growth projections, model calibration, existing and future system analyses, and CIP development. FNI will deliver one (1) electronic PDF file of the draft reports to the City.

F5. Meeting to Review Draft Reports (Virtual)

FNI will meet virtually with the City to discuss the draft reports. FNI will solicit comments to be incorporated into the final reports.

F6. Revise Water and Wastewater Master Plan Reports

FNI will revise the reports based on comments from the City and submit three (3) final hard copies and one (1) electronic copy in PDF format of the Water and Wastewater Master Plan Reports.

F7. City Council and Utility Committee Presentations

FNI will develop material to summarize and present the Capital Improvements Plan and Final Master Plan Reports to City Council and the Utility Committee. FNI will be available for up to two (2) in-person presentations.

SUMMARY OF DELIVERABLES:

- Flow Monitoring and I/I Technical Memorandum
- Wastewater Main CCTV Inspection Scores and GIS Data
- Updated Lift Station Inventory
- Capital Improvements Plan
- Draft Water Master Plan and Wastewater Master Plan Reports
- Final Water Master Plan and Wastewater Master Plan Reports
- City Council and Utility Committee Presentations
- Water and Wastewater Models

SUMMARY OF MEETINGS:

- Project Kickoff Meeting (In-Person)
- Flow Monitoring Locations (Virtual)
- Model Development and Calibration (In-Person)
- City Planning Department (Virtual)
- Growth Projections (In-Person)
- Existing System Evaluation (Virtual)
- System Analyses and Improvements Alternatives (2) (In-Person)
- Draft CIP (In-Person)
- Draft Reports (Virtual)
- City Council and Utility Committee Presentations (2) (In-Person)

SCHEDULE:

FNI is authorized to commence work on the Project upon execution of this Agreement and agrees to complete the services in accordance with the following schedule.

- Draft Master Plan Report within sixteen (16) months from Notice To Proceed
- Final Master Plan Report within one (1) month from written receipt of City comments

If FNI's services are delayed through no fault of FNI, FNI shall be entitled to adjust contract schedule consistent with the number of days of delay. These delays may include but are not limited to delays in City or regulatory reviews, delays on the flow of information to be provided to FNI, delays in field testing, etc.

Scope of Work: Water and Wastewater Master Plan Update
 City of Seguin

COMPENSATION:

Compensation to FNI for the services detailed above shall be the not to exceed fee of \$1,371,440. If FNI sees the Scope of Work changing so that additional services are needed, FNI will notify the City for City’s written approval before proceeding.

A breakdown of the major task items and their associated costs are as follows:

Task	Task Name	Hours	Labor Effort	Expenses	Sub Effort	Total Effort
A	Project Management and Data Collection	132	\$30,190	\$1,310	\$0	\$31,500
B	Water Model Development and Calibration	372	\$61,560	\$11,170	\$0	\$72,730
C	Wastewater Model Development and Calibration	660	\$113,400	\$5,790	\$849,800	\$968,990
D	Growth Projections	252	\$43,900	\$2,330	\$0	\$46,230
E	Hydraulic Analysis	680	\$119,840	\$6,140	\$0	\$125,980
F	Capital Improvements Plan and Master Plan Reports	600	\$119,990	\$6,020	\$0	\$126,010
Total		2,696	\$488,880	\$32,760	\$849,800	\$1,371,440
Additional	30-Day Flow Monitoring Extension	-	-	-	\$24,940	\$24,940

EXHIBIT B
PAYMENT AND FEE SCHEDULE

PAYMENT AND FEE SCHEDULE

EXHIBIT B

Compensation to FNI for Basic Services in Exhibit A shall be computed on the basis of the following Schedule of Charges, but shall not exceed One Million Three Hundred Seventy One Thousand Four Hundred Forty Dollars (\$1,371,440).

Compensation to FNI for Additional Services in Exhibit A shall be computed on the basis of the following Schedule of Charges, but shall not exceed Twenty Four Thousand Nine Hundred Forty Dollars (\$24,940).

If FNI sees the Scope of Services changing so that Additional Services are needed, including but not limited to those services described as Additional Services in Exhibit A, FNI will notify OWNER for OWNER's approval before proceeding. Additional Services shall be computed based on the following Schedule of Charges.

<u>Position</u>	<u>Hourly Rate</u>	
	<u>Min</u>	<u>Max</u>
Professional 1	112	213
Professional 2	123	220
Professional 3	141	324
Professional 4	177	368
Professional 5	245	404
Professional 6	256	476
Construction Manager 1	123	166
Construction Manager 2	141	220
Construction Manager 3	159	234
Construction Manager 4	177	285
Construction Manager 5	249	328
Construction Manager 6	267	400
Construction Representative 1	98	116
Construction Representative 2	108	137
Construction Representative 3	137	166
Construction Representative 4	155	224
CAD Technician/Designer 1	94	144
CAD Technician/Designer 2	116	216
CAD Technician/Designer 3	159	267
Corporate Project Support 1	72	188
Corporate Project Support 2	94	267
Corporate Project Support 3	98	378
Intern / Coop	76	105

Rates for In-House Services and Equipment

<u>Mileage</u>	<u>Bulk Printing and Reproduction</u>		<u>Equipment</u>	
Standard IRS Rates		<u>B&W</u>	<u>Color</u>	Valve Crew Vehicle (hour) \$75
	Small Format (per copy)	\$0.10	\$0.25	Pressure Data Logger (each) \$500
<u>Technology Charge</u>	Large Format (per sq. ft.)			Water Quality Meter (per day) \$100
\$8.50 per hour	Bond	\$0.25	\$0.75	Microscope (each) \$150
	Glossy / Mylar	\$0.75	\$1.25	Ultrasonic Thickness Guage (per day) \$275
	Vinyl / Adhesive	\$1.50	\$2.00	Coating Inspection Kit (per day) \$275
				Flushing / Cfactor (each) \$500
	Mounting (per sq. ft.)	\$2.00		Backpack Electrofisher (each) \$1,000
	Binding (per binding)	\$0.25		
				<u>Survey Grade</u> <u>Standard</u>
				Drone (per day) \$200 \$100
				GPS (per day) \$150 \$50

OTHER DIRECT EXPENSES:

Other direct expenses are reimbursed at actual cost times a multiplier of 1.10. They include outside printing and reproduction expense, communication expense, travel, transportation and subsistence away from the FNI office. For other miscellaneous expenses directly related to the work, including costs of laboratory analysis, test, and other work required to be done by independent persons other than staff members, these services will be billed at a cost times a multiplier of 1.10. For Resident Representative services performed by non-FNI employees and CAD services performed In-house by non-FNI employees where FNI provides workspace and equipment to perform such services, these services will be billed at cost times a multiplier of 2.0. This markup approximates the cost to FNI if an FNI employee was performing the same or similar services.

These ranges and/or rates will be adjusted annually in February. Last updated 2026.

EXHIBIT C COMPLETION SCHEDULE

The FNI shall complete all services and submit one consolidated Draft Water & Wastewater Master Plan within sixteen (16) months from the date of Award by City Council.

Phase 1 – Project Initiation & Data Collection (Months 1–4)

Tasks:

- Kickoff meeting (within 14 days of Award)
 - Data request and collection
 - Review of existing studies, GIS, models, permits, and regulatory requirements
 - Stakeholder and staff coordination meetings
-

Phase 2 – System Evaluation & Modeling (Months 4–10)

Tasks:

- Update and calibrate hydraulic models (water and wastewater)
 - Capacity analysis of treatment, transmission, and collection systems
 - Growth projections and planning criteria development
 - Identification of system deficiencies and regulatory compliance gaps
-

Phase 3 – Capital Improvement Plan Development (Months 12–16)

Tasks:

- Develop prioritized Capital Improvement Plan (CIP)
 - Planning-level cost estimates
 - Phasing plan (short-, mid-, and long-term)
 - CIP prioritization and funding considerations
-

Phase 4 – Draft Master Plan Submittal (Month 16)

Deliverable:

- One (1) Consolidated Draft Water & Wastewater Master Plan Report, including:
 - Executive Summary
 - Existing Conditions & Deficiencies
 - Recommended Improvements
 - Capital Improvement Plan
 - Planning-Level Cost Opinions
 - GIS and modeling files (editable format)
-

Final Master Plan

FNI shall incorporate City comments and submit the Final Master Plan within 30 calendar days following receipt of consolidated City comments.