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March 18, 2014

Rick Cortes
Assistant City Manager
City of Seguin
205 N. River
Seguin, Texas 78155
830-401-2401

Dear Mr. Cortes:

We are pleased to submit the enclosed proposed Agreement for Professional Services for the Water Model and Master Plan Update. The fee breakdown is as follows:

• Task A: Population and Water Demand Projections -	\$32,000
• Task B: Water Model Development and Calibration -	\$32,420
• Task C: Hydraulic Analyses and System Evaluation -	\$41,650
• Task D: Capital Improvement Plan and Master Plan Report -	\$31,610
• Task E: Water Model Training & Software Purchase -	<u>\$21,990</u>
• Total:	\$159,670

We have also attached a detailed breakdown with hours for each individual task. Please note that Task E includes a \$10,000 allowance for software purchase. The actual software cost may vary based on the software selected. Please contact me if you have any questions. We look forward to the opportunity to work with you on this project.

After review and execution of the Agreement for Professional Services, please return a copy for our records.

Sincerely,

A handwritten signature in blue ink, appearing to read 'SA Cole'.

Scott A. Cole, P.E.
Vice President

Enclosures

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AGREEMENT FOR PROFESSIONAL SERVICES

STATE OF TEXAS §

COUNTY OF TARRANT §

This AGREEMENT is entered into by the City of Seguin, Texas hereinafter called "OWNER" and Freese and Nichols, Inc., hereinafter called "FNI." In consideration of the AGREEMENTS herein, the parties agree as follows:

- I. **EMPLOYMENT OF FNI:** In accordance with the terms of this AGREEMENT: OWNER agrees to employ FNI; FNI agrees to perform professional services in connection with the Project; OWNER agrees to pay to FNI compensation. The Project is described as follows: Water Model and Master Plan Update
- II. **SCOPE OF SERVICES:** FNI shall render professional services in connection with Project as set forth in Attachment SC - Scope of Services and Responsibilities of OWNER which is attached to and made a part of this AGREEMENT.
- III. **COMPENSATION:** OWNER agrees to pay FNI for all professional services rendered under this AGREEMENT in accordance with Attachment CO - Compensation which is attached hereto and made a part of this AGREEMENT. FNI shall perform professional services as outlined in the "Scope of Services" for a not to exceed fee of \$159,670.00. Details concerning the fee are included in Attachment CO.
- If FNI's services are delayed or suspended by OWNER, or if FNI's services are extended for more than 60 days through no fault of FNI, FNI shall be entitled to equitable adjustment of rates and amounts of compensation to reflect reasonable costs incurred by FNI in connection with such delay or suspension and reactivation and the fact that the time for performance under this AGREEMENT has been revised.
- IV. **TERMS AND CONDITIONS OF AGREEMENT:** The Terms and Conditions of Agreement as set forth as Attachment TC shall govern the relationship between the OWNER and FNI.

Nothing under this AGREEMENT shall be construed to give any rights or benefits in this AGREEMENT to anyone other than OWNER and FNI, and all duties and responsibilities undertaken pursuant to this AGREEMENT will be for the sole and exclusive benefit of OWNER and FNI and not for the benefit of any other party.

This AGREEMENT constitutes the entire AGREEMENT between OWNER and FNI and supersedes all prior written or oral understandings.

This contract is executed in two counterparts.

IN TESTIMONY HEREOF, they have executed this AGREEMENT, the ____ day of _____, 2014.

ATTEST:

City of Seguin, Texas
(OWNER)

By: _____

Print or Type Name and Title

ATTEST:

Freese and Nichols, Inc.
(FNI)

By:  _____

Scott A. Cole, Vice President

Print or Type Name and Title

SCOPE OF SERVICES AND RESPONSIBILITIES OF OWNER**PROJECT UNDERSTANDING:**

Freese and Nichols, Inc. (FNI) understands that the City of Seguin (City) is seeking assistance to update the City's water system model and water master plan. The intent of the study is to provide an updated water model and develop a prioritized water system capital improvements plan with triggers for major capital improvements. The water service area is defined as the City's current Certificate of Convenience and Necessity (CCN)

ARTICLE I

BASIC SERVICES: FNI shall render the following professional services in connection with the development of the Project:

A. Population and Water Demand Projections

- A1. Project Kick-Off Meeting: Freese and Nichols, Inc. (FNI) will conduct a project kick-off meeting with at City offices to review scope, project team, data requirements, lines of communication, and project schedule.
- A2. Data Collection and Review: FNI will coordinate with City staff to compile information including GIS files, water consumption data, treatment plant data, pump station information, as-built drawings, pump station layouts, pump curves, storage tank facility layouts, tank volume curves, recently completed water system improvements, and other pertinent data.
- A3. Meet with City Planning Department: FNI will attend one meeting with representatives from the City's Planning Department to identify growth areas and make adjustments to the land use assumptions identified in the City's recent Comprehensive Plan.
- A4. Develop and Distribute Population and Non-residential Growth Projections: Using the City's recent Comprehensive Plan document as a starting point, FNI will work with City staff to develop and document population and non-residential growth projections by pressure zone for existing, 5-year, 10-year, and Buildout conditions. Growth projections will be distributed throughout the service area.
- A5. Review and Evaluate Historical Water Usage Data: FNI will review and evaluate historical water usage including single family residential, multifamily residential, commercial/ industrial and selected large users. FNI will calculate historical per-capita water consumption rates and peaking factors.
- A6. Develop Design Criteria for Water Demand Projections: Based on the review of historical data, FNI will develop design criteria for water demand projections including per-capita consumption rates, non-residential usage factors, non-revenue water, and peaking factors.
- A7. Develop and Distribute Existing Demands: FNI will utilize data from the City's utility billing system database to geocode water meters and allocate existing demands throughout the City. The data will consist of metered consumption fields for each customer account and customer type. Demands will be distributed for average day and maximum day demand conditions.

- A8. Develop and Distribute Water Demand Projections: Utilizing selected design criteria and population and land use projections, FNI will develop projected average day, maximum day, and peak hour demands for existing, 5-year, 10-year, and Buildout conditions. FNI will distribute projected water demands throughout the water service area by pressure zone.
- A9. Develop TM-1 – Population and Water Demand Projections: FNI will prepare a technical memorandum that documents the assumptions and analysis of historical usage data and future population and water demand projections. FNI will submit one (1) electronic file in PDF format of the draft TM-1.
- A10. Progress Meeting #1 - Population and Water Demand Projections: FNI will attend a progress meeting with the City to discuss population and water demand projections.
- A11. Finalize TM-1 – Population and Water Demand Projections: FNI will revise TM-1 to incorporate comments from the City. FNI will submit five (5) hard copies and one (1) electronic file in PDF format of the final TM-1.

B. Water Model Development and Calibration

- B1. Conduct Temporary Pressure Testing: FNI will identify locations for field testing based on model calibration needs and areas of concern from City. Up to ten (10) pressure recorders will be furnished by FNI. Procedures for field testing will be prepared showing proposed location of testing, duration of testing, required SCADA data during testing period, and assistance from water utility department. The City will install and remove the pressure recorders on the designated fire hydrants.
- B2. Water Model Evaluation and Selection Workshop: FNI will conduct a modeling workshop to demonstrate the capabilities of different water modeling software packages showing pros and cons of each software for the City to review and make a selection.
- B3. Construct Water Model: FNI will utilize the CAD file of the water system to build an all-pipes water model in the selected software. Facility data will be input from as-built drawings of treatment, pumping, storage and control valve facilities. The all-pipes model will consist of all lines that are currently in the CAD file plus recently constructed lines that may not appear in the CAD file.
- B4. Obtain and Evaluate SCADA Data: FNI will obtain SCADA data for the temporary field pressure testing period. SCADA data will be used for system operations planning, development of diurnal curves, and to assist in model calibration.
- B5. Develop Diurnal Demand Curves: FNI will utilize the SCADA data and operator logs to develop diurnal curves representing existing 24-hour water usage patterns.
- B6. Conduct EPS 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 operation. FNI will provide comparison graphs and mapping to document model calibration results.

- B7. Develop TM-2 – Water Model Development and Calibration: FNI will prepare a technical memorandum that documents the assumptions and analysis of the water model construction and calibration. FNI will submit one (1) electronic file in PDF format of the draft TM-2.
- B8. Progress Meeting #2 - Water Model Development and Calibration: FNI will attend a progress meeting with the City to discuss water model development and calibration.
- B9. Finalize TM-2 – Water Model Development and Calibration: FNI will revise TM-2 to incorporate comments from the City. FNI will submit five (5) hard copies and one (1) electronic file in PDF format of the final TM-2.

C. Hydraulic Analyses and System Evaluation

- C1. Perform Modeling of Existing Water System: FNI will conduct EPS modeling of the existing water system for average day and maximum day operating conditions to evaluate tank cycling, system pressures, and deficiencies within the existing water system.
- C2. Conduct Fire Flow Analysis for Existing System: FNI will utilize the water system model to conduct fire flow analysis under existing maximum day demands to identify areas with less than adequate fire flow capacity. Fire flow analysis will be shown using mapping of available fire flows.
- C3. Evaluate Pressure Plane Delineation: FNI will analyze existing and future pressure plane delineation based on modeling results, field testing data and water supply locations. FNI will identify specific areas with low or high pressures under normal operating conditions. FNI will evaluate and recommend modifications to the existing pressure plane boundaries. Mapping will be prepared showing proposed water system pressures throughout City under new pressure plane boundary alternatives vs. existing pressure plane delineation.
- C4. Evaluate TCEQ Capacity Requirements Compliance: FNI will evaluate the system for compliance with the TCEQ Chapter 290 water system capacity requirements. FNI will analyze production capacity, pumping capacity, elevated storage capacity, and total storage capacity by pressure plane to determine if any deficiencies exist.
- C5. Progress Meeting #3 – Existing System Analysis: FNI will attend a progress meeting with the City to discuss the results of the existing water system analysis and to develop design criteria for future system improvements.
- C6. Identify Requirements for System Improvements: FNI will develop target design criteria to be used for identifying system improvements including headloss gradient, minimum and maximum pressures, tank drain/fill rates, and storage volumes.
- C7. Evaluate Pumping, Storage, and Production Capacity for Future Needs: FNI will analyze and develop existing vs. recommended capacity charts for pumping, ground and elevated storage, and water production throughout the city based on criteria developed for system improvements, including minimum TCEQ capacity requirements identified in Chapter 290.

- C8. Utilize Buildout Model to Determine Sizing of Water System Improvements: FNI will utilize the EPS water model under Buildout demand conditions to develop and analyze alternatives to determine sizing of water system transmission, elevated and ground storage, treatment, and pumping facilities needed to serve Buildout demands throughout each pressure zone.
- C9. Progress Meeting #4 – Water System Improvement Alternatives: FNI will attend a progress meeting with the City to discuss the results of the future water system analysis and to present the proposed water system improvements.
- C10. Utilize 5-year and 10-year Water System Model to Determine Phasing of Water System Improvements: FNI will use interim 5-year and 10-year EPS model runs to determine phasing of water system improvements. System improvements will include treatment, transmission, storage, pumping and distribution system related needs. The first five years of the recommended CIP will be phased yearly and the subsequent years will be phased by planning period (10-year and Buildout).

D. Capital Improvement Plan and Master Plan Report

- D1. Develop Capital Improvement Plan (CIP) Costs, Phasing Plan & Mapping: FNI will develop a draft prioritized water system CIP with descriptions, cost estimates for each proposed project, phasing, and large-scale city-wide mapping of projects based upon water system modeling requirements and reliability needs. Costs will be in Year 2014 dollars and will include engineering and contingencies.
- D2. Progress Meeting #5 – Capital Improvements Plan: FNI will attend a progress meeting with City to discuss draft CIP, project phasing, results of prioritization and analyze alternative completion dates as necessary.
- D3. Prepare Draft Water Master Plan Report: FNI will prepare a Draft Water Master Plan Report discussing assumptions, methodologies, and findings for population and water demand projections, field testing and model calibration, existing and future system hydraulic analyses, and recommended capital improvement plans including schedule and costs of improvements. The report will include colored maps showing proposed system improvements.
- D4. Progress Meeting #6 – Draft Water Master Plan Report: FNI will attend a progress meeting with the City to discuss and solicit comments on the Draft Water Master Plan Report.
- D5. Revise and Finalize Water Master Plan Report: FNI will revise the report based on City comments and submit ten (10) final hard copies and one (1) CD with an electronic copy in PDF format of the Final Water Master Plan Report.
- D6. City Council Presentation: FNI will present the Water Master Plan report to City Council. FNI will be available to answer questions and discuss content.

E. Water Model Training & Software Purchase

- E1. Purchase Selected Software: FNI will purchase, on the City's behalf, one floating seat license of the selected water modeling software. A floating seat license consists of a software license installed on a server that can be accessed by multiple users, but is limited to a single user at any one time. Since the actual software that will be selected is unknown at this time, an allowance of \$10,000 is included for this task. The actual software purchase price may differ from this allowance. The first year of annual maintenance is typically included in the initial software cost. Subsequent year annual maintenance costs are not included in this scope of work.
- E2. Prepare Model Training Material: FNI will prepare model training presentation material and load the City's water model on FNI owned computers for use during training. FNI will coordinate with Innovyze to install temporary training licenses for up to six (6) people on FNI owned computers for use in model training.
- E3. Water Model Training Workshop: FNI will conduct two days of training on selected software with the use of the City's water model. The training will include instructions on setting up, running, and modifying the model as well as viewing results.
- E4. Follow-up Coordination: FNI will provide up to sixteen (16) hours of follow-up coordination after the model training to answer questions and provide additional instruction if necessary

Summary of Deliverables

- TM-1: Population and Water Demand Projections
- TM-2: Water Model Development and Calibration
- Draft Water Master Plan Report
- Final Water Master Plan Report
- Calibrated Water Model
- GIS and electronic project files
- Model Training Manual
- One floating seat software license

Summary of Workshops

- Water Model Evaluation and Selection
- Water Model Training

Summary of Meetings

- Project Kick-off Meeting
- Meeting with Planning Department
- Progress Meeting #1: Population and Water Demand Projections
- Progress Meeting #2: Water Model Development and Calibration
- Progress Meeting #3: Existing System Analysis
- Progress Meeting #4: Water System Improvement Alternatives
- Progress Meeting #5: Capital Improvements Plan
- Progress Meeting #6: Draft Water Master Plan Report

ARTICLE II

ADDITIONAL SERVICES: Additional Services to be performed by FNI, if authorized by OWNER, which are not included in the above described basic services, are described as follows:

- A. Modeling software purchase in excess of \$10,000.
- B. Annual modeling software maintenance costs.
- C. Field surveying required for the preparation of designs and drawings.
- D. GIS mapping services or assistance with these services.
- E. 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.
- F. 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.
- G. Visits to the site in excess of the number of trips included in Article I for periodic site visits, coordination meetings, or contract completion activities.
- H. 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.
- I. Preparing statements for invoicing or other documentation for billing other than for the standard invoice for services attached to this professional services agreement.

ARTICLE III

TIME OF COMPLETION: 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:

- Deliver Draft Water Master Plan Report within **9 months** of Notice to Proceed
- Deliver Final Water Master Plan Report within **30 days** of receipt of comments from the City

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 OWNER or regulatory reviews, delays on the flow of information to be provided to FNI, governmental approvals, etc. These delays may result in an adjustment to compensation as outlined on the face of this AGREEMENT and in Attachment CO.

ARTICLE IV

RESPONSIBILITIES OF OWNER: OWNER shall perform the following in a timely manner so as not to delay the services of FNI:

- A. Designate in writing a person to act as OWNER's representative with respect to the services to be rendered under this AGREEMENT. Such person shall have contract authority to transmit instructions, receive information, interpret and define OWNER's policies and decisions with respect to FNI's services for the Project.
- B. Provide all criteria and full information as to OWNER's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which OWNER will require to be included in the drawings and specifications.
- C. Assist FNI by placing at FNI's disposal all available information pertinent to the Project including previous reports and any other data relative to design or construction of the Project.
- D. Arrange for access to and make all provisions for FNI to enter upon public and private property as required for FNI to perform services under this AGREEMENT.
- E. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by FNI, obtain advice of an attorney, insurance counselor and other consultants as OWNER deems appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of FNI.
- F. Furnish, or direct FNI to provide, Additional Services as stipulated in Attachment SC, Article II of this AGREEMENT or other services as required.
- G. Bear all costs incident to compliance with the requirements of this Article IV.

ARTICLE V

DESIGNATED REPRESENTATIVES: FNI and OWNER designate the following representatives:

Owner's Designated Representative – Rick Cortes, Assistant City Manager, 205 N. River St., Seguin, Texas 78155; Phone 830-401-2401; email rcortes@seguintexas.gov

Owner's Accounting Representative –

FNI's Designated Representative – Stephanie Neises, 10814 Jollyville Rd, Bldg. 4, Suite 100 Austin, Texas 78759; Phone 512-617-3192; email sn@freese.com

FNI's Accounting Representative – Jana Collier, 4055 International Plaza, Suite 200, Fort Worth, Texas 76109; Phone 817-735-7298; Fax 817-735-7496; email jvc@freese.com

COMPENSATION

Not to Exceed: Compensation to FNI for Basic Services in Attachment SC shall be computed on the basis of the Schedule of Charges, but shall not exceed One Hundred Fift Nine Thousand Six Hundred Seventy Dollars (\$159,670). 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 Attachment SC, FNI will notify OWNER for OWNER's approval before proceeding. Additional Services shall be computed based on the Schedule of Charges.

Schedule of Charges:

<u>Position</u>	<u>Rate</u>
Professional - 1	99
Professional - 2	120
Professional - 3	135
Professional - 4	156
Professional - 5	182
Professional - 6	208
Construction Manager - 1	79
Construction Manager - 2	103
Construction Manager - 3	121
Construction Manager - 4	151
CAD Technician/Designer - 1	84
CAD Technician/Designer - 2	109
CAD Technician/Designer - 3	134
Corporate Project Support - 1	80
Corporate Project Support - 2	97
Corporate Project Support - 3	129
Intern/ Coop	49

Rates for In-House Services**Technology Charge**

\$8.50 per hour

Travel

Standard IRS Rates

Bulk Printing and Reproduction

Black and White	\$0.10 per copy
Color	\$0.50 per copy
Plot - Bond	\$2.50 per plot
Plot - Color	\$5.75 per plot
Plot - Other	\$5.00 per plot
Binding	\$5.75 per book

OTHER DIRECT EXPENSES:

Other direct expenses are reimbursed at actual cost times a multiplier of 1.15. They include outside printing and reproduction expense, communication expense, travel, transportation and subsistence away from the FNI office and 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. 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 rates will be adjusted annually.

1-022013

City of Seguin
Water Model & Master Plan Update
2/18/2014
Detailed Cost Breakdown

Project Fee Summary		
Basic	\$	159,670
Special	\$	-
Total Project	\$	159,670

Basic Services										
Project Role	Principal / QC	Project Manager	Project Engineer	GIS Analyst	Design Engineer	Total Hours	Total Labor Effort	Total Expense Effort	Total Sub Effort	Total Effort
Task A: Population and Water Demand Projections										
A1. Project Kick-Off Meeting	2	4	4		2	12	\$ 1,880	\$ 280	\$ -	\$ 2,160
A2. Data Collection & Review		6	12			18	\$ 2,250	\$ 160	\$ -	\$ 2,410
A3. Meet with City Planning Department	2	4	4	2		12	\$ 1,710	\$ 290	\$ -	\$ 2,000
A4. Develop and Distribute Population and Non-Residential Growth Projections	1	12	24	8		45	\$ 5,400	\$ 390	\$ -	\$ 5,790
A5. Review and Evaluate Historical Water Usage Data	1	4	12			17	\$ 2,160	\$ 150	\$ -	\$ 2,310
A6. Develop Design Criteria for Water Demand Projections	1	4	6			11	\$ 1,520	\$ 100	\$ -	\$ 1,620
A7. Develop and Distribute Existing Demands	1	6	12	8		27	\$ 3,150	\$ 230	\$ -	\$ 3,380
A8. Develop and Distribute Water Demand Projections	1	12	20	4		37	\$ 4,640	\$ 320	\$ -	\$ 4,960
A9. Develop TM-1 - Population and Water Demand Projections	1	8	12	4		25	\$ 3,140	\$ 220	\$ -	\$ 3,360
A10. Progress Meeting #1 - Population and Water Demand Projections	2	4	4	2		12	\$ 1,710	\$ 290	\$ -	\$ 2,000
A11. Finalize TM-1 - Population and Water Demand Projections	1	4	6	2		13	\$ 1,680	\$ 300	\$ -	\$ 1,980
TASK A TOTAL	13	68	116	30	2	229	\$ 29,260	\$ 2,740	\$ -	\$ 32,000
Task B: Water Model Development and Calibration										
B1. Conduct Temporary Pressure Testing	1	4	8	2		15	\$ 1,900	\$ 1,510	\$ -	\$ 3,410
B2. Water Model Evaluation and Selection Workshop	2	6	6			14	\$ 2,080	\$ 310	\$ -	\$ 2,390
B3. Construct Water Model	1	16	40	2		59	\$ 7,250	\$ 510	\$ -	\$ 7,760
B4. Obtain and Evaluate SCADA Data	1	4	8			13	\$ 1,730	\$ 120	\$ -	\$ 1,850
B5. Develop Diurnal Demand Curves	1	4	8			13	\$ 1,730	\$ 120	\$ -	\$ 1,850
B6. Conduct EPS Model Calibration	2	16	40			58	\$ 7,310	\$ 500	\$ -	\$ 7,810
B7. Develop TM-2 - Water Model Development and Calibration	1	8	12	4		25	\$ 3,140	\$ 220	\$ -	\$ 3,360
B8. Progress Meeting #2 - Water Model Development and Calibration	2	4	4	2		12	\$ 1,710	\$ 280	\$ -	\$ 2,000
B9. Finalize TM-2 - Water Model Development and Calibration	1	4	6	2		13	\$ 1,680	\$ 300	\$ -	\$ 1,980
TASK B TOTAL	12	66	132	12		222	\$ 28,540	\$ 3,880	\$ -	\$ 32,420
Task C: Hydraulic Analyses and System Evaluation										
C1. Perform Modeling of Existing Water System	1	8	16	2		27	\$ 3,400	\$ 230	\$ -	\$ 3,630
C2. Conduct Fire Flow Analysis for Existing System	1	4	8	2		15	\$ 1,900	\$ 130	\$ -	\$ 2,030
C3. Evaluate Pressure Plane Delineation	1	8	12	2		23	\$ 2,980	\$ 200	\$ -	\$ 3,180
C4. Evaluate TCEQ Capacity Requirements Compliance	1	8	16			25	\$ 3,230	\$ 220	\$ -	\$ 3,450
C5. Progress Meeting #3 - Existing System Analysis	2	4	4	2		12	\$ 1,710	\$ 290	\$ -	\$ 2,000
C6. Identify Requirements for System Improvements	1	4	8			13	\$ 1,730	\$ 120	\$ -	\$ 1,850
C7. Evaluate Pumping, Storage, and Production Capacity for Future Needs	1	8	16			25	\$ 3,230	\$ 220	\$ -	\$ 3,450
C8. Utilize Buildout Model to Determine Sizing of Water System Improvements	4	24	40	4		72	\$ 9,410	\$ 620	\$ -	\$ 10,030
C9. Progress Meeting #4 - Water System Improvement Alternatives	2	4	4	2		12	\$ 1,710	\$ 290	\$ -	\$ 2,000
C10. Utilize 5-year and 10-year Water System Model to Determine Phasing of Water System Improvements	4	24	40	4		72	\$ 9,410	\$ 620	\$ -	\$ 10,030
TASK C TOTAL	18	96	164	18		296	\$ 38,710	\$ 2,940	\$ -	\$ 41,650
Task D: Capital Improvement Plan and Master Plan Report										
D1. Develop Capital Improvement Plan (CIP) Costs, Phasing Plan & Mapping	6	24	48	8	8	94	\$ 12,450	\$ 800	\$ -	\$ 13,250
D2. Progress Meeting #5 - Capital Improvements Plan	2	4	4	2		12	\$ 1,710	\$ 290	\$ -	\$ 2,000
D3. Prepare Draft Water Master Plan Report	2	16	32	8		56	\$ 7,130	\$ 500	\$ -	\$ 7,630
D4. Progress Meeting #6 - Draft Water Master Plan Report	2	4	4	2		12	\$ 1,710	\$ 290	\$ -	\$ 2,000
D5. Revise and Finalize Water Master Plan Report	1	8	16	4		29	\$ 3,570	\$ 1,090	\$ -	\$ 4,660
D6. City Council Presentation	4	4	2			10	\$ 1,290	\$ 280	\$ -	\$ 1,570
TASK D TOTAL	17	60	106	24	8	215	\$ 28,360	\$ 3,250	\$ -	\$ 31,610
Task E: Water Model Training & Software Purchase										
E1. Purchase Selected Software		4				4	\$ 650	\$ 11,540	\$ -	\$ 12,190
E2. Prepare Model Training Material	1	8	8			17	\$ 2,380	\$ 360	\$ -	\$ 2,740
E3. Water Model Training Workshop	8	8				16	\$ 3,150	\$ 620	\$ -	\$ 3,770
E4. Follow-up Coordination	8	8				16	\$ 3,150	\$ 140	\$ -	\$ 3,290
TASK E TOTAL	17	28	8			53	\$ 9,330	\$ 12,660	\$ -	\$ 21,990
Total Basic Services Hours						1015	\$ 134,200	\$ 25,470	\$ -	\$ 159,670

TERMS AND CONDITIONS OF AGREEMENT

1. **DEFINITIONS:** The term Owner as used herein refers to the City of Seguin, Texas. The term FNI as used herein refers to Freese and Nichols, Inc., its employees and agents; also its subcontractors and their employees and agents. As used herein, Services refers to the professional services performed by Freese and Nichols pursuant to the AGREEMENT.
2. **CHANGES:** Owner, without invalidating the AGREEMENT, may order changes within the general scope of the WORK required by the AGREEMENT by altering, adding to and/or deducting from the WORK to be performed. If any change under this clause causes an increase or decrease in FNI's cost of, or the time required for, the performance of any part of the Services under the AGREEMENT, an equitable adjustment will be made by mutual agreement and the AGREEMENT modified in writing accordingly.
3. **TERMINATION:** The obligation to provide services under this AGREEMENT may be terminated by either party upon ten days' written notice. In the event of termination, FNI will be paid for all services rendered and reimbursable expenses incurred to the date of termination and, in addition, all reimbursable expenses directly attributable to termination.
4. **CONSEQUENTIAL DAMAGES:** In no event shall FNI or its subcontractors be liable in contract, tort, strict liability, warranty, or otherwise for any special, indirect, incidental or consequential damages, such as loss of product, loss of use of the equipment or system, loss of anticipated profits or revenue, non-operation or increased expense of operation or other equipment or systems.
5. **INFORMATION FURNISHED BY OWNER:** Owner will assist FNI by placing at FNI's disposal all available information pertinent to the Project including previous reports and any other data relative to design or construction of the Project. FNI shall have no liability for defects or negligence in the Services attributable to FNI's reliance upon or use of data, design criteria, drawings, specifications or other information furnished by Owner and Owner agrees to indemnify and hold FNI harmless from any and all claims and judgments, and all losses, costs and expenses arising therefrom. FNI shall disclose to Owner, prior to use thereof, defects or omissions in the data, design criteria, drawings, specifications or other information furnished by Owner to FNI that FNI may reasonably discover in its review and inspection thereof.
6. **INSURANCE:** FNI shall provide to Owner certificates of insurance which shall contain the following minimum coverage (All limits in thousands):

Commercial General Liability General Aggregate \$2,000	Workers' Compensation Each Accident \$500
Automobile Liability (Any Auto) CSL \$1,000	Professional Liability \$3,000 Annual Aggregate
7. **SUBCONTRACTS:** If, for any reason, at any time during the progress of providing Services, Owner determines that any subcontractor for FNI is incompetent or undesirable, Owner will notify FNI accordingly and FNI shall take immediate steps for cancellation of such subcontract. Subletting by subcontractors shall be subject to the same regulations. Nothing contained in the AGREEMENT shall create any contractual relation between any subcontractor and Owner.
8. **OWNERSHIP OF DOCUMENTS:** All drawings, reports data and other project information developed in the execution of the Services provided under this AGREEMENT shall be the property of the Owner upon payment of FNI's fees for services. FNI may retain copies for record purposes. Owner agrees such documents are not intended or represented to be suitable for reuse by Owner or others. Any reuse by Owner or by those who obtained said documents from Owner without written verification or adaptation by FNI will be at Owner's sole risk and without liability or legal exposure to FNI, or to FNI's independent associates or consultants, and Owner shall indemnify and hold harmless FNI and FNI's independent associates and consultants from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting therefrom. Any such verification or adaptation will entitle FNI to further reasonable compensation. FNI may reuse all drawings, report data and other project information in the execution of the Services provided under this AGREEMENT in FNI's other activities. Any reuse by FNI will be at FNI's sole risk and without liability or legal exposure to Owner, and FNI shall indemnify and hold harmless Owner from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting therefrom.

9. **POLLUTANTS AND HAZARDOUS WASTES:** It is understood and agreed that FNI has neither created nor contributed to the creation or existence of any hazardous, radioactive, toxic, irritant, pollutant, or otherwise dangerous substance or condition at the site, if any, and its compensation hereunder is in no way commensurate with the potential risk of injury or loss that may be caused by exposures to such substances or conditions. The parties agree that in performing the Services required by this AGREEMENT, FNI does not take possession or control of the subject site, but acts as an invitee in performing the services, and is not therefore responsible for the existence of any pollutant present on or migrating from the site. Further, FNI shall have no responsibility for any pollutant during clean-up, transportation, storage or disposal activities.
10. **OPINION OF PROBABLE COSTS:** FNI will furnish an opinion of probable project development cost based on present day cost, but does not guarantee the accuracy of such estimates. Opinions of probable cost, financial evaluations, feasibility studies, economic analyses of alternate solutions and utilitarian considerations of operations and maintenance costs prepared by FNI hereunder will be made on the basis of FNI's experience and qualifications and represent FNI's judgment as an experienced and qualified design professional. It is recognized, however, that FNI does not have control over the cost of labor, material, equipment or services furnished by others or over market conditions or contractors' methods of determining their prices.
11. **CONSTRUCTION REPRESENTATION:** If required by the AGREEMENT, FNI will furnish Construction Representation according to the defined scope for these services. FNI will observe the progress and the quality of work to determine in general if the work is proceeding in accordance with the Contract Documents. In performing these services, FNI will endeavor to protect Owner against defects and deficiencies in the work of Contractors; FNI will report any observed deficiencies to Owner, however, it is understood that FNI does not guarantee the Contractor's performance, nor is FNI responsible for the supervision of the Contractor's operation and employees. FNI shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor, or the safety precautions and programs incident to the work of the Contractor. FNI shall not be responsible for the acts or omissions of any person (except his own employees or agent) at the Project site or otherwise performing any of the work of the Project. If Owner designates a person to serve in the capacity of Resident Project Representative who is not a FNI's employee or FNI's agent, the duties, responsibilities and limitations of authority of such Resident Project Representative(s) will be set forth in writing and made a part of this AGREEMENT before the Construction Phase of the Project begins.
12. **PAYMENT:** Progress payments may be requested by FNI based on the amount of services completed. Payment for the services of FNI shall be due and payable upon submission of a statement for services to OWNER and in acceptance of the services as satisfactory by the OWNER. Statements for services shall not be submitted more frequently than monthly. Any applicable new taxes imposed upon services, expenses, and charges by any governmental body after the execution of this AGREEMENT will be added to FNI's compensation.
- If OWNER fails to make any payment due FNI for services and expenses within thirty (30) days after receipt of FNI's statement for services therefore, the amounts due FNI will be increased at the rate of one percent (1%) per month from said thirtieth (30th) day, and, in addition, FNI may, after giving seven (7) days' written notice to OWNER, suspend services under this AGREEMENT until FNI has been paid in full, all amounts due for services, expenses and charges.
13. **ARBITRATION:** No arbitration arising out of, or relating to, this AGREEMENT involving one party to this AGREEMENT may include the other party to this AGREEMENT without their approval.
14. **SUCCESSORS AND ASSIGNMENTS:** OWNER and FNI each are hereby bound and the partners, successors, executors, administrators and legal representatives of OWNER and FNI are hereby bound to the other party to this AGREEMENT and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements and obligations of this AGREEMENT.
- Neither OWNER nor FNI shall assign, sublet or transfer any rights under or interest in (including, but without limitation, moneys that may become due or moneys that are due) this AGREEMENT without the written consent of the other, except to the extent that any assignment, subletting or transfer is mandated by law or the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this AGREEMENT. Nothing contained in this paragraph shall prevent FNI from employing such independent associates and consultants as FNI may deem appropriate to assist in the performance of services hereunder.
15. **PURCHASE ORDERS:** If a Purchase Order is used to authorize FNI's Services, only the terms, conditions/instructions typed on the face of the Purchase Order shall apply to this AGREEMENT. Should there be any conflict between the Purchase Order and the terms of this AGREEMENT, then this AGREEMENT shall prevail and shall be determinative of the conflict.