

**AGREEMENT FOR DESIGN PROFESSIONAL SERVICES
BETWEEN THE
CITY OF SANTA CLARA, CALIFORNIA,
AND
HYDROSCIENCE ENGINEERS, INC.**

PREAMBLE

This Agreement is entered into between the City of Santa Clara, California, a chartered California municipal corporation (City) and HydroScience Engineers, a California corporation (Contractor). City and Contractor may be referred to individually as a "Party" or collectively as the "Parties" or the "Parties to this Agreement."

RECITALS

- A. City desires to secure the design professional services more fully described in this Agreement, at Exhibit A, entitled "Scope of Services";
- B. "Design professional" includes licensed architects, licensed landscape architects, registered professional engineers and licensed professional land surveyors;
- C. Contractor represents that it, and its subcontractors, if any, have the professional qualifications, expertise, necessary licenses and desire to provide certain goods and/or required services of the quality and type which meet objectives and requirements of City; and,
- D. The Parties have specified herein the terms and conditions under which such services will be provided and paid for.

The Parties agree as follows:

AGREEMENT TERMS AND CONDITIONS

1. AGREEMENT DOCUMENTS

The documents forming the entire Agreement between City and Contractor shall consist of these Terms and Conditions and the following Exhibits, which are hereby incorporated into this Agreement by this reference:

Exhibit A – Scope of Services

Exhibit B – Schedule of Fees

Exhibit C – Insurance Requirements

Exhibit D – Labor Compliance Addendum (if applicable)

This Agreement, including the Exhibits set forth above, contains all the agreements, representations and understandings of the Parties, and supersedes and replaces any previous agreements, representations and understandings, whether oral or written. In the event of any inconsistency between the provisions of any of the Exhibits and the Terms and Conditions, the Terms and Conditions shall govern and control.

2. TERM OF AGREEMENT

Unless otherwise set forth in this Agreement or unless this paragraph is subsequently modified by a written amendment to this Agreement, the term of this Agreement shall begin on July 22, 2019 and terminate on July 21, 2022 (Initial Term) with two (2) one-year renewal periods, depending on satisfactory performance of services described in Exhibit A by Contractor, subject to the Parties' rights to termination pursuant to Section 7.

3. SCOPE OF SERVICES & PERFORMANCE SCHEDULE

Contractor shall perform those Services specified in Exhibit A within the time stated in Exhibit A. Time is of the essence.

- A. All reports, cost estimates, plans and other documentation which may be submitted or furnished by Contractor shall be approved and signed by an appropriate qualified licensed professional in the State of California.
- B. The title sheet for specifications and reports, and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of certificate and signature of the design professional responsible for their preparation.

4. WARRANTY

Contractor expressly warrants that all materials and services covered by this Agreement shall be fit for the purpose intended, shall be free from defect and shall conform to the specifications, requirements and instructions upon which this Agreement is based. Contractor agrees to promptly replace or correct any incomplete, inaccurate or defective Services at no further cost to City when defects are due to the negligence, errors or omissions of Contractor. If Contractor fails to promptly correct or replace materials or services, City may make corrections or replace materials or services and charge Contractor for the cost incurred by City.

5. QUALIFICATIONS OF CONTRACTOR - STANDARD OF CARE

Contractor represents and maintains that it has the expertise in the professional calling necessary to perform the Services, and its duties and obligations, expressed and implied, contained herein, and City expressly relies upon Contractor's representations regarding its skills and knowledge. Contractor shall

perform such Services and duties in conformance to and consistent with the professional standards of a specialist in the same discipline in the State of California.

6. COMPENSATION AND PAYMENT

In consideration for Contractor's complete performance of Services, City shall pay Contractor for all materials provided and Services rendered by Contractor in accordance with Exhibit B, entitled "SCHEDULE OF FEES." The maximum compensation of this Agreement is Four Hundred Five Thousand Six Hundred Sixty Dollars (\$405,660), subject to budget appropriations, which includes all payments that may be authorized for Services and for expenses, supplies, materials and equipment required to perform the Services. All work performed or materials provided in excess of the maximum compensation shall be at Contractor's expense. Contractor shall not be entitled to any payment above the maximum compensation under any circumstance.

7. TERMINATION

- A. Termination for Convenience. City shall have the right to terminate this Agreement, without cause or penalty, by giving not less than Thirty (30) days' prior written notice to Contractor.
- B. Termination for Default. If Contractor fails to perform any of its material obligations under this Agreement, in addition to all other remedies provided by law, City may terminate this Agreement immediately upon written notice to Contractor.
- C. Upon termination, each Party shall assist the other in arranging an orderly transfer and close-out of services. As soon as possible following the notice of termination, but no later than ten (10) days after the notice of termination, Contractor will deliver to City all City information or material that Contractor has in its possession.

8. ASSIGNMENT AND SUBCONTRACTING

City and Contractor bind themselves, their successors and assigns to all covenants of this Agreement. This Agreement shall not be assigned or transferred without the prior written approval of City. Contractor shall not hire subcontractors without express written permission from City.

Contractor shall be as fully responsible to City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as Contractor is for the acts and omissions of persons directly employed by it.

9. NO THIRD PARTY BENEFICIARY

This Agreement shall not be construed to be an agreement for the benefit of any third party or parties and no third party or parties shall have any claim or right of action under this Agreement for any cause whatsoever.

10. INDEPENDENT CONTRACTOR

Contractor and all person(s) employed by or contracted with Contractor to furnish labor and/or materials under this Agreement are independent contractors and do not act as agent(s) or employee(s) of City. Contractor has full rights to manage its employees in their performance of Services under this Agreement.

11. CONFIDENTIALITY OF MATERIAL

All ideas, memoranda, specifications, plans, manufacturing procedures, data, drawings, descriptions, documents, discussions or other information developed or received by or for Contractor and all other written information submitted to Contractor in connection with the performance of this Agreement shall be held confidential by Contractor and shall not, without the prior written consent of City, be used for any purposes other than the performance of the Services nor be disclosed to an entity not connected with performance of the Services. Nothing furnished to Contractor which is otherwise known to Contractor or becomes generally known to the related industry shall be deemed confidential.

12. OWNERSHIP OF MATERIAL

All material, which shall include, but not be limited to, data, sketches, tracings, drawings, plans, diagrams, quantities, estimates, specifications, proposals, tests, maps, calculations, photographs, reports, designs, technology, programming, works of authorship and other material developed, collected, prepared or caused to be prepared under this Agreement shall be the property of City but Contractor may retain and use copies thereof. City shall not be limited in any way or at any time in its use of said material. However, Contractor shall not be responsible for damages resulting from the use of said material for work other than Project, including, but not limited to, the release of this material to third parties.

13. RIGHT OF CITY TO INSPECT RECORDS OF CONTRACTOR

City, through its authorized employees, representatives or agents shall have the right during the term of this Agreement and for four (4) years from the date of final payment for goods or services provided under this Agreement, to audit the books and records of Contractor for the purpose of verifying any and all charges made by Contractor in connection with Contractor compensation under this Agreement, including termination of Contractor. Contractor agrees to maintain sufficient books and records in accordance with generally accepted accounting principles to establish the correctness of all charges submitted to City. Any expenses not so recorded shall be disallowed by City. Contractor shall bear the

cost of the audit if the audit determines that there has been a substantial billing deviation in excess of five (5) percent adverse to the City.

Contractor shall submit to City any and all reports concerning its performance under this Agreement that may be requested by City in writing. Contractor agrees to assist City in meeting City's reporting requirements to the State and other agencies with respect to Contractor's Services hereunder.

14. HOLD HARMLESS/INDEMNIFICATION

To the extent permitted by law, Contractor agrees to protect, defend, hold harmless and indemnify City, its City Council, commissions, officers, employees, volunteers and agents from and against any claim, injury, liability, loss, cost, and/or expense or damage, including all costs and attorney's fees in providing a defense to any such claim or other action, and whether sounding in law, contract, tort, or equity, to the extent arising out of, pertaining to, or related to the negligence, recklessness, or willful misconduct of the Contractor, its employees, subcontractors, or agents in the performance, or non-performance, of Services under this Agreement.

15. INSURANCE REQUIREMENTS

During the term of this Agreement, and for any time period set forth in Exhibit C, Contractor shall provide and maintain in full force and effect, at no cost to City, insurance policies as set forth in Exhibit C.

16. WAIVER

Contractor agrees that waiver by City of any one or more of the conditions of performance under this Agreement shall not be construed as waiver(s) of any other condition of performance under this Agreement. Neither City's review, acceptance nor payments for any of the Services required under this Agreement shall be constructed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.

17. NOTICES

All notices to the Parties shall, unless otherwise requested in writing, be sent to City addressed as follows:

City of Santa Clara
Attention: Water & Sewer Utilities Department
1500 Warburton Avenue
Santa Clara, CA 95050
and by e-mail at NLui@santaclaraca.gov, and
Water@santaclaraca.gov

And to Contractor addressed as follows:

Mary Hoang, P.E., Principal
HydroScience Engineers, Inc.
1922 The Alameda, Suite 212, San Jose, CA 95126
(408) 363-3884 x2 and by e-mail at mhoang@hydroscience.com

The workday the e-mail was sent shall control the date notice was deemed given. An e-mail transmitted after 1:00 p.m. on a Friday shall be deemed to have been transmitted on the following business day.

18. COMPLIANCE WITH LAWS

Contractor shall comply with all applicable laws and regulations of the federal, state and local government, including but not limited to “The Code of the City of Santa Clara, California” (“SCCC”). In particular, Contractor’s attention is called to the regulations regarding Campaign Contributions (SCCC Chapter 2.130), Lobbying (SCCC Chapter 2.155), Minimum Wage (SCCC Chapter 3.20), Business Tax Certificate (SCCC section 3.40.060), and Food and Beverage Service Worker Retention (SCCC Chapter 9.60), as such Chapters or Sections may be amended from time to time or renumbered. Additionally Contractor has read and agrees to comply with City’s Ethical Standards (<http://santaclaraca.gov/home/showdocument?id=58299>).

19. CONFLICTS OF INTEREST

Contractor certifies that to the best of its knowledge, no City officer, employee or authorized representative has any financial interest in the business of Contractor and that no person associated with Contractor has any interest, direct or indirect, which could conflict with the faithful performance of this Agreement. Contractor is familiar with the provisions of California Government Code section 87100 and following, and certifies that it does not know of any facts which would violate these code provisions. Contractor will advise City if a conflict arises.

20. FAIR EMPLOYMENT

Contractor shall not discriminate against any employee or applicant for employment because of race, sex, color, religion, religious creed, national origin, ancestry, age, gender, marital status, physical disability, mental disability, medical condition, genetic information, sexual orientation, gender expression, gender identity, military and veteran status, or ethnic background, in violation of federal, state or local law.

21. NO USE OF CITY NAME OR EMBLEM

Contractor shall not use City’s name, insignia, or emblem, or distribute any information related to services under this Agreement in any magazine, trade paper, newspaper or other medium without express written consent of City.

22. GOVERNING LAW AND VENUE

This Agreement shall be governed and construed in accordance with the statutes and laws of the State of California. The venue of any suit filed by either Party shall be vested in the state courts of the County of Santa Clara, or if appropriate, in the United States District Court, Northern District of California, San Jose, California.

23. SEVERABILITY CLAUSE

In case any one or more of the provisions in this Agreement shall, for any reason, be held invalid, illegal or unenforceable in any respect, it shall not affect the validity of the other provisions, which shall remain in full force and effect.

24. AMENDMENTS

This Agreement may only be modified by a written amendment duly authorized and executed by the Parties to this Agreement.

25. COUNTERPARTS

This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but both of which shall constitute one and the same instrument.

CONTINUED ON PAGE 8

The Parties acknowledge and accept the terms and conditions of this Agreement as evidenced by the following signatures of their duly authorized representatives.

CITY OF SANTA CLARA, CALIFORNIA
a chartered California municipal corporation

Approved as to Form: _____

Dated: _____

BRIAN DOYLE
City Attorney

DEANNA J. SANTANA
City Manager
1500 Warburton Avenue
Santa Clara, CA 95050
Telephone: (408) 615-2210
Fax: (408) 241-6771

"CITY"

HYDROSCIENCE ENGINEERS, INC.
a California corporation

Dated: _____

By (Signature): _____

Name: _____

Title: _____

Principal Place of Business Address: 10569 Old Placerville Road
Sacramento, CA 95827

Email Address: _____

Telephone: () _____

Fax: () _____

"CONTRACTOR"

EXHIBIT A SCOPE OF SERVICES

The Services to be performed for the City by the Contractor under this Agreement are set forth below.

1. GENERAL

To the extent not inconsistent with this Agreement between the City and Contractor including this Scope of Services, the City's RFQUAL 18-19-23 (including subsequent updates), Contractor's proposal response dated April 1, 2019, Contractor's presentation materials dated May 22, 2019, and Contractor's Best and Final Offer (BAFO) response dated May 31, 2019 are hereby incorporated by reference herein, and shall supplement this Scope of Services and be subject to the Terms and Conditions of the Agreement.

2. PROJECT TASKS

Contractor shall provide all resources to complete the following tasks ensuring that the City's InfoWater Hydraulic Model is calibrated and ready to be used. After calibration acceptance, Consultant shall run the model, and provide documentation that the model generated data reflects the actual operation of the City's water distribution system.

2.1. Review Existing Model and Data Provided by the City (Task 1)

Contractor shall review and make necessary corrections of the existing model and data for:

- 2.1.1.** Accuracy of facility and distribution attributes.
- 2.1.2.** Accuracy of demand allocation.
- 2.1.3.** Operation parameters and settings. City will provide operational parameters and verify the pump on/off settings. Data provided will include all available SCADA data on City water distribution facilities in text (.txt) or comma delimited format (.csv).
- 2.1.4.** All other related components to verify the accuracy of the model to the specification as listed per Attachment A: InfoWater model build City of Santa Clara - Technical Memorandum (TM 3) Project Summary Report and make corrections as necessary for areas of inaccuracies.

2.2. Calibration Standards and Plan Technical Memorandum (Task 2)

Contractor shall provide a Technical Memorandum with the proposed Calibration standards for the extended period simulation calibration. In addition, the technical memorandum shall include an overview of the proposed extended period simulation calibration process.

2.3. Field Data Collection (Task 3)

Contractor shall develop a testing plan to collect data for the purpose of model calibration. The testing plan shall be submitted to the City for review. Contractor will coordinate with the City to implement the testing plan over a period to be defined. City staff will complete the hydrant tests in accordance with the testing plan and provide the Contractor with applicable facility data for the duration of the hydrant tests. Contractor shall assume a minimum of two observation hydrants per hydrant test. Contractor will provide guidance on the exact location and number to data collection points. Below are the minimum requirements for field data collection.

- 2.3.1.** Distribution System Data (Hydrant Flow and Pressure) - The hydrant testing plan shall be conducted at minimum of seven (7) locations in the distribution system Zone 1 and 1A and minimum five (5) locations in the distribution system zone 2 and 2A.
- 2.3.2.** Tank Level Data – The validation of data shall be conducted at four (4) tank sites and seven storage (7) tanks. This includes data collection for booster stations associated with the tanks.
- 2.3.3.** Well Flow and Pressure Data – The validation of data shall be conducted at minimum five (5) well locations in Zone 1, five (5) well locations in Zone 2, and one (1) well location Zone 2 A.
- 2.3.4.** Note that data loggers, flash drives, and other equipment needed to collect the data shall be supplied by the City. The Contractor shall define the time and duration of the data collection.
- 2.3.5.** Any proposed deviation from the testing plan indication in this section will require prior approval from the City.

2.4. Model Calibration (Task 4)

- 2.4.1.** Contractor shall calibrate the extended period simulation per the calibration standards developed in the Calibration Standards and Plan TM. Since the City's historical Supervisory Control and Data Acquisition (SCADA) information is limited, the City staff will engage with Contractor to define acceptable system operational metrics and data, which will then be utilized against the model data to determine if the model results are accurate. The data produced should be representative of the system operations. Contractor shall run the hydraulic model to simulate system operations under extended period simulation calibration (Contractor shall create the necessary scenarios to accomplish the extended period simulation calibration). The minimum desired level of accuracy is defined in the table below:

Source ⁽¹⁾		Hydraulic			Flow Percent Error
		Grade Line (ft)	Pressure (psi)	Level (ft)	
AWWA EMAC (2017)		Within 5 to 10 feet of field	Within 2.2 to 4.3 of field	Within 3 to 6 feet of field	-
AWWA ECAC (1999)	Master Plan	-	+/- 5 for all readings	-	+/- 10%
	Design	-	+/- 2 for 90% of readings	-	+/- 5%
	Operations	-	+/- 2 for 90% of readings	-	+/- 5%
	Water Quality	-	+/- 3 for 70% of all readings	-	+/- 2%

2.4.2. It is expected that additional effort will be required for the calibration of the hydraulic model. This will include the development of the static steady state scenarios previously identified in the scope of work as well as the addition of the calibration and development of diurnal patterns for 24-hour conditions for extended period simulation.

2.5. Design Extended Period Simulation Scenarios (Task 5)

2.5.1. Contractor shall review the appropriate historical data to develop the following extended period simulation design scenarios for future use:

2.5.1.1. Average Day Design Scenario

2.5.1.2. Maximum Day Design Scenario

2.5.1.3. Peak Hour Design Scenario

2.6. Design Fireflow Scenario (Task 6)

2.6.1. Utilizing the Maximum day design scenario, the Contractor shall develop the design fireflow scenario. The Contractor shall provide results of simulated fire flow exercise as per NFPA 291 requirements in the fire flow module and recommend improvements in the event of fire flow deficiencies. The results of the model must correspond to the fire flow testing requirements as defined under the National Fire Protection Agency 291 practices for testing and reporting.

2.7. Documentation and Reporting Requirements (Task 7)

- 2.7.1.** Contractor shall provide a Project Summary Report highlighting the process for project tasks 1 to 6, ensuring that the model is fully calibrated and ready for use.

3. AS NEEDED SERVICES

3.1. Basic Staff Training

- 3.1.1.** Training for up to ten (10) staff.
- 3.1.2.** Assume that training will include one full day related to basic functions and tools available with the software. Contractor will provide hardcopies of the training material. City to provide training facility, computer, and fully functional software needed for each participant.

3.2. Annual Model Updates

- 3.2.1.** Contractor shall provide support services to update the hydraulic model as a result of newly installed capital improvement projects, updates to system assets, or changing field operations. The model is assumed to need updating on an annual basis corresponding demand allocations and supply upgrades.
 - 3.2.1.1.** Piping improvements – It is anticipated that the volume of annual distribution system upgrades range from 10,000 to 20,000 feet of main added and/or replaced.
 - 3.2.1.2.** Supply improvements - It is anticipated that two new well supply facilities are added in the near-term capital improvement program.
 - 3.2.1.3.** Abandonment of facilities – It is anticipated that several wells will be abandoned in the near term.
 - 3.2.1.4.** Addition and Deletion of pressure zones – It is anticipated that modeling scenarios will require the addition of new pressure zones or consolidation of existing pressures zones.
 - 3.2.1.5.** It is assumed that the Hydraulic Model Update level of effort shall take no more than three working days for the updating.
- 3.2.2.** All model updates shall be completed on an annual basis and as directed by the City.

- 3.2.3.** Assume two rounds of water system updates to potentially include operational changes, up to 20,000 ft of pipeline improvements, other 100 plus improvements in the distribution system that includes addition/deletion of water/Fire services, fire hydrants, water valves, modification/updates at the tanks or other infrastructure sites, updated pump curves, and two new wells, any other incidental modification to the distribution system that is reflected in the GIS map.

3.3. Residential and Development Fire Flow Analysis

Contractor shall run the model and provide a fire flow recommendation summary for residential and for development projects on an as needed basis.

3.3.1. Residential Fire Flow Analysis:

Assume up to 50 analyses with accompanying reporting per year, a total of 150 over 3 yrs. City to provide the necessary information to run the analysis including, but not limited to fire flow requirements, fire hydrant connections to existing City system, and development water demands. It is assumed that this rate accounts for running the analysis once and preparing a report which will include figures, tables, and identification of deficiencies per development request. If additional model runs are required to assess recommendations or changes to a previous development request, it will be considered a new analysis and charged the unit rate for each rerun. Based on the criteria change for re run, cost could be 50% of the original cost, depending on the effort. Approval from the City must be obtained if it is anticipated that the level of effort for the rerun will exceed 50% of the unit rate.

3.3.2. Development Fire Flow Analysis

Assume up to 50 analyses with accompanying reporting per year, a total of 150 over 3 yrs. City to provide the necessary information to run the analysis including, but not limited to fire flow requirements, fire hydrant connections to existing City system, and development water demands. It is assumed that this rate accounts for running the analysis once and preparing a report which will include figures, tables, and identification of deficiencies per development request. If additional model runs are required to assess recommendations or changes to a previous development request, it will be considered a new analysis and charged the unit rate for each rerun. Based on the criteria change for re run, cost could be 50% of the original cost, depending on the effort. Approval from the City must be obtained if it is anticipated that the level of effort for the rerun will exceed 50% of the unit rate.

3.4. Power User Staff Training

- 3.4.1.** Contractor shall provide power user staff training specific to the needs of the City to be held at the City of Santa Clara.

Items to be covered shall include but not limited to:

- 3.4.1.1.** Model updating for new capital improvement projects
 - 3.4.1.2.** Model updating for demand allocation
 - 3.4.1.3.** Running the model under different demand scenarios
 - 3.4.1.4.** Running the model under steady state and extended simulation
 - 3.4.1.5.** Running additional extended modules such are fire flow and water quality modules.
 - 3.4.1.6.** Reviewing model reporting tools and displays
 - 3.4.1.7.** Removal and addition of pressure zones
 - 3.4.1.8.** And other items to be covered as determined to be necessary by the City and the Contractor.
- 3.4.2.** Assume that training will include one full day related to functions and tools specific to operating the City's hydraulic model. Contractor will provide hardcopies of the training material. City to provide training facility, computer, and fully functional software needed for each participant.

3.5. Uni Directional Flushing (entire system)

- 3.5.1.** Develop Comprehensive Uni-Directional Flushing Program for less than 12-in mains: Develop a comprehensive program that will serve as a sequential guide providing operations staff with the order in which flushing should occur, the valves and hydrants necessary to isolate a selection of pipeline, the targeted flow rates and period of flow, and targeted outcomes based on specific issues identified by the City (e.g. color, turbidity, chlorine residual). The hydraulic model will be used to evaluate the target velocities, the necessary flows and time necessary for pipe turnover, and assure minimum pressures are maintained. The deliverable will consist of maps identifying the sequencing of valves to be isolated and hydrants to be flushed.
- 3.5.2.** Develop Comprehensive Uni-Directional Flushing Program for mains 12-in and greater: Develop a comprehensive program that will serve

as a sequential guide providing operations staff with the order in which flushing should occur, the valves and hydrants necessary to isolate a selection of pipeline, the targeted flow rates and period of flow, and targeted outcomes based on specific issues identified by the City (e.g. color, turbidity, chlorine residual). The hydraulic model will be used to evaluate the target velocities, the necessary flows and time necessary for pipe turnover, and assure minimum pressures are maintained. The deliverable will consist of maps identifying the sequencing of valves to be isolated and hydrants to be flushed.

- 3.5.3.** The City has or will conduct a comprehensive assessment of all valves and hydrants to confirm existence and operation of valves prior to initiating the hydraulic modeling work to develop the program. The primary objective of the assessment is to identify any valves that are non-operational as well as valves/hydrants that are either shown in the model but do not exist in the field, that are in the field and are not shown in the model, or are in the model but the location is misrepresented and needs to be corrected. After the assessment is complete, Contractor will update the hydraulic model to reflect the condition, location, and existence of valves.

3.6. Water Quality Analysis

- 3.6.1.** Optional Water Quality analysis such as water age, chemical residual, disinfection byproduct monitoring, tracer studies, and the like will be completed upon a case by case request from the City. All analysis shall be accompanied by a recommendation summary.

3.7. Pressure Boundary Survey and Zone Consolidation

- 3.7.1.** Pressure Boundary Survey and Zone Consolidation: This task will include the review of pressure zone boundaries within the hydraulic model and opportunities to consolidate zones/subzones.
- 3.7.2.** Assume that the evaluations will include the consolidation of subzone 1A to Zone 1 and separately the consolidation of subzone 2A to Zone 2. The results of the analysis will present potential deficiencies and improvements necessary to operate each consolidated zone.

**EXHIBIT B
SCHEDULE OF FEES**

1. Rate Schedule

The Contractor's rates that apply to the services provided under this Agreement are set forth in the table below. The rates are inclusive of all costs, including all salaries, per diem, general and administrative costs, travel, and profit.

The estimated quantities provided below are for the initial three-year term. No guarantee is made or implied as to the actual quantities that will be required under this Agreement.

Task	Unit of Measure	Estimated Quantity	Unit Cost	Total
Project Tasks				
Review Existing Model	LS	1	\$4,860.00	\$4,860.00
Calibration Standards and Plan Technical Memorandum	LS	1	\$8,140.00	\$8,140.00
Field Data Collection for Extended Period Simulation	LS	1	\$11,660.00	\$11,660.00
Model Calibration for Extended Period Simulation	LS	1	\$30,080.00	\$30,080.00
Design Extended Period Scenarios (3 Scenarios)	LS	1	\$13,420.00	\$13,420.00
Design Fireflow Scenario	LS	1	\$6,640.00	\$6,640.00
Documentation and Reporting requirements	LS	1	\$15,560.00	\$15,560.00
As needed services				
Basic Staff Training	LS	1	\$9,500.00	\$9,500.00
Annual Model Update	LS	2	\$5,580.00	\$11,160.00
Residential Fire Flow Analysis and Reporting	LS	150	\$355.00	\$53,250.00
Commercial, Residential, and Industrial (Mixed Used) Development Fire Flow Analysis with Recommendation Summary	LS	150	\$875.00	\$131,250.00
Power User Staff Training	LS	1	\$9,300.00	\$9,300.00
Develop Comprehensive Uni-Directional Flushing Program for less than 12-in mains	LS	1	\$48,480.00	\$48,480.00
Develop Comprehensive Uni-Directional Flushing Program for 12-in and greater mains	LS	1	\$12,120.00	\$12,120.00
Water Quality Analysis	HR	120	\$225.00	\$27,000.00
Pressure Boundary Survey and Zone Consolidation	LS	2	\$6,620.00	\$13,240.00
GRAND TOTAL (3-YEAR INITIAL TERM)				\$405,660.00

2. Invoicing

Contractor will bill City on a monthly basis for Services provided by Contractor during the preceding month on an invoice and in a format approved by City and subject to verification and approval by City. City will pay Contractor within thirty (30) days of City's receipt of an approved invoice.

3. Rate Adjustment

Rates shall remain fixed for the initial three-year term of this Agreement. After the initial term, the City reserves the right to exercise two (2) additional one-year period extensions for a total of five (5) years. In the event the City elects to exercise options after the Initial Term, price adjustments may be considered by the City. Contractor must demonstrate to the satisfaction to the City that a price increase is justified. Rate increase requests must be tied to CPI, PPI or relevant industry specific index.

EXHIBIT C INSURANCE REQUIREMENTS

Without limiting the Contractor's indemnification of the City, and prior to commencing any of the Services required under this Agreement, the Contractor shall provide and maintain in full force and effect during the period of performance of the Agreement and for twenty-four (24) months following acceptance by the City, at its sole cost and expense, the following insurance policies from insurance companies authorized to do business in the State of California. These policies shall be primary insurance as to the City of Santa Clara so that any other coverage held by the City shall not contribute to any loss under Contractor's insurance. The minimum coverages, provisions and endorsements are as follows:

A. COMMERCIAL GENERAL LIABILITY INSURANCE

1. Commercial General Liability Insurance policy which provides coverage at least as broad as Insurance Services Office form CG 00 01. Policy limits are subject to review, but shall in no event be less than, the following:

- \$1,000,000 Each Occurrence
- \$2,000,000 General Aggregate
- \$2,000,000 Products/Completed Operations Aggregate
- \$1,000,000 Personal Injury

2. Exact structure and layering of the coverage shall be left to the discretion of Contractor; however, any excess or umbrella policies used to meet the required limits shall be at least as broad as the underlying coverage and shall otherwise follow form.

3. The following provisions shall apply to the Commercial Liability policy as well as any umbrella policy maintained by the Contractor to comply with the insurance requirements of this Agreement:

- a. Coverage shall be on a "pay on behalf" basis with defense costs payable in addition to policy limits;
- b. There shall be no cross-liability exclusion which precludes coverage for claims or suits by one insured against another; and
- c. Coverage shall apply separately to each insured against whom a claim is made or a suit is brought, except with respect to the limits of liability.

B. BUSINESS AUTOMOBILE LIABILITY INSURANCE

Business automobile liability insurance policy which provides coverage at least as broad as ISO form CA 00 01 with policy limits a minimum limit of not less than one million dollars (\$1,000,000) each accident using, or providing coverage at

least as broad as, Insurance Services Office form CA 00 01. Liability coverage shall apply to all owned (if any), non-owned and hired autos.

In the event that the Work being performed under this Agreement involves transporting of hazardous or regulated substances, hazardous or regulated wastes and/or hazardous or regulated materials, Contractor and/or its subcontractors involved in such activities shall provide coverage with a limit of one million dollars (\$1,000,000) per accident covering transportation of such materials by the addition to the Business Auto Coverage Policy of Environmental Impairment Endorsement MCS90 or Insurance Services Office endorsement form CA 99 48, which amends the pollution exclusion in the standard Business Automobile Policy to cover pollutants that are in or upon, being transported or towed by, being loaded onto, or being unloaded from a covered auto.

C. WORKERS' COMPENSATION

1. Workers' Compensation Insurance Policy as required by statute and employer's liability with limits of at least one million dollars (\$1,000,000) policy limit Bodily Injury by disease, one million dollars (\$1,000,000) each accident/Bodily Injury and one million dollars (\$1,000,000) each employee Bodily Injury by disease.
2. The indemnification and hold harmless obligations of Contractor included in this Agreement shall not be limited in any way by any limitation on the amount or type of damage, compensation or benefit payable by or for Contractor or any subcontractor under any Workers' Compensation Act(s), Disability Benefits Act(s) or other employee benefits act(s).
3. This policy must include a Waiver of Subrogation in favor of the City of Santa Clara, its City Council, commissions, officers, employees, volunteers and agents.

D. PROFESSIONAL LIABILITY

Professional Liability or Errors and Omissions Insurance as appropriate shall be written on a policy form coverage specifically designed to protect against negligent acts, errors or omissions of the Contractor. Covered services as designated in the policy must specifically include work performed under this agreement. Coverage shall be in an amount of not less than one million dollars (\$1,000,000) per claim or two million dollars (\$2,000,000) aggregate. Any coverage containing a deductible or self-retention must first be approved in writing by the City Attorney's Office.

E. COMPLIANCE WITH REQUIREMENTS

All of the following clauses and/or endorsements, or similar provisions, must be part of each commercial general liability policy, and each umbrella or excess policy.

1. Additional Insureds. City of Santa Clara, its City Council, commissions, officers, employees, volunteers and agents are hereby added as additional insureds in respect to liability arising out of Contractor's work for City, using Insurance Services Office (ISO) Endorsement CG 20 10 11 85, or the combination of CG 20 10 03 97 and CG 20 37 10 01, or its equivalent.
2. Primary and non-contributing. Each insurance policy provided by Contractor shall contain language or be endorsed to contain wording making it primary insurance as respects to, and not requiring contribution from, any other insurance which the indemnities may possess, including any self-insurance or self-insured retention they may have. Any other insurance indemnities may possess shall be considered excess insurance only and shall not be called upon to contribute with Contractor's insurance.
3. Cancellation.
 - a. Each insurance policy shall contain language or be endorsed to reflect that no cancellation or modification of the coverage provided due to non-payment of premiums shall be effective until written notice has been given to City at least ten (10) days prior to the effective date of such modification or cancellation. In the event of non-renewal, written notice shall be given at least ten (10) days prior to the effective date of non-renewal.
 - b. Each insurance policy shall contain language or be endorsed to reflect that no cancellation or modification of the coverage provided for any cause save and except non-payment of premiums shall be effective until written notice has been given to City at least thirty (30) days prior to the effective date of such modification or cancellation. In the event of non-renewal, written notice shall be given at least thirty (30) days prior to the effective date of non-renewal.
4. Other Endorsements. Other endorsements may be required for policies other than the commercial general liability policy if specified in the description of required insurance set forth in Sections A through E of this Exhibit C, above.

F. ADDITIONAL INSURANCE RELATED PROVISIONS

Contractor and City agree as follows:

1. Contractor agrees to ensure that subcontractors, and any other party involved with the Services, who is brought onto or involved in the performance of the Services by Contractor, provide the same minimum

insurance coverage required of Contractor, except as with respect to limits. Contractor agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this Agreement. Contractor agrees that upon request by City, all agreements with, and insurance compliance documents provided by, such subcontractors and others engaged in the project will be submitted to City for review.

2. Contractor agrees to be responsible for ensuring that no contract used by any party involved in any way with the project reserves the right to charge City or Contractor for the cost of additional insurance coverage required by this Agreement. Any such provisions are to be deleted with reference to City. It is not the intent of City to reimburse any third party for the cost of complying with these requirements. There shall be no recourse against City for payment of premiums or other amounts with respect thereto.
3. The City reserves the right to withhold payments from the Contractor in the event of material noncompliance with the insurance requirements set forth in this Agreement.

G. EVIDENCE OF COVERAGE

Prior to commencement of any Services under this Agreement, Contractor, and each and every subcontractor (of every tier) shall, at its sole cost and expense, provide and maintain not less than the minimum insurance coverage with the endorsements and deductibles indicated in this Agreement. Such insurance coverage shall be maintained with insurers, and under forms of policies, satisfactory to City and as described in this Agreement. Contractor shall file with the City all certificates and endorsements for the required insurance policies for City's approval as to adequacy of the insurance protection.

H. EVIDENCE OF COMPLIANCE

Contractor or its insurance broker shall provide the required proof of insurance compliance, consisting of Insurance Services Office (ISO) endorsement forms or their equivalent and the ACORD form 25-S certificate of insurance (or its equivalent), evidencing all required coverage shall be delivered to City, or its representative as set forth below, at or prior to execution of this Agreement. Upon City's request, Contractor shall submit to City copies of the actual insurance policies or renewals or replacements. Unless otherwise required by the terms of this Agreement, all certificates, endorsements, coverage verifications and other items required to be delivered to City pursuant to this Agreement shall be mailed to:

EBIX Inc.

City of Santa Clara Water & Sewer Utilities Department

P.O. Box 100085 – S2

or 1 Ebix Way

Duluth, GA 30096

John's Creek, GA 30097

Telephone number: 951-766-2280
Fax number: 770-325-0409
Email address: ctsantaclara@ebix.com

I. QUALIFYING INSURERS

All of the insurance companies providing insurance for Contractor shall have, and provide written proof of, an A. M. Best rating of at least A minus 6 (A- VI) or shall be an insurance company of equal financial stability that is approved by the City or its insurance compliance representatives.