

**CITY OF MILPITAS
PROFESSIONAL SERVICES AGREEMENT**

This Agreement is made and entered into as of _____, 20____ (“Effective Date”) by and between the City of Milpitas, a municipal corporation organized and operating under the laws of the State of California with its principal place of business at 455 E. Calaveras Boulevard, Milpitas, California 95035 (“City”), and West Yost & Associates, Inc., a California CORPORATION with its principal place of business at 2020 Research Park Drive, Suite 100, Davis, CA 95618 (hereinafter referred to as “Consultant”). City and Consultant are sometimes individually referred to as “Party” and collectively as “Parties” in this Agreement.

RECITALS

A. City is a public agency of the State of California and is in need of professional services for the following project:

City of Milpitas – Water Master Plan (hereinafter referred to as “the Project”).

B. Consultant is duly licensed and has the necessary qualifications to provide such services.

C. The Parties desire by this Agreement to establish the terms for City to retain Consultant to provide the services described herein.

AGREEMENT

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

1. **Services.**

Consultant shall provide the City with the services described in the Scope of Services attached hereto as Exhibit A.

2. **Compensation.**

a. Subject to paragraph 2(b) below, the City shall pay for such services in accordance with the Schedule of Charges set forth in Exhibit B.

b. In no event shall the total amount paid for services rendered by Consultant under this Agreement exceed the sum of **\$600,000 (six hundred thousand and 0/100 dollars)**. This amount is to cover all printing and related costs, and the City will not pay any additional fees for printing expenses. Periodic payments shall be made within thirty (30) days of receipt of an invoice which includes a detailed description of the work performed. Payments to Consultant for work performed will be made on a monthly billing basis.

3. **Additional Work.**

If changes in the work seem merited by Consultant or the City, and informal consultations with the other party indicate that a change is warranted, it shall be processed in the following manner: a letter outlining the changes shall be forwarded to the City by Consultant with a statement of estimated changes in fee or time schedule. An amendment to this Agreement shall be prepared by the City and executed by both Parties before performance of such services, or the City will not be required to pay for the changes in

the scope of work. Such amendment shall not render ineffective or invalidate unaffected portions of this Agreement.

4. Maintenance of Records.

Books, documents, papers, accounting records, and other evidence pertaining to costs incurred shall be maintained by Consultant and made available at all reasonable times during the Agreement term and for four (4) years from the date of final payment under the Agreement for inspection by City.

5. Time of Performance.

Consultant shall perform its services in a prompt and timely manner and shall commence performance upon the Effective Date. Consultant shall complete the services required hereunder by December 31, 2021. The Notice to Proceed shall set forth the date of commencement of work.

6. Delays in Performance.

a. Neither City nor Consultant shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. For purposes of this Agreement, such circumstances include but are not limited to, abnormal weather conditions; floods; earthquakes; fire; epidemics; war; riots and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage or judicial restraint.

b. Should such circumstances occur, the non-performing party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.

7. Compliance with Law.

a. Consultant shall comply with all applicable laws, ordinances, codes and regulations of the federal, state and local government, including Cal/OSHA requirements.

b. If required, Consultant shall assist the City, as requested, in obtaining and maintaining all permits required of Consultant by federal, state and local regulatory agencies.

c. If applicable, Consultant is responsible for all costs of clean up and/ or removal of hazardous and toxic substances spilled as a result of his or her services or operations performed under this Agreement.

8. Standard of Care

Consultant's services will be performed in accordance with generally accepted professional practices and principles and in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions.

9. Assignment and Subconsultant

Consultant shall not assign, sublet, or transfer this Agreement or any rights under or interest in this Agreement without the written consent of the City, which may be withheld for any reason. Any attempt to so assign or so transfer without such consent shall be void and without legal effect and shall constitute grounds for termination. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement. Nothing contained herein shall prevent Consultant from employing independent associates, and subconsultants as Consultant may deem appropriate to assist in the performance of services hereunder.

10. Independent Consultant

Consultant is retained as an independent contractor and is not an employee of City. No employee or agent of Consultant shall become an employee of City. The work to be performed shall be in accordance with the work described in this Agreement, subject to such directions and amendments from City as herein provided.

11. Insurance. Consultant shall not commence work for the City until it has provided evidence satisfactory to the City it has secured all insurance required under Exhibit D (Insurance Requirements), attached hereto and incorporated herein by this reference. In addition, Consultant shall not allow any subcontractor to commence work on any subcontract until it has secured all insurance required therein.

12. Indemnification.

a. To the fullest extent permitted by law, Consultant shall defend (with counsel of City's choosing), indemnify and hold the City, its officials, officers, employees, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any acts, errors or omissions, or willful misconduct of Consultant, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Consultant's services, the Project or this Agreement, including without limitation the payment of all damages, expert witness fees and attorney's fees and other related costs and expenses. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Consultant, the City, its officials, officers, employees, agents, or volunteers.

b. If Consultant's obligation to defend, indemnify, and/or hold harmless arises out of Consultant's performance of "design professional" services (as that term is defined under Civil Code section 2782.8), then, and only to the extent required by Civil Code section 2782.8, which is fully incorporated herein, Consultant's indemnification obligation shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant, and, upon Consultant obtaining a final adjudication by a court of competent jurisdiction, Consultant's liability for such claim, including the cost to defend, shall not exceed the Consultant's proportionate percentage of fault.

13. California Labor Code Requirements.

a. Consultant is aware of the requirements of California Labor Code Sections 1720 et seq. and 1770 et seq., which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects ("Prevailing Wage Laws"). If the services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is One Thousand Dollars and Zero Cents (\$1,000.00) or more, Consultant agrees to fully comply with such Prevailing Wage Laws. Consultant

shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. It shall be mandatory upon the Consultant and all subconsultants to comply with all California Labor Code provisions, which include but are not limited to prevailing wages (Labor Code Sections 1771, 1774 and 1775), employment of apprentices (Labor Code Section 1777.5), certified payroll records (Labor Code Sections 1771.4 and 1776), hours of labor (Labor Code Sections 1813 and 1815) and debarment of contractors and subcontractors (Labor Code Section 1777.1). The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

b. If the services are being performed as part of an applicable “public works” or “maintenance” project, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Consultant and all subconsultants performing such services must be registered with the Department of Industrial Relations. Consultant shall maintain registration for the duration of the Project and require the same of any subconsultants, as applicable. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

c. This Agreement may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant’s sole responsibility to comply with all applicable registration and labor compliance requirements. Any stop orders issued by the Department of Industrial Relations against Consultant or any subcontractor that affect Consultant’s performance of services, including any delay, shall be Consultant’s sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Consultant caused delay and shall not be compensable by the City. Consultant shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Consultant or any subcontractor.

14. Verification of Employment Eligibility.

By executing this Agreement, Consultant verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time, and shall require all subconsultants and sub-subconsultants to comply with the same.

15. City Material Requirements.

Not Used

16. Laws and Venue.

This Agreement shall be interpreted in accordance with the laws of the State of California. If any action is brought to interpret or enforce any term of this Agreement, the action shall be brought in a state or federal court situated in the County of Santa Clara, State of California.

17 Termination or Abandonment

a. City has the right to terminate or abandon any portion or all of the work under this Agreement by giving ten (10) calendar days written notice to Consultant. In such event, City shall be

immediately given title and possession to all original field notes, drawings and specifications, written reports and other documents produced or developed for that portion of the work completed and/or being abandoned. City shall pay Consultant the reasonable value of services rendered for any portion of the work completed prior to termination. If said termination occurs prior to completion of any task for the Project for which a payment request has not been received, the charge for services performed during such task shall be the reasonable value of such services, based on an amount mutually agreed to by City and Consultant of the portion of such task completed but not paid prior to said termination. City shall not be liable for any costs other than the charges or portions thereof which are specified herein. Consultant shall not be entitled to payment for unperformed services, and shall not be entitled to damages or compensation for termination of work.

b. Consultant may terminate its obligation to provide further services under this Agreement upon thirty (30) calendar days' written notice to City only in the event of substantial failure by City to perform in accordance with the terms of this Agreement through no fault of Consultant.

c. The Consultant understands and accepts that at all times; the Agreement is subject to appropriation of funds by the Milpitas City Council. The Agreement may terminate without penalty, liability or expense of any kind to the City at the end of Agreement term. The City has no obligation to make appropriations for the Agreement in lieu of appropriations for new or other contracts. City budget decisions are subject to the discretion of the Mayor and City Council. Consultant's assumption of risk of possible non-appropriation is a part of the consideration for the Agreement. This section controls against any and all other provisions of the Agreement.

18 Documents. Except as otherwise provided in "Termination or Abandonment," above, all original field notes, written reports, Drawings and Specifications and other documents, produced or developed for the Project shall, upon payment in full for the services described in this Agreement, be furnished to and become the property of the City.

19. Organization

Consultant shall assign Elizabeth Drayer as Project Manager. The Project Manager shall not be removed from the Project or reassigned without the prior written consent of the City.

20. Limitation of Agreement.

This Agreement is limited to and includes only the work included in the Project described above.

21. Notice

Any notice or instrument required to be given or delivered by this Agreement may be given or delivered by depositing the same in any United States Post Office, certified mail, return receipt requested, postage prepaid, addressed to:

CITY:

City of Milpitas

455 E. Calaveras Boulevard

Milpitas, California 95035

Attn: Tony Ndah, Public Works Director

CONSULTANT:

West Yost & Associates, Inc.

200 Research Park Drive, Suite 100

Davis, CA 95618

Attn: Elizabeth Drayer

and shall be effective upon receipt thereof.

22. Third Party Rights

Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the City and the Consultant.

23. Equal Opportunity Employment.

Consultant represents that it is an equal opportunity employer and that it shall not discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, sex, age or other interests protected by the State or Federal Constitutions. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

24. Entire Agreement

This Agreement, with its exhibits, represents the entire understanding of City and Consultant as to those matters contained herein, and supersedes and cancels any prior or contemporaneous oral or written understanding, promises or representations with respect to those matters covered hereunder. Each party acknowledges that no representations, inducements, promises or agreements have been made by any person which are not incorporated herein, and that any other agreements shall be void. This Agreement may not be modified or altered except in writing signed by both Parties hereto. This is an integrated Agreement.

25. Severability

The unenforceability, invalidity or illegality of any provision(s) of this Agreement shall not render the provisions unenforceable, invalid or illegal.

26. Successors and Assigns

This Agreement shall be binding upon and shall inure to the benefit of the successors in interest, executors, administrators and assigns of each party to this Agreement. However, Consultant shall not assign or transfer by operation of law or otherwise any or all of its rights, burdens, duties or obligations without the prior written consent of City. Any attempted assignment without such consent shall be invalid and void.

27. Non-Waiver

None of the provisions of this Agreement shall be considered waived by either party, unless such waiver is specifically specified in writing.

28. Time of Essence

Time is of the essence for each and every provision of this Agreement.

29. City's Right to Employ Other Consultants

City reserves its right to employ other consultants, including engineers, in connection with this Project or other projects.

30. Prohibited Interests

Consultant warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, City shall have the right to rescind this Agreement without liability. For the term of this Agreement, no director, official, officer or employee of City, during the term of his or her service with City, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

31. Wage Theft Prevention

a. Consultant, and any subconsultant it employs to complete work under this Agreement, shall comply with all applicable federal, state and local wage and hour laws. Applicable laws may include, but are not limited to, the Federal Fair Labor Standards Act, the California Labor Code and the Milpitas Minimum Wage Ordinance.

b. BY SIGNING THIS AGREEMENT, CONSULTANT AFFIRMS THAT IT HAS DISCLOSED ANY FINAL JUDGMENTS, DECISIONS OR ORDERS FROM A COURT OR INVESTIGATORY GOVERNMENT AGENCY, FINDING IN THE FIVE (5) YEARS PRIOR TO EXECUTING THIS AGREEMENT THAT CONSULTANT OR ITS SUBCONSULTANTS HAS VIOLATED ANY APPLICABLE WAGE AND HOUR LAWS. CONSULTANT FURTHER AFFIRMS THAT IT OR ITS SUBCONSULTANT(S) HAS EITHER FULLY SATISFIED EACH JUDGMENT, DECISION OR ORDER, OR, IF ANY JUDGMENT, DECISION OR ORDER HAS NOT BEEN FULLY SATISFIED, CONSULTANT AFFIRMS THAT IT OR ITS SUBCONSULTANT(S) IS CURRENTLY SATISFYING SAID JUDGMENT, DECISION OR ORDER THROUGH A PAYMENT OR ALTERNATIVE PLAN APPROVED BY THE APPLICABLE COURT/GOVERNMENT AGENCY AND THAT CONSULTANT OR ITS SUBCONSULTANT(S) ARE IN COMPLIANCE WITH SAID PLAN AS OF THE DATE OF EXECUTING THIS AGREEMENT.

c. If at any time during the term of this Agreement, a court or investigatory government agency issues a final judgment, decision or order finding that Consultant or a subconsultant it employs to perform work under this Agreement has violated any applicable wage and hour law, or Consultant learns of such a judgment, decision, or order that was not previously disclosed in its bid/proposal, Consultant shall inform the City no more than fifteen (15) calendar days after the judgment, decision or order becomes final or from the date of learning of the final judgment, decision or order. Consultant or its subconsultant(s) shall, within thirty (30) calendar days after notifying the City, either (i) fully satisfy any such judgment, decision, or order and provide the City with documentary evidence of satisfying said judgment, decision or order; or (ii) provide the City documentary evidence of a payment or other alternative plan approved by the court/government agency to satisfy the judgment, decision or order. If the Consultant or its subconsultant is subject to a payment or other alternative plan, the Consultant or its subconsultant shall continue to submit documentary evidence every thirty (30) calendar days during the term of the Agreement demonstrating continued compliance with the plan until the judgment, decision or order has been fully satisfied.

d. For purposes of this Section, a "final judgment, decision, or order" refers to one for which all appeals have been exhausted or the time period to appeal has expired. Relevant investigatory government agencies include: the United States Department of Labor, the California Division of Labor Standards Enforcement, the City, or any other governmental entity or division tasked with the investigation and enforcement of wage and hour laws.

e. Failure to comply with any part of this Section constitutes a material breach of this Agreement. Such breach may serve as a basis for immediate termination of this Agreement and/or any other remedies available under this Agreement and/or law.

f. Notice provided to the City shall be addressed to: Attention: Finance Director, 455 E. Calaveras Blvd. Milpitas, CA 95035. The Notice provisions of this Section are separate from any other notice provisions in this Agreement and, accordingly, only notice provided to the above address satisfies the notice requirements in this Section.

[SIGNATURES ON FOLLOWING PAGE]

**SIGNATURE PAGE FOR PROFESSIONAL SERVICES AGREEMENT
BETWEEN THE CITY OF MILPITAS
AND WEST YOST & ASSOCIATES, INC.**

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

CITY OF MILPITAS

Approved By:

Steven G. McHarris, Interim City Manager

Date

Approved As To Form:

Christopher J. Diaz, City Attorney

Approved:

Walter C. Rossmann, Director of Finance

Approved As To Content:

Tony Ndah, Public Works Director

WEST YOST & ASSOCIATES, INC.

Signature

Name

Title

Date

DIR Registration Number (If Applicable)

EXHIBIT A

Scope of Services

Consultant will complete the following ten (10) tasks, which are described in detail below, along with assumptions and task deliverables:

- Task 1. Project Management and Coordination for Water Master Plan
- Task 2. Data Collection/Preliminary Research/System Review/Field Inspection
- Task 3. Water Utility Asset Condition Assessment
- Task 4. Hydraulic Model Development and Calibration
- Task 5. Water Demand and Hydraulic Analysis
- Task 6. Model Training
- Task 7. Water Utility Asset Renewal and Replacement Study Report
- Task 8. Water System Capital Improvement Plan Development
- Task 9. Emergency Coordination
- Task 10. Prepare Water Master Plan Report

TASK 1. PROJECT MANAGEMENT AND COORDINATION FOR WATER MASTER PLAN

Project Management Plan. Consultant will prepare a Project Management Plan to communicate and help coordinate and monitor the activities of the project with respect to budget, schedule, and contractual obligations.

Monthly Status Reports. Monthly invoices will be accompanied by a description of the work accomplished during the invoice period, a spreadsheet summary of task budgets, and an update of the project schedule. Schedule updates shall include a description of all changes to the schedule, reasons for the change, and mitigation measures, when necessary, to bring the project back to the baseline schedule. Consultant will coordinate with City personnel to ensure coordination regarding study direction, objectives, and deliverables.

Kickoff Workshop. The project will be initiated with a kickoff workshop with City staff, within one to two weeks after receiving Notice to Proceed, to discuss the initial goals and priorities of the study, discuss existing operation and maintenance of the system and known deficiencies, collect information data, and discuss the schedule of the project. This workshop will be used to identify and discuss water system design and operating criteria and all operating procedures and conditions, identify all features that are unique, challenging to operate, worse case conditions experienced, and all areas that the City has identified where increased capacity or improved system performance is desired. A kickoff meeting agenda and meeting notes will be prepared and distributed.

Project Status Meetings and Calls. Consultant will conduct regularly scheduled conference calls and as-needed face-to-face meetings to review project status with City staff and coordinate with the City's Sewer Master Plan consultant and/or Stormwater Master Plan consultant as needed. These meetings will include technical progress meetings to present interim work products and discuss Project issues. These meetings will focus on obtaining input from the City on its review of completed Draft Chapter work products.

Quality Assurance and Quality Control (QA/QC). Consultant will provide internal quality assurance and quality control (QA/QC) review of all work products prior to submitting them to the City.

Task 1 Deliverables:

- Project Management Plan
- Kickoff workshop presentation materials and meeting minutes
- Meeting agendas and minutes from progress meetings and conference calls
- Monthly invoices and status reports with updates to project schedule

TASK 2. DATA COLLECTION/ PRELIMINARY RESEARCH/ SYSTEM REVIEW/ FIELD INSPECTION

Review of Available Data and Previous Reports. In order to better understand the City's current water system, Consultant will review available studies and reports including, but not limited to, the following: General Plan, Midtown Specific Plan, Transit Area Specific Plan, Corrosivity Study, 2015 Urban Water Management Plan, Water Quality Management Plan, Utility Depreciation Study Report, GIS data, as-builts, pump curves, relevant maps, water billing records, water supply records, and water quality data.

Field Investigation. Consultant will conduct a field investigation of the water distribution system and facilities, including but not limited to, storage and pumping facilities, to strengthen Consultant's understanding of the City's water distribution system. City operations staff will also participate in the field investigation to answer questions and provide insight on system and facilities operations. It is assumed that all facilities can be visited in one day.

Meeting with City's Planning Division. Consultant will meet with the City's Planning Division staff to review land use and zoning to assess existing and future service areas. Obtain pertinent land use planning maps, data, and documents that provide information required for the Water Master Plan and discuss the specific planning issues and potential growth or redevelopment areas in the City. The projected timing of new developments shall be discussed with Planning Division staff to provide input for capital improvement project phasing. Identify interim (near-term) and build-out land use scenarios, based on the General Plan, Midtown Specific Plan, and Transit Area Specific Plan. Together with the Planning Division, identify alternative build-out land use/zoning assuming General Plan amendments may occur.

Evaluation of Adequacy of Existing Data. Consultant will review existing parcel, customer billing, population information, and water use data to determine if it is feasible to use this data to define existing land uses (e.g., number of dwelling units for residential areas and floor area for commercial /industrial areas), and/or water usage on parcel-by-parcel basis for purposes of developing water usage for the hydraulic model.

Review of Existing Water Model. Consultant will obtain and review the existing water model and all reports and files used in the construction and development of the existing model. It should be assumed that many aspects of the existing model can be used in the current status, but the model will require updating and expanding for use in this Water Master Plan. Consultant will develop the City's new water system hydraulic model using InfoWater.

Task 2 Assumptions:

- City's third party consultant will update the City's GIS database and asset inventory spreadsheet to incorporate recent projects and improvements to the both the water and sewer systems and will provide the updated water system GIS database and asset inventory spreadsheet to Consultant for use for this Water Master Plan.
- The City will provide at least five (5) years (2014-2018) of metered water use, by address and ZIP code, for those services that are metered.

Task 2 Deliverables:

- Field inspection and interview forms for water system facilities.
- Draft chapter summarizing the existing water system, including existing water supplies and facilities and a synopsis of key findings from previous studies
- Draft chapter summarizing existing water service area and future development plans

TASK 3. WATER UTILITY ASSET CONDITION ASSESSMENT

Review of Existing Information. Consultant will develop an understanding of the City's water distribution system, and will include a review of the City's 2003 depreciation study, previous prioritization procedures, recommendations for projects from previous efforts, as well as projects completed to date. Consultant will review and update the asset replacement values for the City's utility infrastructure.

Desktop Condition Assessment. Consultant will conduct a desktop condition assessment to determine the remaining useful life of the City's water assets and assign a Likelihood of Failure (LoF) score for each of the City water system assets. Factors to consider in the desktop condition assessment may include age, material, leak history, soil conditions, status of cathodic protection, and pressure variation or high pressure. Consideration will also be given to what data the City currently has available.

Assessment of Criticality. Consultant will develop guidelines for determining the criticality of water system assets, and assign Consequence of Failure (CoF) scores for each of the assets of the City's water system. Factors to consider may include pipe size, pipe flow, number (and perhaps types) of service connections, and proximity to specific features (e.g. faults, hospitals).

Business Risk Exposure. Consultant will use the LoF and CoF scores to characterize the business risk exposure (BRE) of the City associated with each of the City's water assets through assigning risk scores to assets or groups of assets.

Asset Depreciation. Consultant will determine asset replacement values for the City's utility infrastructure and develop a depreciation study using information from the City's 2003 depreciation study, along with information collected as part of this task.

Task 3 Deliverables:

- LoF, CoF, and BRE scores for the City's water utility assets
- Tables in Excel reflecting the 2019 replacement cost for each water utility asset
- A Risk Policy Document will be created that presents LOF and COF definitions to be used for all asset classes
- Findings will be incorporated into the Water Utility Asset Renewal and Replacement Study Report prepared under Task 7

TASK 4. HYDRAULIC MODEL DEVELOPMENT AND CALIBRATION

Create Dynamic Model of the City's Water Distribution System. The model shall be created using the City's existing water system GIS data, as-builts, pump curves, etc. The water distribution components such as, but not limited to, laterals, meters, tanks, pumps, isolation valves, and control valves shall be added to the model. The hydraulic model will be updated to develop a pipe network that includes all distribution system pipelines. Consultant will work with City staff to develop a nodal and pipeline naming convention which will meet both existing and future needs, and to build a model that exchanges new information easily with the City's GIS.

Field Hydrant Testing and Flow Monitoring. Consultant will conduct field hydrant testing and a special flow monitoring program at SFPUC and SCVWD turnouts using rented flow monitoring devices that can be installed at existing meter locations. The flow monitoring data will be used along with the hydrant test data for model calibration, for developing diurnal curves for the hydraulic model, and for establishing daily and hourly peaking factors for use in the system analysis. A hydrant testing calibration plan will be developed for City review. The plan will identify proposed hydrant test locations, proposed test protocols, model calibration target accuracies, and supplemental information from the flow monitoring program required for model calibration. The hydrant test data will be used to calibrate the hydraulic model.

Model Calibration. Consultant will develop computer model simulations or scenarios for each of the hydrant flow calibration tests. Model results from the calibration simulations will be compared with the field data and measured against the calibration criteria. Comparisons that fall outside the established criteria shall be identified and adjustments and/or corrections to the model shall be made until satisfactory results are obtained. The initial calibration target shall be within five percent (5%) accuracy. If calibration at some locations cannot be achieved within the limit, written suggestions shall be made as to possible reasons for the discrepancy and what steps might be taken to improve calibration at that location. Friction coefficient values “C” will be kept within a realistic range as determined based on known and assumed field conditions. Consultant will compare pump test data points to pump curves in the model and will adjust pump curves in the model if necessary. Calibration efforts shall be coordinated and reviewed by the City to determine appropriate level of calibration understanding that the desired initial calibration target shall be within five percent (5%) accuracy. If calibration at some locations cannot be achieved within an acceptable range, written suggestions shall be made as to possible reasons for the discrepancy and what steps might be taken to improve calibration at that location.

Set up Hydraulic Model for Optimal Energy and Water Quality Analysis. The model will be set up for extended period simulation, and includes water quality information to perform water quality evaluations, and pump efficiency information to compute pump energy usage and operating costs.

Task 4 Assumptions:

Consultant will coordinate with City staff to operate valves and water appurtenances to conduct hydrant flow testing, including turning valves as necessary.

Task 4 Deliverables:

- Field hydrant testing and data collection plan (to be included as an appendix to the Water Master Plan)
- Draft chapter summarizing the model development and calibration results

TASK 5. WATER DEMAND AND HYDRAULIC ANALYSIS

Existing and Future Demand Projections. Identify large water users using the annual water supply data furnished by the City. Review/develop unit water demands used by the City and confirm the available parcel basis for the hydraulic model. Analyze population growth trends within the City’s boundary based on land use models developed in Task 2. Compute new land use-based unit demand factors to determine whether the existing unit demand factors used by the City require revision and refinement.

Develop demand projections for the year 2020, 2025, 2030, 2035, and 2040. The year 2040 shall be considered to represent the ultimate buildout. Demand projections for the year 2020 shall be considered as existing and near-term growth. Utilize Association of Bay Area Governments (ABAG), 2015 Urban

Water Management Plan (UWMP), General Plan, Midtown Specific Plan, and the Transit Area Specific Plan to assist in the development of future water demand projections and to prepare the source capacity analysis. The analysis should satisfy the California Water Code 10631 source capacity requirements at 5-years, 10-years, 15-years, and 20-years terms.

Water Use and Peaking Factors. Review water use factors used in the 2009 Water Master Plan Update, analyze historical and existing system usage, and calculate individual user water demands from water billing data. Modify existing Water Use Factors (WUFs) to reflect future demands. Adjust WUFs to reflect any new land use categories and densities. Adjust WUFs for parcels adjacent to future recycled water facilities. Apply WUFs to future land use acreages to determine demands.

Water use for individual water users shall be calculated for each demand condition (i.e. maximum day, maximum hour, average annual, and winter months). Peaking factors shall be developed for average day, minimum day, maximum day, and peak hour demand conditions based upon existing average demand data. Peaking factors must address season demand variations (i.e. winter versus summer) and emergency conditions.

Diurnal Curves. Develop system-wide potable diurnal use patterns for the project. The diurnal water use graphs for each service area shall be developed from hourly water production and tank level data that are representative of the maximum day water use for the City. The graphs shall be used to calculate peaking factors that the model uses to adjust demands for each hour in a day. The diurnal pattern shall be entered into the model and assigned to all demand nodes.

System Design Criteria. For the hydraulic analysis, develop the water distribution system design criteria that address allowable pressures, minimum and maximum velocities, minimum and maximum system pressure, and head-losses during average, peak, and fire flow conditions. The design criteria should be used to evaluate the water system hydraulic model.

Evaluate System Under Existing and Buildout Demand Conditions. Consultant will analyze the existing distribution system and identify improvements that provide appropriate volume, pressure, and storage for the existing system. The existing/buildout system analysis will include, but not be limited to, the following: evaluate pump station and storage capacity, assess system peak demand hydraulic performance, evaluate system emergency reliability, assess water quality, evaluate pump station energy, and identify and prioritize system improvements.

Hydraulic model scenarios will be developed to adequately evaluate the ability to meet the established operational parameters during the following conditions:

- Report deficiencies and provide recommendations to optimize sizing under existing and future conditions.
 - Average Day Demand (ADD)
 - Average Day Demand plus Fire Flow (ADD+FF)
 - Maximum Day Demand (MDD)
 - Maximum Day Demand plus Fire Flow (MDD+FF)
 - Peak Hour Demand (PHD)
 - Water Age
 - Emergency Conditions
- Identify potential tank sites for additional or alternative storage based on emergency and fire needs with respect to the system's distribution capabilities.

- Set up a water age analysis for each of the hydraulic model scenario. The model time period for each scenario shall be set sufficiently long to achieve water age equilibrium.
- Utilize the model to evaluate the distribution system for its capability to maintain storage and move water to storage in higher zones to maximize gravity feeds during MDD and PHD.
- Evaluate the system hydraulically under emergency scenarios. The City anticipates ten (10) different scenarios to be evaluated as part of this task. Use emergency wells and/or interconnections, as appropriate, for each scenario.
- Use the hydraulic model to evaluate water loss under existing demand conditions and develop recommendations for changes to operational practices to reduce water loss.
- Evaluate the pumping costs based on current pump efficiencies over the course of the extended period simulation run. The results shall be analyzed and used to determine effective operational control strategies to minimize the system operational cost.

Task 5 Assumptions:

The City will furnish the annual water supply data and average and monthly flow information. In addition, the City will provide information and projected annual water projections and their locations for use in developing potable demand offsets. Hydraulic analysis will consist primarily of static analysis for existing and buildout scenarios, with extended period simulation analysis used to confirm facilities sizing and for water quality evaluation.

Task 5 Deliverables:

- Draft water demand projection tables for review with City staff
- Draft chapter summarizing existing and projected future water demands
- Draft chapter summarizing water system performance and design criteria
- Draft chapter summarizing existing/near-term water system evaluation results including recommendations for operational efficiencies
- Draft chapter summarizing future water system evaluation results
- Copy of final hydraulic model with all scenarios

TASK 6. MODEL TRAINING

Model Training. At the completion of the Master Plan, Consultant will conduct up to three (3) inhouse training sessions with City staff to review and discuss protocols for the future update and use of the hydraulic model. Focus of training will be to evaluate development projects and perform operational analysis for optimizing system operation.

Task 6 Deliverables:

- Model training materials

TASK 7. WATER UTILITY ASSET RENEWAL AND REPLACEMENT STUDY REPORT

Water Utility Asset Renewal and Replacement Study Report. Consultant will develop a Water Utility Asset Renewal and Replacement Study Report which should include the following:

- Summary of guidelines, recommendations, and findings from the condition assessment task.
- Develop risk management guidelines and recommendations specific to the water utility assets using the LoF, CoF, and BRE scores.
- Develop prioritized replacement/rehabilitation projects based on high risk assets and the projects previously included in other studies that have not been completed.

- Develop cost estimates for projects and/or tools and technology to complete the recommendations.
- Provide additional recommendations and/or items for future consideration.

Task 7 Deliverables:

- Water Utility Asset Renewal and Replacement Study Report (Draft Report for City review and comment; Final Report)
- Findings from the Renewal and Replacement Study will be incorporated into the recommended capital improvement program (see Task 8 below)

TASK 8. WATER SYSTEM CAPITAL IMPROVEMENT PLAN DEVELOPMENT

Phased Water Capital Improvement Program. Establish a practical 5-year, 10-year, 15-year, and 20-year (5-year increments) phased Water Capital Improvement Program. The City will provide an annual CIP budget range to use when developing the CIP program. The CIP shall prioritize projects with the greatest need first and integrate the potentially competing recommendations from the multi-faceted evaluation completed for this Water Master Plan. Include projected costs per project based on what the future costs may be when the project is proposed to be completed.

Based on the findings from the Water Utility Asset Renewal and Replacement Study (see Task 7), Consultant will incorporate recommendations considering the results from the hydraulic analysis and the material, age, service and leak history. The criteria shall address the estimation for remaining life expectancy of an existing asset, assess any economic, service performance, system reliability, or environmental risk that might justify replacing the asset and develop logical and practical weighting or ranking criteria that could be employed to determine a 20-year CIP program.

The projects shall be prioritized and ranked based on the critical needs of replacement, emergency preparedness, and in order of importance. The CIP shall group the projects by anticipated year for construction and summarize the estimated annual costs. Consultant will provide mapping and tables that illustrate the recommended CIP projects.

Prioritized Project Matrix. The prioritized project matrix will be reviewed with City staff with respect to potential overriding factors. A distinction will be made between facilities that 1) improve reliability for emergency preparedness, 2) correct an existing system deficiency, 3) accommodate future development, and 4) facilities that provide multiple benefits. Schedules for implementation of identified projects and annual cash flow shall be prepared, with development-induced improvements scheduled to coincide with planned development. Depending on the future land use sensitivity analysis, an alternative CIP schedule may be prepared.

Cost Criteria. Develop the cost criteria for estimating construction and capital costs based on relevant construction costs from projects throughout the Bay Area, as well as input from City staff on costs of local construction projects. Unit construction costs shall be developed to the detail normally used in master planning based on estimated inflation values. Cost allowances (percentages of estimated construction cost) for construction contingencies and for design engineering, construction administration and inspection, and legal costs shall also be included. The estimates shall be based on the most viable construction method for each specific project. The level of accuracy of the estimates shall be at the conceptual planning level appropriate for system master planning and represents an “order of magnitude” cost estimate as defined by the Association of Cost Estimating Engineers.

Project Summary Sheets. Consultant will prepare project summary sheets detailing the recommended improvements required within each specific planning area that address the supply needs at 5-year, 10-year, 15-year, 20-year terms. The data sheet shall include a map locating the project, the project planning area, a description of the goal and scope of the project, project cost, and any other assumptions which form the basis of the cost estimate.

Task 8 Assumptions:

Budgeting assumes one (1) workshop with the City to review the prioritized CIP.

CIP development will be coordinated with Sewer Master Plan (and Storm Drain Master Plan) to identify opportunities for joint projects and potential cost savings for implementation.

Task 8 Deliverables:

- Workshop materials to review recommended improvements and prioritization
- Project summary sheets for recommended improvements
- Draft chapter summarizing recommended improvements and prioritization methodology
- GIS files for recommended improvements (GIS shapefiles)

TASK 9. EMERGENCY COORDINATION

Review of Existing Emergency Response Plans. Consultant will review existing emergency response plans by SFPUC and SCVWD in addition to reviewing and updating the City's 2010 Water Emergency Response Plan. Consultant will coordinate as needed with the City's Police and Fire Departments for this effort.

Facility Assessments. Conduct facility assessments for purposes of identifying the weak links in the City's water distribution systems during an emergency. Identify measures and procedures that are aimed at securing and protecting property in addition to water sampling and monitoring issues that may arise after a major event. Provide recommendations for what improvements to existing infrastructure will be needed in case of emergency.

Risk and Resiliency Assessment. Conduct a Risk and Resiliency Assessment in compliance with the requirements of the 2018 America's Water Infrastructure Act. This will include both a cyber and physical risk and resiliency assessment and development of a risk and resiliency strategy.

Emergency Response Plan Update. The City's Emergency Response Plan will be updated to include the following:

- Incorporate both water quality contamination and water supply interruption events. Consultant will determine the amount of water needed to address short-term and longterm outages. Identify alternate water supplies available during both types of outages. The plan will include responses to both the duration of the outage and level of cutback of SFPUC and SCVWD supply.
- Results from the Risk and Resiliency Assessment.
- Scenarios that result in a reduction in water supply availability or degradation of water quality.
- Response to situations and impact on agency's facilities and its ability to deliver potable water.
- Established procedures and phone lists for notifying internal agency staff, customers, involved external agencies, media, and key SFPUC/SCVWD staff. This shall include review of the plan's communication plan with the SFPUC and SCVWD emergency coordination plan.
- Establish procedures for responding to water supply or water quality emergency. Shall include coordination with City's overall emergency preparedness plan and consistency with SEMS.

- Assigned roles and responsibilities during an emergency.
- Regular training drills and/or exercises.
- Inclusion of provisions for emergency preparedness, such as mutual aid agreements, emergency service and supply agreements, emergency inventories.

Task 9 Deliverables:

- Risk and Resiliency Assessment in compliance with AWIA requirements.
- Updated Water Emergency Response Plan

TASK 10. PREPARE WATER MASTER PLAN REPORT

Master Plan Report. At the completion of the evaluation and planning efforts, a Master Plan report will be prepared. The Master Plan report will incorporate the findings, recommendations, study assumptions and methodology, recommended design and performance criteria, model results, system replacement strategy and criteria, and the recommended CIP. The appendices to the report shall include the technical memorandums prepared during the course of the study and other pertinent backup data (e.g. model results) that support the plan. The Master Plan report will include a summary of what the potential impacts to the water system, City, customers, and reliability if nothing or the bare minimum is done, including a description of what the future costs might be if maintenance is delayed (e.g. monetary, time loss, out of service areas, etc.). In addition, describe how this would impact planned development in terms of source capacity.

A report/chapter outline will be developed at the beginning of the project and updated throughout the project to facilitate report preparation and coordination. Five (5) copies of the comprehensive draft Master Plan report shall be submitted to the City for review and comment prior to finalization of the report. Subsequent to City review and comment on the draft Master Plan report, Consultant will incorporate the comments, produce the final report, and submit five (5) hard copies to the City. Copies of the final submittal to the City will also be provided in Microsoft Word and Adobe PDF formats.

Source Capacity Planning Study. Prepare Source Capacity Planning Study per Section 64558, Title 22, California Code of Regulations (CCR) by evaluating the existing source capacity and comparing to the projected demands for all planning horizons to ensure that adequate storage is built for future planning developments. Analyze source capacity limitations and develop projects that address the supply needs at 5-year, 10-year, 15-year, and 20-year for both Specific Plans and General Plan projections. The water master plan will use the General Plan, Midtown Specific Plan, and Transit Area Specific Plan growth projections to develop near-term and long-term strategies to secure adequate water supply and ensure the City remains in compliance with California Code Regulations Section 64554, Title 22. Provide analysis for each pressure zone in the distribution system. Identify potential solutions to any deficiencies in source. Develop listing of recommended source improvements for the Capital Improvements Plan update. CIP update shall identify locations and types of piping additions and upgrades needed for improved use of existing sources and those necessary to serve new sources.

A draft Source Capacity Planning Study will be prepared for City review and comment. Upon receipt of comments, a final draft Source Capacity Planning Study will be prepared for submittal to the Division of Drinking Water. Upon receipt of comments from the Division of Drinking Water, a final Source Capacity Planning Study will be prepared.

Task 10 Deliverables:

- Draft/Final Draft/Final Source Capacity Planning Study to meet State requirements.

- Draft Water Master Plan Report, addressing all prior City comments on Draft Chapters and TMs (five (5) hard copies and PDF)
- Final Water Master Plan Report, addressing all of the City's comments from the Draft Report (five (5) hard copies, Word files, and PDF)

EXHIBIT B

Schedule of Charges/Payments

The total not-to-exceed cost for this work is \$600,000. Consultant will invoice City on a monthly cycle. Consultant will include with each invoice a detailed progress report that indicates the amount of budget spent on each task. Consultant will inform City regarding any out-of-scope work being performed by Consultant. This is a time-and-materials Agreement. Consultant billing rates will be adjusted annually.

A Project Progress Report will be provided with each monthly invoice to show billing status by each major task, including amount budgeted, amount billed, work completed each month, and outstanding issues to be resolved.

2019 Billing Rate Schedule

(Effective January 1, 2019 through December 31, 2019) *

POSITIONS	LABOR CHARGES (DOLLARS PER HR)
ENGINEERING	
Principal/Vice President	\$298
Engineering/Scientist/Geologist Manager I / II	\$274 / \$287
Principal Engineer/Scientist/Geologist I / II	\$249 / \$264
Senior Engineer/Scientist/Geologist I / II	\$223 / \$234
Associate Engineer/Scientist/Geologist I / II	\$194 / \$208
Engineer/Scientist/Geologist I / II	\$157 / \$182
Engineering Aide	\$90
Administrative I / II / III / IV	\$79 / \$100 / \$120 / \$133
ENGINEERING TECHNOLOGY	
Engineering Tech Manager I / II	\$283 / \$294
Principal Tech Specialist I / II	\$260 / \$271
Senior Tech Specialist I / II	\$238 / \$249
Senior GIS Analyst	\$217
GIS Analyst	\$205
Technical Specialist I / II / III / IV	\$151 / \$173 / \$195 / \$216
CAD Manager	\$173
CAD Designer I / II	\$134 / \$150
CONSTRUCTION MANAGEMENT	
Senior Construction Manager	\$283
Construction Manager I / II / III / IV	\$170 / \$182 / \$195 / \$246
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	\$149/ \$166 / \$185 / \$192
Apprentice Inspector	\$135
CM Administrative I / II	\$73 / \$97
Field Services	\$192

- Hourly rates include Technology and Communication charges such as general and CAD computer, software, telephone, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses.
- Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, etc. will be billed at actual cost plus 15%.
- Mileage will be billed at the current Federal Rate and Travel will be billed at cost.
- Subconsultants will be billed at actual cost plus 10%.
- Expert witness, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates. Expert witness testimony and depositions billed at 200% of standard hourly rates.
- A Finance Charge of 1.5% per month (an Annual Rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

Equipment Charges

EQUIPMENT	BILLING RATES
Gas Detector	\$80/day
Hydrant Pressure Gauge	\$10/day
Hydrant Pressure Recorder, Standard	\$40/day
Hydrant Pressure Recorder, Impulse (Transient)	\$55/day
Trimble GPS – Geo 7x	\$220/day
Vehicle	\$10/hour
Water Flow Probe Meter	\$20/day
Water Quality Multimeter	\$185/day
Well Sounder	\$30/day

EXHIBIT C

Activity Schedule

The project will commence from the date of the Notice to Proceed and all activities for the project will be completed by December 31, 2021.

Key assumptions:

- The overall project schedule assumes that data needed to perform the project tasks will be provided by the City in a timely manner and that any delays in receiving the required data may impact the overall project schedule.
- The overall project schedule assumes that the water system GIS database and asset inventory will be updated by the City's third party consultant, and provided to Consultant by mid-November 2019.
- The Draft Water Master Plan will be completed by August 2020 with the Final Water Master Plan completed by October 2020.
- Per the requirements of the 2018 America's Water Infrastructure Act, the City's Risk and Resiliency Assessment must be completed by December 31, 2020 and an updated Emergency Response Plan must be completed by June 30, 2021.
- A duration of two (2) weeks is assumed for City's review of project deliverables.

The project schedule will be reviewed and updated as needed as the project progresses. The Consultant will work closely with the City throughout the project and will hold regularly scheduled status meetings to discuss progress on the various tasks and any issues which may impact the completion of each task. This will allow for any issues to be identified and resolved before they impact the overall schedule or budget for the project.

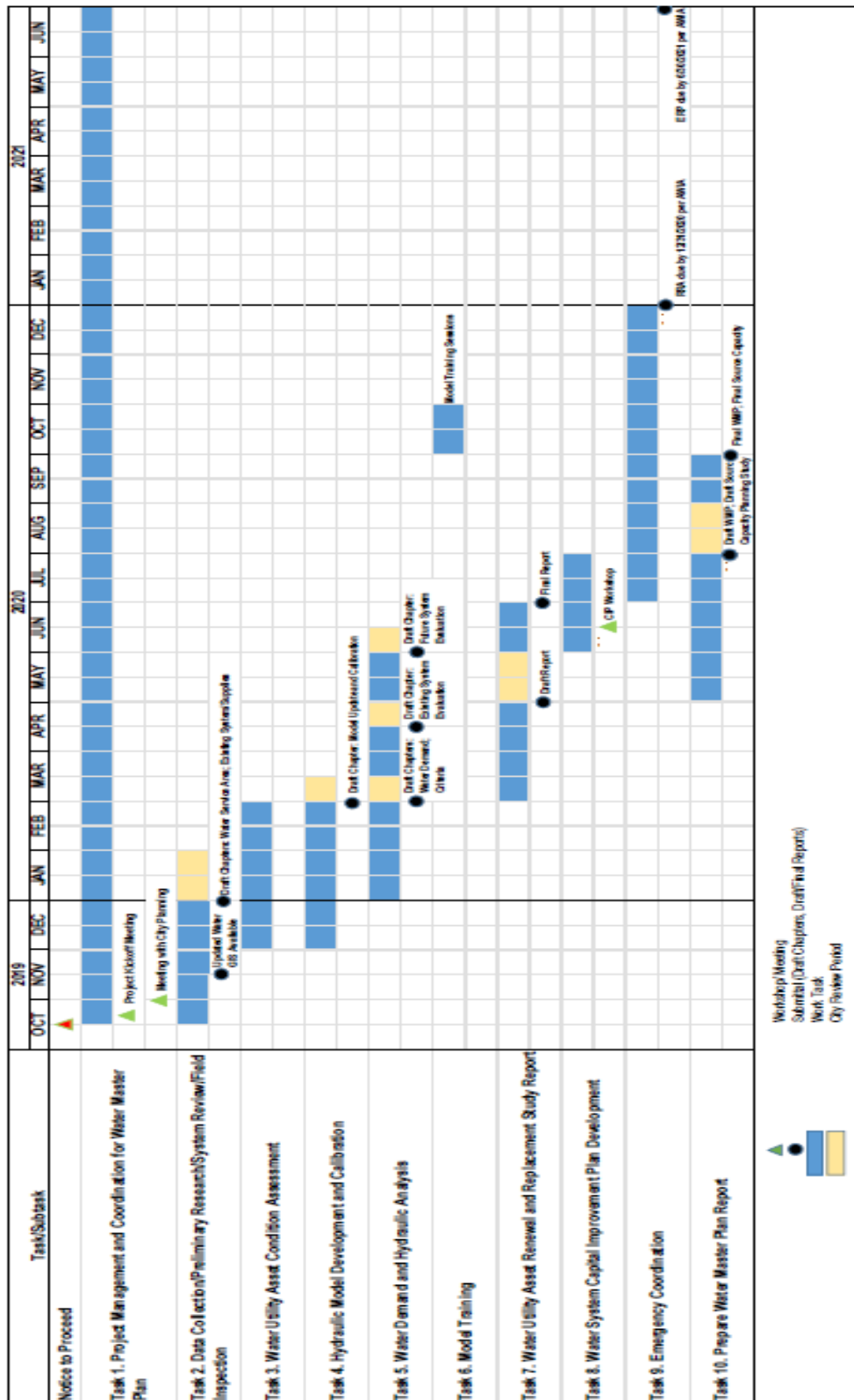


EXHIBIT D

Insurance Requirements

Please refer to the insurance requirements listed below. Those that have an “X” indicated in the space before the requirement apply to Contractor’s or Consultant’s Agreement.

Contractor or Consultant shall procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the Contractor or Consultant, its agents, representatives, employees or subcontractors.

Contractor or Consultant shall provide its insurance broker(s)/agent(s) with a copy of these requirements and request that they provide Certificates of Insurance complete with copies of all required endorsements.

Contractor or Consultant shall furnish City with copies of original endorsements affecting coverage required by this Exhibit D. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. All endorsements and certificates are to be received and approved by City before work commences. City has the right to require Contractor’s or Consultant’s insurer to provide complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by these specifications.

Commercial General Liability (CGL):

☐ Coverage at least as broad as Insurance Services Office (“ISO”) Form CG 00 01 covering CGL on an “occurrence” basis, including products and completed operations, property damage, bodily injury and personal and advertising injury with limits no less than \$2,000,000.00 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

☒ Coverage at least as broad as ISO Form CG 00 01 covering CGL on an “occurrence” basis, including products and completed operations, property damage, bodily injury and personal and advertising injury with limits no less than \$1,000,000.00 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

☐ Coverage at least as broad as ISO Form CG 00 01 covering CGL on an “occurrence” basis, including products and completed operations, property damage, bodily injury and personal and advertising injury with limits no less than \$5,000,000.00 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

Automobile Liability:

X Coverage at least as broad as ISO Form Number CA 0001 covering, Code 1 (any auto), of if Contractor or Consultant has no owned autos, Code 8 (hired) and 9 (non-owned), with limits no less than \$1,000,000.00 per accident for bodily injury and property damage.

 Coverage at least as broad as ISO Form Number CA 0001 covering, Code 1 (any auto), with limits no less than \$5,000,000.00 per accident for bodily injury and property damage.

 Garage keepers' extra liability endorsement to extend coverage to all vehicles in the care, custody and control of the Contractor or Consultant, regardless of where the vehicles are kept or driven.

Professional Liability (Errors and Omissions):

The Employer's Liability policy shall be endorsed to waive any right of subrogation as respects the City, its elected and appointed officials, officers, attorneys, agents, and employees.

 X Insurance appropriate to the Contractor or Consultant's profession, with limit no less than \$2,000,000.00 per occurrence or claim, \$2,000,000.00 aggregate.

 (If Design/Build), with limits no less than \$1,000,000.00 per occurrence or claim, and \$2,000,000.00 policy aggregate.

 Insurance appropriate to the Contractor or Consultant's profession, with limit no less than per occurrence or claim, aggregate

Workers' Compensation Insurance:

 X Insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000.00 per accident for bodily injury or disease. *(Not required if Contractor or Consultant provides written verification it has no employees)*

The Contractor or Consultant makes the following certification, required by section 1861 of the California Labor Code:

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

Contractor/Consultant Signature

Builder's Risk (Course of Construction):

___ Insurance utilizing an “All Risk” (Special Perils) coverage form, with limits equal to the completed value of the project and no coinsurance penalty provisions.

Surety Bonds:

___ Contractor shall provide the following Surety Bonds:

1. Bid Bond
2. Performance Bond
3. Payment Bond

The Payment Bond and Performance Bond shall be in a sum equal to the contract price. Bonds shall be duly executed by a responsible corporate surety, authorized to issue such bonds in the State of California and secured through an authorized agent with an office in California.

Contractor’s or Consultant’s Pollution Legal Liability:

___ Contractor’s or Consultant’s pollution legal liability and/or Asbestos Legal Liability and/or Errors and Omissions (if project involves environmental hazards) with limits no less than \$1,000,000.00 per occurrence or claim and \$2,000,000.00 policy aggregate.

If the Contractor or Consultant maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by the Contractor or Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to City.

Other Insurance Provisions:

The insurance policies are to contain, or be endorsed to contain the following provisions:

___ **Additional Insured Status:**

The insurance policies are to contain, or be endorsed to contain the following provision:

The City, its elected and appointed officials, officers, attorneys, agents, and employees are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor or Consultant or any subcontractors including materials, parts, or equipment furnished in connection with such work or operations, including completed operations. General liability coverage can be provided in the form of an endorsement to the Contractor’s or Consultant’s insurance (at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used).

The Additional Insured coverage under the Contractor’s policy shall be “primary and non-contributory” and will not seek contribution from the City’s insurance or self-insurance and shall be at least as broad as CG 20 01 04 13.

The limits of insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of City (if agreed to in a written contract or agreement) before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.

____ **Primary Coverage:**

The insurance policies are to contain, or be endorsed to contain the following provision:

For any claims related to this contract, the Contractor's or Consultant's insurance coverage shall be primary insurance as respects the City, its elected and appointed officials, officers, attorneys, agents, and employees. Any insurance or self-insurance maintained by the City, its elected and appointed officials, officers, attorneys, agents, and employees shall be in excess of the Contractor's or Consultant's insurance and shall not contribute with it.

____ **Builder's Risk (Course of Construction Insurance) (applicable to Construction Contracts only)**

Contractor or Consultant may submit evidence of Builder's Risk insurance in the form of Course of Construction coverage. Such coverage shall name the City as a loss payee as their interest may appear.

If the project does not involve new or major reconstruction, at the option of the City, an Installation Floater may be acceptable. For such projects, a Property Installation Floater shall be obtained that provides for the improvement, remodel, modification, alteration, conversion or adjustment to existing buildings, structures, processes, machinery and equipment. The Property Installation Floater shall provide property damage coverage for any building, structure, machinery or equipment damaged, impaired, broken, or destroyed during the performance of the Work, including during transit, installation, and testing at the City's site.

____ **Notice of Cancellation, Suspension or Otherwise Voiding Policies:**

Each insurance policy required above shall contain, or be endorsed to contain that coverage shall not be suspended, voided, canceled or reduced in coverage or in limits except with thirty (30) days' prior written notice by certified mail, return receipt requested to the City.

____ **Waiver of Subrogation:**

Contractor or Consultant hereby grants to City a waiver of any right to subrogation which any insurer of said Contractor or Consultant may acquire against the City by virtue of the payment of any loss under such insurance. Contractor or Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer. The Workers' Compensation Policy shall be endorsed with a waiver of subrogation in favor of the

City for all work performed by Contractor or Consultant, its employees, agents and subcontractors.

Completed Operations

For Construction Agreements, Contractor shall maintain insurance as required by this Agreement to the fullest amount allowed by law and shall maintain insurance for a minimum of five (5) years following the completion of this project. In the event Contractor fails to obtain or maintain completed operations coverage as required by this Agreement, the City at its sole discretion may purchase the coverage required and the cost will be paid by Contractor.

THE FOLLOWING PROVISIONS APPLY TO ALL AGREEMENTS

Deductibles and Self-Insured Retentions (“SIR”):

Any deductibles or self-insured retentions must be declared to and approved by City. The City may require the Contractor or Consultant to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. At the option of the City, either (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its elected and appointed officials, officers, attorneys, agents, and employees; or (2) the Contractor or Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

All SIRs must be disclosed to Risk Management for approval and shall not reduce the limits of liability.

Policies containing any SIR provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named insured or the City.

City reserves the right to obtain a full-certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Acceptability of Insurers:

Insurance is to be placed with insurers with a current A.M. Best’s rating of no less than A:VII, unless otherwise acceptable to City.

Claims Made Policies: (note - should be applicable only to professional liability, see below)

1. The Retroactive Date must be shown, and must be before the date of the contract or the beginning of contract work.
2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract of work.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the

Contractor or Consultant must purchase “extended reporting” coverage for a minimum of five (5) years after completion of work.

4. A copy of the claims reporting requirements must be submitted to the City for review.
5. If the services involve lead-based paint or asbestos identification/remediation, the Contractor’s Pollution Liability Policy shall not contain lead-based paint or asbestos exclusions. If the services involve mold identification/remediation, the Contractors Pollution Liability Policy shall not contain a mold exclusion, and the definition of Pollution shall include microbial matter, including mold.

Subcontractors:

Contractor or Consultant shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that City is an additional insured on insurance required from subcontractors.

Subcontractor agrees to be bound to Contractor and City in the same manner and to the same extent as Contractor is bound to City under this Agreement and any other contract documents. Subcontractor further agrees to include the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, with any sub-subcontractor to the extent they apply to the scope of the sub-subcontractor’s work. A copy of the City indemnity and insurance provisions will be furnished to the subcontractor upon request.

Verification of Coverage:

Contractor or Consultant shall furnish the City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor or Consultant’s obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

Special Risks or Circumstances

City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage or other special circumstances.

Failure to Comply:

Each insurance policy required above shall contain or be endorsed to contain that any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its elected and appointed officials, officers, attorneys, agents, and employees.

Applicability of Coverage:

Each insurance policy required above shall contain or be endorsed to contain that the Contractor's or Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.