

**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 HydroScience Engineers, Inc., a California CORPORATION with its principal place of business at 1922 The Alameda, Suite 212, San Jose< California (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 – Sewer 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 **\$642,000 (six hundred and forty-two 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:

HydroScience Engineers, Inc.

1922 The Alameda, Suite 212

San Jose, CA 95126

Attn: Mary Hoang, Principal

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 HYDROSCIENCE ENGINEERS, 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

HYDROSCIENCE ENGINEERS, INC.

Signature

Name

Title

Date

DIR Registration Number (If Applicable)

EXHIBIT A

Scope of Services

Task 1. Project Management and Coordination for Sewer Master Plan

Project Management Plan (PMP). To help manage the efforts for development of the Master Plan, Consultant will prepare a comprehensive PMP that will include expectations for quality of work deliverables and define key project management protocols such as communication procedures, project documentation, roles and responsibilities, budget, and schedule control. It will provide a framework to direct, coordinate, and monitor project activities with respect to budget, schedule, and contractual obligations.

To obtain timely review of deliverables, Consultant's work will include conducting workshops to facilitate and coordinate feedback from City staff.

Monthly Invoices. Consultant will prepare monthly invoices, which will be accompanied by a description of work accomplished, a summary of task budgets, and an update of the project schedule.

Kickoff Workshop. A kickoff workshop will be initiated by Consultant within one week of receiving the notice to proceed. At the kickoff workshop, Consultant will introduce the project team, review scope of work, discuss the initial project goals and priorities, existing operation and maintenance of the system(s) and known deficiencies, identify data needs and collect information/data, and discuss elements to be included in the PMP such as contact information, communication protocol, project objectives, schedule, and invoicing format. During this workshop Consultant will discuss water, sewer, and storm system design and operating criteria and procedures and conditions as well as institutional knowledge of the system performance and other issues identified by the City.

Coordination and Communication. Consultant will schedule and facilitate progress meetings either in person or by conference call once a month to review project progress; discuss issues to be resolved; share early study results; and reconfirm projective objectives, study direction, and deliverables as the project evolves. Consultant will prepare and issue agendas and minutes of all meetings. The budget assumes eight (8) progress conference calls and the following workshops:

- Sewer Kickoff Workshop
- Sewer System Hydraulic Analysis and Capacity Evaluation
- Sewer Utility Asset Renewal and Replacement (R/R) Study Reports
- Draft Sewer System Master Plan Report

Quality Assurance and Quality Control (QA/QC) Review. Consultant will implement QA/QC to assure accuracy and verify quality. All major deliverables will be internally reviewed and checked by Consultant before submission to the City, including technical memoranda, studies, estimates, calculations, and draft and final Master Plans. Checks will address general correctness and accuracy, completeness, compliance with regulations, fulfillment of objectives, and comparison with industry standards.

Deliverables:

- *All meeting agendas/minutes or progress summary with project schedule updates*
- *Monthly invoices – one hard copy via US Mail or electronic PDF.*

Task 2. Data Collection/Preliminary Research/System Review/Field Inspection

Collect and Review System Information and Data. Existing reports and information including, but not limited to the following will be provided by the City and reviewed by Consultant as part of this task.

- Sanitary sewer hydraulic model
- Sanitary hydraulic model development documentation
- General, Midtown Specific, and Transit Area Specific Plans
- Sanitary sewer maintenance records and SOPs
- Sanitary sewer pump curves
- Relevant maps and inventory data
- Current CIP Program (completed, planned, designed, and pending)
- Sewer Master Plan
- GIS electronic data files
- Record drawings for water and sewer that have not already been incorporated into GIS
- City Standard Performance/Design Criteria (including velocity and gravity main and pump station capacity standards)
- 2003 Utility Depreciation Study
- Flow Monitoring Report

Consultant will coordinate with City's third party consultant in communicating with the Planning Department to confirm existing and future service areas for land use, population, timing, configuration, demands, and loading. Consultant will incorporate existing, available CCTV and/or inspection information into GIS. Review will be performed and budgeted under **Task 15**.

Field Investigation and Operations Staff Interview for Sanitary Sewer. To maximize time and efficiency, Consultant will conduct initial sanitary sewer field investigations and interviews with operations staff following the kickoff meeting. It is anticipated that field visits will take no more than one week to complete. Consultant will prepare an inspection form/questionnaire to ensure information needed to complete the project is documented. Consultant will conduct interviews during the field visits to gain a better understanding of the system and how the City defines failure. Performance of the equipment and/or facility will be based on service records such as pump performance test records and interviews with City staff. Visual investigation will include the following major facilities:

- **Sewer Facilities:** Main Lift Station and Venus Way Lift Station
- **Sewer Lines:** Consultant will evaluate sewer lines using a combination of hydraulic modeling, maintenance history, type of material, age, City documented soil condition for corrosivity or known hazards, video inspection if available, and criticality/ consequence of failure. Inspection of below grade facilities are included in **Task 15** CCTV.

Data Gap Analysis (Water, Sewer, Storm). Consultant will identify data gaps in the City's GIS system and resolve discrepancies found between the GIS database, field observations (sanitary sewer only), and record drawings for water and sanitary sewer. Data types, which are expected to be identified and updated for the water and sewer systems may include the following:

- **Water Facilities:** Distribution and transmission pipelines, PRV's, booster stations, reservoirs/tanks, hydrants, turnouts, groundwater wells, and interagency and pressure zone interties.
- **Sewer Facilities:** Collection and trunk sewer pipeline reaches, manholes, junction structures, force main, air release valves, and lift stations.

Consultant will update the GIS database directly and the City's existing MS Excel asset inventory spreadsheet will be updated as well. The level of accuracy for updating the GIS will be for the purpose of hydraulic modeling.

Land Use and Parcels. Consultant will use City planning documents (General Plan and Specific Plans) and existing parcel and land use GIS files, to develop existing (2020) and future buildout condition (2040) parcel files that incorporate land use.

Deliverables:

- *Field Inspection and Interview forms for sewer*
- *Updated water and sewer GIS database, AutoCAD*
- *Updated water and sewer asset inventory spreadsheet*
- *Parcel GIS with current (2020) and future buildout (2040) land use TM*

Sewer and Water Financial Plan

Consultant will work with its subconsultant to participate in a separate kickoff workshop with the City to discuss study objectives, review and validate data and review project approach. Consultant will validate the data to ensure mutual understanding of information. Current financial position, challenges, and potential options for sustaining the City's water and sewer utility financial health will be reviewed. Results will form basis of the financial plan alternatives developed as part of this scope.

Financial Plan. Consultant and its subconsultant will evaluate the projections of rate and other revenues and its ability to meet annual expenditures (revenue requirements), while meeting debt service coverage and reserve targets. The City uses the following subfunds for managing wastewater and water cash flow:

- Sewer Operating Fund
- Sewer CIP Fund
- Treatment Plant Construction Fund
- Sewer Infrastructure Fund
- Sewer 2006 COPS Fund
- Water M&O Fund
- Water Line Extension Fund
- Water Bond Fund
- Water Infrastructure Replacement Fund

Consultant will review and project customer billing data, develop rate revenue projections, identify the timing and level of bond issues, and project budgeted operating and capital expenditures over the study period. Costs will be projected in accordance with the anticipated standards and regulations. Consultant will follow the financial planning and rate-setting principles set forth by the American Water Works Association (AWWA) and the Water Environment Federation (WEF). Consultant will incorporate all relevant data from the Sewer and Water Master Plans to develop the rate revenue adjustments required over the 5-year, 10-year, and 20-year period.

The Financial Plan will be developed with the ability to model different financial planning scenarios. The Financial Plan will set all fees and user charges at a level that fully supports the total direct cost and indirect cost of the activity, including depreciation of assets, overhead charges, and reserves for unanticipated expenses and capital project. The development will involve the following steps:

Projection of accounts, billed volume, and rate revenue: Consultant will examine the billable flow patterns from historical water billing records as well as the number of customers by class. Using this data and other planning documents, Consultant will project contributed bill wastewater volume, number of customers, and rate revenue for the study period. Consultant will conduct sensitivity analysis on the forecasted rate revenues. This analysis will include customer account growth adjusting for potential reductions in the billable flow per customer from continued active and passive water conservation efforts.

For water, Consultant will examine the billable flow patterns from historical water billing records as well as the number of customers by class. Using this data other planning documents, Consultant will project water sales volume, number of customers, and rate revenue for the study period. Consultant will conduct sensitivity analysis on the forecasted rate revenues. This analysis will include customer account growth adjusting for potential reductions in the use per customer from continued active and passive water conservation efforts.

Projection of Fees and other miscellaneous sources. Using the existing fee schedules, sewer connection fees and treatment plant fees based on the growth projections estimated from the water and sewer master plans will be projected. The fee revenue based on the different growth scenarios from the water and sewer master plans will be adjusted. Historical miscellaneous operating and non-operating revenues will be evaluated and reasonable projections for the 20-year study period will be developed in coordination with City staff.

Existing and Proposed Bonds: Consultant will project existing payments along with payments on any proposed debt. Any proposed bond issues will be in accordance with the City's debt policies summarized below:

- Limit long-term debt to only those capital improvements or long-term liabilities that cannot be financed from current revenue sources
- Utilize debt financing for projects which have a useful life that can be reasonably be expected to exceed the period of debt service for the project
- Protect and maintain the City's general credit rating of 'AAA'
- Examine efficacy of using inter-fund loans rather than outside debt to meet short-term cash flow needs.

Debt service coverage and reserve policies: Consultant will incorporate existing bond covenants and reserve policies into the financial plan. Consultant will develop all financial planning scenarios to meet the current debt service coverage requirement of 115% on parity debt and 115% on maximum annual debt service. The City's reserve policies will be followed when developing the financial planning scenarios. The City's current fiscal reserve policies for sewer include:

- Maintain working capital in the Wastewater and Water System funds to provide for future capital projects and unanticipated emergencies, such as pump station repairs. The City will attempt to maintain a working capital reserve of approximately 25% of the annual operating and maintenance expenses for the Sewer Fund.
- Accumulate at least \$2 million each a year in the Sewer and Water Infrastructure Fund for replacement of infrastructure as the infrastructure reaches the end of its useful life.

Operating expenses: Consultant will use historical budget and actuals and the current budget to forecast operating expenses. Line item expenses will be adjusted for inflation and changes in operational costs due to new or replaced facilities or staffing changes. Consultant will incorporate changes to operating expenses based on project alternatives associated with a new and/or upgraded of expanded facilities.

Consultant will determine projected costs for the annual WPCP operating expenses in coordination with City staff.

Capital expenditures: Consultant will evaluate various financing scenarios using the 20-year capital plan, such as varying the timing and the level of bond proceeds and adjusting timing of projects if necessary. The financial plan will have the capability to analyse multiple capital plan scenarios to determine the optimal plan.

The results of this task will provide viable scenarios to test the long-term revenue sufficiency of proposed rate revenue adjustments to meet annual revenue requirements. Consultant will analyze up to 10 different financial planning scenarios.

Study Reports and Meetings. Consultant will prepare a draft executive summary report detailing the analysis and recommendations in the financial analysis study and facilitate a web meeting to review the results with the City. Consultant will incorporate comments from the City and finalize the Study.

Deliverables:

- *Draft and Final Sewer and Water Financial Plan*

Task 3. Sewer Asset Condition Assessment

Our inspection team will collect and record field inspections and condition information in compliance with industry-standard procedures such as NASSCO MACP and PACP to standardize data collection and management procedures, including inspection protocols, defect coding systems, standard database formats, and database import/export routines, all of which will be used for this project, where applicable. The results of the inspections need to be evaluated as part of a comprehensive condition and risk assessment to prioritize and schedule the most critical repairs and rehabilitation.

We will help the City optimize asset management processes by using existing technology such as GIS and Computerized Maintenance Management System (CMMS) tools if available for data analysis, risk assessment, and inspections where appropriate. In addition, there are a growing number of technologies available for the inspection and condition assessment of sewer pipelines and associated infrastructure as described in **Task 15**.

Desktop Condition Assessment. In this task we will develop guidelines for determining remaining useful life of City's sewer systems, and assign a Likelihood of Failure (LOF) score for use on a desktop condition assessment.

- **Determine LOF Factors:** For the sewer system, probabilities of failure driver categories include pipe age, material, SSO history, or soil conditions. For each of these drivers there are multiple LOF factors that can be established in GIS. In the absence of previous condition assessment data, we will need to rely primarily on operational records (leaks, failures, SSOs) to determine these factors.
- **Conduct Desktop LOF Analysis:** Once LOF criteria is established, we will assign each asset a LOF score and validate the results with the City. Results will be documented in the Asset Condition Assessment Table.

Assessment of Criticality. The purpose of this task is to develop guidelines for determining the criticality of the sewer assets and assign Consequence of Failure (COF) scores based on multiple factors.

- **Determine COF Factors:** The consequence of failure rating determines the criticality of a pipeline for use in determining the COF score. COF is a function of pipe repair difficulty, location impact, and

pipe size drivers. We will work within these three driver categories to incorporate COF specific to the City issues, such as flooding or traffic disruption. We will identify factors to quantify potential consequences to system redundancy, outage duration, and cost of repairs.

- **Conduct Desktop COF Analysis:** Once COF criteria is established, we will assign each asset a COF score and validate the results with the City. Results will be documented in the Asset Condition Assessment Table.

Business Risk Exposure (BRE). Our team will use information established in the above exercises to identify each asset's risk score (BRE) based on its LOF and COF. This concept is illustrated in the simple risk matrix below.

Asset Depreciation. To conclude this task, we will develop a summary of replacement values for sewer utility assets and develop depreciation studies using information from the City's 2003 Depreciation Study along with information collected as part of this task. Replacement values will be developed using recent City and Bay Area bid tabs for pipeline and other asset construction costs.

Deliverables

- *Tables (MS Excel and PDF) – LOF, COF, and BRE Scores for Sewer Assets*
- *Tables (MS Excel and PDF) – 2018 Replacement Cost for Sewer Utility Asset*

Task 4. Develop Hydraulic Model and Calibrate Data.

The hydraulic model development will begin with the conversion of the existing Hydra model to the Innovyze® software. We will also incorporate new infrastructure per the updated GIS, sewer maps, and record drawings to represent current conditions. Attention will be paid to accurately representing physical components such as flow diversions and wastewater flow components that affect hydraulic performance to provide a well-functioning model and increase confidence in the results of the analysis. Available software tools such as network validation and viewing profiles will be utilized for efficient quality control. It is assumed that the City has current rim and invert elevations for any new facilities and that the elevations contained in the existing model are accurate.

Using the dry weather unit flows by parcel and land use developed in **Task 5**, wastewater loads will be initially allocated to the nearest manhole, then reviewed for accuracy to delineate subbasins and update the previous model sewer sheds. The unit flows for Base Sanitary Flow (BSF) and groundwater infiltration (GWI) will be calibrated using dry weather flow monitoring data (collected by others and provided by the City). Large (point source) dischargers will also be identified by the City utilizing the customer billing data and future use changes will be discussed with the City. The flow monitoring data will also be used to develop diurnal profiles by land use and, where possible, for specific large dischargers within the system. A scenario will be developed for existing dry weather conditions for the purpose of the calibration.

Wet Weather Flow (WWF) is a combination of calibrated BSF, wet weather GWI, and rainfall dependent inflow and infiltration (RDI/I). The RDI/I and wet weather GWI will be calibrated using wet weather flow monitoring and rainfall data. The rainfall and flow data will be reviewed and appropriate storms will be identified for model wet weather flow calibration. These storms need to be large enough to be used to predict a design storm event flow response.

Deliverables:

- *Sewer Hydraulic Model Development and Calibration Summary TM*

Task 5. Evaluate System Hydraulic Performance

The trunk system evaluation will be included and summarized as part of **Task 8**, Existing and Future Capacity Analysis.

Task 6. Develop Land Use Planning Information and Parcel Loads

The dry weather flow (DWF) is a combination of BSF and dry weather GWI. The BSF will be developed using wastewater flow factors, or unit flows, which are based on available City land use information received from City Planning Department, similar to development of the unit water demands above. These unit flows, represented as either gpd/acre or gpd/dwelling unit, will be compared with the baseline unit demands developed by others for the water system for consistency and as a measure of accuracy/calibration. Large (point source, average flows greater than 20,000 gpd identified by the City) dischargers will also be identified utilizing the customer billing data.

Deliverables:

- *Land Use Summary TM and Parcel GIS with current and future land use.*

Task 7. Develop Design Flow

The design storm will be based on our recommendations per our experience with other local agencies as well as the City's prioritized outcomes of this project. Most local agencies use a 5-year or 10-year recurrence frequency design storm of 6, 12, or 24-hour length as defined by the National Oceanic and Atmospheric Administration (NOAA) Precipitation Data Frequency Server, with the peak hour coinciding with the peak diurnal flow.

The design flow will be developed based on a design storm flow response to identify current and potential future hydraulic deficiencies during a design storm event. This task will also identify deficiency criteria, which will be reviewed and discussed with City staff, for use in the capacity analysis summarized in **Task 8**. Criteria may include depth to diameter ratio (d/D), freeboard, and/or velocity.

Assumption: Wet weather flow monitoring will be conducted by others and is not included in this scope of work. The proposed scope of work is based on the assumption that the data will coincide with at least one storm approaching a 2-year recurrence frequency or larger.

Deliverables:

- *Design Flow Criteria TM*

Task 8. Existing and Future Capacity Analysis

This task includes analysis of the hydraulic performance of the City's trunk and main collection system to identify capacity-triggered improvements for the existing (2020) and future buildout (2040) flows under design conditions. Once capacity deficiencies are identified, remaining capacity will be identified for future deficiencies and all improvements will be sized based on 2040 estimated design flows and prioritized based on the risk assessment and asset management approach.

The model results and potential improvements will be reviewed with City staff prior to finalizing recommendations. This analysis will be performed utilizing the 2020 and 2040 dry and wet weather flow as identified in **Task 6** and **Task 7**. Recommendations will also take into account projected timing of new development information provided by the City Planning Department. Hydraulic model results and capacity evaluation will be summarized in the **Task 11** deliverable.

Deliverable:

- *Sewer System Hydraulic Analysis and Capacity Analysis TM*

Task 9. Model Training

We will provide up to three in-house training sessions. The focus is to provide City staff with the basics for operating the models and understanding the structure of the various scenarios and alternatives. Additionally, operational tools will be covered to provide staff with the knowledge to use the hydraulic models to optimize system operation. If desired by the City, we can evaluate partnering with the selected software company to provide standardized training, while HydroScience provides system specific training.

Deliverables:

- *Sewer model training materials for up to 10 people in three 4-hour training classes*

Task 10. Sewer Utility Asset Renewal and Replacement Study Report

Our approach to the City's infrastructure condition assessment and R/R Studies is to collaborate with City staff to develop guidelines and provide support to ultimately rank the risk of failure in the system. Understanding the relative risk of failure for each pipe or system will help the City rationalize and justify the prioritization of replacement of system or its components. This task consists of the staged development of the R/R Study reports for sewer utility asset renewal, including the risk ranking, assessment, and development of actions based on **Task 3**. The guidelines, recommendations, and findings from asset condition assessment profiling will be combined into this task to develop the overall risk analysis. Finally, this task includes the list of prioritized R/R projects, recommendations, and cost estimates that will be used to develop CIP and update the risk analysis in the future. The R/R Study will include the five scope items listed in the RFP and will be developed based on the steps listed below.

- **Pipeline Risk Sensitivity Analysis:** We will perform a risk analysis of each pipe segment using the LOF and COF ranking criteria and results developed in **Task 3**. This risk mapping will identify pipelines and other assets that pose the greatest impending impact to the operation of the water and sewer systems, based on the anticipated timing and effect of failure. Risk is the product of LOF and COF. We will develop an overall risk matrix of the water or system by pressure zone or service area. We will provide an analysis of risk results and illustrate these on a system map.
- **High Risk Pipe Profiling:** This next step in the overall risk analysis provides a "short-list" of high risk pipes for further evaluation and analysis. The high risk pipelines will be evaluated and profiled for further assessment, based on the combined LOF and COF and developing action items such as immediate R/R or the need to gather further condition data. The high risk pipes are grouped into action levels. Three possible action levels include:
 - R/R. Based on current data and knowledge, the pipe is at high risk of failure. Determine appropriate rehabilitation or replacement project and initiate design.
 - Inspect. Based on current data and knowledge, the pipe is at high risk of failure. Determine appropriate inspection technique and execute inspection.
 - Watch List. Continue monitoring performance, collect failure data, and maintain systems, such as cathodic protection.
- **Prioritized R/R Projects List:** Based on the pipeline projects tagged with an "Inspect," we will evaluate inspection technologies, develop preliminary inspection areas that will optimize inspection activities and maximize benefits to each inspection. We will work with the City to evaluate the timing of capacity-related CIP projects with the recommended R/R project, so that multiple benefits can be achieved.

- **Develop Project Cost Estimates and Tools/ Technology Recommendations:** We will provide input on costs related to pipeline R/R unit costs and typical costs for tools/technology for different types of inspection activities and technologies. This unit cost information will be included in the report. The City will use this unit cost information to develop project planning level costs.

We will provide guidelines and documentation for analyzing the LOF, COF, and overall risk results in a draft and final report. Guidelines will include graphical analyses of results, assumptions, and observations used to interpret the risk results and risk management guidelines and recommendations to reduce the risk scores in the high risk pipelines. Additionally, we will provide a user's guide for step-by-step instructions for the GIS update process and how to use the risk tools so that the City can update this prioritization analysis in the future.

Deliverable:

- *Draft and Final Sewer Utility Asset Renewal and Replacement Study Report*

Task 11. Develop Capacity Relief Projects

We will identify capacity deficiencies in the existing sewer system under 2020 and 2040 design flows based on the deficiency criteria developed in consultation with the City. The updated hydraulic model runs from the scenarios in **Task 8** will identify potential wet weather conveyance capacity deficiencies for each scenario. Following identification of capacity deficiencies, we will review potential measures to address deficiencies including increasing facility size, collection system storage, or relief sewers. We will model these revised pipe segments and sizing to confirm that the resulting system performance will meet design criteria.

Deliverable:

- *Recommended Capacity Relief and Rehabilitation Projects (to be included in Draft Master Plan Report)*

Task 12. Evaluate Sewer Rehabilitation Program

Assess Sewer Rehabilitation Needs. We will use the results from the dry and wet weather flow calibration based on the flow monitoring data to help identify areas with higher inflow and infiltration (I/I). It is assumed that flow monitoring will present useful I/I data and will capture at least one storm approaching a 2-year recurrence frequency or larger. The hydraulic model will identify capacity deficiencies and target areas, which may be suitable for rehabilitation that could substantially reduce I/I. We will also review maintenance history, records, data, and results of the condition assessment from **Task 3** to understand problem areas and types of deficiencies

Develop Rehabilitation Plan. The results from the rehabilitation assessment will yield tributary areas, which would benefit from rehabilitation to reduce and/or correct I/I related to the collection system. Lateral-related I/I is not included in this analysis and will be considered on a case-by-case basis in coordination with the City. Sewer pipeline rehabilitation techniques to be considered will include spot repairs, slip-lining, cured-in-place-pipe (CIPP), pipe bursting (dependent upon host pipe material and size), and replacement. Manhole rehabilitation techniques include sealants, liners, coatings, brick and mortar repairs, and manhole covers and rings adjustments and seals. In some cases, sub-basin studies may be recommended to further isolate sources of I/I.

Deliverable:

- *Sewer Rehabilitation Plan (to be included in Draft Master Plan Report)*

Task 13. Wastewater Capital Improvement Plan Development

We will develop a recommended CIP that describes a logical and carefully considered set of prioritized CIP projects for facilities that are required to meet future wet weather and dry weather flows and other system needs, including projects that may be needed to rehabilitate or replace existing wastewater infrastructure. This CIP will be based upon the conditions of the existing system and outcomes of the previous tasks, to develop a priority array of anticipated projects. Capital improvement projects will be recommended based on asset management principles that incorporate the City's level of service definition and the evaluated risk assessment for the assets. Rehabilitation and replacement will be based on the useful remaining life of existing facilities based on time of installation and condition of the asset. The HydroScience Team will work collaboratively to identify, verify, and prioritize the identified projects to create a comprehensive CIP and triggers for each project. The CIP will include a time schedule for implementation over a 5, 10, 15, and 20-year planning horizon. Due to the timing of available wet weather flow monitoring data and report, we are proposing to eliminate the CIP submittal as a separate TM and instead present the draft CIP within the draft Master Plan Report.

CIP Review. HydroScience will collaborate with City staff in a workshop setting to discuss the CIP projects and priority timeline to incorporate additional considerations and to discuss the results with respect to the following categories of improvement:

- Improve reliability for emergency preparedness,
- Correct an existing system deficiency,
- Accommodate future development, and
- Facilities that provide multiple benefits.

Incorporating information from this review an updated CIP will be drafted. HydroScience will work with the City to provide a well-informed CIP.

Develop Cost Criteria and Estimates for CIP: HydroScience will use information from recent City construction projects and similar local projects to generate unit cost criteria. Construction cost information from these projects will be incorporated in the development of the City's cost estimates. These criteria will be used to develop planning level cost estimates for the recommended projects. Projects will be described in sufficient detail to support reliable planning level capital and operations and maintenance cost estimates (AACE Class 5, -30% to +50% order of magnitude), with underlying assumptions and project dependencies clearly described.

Deliverable:

- *Sewer System Capital Improvement Plan (to be included in Draft Master Plan Report)*

Task 14. Prepare Sewer Master Plan Report

This task involves preparing the SMP Plan draft document. It is expected that the SMP will be organized as follows:

- **Executive Summary:** Summary of the SMP
- **Section 1 – Introduction:** Purpose of the update, the methodology used and the SMP organization
- **Section 2 – Existing Land Use and Sewer System Description:** Describes City and sewer system
- **Section 3 – Condition Assessment:** Results of **Task 3** and a summary of the R/R Study Report.

- **Section 4 – Dry Weather and Wet Weather Sewage Flows:** Methodology for developing wet weather and dry weather existing and future sewage flows, conditions, and projections for hydraulic analysis.
- **Section 5 – Hydraulic Modeling Analysis:** Results of scenarios, assumptions, and criteria used
- **Section 6 –Implementation Strategy:** Justification for the recommended improvements necessary for future land use and development plans to buildout. Maps identifying deficiencies and proposed improvements
- **Section 7 – Capital Improvement Program:** Recommended improvements to address system deficiencies. Descriptions and budgetary costs will be provided for implementation into the City's CIP for the 5, 10, 15, and 20-year planning horizons.

Deliverables:

- *Draft and Final SMP, five (5) hard copies and MS Word and PDF electronic files*

Task 15. CCTV Sanitary Sewer Survey

All CCTV inspection work, defect coding and QC review will be performed by a NASSCO certified subconsultant in accordance with PACP. Our subconsultant's CCTV equipment includes inclinometers that indicate slope direction. Additional higher accuracy equipment is available to use should the City want exact slope measurements from the CCTV. However, the cost for using the more accurate equipment is approximately double and in most cases does not provide much benefit.

The HydroScience Team will evaluate whether CCTV alone will provide condition assessment data, and recommend whether additional inspections technologies such as 2D laser profiling or 3D laser (LiDAR) imaging might be required to definitively measure pipe deterioration and wall loss. We will review the inspection report and prepare a sewer collection system condition summary.

Deliverables:

- *Sewer Collection System Condition Summary*

EXHIBIT B

Schedule of Charges/Payments

The total not-to-exceed cost for this work is \$642,000. 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.

Standard Schedule of Billing Rates

Effective January 1, 2019 through December 31, 2019

Labor Classification	2019 Hourly Rate
Principal	\$240
Engineer IX	\$230
Engineer VIII	\$220
Engineer VII	\$210
Engineer VI	\$200
Engineer V	\$190
Engineer IV	\$180
Engineer III	\$170
Engineer II	\$160
Engineer I	\$145
Engineering Aide	\$80
Construction Professional VI	\$160
Construction Professional V	\$150
Construction Professional IV	\$140
Construction Professional III	\$130
Construction Professional II	\$120
Construction Professional I	\$110
CAD Manager	\$120
CAD Designer I	\$100
Marketing Professional	\$90
Administrative II	\$80
Administrative	\$65

Hourly billing rates include postage and telephone charges that are normal to the work authorized. Other direct costs for travel, reproduction, mail service, outside services, etc. will be invoiced at 110 percent of the actual cost.

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.

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.

X 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 appropriates 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 appropriates 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.