

**AMENDMENT TO CONSULTANT SERVICES AGREEMENT
BETWEEN THE CITY OF SUNNYVALE AND CDM SMITH FOR
WATER POLLUTION CONTROL PLANT PROGRAM
MANAGEMENT SERVICES**

This Amendment to Consultant Services Agreement, dated _____, is by and between the CITY OF SUNNYVALE, a municipal corporation ("CITY") and CDM SMITH ("CONSULTANT").

WHEREAS, on March 31, 2014, CITY and CONSULTANT entered into a Consultant Services agreement whereby CONSULTANT would provide professional program management services necessary for oversight, analysis, coordination, review, consultation, services during construction and other services for a project known as Water Pollution Control Plant Program Management; and

WHEREAS, the parties now agree that an Amendment to said Agreement is advisable;

NOW, THEREFORE, THE PARTIES ENTER INTO THIS AMENDMENT TO CONSULTANT SERVICES AGREEMENT:

1. Services by CONSULTANT

Replace the first four paragraphs of this section with the following:

CONSULTANT shall provide Program Management Core Services in accordance with Exhibit "A" and Exhibit "A-1" entitled "Scope of Work."

At CITY'S sole option, CONSULTANT may be required to perform Additional Reconstruction Program Tasks as detailed in Exhibit "B-1" and Exhibit "B-3" in accordance with the provisions set forth in this Agreement.

All exhibits referenced in this agreement are attached hereto and are incorporated herein by reference.

CONSULTANT agrees to assign Jan Davel, P.E. PhD to this project, to act in the capacity of Program Manager and personally direct the professional services to be provided by CONSULTANT.

2. Notice to Proceed/Completion of Services

Replace section (b) with the following:

(b) When CITY determines that CONSULTANT has satisfactorily completed the services defined in Exhibit "A" and Exhibit "A-1," CITY shall give CONSULTANT written Notice of Final Acceptance, and CONSULTANT shall not incur any further costs hereunder. CONSULTANT may request this determination of completion when, in its opinion, it has satisfactorily complete the Scope of Work (Exhibit "A" and Exhibit "A-1"), and if so requested. CITY shall make this determination within fourteen (14) days of such request.

3. Time for Performance

Replace this section with the following:

The term of this Agreement will be for a six (6) year period effective upon contract execution unless otherwise terminated. CONSULTANT shall deliver the agreed upon services to CITY as specified in Exhibits "A" and "A-1," and Exhibits "B-1" and "B-3" if authorized. Extensions of time may be granted by the City

Manager upon a showing of good cause, and by written amendment signed by both parties.

4. Payment of Fees and Expenses for Core Services and Additional Reconstruction Program Tasks

Replace this section with the following:

CITY agrees to pay CONSULTANT for the services rendered pursuant to this Agreement the not-to-exceed amounts and/or rates set forth in in the attached Exhibits "B" and "B-2" – Compensation Schedule and Exhibits "B-1" and "B-3" – Additional Reconstruction Program Tasks. CONSULTANT acknowledges that any work associated with Additional Reconstruction Program Tasks shall be authorized by CITY on an as-needed basis, and the scope and fee for individual tasks will be negotiated in advance and agreed to in writing by both parties through duly executed task order

Payments shall be made to CONSULTANT on a monthly basis. Compensation will not be due until a detailed billing is submitted to CITY within a reasonable time before payment is expected to allow for normal CITY processing. An estimate of the percent of total completion associated with the various categories of the services shall be furnished by CONSULTANT with said billing. Costs for reimbursable expenses will be paid in accordance with the amounts and terms established in Exhibits "C" and "C-1" – Compensation for Reimbursable Expenses.

In no event shall the total amount of compensation payable under this Agreement for Program Management Core Services exceed the sum of Fifteen Million Nine Hundred Seventy Six Thousand Thirty-nine and No/100 Dollars (\$15,976,039), unless upon written modification of this Agreement executed by both parties.

In no event shall the total amount of compensation payable under this Agreement for Additional Reconstruction Program Tasks exceed the sum of Four Million Four Hundred Eighty Thousand and No/100 Dollars (\$4,480,000), unless upon written modification of this Agreement executed by both parties.

All invoices, including detailed backup, shall be sent to City of Sunnyvale, attention Accounts Payable, P.O. Box 3707, Sunnyvale, CA 94088-3707.

8. Standard of Workmanship

Replace the first sentence of the second paragraph of this section with the following:

The plans, designs, specifications, estimates, calculations reports and other documents furnished under the Scope of Work (Exhibits "A" and "A-1"), and Additional Reconstruction Program Tasks (Exhibits "B-1" and "B-3") if authorized, shall be of a quality acceptable to CITY.

17. Notices

Replace the first paragraph of this section with the following:

All notices required by this Agreement, other than invoices for payment which shall be sent directly to Accounts Payable, shall be in writing, and shall be personally delivered, sent by first class with postage prepaid, or sent by commercial courier, addressed as follows:

To CITY: Craig Mobeck, City Engineer
Department of Public Works
CITY OF SUNNYVALE
P.O. Box 3707
Sunnyvale CA 94088-3707

To CONSULTANT CDM SMITH
Attn: Jan Davel, P.E. PhD
100 Pringle Avenue, Suite 300
Walnut Creek CA 94596

All other terms and conditions remain unchanged.

IN WITNESS WHEREOF, the parties have executed this Agreement Amendment.

ATTEST:

CITY OF SUNNYVALE ("CITY")

By _____
City Clerk

By _____
City Manager

APPROVED AS TO FORM:

CDM SMITH ("CONSULTANT")

By _____
City Attorney

By _____

Name and Title

By _____

Name and Title

Exhibit A-1

Water Pollution Control Plant Program Management SCOPE OF WORK

I. General

This project provides Program Management services for a new Water Pollution Control Plant (WPCP) in the City of Sunnyvale, California. The anticipated work will be an overall rehabilitation as well as new processes and facilities for some portions of the existing WPCP. The existing WPCP must be maintained in operation at all times, for fully compliant discharge.

The City's overall goal is to renovate the existing WPCP to a new facility suitable to treat and dispose of municipal sewage for the next 40 years. The renovated WPCP must meet all regulatory and permit requirements, as well as good practices, sustainability, and cost-effectiveness, with a bias toward reducing overall lifecycle costs, and being good stewards of the land and public trust. The WPCP must be reliable, flexible, and adaptable to meet expected and new challenges over the next generation.

The Program Management Consultant (PMC) shall provide management services to the City's Public Works Department to provide oversight of master planning efforts, oversee and coordinate multiple design and construction contracts, and coordinate the Program with ongoing WPCP operations. Paramount will be the planning of projects and coordination with continued operations of the WPCP and compliance with the Programmatic Environmental Impact Report (PEIR) and the City's National Pollutant Discharge Elimination System (NPDES) permit. Several phases of work might occur simultaneously to provide efficiency and optimum value to the City.

The PMC is an experienced firm with extensive resources in several engineering and financial disciplines including, but not limited to; structural, civil, environmental (treatment process), electrical, mechanical, industrial process control, LEED Certification, construction management, scheduling and coordination of projects with ongoing WPCP operations, operations training and manual preparation, commissioning and startup, budgeting and fiscal reporting. The PMC shall provide regulatory knowledge of state and federal laws and regulations, particularly relative to water pollution control WPCPs, BAAQMD, NPDES, other related permits, air emissions and greenhouse gas regulations, as well as Cal OSHA (safety) and environmental law for EIR/PEIR management and compliance.

The PMC shall be structured and situated to sustain Program Management services over a period of several years (potentially ten or more) and to be continuously responsible to multiple stakeholders including; the Core Project Team, Public Works Project Administration Section (PAS), WPCP Management, City executives and elected officials, and members of the general Sunnyvale public. The PMC shall assist in managing design consultant and construction contracts, including resolution of potential conflicts (scheduling, design and physical) in the City's best interest. The PMC shall also be responsible for managing controls (budget and schedule), establishing and maintaining a document control system, planning and oversight of regulatory and

environmental compliance, public outreach, commissioning, and implementing the automation and control system plan.

The Program Manager will work with the City to implement and refine the Master Plan that will guide further design and construction of the facility in the most cost-effective and efficient manner in compliance with the requirements of the California Environmental Quality Act.

The Program Manager will work with the City and other City consultants and contractors who will be working simultaneously on the primary treatment system, the secondary treatment system, the tertiary treatment system, the solids handling system, the ACS system, the electrical system, the recycled water system, and the WPCP support facilities. These systems include, but are not limited to:

- Primary treatment system
 - Raw sewage conveyance and pumping
 - Raw sewage screening and screenings processing and disposal
 - Grit removal and grit processing and disposal
 - Primary sedimentation and primary sludge pumping and metering
 - Polymer blending, pumping, and feed
 - Connection to the existing anaerobic digesters
 - Connection to the existing primary effluent pipeline
 - Testing, commissioning, and transfer to the new primary system, and decommissioning of the existing primary system
 - Rehabilitation of the existing primary effluent pipelines
- Secondary treatment system
 - Distribution of primary effluent between new and existing treatment facilities
 - Aeration, mixing, and pumping of the mixed liquor
 - Distribution of the mixed liquor among clarifiers
 - Pumping and distribution of return and waste activated sludge
 - Distribution of secondary effluent to existing filtration facilities
 - Circulation of primary effluent in existing oxidation ponds
 - Pumping and distribution of pond effluent to existing fixed growth reactors
 - Pumping and distribution of fixed growth reactor effluent to existing air flotation tanks
 - Separation of algae from the oxidation pond effluent and return to the oxidation ponds
 - Pumping of air flotation tank effluent to secondary clarifiers or existing filtration facilities
 - Testing and commissioning of the new secondary treatment facilities
- Tertiary treatment system
 - Rehabilitation of existing filtration and disinfection facilities
- Solids handling system
 - Thickening of waste activated sludge and feed to digester distribution structure
 - Distribution of thickened primary and secondary sludge among existing anaerobic digesters
 - Dewatering of digested biosolids
 - Storage and handling of cake solids
 - Ventilation of odors through a bioscrubber

- Return of supernatant liquor to existing oxidation ponds
- ACS system
 - Communications through a fiber optic cable backbone
 - Local and remote monitoring and control of treatment processes
- Electrical system
 - Generation of back-up power during outages
 - Distribution of 12 KV primary power across the WPCP
 - Stepdown and distribution of 480V secondary power at load centers
- Recycled water system
 - Completion of commissioning for the sodium hypochlorite disinfection facility
- WPCP support facilities
 - Security and flood protection from a new perimeter wall
 - Public parking and access to the Bay Trail
 - Management, administration, operations, maintenance, and laboratory testing in new buildings
 - Demolition of existing administration, maintenance, and compliance inspection buildings

Design consultants working on the various projects at the WPCP shall oversee all design aspects necessary to prepare complete sets of plans and specifications suitable for Public Works bidding, and compliant with all applicable requirements. The PMC shall be responsible for reviewing these documents including coordinating these designs with the other consultants and contractors working at the WPCP for compatibility and synergy. The PMC shall also be responsible for recommending these plans for bidding to the City Engineer per the following City requirements: 1) plans and technical specifications must be stamped and signed by the Professional Engineer-of-Record, 2) the plans and specifications shall be coordinated with the City's bid documents, standard provisions, and special provisions, and 3) all submittals shall be in both digital and hard copy format. In addition, the plans and specifications shall not have statements obligating the City to do anything other than what is stated in the City's standard construction contract. They shall provide sufficient detail to result in a good quality product while allowing competitive pricing where possible and appropriate, and they shall also provide options to the contractor where appropriate to obtain the same good level of quality for the best bid price. Plans and specifications must be readily biddable and objective, avoiding use of subjective terms, such as "performing work to the satisfaction of the designer or the City", and proprietary products or services should be avoided unless the Consultant has demonstrated there is no other better option.

II. Location

The existing Water Pollution Control Plant (WPCP) is at 1444 Borregas Avenue, Sunnyvale, Santa Clara County, California.

The site lies near the South San Francisco Bay, in the northern part of the City of Sunnyvale. The site includes approximately 16.5 acres of land, approximately 440 acres of wetland, and several associated property rights. The City's SMaRT (Sunnyvale Materials Recovery and Transfer) Station lies to the east and the Sunnyvale East Channel forms the eastern boundary of the site. The City's municipal solid waste landfill borders the south and west of the site. The Sunnyvale West Channel forms the western boundary of the site. Several high technology businesses surround the

site beyond the City-owned land and Caribbean Drive within Moffett Park. San Francisco Bay is directly north of the site.

III. Background

The existing WPCP was initially built in 1956. With additions over the subsequent 15-20 years it has grown to a tertiary treatment facility with an average dry weather flow rate of 14 million gallons per day (MGD) and a permitted average dry weather flow rate of 29.5 MGD. An asset condition assessment conducted in 2006 identified several critical WPCP structures as at-risk and in need of immediate rehabilitation. Based on this assessment, the City began implementing several rehabilitation projects and also developed a long-term Strategic Infrastructure Plan (SIP) to serve as a road map for the physical improvements and process enhancements needed to maintain a high level of treatment and to meet current and expected regulatory requirements and stewardship objectives. In 2013, to help implement the SIP, the City secured the professional services of an engineering design team of consultants to develop a comprehensive Master Plan, which included the “basis of design” development for the various process areas to be rebuilt and a programmatic environmental impact report (PEIR). The Master Plan was adopted by City Council in 2016.

Current projects active at the WPCP include the removal and dewatering of sediment (biosolids) from the oxidation ponds and digesters, construction of new headworks and primary treatment facilities, and a condition assessment of the existing secondary and tertiary treatment facilities. Future projects at the WPCP will include overall rehabilitation as well as new processes and facilities for some portions of the existing WPCP. The WPCP will be constructed while maintaining the existing plant operations at all times for fully compliant discharge.

The current treatment process includes aerated grit removal and primary sedimentation. Two oxidation ponds covering about 440 acres at the south end of San Francisco Bay provide secondary treatment. Tertiary treatment utilizes fixed growth reactors, air flotation tanks for algae removal, dual-media filtration, sodium hypochlorite for disinfection, and sodium bisulfate for chlorine removal. The WPCP can treat up to 2 million gallons per day to Title 22 standards for unrestricted use and distribution as recycled water for irrigation purposes in parts of Sunnyvale and Cupertino. The facility also has four anaerobic digesters and a contract for dewatering biosolids from both the digesters and oxidation ponds. This contract eliminated the need for gravity drained sludge dewatering beds and stockpiling dewatered sludge. This area is now the construction site for new headworks and primary sedimentation facilities. The WPCP has its own State-certified laboratory and WPCP personnel perform industrial waste inspections (pretreatment). WPCP administration is housed onsite and ancillary facilities include workshops for Operations and Maintenance, multiple storage areas, parking and Bay trail access from Carl Road.

The Sunnyvale Water Pollution Control Plant operates in accordance with NPDES Permit No. CA0037621 as adopted by Order R2-2003-0079 of the California Regional Water Quality Control Board, San Francisco Bay Region (CRWQCB-SF Bay), and other permits.

IV. Consultant Coordination Requirements

The City anticipates awarding multiple consulting contracts over the next several years. The Program Management Consultant (PMC) shall coordinate its work with the City and other City Consultants who will be working simultaneously on the Headworks and Primary Treatment Facility; Rehabilitation Primary Effluent Pipeline from Central Plant to Ponds; Rehabilitation Influent Pipelines to WPCP; Existing Plant Rehabilitation; Secondary Treatment Improvements–Stage 1, Air Flotation Tank Pump Station and Pipeline, Digester Supernatant Pump Station and Drainage Piping Upgrades, Thickening and Dewatering Facility–Stage 1, and Maintenance Building; Caribbean Drive Parking and Trail Access Enhancements; and Administration and Lab Building.

V. Program Management Services

The City expects the PMC to be a focal point for coordination and oversight of the WPCP reconstruction process by advising the City in various capacities, including reviewing the work of other consultants retained by the City to assess, design, and construct the WPCP projects over multiple years. The PMC will be responsible for providing various services that include design management, construction coordination, program management, commissioning, schedule and budget controls, records management, public outreach, and oversight of automation and controls systems for various projects included in the program. The PMC's role is to help the City achieve its overall program goals which include:

- Develop process improvements to meet current foreseeable water quality, biosolids, and air quality requirements
- Identify process improvements that are cost effective, incorporate innovative solutions and technologies, and promote City goals to maximize water recycling opportunities
- Provide the WPCP with a more reliable power supply through renewable energy generation that provides means to meet future heat and power demands
- Maximize the use of available space, enhance safety through improved traffic circulation and access, and improve public access to the WPCP while ensuring site security
- Maintain wastewater operations to meet regulatory standards during the course of implementing the Master Plan improvements
- Provide flexibility in responding to financial and regulatory uncertainty
- Maximize the useful life of the existing WPCP facilities in a manner that minimizes rate impacts while maintaining regulatory compliance
- Incorporate a level of redundancy which provides operations and maintenance flexibility to deal with planned and unplanned process downtime
- In partnership with other agencies, protect the WPCP from flooding and risks associated with sea level rise
- Minimize life-cycle costs (capital and operations and maintenance) to City rate payers

The following is a general outline of services anticipated under the PMC agreement:

- Planning and management of the design efforts for a variety of projects including:
 - Headworks and Primary Treatment Facility
 - Rehabilitation Primary Effluent Pipeline from Central Plant to Ponds
 - Rehabilitation Influent Pipelines to WPCP

- Existing Plant Rehabilitation, including the Condition Assessment
- Secondary Treatment and Dewatering Project (Secondary Treatment Improvements–Stage 1, Air Flotation Tank Pump Station and Pipeline, Digester Supernatant Pump Station and Drainage Piping Upgrades, Thickening and Dewatering Facility–Stage 1, and Maintenance Building)
- Caribbean Drive Parking and Trail Access Enhancements
- Administration and Lab Building
- Planning and management of the overall Program implementation including all of its projects
- Maintaining a Records Management System for the Program
- Management and controls of the overall WPCP reconstruction budget and schedule
- Planning and management of regulatory and environmental compliance items
- Public Outreach
- Commissioning services for all the projects included in the program
- Integration and oversight of automation and controls systems for all projects included in the program

The City recognizes the general nature of this contract as providing program management services and that in general the scope of work is defined by the descriptions below and limited by the level of effort stated in the budget.

The PMC shall provide the following services under this agreement:

1. Project Design Management

The PMC shall be responsible for assisting the City with managing the procurement and the design efforts of the projects identified in this scope of work:

- Project 1.1.3 (Headworks and Primary Treatment Facility–Package 3)
- Project 1.2 (Rehabilitation Primary Effluent Pipeline from Central Plant to Ponds); Project 1.3 (Rehabilitation Influent Pipelines to WPCP)
- Project 2.1 (Existing Plant Rehabilitation, including the Condition Assessment)
- Projects 2.2, 2.6, 4.1, 4.2, and 8.4 (Secondary Treatment Improvements–Stage 1, Air Flotation Tank Pump Station and Pipeline, Digester Supernatant Pump Station and Drainage Piping Upgrades, Thickening and Dewatering Facility–Stage 1, and Maintenance Building)
- Project 8.1 (Caribbean Drive Parking and Trail Access Enhancements)
- Project 8.3 (Administration and Lab Building)

Projects shall be managed in accordance with the guidelines of their contracts. Specific responsibilities shall include:

- 1.1 **Design Management:** Responsible for the successful planning, management, and delivery of condition assessment and design services through appropriate management of consultants. Coordinate with City staff in areas of the projects as required for successful delivery of each project element. Assure that all projects are effectively coordinated with the WPCP and concerns are addressed. Engage subject matter experts for the resolution of technical issues.

Coordinate and participate in biweekly meetings and workshops with the City and each consultant to help facilitate the condition assessment and design projects. Work with the consultants to develop agendas and complete meeting minutes for distribution to team members.

Review and evaluate any contractual requests from consultants, such as Notice to Proceed (NTP), release of Optional Services budget, or Contract Change Orders. It is assumed that each consultant submits contractual requests up to once per quarter.

Track project progress and report up to the Program level on project accomplishments, risks, schedule, and budgets. Manage the design decision log and project files, including correspondence and deliverables. (Action item logs will be managed under Task 8.2.)

- 1.2 **Design Procurement:** Assist the City in preparing design services scopes of work (SOWs), attachments, and fee schedule templates to support competitive proposal processes. Confirm that all permit requirements, technical deliverables required for SRF financing, and site characterization (such as hazardous materials assessment) needed to obtain competitive bids are identified in each SOW. Assist City with answering questions from prospective proposers. Verify that the plans and specifications clearly identify any contractor responsibilities related to the permits. PMC will prepare and maintain a master list of required permits for ongoing projects.

It is anticipated for the contract term that SOWs will be developed for the following Projects: Rehabilitation Primary Effluent Pipeline from Central Plant to Ponds (Project 1.2), Rehabilitation Influent Pipelines to WPCP (Project 1.3), and Existing Plant Rehabilitation (Project 2.1). PMC will support the City in procurement of these consultants, as well as supporting completion of the following Project procurements: Administration and Lab Building (Project 8.3), Secondary Treatment and Dewatering (Projects 2.2, 2.6, 4.1, 4.2, and 8.4), Caribbean Drive Parking and Trail Access Enhancements (Project 8.1), Condition Assessment (Project 2.1).

- 1.3 (combined with 1.2)

- 1.4 (combined with 1.1)

- 1.5 **Design Review:** Provide experienced technical resources (civil, hydraulics, process modeling, chemical feed systems, odor control, secondary and side stream treatment, secondary clarification, thickening, dewatering, anaerobic digestion, structural, electrical, architectural, building mechanical, automation, cost estimating, scheduling, landscape design, geotechnical, operations) to provide comments and a thorough review of all deliverables to confirm systems are compatible among the various projects and are fully integrated.

Review all documents and submittals, including: work plans, reports, subsurface utility mapping (utility locations, survey, and geotechnical boring locations will be collected by designers and incorporated into a master basemap by PMC), surveying, geotechnical characterizations, hazardous materials investigations, models, test results, Design Information Memoranda, plans, specifications, cost estimates, and schedules for completeness, accuracy, and consistency with the master plan and adopted City standards. The design reviews shall also include technical disciplines, constructability, operability, maintainability, and startup and testing plan reviews. Biddability and constructability review will be led by the CMC. Reviews shall also focus on design assumptions and criteria, fatal flaws, and compatibility with existing systems. Reviewers will identify opportunities to add value to the designs, but formal value engineering exercises are not anticipated.

The major documents to be reviewed include, but are not limited to the following:

- All condition assessment deliverables for the plant-wide condition assessment
- All design deliverables for the Headworks and Primary Treatment Facility–Package 3
- All design deliverables for Rehabilitation Primary Effluent Pipeline from Central Plant to Ponds
- All design deliverables for Rehabilitation Influent Pipelines to WPCP
- All design deliverables for Existing Plant Rehabilitation
- All design deliverables for Secondary Treatment and Dewatering (Secondary Treatment Improvements–Stage 1, Air Flotation Tank Pump Station and Pipeline, Digester Supernatant Pump Station and Drainage Piping Upgrades, Thickening and Dewatering Facility–Stage 1, and Maintenance Building)
- All design deliverables for Caribbean Drive Parking and Trail Access Enhancements
- All design deliverables for Administration and Lab Building

1.6 **Site Layout Maps:** Maintain current and planned site layouts on WPCP basemap. Update phased site layout figures with footprints of proposed construction to identify site conflicts and sequencing issues.

1.7 **Review Coordination:** Coordinate submittal reviews. Distribute deliverables and comment logs to City, PMC, and CMC reviewers. Compile comments and resolve contradictory comments prior to transmitting to the consultants. Obtain comment responses from the consultants. Provide responses to the commenters and obtain concurrence. Resolve outstanding comments using appropriate means of communication, including potentially coordinating review meetings with the City and the designer so that comments can be discussed in detail, clarified as necessary, and resolved.

1.8 (combined with 1.1)

- 1.9 (combined with 1.1)
- 1.10 (combined with 1.1 and 6.4)
- 1.11 **Design Advice:** Provide experienced technical resources to participate in predesign and design workshops. A workshop is anticipated for each major report, Design Information Memorandum (DIM), and major design submittal. Two members of the PMC team will attend each workshop.
- 1.12 (City validates and authorizes invoices from designers.)
- 1.13 (combined with 1.5)
- 1.14 **Bid Phase Services:** Attend and participate in pre-bid meetings. Assist City with answering questions from prospective bidders and gathering designer input as needed.
- 1.15 **Front-End Document Review:** Review draft front-end documents prepared by the Construction Management Consultant (CMC). Advise on sequencing, intermediate milestones, and delay impacts.
- 1.16 **Basemap Maintenance:** Compile CAD files depicting surface features, utilities, topography, geotechnical boring locations, easement and property boundaries, and other relevant data. As new data becomes available, update basemap with record drawings, design submittals, and field investigations and observations. Coordinate with consultants to resolve conflicting data. Ensure the current basemap is continuously available to all consultants.

2. Construction Coordination (replaces *Construction Management*)

Construction management services on the Headworks and Primary Treatment Facility are provided by a Construction Management Consultant (CMC). These services include biddability reviews, constructability reviews, construction management, commissioning coordination, construction projects schedule and budget controls, site safety plan and implementation, safety training, multi-discipline inspection, and materials testing.

The PMC's role in construction is to monitor projects during construction at a programmatic level for impacts on the Program of changes and clarifications.

Responsibilities of the PMC during construction shall include:

- 2.1 **Construction Meetings:** Attend pre-construction and construction kick-off meetings for the four projects anticipated to begin construction during the term of this Agreement.

- 2.2 **Construction Coordination:** Monitor RFIs, addenda, submittals, change orders, and clarifications submitted by the contractor and identify those which have the potential to impact other projects in the Program. Perform further evaluation if warranted, and prepare a response. Evaluate changes under consideration for potential impacts on the Program. Identify scope, schedule, and budget impacts, and propose options to mitigate impacts. Attend construction progress meetings as appropriate to support performance of this work. It is assumed that a total of no more than one meeting and two evaluations will be required each month.
- 2.3 **SCVWD Coordination:** Maintain communication with Santa Clara Valley Water District during the overlapping construction periods of their East/West Channel project and the City's Caribbean Drive Parking and Trail Access Enhancements project.

3. **Funding and Financing** *(replaces Program Controls Development)*

The PMC shall be responsible for applying for alternative funding sources and preparing project budget and revenue projections to be used in the City's biannual capital project budgets update. At this time, it is anticipated that the scope of Projects 2.2, 2.6, 4.1, 4.2, and 8.4 (Secondary Treatment Improvements–Stage 1, Air Flotation Tank Pump Station and Pipeline, Digester Supernatant Pump Station and Drainage Piping Upgrades, Thickening and Dewatering Facility–Stage 1, and Maintenance Building); and Project 2.1 (Existing Plant Rehabilitation) matches the eligibility criteria for the Clean Water State Revolving Fund Program (SRF). These tasks shall include:

- 3.1 **SRF Applications:** Preparing the General Package, the Technical Package, and the Environmental Package for SRF applications. Identifying, tracking, and following up on the steps to complete the applications. Advising the City on requirements for the Financial Package and the Legal Package. Compiling information from previous application packages and consultants' reports. Collaborating with the City to ensure all required documents are uploaded to the Financial Assistance Application Submittal Tool (FAAST). Responding to the State Water Resources Control Board's questions and requests for follow-up information.
- 3.2 **City Budget Update:** For the FY 2020/2021 City budget update, prepare updated City project request forms and summary spreadsheet of projects and budgets, accounting for any changes in project timing, cost estimates, or actual expenditures for projects associated with the Program.
- 3.3 **Package 1 SRF Administration:** Lead compliance with SRF requirements during construction of Project 1.1.1 (Headworks and Primary Treatment Facility – Package 1).

Address all SRF compliance questions posed by the Contractor; review submittals related to Davis-Bacon, Minority Business Enterprise/Women's Business Enterprise (MBE/WBE), and American Iron and Steel (AIS) requirements; and coordinate with State Water Resources Control Board (SWRCB) staff about the

expected schedule of disbursements based on the contractor's schedule of values and baseline schedule. Advise the City as to processing and approval of Potential Change Orders to meet SRF requirements.

Lead completion and submittal of Compliance Certifications, compiling and submitting disbursement requests, reviewing reimbursement statements and related project financial records, and updating budgets as required. Monitor compliance with AIS requirements; respond to questions from field staff regarding onsite materials, assist with preparation of certification forms, variance, or waiver filings; and communicate and coordinate with SWRCB regarding AIS issues.

Review MBE/WBE participation as reported by the contractor and construction management consultant and compile the reporting form (UR-334) for semi-annual resubmittal to SWRCB. Advise the City on noncompliance issues, waivers, and MBE/WBE documents.

Ascertain whether certified payroll reports have been submitted by the contractor and any subcontractors employing covered workers during each reporting period. Spot-check that certified payroll reports have been completed properly.

In the event of a field visit or audit, lead with gathering records and addressing compliance issues related to record review, field review, and Davis-Bacon.

3.4 Package 2 SRF Administration: Lead compliance with SRF requirements during construction of Project 1.1.2 (Headworks and Primary Treatment Facility–Package 2).

Address all SRF compliance questions posed by the Contractor; review submittals related to Davis-Bacon, Minority Business Enterprise/Women's Business Enterprise (MBE/WBE), and American Iron and Steel (AIS) requirements; and coordinate with State Water Resources Control Board (SWRCB) staff about the expected schedule of disbursements based on the contractor's schedule of values and baseline schedule. Advise the City as to processing and approval of Potential Change Orders to meet SRF requirements.

Lead completion and submittal of Compliance Certifications, compiling and submitting disbursement requests, reviewing reimbursement statements and related project financial records, and updating budgets as required. Monitor compliance with AIS requirements; respond to questions from field staff regarding onsite materials, assist with preparation of certification forms, variance, or waiver filings; and communicate and coordinate with SWRCB regarding AIS issues.

Review MBE/WBE participation as reported by the contractor and construction management consultant and compile the reporting form (UR-334) for semi-annual

submittal to SWRCB. Advise the City on noncompliance issues, waivers, and MBE/WBE documents.

Ascertain whether certified payroll reports have been submitted by the contractor and any subcontractors employing covered workers during each reporting period. Spot-check that certified payroll reports have been completed properly.

In the event of a field visit or audit, lead with gathering records and addressing compliance issues related to record review, field review, and Davis-Bacon.

4. PMC Project Management (replaces *Program Controls System*)

The PMC shall be responsible for conducting project management activities including leading the program management team; managing PMC deliverables; managing the budget for the PMC contract; engaging, managing, and administering subcontracts and subconsultants. These tasks shall include:

- 4.1 **Invoicing:** Submit monthly invoices. Invoices shall include complete back-up of all project costs and include a cover page listing the total budget, amount authorized by NTP, previous billed-to-date, current billing, and total billed-to-date for each task and task order. Invoice shall be accompanied by a brief progress report which lists the work accomplished in the previous month and key activities in the subsequent month.
- 4.2 **Contract Management:** Manage PMC contract and subcontracts. CDM Smith shall be responsible for administering the PMC contract with the City, controlling the budget, and preparing support documentation for the release of partial NTPs over the course of the contract. CDM Smith shall also be responsible for preparing and managing subcontracts and issuing subconsultant task orders. CDM Smith shall also be responsible for executing and administering contracts with vendors for the products and services necessary to support the program, including but not limited to the program management office and associated expenses, Unifier software, and website services.
- 4.3 **Team Management:** Lead the team. Hold internal meetings and conference calls and prepare minutes. Distribute workload among program staff. Communicate budgets and deadlines. Monitor that expectations are met. Quickly resolve internal issues and address any bottlenecks.
- 4.4 **Quality Management:** Perform quality assurance. Monitor that deliverables are internally reviewed by senior staff not directly involved in performing the work, prior to being submitted.

5. Program Controls Management

Records Management: The PMC shall be responsible for providing and maintaining a records management system. This includes being responsible for the management, coordination, logging, tracking, and sharing of all documents. Key correspondence for the project, including official emails, shall also be stored in the records management

system. At the end of the Program, all systems and documents shall be transferred over to the City. At a minimum records management responsibilities shall include:

- 5.1 **Program Management Information System:** Maintain the electronic records management system. Oracle Primavera Unifier software has been selected as the records management platform for this Program.

Provide training to users who are utilizing Unifier. Respond to user support requests.

Monitor that the system continues to perform as expected. Notify users in advance of planned system outages and during unanticipated downtime. Progressively deploy business processes in project shells as projects enter new phases. Update access and permissions as new teams and users mobilize and demobilize.

- 5.2 **Document Management:** Collect, file, and retain electronic copies of key correspondence, consultant deliverables, review comments, contracts, NTPs, change orders, invoices, and other project documents. Ensure that all documents are searchable and coded with proper metadata.

Distribute and help team members find files when needed.

- 5.3 (combined with 5.2)

- 5.4 (combined with 5.2)

- 5.5 (combined with 5.1)

- 5.6 (CMC is responsible for obtaining and storing construction photos. PMC has no scope for construction photos. Storage of photos on Unifier is included under 5.2)

Schedule Management: The PMC shall be responsible for monitoring, tracking, and coordinating the overall Program schedule as well as individual project schedules. The PMC shall coordinate with other consultants working on the various components of the Program and incorporate these schedules into the master schedule. The PMC shall update the schedule on a monthly basis and track key milestones. These tasks shall include:

- 5.7 (CMC is responsible for reviewing and accepting baseline and update schedules for contractors. PMC's scope is limited to incorporation of accepted construction schedules into the master schedule.)

- 5.8 **Project Schedules:** Review schedule submittals at design milestones. Provide comments and incorporate into the program schedule. Incorporate designers' and contractors' baseline schedules once approved.

Update the program schedule on a monthly basis, incorporating actual progress and minor revisions to planned activities for the procurement, permitting, design, bid, construction, commissioning, and close-out of all projects in the Program. Track all start and finish dates and perform critical path method (CPM) analysis as necessary.

Maintain a comprehensive overall project budget and cash flow projection of financial needs based on the current cost-loaded schedule to assist the City with bond sales and cash management.

Financial Management: The PMC shall be responsible for tracking costs across the Program. This includes the program management contract, the construction management contract, the condition assessment contract, design contracts, construction contracts, and miscellaneous costs (permit and utility fees, City labor and expenses, legal ads) incurred against the Program and its projects. The PMC shall coordinate with the City and other consultants and contractors working on the Program to insure that all invoices are obtained and conform to approved amounts, within acceptable budgets. The following financial oversight services shall be provided:

5.9 (combined with 5.10)

5.10 **Cost Tracking:** Review and enter all contracts, amendments, change orders, task orders, NTPs, and invoices in Unifier. Ensure invoices are acceptable for services rendered and in compliance with appropriate contract documents. Obtain monthly reports of City financials and reconcile with program financial data. Prepare monthly graphs showing base, optional, and contingency budgets and expenditures against each contract and the overall program. Keep and maintain complete records of all expenses by project throughout the life of the Program.

5.11 **Budget Management:** Track contract amounts, engineers' cost estimates, and program cost projections against Council-approved budgets. Propose corrective changes if needed to maintain the expected program cost within the amount approved with adoption of the master plan and the City project budgets. The project budget shall also track contingencies and liabilities related to each contract, and contract dates for contract compliance and fiscal control. Technical review of cost estimates prepared by others is included under Subtask 1.5.

5.12 (replaced with 3.2)

Change Management and Reporting: The PMC shall be responsible for implementing the change management procedures developed during the first term of this contract. The PMC shall also be responsible for preparing monthly and quarterly reports that show updated schedules, costs, and activities. These tasks shall include:

5.13 **Program Change Analysis:** Evaluate program impacts of proposed changes to project schedule milestones, cost, packaging, or scopes. Lead meetings and provide written evaluations to support City decisions about proposed changes.

5.14 **Reporting:**

- Perform monthly updates of the program schedule and produce schedule reports.
- Prepare monthly look-ahead of upcoming PMC activities and deliverables.
- Prepare monthly report of program activities, schedules, and budgets.
- Prepare quarterly report of program activities, schedules, and budgets, appropriate for an executive audience.

6. **Regulatory and Environmental Compliance**

The PMC shall be responsible for overseeing the regulatory and environmental compliance effort for the entire Program. This includes verifying that all permits and authorizations necessary are being carried out in accordance with applicable guidelines and requirements. The PMC shall confirm that all necessary items are shown on the schedules and items are tracked and completed on time to avoid any unnecessary delays. The work consists of:

- 6.1 **Permit Review during Design:** Review and comment on the work effort being performed by various consultants of the following projects:
- Project 1.1.3 (Headworks and Primary Treatment Facility–Package 3)
 - Project 1.2 (Rehabilitation Primary Effluent Pipeline from Central Plant to Ponds); Project 1.3 (Rehabilitation Influent Pipelines to WPCP)
 - Project 2.1 (Existing Plant Rehabilitation)
 - Projects 2.2, 2.6, 4.1, 4.2, and 8.4 (Secondary Treatment Improvements–Stage 1, Air Flotation Tank Pump Station and Pipeline, Digester Supernatant Pump Station and Drainage Piping Upgrades, Thickening and Dewatering Facility–Stage 1, and Maintenance Building)
 - Project 8.1 (Caribbean Drive Parking and Trail Access Enhancements)
 - Project 8.3 (Administration and Lab Building) consultants.

Confirm that the work meets applicable regulations and guidelines and that permit applications are prepared in accordance with the work scope.

- 6.2 (combined with 6.3)

- 6.3 **Permit Compliance Tracking:** Track regulatory requirements and studies, work products, and other actions required to secure permits and ensure compliance with the Mitigation Monitoring and Reporting Plan and other permit conditions, for both the PEIR and project-specific permits. Provide monthly updates on completed and upcoming permit-related activities and deadlines. Maintain associated correspondence and proof that required measures have been fulfilled. Verify mitigation measures are included in appropriate plans and specifications.

- 6.4 (combined with 1.2)

- 6.5 (combined with 6.3)

- 6.6 **Permit Review during Construction:** Review and comment on SWPPP, Section 01061, and submittals directly related to fulfillment of the MMRP or other permit condition by various contractors including Project 1.1.2 (Headworks and Primary Treatment–Package 2); Project 1.3 (Rehabilitation Influent Pipelines to WPCP); and Project 8.3 (Administration and Lab Building).
- 6.7 **Nesting Bird Deterrence:** Perform nesting bird deterrence during and leading up to nesting season when the contractor has not yet mobilized, to ensure continuous performance of these activities within the project buffer area. This effort is anticipated to last two months, from Headworks and Primary Treatment–Package 1 Substantial Completion in April, 2017, through Headworks and Primary Treatment–Package 2 Notice to Proceed in June, 2017. During the deterrence period, qualified biologists will search all vegetation and buildings within the work area buffer zone, and remove inactive nests and nest starts. If active nests are observed, establish appropriate buffers. At the end of each month, submit a report summarizing field observations, nest locations, and deterrence activities.

Perform preconstruction Congdon’s tarplant survey and prepare letter report, during the blooming season prior to construction of the west perimeter wall.

- 6.8 **Mitigation Plant Procurement:** Complete procurement of contract-grown mitigation plants. This includes one inspection of the plants during their growing period, communication with the nursery to make species substitutions as-needed, inspection of plants upon delivery to the project site, and final payment to the nursery.

7. **Public Outreach Support**

The PMC shall be responsible for public outreach efforts for the Program. This includes developing outreach strategies, approaches, and templates to help communicate the scope, status, and objectives of the Program to stakeholders, residents, and businesses located in the City. Stakeholders include the media, City Council, commissions, other agencies, organizations, and special interest groups. The PMC shall also be responsible for updating newsletters and web pages throughout the duration of the Program. Tasks shall include:

- 7.1 (complete)

- 7.2 **Outreach Coordination:** Coordinate the efforts of design consultants and construction contractors who conduct outreach meetings for this Program. Ensure outreach efforts are consistent with the Program Communications Plan. Review and provide material for outreach efforts relative to public impacts, such as the Bay Trail access relocation or traffic impacts from the influent pipeline rehab.

Plan, coordinate, attend, lead, and present project/program information to interested stakeholder groups as requested by the City. Prepare necessary handouts, visual aids and presentations; and take photographs at public events. Two public events are anticipated during the 2017-2020 term.

- 7.3 (combined with 7.2)
- 7.4 (Program Communications Plan is complete.)
- 7.5 **Program Website:** Maintain the program webpage. Update an average of once a month with program news, photos, and/or public-facing documents.
- 7.6 **Quarterly Report:** Produce content and graphics for an annual feature in the City's quarterly public newsletter. Include up-to-date information to highlight key events, opportunities for public input, progress, and accomplishments.
- 7.7 (Quarterly report included under Subtask 7.6. Social media not used.)

8. **Program Coordination**

The PMC shall take the lead in assisting the City with coordinating all efforts of the Program. The coordination effort includes.

- 8.1 **Program Meetings:** Assist the City in managing the overall Program by conducting biweekly meetings for three years. This includes leading and preparing handouts and minutes for meetings with core staff from the City, as well as attending management meetings with City Directors.

Regular project meetings and design workshops are included under Task 1. As-needed attendance at construction meetings is included under Task 2.

- 8.2 **Program Logs:** Maintain the logs and tracking systems required to facilitate the Program. These include: action item tracking system to confirm that responsibilities among the project team are understood and tasks are completed; decision logs to document key decisions; and plan/document review logs to track comments and responses. Regularly update with new items, progress, and resolution of completed items. Maintain logs and checklists to document installation, integration, testing, and startup. Prepare printouts for distribution at meetings.
- 8.3 (not used)
- 8.4 (not used)
- 8.5 (complete)
- 8.6 (complete)
- 8.7 (CMC coordinates shutdowns with contractors.)
- 8.8 (scope assumed by CMC)

8.9 (now Optional)

8.10 (moved to 5.14)

8.11 **Kickoff Meetings:** Participate in kickoff meeting with each new designer. Lead a portion of the kickoff meeting, establishing roles, procedures, and expectations for the project.

9. **Commissioning**

The PMC shall coordinate and advise plant staff of commissioning efforts and services related to all projects constructed under the Program. These efforts include being engaged during the design process so that the necessary components of commissioning and start-up are included in the various projects. The PMC shall be responsible for coordinating these commissioning services with the plant staff, design engineer, and the CMC. All items in this section apply to the Headworks and Primary Treatment – Package 2 Project (Project 1.1.2) except for Items 9.2 and 9.14. Item 9.2 applies to both the Headworks and Primary Treatment – Package 2 and the Hypo project, while Item 9.14 applies only to the Hypo project. These services shall include:

9.1 (combined with 9.3, 9.4, and 9.6)

9.2 **Pre-Construction Coordination:** Coordinate testing, commissioning, and start-up requirements in design scopes of work, designs, and construction contracts to ensure obligations of the designers, construction managers, and general construction contractors during the commissioning process are identified. It is assumed that the Secondary Treatment and Dewatering Project (Projects 2.2, 2.6, 4.1, 4.2, and 8.4) would follow a similar process as that used in Headworks and Primary Treatment – Package 2 but that the Administration Lab Building Project (Project 8.3) would use an architect-led process.

9.3 (included in 1.5 and 9.2)

9.4 (CMC is responsible for verifying that O&M Manuals are submitted)

9.5 (included with 9.2)

9.6 **Planning Phase:** Review and critique commissioning work plans prepared by contractors during the submittal process. Read and become familiar with key equipment and system submittals to prepare for the commissioning and start-up period. These plans and submittals are anticipated to include the owner training plan and schedule, the commissioning and process start-up schedule, testing plans for each subsystem, and the clean water facility testing plan.

9.7 (included with 9.6)

9.8 **Commissioning Phase:** Participate in conference calls to coordinate commissioning activities. Resolve field issues as they arise. Participate in vendor

training. Perform factory witness testing for the following, at a minimum, influent pumps, standby generator controls, switchgear, and control panels.

Witness instrument field calibration, network installation testing, and loop testing. Observe system functional testing, including network operational testing, preliminary run testing, process control and instrumentation system demo testing, and start-up and testing for all subsystems and equipment systems. Provide secondary review comments on testing report submittals for the wide area network and all HVAC systems. Provide secondary review comments on all Manufacturers' Certification of Installation Compliance.

Provide secondary review comments on the test water management final plan. Observe clean water facility testing and provide secondary review of the testing results.

- 9.9 **Process Start-Up Phase:** Prior to start-up, provide secondary review comments on the commissioning documentation, including submittals during the various review periods, and data collected to-date, to confirm readiness for start-up. Provide secondary review comments on the final report submittal for HVAC testing, adjustment, and balancing. Attend meetings and conference calls with the designer, CMC, and contractor to define the start-up sequence of events. Provide temporary review comments on the set-up and functional requirements for temporary facilities needed to support start-up. Cross-check process start-up forms submitted by the contractor to assure that all start-up services have been successfully completed in accordance with the design specifications. Provide secondary review comments on the final operations testing plan, the test water management plan, and the start-up go/no-go decision criteria.

Provide on-site support for initiation of facilities start-up, control loop tuning and optimization, process control system testing, odor control system testing, ancillary system and remaining equipment start-up and testing.

Assist with water quality sampling and troubleshooting during operational testing. Review system-level final testing reports and water quality testing documentation. Remotely troubleshoot performance testing and fine tuning of the process control and instrumentation system. Provide onsite post-acceptance support for process optimization and integration.

9.10 (combined with 9.9)

9.11 (combined with 9.9)

9.12 (combined with 9.9)

- 9.13 (scope related to photographs and submittals are assumed by CMC and a commissioning report may be created after commissioning is completed, which occurs outside of the contract timeframe)

- 9.14 **Hypo Project Completion:** Review and critique commissioning work plans prepared by contractors during the submittal process. Read and become familiar with key equipment and system submittals to prepare for the commissioning and start-up period.

Document and observe equipment final installation, testing, integration, system functional testing, and start-up. Coordinate with the CMC to resolve any non-compliance issues related to testing, commissioning, and start-up. Review and comment on O&M manuals and training materials. Prepare a commissioning report to document testing activities of all equipment, observations made during commissioning, and log sheets of operational data taken during the start-up. Provide photographs of equipment installation and inspection reports, equipment vendor/supplier certificates of installation completeness, and other pertinent documents that provide back-up documentation of the installation and start-up activities.

At this time, commissioning of the Administration and Lab Building project is anticipated to be outside the timeframe of this contract. Therefore, services are limited to design phase commissioning preparation.

10. Automation and Control Systems

The Master Plan includes an Automation Controls Systems (ACS) plan as well as ACS design standards. In addition the PMC developed ACS Programming Standards to guide all programming activities by the System Integrator for each construction project. The PMC shall be responsible for overseeing that the design and construction projects conform to the established design standards and fit within the framework of the ACS plan. Specific responsibilities and tasks include:

- 10.1 (complete)
- 10.2 (complete)
- 10.3 (complete)
- 10.4 (complete)
- 10.5 (combined with 1.1 and 1.5)
- 10.6 (combined with 1.1 and 1.5)
- 10.7 (combined with 1.1 and 1.5)
- 10.8 (not included in base scope)
- 10.9 (combined with 1.1 and 1.5)

- 10.10 **ACS Design Workshops:** Attend special ACS workshops, meetings and conference calls facilitated by Secondary Treatment and Dewatering design consultants to provide advice and guidance to the City, and assure conformance to the ACS Master Plan and standards. Attend control strategy narrative development workshops facilitated by the design consultant during the design phase of the projects.
- 10.11 **Control System Algorithms:** Develop process area specific control algorithms that will provide documentation on how each of the process area control systems included in Secondary Treatment and Dewatering are controlled and monitored. Control algorithms will take the control strategy narrative developed by the design consultant and provide additional detail required by programmers to fully program the system. This includes defining how the software will be structured, the operation of the graphics, the information to be provided on the graphics and in the alarm system, as well as additional detail about the operational logic which is required for programming (what to do in the event of different failure situations, defining software interlocks, identifying any operator access levels, etc.) Workshops will be held with WPCP staff and the design consultant to review control strategy narratives and develop detailed control algorithms.
- 10.12 (combined with 1.14)
- 10.13 (combined with 2.2)
- 10.14 (scope assumed by the System Integrator)
- 10.15 **ACS Report Development:** Assistance with developing reports for process control and compliance monitoring and long-term historical storage.
- 10.16 (complete)
- 10.17 (moved to 9.4)
- 10.18 (scope assumed by the System Integrator)
- 10.19 (scope assumed by CMC and contractors)
- 10.20 (scope assumed by the System Integrator)
- 10.21 (work included will be outside of the contract timeframe)
- 10.22 (work included will be outside of the contract timeframe)
- 10.23 (work included will be outside of the contract timeframe)

- 10.24 **Process Optimization and Analysis Development:** Facilitate workshops to discuss and develop optimization opportunities for the processes included in Secondary Treatment and Dewatering.
- 10.25 **Headworks and Primary Treatment –Package 2 Algorithm Implementation:** Advise on implementation of alternate influent pump station control algorithms during bidding, construction, and commissioning of Headworks and Primary Treatment–Package 2.
- 10.26 **Admin Building ACS Support:** Provide review and coordination related to the Administration Building ACS and business networks. Provide input and review related to sequencing, demolition, temporary installations, and permanent tie-ins to network segments constructed under other projects.

EXHIBIT "B-2"
COMPENSATION SCHEDULE

City of Sunnyvale
Program Management Services for a New WPCP
CDM Smith

Tasks		Labor																										Subconsultants					Subconsultant Mark-ups	ODCs	Unifier Licenses	Total					
Task #	Task Description	PIC	Quality Manager	Program Manager	Program Coordinator	Staff Engineer	Technical Advisor	Technical Advisor	Architectural Advisor	Civil Reviewer	Design Coordinator	Structural Reviewer	Hydraulic Profile Reviewer	Odor Control Civil Engineer	Transportation Reviewer	ACS Engineer	I&C Engineer	Operations	Financing Lead	Contract Administrator	Controls Manager	Document Control	Controls Advisor	Controls Engineer	Unifier Lead	Web Design	Graphics	Total Hours	Total Labor Costs	various	Process/Automation	Public Outreach	Water Quality	Biological Permits	5%	CDM	Unifier Licenses	Total Fee			
		Titus / Frisler	Lutzenberger	Davel	McGuire	Song	Strehler	Pretorius	Arnon	Fernbach	Smith	Soohoo	Ott	Singleton	Martin	Hussain	Joy	Chamness	Loutsch	Wood	Allwright	Asis	Scully	Siferd	Rosser	Gilliam	Tijero / Rush			B&V	Alex Ekster	Katz	LWA	HTH							
		Average Escalated Bill Rate	\$267	\$267	\$255	\$206	\$150	\$255	\$255	\$245	\$255	\$167	\$245	\$227	\$238	\$245	\$245	\$227	\$221	\$245	\$150	\$255	\$111	\$255	\$150	\$206	\$150			\$150											
	2016/17 Bill Rate	\$254	\$254	\$243	\$196	\$143	\$243	\$243	\$233	\$243	\$159	\$233	\$216	\$227	\$233	\$233	\$216	\$210	\$233	\$143	\$243	\$106	\$243	\$143	\$196	\$143	\$143														
1.0	Project Design Management	-	-	621	584	540	456	288	494	24	1,100	586	42	24	72	20	-	-	-	-	-	264	-	-	-	-	464	5,579	\$ 1,140,489	\$ 1,843,258	\$ 100,620	\$ -	\$ -	\$ -	\$ -	\$ 5,031	\$ -	\$ -	\$ 3,089,398		
1.1	Design Management				416	176					1,008																1,600	\$ 280,432	\$ 823,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,103,632			
1.2	Design Procurement			30	80	40	40	40	40																		270	\$ 60,330	\$ 69,480	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 129,810			
1.5	Design Review			135			272	152	274	24		578	30	8	32	20											1,525	\$ 378,859	\$ 741,158	\$ 66,220	\$ -	\$ -	\$ -	\$ -	\$ 3,311	\$ -	\$ -	\$ 1,189,548			
1.6	Site Layout Maps				60	60																					240	\$ 39,360	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 39,360			
1.7	Review Coordination				20	264					36											264					584	\$ 79,036	\$ 50,960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 129,996			
1.11	Design Advice			456			144	96	180			8	12	16	40												952	\$ 239,872	\$ 121,668	\$ 34,400	\$ -	\$ -	\$ -	\$ -	\$ 1,720	\$ -	\$ -	\$ 397,660			
1.14	Bid Phase Services				8						8																16	\$ 2,984	\$ 13,720	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,704			
1.15	Front-End Document Review																										0	\$ -	\$ 23,072	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,072			
1.16	Basemap Maintenance										48																344	\$ 92	\$ 59,616	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 59,616			
2.0	Construction Coordination	-	-	8	440	-	306	306	-	-	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,240	\$ 278,800	\$ 166,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 445,400			
2.1	Construction Meetings																										0	\$ -	\$ 19,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,600			
2.2	Construction Coordination				408		306	306			180																1,200	\$ 270,168	\$ 147,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 417,168			
2.3	SCVWD Coordination			8	32																						40	\$ 8,632	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,632			
3.0	Funding and Financing	-	-	-	232	384	-	-	-	-	-	-	-	-	-	-	-	-	1,600	-	-	880	-	-	-	-	3,096	\$ 595,072	\$ 83,790	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 678,862			
3.1	SRF Applications				136	272													800								1,208	\$ 264,816	\$ 33,320	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 298,136			
3.2	City Budget Updates				96	112																					208	\$ 36,576	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,576			
3.3	Package 1 SRF Administration																		100			100					200	\$ 35,600	\$ 6,370	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,970			
3.4	Package 2 SRF Administration																		700			780					1,480	\$ 258,080	\$ 44,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 302,180			
4.0	Project Management	81	24	729	288	288	-	-	-	-	-	-	-	-	-	-	-	-	-	576	-	-	-	-	-	-	1,977	\$ 400,563	\$ 200,232	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600,795			
4.1	Invoicing				72															576							648	\$ 104,760	\$ 104,112	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 208,872			
4.2	Contract Management	81			72	288																						729	\$ 142,515	\$ 19,224	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 161,739		
4.3	Team Management				576																							576	\$ 146,880	\$ 38,448	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 185,328		
4.4	Quality Management			24																								24	\$ 6,408	\$ 38,448	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44,856		
5.0	Program Controls	-	-	134	1,872	785	20	20	-	-	-	-	-	-	-	-	-	-	-	-	1,170	288	61	1,602	396	-	6,348	\$ 1,215,491	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,215,491		
5.1	Program Management Information System																											594	\$ 351,846	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 351,846		
5.2	Document Management																											432	\$ 68,688	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 68,688		
5.8	Project Schedules				475																							528	\$ 111,355	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 111,355		
5.10	Cost Tracking																											1,218	\$ 225,540	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 225,540		
5.11	Budget Management			40	117	59	20	20																				256	\$ 53,352	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 53,352		
5.13	Program Change Analysis			40	80	36																						188	\$ 40,240	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,240		
5.14	Reporting			54	1,200	690																						1,944	\$ 364,470	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 364,470		
6.0	Regulatory and Environmental Compliance	-	-	-	763	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	763	\$ 157,137	\$ -	\$ -	\$ -	\$ -	\$ 200,226	\$ 149,652	\$ 17,494						

Tasks		Labor																ODCs	Total	
Task #	Task Description	Deputy PgM	Design Manager	Contract Administrator	ACS Lead	I&C Engineer	Commissioning Lead	O&M Reviewer	Civil Reviewer	Process - Tertiary Treatment Reviewer / Lab Advisor	Electrical Reviewer	Mechanical Reviewer	Constructability Reviewer	Rehab Advisor	Process - Secondary Treatment Reviewer	Process - Thickening, Anaerobic Digestion, Dewatering Reviewer	Total Labor Costs	ODC	Total Labor Costs + ODCs	
		Reddy	Oriol	Fowler	Inman	Hise	Heaton	Long	Fiorucci	Sathyamoorthy	Forbes	Nelson	Triplett	Wurst	Henken	Carr				
		Average Escalated Bill Rate	\$267	\$245	\$111	\$245	\$227	\$227	\$227	\$255	\$255	\$245	\$245	\$206	\$245	\$289				\$267
		2016/17 Bill Rate	\$254	\$233	\$106	\$233	\$216	\$216	\$216	\$243	\$243	\$233	\$233	\$196	\$233	\$275				\$254
1.0	Project Design Management	230	3,774	-	780	-	-	52	712	156	406	518	490	290	68	56	\$ 1,843,258	\$ -	\$ 1,843,258	
1.1	Design Management		3,360														\$ 823,200	\$ -	\$ 823,200	
1.2	Design Procurement	40	150											90			\$ 69,480	\$ -	\$ 69,480	
1.5	Design Review	38			732			40	528	148	394	506	378	152	68	56	\$ 741,158	\$ -	\$ 741,158	
1.6	Site Layout Maps																\$ -	\$ -	\$ -	
1.7	Review Coordination		208														\$ 50,960	\$ -	\$ 50,960	
1.11	Design Advice	152			48			12	184	8	12	12		48			\$ 121,668	\$ -	\$ 121,668	
1.14	Bid Phase Services		56														\$ 13,720	\$ -	\$ 13,720	
1.16	Front-End Document Review																\$ 23,072	\$ -	\$ 23,072	
1.16	Basemap Maintenance												112				\$ -	\$ -	\$ -	
2.0	Construction Coordination	-	680	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ 166,600	\$ -	\$ 166,600	
2.1	Construction Meetings		80			-	-										\$ 19,600	\$ -	\$ 19,600	
2.2	Construction Coordination		600			-	-										\$ 147,000	\$ -	\$ 147,000	
2.3	SCVWD Coordination					-	-										\$ -	\$ -	\$ -	
3.0	Funding and Financing	-	342	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ 83,790	\$ -	\$ 83,790	
3.1	SRF Applications		136														\$ 33,320	\$ -	\$ 33,320	
3.2	City Budget Updates																\$ -	\$ -	\$ -	
3.3	Package 1 SRF Administration		26														\$ 6,370	\$ -	\$ 6,370	
3.4	Package 2 SRF Administration		180														\$ 44,100	\$ -	\$ 44,100	
4.0	Project Management	432	216	288	-	-	-	-	-	-	-	-	-	-	-	-	\$ 200,232	\$ -	\$ 200,232	
4.1	Invoicing	72	216	288													\$ 104,112	\$ -	\$ 104,112	
4.2	Contract Management	72															\$ 19,224	\$ -	\$ 19,224	
4.3	Team Management	144															\$ 38,448	\$ -	\$ 38,448	
4.4	Quality Management	144															\$ 38,448	\$ -	\$ 38,448	
5.0	Program Controls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	
5.1	Program Management Information System																\$ -	\$ -	\$ -	
5.2	Document management																\$ -	\$ -	\$ -	
5.8	Project Schedules																\$ -	\$ -	\$ -	
5.10	Cost Tracking																\$ -	\$ -	\$ -	
5.11	Budget Management																\$ -	\$ -	\$ -	
5.13	Program Change Analysis																\$ -	\$ -	\$ -	
5.14	Reporting																\$ -	\$ -	\$ -	
6.0	Regulatory and Environmental Compliance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	
6.1	Permit Review during Design																\$ -	\$ -	\$ -	
6.3	Permit Compliance Tracking																\$ -	\$ -	\$ -	
6.6	Permit Review during Construction																\$ -	\$ -	\$ -	
6.7	Nesting Bird Deterrence																\$ -	\$ -	\$ -	
6.8	Mitigation Plant Procurement																\$ -	\$ -	\$ -	
7.0	Public Outreach Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	
7.2	Outreach Coordination																\$ -	\$ -	\$ -	
7.5	Program Website																\$ -	\$ -	\$ -	
7.6	Quarterly Report																\$ -	\$ -	\$ -	
8.0	Project / Program Coordination	122	688	-	72	-	-	-	-	-	-	-	-	-	-	-	\$ 218,774	\$ -	\$ 218,774	
8.1	Program Meetings	122	648		72												\$ 208,974	\$ -	\$ 208,974	
8.2	Program Logs																\$ -	\$ -	\$ -	
8.11	Kick off Meetings		40														\$ 9,800	\$ -	\$ 9,800	
9.0	Commissioning	-	152	-	156	996	1,150	-	-	-	-	-	-	-	-	-	\$ 562,602	\$ -	\$ 562,602	
9.2	Pre-Construction Coordination																\$ -	\$ -	\$ -	
9.1	Planning Phase		32		12		184										\$ 52,548	\$ -	\$ 52,548	
9.2	Commissioning Phase		24		56	574	388										\$ 237,974	\$ -	\$ 237,974	
9.3	Process Start-Up Phase		96		88	422	398										\$ 231,220	\$ -	\$ 231,220	
9.14	Hypo Project Completion						180										\$ 40,860	\$ -	\$ 40,860	
10.0	Automation and Control System Services	-	-	-	457	-	-	-	-	-	-	-	-	-	-	-	\$ 111,965	\$ -	\$ 111,965	
10.10	ACS Design Workshops				112												\$ 27,440	\$ -	\$ 27,440	
10.11	Control System Algorithms				147												\$ 36,015	\$ -	\$ 36,015	
10.15	ACS Report Development				64												\$ 15,680	\$ -	\$ 15,680	
10.24	Process Optimization and Analysis Development				60												\$ 14,700	\$ -	\$ 14,700	
10.25	Headworks and Primary Treatment - Package 2 Algorithm Implementation				24												\$ 5,880	\$ -	\$ 5,880	
10.26	Admin Building ACS Support				50												\$ 12,250	\$ -	\$ 12,250	
11.0	Other Direct Costs																\$ -	\$ 109,108	\$ 109,108	
11.0	Other Direct Costs																\$ -	\$ 109,108	\$ 109,108	
	Proposal Subtotal	784	5,852	288	1,415	996	1,150	52	712	156	406	518	490	290	68	56	\$ 3,187,221	\$ 109,108	\$ 3,296,329	

City of Sunnyvale

Program Management Services for a New WPCP

Ekster

Tasks		Labor			ODCs	Total
Task #	Task Description	Automation Engineer	Total Hours	Total Labor Costs	Other Direct Costs	Total Subcontract Value
		Ekster				
	Current Rate (2016-17)	205				
	Average Escalated Bill Rate	\$215				
1.0	Project Design Management	468	468	\$ 100,620	\$ -	\$ 100,620
1.1	Design Management		-	\$ -		\$ -
1.2	Design Procurement		-	\$ -		\$ -
1.5	Design Review	308	308	\$ 66,220		\$ 66,220
1.6	Site Layout Maps		-	\$ -		\$ -
1.7	Review Coordination		-	\$ -		\$ -
1.11	Design Advice	160	160	\$ 34,400		\$ 34,400
1.14	Bid Phase Services		-	\$ -		\$ -
1.16	Front-End Document Review		-	\$ -		\$ -
1.16	Basemap Maintenance		-	\$ -		\$ -
2.0	Construction Coordination	-	-	\$ -	\$ -	\$ -
2.1	Construction Meetings		-	\$ -		\$ -
2.2	Construction Coordination		-	\$ -		\$ -
2.3	SCVWD Coordination		-	\$ -		\$ -
3.0	Funding and Financing	-	-	\$ -	\$ -	\$ -
3.1	SRF Applications		-	\$ -		\$ -
3.2	City Budget Updates		-	\$ -		\$ -
3.3	Package 1 SRF Administration		-	\$ -		\$ -
3.4	Package 2 SRF Administration		-	\$ -		\$ -
4.0	Project Management	-	-	\$ -	\$ -	\$ -
4.1	Invoicing		-	\$ -		\$ -
4.2	Contract Management		-	\$ -		\$ -
4.3	Team Management		-	\$ -		\$ -
4.4	Quality Management		-	\$ -		\$ -
5.0	Program Controls	-	-	\$ -	\$ -	\$ -
5.1	Program Management Information System		-	\$ -		\$ -
5.2	Document management		-	\$ -		\$ -
5.8	Project Schedules		-	\$ -		\$ -
5.10	Cost Tracking		-	\$ -		\$ -
5.11	Budget Management		-	\$ -		\$ -
5.13	Program Change Analysis		-	\$ -		\$ -
5.14	Reporting		-	\$ -		\$ -
6.0	Regulatory and Environmental Compliance	-	-	\$ -	\$ -	\$ -
6.1	Permit Review during Design		-	\$ -		\$ -
6.3	Permit Compliance Tracking		-	\$ -		\$ -
6.6	Permit Review during Construction		-	\$ -		\$ -
6.7	Nesting Bird Deterrence		-	\$ -		\$ -
6.8	Mitigation Plant Procurement		-	\$ -		\$ -
7.0	Public Outreach Support	-	-	\$ -	\$ -	\$ -
7.2	Outreach Coordination		-	\$ -		\$ -
7.5	Program Website		-	\$ -		\$ -
7.6	Quarterly Report		-	\$ -		\$ -
8.0	Project / Program Coordination	-	-	\$ -	\$ -	\$ -
8.1	Program Meetings		-	\$ -		\$ -
8.2	Program Logs		-	\$ -		\$ -
8.11	Teaming		-	\$ -		\$ -
9.0	Commissioning	572	572	\$ 122,980	\$ -	\$ 122,980
9.2	Pre-Construction Coordination		-	\$ -	\$ -	\$ -
9.1	Planning Phase	24	24	\$ 5,160	\$ -	\$ 5,160
9.2	Commissioning Phase	120	120	\$ 25,800	\$ -	\$ 25,800
9.3	Process Start-Up Phase	268	268	\$ 57,620	\$ -	\$ 57,620
9.14	Hypo Project Completion	160	160	\$ 34,400		\$ 34,400
10.0	Automation and Control System Services	397	397	\$ 85,355	\$ -	\$ 85,355
10.10	ACS Design Workshops	56	56	\$ 12,040		\$ 12,040
10.11	Control System Algorithms	177	177	\$ 38,055		\$ 38,055
10.15	ACS Report Development	32	32	\$ 6,880		\$ 6,880
10.24	Process Optimization and Analysis Development	84	84	\$ 18,060		\$ 18,060
10.25	Headworks and Primary Treatment - Package 2 Algorithm Implementation	48	48	\$ 10,320		\$ 10,320
11.0	Other Direct Costs	-	-	\$ -	\$ 5,200	\$ 5,200
			-	\$ -	\$ 5,200	\$ 5,200
	Proposal Subtotal	1,437	1,437	\$ 308,955	\$ 5,200	\$ 314,155

City of Sunnyvale

Program Management Services for a New WPCP

Katz

Tasks		Labor				ODCs	Total
Task #	Task Description	Account Supervisor	Senior Account Executive	Total Hours	Total Labor Costs	Other Direct Costs	Total Subcontract Value
		Emily Powell	Miranda Iglesias				
		Current Rate (2016-17)	138				
		Average Escalated Bill Rate	\$145				
1.0	Project Design Management	-	-	-	\$ -	\$ -	\$ -
1.1	Design Management			-	\$ -		\$ -
1.2	Design Procurement			-	\$ -		\$ -
1.5	Design Review			-	\$ -		\$ -
1.6	Site Layout Maps			-	\$ -		\$ -
1.7	Review Coordination			-	\$ -		\$ -
1.11	Design Advice			-	\$ -		\$ -
1.14	Bid Phase Services			-	\$ -		\$ -
1.16	Front-End Document Review			-	\$ -		\$ -
1.16	Basemap Maintenance			-	\$ -		\$ -
2.0	Construction Coordination	-	-	-	\$ -	\$ -	\$ -
2.1	Construction Meetings			-	\$ -		\$ -
2.2	Construction Coordination			-	\$ -		\$ -
2.3	SCVWD Coordination			-	\$ -		\$ -
3.0	Funding and Financing	-	-	-	\$ -	\$ -	\$ -
3.1	SRF Applications			-	\$ -		\$ -
3.2	City Budget Updates			-	\$ -		\$ -
3.3	Package 1 SRF Administration			-	\$ -		\$ -
3.4	Package 2 SRF Administration			-	\$ -		\$ -
4.0	Project Management	-	-	-	\$ -	\$ -	\$ -
4.1	Invoicing			-	\$ -		\$ -
4.2	Contract Management			-	\$ -		\$ -
4.3	Team Management			-	\$ -		\$ -
4.4	Quality Management			-	\$ -		\$ -
5.0	Program Controls	-	-	-	\$ -	\$ -	\$ -
5.1	Program Management Information System			-	\$ -		\$ -
5.2	Document management			-	\$ -		\$ -
5.8	Project Schedules			-	\$ -		\$ -
5.10	Cost Tracking			-	\$ -		\$ -
5.11	Budget Management			-	\$ -		\$ -
5.13	Program Change Analysis			-	\$ -		\$ -
5.14	Reporting			-	\$ -		\$ -
6.0	Regulatory and Environmental Compliance	-	-	-	\$ -	\$ -	\$ -
6.1	Permit Review during Design			-	\$ -		\$ -
6.3	Permit Compliance Tracking			-	\$ -		\$ -
6.6	Permit Review during Construction			-	\$ -		\$ -
6.7	Nesting Bird Deterrence			-	\$ -		\$ -
6.8	Mitigation Plant Procurement			-	\$ -		\$ -
7.0	Public Outreach Support	511	58	569	\$ 90,655	\$ -	\$ 90,655
7.2	Outreach Coordination	230	58	288	\$ 45,446		\$ 45,446
7.5	Program Website	173		173	\$ 27,821		\$ 27,821
7.6	Quarterly Report	108		108	\$ 17,388		\$ 17,388
8.0	Project / Program Coordination	72	-	72	\$ 11,592	\$ -	\$ 11,592
8.1	Program Meetings	72		72	\$ 11,592		\$ 11,592
8.2	Program Logs			-	\$ -		\$ -
8.11	Teaming			-	\$ -		\$ -
9.0	Commissioning	-	-	-	\$ -	\$ -	\$ -
9.2	Pre-Construction Coordination			-	\$ -		\$ -
9.1	Planning Phase			-	\$ -		\$ -
9.2	Commissioning Phase			-	\$ -		\$ -
9.3	Process Start-Up Phase			-	\$ -		\$ -
9.14	Hypo Project Completion				\$ -		\$ -
10.0	Automation and Control System Services	-	-	-	\$ -	\$ -	\$ -
10.10	ACS Design Workshops			-	\$ -		\$ -
10.11	Control System Algorithms			-	\$ -		\$ -
10.15	ACS Report Development			-	\$ -		\$ -
10.24	Process Optimization and Analysis Development			-	\$ -		\$ -
10.25	Headworks and Primary Treatment - Package 2 Algorithm Implementation			-	\$ -		\$ -
11.0	Other Direct Costs	-	-	-	\$ -	\$ 2,250	\$ 2,250
				-	\$ -	\$ 2,250	\$ 2,250
	Proposal Subtotal	583	58	641	\$ 102,247	\$ 2,250	\$ 104,497

City of Sunnyvale

Program Management Services for a New WPCP

LWA

Tasks		Labor				ODCs	Total
Task #	Task Description	Associate	Associate	Total Hours	Total Labor Costs	Other Direct Costs	Total Subcontract Value
		Denise Conners	Sandy Mathews				
		Current Rate (2016-17)	243				
		Average Escalated Bill Rate	\$255				
1.0	Project Design Management	-	-	-	\$ -	\$ -	\$ -
1.1	Design Management			-	\$ -		\$ -
1.2	Design Procurement			-	\$ -		\$ -
1.5	Design Review			-	\$ -		\$ -
1.6	Site Layout Maps			-	\$ -		\$ -
1.7	Review Coordination			-	\$ -		\$ -
1.11	Design Advice			-	\$ -		\$ -
1.14	Bid Phase Services			-	\$ -		\$ -
1.16	Front-End Document Review			-	\$ -		\$ -
1.16	Basemap Maintenance			-	\$ -		\$ -
2.0	Construction Coordination	-	-	-	\$ -	\$ -	\$ -
2.1	Construction Meetings			-	\$ -		\$ -
2.2	Construction Coordination			-	\$ -		\$ -
2.3	SCVWD Coordination			-	\$ -		\$ -
3.0	Funding and Financing	-	-	-	\$ -	\$ -	\$ -
3.1	SRF Applications			-	\$ -		\$ -
3.2	City Budget Updates			-	\$ -		\$ -
3.3	Package 1 SRF Administration			-	\$ -		\$ -
3.4	Package 2 SRF Administration			-	\$ -		\$ -
4.0	Project Management	-	-	-	\$ -	\$ -	\$ -
4.1	Invoicing			-	\$ -		\$ -
4.2	Contract Management			-	\$ -		\$ -
4.3	Team Management			-	\$ -		\$ -
4.4	Quality Management			-	\$ -		\$ -
5.0	Program Controls	-	-	-	\$ -	\$ -	\$ -
5.1	Program Management Information System			-	\$ -		\$ -
5.2	Document management			-	\$ -		\$ -
5.8	Project Schedules			-	\$ -		\$ -
5.10	Cost Tracking			-	\$ -		\$ -
5.11	Budget Management			-	\$ -		\$ -
5.13	Program Change Analysis			-	\$ -		\$ -
5.14	Reporting			-	\$ -		\$ -
6.0	Regulatory and Environmental Compliance	562	223	785	\$ 200,226	\$ -	\$ 200,226
6.1	Permit Review during Design	340	170	510	\$ 130,050		\$ 130,050
6.3	Permit Compliance Tracking	115		115	\$ 29,376		\$ 29,376
6.6	Permit Review during Construction	107	53	160	\$ 40,800		\$ 40,800
6.7	Nesting Bird Deterrence			-	\$ -		\$ -
6.8	Mitigation Plant Procurement			-	\$ -		\$ -
7.0	Public Outreach Support	-	-	-	\$ -	\$ -	\$ -
7.2	Outreach Coordination			-	\$ -		\$ -
7.5	Program Website			-	\$ -		\$ -
7.6	Quarterly Report			-	\$ -		\$ -
8.0	Project / Program Coordination	-	-	-	\$ -	\$ -	\$ -
8.1	Program Meetings			-	\$ -		\$ -
8.2	Program Logs			-	\$ -		\$ -
8.11	Teaming			-	\$ -		\$ -
9.0	Commissioning	-	-	-	\$ -	\$ -	\$ -
9.2	Pre-Construction Coordination			-	\$ -		\$ -
9.1	Planning Phase			-	\$ -		\$ -
9.2	Commissioning Phase			-	\$ -		\$ -
9.3	Process Start-Up Phase			-	\$ -		\$ -
9.14	Hypo Project Completion			-	\$ -		\$ -
10.0	Automation and Control System Services	-	-	-	\$ -	\$ -	\$ -
10.10	ACS Design Workshops			-	\$ -		\$ -
10.11	Control System Algorithms			-	\$ -		\$ -
10.15	ACS Report Development			-	\$ -		\$ -
10.24	Process Optimization and Analysis Development			-	\$ -		\$ -
10.25	Headworks and Primary Treatment - Package 2 Algorithm Implementation			-	\$ -		\$ -
11.0	Other Direct Costs	-	-	-	\$ -	\$ 500	\$ 500
					\$ -	\$ 500	\$ 500
	Proposal Subtotal	562	223	785	\$ 200,226	\$ 500	\$ 200,726

City of Sunnyvale

Program Management Services for a New WPCP

HTH

Tasks		Labor					ODCs	Total
Task #	Task Description	Principal	Senior Ecologist 1	Senior Ecologist 1	Total Hours	Total Labor Costs	Other Direct Costs	Total Subcontract Value
		Steve Rottenborn	Gavin Archbald	Patrick Stone				
		Current Rate (2016-17)	151	151				
		Average Escalated Bill Rate	\$159	\$159				
1.0	Project Design Management	-	-	-	-	\$ -	\$ -	\$ -
1.1	Design Management				-	\$ -		\$ -
1.2	Design Procurement				-	\$ -		\$ -
1.5	Design Review				-	\$ -		\$ -
1.6	Site Layout Maps				-	\$ -		\$ -
1.7	Review Coordination				-	\$ -		\$ -
1.11	Design Advice				-	\$ -		\$ -
1.14	Bid Phase Services				-	\$ -		\$ -
1.16	Front-End Document Review				-	\$ -		\$ -
1.16	Basemap Maintenance				-	\$ -		\$ -
2.0	Construction Coordination	-	-	-	-	\$ -	\$ -	\$ -
2.1	Construction Meetings				-	\$ -		\$ -
2.2	Construction Coordination				-	\$ -		\$ -
2.3	SCVWD Coordination				-	\$ -		\$ -
3.0	Funding and Financing	-	-	-	-	\$ -	\$ -	\$ -
3.1	SRF Applications				-	\$ -		\$ -
3.2	City Budget Updates				-	\$ -		\$ -
3.3	Package 1 SRF Administration				-	\$ -		\$ -
3.4	Package 2 SRF Administration				-	\$ -		\$ -
4.0	Project Management	-	-	-	-	\$ -	\$ -	\$ -
4.1	Invoicing				-	\$ -		\$ -
4.2	Contract Management				-	\$ -		\$ -
4.3	Team Management				-	\$ -		\$ -
4.4	Quality Management				-	\$ -		\$ -
5.0	Program Controls	-	-	-	-	\$ -	\$ -	\$ -
5.1	Program Management Information System				-	\$ -		\$ -
5.2	Document management				-	\$ -		\$ -
5.8	Project Schedules				-	\$ -		\$ -
5.10	Cost Tracking				-	\$ -		\$ -
5.11	Budget Management				-	\$ -		\$ -
5.13	Program Change Analysis				-	\$ -		\$ -
5.14	Reporting				-	\$ -		\$ -
6.0	Regulatory and Environmental Compliance	582	40	52	674	\$ 149,652	\$ -	\$ 149,652
6.1	Permit Review during Design	306			306	\$ 70,992		\$ 70,992
6.3	Permit Compliance Tracking				-	\$ -		\$ -
6.6	Permit Review during Construction	96			96	\$ 22,272		\$ 22,272
6.7	Nesting Bird Deterrence	180		52	232	\$ 50,028		\$ 50,028
6.8	Mitigation Plant Procurement		40		40	\$ 6,360		\$ 6,360
7.0	Public Outreach Support	-	-	-	-	\$ -	\$ -	\$ -
7.2	Outreach Coordination				-	\$ -		\$ -
7.5	Program Website				-	\$ -		\$ -
7.6	Quarterly Report				-	\$ -		\$ -
8.0	Project / Program Coordination	-	-	-	-	\$ -	\$ -	\$ -
8.1	Program Meetings				-	\$ -		\$ -
8.2	Program Logs				-	\$ -		\$ -
8.11	Teaming				-	\$ -		\$ -
9.0	Commissioning	-	-	-	-	\$ -	\$ -	\$ -
9.2	Pre-Construction Coordination				-	\$ -		\$ -
9.1	Planning Phase				-	\$ -		\$ -
9.2	Commissioning Phase				-	\$ -		\$ -
9.3	Process Start-Up Phase				-	\$ -		\$ -
9.14	Hypo Project Completion				-	\$ -		\$ -
10.0	Automation and Control System Services	-	-	-	-	\$ -	\$ -	\$ -
10.10	ACS Design Workshops				-	\$ -		\$ -
10.11	Control System Algorithms				-	\$ -		\$ -
10.15	ACS Report Development				-	\$ -		\$ -
10.24	Process Optimization and Analysis Development				-	\$ -		\$ -
10.25	Headworks and Primary Treatment - Package 2 Algorithm Implementation				-	\$ -		\$ -
11.0	Other Direct Costs	-	-	-	-	\$ -	\$ 12,000	\$ 12,000
					-	\$ -	\$ 12,000	\$ 12,000
	Proposal Subtotal	582	40	52	674	\$ 149,652	\$ 12,000	\$ 161,652

Billing Rate Schedule

Effective April 1, 2017

The following rates are applicable for CDM Smith and Black & Veatch.

PROFESSIONAL AND SUPPORT SERVICES	HOURLY RATES
Senior Vice President (Grade 10)	\$275
Vice President (Grade 9)	\$254
Principal, Associate & Senior Engineer/Scientist (Grade 8)	\$243
Senior Engineer/Scientist (Grade 7)	\$233
Senior Engineer/Scientist (Grade 6)	\$216
Engineer/Scientist (Grade 5)	\$196
Engineer/Scientist (Grade 4)	\$159
Staff Engineer/Scientist (Grade 1, 2, & 3)	\$143
Draftsperson/Designer (DNDF1- DNDF8)	\$116
Contract/Project Administrator (FNCA5-8, ASPR8)	\$143
Technical Editor (CDMK5 – CMMK8)	\$143
Secretary/Word Processor (ASWP1-ASWP5)	\$116
Administrative Assistant (ASAD1-ASAD5)	\$106
Technician/Clerk (TEGN1-3)	\$79

The following table provides the hourly rates of additional team members/sub-consultants.

Name	Sub-consultant	Hourly Rate
Alex Ekster	Ekster & Associates	\$205

Larry Walker Associates	
Personnel	Hourly Rate
President	\$291.00
Vice President	\$270.00
Associates	\$243.00
Senior Staff	\$217.00
Project Staff 2A	\$196.00
Project Staff 2B	\$175.00
Project Staff 1A	\$159.00
Project Staff 1B	\$138.00
Contract Administrator	\$148.00
Administrative	\$79.00

Katz Associates	
Personnel	Hourly Rate
CEO	\$254.00
President	\$243.00
Executive Vice President	\$222.00
Vice President	\$212.00
Senior Director	\$201.00
Director	\$190.00
Senior Account Supervisor	\$169.00
Account Supervisor	\$153.00
Senior Account Executive	\$138.00
Account Executive II	\$116.00
Account Executive I	\$111.00
Account Assistant	\$90.00
Graphic Designer	\$90.00
Account Coordinator	\$74.00
Project Support	\$64.00

ATS	
Personnel	Hourly Rate
Senior Archaeologist	\$195.00

The above are based on regular rates current at the time of execution of this Agreement. Hourly rates may be increased once each year beginning July 1, 2017 by up to 3% annually for the duration of the contract.

Exhibit B-3

Water Pollution Control Plant Program Management **Additional Reconstruction Program Tasks**

The City is undergoing major efforts to procure, permit, design, bid, construct, and commission the various capital improvements necessary to rebuild the Water Pollution Control Plant. As part of this effort, the City may require that the Program Management Consultant (PMC) provide the additional support services briefly enumerated in the 10 sections below. Should the City decide to utilize the PMC for such services, a separate scope and fee shall be negotiated for each required task, and a task order issued which shall be executed by the City Manager or his/her designee and the PMC. The individual task amounts specified herein are estimates and may change once scope and fee are clearly defined and agreed upon. However, the total amount of \$2,000,000 may not be exceeded without City Council approval.

<u>Task</u>	<u>Est. Not-to-exceed Amount</u>
1. Funding/Budget/Finance/Records and Schedule and Controls Management - This task relates to securing and administering alternative finance and to modification of the Program Management Information System, as well as supplemental estimating, scheduling, and contract administration activities. Tasks may also include analysis and tracking of bonds and loan disbursements.	\$300,000
2. Evaluate and Manage Technical Design Issues – This task relates to procurement and oversight of design consultants; independent technical evaluations; and preparation of supplemental specifications, design concepts, and technical information.	\$300,000
3. Process Control Implementation – This task relates to advice and implementation of automation and control system upgrades during design and construction. ACS oversight budgets will be determined once design has progressed.	\$200,000
4. Permitting and Compliance – This task relates to compliance with CEQA and other permits. Activities may include coordination with regulatory agencies, archaeological evaluation, or work required to fulfill the Habitat Mitigation and Monitoring Plan.	\$400,000
5. Construction Planning and Oversight Management – This task relates to services performed by the PMC for construction activities.	\$200,000

6. Stakeholder Management – This task relates to preparation of public outreach materials, coordination of public outreach events, and overall coordination of the Program across projects, firms, and City departments. Activities may include preparation of high-level Program documents and presentations to City Council.	\$400,000
7. Commissioning – This task relates to commissioning and start-up of completed construction. Commissioning budgets will be determined once design has progressed.	\$200,000
TOTAL	\$2,000,000

Exhibit C-1
Compensation for Reimbursable Expenditures/Subconsultant Markups
WPCP Program Management Services

Printing

Printing costs for all project documentation (i.e., meeting notes, technical memos, drawings, etc.) shall be expensed at accepted industry commercial rates.

Postage/Overnight Delivery

Postage/overnight delivery costs for all project documentation shall be expensed at accepted industry commercial rates.

Travel

Expenses for staff assigned to this project required to travel by air (i.e., air travel, lodging, car rental and meals) shall be subject to the following per diem rates and limits:

- Airfare and associated fees shall be reimbursed at the cost of Coach Class only. Business Class or First Class travel costs exceeding the Coach Class fare shall be at no additional cost to the CITY.
- Lodging shall be reimbursed at the per diem rate of one-hundred seventy-five dollars (\$175) per night, inclusive of taxes.
- Rental car expenses, including applicable taxes, fees and fuel, shall be reimbursed at the per diem rate of eighty-five dollars (\$85) per day (assumes rental of mid-size car).
- Meals and incidental expenses, including applicable taxes and gratuities, shall be reimbursed at the per diem rate of (\$40) per day. Reimbursement for alcoholic beverages or entertainment shall not be permitted.

The maximum allowable rate for mileage expenses for Northern California staff shall be at the current IRS standard mileage rate.

Other travel costs including bridge fares, parking fees and cab fare shall be reimbursed at cost.

Program Management Office

Rent, internet service, and biweekly janitorial services shall be expensed at cost. Annual lease increase in excess of 10% must be pre-approved by the City.

Program Management Information System

Unifier licenses for City, Consultant, and other firms engaged in the Program shall be paid for by Consultant and expensed at cost. Licenses must be purchased on an annual basis. The quantity of licenses purchased must be pre-approved by the City.

No other expenses are reimbursable, unless the CITY has pre-approved such expense in writing.

Subconsultant Markups

No markups shall be allowed on reimbursable expenses and the maximum markup on subconsultants shall be 5%.

CITY can reject invoices and/or request additional backup as necessary for these expenses.