

**Master City of San José Consultant Agreement
Amendment to Approved Service Order – RWF Capital Projects
Cover Page**

1a. CPMS Contract No.: 7745 1b. Master Agreement AC No.: 27585

2. First Second Third Fourth Amendment to Approved Service Order No. 04

3. Consultant's Name: AECOM Technical Services, Inc. ("Consultant")

Project Name: Outfall Channel and Instrumentation Improvements (Detailed Design and Bid/Award Services) ("Project")

Amendment Description: This first amendment to Service Order No. 4 reallocates compensation from Task No. 1 (Project Management), Task No. 2 (Diver Inspection of Erosion beneath Outfall Weir Structure), Task No. 3 (Hazardous Materials Management Plan), and Task No. 5 (Bid and Award Period Services), to Task 4 (Detailed Design Services). It also amends the completion dates for Task No. 1, 4, and 5.

4. The above-referenced Approved Service Order is amended as follows:

- a. **Budget/Fiscal:** The original Budget/Fiscal information in Section 7 of the Approved Service Order First Revised Budget/Fiscal Attachment Second Revised Budget/Fiscal Attachment is amended to read as set forth in the attached First Second Third Revised Budget/Fiscal Attachment.
- b. **Tasks – Attachment A:** The original First Revised Second Revised Attachment A is amended to read as set forth in the attached First Second Third Revised Attachment A.
- c. **Terms and Conditions – Attachment B:** The original First Revised Second Revised Attachment B is amended to read as set forth in the attached First Second Third Revised Attachment B.
- d. **Compensation Table – Attachment C:** The original First Revised Second Revised Attachment C is amended to read as set forth in the attached First Second Third Revised Attachment C.

5. Each of the attachments to this amendment is incorporated herein by reference.

6. **Consultant Approval:** *craig smith* Date: Aug 2, 2021
[craig smith \(Aug 2, 2021 11:43 PDT\)](#)

7. **Approval as to Form (City Attorney):**

Approved Service Order Amendment Form Approved by the Office of the City Attorney

(The Maximum Service Order Compensation of the Approved Service Order, as amended, is \$100,000 or less, and the provisions of service order amendment form are not altered.)

Approved as to Form:
(Sr.) Dept. City Attorney: *Jenn Reed* Date: Aug 3, 2021

8. **City Director Approval:** *Napp Fukuda* Date: Aug 4, 2021
[Napp Fukuda \(Aug 4, 2021 10:05 PDT\)](#)

First **Second** **Third** **Revised Budget/Fiscal Attachment**

- This Revised Budget/Fiscal Attachment is attached to the First Second Third amendment to Approved Service Order No.04 issued pursuant to the Master Agreement having the above-referenced CPMS Contract No.
- The Maximum Service Order Compensation set forth on Line 7.b. of Section 7 of the Approved Service Order cover page is:

Decreased from \$ _____ to \$ _____.

Increased from \$ _____ to \$ _____.

- Section 7 of the Approved Service Order cover page is appended to read as follows:

a.	Current unencumbered amount in Master Agreement:	\$	948,027.48
b.	Service Order Compensation for this Approved Service Order Amendment:	\$	0.00
c.	New unencumbered balance in Master Agreement:	\$	948,027.48
d.	Appropriation Certification: I certify that an unexpended appropriation in the amount of the Maximum service Order Compensation is available in the following fund(s) and that such fund(s) will be encumbered to pay for this Approved Service Order.		
	Fund: <u>512</u>	Appn: <u>7678</u>	RC: <u>181253</u> Amount: <u>\$5,603.00</u>
	Fund: <u>512</u>	Appn: <u>7678</u>	RC: <u>181254</u> Amount: <u>(\$5,603.00)</u>
	Division Analyst Approval: <u>Mary Crippen</u>	Date:	<u>Aug 2, 2021</u>
	Authorized Signature: <u>Harpal Singh</u>	Date:	<u>Aug 2, 2021</u>
			<small>Harpal Singh (Aug 2, 2021 11:50 PDT)</small>

First **Second** **Third** **Revised Attachment A: Tasks**

This Revised Attachment A is attached to the First Second Third amendment to Approved Service Order No. 04 issued pursuant to the Master Agreement having the above-referenced CPMS Contract No.

The tasks set forth in the original Attachment A, or in any previous amendment to the original Attachment A, are amended as set forth herein.

The Consultant shall provide the services and deliverables set forth in this **Attachment A**. The Consultant shall provide all services and deliverables required by this **Attachment A** to the satisfaction of the City's Contract Manager.

General Description of Project for which Consultant will Provide Services:

The Outfall Channel and Instrumentation Improvement Project ("Project") includes the replacement or rehabilitation of the existing outfall weir, monitoring instrumentation and equipment, and the electrical transformer located adjacent to the sulfur dioxide building ("SO2-Building"). The Project will also improve staff access and provide increased flood protection for the SO2-Building and transformer pad by raising the elevation of the existing ground around the SO2-Building. A fiber optic communications system will be installed between the SO2-Building, Daylight Station, and the Disinfection Building to provide improved communications and operational flexibility for these remote facilities.

Under Service Order No. 1, the Consultant performed a comprehensive condition assessment of the existing site conditions, equipment locations, process layout and flow, service functions, access and other features related to the Project. The Consultant also completed an alternatives analysis, conceptual design, and preliminary design (30% design documents).

The Project scope of work entails the following:

- a. Weir improvement by replacing flash boards and adding riprap, gravel, and grout to protect the weir foundation.
- b. Replacement of outdated instruments at the SO2-Building location, including placement of a new floating pump in the outfall channel and relocating the instruments currently installed on the bridge to the SO2-Building.
- c. Expanding and regrading the levee at the SO2-Building to facilitate vehicle turnaround and to protect that building's foundation. Dispose of leftover debris currently located in the work area.
- d. Replacement of the electrical transformer and pad at the SO2-Building.
- e. A fiber optic communications system between the SO2-Building, Daylight Station, and the Disinfection Building.
- f. Flow meter vault with insertion flow meters into the existing Outfall piping, followed by removal of the existing meter arrays.
- g. Finish detailed design for including extra electrical conduits within the fiber optic trench, and identify this configuration as an add alternative bid item in the completed plans and specifications.
- h. Include demolition plans for infrastructure rendered obsolete or unnecessary by Project improvements.

The objective of this Service Order No. 4 ("SO") is for the Consultant to prepare construction bid documents for the Project and support the City during the bid and award period. This SO includes the following tasks:

- Task No. 1: Project Management
 - Task No. 2: Diver Inspection of Erosion beneath Outfall Weir Structure
 - Task No. 3: Hazardous Materials Management Plan
 - Task No. 4: Detailed Design Services
 - Task No. 5: Bid and Award Period Services
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Task No. 1: Project Management

- A. Services:** Consultant's project manager ("PM") shall make staffing assignments, review and track work progress, coordinate quality management and review procedures, and serve as the primary point of contact when communicating with the City. Consultant's PM shall manage the budget, schedule and invoicing. Consultant's PM shall also prepare and maintain a log to record decisions made by City throughout the Project and manage the quality of deliverables.

Consultant shall use the document management systems used by the RWF CIP. The systems included a Microsoft SharePoint site referred to as the CIP Portal and EADOC, which is a cloud-based design and construction management software.

Consultant shall follow the City's templates and guidelines. The deliverables submitted by Consultant shall conform to the City's templates and guidelines. The City will provide access to these templates and guidelines no later than ten (10) Business Days following the Kickoff Meeting. The templates and guidelines currently available include the following:

- o CIP Cost Estimating Manual;
- o Design Guidelines;
- o Division 0 and Division 1 Specifications;
- o Meeting Agenda;
- o Meeting Minutes;
- o Project Work Plan ("PWP")
- o Project Decision Log ("PDL");
- o Project Quality Plan ("PQP");
- o Quality Management Certification;
- o Quality Review Form;
- o Risk Matrix and Assessment;
- o Technical Memorandum;

- o Technical Report; and
- o SOP Preparation Design Guidance.

Consultant shall perform the following project management activities.

1. **Daily Oversight:** Consultant shall oversee the daily management of scope, deliverables, schedule and budget.
2. **Coordination:** Consultant shall coordinate work with internal staff, subconsultants, City staff, and other City consultants as appropriate and necessary. All work performed and all work products should be coordinated with other CIP projects currently underway to avoid duplication, confusion, and conflicts.
3. **Teleconferences:** Consultant shall participate in bi-weekly status teleconferences with the City to discuss overall work progress and the status of near-term efforts and requirements. Communication that is more frequent may occur if necessary, and as requested by the City's Contract Manager. Starting with the Bid and Award Period Services task (Task 5), bi-weekly coordination teleconferences will be replaced by monthly teleconferences. This applies to the time from June 1, 2021 through October 30, 2021.
4. **Project Work Plan:** Consultant shall update and submit the PWP detailing tasks to be performed, schedule, deliverables (including their requirements and resources needed), and risk management plan. The PWP does not need to be updated monthly.
5. **Project Schedule:** Consultant shall prepare and maintain a Project schedule utilizing the Critical Path Method technique and electronic scheduling software (e.g., Primavera or Microsoft Project). The schedule shall adopt a work breakdown structure that reflects the Project scope and that is based on City Business Days for activity durations (i.e., start and finish dates) and link activities with the appropriate logic (i.e., predecessors and successors). The schedule shall include required constraints, sequences, milestones, and a baseline to track actual progress to date and anticipated future performance. No changes shall be made to the baseline without approval from the City's Contract Manager. As appropriate, Consultant shall summarize significant changes in the updated schedule from the previous submitted schedule and propose corrective actions to mitigate negative variances (i.e., delays) to the baseline as soon as they are identified. Consultant shall update the schedule on a monthly basis and submit the updated schedule with the summary of significant changes and proposed corrective actions along with Monthly Progress Reports.
6. **Health and Safety Plan:** Consultant shall update and submit the Health and Safety Plan ("HASP") for the portion of Consultant's work that will involve field work, assessments, or investigations of certain Project elements. The HASP shall describe Consultant's confined space entry program and how Consultant plans to complete field work, assessments, and/or investigations at the RWF. Consultant's HASP must comply with the CIP HASP and shall be updated as new conditions are encountered.
7. **Quality Management:** Consultant shall update and implement the Project-specific Quality Management Plan ("QMP") to support the execution of the work required by this SO. The QMP shall describe Consultant's overall quality management process, identify the quality reviewers and the review levels associated with each Project milestone and deliverable.
 - a. The quality management efforts that shall be addressed by Consultant in the QMP include:

- o Coordinating work products, milestones, and staff assigned for review activities;
 - o Conducting milestone technical and readability reviews for deliverables;
 - o Documenting comments and work product modifications in the PDL; and
 - o Completing and submitting Quality Review Forms and Quality Management Certifications for draft and final deliverables.
- b. Consultant's quality reviewers and their respective qualifications shall be identified in the QMP. Quality reviewers shall be independent (i.e., not part of Consultant's core team for the Project) and shall be qualified to provide technical reviews. Each deliverable shall be reviewed by quality reviewers for technical correctness and completeness and proofread by a technical writer for readability prior to the submittal of the deliverable to the City. Consultant shall submit a Quality Management Certification signed by the quality reviewers confirming the quality review process was completed for each draft and final deliverable. The City may request Consultant to submit additional evidence that Consultant is following the procedures in the QMP.
- c. Comments from the City's review of the Consultant's draft and final deliverables will be recorded on a Quality Review Form. Consultant shall review the City's comments, confirm with the City how Consultant shall address the comments in the next iteration of the deliverable or a subsequent deliverable, and then submit a Quality Review Form with responses to the City's comments.
8. Kickoff Meeting: Consultant shall organize and facilitate a Kickoff Meeting with City staff. Consultant's PM and the appropriate Project team members shall attend the Kickoff Meeting. Topics to be discussed at the meeting shall include the following:
- a. Introduction of key Consultant and City Project team members;
 - b. Presentation of Consultant's QMP;
 - c. Review of Consultant's understanding of the Project need and objectives;
 - d. Summary of Project scope, work plan, schedule and deliverables;
 - e. Recap of previously completed analyses, studies, and reports associated with the Project;
 - f. Discussion of other CIP or maintenance projects underway and planned that may be dependent on and/or have implications for the Project;
 - g. Additional information Consultant has deemed relevant to or necessary for Project and for which City may address by transmitting an existing document; and
 - h. Confirmation of next steps.

Consultant shall prepare an agenda and meeting materials in advance of the Kickoff Meeting and shall prepare meeting minutes following the Kickoff Meeting.

9. Progress Meetings: Consultant shall organize and facilitate bi-monthly meetings to discuss the Project's progress and any other issues as needed. Bi-Monthly meetings shall be held unless otherwise determined by the City. Topics discussed at the bi-monthly meetings shall be determined in collaboration with the City. Consultant shall prepare agendas and meeting materials in advance

of the bi-monthly meetings and shall prepare meeting minutes following each bi-monthly meeting.

10. **Risk Register:** Consultant shall prepare and maintain a Risk Register that identifies project risks, probabilities, mitigation measures, and ownership using the Program's Risk Matrix and Assessment template. The Risk Register shall list interfaces with other projects, possible schedule impacts, and contingency plans. The Risk Register shall be updated on a monthly basis and submitted with Monthly Progress Reports.

11. **Project Decision Log:** Consultant shall prepare and maintain a PDL that documents the City's comments and decisions made related to the Project and Consultant's work. As applicable, the PDL shall reference other documents such as meeting minutes, technical memoranda, and reports for all decisions made. The PDL shall be updated on a monthly basis and submitted with Monthly Progress Reports.

12. **Monthly Progress Reports:** Consultant shall prepare and submit a Monthly Progress Report by the tenth of each month, unless requested otherwise by the City's Contract Manager. The Monthly Progress Report shall be a brief written summary of the progress made on each task, estimate the overall task's percent completion, and include the status of each deliverable. The Monthly Progress Report shall also include any significant issues encountered, risks, or concerns Consultant has (e.g., anticipates difficulty meeting deadline for work due within the next 30 days for some reason beyond their control).

13. **Monthly Invoices:** Consultant shall prepare and submit invoices on a monthly basis by the tenth of each month, unless requested otherwise by the City's Contract Manager. The invoices shall be accompanied by the Monthly Progress Report that describes the work completed during the invoice's billing period.

B. Deliverables: Consultant shall provide the following documents to the City's Contract Manager.

1. **PWP:**
 - a. A draft updated PWP shall be provided in an electronic editable file format within ten (10) Business Days from issuance of Notice to Proceed ("NTP"). Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments.
 - b. The final PWP addressing City comments shall be provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.
2. **Schedule:**
 - a. The initial schedule shall be provided in an electronic editable file format and PDF no later than the Kickoff Meeting.
 - b. Updated schedules, including summaries of significant changes and proposed corrective actions, shall be provided as an electronic editable file and as a PDF file submitted along with Monthly Progress Reports.
3. **HASP:**
 - a. A draft updated HASP shall be provided in an electronic editable file format at least twenty (20) Business Days prior to first scheduled field work, assessment, or investigation. Consultant shall allow City a minimum of ten (10) Business Days to review, compile, and

- provide comments.
- b. The final HASP addressing City comments shall be provided as an electronic editable file and as a PDF file within ten (10) Business Days after receipt of City comments.
 - c. Updated plans shall be provided, as new conditions are encountered and/or as requested by the City.
4. QMP:
- a. A draft updated QMP shall be provided in an electronic editable file format when the draft PWP is provided to City. Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments. The draft QMP can be included in the draft PWP.
 - b. The final QMP addressing City comments shall be provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments. The final QMP can be included in the final PWP.
5. A completed Quality Management Certification shall be submitted along with each draft and final deliverable.
6. A Quality Review Form with Consultant's responses to the City's comments shall be submitted within five (5) Business Days after receipt of City comments on the draft deliverable.
7. Kickoff and progress meeting agendas and materials (e.g., handouts and presentation):
- a. The draft agenda and materials for kickoff and monthly/bi-monthly progress meetings shall be provided in an electronic editable file format five (5) Business Days in advance of the meeting date. Consultant shall allow City three (3) Business Days to review, compile, and provide comments. Agendas for bi-weekly teleconferences will be submitted two (2) Business Days in advance of the meeting date.
 - b. The final agenda and materials addressing City comments shall be provided as electronic editable files and as PDF files no later than one (1) Business Day before the meeting. Consultant shall also provide sufficient printed copies of the final agenda and any handouts for meeting attendees for those meetings held in person at the RWF.
8. Kickoff and progress meeting minutes:
- a. Draft minutes shall be provided in an electronic editable file format within five (5) Business Days after the meeting. Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments.
 - b. Final minutes addressing City comments shall be provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.
9. Risk Register:
- a. The initial Risk Register shall be provided within thirty (30) Business Days of the NTP in an electronic editable file format.
 - b. An updated risk register shall be provided monthly as an electronic editable file and as a

PDF file with each Monthly Progress Report.

10. PDL:
 - a. The initial PDF shall be provided within thirty (30) Business Days of the NTP in an electronic editable file format.
 - b. An updated PDL shall be provided monthly shall be provided as an electronic editable file and as a PDF file with each Monthly Progress Report.
11. Monthly Progress Reports shall be provided as a PDF file.
12. Monthly invoices shall be provided as a PDF file with each Monthly Progress Report.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following times is marked:

- On or before the following date: November 30, 2021.
- On or before ____ Business Days from _____.

Task No. 2: Diver Inspection of Erosion beneath Outfall Weir Structure

A. Services: Consultant shall inspect the status of soil erosion beneath the outfall channel weir structure.

Consultant shall prepare an addition to its Health and Safety Plan to include the diving work. The amended Plan will be submitted to City for review and approval prior to performing the work.

In this task, Consultant shall determine the existing condition and extent of the eroded channel bottom at the foundation of the outfall weir structure. To do so, Consultant will review previous structure inspection reports dated March 2, 2015, and June 25, 2018 before performing an underwater inspection of the site. Consultant shall perform the inspection work during daylight hours and provide at least a 7-day notice to the City before the planned work to allow the City time to coordinate with RWF security and staff accordingly.

Consultant shall develop and submit for review and comment a draft inspection report which will include a plan and profile of the eroded condition found during the inspection. A final Diver Inspection Report will be submitted after incorporating comments and revisions obtained during City review.

B. Deliverables: Consultant shall provide the following documents to the City's Contract Manager.

1. Amended Health and Safety Plan provided as a PDF
2. Draft in Word format and Final in PDF format of the Diver Inspection Report.

C. Completion Time: Consultant must complete the services and deliverables for this task to in accordance with whichever one of the following times is marked:

- On or before the following date: May 31, 2021.
- On or before ____ Business Days from _____.

Task No. 3: Hazardous Materials Management Plan

A. Services: Consultant shall perform the following:

- 1) Consultant shall complete a 1) Shallow Soil and Groundwater Investigation for the collection of shallow soil and groundwater samples and 2) a Hazardous Building Material Survey ("HBMS") consisting of non-destructive pre-renovation asbestos, lead, and PCB sampling to evaluate potential contamination in the building materials on the project site.
- 2) Consultant shall complete a Shallow Soil and Groundwater Investigation:
 - a) Consultant shall conduct a shallow soil and groundwater investigation by completing ten (10) soil borings. The soil boring depths will range from 5 to 15 feet below ground surface (bgs). Soil borings will be completed by an air knife/vacuum truck for the 15 foot borings and by hand auger for the 5 foot borings. Groundwater samples are proposed to be collected via bailer in five of the ten (10) proposed borings. Groundwater is tidally influenced and is 3 to 4 feet bgs during high tide and 6 to 7 feet during low tide.
 - b) Two (2) of the soil borings will be completed to depths of 15 feet bgs and the remaining eight (8) soil borings will be completed to depths of 5 feet bgs. The two (2) 15 foot borings will be completed at the location of proposed vault, one 5 foot boring at the location of the above ground transformer by the SO2 building and the remaining seven 5 foot borings will be completed along the proposed half mile fiber optic trench. The two (2) 15 foot borings, as noted above, will be cleared by an air knife/vacuum truck to carefully expose the large diameter water pipes. Soil boring holes will be backfilled with a controlled low-strength slurry.
 - c) Prior to initiation of field activities, the Consultant shall prepare a Soil and Groundwater Investigation Work Plan and obtain approval from the City and shall obtain drilling permits from the Santa Clara Valley Water District for completion of the soil borings.
 - d) Consultant shall develop an update to the site HASP, which will include soil boring advancement, soil sampling and groundwater sampling.
 - e) Consultant shall inspect the site for overhead and underground utilities prior to conducting the work. Each boring location will be marked, Underground Service Alert of Northern California ("USA North") will be contacted by the Consultant more than 48 hours prior to initiating subsurface activities, and USA North will issue ticket numbers to the Consultant. Consultant will conduct a private utility survey to identify subsurface utilities in the vicinity of the proposed borings. In particular, water supply lines, sanitary sewer lines, storm sewer lines, natural gas lines, communication cable lines, and electrical lines will be identified.
 - f) Consultant shall provide drilling and sampling services by a California State licensed professional. Soils will be logged by a Consultant geologist in accordance with the Unified Soil Classification System ("USCS"). Headspace measurements for organic vapors in soil

samples will be made in the field using a photo ionization detector (“PID”). The soil will be placed in a sealable plastic bag, the bag will be sealed, and the soil will be broken up. The highest PID reading will be recorded for each headspace sample. A detailed field log of each boring will be prepared in the field noting soil type, soil color, groundwater depth, moisture, (density, stiffness, and plasticity as applicable), and PID readings.

- g) Consultant will collect two groundwater samples at approximately 4 to 5 feet bgs from the two borings at the proposed vault and three other locations along the half mile proposed trench. At that depth, a three-quarter-inch-diameter polyvinyl chloride (“PVC”) casing with a 0.010-inch machine slotted screen section will be placed down the open borehole. Dedicated polyethylene tubing will be placed inside the PVC tubing so that the intake end of the tubing is situated adjacent to the screened interval exposed to the surround sediments. The PVC casing and polyethylene tubing will be left for an hour to allow groundwater to enter the PVC tubing. If no groundwater enters the PVC tubing within the hour, the PVC tubing will be removed, and no groundwater sample will be collected. If groundwater accumulates in the PVC casing, a peristaltic pump will be used to purge a small volume of water (between one half gallon and one gallon) prior to collecting the groundwater sample. The grab groundwater sample will be collected using the peristaltic pump and placed directly in laboratory supplied glassware containing the appropriate preservative.
- h) Consultant will collect two (2) soil samples from the 5-foot soil borings, and three (3) soil samples from the 15-foot soil borings for off-site laboratory analysis. Soil sample depths will be determined by Consultant field geologist based on lithology and signs of impacts. Groundwater samples will be collected from five soil borings if water is encountered.
- i) Soil and groundwater will be analyzed by:
 - 1. Volatile organic compounds by EPA method 8260,
 - 2. Semi-volatile organic compounds by EPA method 8270,
 - 3. CAM 17 metals by EPA methods 6010/7471,
 - 4. Total petroleum hydrocarbons (gasoline, diesel, and motor oil) by EPA method 8015, and
 - 5. Naturally Occurring Asbestos (Polarizing Light Microscope analysis) by Method CARB 435.
- j) Soil samples collected for analysis of volatile compounds will be collected using a gas tight sampler such as a TerraCore®. Samples collected for other analyses will be placed in an 8-ounce glass jar with a Teflon® lined plastic lid. A total of 22 soil and 5 groundwater samples, as well as 2 additional field duplicate soil samples, 1 additional field duplicate groundwater sample, 3 equipment water blank samples and 2 trip blank sample (only for VOCs) will be collected.
- k) Consultant will conduct leachability testing with the California Waste Extraction Test (“WET”) and the Toxicity Characteristic Leaching Procedure (“TCLP”) iteratively based on Consultant’s review of the total metals data from the initial analyses. Additional leachate testing will be performed on any sample which exceeds the STLC/TCLP trigger criteria. This additional testing will extend our analytical testing schedule by the normal lab turnaround time of 5-10 additional days, per request. It is assumed that 5 soil samples will require STLC/TCLP analysis.

- l) Consultant will use proper chain-of-custody and sample tracking protocols during sample collection. This protocol includes maintaining documentation necessary to trace sample possession, and the proper completion of standardized chain-of-custody forms used to accompany samples shipped to the analytical laboratory. All shipments will be accompanied by the appropriate chain-of-custody and analysis specification document(s) identifying the shipment container's contents and analyses needed for each sample.
 - m) Consultant shall follow Quality Assurance/Quality Control ("QA/QC") procedures during this project. The QA/QC procedures shall be followed for soil and groundwater samples and shall include the collection of duplicate samples. Batch matrix spike/matrix spike duplicate ("MS/MSD") samples will be selected and analyzed by the laboratory. Field duplicate samples will be collected at a frequency of 10 percent of the total number of samples. The field duplicates will be handled and analyzed in the same manner as the other environmental samples. Data resulting from field duplicates, and from their corresponding environmental samples, will be used in the determination of precision.
 - n) Consultant will store all soil investigation derived waste ("IDW") in U.S. Department of Transportation ("DOT") approved 55-gallon drums. Upon receipt of laboratory analytical results for representative samples, the material will be profiled and then transported to and disposed of at an appropriate waste disposal facility in accordance with applicable regulations.
 - o) Consultant will contain all water generated from field activities (i.e., equipment decontamination, purge water, groundwater) in DOT-approved 55-gallon drums. Upon receipt of laboratory analytical results, wastewater will be profiled and then transported to and disposed of at an appropriate waste disposal facility in accordance with applicable regulations.
 - p) Consultant will not be sampling potential Treated Wood Waste ("TWW") as this is managed under DTSC's Alternative Management Standards ("AMS"). The TWW AMS is in California Code Regulations (Cal. Code Regs.) Title 22, Division 4.5, Chapter 34. In summary, AMS lessen storage requirements, extend accumulation periods, allow shipments without a hazardous waste manifest and a hazardous waste hauler, and allow disposal at specific non-hazardous waste landfills.
 - q) At this time, it is anticipated that soil and water IDW will be classified as non-hazardous waste. The City shall sign all regulatory paperwork, including all waste manifests or bills of lading. In the event that hazardous waste is identified in the soil and water, Consultant shall notify the City. Consultant and City shall thereafter work together to develop a follow up plan to address the hazardous waste. Such plan may be the subject of an amended or new Service Order pursuant to the terms of the Master Agreement.
 - r) Consultant shall develop and submit for review and comment a draft Shallow Soil and Groundwater Investigation Report. A final report will be submitted after incorporating comments and revisions obtained during City review.
- 3) Consultant shall complete a Hazardous Building Material Survey ("HBMS"):
- a) The Consultant will conduct a HBMS for asbestos-containing materials ("ACM"), lead based paint ("LBP"), polychlorinated biphenyl ("PCBs") at the SO2 building, the fiberoptic cable termination location in the FIPS building, the Flow Master Panels, and two smaller structures.
 - 1. The SO2 building is a concrete 20 feet by 20 feet concrete bunker type building and requires a complete HBMS survey.

2. The FIPS Building only requires spot HBMS at the points of termination of the fiberoptic cable.
 3. Two suspected flow master panels and possible two other small structures will be also be surveyed.
- b) The Consultant, with the supervision of a Certified Industrial Hygienist (“CIH”), will make up to 3 site visits. The following will be investigated and sampled:
1. ACM – Up to 60 ACM samples will be collected using techniques to prevent exposures to the surveying staff and any occupants;
 2. PCBs – Up to 5 PCB representative caulks and putties samples will be collected to provide a screening of material in the buildings; and
 3. Lead based paint – Up to 15 representative paint chips and/or other suspect lead-containing material samples will be collected.
- c) The Consultant will collect up to 1 sample of transformer fluid to evaluate PCB content in the existing transformer behind the SO2 Building. The transformer will require to be deenergized prior and during the sampling of the transformer fluid. To that end, Consultant shall submit a Process Shutdown Request 28 days prior to the planned work.
- d) Consultant shall develop and submit for review and comment a draft Hazardous Building Materials Survey Report. A final report will be submitted after incorporating comments and revisions obtained during City review.

B. Deliverables: Consultant shall provide the following documents to the City’s Contract Manager.

1. Amended Health and Safety Plan as a PDF file;
2. Process Shutdown Request for the transformer oil sampling task;
3. Soil and Groundwater Investigation Work Plan Draft (Word format) and Final (Word and PDF format);
4. Soil and Groundwater Investigation Report Draft (Word format) and Final (Word and PDF format); and
5. Hazardous Building Materials Survey Report Draft (Word format) and Final (Word and PDF format).

C. Completion Time:

Consultant must complete the services and deliverables for this task to in accordance with whichever one of the following times is marked:

- On or before the following date: May 31, 2021
- On or before ____ Business Days from _____

Task No. 4: Detailed Design Services

- A. Services:** Based upon the Preliminary Design deliverables prepared under Service Order No. 1, Consultant shall prepare detailed drawings and specifications suitable for public bidding and construction by general contractors.

Consultant shall prepare detailed design packages at 50% and 100% (final) design completions. Consultant shall submit specifications and half-sized (11" x 17") drawings for the City's review at these milestones. Consultant shall coordinate the 50% design documents with the appropriate disciplines. At this point, all major design decisions should have been documented clearly by Consultant and agreed by the City, and all outstanding issues from the Preliminary Design phase must be resolved. The 100% review package shall be functionally complete such that it is ready for final review and will only need minor adjustments prior to bidding.

Consultant shall incorporate City's comments on the 50% and 100% design review packages into the finalized 50% and 100% designs, respectively. Consultant shall also respond to the list of comments and questions received from the City prior to the issuance of the finalized design package.

Consultant shall incorporate Task No. 3 findings from Soil and Groundwater Investigation Report and Hazardous Building Materials Survey into 100% Review Package documents and if necessary, create a bid item for addressing removal or remediation of hazardous materials.

Consultant shall prepare a Class 3 Opinion of Probable Construction Cost ("OPCC"), accompanying Basis of Cost Estimate Report, and estimates of annual operating and maintenance costs at the 50% level of completion and a Class 2 OPCC at 100% level of completion. The construction cost estimates shall be based on available quantity take-offs, manufacturers' quotes, experience at other wastewater treatment facilities incorporating similar Project elements and shall be escalated to the mid-point of construction. The OPCCs shall be prepared to a level of accuracy consistent with the standards of the AACE International, formerly known as the American Association of Cost Engineering and the Association for the Advancement of Cost Engineering, and the Program's cost estimating guidelines. If the Class 2 OPCC total exceeds the Class 3 OPCC total by more than 10%, Consultant shall include a summary explaining the cause(s) for such increase.

Consultant shall prepare a process control strategy as defined in "City of San José Program Automation Requirements AG-RWF-008", Section 7.1 to cover the entire operation of the Project's systems. A section providing a table of instrument ranges, set points, process minimum and maximums, signal scaling and alarm limits shall be included.

Consultant shall develop construction drawings using Consultant's and/or City's computer-aided design ("CAD") standards as determined by the City, and shall include applicable drawings including, without limitation: general, civil, structural, mechanical, electrical, and instrumentation drawings. Consultant shall develop/update specifications using the City's Division 0 and Division 1 templates and Construction Specifiers Institute ("CSI") Masterformat 2004. Consultant shall provide technical specifications for the Project elements for which City does not maintain its own specifications. If Consultant utilizes Masterformat 2010, the specifications utilized shall be formatted to the extent practicable to conform into a unified document.

Consultant shall prepare and submit an updated schedule for construction and commissioning of the Project to the City at the 50% level of completion. Consultant shall base the schedule on an analysis of key sequencing constraints by a construction management specialist. The schedule shall serve as the basis for determining the appropriate construction duration. Consultant shall produce and submit a final construction and commissioning schedule at the 100% level of completion.

Consultant shall develop a series of Standard Operating Procedures (“SOPs”) (revised and new) to be incorporated into the Operations Manual. A draft of the proposed SOPs shall be submitted with the 100% Review Package and shall be updated and submitted with the 100% (Final) Package. The SOPs shall be finalized by the designer and incorporated into the Operations Manual. The SOPs shall be prepared in conformance with the “Design Guideline – Standard Operating Procedures” which describes content and format of the procedures.

Consultant shall develop a series of commissioning (also referred to as “acceptance”) tests for instruments, to be incorporated into the general contractor’s functional (also referred to as “start-up”) testing and acceptance plan. These tests shall be performed by the Project’s general contractor to demonstrate that the installed equipment and systems meet the specified requirements and that the installed electrical and control systems operate as designed. A draft of the proposed commissioning tests shall be submitted with the 50% design review package. The final commissioning tests shall be submitted with the 100% design review package.

Consultant shall develop a training program for RWF operations and maintenance (“O&M”) staff. The training program shall include an overview of (a) the Project’s process and system operations (b) the Project’s elements, design intent and operational set points, and (c) shall be complementary to the equipment training program to be developed and implemented by the general contractor. A draft of the proposed training program shall be submitted with the 50% design review package. The final training program shall be submitted with the 100% design review package.

Consultant shall organize and facilitate two (2) workshops, each up to three (3) hours in length, with City to present the 50% and 100% packages. During each workshop, Consultant shall present: key elements of the design; operational requirements/changes to current RWF practices; an overview of the control narrative, and P&IDs; maintenance requirements; construction sequencing; and anticipated construction impacts on RWF operations. Consultant shall prepare an agenda in advance of each workshop and a summary following each workshop. The summaries shall include action items for the ensuing phase of design development.

All supporting documents related to design of the Project—including, but not limited to: engineering calculations, equipment or catalog cut sheets, and back up for engineer’s cost estimates—shall be submitted by Consultant to the City as a bound document and cataloged per the appropriate engineering discipline with each review package. The final design submittal shall be sealed and signed by the responsible California Professional Engineer (“PE”) or architect and shall be comprised of complete biddable construction documents.

The Consultant shall include the following during design for the applicable disciplines:

1. Site Civil
 - a. Update Demolition and removal requirements and drawings;
 - b. Update Site Grading Plans as needed;
 - c. Provide additional details on construction access and staging areas, fencing and access gate; and

- d. Provide additional details on stormwater management, sedimentation and erosion control during construction.
2. Structural
 - a. Perform geotechnical boring at the final flow meter vault location;
 - b. Revise/update structural design drawings; and
 - c. Revise/update specifications, as needed.
 3. Electrical System
 - a. Electrical load requirements;
 - b. Source of electrical power supply: Current power supply infrastructure is sufficient to power new equipment and instruments that are part of this project;
 - c. Revise / update specifications;
 - d. Revise / update current drawing set;
 - e. Revise / update panel schedules;
 - f. Revise / update load list – includes transformer sizing verification, pad requirements;
 - g. Revise / update conduit plans and cable schedules, including demolition plans for infrastructure rendered obsolete;
 - h. Eliminate previously included new bridge and associated items from the design package, including lights, cables, conduits, install details, and grounding plans;
 - i. Eliminate temporary floating platform and associated items related to the temporary floating platform from the design package, including cables, installation details;
 - j. Coordinate trench details with other disciplines – include spare conduits for fiber optic and power. Electrical conduits along the Outfall levee, intended for a future pump station, will remain included in design and listed as separate add alternative bid item in the bid package; and
 - k. Coordinate all work with other disciplines.
 4. Instrumentation and Controls
 - a. Revise / update instrument specifications prepared during 30% design phase;
 - b. Revise / update current drawing set;
 - c. Revise / update instrument list and IO list (as required);
 - d. Revise / update control panel drawings (as required);
 - e. Revise / update conduit plans and cable schedules, including demolition plans for infrastructure rendered obsolete;

- f. Revise / update installation details;
 - g. Input to revise P&IDs (as required);
 - h. Process control strategy and new control room screen graphic drawing for new compliance-related instruments at Outfall;
 - i. Instrumentation commissioning and training program requirements and outline; and
 - j. Coordinate all work with other disciplines.
5. Mechanical
- a. Prepare detailed design for floating sampling pump upstream of existing weir;
 - b. Revise / update specifications prepared during 30% design phase; and
 - c. Revise / update current drawing set.
6. Constructability
- a. Identify the provision of temporary systems to maintain RWF operations during construction;
 - b. Address coordination of the construction in recognition of other construction projects underway or proposed at the RWF, noting potential interferences, construction issues, etc.; and
 - c. Include pre-design of the demolition and decommissioning work required.
7. Agency Requirements
- a. City will coordinate and apply for all necessary permits related to this work; and
 - b. Consultant shall include in specifications and/or design drawings, as necessary, Mitigation, Monitoring, Reporting Program requirements, agency requirements related to scheduling, performance, and compliance monitoring of the planned construction activities. Information regarding these requirements will be provided to Consultant by City's Environmental staff.
8. Schedule
- a. Prepare a preliminary schedule for final design, construction, commissioning and post-construction services. Consultant shall incorporate reasonable timelines into the schedule for obtaining City approvals, and considering the impact to in-water work if acquisition of the State Water Board permit occurs on September 1, 2022; and
 - b. Propose design sequence with particular consideration to the sequence or phasing of construction required to minimize disruption to RWF operations.
9. Cost Estimates—a summary of the construction costs as well as an updated estimate of annual operational and maintenance costs. Construction costs shall be a Class 2 OPCC and be based on available quantity take-offs, manufacturers' quotes, experience at other wastewater treatment facilities incorporating similar Project elements and shall be escalated to the mid-point of construction. The OPCC shall be prepared to a level of accuracy consistent with the

standards of the AACE International, formerly known as the American Association of Cost Engineering and the Association for the Advancement of Cost Engineering, and the Program's cost estimating guidelines. If the Class 2 OPCC total exceeds the total fee estimated in the Class 3 OPCC prepared during 30% design, Consultant shall include a summary explaining the cause(s) for such increase.

B. Deliverables: Consultant shall provide the following documents to the City's Contract Manager.

1. 50% Design Package - Provided as eight (8) printed bound copies, an electronic editable file (e.g. CAD and Microsoft Word), and a PDF file. Consultant shall allow City a minimum of fifteen (15) Business Days to review, compile, and provide comments. The 50% review package shall consist of the following:
 - a. Specifications;
 - b. Half-sized drawings;
 - c. Updated construction and commissioning schedule;
 - d. Class 2 OPCC and Basis of Cost Estimate Report;
 - e. Updated estimate of annual operating and maintenance costs;
 - f. Process control strategy;
 - g. Commissioning tests and inspections; and
 - h. Training program for RWF O&M staff.
2. 50% Review Workshop agenda and materials provided in PDF format no later than two (2) Business Days before the workshop. Consultant shall also provide sufficient printed copies of the agenda and any handouts for attendees.
3. 50% Review Workshop Summary:
 - a. Draft summary provided in an electronic editable file format within five (5) Business Days after the workshop. Consultant shall allow City a minimum of five (5) Business Days to review, compile and provide comments.
 - b. Final summary addressing City comments provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.
4. Finalized 50% Design Package up to ten (10) business days after finalizing 50% Review Workshop summary. Provide as eight (8) printed bound copies, an electronic editable file (e.g. CAD and Microsoft Word), and a PDF file.
5. 100% Review Package - Provided as eight (8) printed bound copies, an electronic editable file (e.g. CAD and Microsoft Word), and a PDF file. Consultant shall allow City a minimum of fifteen (15) Business Days to review, compile, and provide comments. The 100% review package shall consist of the following:
 - a. Specifications;

- b. Half-sized drawings;
 - c. Class 2 OPCC and Basis of Cost Estimate Report;
 - d. Updated construction and commissioning schedule;
 - e. Updated estimate of annual operating and maintenance costs;
 - f. Process control narratives;
 - g. Draft Standard Operating Procedures;
 - h. Commissioning tests and inspections; and
 - i. Training program for RWF O&M staff.
6. 100% Review Workshop agenda and material provided in PDF format no later than two (2) Business Days before the workshop. Consultant shall also provide sufficient printed copies of the agenda and any handouts for attendees.
7. 100% Review Workshop Summary:
- a. Draft summary provided in an electronic editable file format within five (5) Business Days after the workshop. Consultant shall allow City a minimum of five (5) Business Days to review, compile and provide comments.
 - b. Final summary addressing City comments provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.
8. 100% (Final) Package provided as ten (10) printed bound copies, one (1) electronic editable file package (e.g., CAD and/or Microsoft Office formats), and one (1) PDF file of the complete document. The 100% package shall consist of the following:
- a. Specifications;
 - b. Drawings stamped and signed by a registered Professional Engineer in California. At least one (1) printed copy shall be full-sized (22" x 34") and all others shall be half-sized copies.
 - c. Class 2 OPCC and Basis of Cost Estimate Report;
 - d. Updated construction and commissioning schedule;
 - e. Updated estimate of annual operating and maintenance costs;
 - f. Process control narratives;
 - g. Upgraded Standard Operating Procedures;
 - h. Commissioning tests and inspections; and
 - i. Training program for RWF O&M staff.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following times is marked:

- On or before the following date: June 30, 2021.
- On or before ____ Business Days from _____.

Task No. 5: Bid and Award Period Services

A. Services: Consultant shall provide the following engineering services between the advertisement of a request for bids and award of a construction contract. The City will schedule and conduct the Project's pre-bid meeting, bid opening, and bid review. Advertisement, printing, and distribution of construction documents and addenda will be conducted by the City.

1. **Pre-Bid Meeting:** Consultant shall attend a pre-bid meeting and prepare meeting minutes for the meeting.
2. **Responses/Addenda:** Consultant shall assist the City in answering questions from prospective bidders. Consultant shall prepare up to two (2) addenda and respond to up to ten (10) Request for Information ("RFIs") to provide answers, supplementary details, clarifications, and/or revise the drawings and specifications as needed and directed by City.
3. **Bid Reviews:** After the advertisement period ends, Consultant shall review the bids submitted by prospective contractors and assist the City with the award recommendation, as necessary and directed by the City.
4. **Conformed Bid Documents:** Consultant shall prepare a conformed set of the bid documents consisting of the updated/revised drawings and specifications to include all addenda as described in the City's design guidelines.

B. Deliverables: Consultant shall provide the following documents to the City's Contract Manager.

1. Pre-Bid Meeting Minutes:
 - a. Draft minutes shall be provided in an electronic editable file format within five (5) Business Days after the meeting. Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments.
 - b. Final minutes addressing City comments shall be provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.
2. Responses to technical questions during the bid period provided as one (1) electronic editable file and one (1) PDF file, as needed and directed by City.
3. Addenda that address questions during the bid period provided as one (1) electronic editable file and one (1) PDF file, as needed and directed by City.
4. Conformed set of documents provided as two (2) printed bound sets of full-sized (22" x 34") drawings, ten (10) printed bound sets of half-sized (11" x 17") drawings, ten (10) printed bound sets of specifications, and PDF files in three (3) DVDs each containing searchable PDF files of

all drawings and specifications. The electronic drawings and specifications shall be organized in folders for each discipline and division, respectively. Each discipline folder shall include PDF files of each drawing sheet. Each division folder shall include PDF files of each specification section. Consultant shall also provide PDF files that consolidate the drawings and specifications. The conformed documents shall be provided within five (5) Business Days after the City's award of the Project's construction contract.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following times is marked:

- On or before the following date: October 31, 2021.
- On or before ____ Business Days from _____.

First **Second** **Third** **Revised Attachment C: Compensation Table**

This Revised Attachment C is an attachment to the First Second Third amendment to Approved Service Order No. 04 issued pursuant to the Master Agreement having the above-referenced CPMS Contract No.

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Task No. and Task Title from Attachment A	Invoice Period	Multiplier Compensation	Contract Personnel	Reimbursable Expenses (Including applicable markup)	Subconsultant Costs (Including markup)	Total Compensation
Task 1 Project Management	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$40,673	\$0	\$0	\$0	\$40,673
Task 2 Diver Inspection of Erosion beneath Outfall Weir Structure	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$2,858	\$0	\$0	\$10,915	\$13,773
Task 3 Hazardous Materials Management Plan	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$23,880	\$0	\$463	\$39,281	\$63,624
Task 4 Detailed Design Services	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$342,7152	\$0	\$0	\$11,939	\$354,654
Task 5 Bid and Award Period Services	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$20,243	\$0	\$0	\$0	\$20,243
Maximum Compensation		\$430,369	\$0	\$463	\$62,135	\$492,967

City of San José Contract/Agreement Transmittal Form

Route Order

Attached / Completed

Electronically Signed

TO: City Attorney
 City Manager
 City Clerk **OR** Return to
Dept. (circle one)

Insurance Certificates / Waivers Electronically Signed: Yes
 Business Tax Certificate Audit Trail Attached (if applicable)
 Contacted Clerk re: Form 700 Scanned Signature Authorization
 Supplemental Memorandums (if applicable): Select One

Type of Document: Amendment

Type of Contract: Consulting Services

REQUIRED INFORMATION FOR ALL CONTRACTS:

Existing GILES # 661305 -017

Contractor: AECOM Technical Services, Inc.

Address: 300 Lakeside Drive, Oakland, CA 94612

Phone: (510) 874-3117

Email: craig.j.smith@aecom.com

Contract Description: First Amendment to Service Order 04 - Outfall Channel and Instrumentation Improvements (Detailed Design and Bid/Award Services)

Term Start Date: 10/15/2020 Term End Date: 11/30/2021 Extension: Yes

Method of Procurement: Select one RFB, RFP or RFQ No.: _____ Date Conducted: _____

Agenda Date (if applicable): _____ Agenda Item No.: _____

Resolution No.: _____ Ordinance No.: _____

Original Contract Amount: \$492,967.00 Amount of Increase/Decrease: _____

Option #: ___ of ___ Option Amount: _____ NTE/Updated Contract Amount: \$492,967.00

Fund/Appropriation: _____

Form 700 Required (Selection mandatory for processing): Select one Revenue Agreement: Select one

Tax Certificate No.: 6213376289 Expiration Date: 07/15/2022

Department: ESD (76)

Department Contact: Scott Katric / 635-4043 Customer (Finance Only): _____

Notes:



Department Director Signature: _____ Date

Office of the City Manager Signature: _____ Date