

**AMENDMENT NO. 5 TO AGREEMENT A4464A
BETWEEN SANTA CLARA VALLEY WATER DISTRICT
AND AECOM TECHNICAL SERVICES, INC.**

This Amendment No. 5 (Amendment), effective as of the date it is fully executed by the Parties, amends the terms and conditions of the Standard Consultant Agreement A4464A (Agreement) dated May 25, 2021, as amended by Amendment No. 1 dated November 18, 2021, Amendment No. 2 dated June 13, 2023, Amendment No. 3 dated March 26, 2024, and Amendment No. 4 dated March 7, 2025 between SANTA CLARA VALLEY WATER DISTRICT (Valley Water) and AECOM TECHNICAL SERVICES, INC., (Consultant), collectively, the Parties.

RECITALS

WHEREAS, the Consultant is currently providing construction phase engineering support and professional design services for, respectively, Valley Water's Coyote Creek Flood Management Measures Project (CCFMMP or Project A) and Coyote Creek Flood Protection Project (CCFPP or Project B), collectively, the Project;

WHEREAS, due to divergent design and construction schedules, the Coyote Creek Flood Management Measures Project has completed construction and is currently in plant establishment period, while the Consultant continues to design the Coyote Creek Flood Protection Project which will soon be progressing to the construction phase;

WHEREAS, the Agreement currently expires on December 31, 2026, at which time Project construction will not be completed; and

WHEREAS, the Parties desire to extend the term of the Agreement; revise the Schedule of Completion; increase the Total Not-To-Exceed fee to provide funds for Consultant to perform additional design services and provide construction phase engineering support services during Coyote Creek Flood Protection Project construction; and to incorporate administrative changes.

NOW, THEREFORE, in consideration of the mutual promises and agreements stated herein and notwithstanding anything to the contrary stated in the Agreement, Amendment No. 1, Amendment No. 2, Amendment No. 3, and Amendment No. 4, Valley Water and Consultant hereby agree to amend the Agreement as follows:

1. Revised Standard Consultant Agreement, Section Twelve, Miscellaneous Provisions, subsection 23. Schedule(s) and Attachments, is amended to state as follows:

“23. Schedules and Attachments

Revised Schedule D, Scope of Services, and the following listed Attachments are incorporated herein by this reference as though set forth in full:

Revised Attachment One - Fees and Payments (REVISED)
Revised Attachment Two - Schedule of Completion (REVISED)
Revised Attachment Three - Consultant's Key Staff and Subconsultants (REVISED)
Revised Attachment Four - Reference Materials (REVISED).”

2. Revised Schedule D, Scope of Services, is amended as set forth in the attached Revised Schedule D, Scope of Services, and incorporated herein by this reference.

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3. Revised Attachment One to Revised Schedule D, Fees and Payments, is amended as set forth in the attached Revised Attachment One to Revised Schedule D, Fees and Payments, and incorporated herein by this reference.
4. Revised Attachment Two to Revised Schedule D, Schedule of Completion, is amended as set forth in the attached Revised Attachment Two to Revised Schedule D, Schedule of Completion, and incorporated herein by this reference.
5. Revised Attachment Three to Revised Schedule D, Consultant's Key Staff and Subconsultants, is amended as set forth in the attached Revised Attachment Three to Revised Schedule D, Consultant's Key Staff and Subconsultants, and incorporated herein by this reference.
6. Attachment Four to Revised Schedule D, Reference Materials, is amended as set forth in the attached Revised Attachment Four to Revised Schedule D, Reference Materials, and incorporated herein by this reference.
7. All other terms and conditions of the Agreement A4464A, Amendment No. 1, Amendment No. 2, Amendment No. 3, and Amendment No. 4 not otherwise amended as stated herein remain in full force and effect.

(SIGNATURES FOLLOW ON NEXT PAGE)

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**IN WITNESS WHEREOF, THE PARTIES HAVE SET FORTH BELOW THEIR CONSENT TO
THE TERMS AND CONDITIONS OF THIS AMENDMENT NO. 5 TO AGREEMENT A4464A
THROUGH THE SIGNATURES OF THEIR DULY AUTHORIZED REPRESENTATIVES.**

SANTA CLARA VALLEY WATER DISTRICT
Valley Water

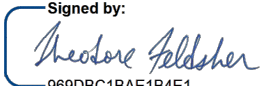
By: _____
Tony Estremera
Chair, Board of Directors

Date: _____

ATTEST:

Candice Kwok-Smith
Clerk, Board of Directors

AECOM TECHNICAL SERVICES, INC.
Consultant

Signed by:
By:  _____
Theodore B. Feldsher, PE, GE
Principal-in-Charge / Vice President

Date: 8/13/2025

Consultant's Address:
4 N. Street, Suite 675
San Jose, CA 95113

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1. Representatives (REVISED)

- A. Valley Water's representatives are as listed below. Unless otherwise provided in this Agreement, all correspondence to Valley Water must be addressed to the Valley Water Project Manager (VWPM).

Robert Yamane, P.E. (Valley Water Project Manager)
Senior Engineer
Design and Construction Unit #1
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: (408) 630-2202
Email: ryamane@valleywater.org

Madhu Thummaluru, P.E., G.E.
Capital Engineering Manager
Design and Construction Unit #1
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: (408) 630-2256
Email: mthummaluru@valleywater.org

Bhavani Yerrapotu, P.E.
Deputy Operating Officer
Watersheds Design and Construction Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686

Phone: (408) 630-2735
Email: byerrapotu@valleywater.org

- B. The Consultant's Project Manager is as listed below. All Valley Water questions pertaining to this Agreement shall be referred to the Consultant's Project Manager.

Stoney Mather (Consultant Project Manager)
AECOM Technical Services, Inc.
756 East Winchester Street, Suite 400
Salt Lake City, Utah 84107

Phone: (385) 266.6288
Email: stoney.mather@aecom.com

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- C. The Consultant's Principal Officer for this Agreement is as listed below. As per the Agreement, Section Twelve, Miscellaneous Provisions, subsection 18. Notices, all notices pertaining to this Agreement must be submitted to the Consultant's Principal Officer.

Theodore Feldsher
Vice President
AECOM Technical Services, Inc.
300 Lakeside Drive, Suite 400
Oakland, CA 94612

Phone: (510) 874-3245

Email: theodore.feldsher@aecom.com

2. Scope of Services (REVISED)

- A. This Revised Schedule D, Scope of Services describes the professional design services to be performed by Consultant for Valley Water's Coyote Creek Flood Management Measures Project (CCFMMP) and Coyote Creek Flood Protection Project (CCFPP) (collectively, the Project). Design services for the CCFMMP and CCFPP are composed of two distinct Projects within the same geographic area of Coyote Creek in San Jose.
- B. Due to divergent design schedules, the CCFMMP completed the construction phase and is in plant establishment period now, while Consultant continues to design the CCFPP. CCFPP is in the 100% design phase, with final design documents expected by January 2026.
- C. Amendment No. 1 updated the Agreement insurance requirements.
- D. Amendment No. 2 added Tasks 10A Engineering Support During Construction and Task 11A Supplemental Services During Construction, both of which pertain only to the CCFMMP. As engineer-of-record, Consultant is performing construction phase engineering support services for the CCFMMP.
- E. Amendment No. 3 revised the CCFPP scope of services to include the additional elements that were added to the scope upon completion of CCFPP 60% design; additional hydraulic analyses needed for the Environmental Impact Report; and coordination with City of San Jose Parks, Recreation, and Neighborhood Services for development of design alternatives that may minimize impacts in several City parks.
- F. Amendment No. 4 revised the Agreement to incorporate terms required by the WIFIA loan agreement and transferred the unspent funds from CCFMMP to CCFPP.
- G. Amendment No. 5 adds Tasks 10B Engineering Support During Construction and Task 11B Supplemental Services During Construction, both of which pertain only to CCFPP. As engineer-of-record, Consultant will perform construction phase engineering support services for the CCFPP.

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3. Project Objectives (UNCHANGED)

- A. Reduce the risk of flooding to homes, schools, businesses, and transportation networks from flood flows associated with a 20-year recurrence interval flood, approximately equivalent to the February 2017 flood event (pertains to Project A and Project B).
- B. Reduce the risk of flooding in San José as a result of water releases from Valley Water's Anderson Dam that may occur after construction of Valley Water's Anderson Dam Tunnel Project (ADTP), scheduled to be completed in 2025 (pertains only to Project A).

4. Project Background (REVISED)

- A. The Federal Energy Regulatory Commission (FERC) has jurisdiction over Anderson Dam, located on Coyote Creek in Morgan Hill, and its associated safety measures. Pursuant to FERC's authority, for public health and safety reasons, on February 20, 2020, Valley Water received an Order from FERC to further reduce risks to public safety by implementing certain risk reduction measures for dam operation and design.
- B. Design and construction of the CCFMMP will implement avoidance and minimization measures to coincide with completion of Valley Water's Anderson Dam Tunnel Project (ADTP). Once constructed, the CCFMMP will reduce potential flooding within urbanized areas of San José due to water releases resulting from operations of the completed Anderson Dam Tunnel Project in 2026. Valley Water created the CCFMMP in response to the FERC Order.
- C. Design and construction of the CCFPP will implement all remaining Coyote Creek flood protection elements within the Project geographic area that are necessary to convey flows similar to those that occurred during the February 2017 flood event and any additional flows from the stage 2 diversion tunnel that will be constructed as part of Anderson Dam Seismic Retrofit Project (ADSRP).
- D. Project Elements

Primary design elements for both CCFMMP and CCFPP include:

- 1) Earthen levees
 - 2) Floodwalls
 - 3) Passive barriers
 - 4) Vegetated berms
 - 5) Backflow prevention (flap gates/manholes with flap gates/inline check valves)
- E. Measures will be implemented as indicated in the following reaches of Coyote Creek. All lengths and elevations in the Project elements are to be considered approximate and for estimating purposes only.
 - 1) CCFMMP (Project A) Location and Elements
 - a. Reach 5

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- (1) 350 linear feet (LF) of 4-foot tall levee on the south end of the South Bay Mobile Home Park, east of the Union Pacific Railroad (UPRR) tracks
- (2) 350 LF of 2-foot tall floodwall to protect homes located on Notting Hill Drive, on east bank of Coyote Creek
- (3) 2,000 LF of 9-foot tall floodwall between Berryessa Road and UPRR tracks, on west bank of Coyote Creek
- (4) 2,500 LF of 9-foot tall floodwall between Berryessa Road and Mabury Road, on west bank of Coyote Creek

b. Reach 6

1,200 LF of 6-foot tall floodwall on west bank from Mabury Road to Highway 101

c. Reach 7

- (1) Acquire or elevate three properties located on South 17th Street between Santa Clara Street and San Fernando Street
- (2) 550 LF of 5.5-foot tall floodwall behind the backyards of two properties located on South 17th Street just north of Arroyo Way
- (3) Acquire or elevate four properties located east of Arroyo Way
- (4) Acquire or elevate two properties located on South 17th Street between San Carlos Street and San Salvador Street
- (5) 700 LF of 9-foot tall floodwall along the western edge of Coyote Outdoor Classroom
- (6) Acquire or elevate one property located on East William Street, east of South 16th Street
- (7) 400 LF of 4-foot tall floodwall along the backyard perimeter of two properties located at the southern end of William Street Park

2) CCFPP (Project B) Location and Elements

a. Reach 4

- (1) 2,450 LF of 4-foot tall floodwalls on both banks upstream and downstream of Charcot Avenue bridge
- (2) 1,000 LF of 4-foot tall berm upstream of Charcot Avenue bridge
- (3) 4-foot tall passive barriers across each maintenance road entrance adjacent to Charcot Avenue bridge

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- (4) Charcot Avenue bridge head wall and wingwall modifications and deck reinforcement
- (5) Backflow prevention at multiple outfall locations
- b. Reach 6
 - (1) 1,200 LF of 7-foot tall floodwall on east bank adjacent to CSJ Mabury Service Yard
 - (2) 400 LF of 7-foot tall floodwall along Highway 101
 - (3) 70 LF of 8-foot tall passive barrier across Jackson St.
 - (4) 650 LF of 6-foot tall floodwall at western edge of Watson Park
 - (5) 100 LF of 6-foot tall vegetated berm at Watson Park
 - (6) 250 LF of 6-foot tall floodwall at northern side of Empire Gardens Elementary School
 - (7) 1,000 LF of 5-foot tall floodwall at western edge of Kellogg Co.
 - (8) 850 LF of 5-foot tall floodwall on east bank at Parkside Terrace Apartments
 - (9) 80 LF of 8 foot tall floodwall around utility site in Watson Park
 - (10) 550 LF of 2-foot tall floodwall along the northern section of Parkside Terrace Apartments along Lower Silver Creek
 - (11) 500 LF of 2-foot floodwall along Roosevelt Street
 - (12) 450 LF of 2-foot floodwall along North 18th Street
 - (13) Backflow prevention at multiple outfall locations
- c. Reach 7
 - (1) 400 LF of 7-foot tall floodwall in the residential backyards of Brookwood Avenue.
 - (2) 1,350 LF of 5-foot tall passive barrier on the western edge of William Street Park and associated roadway modifications
 - (3) 1,100 LF of 5-foot tall floodwall located west of Olinder Elementary School
 - (4) 1,700 LF of 5-foot tall passive barrier at eastern edge of Selma Olinder Park and associated parking lot and trail modifications
 - (5) Backflow prevention at multiple outfall locations

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d. Reach 8

- (1) 350 LF of 6-foot tall floodwall on west bank, north of Keyes Street
- (2) 1,600 LF of 5-foot tall floodwall at edge of Rock Springs Park and associated roadway modifications
- (3) 1,250 LF of 3-foot tall vegetated berm and floodwall east of San Jose Water Company station and Bevin Brook Drive.
- (4) 600 LF of 7-foot tall floodwall on east bank, downstream of Tully Road.
- (5) Backflow prevention at multiple outfall locations

5. Assumptions and Requirements (REVISED)

A. General Assumptions and Requirements (UNCHANGED)

1) Manage Scope of services

Consultant shall manage the Scope of Services such that the work is completed within the Not-to-Exceed Fees limit and in accordance with the Project schedule and ensure that all services and deliverables meet Valley Water and Project objectives and requirements.

2) Deliverable Format

Consultant shall submit deliverables in both electronic and hardcopy format, if requested. Deliverables shall be submitted in PDF and native (editable) format, including Word documents, Excel spreadsheets, PowerPoint files, Autodesk files, etc. The hard copy deliverables shall be printed in professional quality presentation and submitted in 5 (five) copies, if requested. Valley Water may require original copies of signed documents and/or scanned (Adobe PDF) versions.

a) Valley Water Standardization Requirements

- (1) Consultant shall perform the Services utilizing Valley Water nomenclature, standardized forms, software requirements, documented procedures, and best management practices. Consultant shall use Microsoft Office software and Autodesk Civil 3D software that is compatible with Valley Water's current Microsoft Office software and Autodesk software used at the time(s) Valley Water issues a Notice to Proceed pursuant to this Agreement.
- (2) Engineering drawings prepared by Consultant must be in compliance with Valley Water's Computer-Aided Design and Drafting (CADD) standards including line types, line weights, text sizes, text orientation, dimensioning, labeling/numbering system for detailed plan views and detailed section views. Drawings prepared using different CADD software and versions must be converted to be compatible with Valley Water's CADD software at no

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additional cost to Valley Water. Prior to acceptance, Valley Water reserves the right to test the submitted CADD files to verify that the files are not corrupted or missing linkages (for blocks, etc., used in the drawings) and that the standards are retained during the conversion process used by the Consultant.”

3) Review of Deliverables

Valley Water will review and comment on all Project deliverables and forward to the Consultant for revision and preparation of final versions. As determined by Valley Water, some of the deliverables may also be subject to review and comment from regulatory agencies and stakeholders following Valley Water review process. For each deliverable, Valley Water will collect comments from all Valley Water stakeholders and provide a single set of consolidated comments to the Consultant. The comments provided by Valley Water staff during the workshops will be documented by the Consultant as meeting minutes and will be included in the next revision of the documents.

4) Valley Water Quality Environmental Management System

Valley Water maintains a Quality Environmental Management System (QEMS) which has procedures, guidelines and work instructions for the performance of various Valley Water work. If requested, the Consultant will perform some of the Agreement tasks and/or sub-tasks in accordance with the QEMS framework. In such situations, Valley Water Project Manager (DPM) will provide the Consultant with the specific QEMS procedure, guideline, and/or work instruction prior to the production of deliverables.

5) Consultant Responsibility

Consultant, with its expertise in performing the Services described herein, is responsible for making the appropriate assumptions in each task to complete each task's deliverables and to achieve the Project objectives of this Agreement as described in Section Three. Project Objectives.

6) Document Control

Consultant must utilize the document control system designated by Valley Water (Capital Project Management and Project Controls Program).

7) File Exchange Service

- a. Consultant must utilize the file exchange service designated by Valley Water (Capital Project Management and Project Controls Program), accessible to all parties as designated by Valley Water, to facilitate communications.
- b. Consultant may need to coordinate with Valley Water's Capital Project Management and Project Controls Program (CPMPC@valleywater.org) to address any firewall issues and/or permissions required to allow for these communications.

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8) Completeness

- a. The completeness of a design set is determined primarily by the substance of the materials on the set, including the adequacy of background and relevant information. Three levels of completeness of a design set are defined using these four terms: Partially Complete; Substantially Complete; Virtually Complete; and Complete.
- b. A Complete Design Set must include all the information required for a constructible set of plans and specifications; include a project cost estimate; and provide sufficient direction to enable the construction to be performed. The set must be ready for engineering certification (stamping, signing, and dating) by a Registered Professional Engineer(s). The set must show the work with complete details and dimensions; identify all constraints; include all background information and provide dimensions; and comply with all drafting, specifications and cost estimating standards.

B. Project-Specific Assumptions and Requirements (REVISED)

- 1) The final work products from this scope shall be plans, specifications, and construction cost estimates (PS&E) to build the two Projects separately. There will be two separate sets of Plans, Specifications, and Engineering Cost Estimates prepared on separate timelines.
- 2) The approved design and all associated deliverables for the CCFMMP (Project A) were completed in March 2023, and the final design and all associated deliverables for the CCFPP (Project B) are expected to be completed by October 2025. This final schedule is by regulatory order and is not subject to revision, unless modified pursuant to an amendment to this Agreement.
- 3) Consultant shall incorporate additional measures in the designs that are necessary to protect multiple environmental resources during construction and operation of the Projects. These measures include storm water pollution prevention Best Management Practices and measures necessary to avoid and minimize impacts on sensitive native fish populations, other aquatic sensitive species, and sensitive native habitat types, and, in particular, *Oncorhynchus mykiss* (steelhead trout) populations and habitat.
- 4) Consultant is advised that safety and security issues may occur at Project locations. It is the Consultant's responsibility to identify, specify, and take appropriate measures to address such issues. It is recommended that the Consultant coordinate with the City of San José Police Department Secondary Employment Unit (SJPD SEU) for any on-site security during work hours.

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6. Tasks (REVISED)

SUMMARY OF TASKS DESCRIPTIONS			
		Project A	Project B
Task No.	Task Description	Coyote Creek Flood Management Measures Project (CCFMMP)	Coyote Creek Flood Protection Project (CCFPP)
1	Project Management	X	X
2	Data Collection and Investigations	X	X
3	Basis for Design	X	X
4	30 Percent Design Document Preparation	X	X
5	60 Percent Design Document Preparation	X	X
6	90 Percent Design Document Preparation	X	X
7	Final Design Document Preparation	X	X
8	Bid and Award Services	X	X
9	Supplemental Services	X	X
10A	Engineering Support During Construction	X	-
11A	Supplemental Services During Construction	X	-
10B	Engineering Support During Construction	-	X
11B	Supplemental Services During Construction	-	X

NOTES:

1. Task 10B and Task 11B pertain only to construction of CCFPP (Project B).

TASK 1 - PROJECT MANAGEMENT (REVISED)

The purpose of this task is for Consultant to manage this Scope of Services such that the work is completed within the not-to-exceed fees limit stated in Revised Schedule D, Revised Attachment One, Fees and Payments, and in accordance with the Project Schedule stated in Revised Schedule D, Revised Attachment Two, Schedule of Completion, while ensuring that all services and deliverables by the Consultant meet Valley Water and Project requirements.

1.1 Kickoff Meeting (COMPLETED)

Consultant's key staff and subconsultants, as determined necessary and appropriate by Consultant, and additional participants, as directed by Valley Water, will attend a kickoff meeting with Valley Water. The purpose of the kickoff meeting is to introduce key Valley Water and Consultant team members to one another, acquaint all participants with the purpose of and expectations for the Project, describe team members' roles and responsibilities, describe Project procedures, and summarize scope and schedule.

Task 1.1A - Deliverables

1. Kick-off meeting minutes (Draft and Final).
2. Record of minutes and distribution.

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Task 1.1B - Deliverables

1. Kick-off meeting minutes (Draft and Final).
2. Record of minutes and distribution.

1.2 Project Design Work Plans (UNCHANGED)

Consultant will prepare Project Design Work Plans in accordance with this Scope of Services.

1.2A - Project Design Work Plan for CCFMMP

1.2B - Project Design Work Plan for CCFPP

- 1.2.1 The Project Design Work Plans shall include Project objectives, requirements, constraints, a detailed Project Schedule (showing major tasks and deliverables), a breakdown of Consultant's costs for the major tasks, a list of the Consultant's team members and their roles and responsibilities, communication protocols (internal and external), document control procedures, and other administrative procedures.

- 1.2.2 Quality Assurance & Quality Control Plans

1.2A.2 - Quality Assurance & Quality Control Plan for CCFMMP

1.2B.2 - Quality Assurance & Quality Control Plan for CCFPP

The Project Design Work Plans shall include Project Quality Assurance and Quality Control (QA/QC) Plans documenting Consultant's procedures to ensure Consultant's services and deliverables meet Valley Water requirements and accepted practices and standards of the Consultant's profession. Valley Water reserves the right to request and review the Consultant's Project documentation demonstrating its adherence with their own quality assurance procedures.

Consultant shall prepare and include a specific Survey Control Quality Control Plan consistent with the Caltrans Survey Manual, Article 9.6-1, Evaluation and Adjustment (see Revised Attachment Four to Revised Schedule D, Reference Materials) and a report shall be submitted to Valley Water.

Task 1.2A - Deliverables

1. CCFMMP Work Plan including Quality Assurance and Quality Control Plan (Draft, Draft Final, Final).
2. Baseline schedule draft and final (electronic; mmp and pdf).
3. Monthly schedule updates (electronic; mmp and pdf) and expenditures.
4. Significant schedule updates as necessary.
5. Survey Control Quality Control Plan (Draft, Draft Final, Final).

Task 1.2B - Deliverables

1. CCFPP Work Plan including Quality Assurance and Quality Control Plan (Draft, Draft Final, Final).

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2. Baseline schedule draft and final (electronic; mmp and pdf).
3. Monthly schedule updates (electronic; mmp and pdf) and expenditures.
4. Significant schedule updates as necessary.
5. Survey Control Quality Control Plan (Draft, Draft Final, Final).

1.3 Progress Meetings (UNCHANGED)

1.3A - Progress Meetings for CCFMMP

1.3B - Progress Meetings for CCFPP

Valley Water and Consultant's key staff and subconsultants, as determined necessary and appropriate by Consultant, subject to VWPM approval, and additional participants, as directed by Valley Water, or at Valley Water's direction, will coordinate and attend periodic progress meetings and workshops with Valley Water staff, including monthly design coordination meetings, regulatory and resource agencies, and review boards, as needed, to review, discuss and progress the work. For each meeting or workshop, the Consultant will prepare the meeting agenda and notes and submit them for review by Valley Water at least one week prior to the meetings.

Task 1.3A - Deliverables

1. Monthly meeting agendas, minutes, and presentations (Draft and Final).
2. Records of minutes and distribution.

Task 1.3B - Deliverables

1. Monthly meeting agendas, minutes, and presentations (Draft and Final).
2. Records of minutes and distribution.

1.4 One-on-One Meetings with Valley Water (UNCHANGED)

1.4A - One-on-One Meetings with Valley Water for CCFMMP

1.4B - One-on-One Meetings with Valley Water for CCFPP

Consultant Project Manager must provide a brief update of the team's work activities completed within each week, the look-ahead activities, and the issues and actions that require Valley Water's attention. The meeting schedule will be established by Valley Water, weekly/biweekly in person, video conference, or teleconference at Valley Water's discretion.

Task 1.4A - Deliverables

1. Weekly meeting agendas, minutes, and presentations (Draft and Final).
2. Records of minutes and distribution.

Task 1.4B - Deliverables

1. Weekly meeting agendas, minutes, and presentations (Draft and Final).
2. Records of minutes and distribution.

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1.5 Coordination and Communication with External Agencies (UNCHANGED)

**1.5A - Coordination and Communication with External Agencies for CCFMMP and
1.5B - Coordination and Communication with External Agencies for CCFPP**

Consultant will assist the VWPM with coordination and communication with appropriate regulatory or other agencies, such as City of San José and utility companies, as necessary, to execute this Scope of Services. This task includes support in drafting correspondence related to the Consultant's Project design activities as requested by Valley Water.

Task 1.5A - Deliverables

1. External Agencies Communication and Meetings minutes (Draft and Final).
2. Record of minutes and distribution.

Task 1.5B - Deliverables

1. External Agencies Communication and Meetings minutes (Draft and Final).
2. Record of minutes and distribution.

1.6 Public Outreach (UNCHANGED)

**1.6A - Public Outreach for CCFMMP
1.6B - Public Outreach for CCFPP**

If requested, Consultant will provide support and assistance with Valley Water's public outreach activities. Such assistance may include coordination, preparation, and participation including, preparing presentation materials, attendance at meetings, preparation of newsletters, graphics, updates to the Project website, developing responses to questions, and other tasks as directed by the VWPM.

Task 1.6A - Deliverables

1. Summaries of public comments detailing/categorizing public interests/concerns.
2. Content for outreach-related activities and materials.

Task 1.6B - Deliverables

1. Summaries of public comments detailing/categorizing public interests/concerns.
2. Content for outreach-related activities and materials.

1.7 Project-Specific Sub-Tasks (UNCHANGED)

1.7.1 Additional Review Meetings

Consultant shall recommend convening and attending meetings, workshops and consultations with Valley Water as needed to complete the 30% design tasks, 60% design tasks, 90% design tasks, and other design tasks.

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Task 1 - Assumptions

A. Project Management

Consultant shall perform as described below:

- 1) Supervise, coordinate and monitor design for conformance with standard engineering practice, Valley Water Policies and Procedures, and other governing agency requirements.
- 2) Notify Valley Water of any changes in scope or budget as soon as possible and determine actions, if necessary, to address these changes.
- 3) Maintain communication by being available by phone or e-mail and responding in a timely fashion.
- 4) Maintain Project Files.
- 5) Prepare monthly progress reports and invoices showing budgeted and actual costs versus work progress status and the projected spending versus progress.
- 6) Prepare correspondence and memoranda.
- 7) Perform other project management activities necessary to keep the Project on schedule.

B. Project Design Workplans

- 1) Quality Control must include, but not be limited to, the items listed below:
 - a. Quality control strategy.
 - b. All quality control activities to be conducted.
 - c. Identification of the technical reviewers and the Consultant's Quality Control Team.
 - d. Identification of Consultant's independent QA/QC Team.
 - e. Define roles and responsibilities of those who do work (e.g. project team members, design consultants, etc.), technical reviewers (from Consultant) and the Quality Control Team (from Consultant) relative to ensuring the interim work product and final deliverables meet quality standards.
 - f. Design Review Checklist
 - (1) Work product to be reviewed
 - (2) Scope of the review
 - (3) Reviewers
 - (4) Sign-off and date, remarks

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Consultant shall prepare and include a specific Survey Control Quality Control Plan consistent with the Caltrans Survey Manual, Article 9.6-1, Evaluation and Adjustment, and a report shall be submitted to Valley Water.

- 2) All control surveys will be evaluated, checked and adjusted by least squares or compass rule adjustment method, as appropriate, using observation equations before being used as a basis for any project survey.
 - a. The Project surveyor assembles all research materials and completed field data into a Project control survey file. The file then must be evaluated based on the process listed below.
 - (1) Reviewing field notes for completeness and accuracy.
 - (2) Reviewing all closures (residuals), adjustments, and conformance to standards.
 - (3) Reviewing final adjusted horizontal and vertical coordinate values.
 - b. All surveys must be performed under the direction of a Professional Land Surveyor licensed in the State of California.
- C. Progress Meetings, One-on-One Meetings with Valley Water, Coordination and Communication with External Agencies
 - 1) Meetings will be held in-person, in video conference, or in teleconference at the discretion of Valley Water with concurrence of the attendees.
 - 2) The Consultant shall communicate with the Project Team by any of the means listed below:
 - a. Meetings as described in Tasks 1.3 Progress Meetings, 1.4 One-on-One Meetings with Valley Water, and 1.5 Coordination and Communication with External Agencies.
 - b. Telephone communication with subsequent notes.
 - c. Maintenance of a decision log to monitor the impact and source of key decisions.
 - d. Maintenance of outstanding information log.
 - e. Maintenance of an action item log to monitor the status of critical assignments that affect the work progress.
 - f. Monthly status reports for attachment to the invoice, which will outline the work performed, budget and schedule status, earned value update, and any issues to be resolved.
 - 3) Consultant shall perform as described below.
 - a. Meet with Valley Water staff when either Party determines necessary, to review the Project scope of work, schedules, design standards, environmental mitigation

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measures, and Plans, Specifications, and Estimates (PS&E) requirements for the Project.

- b. Assist and participate in coordination meetings with the City of San José and regulatory agencies, as directed by Valley Water.
- c. Conduct utility coordination meetings, as needed, three (3) for CCFMMP and ten (20) for CCFPP.
- d. The above meetings will be held in-person, in video conference, or in teleconference at the discretion of Valley Water with concurrence of the attendees.

4) Public Outreach

- a. Public meetings for design, to a maximum of eighteen (18) for CCFMMP and twenty-five (25) for CCFPP, including landscaping design.
- b. Public meetings for aesthetic and similar issues, to a maximum of three (3) for CCFMMP and ten (10) for CCFPP.
- c. Attend and participate in up to thirty-six (36) public meetings/workshops for Public Outreach as required by Valley Water.

D. Basis of Level of Effort Estimates

- 1) The kick-off meeting task includes one day preparation and ½ day meeting for the PM, A and B Project Leads, and Discipline Leads.
- 2) The preparation of Work Plans is based on one draft version and one final version with contribution from PM for overall content and organization of the plan. A and B Project Leads and Discipline leads provide the detailed descriptions of task execution, review, and quality control measures for the deliverables.
- 3) Progress meeting task includes thirty-six (36) meetings (assuming a Project duration of 3 years) based on 2 hours of meeting with 4 hours preparation for the PM and commensurately for A and B Project Lead, as well as Discipline leads.
- 4) One-on-one meeting task is based on 300, 1½ hour meeting for the PM; accompanied by either the Project A Lead or the Project B Lead (2 total persons per meeting).
- 5) External agency meeting task is based on a maximum of fifty (50) coordination meetings (preparation, meeting, minutes).
- 6) Public outreach task is based on a maximum of forty-five (45) ½-day outreach meetings/events, including meeting time and support effort.
- 7) Project-Specific Sub-Tasks are based on a maximum of ten (10) 1-day meeting/workshop.

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TASK 2 - DATA COLLECTION AND INVESTIGATIONS (UNCHANGED)

2A - Data Collection and Investigations for CCFMMP (COMPLETED)

2B - Data Collection and Investigations for CCFPP

The purpose of this task is to research, review, and use Planning Phase deliverables as a basis for the design, as well as to conduct necessary field investigations (i.e., geotechnical, hydrological, hydraulic, etc.) to establish a Project Base Map, and prepare reports that will inform the design. Consultant is responsible for collecting all the data and conducting all investigations that are needed to complete the final design.

2.1 Research and Review of Available Project Documentation

2.1A - Research and Review of Available Project Documentation for CCFMMP

2.1B - Research and Review of Available Project Documentation for CCFPP

Consultant will research and review available relevant documents and standards from Valley Water, the City of San José, utilities, and others, including, but not limited to, Valley Water hydraulic and hydrologic modeling and the Planning Study Report (PSR), as-built plans, aerial photos, parcel maps, records of survey, available utility maps, assessor's maps, geotechnical reports and subsurface investigations, Cultural Resource Reports, etc.

Task 2.1A - Deliverables

1. Data request log, updates, and completion information.
2. List of existing data collected.

Task 2.1B - Deliverables

1. Data request log, updates, and completion information.
2. List of existing data collected.

2.2 Project Base Map

2.2A - Project Base Map for CCFMMP

2.2B - Project Base Map for CCFPP

Consultant shall prepare and submit Project Base Maps, survey data, drawings, utility info, etc. and data as necessary to complete required studies and prepare contract drawings for the Project. Base map preparation must conform to Santa Clara Valley Water District Standards for GIS Products (Schedule D, Attachment Four, Reference Materials). Base Map preparation shall include, but not be limited to:

- 2.2.1 Review data for existing utilities, pipelines, and other infrastructure to determine where it is necessary to verify locations for design and inclusion in final drawings. Request information, including maps if possible, from the City of San Jose, utilities, and private companies with potential infrastructure conflicts. At critical locations, the Consultant shall pothole existing utilities, pipelines, and other infrastructure as necessary to evaluate for potential conflicts and verify location for design and inclusion in the final drawings. Survey

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the location, type, and depth of each pothole location.

- 2.2.2 Survey the location and elevation of each geotechnical exploration. A standalone mapping deliverable showing this geotechnical boring data will also be prepared. Survey the location and elevation of each monitoring well and incorporate data into the Base Mapping.
- 2.2.3 Review data for existing utilities, pipelines, and other infrastructure to determine where it is necessary to verify locations for design and inclusion in final drawings. Request information, including maps if possible, from the City of San Jose, utilities, and private companies with potential infrastructure conflicts. At critical locations, the Consultant shall pothole existing utilities, pipelines, and other infrastructure as necessary to evaluate for potential conflicts and verify location for design and inclusion in the final drawings.
- 2.2.4 Perform land surveying to identify Project site utilities and other features for incorporation into the Project base map as well as support any mapping data collection and validation, including LiDAR. Land surveying will include a GPS survey to establish precise horizontal and vertical coordinates on a local control station. Checkpoints will be surveyed throughout the mapping area to validate existing LiDAR data (if any) and support new LiDAR data collection, if needed. The survey will include horizontal and vertical control stations published by the National Geodetic Survey (NGS) and/or NGS-published Continuously Operating Reference Stations in order to reference the Project to a specified geodetic coordinate system and vertical datum. [NOT USED]
- 2.2.5 Conduct field survey work as necessary to verify and supplement existing topographical data for the Project work. Survey work shall be adequate for preparation of base mapping data as well as any additional mapping data collection, including the LiDAR survey (if needed). The survey work will be conducted at high density and with accuracy capable of supporting 1-foot contours. In addition, aerial photography will be obtained at 1:3600 photo scale to provide 1" = 40' scale mapping and 1-foot contours. LiDAR data together with aerial photography will be used to generate a base map covering the Project work area. [NOT USED]

Task 2.2A - Deliverables

- 1. Project Base Map.
- 2. Report of findings including survey data, drawings, and utility Information.

Task 2.2B - Deliverables

- 1. Project Base Map.
- 2. Report of findings including survey data, drawings, and utility Information.

Task 2.2 - Assumptions

- 1. Quality control/quality assurance of all survey deliverables will be performed by a CA LS not in responsible charge of that specific deliverable.

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2. Title reports for all acquisition parcels, required for utility easement identification and location, to be provided by Valley Water.
3. Property access notification and coordination to be performed by Valley Water.
4. Any Supplemental Survey Control established shall be consistent with Caltrans Third Order survey procedures, protocols, and requirements.
5. A full underground utility survey utilizing electronic locating equipment and Ground Penetrating Radar (GPR) methods will be performed by Consultant's private utility locator to Quality Level B (Utility Designation) standards along each improvement route. Consultant will survey the location, type, and depth, if ascertainable, of each utility marking. This underground utility data will be incorporated into the Base Mapping.
6. National Flood Insurance Program (NFIP) survey support will be provided in those instances where the property owner wishes to elevate their residence above the base flood elevation (BFE) instead of relinquishing their property. Support could include BFE determination, establishment of a site benchmark, finished floor elevation confirmation, and preparation of a Federal Emergency Management Agency (FEMA) NFIP elevation certificate. **(DELETED)**
7. The Primary Control Network (PCN), as previously established and currently utilized by the Valley Water Land Surveying and Mapping Unit (LSMU), will be the measurement basis for this project. Following verification of the PCN, a supplemental control survey will be performed along the planned improvement routes to facilitate the field data collection required for this project.
8. As requested by the LSMU, Consultant will perform a verification review of the acquisition parcel resolved boundary locations. Selected property monumentation will be recovered to perform this task. Following boundary verification and as requested by Valley Water, stakeholders, or property owners, Consultant will provide right-of-way (ROW) and proposed ROW staking to field-delineate selected boundary and easement locations to aid in visualization of the planned acquisition or improvements.
9. Utility potholing based on Quality Level A (Potholing) standards at selected locations. These pothole data will be incorporated into the Base Mapping.

2.3 Geotechnical Investigations.

2.3A - Geotechnical Investigations for CCFMMP

2.3B - Geotechnical Investigations for CCFPP

- A. Consultant shall review previously completed relevant geotechnical reports and recommend additional investigations, if needed. The investigation will be designed to provide adequate data for the engineering analyses, the development of the Geotechnical Data Report and the Basis of Design Report.
- B. The Consultant shall conduct all investigations needed to develop the geotechnical parameters needed for the designs of the various project elements. The Geotechnical

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Investigation shall be performed by or under the charge of a Geotechnical Engineer licensed in the State of California.

- C. Valley Water will provide all existing geotechnical data for the Project to the Consultant for their evaluation and use. Additional Geotechnical Investigations may be approved by Valley Water with justification, to fill in data gaps identified as the detailed design progresses.
- D. The field exploration schedule is based on forty-five (45) days to perform seventy (70) exploratory auger borings and twenty (20) days to advance forty-five (45) Cone Penetration Tests.

2.3.1 Field Work

2.3.1A - Field Work for CCFMMP

2.3.1B - Field Work for CCFPP

- A. Consultant shall conduct Geotechnical/Subsurface Investigations as needed for the design and identified in the Geotechnical Investigations Work Plan. Consultant is responsible for the disposal of spoils generated from the investigations activities and to provide documentation of such disposal actions to Valley Water.
- B. The field work shall be delineated by the following Reaches and further delineated by CCFMMP and CCFPP elements within each Reach as stated in Section 4. Project Background, Subsection D. Project Elements, above.
 - 1) Reach 4 Montague Expwy to Old Oakland Road
 - 2) Reach 5 Old Oakland Rd to Mabury Rd
 - 3) Reach 6 Mabury Rd to East Santa Clara St
 - 4) Reach 7 East Santa Clara St to I-280
 - 5) Reach 8 I-280 to Tully Rd

2.3.1A.1 and 2.3.1B.1 Field Work Plan

Prior to commencing field work, the Consultant shall submit a Field Work Plan for Valley Water review and approval for all aspects of the work. This Field Work Plan will include, at a minimum, the elements listed below.

- A. A written narrative of the work to be performed including a description of all permits needed and any special conditions noted for the field work.
- B. Description of drilling and safety equipment and procedures to be used.
- C. Exploration site plan and table showing the Consultant's recommendations for exploration locations, depths, designs, and types of exploration to be performed (e.g., soil borings, cone penetration, piezometer, monitoring well installation, and others).
- D. Permits, regulations and conditions of work including, but not limited to, encroachment, traffic and transportation, noise and vibration limitations, hours of work

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as required by Valley Water, County of Santa Clara, City of San José, and State of California.

- E. A schedule showing all field work to be performed and who will be doing it.
- F. The cell phone numbers and names for the Consultant and/or a representative to be reached.
- G. A site-specific Health and Safety Plan.
- H. The Best Management Practices (BMPs) to be followed to protect staff and the public, property, and the environment from harm, damage, or pollution.
- I. The proposed drilling contractor(s) name, address, phone number, and proof of insurance and C-57 license.
- J. The names and qualifications of the individuals logging the borings.
- K. The laboratory proposed for testing and their current accreditations.

Task 2.3.1A.1 - Deliverables

- 1. Draft Field Work Plan.
- 2. Final Field Work Plan within one (1) week after Consultant's receipt of Valley Water comments.

Task 2.3.1B.1 - Deliverables

- 1. Draft Field Work Plan.
- 2. Final Field Work Plan within one (1) week after Consultant's receipt of Valley Water comments.
- 3. Draft Field Work Plan for additional flood protection elements added to Project scope upon completion of 60% design.
- 4. Final Field Work Plan for additional flood protection elements added to Project scope within one (1) week after Consultant's receipt of Valley Water comments.

Tasks 2.3.1 - Assumptions

The number and depths of explorations are based on information made available to Consultant regarding general site and subsurface conditions as they relate to planned improvements.

2.3.1A.2 and 2.3.1B.2 Field Work Coordination, Permits, and Applicable Regulations

Consultant shall coordinate all field work activities with the property owners and residents, public, government agencies, regulatory agencies, and Valley Water. Conformance with all conditions of Valley Water well standards, Best Management Practices listed in the Environmental Impact Report, encroachment permit regulations, applicable noise standards, and all other applicable regulations will be accomplished by

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Consultant by adhering to the detailed final Field Work Plan. During the field work, Consultant or a representative shall be available to respond to Valley Water and public inquiries within two hours.

Task 2.3.1A.2 - Deliverables

Supporting documentation to the Field Work Plan which is needed to apply for and obtain permits.

Task 2.3.1B.2 - Deliverables

Supporting documentation to the Field Work Plan which is needed to apply for and obtain permits.

2.3.1A.3 and 2.3.1B.3 Encroachment Permits and Traffic Control Plans

Consultant shall apply for and obtain encroachment permits from the City of San José and Valley Water drilling/well permits as needed for the applicable exploration locations. Consultant shall prepare all traffic control plans and correspondence necessary to obtain the permits. Consultant shall be responsible for ensuring compliance with the traffic control plan and permit requirements.

Task 2.3.1A.3 - Deliverables

Copies of the permit applications and permits.

Task 2.3.1B.3 - Deliverables

Copies of the permit applications and permits for original flood protection elements and additional flood protection elements added after completion of 60% design.

2.3.1A.4 and 2.3.1B.4 Utility and Access Verification

- A. Prior to initiation of the subsurface exploration work, Consultant's field personnel shall specifically evaluate each location to assess potential issues relating to the timely, safe, and successful completion of the work. This will include contacting each property owner who has granted right-of-entry and discussing any special needs they may have regarding access. Overall safety at each particular exploration location shall be the responsibility of Consultant.
- B. Consultant shall initially identify the locations of utilities and utility corridors during the development and preparation of the Field Work Plan. The ability to access and obtain utility clearance of the proposed exploration locations indicated in the Field Work Plan will first be checked in the field by Consultant during site reconnaissance. The accessibility of each site shall be evaluated by Consultant based on visual observations, the identified property ownership, and right-of-entry constraints, environmental constraints identified by Valley Water, and publicly available information regarding locations of utilities or other third-party improvements. Consultant shall use the Field Work Plan level evaluations as the basis for initial

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clearance of the locations only and those locations will be subject to formal clearance by USA and Consultant's private utility locator, applicable utility owners, and property or easement owners whether public or private.

- C. Consultant shall complete the final verification using the process for contacting USA as detailed in the California Government Code Sections 4216-4216.9 for marking and clearing of utilities prior to initiating subsurface excavations including drilling. In addition, Consultant shall provide clearance of those utilities excluded under Section 4216(h) through use of a private utility locating service, as necessary.

Task 2.3.1A.4 - Deliverables

Copies of the utility clearance request and response documents and correspondence with utilities, public agencies, and property owners.

Task 2.3.1B.4 - Deliverables

Copies of the utility clearance request and response documents and correspondence with utilities, public agencies, and property owners.

2.3.1A.5 and 2.3.1B.5 Health and Safety Plan

- A. A draft Health and Safety Plan as defined in California Code of Regulations Title 8, Section 5192(b)(4)(B), shall be prepared by Consultant's Certified Industrial Hygienist will be prepared concurrently with the draft Field Work Plan and will be appended to the draft Field Work Plan by Consultant. The Consultant will modify the draft Health and Safety Plan to reflect Valley Water's comments and the final Health and Safety Plan will be appended to the final Field Work Plan.
- B. Consultant is advised that safety and security issues may occur at Project locations. It is the Consultant's responsibility to identify, specify, and take appropriate measures to address such issues.

Task 2.3.1A.5 - Deliverables

Copies of the draft and final Health and Safety Plans shall be included as appendices to the draft and final Field Work Plan submittals.

Task 2.3.1B.5 - Deliverables

Copies of the draft and final Health and Safety Plans shall be included as appendices to the draft and final Field Work Plan submittals.

2.3.1A.6 and 2.3.1B.6 Survey Work

Following the acceptance of the Field Work Plan by Valley Water, Consultant shall physically locate all planned exploration locations in the field using handheld GPS devices. Consultant shall tabulate the locations indicated in the Field Work Plan using northing and easting data based on the apparent locations determined from the LiDAR

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maps to be provided by Valley Water. Consultant shall mark the actual proposed locations in the field prior to requesting USA clearance, and Consultant will determine the locations of the markings using portable GPS units that are reported to be accurate within one foot. As required by the results of the USA clearance or other constraints, Consultant shall revise and mark the final locations of the exploration points after completion of the exploration. The final locations of the completed exploration points will be surveyed by Consultant's registered and licensed California Land Surveyor.

Task 2.3.1A.6 - Deliverables

Copies of the survey map depicting and summarizing the locations of the completed exploration points will be delivered as a paper copy and as an AutoCAD file.

Task 2.3.1B.6 - Deliverables

Copies of the survey map depicting and summarizing the locations of the completed exploration points will be delivered as a paper copy and as an AutoCAD file.

2.3.1A.7 and 2.3.1B.7 Subsurface Exploration, Classification, Sampling, Backfilling

The Consultant shall provide all necessary labor, materials, tools, and equipment to perform the explorations and subsurface soil sampling.

- A. All borings that are not converted to monitoring wells or piezometers shall be backfilled with cement grout in accordance with Valley Water, City, and Santa Clara County standards including Valley Water Ordinance No. 90-1, *Valley Water Well Standards*, and California Department of Water Resources Bulletin 74-81, *California Well Standards*, and Bulletin 74-90, *Draft Supplement to Bulletin 74-81*.
- B. The Consultant shall be responsible for repair and replacement of fences, landscaping, or other features damaged or removed for drill rig access. While performing the field work, the Consultant shall act in a professional manner at all times and keep the work area neat and clean. The Consultant shall minimize any interference to the adjacent private property owners and adjacent properties during the execution of the work. All field work shall be documented with digital photos.

2.3.1A.7.1 and 2.3.1B.7.1

Consultant shall be responsible for the testing, on-site storage, and disposal of investigation spoils. Three to five drums of spoils per boring have been used to estimate storage and analytical testing quantities.

- A. Consultant shall drum and transport soil cuttings to an on-site storage location designated by Valley Water.
- B. Consultant shall perform the necessary tests of the drummed soil cuttings for disposal in accordance with state, federal and local regulations. The soil cuttings are assumed to be non-hazardous.

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- C. Consultant shall be responsible for proper collection, preservation, transportation, and chains of custody of the samples. Samples will be the property of the Consultant.
- D. Consultant shall dispose of the drums in accordance with state, federal, and local regulations.
- E. Consultant shall provide certificate(s) of disposal to Valley Water.

2.3.1A.7.2 and 2.3.1B.7.2 Installation of Monitoring Wells or Piezometers

- A. Some of the borings may need to be converted into piezometers or monitoring wells for medium and long-term monitoring of the groundwater level. Consultant shall make recommendations for which borings should be converted. Consultant shall obtain Valley Water Well Permits (<https://www.valleywater.org/contractors/doing-businesses-with-the-district/wells-and-well-owners/well-permits-and-inspections>) for the installation of the piezometers or monitoring wells. Consultant shall be responsible for monitoring the wells and piezometers from the time of installation until submittal and approval of the final 100% PS&E.
- B. To characterize the groundwater environment for CCFMMP, three monitoring wells/piezometers will be installed in each Reach (5, 6, and 7) for a total of 9 wells. To characterize the groundwater environment for CCFPP, three monitoring wells/piezometers will be installed in each Reach (4 and 8) for a total of 6 wells. Locations of monitoring wells/piezometers proposed in Reaches 6 and 7 will be positioned in relation to planned improvements of Project A and Project B.

Task 2.3.1A.7 - Deliverables

- 1. Field work documentation, including digital photographs.
- 2. Copies of spoils disposal certificates.
- 3. Monitoring well and/or piezometer readings.

Task 2.3.1B.7 - Deliverables

- 1. Field work documentation, including digital photographs.
- 2. Copies of spoils disposal certificates.
- 3. Monitoring well and/or piezometer readings.

2.3.2 Laboratory Testing Program

2.3.2A - Laboratory Testing Program for CCFMMP

2.3.2B - Laboratory Testing Program for CCFPP

2.3.2A.1 and 2.3.2B.1 Laboratory Testing Plan

- A. Prior to commencing laboratory testing for all aspects of the work, Consultant shall submit a Laboratory Testing Plan for Valley Water review and approval. This testing plan shall include a list of selected soil samples and proposed testing for the sample. Include the name(s) and credentials of the proposed testing laboratory(ies) to be used

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by Consultant. A reputable laboratory, which has been accredited by the AASHTO Materials Reference Laboratory or by the US Army Corps of Engineers for the required soil tests shall perform the soils testing.

- B. Anticipated laboratory testing will include sieve analysis, moisture content and unit weight, Atterberg limits (plasticity index), consolidation, unconfined compression, triaxial shear strength, corrosion tests and R-value tests for selected samples.

2.3.2A.2 and 2.3.2B.2 Laboratory Testing and Results

Laboratory work shall include testing of selected soil samples to determine relevant engineering properties, corrosion characteristics, and classifications of the soils. Consultant shall submit all Laboratory Testing Results to Valley Water as they become available.

Task 2.3.2A - Deliverables

1. Laboratory Testing Plan
2. Laboratory Testing Results

Task 2.3.2B - Deliverables

1. Laboratory Testing Plan
2. Laboratory Testing Results

2.3.3 Engineering Analysis, Evaluation, And Recommendation

2.3.3A - Engineering Analysis, Evaluation, and Recommendation for CCFMMP

2.3.3B - Engineering Analysis, Evaluation, and Recommendation for CCFPP

2.3.3A.1 and 2.3.3B.1 Engineering Analyses

- A. Consultant shall perform all necessary engineering analyses to determine all soil parameters needed for the design of the various project elements. This should include evaluating slope stability, seepage, bearing capacity, pile load capacity, settlement, lateral earth pressure, liquefaction potential and any other elements considered necessary by Consultant. Consultant shall also develop conclusions and recommendations for design and construction of the project structures as described in project description.
- B. Analysis and evaluation shall be submitted as a part of the geotechnical design report and shall include, but not be limited to, the following:
- 1) Site characterization and evaluation of engineering properties of the soils;
 - 2) Any unusual subsurface materials and foundations issues;
 - 3) Groundwater conditions at all sites and requirements for drainage;
 - 4) Design criteria for cut and fill slopes;

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- 5) Potential usability of onsite materials as fill and/or the usability of nearby material sources;
- 6) Foundation recommendations and design criteria for required structures;
- 7) Evaluation of potential geological hazards including liquefaction, lateral spreading, differential seismic compaction, fault rupture and ground shaking;
- 8) Recommendations for lateral earth pressures (active, passive, and seismic), filter materials, geo-textiles and temporary slope inclinations for construction;
- 9) Seismic design criteria;
- 10) Corrosion protection;
- 11) Design criteria for erosion control measures;
- 12) CBR or R-values to be used in the design of pavements for roads and parking areas; and
- 13) Preparation of inclusive Geotechnical Investigation Report including recommendations.

2.3.3A.2 and 2.3.3B.2 Plans and Specifications Review

Geotechnical Engineer shall review and revise 60%, 90%, and 100% PS&E in order to ensure that the intent of the geotechnical recommendations and design criteria are accurately reflected in the PS&E. Reviews shall be concurrent with Valley Water 60%, 90%, and 100% reviews.

Task 2.3.3A - Deliverables

1. Description of analysis to be performed, including assumptions.
2. Analysis results to be included in the Geotechnical Report, Task 2.3.4 Geotechnical Report.
3. 60%, 90%, and 100% plan and specification geotechnical reviews and revisions.

Task 2.3.3B - Deliverables

1. Description of analysis to be performed, including assumptions.
2. Analysis results to be included in the Geotechnical Report, Task 2.3.4 Geotechnical Report.
3. 60%, 90%, and 100% plan and specification geotechnical reviews and revisions.
4. Technical Memorandum from Consultant, as confirmed by the Geotechnical Engineer, confirming that the intent of the geotechnical recommendations and design criteria are accurately reflected in the 90% PS&E.
5. Technical Memorandum from Consultant, as confirmed by the Geotechnical Engineer, confirming that the intent of the geotechnical recommendations and design criteria are accurately reflected in the final PS&E.

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2.3.4 Geotechnical Report

2.3.4A - Geotechnical Report for CCFMMP

2.3.4B - Geotechnical Report for CCFPP

- A. Consultant shall develop a Geotechnical Report which will document the investigations performed and present the data obtained and the results of the field exploration and laboratory testing work completed as well as other the results of other investigations previously completed relating to this Project. The report shall also include detailed descriptions of the methodologies followed, a summary of the soil and geologic conditions, previous and current investigations and explorations, materials encountered, and the laboratory testing program as listed below.
- B. The Geotechnical Report shall include a Geotechnical Design/Baseline Report that provides an analysis, assessment and interpretation of the existing subsurface conditions. The report will also provide appropriate design recommendations for the basis of design, final design and construction. It will also provide information to the contractor and guidance to Valley Water in the management and monitoring performance during construction. The report shall reference other geotechnical studies previously performed on the Project and other historical studies from the site vicinity.

**2.3.4A.1 and 2.3.4B.1 Preliminary Geotechnical Recommendations,
2.3.4A.2 and 2.3.4B.2 Geotechnical Report**

Consultant shall prepare Draft 60%, 90%, and 100% Geotechnical Reports and Final Geotechnical Reports for the CCFMMP and the CCFPP separately. Comments on the draft reports shall be addressed in the subsequent reports. Reports shall be stamped and signed by the Geotechnical Engineer. The reports shall be prepared as technical reports and include, but not be limited to, the items from the list below.

- A. Table of Contents.
- B. Introduction including site location, description and purpose of investigation.
- C. Description of field investigation including field methods and equipment.
- D. Laboratory results including methods and calculations.
- E. Vicinity map and exploration locations map with pertinent geology, including the approximate location of previous exploration performed by others.
- F. Description of physical properties and characteristics of the subsurface materials including groundwater level and possible seasonal variations in the level.
- G. General site geology and seismicity including seismic design criteria in accordance with current design standards.
- H. Discussion of liquefaction potential.

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- I. Potential usability of on-site materials.
- J. Logs of the exploratory borings and other investigation, and included in 60%, 90%, and 100% plans.
- K. Recommendations for excavation and site earthwork, including procedures for subgrade preparation and proper placement of fill and backfill.
- L. Recommendations and design criteria for floodwalls and retaining walls including lateral earth pressures.
- M. Recommendations for corrosion protection.
- N. Recommendations for erosion control measures, if applicable.
- O. Foundation recommendations for planned structures.
- P. Pavement design recommendations, if applicable.

Task 2.3.4A - Deliverables

- 1. Analysis and Recommendations.
- 2. Any additional documentation including site visits, meetings (assume three (3) site visits and three (3) meetings in-person, teleconference, or video conferencing for CCFMMP).
- 3. Draft 60%, 90%, and 100% Geotechnical Reports for CCFMMP.
- 4. Final Draft Geotechnical Reports, three (3) copies for CCFMMP.

Task 2.3.4B - Deliverables

- 1. Analysis and Recommendations.
- 2. Any additional documentation including site visits, meetings (assume six (6) site visits and six (6) meetings in-person, teleconference, or video conferencing for CCFPP).
- 3. Draft 60%, 90%, and 100% Geotechnical Reports for CCFPP.
- 4. Final Draft Geotechnical Reports, three (3) copies for CCFPP.

2.4 Review to Confirm or Modify Valley Water Hydrology & Hydraulic (H&H) Model Results

Valley Water (VW) performed hydrology and hydraulics modeling to determine design water surface elevations (WSE) for the preliminary design of the Coyote Creek Flood Protection Project (CCFPP). The purpose of this task is to review the VW modeling and, if appropriate, make changes and modify design WSEs. As part of this review Consultant will conduct the following tasks.

- A. Obtain HEC-RAS model developed by Valley Water for Project A and Project B and run to confirm existing design water surface elevations.
- B. Review survey data collected for both Project A and Project B and compare to what was used in the Valley Water's hydraulics model. Modify topography/cross-sections as necessary.

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- C. Confirm size and elevation of design elements in the hydraulic model.
- D. Develop water surface profiles for each design element. Modify elevations of design elements as necessary.
- E. Attend meetings/conference calls.
- F. Draft memorandum on H&H study (part of Basis of Design report).
- G. Final memorandum on H&H study.

Task 2.4 - Assumptions

- 1. Valley Water will provide HEC-RAS model used for initial design.
- 2. Hydrology is acceptable to VW so will not be reviewed or modified.

TASK 3 - BASIS FOR DESIGN (UNCHANGED)

3A - Basis for Design for CCFMMP (COMPLETED)

3B - Basis for Design for CCFPP

The purpose of this Task is to perform the engineering analyses, calculations, and interpretations that are required to support and develop the Basis of Design for the Project. Consultant is responsible for developing a comprehensive scope of work and performing independent analyses, as appropriate, to fully develop the Basis of Design without relying solely on work completed by others to achieve this purpose. The supporting analyses, calculations, and other standards and detailed design information shall be used to prepare a biddable and constructible set of Plans and Specifications and Engineering Cost Estimates for the Project.

3A.1 and 3B.1

Consultant shall perform design analysis to establish basis for final design of all project elements.

3.1 Design Criteria Memorandum

The Design Criteria Memorandum (DCM) will define the basic criteria and guidance that will be utilized during design. It will include Valley Water basic operations requirements, Project performance requirements, and other stakeholders' design criteria as identified by Valley Water. It will include known relevant constraints such as environmental restriction dates, etc. It will document geotechnical, civil, structural, electrical, mechanical, hydrologic and/or hydraulic standards to be used in the analyses and design. Pertinent codes and references will be cited. The Design Criteria Memorandum will be issued in Draft form and updated as design progresses through the various design stages.

3.2 Basis of Design Report

Consultant shall prepare a full Basis of Design Report to define the technical requirements and parameters for the entire Project including the fields of civil,

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geotechnical, structural, hydrologic, hydraulic, mechanical, electrical, controls, instrumentation, maintenance, and others, as appropriate.

3.2.1 The Basis of Design Report may include but is not limited to the following: description of the general arrangement of existing and new Project facilities; summary of the pertinent findings of field investigations; basis for material properties for use in analyses; construction materials source assessment (on-site and commercial); foundation characterization to assess excavation requirements and foundation acceptance criteria; groundwater dewatering requirements; civil and geotechnical design of the Project elements for analyses; design of disposal sites; hydraulic and structural design of various elements; mechanical and electrical facilities design; and access roadwork.

3.2.1.1 Consultant shall complete any design work that forms the basis for what is shown and specified in the 30% Plans and Specifications (P&S). Design analysis and/or calculations shall confirm that the design as shown in the 30% P&S is valid and constructible and be completed prior to finalizing the 30% P&S for Valley Water review. Design analysis and calculations shall include the following:

- A. Project name and number.
- B. Table of contents if more than one item is being calculated.
- C. Purpose of the analysis and calculations at the beginning of the document.
- D. Summary of the results (or highlight clearly in the calculations).
- E. Citation of any references such as other technical memoranda, codes, reports, standards used in the analysis and calculations.
- F. Clearly documented assumptions.
- G. Explanations and unit measures for what each parameter in each formula is used.

3.2.2 The Basis of Design Report is to be updated throughout the design phase, if required. Upon completion of final design, the Basis of Design Report shall be updated to reflect any changes or additions that occurred over the course of the design development as detailed in the final design document preparation.

Task 3 - Deliverables

1. Design Criteria Memorandum. (Multiple Drafts and Final).
2. Basis of Design Report (Draft and Draft Final).

Task 3 - Assumptions

Nominal effort assumed for the Design Criteria Tech Memo and the Basis of Design Report to allow Project A deliverables to be updated and refined for Project B.

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TASK 4 - 30-PERCENT DESIGN DOCUMENT PREPARATION (COMPLETED)

4A - 30 Percent Design Document Preparation for CCFMMP

4B - 30 Percent Design Document Preparation for CCFPP

The 30% design set shall establish primary drawings and specifications for all major Project components and shall include newly developed design details and/or refinement of the preliminary design prepared during the planning phase. The 30% design set will incorporate requirements and criteria identified in the Basis of Design documents and describe the construction scope in more detail. The level of completeness shall be Partially Complete to Substantially Complete.

4.1 Sample Drawings and Specifications

Consultant shall prepare, and submit to Valley Water, sample drawings and specifications for Valley Water review and approval to ensure that Drafting Standards are being adopted into the plan set and the specifications also follow Valley Water Specification standards.

- 4.1.1 The sample drawings shall include an index drawing numbering scheme, file naming labeling, layout, and format.
- 4.1.2 For specification development, the Consultant shall use Valley Water's Standard Provisions (boilerplate) and Valley Water's Special Provisions format. Consultant shall recommend edits and additions to Valley Water Provisions where appropriate.
- 4.1.3 Consultant shall submit a recommended format for the Technical provisions, for review and approval by Valley Water.

4.2 30% Plans, Specification and Cost Estimate

Consultant shall prepare and submit 30% drawings, specifications, and an Association for the Advancement of Cost Engineering (AACE) Class 4 construction cost estimate. The plans shall include the detailed design elements, at the 30% level of design, and the specifications shall include detailed outlines of the technical specifications. Cost estimates for the most significant lines of the work breakdown structure shall be "bottom-up" estimates. The basis for field and office overhead, other markups, and profit shall be clearly identified in the estimate.

- 4.2.1 Valley Water has a separate bid proposal package/template for which the Consultant shall provide input, as requested by Valley Water. Multiple, intermediate submittals of Special Provision sections to Valley Water are anticipated to reconcile referencing and formatting issues.

4.3 Right of Way

The 30% plans shall also include clear delineation of existing property lines and take lines (i.e., rights of way, easements, or property acquisitions) needed for Project construction and/or ongoing maintenance or access.

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4.4 Review Meetings

Consultant will conduct a 30% review meeting/workshop with Valley Water to review and discuss Valley Water comments. Consultant will compile a Comment Resolution Document. The Comment Resolution Document shall list collected comments, proposed means of resolution, and means to document that resolution is completed in the next design submittal. This sub-task is funded pursuant to sub-task 1.3 One-on-One Meetings with Valley Water.

4.5 Additional Review Meetings

Consultant shall identify and attend meetings, workshops and consultations with Valley Water as needed to complete the 30% design tasks. This sub-task is funded pursuant to sub-task 1.6.1 Additional Review Meetings.

4.6 Project-Specific Sub-Tasks

4.6.1A and 4.6.1B

- A. Consultant shall develop a Type Selection Report.
- B. Project alternatives shall be presented in detail, are reviewed, and the recommended alternative is presented. The review and report shall be in accordance with the Caltrans Information and Procedures Guide, June 2019 or latest version (Schedule D, Attachment Four, Reference Materials).

4.6.2A and 4.6.2B

- A. Consultant shall perform a Control Survey in accordance with the Caltrans Survey Manual, Chapter 9, Control Surveys, (Schedule D, Attachment Four, Reference Materials) and prepare a Survey Control Report.
- B. The Survey Control Report shall contain the following at a minimum:
 - 1) Introduction
 - 2) Purpose
 - 3) Project Coordinate System
 - 4) Methods
 - 5) Network Adjustment Results
 - 6) Positional Accuracy Results
 - 7) Recommendations
 - 8) Surveyor's Statement
- C. Survey support will include the verification review of the acquisition parcel resolved boundary linework. Supplemental control points, work control points, recovered property monumentation and control point tables thereof will be shown on the 30% design submittal.

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Task 4A - Deliverables

1. Sample Drawings and Specifications
2. Quantity take-offs
3. Technical memorandum detailing design analysis
4. Type Selection Report
5. Draft 30% Plans (11" x 17") and Specifications
6. 30% AACE Class 4 Construction Cost Estimate
7. Review Meeting/Workshop draft and final minutes
8. Survey Control Report

Task 4B - Deliverables

1. Sample Drawings and Specifications
2. Quantity take-offs
3. Technical memorandum detailing design analysis
4. Type Selection Report
5. Draft 30% Plans (11" x 17") and Specifications
6. 30% AACE Class 4 Construction Cost Estimate
7. Review Meeting/Workshop draft and final minutes
8. Survey Control Report

Task 4 - Assumptions

1. Consultant shall prepare 30% Design Plan Set in AutoCAD in accordance with Valley Water CADD Standards and include appropriate elements from the Coyote Watershed Aesthetic Guidelines (Schedule D, Attachment Four, Reference Materials).
2. At a minimum, these sheets shall include the following:
 - a. Cover/Title sheet
 - b. Index map and sheet
 - c. General Notes, Abbreviations and Legend sheets
 - d. General site plan sheet
 - e. Survey control points and table
 - f. Plan and Profile sheets
 - g. Cross sections
 - h. Typical Sections
 - i. Contractor layout, staging, access, and work areas
 - j. Valley Water existing fee and permanent easement and temporary construction easements

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- k. Additional temporary construction easements required to construct the Projects
- l. Preliminary Landscaping and Revegetation plans and details
- 3. Special Provision articles shall describe key implementation strategies that will impact future design work. Technical Provisions shall be prepared at the 60% stage.
- 4. Drawings shall be marked as "Preliminary" until approved by Valley Water.
- 5. For budgetary purposes, the level of effort for design documentation was developed based on an estimated sheet count for each design phase deliverable and an assumed number of hours per sheet to prepare the design documents for each phase of design. Consultant will advise Valley Water at the monthly meetings if the level of effort estimates are commensurate with the budgetary assumptions. See Table 7-1 Summary of Estimated Sheet Count for Projects A and B, which provides a summary of the estimated sheet count for Projects A and B.

TASK 5 - 60 PERCENT DESIGN DOCUMENT PREPARATION (COMPLETED)

5A - 60 Percent Design Document Preparation for CCFMMP

5B - 60 Percent Design Document Preparation for CCFPP

The 60% design set shall incorporate additional requirements, criteria, and details that were not included in the 30% design set. It shall address the comments received and reflect necessary revisions and resolved issues from the 30% design set. It shall be ready for agency permitting review. The level of completeness shall be Substantially Complete to Virtually Complete and ready for permitting agency review.

5.1 60% Plans, Specification and Cost Estimate

Consultant shall prepare and submit 60% drawings, specifications, and an AACE Class 3 construction cost estimate. The drawings, sections, and details must be substantially completed. Cost estimates for the most significant lines of the work breakdown structure shall be "bottom-up" estimates based on assumed productivity, equipment, and labor spreads for the activities. The basis for field and office overhead, other markups, and profit shall be clearly identified in the estimate. The submittal shall address the review comments in the 30% Design Comment Resolution Document.

5.2 Review Meetings

Consultant will conduct a 60% review meeting/workshop with Valley Water to review and discuss Valley Water comments. Consultant will compile a Comment Resolution Document. The Comment Resolution Document shall list collected comments, proposed means of resolution, and means to document that resolution is completed in the next design submittal. This sub-task is funded in sub-task 1.3 - One-on-One Meetings with Valley Water.

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5.3 Additional Review Meetings

Consultant shall identify and attend design input meetings, workshops and consultations with Valley Water as needed to complete the 60% design tasks. This sub-task is funded in sub-task 1.7.1 - Additional Review Meetings.

5.4 Draft Bid Items

Consultant shall prepare draft bid items at the 60% level of design, including a Technical Memorandum that explains the basis for the bid items and the strategies related to risk and cost uncertainty associated with work that may be difficult to define.

5.5 Project Completion

Provisions regarding milestones, testing, and acceptance schedule and criteria for the Project aligned with completion and payment for the Contractor's completion of each milestone are to be included in the Project specifications.

5.6 Project-Specific Sub-Tasks

5.6A.1 and 5.6B.1 Tree Survey

Consultant shall conduct a tree survey within the Project boundary. The tree survey shall be performed, and the resulting report prepared by an ISA-certified arborist or ASCA consulting arborist.

5.6A.1.1 and 5.6B.1.1 Conduct Tree and Shrub Inventory of the Project

The inventory shall include the following:

- A. Identification of all trees and shrubs (e.g. elderberry and willow) greater than 2 inches Diameter at Breast at Height (DBH) in project reach by species. Mark each tree and shrub with a tree tag using a unique identifier.
- B. Information including species, height, DBH, whether regionally native or not, and condition (tree/shrub health such as dead and/or diseased).
- C. A detailed map showing location of all trees and shrubs along the project reach. Locations should be recorded using a GPS unit with sub-meter accuracy.

5.6A.1.2. and 5.6B.1.2 Identify City of San José Heritage Trees

Identify on map any trees that meet the City of San José definition of a heritage tree.

5.6A.1.3 and 5.6B.1.3 Tree Survey Report

The tree survey report shall include a list of all mapped trees and shrubs in tabular form with species, height, DBH, whether regionally native or not, whether a Heritage Tree, and condition, as well as a map of all tagged trees/shrubs. Include representative photos of

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each dominant species. Include GPS shapefile(s) of locations of tagged individuals, along with appropriate metadata. Include findings and recommendations for tree protections (for example, trees that should/can be reasonably avoided), removals, and rationale. Consultant shall include an Excel table of survey results.

5.6A.1.4 and 5.6B.1.4 Tree Demolition Plan Sheets

Consultant shall prepare tree demolition plan sheets, including tabular survey results. Plan sheets shall be included in 60% PS&E plan submittals.

Task 5.6A - Deliverables

1. Statement of Qualifications for ISA-certified Arborist or ASCA Consulting Arborist.
2. Tree survey report.
3. Tree demolition plan sheets for inclusion in 60% Design Plan Set.
4. Revised quantity take-offs.
5. AACE Class 3 Construction Cost Estimate.
6. Draft 60% Plans.
7. Draft 60% Special and Technical Specifications.
8. Review meetings Agendas and 60% Design Comment Resolution Document draft and final minutes.
9. Draft Bid Items & Supporting Technical Memorandum.

Task 5.6B - Deliverables

1. Statement of Qualifications for ISA-certified Arborist or ASCA Consulting Arborist.
2. Tree survey report.
3. Tree demolition plan sheets for inclusion in 60% Design Plan Set.
4. Revised quantity take-offs.
5. AACE Class 3 Construction Cost Estimate.
6. Draft 60% Plans.
7. Draft 60% Special and Technical Specifications.
8. Review meetings Agendas and 60% Design Comment Resolution Document draft and final minutes.
9. Draft Bid Items & Supporting Technical Memorandum.

Task 5 - Assumptions

1. Prepare 60% Design Plan Set in AutoCAD following Valley Water design standards. At a minimum, these sheets shall include the following:
 - a. Cover/Title sheet
 - b. Index map
 - c. General notes, Abbreviations, and Legend sheet
 - d. General site plan sheet
 - e. Drawing index sheet
 - f. Plan and Profile sheets
 - g. Cross Sections
 - h. Typical Sections

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- i. Demolition sheets
 - j. Civil/Detail, including grading details sheets, hazardous material locations
 - k. Traffic Control and Detour Plans
 - l. Contractor layout and work area diagram
 - m. Structural Sheets
 - n. Landscape, Tree Demolition, Revegetation Plans and Details
 - o. Irrigation Plans and Details
 - p. Right of Way Layout and Control sheets
 - q. Standard Details sheets
 - r. Sheets(s) of geotechnical investigation logs
 - s. Supplemental sheets as required
2. Prepare 60% Special and Technical Provisions. The specifications shall contain the following:
 - a. Cover sheet
 - b. Title sheet
 - c. Table of Contents
 - d. Special Provisions
 - e. Technical Provisions
3. Incorporate in the Plans and in the Specifications locations and specifics of areas in which the Construction Contractor may encounter hazardous materials or waste during construction.
4. Specifications that are not the approved 60% specifications but are working copies shall be marked "Preliminary" and dated.
5. Coordinate for potholing and verification, preparation of high-risk utility certifications, assisting Valley Water with utility agreements, inclusion of utility designs with PS&E, incorporating utility and agency requirements in the PS&E and final Right-of-Way certification.
6. Perform 60% level quantity take offs and update engineer's estimate for the Project and revise quantities/cost calculations as required per review comments.
7. Drawings shall be marked as Preliminary until approved by Valley Water.
8. For budgetary purposes, the level of effort for design documentation was developed based on an estimated sheet count for each design phase deliverable and an assumed number of hours per sheet to prepare the design documents for each phase of design. Consultant will advise Valley Water at the monthly meetings if the level of effort estimates are commensurate with the budgetary assumptions. See Table 7-1 Summary of Estimated Sheet Count for Projects A and B, which provides a summary of the estimated sheet count for Projects A and B.

TASK 6 - 90 PERCENT DESIGN DOCUMENT PREPARATION (COMPLETED)

The 90% design set shall reflect the revisions and resolutions required from the comments received for the 60% design set. It shall also incorporate any permit conditions established by regulatory agencies. The level of completeness shall be Complete.

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6A - 90 Percent Design Document Preparation for CCFMMP

6B - 90 Percent Design Document Preparation for CCFPP

6.1 90% Plans, Specification and Cost Estimate

- A. Consultant shall prepare and submit 90% drawings, specifications, and an AACE Class 2 construction cost estimate. The submittal shall be a complete drawing and specification set at or near the level of completion for construction. The cost estimate shall be based on an updated, detailed logical work breakdown structure based on the 90% plans and specifications. The submittal shall address the comments in the Design Comment Resolution Document.
- B. Consultant shall review 60% PS&E Submittal comments and prepare responses. Coordinate and resolve design comments and issues from comments received from Valley Water, City of San Jose, and resource/regulatory agencies.
- C. Consultant shall coordinate design with all agencies and update PS&E, cost/quantity take-offs by incorporating comments from 60% review. This submittal represents complete checked plans, specifications, quantities and cost estimates, ready for final Valley Water final review. This submittal stage is for Valley Water to perform final check.
- D. Design calculations shall include all analysis and computations that were necessary in designing the structures or elements of both Projects. Independent check calculations shall include all analysis and computations that are necessary to independently check all aspects of the design shown on the unchecked details. Results from the check calculations shall be compared with the design. Discrepancies shall be resolved between the designer and checker and the resolutions documented.
- E. Design and check calculations shall conform to the following additional requirements:
 - 1) Must be bound separately from each other for each structure or element.
 - 2) Must be labeled with whether they are design or check calculations
 - 3) Must bear the State of California Registered Professional Engineer Registration seal with the signature, license number, and registration certificate expiration date of the design engineer and independent check engineer.
 - 4) Must contain a table of contents that refers to page numbers--all pages must be numbered.
 - 5) Must be legible and organized so that the design logic can be easily followed.
 - 6) Must contain only final computer runs including input and output sheets.
 - 7) Must contain enough notes on calculation sheets, computer input/output, and on other documentation to clearly show the design logic.

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- 8) Must contain copies of design charts with the specific entries highlighted that were used in the design.
- 9) Must document all assumptions and conclusions.
- F. An independent check shall be performed by a third party, not previously involved with the Project, for the design calculations, plans, specifications, and estimate prior to the 90% submittal. Independent check and primary design team(s) shall prepare a comment resolution form detailing comments and responses.
- G. Consultant shall prepare 90% Design Plan Set in AutoCAD following Valley Water design standards.
- H. If major comments are received and these comments result in significant rework/revisions, the Consultant shall address the comments and resubmit the 90% Design Submittal for review before proceeding to finalize the contract documents.

6.2 Mitigation and Permitting

Consultant shall identify all applicable mitigation requirements in the certified CEQA document and incorporate the requirements into the 90% design documents. Consultant shall assist Valley Water in preparing submittals or other supporting documents during the permit acquisition process.

6.3 Review Meetings

Consultant will conduct a 90% review meeting/workshop with Valley Water to review and discuss Valley Water comments. Consultant will compile a Comment Resolution Document. The Comment Resolution Document shall list collected comments, proposed means of resolution, and means to document that resolution is completed in the next design submittal. This sub-task is funded in sub-task 1.3 - One-on-One Meetings with Valley Water.

6.4 Additional Review Meetings

Consultant shall identify and attend design input meetings, workshops, and consultations with Valley Water as needed to complete the 90% design tasks. This sub-task is funded in sub-task 1.7.1 - Additional Review Meetings.

6.5 Technical Design Document Update

Consultant shall prepare and/or update the Basis of Design Report, Design Criteria (Technical) Memorandums, analyses, calculations, etc., as identified in previous task.

6.6 Draft Bid Items

Consultant shall update the draft bid items to the 90% level of design, including a Technical Memorandum that explains the basis for the bid sheet and the strategies related to risk and cost uncertainty associated with work that may be difficult to define.

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Provisions regarding milestones, testing, and acceptance schedule and criteria for the Project aligned with completion and payment for the Contractor's completion of each milestone to be included in the Project specifications.

6.7 Constructability/Sequencing Requirements for the Contractor

Consultant shall prepare/update a Construction Sequencing Plan and/or Specification, which will identify key milestone dates to be met during construction and will include specific provisions for incorporation into the Contractor's plan, as needed.

6.8 Operation and Maintenance Manual

6.8.1 Consultant shall prepare an Operations and Maintenance (O&M) Guidance Manual in order to communicate key Project information to Valley Water Operations and Maintenance staff to ensure proper operation and appropriate maintenance of the facility and long-term protection of the assets.

A. Separate O&M Guidance Manual shall be prepared for CCFMMP to clarify the maintenance requirements from the time CCFMMP construction is completed until CCFPP is completed.

B. CCFMMP O&M Guidance Manual shall be updated to create a single O&M Manual for both Projects together as the elements are similar and locations are contiguous.

6.8.2 The information below shall be included:

A. Project background.

B. Project description and major features.

C. Major design criteria.

D. Operational control strategy and system capabilities and limitations.

E. Special conditions, terms and requirements pertaining to operation and maintenance of the facility, including maintenance triggers.

F. Agreement(s) and/or permit requirements applicable to the operation and maintenance of the completed Projects.

6.9 Project Impacts to City of San Jose Parks

6.9A Project Impacts to City of San Jose Parks by CCFPP

A. Consultant will perform planning and design services relating to restoration of certain areas in five City of San Jose Parks (Parks): Watson Park, Williams Street Park, Selma Olinder Park, Kelly Park and Rocksprings Park, which may be impacted by construction of the CCFPP.

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- B. Consultant will evaluate City of San Jose's proposed restoration and aesthetic improvements relating to Parks that may be impacted by CCFPP construction and recommend appropriate design elements to incorporate them into the final CCFPP design.
- C. The Parks restoration design must be consistent with all City of San Jose Parks Neighborhood and Recreation Services planning and design requirements.
- D. Consultant will prepare a City of San Jose Parks Restoration Analysis Technical Memorandum which must include necessary alternative analysis as required to meet the City of San Jose Parks and Neighborhood and Recreation Services design and aesthetic requirements.

6.10 Project-Specific Sub-Tasks

6.10.1 Stormwater Pollution Prevention Plan

6.10A.1 - SWPPP for CCFMMP

6.10B.1 - SWPPP for CCFPP

- A. Consultant will note that separate subtasks apply to the CCFMMP and the CCFPP.
- B. Consultant shall prepare a preliminary Storm Water Pollution Prevention Plan (SWPPP) that includes short- and long-term construction and post-construction erosion control and pollution prevention methods. The draft SWPPP will include a description of interim and permanent stabilization practices for the Projects' locations, including a schedule of when the practices will be implemented. Site plans shall show that existing vegetation is preserved where possible and that disturbed portions of the site are stabilized. Use of impervious surfaces for stabilization will be avoided. SWPPPs shall be in accordance with the Project Risk Level requirements of the State Water Resources Control Board Order No. 2009-0009-DWQ as amended (Construction General Permit), National Pollutant Discharge Elimination System (NPDES) No. CAS000002.
- C. In preparing the SWPPP, the Consultant shall perform the following:
 - 1) Determine the Risk Level of the project.
 - 2) Evaluate existing data regarding soil and runoff quality.
 - 3) Develop plans to disturb the smallest area possible and avoid sensitive areas.
 - 4) List potential pollution sources in construction areas.
 - 5) List all soil-disturbing activities.
 - 6) Prepare a pollution prevention site map that delineates surface waters, steep slopes, areas of soil disturbance, and post construction storm water discharge locations.

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- 7) Prepare preliminary plan sheets outlining locations and elements of pollution prevention.
- 8) Select BMPs for the site that are compliant with the California Stormwater Quality Association's Construction Best Management Practices Handbook to be located on the preliminary plan sheets.

Task 6A - Deliverables

1. Responses to Comments.
2. Design analyses and calculations and other reports (Calculations electronic and in one loose-leaf binder).
3. Draft 90% PS&E.
4. Applicable mitigation requirements to be included in the Draft CCFMMP 90% PS&E.
5. Design Review Workshop.
6. Independent check comments on 60% PS&E, including independent design and quantity calculations and comment resolution form.
7. Design Review Workshop draft and final minutes.
8. Draft SWPPPs for the CCFMMP.
9. Preliminary SWPPP Plan Sheets for the CCFMMP to be included in the Draft CCFMMP 90% PS&E.
10. Draft Operations and Maintenance Guidance Manual.
11. Design Review Workshop draft and final minutes.
12. Draft Bid Items & Supporting Technical Memorandum.
13. 90% Plans, Specifications, and AACE Class 2 Construction Cost Estimate (Draft and Final).
14. Agenda and 90% Design Comment Resolution Document (Draft and Final).
15. Updated Basis of Design Report (Draft and Draft Final).
16. Design Criteria Technical Memoranda, and all supporting analyses and calculations, as identified in this Scope of Services (Draft and Final).
17. Updated Draft Bid Sheet and Supporting Technical Memorandum (Draft and Final).
18. 90% Construction Sequencing Plan and Specification (Draft and Final).
19. Draft CCFMMP Operations and Maintenance Guidance Manual.

Task 6B - Deliverables

1. Responses to Comments.
2. Design analyses and calculations and other reports (Calculations electronic and in one loose-leaf binder).
3. Applicable mitigation requirements to be included in the Draft CCFMMP 90% PS&E.
4. Independent check comments on 60% PS&E, including independent design and quantity calculations and comment resolution form.
5. Design Review Workshop draft and final minutes.
6. Draft SWPPP for the CCFPP.
7. Preliminary SWPPP Plan Sheets for the CCFPP to be included in the Draft CCFPP 90% PS&E.
8. Draft Bid Items & Supporting Technical Memorandum.
9. 90% Plans, Specifications, and AACE Class 2 Construction Cost Estimate (Preliminary and Final).
10. AutoCAD (.dwg) files for 90% plans and Word files of Special and Technical specifications.

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11. Agenda and 90% Design Comment Resolution Document (Draft and Final).
12. Updated Basis of Design Report (Draft and Draft Final).
13. Design Criteria Technical Memoranda, and all supporting analyses and calculations, as identified in this Scope of Services (Draft and Final).
14. Updated Draft Bid Sheet and Supporting Technical Memorandum (Draft and Final).
15. 90% Construction Sequencing Plan and Specification (Draft and Final).
16. Draft CCFPP Operations and Maintenance Guidance Manual.
17. Hydraulic Analyses Results Memorandum.
18. Hydraulic Analyses Results Memorandum for EIR scenarios.
19. Memorandum detailing the staged construction and traffic control details for construction of headwalls and passive barriers near active roadways.
20. City of San Jose Parks Restoration Technical Memorandum and aesthetic renderings and details for Parks Neighborhood and Recreation Services staff review

Task 6B - Assumptions

1. Survey support will be provided as needed.
2. Budget includes design of elements that were added to the Project to avoid induced flooding during a 100-year storm event; additional hydraulic analyses needed for various EIR scenarios; and preparation of a memo summarizing the hydraulic analyses results of various EIR scenarios.
3. Budget includes design revisions at Charcot Avenue, San Jose, to replace the existing headwalls and wingwalls at Charcot Avenue; bridge deck reinforcement; and change of floodwall design to levee along the west bank of Coyote Creek upstream of Charcot Avenue.
4. Consultant will evaluate the feasibility of using existing retaining wall built along Mabury Avenue, San Jose, Service Yard as a floodwall. Consultant will determine the details of retrofit to be performed for the existing retaining wall to provide 20-year flood protection. Consultant will prepare all the necessary rendering and design drawings for coordination with City of San Jose. Consultant will design a stand-alone floodwall if City of San Jose does not agree to make modifications to existing retaining wall along Mabury Service Yard.
5. Consultant will make revisions to the design plans based on results of public survey conducted in February 2022 public meeting relating to CCFPP.
6. Consultant will make revisions to the design plans in response to comments received from City of San Jose on 60% design plans.
7. Consultant will prepare the necessary stage construction plans, traffic control plans, and other memoranda/reports needed for construction of flood control elements within City of San Jose Parks and roads.
8. Design documents shall include a complete set of drawings and specifications for all major modified and new components at a level required for Agency Permitting Review and Contractor Bidding.

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TASK 7 - FINAL DESIGN DOCUMENT PREPARATION (UNCHANGED)

The 100% Design Set shall be a fully completed, signed, and sealed set of Plans, Specifications and Cost Estimate that is ready for construction bidding. The 90% design set will be revised, as necessary, to address any remaining permitting agency comments.

7A - Final Design Document Preparation for CCFMMP (COMPLETED)

7B - Final Design Document Preparation for CCFPP

7.1 100% Plans, Specifications, Cost Estimate and Engineering Documents

7.1.1 Consultant shall prepare and submit 100% Design and Contract Documents for Valley Water review, including:

- A. 100% Plans and Specifications that address 90% submittal comments and design modifications or clarifications, as required, prepare responses, and coordinate design with all agencies. This submittal represents complete checked plans and submittal of the original drawings, ready for bidding, with incorporation of changes as required from the 90% PS&E review. Perform independent quality control review for constructability. Submit original tracings and AutoCAD electronic files to Valley Water. Submit project specifications in Microsoft Word format. Provide independent check on any revisions to the PS&E made since the previous independent check.
- B. Consultant shall prepare Project Status Report, which will include a list of Project contacts, memos to the Resident Engineer, quantity calculations for use in releasing progress payments, utility agreements, permits, right-of-way contracts, and copies of relevant report.
- C. Consultant shall prepare Surveyor's File including slope staking data, rough grading data, finish grading data, and bridge construction control data. Prepare cutsheets as required. Include control line traverses and ties to right-of-way lines.
- D. Consultant shall prepare permit applications for submission to Caltrans, City of San José, and/or the County of Santa Clara, and/or as necessary for construction permits (including but not limited to Caltrans encroachment permit and maintenance agreement, Interagency encroachment permit, traffic control plan, tree removal permit, and other local construction permits).
- E. Consultant shall prepare a draft Notice of Intent (NOI) in accordance with the State Water Resources Control Board's General Permit to Discharge Storm Water Associated with Construction Activity, Water Quality Order 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ.

7.1.2 100% Class 2 Engineer's Estimate as defined by AACE.

7.1.3 The Final Basis of Design Report with all revisions incorporated.

7.1.4 All Engineering Analysis and Calculations completed and checked as per the QA/QC Plan and assembled in accordance with the relevant design analyses sections in the

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Basis of Design Report.

7.1.5 100% Design Comments Resolution Form.

7.2 Bid Set

Prepare and submit Bid Set.

7.2.1 Consultant shall prepare final plans and specifications (signed and stamped by responsible engineers and managers), Engineer's Estimate, Basis of Design Report, and Engineering Calculations, if necessary, which include revisions that address and resolve all outstanding issues. Bid set shall include final digital AutoCAD plans, a pdf set, and hard copy (mylar), all signed and stamped by responsible engineers and managers. The mylars shall be populated with Records Document Numbers to be provided by Valley Water.

7.3 Design-to-Construction Phase Transition Report

Consultant shall prepare a Design-to-Construction Phase Transition Report.

Task 7A - Deliverables

1. 100% Plans, Specifications, AACE Class 2 Cost Estimate and Engineering Documents.
2. AutoCAD (.dwg) files for plans.
3. Permit applications and permits.
4. Microsoft Word file of project specifications.
5. Project Status Report.
6. Surveyor's File including slope staking data, rough grading data, finish grading data, and bridge construction control data.
7. Final review comments with responses.
8. Draft NOI.
9. Independent check comments on revisions to 90% PS&E, including independent design and quantity calculations and comment resolution form.
10. Final calculations package for design and cost estimate, stamped and signed.
11. Final Technical Report and other reports including stamped structural, hydraulic and geometric quantity take-off calculations.
12. Bid Set that includes Final Plans and Specifications (signed and stamped), including Standard Provisions, Special Provisions, Technical Provisions, Appendices, Notice to Bidders, Geotechnical Data Report, Geotechnical Baseline Report, and other bid documents.
13. Design-to-Construction Phase Transition Report (Draft, Draft Final and Final).
14. Final Basis of Design Report, including Engineering Analysis and Calculations.
15. 100% Comment Resolution Document.
16. Local construction permit applications.

Task 7B - Deliverables

1. 100% Plans, Specifications, AACE Class 2 Cost Estimate and Engineering Documents.
2. AutoCAD (.dwg) files for plans.
3. Permit applications and permits

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4. Microsoft Word file of project specifications.
5. Project Status Report.
6. Final review comments with responses.
7. Draft NOI.
8. Independent check comments on revisions to 100% PS&E, including independent design and quantity calculations and comment resolution form.
9. Final calculations package for design and cost estimate, stamped and signed.
10. Final Technical Report and other reports including stamped structural, hydraulic and geometric quantity take-off calculations.
11. Bid Set that includes Final Plans and Specifications (signed and stamped), including Standard Provisions, Special Provisions, Technical Provisions, Appendices, Notice to Bidders, Geotechnical Data Report, Geotechnical Baseline Report, and other bid documents.
12. Design-to-Construction Phase Transition Report (Draft, Draft Final and Final).
13. Final Basis of Design Report, including Engineering Analysis and Calculations (Draft Final and Final).
14. 100% Comment Resolution Document.
15. Local construction permit applications and permits (Caltrans Encroachment Permit and maintenance agreement, City of San Jose interagency encroachment permit, traffic control plans, tree removal permit etc.,).
16. 100% Construction Sequencing Plan and Specification (Draft and Final).
17. CCFPP and CCFMMP Joint Operations and Maintenance Guidance Manual (Draft, Draft Final, and Final).

Task 7 - Assumptions

1. Drawings and documents for approval shall be marked as Preliminary until approved by Valley Water.
2. For budgetary purposes, the level of effort for design documentation was developed based on an estimated sheet count for each design phase deliverable and an assumed number of hours per sheet to prepare the design documents for each phase of design. Consultant will advise Valley Water at the monthly meetings if the level of effort estimates are commensurate with the budgetary assumptions. See Table 7-1 Summary of Estimated Sheet Count for Projects A and B, which provides a summary of the estimated sheet count for Projects A and B.
3. Table 7-1 provides a summary of the estimated sheet count for Projects A and B.

**TABLE 7-1
Summary of Estimated Sheet Count for Projects A and B**

Drawing Sheet Description	Sheet Count Project A	Sheet Count Project B
Cover/Title Sheet	1	1
Index Map and Sheet	1	4
General Notes, Abbreviations and Legend sheets	1	3

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Drawing Sheet Description	Sheet Count Project A	Sheet Count Project B
General site plan sheet	1	2
Drawing index sheet	1	5
Survey control points and table	1	38
Right of Way Map	-	47
Plan and Profile sheets Geotechnical	13	-
Plan and Profile sheets Structural	25	75
Structural Details	-	50
Bridge Structural	-	8
Plan and Profile sheets Civil	13	60
Utility Sheets	-	36
Civil Details	-	35
Construction Details	-	20
Drainage Details	-	40
Cross sections	11	29
Typical Sections	2	3
Demolition	3	33
Stage Construction and Traffic Handling	-	5
Signing and Striping	-	3
Tree Removal Plan	-	40
Traffic Control Plans	3	12
Contractor layout, staging, access, and work areas	2	8
Landscape, Tree Demolition, Revegetation Plans and Details	15	-
Landscape, Revegetation Plans and Details	-	42
Irrigation Plans and Details	15	-
Fee and permanent easement and TCEs, Work Areas	8	-
Additional TCEs required to construct the Project	2	-
Other drawings needed for 100% submittal	7	-
Water Pollution Control	-	35
Backflow Prevention Plans and Details	-	20
Total:	125	654

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TASK 8 - BID AND AWARD SERVICES (UNCHANGED)

8A - Engineering Support during Bidding for the CCFMMP (COMPLETED)

8B - Engineering Support during Bidding for the CCFPP

Upon Valley Water's request, Consultant shall assist during the Project bidding process as described below.

8.1 Bidder's Questions

Responding to bidders' questions pertaining to the Bid Set within two business days of receipt of Valley Water's written request. Consultant will maintain a log of bidders' questions and responses, including whether any questions require preparing addenda to the Bid Set.

8.2 Pre-Bid Meeting

Attending the pre-bid conference, including a site visit, and assisting with preparation of documents to be distributed at the conference.

8.3 Addenda

Preparing bid document addenda if clarifications or changes to documents in the Bid Set are needed, which includes:

- 8.3.1 Changes to drawings will be shown on 8.5 x 11 sheets to the extent possible.
- 8.3.2 Consultant shall sign and stamp changes to the drawings and provide within five (5) business days of the written request from Valley Water.
- 8.3.3 During preparation of each addendum, Consultant shall determine any construction schedule and cost impact of the addendum and submit to Valley Water for consideration prior to finalizing addendum.

8.4 Conformed Contract Documents

Preparing a Conformed Set of construction Contract Documents after construction bids are received for use during construction.

Task 8 - Assumptions

- 1. Valley Water will receive all bidders' questions, convey those questions related to Consultant's work to Consultant, and disseminate the responses to bidders.
- 2. Valley Water will be responsible for generating pre-bid conference notes and disseminating the notes to bidders.
- 3. Valley Water will be responsible for reproducing and distributing bid documents and addenda documents.

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4. Budget for this task includes effort required for additional elements added to the Project and revisions made in response to Valley Water, City of San Jose, and other stakeholders' input.

Task 8A - Deliverables

1. Written responses to bidders' questions and associated log.
2. Attendance at pre-bid conference including site visit and preparation of minutes.
3. Assist Valley Water in preparing addenda.
4. Electronic versions of stamped and signed conformed set of Contract Documents.
5. Stamped and electronic- or wet-signed conformed set of construction contract (electronic and hard copy) for use during project construction.

Task 8B - Deliverables

1. Written responses to bidders' questions and associated log.
2. Attend pre-bid conference including site visit and preparation of minutes.
3. Assist Valley Water in preparing addenda.
4. Electronic versions of stamped and signed conformed set of contract documents.
5. Stamped and electronic- or wet-signed conformed set of contract documents (electronic and hard copy) for use during project construction.

TASK 9 - SUPPLEMENTAL SERVICES (REVISED)

Valley Water may require, and the Consultant will perform, Supplemental Services on an as-needed basis. Prior to performing any Supplemental Services, Consultant must receive an approved Task Order issued by Valley Water and executed by both Parties. Refer to the Revised Standard Consultant Agreement, Section Twelve, Miscellaneous Provisions, Subsection 13. Task Orders, and Revised Appendix Three, Task Order Template.

9.1 Specific examples include the following:

9.1.1 Services for the Native Landscaping Restoration for Acquired Residential Parcels

9.1.1A - Services for the Native Landscaping Restoration for Acquired Residential Parcels within the CCFMMP

9.1.1B - Services for the Native Landscaping Restoration for Acquired Residential Parcels within the CCFPP

- A. Consultant shall develop and provide Landscaping Plans, Specifications, and Cost Estimates which shall be incorporated into Task 5 - 60 Percent Design Document Preparation, Task 6 - 90 Percent Design Document Preparation, and Task 7 - Final Design Document Preparation. The properties are within the CCFMMP for Task 9.1.1A and within the CCFPP for Task 9.1.1B. Tasks shall include, but not be limited to:
 - 1) Restoration of natural conditions for properties acquired by Valley Water (including seeding and planting, demolition, during and post-Project erosion control, bank restoration of restored property);

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- 2) Irrigation system required for establishment; and
 - 3) Site specific Establishment Maintenance for 3 years.
 - 4) The restoration PS&E will include, at a minimum, planting and seeding plans, legends and details; irrigation plans, legends, flow rate and pipe sizing calculations and details; cross-sections of typical soil profiles and proposed topography indicating pervious and impervious soil layers, slopes, berms and their dimensions based on engineering grading plans.
- B. Tasks 9.1.1A and 9.1.1B shall be performed by a qualified, licensed landscape architect or architecture firm. The following qualifications are the minimum required qualifications that shall be met:
- 1) The Consultant or Consultant's employees shall have at least 10 years of experience in native habitat restoration planning and design.
 - 2) The Contractor or Contractor's employees shall have the following certifications, licenses or affiliations: Licensed Landscape Architect.
 - 3) The Contractor shall possess knowledge of regulations and codes regarding in-water riparian Projects and shall be familiar with local conditions relating to riparian, wetland, and upland vegetation in Santa Clara County.
 - 4) Note that these qualifications may be subject to approval by permitting resource agencies.
- C. Consultant shall:
- 1) Develop the soil specifications (texture, nutrients, compaction, etc.) for project areas where restoration/planting will occur.
 - 2) Coordinate design with Valley Water biologists and environmental planner, including meetings and updates as necessary.
 - 3) Develop the 60%, 90%, and 100% PS&Es for the agreed-upon approach.
 - 4) Participate in a series of three (3) meetings with residents, stakeholders, City of San José and Valley Water to arrive at an agreed-upon approach for landscape designs in restored areas
 - 5) Prepare a Mitigation Monitoring and Reporting Program for this project element. Required format is a matrix showing impacts, mitigation measures, timing, status and document references.
 - 6) Coordinate with the Valley Water Environmental Planning Consultant.
 - 7) Identify all applicable mitigation requirements in the CEQA compliance documents, and Environmental Permits, as they relate to native riparian

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landscaping, habitat restoration and mitigation and incorporate the requirements into the design documents.

- 8) In developing the native landscape restoration design, consider the project site conditions such as geotechnical and soil conditions, existing vegetation, hydrology, climatic conditions, slope aspects, project needs and ecological functions, etc.
- 9) Mitigation design must focus on restoration of ecological processes and functions on the banks of Coyote Creek by placing native, locally sourced native plants, pole cuttings and seed in the most appropriate microhabitats of each of the restoration sites, allowing them to thrive and expediently provide key riparian functions essential for compliance with natural resource agencies' imposed performance standards such as vegetation cover, shaded riverine habitat, erosion protection, bank stabilization, nutrient cycling and production, habitat creation, water retention and many others.
- 10) Follow the Standard Assessment Methodology (SAM) criteria for re-establishment, rehabilitation and enhancement of anadromous fish riverine and riparian habitats.
- 11) Prepare a detailed landscape construction schedule aligned with the overall project construction schedule.

Task 9.1.1A - Deliverables

1. Statement of Qualifications for Landscape Architect.
2. Agendas, minutes, and presentation materials for all meetings with residents, stakeholders, City of San José; in-person, by video conference, or by teleconference.
3. 60%, 90%, and 100% Landscaping PS&E incorporated into Consultant's Task 5A
- 60 Percent Design Document Preparation for CCFMMP, Task 6A - 90 Percent Design Document Preparation for CCFMMP and Task 7A - Final Design Document Preparation for CCFMMP submittals.

Task 9.1.1B - Deliverables

1. Statement of Qualifications for Landscape Architect.
2. Agendas, minutes, and presentation materials for all meetings with residents, stakeholders, City of San José; in-person, by video conference, or by teleconference.
3. 60%, 90%, and 100% Landscaping PS&E incorporated into Consultant's Task 5B
- 60 Percent Design Document Preparation for CCFPP, Task 6B - 90 Percent Design Document Preparation for CCFPP and Task 7B - Final Design Document Preparation for CCFPP submittals.

9.1.2 Services for Designs to Elevate Residential Structures (DELETED)

9.1.2A - Services for Designs to Elevate Residential Structures within the CCFMMP

9.1.2B - Services for Designs to Elevate Residential Structures within the CCFPP

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- A. Services shall be those of Task 5 - 60 Percent Design Document Preparation, Task 6 - 90 Percent Design Document Preparation, and Task 7 - Final Design Document Preparation that pertain to this task, including the submittals of 60%, 90%, and 100% PS&E for elevating incorporated into the submittals in those Articles. Before beginning any design, Consultant shall determine the feasibility of elevating any structure specified by Valley Water and provide a feasibility report. Task 9.1.2A is for properties that are within the CCFMMP. Task 9.1.2B is for properties that are within the CCFPP.
- 1) The design shall elevate the lowest floor of the structure to the 20-year recurrence elevation plus one foot of freeboard.
 - 2) Designs shall be consistent with FEMA Publication P-259, Engineering Principles and Practices for Retrofitting Flood-Prone Residential Structures, 2012 (Attachment Four to Schedule D, Reference Materials) or subsequent, with FEMA floodplain requirements, and with the National Flood Insurance Program (NFIP);
 - 3) Designer shall be knowledgeable in the programs and documents cited above;
 - 4) Consultant shall identify and acquire any and all permits and certifications for the design and construction of the elevating from the City of San José, the Historic Preservation Commission, and other permit issuing entity; and
 - 5) Elevation plan designer shall be a licensed architect or engineer with no less than 5 years' experience in the design and construction of residential house elevating for the purposes of flood protection.
- B. Design shall reflect the following considerations at a minimum:
- 1) Adjoining properties
 - 2) Site elevation and topography
 - 3) Parcel configuration and access
 - 4) Building footprint and orientation
 - 5) Parking and circulation
 - 6) Landscape elements
 - 7) Neighborhood context, including neighbor privacy and impacts
 - 8) Elevation alternatives
 - 9) Historic building types
 - 10) Composition and scale
 - 11) Stairs/Access
 - 12) Fences and walls
 - 13) Entrances, porches, and balconies
 - 14) Foundation design guidelines
 - 15) National Flood Insurance Program
 - 16) Elevation requirements
 - 17) Flood zones
 - 18) Elevation aesthetics
 - 19) Architectural considerations
 - 20) Foundation screening systems
 - 21) Building Codes and Code Upgrades

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22) Permit requirements

C. Consultant shall:

- 1) Designer shall participate in three (3) public meetings.
- 2) Develop a systematic method of raising the homes to achieve flood protection while designing aesthetically pleasing individual properties for five properties in Project A and one property in Project B.
- 3) Establish base-line information and code requirements to apply to each property, verify feasibility of raising the home, design a proper exterior appearance, and develop the PS&E to support the permitting and eventual construction of the Projects. Historic building issues will be identified early on, so as to segment the design and review processes for historic vs. non-historic properties.
- 4) Coordinate site visits to each property with Valley Water and homeowners.
- 5) Assume for all homes that are to be raised, building permit submittals will be batched for same day submission, including for properties of limited slab on grade,
- 6) Include plans, specifications and engineer's estimate for all work necessary for elevating structures, including, but not be limited to, mechanical, electrical, and plumbing engineering services.
- 7) Assume Valley Water to provide historic determinations for all properties. If Consultant is required to perform historic resource evaluation, the cost is estimated to be \$4,500 each.
- 8) Prepare, for the purposes of City of San José building and other permits, individual plan sets for all properties consisting of plans and documents to comply with City of San José Plan Review Submittal Package, including cover sheet, plot plan, grading and drainage plans, landscaping plan, architectural plans, structural plans, detail sheet, and plumbing, mechanical, and electrical plans. See the Submittal package at <https://www.sanjoseca.gov/home/showpublisheddocument?id=25959>.

Task 9.1.2A - Deliverables

1. Statement of Qualifications for Designer.
2. Feasibility Report(s) for each structure specified by Valley Water.
3. Agendas, Minutes, and presentation materials for all meetings with residents, stakeholders, City of San José; in-person, by video conference, or by teleconference.
4. 60%, 90%, and 100% PS&E incorporated into Consultant's Task 5A - 60 Percent Design Document Preparation for CCFMMP, Task 6A - 90 Percent Design Document Preparation for CCFMMP and Task 7A - Final Design Document Preparation for CCFMMP submittals.
5. Perform historic resource evaluation, if necessary.

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Task 9.1.2B - Deliverables

1. Statement of Qualifications for Designer
2. Feasibility Report(s) for each structure specified by Valley Water
3. Agendas, Minutes, and presentation materials for all meetings with residents, stakeholders, City of San José; in-person, by video conference, or by teleconference
4. 60%, 90%, and 100% PS&E incorporated into Consultant's Task 5B - 60 Percent Design Document Preparation for CCFPP, Task 6B - 90 Percent Design Document Preparation for CCFPP and Task 7B - Final Design Document Preparation for CCFPP submittals

9.1.3 Costs and Feasibility for Design and Construction to Elevate A Specific Residential Structure to NFIP Requirements to Remove the Structure from the 100-Year Floodplain (DELETED)

9.1.3A - Costs and Feasibility to Elevate a Structure to NFIP Requirements within the CCFMMP

9.1.3B - Costs and Feasibility to Elevate a Structure to NFIP Requirements within the CCFPP

Some residents may wish to elevate their residences in order to comply with NFIP requirements to remove the structure from the floodplain, including 1 foot of freeboard above the base flood elevation. Consultant shall provide costs for the extra design effort and construction beyond the cost for elevating to the 20-year water elevation. Costs shall be those increases that will be required if a property owner wishes to elevate to the 100-year from the 20-year elevation. Consultant shall determine the feasibility of constructing the additional elevation. Valley Water will identify the properties to be considered. Task 9.1.3A is for properties within the CCFMMP. Task 9.1.3B is for properties within the CCFPP.

Consultant shall:

- A. Evaluate the feasibility and cost of increasing the elevation of property to the 100-year elevation.
- B. Prepare feasibility report documenting findings based on design efforts for structural engineering and architectural design as well as their estimated cost.

Task 9.1.3A - Deliverables

Additional design and construction costs and feasibility for increasing elevation for each property identified.

Task 9.1.3B - Deliverables

Additional design and construction costs and feasibility for increasing elevation for each property identified.

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9.1.4 Phase II HSLA

9.1.4.1 Phase II HSLA Work Plan

Prepare a Draft and Valley Water-approved Final Phase II HSLA Work Plan and coordinate with District staff in obtaining applicable regulatory agency approvals.

9.1.4.2 Potential Sources of Contamination

Confirm potential sources of on-site or off-site surface or subsurface contamination or on-site and off-site releases, or substantial threats of such releases, of hazardous substances or of any pollutants or contaminants which may adversely impact the environment or public health or welfare, or possible future District use of the Property. Assume 18 properties would require Phase II assessment for Project A, and 23 properties for Project B.

9.1.4.3 Drilling and Sampling

Characterize subsurface contamination by drilling shallow or deep soil borings, and by installing ground water wells, and sampling the contamination resulting from the on-site and off-site releases, or substantial threats of such releases, of hazardous substances or of any pollutants or contaminants which may adversely impact the environment or public health or welfare, or possible future District use of the Property. Manage storage, testing, transportation, and disposal of Investigative-Derived-Waste generated from soil borings and ground water monitoring wells.

9.1.4.4 Evaluate Environmental Condition, Potential Liabilities and Impacts on Use of Property

Evaluate the data collected and provide professional opinions on the environmental condition, the potential liabilities, and the potential impacts to Valley Water's possible use of the Property, being as specific and comprehensive as the available data allows.

9.1.4.5 Recommendations for Remediation or Risk Assessment

Evaluate the data collected and provide professional opinions on the need for and recommendations for the scope of site remediation or risk assessment.

9.1.4.6 Additional Environmental Site Assessment

Evaluate the data collected and provide professional opinions on the need for and justification for recommendations for the scope of any recommended additional environmental site assessment and site remediation or risk assessment and estimated costs thereof.

9.1.4.7 Phase II HSLA Report

Submit a draft Phase II HSLA Report including but not limited to the aforementioned, documenting the findings, conclusions, and recommendations from the Phase II HSLA. Submit a final Phase II HSLA Report addressing Valley Water comments on the Draft Phase II HSLA Report.

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Task 9.1.4 - Deliverables

1. Draft Phase II HSLA Work Plan (electronic) for Valley Water review
2. Final Phase II HSLA Work Plan (electronic) addressing Valley Water comments on the Draft Phase II HSLA Work Plan
3. Draft Phase II HSLA Report (electronic) for Valley Water review
4. Final Phase II HSLA Report (electronic) addressing Valley Water comments on the Draft Phase II HSLA

9.2 Additional Services

Consultant will provide additional quantities of previously identified services as requested by Valley Water. Consultant will provide additional services for any quantity of tasks and deliverables beyond those stated in Tasks 1 through 8 as Task 9 Supplemental Services, to include, but not be limited to:

- 9.2.1 Additional meetings;
- 9.2.2 Additional time allotted for meetings;
- 9.2.3 Additional status/progress reports;
- 9.2.4 Additional phone conference calls;
- 9.2.5 Additional pages or copies of technical memoranda, plans, reports, drawings, and specifications; and
- 9.2.6 Additional public outreach visual materials.
- 9.2.7 Additional hydraulic analyses
- 9.2.8 Additional workshops
- 9.2.9 Additional utility vacuum potholing
- 9.2.10 Additional geotechnical investigations and reporting
- 9.2.11 Additional design support for EIR and permits
- 9.2.12 Additional City of San Jose Park restoration items
- 9.2.13 Additional geotechnical investigations to determine the extent of manmade buried objects
- 9.2.14 Additional design services to reduce property owner impacts based on the feedback received during real estate negotiations
- 9.2.15 Additional design services to look at the potential construction cost savings through design revisions

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9.2.16 Additional design services to evaluate alternate flood control structures and alignments

9.2.17 Additional design services for backflow prevention measures

**TASK 10A - ENGINEERING SUPPORT DURING CONSTRUCTION – CCFMMP
(UNCHANGED)**

Consultant will provide engineering services during construction of only the Coyote Creek Flood Management Measures Project (CCFMMP or Project A). Such services will include attending the preconstruction meeting, reviewing the construction Contractor's technical submittals, and responding to technical questions, and requests for information.

10.1A Project Management Services During Construction

A. The purpose of this Task is to manage services such that the Support During Construction services are completed within the not-to-exceed fee limit stated in Revised Schedule D, Revised Attachment One, Fees and Payments, and in accordance with the Project Schedule as stated in Revised Schedule D, Revised Attachment Two, Schedule of Completion, and such that all services and deliverables by the Consultant meet these Scope of Services requirements. Consultant will:

10.1.1 Manage efforts of Consultant's and subconsultants' staff;

10.1.2 Identify construction phase events where the presence of the Consultant in the field is appropriate;

10.2.1 Coordinate its work with the District and its Construction Management Consultant, if any, regarding the scheduling of meetings, attendance, site observations, and deliverables;

10.2.2 Monitor and manage its expenditures, schedule, and progress, including maintaining an efficient, effective document tracking system for requests for information, and submittals; and

10.2.3 Provide Monthly Progress Reports of Consultant's activities. The purpose of the Monthly Progress Report is to record the work completed and document the execution of the Tasks described in this Scope of Services as well as to allow the Valley Water to evaluate the Consultant's progress and performance in completing the services pursuant to Revised Schedule D, Revised Attachment One, Fees and Payments, and Revised Schedule D, Revised Attachment Two, Schedule of Completion. Each Monthly Progress Report will include the following:

- a. An assessment of actual versus planned progress in completing the work, including a description of the tasks, and deliverables completed to date;
- b. For each task, the percentage of services performed versus the percentage of Agreement not-to-exceed fees incurred for such task, and explanation of any significant variances in percentage of services performed compared to percentage of fees incurred;

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- c. For each task, the percentage of the fees incurred for such task compared to dollar amount allocated to such task;
- d. A statement that all tasks together shall be completed within the agreed upon not-to-exceed total amount of this Agreement;
- e. A statement that progress towards completion of the Scope of Services is on schedule to be completed within the timeline set forth in the Project schedule; if completion of the work is not on schedule, then a statement of the anticipated length of delay, the cause of the delay, measures proposed or taken to prevent or minimize the delay, and the timetable for implementation of such measures;
- f. A summary of proposed change to the Scope of Services, if required, including justifications for such changes;
- g. A Small Business Enterprise participation report to document the level of SBE participation throughout the Project;
- h. Project Management Action Item and Decision Log to document action items, concerns, and issues throughout the term of this Agreement which require resolution by Valley Water and/or Consultant. This log will be for Consultant's use in tracking ongoing issues requiring Consultant's input and is not intended to capture all action items and decisions related to the construction phase. The Construction Management Consultant and/or Valley Water will maintain a separate Project-wide Action Item and Decision Log;
- i. A summary of performed tasks to date, explanation of any major variances in percentage of Services to be completed compared to percentage of the Agreement NTE fees remaining; and
- j. Any changes in Consultant's key staff or subconsultants.

10.1A - Assumptions

- 1. Monthly Progress Reports will be provided on a monthly basis, regardless of whether an invoice is submitted.

10.1A - Deliverables

- 1. Monthly Progress Reports

10.2A Requests for Information. (RFI)

- A. During construction, the Contractor may submit to Valley Water questions on details of the design, the construction contract, substitutions, and alternatives approaches, etc. If the Contractor's inquiry is related to the Consultant's Project design or an issue having the potential to impact the Project design, and cannot be readily answered from the construction contract, Valley Water may require Consultant to respond to the inquiry with

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written clarifications and return their response back to the Valley Water for Valley Water to address with its construction Contractor.

- B. If the Consultant's response to an RFI appears to have the potential to impact the construction schedule or cost, the issue will be immediately addressed with the Valley Water. Where appropriate, alternatives will be suggested and explored.
- 10.2.1 Consultant will coordinate notification of any changes or potential changes given by the Contractor with the Valley Water and then respond on both the condition cited for the request and possible impacts on the Contractor's operations. In this manner, information will be gathered that will allow for a determination of merit on the request and quantification of the Contractor's losses, if any. Consultant will make a preliminary assessment of the situation to identify whether additional resources or measures will be necessary for the process. These might include such activities as testing for hazardous waste or additional compaction testing. All issues that have the potential to impact the time and cost of the Project will be given issue status and be addressed.
- 10.2.2 Consultant will respond to requests for information received from the Valley Water.
- 10.2.3 Consultant will respond to the Valley Water's requests for evaluation of proposed substitutions and "or equal" proposals of equipment, materials or methods, and minor design changes.
- 10.2.4 Consultant will render written decisions within seven calendar days unless otherwise agreed between Consultant and the Valley Water. Consultant must notify Valley Water immediately if more time is required to respond to RFIs. The Valley Water may approve an extension of time and will document approval in writing.
- 10.2.5 Consultant will evaluate whether its RFI response will result in a change to the requirements of the Contract Documents. If the Consultant's response to an RFI will change the requirements of the Contract Documents, Consultant must:
- 10.2.5.1 State in writing in Consultants' response to the RFI that the response to the RFI is a change to the requirements of the Contract Documents; and
- 10.2.5.2 Promptly notify the Valley Water that the Consultant's response to the RFI is a change to the requirements of the Contract Documents.
- 10.2.6 Upon Valley Water request, Consultant may be required to assist the Valley Water in ascertaining any adjustment in the Contract time or Contract Sum resulting from Contract modifications based on Consultant's response to an RFI.

Task 10.2A - Assumptions

1. Consultant will review and respond to up to two hundreds (200) RFI's at 6 hours of Consultant staff time each, 1.5 hours per RFI for coordination and communication (Project Engineer and Project Manager), plus 80 hours total for a senior landscape designer for landscape-related RFIs.

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2. Consultant will review and respond to up to one hundred (100) questions/clarifications at 4 hours of Consultant staff time each, 1.5 hours per question for coordination and communication (project engineer and project manager) plus 40 hours total for a senior landscape designer for landscape-related RFIs.
3. Additional hours are also assumed for final review and QC of responses for RFIs and questions/clarifications by a senior structural engineer and senior geotechnical engineer (1.75 hours total per response).
4. Review of RFIs in addition to the estimated number stated herein may be compensated pursuant to Task 11A Supplemental Services During Construction.

Task 10.2A - Deliverables

1. Memoranda in PDF or Microsoft Word stating Consultant's responses to RFIs
2. Written notification of potential change orders due to RFI responses by Consultant
3. RFI documentation including drawings and specifications, including revised drawings and specifications, as necessary, all of which will be signed and stamped
4. Emails and verbal responses for input as requested by the Valley Water Project Manager with email follow-up documentation for all verbal responses

10.3A Submittal Review

- 10.3.1 Consultant will review the submittals provided by the Contractor as required in the construction Contract Documents prepared by the Consultant and as the Contractor is otherwise directed. Consultant will create and maintain a submittal log of all submittals required by the construction Contract Documents.
- 10.3.2 Consultant will check submittals to ensure that they are complete and contain the correct references before being entered into the system. Consultant will track through its submittal log the status of all submittals and make all parties aware of the need to maintain the review and Project construction schedule. The submittals will be reviewed for conformance with the design and field conditions, as necessary and appropriate.
- 10.3.3 Consultant will review, respond, and return all Contractor Submittals and re-submittals as promptly as possible, but in no case shall Contractor submittals be returned later than seven days from receipt of the Contractor's submittals by Valley Water, unless otherwise agreed between Consultant and Valley Water. Consultant must notify Valley Water immediately if more time is required to respond to submittals. Valley Water may approve an extension of time and will document approval in writing.
- 10.3.4 Consultant will notify Valley Water of any submittal review comment that could result in a Change Order. Prior to Consultant entering notations on a Contractor's Submittal that constitute a change to the requirements of the Contract Documents, Consultant will notify Valley Water in writing of the potential for a Contractor Change Order request.
- 10.3.5 Consultant will create and maintain the submittal log for the duration of the Project construction until completion and acceptance by the Valley Water.

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Task 10.3A - Assumptions

1. Consultant will review and respond up to eighty (80) submittals, each requiring 8 to 16 hours of two Consultant staff time to review and prepare a response, plus 2 hours from the Project Engineer to coordinate and communicate, 2 hours for review by a senior reviewer, 2 hours review by a Geotech engineer, and 0.5 hour from the Project Manager.
2. Review of submittals in addition to the estimated number stated herein may be compensated in accordance with Task 11A Supplemental Services During Construction.

Task 10.3 A- Deliverables

1. Memoranda in PDF or Microsoft Word presenting Consultant's evaluation of submittals
2. Written notification via email of potential change orders due to submittal review comments by Consultant
3. E-mails and verbal responses for input as requested by the Valley Water with email follow-up documentation for all verbal responses

10.4A Meetings and Site Visits

- 10.4.1 Attend the preconstruction conference. Consultant will respond to technical questions from the Contractor or the Valley Water, as requested by the Valley Water.
- 10.4.2 Attend progress and other meetings as requested by Valley Water or requested/recommended by Consultant and approved by Valley Water, coordination meetings and telephone conference calls with the Valley Water's construction Contractor, Valley Water, and other parties as determined by Valley Water, in order to discuss and coordinate the construction progress, resolve technical issues, concerns, and related activities.
- 10.4.3 Perform site visits as requested by the Valley Water or determined necessary by Consultant.
- 10.4.4 Perform full-time observation of the earthwork (levee fill, asphalt concrete and aggregate base placement and compaction), including nuclear gauge testing to confirm the levee fill, asphalt concrete and aggregate base are being compacted as per the Project specifications. After completion of all earthwork operations, Consultant shall prepare a summary report documenting the results of their observations and test results.

Task 10.4A - Assumptions

1. All meetings will be conducted at the Contractor's construction trailer, Project site, or at a Valley Water office.
2. Consultant's PM and Project Engineer will attend the preconstruction conference.
3. Consultant's staff from appropriate disciplines will attend progress and other meetings. Consultant's staff will attend the meetings either on site or virtually.
4. Consultant will attend eighty (80) site visits and prepare field reports by two Consultant staff at 8 hours per visit per staff.
5. Consultant will also attend an additional ten (10) survey days at 12 hours per day for a two-man survey crew and surveyor and 280 hours for civil support (CADD, senior civil engineer,

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and staff Civil engineer). A total of 72 hours is assumed for coordination and consultation with the PE and PM.

6. For budgetary purposes, the Parties estimate that Consultant will be onsite for approximately 24 hours per week, for 24 months to coordinate engineering services relating to RFIs review, submittals, and to assist Valley Water in resolving design-related issues that arise during construction.
7. Valley Water may determine that certain services specified in Task 10.4A list of Deliverables below may be considered Supplemental Services in accordance with Task 11A Supplemental Services During Construction.

Task 10.4A - Deliverables

1. Written responses to issues raised during all meetings, including the pre-construction meeting
2. Attendance at meetings and/or conference calls as required to respond to and raise issues
3. Summary report of earthwork observations

10.5A Construction Change Order Assistance

The purpose of this subtask is for Consultant to provide support to the Valley Water with potential change orders, change orders, and related activities. The origination of the change orders may come from the Valley Water or the Contractor.

- 10.5.1 As requested by the Valley Water, Consultant will be required on an as-needed basis to design, write, or review change order documentation. Anticipated Consultant services may include: research and respond back to Valley Water whether work proposed by its construction Contractor warrants the need for a change order and whether it should be considered as extra work; review of design calculations and intent; review of cost estimates.
- 10.5.2 If a Change Order is required as the result of the probable error or omission with respect to the services performed, Consultant must prepare and submit to the Valley Water, along with the Change Order documentation, a cost estimate for the value of Change Order Work. Only if determined by the Valley Water that the Change Order was not due to an error or omission on the part of the Consultant, Consultant will be compensated for preparation of Change Order.

Task 10.5A - Deliverables

1. Change order documentation including signed and stamped drawings and specifications, and cost opinions
2. Review comments on Valley Water Project Manager's analyses of potential change orders
3. Emails and verbal responses for input as requested by the Valley Water's Project Manager with email follow-up documentation for all verbal responses

Task 10.5A - Assumptions

1. Consultant will review and evaluate the change order requests as part of the RFI review.
2. For budgetary purposes, the Parties estimate the not-to-exceed fees for this subtask is

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based upon up to 1,220 hours of labor associated with construction change orders including reviewing proposed change orders from the construction Contractor or Valley Water.

10.6A Engineer-of-Record's Project Record Drawings

- A. Record Drawings are necessary to accurately depict changes resulting from field conditions, design changes, Project scope changes, or other causes since the initial Construction Contract Drawings (or bid set) were adopted by the Valley Water's Board of Directors and in accordance with the conformed documents prepared by Consultant, if any.

10.6.1 Consultant will prepare and maintain a set of Engineer-of-Record's Project Record Drawings by marking up on the full-size (22" x 34") conformed drawings from the design phase or redlining PDF drawings from the design phase with all changes and clarifications recommended by Consultant and accepted by Valley Water's Project Manager during Project construction. Such changes may be the result of information that was approved in RFIs, change orders, or field memoranda written by Consultant, as well as for other reasons.

10.6.2 The final Engineer-of-Record's Project Record Drawings (one set) will be submitted to Valley Water Project Manager within 15 working days of the Valley Water Project Manager's issuance of a Project completion letter to the Contractor. Consultant will complete work on this subtask as construction progresses to aid completion of the entire drawing set within the time period stipulated.

Task 10.6A - Assumptions

1. Approximately thirty new plan sheets will be prepared, signed and stamped by Consultant. Consultant will also label all remaining sheets not requiring revisions to ensure all sheets accurately reflect Project Record Drawings.
2. Preparation of Record Drawings in addition to the estimated quantity stated herein may be compensated pursuant to Task 11A Supplemental Services During Construction.

Task 10.6A - Deliverables

1. Emailed memoranda in Adobe PDF or Microsoft Word presenting Consultant's evaluation of submittals, RFIs, Potential Change Order (PCO) requests, and change order proposals
2. Written notification (via email) of potential change orders due to submittal review comment(s) by Consultant
3. RFI, submittal, and change order documentation including drawings, specifications, signed and stamped, and cost opinions (electronic sent via email)
4. Written comments of review of construction contractor's cost estimates, schedules, and schedules of values (electronic sent via email)
5. Review comments on Valley Water Project Manager analyses of potential change orders (electronic sent via e-mail) and Consultant's own independent analyses of such potential change orders
6. Emails and verbal responses for input as requested by the Valley Water's Project Manager with email follow-up documentation for all verbal responses
7. Final Engineer-of-Record's Project Record Drawings that include engineering changes

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recommended by Consultant and accepted by Valley Water Project Manager – one full-size copy and one set of DVDs with Adobe PDF and CADD files of these drawings

10.7A Engineering Support for Dispute Resolution

- 10.7.1 Consultant will perform engineering investigations and analyses and provide recommendations to assist the Valley Water in the resolution of construction Contractor's claims and disputes or other matters that may arise during construction, if requested by Valley Water. All of Consultant's investigations, analyses and recommendations will be summarized and provide in writing by Consultant, upon request by Valley Water.
- 10.7.2 Render written opinion/recommendations within 15 working days for claims, disputes and other matters in question between the Valley Water and construction Contractor.
- 10.7.3 Notify the Valley Water Project Manager immediately if more time is required, for reasonable cause, to respond to dispute, claim or other matters. Consultant's request for time extension is subject to Valley Water Project Manager's approval as confirmed by email.
- 10.7.4 Document events and activities accurately to provide a reliable basis for investigation at a later date.
 - 10.7.4.1 Maintain documentation and records on all relevant decisions and facts relating to disputes on an ongoing basis.
 - 10.7.4.2 Maintain said records in an orderly manner and make available to Valley Water personnel upon request.
- 10.7.5 Analyze claims for additional compensation submitted by Contractor and prepare responses.
- 10.7.6 When Contractor files a notice of potential claim or dispute in accordance with the Contract Documents, Consultant will:
 - 10.7.6.1 Compile any formal data, and records which pertain to Consultant's services relating to such claim;
 - 10.7.6.2 Prepare a summary of the dispute, by issue, clearly stating the Consultant's position on each issue;
 - 10.7.6.3 Prepare a summary sheet with a chronological listing of events and/or items such as letters to Contractor, meetings, etc., and a brief statement of content; and
 - 10.7.6.4 Document pertinent conversations with Contractor.
- 10.7.7 Compile additional documents such as:
 - A. Drawings, shop drawings and Technical Specifications with the areas in question

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highlighted or noted by other appropriate means.

- B. Correspondence between Consultant and Contractor, Consultant and Valley Water, etc.
- C. Any other documentation that supports the position of the Contractor and Consultant etc.

- 10.7.8 Prepare engineering sketches for PCOs or other purposes.
- 10.7.9 Coordinate work with Consultant's design engineers.
- 10.7.10 Participate in the Project's Dispute Review Board (DRB) process, as specified in the Project Contract Documents, Standard Provisions, Section 3.13. Dispute Review Board, including but not limited to the following activities: reviewing Contractor's dispute submittals and position papers; assisting Valley Water in preparing Valley Water's dispute submittals and position papers, including rebuttals or responses to Contractor's submittals and position papers and DRB meeting presentations; attending DRB meetings and hearings; and reviewing and commenting on DRB-issued recommendations for resolution of disputes, and their potential impact on the Project schedule and budget.
- 10.7.11 Participate in Partnering Workshops as specified in the Project Contract Documents, Standard Provisions Section 5.12. Partnering.
 - 10.7.11.1 Consultant's lead staff and project engineer shall participate in an initial two-day partnering workshop and subsequent one-day workshops to be conducted on a quarterly basis, if requested by Valley Water, or by Contractor and Valley Water agrees.
 - 10.7.11.2 Prepare questionnaires and lists of issues and concerns prior to each workshop.

Task 10.7A - Assumptions

- 1. Consultant's written opinions/recommendations on disputes, claims or other matters in question between the Valley Water's Project Manager and construction contractor are subject to the provisions of the construction Contract Documents.
- 2. This subtask is limited to 200 hours. Additional engineering support may be scoped and paid for as Task 11A Supplemental Services During Construction.

TASK 10B - ENGINEERING SUPPORT DURING CONSTRUCTION – CCFPP (NEW)

Consultant will provide engineering services during construction of the Coyote Creek Flood Protection Project (CCFPP or Project B). Such services will include attending the preconstruction meeting, reviewing the construction Contractor's technical submittals, and responding to technical questions and requests for information.

10.1B Project Management Services During Construction

The purpose of this Task is for Consultant to manage Support During Construction services within the not-to-exceed fee limit stated in Revised Attachment One to Revised Schedule D,

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Fees and Payments, and in accordance with the Project Schedule as stated in Revised Attachment Two to Revised Schedule D, Schedule of Completion, and such that all services and deliverables by the Consultant meet these Scope of Services requirements. Consultant shall inform Valley Water of any changes in the not-to-exceed fee limit, scope of services, or Project Schedule, as required by the progress in Project construction. Ensuing changes to this Amendment will be negotiated between Consultant and Valley Water. Consultant will:

- 10.1.2 Manage efforts of Consultant's and subconsultants' staff,
- 10.1.2 Identify construction phase events where the presence of the Consultant in the field is appropriate,
- 10.2.4 Coordinate its work with the District and its Construction Management Consultant, if any, regarding the scheduling of meetings, attendance, site observations, and deliverables,
- 10.2.5 Monitor and manage its expenditures, schedule, and progress, including maintaining an efficient, effective document tracking system for requests for information, and submittals, and
- 10.2.6 Provide Monthly Progress Reports of Consultant's activities. The purpose of the Monthly Progress Report is to record the work completed and document the execution of the Tasks described in this Scope of Services as well as to allow Valley Water to evaluate Consultant's progress and performance in completing the services pursuant to Revised Attachment One to Revised Schedule D, Fees and Payments, and Revised Attachment Two to Revised Schedule D, Schedule of Completion. Each Monthly Progress Report will include the following:
 - a. An assessment of actual versus planned progress in completing the work, including a description of the tasks, and deliverables completed to date
 - b. For each task, the percentage of services performed versus the percentage of Agreement not-to-exceed fees incurred for such task, and explanation of any significant variances in percentage of services performed compared to percentage of fees incurred
 - c. For each task, the percentage of the fees incurred for such task compared to dollar amount allocated to such task
 - d. A statement that all tasks together shall be completed within the agreed upon not-to-exceed total amount of this Agreement
 - e. A statement that progress towards completion of the Scope of Services is on schedule to be completed within the timeline set forth in the Project schedule; if completion of the work is not on schedule, then a statement of the anticipated length of delay, the cause of the delay, measures proposed or taken to prevent or minimize the delay, and the timetable for implementation of such measures
 - f. A summary of proposed change to the Scope of Services, if required, including justifications for such changes

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- g. A Small Business Enterprise participation report to document the level of SBE participation throughout the Project
- h. Project Management Action Item and Decision Log to document action items, concerns, and issues throughout the term of this Agreement which require resolution by Valley Water and/or Consultant. This log will be for Consultant's use in tracking ongoing issues requiring Consultant's input and is not intended to capture all action items and decisions related to the construction phase. The Construction Management Consultant and/or Valley Water will maintain a separate Project-wide Action Item and Decision Log
- i. A summary of performed tasks to date, explanation of any major variances in percentage of Services to be completed compared to percentage of the Agreement NTE fees remaining
- j. Any changes in Consultant's key staff or subconsultants.

10.1B - Assumptions

- 1. Monthly Progress Reports will be provided on a monthly basis, regardless of whether an invoice is submitted.

10.1B - Deliverables

- 1. Monthly Progress Reports

10.2B Requests for Information (RFI)

- A. During construction, the Contractor may submit to Valley Water questions on details of the design, the construction contract, substitutions, and alternatives approaches, etc. If the construction Contractor's inquiry is related to Consultant's design and cannot be readily addressed by the construction contract, Valley Water may require Consultant to respond to the inquiry with written clarifications and return their response to Valley Water to address the inquiry with its construction Contractor.
- B. If Consultant's response to an RFI appears to have the potential to impact the construction schedule or cost, the issue will be immediately addressed with Valley Water. Where appropriate, Consultant will explore and propose alternatives.
- C. Consultant will notify Valley Water of any changes or potential changes given by the Contractor and respond on both the condition cited for the request and possible impacts on the Project construction and Contractor's operations. Consultant will gather information that will allow determination of merit on the request and quantification of impacts on the Project, if any. Consultant will make a preliminary assessment of the situation to identify whether additional resources or measures will be necessary for the process. These might include such activities as testing or additional field investigation activities. All issues that have the potential to impact the time and cost of construction will be given issue status and be addressed.

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- D. Consultant will respond to requests for information received from Valley Water.
- E. Consultant will respond to Valley Water's requests for evaluation of proposed substitutions and "or equal" proposals of equipment, materials or methods, and minor design changes.
- F. Consultant will render written decisions within seven calendar days unless otherwise agreed between Consultant and Valley Water. Consultant must notify Valley Water promptly if more time is required to respond to RFIs. Valley Water may approve an extension of time and will document approval in writing.
- G. Consultant will evaluate whether its RFI response will result in a change to the requirements of the Contract Documents. If Consultant's response to an RFI results in change of the requirements of the Contract Documents, Consultant must:
 - 10.2.G.1 State in writing in Consultants' response to the RFI that the response to the RFI is a change to the requirements of the Contract Documents; and
 - 10.2.G.2 Promptly notify Valley Water that Consultant's response to the RFI results in a change to the requirements of the Contract Documents.
- H. Upon Valley Water request, Consultant may be required to assist Valley Water in ascertaining any adjustment in the Contract time or Contract Sum resulting from Contract modifications based on Consultant's response to an RFI.

Task 10.2B - Assumptions

- 1. Consultant will review and respond to up to six hundred (600) RFI's, with 4 hours per RFI (on average) for review and 1 hour per RFI (on average) for coordination and communication (Project Engineer and Project Manager).
- 2. Consultant will spend up to 80 hours for review of landscaping related RFIs.
- 3. Consultant will review and respond to up to two hundred (200) questions/clarifications, with 1.5 hours per question (on average) for review, 1 hour per question (on average) for coordination and communication (Project Engineer and Project Manager)
- 4. Consultant will spend up to 40 hours for review of landscaping-related questions.
- 5. Additional hours are assumed for review and QC of responses to RFIs and questions/clarifications by Consultant's senior structural engineer and senior geotechnical engineer (2 hours total per response).
- 6. Review of RFIs in addition to the estimated number stated herein will be compensated pursuant to Task 11 Supplemental Services During Construction.

Task 10.2B - Deliverables

- 1. Memoranda in PDF or Microsoft Word stating Consultant's responses to RFIs

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2. Written notification of potential change orders due to RFI responses by Consultant
3. RFI documentation including drawings and specifications, including revised drawings and specifications, as necessary, all of which will be signed and stamped
4. Emails and verbal responses for input as requested by Valley Water Project Manager with email follow-up documentation for all verbal responses

10.3B Submittal Review

- A. Consultant will review the submittals provided by the Contractor as required in the construction Contract Documents prepared by the Consultant and as the Contractor is otherwise directed. Consultant will create and maintain a submittal log of all submittals required by the construction Contract Documents.
- B. Consultant will check submittals to ensure that they are complete and contain the correct references before being entered into the system. Consultant will track the status of all submittals addressed by Consultant in its submittal log. Consultant will review the submittals for conformance with the design and field conditions, as necessary and appropriate.
- C. Consultant will review, respond, and return all Contractor Submittals and re-submittals requested by Valley Water to be reviewed by Consultant as promptly as possible. Contractor submittal reviews will be returned no later than seven days from receipt of the Contractor's submittals by Valley Water, unless otherwise agreed between Consultant and Valley Water. Consultant must notify Valley Water immediately if more time is needed to respond to submittals. Extension of time may be granted by Valley Water upon discussion with Consultant and Valley Water will communicate approval of time extension in writing.
- D. Consultant will notify Valley Water of submittal review comments that may result in a Change Order. Prior to Consultant entering notations on a Contractor's Submittal that constitute a change to the requirements of the Contract Documents, Consultant will notify Valley Water in writing of the potential for a Contractor Change Order request.
- E. Consultant will create and maintain the submittal log for the duration of the Project construction until completion and acceptance by Valley Water.

Task 10.3B - Assumptions

1. Consultant will review and respond up to five hundred (500) submittals, each requiring 8 hours of Consultant staff time to review and prepare a response, plus 2 hours from the Project Engineer to coordinate and communicate, 2 hours for review by a senior reviewer, 2 hours review by a Geotech engineer, and 1 hour from the Project Manager.
2. Review of submittals in addition to the estimated number stated herein will be compensated in accordance with Task 11B Supplemental Services During Construction.

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Task 10.3B - Deliverables

1. Memoranda in PDF or Microsoft Word presenting Consultant's evaluation of submittals
2. Written notification via email of potential change orders due to submittal review comments by Consultant
3. E-mails and verbal responses for input as requested by Valley Water with email follow-up documentation for all verbal responses

10.4B Meetings and Site Visits

- A. Attend the preconstruction conference. Consultant will respond to technical questions from the Contractor or Valley Water, as requested by Valley Water.
- B. Attend progress and other meetings as requested by Valley Water or requested/recommended by Consultant and approved by Valley Water, coordination meetings and telephone conference calls with Valley Water's construction Contractor, Valley Water, and other parties as determined by Valley Water, in order to discuss and coordinate the construction progress, resolve technical issues, concerns, and related activities.
- C. Perform site visits as requested by Valley Water or determined necessary by Consultant.
- D. Perform full-time observation of the earthwork (levee fill, asphalt concrete and aggregate base placement and compaction), including nuclear gauge testing to confirm the levee fill, asphalt concrete and aggregate base are being compacted as per the Project specifications and to observe subgrade conditions in specific areas to confirm design assumptions. After completion of all earthwork operations, Consultant shall prepare a summary report documenting the results of their observations and test results.

Task 10.4B - Assumptions

1. Meetings will be held weekly during active construction duration. It is anticipated that meetings will be held either at the Project site or Valley Water Headquarters in San Jose, California, but could be elsewhere, at Valley Water's direction. Duration of each meeting is assumed to be 1 hour. Meetings will be attended by the Consultant's PM or their representative and representatives of other disciplines within the Consultant's firm and Subconsultants as needed up to 800 hours.
2. Consultant's PM and Project Engineer will attend the preconstruction conference.
3. Consultant's staff from appropriate disciplines will attend progress and other meetings. Consultant's staff will attend the meetings either on site or virtually.
4. Consultant will attend one hundred (100) site visits and prepare field reports. Each site visit will be attended by one Consultant staff at 8 hours per visit per staff (including travel

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time).

5. For budgetary purposes, the Parties estimate that Consultant will be onsite for approximately 24 hours per week, for 30 months to coordinate engineering services relating to RFIs review, submittals, engineering testing/inspections and observations, and to assist Valley Water in resolving design related issues that arise during construction.
6. Attendance by Consultant PM at each 1-day partnering session.

Task 10.4B - Deliverables

1. Written responses to issues raised during all meetings, including the pre-construction meeting
2. Attendance at meetings and/or conference calls as required to respond to and raise issues
3. Site visit report for each site visit including observations.
4. Summary report of earthwork and subgrade observations.

10.5B Construction Change Order Assistance

The purpose of this subtask is for Consultant to provide support to Valley Water for potential change orders and related activities submitted by the construction contractor. The origination of the change orders may come from Valley Water or the Contractor.

- A. As requested by Valley Water, Consultant will be required on an as-needed basis to design, write, or review change order documentation. Anticipated Consultant services may include: research and respond back to Valley Water whether work proposed by its construction Contractor warrants the need for a change order and whether it should be considered as extra work; review of design calculations and intent; review of cost estimates.
- B. If a Change Order is required as the result of the probable error or omission with respect to the services performed, the Consultant must prepare and submit to Valley Water, along with the Change Order documentation, a cost estimate for the value of Change Order Work. Only if determined by Valley Water that the Change Order was not due to an error or omission on the part of the Consultant, Consultant will be compensated for preparation of Change Order.

Task 10.5B - Deliverables

1. Change order documentation including signed and stamped drawings and specifications, and cost opinions.

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2. Review comments on Valley Water Project Manager's analyses of potential change orders.
3. Emails and verbal responses for input as requested by the Valley Water's Project Manager with email follow-up documentation for all verbal responses

Task 10.5B - Assumptions

1. Consultant will review and evaluate the change order requests as part of the RFI review.
2. For budgetary purposes, the Parties estimate the not-to-exceed fees for this subtask is based upon up to 3,650 hours of labor associated with construction change orders including reviewing proposed change orders from the construction contractor or Valley Water.

10.6B Engineer-of-Record's Project Record Drawings

- A. Record Drawings are necessary to accurately depict changes resulting from field conditions, design changes, Project scope changes, or other causes since the initial Construction Contract Drawings (or bid set) were adopted by Valley Water's Board of Directors and in accordance with the conformed documents prepared by Consultant, if any.
 - 10.6.1 Consultant will prepare and maintain a set of Engineer-of-Record's Project Record Drawings by marking up on the full-size (22" x 34") conformed drawings from the design phase or redlining PDF drawings from the design phase with all changes and clarifications recommended by Consultant and accepted by Valley Water's Project Manager during Project construction. Such changes may be the result of information that was approved in RFIs, change orders, or field memoranda written by Consultant, as well as for other reasons.
 - 10.6.2 The final Engineer-of-Record's Project Record Drawings (one set) will be submitted to Valley Water Project Manager within 15 working days of Valley Water Project Manager's issuance of a Project completion letter to the Contractor. Consultant will complete work on this subtask as construction progresses to aid completion of the entire drawing set within the time period stipulated.

Task 10.6B - Assumptions

1. Approximately sixty (60) new plan sheets will be prepared, signed and stamped by Consultant. Consultant will also label all remaining sheets not requiring revisions to ensure all sheets accurately reflect Project Record Drawings.
2. Preparation of Record Drawings in addition to the estimated quantity stated herein may be compensated pursuant to Task 11B Supplemental Services During Construction.

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Task 10.6B - Deliverables

1. Memoranda in Adobe PDF or Microsoft Word presenting Consultant's evaluation of submittals, RFIs, Potential Change Order (PCO) requests, and change order proposals
2. Written notification (via email) of potential change orders due to submittal review comment(s) by Consultant.
3. RFI, submittal, and change order documentation including drawings, specifications, signed and stamped, and cost opinions (electronic sent via email)
4. Written comments of review of construction contractor's cost estimates, schedules, and schedules of values (electronic sent via email)
5. Review comments on Valley Water Project Manager analysis of potential change orders (electronic sent via e-mail) and Consultant's own independent analysis of such potential change orders
6. Emails and verbal responses for input as requested by Valley Water's Project Manager with email follow-up documentation for all verbal responses
7. Final Engineer-of-Record's Project Record Drawings that include engineering changes recommended by Consultant and accepted by Valley Water Project Manager – one full size copy and one electronic copy with Adobe PDF and CADD files of these drawings.

10.7B Engineering Support for Dispute Resolution

- 10.7.1 Consultant will perform engineering investigations and analyses and provide recommendations to assist Valley Water in the resolution of construction Contractor's claims and disputes or other matters that may arise during construction, if requested by Valley Water. All of Consultant's investigations, analyses and recommendations will be summarized and provided in writing, upon request by Valley Water.
- 10.7.2 Consultant will render written opinion/recommendations within 15 working days for claims, disputes and other matters in question between Valley Water and construction Contractor.
- 10.7.3 Consultant will notify Valley Water Project Manager immediately if more time is required, for reasonable cause, to respond to dispute, claim or other matters. Consultant's request for time extension is subject to Valley Water Project Manager's approval as confirmed by email.
- 10.7.4 Consultant will document events and activities accurately to provide a reliable basis for investigation at a later date.
 - 10.7.4.1 Maintain documentation and records on all relevant decisions and facts relating to disputes on an ongoing basis.

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- 10.7.4.2 Maintain said records in an orderly manner and make available to Valley Water personnel upon request.
- 10.7.5 If requested by Valley Water, Consultant will analyze claims for additional compensation submitted by Contractor and prepare responses.
- 10.7.6 When Contractor files a notice of potential claim or dispute in accordance with the Contract Documents, Consultant will, upon Valley Water's request:
- 10.7.6.1 Compile any formal data, and records which pertain to Consultant's services relating to such claim;
 - 10.7.6.2 Prepare a summary of the dispute, by issue, clearly stating the Consultant's position on each issue;
 - 10.7.6.3 Prepare a summary sheet with a chronological listing of events and/or items such as letters to Contractor, meetings, etc., and a brief statement of content; and
 - 10.7.6.4 Document pertinent conversations with Contractor.
- 10.7.7 If requested by Valley Water, Consultant will compile additional documents such as:
- A. Drawings, shop drawings and Technical Specifications with the areas in question highlighted or noted by other appropriate means.
 - B. Correspondence between Consultant and Contractor, Consultant and Valley Water, etc.
 - C. Any other documentation that supports the position of the Contractor and Consultant etc.
- 10.7.8 If requested by Valley Water, Consultant will prepare engineering sketches for potential change orders (PCOs) or other purposes.
- 10.7.9 Coordinate work with Consultant's design engineers.
- 10.7.10 If requested by Valley Water, Consultant will participate in the Project's Dispute Review Board (DRB) process, as specified in the Project Contract Documents, Standard Provisions, Section 3.13, Dispute Review Board, including but not limited to the following activities: reviewing Contractor's dispute submittals and position papers; assisting Valley Water in preparing Valley Water's dispute submittals and position papers, including rebuttals or responses to Contractor's submittals and position papers and DRB meeting presentations; attending DRB meetings and hearings; and reviewing and commenting on DRB-issued recommendations for resolution of disputes, and their potential impact on the Project schedule and budget.
- 10.7.11 If requested by Valley Water, Consultant will participate in Partnering Workshops as specified in the Project Contract Documents, Standard Provisions Section 5.12 Partnering.

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10.7.11.1 Consultant's lead staff and project engineer shall participate in an initial two-day partnering workshop and subsequent one-day workshops to be conducted on a quarterly basis, if requested by Valley Water.

10.7.11.2 Prepare questionnaires and lists of issues and concerns prior to each workshop.

Task 10.7B - Assumptions

1. Consultant's written opinions/recommendations on disputes, claims or other matters in question between Valley Water's Project Manager and construction contractor are subject to the provisions of the construction Contract Documents.
2. This subtask is limited to 200 hours. Additional engineering support hours may be scoped and paid for as Task 11B Supplemental Services During Construction.

**TASK 11A - SUPPLEMENTAL SERVICES DURING CONSTRUCTION – CCFMMP
(UNCHANGED)**

Valley Water may require Consultant to perform Supplemental Services on an as-needed basis relating to construction of only the Coyote Creek Flood Management Measures Project (CCFMMP or Project A). Prior to performing such Supplemental Services, Consultant must receive an approved Task Order issued by the Valley Water and executed by both Parties. Refer to the Revised Standard Consultant Agreement, Section Twelve, Miscellaneous Provisions, subsection 13. Task Orders and Revised Appendix Three, Task Order Template.

11.1 Specific Supplemental Services. Specific examples of possible Supplemental Services include:

11.1.1 Reviewing construction contractor's substitution and "or equal" requests.

11.1.2 Engineering Geology and Geotechnical Services

11.2 Additional Services: Consultant will provide additional quantities of previously identified services as requested by Valley Water. Consultant will provide additional services for any quantity of tasks and deliverables beyond those stated in Task 10A as Task 11A Supplemental Services, to include but not be limited to:

11.2.1 Additional submittal or RFI review;

11.2.2 Additional construction change order review and preparation;

11.2.3 Additional schedule updates review;

11.2.4 Attendance at additional partnering sessions;

11.2.5 Additional meeting participation or site visits;

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- 11.2.6 Additional on-site monitoring;
- 11.2.7 Additional training classes;
- 11.2.8 Additional factory testing witnessing;
- 11.2.9 Dispute resolution assistance in addition to services described in subtask 10.7A; and
- 11.2.10 Other unanticipated services such as reviewing Contractor's value engineering proposals, mediation, and litigation support.

TASK 11B - SUPPLEMENTAL SERVICES DURING CONSTRUCTION – CCFPP (NEW)

Valley Water may require the Consultant to perform Supplemental Services on an as-needed basis relating to construction of Coyote Creek Flood Protection Project (CCFPP or Project B). Prior to performing such Supplemental Services, Consultant must receive an approved Task Order issued by Valley Water and executed by both Parties. Refer to the Revised Standard Consultant Agreement, Section Twelve, Miscellaneous Provisions, subsection 13. Task Orders and Revised Appendix Three, Task Order Template.

11.1 Specific Supplemental Services. Specific examples of possible Supplemental Services include:

- 11.1.1 Reviewing construction contractor's substitution and "or equal" requests.
- 11.1.2 Performing value engineering on specific Project elements. Consultant will present and discuss the value engineering concepts with Valley Water. Upon Valley Water's request, Consultant will implement the changes in the design drawings.

11.2 Additional Services: Consultant will provide additional quantities of previously identified services as requested by Valley Water. Consultant will provide additional services for any quantity of tasks and deliverables beyond those stated in Task 10B as Task 11B Supplemental Services, to include but not be limited to:

- 11.2.1 Additional submittal or RFI review;
- 11.2.2 Additional construction change order preparation;
- 11.2.3 Additional schedule updates review;
- 11.2.4 Attendance at additional partnering sessions;
- 11.2.5 Additional meeting participation or site visits;
- 11.2.6 Additional on-site monitoring;
- 11.2.7 Additional training classes;

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- 11.2.8 Additional factory testing witnessing;
- 11.2.9 Dispute resolution assistance; and
- 11.2.10 Other unanticipated services such as reviewing Contractor's value engineering proposals, mediation, and litigation support.

7. Attachments

The following listed Attachments are incorporated herein by this reference as though set forth in full:

Revised Attachment One - Fees and Payments (REVISED)
Revised Attachment Two - Schedule of Completion (REVISED)
Revised Attachment Three - Consultant's Key Staff and Subconsultants (REVISED)
Revised Attachment Four - Reference Materials (REVISED)

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**AMENDMENT NO. 5 TO AGREEMENT A4464A
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ATTACHMENT ONE
FEES AND PAYMENTS**

1. Total Authorized Funding (REVISED)

Total payment for Services performed, to the satisfaction of Valley Water, as described in the Schedule(s) will not exceed a total amount of **\$24,997,196.00** (Not-to-Exceed Fees or NTE). Under no conditions will the total compensation to the Consultant exceed this NTE payment amount without prior written approval in the form of an amendment to this Agreement executed by Valley Water's Board of Directors (Board), or Chief Executive Officer, or designee, as authorized by the Board.

2. Cost Breakdown (REVISED)

The NTE total compensation of this Agreement consists of the following task fee breakdown. No services will be performed or fees paid by Valley Water to the Consultant for Supplemental Services without prior written authorization by Valley Water as stated in this Agreement.

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**AMENDMENT NO. 5 TO AGREEMENT A4464A
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FEES AND PAYMENTS**

**COST BREAKDOWN
PROJECT A AND PROJECT B (REVISED)**

Task	Description	Project A	Project B	Not-to-Exceed Fees
1	Project Management	\$352,854.88	\$806,201.18	\$1,159,056.06
2	Data Collection and Investigations	\$921,436.31	\$1,487,915.41	\$2,409,351.72
3	Basis for Design	\$129,247.13	\$56,270.72	\$185,517.85
4	30 Percent Design Document Preparation (COMPLETED)	\$459,599.75	\$396,048.81	\$855,648.56
5	60 Percent Design Document Preparation (COMPLETED)	\$727,409.28	\$1,007,064.01	\$1,734,473.29
6	90 Percent Design Document Preparation (COMPLETED)	\$671,751.10	\$3,335,756.99	\$4,007,508.09
7	Final Design Document Preparation	\$670,784.01	\$1,387,215.35	\$2,057,999.36
8	Bid and Award Services	\$47,120.89	\$171,578.02	\$218,698.91
9	Supplemental Services	\$1,078,780.63	\$3,764,328.09	\$4,843,108.72
10A	Engineering Support During Construction	\$1,610,337.76	-	\$1,610,337.76
10B	Engineering Support During Construction	-	\$4,407,477.87	\$4,407,477.87
11A	Supplemental Services During Construction	\$216,269.00	-	\$216,269.00
11B	Supplemental Services During Construction	-	\$1,291,748.81	\$1,291,748.81
Total Not-to-Exceed Fees		\$6,885,590.74	\$17,161,605.81	\$24,997,196.00

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**COST BREAKDOWN
PROJECT A (UNCHANGED)**

Task	Description	Project A	Reallocation 9/26/22 ²	Amendment No. 2	Reallocation 8/15/23 ³	Amendment No. 4	Not-to-Exceed Fees
1	Project Management (COMPLETED)	\$339,839.50	-	-	\$13,015.38		\$352,854.88
2	Data Collection and Investigations (COMPLETED)	\$965,679.93	-	-	(\$44,243.62)		\$921,436.31
3	Basis for Design (COMPLETED)	\$127,752.06	-	-	\$1,495.07		\$129,247.13
4	30 Percent Design Document Preparation (COMPLETED)	\$511,769.74	(\$62,732.56)	-	\$10,562.57		\$459,599.75
5	60 Percent Design Document Preparation (COMPLETED)	\$881,495.81	(\$170,760.78)	-	\$16,674.25		\$727,409.28
6	90 Percent Design Document Preparation (COMPLETED)	\$611,249.52	-	-	\$60,501.58		\$671,751.10
7	Final Design Document Preparation (COMPLETED)	\$403,316.80	\$233,493.34	-	\$33,973.87		\$670,784.01
8	Bid and Award Services (COMPLETED)	\$111,578.02	-	-	(\$64,457.13)		\$47,120.89
9	Supplemental Services (COMPLETED)	\$1,106,302.60	-	-	(\$27,521.97)		\$1,078,780.63
10A	Engineering Support During Construction	-	-	\$2,359,309.00	-	(\$748,971.42)	\$1,610,337.76
11A	Supplemental Services During Construction	-	-	\$417,297.76	-	(\$201,028.76)	\$216,269.00
Total Not-to-Exceed Fees:		\$6,885,590.74	\$0	\$2,776,606.76	\$0	(\$950,000.00)	\$6,885,590.74

NOTES:

1. Amendment No.1 was a no cost amendment.
2. Reallocation of fees listed above was administratively approved by Valley Water, as documented by letter to Consultant dated September 26, 2022; and was formally incorporated in Amendment No. 2.
3. Reallocation of fees listed above was administratively approved by Valley Water by letter to Consultant dated August 16, 2023; and was formally incorporated in Amendment No. 3.

Amendment No. 5 to Agreement A 4464Ae
Coyote Creek Flood Management Measures Project and
Coyote Creek Flood Protection Project – Design Services
Ver: 8/7/25

Agreement No. A4464Ae / CAS File No. 5157

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**COST BREAKDOWN
PROJECT B (REVISED)**

Task	Description	Project B	Reallocation 8/15/23	Reallocation 1/16/24	Amendment No. 3	Amendment No. 4	Amendment No. 5	Revised Not-to- Exceed Fees
1	Project Management	\$339,839.50	-	-	\$466,361.68	-	-	\$806,201.18
2	Data Collection and Investigations	\$1,274,337.09	\$63,578.32	-	\$150,000.00	-	-	\$1,487,915.41
3	Basis for Design	\$25,889.92	\$380.80	-	\$30,000	-	-	\$56,270.72
4	30 Percent Design Document Preparation (COMPLETED)	\$460,007.93	(\$63,959.12)	-	-	-	-	\$396,048.81
5	60 Percent Design Document Preparation (COMPLETED)	\$1,007,064.01	-	-	-	-	-	\$1,007,064.01
6	90 Percent Design Document Preparation (COMPLETED)	\$696,496.23	-	\$204,023.47	\$2,435,237.29	-	-	\$3,335,756.99
7	Final Design Document Preparation	\$444,129.35	-	-	\$943,086.00	-	-	\$1,387,215.35
8	Bid and Award Services	\$111,578.02	-	-	\$60,000.00	-	-	\$171,578.02
9	Supplemental Services	\$566,987.21	-	(\$204,023.47)	\$808,086.03	\$950,000.00	\$1,643,278.32	\$3,764,328.09
10B	Engineering Support During Construction	-	-	-	-	-	\$4,407,477.87	\$4,407,477.87
11B	Supplemental Services During Construction	-	-	-	-	-	\$1,291,748.81	\$1,291,748.81
Total Not-to-Exceed Fees:		\$4,926,329.26	\$0	\$0	\$4,892,771.00	\$950,000.00	\$7,342,505.00	\$18,111,605.26

NOTES:

1. Amendment No.1 was a no cost amendment.
2. Reallocation of fees listed above were administratively approved by Valley Water, as documented by letters to Consultant dated August 16, 2023 and January 16, 2024; and are formally incorporated in Amendment No. 3.

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3. Cost Breakdown table was unchanged in Amendment No. 2.

3. Terms and Conditions

A. Payments for Services performed, as described in this Schedule, which applies to the specific Services, will be based on the following terms:

- 1) Valley Water will pay for Services provided by the Consultant according to the schedule of rates for professional, technical, and administrative personnel, as well as materials and supplies as listed below in the Hourly/Unit Rate Schedule.
- 2) The stated hourly rates are effective for the term of this Agreement unless otherwise revised as indicated. After 12 months from the date this Agreement is entered into by parties ("anniversary date"), and each 12 months thereafter, these hourly rates may be negotiated by the Consultant and Valley Water, provided Consultant submits written notice to Valley Water of Consultant's request to revise the hourly rates 90 calendar days prior to the anniversary date of this Agreement. Both parties will use as a benchmark for negotiations the percent change for the previous 12 months of the "Employment Cost Index (ECI), for total compensation for private industry workers, for the San Francisco-Oakland-San Jose, CA CSA Census region and metropolitan area (not seasonally adjusted)" as published by the U.S. Department of Labor, Bureau of Labor Statistics, or 2.5%, whichever is less. A negative index will result in rates remaining the same. Such rate revisions are subject to written approval by Valley Water's Deputy Operating Officer.

B. Reimbursable Expenses

1. All reimbursable expenses not already covered in overhead may include, but are not limited to, mapping, rendering, printouts, leased equipment, mailing and delivery services, printing services, film and processing, plotting, and supplies. These other direct expenses as approved by Valley Water Project Manager will be billed on a monthly basis at actual cost plus 0% linked to each Agreement Task, provided that the Task total NTE amount is not exceeded. Consultant shall provide receipts for each other direct expense item(s) with monthly invoices submitted.
2. Equipment purchased on behalf of Valley Water that costs \$50 or more must receive the prior written approval of Valley Water Project Manager. All equipment purchased on behalf of Valley Water and paid for by Valley Water shall become the property of Valley Water and be delivered to Valley Water prior to expiration of this Agreement.
3. Travel expenses are reimbursed at actual costs. Travel and overnight accommodations, including per diem, required for performance of this Agreement will be paid at reasonable cost not to exceed the U.S. General Services Agency Per Diem Rates

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for Sunnyvale/Palo Alto/San Jose, California area, provided prior approval has been obtained from Valley Water Project Manager. For air travel, Valley Water will pay the cost of a coach class or equivalent ticket. Where air travel is required, Valley Water will pay the total cost of taxi, rideshare, public transportation, or a rental car, which may include insurance, gas, car fee, and taxes and will be paid at the actual costs incurred. Vehicle rental is limited to a compact or economy model, unless prior approval has been obtained from Valley Water Project Manager for a different type of vehicle. Mileage for personal car use shall be calculated from the Consultant staff's base office to the Project site.

4. Expenses incurred by the Consultant, including for Subconsultants, subcontractors and vendors, including lab services, will be reimbursed at actual cost plus 5%. Consultant shall provide invoices for all such services regardless of cost. The 5% markup will be applied only once, either by the Consultant or by its subconsultants, subcontractors, or vendors.
- C. For staff with rates exceeding the rate of \$[RATE LIMIT]/hr, the Consultant must obtain written approval from Valley Water Project Manager as to the numbers of hours per task prior to that individual working on the Project. [NOT USED]
- D. Prevailing Wage Requirements
1. The Scope of Services described in Tasks 2 through 8 is considered by Valley Water to be "Public Works" requiring the payment of prevailing wages. See Revised Standard Consultant Agreement Section Four, Fees and Payments, subsection 3. Prevailing Wages.
 2. In accordance with prevailing wage laws, the Director of the California Department of Industrial Relations (Director) has ascertained the general prevailing rate of wages and employer payments for health and welfare, pension, vacation, and similar purposes available to the particular craft, classification, or type of workers employed on the Project. These rates are set forth in the latest determination obtained from the Director, which is on file in Valley Water's Office of the Clerk of the Board of Directors and incorporated herein by reference the same as though set forth in full. The rates are also available on the State of California Department of Industrial Relations website at <http://www.dir.ca.gov>.

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HOURLY/UNIT RATE TABLE (REVISED)

CLASSIFICATION	ORIGINAL HOURLY/ UNIT RATE	HOURLY/ UNIT RATE EFFECTIVE 5/25/2022	HOURLY/ UNIT RATE EFFECTIVE 12/1/2022	HOURLY/ UNIT RATE EFFECTIVE 05/25/23	HOURLY/ UNIT RATE EFFECTIVE 12/5/23	HOURLY/ UNIT RATE EFFECTIVE 05/25/24	HOURLY/ UNIT RATE EFFECTIVE 06/25/25
Consultant: AECOM							
Principal	\$305.00	\$312.63	-	\$320.44	-	\$328.45	\$336.66
Project Manager	\$280.00	\$287.00	-	\$294.18	-	\$301.53	\$309.07
Senior Manager	\$260.00	\$266.50	-	\$273.16	-	\$279.99	\$286.99
Senior Manager 1	-	-	-	-	-	\$265.00	\$271.63
Senior Project Engineer/Scientist	\$224.91	\$230.53	-	\$236.30	-	\$242.21	\$248.26
Senior Project Engineer/Scientist 2	-	-	-	-	-	\$220.00	\$225.50
Senior Project Engineer/Scientist 1	-	-	-	-	-	\$200.00	\$205.00
Project Engineer/Scientist	\$184.54	\$189.15	-	\$193.88	-	\$198.73	\$203.70
Assistant Project Engineer/Scientist	-	-	-	-	-	\$155.00	\$158.88
Senior Engineer/Scientist	\$155.70	\$159.59	-	\$163.58	-	\$167.67	\$171.86
Senior Staff Engineer/Scientist	-	-	-	-	-	\$133.00	\$136.33
Staff Engineer/ Scientist	\$118.22	\$121.18	-	\$124.20	-	\$127.31	\$130.49
Staff Engineer/Scientist 1	-	-	-	-	-	\$112.00	\$114.80
Engineer/Scientist Intern 2	-	-	-	-	-	\$96.00	\$98.40
Engineer/Scientist Intern 1	-	-	-	-	-	\$80.00	\$82.00
Sr. GIS/CADD/ Graphic	\$167.24	\$171.42	-	\$175.71	-	\$180.10	\$184.61
Project GIS/CADD/Graphic	-	-	-	-	-	\$150.00	\$153.75
GIS/CADD/ Graphic	\$129.75	\$132.99	-	\$136.32	-	\$139.73	\$143.22
Staff GIS/CADD/Graphic	-	-	-	-	-	\$104.00	\$106.60

Amendment No. 5 to Agreement A 4464Ae
Coyote Creek Flood Management Measures Project and
Coyote Creek Flood Protection Project – Design Services
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CLASSIFICATION	ORIGINAL HOURLY/ UNIT RATE	HOURLY/ UNIT RATE EFFECTIVE 5/25/2022	HOURLY/ UNIT RATE EFFECTIVE 12/1/2022	HOURLY/ UNIT RATE EFFECTIVE 05/25/23	HOURLY/ UNIT RATE EFFECTIVE 12/5/23	HOURLY/ UNIT RATE EFFECTIVE 05/25/24	HOURLY/ UNIT RATE EFFECTIVE 06/25/25
GIS/CADD/Graphic Intern 1	-	-	-	-	-	\$70.00	\$71.75
Graphics Intern	-	-	-	-	-	\$50.00	\$51.25
Editor	\$144.17	\$147.77	-	\$151.47	-	\$155.26	\$159.14
Assistant Editor	-	-	-	-	-	\$115.00	\$117.88
Contract Administrator	\$138.40	\$141.86	-	\$145.41	-	\$149.05	\$152.77
Administrative Assistant/Typist	\$100.92	\$103.44	-	\$106.03	-	\$108.68	\$111.40
Subconsultant: Kleinfelder, Inc.							
Senior Principal Professional	\$286.40	\$293.56	-	\$300.90	-	\$308.42	-
Program Manager	\$262.11	\$268.66	-	\$275.38	-	\$282.26	-
Principal Professional	\$245.03	\$251.16	-	\$257.43	-	\$263.87	-
Project Manager III	\$247.64	\$253.83	-	\$260.18	-	\$266.68	-
Project Manager I	\$153.11	\$156.94	-	\$160.86	-	\$164.88	-
Project Professional	\$153.11	\$156.94	-	\$160.86	-	\$164.88	-
Staff Professional II	\$130.09	\$133.34	-	\$136.68	-	\$140.10	-
Staff Professional I	\$118.80	\$121.77	-	\$124.81	-	\$127.93	-
Senior CADD Designer	\$130.09	\$133.34	-	\$136.68	-	\$140.10	-
Staff Professional I, II- Prevailing Wage RT	\$165.97	\$170.12	-	\$174.37	-	\$178.73	-
Staff Professional I, II- Prevailing Wage OT	\$220.41	\$225.92	-	\$231.57	-	\$237.36	-
Subconsultant: Ruggeri-Jensen-Azar							
Principal	\$305.00	\$312.63	-	\$320.44	-	\$328.45	-
Survey Project Manager	\$230.00	\$235.75	-	\$241.64	-	\$247.68	-
Project Surveyor	\$171.10	\$175.38	-	\$179.76	-	\$184.25	-

Amendment No. 5 to Agreement A 4464Ae

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Coyote Creek Flood Management Measures Project and
Coyote Creek Flood Protection Project – Design Services
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**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

CLASSIFICATION	ORIGINAL HOURLY/ UNIT RATE	HOURLY/ UNIT RATE EFFECTIVE 5/25/2022	HOURLY/ UNIT RATE EFFECTIVE 12/1/2022	HOURLY/ UNIT RATE EFFECTIVE 05/25/23	HOURLY/ UNIT RATE EFFECTIVE 12/5/23	HOURLY/ UNIT RATE EFFECTIVE 05/25/24	HOURLY/ UNIT RATE EFFECTIVE 06/25/25
Field Survey Manager	\$132.44	\$135.75	-	\$139.14	-	\$142.62	-
1-Person Survey Crew (RJA)	\$189.00	\$193.73	-	\$198.57	-	\$203.53	-
2-Person Survey Crew (RJA)	\$248.06	\$254.26	-	\$260.62	-	\$267.14	-
3-Person Survey Crew (RJA)	\$363.69	\$372.78	-	\$382.10	-	\$391.65	-
Subconsultant: Cal Engineering and Geology (now known as Haley & Aldrich, Inc., effective April 1, 2023)							
Sr. Principal Engineer/Geologist	\$277.00	\$283.93	-	\$291.02	-	\$298.30	-
Principal Engineer/Geologist	\$208.00	\$213.20	-	\$218.53	-	\$223.99	-
Associate Engineer/Geologist	\$169.00	\$173.23	-	\$177.56	-	\$182.00	-
Senior Engineer/Geologist	\$138.00	\$141.45	-	\$144.99	-	\$148.61	-
Project Engineer/Geologist	\$120.00	\$123.00	-	\$126.08	-	\$129.23	-
Staff Engineer/Geologist	\$ 95.00	\$97.38	-	\$99.81	-	\$102.31	-
Senior GIS/CADD Specialist	\$106.00	\$108.65	-	\$111.37	-	\$114.15	-
Project Assistant	\$ 86.00	\$88.15	-	\$90.35	-	\$92.61	-
Subconsultant: Horizon Water and Environment							
Principal	\$235.13	\$241.00	-	\$247.03	-	\$253.21	-
Subconsultant: MGE							
Supervising Structural Engineer	\$255.00	\$261.38	-	\$267.91	-	\$274.61	-
Senior Structural Engineer	\$231.11	\$236.89	-	\$242.81	-	\$248.88	-
Senior Engineer	\$190.00	\$194.75	-	\$199.62	-	\$204.61	-
CADD	\$136.00	\$139.40	-	\$142.89	-	\$146.46	-
Administrative Assistant	\$91.00	\$93.28	-	\$95.61	-	\$98.00	-
Subconsultant: M Lee Corporation							

**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

CLASSIFICATION	ORIGINAL HOURLY/ UNIT RATE	HOURLY/ UNIT RATE EFFECTIVE 5/25/2022	HOURLY/ UNIT RATE EFFECTIVE 12/1/2022	HOURLY/ UNIT RATE EFFECTIVE 05/25/23	HOURLY/ UNIT RATE EFFECTIVE 12/5/23	HOURLY/ UNIT RATE EFFECTIVE 05/25/24	HOURLY/ UNIT RATE EFFECTIVE 06/25/25
Chief Estimator	\$255.60	\$261.99	-	\$268.54	-	\$275.25	-
Lead Estimator	\$222.97	\$228.54	-	\$234.26	-	\$240.12	-
Senior Estimator	\$198.50	\$203.46	-	\$208.55	-	\$213.76	-
Cost Estimator	\$135.96	\$139.36	-	\$142.84	-	\$146.41	-
Subconsultant: Garavaglia Architecture							
Principal	\$205.21	\$210.34	-	\$215.60	-	\$220.99	-
Sr. Project Manager	\$134.08	\$137.43	-	\$140.87	-	\$144.39	-
Sr. Architectural Historian	\$284.13	\$291.23	-	\$298.51	-	\$305.97	-
Architectural Conservator	\$113.84	\$116.69	-	\$119.60	-	\$122.59	-
Job Captain/Senior Drafter	\$ 94.74	\$97.11	-	\$99.54	-	\$102.03	-
Architectural Historian	\$ 63.14	\$64.72	-	\$66.34	-	\$68.00	-
Subconsultant: Duquette Engineering							
Principal	\$252.00	\$258.30	-	\$264.76	-	\$271.38	-
Project Engineer	\$175.00	\$179.38	-	\$183.86	-	\$188.46	-
Staff Engineer	\$141.00	\$144.53	-	\$148.14	-	\$151.84	-
CAD/Engineering Assistant	\$122.00	\$125.05	-	\$128.18	-	\$131.38	-
Administrative Assistant	\$102.00	\$104.55	-	\$107.16	-	\$109.84	-
Subconsultant: Bess Test Labs							
Operator	\$125.69	-	-	\$132.05	-	\$135.35	-
Laborer	\$ 91.55	-	-	\$96.18	-	\$98.58	-
1-Person Traffic Control w/Arrow Truck	\$1,840/per day	\$1,886/per day	-	\$1,933.15/per day	-	\$1,981.48/per day	-
Clearance of Bore Locations	\$150/each	\$153.75/each	-	\$157.59/each	-	\$161.53/each	-

**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

CLASSIFICATION	ORIGINAL HOURLY/ UNIT RATE	HOURLY/ UNIT RATE EFFECTIVE 5/25/2022	HOURLY/ UNIT RATE EFFECTIVE 12/1/2022	HOURLY/ UNIT RATE EFFECTIVE 05/25/23	HOURLY/ UNIT RATE EFFECTIVE 12/5/23	HOURLY/ UNIT RATE EFFECTIVE 05/25/24	HOURLY/ UNIT RATE EFFECTIVE 06/25/25
2 Person Sewer Camera Inspection Service (Hydroflush)	-	\$325.00	-		-	\$333.13	-
2 Person Sewer Camera Inspection Service	-	\$295.00	-		-	\$302.38	-
Subconsultant: EROCK Associates LLCs							
Engineer	\$184.00	\$188.60	-	\$193.32	-	\$198.15	-
Operator	\$135.00	\$138.38	-	\$141.83	-	\$145.38	-
Staff	\$121.00	\$124.03	-	\$127.13	-	\$130.31	-
Subcontractor: Bay Area Traffic Solutions, Inc. (BATS)							
Traffic Control, 2 man 8-hour weekday rate	\$1,590.00/day	\$1,629.75/day	-	\$1,670.49/day	-	\$1,712.25/day	-
Traffic Control, Time Exceeding 8- hour, per traffic tech	\$135/hour	\$138.38/hour	-	\$141.83/hour	-	\$145.38/hour	-
Engineer Stamped Traffic Control Plans (3-4 Business day turnaround), up to 3 sheets	\$500/each	\$512.50/each	-	\$525.31/each	-	\$538.44/each	-
Subcontractor: CERCO Analytical							
Quality Assurance Reports	\$10/per report	\$10.15/per report	-	\$10.40/per report	-	\$10.66/per report	-
Reproduction	\$0.25/each	\$0.26/each	-	\$0.26/each	-	\$0.27/each	-

**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

CLASSIFICATION	ORIGINAL HOURLY/ UNIT RATE	HOURLY/ UNIT RATE EFFECTIVE 5/25/2022	HOURLY/ UNIT RATE EFFECTIVE 12/1/2022	HOURLY/ UNIT RATE EFFECTIVE 05/25/23	HOURLY/ UNIT RATE EFFECTIVE 12/5/23	HOURLY/ UNIT RATE EFFECTIVE 05/25/24	HOURLY/ UNIT RATE EFFECTIVE 06/25/25
ASTM Corrosivity Test Methods (with Brief Evaluation) - Redox, pH, sulfate, resistivity (100% saturation) & chloride	\$250/each	\$256.25/each	-	\$262.66/each	-	\$269.23/each	-
Subcontractor: Gregg Drilling, LLC							
Mobilization/Demob/Travel - Truck CPT	\$600/day	\$615/day	-	\$630.38/day	-	\$646.14/day	-
CPT Truck, 2-man crew	\$3,500/day	\$3,587.50/day	-	\$3,677.19/day	-	\$3,769.12/day	-
Prevailing Wage Surcharge	\$130/hour	\$133.25/hour	-	\$136.58/hour	-	\$139.99/hour	-
Overtime (Over 9 hours per day)	\$545/hour	\$558.63/hour	-	\$572.59/hour	-	\$586.90/hour	-
Grouting Hole at Completion	\$2/foot	\$2.05/foot	-	\$2.10/foot	-	\$2.15/foot	-
Subcontractor: Exploration Geoservices							
8-hour day, 3 man crew, prevailing wage	\$455/hour	\$466.38/hour	-	\$478.03/hour	-	\$489.98/hour	-
Overtime, 3 man crew, prevailing wage	\$692/hour	\$709.30/hour	-	\$727.03/hour	-	\$745.21/hour	-
Grout	\$7/foot	\$7.18/foot	-	\$7.35/foot	-	\$7.53/foot	-
Visqueen Roll	\$100/roll	\$102.50/roll	-	\$105.06/roll	-	\$107.69/roll	-
Mud Trailer	\$85/day	\$87.13/day	-	\$89.30/day	-	\$91.53/day	-
Travel, 3-man crew, OT	\$363/hour	\$372.08/hour	-	\$381.38/hour	-	\$390.91/hour	-
Spoils Drums	\$93/each	\$95.33/each	-	\$97.71/each	-	\$100.15/each	-
Drum Offhaul and Disposal	\$190/each	\$194.75/each	-	\$199.62/each	-	\$204.61/each	-

**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

CLASSIFICATION	ORIGINAL HOURLY/ UNIT RATE	HOURLY/ UNIT RATE EFFECTIVE 5/25/2022	HOURLY/ UNIT RATE EFFECTIVE 12/1/2022	HOURLY/ UNIT RATE EFFECTIVE 05/25/23	HOURLY/ UNIT RATE EFFECTIVE 12/5/23	HOURLY/ UNIT RATE EFFECTIVE 05/25/24	HOURLY/ UNIT RATE EFFECTIVE 06/25/25
Drum (Composite) Analytical Testing	\$405/each	\$415.13/each	-	\$425.50/each	-	\$436.14/each	-
Support Truck	\$140/day	\$143.50/day	-	\$147.09/day	-	\$150.77/day	-
Subcontractor: McCampbell Analytical							
Multi-Range TPH	\$67/each	\$68.68/each	-	\$70.39/each	-	\$72.15/each	-
SW6020 (CAM17)	\$123/each	\$126.08/each	-	\$129.23/each	-	\$132.46/each	-
SW8260B (VOCs)	\$100/each	\$102.50/each	-	\$105.06/each	-	\$107.69/each	-
Sample Disposal Fee	\$2/each	\$2.05/each	-	\$2.10/each	-	\$2.15/each	-
Subcontractor: Taber Drilling (CPTs)							
Mobilization	\$1,200/each	\$1,230/each	-	\$1,260.75/each	-	\$1,292.27/each	-
Travel, Weekend	\$950/each	\$973.75/each	-	\$998.09/each	-	\$1023.04/each	-
CPT Truck, 2-man crew	\$325/hour	\$333.13/hour	-	\$341.45/hour	-	\$349.99/hour	-
Per Diem, 2-man crew	\$400/day	\$410/day	-	\$420.25/day	-	\$430.76/day	-
Travel, Weekday	\$200/hour	\$205/hour	-	\$210.13/hour	-	\$215.38/hour	-
Cement	\$8/bag	\$8.20/bag	-	\$8.41/bag	-	\$8.62/bag	-
Subcontractor: Pitcher Drilling, Inc.							
Mob/demob Truck drill, support truck & Liftgate truck	\$1,400/each	\$1,435/each	-	\$1,470.88/each	-	\$1,507.65/each	-
Mob/demob Track drill & Liftgate truck	\$1,800/each	\$1,845/each	-	\$1,891.13/each	-	\$1,938.41/each	-
Mob/demob Track support carrier (Morooka)	\$600/each	\$615/each	-	\$630.38/each	-	\$646.14/each	-

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ATTACHMENT ONE
FEES AND PAYMENTS**

CLASSIFICATION	ORIGINAL HOURLY/ UNIT RATE	HOURLY/ UNIT RATE EFFECTIVE 5/25/2022	HOURLY/ UNIT RATE EFFECTIVE 12/1/2022	HOURLY/ UNIT RATE EFFECTIVE 05/25/23	HOURLY/ UNIT RATE EFFECTIVE 12/5/23	HOURLY/ UNIT RATE EFFECTIVE 05/25/24	HOURLY/ UNIT RATE EFFECTIVE 06/25/25
HSA/SolidFlitAugur/MR Truck drill, 36 borings, 9 hr. shifts	\$4,200/day	\$4,305/day	-	\$4,412.63/day	-	\$4,522.95/day	-
Truck drill, install 8-2" Standpipe Piezometers to 45'.	\$4,200/day	\$4,305/day	-	\$4,412.63/day	-	\$4,522.95/day	-
HSA/MR Track Drill, 18 borings, 9 hrs. shifts	\$4,600/day	\$4,715/day	-	\$4,832.88/day	-	\$4,953.70/day	-
Track Drill, install 4-2" Standpipe Piezometers to 45'	\$4,600/day	\$4,715/day	-	\$4,832.88/day	-	\$4,953.70/day	-
OPTION Track Support Vehicle (Morooka)	\$500/day	\$512.50/day	-	\$525.31/day	-	\$538.44/day	-
Drilling Additives	\$3/hour	\$3.08/hour	-	\$3.15/hour	-	\$3.23/hour	-
Portland cement grout (MR or HSA borings)	\$5/foot	\$5.13/foot	-	\$5.25/foot	-	\$5.38/foot	-
Standpipe Piezometers Materials	\$14/foot	\$14.35/foot	-	\$14.71/foot	-	\$15.08/foot	-
Monitoring Well Box Installations (Heavy duty)	\$350/each	\$358.75/each	-	\$367.72/each	-	\$376.91/each	-
55 gallon drums	\$65/each	\$66.63/each	-	\$68.29/each	-	\$70.00/each	-
2.5" Liners & caps	\$8/each	\$8.20/each	-	\$8.41/each	-	\$8.62/each	-
Shelby Tubes & Caps	\$45/each	\$46.13/each	-	\$47.28/each	-	\$48.46/each	-
Additional Field Technician	\$1,150/day	\$1,178.75/day	-	\$1,208.22/day	-	\$1,238.43/day	-
Liftgate Truck Rental	\$400/each	\$410/each	-	\$420.25/each	-	\$430.76/each	-
OT Truck drill (2 man crew)	\$580/hour	\$594.50/hour	-	\$609.36/hour	-	\$624.59/hour	-

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**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

CLASSIFICATION	ORIGINAL HOURLY/ UNIT RATE	HOURLY/ UNIT RATE EFFECTIVE 5/25/2022	HOURLY/ UNIT RATE EFFECTIVE 12/1/2022	HOURLY/ UNIT RATE EFFECTIVE 05/25/23	HOURLY/ UNIT RATE EFFECTIVE 12/5/23	HOURLY/ UNIT RATE EFFECTIVE 05/25/24	HOURLY/ UNIT RATE EFFECTIVE 06/25/25
OT Track drill (2 man crew)	\$620/hour	\$635.50/hour	-	\$651.39/hour	-	\$667.67/hour	-
OT Additional technician	\$180/hour	\$184.50/hour	-	\$189.11/hour	-	\$193.84/hour	-
Drill Spoils Analysis and Profiling Fee	\$1,200/each	\$1,230/each	-	\$1,260.75/each	-	\$1,292.27/each	-
Drill spoils Transport	\$1,400/each	\$1,435/each	-	\$1,470.88/each	-	\$1,507.65/each	-
Drill Spoils Disposal	\$149/each	\$152.73/each	-	\$156.54/each	-	\$160.45/each	-
Taxes on Materials (9%)	9% total	9% total	-	9% total	-	9% total	-
Subcontractor: Integrated Waste Management							
Drill Spoils Analysis and Profiling Fee	\$1,200/each	\$1,230/each	-	\$1,260.75/each	-	\$1,292.27/each	-
Drill spoils Transport	\$1,400/each	\$1,435/each	-	\$1,470.88/each	-	\$1,507.65/each	-
Drill Spoils Disposal	\$149/each	\$152.73/each	-	\$156.54/each	-	\$160.45/each	-
Subcontractor: Conetec							
Daily Rig Travel from San Leandro	\$7.50/mile	\$7.69/mile	-	\$7.88/mile	-	\$8.08/mile	-
Prevailing Wage Premium, 2- man crew, 0-8 hrs	\$145/hour	\$148.63/hour	-	\$152.54/hour	-	\$156.35/hour	-
Prevailing Wage Premium, 2- man crew, >8 hrs	\$195/person/hour	\$199.88/person /hour	-	\$204.87/person /hour	-	\$209.99/person /hour	-
CPT Truck, 2-man crew, up to 9- hours	\$3,500/day	\$3,587.50/day	-	\$3,677.19/day	-	\$3,769.12/day	-
Seismic Shear Wave Velocity Profiling, per Vs100	\$450 each	\$461.25/each	-	\$472.78/each	-	\$484.60/each	-

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**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

CLASSIFICATION	ORIGINAL HOURLY/ UNIT RATE	HOURLY/ UNIT RATE EFFECTIVE 5/25/2022	HOURLY/ UNIT RATE EFFECTIVE 12/1/2022	HOURLY/ UNIT RATE EFFECTIVE 05/25/23	HOURLY/ UNIT RATE EFFECTIVE 12/5/23	HOURLY/ UNIT RATE EFFECTIVE 05/25/24	HOURLY/ UNIT RATE EFFECTIVE 06/25/25
Grouting at Hole Completion	\$50/hole	\$51.25/hole	-	\$52.53/hole	-	\$53.84/hole	-
Subcontractor: Cascade Drilling/Technical Services							
Mob/Demob (2-person) & Project Setup (50-100 miles)	-	\$950/ea	\$950/ea	-		973.75/ea	-
Hand Auger Crew (Up to 9hrs onsite)	-	\$1,900/day	\$1,900/day	-	-	1947.50/day	-
Daily Travel/Per Diem (2-person crew)	-	\$500/day	\$500/day	-	-	512.50/day	-
Hand Auger Crew (After 9-hrs onsite)	-	\$275/hour	\$275/hour	-	-	281.88/hour	-
55 Gallon Steel Drum	-	\$100/ea	\$100/ea	-	-	102.50/ea	-
Surface Core (4" diameter) - up to 6" thick	-	\$65/ea	\$65/ea	-	-	66.63/ea	-
Subcontractor: Belshire Environmental Services, Inc.							
Transportation & Disposal Non-Hazardous Soil (Soil Safe)	-	-	\$150/ea	-	-	153.75/ea	-
Transportation & Disposal Non-Hazardous Water (World Oil Recycling)	-	-	\$150/ea	-	-	153.75/ea	-
Stop Fee (< drums)	-	-	\$115/fixed fee	-	-	117.88/fixed fee	-
Project Management Fee	-	-	\$100/fixed fee	-	-	102.50/fixed fee	-

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REVISED SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

CLASSIFICATION	ORIGINAL HOURLY/ UNIT RATE	HOURLY/ UNIT RATE EFFECTIVE 5/25/2022	HOURLY/ UNIT RATE EFFECTIVE 12/1/2022	HOURLY/ UNIT RATE EFFECTIVE 05/25/23	HOURLY/ UNIT RATE EFFECTIVE 12/5/23	HOURLY/ UNIT RATE EFFECTIVE 05/25/24	HOURLY/ UNIT RATE EFFECTIVE 06/25/25
Fuel Surcharge Applies	-	-	\$55.00	-	-	\$56.38	-
Subcontractor: Eurofins Environmental Testing America							
CAM 17 Metals List, No Mercury (6010B) (water/solid)	-	-	\$80/ea	-	-	\$82.00	-
Mercury (7471A) (solid)	-	-	\$20/ea	-	-	\$20.50	-
Mercury (7470A) (water)	-	-	\$20/ea	-	-	\$20.50	-
DRO/MRO (8015C) (water/solid)	-	-	\$55/ea	-	-	\$56.38	-
VOCs - Standard List + GRO (8260B) (water/solid)	-	-	\$100/ea	-	-	\$102.50	-
SVOCs - Standard List (8270C) (water/solid)	-	-	\$149/ea	-	-	\$172.73	-
PAHs_SIM (8270C SIM) (water/solid)	-	-	\$90/ea	-	-	\$92.25	-
Pesticides - Standard List (8081B) (water/solid)	-	-	\$85/ea	-	-	87.13/ea	-
PCBs - Standard List (8082A) (water/solid)	-	-	\$59/ea	-	-	60.48/ea	-
Terracore Kits	-	-	\$15/ea	-	-	15.38/ea	-
Safe and Environmentally Responsible Waste Management	-	-	\$2.50/per sample	-	-	2.56/per sample	-
Subcontractor: Ground Penetrating Radar Systems, LLC (GPRSINC)							

**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

CLASSIFICATION	ORIGINAL HOURLY/ UNIT RATE	HOURLY/ UNIT RATE EFFECTIVE 5/25/2022	HOURLY/ UNIT RATE EFFECTIVE 12/1/2022	HOURLY/ UNIT RATE EFFECTIVE 05/25/23	HOURLY/ UNIT RATE EFFECTIVE 12/5/23	HOURLY/ UNIT RATE EFFECTIVE 05/25/24	HOURLY/ UNIT RATE EFFECTIVE 06/25/25
Scanning/field markings/mobilization	-	-	\$243.75/hour	-	-	249.82/hour	-
Subconsultant: Wood Rodgers¹							
Principal Engineer II	-	-	-	-	\$319.06	\$327.04	-
Principal Engineer I	-	-	-	-	\$295.14	\$302.52	-
Associate Engineer III	-	-	-	-	\$247.29	\$253.47	-
Associate Engineer II	-	-	-	-	\$210.51	\$215.77	-
Associate Engineer I	-	-	-	-	\$182.51	\$187.07	-
Engineer III	-	-	-	-	\$173.39	\$177.72	-
Associate Planner I	-	-	-	-	\$179.19	\$183.67	-
Engineer II	-	-	-	-	\$118.06	\$121.01	-
Engineer I	-	-	-	-	\$106.19	\$108.84	-
Associate Surveyor III	-	-	-	-	\$227.35	\$233.03	-
GIS Technician III	-	-	-	-	\$156.79	\$160.71	-
Project Coordinator	-	-	-	-	\$122.78	\$125.85	-
CADD Technician III	-	-	-	-	\$123.60	\$126.69	-
1 Person Survey Crew	-	-	-	-	\$140.00	\$143.50	-
2 Person Survey Crew	-	-	-	-	\$280.01	\$287.01	-
3 Person Survey Crew	-	-	-	-	\$420.00	\$430.50	-

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FEES AND PAYMENTS**

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**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT TWO
SCHEDULE OF COMPLETION**

1. This Agreement commences on the Effective Date, subject to accomplishment of all conditions to formation of an agreement listed in the Agreement at Section Twelve, Miscellaneous Provisions, subsection 2. Formation of Agreement.
2. This Agreement expires **June 30, 2029**, unless, prior to its expiration, its term is modified by a written amendment hereto and signed by both Parties.
3. Valley Water and Consultant may agree to modify the schedule specified for Consultant's performance as an administrative modification to the Agreement and will confirm such modification in writing.

PROJECT SCHEDULE

Task	Description	Project A Duration From Notice to Proceed (months)	Project B Duration From Notice to Proceed (months)
1	Project Management	Completed	62
2	Data Collection and Investigations	Completed	58
3	Basis for Design	Completed	58
4	30 Percent Design Document Preparation	Completed	Completed
5	60 Percent Design Document Preparation	Completed	Completed
6	90 Percent Design Document Preparation	Completed	Completed
7	Final Design Document Preparation	Completed	58
8	Bid and Award Services	Completed	62
9	Supplemental Services	Completed	Duration of Agreement
10A	Engineering Support During Construction	Duration of Agreement	N/A
10B	Engineering Support During Construction	N/A	Duration of Agreement
11A	Supplemental Services During Construction	Duration of Agreement	N/A
11B	Supplemental Services During Construction	N/A	Duration of Agreement

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**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT THREE
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

1. Consultant's key staff assigned to the Project are as follows:

Team Member	Classification	Project Role	Contact Information
Stoney Mather	Senior Project Engineer	Project Manager	756 East Winchester Street, Ste 400 Salt Lake City, Utah 84107 Phone: 385-266-6288 Stoney.Mather@aecom.com
Theodore Feldsher	Principal	Principal-in-Charge	300 Lakeside Dr., Ste 400 Oakland, CA 94612 Phone: 510-874-3245 Theodore.Feldsher@aecom.com
Mourad Attalla	Principal	Management Oversight	300 Lakeside Dr., Ste 400 Oakland, CA 94612 Phone: 925-698-5411 Mourad.Attalla@aecom.com
Clara Ponce	Senior Manager	Design Manager & Civil Design Lead	2020 L Street, Ste 300 Sacramento, CA 95811 Phone: 916-414-5816 Clara.Ponce@aecom.com
Charlie Krolkowski	Project Engineer	Deputy Project Manager	12120 Shamrock Plaza, Ste 675 Omaha, NE 68154 Phone: 402-682-1853 Charles.krolkowski@aecom.com
Phillip Oliver	Senior Project Engineer	Civil Design	1555 Poydras Street, Ste 1200 New Orleans, LA 70112 Phone: 985-859-8631 Phillip.Oliver@aecom.com
Tony Tran	Water Resources Leader	Civil Design, H&H	7595 East Technology Way Denver, CO 80920 Phone: 720-278-6613 Tony.Tran@aecom.com
Adam Carlton	Project Engineer	Structural Design Lead	1111 3rd Avenue, Ste 1600 Seattle, WA 98101 Phone: 206-438-2028 Adam.Carlton@aecom.com
Yasser Soltanpour	Project Engineer	Geotechnical Design Lead	13355 Noel Road, Ste 400 Dallas, TX 75240 Phone: 979-676-7004

**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT THREE
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

Team Member	Classification	Project Role	Contact Information
			yasser.soltanpour@aecom.com
Frederick Young	Senior Project Engineer	Specification Lead	1555 Poydras St, Ste 1200 New Orleans, LA 70112 Phone: 504-975-8050 Frederick.S.Young@aecom.com
Lawrence (Larry) Taicz	Senior Engineer	Construction Support Engineer	300 Lakeside Drive, Ste 400 Oakland, CA 94612 Phone: 206-422-5429 larry.taicz@aecom.com

2. The following Subconsultants are authorized to perform Services on the Project:

Firm	Project Role	Contact Information
Bess Test Labs, Inc.	Utility locator	Michael Bohorquez 2463 Tripaldi Way Hayward, CA 94545 510-432-8841 michael@besstestlab.com
Cal Engineering & Geology, Inc. (now known as Haley & Aldrich, Inc., effective April 1, 2023)	Geotechnical Investigation	Dan Peluso 785 Ygnacio Valley Rd., Walnut Creek, CA, 94596 925-433-5018 dpeluso@haleyaldrich.com
Duquette Engineering	Structural Engineer	Steven P Duquette 1171 Homestead Road, Suite 275, Santa Clara, CA 95050 408-615-9200 spd@duquette-eng.com
EROCK Associates, LLC	UAV	Eric Bennett 116 W. Main Street, Suite 6 Grass Valley, CA 95945 530-460-1848 eric@erockllc.com

**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT THREE
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

Firm	Project Role	Contact Information
Garavaglia Architecture, Inc.	House elevation architect	Michael Garavaglia 582 Market Street, Suite 1800, San Francisco, CA 94104 415-391-9633 mike@garavaglia.com
Horizon Water and Environment, LLC ¹	Environmental permitting compliance	Ken Schwarz 266 Grand Ave., Suite 210; Oakland CA 94610 510-986-1851 ken@horizonh2o.com
Kleinfelder, Inc	Geotechnical Investigation	Andrea Traum 380 N 1st St Suite A, San Jose, CA 95112 408-595-3275 atraum@kleinfelder.com
M Lee Corporation	Cost Estimating	Franklin Lee 601 Montgomery Street, Suite 2040, San Francisco, CA 94111 415-693-0236 flee@MLEECORP.COM
MGE Engineering, Inc.	Structural Designer	Robert Sennett 7415 Greenhaven Drive, Suite 100, Sacramento, CA 95831 916-421-1000 rsennett@mgeeng.com
Ruggeri Jensen Azar	Survey	Scott Shortlidge 4690 Chabot Drive, Suite 200, Pleasanton, CA 94588 925-249-5010 sshortlidge@rja-gps.com
Bay Area Traffic Solutions (BATS) B.A.T.S.	Traffic Control	Tammy Ta A 44800 Industrial Drive, Fremont, CA 94538 510-657-2543 Ext 231 tta@gobats.net

**AMENDMENT NO. 5 TO AGREEMENT A4464A
REVISED SCHEDULE D
ATTACHMENT THREE
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

Firm	Project Role	Contact Information
CERCO Analytical, Inc.	Analytical Testing	Darlene Langford 1100 Willow Pass Court, Suite A, Concord, CA 94520-1006 925-462-2771 darlene@cercoanalytical.com
JDH Corrosion Consultants, Inc.	Corrosion Testing	J. Darby Howard 1100 Willow Pass Court, Concord, CA 94520 925 927-6630, ext. 120 dhoward@jdhcorrosion.com
McC Campbell Analytical	Analytical Testing	Beverlyn Madrigal 1534 Willow Pass Road, Pittsburg, CA 94565 925-252-9262 Beverlyn.Madrigal@mccampbell.com
Exploration Geoservices, Inc.	Drilling	John Collins, 1535 Industrial Avenue, San Jose, CA 95112 408-483-9026 john@explorationgeo.com
Gregg Drilling, LLC	Drilling and/or CPT	Tim Boyd 950 Howe Road, Martinez, CA 94553 925-708-2036 tboyd@greggdrilling.com
Pitcher Services, LLC	Drilling	Terry Shewchuk 218 Demeter Street, E. Palo Alto, CA 94303 650-328-8910 tshewchuk@pitcherservicesllc.com
Taber Drilling	Drilling and/or CPT	Brian Young 536 Galveston St., West Sac. CA 9569 530-304-3191 byoung@taberdrilling.com

NOTE:

1. Services to be performed by Horizon Water and Environment, LLC, listed as a subconsultant in Schedule D, Attachment Three, Consultant's Key Staff and Subconsultants, are subject to prior approval by VWPM.

Amendment No. 5 to Agreement A 4464Ae

Agreement No. A4464Ae / CAS File No. 5157

Coyote Creek Flood Management Measures Project and
Coyote Creek Flood Protection Project – Design Services

Ver: 8/7/25

**AMENDMENT NO. 2 TO AGREEMENT A4464A
REVISED SCHEDULE D
REVISED ATTACHMENT FOUR
REFERENCE MATERIALS**

Ref. No.	Description
1	Santa Clara Valley Water District (Valley Water) Non-Disclosure Agreement (NDA) and Personal Non-Disclosure Agreement (PNDA)
2	Santa Clara Valley Water District (Valley Water) Standards for GIS Products, April 2021 version
3	Location Maps, as of June 2020
4	Coyote Watershed Aesthetic Guidelines, December 23, 2000
5	Caltrans Information and Procedures Guide, June 2019
6	Caltrans Survey Manual, July 2018
7	Engineering Principles and Practices for Retrofitting Flood Prone Residential Structures (Third Edition), FEMA-259, January 2012
8	Preliminary Geotechnical Report by Kleinfelder, Inc. dated February 27, 2020 for the Coyote Creek Flood Protection Project Reaches 4 and 5, STA 3+33 to STA 145+50, San Jose, Santa Clara County, California, prepared for the Santa Clara Valley Water District
9	Final Notice of Exemption for the Federal Energy Regulatory Commission Order Compliance Project (FOCP), File Date: June 29, 2020
10	Best Management Practices Handbook, W-751-037, Santa Clara Valley Water District, September 25, 2014
11	Easement-Fee Maps, as of September 2020
12	Inundation and Breakout Maps, February 2017
13	TM FERC Flood Measures, June 24, 2020
14	Clean Water Act Section 401 Water Quality Certification Project No. 91864005 FERC Project No. 5737 ¹ for the Coyote Creek Flood Management Measures Project, Santa Clara County, California State Water Resources Control Board, November 2020
15	Lake or Streambed Alteration Agreement, Notification No. 1600-2020-0236-R3 ² , Coyote Creek Flood Management Measures Project, California Department of Fish and Wildlife, July 12, 2021
16	FOCP Valley Habitat Agency Reporting File Number: SVWD-2021-006 ³ , Coyote Creek Flood Management Measures Project, June 2021
17	Santa Clara Valley Water District, 100% Contract Bid Documents for the Coyote Creek Flood Management Measures Project, March 2023
18	Santa Clara Valley Water District, Final Environmental Impact Report for the Coyote Creek Flood Protection Project, February 2025

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