



SCVWD Execution Date: 103/08/2016
STANDARD CONSULTANT AGREEMENT

(For Capital Consultant Contracts)
Terms and Conditions + Schedule D (Design) Template
Rev. A [09/01/2015-06/30/2016]

This agreement (Agreement) is effective once fully executed (Effective Date), by and between SANTA CLARA VALLEY WATER DISTRICT (District), and **GEI CONSULTANTS, INC.** (Consultant), individually the Party or collectively the Parties.

WHEREAS the District desires certain services hereinafter described and Consultant affirms it has the requisite experience and expertise, and desires to provide such services.

NOW, THEREFORE, the District and Consultant, for the consideration and upon the terms and conditions specified, agree as follows:

SECTION ONE

SCOPE OF SERVICES

The scope of services (Services) to be performed pursuant to this Agreement is described in the schedule(s), attached hereto and incorporated herein by this reference (Schedule(s)). Services described in each Schedule are considered a scope of Services that is separate and apart from the scope of Services described in another Schedule.

SECTION TWO

DUTIES OF CONSULTANT

1. Performance.

- A. Each scope of Services described in an attached Schedule(s) must be performed by Consultant, or at its direction, in a manner sufficient to meet the purposes specified in this Agreement. References to "Consultant" herein include those performing any portion of the Services at its direction such as Subconsultants, vendors, suppliers, subcontractors, and other business entities and individuals. Consultant will collaborate with District staff in engineering, operations, and maintenance units to be made aware of District operational constraints, procedures, or preferences relevant to Consultant's performance of the Services described in the attached Schedule(s).
- B. Unless the requirements for the Services described in the attached Schedule(s) are specifically modified in writing, Consultant must perform services and provide all deliverables as required.
- C. Consultant shall not undertake any Services not described in the attached Schedule(s) unless authorized in writing by the District prior to the performance of such Services by issuance of a Task Order or pursuant to an amendment to this Agreement signed by both Parties.

2. **Consultant Controlled Areas.** Consultant is responsible for the security and safety of the area(s) it controls wherein it is required to perform field operations pursuant to a scope of Services.
3. **Licensing.** Services performed by Consultant will be undertaken only by persons appropriately licensed, certified, or registered in California, as applicable to the Services described herein, when required by statutes or regulations, as well as pursuant to the relevant standard of care as described in Subsection 11., Standard of Care. Examples of such Services include those performed by: California State Licensed Contractors, Professional Engineers and Architects, Inspectors, and Surveyors. Consultant shall make available upon District's request, documentation of qualifications and licensing of personnel performing Services described herein. Consultant must be registered with the California Department of Labor Standards Enforcement if the Services or a portion thereof is determined to be 'public works' pursuant to California Labor Code section 1720(a)(1).
4. **District's Approval of Deliverables.** Deliverables prepared by Consultant, notwithstanding acceptance and approval by District, which District determines must subsequently be modified due to errors or omissions, will be corrected at no additional cost to District.
5. **Errors and Omissions.** The Services may include preparation of deliverables by Consultant which will be implemented in a public works construction project. Consultant is responsible for any direct or actual damages incurred by District which District determines result from Consultant's errors or omissions in Consultant's deliverables, including, but not limited to, any increase in the District's payment(s) due to its construction contractor, which increase is directly attributable to required revisions to the construction contract documents to the extent caused by Consultant's negligent acts, errors, or omissions.
6. **District Standardization Requirements.**
 - A. Consultant shall perform the Services utilizing District nomenclature, standardized forms, software requirements, documented procedures, and best management practices. Consultant shall use Microsoft Office software and AutoCAD software that is compatible with the District Microsoft Office software and AutoCAD software used at the time(s) the District issues a notice-to-proceed pursuant to this Agreement.
 - B. Engineering drawings prepared by Consultant must be in compliance with the District's CADD and drafting 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 the District's CADD software. Prior to acceptance, the District 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 drawing) and that the standards are retained during the conversion process used by the Consultant.
7. **Consultant Key Staff and Subconsultants.**
 - A. Consultant's key staff and Subconsultants assigned to perform the Services are identified in Attachment Three to the Schedule(s), Consultant's Key Staff and Subconsultants.

- B. Consultant may employ Subconsultants, subcontractors, suppliers, or vendors (Subconsultant) it deems appropriate to the complexity and nature of the required Services. All Subconsultants must, if their specialty is licensable, be licensed by the State of California to perform their specific Services, and must be registered with the California Department of Labor Standards Enforcement if their Services or a portion thereof is determined to be 'public works' pursuant to California Labor Code Section 1720(a)(1).
 - I. Consultant must obtain the District's approval of all Subconsultants. Upon the District's request, Consultant must provide copies of all Subconsultant agreements.
 - II. Any delegation or use of Subconsultants by Consultant will not operate to relieve Consultant of its responsibilities as described in this Agreement. Consultant must require its delegates or Subconsultants to agree, in writing, to adhere to terms and conditions of this Agreement.
 - C. None of the Consultant's key staff or Subconsultants listed in Attachment Three to Schedule(s), Consultant's Key Staff and Subconsultants, will be replaced without the approval of the District.
 - D. If any of Consultant's designated key staff persons or Subconsultants fail to perform to the satisfaction of the District, on written notice from the District, Consultant will have fifteen (15) calendar days to remove that person from the Project and provide a replacement acceptable to the District.
 - E. Consultant will not charge the District for the time it takes Consultant's replacement personnel to obtain the District specific Project knowledge in the possession of the person or persons being replaced.
 - F. The Project team organization chart and delegated responsibilities of each team member will be revised accordingly and submitted to the District for concurrence.
 - G. The District may approve any revisions to Consultant's key personnel or designated Subconsultant(s) as an administrative modification to this Agreement and if approved, will confirm such approval in writing.
- 8. Compliance With All Laws.** Consultant's performance must be in compliance with the most current versions of any and all laws relevant to the Services it performs pursuant to this Agreement, including, but not limited to adherence to: all applicable governmental laws, statutes, ordinances, rules, codes, regulations, orders, and other requirements; governmental requirements applicable to State and Federal compliance with the Professional Land Surveyors Act; state and federal Endangered Species Act; state and federal water quality laws; and all other state and federal laws or regulations regarding environmental protection and compliance, health, safety, wages, hours, equal employment opportunity, nondiscrimination, working conditions, and transportation. In the event that the District's assistance is necessary to achieve such compliance, Consultant shall promptly notify the District.
- A. Consultant shall provide, at District's request, documentation demonstrating Consultant's compliance with all laws as described herein. After reasonable notice and according to

reasonable conditions, the District has the right to inspect and copy any records of Consultant regarding such compliance.

- B. Consultant represents and warrants that neither Consultant nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal government department or agency.

9. Occupational Safety and Health.

- A. Consultant will perform the Services in compliance with the most current versions of all laws, standards, rules, and regulations of the Occupational Safety and Health Act, and all state and federal laws and regulations relating to safety and health standards. Consultant shall perform the Services in compliance with, will furnish only supplies, articles, and equipment that comply with such laws, standards, and regulations.
- B. Consultant shall immediately notify the District in the event of any personal injury accident or occurrence occurring during the performance of the Services. Upon the District's request, Consultant shall provide the District with documentation fully describing the accident and injury and the actions implemented to prevent similar occurrences.

10. Consultant as Independent Contractor. Consultant will perform all services as an independent contractor and not an agent or employee of District. Consultant represents and warrants that it and its contractors who are performing any of the Services as Subconsultants will perform such services as an independent contractor, and neither Consultant nor Subconsultants nor their employees are the servants, agents or employees of the District. Except as expressly provided in this Agreement, the District exercises no direction, supervision or control over Consultant, its employees, agents, or Subconsultants.

11. Standard of Care.

- A. Consultant must possess and maintain during the term of this Agreement, all certifications, licenses, permits, and qualifications to perform the Services and prepare all deliverables. Consultant must perform all services and prepare all deliverables in accordance with those standards and practices of care, skill, and diligence that are generally recognized and customarily observed by competent persons in Consultant's area of specialty in the State of California at the time such services are rendered.
- B. Consultant shall perform the Services and prepare all deliverables without any errors or omissions, and in accordance with Section Two, Duties of Consultant, Subsection 8., Compliance With All Laws.
- C. Consultant and its Subconsultants must perform the Services in compliance with all applicable written federal, state and local codes, statutes, laws, regulations, and ordinances, including, but not limited to, environmental, energy conservation, and disabled access requirements as per the provisions of Section Two, Duties of Consultant, Subsection 8., Compliance With All Laws.

SECTION THREE

DUTIES OF DISTRICT

1. **Available Data.** The District will make available to Consultant all data and information in its possession and control and which it deems necessary to the preparation of the deliverables specified in the Schedule(s). The District will actively aid and assist Consultant in obtaining such information from other agencies and individuals as it deems necessary. The District is not responsible to provide the data and information that it does not possess.

2. **Review of Deliverables.**

- A. The District will designate a Project Manager (District Project Manager) for purposes of administering and managing this Agreement.
- B. The Consultant's progress in completing the Services will be reviewed by the District's Project Manager at each milestone identified in the Schedule(s) and at such other time(s) at the discretion of the District.
- C. Consultant must notify the District in writing when it completes each deliverable described in the Schedule(s) and provide the District with such deliverable. Deliverables deemed satisfactory and in compliance with this Agreement are subject to approval by District. Within thirty (30) calendar days of receipt of each deliverable, the District will either (i) notify Consultant that the District accepts the deliverable, or (ii) notify the Consultant that the deliverable is not acceptable and must be revised.
- D. If the District advises Consultant that a deliverable must be revised due to errors or omissions by the Consultant, Consultant must correct, at no cost to the District, those deficiencies as soon as possible and shall notify the District upon completion of the revised deliverable and submit to the District.

The District will then review the revised deliverable and within thirty (30) calendar days of receipt, advise the Consultant if the revised deliverable is acceptable. All deficient deliverables will be revised at no cost to the District and this process will continue until Consultant has corrected all deficiencies identified by District.

- E. None of the proposed changes or revisions or anything else in this Agreement will be construed to relieve the Consultant of professional or legal responsibility for the performance of the services as otherwise required by the terms and conditions of this Agreement. Corrections to any deliverable as a result of Consultant's errors or omissions will not result in additional costs or expenses to the District.

3. **Access to District Facilities.** The District will facilitate access to District facilities as required for the Consultant to perform the Services.

SECTION FOUR

FEES AND PAYMENTS

1. **Total Fixed Not-to-Exceed Fees.** Payment for all services performed by Consultant to the satisfaction of the District, as described in the Schedule(s) will be based on the Total Fixed

Not-to-Exceed (NTE) Fees stated in Attachment One to the Schedule(s), Fees and Payments, for completion of the associated tasks. The District will make payments to the Consultant according to the terms provided for herein and in Attachment One to the Schedule(s), Fees and Payments. Payments made by the District to the Consultant for services rendered will be considered full compensation for all personnel, materials, supplies, Subconsultant(s) if any, equipment, reimbursable travel and per diem expenses incurred by the Consultant to perform the services.

- A. Upon the written approval of the District's Deputy Operating Officer referenced herein, unused fees from a completed or cancelled task may be re-allocated to a task that has not yet been completed, provided the Agreement Total Not-to-Exceed Fees is not exceeded. Transferring fees from a task not yet completed to a different task is not permitted.
- B. Upon the written approval of the District's Deputy Operating Officer referenced herein, the scope of services described in a task may be reduced or eliminated. If the scope of services of a task is reduced or eliminated, the portion of the fees attributable to that reduced or eliminated task may be allocated to new or revised existing tasks, or transferred to a Supplemental Services task, if provided for herein.
- C. Any reduction or elimination of tasks and any inter-task transfers will be clearly noted and described in the subsequent monthly progress report to the District.
- D. Services to be performed pursuant to the Supplemental Services task, if provided for herein, will commence only after issuance of a fully executed Task Order.
- E. Automobile travel mileage expenses will be paid at the current IRS rate. District will not reimburse Consultant and its Subconsultants for mileage and travel time to and from District Headquarters and surrounding campus located at 5700 Almaden Expressway, San Jose, California. District will reimburse Consultant and its Subconsultants for mileage incurred from District Headquarters or Consultant's and Subconsultants' firm address, whichever is closer to the destination, to Project site(s) and, if directed or authorized by the District, to meeting locations such as with regulatory agencies, for community outreach activities and meetings, for partnering meetings, and Dispute Review Board meetings.

2. Consultant Monthly Invoices.

- A. Consultant's monthly invoices will be prepared in accordance with the terms of this Agreement, Section Four, Fees and Payments, and represent services performed and reimbursable costs incurred during the identified billing period; will be consistent with scope of Services described in the Schedule(s) attached hereto; and include the following:
 - I. Personnel Category and employee name itemized with all labor charges by Service task.
 - II. Consultant's summary of the amount Consultant has been billed by their Subconsultants and further detailed by Service task.
 - III. Other direct charges and expenses by Service task.

- IV. Other Direct charges and expenses must reflect actual fees versus the Agreement not-to-exceed fees as stated in Attachment One to Schedule(s), Fees and Payments.
 - V. To the extent that the Consultant is adding an administrative, processing, overhead or mark-up fee, the District will not pay for such duplication of costs for both the Consultant and its Subconsultants.
- B. Before submitting monthly invoices, a progress report and draft invoice (in Adobe PDF format) will be provided by the Consultant for preliminary review by the District Project Manager. Upon preliminary approval by the District, the Consultant will mail the complete signed and dated hardcopy invoice, including all supporting documentation. District's preliminary review of the draft invoice does not represent final approval of the hardcopy invoice, but is intended to reduce potential for re-submittals of hardcopy invoice by Consultant.
- C. Each monthly invoice must include a monthly progress report that documents whether or not the Services are on schedule to be completed in accordance with the Project schedule in Attachment Two to the Schedule(s), Schedule of Completion, which applies to the specific scope of Services (Schedule of Completion), and within the Agreement NTE Fees in accordance with Attachment One to the Schedule(s), Fees and Payments. The progress report shall document the Services completed; document the execution of the tasks described in this Services; and enable the District to evaluate the Consultant's progress and performance towards completion of the Services.
- I. The monthly progress report shall include:
- a. An assessment of actual versus planned progress in completing the Services, including a description of the tasks and deliverables completed to date;
 - b. A look ahead schedule listing deliverables and activities planned for the next 2 months;
 - c. A statement that progress towards completion of the Services is on schedule and will be completed within the timeline set forth in the Schedule of Completion; or, if completion of the Services is not on schedule, then a statement of the anticipated length of the delay, the cause of the delay, measures proposed or taken to prevent or minimize the delay, and the schedule for implementation of such measures;
 - d. A summary of performed tasks to date, an updated Project work plan including estimate of work required to complete this Agreement, explanation of any major variances in percentage of services to be completed compared to percentage of this Agreement NTE fees remaining, and any anticipated changes to this Agreement that may be necessary to complete the Services;
 - e. For any proposed change to the scope of Services, provide a summary of the proposed changes, including supporting rationale for such change;
 - f. For each task, the percentage of the fees incurred for the task compared to dollar amount allocated to the task, the percentage of services performed versus the percentage of Agreement NTE fees incurred for such task, and explanation of

any significant variances in percentage of services performed compared to percentage of fees incurred;

- g. A statement that all tasks, as specified in this Agreement, shall be completed within the NTE amount of the Agreement;
 - h. Level of Small Business Enterprise (SBE) participation, if applicable, documenting the level of SBE participation throughout the Project; and
 - i. Any changes in Consultant's key staff or Subconsultants.
- D. Invoices will include a summary of labor expenditures, direct costs, and billed Subconsultant charges. Billing statements, transmitted separately from the monthly progress reports, will be organized such that the billing categories correspond with the Services tasks.
- E. Consultant shall send all invoices to:
- Santa Clara Valley Water District
Attention: Accounts Payable
P.O. Box 20670
San Jose, CA 95160-0670
- F. In addition to ensuring that each invoice is accompanied with a monthly progress report, Consultant must also ensure that each invoice contains the following information:
- I. Agreement Number
 - II. Full Legal Name of Consultant/Firm
 - III. Payment Remit-to Address
 - IV. Invoice Number
 - V. Invoice Date (the date invoice is mailed)
 - VI. Beginning and end date for billing period that services were provided
- G. Consultant shall invoice for its performance of the Services on a monthly basis consistent with the task fee breakdown stated in Attachment One to the Schedule(s), Fees and Payments, to the Schedule(s), which applies to the specific scope of Services.
- H. District's Project Manager will review Consultant's written invoice within five (5) District business days of receipt, address any questions with Consultant's Contact/Project Officer and approve the undisputed amount of the invoice within ten (10) working days of receipt of the invoice. District will pay undisputed invoice amounts within thirty (30) calendar days from date invoice is received by District's Project Manager.
- I. Consultant's services will be performed by its staff members and Subconsultants' staff members at the lowest hourly and unit rates commensurate with the complexity of the required Services.

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3. Prevailing Wages.

- A. A portion of the Services to be performed pursuant to this Agreement may be considered "Public Works" subject to California Labor Code Section §1771, et. seq. and the applicable implementing regulations.
- B. Labor Code Section §1720 includes "Inspection and Land Surveying" in its definition of "Public Works." If Consultant's Services includes such work, Consultant and its Subconsultants must comply with all Labor Codes applicable to prevailing wages.
- C. The Consultant and its Subconsultants shall not engage in the performance of public work, as defined in California Labor Code Section 1771.1, unless currently registered and qualified to perform public work pursuant to California Labor Code Section 1725.5.
- D. The General Prevailing Wage Rates issued by the California Department of Industrial Relations may be adjusted by the State throughout the term of this Agreement. Notwithstanding any other provision of this Agreement, Consultant will not be entitled to any adjustment in compensation rates in the event there are adjustments to the General Prevailing Wage Rates.
- E. This Agreement is subject to compliance monitoring and enforcement by the State of California Department of Industrial Relations. Upon request, the Consultant and Subconsultants must furnish the records specified in Labor Code §1776 directly to the Labor Commissioner, in a format prescribed by the Labor Commissioner.
- F. All records or documents required to be kept to verify statutory compliance with the prevailing wage requirement such as certified payroll records must be made available for audit at no cost to the District, at any time during regular business hours, upon written request by the District.

- 4. **Retention.** Unless otherwise specified in Attachment One to the Schedule(s), Fees and Payments, when the total compensation payable pursuant to this Agreement exceeds twenty thousand dollars (\$20,000), five (5) percent of each statement will be withheld by the District and not paid to Consultant until thirty (30) calendar days after the assigned District representative signs off the final approval for all services/deliverables as stated in the applicable Schedule, Attachment Two to the Schedule(s), Schedule of Completion, and Section Three, subsection 2 of this Agreement.

SECTION FIVE

SCHEDULE OF COMPLETION

- 1. **Performance of Tasks.** Consultant will commence performing the tasks described in the scope of Services of the attached Schedule(s) to this Agreement upon receipt of the Notice-to-Proceed (NTP) issued by the District.
- 2. **Project Schedule Table.** Consultant will perform and complete the services described in the scope of Service in accordance with the Project Schedule table (Project Schedule) as stated in Attachment Two to the Schedule(s), Schedule of Completion. Consultant will

coordinate services with the District to provide the timeline of all tasks and subtasks including the site visits, document review, meetings, and deliverables.

3. **Monitoring of Project Schedule.** The approved Project Schedule will be monitored monthly. Changes to the schedule for performance of tasks and deliverables are subject to advance written approval by the District.
4. **Project Delays.** The Consultant will make all reasonable efforts to comply with the Project Schedule as stated in the Attachment Two to the Schedule(s), Schedule of Completion. In the event the Project Schedule will be delayed, Consultant will notify the District Project Manager as soon as possible, providing the reason why, the length of the delay, and a description of the actions being taken to address the delay. In the event Consultant is delayed in performance of its services by circumstances beyond its control, District may in its discretion grant a reasonable adjustment in the Project Schedule.
5. **Changes to the Project Schedule.** District's Project Manager and Consultant may agree to modify the Project Schedule specified for Consultant's performance as an administrative modification to the Agreement and will confirm such modifications in writing.

SECTION SIX

AGREEMENT MODIFICATIONS

The Parties may agree to modify the terms and conditions of this Agreement by executing a written amendment hereto.

SECTION SEVEN

TERM AND TERMINATION

1. **Term & Automatic Termination.** This Agreement encompasses all Services that Consultant is responsible to perform within the time limits and Not-to-Exceed Fees set forth herein. Consultant will not undertake to provide Services where it reasonably appears that the Services cannot be provided and expenses cannot be incurred within said total compensation limit and the applicable Not-to-Exceed Fees of any Task Order.
2. **District Rights.**
 - A. **Suspension:** District may, by written notice to Consultant, suspend any or all Services pursuant to this Agreement or to any individual Task Order. District may subsequently terminate this Agreement or any Task Order for convenience, or determine to proceed. If a decision to proceed is not made within ninety (90) days from the date of the notice of suspension, any decision to proceed must be conditioned upon execution of a new Notice-To-Proceed or Task Order.
 - B. **Termination for Convenience:** District may, by written notice to Consultant, terminate all or part of this Agreement or any Task Order at any time for District's convenience. Upon receipt of such notice, Consultant will immediately cease all work as specified in the notice. If this Agreement or any Task Order is so terminated, Consultant will be

compensated as set forth in Subsection 3., Consultant's Compensation Upon Termination or Suspension.

- C. Termination for Breach: If Consultant violates any of the covenants, agreements or stipulations of this Agreement or a Task Order, or if Consultant fails to fulfill in a timely and proper manner its obligations pursuant to this Agreement or any Task Order, and does not cure such failure or violation within thirty (30) days (or a reasonable extension thereof, if requested, which extension will not be unreasonably withheld) after receipt of written notice from District specifying such failure or violation, District will thereupon have the right to terminate this Agreement and any or all uncompleted Task Orders by giving written notice to Consultant of such termination. Such notice will specify the effective date thereof, and Consultant will not be entitled to compensation for services or expenses beyond the specified termination date.
- D. If, after notice of termination for breach of this Agreement or any Task Order, it is determined that Consultant did not breach the Agreement or Task Order, the termination will be deemed to have been effected for District's convenience, and Consultant will receive payment that is allowed by this Agreement for a termination for convenience.
- E. The rights and remedies provided herein to District are in addition to any other rights and remedies provided by law, this Agreement, or a Task Order.

3. Consultant's Compensation Upon Termination or Suspension. In the event of termination of this Agreement or any Task Order, or suspension of Services by District, Consultant shall receive compensation based on satisfactory performance, accepted by the District, as follows:

- A. For Direct Labor—Consultant shall be entitled to receive compensation for all authorized direct labor performed prior to termination pursuant to the provisions of this Agreement or Task Order and all authorized labor expenses incurred to demobilize from the Project after the date of termination.
- B. For Other Direct Costs and Expenses—Consultant shall be entitled to receive compensation for all authorized other direct costs and expenses incurred prior to termination and all authorized expenses incurred to demobilize from the Project after the date of termination.
- C. In no event shall the total compensation paid for any item of Service exceed the payment specified in the Agreement or applicable Task Order for that item of Service.

4. Survival. The terms and conditions of this Agreement, that by their context and a standard of reasonableness, are intended to survive termination, suspension, completion, and expiration of this Agreement, shall survive, including but not limited to, the following Sections and subsections: Independent Contractor Status, Confidentiality, Indemnification, Insurance Requirements, and Dispute Resolution as well as any Consultant representations and warranties.

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SECTION EIGHT
INDEMNIFICATION

Notwithstanding any other provision of this Agreement, Consultant agrees to indemnify, defend and hold harmless the District, its agents, officers, directors, and employees from and against any and all demands, claims, damages, losses and reasonable expenses, including but not limited to liabilities, obligations, claims, costs, reasonable expenses (including without limitation interest, penalties and reasonable attorney's fees), fines, taxes, levies, imposts, assessment, demands, damages or judgments of any kind or nature, whether in law or equity (including without limitation, death or injury to any person, property damage, administrative and judicial orders and consents, or any other loss) to the extent they arise out of, pertain to, or relate to the Consultant's negligence, recklessness, or willful misconduct. The foregoing does not limit any strict liability imposed onto the Consultant by law. The rights, duties, and obligations of the Parties as set forth above in this Section Eight, Indemnification, survive termination, expiration, completion, and suspension of this Agreement.

SECTION NINE
INSURANCE REQUIREMENTS

Insurance requirements applicable to this Agreement are set forth in Appendix Four to the Standard Consultant Agreement, Insurance Requirements. Consultant must provide and maintain at its own expense, during the term of this Agreement, or as may be further required herein, all insurance coverages as detailed in Appendix Four to the Standard Consultant Agreement, and comply with all provisions stated therein.

SECTION TEN
OWNERSHIP & REUSE OF DELIVERABLES

- 1. District Ownership.** All deliverables and other materials prepared by Consultant, including computer programs and media developed by the Consultant, to perform the Services, during the term of this Agreement, will be and remain the property of the District following payment in full to Consultant for each task or portion of a completed task, or in accordance with Section Seven, Term and Termination. In the event the work is not completed, the completed portions thereof will become the property of the District. Consultant will provide the District with such deliverables and material at appropriate times during this Agreement. Consultant may retain a copy for its records. Consultant does not convey, assign, or transfer the intellectual property rights it has so as to limit its ability or right to develop, design, or provide services on other projects of or for its other clients.
- 2. Re-Use of Instruments of Service.** If the District desires to re-use the completed plans, specifications, or other deliverables, in total or in part, on project sites associated with this Agreement, or any other site, or to complete any incomplete portion of construction documentation which the District has already paid Consultant, the District will release the Consultant from any liability incurred by the District from re-using said deliverables.
- 3. Copies of Data.** Copies of data exchanged by, through, and between the District and Consultant that may be relied upon are limited to the printed copies. Computer-generated

files, disks, or tapes of text, data or graphics that are furnished, are only for the mutual convenience of the Parties.

4. **Computer-Generated Material.** Any risk of translation or reliance on information obtained or derived from the computer-generated material will be at the user's sole risk, and no representations are made, either express or implied, as to the long-term performance of data thus transferred.
5. **Work for Hire.** Any and all original correspondence, memoranda, reports, designs, plans, specifications, data compilations, computer programs, or drawings delivered to the District by Consultant according to the terms of this Agreement, in or by any medium is deemed to be "work for hire" according to the copyright laws of the United States and the copyright will belong to the District.
6. **Copyright Claims.** Co-venturers, subcontractors, Subconsultants, suppliers, and vendors to Consultant likewise are bound by these copyright terms. The District makes no copyright claim and requires no release for copyrighted material or trademarked names used incidentally by Consultant.

SECTION ELEVEN

EQUAL OPPORTUNITY

1. **Equal Opportunity Employer.** The Santa Clara Valley Water District is an equal opportunity employer and requires its consultants to have and adhere to a policy of equal opportunity and non-discrimination. In the performance of the Agreement, the Consultant will comply with all applicable federal, state, local laws and regulations, and will not discriminate against any subcontractor, employee, or applicant for employment, in the recruitment, hiring, employment, utilization, promotion, classification or reclassification, transfer, recruitment advertising, evaluation, treatment, demotion, layoff, termination, rates of pay or other forms of compensation, and selection for professional development training (including apprenticeship), or against any other person, on the basis of sex (which includes pregnancy, childbirth, breastfeeding and medical conditions related to pregnancy, childbirth or breastfeeding), race, religion, color, national origin (including language use restrictions), ancestry, religious creed (including religious dress and grooming practices), political affiliation, disability (mental and physical, including HIV or AIDS), medical condition (cancer and genetic characteristics), genetic information, marital status, parental status, gender, age (40 and over), pregnancy, military and veteran status, sexual orientation, gender identity and gender expression, the exercise of family and medical care leave, the exercise of pregnancy disability leave, or the request, exercise, or need for reasonable accommodation.
2. **Compliance With Applicable Equal Opportunity Laws.** The Consultant's policy must conform with applicable state and federal guidelines including the Federal Equal Opportunity Clause, "Section 60-1.4 of Title 41, Part 60 of the Code of Federal Regulations," Title VII of the Civil Rights Act of 1964 as amended; the American's with Disabilities Act of 1990; the Rehabilitation Act of 1973 (Sections 503 and 504); California Fair Employment and Housing Act (Government Code Section 12900 et. seq.); California Labor Code Sections 1101 and 1102.

3. **Investigation of Claims.** Consultant must designate a specific position within its organization to be responsible for assuring nondiscrimination and non-harassment as provided in this Agreement. Consultant must investigate all complaints directed to it by District. District will refer complaints in writing and Consultant will advise District in writing when such investigations are concluded. The scope of such investigations must include all appropriate officers, employees, and agents of the Consultant, as well as all subcontractors, Subconsultants, and material suppliers of the Consultant. In cases where such investigation results in a finding of discrimination, harassment, or hostile work environment, Consultant must take prompt, effective disciplinary action against the offender.

SECTION TWELVE

MISCELLANEOUS PROVISIONS

1. **Entire Agreement.** This Agreement, which includes the terms and conditions, the Schedule(s), the Attachments to the Schedules, and the attached Appendices, represents the entire understanding between the Parties hereto relating to the Services described in this Agreement and supersedes any and all prior proposals or agreements, whether written or oral, that may exist between the Parties. This Agreement may not be modified or amended except in writing as stated herein. To the extent that any Schedule conflicts with this Agreement, this Agreement shall control.
2. **Formation of Agreement.** Formation of an Agreement between the Parties requires accomplishment of the following: (1) execution of the Agreement by Consultant; (2) submission by the Consultant, and acceptance by the District, of evidence of all required insurance coverages and documents; (3) submission by the Consultant, and acceptance by the District, of evidence of all required Form 700 documents, if applicable; (4) submission by the Consultant of the QEMS Awareness certification (See Attachment Four to the Schedule(s), Reference Materials); (5) submission by the Consultant, and acceptance by the District, of all required Non-Disclosure Agreements (NDA) documents as provided in Attachment Four to the Schedule(s), Reference Materials, if applicable; (6) submission by the Consultant, and acceptance by the District, of a Health and Safety Plan, if applicable; (7) any other requirements that are deemed necessary by the District, and (8) execution of the Agreement by the District. No contract between the Parties is formed until all eight actions items have been accomplished to the satisfaction of the District. The District Project Manager will not issue a Notice-to-Proceed until all required documents have been submitted and accepted by the District, if applicable.
3. **No Assignment.**
 - A. The expertise and experience of Consultant are material considerations for District's award and execution of this Agreement. Consultant will not assign or transfer any interest in this Agreement nor the performance of any of Consultant obligations hereunder, without prior written consent of District in the form of an amendment executed by the Parties, and any attempt to so assign this Agreement, or any rights, duties or obligations arising hereunder, will be void and of no effect. Any assignment of monies due or to become due in accordance with this Agreement, will be to the extent permitted by law, and will be subject to all proper set-offs, deductions, and withholdings in favor of the District.

B. In no event, shall an assignment of any interest in this Agreement release the Consultant from its duties and responsibilities as described in this Agreement nor shall the Consultant be released from liability created by the provision of Services as described in this Agreement until such assignment takes effect. Any attempted or purported assignment without the District's written consent in the form of an amendment executed by the Parties is null and void.

4. **Reasonableness.** Discretionary actions or approvals to be performed by the Parties will be exercised in a reasonable manner.
5. **Gifts.** Consultant hereby acknowledges that District policy prohibits the acceptance by District personnel of gifts of any kind from its contractors, consultants, suppliers or vendors. Consultant shall honor this policy by not sending or bringing gifts to the District.
6. **Audits.** Consultant agrees that the District and its agent(s), have the right to review, obtain, and copy all records pertaining to performance of this Agreement. Consultant agrees to provide the District and its agent(s) with any relevant information requested and will permit the District and its agent(s), access to its premises, upon reasonable notice, during normal business hours for the purpose of interviewing employees and inspecting or copying books, records, accounts, computerized records, and other materials that may be relevant to the matter under investigation or subject to audit such as by a government agency providing the District with grant funds to pay for Consultant's services, for the purpose of determining compliance with this Agreement. Consultant further agrees to maintain such records for a period of three (3) years after final payment as provide for in this Agreement.
7. **Force Majeure.** Neither Party will be held responsible for delays caused by acts beyond its control, such as acts of God or public enemies, utility or communication delays, or failures not caused by such Party's negligence or fault, accidents not caused by such Party's negligence or fault, labor disputes, war, or failure of the other Party to provide data that it is required to provide pursuant to this Agreement.
8. **Binding Effect.** This Agreement is binding on the heirs, executors, administrators, successors and assigns of the Parties.
9. **Choice of Law and Venue.** The Parties agree that this Agreement is to be governed, construed and enforced in accordance with the laws of the State of California. The Parties also agree that the venue of any litigation arising out of or connected with this Agreement will lie exclusively in the state trial court or Federal District Court located in Santa Clara County in the State of California, and the Parties consent to jurisdiction over their persons and over the subject matter of any such litigation in such courts, and consent to service of process issued by such courts.

10. Confidentiality.

- A. Due to the nature of the services the Consultant will provide pursuant to this Agreement, there may be disclosures made to the Consultant of detailed information about the District's operations, including on a need-to-know basis information which may be protected from public disclosure by confidentiality laws, the attorney-client privilege, and/or other provisions of law which govern the nature and timing of disclosure of public information.

- B. The Consultant understands and acknowledges that District staff members providing information to the Consultant do so with the understanding that such information will be handled appropriately.
- C. In the event the Consultant receives such restricted or confidential information, the Consultant will limit access to the information to only those of the Consultant's employees, its subcontractors and its Subconsultants authorized by the District to have the information.
- D. Consultant will notify the District immediately of any request by any third party to have access to confidential information, and will not disclose the requested information without first receiving express written authorization from the District.
- E. The requirements stated herein will survive completion, expiration, suspension, and termination of this Agreement.

11. Release of Information Prohibited. The Consultant is not permitted to provide any information concerning the Project to the media nor anyone other than authorized District personnel. The Consultant will not release any information pertinent to the Project for publication, public disclosure, or in any other manner without first obtaining clearance and a release in writing from the District. Any media inquiry at any time to Consultant relating to any matter concerning Services provided or requested to be provided pursuant to this Agreement will be referred immediately to the District. Consultant will not communicate with the media regarding any such matter.

12. Conflict of Interest.

- A. Consultant represents that there exists no actual or potential conflict of interest concerning the services to be performed pursuant to this Agreement.
- B. Consultant represents that Consultant's performance required as stated in this Agreement does not require the breach of any agreement or obligation to keep in confidence the proprietary information of another party. Consultant will not bring to the District, or use in the performance of Consultant's duties as described in this Agreement, any materials or documents of another party considered confidential or proprietary unless Consultant has obtained written authorization from such party, and the informed consent of the District, for the possession and use of such materials.
- C. Consultant represents and warrants that during the term of the Agreement, Consultant, Consultant's parent company, Consultant's subsidiaries, or any affiliated entity sharing substantially similar ownership of or control with Consultant shall not act as a Consultant or expert for any party in support of any potential or active claim or legal action against the District by such party.
- D. CALIFORNIA FAIR POLITICAL PRACTICES COMMISSION STATEMENT OF ECONOMIC INTEREST FORM 700 ("FORM 700"): Upon District's request, Consultant employees, officers, agents, Subconsultants, and subcontractors shall complete, execute, and submit a Form 700 as follows:

- I. Consultant employees, officers, agents, Subconsultants, and subcontractors assigned to perform services pursuant to this Agreement shall file with the District an Assuming Office Statement. The Assuming Office Statement shall be filed:
 - a. Within thirty (30) calendar days of the effective date of this Agreement; and
 - b. Within thirty (30) calendar days of Consultant hiring, adding or promoting to a designated filer position employees, officers, agents, Subconsultants, and subcontractors to perform services pursuant to this Agreement.
- II. Consultant employees, officers, agents, Subconsultants, and subcontractors assigned to perform Services pursuant to this Agreement that filed an Assuming Office Statement shall file with the District an amendment to their Form 700 any time there is a change to their disclosure information.
- III. Consultant employees, officers, agents, Subconsultants, and subcontractors assigned to perform Services pursuant to this Agreement that filed an Assuming Office Statement shall file with the District an Annual Statement with the District during the District's annual filing season as determined by the District Clerk of the Board;
- IV. Consultant employees, officers, agents, Subconsultants, and subcontractors assigned to perform Services pursuant to this Agreement that filed an Assuming Office Statement shall file a Leaving Office Statement with the District when one of the following occurs:
 - a. Upon termination of this Agreement; and
 - b. Within thirty (30) calendar days of Consultant employees, officers, agents, Subconsultants, and subcontractors vacating a designated filing position (i.e., removed from the Project, promotion, demotion, transfer to non-designated position, end of employment, or as a result of changes in designated filer positions in the District's Conflict of Interest Code).
- V. Consultant understands and agrees that its employees, officers, agents, Subconsultants, and subcontractors may be disqualified from providing services to the District pursuant to the California Political Reform Act, Gov. Code Sections 81000 et. seq. and Government Code Section 1090. If any of Consultant's employees, officers, agents, Subconsultants, and subcontractors are disqualified from providing services, on written notice from District, Consultant will have fifteen (15) calendar days to remove that employee(s), officer(s), agent(s), Subconsultant's, and subcontractor's person from the Project and provide a replacement acceptable to the District and Consultant's adherence to Section Two, Duties of Consultant, Subsections 7., Consultant Key Staff and Subconsultants, paragraphs E and F.
- VI. The failure of Consultant's employees, officers, agents, Subconsultants, and subcontractors to file an Assuming Office, Amended, or Leaving Office Statement within the time prescribed herein or by the District is deemed a material breach and may result in termination of the Agreement for cause.

13. Task Orders. As described herein some tasks and services will be assigned to the Consultant through issuance of Task Orders. After said tasks and services to be performed pursuant to this Agreement are identified and communicated to Consultant by the District Project Manager, the Consultant will prepare a proposed Task Order (See Appendix Three to the Standard Consultant Agreement—Task Order Template.) The proposed Task Order must identify the following:

- A. Description of the services, including deliverables;
- B. The total Not-to-Exceed Fees for Consultant to complete the services, including estimated number of hours per assigned staff to complete the services;
- C. Proposed staff that will be assigned to complete the services, including resumes if not previously provided to the District's Project Manager;
- D. Estimated cost of each other direct cost and reimbursable expense, including any applicable fees;
- E. Time schedule for completing the services; and
- F. Copies of applicable state and federal permits required to complete the services, unless previously provided to the District.
 - I. The Consultant agrees that the Not-to-Exceed Fees specified in a proposed Task Order will be the product of a good faith effort in exercising its professional judgment. After an agreement has been reached on the negotiable items, the finalized Task Order will be signed by both the District's authorized representative referenced in Appendix One to the Standard Consultant Agreement, Additional Legal Terms (Appendix One) and the Consultant's authorized representative.
 - II. The Consultant must not commence performance of work or services on a Task Order until it has been approved by the District's authorized representative and notice to proceed has been issued by the District's Project Manager. No payment will be made for any services performed prior to approval or after the period of performance of the Task Order. The period of performance for Task Orders will be in accordance with dates specified in the Task Order. No Task Order will be written which extends beyond the expiration date of this Agreement. The total amount payable by the District for an individual Task Order will not exceed the amount agreed to in the Task Order.

14. Good Neighbor. The District always strives to be a good neighbor to the community adjacent to its facilities. The Consultant will ensure that disturbance to neighbors is minimized. The Consultant, its staff, and Subconsultants will always interact with the members of the public in a polite and professional manner.

15. District Quality Environmental Management System (QEMS) Awareness. As an on-site provider of services that has the potential to result in significant environmental impacts, Consultant is required to review the QEMS Fact Sheet, which is incorporated herein by this reference hereto (Attachment Four to the Schedule(s), Reference Materials), with any of the employee(s), subcontractor(s), and/or Subconsultant(s) (Staff) performing Services on

behalf of the District, and make Staff aware of the District's Quality and Environmental Policy and their role and responsibility in achieving conformity with the expectations.

- 16. Governmental Permits and Notifications.** Unless otherwise expressly stated herein or in an executed Task Order, Consultant represents and warrants that it has investigated the need for, and has or will procure, at its cost, and in its own name to the extent allowed by law, all governmental permits, notifications, approvals and inspections required for the performance of the Services. Consultant shall promptly notify the District if any such permit or approval lapses, or is modified or revoked. If, pursuant to applicable law, any such permits or approvals must be procured in the District's name, Consultant shall promptly so inform the District and shall assist the District in obtaining such permits or approvals.
- 17. Taxes and Benefits.** Consultant has full and exclusive liability for the payment of, and Consultant will pay, any and all taxes and contributions for unemployment insurance, retirement benefits, workers' compensation insurance or benefits, life insurance, pensions, annuities and similar benefits and any other employment-related costs, obligations, and duties that may now or hereafter be imposed by law, collective bargaining agreements or otherwise with respect to persons employed by Consultant for the performance of Services pursuant to this Agreement.
- 18. Nonwaiver of Rights.** The failure of either Party to this Agreement to object to or to take affirmative action with respect to any conduct of the other Party that is in violation of the terms of this Agreement will not be construed as a waiver thereof, or as waiver of any future breach or subsequent wrongful conduct.
- 19. Notices.** Unless otherwise specified in this Agreement, all requests for written approval or legal notices must be sent to the representatives below. All notices will be deemed to have been given when made in writing and when delivered or mailed to the representatives of the District and the Consultant at their respective addresses as follows:
- DISTRICT:
- Deputy Operating Officer as defined in Section 1. Representatives, of the attached Schedule(s), Scope of Services.
- CONSULTANT:
- Consultant Principal Officer as defined in Section 1. Representatives, of the attached Schedule(s), Scope of Services.
- 20. Appendices.** The following listed Appendices are incorporated herein by this reference as though set forth in full:
- Appendix One to the Standard Consultant Agreement—Additional Legal Terms.
Appendix Two to the Standard Consultant Agreement—Dispute Resolution.
Appendix Three to the Standard Consultant Agreement—Task Order Template.
Appendix Four to the Standard Consultant Agreement—Insurance Requirements.

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

Attachment One to Schedule D—Fees and Payments

Attachment Two to Schedule D—Schedule of Completion

Attachment Three to Schedule D—Consultant's Key Staff and Subconsultants

Attachment Four to Schedule D—Reference Materials

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IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date it is fully executed by the Parties.

SANTA CLARA VALLEY WATER DISTRICT
"District"

By: 
Barbara Keegan
Chair/Board of Directors

Date: 03/08/2016

GEI CONSULTANTS, INC.
"Consultant"

By: 
William A. Rettberg, P.E.
Senior Vice President

Date: 2-9-16

Firm Address:

180 Grand Avenue, Suite 1410
Oakland, CA 94612

ATTEST:


Michelle L. King, CMC
Clerk/Board of Directors

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**APPENDIX ONE TO THE
STANDARD CONSULTANT AGREEMENT
ADDITIONAL LEGAL TERMS**

- 1. Conflict of Interest—Future Services.** Consultant, Consultant's parent company, Consultant's subsidiaries, or any affiliated entity sharing substantially similar ownership of or control with Consultant shall not submit a proposal: (i) for any contract to be awarded for construction management or the construction of any project that is related to the Services provided pursuant to this Agreement; (ii) in response to any request for proposal or District solicitation developed or prepared by or with the assistance of Consultant, Consultant's parent company, Consultant's subsidiaries, or any affiliated entity sharing substantially similar ownership of or control with Consultant; or (iii) for any single or sole source products/services related to the Services pursuant to this Agreement, or have a financial stake in any single or sole source products/services resulting from this Agreement.
- 2. Dispute Resolution.** If a dispute occurs between the Parties as a result of this Agreement, then the Parties agree to use the Dispute Resolution process outlined in Appendix Two of the Standard Consultant Agreement, Dispute Resolution.
- 3. Small Business Enterprise (SBE) Participation.** This Agreement provides for the Consultant to include California Department of General Services certified Small/Micro Businesses in the performance of the Services, estimated to be 30% or more of the Total Not-to-Exceed Fees stated in Attachment One, Fees and Payments, to the Schedule(s), and Consultant agrees to use its best efforts to meet this goal.
- 4. Task Order Approvals.**
 - A. Task Orders are subject to approval by the District's Water Utility Capital Division Operating Officer unless delegated to the Unit Manager.
 - B. District Unit Manager(s) is authorized to approve individual Task Orders in an amount not-to-exceed \$ 100,000.
 - C. Services to be performed pursuant to a Task Order may only commence once a specific Notice to Proceed for that Task Order has been issued by the District.

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**APPENDIX TWO TO THE
STANDARD CONSULTANT AGREEMENT
DISPUTE RESOLUTION**

1. Consultant's Questions and Concerns.

Questions regarding the terms, conditions, and services relating to this Agreement will be decided by the District who will furnish the decisions to Consultant in writing within thirty (30) Days after receiving a written request from Consultant.

2. Dispute Resolution.

A. Alternate Dispute Resolution (ADR)

- I. District intends to use ADR techniques including partnering and mediation to resolve disputes relating to the Project.

B. Consultant and its Subconsultants are expected to participate in all ADR efforts.

C. The cost of partnering training facilities and facilitator will be borne by District.

3. Negotiations Before and During Mediation.

Negotiations to resolve disputes before and during mediation are initiated for settlement purposes only and are not binding unless otherwise agreed by District and Consultant.

4. Voluntary Mediation.

A. Initiation of Mediation

- I. Any Party to a dispute or claim may initiate mediation by notifying the other Party or Parties in writing.

B. Request for Mediation

- I. A request for mediation must contain a brief written statement of the nature of the dispute or claim, and the names, addresses, and phone numbers of all parties to the dispute or claim, and those who will represent them, if any, in the mediation.

C. Selection of Mediator

- I. Upon receipt of a written request for mediation, unless otherwise agreed by the Parties, within fourteen (14) Days, the Parties will confer to select an appropriate mediator agreeable to all Parties.
- II. If the Parties cannot agree on a mediator, they hereby agree to accept a mediator appointed by a recognized association such as the American Arbitration Association.

D. Qualifications of a Mediator

- I. Any mediator selected must have expertise in the area of the dispute and be knowledgeable in the mediation process.
- II. No person shall serve as a mediator in any dispute in which that person has any financial or personal interest in the result of the mediation.

**APPENDIX TWO TO THE
STANDARD CONSULTANT AGREEMENT
DISPUTE RESOLUTION**

E. Before accepting an appointment, the prospective mediator must disclose any circumstances likely to create a presumption of bias or prevent a prompt meeting with the Parties. Upon receipt of such information, the Parties will confer and decide whether to select another mediator.

F. Vacancies

- I. If any mediator becomes unwilling or unable to serve, another mediator will be selected unless the Parties agree otherwise.

G. Representation

- I. Any Party may be represented by person(s) of their choice who must have full authority to negotiate.
- II. The names and addresses of such person(s) must be communicated in writing to both Parties and to the mediator.

H. Time and Place of Mediation

- I. The mediator will set the time of each mediation session.
- II. The mediation will be held at a convenient location agreeable to the mediator and the Parties, as determined by the mediator.
- III. All reasonable efforts will be made by the Parties and the mediator to schedule the first session within sixty (60) Days after selection of the mediator.

I. Identification of Matters in Dispute

- I. The Parties shall comply with the process as required by the mediator with regard to providing the mediator with a memorandum setting forth its position with regard to the issues that need to be resolved. At the discretion of the mediator, or otherwise agreed by the Parties, the Parties may mutually exchange such memoranda.
- II. At the first session, the Parties will be expected to produce all information reasonably required for the Mediator to understand the issue(s) presented. The mediator may require each Party to supplement such information.

J. Authority of Mediator

- I. The mediator does not have authority to impose a settlement on the Parties but will attempt to assist the Parties in reaching a satisfactory resolution of their dispute.
- II. The mediator is authorized to conduct joint and separate meetings with the Parties and to make oral and written recommendations for settlement.
- III. Whenever necessary, the mediator may also obtain expert advice concerning technical aspects of the dispute, provided the Parties agree and assume the expenses of obtaining such advice. Arrangements for obtaining such advice will be made by the mediator or the Parties, as determined by the mediator.
- IV. The mediator is authorized to end the mediation whenever, in the mediator's judgment, further efforts at mediation would not contribute to a resolution of the dispute between the Parties.

**APPENDIX TWO TO THE
STANDARD CONSULTANT AGREEMENT
DISPUTE RESOLUTION**

K. Privacy

- I. Mediation sessions are private.
- II. The Parties and their representatives may attend mediation sessions.
- III. Other persons may attend only with the permission of the Parties and with the consent of the mediator.

L. Confidentiality

Except as provided by California or federal law or regulation:

- I. The mediator will not divulge confidential information disclosed to a mediator by the Parties or by witnesses in the course of the mediation.
- II. All records, reports, or other documents received by a mediator while serving as mediator, are confidential.
- III. The mediator must not be compelled to divulge such records or to testify in regard to the mediation in any adversary proceeding or judicial forum.
- IV. The Parties must maintain the confidentiality of the mediation and must not rely on, or introduce as evidence in any arbitration, judicial or other proceedings:
 - a. Views expressed or suggestions made by the other Party with respect to a possible settlement of the dispute;
 - b. Statements made by the other Party in the course of the mediation proceedings;
 - c. Proposals made or views expressed by the mediator;
 - d. Whether the other Party had or had not indicated willingness to accept a proposal for settlement made by the mediator.

M. No Stenographic Record

- I. There shall be no stenographic record of the mediation.

N. Termination of Mediation

- I. The mediation shall be terminated:
 - a. By the execution of a Settlement Agreement by the Parties;
 - b. By a written declaration of the mediator to the effect that further efforts at mediation are no longer worthwhile; or
 - c. By a written declaration of a Party or Parties to the effect that the mediation proceedings are terminated.
 - d. Exclusion of Liability
- II. No mediator shall be a necessary Party in judicial proceedings related to the mediation.

O. Interpretation and Application of These Mediation Provisions

- I. The mediator will interpret and apply these mediation provisions insofar as they relate to the mediator's duties and responsibility.

**APPENDIX TWO TO THE
STANDARD CONSULTANT AGREEMENT
DISPUTE RESOLUTION**

P. Expenses

- I. The expenses of witnesses for each Party must be paid by the Party producing the witnesses.
- II. All other expenses of the mediation, including required travel and other expenses of the mediator, and the expenses of any witness called by the mediator, or the cost of any proofs or expert advice produced at the direct request of the mediator, will be apportioned as the mediator finds appropriate or as otherwise agreed to by the Parties.

5. Compensation for Participation in Mediation.

Neither Consultant nor the District is entitled to compensation for time spent in or for negotiations or mediation to resolve questions or disputes between Consultant and District arising out of this Agreement.

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**APPENDIX THREE TO THE
STANDARD CONSULTANT AGREEMENT
TASK ORDER TEMPLATE**

Task Order No. _____

Title: _____

Agreement: Standard Consultant Agreement _____ ("Agreement") Between the Santa Clara Valley Water District ("District") and _____ ("Consultant"), dated _____.

District Project Manager: _____

Consultant Project Manager: _____

Dollar Amount of Task Order: Not-to-Exceed \$ _____

1. Upon full execution of this Task Order No. _____, as set forth in the Standard Consultant Agreement Section Twelve, Miscellaneous Provisions, Subsection 13., Task Orders, and the issuance of a notice to proceed by the District Project Manager, the Consultant is hereby authorized to perform the Services described in Attachment A to this Task Order. Any costs incurred, Services performed or expenditures by the Consultant before this Task Order is executed or before the issuance of the notice to proceed will be considered outside the contracted scope of Services and will not be eligible for payment.
2. Both the scope of Services to be performed and the deliverables to be provided in accordance with this Task Order are described in Attachment A which is attached hereto and incorporated by this reference. Attachment A shall include at a minimum the following:
 - a. The Consultant personnel to be assigned to perform the Services, including resumes if not previously provided to the District Project Manager.
 - b. The total not-to-exceed fees amount for Consultant to complete the Services, including estimated number of hours required to perform the Services assigned to each Consultant classification.
 - c. Estimated cost of each other direct cost and reimbursable expense, including any applicable fees.
 - d. Project schedule for completing the scope of Services.
3. The Consultant shall be compensated at fixed fees or at the hourly rates established in Attachment One to the Schedule(s), Fees and Payments, of the Agreement. The Consultant agrees that it will provide all equipment, furnish all materials, except as may be otherwise noted in the Attachment A.
4. This Task Order will become effective on the date of full execution by authorized representatives of the Parties and remain in effect until the earlier of: completion of the tasks set forth in Attachment A or [expected completion date].

**APPENDIX THREE TO THE
STANDARD CONSULTANT AGREEMENT
TASK ORDER TEMPLATE**

- 5. Copies of applicable local, state and federal permits required to perform the Services described in Attachment A are attached to this Task Order, unless the Consultant previously provided the appropriate permits to the District.
- 6. The Consultant shall perform all Services described in Attachment A to this Task Order in accordance with the terms and conditions of the Agreement.
- 7. Signatures:

Signature: _____ DATE _____
GEI Consultants, Inc.
[PRINT NAME]
[PRINT TITLE]
ON BEHALF OF THE CONSULTANT

Signature: _____ DATE _____
SANTA CLARA VALLEY WATER DISTRICT
[PRINT NAME]
[PRINT TITLE]

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**APPENDIX FOUR TO THE
STANDARD CONSULTANT AGREEMENT
INSURANCE REQUIREMENTS**

Please refer to the insurance requirements listed below.

Without limiting the Consultant's indemnification of, or liability to, the Santa Clara Valley Water District ("District"), the Consultant must provide and maintain at its own expense, during the term of this Agreement, or as may be further required herein, the following insurance coverages and provisions.

Consultant must provide its insurance broker(s)/agent(s) with a copy of these requirements and warrants that these requirements have been reviewed by Consultant's insurance agent(s) and/or broker(s), who have been instructed by Consultant to procure the insurance coverage required herein.

In addition to certificates, Consultant must furnish the District with copies of original endorsements affecting coverage required by this Appendix. The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. **All endorsements and certificates are to be received and approved by the District before services commences.** In the event of a claim or dispute, the District has the right to require Consultant's insurer to provide complete, certified copies of all required pertinent insurance policies, including endorsements affecting the coverage required by this Appendix.

Consultant must, at its sole cost and expense, procure and maintain during the entire period of this Agreement the following insurance coverage(s).

REQUIRED COVERAGES

1. Commercial General/Business Liability Insurance with coverage as indicated:

\$2,000,000 per occurrence/\$2,000,000 aggregate limits for bodily injury and property damage

General Liability insurance must include:

- a. Coverage at least as broad as found in standard ISO form CG 00 01.
- b. Contractual Liability expressly including liability assumed pursuant to this contract.
- c. If Consultant must be working within fifty (50) feet of a railroad or light rail operation, any exclusion as to performance of operations within the vicinity of any railroad bridge, trestle, track, roadbed, tunnel, overpass, underpass, or crossway must be deleted, or a railroad protective policy in the above amounts provided.
- d. Severability of Interest.
- e. Broad Form Property Damage liability.
- f. If the standard ISO Form wording for "OTHER INSURANCE," or other comparable wording, is not contained in Consultant's liability insurance policy, an endorsement must be provided that said insurance will be primary insurance and any insurance or

**APPENDIX FOUR TO THE
STANDARD CONSULTANT AGREEMENT
INSURANCE REQUIREMENTS**

self-insurance maintained by the District, its Directors, officers, employees, agents or volunteers must be in excess of Consultant's insurance and must not contribute to it.

2. Business Auto Liability Insurance with coverage as indicated:

\$2,000,000 combined single limit for bodily injury and property damage per occurrence, covering all owned, non-owned and hired vehicles.

3. Professional/Errors and Omissions Liability with coverage as indicated:

\$5,000,000 per claim/\$5,000,000 aggregate

Professional/Errors and Omission Liability appropriate to the Consultant's profession, and must include:

- a. If coverage contains a deductible, or self-insured retention, it shall not be greater than one hundred thousand dollars (\$100,000) per occurrence/event.
- b. Coverage shall include contractual liability.
- c. If coverage is claims-made:
 - (1) Certificate of Insurance shall clearly state that the coverage is claims-made.
 - (2) Policy retroactive date must coincide with or precede the Consultant's start of services (including subsequent policies purchased as renewals or replacements).
 - (3) Policy must allow for reporting of circumstances or incidents that might give rise to future claims.
 - (4) Insurance must be maintained and evidence of insurance must be provided for at least three (3) years after completion of the contract services.

4. Workers' Compensation and Employer's Liability Insurance.

- a. Statutory California Workers' Compensation coverage covering all work to be performed for the District.
- b. Employer Liability coverage for not less than \$1,000,000 per occurrence.
- c. In accordance with the provisions of Section 3700 of the California Labor Code, Consultant is required to secure Workers' Compensation insurance for its employees. Consultant must obtain and keep in full force and effect Workers' Compensation insurance necessary in connection with the performance of this Agreement to protect Consultant and its employees pursuant to the Workers' Compensation Insurance and Safety Act, including coverage pursuant to United States Longshoremen's and Harbor Worker Act, when applicable. Such insurance must be in a standard form and relieve the District of all responsibility. Prior to performing the Scope of Services, Consultant must

**APPENDIX FOUR TO THE
STANDARD CONSULTANT AGREEMENT
INSURANCE REQUIREMENTS**

provide the District with a certificate(s) of insurance evidencing that said requirements are fully in effect in addition to the requirements.

GENERAL REQUIREMENTS

With respect to all coverages noted above, the following additional requirements apply:

- 1. Additional Insured Endorsement(s):** Consultant *must* provide an additional insured endorsement for Commercial General/Business Liability and Business Automobile liability coverage naming the **Santa Clara Valley Water District, its Directors, officers, employees, and agents, individually and collectively**, as additional insureds, and must provide coverage for acts, omissions, etc., arising out of the named insureds' activities and services. Other public entities may also be added to the additional insured endorsement as applicable and the Consultant will be notified of such requirement(s) by the District.

(NOTE: Additional insured language on the Certificate of Insurance is **NOT** acceptable without a separate endorsement such as Form CG 20 10, CG 2033, CG 2037. Note: Editions dated 07/04 are not acceptable.)

- 2. Primacy Clause:** Consultant's insurance must be primary with respect to any other insurance which may be carried by the District, its officer, agents and employees, and the District's coverage must not be called upon to contribute or share in the loss.
- 3. Cancellation Clause Revision:** The Certificate of Insurance **MUST provide Thirty (30) days notice of cancellation, (ten (10) days notice for non-payment of premium). NOTE: The standard wording in the ISO Certificate of Insurance is not acceptable.** The following words must be crossed out or deleted from the standard cancellation clause: ". . . endeavor to . . ." AND ". . . but failure to mail such notice must impose no obligation or liability of any kind upon the company, its agents or representatives."
- 4. Acceptability of Insurers:** All coverages must be issued by companies admitted to conduct business in the State of California, which hold a current policy holder's alphabetic and financial size category rating of not less than A-V, according to the current Best's Key Rating Guide or a company of equal financial stability that is approved by the District's Risk Management Administrator.
- 5. Self-Insured Retentions or Deductibles:** Any deductibles or self-insured retentions must be declared to and approved by the District. At the option of the District, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, its officers, officials, employees and volunteers; or the Consultant shall provide a financial guarantee satisfactory to the Entity guaranteeing payment of losses and related investigations, claim administration, and defense expenses.
- 6. Subconsultants:** Some of the services pursuant to this Agreement are sublet. Notwithstanding Table IV to this Appendix Four, Subconsultants Insurance Requirements, the Consultant must require each of its Subconsultants of any tier to carry the aforementioned coverages, or Consultants may insure Subconsultants pursuant to its own policies.

**APPENDIX FOUR TO THE
STANDARD CONSULTANT AGREEMENT
INSURANCE REQUIREMENTS**

- 7. Amount of Liability Not Limited to Amount of Insurance:** The insurance procured by Consultant for the benefit of the District must not be deemed to release or limit any liability of Consultant. Damages recoverable by the District for any liability of Consultant must, in any event, not be limited by the amount of the required insurance coverage.
- 8. Coverage to Be Occurrence Based:** With the exception of the Professional Liability/Errors and Omissions coverage mentioned above, all coverage must be occurrence-based coverage. Claims-made coverage is not allowed.
- 9. Waiver of Subrogation:** Consultant agrees on to waive subrogation against the District to the extent any loss suffered by Consultant is covered by any Commercial General Liability policy, Automobile policy, Workers' Compensation policy, or Professional policy described in **Required Coverages** above. Consultant agrees to advise its broker/agent/insurer about this provision and obtain any endorsements, if needed, necessary to ensure the insurer agrees.
- 10. Non-Compliance:** The District reserves the right to withhold payments to the Consultant in the event of material noncompliance with the insurance requirements outlined above.
- 11. Please mail the certificates and endorsements to:**

**Bal Ganjoo
Senior Project Manager
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118**

IMPORTANT: On the certificate of insurance, please note:

**Bal Ganjoo, Senior Project Manager
Guadalupe Dam Seismic Retrofit Project Design Consultant Services,
CAS No. 4675**

If your insurance broker has any questions, please advise him/her to call the District Risk Management Administrator, David Cahen, at (408) 630-2213.

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**APPENDIX FOUR TO THE
STANDARD CONSULTANT AGREEMENT
INSURANCE REQUIREMENTS**

TABLE IV-A. SUBCONSULTANT INSURANCE REQUIREMENTS

| Company | Project Role | General Liability | | Auto Liability | Professional/Errors and Omissions Liability | | Worker's Compensation |
|---------------------------------------|---|-------------------|--------------|----------------|---|-------------|-----------------------|
| | | Per Claim | Aggregate | Limit | Per Claim | Aggregate | Limit |
| AECOM | Environmental, CEQA, Permitting, Dam Engineering Constructability Review | \$2,000,000 | \$2,000,000 | \$2,000,000 | \$5,000,000 | \$5,000,000 | \$2,000,000 |
| Beyaz & Patel, Inc | Outlet Structures, Structural Design | \$2,000,000* | \$4,000,000* | \$1,000,000* | \$3,000,000 | \$3,000,000 | \$1,000,000 |
| Cal Engineering & Geology, Inc. | Geotechnical Investigations, Geotechnical Engineering, Civil Design | \$2,000,000* | \$4,000,000* | \$1,000,000* | \$2,000,000 | \$2,000,000 | \$1,000,000 |
| Carnes & Associates, Inc. | Site Surveys, Baseline Map | \$1,000,000 | \$2,000,000 | \$500,000 | \$1,000,000 | \$2,000,000 | \$1,000,000 |
| Cooper Testing | Geotechnical Laboratory Testing | \$100,000 | \$200,000 | N/A | N/A | N/A | \$100,000 |
| David Ford Consulting Engineers, Inc. | Hydraulics and Hydrology | \$2,000,000 | \$4,000,000 | \$1,000,000 | \$2,000,000 | \$2,000,000 | \$1,000,000 |
| Frisch Engineering, Inc. | Electrical Engineering | \$3,000,000 | \$5,000,000 | \$2,000,000 | \$2,000,000 | \$2,000,000 | \$1,000,000 |
| Hatch Mott MacDonald | Tunnel Engineering Analyses and Design, Geotechnical Baseline Reports, Constructability Reviews | \$2,000,000 | \$2,000,000 | \$2,000,000 | \$5,000,000 | \$5,000,000 | \$1,000,000 |

**APPENDIX FOUR TO THE
STANDARD CONSULTANT AGREEMENT
INSURANCE REQUIREMENTS**

| Company | Project Role | General Liability | | Auto Liability | Professional/Errors and Omissions Liability | | Worker's Compensation |
|---------------------------------|---------------------------------------|-------------------|-------------|----------------|---|-------------|-----------------------|
| | | Per Claim | Aggregate | Limit | Per Claim | Aggregate | Limit |
| JDH Corrosion Consultants, Inc. | Corrosion Engineering and Evaluations | \$2,000,000* | \$4,000,000 | \$1,000,000 | \$2,000,000 | \$2,000,000 | \$1,000,000 |
| Taber Drilling | Geotechnical Exploration and Testing | \$1,000,000* | \$2,000,000 | \$1,000,000 | N/A | N/A | \$1,000,000 |

- (1) AECOM will provide CEQA permit coordination, and constructability reviews.
- (2) Beyaz & Patel has a small role on the project providing structural engineering for the outlet works and ancillary structures.
*Beyaz & Patel, Inc. has an Umbrella Limit for \$1M which covers General and Auto Liability.
- (3) Cal Engineering & Geology will provide geotechnical engineering services including field engineers and geologists for the field exploration program, some geotechnical analysis support for the embankment design, and civil engineering design for the Hicks Road Realignment.
*CE&G has an Umbrella Limit for \$3M which covers General and Auto Liability.
- (4) Carnes & Associates has a small role on the project providing surveying.
- (5) Cooper Testing has a small role on the project providing laboratory testing and analysis of soil and rock samples.
- (6) David Ford Consulting Engineers will provide hydraulic modeling and analyses for the spillway modifications and reservoir operations during construction.
- (7) Frisch Engineering has a small role on the project providing electrical engineering.
- (8) Hatch Mott MacDonald will be preparing tunnel analyses and designs for the new outlet works.
- (9) JDH Corrosion Consultants has a small role on the project providing corrosion evaluation for new structures.
*JDH Corrosion has an Umbrella Limit of \$4M.
- (10) Taber Drilling is providing equipment and labor to complete exploration borings.
*Taber Drilling has an Umbrella Limit for \$2M.

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**SCHEDULE D
SCOPE OF SERVICES**

1. Representatives.

- A.** The District's representatives are as listed below. Unless otherwise provided in this Agreement, all correspondence to the District shall be addressed to the District Project Manager.

Bal Ganjoo, P.E. (District Project Manager)
Senior Project Manager
Dams and Pipelines Project Delivery Unit
Water Utility Capital Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: 408-630-3117
E-mail: bganjoo@valleywater.org

Emmanuel Aryee, P.E., Engineering Unit Manager
Dams and Pipelines Project Delivery Unit
Water Utility Capital Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: 408-630-3074
E-mail: earyee@valleywater.org

Katherine Oven, P.E., (Division Deputy Operating Officer)
Water Utility Capital Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: 408-630-3126
E-mail: Koven@valleywater.org

- B.** The Consultant's Project Manager is as listed below. All District questions and correspondence pertaining to this Agreement shall be referred to the Consultant's Project Manager.

Joseph M. Green-Heffern, P.E. (Consultant Project Manager)
Senior Professional
GEI Consultants, Inc.
180 Grand Avenue, Suite 1410
Oakland, CA 94612

Phone: 510-350-2919
E-mail: jgreenheffern@geiconsultants.com

**SCHEDULE D
SCOPE OF SERVICES**

- C. The Consultant's Principal Officer for this Agreement is as listed below. As per the Agreement, Section Twelve, Miscellaneous Provisions, Subsection 19., Notices, all notices pertaining to this Agreement shall be sent to the Consultant's Principal Officer.

William A. Rettberg, P.E. (Consultant Principal Officer)
Senior Vice President
GEI Consultants, Inc.
180 Grand Avenue, Suite 1410
Oakland, CA 94612

Phone: 510-350-2910
E-mail: wrettberg@geiconsultants.com

2. Scope of Services.

This Schedule D, Scope of Services, describes the professional design services to be performed by Consultant for the District's **Guadalupe Dam Seismic Retrofit** (Project). The District may, at its discretion, choose to negotiate an amendment to this Agreement with Consultant, as engineer-of-record, for construction phase engineering support services. The District reserves the right to initiate a new consultant agreement selection process for services for any subsequent phase(s) and/or utilize District staff to perform such services.

3. Project Objectives.

- A. Stabilize the Guadalupe Dam embankment to withstand a Maximum Credible Earthquake (MCE).
- B. Implement improvements as necessary for the Dam system to safely pass the Probable Maximum Flood (PMF).
- C. Ensure that the outlet works and hydraulic control system meet the Division of Safety of Dams (DSOD) requirements.
- D. Relocate the Guadalupe Dam intake structure out of the upstream berm.
- E. Incorporate other measures to address seismic and other dam safety deficiencies that are identified through the Project delivery process.

4. Project Background.

The District manages an integrated water resources system that includes the supply of clean safe water, flood protection, and stewardship of streams on behalf of Santa Clara County's 1.8 million residents and businesses. The District effectively manages 10 (ten) dams and surface water reservoirs, 3 (three) water treatments plants, nearly 400 (four hundred) acres of groundwater recharge ponds and more than 275 (two hundred seventy-five) miles of streams.

This Project was initiated to remediate seismic deficiencies at Guadalupe Dam identified in the Seismic Stability Evaluation of Guadalupe Dam (SSE1B-C) Report dated May 22, 2012. The report indicated that since construction in the mid 1930's, Guadalupe Dam has

SCHEDULE D SCOPE OF SERVICES

performed well, and endured the significant ground shaking during the 1989 Loma Prieta earthquake with only minor settlement of the dam and cracking observed along the dam crest and the top of the 1972 berm. The dam was evaluated for earthquake loading in the 1970s and 1980s and found to meet then-current dam safety criteria.

Since that time, the criteria for evaluating ground motions have changed and evaluation procedures have advanced. For those reasons the District performed a new seismic safety evaluation. The 2012 SSE findings conclude that the Guadalupe Dam has inadequate seismic stability, with anticipated large embankment deformations, under the anticipated design Maximum Credible Earthquake (MCE) loading.

The Guadalupe Dam is currently operating with a reservoir restriction as an interim risk reduction measure, until the seismic deficiencies are remediated. The restriction has been approved by the Division of Safety of Dams (DSOD). DSOD expects that the remedial construction work will be completed by June 2019. In order to meet the construction schedule, timely completion of this Project is essential.

Description of Dam and Reservoir

The Guadalupe Dam was constructed in 1936. The reservoir has a capacity of 3,460 acre-feet.

The Guadalupe Dam was designed as an earthfill dam with upstream and downstream embankment zones. Subsequent investigations have shown the upstream and downstream embankment materials are similar in nature and engineering characteristics, thus the dam could essentially be treated as a homogeneous dam. No internal drainage or filter zones are incorporated in the dam.

Spillway and Outlet Works

The spillway is a reinforced concrete-lined side-weir channel cut into the left abutment and has a capacity of 9,000 cfs.

The outlet works consists of an intake structure, an outlet pipe and an outlet structure. The intake is 72-inch-diameter reinforced concrete box-type structure which was modified in 1972 when an upstream embankment stabilizing berm was added. The outlet structure was extended vertically through the berm. In the event of an earthquake the estimated deformations of the upstream embankment/berm have the potential to impact the intake and associated hydraulic lines that control the slide gate in the intake structure. In such an event the outlet could become inoperable and hence it needs to be relocated outside the berm.

Centered underneath the dam is the low-level outlet pipe which is a 36-inch-diameter, 720-foot long cast-in-place concrete pipe with steel liner. The outlet structure is located at the downstream toe and includes a 30-inch butterfly valve used to control flow to Guadalupe Creek. The outlet pipe discharges to a stilling basin before reaching the creek channel.

5. General Assumptions and Requirements.

The following is a list of general assumptions:

**SCHEDULE D
SCOPE OF SERVICES**

- A. Manage Scope of Services.** The 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 the District and Project requirements.
- B. Deliverable Format.** Consultant shall submit deliverables in both electronic and hardcopy format. Deliverables shall be submitted in PDF and native (editable) format, including Word documents, Excel spreadsheets, PowerPoint files, AutoCAD files, etc. The hard copy deliverables shall be printed in professional quality presentation and submitted in 5 (five) copies. District may require original copies of signed documents and/or scanned (Adobe PDF) versions.
- C. Review of Deliverables.** The District will review and comment on all Project deliverables and forward to the Consultant for revision and preparation of final versions. As determined by the District, some of the deliverables may also be subject to review and comment from regulatory agencies and stakeholders following the District review process.
- D. District Quality Environmental Management System.** The District maintains a Quality Environmental Management System (QEMS) which has procedures, guidelines and work instructions for the performance of various District work. If requested, the Consultant will perform some of the contract tasks and/or subtasks in accordance with the QEMS framework. In such situations, the DPM will provide the Consultant with the specific QEMS procedure, guideline, and/or work instruction prior to the production of deliverables.
- E. Consultant Responsibility.** Consultant, with its expertise in the provision of the listed services, 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 Article 2, Scope of Services.
- F. Document Control.** The Consultant is responsible for establishing and maintaining its own document control system to execute this Scope of Services. An internal document control system for this project is maintained by the District.
- G. File Exchange Service.** Consultant will provide a file exchange service to facilitate communications; particularly of large files over three (3) megabytes. Difficulties in using and transmitting information with this exchange service shall be resolved by the Consultant. In the event that transmitting or receiving information does not occur in a timely manner, the District will not be responsible for delays in completing Project work. Consultant may need to work with District's Information Technology Unit to address any firewall issues and/or permissions required to allow for these communications.
- H. Completeness.**

 - I.** 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

SCHEDULE D SCOPE OF SERVICES

PARTIALLY COMPLETE; SUBSTANTIALLY COMPLETE; VIRTUALLY COMPLETE; and COMPLETE.

II. COMPLETE design set must include all the information required for a constructible set of plans, specifications and estimate of cost and giving such directions to enable the construction to be carried out. 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 call out dimensions, and comply with all drafting, specifications and cost estimating standards.

I. Project-Specific Assumptions and Requirements.

Not Used.

6. Design Phase Tasks.

Task 1—Project Management.

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 Attachment One to Schedule D, Fees and Payments, and in accordance with the Project Schedule stated in Attachment Two to Schedule D, Schedule of Completion, while ensuring that all services and deliverables by the Consultant meet the District and Project requirements.

1.1 Project Design Work Plan. Consultant will prepare a Project Design Work Plan in accordance with this Scope of Services.

1.1.1 The Project Design Work Plan 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.

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

1.2 Progress Meetings and Workshops. District and Consultant key staff and subconsultants as determined necessary and appropriate by Consultant, subject to DPM approval, will coordinate and attend periodic progress meetings and workshops with District staff, regulatory and resource agencies, and review boards, as needed, to review, discuss and progress of the work. For each meeting or workshop, the Consultant will prepare the meeting agenda and notes and submit them for review by the District.

1.3 One-on-One Meetings with District. The Consultant Project Manager must provide a brief update of the teams work activities completed within the week, the look-ahead

SCHEDULE D SCOPE OF SERVICES

activities, and the issues and actions that require the District's attention, in a weekly/ bi-weekly meeting/conference call with the DPM; frequency of these meetings and calls will be as directed by the District.

1.4 Coordination and Communication with External Agencies. Consultant will assist the DPM with coordination and communication with appropriate regulatory or other agencies, 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 the District.

1.5 Public Outreach. If requested, the Consultant will provide support and assistance to the District's public outreach activities and will relate to 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 DPM.

1.6 Project-Specific Sub-Tasks.

1.6.1 Additional Review Meetings. Consultant shall recommend convening and attending meetings, workshops and consultations with the District as needed to complete the 30% design tasks, 60% design tasks, 90% design tasks, and other design tasks.

1.6.2 Not Used.

Task 1—Deliverables.

1. Project Design Work Plan including QA/QC Plan (Draft, Final Draft and Final).
2. Meeting Agendas, Minutes, and Presentations.
3. Weekly or Bi-weekly Meetings/Conference Calls attendance and notes; frequency of meetings and calls will be at District's discretion.

Task 1—Assumptions.

1. Budgeted level-of-effort (LOE) for Project Management is based on Project duration of 32 months from design Notice To Proceed through opening of construction bids.
2. Level of effort(LOE) for subtask 1.2 is estimated to include:
 - a. Five (5) design progress meetings/workshops with District staff (Kickoff, 30%, 60%, 90% and Draft 100%); meetings/workshops to be held in San Jose.
 - b. Four (4) review meetings with DSOD (30%, 60%, 90% and 100%); meetings to be held in Sacramento.
3. LOE for subtask 1.3 is estimated to include:
 - a. Bi-weekly coordination meetings with District PM; with approximately 90% by teleconference, and remainder in-person at District office or GEI Team office in San Jose (Cal E&G).

SCHEDULE D SCOPE OF SERVICES

- b. Ongoing coordination/management of the design team, and preparation of status reports and other documentation to accompany monthly invoices to District.
 - c. QA review of major deliverables and ongoing oversight of QA/QC process. QC reviews are not included in this subtask, but are covered under the relevant design task.
- 4. LOE for subtask 1.4 is estimated to include: an allowance of 160 hours for participation in four (4) meetings with external agencies as directed by the District PM.
 - 5. LOE for subtask 1.5 is estimated to include: an allowance of 160 hours to assist District staff with outreach materials or attend public meetings as directed by the District PM.
 - 6. LOE for subtask 1.6 is estimated to include: an allowance of 160 hours for four (4) additional design coordination meetings with District staff.

Task 2—Data Collection and Investigations.

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.

Services shall include but not be limited to:

- 2.1 Research and Review of Available Project Documentation.** Consultant will research and review available relevant documents and standards provided by the District.
- 2.2 Project Base Map.** Consultant will prepare and submit a Project Base Map, survey data, drawings, utility info, etc. and data as necessary to complete required studies and prepare contract drawings for the Project. Base Map preparation shall include, but not be limited to:
 - 2.2.1 Collect existing survey, topographical, GIS, property, easements and rights of way and utility/infrastructure data as applicable to generation of the Project Base Map for purposes of final design.
 - 2.2.2 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. At critical locations, the Consultant will pothole existing utilities, pipelines, and other infrastructure as necessary to verify location for design and inclusion in the final drawings.
 - 2.2.3 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 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.

SCHEDULE D SCOPE OF SERVICES

- 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 LiDAR collection and validation. 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.
- 2.2.5 Base map preparation shall conform to District Standards for GIS Products (Attachment Four to Schedule D, Reference Materials).
- 2.3 Geotechnical Investigations.** Consultant shall review previously completed relevant geotechnical reports and recommend additional investigations, if needed. Consultant shall prepare a Geotechnical Investigations Work Plan, which will describe the goals of the investigations needed, the exploration locations and depths, the access and drilling methods, and the instrumentation and in-situ testing methods (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.
- 2.3.1 Conduct Geotechnical/Subsurface Investigations as needed for the detailed design and identified in the Geotechnical Investigations Work Plan. Consultant is responsible for the proper disposal of spoils generated from the investigations activities and to provide documentation of such disposal actions to District.
- 2.3.2 Additional Geotechnical Investigations may be approved by the District with justification, to fill in data gaps identified as the detailed design progresses.
- 2.3.3 Laboratory Testing Program.** Consultant shall develop a material testing program to provide all necessary data (index and performance testing) for analysis and design of the Project, for approval by the District and other stakeholders identified by the District PM. The tests will include index, hydraulic conductivity, compaction, consolidation, and strength tests.
- 2.3.4 Geotechnical Investigations/Data Report.** Consultant shall develop a Geotechnical Investigation/Data 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 a summary of the soil and geologic conditions, previous and current investigations and explorations, methodology, materials encountered and the laboratory testing program.
- 2.3.5 Geotechnical Design/Baseline Report.** Consultant shall prepare and submit 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 the District in the management and monitoring performance during construction. The report shall

SCHEDULE D SCOPE OF SERVICES

reference other geotechnical studies previously performed on the Project and other historical studies from the site vicinity. This report may or may not be combined with the Geotechnical Investigation/Data Report if directed by the District.

2.4 Watershed/Flood Protection Projects: Hydrologic/Hydraulic Analyses and Studies.

2.4.1 Not Used.

2.5 Project-Specific Sub-Tasks.

2.5.1 **Planning Studies Review and Adoption Memorandum.** Consultant shall prepare a Planning Studies Review and Adoption Memorandum accepting the findings of the referenced documents (Attachment Four to Schedule D, Reference Materials) and identifying assumptions and findings contained in the planning documents that require clarifications or changes as required to move forward with these documents as a Basis of Design work.

2.5.2 **Upstream Berm Investigations.** Consultant shall conduct overwater Geotechnical/Subsurface Investigations in the upstream berm as identified in the Geotechnical Investigations Work Plan. The overwater explorations in the upstream berm shall be used to characterize and evaluate the engineering properties of the berm for additional seismic stability evaluations. The explorations will allow for geologic identification and sampling of the materials in the berm and the coarse foundation layer. Laboratory tests will be performed on collected samples to support characterization of the berm (including the coarse foundation).

Task 2—Deliverables.

1. Project Base Map, survey data and drawing, utility Information, etc.
2. Geotechnical Investigation Work Plan (Draft, Final Draft and Final).
3. Geotechnical Investigation/Data Report (Draft, Final Draft and Final).
4. Geotechnical Baseline/Design Report (Draft, Final Draft and Final).
5. Planning Studies Review and Adoption Memorandum.

Task 2—Assumptions.

1. General
 - a. Subtask 2.1 Research and Review of Available Project Documentation, includes a 1-day site reconnaissance visit with the design team and District staff to review existing site conditions and constraints.
 - b. District staff will arrange with County of Santa Clara/private property owners for mapping and geotechnical exploration access to areas outside District property.
 - c. Access and permitting approvals for geotechnical exploration will be secured by May 2016 to allow completion of base geotechnical explorations described in subtask 2.3.1 Subsurface Geotechnical Investigation, in one season (Summer/Fall 2016).

SCHEDULE D SCOPE OF SERVICES

- d. Permitting/environmental compliance documentation required for geotechnical explorations will be prepared by the District's Planning Consultant.
 - e. The District will pay all application fees associated with the environmental permitting of design investigations.
 - f. Water for drilling and potable water for packer testing will be provided by District near the site.
 - g. Drilling and well construction permits will be provided by the District at no cost.
 - h. District will provide onsite space for storage containers for drilling equipment and boring samples.
 - i. Reservoir water levels will be high enough to launch and recover drilling barge and tender with a small crane from the right upstream groin area of the dam.
2. Base Mapping under subtask 2.2 Project Base Map:
- a. The topographic base map will be produced by photogrammetric methods from new color aerial photography, supplemented by a topographic survey in areas of dense trees and vegetation, to obtain spot elevations of key dam components and to locate geotechnical explorations.
3. Geotechnical investigations described in subtask 2.3 Geotechnical Investigations:
- a. **Geologic Mapping:** Reconnaissance level geologic mapping, including analysis of aerial photography and field mapping will be performed in vicinity of the dam site and borrow areas to confirm previously identified geologic conditions. It is anticipated that field mapping activities will take place before, during and after surface geophysical and subsurface geotechnical investigations. A map will be prepared including a plan and representative cross sections of geologic features in the project vicinity. The findings of the geologic mapping will be incorporated into the Geotechnical Data and Geotechnical Baseline Reports.
 - b. **Access Construction:** Land-based boring locations will be in roadway areas that will not require grading or are accessible by track mounted rigs in areas with only minor grading or disturbance to existing vegetation. Any minor grading performed for the development of short access ramps or level pads will be regraded to conform to existing topography. Any overwater borings will be accessed by a barge that can be launched from existing access corridors adjacent to the right abutment of the dam.
 - c. **Land Drilling/Packer Testing:** Up to 22 land based borings with an estimated total lineal footage of 1,300 feet will be advanced to characterize soil and rock conditions for design components of the dam, including the spillway, outlet works, dam buttress and foundation, access roads, borrow areas and the relocation of Hicks Road. Land based borings will also be advanced in borrow area locations above the restricted water surface elevation of the dam. The borings will be drilled using rotary wash and wireline coring techniques. Drive samples will be collected at a minimum interval spacing of 5 feet in soils or severely weathered rock materials. Rock core samples will be collected in the underlying bedrock materials. Water permeability (wire-line packer) testing will be

SCHEDULE D SCOPE OF SERVICES

conducted through the core barrel in select outlet works borings to evaluate the bedrock permeability at the proposed outlet tunnel section. Packer testing will be performed in up to five borings.

- d. **Test Pits:** Up to 25 test pits will be excavated in borrow, spoils disposal, stockpile and access road areas to characterize subsurface conditions for foundations and cut and fill grading. Bulk samples of excavated test pit materials from borrow areas may be used to determine rock process-ability, durability and shear strength characteristics.
- e. **Overwater Drilling:** Up to 11 overwater borings with an estimated total lineal footage of 600 feet will be advanced to characterize soil and rock conditions for upstream design components of the dam, including the new sloping intake, outlet tunnel, upstream berm and underlying foundation, and borrow area location below the restricted water surface elevation of the dam. The borings will be drilled using rotary wash and wireline coring techniques. Drive samples will be collected at a minimum interval spacing of five feet in soils or severely weathered rock materials. Rock core samples will be collected in the underlying bedrock materials.
- f. **Geophysical Surveys:** Borehole shear wave velocity surveys will be performed to determine geologic boundaries, and rock properties (dynamic moduli and velocities) of the buttress foundation in one boring. Televiwer surveys will also be performed in up to 8 borings to evaluate rock mass fracture patterns. Up to 4,800 lineal feet of surface seismic refraction surveys will be performed in borrow and potential major excavation areas to evaluate rock quality, weathering depth and potential ripability.
- g. **Piezometers:** Open standpipe or vibrating wire piezometers will be installed in up to eight select land based borings in the buttress foundation, outlet tunnel and borrow areas. The piezometers will be used to measure groundwater levels outside of areas previously explored, and to assist in the development of phreatic surfaces for embankment and borrow cut slope stability analysis. Piezometers will be measured for a period of up to two years, generally on a quarterly basis.
- h. **Site Management and Restoration:** Following completion of drilling, borings will be tremie backfilled with neat cement–bentonite grout in accordance with Santa Clara Valley Water District Requirements. Test pits will be backfilled and the site restored to the original grade. The Consultant will temporarily store the drilling spoils in sealed 55-gallon drums or a disposal bin onsite and disposed of offsite after completion of drilling activities. Applicable District Best Management Practices and relevant avoidance measures from the Santa Clara Valley Habitat Conservation Plan and other environmental permits and clearances will be performed.
- i. **Field Investigation Logs:** Logs will be prepared for all borings, test pits and open standpipe piezometers. Soils and rock physical and strength descriptions on the logs will be prepared in general accordance with applicable ASTM and USBR standards. The logs will include recorded blow counts from Standard Penetration Tests (SPT's) to estimate degree of relative density and consistency of soils. The final logs will be prepared under the direction of a licensed field engineering geologist or geotechnical engineer. The logs will be presented in the Geotechnical Data Report and will be

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incorporated into baseline reports that will be used as information for the Contractor during construction.

- j. **Core Storage:** The recovered core will be placed in wooden boxes, photographed and stored in a water tight container onsite or at a District facility within 5 miles of the site until a construction contract is awarded by District; disposal to be performed by the construction contractor awarded a contract by District.
- k. **General:**
 - i. Additional Investigations may be approved by the District with justification, to fill in data gaps identified as the detailed design progresses. The LOE for offsite Project components does not include the need to investigate potential major slope stability issues related to the relocation/reconfiguration of the Hicks Road.
 - ii. For offsite exploration work for Hicks Road, the Consultant will assist the District to coordinate with the County of Santa Clara with respect to required traffic control and temporary road closures.
 - iii. The Geotechnical Baseline Report will be provided along with the Geotechnical Data Report as part of the construction bid documents to prospective bidders.
 - iv. The Geotechnical Design Report will identify design considerations, engineering analyses recommendations for design for all onsite project components. Detailed final geotechnical design analyses will be included in the applicable Technical Memoranda prepared in subtask 3.3 Project Specific Basis of Design Subtasks, and compiled in the Basis of Design Report; and not be included in the Geotechnical Design Report. A separate stand-alone report will be prepared for the off-site component related to Hicks Road realignment.

Task 3—Basis for Design.

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.

The scope of this task includes:

- 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 District basic operations requirements, Project performance requirements, and other stakeholders' design criteria as identified by the District. 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

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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, geotechnical, structural, hydrologic, hydraulic, mechanical, electrical, instrumentation, controls, 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.
- 3.2.2 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.
- 3.3 Project-Specific Basis of Design Sub-Tasks.**
- 3.3.1 **Outlet System Hydraulic and Operational Analysis.** Consultant shall evaluate the proposed outlet system to confirm, select, and refine the proposed system features and hydraulics as necessary to support detailed design. The outlet system shall be capable of meeting all established operational and regulatory requirements; including, but not limited to, passing the range of District operational flows in and out of the reservoir, passing the required DSOD drawdown requirement. Consultant will prepare a Technical Memorandum (TM) which shall include necessary alternative analyses as required to select the configuration of the piping and control for final design.
- 3.3.2 **Outlet Works.** Consultant shall evaluate the proposed outlet works to confirm, select, and refine the proposed outlet works as necessary to support detailed design. The outlet works shall be capable of meeting all established operational, regulatory and District requirements. Consultant shall provide the size, horizontal and vertical layout, hydraulic, structural and geotechnical design details as well as control and operational requirements for the District. The TM shall summarize Basis of Design for the outlet works. Operations and maintenance input will be incorporated into this memo including lessons learned from the new Lenihan outlet commissioning and operation.
- 3.3.3 **Reservoir Operations.** Consultant shall prepare a Technical Memorandum that evaluates and addresses reservoir operations, flow releases to Guadalupe, and management of inflows to the reservoir over the expected duration of construction. This TM must establish clear baselines for inflows into the reservoir and requirements for design of temporary cofferdams, if required. This TM must further define schedule baselines for reservoir lowering to facilitate construction and for maintaining the existing intake in service, if required.

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- 3.3.4 **Embankments Evaluation.** Consultant shall evaluate seepage, settlement, erosion, and stability and seismic response deformation of the modified dam embankment and foundations, and develop remedial measures to fully address the dam safety requirements of the District and DSOD. Consultant shall perform stability analyses to confirm stability during construction and other loading conditions, stability of all temporary and permanent slopes on the upstream and downstream slopes and include long-term steady-state seepage and rapid drawdown conditions.

The modeling work shall include sufficient number of dam sections to evaluate the various conditions and potential response of the embankments. The models shall incorporate appropriate phreatic conditions for the loading conditions being evaluated. Seepage analysis shall also be performed using 2-dimensional finite element methods to evaluate pore pressures for stability and deformation analysis, seepage control measures for embankment modifications, and seepage control and monitoring measures along the abutments of the dam. An Embankment Evaluation Technical Memorandum presenting the methodologies used, input parameters and assumptions used, and the results of all the analyses will be prepared.

- 3.3.5 **Material Development and Handling.** Consultant shall prepare a Technical Memorandum with recommendations on material development and handling as required to facilitate construction. Specific recommendations on development of borrow and disposal areas shall be developed, along with staging requirements to facilitate these operations, including haul roads associated with borrow and disposal areas and associated reclamation of borrow areas. Mass balance calculations should be performed and summarized in the TM to reflect anticipated excavation volumes, requirements for new fills, and shrink/swell factors.
- 3.3.6 **Temporary Cofferdam.** Consultant shall prepare a Technical Memorandum that defines the Basis of Design for temporary cofferdam to facilitate upstream work in the dry. The TM should focus on defining criteria for design, including requirements for foundation treatment, freeboard requirements and seepage control.
- 3.3.7 **Instrumentation.** Consultant will prepare a Technical Memorandum describing basis and the selection of instrumentation and instrumentation details required for construction and for permanent operation of the Guadalupe Dam. Instrumentation designs shall be coordinated with the District operations units to ensure system compatibility, and maintenance requirements are adequately incorporated.
- 3.3.8 **Civil, Roads, Utilities.** Consultant shall prepare a Technical Memorandum describing the Basis of Design for permanent site access roads, other civil works, and utilities.
- 3.3.9 **Existing Spillway Structure.** Consultant shall evaluate the existing transition, chute and stilling basin to meet new design requirements.
- 3.3.10 **Upstream Berm Investigation, Studies and Analyses Report.** Consultant shall perform evaluations and analyses necessary to investigate, characterize, model and perform deformation analyses of the upstream berm. These evaluations and analyses shall be used to inform outstanding questions regarding the SSE-1B upstream berm analyses which predicted high deformations associated with potential liquefaction of the

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coarse fill layer. (Note that the Guadalupe SSE1B recommendations did not include retrofit of the existing upstream berm, nor does the Guadalupe SRA include retrofit of the upstream berm).

The upstream berm shall be incorporated into the seismic stability model of the remediated Guadalupe Dam and deformation analyses shall be performed. The stability evaluation will include sensitivity analyses considering variability of the coarse fill layer's characteristics, which may include its strength, resistance to liquefaction, thickness, and composition. The seismically-induced deformations of the dam, including the upstream berm, will then be reviewed with the District and DSOD to determine whether predicted deformations are acceptable for dam safety and/or whether the District wishes to retrofit the upstream berm to avoid potential future post-earthquake repairs.

Task 3—Deliverables.

1. Design Criteria Memorandum. (Multiple Drafts and Final).
2. Basis of Design Report (Draft, Final Draft and Final).
3. Outlet System Hydraulic and Operational Analysis Technical Memorandum (Draft, Final Draft and Final).
4. Outlet Works Design Technical Memorandum (Draft, Final Draft and Final).
5. Reservoir Operations Technical Memorandum (Draft, Final Draft and Final).
6. Embankment Evaluation Technical Memorandum (Draft, Final Draft and Final).
7. Material Development and Handling Technical Memorandum (Draft, Final Draft and Final).
8. Temporary Cofferdam Technical Memorandum (Draft, Final Draft and Final).
9. Instrumentation Technical Memorandum (Draft, Final Draft and Final).
10. Civil, Roads, Utilities Technical Memorandum (Draft, Final Draft and Final).
11. Modified Spillway Structure Technical Memorandum (Draft, Final Draft and Final)
12. Upstream Berm Characterization and Seismic Evaluation Technical Memorandum (Draft, Final Draft and Final)

Task 3—Assumptions.

1. General
 - a. Budgeted level-of-effort and schedule are based on the retrofit configuration for the Staff Recommended Alternative (SRA), with key areas of refinement as generally described in the Planning Study Report (PSR).
 - b. District will be responsible for coordination and negotiation with County of Santa Clara and landowners for acquisition of rights-of-way.

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- c. District will coordinate meetings with the County of Santa Clara and other agencies to identify and confirm requirements for realignment of Hicks Road as well as construction access from Hicks Road or via Almaden-Quicksilver Park.
 - d. District will coordinate with PG&E and other utilities for any necessary relocation of electrical power lines or other utilities.
 - e. Spillway hydraulic design evaluations will be based on PMF Hydrology prepared during the planning phase study that has been approved by DSOD. 2-D hydraulic modeling will be based on 2 flow events, 3 potential weir configurations and 2 potential downstream channel configurations.
 - f. The existing seismic input ground motions developed for the 2012 SSE1B studies will be used for the design seismic deformation analyses.
 - g. Geotechnical analyses will utilize the SSE1B embankment characterization material properties supplemented with additional data collected during the Task 2 investigations.
2. **Outlet Works:** This task also includes establishment of electrical and instrumentation & control (I&C) requirements for operation of the outlet works, and design requirements for the outlet conduit tunnel, temporary extension of the existing outlet conduit for stream diversion, and the approach to abandonment of the existing outlet works once the new outlet works is in service. Construction methods and staging of temporary works associated with the outlet pipe, backfill and the foundation excavations at both ends will also be evaluated, and up to two configurations will be considered based on different construction methods. Consideration will also be given to inclusion of bid options for contractor flexibility to suit their preferred equipment and methods.
3. **Reservoir Operations:** To estimate reservoir inflows during construction, the consultant may rely on observed (gauged) streamflow data, historical reservoir operational data, and rainfall-runoff modeling. Using observed streamflow data from nearby, hydrologically similar watersheds, the Consultant will estimate seasonal base-flows to Guadalupe Reservoir, adjusting for differences in watershed area, elevation, and orographic effects. With historical reservoir data (e.g., reservoir storage and outflow time series), the consultant will develop a period of record inflow time series from which reservoir inflows of various durations and annual exceedance properties can be estimated. With rainfall-runoff modeling, the consultant will simulate the inflow resulting from applying NOAA Atlas 14-based precipitation for developing design storms to the watershed. Using the results from these analyses, the Consultant will provide information that will support reservoir lowering, reservoir operations during construction, and the sizing of a possible cofferdam.
- a. The Technical Memorandum will also include recommendations to minimize the mobilization of sediment in the reservoir that may contain mercury and bypass existing flows as available. Sediment control measures could include construction of the stream bypass at the upper end of the reservoir to avoid scouring of sediment into the bypass or constructing the diversion with an intake pond that will allow sediment to settle before entering the bypass. Mitigation measures included in the Dam Maintenance Program Final EIR will also be incorporated as applicable.

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4. Embankment: Steady-state seepage and stability analyses of the dam will be performed to evaluate the dam during construction, end of construction, long-term steady-state, and rapid drawdown loading conditions. Seepage pressures will be estimated using the finite element program SEEP/W 2012. Slope stability calculations will be performed with SLOPE/W 2012, which can perform stability calculations with the seepage pressures calculated from SEEP/W. The models will be calibrated against piezometer measurements and observed performance to ensure the models predict reasonable responses.
 - a. Seismic deformations of the dam with proposed remedial measures may be estimated with either or both equivalent linear analyses with QUAD4M and nonlinear analyses with FLAC. QUAD4M analyses will be performed to provide baseline estimates of deformations with the proposed improvements and will provide baseline estimates of deformations for more detailed analyses with FLAC. FLAC analyses are considered to be more accurate because they can capture the inherent nonlinearities of the embankment response to seismic loading. Seismically-induced settlement of the dam crest and deformation of the upstream and downstream slopes will be estimated from the analyses. The estimated seismically-induced deformations will be used to determine the size of the proposed downstream buttress and to also evaluate the seismic performance of the existing upstream berm.
 - b. Settlement of the dam due to the addition of a downstream buttress will be estimated. Settlements will be estimated based on available laboratory testing and estimated changes in stresses estimated from SIGMA/W analyses models and / or FLAC analyses.
5. Material Development and Handling: Other activities to be performed in the material development and handling task include:
 - a. Identifying potential commercial sources of filter materials based on proximity to the Guadalupe Dam site and material suitability.
 - b. Alternative uses for oversize rock materials including riprap placement for embankment and scour protection.
 - c. Disposal requirements for potential mercury-contaminated sediments.
 - d. Development of earth/rock material balance flow diagrams for incorporation and use in the 30, 60 and 90 percent design documents.
6. Temporary Cofferdam: Temporary cofferdam requirements will be based on the Reservoir Operations TM and the Geotechnical Baseline Report prepared under separate subtasks, and on risk-management criteria established during constructability review and discussions with the District and DSOD. The requirements will also need to be coordinated with environmental controls and mitigation requirements identified during preparation of CEQA documentation. Consultant will develop a preliminary design for the temporary cofferdam that can be used to define minimum cofferdam requirements and constraints to be included in the contract documents and for permitting and DSOD review. Consideration will also be given to whether the preferred outlet works configuration and a specified construction sequence/schedule might allow elimination of the cofferdam as a Contractor bid option.

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7. Instrumentation: This task includes flow monitoring and other instrumentation and control requirements for operation of the outlet works as well as geotechnical instrumentation to monitor performance of the dam.
8. Civil, Roads, Utilities: The Consultant will work with the District, County, and DSOD to establish operational needs and design criteria for the onsite access roads, including Hicks Road modification/relocation, the dam crest access bridge, Guadalupe Creek low-water crossing, on- and offsite surface drainage features, and related appurtenant utility components. The operational needs and design criteria will be documented in a Technical Memorandum. The Basis of Design for each individual component will reflect the land ownership and operation of that component.
9. Criteria for design of on-site components such as road geometry, cut slope and embankment configurations, pavement structural sections, low water crossings, control or utility vaults, and related features will be based on the District's operational needs and performance criteria as required by DSOD. Conventional civil design criteria based on current codes will be incorporated unless superseded by specific District or DSOD requirements.
10. Criteria for design of off-site project components will be developed based on the conventional engineering principles and practices and the specific requirements of off-site stakeholder(s), the primary of which is anticipated to be the County. The major offsite component will be the modifications to Hicks Road and the dam access bridge which will span from Hicks Road over the spillway and onto the left abutment of the dam. The development of the design criteria for the relocation of Hicks Road will require coordination with the road department at the County and with District staff. The goal of the modifications to the road will be to facilitate improved accessibility and while maintaining the current equivalent service level for the existing, narrow rural county road. The consultant will assist the District in negotiating with the County as needed to reach a mutually agreed upon level of work to serve as criteria for design of the road modification and the access bridge related to the project. In general, the criteria will be based on County and/or Caltrans standards for roads, pre-fabricated vehicular access bridges, retaining walls, and drainage structures.
 - a. The Technical Memorandum will discuss the means by which basis of design criteria was developed and documentation of discussions and negotiations between the District, DSOD, and the County. Component-specific geotechnical analyses and recommendations will be completed and included in the memorandum. Preliminary structural and pavement design analyses will also be completed and included. Exceptions to standard design requirements and the justification for each exception will be detailed in the memorandum.
11. Spillway: To support the spillway design modifications the consultant will refine the existing HEC-RAS 1-D model and develop a HEC-RAS 2-D model. These models will be used to evaluate the hydraulic conditions of the spillway associated with the design alternatives. The 2-D model will include a portion of the reservoir, the spillway inlet structure (including the side channel weir), the spillway chute, the stilling basin, and a portion of the downstream discharge channel. Since the 2-D model will include a portion of the reservoir, the model will be capable of simulating the flow from the reservoir into the spillway intake structure (and over the weir) and will be used to evaluate the lengthening of the weir crest and associated

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water level within the intake structure. The 2-D model will also be capable of simulating the hydraulics of the spillway chute (including super-elevation associated with curved alignment and freeboard within the chute), the stilling basin (including the hydraulic jump), and the downstream discharge channel. The 1-D model results will be used as a check on the 2-D results within the spillway chute and to estimate the effect of air bulking on the water surface profile in the chute.

Task 4—30 Percent Design Document Preparation.

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. It shall translate major/minor 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.

The scope of this task includes:

- 4.1 Sample Drawings and Specifications.** Consultant shall prepare, and submit to the District, sample drawings and specifications for District review and approval to ensure that Drafting Standards are being adopted into the plan set and the specifications also follow District 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 the District's Standard Provisions (Boiler Plate) and the District's Special Provisions Format. Consultant shall recommend edits and additions to the District Provisions where appropriate.
 - 4.1.3 Consultant shall submit a recommended format for the Technical provisions, for review and approval by the District.
- 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 specification 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 The District has a separate bid proposal package/template for which the Consultant shall provide input, as requested by the District. Multiple, intermediate submittals of Special Provision sections to the District 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 the District to review and discuss District 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 subtask is funded pursuant to subtask 1.2. Progress Meetings and Workshops.
- 4.5 Additional Review Meetings.** Consultant shall identify and attend meetings, workshops and consultations with the District as needed to complete the 30% design tasks. This subtask is funded pursuant to subtask 1.6.1. Additional Review Meetings.

4.6 Project-Specific Subtasks.

4.6.1 Not Used

Task 4—Deliverables.

1. Sample Drawings and Specifications.
2. 30% Plans and Specifications, and 30% AACE Class 4 Construction Cost Estimate (Preliminary and Final).

Task 4—Assumptions.

1. 30% Drawings: Approximately 60-65 30% Drawings will be prepared to define the configuration and key features of the project for general endorsement by the District; the 30% design is intended to provide a basis for preparation of CEQA documentation (Project Definition), for initiating ROW acquisition discussions, and for establishing the basis for detailed design analyses required for 60% design.
2. Technical Specifications: An outline will be prepared to identify the technical specification sections that are required for bidding and construction. In addition, a draft technical specification section will be prepared to serve as a template for development of the other specification sections.
3. Construction Schedule and Costs: A preliminary construction schedule and AACE Class 4 cost opinion will be prepared based on the 30% design. The preliminary schedule and construction quantities will provide a basis preparation of CEQA documentation.
4. The District will review the 30% Plans, Specification and Cost Estimate (PS&E) review package concurrent with review of Draft Design Criteria Memorandum and any draft Basis of Design (BOD) TM's that have been completed at the time of the 30% submittal. Responses to District review comments to the 30% PS&E package and Draft Design Criteria Memorandum will be documented on a comment response form and provide the basis for proceeding with 60% design and development of BOD TM's. Revisions to Preliminary 30% Drawings will be incorporated as part of 60% PS&E submittal and will not be submitted as a separate (conformed) Final 30% Drawings.

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5. The District will coordinate with the County of Santa Clara and others as needed for review of the applicable 30% drawings for the realignment of Hicks Road, the dam crest access bridge, and construction access from Hicks Road or via Almaden-Quicksilver County Park.

Task 5—60% Design Document Preparation.

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.

The scope of this task includes:

- 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 the District to review and discuss District 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 subtask is funded in subtask 1.2. Progress Meetings and Workshops.
- 5.3 **Additional Review Meetings.** Consultant shall identify and attend design input meetings, workshops and consultations with District as needed to complete the 60% design tasks. This subtask is funded in subtask 1.6.1, Additional Review Meetings.
- 5.4 **Draft Bid Sheet.** Consultant shall prepare a draft bid sheet at the 60% 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.
- 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.**
 - 5.6.1 **Construction Sequencing Plan.** Consultant shall prepare a Construction Sequencing Plan (CSP) to identify the Consultant's intended construction sequencing to meet Project requirements, including excavations for foundation, abutments, outlet works, stockpiling, embankment construction and other constructability considerations, including

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maintaining the required reservoir levels and service. The CSP shall be used to guide the detailed design and shall be updated as the design is refined. The CSP shall eventually be incorporated into the specifications as a guide to the construction contractor awarded a contract by the District and to establish requirements for the construction contractor to meet in creating its own sequencing plans as needed to confirm continuance of reservoir operations.

Task 5—Deliverables.

1. 60% Plans, Specifications, and AACE Class 3 Construction Cost Estimate (Preliminary and Final).
2. Agenda and 60% Design Comment Resolution Document.
3. Draft Bid Sheet & Supporting Technical Memorandum.
4. Construction Sequencing Plan (draft and final).

Task 5—Assumptions.

1. 60% Drawings: Approximately 135–140 60% Drawings will be prepared to fully delineate the design layout, sizing and features of construction including representative sections and details sufficient for review by the District and DSOD. It is expected that fewer than 10% of additional sheets would need to be added for completion of the 100% plans.
2. Technical Specifications: Initial draft version of all technical specification sections that are expected to be required.
3. Construction Schedule and Costs: update of previous schedule and estimate to an AACE Class 3 level of accuracy.
4. The District will review the 60% PS&E review package concurrent with review of the updated Design Criteria Memorandum and draft BOD TM's, and a preliminary draft of the BOD Report. Responses to District review comments to the 60% PS&E package and will be documented on a comment response form and provide the basis for proceeding to 90% design and finalization of the BOD TM's and Report. Revisions to Preliminary 60% Drawings will be incorporated as part of 90% PS&E submittal and will not be submitted as a separate conformed Final 60% Drawings.
5. The District will coordinate with the County and others as needed for review of the applicable 60% drawings and specifications for realignment of Hicks Road, the access bridge, and construction access from Hicks Road or via Almaden-Quicksilver Park.

Task 6—90% Design Document Preparation.

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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The scope of this task includes:

- 6.1 90% Plans, Specification and Cost Estimate.** 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.
- 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 the District 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 the District to review and discuss District 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 subtask is funded in subtask 1.2. Progress Meetings.
- 6.4 Additional Review Meetings.** Consultant shall identify and attend design input meetings, workshops, and consultations with District as needed to complete the 90% design tasks. This subtask is funded in subtask 1.6.1. 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 Sheet.** Consultant shall update the draft bid sheet 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. 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 Water Utility Projects: Commissioning and Training Plans, and Operations and Maintenance Manual.** Consultant shall develop a Commissioning, Training and Maintenance Plan to prepare District staff for different operational modes: through the construction milestones, start-up and testing, and through the first year of operation. The plan shall assure the facility can continue to operate through construction and not disrupt the ability to meet its delivery obligations and assist the District Operations and Maintenance staff to continue to complete their primary duties of operating the facility on a day-to-day basis and not be dedicated to supporting the Project.

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6.9 Watershed/Flood Protection Projects: Operation and Maintenance Manual.

6.9.1 Not Used.

6.10 Project-Specific Sub-Tasks.

6.10.1 Construction Management, Testing and Inspection Plan. Consultant will develop recommendations for construction management, observation and inspection, and testing during construction, and document these in a Construction Management, Testing and Inspection Plan.

Task 6—Deliverables.

1. 90% Plans, Specifications, and AACE Class 2 Construction Cost Estimate (Preliminary and Final).
2. Agenda and 90% Design Comment Resolution Document (Preliminary and Final).
3. Updated Basis of Design Report, Design Criteria Technical Memorandums, and all supporting analyses and calculations, as identified in this Scope of Services (Draft and Final).
4. Updated Draft Bid Sheet and Supporting Technical Memorandum (Draft and Final).
5. 90% Construction Sequencing Plan and Specification (Draft and Final).
6. Commissioning and Training Plans Plan and Operations and Maintenance Manual (Preliminary and Final).
7. Construction Management, Testing and Inspection Plan (Draft and Final).

Task 6—Assumptions.

1. The Final EIR and associated environmental mitigation and monitoring requirements will be available concurrently with District and DSOD review of the 60% PS&E package so that there is a clear basis for proceeding with 90% design.
2. 90% Drawings: Approximately 155 Drawings will be prepared.
3. Technical Specification: Final draft technical specifications sections for anticipated specification sections.
4. In preparing the Construction Sequencing Plan and Specification, the Consultant will evaluate the timing and duration of proposed construction activities relative to the requirements included in the CEQA document and available permit documents. The Consultant will utilize information from the Dam Maintenance Program Final EIR and the Valley Habitat Plan to develop initial sequencing requirements and identify any specific needs that should be resolved in the project-specific environmental documents. Measures most likely to affect construction sequencing include water quality, bypass flows, nesting birds, traffic, and coordination with other District dam retrofit projects.
5. The District will review the 90% PS&E review package concurrent with final updated Design Criteria Memorandum and BOD Report. Responses to District review comments to the 90% PS&E package will be documented on a comment response form and provide the basis for finalizing the 100% plans for approval by the District and DSOD. Any revisions to 90%

SCHEDULE D SCOPE OF SERVICES

Drawings will be incorporated as part of 100% PS&E submittal for approval by the District and DSOD, and will not be submitted as conformed final 90% Drawings.

6. The District will coordinate with the County of Santa Clara and others as needed for review of the applicable 90% drawings and specifications for realignment of Hicks Road, the Access Bridge, and construction access from Hicks Road or via Almaden-Quicksilver Park.

Task 7—Final Design Document Preparation.

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.

The scope of this task includes:

- 7.1 100% Plans, Specifications, Cost Estimate and Engineering Documents.**
Consultant shall prepare and submit 100% Design and Contract Documents for District review, including:
 - 7.1.1 Plans and Specifications that address 90% review comments and design modifications or clarifications, as required.
 - 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 Basis of Design Report.
 - 7.1.5 100% Design Comments Resolution Form.
- 7.2 Bid Set.** Prepare and submit Bid Set including:
 - 7.2.1 Final plans and specifications, Engineer's Estimate, Basis of Design Report, and Engineering Calculations, if necessary, which include revisions that address and resolve all outstanding issues.
- 7.3 Design-to-Construction Phase Transition Report.** Consultant shall prepare a Design-to-Construction Phase Transition Report.
- 7.4 Project-Specific Sub-Tasks.**
 - 7.4.1 Not used

Task 7—Deliverables.

1. 100% Plans, Specifications, AACE Class 2 Cost Estimate and Engineering Documents, stamped, signed, and authored, by a California registered PE.
2. Final Basis of Design Report.

SCHEDULE D SCOPE OF SERVICES

3. Engineering Analysis and Calculations.
4. 100% Comment Resolution Document.
5. Bid Set that includes Final Plans and Specifications, including Standard Provisions, Special Provisions, Technical Provisions, Appendices, Notice to Bidders, Geotechnical Data Report, Geotechnical Baseline Report, and other bid documents.
6. Design-to-Construction Phase Transition Report (Draft, Final Draft and Final).

Task 7—Assumptions.

1. 100% submittal will consist of (5) five stamped and signed hardcopies + (1) one electronic copy.

Task 8—Bid and Award Services.

Upon the District's request, the Consultant shall assist during the bidding process of the Project by:

- 8.1 Bidder's Questions.** Responding to bidders' questions pertaining to the Bid Set within two business days of receipt of District'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 Changes to drawings will be signed and stamped by California registered professional engineers and will be provided within five business days of the written request from District.
 - 8.3.3 During preparation of each addendum, the Consultant shall evaluate any construction schedule and cost impact of the addendum and submit to District 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.
- 8.5 Project-Specific Sub-Tasks.**
 - 8.5.1 Not used.

Task 8—Deliverables.

1. Written responses to bidders' questions and associated log.
2. Attendance at pre-bid conference, including site visit, and preparation of minutes.
3. Addenda to bid documents.

**SCHEDULE D
SCOPE OF SERVICES**

4. Electronic versions of stamped and signed conformed set of construction contract documents.
5. Stamped and wet-signed conformed set of contract documents (electronic and hard copy) for use during Project construction.

Task 8—Assumptions.

1. District staff will be responsible for distribution of bid sets and addenda to potential bidders.
2. Construction Contract Documents will include (5) five stamped and signed hardcopies + (1) one electronic version.

Task 9—Independent Technical Review Board.

Prior to performing any subtasks described in this task, the Consultant must receive a Task Order issued by the District.

- 9.1** Consultant will retain and manage a two- or three-person independent Technical Review Board (TRB) to provide guidance and review of issues and documents throughout the Project. The District will select the TRB members and they will report directly to the District, but will be contracted for through this Agreement. They will function in accordance with District's requirements. The TRB members will operate under District's Conflict of Interest and Non-Disclosure rules and will therefore be required to sign documents relating to these rules.

9.2 Project-Specific Sub-Tasks.

Not used.

Task 9—Deliverables.

1. TRB Reports.
2. TRB correspondence.

Task 9—Assumptions.

1. Contract includes a District-specified budgetary allowance for this work; actual LOE to be defined by Task Order.

Task 10—Supplemental Services.

The District may require, and the Consultant shall perform, Supplemental Services on an as-needed basis. Prior to performing any Supplemental Services, Consultant must receive a Task Order issued by the District.

10.1 Specific Supplemental Services.

Specific examples of possible Supplemental Services include:

- 10.1.1 Spillway modeling and design using computational and/or physical modeling.
- 10.1.2 Site specific land surveys.

SCHEDULE D SCOPE OF SERVICES

- 10.1.3 Value Engineering, constructability review and risk workshops.
- 10.1.4 Additional engineering surveys and geotechnical investigations; Configuration Resolution Evaluation; Flood mapping below toe of dam; Investigation of Scour and Erosion of Channel Downstream of spillway.
- 10.1.5 Updating Seismic Hazards ground motions to current attenuation relationships.
- 10.1.6 Design of an upstream buttress to reduce upstream deformations
- 10.1.7 Tree surveys and harvest/removal permits.
- 10.1.8 Design of additional facilities, construction sequencing or mitigation required by the FAHCE agreement.
- 10.1.9 Additional I&C design for SCADA integration of Guadalupe facilities with other District facilities.
- 10.1.10 Environmental investigation, permitting and clearances during the design phase activities.

10.2 Additional Services.

The Consultant will provide additional quantities of previously identified services as requested by District. Consultant will provide additional services for any quantity of tasks and deliverables beyond those stated in Task 1 through 9 as Task 10 Supplemental Services, to include but not be limited to:

- 10.2.1 Additional meetings;
- 10.2.2 Additional time allotted for meetings;
- 10.2.3 Additional status/progress reports;
- 10.2.4 Additional telephone conference calls;
- 10.2.5 Additional pages or copies of technical memorandums, plans, reports, drawings and specifications; and
- 10.2.6 Additional public outreach visual materials.

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**SCHEDULE D
SCOPE OF SERVICES**

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

Attachment One to Schedule D—Fees and Payments
Attachment Two to Schedule D—Schedule of Completion
Attachment Three to Schedule D—Consultant's Key Staff and Subconsultants
Attachment Four to Schedule D—Reference Materials

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**ATTACHMENT ONE TO
SCHEDULE D
FEES AND PAYMENTS**

1. Total Authorized Funding.

Total payment for Services performed, to the satisfaction of District, as described in the Schedule(s) will not exceed a total amount of **\$5,901,218** (Not-to-Exceed Fees or NTE). Under no conditions will the total compensation to the Consultant exceed this NTE amount without prior written approval in the form of an amendment to this Agreement executed by the District's Board of Directors (Board), or Chief Executive Officer, or designee, as authorized by the Board.

2. Cost Breakdown.

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

COST BREAKDOWN

| Task | Description | Total Not-to-Exceed Fees |
|---------------------------------|--|---------------------------------|
| 1 | Project Management | \$529,717 |
| 2 | Data Collection and Investigations | \$1,215,256 |
| 3 | Basis for Design | \$1,079,229 |
| 4 | 30 Percent Design Document Preparation | \$490,795 |
| 5 | 60 Percent Design Document Preparation | \$727,917 |
| 6 | 90 Percent Design Document Preparation | \$654,575 |
| 7 | Final Design Document Preparation | \$375,454 |
| 8 | Bid and Award Services | \$70,275 |
| 9 | Independent Technical Review Board | \$58,000 |
| 10 | Supplemental Services | \$700,000 |
| Total Not-to-Exceed Fees | | \$5,901,218 |

3. Terms and Conditions.

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

- A.** The District 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.
- B.** The stated hourly and unit rates listed in the Hourly/Unit Rate Table are effective for the term of this Agreement unless otherwise revised as indicated. After twelve (12) months from the Effective Date of this Agreement, and each 12 months thereafter, these hourly

**ATTACHMENT ONE TO
SCHEDULE D
FEES AND PAYMENTS**

and unit rates may be negotiated by the Consultant and the District, provided Consultant submits written notice to District of Consultant's request to revise the hourly and unit rates ninety (90) calendar days prior to the Effective Date of this Agreement. Both Parties will use as a benchmark for negotiations the percent change for the previous twelve (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 3% whichever is less. A negative index will result in rates remaining the same. Such rate revisions are subject to written approval by the District's Water Supply Division Deputy Operating Officer.

C. Reimbursable Expenses. 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 will be billed on a monthly basis at actual cost plus 5% percent linked to each Agreement Task, as approved by the District's Project Manager, provided that the Agreement total NTE amount is not exceeded. Consultant shall provide receipts for each other direct expense item(s) with monthly invoices submitted. Any equipment purchased on behalf of the District that cost \$50 or more must receive the prior written approval of the District Project Manager. All equipment that the District is invoiced for becomes the property of the District when the Consultant is reimbursed for the amount it paid for that equipment.

D. Expenses incurred by the Consultant for subconsultants providing professional services and for subcontractor, including lab services, will be reimbursed at actual cost plus 5%. Consultant shall provide invoices for all lab services regardless of cost.

4. Additional Fees and Payments Language.

A. For staff with rates exceeding the rate of \$[RATE LIMIT]/hr, the Consultant shall obtain written approval from the District Project Manager as to the numbers of hours per task prior to that individual working on the Project.

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**ATTACHMENT ONE
TO SCHEDULE D
FEES AND PAYMENTS**

HOURLY/UNIT RATE TABLE

| CLASSIFICATION/STAFF | HOURLY/UNIT RATE |
|--|-------------------------|
| Consultant: GEI Consultants, Inc. | |
| Senior Consultant – Grade 8 | \$258.00 |
| Senior Professional – Grade 7 | \$228.00 |
| Senior Professional – Grade 6 | \$194.00 |
| Senior Professional – Grade 5 | \$170.00 |
| Project Professional – Grade 4 | \$143.00 |
| Project Professional – Grade 3 | \$129.00 |
| Staff Professional – Grade 2 | \$116.00 |
| Staff Professional – Grade 1 | \$106.00 |
| Senior CADD Drafter and Designer | \$129.00 |
| CADD Drafter / Designer and Senior Technician | \$116.00 |
| Technician, Word Processor, Administrative Assistant | \$90.00 |
| | |
| Subconsultant(s): | |
| Ross Boulanger, Ph.D., PE. UC Davis | \$250.00 |
| | |
| Subconsultant(s): AECOM | |
| Principal Engineer/Geologist/Scientist | \$220.00 |
| Senior Engineer/Geologist/Scientist | \$150.00 |
| Project Engineer/Geologist/Scientist | \$125.00 |
| Staff Engineer/Geologist/Scientist | \$110.00 |
| GIS/CADD/Senior Staff | \$110.00 |
| Administrative Professional | \$100.00 |
| | |
| Subconsultant(s): Hatch Mott Macdonald | |
| Principal/Project Manager | \$283.04 |
| Senior Project Engineer | \$192.55 |
| Project Manager | \$216.93 |
| Project Engineer | \$141.58 |
| CADD Drafting | \$96.27 |

**ATTACHMENT ONE
TO SCHEDULE D
FEES AND PAYMENTS**

| CLASSIFICATION/STAFF | HOURLY/UNIT RATE |
|--|------------------|
| Subconsultant(s): David Ford Consulting Engineers | |
| Principal | \$277.50 |
| Senior Engineer | \$188.61 |
| Engineer | \$131.60 |
| Junior Engineer | \$88.59 |
| Technical Writer | \$111.67 |
| Subconsultant(s): Cal Engineering & Geology | |
| Senior Principal Engineer | \$228.00 |
| Principal Engineer/Geologist | \$218.00 |
| Associate Engineer/Geologist | \$196.00 |
| Senior Engineer/Geologist | \$180.00 |
| Project Engineer/Geologist | \$144.00 |
| Staff Engineer/Geologist | \$129.00 |
| CADD Designer/Technician | \$108.00 |
| Project Assistant | \$85.00 |
| Subconsultant(s): Frisch Engineering | |
| Principal Engineer | \$185.00 |
| Senior Engineer | \$170.00 |
| Associate Engineer | \$148.00 |
| Technical Assistant | \$110.00 |
| Subconsultant(s): Beyaz & Patel, Inc. | |
| Principal Engineer | \$224.00 |
| Managing Engineer | \$195.00 |
| Senior Engineer | \$153.00 |
| Engineer | \$127.00 |
| CADD Designer | \$121.00 |
| Clerical/Word Processing | \$70.00 |
| Subconsultant(s): JDH Corrosion | |
| Principal Corrosion Engineer | \$220.00 |
| Senior Corrosion Engineer | \$205.00 |

**ATTACHMENT ONE
TO SCHEDULE D
FEES AND PAYMENTS**

| CLASSIFICATION/STAFF | HOURLY/UNIT RATE |
|---|-------------------------|
| Corrosion Design Specialist | \$185.00 |
| Corrosion Project Supervisor | \$175.00 |
| Project Engineer | \$165.00 |
| Corrosion Technician | \$135.00 |
| Field Technician | \$115.00 |
| Subconsultant(s): Carnes & Associates | |
| Professional Land Surveyor | \$150.00 |
| Associate Land Surveyor | \$110.00 |
| 2 Man Field Survey Crew | \$215.00 |
| CAD Draftsman | \$85.00 |
| Clerical | \$75.00 |
| Subconsultant(s): Taber Drilling | |
| <i>Overwater Explorations (estimate of units)</i> | |
| Barge Mob/Demo | \$11,750 lump sum |
| Crane to assist in Mob/Demob (2) | \$4,750 each |
| Soil Drilling (260 feet) | \$150 per foot |
| Rock Coring (340 feet) | \$165 per foot |
| Wooden Core Boxes (22) | \$80 each |
| 3" Pitcher Tube Sampling (12) | \$35 each |
| Mod Cal Sampling (30) | \$15 each |
| Boring Backfill (5) | \$600 each |
| <i>Land Based Explorations (estimate of units)</i> | |
| Land Rig Mob/Demob | \$2,700 each |
| Soil Drilling (305 feet) | \$82 per foot |
| Rock Coring (815 feet) | \$93 per foot |
| Inclined Hole Drilling (190 feet) | \$150 per foot |
| Packer Testing (10) | \$740 per test |
| Wooden Core Boxes (66) | \$80 each |
| 3" Pitcher Tube Sampling (18) | \$35 each |
| Mod Cal Sampling (30) | \$15 each |
| Boring Backfill (1310) | \$5 per foot |
| Cuttings Disposal (1310) | \$7 per foot |

**ATTACHMENT ONE
TO SCHEDULE D
FEES AND PAYMENTS**

| CLASSIFICATION/STAFF | HOURLY/UNIT RATE | |
|---|------------------|------------------|
| Subconsultant(s): Taber Drilling | | |
| Assist Geophysicist (8) | \$1,180 each | |
| Hammer Calibration | \$2,500 each | |
| | | |
| 1-1/2 " PVC Piezometer Installation | \$11 per foot | |
| 1" PVC Piezometer Installation | \$7 per foot | |
| Borehole Reaming for Full Piezometer Sizing | \$45 per foot | |
| 6" Christie Box | \$45 each | |
| 8" Christie Box | \$75 each | |
| 12" Christie Box | \$115 each | |
| Standpipe Monument | \$125 each | |
| | | |
| Subconsultant(s): Cooper Testing Laboratories | | |
| Laboratory Testing | | |
| Test Type (soil) | ASTM | 2016 Rate |
| Sieve analysis with wash 200 | D422 | \$109.00 |
| Std. Hydrometer tests | D422 | \$182.00 |
| Compaction test, | D1557 or D698 | |
| 4-in mold | | \$260.00 |
| 6-in mold | | \$311.00 |
| Moisture Content and density of soils | | \$34.00 |
| Maximum Density using a Vibratory Table | D4253 | \$362.00 |
| Atterberg Limits, Dry method, 3 pts | D4318 | \$163.00 |
| Specific Gravity of Soils | D854 | \$89.00 |
| Porosity | D7263 | \$109.00 |
| One-Dimensional Consolidation Testing of Soils | D2435 | \$376.00 |
| rebond - reload per load | | \$37.00 |
| Constant Rate of Strain Consolidation | D4186 | \$507.00 |
| Unconfined Compression Strength of Cohesive Soil | D2166 | \$73.00 |
| Unconsolidated-Undrained Triaxial Compression Test | D2850 | \$136.00 |
| back pressure saturation add | | \$99.00 |
| Consolidated-Undrained Triaxial Compression Test on Cohesive Soils with pore pressure | D4767 | \$470.00 |
| Ko consolidation add | | \$260.00 |
| Consolidated-Undrained Triaxial | D4767 | \$1,010.00 |

**ATTACHMENT ONE
TO SCHEDULE D
FEES AND PAYMENTS**

| | | |
|---|-------------|------------------|
| Compression Test on remolded sample, 4-inch diameter with pore pressure | | |
| Direct Shear Test of Soils Under Consolidated Drained Conditions | D3080 | \$209.00 |
| Standard Test Method for Permeability of Granular Soils (Constant Head) | D2434 | \$318.00 |
| Standard Test Method for Identification and Classification of Dispersive Clay Soils by the Pinhole Test | D4647 | \$423.00 |
| Soil R-value, CTM 301 | CTM301 | \$250.00 |
| Corrosivity per Caltrans standards: CTMs 201, 202, 417, 422, 643 | | \$240.00 |
| Test Type (rock) | ASTM | 2016 Rate |
| Unconfined Strength of Rock with Young's Modulus | D7012 | \$219.00 |
| Point Load Strength Index of Rock Core | D5731 | \$78.00 |
| Slake Durability | D4644 | \$193.00 |
| Splitting Tensile Strength-Brazilian Splitting Test (per point) | D3967 | \$109.00 |

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**ATTACHMENT TWO TO
SCHEDULE D
SCHEDULE OF COMPLETION**

1. This Agreement commences on the Effective Date, subject to accomplishment of all of the conditions to formation of an agreement listed in the Agreement at Section Twelve, Miscellaneous Provisions, Subsection 2., Formation of Agreement.
2. This Agreement expires on **June 30, 2020**, unless, prior to its expiration, its term is modified by a written amendment hereto, signed by both Parties.
3. District's Project Manager 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 | Duration From Notice to Proceed (months) |
|-------------|------------------------------------|---|
| 1 | Project Management | Agreement Term |
| 2 | Data Collection and Investigations | 12 |
| 3 | Basis of Design | 18 |
| 4 | 30% Design Document Preparation | 9 |
| 5 | 60% Design Document Preparation | 15 |
| 6 | 90% Design Document Preparation | 23 |
| 7 | Final Design Document Preparation | 26 |
| 8 | Bid and Award Services | 30 |
| 9 | Independent Technical Review Board | 26 |
| 10 | Supplemental Services | Agreement Term |

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**ATTACHMENT THREE TO
SCHEDULE D
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

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

| Team Member | Project Role | Contact Information |
|--------------------|-------------------------------|--|
| Joe Green-Heffern | Project Manager | 180 Grand Ave., Suite 1410 Oakland, CA 94612 510-350-2919 jgreenheffern@geiconsultants.com |
| Bill Rettberg | Principal-in-Charge | 180 Grand Ave., Suite 1410 Oakland, CA 94612 510-350-2910 wrettberg@geiconsultants.com |
| Matt Powers | Engineering Manager | 180 Grand Ave., Suite 1410 Oakland, CA 94612 510-350-2902 |
| Stephen Verigin | QA/QC and DSOD Liaison | 2868 Prospect Park Dr, Suite 400 Rancho Cordova, CA 95670 916-631-4574 sverigin@geiconsultants.com |
| Alberto Pujol | Lead Dam Engineer | 180 Grand Ave., Suite 1410 Oakland, CA 94612 510-350-2908 apujol@geiconsultants.com |
| Mark Freitas | Lead Geotechnical Engineer | 180 Grand Ave., Suite 1410 Oakland, CA 94612 510-350-2906 mfreitas@geiconsultants.com |

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

| Firm | Project Role | Contact Information |
|------------------------------|--|--|
| AECOM | CEQA permit coordination, and constructability reviews | 1333 Broadway, Suite 800 Oakland, CA 94612 T:510-893-3600 Contact: Steve Leach 510-874-3205 Steve.leach@aecom.com |
| Cal Engineering & Geology | Geotechnical engineering services and civil engineering design for the Hicks Road realignment. | 1870 Olympic Boulevard, Suite 100 Walnut Creek, CA 94596 T:925-935-9771 Contact: Phil Gregory 925-935-9771 pgregory@caleng.com |

**ATTACHMENT THREE TO
SCHEDULE D
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

| Firm | Project Role | Contact Information |
|---------------------------------------|---|--|
| Hatch Mott McDonald | Services associated with tunnel analyses and designs for the new outlet works | 4301 Hacienda Drive, Suite 300 Pleasanton, CA 94588 T: 925-469-8010 Contact: Dave Young 604-637-4563 Dave.young@hatchmott.com |
| David Ford Consulting Engineers, Inc. | Hydraulics and Hydrology services | 2015 J Street, Suite 200 Sacramento, CA 95811 T: 916-447-8779 Contact: Tom Molls 916-447-8779 tmolls@ford-consulting.com |
| Carnes & Associates | Surveying services | 9505 Sugar Babe Dr. Gilroy, CA 95020 T: 408-847-2013 Contact: Gary Carnes 408-847-2013 gary@carnesandassociates.net |
| Frisch Engineering, Inc. | Electrical engineering services | 13405 Folsom Blvd., Unit 600 Folsom, CA 95630 T: 916-353-1025 Contact: Thomas Frisch 916-353-1025 tfrisch@frischengineering.com |
| JDH Corrosion Consultants, Inc. | Corrosion engineering and evaluations | 100 Willow Pass Court Concord, CA 94520 T: 925-927-6630 Contact: J. Darby Howard 925-927-6330 dhoward@jdhcorrosion.com |
| Beyaz and Patel, Inc. | Structural engineering for the outlet works and ancillary structures | 1280 Civic Drive, Suite 204 Walnut Creek, CA 94596 T: 925-934-0707 Contact: Gary Ho 925-949-2661 gho@beyazpatel.com |
| Taber Drilling | Provide equipment and labor to complete exploration borings | 536 Galveston st. West Sacramento, CA 95691 T: 916-371-8234 Contact: Brian Young 916-371-8234 byoung@taberdrilling.com |

**ATTACHMENT THREE TO
SCHEDULE D
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

| Firm | Project Role | Contact Information |
|---------------------------|--|--|
| Cooper Testing Labs, Inc. | Laboratory testing and analysis of soil and rock samples | 937 Commercial St. Palo Alto, CA 94303 T:650-213-8436 Contact: Peter Jacke 650-213-8436 peter@coopertestinglabs.com |

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**ATTACHMENT FOUR TO
SCHEDULE D
REFERENCE MATERIALS**

| Ref No. | Description |
|---------|--|
| 1 | Quality and Environmental Management System (QEMS) Fact-Sheet. |
| 2 | Santa Clara Valley Water District Non-Disclosure Agreement (NDA) |
| 3 | Personal NDA (PNDA) |
| 4 | GIS Product Standards July 2015 version |
| 5 | Santa Clara Valley Water District , April 2012, Supporting Technical Information Document (STID) for Guadalupe Dam |
| 6 | URS Corporation, 2012, Final Report SSE1B-C Volume 1 & Volume 2- Appendices, Seismic Stability Evaluation of Guadalupe Dam, May 22, 2012. |
| 7 | URS Corporation AMEC, 2012, Design Memorandum No. 7, Recommended Reservoir Restriction, Seismic Stability Evaluation SSE1B, Almaden and Guadalupe Reservoirs, February 28, 2012. |
| 8 | URS Corporation AMEC, 2012, Design Memorandum No. 8A (DM-8A), Conceptual Remedial Alternatives, Seismic Stability Evaluation SSE1B, Guadalupe Dam, March 7, 2012. |
| 9 | DSOD Letter dated April 25, 2012 regarding operating restrictions and Project Schedule for Guadalupe Dam |
| 10 | Santa Clara Valley Water District, 2012, Dam Maintenance Program, Final Program Environmental Impact Report, January 2012. |
| 11 | Santa Clara Valley Water District, 2012, Dam Maintenance Program, Final Program Environmental Impact Report- Appendices, January 2012. |
| 12 | Santa Clara Valley Water District, 2012, 2012 Water Supply and Infrastructure Master Plan, October 2012 |
| 13 | Black & Veatch, 2012, Guadalupe Dam Intake Structure Evaluation, (memorandum), August 1, 2012 |
| 14 | Cal Engineering and Geology, 2014, Geotechnical Data Memorandum Guadalupe Dam, dated August 2014 |
| 15 | David Ford Consulting Engineers, 2014, Guadalupe Dam and Reservoir: Probable maximum flood (dam number 72-005), dated March 2014 |
| 16 | Cal Engineering and Geology, 2014, Guadalupe Dam Borrow Study, Field Exploration Work Plan, dated September 2014 |
| 17 | GEI Consultants, 2014, Borrow and Spoil Siting Suitability Study, Guadalupe Dam and Reservoir, dated August 2014 |
| 18 | GEI Consultants, 2014, Problem Definition Report, Guadalupe Dam Volume 1 and Volume 2, dated September 2014 |
| 19 | GEI Consultants, 2015, Guadalupe Dam INITIAL Staff Recommended Alternative Drawings, dated June 2015 (Preliminary) |
| 20 | GEI Consultants, 2015, Alternatives Report (Draft), Guadalupe Dam, Volume 1 and Volume 2, dated July 2015 |
| 21 | GEI Consultants, 2015, Planning Study Report (Draft), Guadalupe Dam, dated August 2015. |

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Santa Clara Valley Water District
CONFORMED COPY

File No.: 16-0008

Agenda Date: 3/8/2016
Item No.: 5.1.

BOARD AGENDA MEMORANDUM

SUBJECT:

Consultant Agreement With GEI Consultants, Inc., for Design Services for Guadalupe Dam Seismic Retrofit Project - Project No. 91894002 (San Jose).

RECOMMENDATION:

Approve the Consultant Agreement with GEI Consultants Inc., for Design Services for the Guadalupe Dam Seismic Retrofit Project (Project), for a not-to-exceed fee of \$5,901,218.

SUMMARY:

The purpose of the Guadalupe Dam Seismic Retrofit Project is to reinforce the dam's downstream embankment to meet current seismic standards and to replace or improve other infrastructure associated with the dam to ensure another fifty years of reliable reservoir operations. The design services agreement with GEI Consultants, Inc. (GEI) will result in the preparation of design plans and specifications for constructing the retrofit and associated improvements. GEI staff and subconsultants possess the technical expertise necessary for Project design as they are experienced in seismic analysis, evaluation, and design of embankments, tunnels, intake structures, and borrow source development.

Staff anticipates completion of design in fall 2018, and award of a construction contract for this Project in early 2019.

Project Background

Guadalupe Dam, an earthen fill dam, was constructed in 1936. The reservoir has a capacity of 3,460 acre-feet, and stores watershed runoff. The impounded water is used for conservation, groundwater recharge, incidental flood protection, and, environmental flows.

In August 2009, the District retained URS Corporation to perform a Seismic Stability Study (Study) for Guadalupe and Calero Dams. The authors of the Study concluded that during a large magnitude earthquake, the downstream slopes of the Guadalupe Dam could become unstable. As a result, the District and the California Department of Water Resources, Division of Safety of Dams (DSOD) agreed to restrict the water level in the reservoir until the seismic retrofit of the dam is completed. Currently, the dam is operated such that the maximum water level remains 18 feet or greater below

the spillway crest, which reduces the reservoir's allowed storage to about 66 percent of total storage capacity.

Previous Board Actions

On August 27, 2013, the Board approved a consultant agreement with GEI Consultants Inc. to perform Planning Services for Calero and Guadalupe Dams Seismic Retrofits Project. The resulting Planning Study Report for the Guadalupe Dam retrofit was provided to the Board via a Non-Agenda Memorandum in December 2015.

Staff is now recommending Board approval of the Design Services Agreement for Guadalupe Dam to prepare design plans, specifications, and construction documents.

Design Consultant Selection Process

On August 27, 2015, staff published a Request for Proposals (RFP) for design services and sent the RFP to more than 100 firms on the District's self-registered list of Geotechnical Engineering consultants. In addition, the RFP was posted on the District's Contract Administration System internet portal and advertised in the Silicon Valley-San Jose Business Journal and the Small Business Exchange. An optional pre-proposal meeting and site visit were held on September 9, 2015, and were attended by representatives from three large consulting firms and eleven subconsultants. During the 7-week proposal period, staff issued four addenda to clarify details and instructions in the RFP and respond to questions received from interested consultants.

Over the past several years of dam retrofit planning and design work, staff has determined that the number of firms qualified to perform such work is very limited. If exclusions to future phases of work are included in the RFP, there are not many consultant firms who are eligible to compete. In the case of the Calero Dam Seismic Retrofit design RFP process last spring, the exclusion of any firm that was involved in the Planning Phase from proposing on design work was applied; this resulted in only one firm submitting a proposal for design. To encourage more competition, staff decided to drop the exclusion terms in the design RFP for Guadalupe Dam work.

The District received proposals from two consultants, GEI Consultants Inc. and McMillen Jacobs Associates on October 6, 2015. A Consultant Review Board (CRB), consisting of three subject matter experts from the District and one external subject matter expert from the East Bay Municipal Utility District, evaluated the proposals and interviewed the two proposers on October 27, 2015. Subsequently, the CRB recommended that staff undertake contract negotiations with GEI Consultants Inc.

Information on the past performance of GEI, small business participation for this Agreement, and other related matters is provided in Attachment 1.

Consultant Services Scope of Work

The Consultant Design Services Agreement includes the required tasks for GEI to perform all necessary Project design services. A summary of the tasks and budget for this Agreement is presented in Table 1. The basic scope of services includes project management, data collection and development of the basis of design documentation, preparation of design documentation (30%, 60%, 90% and final design), and provision of bid and award services. The supplemental services task includes additional services, if necessary, to address spillway modeling studies, updating of seismic hazard ground motions, constructability reviews, value engineering workshops, and other unforeseen issues. Prior to performing any supplemental services, the Consultant will be required to obtain written authorization from the Water Utility Capital Division Deputy Operating Officer.

Table 1 Summary Tasks and Fees for Proposed Consultant Agreement with GEI Consultants Inc.

| Task | Description | Total Not-to-Exceed Fees |
|------|---|--------------------------|
| 1 | Project Management Services | \$529,717 |
| 2 | Data Collection and Investigations | \$1,215,256 |
| 3 | Basis of Design | \$1,079,229 |
| 4 | 30% Design Document Preparation | \$490,795 |
| 5 | 60% Design Document Preparation | \$727,917 |
| 6 | 90% Design Document Preparation | \$654,575 |
| 7 | Final Design Document Preparation | \$375,454 |
| 8 | Bid and Award Services | \$70,275 |
| 9 | Independent Technical Review Board | \$58,000 |
| 10 | Supplemental Services during Design | \$700,000 |
| | Total Not-to-Exceed Fee (Task 1 through 10) | \$5,901,218 |

FINANCIAL IMPACT:

The Project is included in the District's FY 2016-20 Capital Improvement Program. The not-to-exceed fee for the Design Services Agreement with GEI Consultants Inc. is \$5,901,218. There are adequate funds in the Board-adopted FY2015-16 Budget to encumber \$3.0 million for design services in the current fiscal year. The remaining amount of \$2,901,218 will be encumbered in FY2016-2017.

CEQA:

The recommended action does not constitute a project under CEQA because it does not have a potential for resulting in direct or reasonably foreseeable indirect physical change in the environment. Once the Project development is complete, a CEQA environmental analysis will be provided for the Board to consider as part of its Project approval process.

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ATTACHMENTS:

Attachment 1: Consultant Agreement Justification

Attachment 2: Consultant Agreement

UNCLASSIFIED MANAGER:

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