REQUEST FOR PROPOSALS (RFP)

FOR

ECHOWATER FACILITY

PRIMARY SLUDGE THICKENING PROJECT

SACRAMENTO AREA SEWER DISTRICT
EchoWater Resource Recovery Facility

RFP No. 9159

RFP ISSUE DATE:
October 24, 2025

PROPOSAL DUE DATE & TIME:
December 05, 2025
3:00 P.M.

Contents

1. INTRODUCTION

The Sacramento Area Sewer District (SacSewer) is a sewage collection, treatment, and resource recovery utility providing service to more than 1.6 million people in a 386 square-mile service area in the Sacramento region. SacSewer's service area includes the unincorporated areas of Sacramento County, and the cities of Citrus Heights, Rancho Cordova, Elk Grove, Folsom, Sacramento, and West Sacramento.

SacSewer owns and operates over 5,000 miles of sewer pipes and is responsible for the operations and maintenance of those pipes. Sewage is collected from residential, commercial, and industrial customers and conveyed to SacSewer's EchoWater Resource Recovery Facility (EchoWater Facility) near Elk Grove.

The following is SacSewer's mission and vision:

Mission: *Serving our community by protecting public health and the environment through sewage collection, treatment, and resource recovery.*

Vision: *Setting the bar for excellence in utility management and environmental sustainability.*

2. BACKGROUND

In April of 2021, the EchoWater Facility fully completed its transition from secondary activated sludge treatment to a biological nutrient removal (BNR) process. The wasted sludge from the secondary process is conveyed to the solids process train which consists of thickening, blending, anaerobic digestion, biosolids recycling, biosolids storage and onsite land disposal. During the design of the new BNR process it was assumed that the amount of wasted sludge to the solids train would be essentially the same and thus the solids train was largely left unchanged post BNR startup. The loading, or amount of waste activated sludge, from the BNR is roughly similar to the prior operation; however, the characteristics of the sludge are different. The new wasted sludge from the BNR process is more stable and does not appear to be as biodegradable as past performance, which will therefore require additional solids processing in order to achieve the same level of treatment going forward. Additionally in 2023, the EchoWater Facility's Tertiary Treatment Facility was commissioned and the filters captured and returned to the headworks a significant amount of mostly inert solids that are not very settleable. This type of solids further added to the volume and changing characteristics of the solids train.

The anaerobic digestion performance has been adversely impacted by the new BNR sludge. The new sludge does not break down as easily, resulting in more biosolids leaving the digestion process and entering the solids storage basins (SSBs). The SSBs store digested solids for approximately four to five years on average, where additional solids stabilization

occurs before they are harvested and land applied during the warmer months of May to October. Historically, the SSBs reduce the stored solids inventory by an additional 25 to 30 percent annually through volatile solids (VS) destruction, however, it is believed that the VS reduction is much less with the new sludge. Measurements and physical observations show that the solids are not settling or distributing as in the past. As a result, the solids storage capacity of the SSBs has decreased significantly.

When the BNR was put into service in early 2021, the EchoWater Facility had to operate one additional digester (six total) than was needed in the years leading up to the BNR conversion. Even with the additional Digester in service, the EchoWater Facility saw a decrease in gas production, which is consistent with a lower solids destruction rate during digestion. After about a year of operation with the new BNR, Digester 9 was taken out of service (August 2022) for routine maintenance, bringing the digester operation back to pre-BNR condition with only five in service. Almost immediately, the SSBs started to see an appreciable increase in loading. The SSB loading was further increased when operational changes (flow equalization) were enacted to optimize the BNR process. The solids inventory estimated in the SSBs increased from just under 70% capacity (target) at the start of 2022, to more than 90% capacity in 2023. The SSB ponds have historically been managed to 70% of solids capacity, or less, for optimum pond performance; however, the overall available capacity has been reduced to an unhealthy level due to the poor settling of the new sludge.

The number of digesters in service is regulated by the California Accidental Release Prevention Program (CalARP) constraints. However, the constraint should be lifted when the BioGen project becomes operational. Therefore, the digestion capacity is calculated based on the largest unit being out of service (LUOOS). This assumption allows for cleaning of the digesters on an approximate rotation of one digester every 8 years.

Mesophilic anaerobic digestion capacity is based on both volatile solids load and hydraulic retention time (HRT). The typical VS loading for mesophilic digesters ranges between 0.06 and 0.30 (lbs VS/cu.ft/day). Assuming a design VS loading of 0.18 VS lb/cu.ft/day, the digesters appear to have adequate capacity through to the end of the project horizon of 2048. The preferred stabilization time for digester HRT is 18 days for Waste Activated Sludge (WAS) from the BNR process; however, SacSewer can get by with a minimum of 15 days HRT to meet compliance with US EPA 503 standards for Class B Biosolids.

The average and maximum month flow to the digesters were analyzed for two scenarios:

1. Primary sludge unthickened at 3% - 3.5% Total Solids (TS).
2. Primary sludge thickened to approximately 6% TS before digestion

If primary sludge is not thickened, then 3 additional digesters will be required to service the estimated 2048 MS flow and loads to meet the minimum 15-day HRT required for EPA 503 Class B biosolids designation. If primary sludge is thickened, then no additional digesters will be required for the 2048 MS flow and loads. A digester expansion project is more expensive than a primary sludge thickening project, so this project is the preferred alternative over digester expansion.

3. OBJECTIVE

SacSewer seeks the services of a consulting engineering firm or team (Consultant) for design and support during construction of the Primary Sludge Thickening Project (PST Project). This Request for Proposal (RFP) includes the information needed for proposal preparation and various attachments associated with proposal preparation and contractual requirements, including a Sacsewer sample agreement, sample labor hour matrix, and the Biosolids Management Plan. The RFP and all attachments describe the scope requirements for the Project and are posted on SacSewer's website (https://www.sacsewer.com/business-opportunities/).

4. RFP TIMELINE

Event or Action	Deadline
Release of RFP	October 24, 2025
Pre-Proposal Meeting (Proposers to request time)	Nov 5, 2025
Question Submission Deadline	November 12, 2025, 5:00 PM Pacific Time (PT)
Final date to provide Responses to Questions on Business Opportunities webpage	November 17, 2025
Proposal Submission Deadline	December 5, 2025,3:00 PM PT
Consultant Interviews (if requested by SacSewer)	December 18, 2025
Notice of Intent to Award	December 29, 2025, or later

5. PRE-PROPOSAL MEETINGS

Prospective consultants or consultant teams may request one private meeting with SacSewer after the RFP is issued and prior to the proposal due date. Meetings may be scheduled on the date listed in Section 4 above for up to one hour by contacting SacSewer's designated point of contact for this RFP listed in Section 6. Meeting times will be scheduled on a first come first served basis, to be held at the EchoWater Facility. Prospective consultants can meet with SacSewer staff, ask questions, and discuss the content of the RFP in further detail.

Generally, any information and/or questions raised during these individual meetings will be kept private; however, SacSewer may determine that some information be summarized and shared with all proposers. If required, a document addressing the summarized information, or

modifications, will be uploaded to this RFP's posting on SacSewer Business Opportunities website no later than the date set in Section 4 of this RFP.

6. QUESTIONS AND COMMUNICATION ABOUT THIS RFP

   All communication regarding this RFP should be directed to Daniel (Dan) Wilson via email at wilsonda@sacsewer.com, SacSewer's designated point of contact. Questions for this RFP should be submitted to the SacSewer's designated point of contact via email no later than the date and time stated in Section 4 of this RFP. If there is missing information in the RFP, or incorrect information is provided, inquiries and responses related to those issues will be posted at https://www.sacsewer.com/business-opportunities/ by no later than date stated in Section 4 of this RFP.

   It is the responsibility of interested firms to periodically check the SacSewer website for addenda to this RFP and responses to inquiries.

7. PROJECT DESCRIPTION

   The project will design and construct a new primary sludge thickening facility with all of the necessary appurtenances needed for the new facility to function properly. The proposed project location at the time of this RFP is east of the I/E Building, just south of the existing gravity belt thickener building; however, the designer and the project team will evaluate if this location remains preferred. This facility will likely include one or more buildings to house sludge screening equipment, centrifuges, mixing tanks, pumps, grinders, odor control facilities and several other miscellaneous appurtenances needed for a fully functional operation. Initial planning efforts identified centrifuges as the preferred treatment process for this facility; however the designer shall confirm this preference through a BCE analysis. There may be the need to pilot test different manufacturers of sludge thickening equipment to efficiently design the building structures, but the project team will make that decision with the Consultant after more information is known during the planning phase.

8. SCOPE OF SERVICES

   The project will be divided into the following six phases:

   Phase 1 – Planning
   Phase 2 – Design
   Phase 3 – Bid and Award
   Phase 4 – Construction
   Phase 5 – Commissioning
   Phase 6 – Closeout

The Consultant will provide engineering services for all six project phases but will only provide a detailed scope and fee for the first three phases as part of this RFP. During the planning and design phases, the Consultant and SacSewer will work to resolve design issues, leading to the production of contract documents for construction. During the construction phase (under a future amendment), the Consultant will assist SacSewer with requests for information (RFIs) and submittal reviews from the contractor and will provide other construction support services relating to the installation of the facilities. The Consultant will also participate as necessary during the commissioning and closeout phases of the Project.

The successful proposal will demonstrate the approach and qualifications for the **entire project** (Project Phases 1-6); however, only services for Phases 1-3 (through the bid and award period) will be negotiated and incorporated into an agreement. Upon completion of the bid period, the construction, commissioning, and closeout phase services will be negotiated and then incorporated into the agreement via an amendment.

This scope of services shall be used as a basis for preparation of the proposal. Additional tasks or modifications to the scope of services that the Consultant feels will produce a more cost-effective project should be included in the proposal. The scope of services is supplemented by detailed requirements contained in various attachments to this RFP.

In general, Sacsewer requires that all design documents use similar format, symbols, and conventions and provide, at a minimum, the level of detail as defined in Attachment E - Design Contract Requirements for EchoWater Project, Attachment F - Sacsewer CAD/BIM Standards, and Attachment G – Design Guidelines. However, there are instances where more design details are required.

The Consultant is required to use SacSewer's Program Management Information System (PMIS) for various functions. The PMIS is a web-based program called PMWeb. PMWeb description and functions are defined in Attachment H – Design Consultant Project Management Requirements.

A. PHASE 1 – PLANNING

This task includes project management and Basis of Design Report (BODR) development and confirmation tasks performed during the planning phase of the Project.

Task 1.1 –Project Management (Planning Phase)

Consultant shall be responsible for tasks related to the project in terms of staffing, budget, schedule and scope; promote communication within the project team and document key decisions and risks.

Items covered under this task include, but are not limited to:

- Project management plan.
- Consultant Project Safety Plan - Prepare and submit a project-specific safety plan consistent with Consultant company policy. The plan must incorporate Sacsewer's safety requirements. The plan must meet the requirements of an OSHA Injury and Illness Prevention Plan.
- Design submittal contents. Prepare a document summarizing the proposed deliverables at each design milestone and a narrative description of the level of completion of each item. Review this with SacSewer's Project Manager (PM) to establish common expectations.
- Kickoff meeting for planning and preliminary design phases.
- Weekly progress meetings at the EchoWater Facility.
- Support Sacsewer's Project Manager (PM).
- Other meetings. In addition to specific types of meetings described in the RFP and attachments, Consultant should anticipate participation in management briefings, specialty meetings, and other meetings, throughout the duration of the project.
- Scope, budget and schedule management and updates.
- Interface with PMWeb, the program management information system deployed for the program.
  a. Assist SacSewer's PM in updating the risk register and the Risk Management Plan as needed. Assist SacSewer's PM in identifying, tracking, managing and mitigating project risks that are shared by Sacsewer and Consultant. Identify, manage and mitigate Consultant's project risks.
- Management and coordination of subconsultants.
- Management and coordination of Consultant staff.
- Monthly invoicing and schedule updates.
- Monthly earned value analyses and progress reports.

Additional detail regarding project management requirements is provided in Attachment H – Design Consultant Project Management Requirements.

Task 1.2–BODR Development

Consultant shall perform evaluations and analyses to confirm the major project design elements including flows and loads, process type and sizing, general site layout, and connection/interface with existing utilities and structures, and with other projects. Consultant is expected to offer ideas and approaches that improve functionality, flexibility and/or cost-effectiveness of the Project for consideration by Sacsewer. A review of the overall project schedule should be included.

The Consultant shall develop the BODR and submit via PMWeb for Sacsewer review and comment. The Consultant's budget should include three meetings/workshops to discuss the BODR.

The Consultant will prepare presentation material and pre-meeting handouts as required to present the BODR to SacSewer management. The end result of this task will be acceptance of full responsibility for the Project's design by the Consultant.

B. PHASE 2 – DESIGN

Phase 2 – Design consists of four main tasks:

- Task 2.1 – Preliminary Design Report (PDR)
- Task 2.2 – Design Submittal 1
- Task 2.3 – Design Submittal 2
- Task 2.4 – Design Submittal 3 and Bid Documents

The Consultant shall provide engineering services to prepare the PDR and subsequently produce a complete package of biddable plans, technical specifications, and other contract documents as required based on the design concepts and criteria developed during the PDR task.

The Consultant shall maintain up-to-date comments and responses and decision logs in electronic format on the PMWeb system for all Sacsewer comments received as a result of each submittal review. Sacsewer comments shall be incorporated into the next submittal, as appropriate.

Task 2.1 – Preliminary Design Report

Consultant will define the project in sufficient detail to establish a clear direction for the subsequent design phases, complete preliminary site layout to a level of detail that will establish overall space requirements/allocation, estimate construction cost for comparison to SacSewer's project budget, and establish a preliminary construction schedule. The Consultant will prepare a series of TMs culminating in the preparation of a draft and final PDR. As part of the proposal, Consultant may propose changes to and/or consolidation of TM topics listed in the tasks below. For the listed BCEs, the Consultant may propose changes to and/or consolidation of these items. The PDR shall include a summary of the TMs, plus drawings showing the proposed improvements.

Task 2.1.01 - Project Management (PDR Phase)

The project management task encompasses overall project management, coordination with other projects, and project permitting support.

Task 2.1.01.1 – Project Management

Consultant shall continue to ensure responsibility of the project in terms of staffing, budget, schedule and scope, promote communication within the project team, and document key decisions and risks. The Consultant may co-locate one or more members of Consultant's core project management team with the SacSewer team at the EchoWater Facility for the duration of the design phase.

Items covered under this task include, but are not limited to:

- Weekly progress meetings.
- Project workshops and focused meetings.
- Other meetings. In addition to specific types of meetings described in the RFP and attachments, Consultant should anticipate participation in management briefings, and other meetings, throughout the duration of the project.
- Scope, budget and schedule management and updates.
- Interface with the program management information system PMWeb.
- Assist the SacSewer PM in updating the Risk Register and the Risk Management Plan as needed. Assist the SacSewer PM in identifying, tracking, managing and mitigating project risks that are shared by Sacsewer and Consultant. Identify, manage and mitigate Consultant's project risks.
- Management and coordination of subconsultants.
- Management and coordination of Consultant staff.
- Monthly invoicing and schedule updates.
- Monthly earned value analyses and progress reports.

Additional detail regarding project management requirements is provided in Attachment H – Design Consultant Project Management Requirements.

Task 2.1.01.2 - Permitting Assistance

For all applicable project elements of this Scope of Services, the Consultant shall provide contract documents, which ensure that facility features and performance and construction procedures comply with all conditions of existing permits and permits required to construct this project. Construction drawings, specifications and supplemental drawings shall be prepared, as necessary, in the format required to obtain all permits.

The project has not performed the California Environmental Quality Act (CEQA) process yet, but is anticipated to be a Mitigated Negative Declaration. When the CEQA process is underway, the Consultant may be asked to assist SacSewer by answering questions and

preparing exhibits. The Consultant will verify the bid documents meet the mitigation measures from the CEQA document.

The Consultant shall assist SacSewer in obtaining the permits listed below. This shall include assistance with completing application forms provided by SacSewer, preparing supporting documentation for the permit applications as required by the issuing agency, furnishing the required number of copies of all construction drawings, and exhibits and attending meetings with permitting agencies at the request of SacSewer.

SacSewer staff will execute all applications. All permit fees will be paid directly by SacSewer and will not be part of the Consultant's fee. The Consultant shall submit all supporting documentation in a timely fashion for all permits required for this project which include, but are not limited to, the following:

- Permit to construct from the Sacramento Metropolitan Air Quality Management District (SMAQMD)
- Permit to operate from SMAQMD
- Cosumnes Fire Department
- Sacramento County

In the event that during the CEQA process or the SMAQMD permit process that any type of modeling is required, Consultant shall support SacSewer in the process. This effort should be scoped as Special Services.

Task 2.1.01.3 - Risk Management Plan – Design Phase

The Consultant shall participate in the development of a risk management plan. This participation shall include preparation and attendance of one Risk Management Workshop during the preliminary design phase of work to assist SacSewer in identifying and developing mitigations for potential risks to the project during final design. This workshop is anticipated to last up to four hours. The Consultant should agree that incorporating risk mitigation measures into the project documents is part of the normal scope of a design project and, therefore, is not to be budgeted under this task. This task is limited to the Consultant's participation in development and updating of the Risk Management Plan. Consultant's staff may be designated as a "Risk Owner."

Task 2.1.02 – Quality Assurance/Quality Control Management (PDR Phase)

The Consultant shall implement a quality assurance and quality control (QA/QC) program during the course of executing the scope of work for the Primary Sludge Thickening Project including, at a minimum, the following:

1. Identify the qualified professional assigned the responsibility and accountability for administering the QA/QC program for the duration of the Project. This person shall lead the quality assurance activities and provide evidence of compliance to SacSewer.

2. Provide a structured program for quality control activities including independent reviews by a senior professional of all work products, technical assumptions, and directives. Perform reviews to verify that project deliverables and supporting documentation are complete, understandable, conform to applicable and reasonable standards relative to their intended purpose and meet the requirements of each design submittal.

3. The structured program for quality assurance (QA) activities shall include the planned and systematic actions that provide adequate confidence that an activity or service consistently fulfills the requirements for its intended purpose.

4. Prepare a project-specific QA/QC plan within 20 working days of contract award. The project-specific QA/QC plan shall identify the individuals assigned to perform QC reviews. The QC reviewers shall possess qualifications necessary to perform the review and shall be independent of the project team and the individuals originally providing the services to be reviewed. The Consultant shall coordinate with SacSewer QA/QC guidelines, see Attachment H – Design Consultant Project Management Requirements. The Consultant's QA/QC Plan shall be reviewed and accepted by SacSewer's PM and shall include or reference all the controls necessary for implementation. Major elements of the QA/QC Plan shall include the following at a minimum:

    - The Consultant and all subconsultants shall be responsible for the technical adequacy and quality control of this work.
    - QC will include discipline QC of all design work, coordination of work between disciplines, coordination between drawings and specifications, asset data management, and BIM clash detection. All submittals are to be made clash free.
    - Consultant controls shall ensure that planning and design inputs are correctly translated into planning and design documents such as drawings, procedures, specifications, reports and calculations.
    - The Consultant shall be responsible for the physical control, security and distribution of controlled documents required for performance of the Scope of Work in paper and electronic format.
    - All submittals shall be accompanied by a transmittal letter signed by Consultant's Principal-in-Charge or Project Manager stating that the submitted documents have been checked and identify the reviewers' names. All submittals shall be checked with a goal of assuring accuracy and consistency. Consultant QC staff shall sign an affidavit stating that the QC has been completed.

On a periodic basis, SacSewer will conduct an audit of the Consultant's work to ensure conformance with the QA/QC Plan. SacSewer will notify the Consultant when these audits will occur. For this project, an audit will be done before the PDR submittal and after the DS2 submittal is received. The Consultant shall respond to any SacSewer comments made during the audit within two weeks. If comments are extensive, SacSewer will schedule a follow-up audit approximately 60 days after the comments are received.

SacSewer may also make periodic visits to the Consultant's offices to review the progress of the technical work. These visits may include talking to the Consultant's personnel, reviewing

drawings (both hardcopy and electronic), discussing QA/QC techniques that will be employed by SacSewer in reviewing drawings and assisting the Consultant's staff with understanding the Project.

The Consultant shall include labor-hours for all QA/QC activities related to preliminary design as part of this task, including the development of the QA/QC Plan and review of deliverables either by the Consultant, or by the Consultant in conjunction with SacSewer staff in meetings and workshops. These labor-hours and associated costs shall be budgeted and tracked separately in the Consultant's invoice as determined at the beginning of the Project.

Task 2.1.03 – Construction Cost Estimate

The Consultant shall prepare a planning level construction cost estimate to be included as part of the draft PDR submittal. Refer to Attachment J – Design Consultant Cost Estimating Guidelines for details regarding construction cost estimating requirements. After review and when accepted by SacSewer, this estimate will be the baseline estimate for the project as defined by the PDR. Unless there is a SacSewer-approved change in Project scope establishing a new baseline, the PDR baseline will not be changed. All future estimates will be compared to the baseline estimate by the Consultant. If future estimates vary from the baseline estimate, the Consultant shall identify the specific reasons for variations and identify corrective actions to align the newest estimate with the baseline. The Consultant shall particularly note the change in contingency percentages at various stages of design. The Consultant shall submit two (2) hard copies along with the electronic files to SacSewer.

Task 2.1.04 – Preliminary Construction Schedule

The Consultant shall prepare a preliminary construction schedule using the latest version of Microsoft Project or Oracle Primavera P6. The initial construction schedule shall be submitted shortly following the PDR and updated with each subsequent design submittal as the design becomes more refined. The schedule shall include the milestones included in Section 4 of this RFP, and also include each of the Design Submittals and Workshops, estimated bid date, and approximate dates for phases 4 through 6. It shall include a construction sequencing plan consistent with the Implementation Plan in TM6 and include all major construction, testing and commissioning activities necessary to establish the project critical path and milestone durations. This schedule shall be broken down into major work packages and areas. It must be detailed enough to identify the major sequencing of work and coordination of interface to other areas of work. A basic startup, commissioning and testing schedule must be included.

The level of detail in the schedule submittals should be consistent with that of the 3D model and the construction estimate. The activity descriptions in the schedule should be consistent with the line items in the construction estimate breakdown and with the object descriptions in the 3D model.

The Consultant is expected to apply work production estimating techniques to determine activity durations to ensure there is validity to the proposed schedule durations. They should

also include seasonal weather considerations and any needed shutdowns or blackout periods in developing the schedule durations.

A schedule narrative should be delivered with each schedule submittal describing the sequencing, constraints and any critical sections of work. Any long-lead procurements shall also be identified at this stage. The Consultant shall submit two (2) hard copies, the electronic native file, and a PDF copy of the construction schedule to SacSewer.

Task 2.1.05 – Field Survey

A project-specific topographic survey shall be provided by the designer to support the Project. The Consultant shall identify additional design-level survey requirements and include the required scope for this effort in the proposal.

Task 2.1.06 – Geotechnical Services

Consultant will hire a geotechnical engineer of record for the Project who shall prepare a complete and thorough design-level geotechnical investigation and report. The following tasks are anticipated as part of this effort.

Task 2.1.06.1 – Review of Existing Data – Preliminary Geotechnical Report

The Consultant shall review all known soils and inspection reports. These reports will be made available to the selected Consultant after successful agreement award. Consultant shall submit a preliminary geotechnical report, based on the existing data review. The report shall cover soil classifications and properties that affect design and construction. The preliminary geotechnical report shall also cover recommendations for subsurface exploration, laboratory testing, access requests, and traffic control for boring work.

Task 2.1.06.2 - Subsurface Exploration

The geotechnical services will include the subsurface exploration necessary to observe, test, and classify soils and monitor groundwater. The number and spacing of borings or other subsurface exploratory means ("borings" hereafter) shall be based on the Consultant's and geotechnical professional's interpretation of needs and recommendations. In addition, a sufficient number of observation wells and groundwater pumping tests shall be conducted to determine the appropriate groundwater dewatering requirements (if needed).

The depth of the borings, proposed sampling, and boring locations shall be adequate to characterize the soils to a depth of at least 10 feet below the bottom of any excavation or any proposed sewer invert elevation. At least four (4) borings shall extend 20 feet below the proposed excavation bottom or sewer/conduit invert. If unexpected or unique soils are encountered, an adequate number of borings shall be taken to try and define the limits of the anomaly.

Consultant shall specify in the proposal the recommended number of borings and observation wells and include them in the cost proposal. The final number of borings and observation wells proposed for the Project will be determined and agreed upon by the Consultant and SacSewer.

The location of all borings and observation wells shall be plotted on a map and attached to the geotechnical report. The borings shall be located by survey coordinates consistent with the Project survey. Complete logs of the soil profiles shall be included in the report.

Task 2.1.06.3 - Geotechnical Report

The Geotechnical Report shall address, but not be limited to, seismic design parameters, soil contamination, groundwater presence, groundwater levels, groundwater contamination, construction dewatering, pipe bedding requirements, trench shoring requirements, engineered fill and settlement potential, excavation of soils, temporary slope stability, location of rock, backfill suitability, backfill compaction, allowable foundation bearing pressures, and many other analyses and recommendations needed to design and construct the Primary Sludge Thickening Project.

If dewatering is deemed necessary, pumping tests will be required to determine dewatering parameters for inclusion in the specifications.

The report shall describe and categorize the soil types and identify potential for off-site disposal locations. The Consultant shall be responsible for establishing the actual scope of work for the geotechnical report. The report shall emphasize specific construction concerns regarding the integrity of sewers, pavement and structures.

The report shall address in detail the excavation impact of the proposed work on all existing structures and utility trenches in the vicinity of the proposed Project. The report also shall focus on the potential collapse of the earth prism located between existing parallel utilities and the trench excavated for any proposed sewer installation. The report shall address all of the information needed for compliance with codes, structural design, buried piping, roads, walkways, and other design elements such as soil corrosivity.

The draft and final geotechnical reports shall be submitted to SacSewer for review and comment. All comments received regarding the geotechnical report shall be addressed.

Task 2.1.07 – Coordination with Other Projects

The project shall be a complete and fully functional facility that is integrated with existing facilities and coordinated with other projects in the vicinity.

The Primary Sludge Thickening Consultant must work closely with SacSewer Staff to coordinate the following:

- Physical points of connection between any projects in the area and existing facilities.

- Hydraulic profile points at the interface between the Project and the components of the existing plant. Consultant will coordinate with SacSewer finalize the hydraulic profiles necessary for the construction of the Project.
- Process control and instrumentation.
- Testing and commissioning plans, requirements and schedules.
- Temporary bypasses, structures, piping and pumping to route water during testing and commissioning.
- Electrical power supply and distribution.
- Building space for O&M staff.
- Ancillary process support systems.
- Contractor access, office trailers and laydown areas.
- Site earthwork, grading, paving, storm drainage and utilities.
- Site access, traffic flow and parking.
- Demolition, facility abandonment, and utility relocation.

Task 2.1.08 – TM-1 Design Criteria

TM-1 will focus on the basis of design and design criteria. The key elements of the BODR shall be incorporated into TM-1. The TM shall include any exceptions being proposed to SacSewer design standards. The TM will also include a list of major equipment and their individual sizing criteria. A general outline for the TM is as follows:

TM-1	Design Criteria
• Flows and loads	
• Process overview	
• Treated water quality	
• Discipline design criteria as needed	
	Civil
	Architecture
	Structural
	Process
	Corrosion
	Noise
	Mechanical (HVAC, plumbing)
	Electrical
	Process and instrumentation
• Process flow diagrams	
• Hydraulic profile	
• Naming and numbering plan for facilities and equipment, including asset	

tagging
• Preliminary drawing list
• CAD/BIM execution plan

Key elements of TM-1 shall include the following:

1. Evaluate process design criteria.
2. Evaluate and analyze system operation for extended periods at equalized maximum day flow and determine any special design requirements and considerations.
3. Augment the discipline design criteria found in the SacSewer design guidelines with design criteria specific to individual design discipline elements.
4. Update the process flow diagrams for the design condition at 181 million gallons per day (mgd) ADWF and for the startup condition. Flow diagrams shall include flow and load values to and from each unit process.
5. Evaluate equipment for the Digesters systems to make sure that the thickened sludge being processed from this Project does not negatively affect the pumping, mixing and general operation of the system.
6. Start development of the Master Equipment List (MEL) including the list of major equipment, develop equipment names and begin to assign tag numbers based on SacSewer's conventions and guidance.
7. Develop a preliminary drawing list.
8. Review SacSewer design guidelines and identify any exceptions.
9. Submit the CAD/BIM Execution Plan including hardware, software, configuration, responsibilities, and methodologies in accordance with Attachment F - SacSewer CAD/BIM Standards.

Task 2.1.9 – TM-2 Unit Processes

TM-2 will focus on the preliminary design of each unit process. The Consultant may divide the unit processes into separate TMs, but the final deliverable for TM-2 must include all process components associated with the Project under one cover. Since there will be an evaluation of technology task for the consultant to verify if centrifuges are the preferred technology for this Project (Biosolids Management Plan), identification of the unit processes at this stage is difficult to list; however, assuming centrifuges, the unit processes to be included in the TMs are as follows:

TM-2	**Unit Processes**
• Primary Sludge Inlet Tank and Mixers	
• Primary Sludge Centrifuge Feed Pumping Station	
• Primary Sludge Screens	
• Primary Sludge Grinders	

• Primary Sludge Thickening Centrifuges
• Thickened Primary Sludge Pumps
• Primary Sludge Blending Tank (if used)
• Chemical Storage and Feed Systems
• Odor Control Facilities
• Digester Mixed Sludge Tanks (Verify Adequacy)
• Digester Mixed Sludge Pumping and Heating (Verify Adequacy)

Key elements of TM-2 and guidance for evaluation of each unit process in terms of topics, content and level of detail are listed below:

General

For each unit process, present the following:

1. Unit process number, capacity, orientation.
2. Equipment number, size, orientation, features.
3. Process and equipment redundancy.
4. Arrangement to allow future expansion to build out capacity (about double the capacity).
5. Utility requirements.
6. Operating philosophies and general control descriptions.
7. Process flow diagrams.
8. Process and Instrumentation Diagrams
9. Process and piping schematics (not included in Bid Set).
10. Models of unit processes and buildings.
11. Use BCEs to compare process alternatives and major equipment types. See Attachment K – BCE Guidance.

Task 2.1.10 – TM-3 Site Development and Layout

TM-3 will focus on the site. The Primary Sludge Thickening site is located within an active process area, so the Consultant will develop assumptions and constraints relative to parts of the site that may need to be occupied by other projects.

SacSewer will provide the selected Consultant a master site utility and process pipeline drawings of the project area in AutoCAD Civil 3D. The drawings show known buried lines and ductbanks and the proposed utilities. These drawings indicate the accuracy of location information (i.e., whether the location of a line is based on survey, or record drawings or design documents). The Consultant shall review these drawings and perform additional

surveying, and all other research, to produce complete drawings of existing conditions for design and construction. The TM should include recommendations for potholing.

The TM shall include the locations of treatment processes on the site plan, interconnections between the unit processes, hydraulic profile, site development plans, and utility information as follows:

TM-3	Site Development and Layout
• Demolition and relocation requirements	
• Site plans o Site plan o Grading plan and site sections o Site paving plan including site gravel and erosion control o Stormwater handling requirements o Site Utility Plan (water, gas, drains, etc.)	
• Channels and conveyance piping between unit processes	
• Flow distribution and connection structure(s)	
• Pipe/ductbank corridors	
• Tank drain pumping station (if used)	
• Sanitary drain pumping station (if used)	
• Earthwork balance calculation and drawings	
• Geotechnical considerations and potential groundwater impacts	
• Coordination with other projects	
• Utility coordination and requirements	
• Corrosion assessment and means of protection for buried utilities	
• Chemical storage and feed	

Key elements of TM-3 shall include the following:

1. Evaluate site plans, unit process locations, and coordinate with any other projects in the area.
2. Develop interconnecting channels and piping systems between unit processes and other projects (if needed).
3. Use the hydraulic conditions from the Biosolids Management Plan, the design dry-weather and peak flows, and buildout peak flow.
4. Assess relocation of any existing utilities that conflict with construction.
5. Develop site grading and paving plans and show access and circulation for chemical deliveries and maintenance.
6. Evaluate and plan mitigation for groundwater impacts including disposal of dewatering discharge.
7. Determine stormwater requirements including drainage patterns and flow rates. Coordinate with SacSewer on points of connection to plant stormwater system.

8. Evaluate utility demands and coordinate with SacSewer to assess existing utility capacity and need for the extension of utilities.
9. Show contractor laydown areas and portion of site that will be under the contractor's control.
10. Confirm and show areas for contractor trailers and construction support facilities, and construction management (CM) facilities (if used).
11. Show areas to be reserved for future expansion.
12. Site Layout BCE to determine optimum, and most cost-efficient use of space. This could be eliminated if included in the technology evaluation.

Task 2.1.11 – TM-4 Electrical and Instrumentation

TM-4 will focus on electrical and instrumentation. The TM shall include electrical and instrumentation design information as well as an initial Process and Instrumentation Diagram (P&ID) for each type of equipment on the project. A general outline for the TM is as follows:

TM-4	Electrical and Instrumentation
• Site power and distribution schematic	
• Electrical site plan and duct bank routing	
• Single-line diagrams	
• Network and communication block diagrams	
• Control system overview schematic diagrams	
• Communication systems overview diagrams	
• Preliminary control strategies and control narratives	

Key elements of TM-4 shall include the following:

1. Locate, size, and develop the electrical requirements and equipment to support the Project and buildout conditions.
2. Evaluate power distribution options and the location and size for each electrical building and MCC. Prepare preliminary load calculations.
3. Determine corridors for routing for power and signal ductbanks and coordinate with site piping and other potential conflicts.
4. Show preliminary locations of electrical buildings or rooms. Assess whether the existing ACC-8 can accommodate the new Project, or if alternative accommodations have to be considered. Identify preliminary number and location of PCCS distributed control units.
5. Prepare the network and communication block diagram.

6. Develop overall control strategies for each unit process, major equipment, and instruments and coordinate with related projects.

Task 2.1.12 – TM-5 Buildings and Structures

TM-5 is focused on the structures and buildings. The TM includes a section for each discipline involved with the design of buildings and structures. A general outline for the TM is as follows:

TM-5	Buildings and Structures
• Architecture	
	Room area plan, section, and dimensions
	Code analysis and requirements
	Exit plan
	Fire protection requirements
	Building materials and finishes
	Doors, windows, skylights
	Roof
• Structural	
	Foundation design based on geotechnical study results
	Structural concept
	Preliminary structural sizing and thicknesses
• Process	
	Equipment location and working space
	Major pipe routing
	Maintenance access and removal provisions for equipment
	Safety hazards for O&M after construction
• Corrosion	
	Corrosion narrative
	Protection schemes
• Noise	
	Noise narrative
	Noise mitigation schemes
• Mechanical (HVAC, plumbing)	
	Interior air temperatures
	HVAC requirements and duct layout
	Plumbing provisions
	Utility needs and coordination with site

Key elements of TM-5 shall include the following:

1. Develop floor plans and sections for all unit processes and buildings and determine code requirements.
2. The Consultant will determine needs for a control system equipment room, O&M staff office space, work areas, storage, restrooms or locker rooms.
3. Develop architectural concepts consistent with SacSewer Standards.
4. Evaluate structural concepts and list alternatives for materials, finishes, and features.
5. Give dimensions for areas, volumes, and estimate wall thicknesses.
6. Provide foundation design based on the geotechnical report.
7. For all processes and equipment, identify the equipment location, working space requirements, pipe routing, valve and equipment access, and maintenance access and removal provisions.
8. Identify potential safety hazards for O&M activities and mitigation measures.
9. Evaluate corrosion potential and mitigation measures for structural and building materials, equipment, and exposed pipe and conduit.

Task 2.1.13 – TM-6 Implementation Plan

TM-6 will focus on construction, testing and commissioning. A general outline for the TM is as follows:

TM-6	Implementation Plan
• Constructability issues	
• Construction sequencing narrative and drawings	
• Permit requirements	
• Preliminary construction schedule	
• Preliminary construction cost estimate	
• Coordination with other projects	
• Testing/commissioning planning	

Key elements of TM-6 shall include the following:

1. Evaluate construction sequencing in coordination with other projects and existing operations.
2. Identify potential constructability issues and develop strategies for mitigating the impacts.
3. Incorporate preliminary construction schedule and cost estimate developed under other tasks.
4. Coordinate implementation plan with other projects that may be under construction as the similar timeframe.

5. Develop operational testing, reliability testing and commissioning procedures and coordinate with related projects.

Task 2.1.14 – TM-7 Reliability Centered Design Workshop

In accordance with Attachment I – Reliability Centered Design Implementation Guide, Consultant will organize and lead a Reliability Centered Design (RCD) Workshop with Sacsewer and designer's staff to facilitate acquiring the results needed for design of the project. The workshop will be conducted when preliminary P&IDs have been prepared, but before quantities and layout of Project elements requiring maintenance are established. Prepare a TM describing how RCD will be incorporated into design of the Project. Incorporate outcome of RCD activities into PDR documents.

Task 2.1.15 – TM-8 Pilot Testing (Special Services)

The TM (or series of TMs) will document the results of any pilot testing performed with different centrifuge vendors. If desired by SacSewer, the Consultant shall coordinate and pilot test different manufacturers' equipment and provide the result in this TM.

Task 2.1.16 – Equipment Preselection (Special Services)

Once the primary sludge thickening technology is selected, the Consultant may be asked to develop an RFP to select a preferred manufacturer (or process) to improve the design efficiency or the project schedule. This could include preselection of equipment based on criteria mutually agreed upon by the project team with a negotiated agreement and cost that would be novated to the Contractor in the contract documents, or possibly even prepurchase the equipment if market delivery times could impact the project schedule significantly.

Task 2.1.20 – PDR – Draft

The draft TMs prepared under the previous tasks will be submitted individually for review as they are completed. Final TMs will be integrated into the draft PDR that includes all of the drawings associated with the PDR.

Documents that must accompany the PDR include the following:

- PDR in PDF format with 8-1/2" x 11" documents in Volume 1 and 11"x17" (half size) drawings in Volume 2. Three hard copies plus PDF electronic files.
- BIM and CAD files per Attachment F– SacSewer CAD/BIM Standards.
- QA/QC documentation.
- Verification that all comments have been responded to in PMWeb.
- Verification that the decision log is up to date in PMWeb.
- Verification that all meeting and workshop notes are up to date in PMWeb.

- Equipment catalog and correspondence with suppliers and vendors.
- Native data files as needed for review.
- Other research, materials, and construction cost documentation.

Task 2.1.30 – PDR Review Workshop

Conduct PDR submittal workshop with SacSewer staff.

Task 2.1.31 – PDR – Final

Following incorporation of responses to all comments, Consultant will submit the following:

- PDR in PDF format with 8-1/2"x11" documents in Volume 1 and 11"x17" drawings in Volume 2. Three hard copies plus PDF electronic files formatted to print 11"x17" drawings.
- Written responses to comments in PMWeb.
- Updated decision log in PMWeb.

Consultant shall attend and participate in the PDR Design Workshop at completion of the PDR. Consultant shall assist SacSewer's PM in preparing presentation material and pre-meeting handouts for the meeting, including briefing on outcome of PDR phase, updates to project schedule and budget, risk management matrix, updated schedule, and updates to project team. Refer to Attachment H - Design Consultant Project Management Requirements.

Task 2.2 – Design Submittal 1

Design Submittal 1 (DS1) begins the process of preparing the project design specifications, drawings, and construction cost estimate, building on the work performed during the preliminary design phase. The focus during this phase of design is finalizing major equipment sizing, process and piping schematics (not part of Bid Package), P&IDs, overall facility layouts, and utility corridors. The list of specifications shall be finalized as well during the DS1 phase. The following describes the specific tasks required as part of this effort.

Task 2.2.01 – Project Management (DS1 Phase)

The project management task encompasses overall project management, coordination with other projects, and risk management.

Task 2.2.01.1 – Project Management

Consultant shall continue responsibility of the Project in terms of staffing, budget, schedule and scope, promote communication within the project team, and document key decisions in PMWeb.

Items covered under this task include, but are not limited to:

- Design phase kickoff meeting.
- Bi-weekly progress meetings.
- Project workshops and focused meetings.
- Other meetings. In addition to specific types of meetings described in the RFP and attachments, Consultant should anticipate participation in management briefings, operability review meetings, and other meetings, throughout the duration of the project.
- Scope, budget and schedule management.
- Interface with the program management information system PMWeb.
- Assist the SacSewer PM in updating the risk register and the Risk Management Plan as needed. Assist SacSewer's PM in identifying, tracking, managing and mitigating project risks that are shared by SacSewer and Consultant. Identify, manage and mitigate Consultant's project risks.
- Management and coordination of subconsultants.
- Management and coordination of Consultant staff.
- Monthly invoicing and updated schedule.
- Monthly earned value analyses and progress reports.

Additional detail regarding project management requirements is provided in Attachment H – Design Consultant Project Management Requirements.

Task 2.2.01.2 - Risk Management Plan- Design Phase

The Consultant shall participate in an update of the Risk Management Plan developed during the PDR Phase. This participation shall include preparation for and attendance at one Risk Management workshop to identify and mitigate potential risk to the project during final design. This workshop is anticipated to last up to four (4) hours. The Consultant should assume that incorporating risk mitigation measures into the project documents is part of the normal scope of a design project and, therefore, is not to be separately budgeted under this task. This task is limited to the Consultant's participation in the workshop and updating of the Risk Management Plan.

Task 2.2.02 – Quality Assurance/Quality Control (DS1 Phase)

This task includes labor-hours for all QA/QC activities related to DS1, including the review of deliverables either by the Consultant, or by the Consultant in conjunction with SacSewer staff in meetings and workshops as described in Attachment E - Design Contract Requirements for

Projects. These labor-hours and associated costs shall be tracked separately in the Consultant's invoice as determined at the beginning of the Project.

Task 2.2.03 – Construction Cost Estimate

Consultant shall prepare a design-level construction cost estimate to be included as part of the DS1 submittal. Refer to Attachment J – Design Consultant Cost Estimating Guidelines for details regarding construction cost estimating requirements. Consultant will compare the construction cost estimate to the baseline estimate. If the current estimate exceeds the baseline estimate, the Consultant shall identify the specific reasons for variations and identify corrective actions to align the newest estimate with the baseline. The Consultant shall particularly note the change in contingency percentages at various stages of design. Unless there is a SacSewer-approved change in Project scope establishing a new baseline, the baseline estimate will not be changed. Submit one (1) hard copy and the electronic files.

Task 2.2.04 – Construction Schedule

Consultant shall incorporate any comments to the PDR construction schedule made by SacSewer, update the construction schedule to reflect any changes to the PDR, and submit it with the DS1 submittal package. Additional construction detail should be added consistent with the further detail incorporated in the DS1 design. The 3D model detail should be expanded for consistency with the expanded DS1 construction schedule and estimate. Any changes to durations, sequencing, tie-ins, and milestones must also be included. A more detailed startup, commissioning and testing plan must be included. The schedule narrative shall also be updated and expanded, particularly noting any critical sections of work, coordination with other projects and SacSewer shutdown or tie-in requirements. Submit the updated native (digital) schedule file and PDF files.

Task 2.2.05 - Coordination with Other Projects

The project shall continue to be coordinated with any other projects in the area at the time of design. These projects will be made known to the designer when and if they materialize. Consultant shall include the potential to attend a minimum of four (4) coordination meetings with other design consultants.

Task 2.2.10– Drawings and Design Development

The Consultant shall prepare DS1submittal including drawings, electronic drawing files, BIM model and clash detection reports in accordance with Attachment E - Design Contract Requirements and Attachment F–SacSewer CAD/BIM Standards. Consultant's work breakdown structure and budget for the drawing preparation effort shall include subtasks for tracking of progress and costs. Breakdown shall be by process and then discipline.

Task 2.2.20 – Specifications

The Consultant shall prepare a full list of anticipated specifications using the Construction Specifications Institute Master Format 50-Division numbering system. Identify specification sections that will be sourced from SacSewer's guide specifications, as well as those that will be prepared by the Consultant. (Final content and format of all project specification sections, including those sourced from SacSewer guide specifications shall be the responsibility of the Consultant.) Note that source of Division 00 contract specifications will be SacSewer guide specifications, with the exception that the Consultant shall provide project-specific information such as the bid schedule, work constraints, and time of completion.

Task 2.2.30 – Design Related Documents

Under this task, the Consultant shall develop all parts of the DS1 submittal which are not specifically identified under other DS1 tasks including, but not limited to, the documents described in Attachment E - Design Contract Requirements. Minimum content expected at the time of DS1 submittal includes:

- A detailed outline for the project test plans.
- A Project Design Manual shall be prepared, and include updates of information contained in the PDR to conform to the DS1 submittal, and any other DS1 level documentation that is not specifically included in Tasks 2.2.01 through 2.2.20 above.
- Equipment numbering system and related asset management database shall be developed for the project. Database shall include:
    - Master equipment list
    - Equipment maintenance summary spreadsheets
    - Major equipment inventory control list
    - Copy of manufacturer's catalog information for acceptable equipment

Task 2.2.40 – DS1 Submittal and Design Review Workshops

DS1 work products shall consist of:

- Contract drawings, compiled into sets on 11" x17" (half size) paper – three (3) hard copies and PDF files formatted to print 11" x 17" drawings.
- Complete list of specifications printed on 8-1/2" x 11" paper– one (1) hard copy and PDF files. Native Word File shall also be submitted.
- BIM and CAD files per Attachment F – SacSewer CAD/BIM Standards.
- Clash detection report–electronic file.
- Project test plans outline – two (2) hard copies and PDF files.
- Project Design Report – two (2) hard copies and PDF files.

- Equipment databases –MS Excel or Access files, and PDF files.
- Construction schedule (see specific task).
- Construction cost estimate (see specific task).

Conduct design submittal review workshops during SacSewer's review of DS1.

Task 2.2.41 – Responses to Review Comments and Validation Workshop

Respond to all review comments from SacSewer in PMWeb. Conduct one design submittal validation workshop to confirm responses to comments and resolve any issues. Refer to Attachment H – Design Consultant Project Management Requirements.

Task 2.3 – Design Submittal 2

Design Submittal 2 (DS2) continues the process of preparing the project design specifications, drawings, and construction cost estimate, building on the work performed during the DS1 phase. For this submittal, the major design elements are well established and supplementary/auxiliary design elements are in progress between DS1and DS2. Drawings for all disciplines shall be complete or nearly complete relative to basic design elements. Auxiliary equipment, details, and schedules may still be missing. The submittal shall include the location and arrangement of all significant existing and proposed structures and equipment, all existing utilities adjacent to or within the construction area, drawing index, legend, etc. Specifications are substantially complete and detailed enough for meaningful review and comment by SacSewer.

The electrical calculations and other discipline calculations, databases, construction costs estimates, schedule and other Project Support Documentation shall be updated to reflect the status of the Drawings and Detailed Specifications and shall support the DS2 workshops.

Task 2.3.01 – Project Management (DS2 Phase)

The project management task encompasses overall project management and coordination with other projects.

Task 2.3.01.1 - Project Management

Consultant shall continue to be responsible for the project in terms of staffing, budget, schedule and scope, promote communication within the project team, and document key decisions.

Items covered under this task include, but are not limited to:

- Bi-weekly progress meetings.
- Project workshops and focused meetings.

- Other meetings. In addition to specific meetings described in the RFP and attachments, Consultant should anticipate participation in management briefings, and other meetings, throughout the duration of the project.
- Scope, budget and schedule management and updates.
- Interface with the program management information system PMWeb.
- Assist the PMO PM in updating the risk register and the Risk Management Plan as needed. Assist the PMO PM in identifying, tracking, managing and mitigating project risks that are shared by SacSewer and Consultant. Identify, manage and mitigate Consultant's project risks.
- Management and coordination of subconsultants.
- Management and coordination of Consultant staff.
- Monthly invoicing and schedule update.
- Monthly earned value analyses and progress reports.

Additional detail regarding project management requirements is provided in Attachment H – Design Consultant Project Management Requirements.

Task 2.3.02 – Quality Assurance/Quality Control (DS2 Phase)

This task includes labor-hours for all QA/QC activities related to DS2, including the review of deliverables either by the Consultant, or by the Consultant in conjunction with SacSewer staff in meetings and workshops, and preparation of the Submittal Outcome Report, as described in Attachment H - Design Consultant Project Management Requirements. These labor-hours and associated costs shall be tracked separately in the Consultant's invoice as determined at the beginning of the project.

Task 2.3.03 – Construction Cost Estimate

Consultant shall update the design level construction cost estimate and include it as part of the DS2 submittal. Refer to Attachment J – Design Consultant Cost Estimating Guidelines for details regarding construction cost estimating requirements. Consultant will compare the construction cost estimate to the estimate prepared for DS1. If the current estimate exceeds the latest baseline estimate, the Consultant shall identify the specific reasons for variations and identify corrective actions to align the newest estimate with the baseline. The Consultant shall particularly note the change in contingency percentages at various stages of design. Unless there is a SacSewer-approved change in Project scope establishing a new baseline, the baseline estimate will not be changed. Submit one (1) hard copy and electronic files.

Task 2.3.04 – Construction Schedule

The Consultant shall incorporate any comments to the DS1 construction schedule made by SacSewer, update the construction schedule to reflect any changes since the DS1 submittal

and submit it with the DS2 submittal package. This schedule submittal shall be utilized for the constructability review (Task 2.3.43), and the Consultant should be prepared to discuss the proposed method of construction. The DS2 construction schedule should provide additional detail consistent with the further design definition and update the durations, sequencing, tie-ins, and milestones based on the further development of the project design. A detailed startup, commissioning and testing plan must be included. The 3D model detail shall be expanded for consistency with the expanded DS2 construction schedule and estimate, and the terminology in the 3D model, construction schedule and estimate must remain consistent. The schedule narrative also shall be updated and expanded with a clear explanation of the construction plan, noting critical sections of work, coordination with other projects and SacSewer shutdown or tie-in requirements. The updated schedule shall be submitted as part of the DS2 submittal package. Submit the updated native digital file and a PDF file.

Task 2.3.05 - Coordination with Other Projects

The project shall continue to be coordinated with any other projects in the area at the time of design. These projects will be made known to the designer when and if they materialize. Consultant shall include the potential to attend meetings with other design engineers as needed. Assume a minimum of four (4) two-hour meetings.

Task 2.3.10 – Drawings and Design Development

The Consultant shall prepare DS2 submittal including hard copy drawings, electronic files, BIM model and clash detection reports in accordance with Attachment E - Design Contract Requirements and Attachment F–SacSewer CAD/BIM Standards. Consultant's work breakdown structure and budget for the drawing preparation effort shall include subtasks for tracking progress and costs. Breakdown shall be by process and then discipline or by discipline and then process.

Task 2.3.20 – Specifications

The Consultant shall prepare a full list of anticipated specifications using the Construction Specifications Institute Master Format 50-Division numbering system. Identify specification sections that will be sourced from SacSewer's guide specifications, as well as those that will be prepared by the Consultant. (Final content and format of all project specification sections, including those sourced from SacSewer guide specifications shall be the responsibility of the Consultant.) Note that source of Division 00 contract specifications will be SacSewer guide specifications, with the exception that the Consultant shall provide project-specific information such as the bid schedule, work constraints, and time of completion.

Task 2.3.30 – Design Related Documents

Under this task, the Consultant shall develop all parts of the DS2 submittal which are not specifically identified under other DS2 tasks including, but not limited to, the documents

described in Attachment E - Design Contract Requirements. Minimum expected level of design development at the time of DS2 submittal includes:

- Draft project commissioning and test plans.
- Project Design Manual - updated to conform with the DS2 submittal.
- Draft databases (hard copy and electronic files) shall be submitted for:
    - Master equipment list (MEL shall be substantially complete and tag numbers verified at the completion of DS-2.)
    - Equipment maintenance summary spreadsheets
    - Major equipment inventory control list
    - Catalog information from acceptable manufacturers.
- Calculations in accordance with Attachment E – Design Contract Requirements.

Task 2.3.41 – DS2 Submittal and Design Review Workshops

DS2 work products shall consist of:

- Contract drawings, compiled into sets on 11" x17" (half size) paper – five (5) hard copies and PDF files formatted to print 11" x 17" drawings.
- Complete technical specifications printed on 8-1/2" x 11" paper– two (2) hard copies and PDF files.
- BIM and CAD files per Attachment F – SacSewer CAD/BIM Standards.
- Clash detection report –electronic file.
- Draft Commissioning Plan – three (3) hard copies and PDF files.
- Project Design Report – five (5) hard copies and PDF files.
- Equipment databases – One (1) hard copy and MS Excel or Access files, and PDF files.
- Construction schedule (see specific task).
- Construction cost estimate (see specific task).
- Calculations – two (2) hard copies.

Conduct design submittal review workshops during SacSewer's review of DS2.

Task 2.3.42 – Responses to Review Comments, Validation Workshop

Respond to all review comments from SacSewer in PMWeb. Conduct a design submittal validation workshop to confirm responses to comments and resolve any issues. Refer to Attachment H – Design Consultant Project Management Requirements.

Task 2.3.43 – Constructability Review

A constructability review shall be held immediately following DS2 in accordance with the Attachment H - Design Consultant Project Management Requirements. SacSewer will assemble a constructability review team. The Consultant is responsible for preparing the documents for the constructability review, presenting the project to the review team, meetings with the review team, responding to review comments, and incorporating the results of review into the design documents. Consultant shall include adequate time in project schedule to allow for Constructability Review (CR), response to CR team recommendations, and SacSewer's disposition of CR recommendations, prior to commencing work on DS3.

Task 2.4 – Design Submittal 3 and Bid Documents

This task includes preparation of the third design submittal and bid documents.

Task 2.4.01 – Project Management (DS3 Phase)

The project management task encompasses overall project management, coordination with other projects, and risk management.

Task 2.4.01.1 – Project Management

Consultant shall continue to be responsible for the project in terms of staffing, budget, schedule and scope, promote communication within the project team, and document key decisions.

Items covered under this task include, but are not limited to:

- Bi-weekly progress meetings.
- Project workshops and focused meetings.
- Other meetings. In addition to specific types of meetings described in the RFP and attachments, Consultant should anticipate participation in management briefings, and other meetings, throughout the duration of the project.
- Scope, budget and schedule management and updates.
- Interface with the program management information system PMWeb.
- Assist the SacSewer PM in updating the Risk Register and the Risk Management Plan as needed. Assist the SacSewer PM in identifying, tracking, managing and mitigating project risks that are shared by SacSewer and Consultant. Identify, manage and mitigate Consultant's project risks.
- Management and coordination of subconsultants.

- Management and coordination of Consultant staff.
- Monthly invoicing and schedule update.
- Monthly earned value analyses and progress reports.
- Consultant shall attend and participate in the Design Workshop scheduled between DS2 and DS3 submittals. Consultant shall assist SacSewer's PM in preparing presentation material and pre-meeting handouts for the meeting. The meeting is focused on confirming and validating the tag numbering in the project MEL database (all tagged assets, equipment names and tag numbers) and related design documents are sufficiently complete to proceed with production of DS3.

Additional detail regarding project management requirements is provided in Attachment H – Design Consultant Project Management Requirements.

Task 2.4.01.2 - Risk Management Plan – Construction and Commissioning

The Consultant shall participate in a third Risk Management workshop during this phase of work to identify and mitigate potential risk to the project during construction and commissioning. This workshop is anticipated to last up to 4 hours. The Consultant should assume that incorporating risk mitigation measures into the project bid documents is part of the normal scope of a design project and, therefore, is not to be budgeted under this task. This task is limited to the Consultant's participation in the workshop and updating of the Risk Management Plan.

Task 2.4.02 – Quality Assurance/Quality Control (DS3 Phase)

This task includes labor-hours for all QA/QC activities related to DS3, including the final review of all design phase deliverables either by the Consultant, or by the Consultant in conjunction with SacSewer staff in meetings and workshops. Refer to Attachment H – Design Consultant Project Management Requirements for guidance. These labor-hours and associated costs shall be tracked separately in the Consultant's invoice as determined at the beginning of the Project.

Task 2.4.03 – Construction Cost Estimate

Consultant shall update the design level construction cost estimate and include it as part of the DS3 submittal. This will be the final estimate prior to issuing the contract documents for bid. Refer to Attachment J – Design Consultant Cost Estimating Guidelines for details regarding construction cost estimating requirements. Consultant will compare the construction cost estimate to the estimate prepared for DS2. If the current estimate exceeds the latest baseline estimate, the Consultant shall identify the reasons for differences and identify corrective actions to align the newest estimate with the baseline. The Consultant shall particularly note the change in contingency percentages at various stages of design. Unless there is a SacSewer-approved change in Project scope establishing a new baseline, the baseline estimate will not be changed. Submit one (1) hard copy and electronic files.

Task 2.4.04 – Construction Schedule

The Consultant shall provide a final DS3 construction schedule based on the bid documents. This schedule shall be the basis for the contract durations and milestones. The Consultant shall incorporate any comments to the DS2 construction schedule made by SacSewer and update the construction schedule to reflect any changes since the DS2 submittal. This schedule submittal shall also incorporate any comments from the constructability review. Similar to the DS2 schedule submittal, the DS3 construction schedule should provide additional detail consistent with the further design definition and update the durations, sequencing, tie-ins, and milestones based on the further development of the project design. A detailed startup, commissioning and testing plan should be included. The 3D model detail should be expanded for consistency with the expanded DS3 construction schedule and estimate. The schedule narrative shall also be updated and expanded with a clear explanation of the construction plan, noting critical sections of work, coordination with other projects and SacSewer shutdown or tie-in requirements. The updated schedule shall be submitted as part of the DS3 submittal package. Submit the native digital file and a PDF file.

The final construction schedule will be made available to bidders in PDF format during the bid period.

Task 2.4.05 - Coordination with Other Projects

The project shall continue to be coordinated with any other projects in the area at the time of design. These projects will be made known to the designer when and if they materialize. Consultant shall include the potential to attend a minimum of four (4) coordination meetings with other design consultants.

Task 2.4.10– Drawings and Design Development

The Consultant shall prepare DS3 submittal in accordance with Attachment E - Design Contract Requirements and Attachment F – SacSewer CAD/BIM Standards. CAD/BIM models must be used to generate plan and sections for printing. Consultant's work breakdown structure and budget for the drawing preparation effort shall include subtasks for tracking of progress and costs. Breakdown shall be by process and then discipline or by discipline and then process.

DS3 shall be delivered when the drawings and specifications are 100 percent complete, fully checked by the Consultant, and assembled into packages as they will be printed and distributed to bidders. No new drawings and/or specification sections by the Consultant shall be expected after this stage. All SacSewer comments on the previous submittal shall have been resolved, addressed and/or incorporated in this submittal. The only additional effort is SacSewer final review of the documents after comments are incorporated (The Consultant shall deliver a complete hardcopy set of the specifications and drawings to SacSewer from a direct PDF print as a check set prior to issuing the final bid documents).

The check performed by the Consultant shall include a review of all deliverables at the discipline level and a comprehensive inter-discipline review of all deliverables to ensure that every document is consistent with all other documents. The Consultant shall incorporate corrections into the project deliverables prior to DS3.

A copy of the comprehensive inter-discipline review comments with the Consultant's detailed responses written next to each respective checker's comments shall be submitted to SacSewer along with DS3. A typical mechanical process and electrical/ instrumentation/control cross-check shall compare the process and piping schematics, P&IDs, singe-line diagrams, elementary diagrams, input/output (I/O) schedules or lists, control system and communications schematic, communications plan, control strategy, plans, schedules, and specifications so that each instance of a loop tag number will be consistent between documents, motor horsepower match, and all equipment is identified in each location. The electrical calculations and other discipline calculations and databases, construction cost estimates, schedules, and other project support documentation shall reflect the status of the final drawings and detailed specifications and shall support the DS3 workshops.

Task 2.4.20 – Specifications

The Consultant shall incorporate SacSewer comments on the draft specifications into a final set of project specifications. Finalize and review the list of approved equipment within the specifications.

Task 2.4.30 – Design Related Documents

Under this task, the Consultant shall develop all parts of the DS3/Bid Document submittal which are not specifically identified under other DS3/Bid Document tasks including, but not limited to, the documents described in the Design Contract Requirements. Minimum expected level of design development at the time of DS3/Bid Document submittal includes:

- Project Commissioning and Test Plans in accordance with Attachment L– Commissioning Plan Preparation Guide.
- The Project Design Manual shall be finalized to conform with the DS3/Bid Document submittal.
- Complete and final equipment databases (hard copy and electronic files) shall be submitted for:
    b. Master equipment list (submitted with all tag number for verification by SacSewer at least one month prior to DS3 submittal)
    - Equipment maintenance and spare parts summary spreadsheets
    - Major equipment inventory control list
    - All catalog information from manufacturers listed in the specifications.

Task 2.4.40 – DS3 Submittal and Design Review Workshops

DS3 work products shall consist of the following:

- Contract drawings, compiled into sets on 11"x 17" (half size) paper – five (5) hard copies and PDF files formatted to print 11" x 17" drawings.
- Complete specifications including front-end, technical sections and appendices printed on 8-1/2" x 11" paper – five (5) hard copies and PDF files.
- BIM and CAD files per Attachment F – SacSewer CAD/BIM Standards.
- Clash detection report–electronic file.
- Project test plans – two (2) hard copies and PDF files.
- Project Design Report – five (5) hard copies and PDF files.
- Equipment databases – MS Excel or Access files, and PDF files.
- Construction schedule (see specific task).
- Construction cost estimate (see specific task).
- All design phase calculations, assembled, logged, and QC'd. Stamped final calculations and computer output – two (2) hard copies and PDF files. Refer to Attachment E – Design Contract Requirements.

Conduct design submittal review workshops during SacSewer's review of DS3.

Task 2.4.41 – Responses to Review Comments and Validation Workshop

Consultant shall respond to all review comments from SacSewer in PMWeb. Conduct a design submittal validation workshop to review responses to comments and resolve any issues. Refer to Attachment H – Design Consultant Project Management Requirements.

Task 2.4.50–Bid Set Submittal

The Consultant shall prepare a check set of the bid documents for final review by SacSewer and confirmation that all comments have been addressed satisfactorily. The check set shall be printed directly from the PDF version of the bid documents. After review of the check set and response to any final comments, the Consultant shall furnish the bid documents for advertising. SacSewer will advertise for bids and distribute the bid documents.

Final Check Set

Once all revisions have been made to DS3 documents, three complete printed copies of these documents shall be submitted to SacSewer PM for a final review. The final check set shall include finished, checked and complete drawings and specifications and other documents that

incorporate all SacSewer comments from previous submittals, workshops and the constructability review as appropriate.

Prior to submittal of the final check set, the Consultant shall have performed an interdisciplinary cross-check and clash detection of the design changes made after DS3 and corrected the related discrepancies. The Consultant shall not add any new drawings or make any changes to the plans or specifications that are not a result of comments received from SacSewer or the final in-house QC check, or to resolve a problem needing correction that was not previously known. Any such changes shall be identified so that SacSewer can review them. The Consultant shall document in-house changes and submit them to SacSewer along with the final check set.

Models are to be clash free. All plans and sections shown on drawings must be generated from the models. The models will be made available to the selected contractor for use after award. The models will be provided to bidders during the bid phase with the appropriate use limitations (the models are not for bidding purposes).

All contract documents shall be stamped and signed by a licensed engineer in the State of California.

The final check set of the contract documents shall be in the exact form as intended to be sent to bidders for preparation of bids. Hard copies shall be half size (11" x 17") and the specifications, test plans, and other documents in shall be printed on 8-1/2" x 11" paper. Electronic files shall be PDF. The PM will review the final Check Set documents and notify the Consultant within 5 working days of any comments.

Consultant shall attend and participate in the Design Workshop 4 (final design acceptance) at completion of the design phase, and shall assist SacSewer's PM in preparing presentation material and pre-meeting handouts for the meeting, including briefing on outcome of design phase, updates to project schedule and budget, Risk Management matrix, and updates to project team. Refer to Attachment H- Design Consultant Project Management Requirements. The Consultant shall include adequate time in the project schedule to resolve any issues discussed in the Design Workshop 4 before the final design is scheduled for approval to bid by the SacSewer Board of Directors (Board).

Bid Documents

The selected Consultant shall respond to and resolve any final comments from SacSewer and update the contract documents accordingly. The Board will authorize advertising for bids. The final bid documents shall be complete and ready in electronic form a minimum of seven (7) calendar days prior to the Board meeting. Within five (5) working days prior to the day bids are advertised to the public, the following documents shall be delivered:

- Stamped and signed bid sets of drawings and specifications – five (5) hard copies with half-size drawings.
- One set of full-size drawings.

- Final construction schedule – two (2) hard copies.
- Final construction cost estimate – two (2) hard copies.
- Equipment databases – two (2) hard copies.
- Electronic files of all deliverables (including models). Consultant shall coordinate with SacSewer's PM regarding format and layout electronic media prior to submittal.

C. PHASE 3 – BID AND AWARD

The Consultant shall assist SacSewer during the bid and award phase of the Project. The Consultant shall provide the following bid period services:

- Project management
- Respond to bidders' questions
- Attend the pre-bid meeting
- Prepare addenda
- Prepare conformed documents

Task 3.1 – Project Management

Consultant shall continue to be responsible for the project in terms of staffing, budget, schedule and scope, promote communication within the project team, and document key decisions.

Items covered under this task include, but are not limited to:

- Bi-weekly progress meetings.
- Project workshops and focused meetings.
- Other meetings. In addition to specific types of meetings described in the RFP and attachments, Consultant should anticipate participation in management briefings, and other meetings, throughout the duration of the project
- Scope, budget and schedule management.
- Interface with the program management information system PMWeb.
- Assist the SacSewer PM in updating the Risk Register and the Risk Management Plan as needed. Assist the SacSewer PM in identifying, tracking, managing and mitigating project risks that are shared by SacSewer and Consultant. Identify, manage and mitigate Consultant's project risks.
- Management and coordination of subconsultants.
- Management and coordination of Consultant staff.
- Monthly invoicing.

- Monthly earned value analyses and progress reports.

Additional detail regarding project management requirements is provided in Attachment H - Design Consultant Project Management Requirements.

Task 3.2 – Respond to Bidders' Questions

SacSewer will take the lead in responding to bidders' questions. Consultant shall provide responses to bidders' questions delegated by SacSewer. Consultant shall also participate in the evaluation of the submitted bids, furnish consultation and advice to SacSewer staff and assist with all the related equipment, cost, and other analyses as required to finalize the award decision. Consultant shall lead the review of the Contractor's requests for substitution in collaboration with SacSewer.

Task 3.3 – Attend Pre-Bid Meeting

SacSewer will lead the pre-bid meeting and the Consultant will participate by contributing materials and information for the presentation, contributing to the site walk, responding to certain questions and preparing information materials for attendees. Consultant shall prepare the meeting minutes.

Task 3.4 – Prepare Addenda

During the bid period, the Consultant shall prepare addenda to provide clarification and resolve errors and omissions identified prior to bid opening. Consultant shall update estimate of probable construction cost to account for addenda changes. Each addendum shall include:

- Narrative description of changes
- Revised or new drawings as needed
- Revised or new specification sections as needed

Addenda deliverables shall consist of five hard copies and PDF files.

Task 3.5 – Prepare Conformed Documents

The bid set of contract documents shall be updated by incorporating all addenda items issued during the bid period. No other changes to the contract documents shall be made. Within 15 working days after the bid opening date, all addenda shall be incorporated, and one complete set of conformed contract documents in PDF format shall be submitted to the PM for a final review. The set shall be in the exact form as intended to be sent to the printers for reproduction of the conformed sets. The PM will notify the Consultant within 5 working days of any comments.

Submit the following:

- Conformed contract documents – 10 hard copies (half-size drawings), one full-size set of drawings, MS Word, Excel and Access files, and PDF files formatted to print 11" x 17" drawings.
- BIM and CAD files per Attachment F – SacSewer CAD/BIM Standards.
- Any final calculations that have been modified subsequent to the DS3 submittal shall be resubmitted as stamped final calculations and computer output – two (2) hard copies and PDF files. Refer to Attachment E – Design Contract Requirements.

D. PHASE 4 – CONSTRUCTION (FUTURE TASK)

Construction phase services including on-site support will be scoped and included by future contract amendment once Phase 2 – Design is complete.

SacSewer will administer and provide field inspection for construction contracts. Construction support services shall be provided by the Consultant as requested by SacSewer.

For purposes of the proposal, the Consultant shall identify the staff that will participate during the construction phase. It is anticipated that the Consultant shall assign at least one person familiar with the design to be co-located at the EchoWater Facility onsite for the duration of construction.

E. PHASE 5 – COMMISSIONING (FUTURE TASK)

Commissioning services will be scoped and included by future contract amendment once Phase 2 – Design is complete.

The Consultant shall provide commissioning services as requested by SacSewer and assign a commissioning leader.

F. PHASE 6 – CLOSEOUT (FUTURE TASK)

The Consultant shall provide assistance during the closeout phase to support project acceptance and financial closeout. This task will be scoped and included by future contract amendment once Phase 2 – Design is complete.

9. BASIS FOR COMPENSATION

Time and Expenses: Compensation for services rendered will be based on a Time and Expenses basis with a not-to-exceed dollar ceiling for the entire contract.

10. ORGANIZATION AND CONTENT OF PROPOSAL

Consultants must provide complete and current information for all categories listed below. A Proposal shall not exceed 30 singled-sided pages. The following items will not count against the maximum page count: Transmittal Letter, Table of Contents, Section Dividers, Outline Description of Project Deliverables (per Section b.), sealed Fee Estimate, Resumes, Insurance, Conflict of Interest Form, Employment Practices, Exceptions to Sample Agreement Terms and Conditions, and Iran Contracting Act Disclosure Form and Compliance with Economic Sanctions in Response to Russia's Action in Ukraine. In addition page sizes shall be 8 ½ X 11 with font size no smaller than 12 pt. Up to six 11" x 17" pages within Sections "b" through "h" will be counted as single pages when used to display figures and tables that do not fit on a standard page; additional 11" x 17" pages will be counted as two pages each.

SECTION	CONTENTS
Cover Letter	Transmittal
a	Identification of Proposer
b	Project Overview
c	Project Approach
d	Management Approach
e	Capabilities, Tools, and Processes
f	Staffing
g	Staff Qualifications
h	Related Project Experience
i	Project Schedule
j	Conflicts of Interest
k	Proprietary Information
l	Indemnification
m	Insurance
n	Department of Industrial Relations (DIR) Compliance
o	Fee Estimate (Must be in sealed envelope)
p	Exceptions to Sample Agreement Terms and Conditions
q	Iran Contracting Act Disclosure Form and Compliance with Economic Sanctions in Response to Russia's Action in Ukraine
A	Resumes of Key Staff
B	Description of Project Deliverables

a. **Identification of Proposer**

The proposal shall include the names, offices, addresses, and phone numbers of key Consultant and key subconsultant staff that are proposed to be involved in the Project. The proposer shall identify in which office(s) the production will occur.

b. **Project Overview**

The proposal shall include a description of the Consultant's understanding of the Project including the Project's background, purpose, main issues, and interrelationship with other SacSewer projects. The Consultant also shall demonstrate an understanding of SacSewer's goals and objectives as related to this Project. The proposal shall include a statement acknowledging the Scope of Work, including Consultant's recommended enhancements to the scope, consistent with the Consultant's project approach (Section c.). To demonstrate an understanding of the Scope of Work, the Consultant shall develop an outline description of project deliverables and include it as an appendix to the proposal. As a minimum, this outline should include proposed technical memoranda, report deliverables, and a preliminary list of drawings. The lists of deliverables and drawings are to be appended to the proposal and will not be counted in the page limit.

c. **Project Approach**

The proposal shall include a detailed description of the proposed approach to the Project. The description shall include details to implement the tasks described in the Scope of Work and any recommended revisions or additions to the list of tasks. The Consultant is encouraged to provide comments and enhancements to the scope provided in the RFP. As an example, many BCEs and modeling efforts were described in the scope. In developing the approach, the Consultant/Proposer will likely recommend additional BCEs and alternatives along with the value added by these BCEs. Conversely, the Consultant/Proposer may recommend value in eliminating some of the BCEs and modeling efforts described in the RFP.

The proposal shall describe the Project's technical issues and the Consultant's approach to handling said issues. The Consultant shall explain how technical memoranda, workshops, and/or design review meetings will be used, working with the framework of the Scope of Work, to achieve consensus in design details while incorporating SacSewer's design guidelines into the Project. Emphasis should be placed on how the Consultant's technical approach will promote the Project's success, cost containment, coordination, and schedule compliance. The Consultant's approach to construction support services should be included in this section.

d. **Management Approach**

The proposal shall present the Consultant's management approach, including management organization, coordination and monitoring of project schedule, cost, risk, scope, communications, quality, resources, and other management issues that the Consultant feels should be addressed. Emphasis should be placed on how the Consultant's management approach will promote the Project's success and schedule compliance.

The proposal shall describe the Consultant's approach to managing the design review meetings, organizing the constructability workshop, and involving stakeholders in focus meetings and workshops. The Consultant's approach to quality control and assurance in the preparation of construction documents shall be clearly described in this section.

Finally, describe the Consultant's approach for successful collaboration and coordination with SacSewer and other design consultants.

e. **Capabilities, Tools, and Processes**

The proposal shall highlight resources, tools, and processes that will be used by Consultant to obtain and manage resources, partner with SacSewer staff, meet BIM requirements, conduct design engineering, and produce drawings and specifications on schedule and on budget. Tools may include capabilities for coordination, communication, automatic checking, and design drawing management. Proposers should highlight items that may have been developed on other projects as well as items to be developed specifically for the Project.

f. **Staffing**

The proposal shall include a Team Member Organizational Chart clearly identifying the key individuals assigned to the project and each person's proposed position, responsibility, availability and location. The proposal shall also clearly indicate who will be in responsible charge of the Project.

The proposal shall include an estimate of labor-hours to conduct and complete each task of the Scope of Work through Phase 3 – Bid and Award, broken out by each Consultant labor classification that will be assigned to the Project. A matrix format showing hours per personnel classification (management, engineering, technical, drafting, and support personnel) for each task shall be used. The Consultant may use their own matrix provided that it includes all of the requested information. A list of drawings is required and may be included as an appendix.

g. **Staff Qualifications**

The proposal shall include a biography of key individuals proposed to be assigned to the project including, but not limited to, management staff and discipline leaders. Special emphasis shall be provided on the individual's background, qualifications, certifications, experience on related and/or similar projects, and the location from where each person's work will be performed.

At least three client references, including name, description of past working relationship, and current contact information, shall be listed for each key individual who is proposed in the

organizational chart. Identify proposed key staff who will be assigned to the Project for construction support, to be negotiated at a later date.

Firm affiliation and professional engineering licenses, including discipline and state of licensure, shall be designated for each individual. Full resumes, sorted first by firm, then by last name, shall be included as an appendix to the proposal.

h. **Related Project Experience**

The proposal shall include profiles of similar projects for which the firm(s) and proposed team members have completed design in the last 10 years including project name, date, description and capacity of project, location, design and construction cost, and client reference including phone number. The firm's role in the project (prime consultant, subconsultant, etc.) should also be described together with the general scope of services (preliminary design, design, construction management, etc.). For each project, indicate which proposed team members worked on the project and describe the role/work they performed and their level of involvement.

i. **Project Schedule**

The Consultant shall confirm that the work can be done within the schedule planned by SacSewer using the resources proposed by the Consultant, as well as describe how the proposed staff will meet the resource requirements of the project. The Consultant shall prepare a schedule showing all major project tasks and milestones required to complete all work through Phase 6 (i.e., from Final BODR through closeout). Consultant also shall be prepared to present a resource loaded schedule during the interview. Consultant may use Primavera, Microsoft Project, or other software of choice for presentation in the proposal and for the interview.

j. **Conflicts of Interest**

Firms submitting proposals in response to this RFP must disclose to SacSewer any actual, apparent, direct or indirect, or potential conflicts of interest that may exist with respect to the firm, management, or employees of the firm or other persons relative to the services to be provided to be awarded pursuant to this RFP. If a firm has no conflicts of interest, a statement to that effect must be included in the proposal. Consultants must submit with their proposal a completed "Conflict of Interest and Non-Collusion Affidavit" Form attached here to as Attachment A.

k. **Proprietary Information**

Any information submitted in a proposal in response to this RFP which the consultant considers to be proprietary must be identified as such, and the consultant must include the legal basis for a claim of confidentiality. SacSewer will not assert the confidentiality of such

information unless the consultant executes and submits a written agreement prepared by SacSewer to defend and indemnify the agency for any liability, costs, and expenses incurred in asserting such confidentiality as part of the proposal. The final determination as to whether or not SacSewer will assert the claim of confidentiality on behalf of the consultant is in the sole discretion of the SacSewer.

l. **Indemnification**

For work or services provided under this Agreement, Consultant shall indemnify, defend, and hold harmless Sacramento Area Sewer District, the County of Sacramento, their respective Boards of Directors/Supervisors, officers, agents, employees and volunteers from and against any and all claims, demands, actions, losses, liabilities, damages, and costs, including reasonable attorneys' fees, arising out of or resulting from the performance of this Agreement, but only to the extent of the negligent acts, errors, omissions, recklessness or willful misconduct on the part of the Consultant or the Consultant's subcontractors. The provisions of this indemnity shall survive the expiration or termination of the Agreement.

m. **Insurance**

Provide a summary of the consultant's present and proposed insurance coverage, including commercial general liability, automobile liability, workers' compensation, property damage, employer's liability, and professional liability or errors and omissions liability for the duration of the contract. Please see Attachment B - Sample Agreement and refer to its Exhibit B for SacSewer insurance requirements.

n. **Department of Industrial Relations (DIR) Compliance**

Consultants must note within their proposal, valid DIR registration numbers for consultant's personnel and sub-consultants performing public works tasks.

i. If applicable to work contemplated under the proposed Agreement, no contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].
ii. If applicable to work contemplated under the proposed Agreement, no contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.
iii. If applicable to work contemplated under the proposed Agreement, this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
iv. Labor Compliance Program: The County of Sacramento received final approval from the Director of California Department of Industrial Relations as a Labor Compliance

Program effective March 15, 1994. All questions regarding this Labor Compliance Program and prevailing wage requirements should be directed to the Labor Compliance Section at (916) 875-2711.

v. Pursuant to California Labor Code Section 1720 and following, and Section 1770 and following, the CONTRACTOR shall pay not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations. Copies of the prevailing wage determinations are on file at the office of the County of Sacramento Labor Compliance Program, 9700 Goethe Road, Suite D, Sacramento, CA 95827, and are also available on the internet at http://www.dir.ca.gov/DLSR/PWD.

o. **Fee Estimate**

Provide your firm's fee estimate in a separately sealed envelope. Additionally, the electronic copy of your firm's proposal **must not** include a copy of the fee estimate. The submitted cost information must represent the full estimated LOE and project schedule included in the consultant's proposal. The envelope for the selected firm will be opened for the purpose of negotiating an agreement. The envelopes for the firms not selected will be returned unopened after negotiations are complete and the contract has been executed.

Compensation will be on a time-and-materials basis, with an authorized not-to-exceed amount. Include the following information:

i. Direct hourly labor rates for those staff to be billed to the project.
ii. Estimated labor hours (LOE) and fee by task.
iii. Types and estimated amount of non-labor costs to be billed to the project.
iv. Adjustments in rates predicted to occur during the project. For budgeting purposes, a maximum escalation rate of 3 percent per year should be assumed and will be discussed during fee negotiations.
v. Sub-consultant costs. A maximum markup of 5 percent is permitted.
vi. Other direct costs (ODCs). A maximum markup of 5 percent is permitted.
vii. Lodging, meals, and travel shall be reimbursed as follows:
    1. Per diem for lodging (equal to the federal standard CONUS per diem rate for Sacramento County at the time of contract negotiation) will be reimbursed for each work night, up to five (5) nights per week.
    2. Per diem for meals and incidentals (equal to the federal standard CONUS per diem rate for Sacramento County at the time of contract negotiation) will be reimbursed for each workday, up to five (5) days per week.
    3. Airfare and local and home transportation costs will be reimbursed at cost.

4. Mileage will be reimbursed at the current IRS rate which can be accessed by clicking the following link: https://www.irs.gov/tax-professionals/standard-mileage-rates

p. **Exceptions to Sample Agreement Terms and Conditions**

Provide a list of specific exceptions to contract terms and conditions which the consultant will seek from SacSewer's Sample Agreement. The Sample Agreement is incorporated into this RFP package as Attachment B.

If a consultant does not seek any exceptions from the contract terms and conditions in SacSewer's Sample Agreement, then a statement stating such must be included in this section.

q. **Iran Contracting Act Disclosure Form and Compliance with Economic Sanctions in Response to Russia's Action in Ukraine**

Please see Section 15 of this RFP for additional information on the Iran Contracting Act Disclosure Form and Compliance with Economic Sanctions in Response to Russia's Action in Ukraine. If either or both forms are completed, they must be placed in this section of the proposal.

If a consultant's proposal does not meet the requirement for either condition, then a statement stating such must be included in this section.

11. PROPOSAL SUBMISSION INSTRUCTIONS

Please submit a total of one (1) signed original, six (6) hard copy sets, and one (1) digital media copy by the proposal submission deadline stated in Section 4 of this RFP. A submitted proposal should be addressed to the following:

Deliver To:
Sacramento Area Sewer District
EchoWater Facility
Attn: Daniel Wilson
8521 Laguna Station Rd.,
Elk Grove, CA 95758

All proposals received after the deadline stated in Section 4 of this RFP will not be accepted.

12. EVALUATION AND SELECTION CRITERIA

A technical review panel composed of SacSewer staff will evaluate and rate each proposal on the following criteria:

Criteria	Weight	Scores[a]	Weighted Scores[b]
Project Approach	30		
Management Approach	15		
Resources, tools, and processes	10		
Staffing, staff qualifications, and related project experience	25		
Interview	20		
Total Score			

[a] Each criterion will be assigned a score of 1 to 100

[b] Scores will be multiplied by the weights and totaled to yield the total points on the proposal and interview. Maximum total points is 100

13. SELECTION PROCESS

In order to be considered, interested consultants must submit a complete proposal document, with organization and content consistent with Section 10 of this RFP, by the proposal submission deadline stated in Section 4 of this RFP.

Ranking of the proposals will be based on capability/qualifications criteria. Proposals will be evaluated in three parts as follows:

Part 1: Proposals will be examined as to whether or not the Consultant understood and responded in accordance with the following requirements:

1) Proper completion and submittal of required proposal documents; and
2) Related experience requirement met or exceeded.

Part 2: Proposals that meet the requirements in Part 1 will be evaluated and scored using the table in Section 12 of this RFP. The table identifies criteria used in the determination of the final proposal ranking. If any single criterion score fails to be above zero, the proposal will be automatically rejected. Those proposals with a weighted score of less than 60 will be disqualified. Based upon the evaluation of the proposals and reference checks, the most responsive proposals may be invited to an interview to further aid the selection process. Presentations at the oral interviews shall be made by key project staff. SacSewer may also elect to complete the consultant evaluation and selection without going through the interview process.

Part 3: the sealed fee estimate for the highest ranked proposal (and interview, if conducted) will be opened and SacSewer will enter into negotiations with the consultant. Final negotiations as to scope and cost through bid phase (Phases 1 through 3) will take place after

selection of the firm. If a mutually agreeable contract is unable to be negotiated, SacSewer will conclude negotiations with said consultant, and commence negotiations with the consultant with the next highest ranked proposal. This process will continue until an agreement is successfully negotiated or the entire list of eligible consultants is exhausted. Once a mutually agreeable contract is executed, the remaining sealed cost proposals will be returned to remaining consultants.

SacSewer reserves the right:

1. To reject any or all Proposals, or any part thereof; and
2. To select more than one consultant; and
3. To waive any informality in the Proposal; and
4. To accept the Proposal that is in the best interest of SacSewer.

All SacSewer's decisions will be final.

14. AWARD OF CONTRACT

Award of contract shall be made to the consultant who provides the best value and overall response to the requirements of this RFP. SacSewer may select whichever proposal it determines will best serve its interests. The successful consultant will be selected in accordance with the selection process identified in Section 12 of this RFP, and any addenda thereto, except for such immaterial deviation as may be waived by SacSewer. Selection is expected to be made on or about December 29, 2025, subject to final approval by the SacSewer Board of Directors. Consultants who submitted proposals will be notified of the outcome of the selection process in writing.

15. ADDITIONAL TERMS AND CONDITIONS

a. Federal Exclusion List

SacSewer is prohibited from awarding this contract to any person, entity or business that is on the Federal Exclusion List (https://www.sam.gov/). If you or your firm is on this list, then SacSewer cannot award this agreement to you, and you should not provide a response to this RFP. In addition, consultant certifies that it shall not contract with a subcontractor that is debarred, suspended or on the Federal Exclusion List.

b. Revision of Proposal

Consultants may withdraw or revise a proposal on the consultant's initiative at any time before the deadline for submission of proposals. The consultant must submit the revised proposal in the same manner as the original proposal on or before the listed proposal's due date and time. In no case will a statement of intent to submit a revised proposal extend any consultant's due date. At any time during the proposal evaluation process, SacSewer may request a consultant to provide oral or written clarification of its proposal.

c. Errors and Omissions in Proposal

Failure by SacSewer to object to an error, omission, or deviation in the proposal will in no way modify the RFP or excuse the consultant from full compliance with the specifications of the RFP or any Agreement awarded pursuant to the RFP.

d. Iran Contracting Act Disclosure

Pursuant to the Iran Contract Act of 2010 (California Public Contract Code, Sections 2202-2208), consultants are ineligible to submit a proposal for projects with a public entity for goods or services of one million dollars ($1,000,000) or more if the Consultant engages in investment activities in Iran.

The Iran Contracting Act Disclosure Form, incorporated into this RFP package as Attachment C, shall be completed and submitted by participating firms if the total cost of their proposed solution is in excess of $1,000,000. The Iran Contracting Act Disclosure Form will also need to be completed by the awarded consultant(s) if the total value of their agreement exceeds $1,000,000 during its entire term.

e. Economic Sanctions

Pursuant to California State Executive Order N-6-22 (Order) imposing economic sanctions against Russia and declaring support of Ukraine, SacSewer shall terminate any contract with any individual or entity that is in violation of the Order or that is subject to economic sanctions therein and shall not enter a contract with any such individual or entity while the Order is in effect.

Compliance With Economic Sanctions In Response To Russia's Actions In Ukraine Form, incorporated into this RFP package as Attachment D, shall be completed and submitted by the participating firms if the total cost of their proposed solution is in excess of $5,000,000. Compliance With Economic Sanctions In Response To Russia's Actions In Ukraine form will also need to be completed by the awarded consultant(s) if the total value of their agreement exceeds $5,000,000 during its entire term. SacSewer shall keep the form and other supporting documentation on file as evidence of compliance with the Order.

(ATTACHMENTS FOLLOW)