Request for Qualifications

for the preparation of
Integrated Water and Wastewater Master Plan

The Esparto Community Services District is seeking proposals from qualified consultants to provide engineering services to prepare an integrated Water and Wastewater Master Plan. The Integrated Water and Wastewater Master Plan will update, replace and expand upon the existing plans, studies, and policies.

Prospective firms are required to provide team qualification, proposed work plans, proposed schedule, and other related items as described in this Request for Qualifications. The deadline for submitting proposals is 5:00PM on October 27, 2023. Submit three (3) hard copies of the Proposal to:

Esparto Community Services District
Attn: Jose M. Quintana
26490 Woodland Ave
Esparto CA, 95627

Submit one (1) electronic copy (pdf format) of the Proposal to: GM@ecsd-ca.org

All communications and questions relative to this RFQ shall be directed in writing no later than 5:00 P.M. on October 13, 2023, to Jose M. Quintana, General Manager via email at GM@ecsd-ca.org.

Questions submitted after this time period will not receive a response.

Background

The Esparto Community Services District (ECSD) is located in Esparto California, 35 miles due west from Sacramento, in the unincorporated area of Yolo County. ECSD provides Wastewater Treatment, Collections, Water Distribution and Street Light services. The Esparto CSD also provides maintenance and operational services for the town's Aquatic Center, Central Park and Detention Basins.

The sewer system is comprised of 9 miles of sewer mains ranging from 4" to 12", two lift stations, and 981 residential and commercial sewer tap connections.

The water system is comprised of 4 wells, one 500,000-gallon storage tank, 1 booster pump station with 3 booster pumps and 1 emergency fire flow booster pump. The distribution system is comprised of approximately 8 miles of water mains ranging in sizes from 4" to 12" with 1,000 water connections.

The most recent Master Plan was prepared in 2011. The District would like to update the Water and Wastewater Master Plans to include a new condition assessment of its facilities and to determine the need of improvements to adequately serve ECSD's customers through year 2044 (Planning horizon).

Master Plan Goals and Objectives

The goal of this Integrated Water and Wastewater Master Plan (referred hereafter as the ECSD Master Plan or Master Plan) is to provide a 20-year roadmap for the water and wastewater services provided by the ECSD. The Master Plan will help determine the projects needed to repair, replace, and/or upgrade the ECSD's aging infrastructure to increase system operating efficiencies and reliability, while improving cost predictability and maintaining a high level of customer satisfaction into the future. The Master Plan will proactively address increasingly stringent water quality and environmental regulations to protect public health and promote stewardship of the groundwater production wells and aquafers from where the District receives 100% of its drinking water. This will serve as a guide to establish future rates and charges to allow ECSD to prioritize available funding and the pursuit of grants to complete the required projects. The Master Plan will outline a strategy to improve maintenance and asset management, prioritize new facilities and interweave the necessary upgrades or decommission of existing facilities.

The following planning objectives will guide the development of the Master Plan:

- Develop a roadmap for preserving and replacing assets, while also considering continued conversion of septic properties to ECSD sewer, odor management, aging infrastructure.
- Consider the financial constraints of the small ECSD customer base and the need for maintaining fair and reasonable rates/charges.
- Maintain and improve cost-effective services through efficient operations, flexibility, and evaluation of new technologies.
- Include methods and means to reduce sanitary sewer overflows to zero, and to keep water losses low and outages to an absolute minimum.
- Provide reliable capacity to manage and treat all wastewater flows within the existing and potential future wastewater service area, including during peak wet weather conditions. After meeting service area needs, identify additional capacity for ratepayer benefit and future customer growth.
- Identify and implement ways to beneficially use or reduce the disposal cost of treatment byproducts (effluent, biosolids, and sludge).
- Consider the need, opportunities and methods for continued connection of existing septic properties and auxiliary water supply users within our sphere of influence to the ECSD public sewer and water system.

- Continue to meet increasingly stringent drinking water quality and environmental regulations and proactively upgrade water and wastewater facilities to comply with regulatory requirements.
- Minimize energy and chemical consumption and consider alternative energy sources.
- Develop capital improvement plans and implementation strategies with the understanding that District staff will focus on technical maintenance functions and works of improvement, and extensive renovations/replacements will be contracted.
- Identify production flows and capacity to correlate with future growth and demand. Implement plan to meet future demand with well production and storage capacity.
- Identify pressure differential between west and east side of the distribution system and suggest correction to balance system pressure.
- Identify optimal system maintenance requirements and methods in accordance with industry standards and consider the District's staffing levels and technical expertise.
- Reduce odor impacts from the wastewater plant to neighbors to the extent practicable.

Scope of Work

The consultant will be required to evaluate and make recommendations regarding the condition and reliability for the Wastewater Treatment Plant, Wastewater Collection and Water Distribution System, and Water Production major components. The consultant should identify those systems requiring immediate (within the next fiscal year), short term (less than 5 years) and long term (5 to 20 years) improvements. The report should further address known regulatory issues that might impact the medium and long-term operation. The Improvement Plan should not solely be limited to reconditioning of existing plant/system assets. The consultant should also consider in concept alternative treatment systems which would incorporate recent technologies to meet future water/wastewater treatment, collection and distribution system goals. The consultant will be required to compare the cost of constructing alternative treatment processes with the cost of reconditioning existing assets.

In general, the capacity, reliability, condition, aesthetics, safety issues and code compliance for each system should be analyzed. The report shall contain an overview of the Treatment Plant and Systems, evaluation of the systems' performance including their limitations, highlighting deficiencies, aging components, and outdated technology of the systems, and highlighting positive aspects of the systems. The report shall also include recommendations regarding the various components which will need short term and long-term replacements or rehabilitation. Consultant shall report the estimated cost for any improvements recommended and a proposed schedule on how to make the improvements for the various components. The elements to be identified in the Consultant's written report shall include but not be limited to the following:

1. Population, growth, current and estimated future wastewater flows and water demands
    a. Effect of conversion of septic systems to public sewer
    b. Effect of water conservation on water demand and wastewater capacity.

2. Wastewater treatment evaluation
    a. Wastewater loading and quality
    b. Wastewater treatment regulations
    c. Plant performance
    d. Equipment/Asset Condition Assessment
    e. Effluent disposal alternatives
    f. Biosolids/Sludge management

3. Wastewater Treatment Improvement Alternatives
    a. WWTP Immediate and Short-Term Response Measures (Years 1-5)
    b. WWTP long term alternatives (5-20 years)
    c. WWTP upgrade for recycled water
    d. WWTP pond sludge removal and lining

4. Collection System Description and Evaluation
    a. SSO, failure, complaint history (such as odor)
    b. System Evaluation Criteria
    c. System Asset Inventory, Age and Condition, Maintenance
    d. Current and future flows by lift station/capacity evaluation
    e. Gravity sewer and force main capacity

5. Collection System Proposed Improvements/Alternatives
    a. Immediate, short term (Years 1-5) and long-term (5-20) pipeline improvements
    b. Immediate, short term (Years 1-5) and long-term (5-20) lift station improvements
    c. Maintenance Improvement and Asset Management Program

6. Existing Water Distribution System Evaluation
    a. System Evaluation Criteria
    b. System Asset Inventory, Age and Condition, Maintenance
    c. System Operation
    d. Identify Pressure Zones and Immediate improvements
    e. Consumption demands and sources, transmission/distribution capacity analysis
    f. Storage analysis

7. Proposed Distribution System Improvements
    a. Categories of Improvements
        i. Immediate Improvements
        ii. Reliability Improvements
        iii. Regulatory Improvements
        iv. Capacity Enhancement
        v. Efficiency improvements
    b. Maintenance Improvement
    c. Long Term Improvement

8. Decision and Prioritization Plan
    a. Recommended alternatives

9. Capital Improvement Plan and Project Costs for Water and Wastewater
    a. Immediate, short and long term
    b. Include tables, figures and maps

12. Review and Recommendations on Water and Wastewater Capacity and Connection Fees

Services to be Provided by Consultant

1. Review existing plans and related documents. Conduct a detailed review of:
a. 2011 ECSD Facility Master Plan Report/ Wood Rodgers
b. 2017 Wastewater Mass Balance Report/ Holmes International
c. 2019 Esparto CSD Water Rate Study/ Stantec
d. 2007 Water/Wastewater USDA funded improvement plans/ Nolte
e.2007 Hydraulic Model/Nolte
f. Mobile MMS GIS
g. Yolo County General Plan
2. Attend Meetings. Attend a kick-off meeting to begin the project. Attend three meetings of the Board of Directors to present an interim status of the study and obtain their input, and also one meeting to present the final draft of the Reports and Plans. Prepare related graphics, composite development land use and demand maps.
3. Conduct Analysis. Conduct the following analyses required to address the scope of work:
3.1 Water Demands and Wastewater Flow Projections
This task includes the preparation of a hydraulic analysis of the water distribution system and sewer collection system to calculate the District's current and projected potable water demand and wastewater flows through year 2044.
Demand and flow projection methods shall include: 1) land use based and 2) population based. The Master Plan shall compare the results of the two methods and reconcile them to the District's historic water demand data.
The Master Plan shall also include projections for future growth and fire flow needs to meet California Waterworks Standards, 2022 California Fire code and Yolo County requirements. The Master Plan shall determine peak factors, and maximum day and peak hour water demand factors based on historical use.
3.2 Evaluation of Existing Facilities
The Master Plan will provide an evaluation of critical water and wastewater system infrastructure including water pump stations, water storage tanks, distribution system, fire hydrants, sewer lift stations, sewer collection system, wastewater treatment facility and disposal facilities. The Master Plan will identify the evaluation criteria and methodology for the evaluation and will include specific recommendations to each facility.
3.3 Capital Improvement Plan Preparation
The Master Plan will summarize the improvements required for the District's water, Sewer, and Wastewater systems to adequately serve customers through year 2044. Prioritization of the

improvements will be established for all of the required improvements. The criteria will be developed based on the nature of each improvement and how critical it is to the overall water and sewer system operation.

4. Prepare Administrative Draft Plan, Cost Estimates and Reports.

a. Prepare administrative draft plans, study reports and tentative fee cost impacts for staff review.

b. Submit electronic copy of the administrative draft plans, estimates and reports.

c. Meet with staff to review the administrative drafts.

5. Prepare Public Review Draft Plans, Cost Estimates and Reports.

a. Incorporate changes pursuant to comments received from staff during the administrative draft review.

b. Prepare Study Session Public Review Drafts.

i. Submit one electronic copy and 6 bound copies for each Board of Directors Study Session.

c. Attend and present at the Board of Directors Study Sessions.

d. Incorporate changes pursuant to comments received from Board of Directors during the Study Sessions.

e. Attend and Present the Draft Final Integrated Master Plan to the Board of Directors for approval at a regularly scheduled Board Meeting.

6. Prepare Final Plan Report.

a. Incorporate changes pursuant to comments received at the Board presentation.

b. Submit one unbound copy, 6 bound copies, and one electronic copy.

7. Time Schedule. Supply a time schedule for developing the preliminary and final reports and Plan adoption. The final report shall be delivered to the District within 180 days or sooner from Notice to Proceed.

8. Public Relations and Outreach. Provide one draft press release and one draft informational flyer summarizing the evaluation, findings and recommendations of the Plan and the importance of its implementation. Provide suggestions to the District for ways to obtain the understanding and support of our customers, jurisdictions, other agencies and stake holders for implementation of the Plan.

Services to be Provided by the District

The services to be provided by the District include, but are not necessarily limited to the following:

1. Furnish Data. Furnish all reasonably available records and information, including reports, maintenance and past project information, budgets, production and consumption data, ordinances, and demand projections.

2. Master Plans. Provide electronic or paper copies of Master Plans, USDA funded facility improvement plans, and studies referenced for review above. Provide available water and wastewater models.

3. Capital Improvement Projects. Provide information on the most recent Capital Improvement Project list and five-year plan.

4. Staff Support. Coordinate Board and/or Committee meetings, staff meetings, provide staff support and assistance as required and agreed to in advance of the study.

SOQ Content and Requirements

The District welcomes a response to this request for qualifications (RFQ) in any format that best expresses the consultant's qualifications, approach to the project, and proposed scope of services. Statement of qualifications submitted in response to this RFQ must include the following items:

1. Statement of Qualifications - Section A of the Proposal shall consist of a statement of qualifications. Identify the individuals who will be responsible for directly conducting and preparing the evaluation and recommendations. Describe the background and experience of the individuals who will actually perform the services including individual experience in conducting surveys and preparing reports for similar projects. Include the professional license numbers of those individuals holding relevant involved in key positions in the development of this project.

Provide a list of five similar projects that your firm has undertaken. For each project please list the following:

• Project name, location, description of size and nature of treatment facilities, collection and distribution systems.

• Detailed description of the services performed, and the time period in which they were performed.

• The name and telephone number of at least one reference for the project that can attest to the quality and effectiveness of the Consultant's work.

The statement of qualifications including resumes of individuals shall be limited to ten (10) pages.

2. Methodology and Approach - Section B of the Proposal shall describe the methodology and approach that the Consultant will use to perform the requested services and develop the desired report and recommendations. At a minimum the proposal should include the following:

• A description of the step-by-step process that the consultant will utilize to research the existing water and wastewater treatment plant processes and systems, water distribution and wastewater collection system condition, conduct investigations, perform alternative analysis, identify cost implications, establish priorities and make recommendations concerning upgrades, repairs or replacement of each system and/or implementation of new technology.

• A list of the proposed tasks and the effort proposed to be devoted to each.

• A schedule of milestones and tasks, and estimated dates of completion for each task.

Selection of Consultant

A consultant selection committee will assess and rate the Consultants' proposals based upon the following criteria:

• Responsiveness to the RFQ

• Qualifications of individuals to be assigned to this project

• Experience and demonstrated success of the Consultant in preparing similar evaluations for systems located in isolated, rural communities

• Previous work with ECSD
• Evidence that the Consultant understands the project purpose and requirements
• Consultant's approach to the project
• Evidence of the Consultant's ability to prepare a well-written document and accompanying technical drawings
• Demonstration of commitment to project and ability to deliver the finished product on time

The consultant(s), which the District in its sole discretion, has determined to be the most qualified to perform the evaluation and prepare the required report will be identified as the top-rated consultants. The top-rated consultants may be asked to make a presentation of their proposal to a selection committee. The Consultant's key person or Project Manager will be required to attend the interview if held. Based on the results of the interview, a contract will be negotiated with the highest rated proposer. If agreement cannot be reached, negotiations with other proposers, in order of their respective final ratings will be conducted until tentative agreements can be reached. The draft negotiated agreement will be presented to the Board of Directors for their approval.

The District anticipates that a consultant will be selected in November of 2023, and that a contract for services will be negotiated and executed within a month thereafter. The consultant will be expected to commence services immediately upon execution of the Consultant Services Agreement.

Proposed Compensation

The Consultant shall provide, in a separately sealed and clearly marked envelope, the estimated cost to be charged to the District by task and subtask, and a total proposed project cost. The cost proposal shall identify the hourly rates and include direct labor costs and expenses including travel and other direct costs. Cost proposals will not be opened until after each firm has been ranked and the firm deemed most qualified has been selected. The cost proposal for the selected firm will form the basis of negotiations for the contract.