

REQUEST FOR PROPOSALS

TO PROVIDE:

CONSULTING SERVICES TO THE SAN LORENZO VALLEY WATER DISTRICT

PROJECT TITLE:

CROSS COUNTRY PIPELINE CONSTRUCTABILITY STUDY

RESPONSE DUE BEFORE 3:00 P.M.

ON

April 13th, 2021

San Lorenzo Valley Water District 13060 Highway 9 Boulder Creek, CA 95006 (831) 430-4625

I. BACKGROUND

A. Description and Setting

San Lorenzo Valley Water District (District) is an urban water supplier established in 1941 and serves several communities within the 136 square-mile San Lorenzo River watershed. The District serves a population of approximately 21,924 through approximately 7900 connections.

The District's legal boundaries encompass approximately 60 square miles. Land uses include timber, State and regional parks, water supply watersheds, rural residential, low-density urban residential and commercial, quarries, agriculture, and other open space. Within these boundaries, the District's two service areas have a combined area of approximately 24 square miles and individual areas as follows: North Service Area (21.7 square miles) and Felton Service Area (2.2 square miles).

The District owns, operates, and maintains two water systems comprised of thirty-three pressure zones: San Lorenzo Valley Water District and The San Lorenzo Valley Water District-Felton. Each of these two drinking water systems have their own separate source of drinking water supply. The SLVWD and SLVWD-Felton systems have an interconnection, which allows for the transfer of water between the two systems on an emergency basis. In 2019, the SLVWD did not receive a significant amount of water from the SLVWD-Felton system; while the SLVWD-Felton system received approximately 400,000 gallons of water from the SLVWD system, or approximately 0.4% of water provided to the SLVWD-Felton system. The District relies on both surface water and groundwater resources, including nine currently active stream diversions, one groundwater spring, and eight active groundwater wells. These sources are derived solely from rainfall within the San Lorenzo River watershed. Each service area is supplied as follows:

1. San Lorenzo Valley Water District System:

The San Lorenzo Valley Water District system service area includes the communities of: Boulder Creek, North of Boulder Creek, Brookdale, Ben Lomond, Quail Hollow, Glen Arbor, Zayante, Lompico and the Scotts Valley areas of Hidden Glenn, Lockewood Ln, Pasatiempo Pines, Whispering Pines, Manana Woods and both Spring Lakes and Vista Del Lago Mobile Home Parks.

Water Supply for the SLVWD system primarily utilizes surface water during the months of November to May. During periods of high stream flow, surface water can provide up to 100% of the drinking water in the District's system. Seven points of diversion draw from Peavine, Silver, Foremen, Clear, and Sweetwater creeks. The existing pipeline bypasses an additional intake at Malosky Creek which has been removed from service. Raw water pipelines run cross-country from these intakes to the Water Treatment Plant north of Boulder Creek. These cross-country pipelines are primarily located on SLVWD owned property. Pipelines located outside of District property may or may not be located in a recorded easement, those which are not so located are within prescriptive easements previously established by the District.

To supplement supply during periods of low stream flow, the SLVWD blends surface water with groundwater from 3 separate wellfields: The Quail Hollow wellfield, the Olympia wellfield and the Pasatiempo wellfield.

The Scotts Valley and Manana Woods neighborhoods are supplied by groundwater wells producing from the Lompico Sandstone aquifer, and the overlying Santa Margarita Sandstone aquifer where saturated. These include three active Pasatiempo wells and one active Mañana Woods well.

2. San Lorenzo Valley Water District-Felton System:

The San Lorenzo Valley Water District-Felton system service area includes the town of Felton, Hwy 9 south to Big Trees, San Lorenzo Ave, Felton Empire Grade, Felton Grove and El Solyo Heights. The SLVWD-Felton system are supplied water from Bennett Springs, Bull Springs and Fall Creek. Drinking water treatment for these sources is provided at a conventional surface water treatment plant.

The scale and complexity of SLVWD's water distribution system reflect the San Lorenzo Valley's rugged topography, dispersed pattern of development, and widely distributed raw water sources. The District's two systems have limited above-ground storage capacity equal to a few days' average use, and rely on groundwater for seasonal and year-to-year storage. The District produces and treats water based on relatively immediate water demand.

B. Water Demand

SLVWD total water production has ranged between approximately 1,600 and 2,200 acre-feet per year (AF/Y; 520 and 710 MG/Y) since 1984, and averaged approximately 2,130 AF/Y (694 MG/Y) since 2001. SLVWD total water deliveries average approximately 86 percent of total water produced, have ranged between approximately 980 and 1,900 AF/Y (320 and 620 MG/Y) since 1978, and averaged approximately 1,800 AF/Y (590 MG/Y) since 2001. SLVWD's annexation of several small mutual water systems during the 1990s, and subsequent annexation of Mañana Woods in 2006 and Felton in 2008, account for a generally increasing long term trend in total water production and deliveries.

Water production and deliveries fluctuate in response to the climatic cycle. During multiyear droughts, water use may increase initially before declining in response to voluntary and mandatory water conservation. Reduced demand typically persists beyond the end of a drought. Water demand also tends to be lower during years of above average rainfall.

II. PROJECT OBJECTIVES & DESCRIPTION

The San Lorenzo Valley Water District (District) is soliciting proposals from qualified firms to prepare a Constructability Study related to the replacement of approximately seven linear miles of raw water supply cross-country pipeline. The pipeline originally consisted of 6-inch and 8-inch High Density Polyethylene (HDPE) pipeline installed at grade along a narrow (approx. 2-foot wide) shelf cut into the hillside, sloped at 1% along the axis of the pipeline. Certain reaches of the pipeline were installed on free-standing wooden trestles where needed to clear watercourses or maintain consistent slope. The pipeline as a whole is referred to as the "5-Mile"

Pipeline", and is split into two legs, Sweetwater (or Southern) and Peavine (or Northern). This pipeline was completely destroyed during the CZU fire event, and the shelf has suffered erosion since the pipeline was installed.

SLVWD is considering alternative replacement strategies for this pipeline, including:

- Replacement in kind, installing new HDPE pipe at grade along the existing shelf;
- 2. Installation of new pipeline at grade with alternate materials intended to be more fireresistant, with or without additional fire protection measures intended to harden the installation against future wildfires;
- 3. Installation of HDPE or other suitable material pipe below grade; and
- 4. Possible re-routing of pipeline by increasing axial slope of pipeline to 2%, for each of items 1 through 3, inclusive, above.

The selected Consultant shall provide the full range of services for the Study, including but not limited to delineation of: required permitting; agency coordination; pipe material selection pro/con factors; additional work implicit in choice of alternate materials and/or to bury the new pipeline; access restrictions and constructability issues presented by each material and/or placement strategy; anticipated environmental impacts of the pipe replacement work; and anticipated cost of each presented option.

III. PROJECT SCOPE OF SERVICES

The proposed scope of required services for this project includes:

TASK 1: KICK-OFF MEETING/PRELIMINARY WORK

- 1.1 Review the previously existing pipeline alignment, raw water intake locations, and watershed geography.
- 1.2 Kick-off meeting with SLVWD to ensure clarity of intent; establish coordination expectations; and determine schedules.

TASK 2: AGENCY JURISDICTION IDENTIFICATION

- 2.1 Determine all Public agencies with jurisdiction;
- 2.2 For each agency, identify required permits and determine required effort for each permit

TASK 3: RESEARCH OTHER ENVIRONMENTAL FACTORS

- 3.1 Evaluate possible/required watershed protection measures for each type of construction
- 3.2 Identify any geological and/or climatological considerations, to include depth to bedrock, soil types, impact of sideslopes, impact of the CZU fires on the area, and elevated debris flow or flood risk;
- 3.3 Evaluate biological resources within the work area which may require protection during or after construction
- 3.4 Evaluate likely scope and frequency of future catastrophic natural events in the project area. These events could include but not be limited to fires, seismic activity, flooding, and mud/debris flow.

TASK 4: EVALUATE PIPE MATERIAL AND INSTALLATION OPTIONS

The destruction during the CZU fire of the District's at-grade HDPE pipelines shows the vulnerability of such installations. As a result, the District desires to construct a more fire resistant raw water supply facility. Additional data regarding other natural disasters and their effects on the proposed pipeline replacement shall be included in this Study.

- 4.1 Provide an evaluation of the advantages and disadvantages of each of the following scenarios:
 - a. Replacement in kind of HDPE pipeline, placed at grade or on stations;
 - b. Installation at grade or on stations of alternate pipe materials, to include ductile iron pipe (DIP), welded steel pipe, and any other material that the Consultant believes to be suitable:
 - c. Fire-hardening measures for any pipe material installed at grade or on stanchions;
 - d. Hardening of proposed pipe installation against other natural disasters; and
 - e. Installation below grade of HDPE pipe. This option must include evaluation of required depth of bury, shelf widening and restoration. Final condition of this option should include the provision of access suitable for ATV or Mule type vehicles for operations and maintenance of the pipeline and associated fittings/valves/appurtences.
- 4.2 The Consultant shall address each of the following factors in their evaluation of item 4.1, above:
 - a. Access issues/moving materials. Existing access to the pipeline is limited to the existing 2-foot wide shelf cut into the hill;
 - b. Assembly challenges related to weight and awkwardness of materials/fittings/equipment;
 - c. Grading needs, to include but not be limited to equipment types, extent of grading, and permitting for necessary grading;
 - d. Costs and effects of full or partial site restoration subsequent to pipe installation;

- e. Approximate construction costs and time requirements; and
- f. Safety concerns for crews working in the rugged environment.

TASK 5: ALTERNATE ROUTING OF PIPELINE

The existing pipeline route was determined based on maintaining a pipeline axial slope of approximately 1% and providing collection of surface water from eight separate intakes. Since that time, the Malosky intake has been abandoned and will not be returned to service. SLVWD is considering increasing the axial slope from 1% to 2%, allowing for shorter pipelines and increasing velocity within the pipeline to promote self-cleaning of minor debris that may enter the pipeline. The Consultant should evaluate alternate routes which meet the following requirements:

- a. All pipes, fittings, and appurtenances must be located within District-owned property or existing recorded easements;
- b. All construction must be located within District-owned property or existing recorded easements. No new easements are acceptable;
- c. Pipe axial slope shall be 2% minimum, 3% maximum;
- d. Sweetwater pipeline shall include the four existing intakes at Sweetwater Creek (one) and Clear Creek (three); and
- e. Peavine pipeline shall include the three existing intakes at Peavine Creek, Silver Creek, and Foreman Creek (one each).

IV. PROPOSAL REQUIREMENTS

The proposal shall not exceed 10 pages excluding resumes, cover letter, dividers, front and back covers. Responses to this RFP shall be in the following order and shall include:

1. Executive Summary (2 pages maximum)

- I. Include a brief overview of the specific approach proposed to meet the District's needs and why the specific plan detailed in the proposal is te best plan for the District. The consultant may also propose varying approaches that meet the same goal yet may save the District money, increase efficiency, result in a better outcome, etc.; and
- II. Summarize the contents of your firm's proposal in a clear and concise manner

2. Project Description (3 pages maximum)

- I. Explain the objective of the project and how you propose to accomplish the recognized goals:
- II. Describe the services and deliverables to be provided, to include proposed Study format; and
- III. Include a statement on what makes your firm uniquely qualified.

3. Identification of Prime Consultant (1 page maximum)

- I. Legal name and address of the company:
- II. Legal form of company (partnership, corporation);
- III. If company is wholly owned subsidiary of a "parent company," identify the "parent

company";

- IV. Name, title, address and telephone number of person to contact concerning the Response Submittal; and
- V. Number of staff and the discipline/job title of each.

4. Identification of Sub Consultants, if any (1-page maximum)

- I. Legal name and address of the company;
- II. Name, title, address and telephone number of prime contact; and
- III. Number of staff and the discipline/job title of each.

5. <u>Project Organization and Experience of the Project Team (3 pages maximum, not including resumes)</u>

- Describe proposed project organization, including identification and responsibilities of key personnel, including sub-consultants. Include only one-page resumes;
- II. Describe the experience of the Project Manager and the experience that the proposed personnel have working on past projects as a team;
- III. Describe project management approach to the work effort, locations where work will be done, responsibilities for coordination with the District, lines of communication necessary to maintain design on schedule;
- IV. Describe a proposed schedule showing all facets of work that will meet the District's objectives and goals in a timely manner; and
- V. Describe the Firm's capacity to perform the work within the time limitations, considering the firm's current and planned workload and the firm's current and planned work force.

6. Experience and Past Performance, Including Cost and Schedule Control (3 pages max / 3 projects max)

- I. Include a summary of the past experience and performance of the Project Manager on similar projects. Include the following information:
 - 1. Owner, contact name and phone number;
 - 2. Project size and description;
 - 3. Project design budget and total dollar value of completed design;
 - 4. Budgeted project design schedule and total time to design completion; and
 - 5. Estimated contract costs and actual contract costs.
- II. Describe the firm's past experience and performance on similar projects. Include the information listed above.

7. Firm's Local Experience (1 page maximum)

I. Describe the firm's experience and knowledge related to raw water collection, cross-country pipe design development, and permitting for similar projects.

8. Creative Alternatives (1 pages maximum)

I. Discuss any creative solutions to meet the project objectives.

9. Proposed Total Professional Fee and Fee Schedules

- I. Proposed fee shall be organized into Task 1 through 5, as discussed above, with appropriate further breakdown into subtasks;
- II. Proposed Fee Schedule shall include an estimated timeline (Gantt Chart Format) for completion of each task and subtask;
- III. Proposed fee shall not be the sole basis of award, but will be used to evaluate the Consultant's understanding of the Scope of Work; and
- IV. Include the hourly rates of all staff that will charge directly to the project.

10. Exceptions to this RFP

I. The Consultant shall certify that it has fully read the RFP and takes no exceptions to this RFP including, but not limited, to the Consultant Services Agreement (attached). If the Consultant does take exception(s) to any portion of the RFP, the specific portion of the RFP to which exception is taken shall be identified and explained.

11. Contractual Scope of Services

I. The Consultant shall provide a detailed scope of services to be provided. This should be responsive to the requested scope of services with additional detail as necessary. ii. Prepare a detailed schedule based on the allowable construction contract working days showing all facets of work that will meet the District's objectives and goals in a timely manner. Both the Scope and Schedule are anticipated to become attachments to the Contract between the Consultant and the District.

12. Insurance

- I. Without limiting Consultant's indemnification of District, and prior to commencing any Services required under this Agreement, Consultant shall purchase and maintain in full force and effect, at its sole cost and expense, the following insurance policies with at least the indicated coverages, provisions and endorsements:
- II. Commercial General Liability Policy (bodily injury and property damage): Policy limits are subject to review, but shall in no event be less than, the following:
 - 1. \$1,000,000 Each Occurrence;
 - 2. \$1,000,000 General Aggregate;
 - 3. \$1,000,000 Products/Completed Operations Aggregate;
 - 4. \$1,000,000 Personal Injury;
 - 5. Workers' Compensation Insurance Policy as required by statute and employer's liability with limits of at least one million dollars (\$1,000,000) policy limit Bodily Injury by disease, one million dollars (\$1,000,000) each accident/Bodily Injury and one million dollars (\$1,000,000) each employee Bodily Injury by disease. Lyon Tank Access Road Rehabilitation Project;
 - 6. Comprehensive Business Automobile Liability Insurance Policy with policy limits at minimum limit of not less than one million dollars (\$1,000,000) each accident using. Liability coverage shall apply to all owned, non-owned and hired autos; and
 - 7. Professional Liability or Errors and Omissions Insurance as appropriate shall be

written on a policy form coverage specifically designed to protect against acts, errors or omissions of Consultant. Coverage shall be in an amount of not less than one million dollars (\$1,000,000) per claim/aggregate.

- III. Prior to commencement of any services under this Agreement, Consultant, shall, at its sole cost and expense, purchase and maintain not less than the minimum insurance coverage with endorsements and deductibles indicated in this Agreement.
- IV. The Consultant and its subconsultants are required to name the State, its officers, agents and employees as additional insured on their liability insurance for activities undertaken pursuant to this Agreement.
- V. Consultant shall file with District all certificates for required insurance policies for District's approval as to adequacy of insurance protection. The District will require a professional liability insurance verification for coverage of not less than \$1,000,000.00.

V. EVALUATION CRITERIA

The evaluation criteria and the respective weights that will be given to each criterion are as follows:

1.	Executive Summary	10%
2.	Project Description	25%
3.	Identification of Consultant	5%
4.	Project Organization and Experience	25%
5.	Past Performance, Including Cost and Schedule Control	20%
6.	Firm's Local Experience	5%
7.	Creative Alternatives	5%
8.	Proposed Fee	5%

VI. SELECTION PROCESS

It is anticipated that a contract/contracts will be awarded with the highest-ranking firm being selected. However, the District reserves the right to consider other factors such as overall cost and may award contracts to any qualified applicant, regardless of the assigned rank. The District will enter into negotiations with the selected firm. If the District can't negotiate an agreement that is fair and reasonable in the District's sole discretion, it reserves the right to select an alternate firm. At this time, the District contemplates the use of a Time and Materials are Not-to-Exceed Total type contract for the services requested. Negotiations will cover: scope of work, contract terms and conditions, office arrangements, attendance requirements and the proposed fee schedule.

VII. SELECTION SCHEDULE

The District anticipates that the process for selection of firm and awarding of the contract will be according to the following tentative schedule:

Pre-Bid Meeting	March 22 nd , 2021
Proposal Due Date	April 13 th , 2021
Presentation (TBD-If Necessary)	April 15 th , 2021
Board of Directors Approval	April 15 th , 2021

VIII. SPECIAL CONDITIONS / ATTACHMENTS

The following documents are included to provide background for the Study:

a. 5-Mile Pipeline Intakes: Northb. 5-Mile Pipeline Intakes: South

IX. SUBMITTAL REQUIREMENTS

a. One (1) executed original marked "ORIGINAL" in red ink and three (3) copies of the proposal shall be submitted. Submit one electronic copy of the proposal in PDF format (on CD, DVD or Thumb Drive); **OR** Submit one (1) electronic copy of the proposal in PDF format via email.

The proposal shall be signed by an individual, partner, officer or officers authorized to execute legal documents on behalf of the Firm.

b. Proposals must be received in person or via email no later than **3:00 p.m.** local time, on or before **April 13**th, **2021** at the office of:

San Lorenzo Valley Water District 13060 Highway 9 Boulder Creek, CA 95006

Attn: District Engineer - Cross Country Pipeline Constructability

OR via email at:

JWolff@SLVWD.com

Subject Line: Cross Country Pipeline Constructability Bid

Failure to comply with the requirements of this RFP may result in disqualification.