COLEMAN
ENGINEERING

Statement of Qualifications for Lake Francis Estates and Mutual Water Company

DESIGN AND ENGINEERING SERVICES FOR LAKE FRANCIS MUTUAL WATER COMPANY DRINKING WATER SYSTEM IMPROVEMENTS: RFQ NO. 6555

JULY 9, 2022

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ATTACHMENT A — Project Team Resumes

A

COVER LETTER

July 9, 2022 (Original Document dated March 4, 2022)

Kiera Brown
Rural Community Assistance Corporation
By E-mail to: kbrown@rcac.org

Re: Proposal for Design and Engineering Services for Lake Francis Mutual Water Company Drinking Water Improvements in response to Request for Qualifications No. 6555

Dear Kiera

Coleman Engineering is pleased to submit the attached Statement of Qualification for Design and Engineering services for the Lake Francis Mutual Water Company (LFMWC).

Please see below for the key contact details for our response to this RFQ:

Respondent Name	Coleman Engineering, Inc.
Mailing Address	1223 Pleasant Grove Blvd., Suite 100 Roseville, CA 95678
Telephone Number	(916) 791-1188
Fax Number	(916) 791-0399
Contact Name	Jon Kaminsky, P.E. Project Manager jon@coleman-eng.com Office: (916) 791-1188
Principal Contact Person authorized to commit the respondent to a contractual agreement	Chad Coleman, P.E. President chad@coleman-eng.com Office: (916) 791-1188
Location of Corporate Headquarters	Roseville, CA
Years in Business	12 years
Professional Liability Insurance	Our current Professional Liability policy limits are $2,000,000 per claim and $2,000,000 aggregate. We have found that these limits have been sufficient for all our existing clients and trust they will be sufficient for RCAC.

Services Offered

Coleman Engineering is specialized in engineering planning, design, and construction services for water facilities including:

- Water, wastewater, and stormwater conveyance
- Water, wastewater, and stormwater pumping
- Water, wastewater, and stormwater storage and detention
- Surface water, groundwater, and wastewater treatment
- Water supply source development including groundwater wells
- Water and wastewater system master planning
- SRF funding administration

We also have the benefit of a water and wastewater operations branch that allows us a unique perspective so that we can design facilities that are simple to operate and maintain on a day-to-day basis. Our operations branch provides the following services:

- Drinking water treatment plant operations
- Drinking water distribution system operations
- Wastewater treatment plant and collection systems operations

We have served a wide range of clients including:

- Public drinking water systems
- Public wastewater systems
- Systems receiving State and Federal funding to complete projects
- Private developers

To supplement the services we offer, we sub-consult with other firms that are experts in their specific disciplines to provide an outstanding level of service to our clients. Coleman Engineering and our sub-consultants pride ourselves on being specialized in our industries, which enables us to know and understand the finer details of our discipline as compared to a "one-stop-shop". We have assembled a team of sub-consultants with whom we have a long working relationship and experience:

- Electrical Engineering: J. Calton Engineering
- Geotechnical Engineering: Crawford & Associates, Inc.
- Topographical Surveying: Carlson, Barbee & Gibson, Inc.
- Environmental: Area West Environmental, Inc.

Qualifications of Coleman Engineering

We understand that the award will be made to the most qualified responsive engineering consultant as judged by the criteria detailed in the RFQ.
The table below demonstrates that Coleman Engineering is very well qualified and prepared to provide excellent engineering services to RCAC and the Lake Francis Mutual Water Company.

Evaluation Criteria vs. Coleman Engineering Qualifications

CRITERIA	COLEMAN ENGINEERING QUALIFICATIONS
1. Firm's experience with similar small water system projects	See attached *Examples of Funded Projects.* Also, note the statement below about Coleman Engineering being on "RCAC's approved consultant list."
2. Technical and professional capacity to address each of the scope of work items	See attached *Examples of Funded Projects.* We have assembled a team who are experts in their specific disciplines to provide an excellent level of service for all scope items.
3. Experience with SWRCB grant programs, specifically DWSRF and the construction funding process	See attached *Examples of Funded Projects* which outlines several recent projects that were funded by DWSRF planning and construction programs.
4. Experience with local agencies	See attached *Examples of Funded Projects* demonstrating excellent experience working with local agencies.
5. Interview performance	We look forward to meeting virtually or in person for an interview next week.

As summarized in the table above, Coleman Engineering and our subconsultants are specialists in our respective fields and thus are 100% qualified and prepared with the experience and expertise needed to make this a successful project. In addition, as a result of our previous work with RCAC and multiple previous proposals, Coleman Engineering has been "...added to RCAC's approved consultant list..." per an e-mail received from Zane Mortensen (RCAC) and copied to Brett Gleitsmann (RCAC), dated December 10, 2021.

The great majority of our projects are for local agencies. We have chosen to focus on very small to medium sized local utility owners as our clients. Therefore, we are experts in serving local agencies successfully. And, as the Examples of Funded Projects demonstrates, we are successfully serving clients all over the state.

We are thrilled that our headquarters is a very short drive to the Lake Francis Mutual Water Company in Dobbins, CA. Due to our proximity, we have the benefit of easily meeting in person with the LFMWC during the project as well as make site visits to create a better design and provide services during the construction phase of the project.

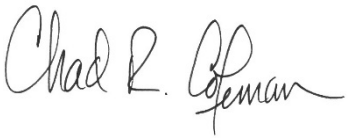
Additionally, we had the pleasure of meeting onsite with LFMWC Vice President Ethel See-Winchell and Water Manager Terry Patton to tour the system's facilities. This meeting has enabled us to understand the intricacies of the system and therefore the required scope of the capital improvement goals. We look forward to discussing our technical approach to this project during an interview with RCAC and the LFMWC.

Conclusion

We have reviewed the entire Request for Qualifications and take no exceptions to its contents. Coleman Engineering has previously executed multiple contracts with RCAC, so we do not expect any difficulties getting under contract and beginning to provide services in an efficient manner. Coleman Engineering has the capacity to take on this project immediately and has no current or projected workload issues that might affect work on this project.

We genuinely look forward to the opportunity to assist the Lake Francis Mutual Water Company to improve the service quality of their drinking water system to meet their customers' needs.

Sincerely,



Chad R. Coleman, P.E.
Principal Engineer

Jon Kaminsky, P.E.
Production Manager

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FIRM DESCRIPTION

COLEMAN ENGINEERING

Founded in 2010 by Chad Coleman, Coleman Engineering Inc. is a California corporation that has successfully completed many projects as a specialist water and wastewater engineering firm. The project team has decades of experience and expertise designing water and wastewater infrastructure for both municipal agencies and the private sector in northern California. Our resume includes in depth knowledge and experience with design, permitting, and construction management/quality assurance associated with public water, recycled water and wastewater systems.

Located in Roseville, CA, we have 19 employees. Our professionals are licensed Civil Engineers in California, Nevada, Utah, Washington, and Idaho. Our company President and Principal Engineer, Chad Coleman P.E., is also a Certified Grade 3 Water Treatment Plant Operator in California. We also employ 2 full-time water and wastewater treatment plant operators.

I appreciate that Chad is flexible - he can always meet the City's schedule. He understands a lot about our system because he's done a lot of work for us so there's institutional knowledge there, and he produces a quality product.

Chris Ehlers, Former Assistant Director of Public Works

Coleman Engineering provides the following services:

Planning Studies

- Master planning for water, sewer, and recycled water systems.
- Development of Capital Improvement Plans and Specific Plans for developments.
- Water and wastewater facility condition and vulnerability assessments.
- Reviews of operation and maintenance procedures.

Modeling

- Hydraulic models of pressurized and gravity conveyance systems.
- Hydraulic transient modeling of large hydroelectric penstocks.

Design

- Feasibility and pre-design studies and reports, including detailed alternatives evaluations and project selection.
- Preliminary and final design of water, wastewater, and recycled water treatment and pipeline conveyance projects, including plans, technical specifications, and contract documents for bidding.
- Capital and life-cycle cost estimating.
- Schedule preparation and constructability review.
- Value Engineering

Bidding and Construction

- Bid support, including responses to Requests for Information (RFIs), pre-bid meetings and site walks, bid addenda, bid evaluation, and contract award recommendation.
- Engineering Services During Construction, including site meetings, submittal reviews, responses to RFIs, claims support and evaluation, pay request reviews, and construction observation.
- Contractor schedule review and analysis.
- Funding agency contract conditions compliance monitoring.
- Full construction management and inspection.
- Record drawings and operations and maintenance manuals.

Funding Support

- Engineering and managerial support to obtain and manage state and federal funding from a variety of loan and grant sources.
- Engineering and managerial support of bridge loans to fund planning, environmental and design activities.

WATER SYSTEM EXPERIENCE	WASTEWATER & RECYCLED WATER SYSTEM EXPERIENCE
Water treatment plant process and operations	Wastewater treatment plant process design and operations
Water pumping stations	Wastewater lift stations
Water storage tanks	Collection system pipelines
Transmission and distribution pipelines	Force main pipelines
Well down-hole designs	Trenchless pipeline replacement and rehabilitation
Well pumping stations	NPDES/WDR compliance studies and reporting
Wellhead treatment systems	Decentralized and onsite wastewater treatment systems

Our previous clients for funded water projects in **California** include:

- Castle City MHP
- City of Crescent City
- City of Fort Bragg
- Forest Ranch Municipal Water Company
- Hamilton City Sanitary District
- Locke Water Works
- Los Molinos Community Services District
- Madison Community Services District
- Shaffer School
- Sky View Ranch Water District
- Spalding Community Services District
- Tuolumne City Sanitary District
- Valenzuela Water System
- Winship School

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PROJECT TEAM

We have assembled a strong team from both our Coleman Engineering resources and specialist sub consultants to provide quality professional engineering services for this statement of qualifications.

Starting first with a brief summary of the Coleman Engineering team, we have also included firm bios for each of our sub consultants. We have also included an organization diagram for the project team.

Professional Team Member	Education and Years of Experience	Qualifications
Chad Coleman, P.E. *Project Role:* Principal-in-Charge / Technical Review / QA Manager	B.S., Brigham Young University M.S., Brigham Young University 29 years (12 years with Coleman Engineering since its founding)	Professional Civil Engineer: CA # 56490 ID # 8964 NV # 16990 UT # 188915 Water Treatment Plant Operator, Grade 3, CA # 31314
Jon Kaminsky, P.E. *Project Role:* Project Manager	M.S., Civil and Environmental Engineering University of California, Davis CA B.S., Civil Engineering University of California, Davis CA 11 years (2 years with Coleman Engineering)	Professional Civil Engineer: CA # 82004 ID # 17460 WA # 55136
Simon Gray, P.E. *Project Role:* Technical and Constructability	BSc (Eng.) (Hons), Civil Engineering, Imperial College of Science and Technology, University of London, United Kingdom 39 years (4 years with Coleman Engineering)	Professional Civil Engineer: CA # 60311 WA # 51959 Chartered Engineer, United Kingdom: #45101217
Karen Holcombe, E.I.T. *Project Role:* Staff Engineer	B.S., Civil Engineering, California State University, Sacramento 3 years (2 years with Coleman Engineering)	Engineer-in-Training: CA #173019

KEY SUBCONSULTANT INFORMATION

Coleman Engineering contracts with subconsultants to provide the specialized engineering and other services required for each project. The following table gives details of the subconsultants we will work with on this project. We have regularly worked with these firms and know them to be experts in their field and trusted partners.

Crawford & Associates, Inc. – Geotechnical Investigation. Crawford & Associates, Inc. is a full-service geotechnical engineering firm based in Sacramento, CA. The firm is a State of California certified small business. In addition to geotechnical investigation, testing and reporting, the firm provides geotechnical foundation design, materials testing, special inspection, and hazardous materials assessment services in the water and wastewater, bridge, and structures sectors. In the water and wastewater fields, Crawford specializes in investigation for, and design of pump stations, treatment plants, tanks, pipelines, and reservoirs. The firm has broad experience working with various oversight agencies, including FEMA; Cal OES; FHWA; Caltrans; regional water quality control boards; State of California Departments of Water Resources and Fish and Wildlife, United States Corps of Engineers; and Union Pacific Railroad.

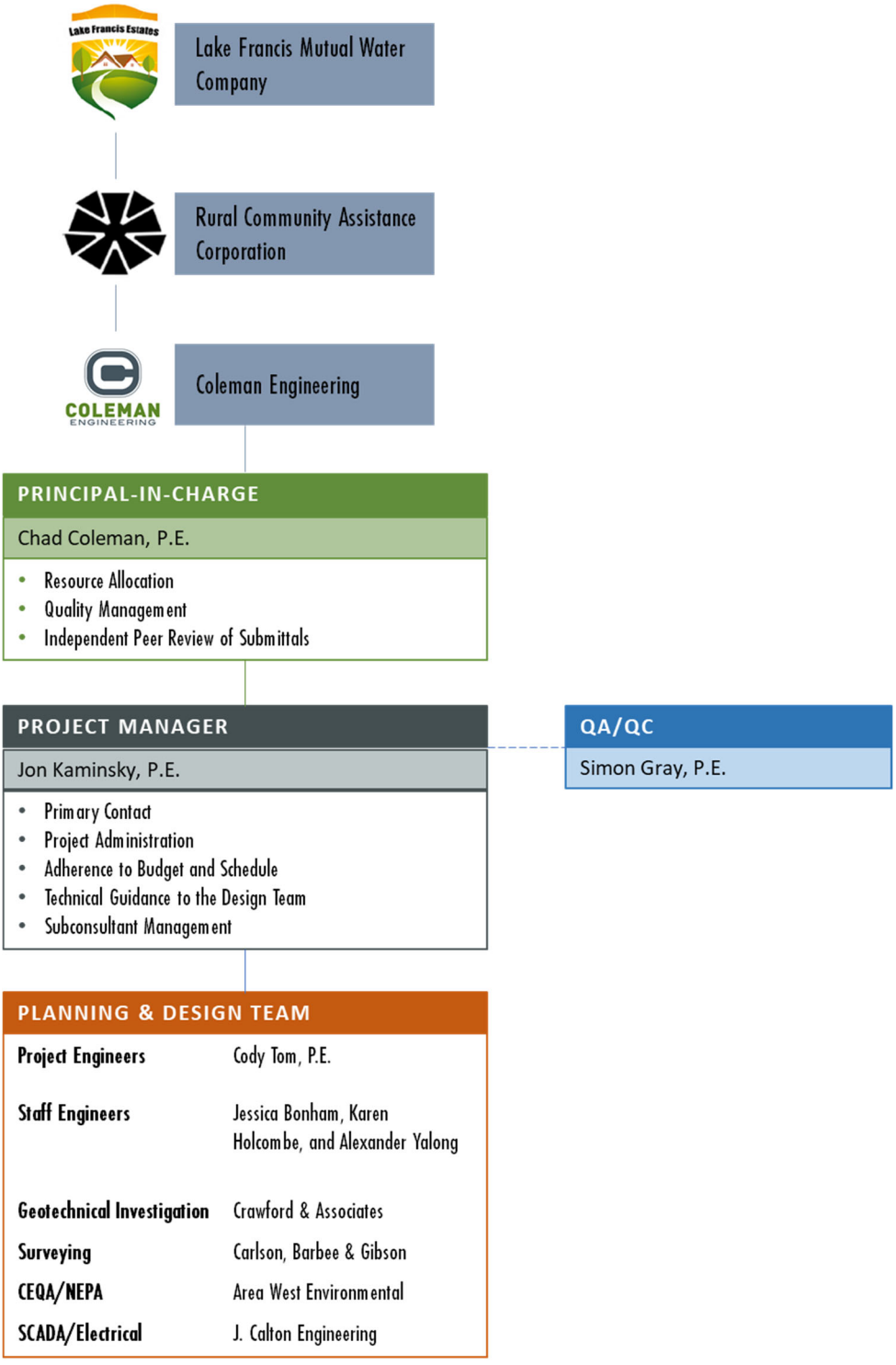
Carlson, Barbee & Gibson, Inc. – Surveying. Carlson, Barbee & Gibson Inc. – Topographical Mapping and Survey. A 30-year-old firm, Carlson, Barbee & Gibson (CBG) specializes in civil engineering, planning and survey with offices in Santa Ramon, CA and West Sacramento, CA, the firm has over 100 professionals, registered engineers, and licensed surveyors. Survey services include full topographic mapping, boundary surveys, preparation of plot maps and legal descriptions, right-of-way surveys, ALTA land title surveys, construction staking and GIS mapping.

Area West Environmental, Inc. (AWE) - CEQA/NEPA Environmental Compliance. AWE is a small, woman-owned California S Corporation headquartered in Orangevale, Sacramento County, California. AWE is also a disadvantaged business enterprise and we understand working in disadvantaged rural communities. AWE was founded in 2000 as a natural resource specialty firm but has grown into a full-service environmental science, planning, and consulting firm. With over 22 years of experience providing California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) compliance, biological and cultural resources support, environmental analysis, permitting, and monitoring consulting services.

J. Calton Electrical – SCADA/Electrical. Mr. Calton has been sole proprietor of J Calton Engineering since September 2006. He has over thirty years of experience in water and waste water related projects. He has performed electrical designs for water treatment facilities, pumping plants, storm drain facilities, ground water wells, reservoirs, irrigation canals and fish screens. John has also provided instrumentation design for above-mentioned projects, in addition to programming programmable logic controllers (PLC) and configuring in-plant supervisory control and data acquisition (SCADA) systems. He has been involved on numerous projects during the construction phase providing construction management support ranging from shop drawings review, cost estimates, contract document clarifications, change order negotiations, construction inspection, field testing, weekly coordination meetings, staff training and system start-up. Mr. Calton has assisted with configuration and witnessed testing of electrical protective relays and overcurrent devices.

PROJECT ORGANIZATION

The organization chart below outlines the typical organization of our internal team and expert subconsultants on projects. The subconsultants are incorporated into our design team to ensure seamless and uninterrupted two-way communication and ensures all members are always up to speed on the current status of the project.



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RELEVANT PROJECT EXPERIENCE

EXAMPLES OF FUNDED PROJECTS

The table below is a list of examples of projects for which Coleman Engineering has successfully assisted or is currently assisting clients to secure Federal and State funding. Following the table are some more detailed examples of specific projects, including reference information for each project.

Client and Project Name	Funding Types and Totals	Phase and Status
Castle City MHP Water System Consolidation	> SRF Planning (Prop. 84) = $125,500 > SRF Construction (Prop. 1) = $1,642,923	Planning and design complete. Bidding assistance and construction complete as of Fall 2021.
Castle City MHP Wastewater System Consolidation	> SRF Planning = $500,000 (application in process)	Planning funding application is being prepared. Goal is to begin Planning in 2022.
City of Crescent City Water System Improvements	> SRF Planning (Prop. 1) = $120,000	Planning Complete.
City of Fort Bragg Water Supply Pipeline Replacement	> SRF Construction = $8,800,000	Design complete. Supported the City with their application for construction funds.
Forest Ranch Municipal Water Company Water System Upgrades	> Prop 1 SRF Planning Funding = $98,639 > Working with UEI	Original planning services complete. Now working through contracting for additional planning services.
Hamilton City Sanitary District Wastewater Treatment Plant and Pipeline Improvements	> RCAC = $150,000 > USDA = $1,088,000	Planning, Design and Construction completed in 2015. Currently providing contract wastewater system operations services.
Locke Water Works Consolidation Pipeline	> SRF Planning (Props. 1 and 84) = $360,000	Planning and Pilot Studies complete. Final Design currently underway. Construction anticipated 2022.

Client and Project Name	Funding Types and Totals	Phase and Status
Los Molinos CSD New Well and Consolidation	> SRF Planning (Prop. 84) = $120,000 > SRF Construction (Prop. 1) = $2,087,875	Planning and Design complete. Construction currently underway.
Madison CSD, Yolo County Water System Improvements	> CDBG Planning Funding = $50,000 > SRF and Private Construction funding = $5,000,000	Preliminary Engineering complete. Assisting the District to pursue funding from Private, State, and Federal sources.
Shaffer School Well Source Capacity Project	> SRF Planning (Prop. 1) = $381,000	Planning and Design completed March 2019.
Sky View Ranch Water District Water System Improvements	> Emergency SRF Planning = $57,507 > SRF Planning = $500,000	Emergency Funding secured and emergency planning complete. Planning Funding secured.
Spalding CSD Sewer Pond Ballast	> CDBG Design and Construction = $170,000	Design and Construction Completed in February 2018.
Tuolumne City Sanitary District Wastewater Treatment Plant Improvements	> RCAC = $1,230,000 > USDA = $4,985,000	Design and Construction Completed in 2013.
Valenzuela Water System Arsenic Treatment or Consolidation	> Prop 1 SRF Planning Funding = $154,740 > Working with RCAC	Planning underway. Treatment considered too expensive and operations intensive. Coordinating with the City of Hollister for consolidation.
Winship School Arsenic Treatment/ New Well #2	> SRF Planning (Prop. 84) = $250,250 > SRF Construction (Prop. 1) = $400,000	Planning, Design and Bid Assistance complete. Currently in construction.

RELEVANT PROJECT EXPERIENCE

LOS MOLINOS CSD ARSENIC COMPLIANCE AND CONSOLIDATION PROJECT | LOS MOLINOS, CA

PROJECT OVERVIEW

Coleman Engineering provided planning services (including a successful SRF-grant funding application); preliminary and final design; project management; and inspection and construction contract administration for a new drinking water well and for a consolidation pipeline for the Los Molinos Community Services District to connect to two existing mobiule home parks. The water supply pipeline portion of the project consisted of 1,800-feet of 10-inch dia. C900 PVC transmission main within and adjacent to the Caltrans right-of-way for State Highway 99, and two 4-inch dia. C900 PVC distribution mains each approximately 450-feet long. The distribution mains are to connect two mobile home parks into the Los Molinos water supply network so that existing wells can be decommissioned. Three horizontal directional drilling (HDD) / jack-and-bore crossings – two of State Highway 99 and one of Los Molinos Creek – were included in the project.

REFERENCE

Jim Lowden | General Manager, Los Molinos Community Services District

Telephone: (530) 824-2914 | E-mail: jglowden54@gmail.com

WINSHIP WELL #2 | WINSHIP ROBBINS SCHOOL DISTRICT, MERIDIAN, CA

PROJECT OVERVIEW

Coleman Engineering was originally retained to aid in securing SRF Prop. 84 funding for Arsenic treatment for the Winship-Robbins Elementary School District. After initial well zone testing and treatment options considered, design of a new 120 gpm water supply well became the best cost to value decision.

A zone testing well was designed by Coleman Engineering and approved by the State Division of Drinking water as a means of testing water quality at different depths. Suitable water quality was identified in a quantity sufficient to supply the School with its needs to satisfy both drinking water uses and irrigation uses.

The replacement production well was designed to meet all state and local standards and features State Revolving Fund Bidding and Contract Documents. The well was designed to draw water only from select aquifers that meet drinking water standards. The final design includes electrical controls, a 500 gallon hydropneumatic tank, and provisions to treat water if needed in the future. The site was designed for simplified maintenance and fully automatic functionality to accommodate the District.

REFERENCE

Dawn Carl | Superintendent, Winship Robbins School District

Telephone: (530) 696-2451 | E-mail: dawnc@sutter.k12.ca.us

WATER SUPPLY IMPROVEMENTS | LOCKE WATER WORKS COMPANY, LOCKE, CA

PROJECT OVERVIEW

Coleman Engineering was retained by the Locke Water Works Company to investigate alternatives that would bring the Locke Water System into Arsenic compliance with drinking water standards. The town of Locke by definition is a community, non-transient, small, rural water system.

The project was SRF Proposition 84 state funded and initially involved investigation of conventional coagulation filtration and adsorptive media treatments. A pilot study of 3 different types of adsorptive media was completed and after careful consideration of long term O&M and capital costs the decision was made to consolidate the Locke Water System with neighboring Sacramento County Water Agency (SCWA) in Walnut Grove. A 4,000-foot pipeline is nearing design completion and will be constructed to consolidate with SCWA which involves a new force main between Locke and Walnut Grove using horizontal directional drilling under the Delta Cross channel.

REFERENCE

Clarence Chu | Locke Water Works Company, Locke, CA

Telephone: (916) 552-9983 | E-mail: ckchu52@comcast.net

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ABILITY TO PERFORM SERVICES

Coleman Engineering has always performed to the expectations of our clients. We have never been removed from a project for lack of ability to meet project schedules or budget constraints. We invite the RCAC reviewers to include a discussion of our Staffing Capability in communications with our project references.

It is relevant to note that approximately half of our work is under contract with private land developers and home builders. We work for some of the largest homebuilders in the nation providing water and wastewater engineering services, including: DR Horton, Lennar, Shea Homes, Brookfield Land, DeNova Homes, Taylor Morrison, Anthem United, The New Home Company, etc. These clients can be exceedingly demanding in terms of their expectations for schedule compliance and efficiency. Our team is very comfortable and accustomed to delivering quality projects on-time and within budget under these demanding circumstances. Our staff is sized just right to produce great design projects by working well together. Our private sector clients have been very pleased to be repeat clients because of our history of delivering quality designs for them.

Coleman Engineering has excellent relationships with multiple sub-consultants and associated firms. We routinely share project assignments as needed to deliver the results required by our clients. If schedules get tight, we can call in help to make certain that we achieve the expected project delivery timelines.

Coleman Engineering does what is required to exceed the expectations of our clients. We have the current capacity to serve the Lake Francis MWC on this project and look forward to assigning our expert professional staff to deliver excellent project results. In the following table we demonstrate the current workload and availability of our key personnel:

Key Team Member	Project Role	% of Total Time Required for this Project	Key Ongoing Projects
Jon Kaminsky	Project Manager	20	• Homestead Well and Storm Drain Pump Station, Dixon, CA • Eden Light Tree Fire System, East Palo Alto, CA • Valenzuela Water System, San Benito County, CA
Chad Coleman	Principal-in-Charge	5	• Quality assurance, technical review, and oversight of all office projects
Simon Gray	Technical Review & Quality Management	5	• Winship Elementary School, Well #2, Meridian, CA • Los Molinos CSD Arsenic Compliance, Los Molinos, CA
Karen Holcombe	Staff Engineer	30	• Valenzuela Water System, San Benito County, CA • Homestead Well, Dixon, CA • Homestead Storm Water Pump Station, Dixon, CA

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PROJECT UNDERSTANDING AND APPROACH

PROJECT UNDERSTANDING

- Distribution System:
  - Community water system
  - 22 active service connection (unmetered)
  - Up to 36 future connections for undeveloped lots
  - Distribution Classification D1
  - Not metered – desire to add meters
  - Failing distribution pipe – desire to replace about 1 mile of pipe

- Water Supply:
  - Two active wells: Well 4 and Well 5
  - Well pumps do not have backup power
  - LFMWC is subject to extended PG&E Power Safety Shutoffs, which can last several days.
    - Extended power shutoffs result in water supply deficiencies
  - Backup power generator for wells is required
  - Two inactive wells – desire to rehab/replace

- Water Quality:
  - Well 5 has arsenic levels that can be in excess of the Maximum Contaminant Level
  - Blending of Wells 4 and 5 enables compliance with water quality regulations
  - LFMWC wants to explore treatment systems or a new well

- Water Storage:
  - Three uncoated railroad car water tanks manifolded together store approximately 31,000 gallons
  - Have not been cleaned or serviced
  - Do not have sufficient storage capacity, particularly during PG&E Power Safety Shutoffs
  - Do not have fire flow storage capacity
  - Desire new water storage tank with sufficient equalization and emergency capacity and meets current drinking water standards

- Operations:
  - Wells are operated based on water level in tanks (float system)
  - No modern controls, status monitoring, or alarming systems
  - Desire new SCADA system to operate and monitor LFMWC's existing and proposed facilities

- LFMWC's wells and tanks are located on leased land with limited ability to expand on existing sites.

LFMWC'S PRIMARY CONCERNS

- Water Supply:
  - > Existing wells can meet demand
  - > No source redundancy
  - > Limited ability to connect additional connections
  - > System at risk of PG&E Power Safety Shutoffs

- Water Storage:
  - > No fire flow capacity
  - > Insufficient capacity for extended PG&E Power Safety Shutoffs

- Historical Records and Data Keeping:
  - > No historical data of system operations to use for design or reporting requirements

LFMWC'S PRIMARY CONCERNS

- Water Supply:
  - > Existing wells can meet demand
  - > No source redundancy
  - > Limited ability to connect additional connections
  - > System at risk of PG&E Power Safety Shutoffs
- Water Storage:
  - > No fire flow capacity
  - > Insufficient capacity for extended PG&E Power Safety Shutoffs
- Historical Records and Data Keeping:
  - > No historical data of system operations to use for design or reporting requirements

ANTICIPATED PROJECTS & LFMWC'S PRIORITY

PRIORITY	PROJECT
1	Well site backup power
2	New storage tank – equalization & emergency
3	Replace 5,077 feet of failing distribution pipe
	Additional groundwater sources – new and/or rehab
	Well 5 arsenic treatment
	Install SCADA system
	Water service meters

PROJECT APPROACH

1. System Planning
2. Preliminary Engineering
3. 90% Plans and Specifications
4. Complete DWSRF Technical Package
5. Environmental/CEQA Documentation

1. System Planning
   a) Review existing system records and information
   b) Meet with LFMWC & Site Visit
      - Prioritize desired improvements
   c) Assessment and pump testing of LFMWC existing wells
   d) Research construction information of existing wells in the vicinity of LFMWC
   e) Determine allowable improvements on existing LFMWC sites
   f) Assist LFMWC to identify sites to locate new facilities (well, tank, generator, SCADA)
   g) Determine the total State DFA funding amount available to the LFMWC
   h) Research consolidation options

2. Preliminary Engineering
   a) Calculate system design parameters (ADD, MDD, PHD, Fire Flow)
   b) Calculate required well source capacity
   c) Calculate required storage capacity
   d) Create system model and perform model runs to size distribution system
   e) Preliminary electrical engineering for SCADA system
   f) Identify capital improvement projects
   g) Conceptual level cost opinions for capital improvement projects (CIP)
   h) Preliminary Engineering Report
      i. Summary of findings from System Planning
      ii. Summary of findings from Preliminary Engineering
      iii. Present possible CIP and cost opinions
      iv. CIP alternatives analysis
      v. Recommendation of CIP plan
   i) Discussions with LFMWC and RCAC to determine a final CIP Plan

3. 90% Design Plans and Specifications
   a) Assist LFMWC and RCAC with pursuit of land acquisitions and easements
   b) Topographical survey of CIP sites
   c) Geotechnical Investigation of CIP sites
   d) Environmental investigations of CIP sites
   e) Project Plans (50% and 90%)
   f) Technical Specifications
   g) 90% Opinion of Probable Construction Cost

4. Complete DWSRF Technical Package
5. Environmental/CEQA Documentation
   a) Initial Study
   b) DWSRF Environmental Package

ANTICIPATED PROJECT SCHEDULE

MILESTONE	TASK TIME	ELAPSED TIME
Signed Agreement	n/a	0 weeks
Site Visit	4 weeks	4 weeks
Submit Draft PER	8 weeks	12 weeks
Client and Owner Review	2 weeks	14 weeks
Submit Final PER	4 weeks	18 weeks
Submit 50% Plans & Specs	6 weeks	24 weeks
Client and Owner Review	2 weeks	26 weeks
Submit: -90% Plans & Specs -CEQA Documentation -DWSRF Packages	16 weeks	42 weeks

COLEMAN
ENGINEERING

ATTACHMENT A

PROJECT TEAM RESUMES

Chad R. Coleman, P.E.

Principal Engineer / Project Manager

Education

M.S., Civil Engineering
Brigham Young University

B.S., Civil Engineering
Brigham Young University

Registrations

Professional Engineer # 56490, CA

Professional Engineer # 8964, ID

Professional Engineer # 188915, UT

Professional Engineer # 16990, NV

Water Treatment Plant Operator, CA, Grade 3

Professional Affiliations

American Public Works Association

American Water Works Association

Water Environment Federation

Sacramento Area Water Works Association

Mountain Counties Water Resources Association

California Water Environment Association

Special Certifications

Completed Risk Assessment Methodology for Water Utilities (RAM-W™) Training Course sponsored by AWWA

Certified Grant Administrator, Idaho

Chad has over twenty-five years of experience planning, designing, and managing construction of water and wastewater infrastructure and facilities. He is experienced with the planning, design, and construction management of municipal wells, water treatment plants, water storage tanks, transmission and distribution piping, and pumping stations; as well as wastewater collection system rehabilitation and design, wastewater lift stations and wastewater treatment plants.

Chad distinguishes himself by providing outstanding client service that is punctuated with attention to excellent written and verbal communications.

Selected Project Experience

Midas Booster Pump Station, Rocklin, California: Retained by The Granite Bay Developers for the design of a water booster pump station for a new housing development. The pump station was located at the exiting Placer County Water Agency (PCWA) Midas Tank site in Rocklin, California. The design included the water hydraulic modeling of the distribution system, a surge analysis, and a preliminary design report and cost estimate. Modifications to the existing tank include a new above ground wall mounted tank nozzle and tie-ins to the exiting tank inlet/outlet and overflow lines. The pump station included a pump building, electrical and control panel, emergency generator with automatic transfer switch, fuel tank, surge tank, and a total 3 jockey pumps and 4 booster pumps with variable frequency drives.

Well Source Capacity Compliance, Shaffer School, Litchfield, California: Principal in Charge for responsible for existing well testing and well zone testing and site investigation to bring the Shaffer School drinking water system into compliance with drinking water standards. Project was Prop 1 funded and involved investigation of an existing on site well for possible development and a new well to determine water quality and total yield to meet peak hour and maximum day demands. Responsible for field oversight, hydraulic calculations, and groundwater data analysis.

Well #5, Los Molinos Community Services District, Los Molinos, CA: Principal in Charge. Project included design of a well, pipeline, treatment, storage, fire protection, and distribution facilities; structural design for control buildings, supports, and site improvements;

preparation of funding application; project planning and management; resident inspection; construction management; and O&M training. The project was funded by USDA Rural Development in two phases.

Reno VA Booster Pump Station, Psomas, Reno, NV: Principal in Charge for design of a new booster pump station to meet the needs of the Reno VA Hospital Expansion Project that included a dedicated fire water and domestic water underground water storage tank. Responsibilities included: layout, design and coordination of all sub consultants. Challenges included design of a building and equipment that could withstand blast radius conditions but still maintain operability for a critical facility.

Calaveras County Water Agency, Techite Pipe Replacement: Principal in Charge of the preliminary design of approximately 8100-fee of 10-inch PVC pipeline. The purpose of the project was to replace Techite pipe that had reached the end of its useful life. Because the project site included many differing terrains and challenges, the design effort included evaluation and recommendation of numerous construction methods, including: parallel open cut, remove and replace open cut, bore and jack, and sliplining the old pipe. The preliminary design effort was successful in helping the Water Agency to make budget decisions and to prepare for funding applications.

Arsenic Treatment, Funding, Planning and Design, Winship-Robbins Elementary School District: Principal in Charge for the design of a new 120 gpm water supply well to mitigate arsenic levels in an existing well. The well was designed to meet all state and local standards and features State Revolving Fund Contract Documents. A pilot well was drilled and zone-tested to verify the water quality prior to design. The well is designed to draw water only from select aquifers that meet drinking water standards. The final design includes controls, 500-gallon hydropneumatic tank, and provisions to treat water as needed in the future. The site was designed for simplified maintenance and fully automatic functionality to accommodate the District.

Broadmoor Estates Water Main Replacements, Sacramento Suburban Water District, Sacramento, CA: Principal in Charge responsible for preparation of design, plans and specifications for replacement of 6,500 feet of new water distribution piping and 95 residential service connections.

Latrobe Road Utilities Relocation, El Dorado Irrigation District, CA: Project Manager responsible for design and plan preparation for construction of approximately 4,000 feet of 18-inch water line and abandonment of a like footage of 12-inch water line.

Alta Water Treatment Plant Improvements, Placer County Water Agency, Auburn, CA: Principal in Charge for the

pre-design and design of multiple improvements to an existing water treatment plant located in Alta, CA. Improvements that required assessment and design to increase maximum plant flow rate included: new raw water pumps and MCC with VFD's, influent strainer, static mixer, influent raw water meter and rate of flow control valve, new pressure filters with air scour systems, backwash pump, in-plant water system and new genset with ATS. In addition, improvements were designed for the interior building walls to create concrete splash walls and remove timber framing that had rotted over the years. An additional study was made of system operations to determine ways to increase CT prior to the first customer.

Water System Consolidation, Castle City Mobile Home Park, Newcastle, CA: Principal in Charge for design of new potable water pipeline, fire-flow pipeline, and connection to existing Placer County Water Agency potable water main to service 212-unit residential mobile home park. Responsible for coordinating project funding from the Drinking Water State Revolving Loan Fund, design of over 2,800 feet of pipe alignment including existing utility conflicts, connections at existing pipelines, landscape removal and replacement costs, hydraulic calculations, project cost estimates, and plan drafting. Construction is scheduled for 2017.

Hydropneumatic Pump Station 3.3, Brentwood, CA: Project Manager responsible for the design and construction engineering services for a hydropneumatic pump station required to serve the new Vineyards development in the City of Brentwood. The hydro- pump station included four domestic pumps capable of a firm capacity of 750 gpm and a maximum capacity of 3,300 gpm. In addition, the site included a 275 KW emergency generator and a 20,000-gallon hydropneumatic tank.

Reservoir 2.3, Brentwood, CA: Project Manager responsible for the design and construction engineering services for a partially buried 4-million-gallon pre-stressed concrete water storage reservoir.

Booster Pump Station 2.3, Brentwood, CA: Project Manager responsible for the design and construction engineering services for a booster pumping station with a firm pumping capacity of 2,700 gpm which pumped to an upper pressure zone and a ground level tank in that zone.

Hydropneumatic Booster Pump Station 2.2, Brentwood, CA: Project Manager responsible for design of a hydropneumatic booster pump station capable of a firm capacity of 1,400 gpm and a total capacity of 5,400 gpm used to provide domestic service and fire protection water to the northwest side of Brentwood. System included a 25,000-gallon hydropneumatic tank and a 450-kW generator.

Jonathan W. Kaminsky, P.E.

Project Manager

Education

M.S., Civil and Environmental Engineering
University of California, Davis CA

B.S., Civil Engineering
University of California, Davis CA

Registrations

Professional Engineer # 82004, CA

Professional Engineer # 17460, ID

Professional Engineer # 55136, WA

Technical Expertise

Well design

Water system master planning

Pumping station design

Aquifer pump testing

Geophysical testing

Water seepage investigations

Distributions system hydraulic modeling, calibration, and field testing

Groundwater level contouring

Public water system permitting

Jon is experienced planning, designing, and managing construction of water and wastewater infrastructure and facilities. He is an expert in the planning, design, and construction management of wells of all types including drinking water and agricultural water. In addition, Jon is experienced providing engineering services for all other parts of water and wastewater utility systems.

Selected Representative Project Experience

Valenzuela Water System Consolidation, San Benito County, CA: Project Manager. The Valenzuela Water System is a small, disadvantaged community with a single domestic well supplying the community's water system. In recent years, the well has shown MCL levels of nitrate in the State of CA. This project was state funded to help bring the VWS up to regulation. Coleman Engineering was contracted to help determine what possible options could be provided for the Valenzuela community, develop design criteria, and coordinate with the various project shareholders including the system owners, RCAC, the Division of Drinking Water, the City of Hollister, and the San Benito Water District.

Light Tree Apartments Fire System, East Palo Alto, CA: Project Manager. Engineering design for facilities to provide required fire flow to a redeveloped apartment complex. Components of the fire water supply system included a 2,500 gpm packaged fire booster pump station, a 135,000-gallon bolted-steel drinking water storage tank, and approximately of 300 feet of 12-inch fire service pipeline. The pump station was sized to provide both building sprinkler system service and private fire hydrant service. The water storage tank was designed to drinking water standards to facilitate possible future transition for use on the City's drinking water system.

Lower Elkhorn Corporation Yard Water and Wastewater Systems, Yolo County, CA: Project Manager. Engineering design for a potable water supply well, onsite wastewater treatment system, and fire flow service system. The potable water well serves an office building, fire supply, and equipment wash station. The wastewater system consists of a septic tank, pump chamber and pump, and a mound leach field to accommodate clay soils and high groundwater levels. The fire system consists of a 1,000 gpm packaged

fire booster pump station, a 50,000-gallon storage tank, and 8-inch fire service pipe to a fire hydrant.

Homestead Well, Dixon, CA: Assistant Project Manager and Project Engineer. Engineering design and construction services for a municipal public water system drinking water well and associated appurtenances. Production well parameters are a targeted rate of 1,500 gpm, depth of 1,000 feet, 16-inch diameter casing. The well was designed to minimize exceedances of federal and state water quality standards while meeting production goals. Design and construction also included a vertical turbine, deep well pump with a design point of 750 gpm. Engineering services consisted of permitting the well for use by a public drinking water system.

Homestead Storm Drain Pump Station, Dixon, CA: Assistant Project Manager. Engineering design and construction services for a 15 cfs storm drain pump station. The pump station consists of a wet well that houses four submersible solids handling pumps. The pump station conveys water from a storm catch basin to a 30-inch pipeline that transitions from pressure to gravity-flow.

Winship School Drinking Water Well, Winship, CA: Project Engineer. Engineering construction services for a small public water system potable supply well and associated appurtenances for an elementary school. Construction of the well posed water quality issues, which was explored extensively during pump testing to minimize the occurrence of arsenic in the drinking water supply through well modifications and pumping procedures.

Water System Facility Plan and Projects, City of Lewiston, ID: Project Engineer. Responsible for completing a condition assessment of the City's groundwater supply, booster pumps, and distribution system. This project included the design of well pump for Well 3, water quality testing of Well 2, and analysis of water quality data for City's wells. Performed engineering design for storage tank and pump station.

Water System Improvement Project, Fernwood Water and Sewer District, ID: Project Manager. Completed a preliminary engineering report, well site evaluation, design plans and specifications for a booster station and new pipelines. Conducted and managed bidding, submittal review, construction inspections, and construction meetings. Managed project budget and coordinated with federal and state grant and loan agencies. Attended District Board meetings to discuss project scope, budget, and timeline ensuring project was delivered on time and on budget.

Water System Emergency Improvement, City of White Bird, ID: Project Manager. Conducted well performance testing, evaluated well yield and required recovery time, and assessed the

hydrogeological conditions of the City's wells during the water system emergency. Completed a Well Evaluation Report detailing findings of the field data. Completed design of new well pumps and chlorination facilities for the City's groundwater sources. Managed project budget and coordinated USDA-RD grant administrators.

Water System Upgrades, City of Deary, ID: Project Engineer. Directed and inspected replacement of well pump; conducted well capacity testing; evaluated test data to determine yield based on pumping test data.

Simco Road Wells 1 and 2, J&M Solid Rock (Management Group), LLC, Boise, ID: Project Engineer. Performed engineering design for two production wells intended to be used as municipal drinking water wells. Completed well site evaluations, preliminary engineering reports, and construction plans and specifications. Performed construction inspections and well yield testing. Composed well completion reports for regulatory approval of the wells for use as a public drinking water source.

Groundwater Source Exploration, Blue Lake Springs Mutual Water Company, CA: Project Engineer. Conducted groundwater level monitoring, water quality sampling and analysis, and well testing for hard rock wells; performed siting and managed exploratory drilling for new production wells; inspected and managed production well rehabilitation and deepening activities; mapped and modeled the distribution system for a pressure zone analysis and water master plan.

El Prado Well Rehabilitation, Sacramento Suburban Water District, CA: Project Engineer. Performed engineering construction services for a well rehabilitation and pump station construction. Conducted submittal review, coordinated responses to RFPs and filed change orders. Conducted site inspections including rebar placement, asphalt paving, well casing extension, well chlorination and rehabilitation, and submersible pump installation. Conducted construction meetings between the client and contractor. Conducted start up testing on the well and closeout punch-list inspections.

Public Water System Permitting, Crew Wine Company, Zamora, CA: Project Engineer. Completed a TMF (technical, managerial, and financial) evaluation and documentation for permitting as a non-transient, non-community public water system. Performed and inspection and evaluation of the production well, storage tank, distribution lines, and backflow devices. Completed a demand analysis to determine adequacy of the well source capacity and available storage to meet the system's maximum day demand per State regulations. Prepared

recommendations regarding water quality sampling plans and location changes to meet County requirements. Conducted a walkthrough of the system with the County Environmental Health Department for final approval of the permit.

Well Field Investigation and Analysis, City of Cloverdale, CA: Staff Engineer. Created a MODFLOW model of the City's drinking water production well field to analyze groundwater and surface water influence. Conducted production well testing to optimize pumping operations.

Simon Gray, P.E.

Principal

Education

BSc (Eng.) (Hons), Civil Engineering, Imperial College of Science and Technology, University of London, United Kingdom

Certificate in Business Administration, Hong Kong Management Association / Wolsey Hall, Oxford, United Kingdom,

Leadership Course, Ashridge Business School, Ashridge, United Kingdom

Registrations

Professional Engineer # 60311, CA

Professional Engineer # 51959, WA

Chartered Engineer # 45101217, United Kingdom

Fellow, Institution of Civil Engineers, United Kingdom

Professional Affiliations

American Water Works Association

Water Environment Federation

American Public Works Association

Sacramento Area Water Works Association

Mountain Counties Water Resources Association

California Water Environment Association

Simon has 37 years of varied and broad-based technical and managerial experience covering all aspects of project implementation. His career is well balanced, and includes planning studies, condition assessment, design, contracting, project and construction management in the United States, United Kingdom, Hong Kong, Singapore, Indonesia, Malaysia and Trinidad and Tobago. This extensive experience also includes successful management of multi-discipline 'fast-track' design build projects with particular emphasis on constructability and design–construction coordination. Simon has also been responsible for successful public outreach on many potentially- contentious projects and has particular skills in communicating technical concepts to a lay audience, and in consensus-building.

Simon has worked on multi-million-dollar programs as well as on small-scale projects for municipalities and rural communities. He also has heavy civil engineering experience beyond water engineering that includes roads, bridges, power stations, buildings, and airports.

Selected Project Experience

Well No. 5 and Consolidation Pipeline, Los Molinos, CA: Staff Engineer for a well drilling and development and water supply pipelines project. The planning phase was Proposition 84 - funded and included connection of two mobile home parks. Challenges included CEQA compliance, horizontal drilling under a creek, and two borings under Caltrans Highway 99, and funding restrictions. Solutions included a three-phase-sequenced, Proposition 1 construction funding agreement that allowed the State Division of Drinking Water time to find additional funding.

Arsenic Treatment, Funding, Planning and Design, Winship-Robbins Elementary School District: Staff Engineer for the design of a new 120 gpm water supply well to mitigate arsenic levels in an existing well. The well was designed to meet all state and local standards and features State Revolving Fund Contract Documents. A pilot well was drilled and zone-tested to verify the water quality prior to design. The well is designed to draw water only from select aquifers that meet drinking water standards. The final design includes controls, a 500-gallon hydropneumatic tank, and provisions to treat water as

needed in the future. The site was designed for simplified maintenance and fully automatic functionality to accommodate the District.

Locke Water System Intertie Project, Locke Water Works Company, Locke, CA: Staff Engineer responsible for design of a SRF-funded, intertie project comprising 4000-feet of 4-inch dia. potable water pipeline across the Delta Channel to connect the existing Town of Locke system to the Sacramento County Water Agency network in Walnut Grove. Planning was funded by both Propositions 1 and 84.

Well Source Capacity Compliance, Shaffer School, Litchfield, CA: Staff Engineer for a Proposition 1-funded project that included investigation of an existing well for possible development and a new well to determine water quality and total yield to meet peak hour and maximum day demands. The subsequent design project included well design and development, the site distribution system, and a sewer lift station and force main.

Raw Water Line Replacement Project, City of Fort Bragg, Fort Bragg, CA: Staff Engineer. Coleman Engineering has been retained by the City of Fort Bragg to design a replacement raw water transmission line to support the construction of approximately 15,000 LF of raw water transmission line and appurtenances from the City's Water Treatment Facility to Summers Lane Reservoir and from Highway 20 to Waterfall Gulch. This pipeline is critical to the secure supply of raw water from the City's best quality sources, and the existing pipeline is nearing the end of its service life.