

COVER LETTER

RE: CAMINO DEL NORTE SEWER EXTENSION

Dear Carlos Norvani, LEED AP:

Ardurra has reviewed the subject Request for Proposal (RFP) and associated documents and is pleased to submit this proposal for engineering design services to the City of Lake Elsinore. The Ardurra team is ideally suited to provide professional services to assist the City and we offer the following:

EXPERIENCE. The design team will be led by Ms. Amy Czajkowski, PE, CCM as Principal-in-Charge, and Ms. Jamie Fagnant, PE, QSD as Project Manager. The Ardurra team understands the standards of both the City of Elsinore, and Elsinore Municipal Water District. Our team is known regionally for our excellent communication, sound engineering design, and unmatched dedication to our client's goals. Ms. Czajkowski and Ms. Fagnant have developed a strong working relationships in the region and we are eager to put our technical expertise, local knowledge, and unmatched dedication to work to make this project a success.

TEAM. Our project team has a proven track record of delivering successful projects. Mr. Gregory Farrand, of Ninyo & Moore, has years of providing Geotechnical investigations and reports in support of pipeline projects and has specific local knowledge of the recent developments and fill materials within the project area. Mr. Brian Fox with Cozad & Fox, Inc. is experienced in working within the City's jurisdiction and is familiar with the City's standards for survey. Underground Solutions will provide vacuum based potholing for safe and precise potholing, and is intimately familiar with City of Elsinore right of way permitting in order to minimize impact of potholing to the schedule. Our staff and subconsultants are experienced at working as an integrated multidisciplinary team and is poised to deliver a successful design for the El Camino Del Norte Sewer Extension.

Thank you for your consideration and please feel free to contact me if you should have any questions.

Sincerely,



Jamie Fagnant, PE, QSD

Project Manager
jfagnant@ardurra.com
858.842.6992



Amy Czajkowski, PE, CCM

Principal-in-Charge
aczajkowski@ardurra.com
760.518.6266

September 16, 2022

**CITY OF LAKE
ELSINORE**

130 SOUTH MAIN ST.
LAKE ELSINORE, CA 92530

- 02 FIRM'S EXPERIENCE
- 06 PROJECT TEAM
- 09 UNDERSTANDING & SCOPE
- 12 SCHEDULE
- 13 FEE



41593 WINCHESTER ROAD,
SUITE 110

TEMECULA, CA 92590

ARDURRA.COM

MESA GARRISON SEWER EMERGENCY REPAIR

City of Oceanside

The Mesa Garrison gravity sewer conveys 5 MGD through a 24" ductile iron pipeline construction in 1971 to the City's San Luis Rey Wastewater Treatment Facility. In August of 2015, the pipeline experienced a catastrophic failure due to crown corrosion. Ardurra prepared emergency plans and specifications to install approximately 800 feet of 18" HDPE via sliplining through the existing pipeline within a deep utility tunnel and an additional approximately 1200 feet of cured in place pipe lining. The project was performed round the clock for 4 months until the 24" repair was completed, and normal flow reintroduced.

KEY PROJECT COMPONENTS

- Developed bypassing plan for the 5 MGD gravity sewer in order to perform the repairs.
- Developed Shoring System for 45-foot-deep sewer to go under SDG&E high voltage lines.
- Developed plan to protect-in-place, remove, and/or relocate nine (9) other utilities through the same utility corridor in order to repair sewer. This included stabilizing of the 24-inch land outfall within this trench since it is at the same invert as the 24-inch gravity line.
- Locating the failed location of sewer line 45 feet deep, realizing a 45-deg bend had been installed, not a manhole, and CCTV video showed blockage in the line on both sides of the bend.
- Obtained all of the permits from OSHA, Traffic Control Department, NCTD, RWQCB and OSHA Mining and Tunneling Classification.
- Based on Geotechnical investigations, potential for methane gas was present, thus classified as "potentially gassy", and requiring OSHA Mining and Tunneling approval and consistent safety inspection throughout the duration of construction.

PROJECT SPECIFICATIONS

Reference:

City of Oceanside
Jason Dafforn, PE*
951.434.4708

*former City of Oceanside Water Utilities Director, now with Elsinore Valley MWD

Project Dates:

August 2015 — October 2015

Project Value:

\$3,200,000

"...This project would not have been completed in five months without the careful and quick thinking efforts of the Project Team. This team completed the project with no injuries or incidents. The project was carefully managed on a time and materials basis that ultimately resulted in a cost advantage to the City...The City Council was please with the final product and the timely completion."

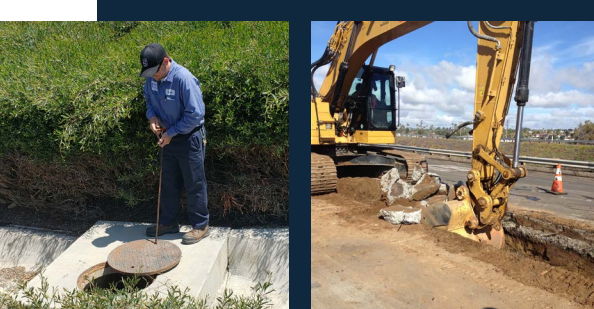
– Mr. Jason Dafforn, PE

AS NEEDED ENGINEERING DESIGN SERVICES

Leucadia Wastewater District

As a prime consultant, Ardurra has provided as-needed engineering services on a task order delivery basis to the Leucadia Wastewater District (District) since 2006. Services have encompassed a wide variety of tasks to support all aspects of the District's Capital and Operational needs including planning and hydraulic modeling, Geographical Information System (GIS) support services, flow monitoring, engineering design, cost estimating, plan preparation, office engineering during construction, and construction inspection. The following list includes highlights of the several task orders Ardurra has completed for the District:

- FY 21 Gravity Line Rehabilitation | \$343,000 – 6,600 lf CIPPL
- FY 20 Gravity Line Rehabilitation | \$1,300,000 – Replace 12 clean outs with new manholes, 955 lf of CIPPL, 4 point repairs
- FY 18 District-Wide Cured-in-Place Pipe Lining | \$700,000 – Over 7,000 lf CIPPL, 16 cured-in-place manhole linings, two epoxy manhole liners, several excavated point repairs
- FY 17 Gravity Line Rehabilitation | \$938,000 – 2,468 lf cured in place pipe lining, 6 cured in place manhole liners, 3 epoxy manhole rehabilitations
- Lanikai Trunk Sewer Rehabilitation | \$235,000 – Design of a cured-in-place pipe liner through North County Transit District (NCTD) right of way for a 21-inch vitrified clay trunk sewer. Cured-in-place pipe lining included analysis and inclusion of Cooper E80 rail loading on the fully structural pipe rehabilitation. Project challenges included detailing a conceptual bypass plan for bypassing the trunk sewer to the other side of the NCTD railway.
- La Costa Golf Course Gravity Line Improvements | \$18,700 – Feasibility, preliminary design and final design of sewer improvements to mitigate infiltration in an existing gravity sewer. The project ultimately consisted of approximately 100 linear feet of gravity sewer relocation on private property and abandonment in place of the existing gravity sewer.
- FY 16 Gravity Line Rehabilitation | \$284,000 – 3,131 lf CIPPL, one cured-in-place manhole liner, three sag repairs
- Scott's Valley Sewer Rehabilitation | \$350,000 – Rehabilitation of three manholes via cured-in-place manhole lining, 678 lf of 15" cured-in-place pipe lining, sewer bypassing for cured-in-place pipe lining, six manholes rehabilitated via epoxy manhole lining
- FY 15 Gravity Line Rehabilitation | \$653,000 – 2,829 lf cured-in-place pipe lining, one manhole rehabilitation, replacement in place of 916 lf 8" gravity main, two excavated gravity sewer repairs
- Asset Management Plan Implementation Phase I | \$70,000 – Prioritization and assessment of the District's gravity sewers and pump stations. Included review of CCTV tapes for the critical portions of the system and support services for cured in place pipe lining of failed sections.
- Gravity Line Rehabilitation | \$342,000 – 2,822 lf cured-in-place pipe lining, sag repairs, 7 manhole liners, and 5 CIPPL point repairs



PROJECT SPECIFICATIONS

Reference:

Leucadia Wastewater District
Robin Morishita
760.753.0155 X3007

Project Dates:

2006 — Present

Project Value:

\$25,000,000

ROCKS SPRINGS SEWER

Vallecitos Water District



The existing gravity sewer system within the general project area had been subject to periodic surcharging, particularly a reach of sewer that traversed an existing green belt surrounded by residences. Ardurra was retained by the Vallecitos Water District to prepare a planning and alignment alternatives study, followed by the design PS&E and preparation of environmental documents for CEQA compliance. The final project is comprised of 2,700 ft of 12"-15" gravity sewer alignment to replace an existing 8" sewer, cured-in-place pipe lining of 300 ft of 8" gravity sewer, new and rehabilitated manholes, improved access paths for sewer system operators, and improvements to the HOA greenbelt hardscape and landscaping.

The Planning Study entailed preliminary hydraulic modeling to evaluate required pipe size and flow, a limited geotechnical investigation, and development of several alignment alternatives to relocate the pipe out of the green belt and private properties. Seven alternatives/sub-alternatives were developed and evaluated for advantages/disadvantages, constructability, geotechnical concerns, easement and property requirements, and costs. The recommended alternative called for upsizing the majority of the pipe along a parallel alignment (to relieve the surcharging problem) with re-alignment of certain pipe sections into the public right of way.

The District subsequently engaged Ardurra to prepare the design plans, specifications and bid documents. The plans include the abandonment of the sewer main traversing private properties, connections to existing sewer manholes, pavement reconstruction requirements, and traffic control. The pipe design included requirements for trenchless construction where segments of the new sewer pass under the existing creek. Ardurra provided permit compliance support for the State Water Resources Control Board for NPDES General Permit for Storm Water Discharges: Risk Assessment, Site Maps, SWPPP, and Water Pollution Control Drawings.

The Ardurra Team (via subconsultant Dudek) also prepared the environmental documents needed for CEQA compliance including Biological Resources Report, Noise Report, Hazardous Materials Memorandum, Cultural Resources Assessment, IS/MND, MMRP, NOI and NOD.

PROJECT SPECIFICATIONS

Reference:

Vallecitos Water District
Lito Santos, PE
760.744.0460 ext. 370
lsantos@vwd.org

Project Dates:

2010 — 2016

Project Value:

\$2,000,000

ADDITIONAL EXPERIENCE

Our pipeline experience encompasses sizes up to 54-inch diameter and all pipe types including commonly used PVC and CIPP, as well as materials for special applications such as fusible PVC and HDPE. Our services have spanned hydraulic analyses, alignment studies, preliminary and final design, and construction support. The following table highlights some of our pipeline projects and their respective types and sizes:

SEWER PIPELINES

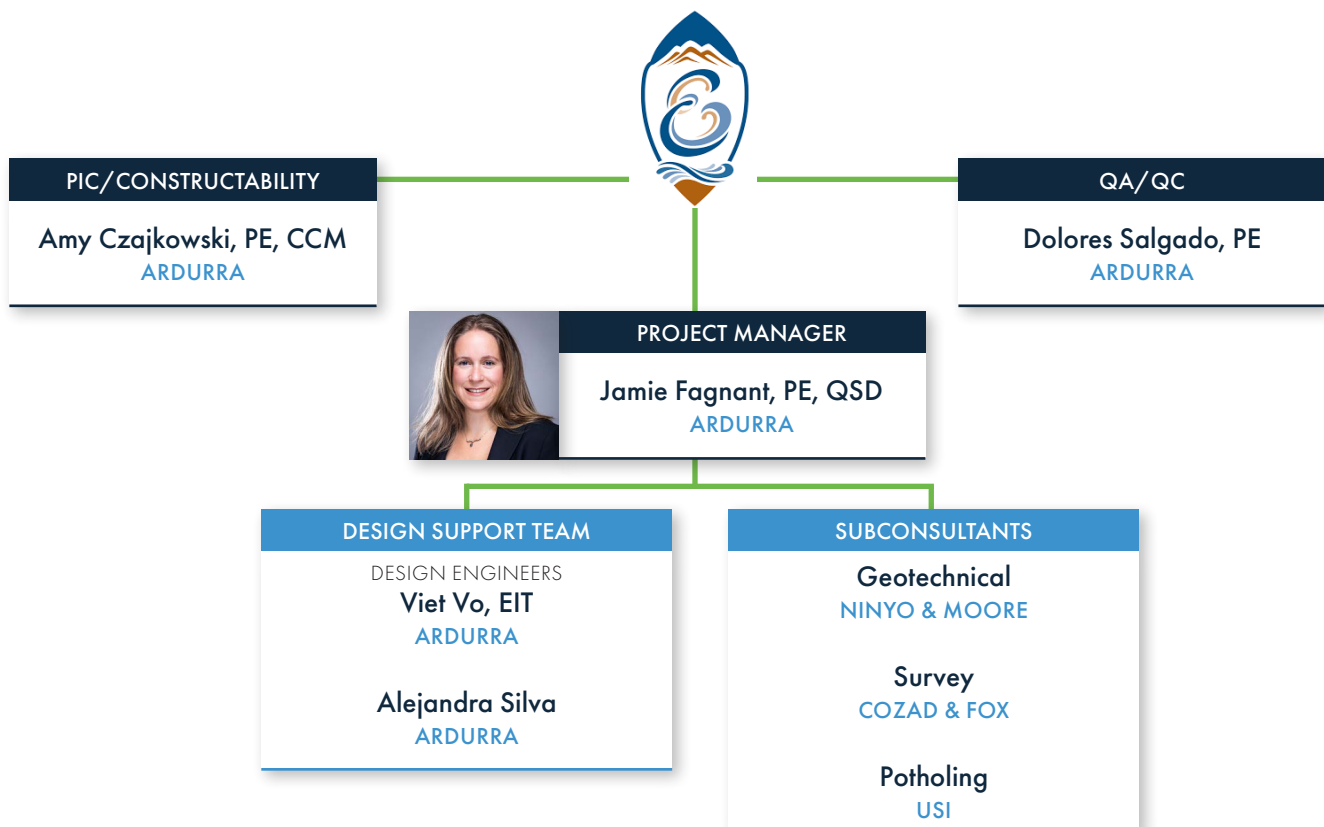
PROJECT/AGENCY	DESCRIPTION
SEWER REPLACEMENT FOR NEVADA AVENUE AND BODGER STREET AREA CITY OF EL MONTE	<ul style="list-style-type: none"> ▪ Approx 4,000 lf 8" PVC sewer ▪ 1,500 lf 12" PVC sewer ▪ Rehabilitation of several existing manholes ▪ Relocation of over 100 sewer laterals to new sewer main
OLIVENHAIN TRUNK SEWER IMPROVEMENTS CITY OF ENCINITAS	<ul style="list-style-type: none"> ▪ 2,800 lf 15" trunk sewer
LA SALINA FORCE MAIN IMPROVEMENTS CITY OF OCEANSIDE	<ul style="list-style-type: none"> ▪ 18,000 lf 20" HDPE sewer force main
BUENA VISTA FORCE MAIN REPLACEMENT CITY OF OCEANSIDE	<ul style="list-style-type: none"> ▪ 9,000 lf 24-inch PVC ▪ Auger bore & microtunnel
CONDITION ASSESSMENT AND SEWER IMPROVEMENTS CITY OF OCEANSIDE	<ul style="list-style-type: none"> ▪ 17,000 lf 24-inch sewer ▪ 12,000 lf 42-inch force main
MYERS/TAIT STREET SEWER REPLACEMENT PROJECT CITY OF OCEANSIDE	<ul style="list-style-type: none"> ▪ 2,120 lf 16-inch CIPP sewer ▪ 1,077 lf 30-inch PVC sewer ▪ 3,200 lf 27-inch PVC sewer
DISTRICT 3 & 4 SEWER MAIN REPLACEMENT CITY OF POMONA	<ul style="list-style-type: none"> ▪ 10,000 lf 12"-15" VCP sewer
OAK KNOLL TRUNK SEWER REPLACEMENT CITY OF POWAY	<ul style="list-style-type: none"> ▪ 5,500 lf 27-inch PVC
B2/B3 FORCEMAIN LEUCADIA WASTEWATER DISTRICT	<ul style="list-style-type: none"> ▪ 2,600 lf 24" PVC sewer ▪ 1,400 lf 14" PVC sewer
BATIQUITOS INLET SEWER LEUCADIA WASTEWATER DISTRICT	<ul style="list-style-type: none"> ▪ 900 lf 21-inch/24-inch PVC
FORCE MAIN REPLACEMENT LEUCADIA WASTEWATER DISTRICT	<ul style="list-style-type: none"> ▪ 9,000 lf 6"/10" PVC sewer
DISCOVERY STREET SEWER REPLACEMENT VALLECITOS WATER DISTRICT	<ul style="list-style-type: none"> ▪ 4,000 lf 12"/15" gravity sewer
LAND OUTFALL SLIPLINING UNDER I-5* VALLECITOS WATER DISTRICT	<ul style="list-style-type: none"> ▪ 800 lf 54-inch DIP gravity sewer

*Award Winning Project

PROJECT TEAM

ORGANIZATIONAL CHART

Ardurra’s proposed team for the City of Lake Elsinore’s Camino Del Norte Sewer Extension Project has the resources, capabilities, and commitment to deliver a successful project. The team, under the leadership of Jamie Fagnant, PE, QSD, as Project Manager, is well prepared to deliver a project on-time and within budget. Supporting Ms. Fagnant are Amy Czajkowski, PE, CCM and Dolores Salgado, PE as Principal-in-Charge and QA/QC Review, respectively. The organization chart to below depicts the roles and reporting structure for key staff available for the contract.





JAMIE FAGNANT, PE, QSD

PROJECT MANAGER

Ms. Fagnant has been working in the water and wastewater field for 18 years and has extensive experience and a specific expertise in sewer design and rehabilitation. Ms. Fagnant has experience working with Cities, Water and Sewer Districts in the San Diego region and has a thorough understanding of industry standard design guidelines for the design and rehabilitation of sewers as well as a working knowledge of standard specifications and drawings for various agencies throughout San Diego County. Ms. Fagnant is very active in the engineering community, and served on the board of the San Diego Chapter WateReuse Association for seven years in various positions.

PROFESSIONAL REGISTRATION

Registered Professional Engineer
California No. C78967

EDUCATION

San Diego State University
B.S. Civil Engineering, 2006

CERTIFICATIONS

California Board of Professional Engineers, Land Surveyors and Geologists (CBPELSG) Qualified SWPPP Developer (QSD) Certification #C78967

AFFILIATIONS

American Society of Civil Engineers Chi Epsilon, Civil Engineering Honor Society WateReuse Association, San Diego Chapter, Director of Public Outreach

SOFTWARE

Primavera® P6 Project Management

RELEVANT EXPERIENCE:

Rock Springs Sewer Project, Vallecitos Water District – Project Engineer to prepare a planning and alignment alternatives study, followed by the design PS&E and preparation of environmental documents for CEQA compliance. The final project is comprised of 2,700 ft of 12"-15" gravity sewer alignment to replace an existing 8" sewer, cured-in-place pipe lining of 300 ft of 8" gravity sewer, new and rehabilitated manholes, improved access paths for sewer system operators, and improvements to the HOA greenbelt hardscape and landscaping.

City of Lemon Grove Sewer Rehabilitation and Upsizing, City of Lemon Grove – Project Engineer for the design of 3,480 lf of 8-inch cured-in-place pipe liner and upsizing of 4,942 lf of 6" and 8" sewer to 8" and 10", respectively.

FY16 Gravity Sewer Main Repairs, Leucadia Wastewater District – Project Engineer for the design of 3,131 linear feet of cured-in-place pipe lining, installation of a cured-in-place manhole liner and three sag repairs. Project also included the emergency installation of a 355 linear foot cured-in-place pipe liner for a badly corroded 10" cast iron gravity sewer on an expedited design basis.

Lanikai Trunk Sewer Rehabilitation, Leucadia Wastewater District – Project engineer for the design of a cured-in-place pipe liner through North County Transit District right of way for a 21 inch vitrified clay trunk sewer. Cured-in-place pipe lining included analysis and inclusion of Cooper E80 rail loading on the fully structural pipe rehabilitation. Project challenges included detailing a conceptual bypass plan for bypassing the trunk sewer to the other side of the NCTD railway.

Leucadia Scenic Cured-in-Place Pipe Lining, Leucadia Wastewater District – Project Engineer for the design of 2,018 linear feet of cured-in-place pipe lining in existing 12" gravity sewer. Project included obtaining Caltrans encroachment permit.

Scott's Valley Sewer Rehabilitation, Leucadia Wastewater District – Project Engineer for the design of 678 linear feet of cured-in-place pipe lining in existing 18" sewer, installation of four cured-in-place manhole liners, rehabilitation of seven sewer manholes by epoxy lining, development of a conceptual bypass and access plan in a sensitive environmental habitat.

JAMIE FAGNANT, PE, QSD

Olivenhain Trunk Sewer Improvements Project, City of Encinitas – Project Engineer. The project addressed existing maintenance issues, improve system reliability, and provide better protection for water quality and habitat values in Escondido Creek and San Elijo Lagoon. Specific objectives included: rehabilitating 54 existing sewer manholes to reduce I&I, relocating 2,800 lf of the upper OTS out of the Escondido Creek floodplain and increasing its capacity to meet currently projected system needs, and providing environmentally appropriate access for maintenance vehicles along the remainder of the OTS. Project is currently in design.

V2/V6 Planning & Alignment Study, City of Vista – Project Engineer. This project proposed to upsize approximately 3,389 feet of existing 12"-33" sewer to 15"-42" and 1,289 feet of existing 10" to 15". The upsizing included a new trenchless crossing of state route 78. Ardurra teamed with Brierley & Associates to complete a planning study assessing project hydraulics, identifying traffic and environmental impacts, and investigating the feasibility of trenchless construction for the sewer upsizing.

Condition Assessment of the Land Outfall, Gravity Main and Force Main, City of Oceanside – Condition Assessment Project Manager. Working closely with Arcadis, the project included condition assessment and related capital improvement projects for the City's 24" Land Outfall, 24" Gravity Line and 42" Force Main. Selected condition assessment technologies include a variety of external and internal thickness testing tools.

L1 West Side Sewer Force Main Replacement, Leucadia Wastewater District – Project Engineer for the design of 2,594 linear feet of 24" sewer force main replacement and associated appurtenances. Project included obtaining permits from multiple agencies including Caltrans, North County Transit District and the City of Encinitas. Project included installation of flexible expansion joints on the existing ductile iron bridge crossing.

B1/B2 Sewer Force Main Replacement, Leucadia Wastewater District – Project Engineer for the design of 8,527 linear feet of 24" sewer force main and 14" secondary effluent force main. Ms. Fagnant also supported Ardurra's environmental department to prepare a Mitigated Negative Declaration for the project. Mitigation measures from the MND were incorporated into the contract documents.

FY15 Gravity Sewer Main Repairs, Leucadia Wastewater District – Project Engineer for the design of 2,272 linear feet of cured-in-place pipe lining, two cured-in-place manhole liners, two sag repairs and two cured-in-place pipe patch rehabilitations.


Recycled Water Line Creek Crossing, Leucadia Wastewater District – Project Engineer for the design of a 330 linear foot crossing of San Marcos Creek via horizontal directional drilling for a replacement 12" recycled waterline with fusible PVC. Project also included installation of an isolation valve via the use of a linestop and replacement of an isolation valve and installation of a blow off on the District's Gafner Water Reclamation Facility site. Project challenges included timing construction to coincide with the closure of the Omni La Costa Golf Course and specific contract requirements to limit damage to the fairway and install replacement turf.

Industry Road Trunk Sewer Replacement, County of San Diego – Project Engineer for the design of 325 linear feet of 8" gravity sewer, 92 linear feet of 21" gravity sewer, and 2,464 linear feet of 18" gravity sewer.

South Oceanside Waterline Replacement & Sewer Upsizing, City of Oceanside – Project Engineer for the design of 7,400 lf of replacement water distribution main and 2,771 lf of sewer upsizing to 8-inch, with 4 manhole rehabilitations and 8 manhole replacements, within residential areas of south Oceanside. The project encompassed evaluation of replace in place versus parallel alignments as well as re-routing of several existing water services in order to eliminate a problematic alley main. Final contract documents have been submitted.

L1 Sewer Force Main Destructive Testing, Leucadia Wastewater District – As Project Engineer, Ms. Fagnant analyzed the dual 24" sewer force main system to assess the feasibility of utilizing a non-destructive free swimming inspection tool.

L1 Sewer Force Main Non-Destructive Testing, Leucadia Wastewater District – As Project Engineer Ms. Fagnant developed contract documents for removal of a ten foot section of existing 24-inch ductile iron force main. Ms. Fagnant provided recommendations for repair based on inspection of the force main section and available CCTV inspection of the upstream and downstream sections of the pipe adjacent to the destructive testing location.



PROJECT UNDERSTANDING & SCOPE OF WORK

PROJECT UNDERSTANDING

The City of Elsinore is proposing to install approximately 1,225 linear feet of the new 8-inch diameter polyvinyl chloride pipe (PVC) sewer. The Elsinore Valley Municipal Water District (District) would provide oversight of the design review process. Design and construction standards for new sewers will comply with the District's requirements. The sewer would extend easterly from an existing sewer manhole located 380 feet southeast of the Main Street and Camino Del Norte intersection. We have reviewed the information provided with the Request for Proposal (RFP) and the associated record drawing and have developed our scope and approach to be responsive to the provided RFP.

SUMMARY OF THE PROPOSED PIPELINE

1. Pipe size: 8-inch diameter
2. Permanent Easement width: none, within existing right-of-way
3. Existing cover: ranges between 8-feet below ground surface to 9-feet bgs
4. Length: 1,225 linear feet
5. Material: PVC
6. Jurisdiction: City of Lake Elsinore

APPROACH

Ardurra values our relationships with the City of Elsinore and Elsinore Valley Municipal Water District and appreciates the opportunity to propose on this project. We understand the importance of completing capital improvement projects on budget and on schedule and we have prepared this proposal and associated staffing levels with the highest priority in consideration of the City's and District's goals and objectives.

TECHNICAL APPROACH

The first step in providing the City with the best, most cost-effective alignment option, will be to evaluate the site constraints. Initiating the data collection process, including the geotechnical investigations, surveying and mapping immediately upon Notice to Proceed will accelerate the project schedule. Our comprehensive utility research and mapping practices will begin immediately and our thorough utility documentation will continue throughout design. By conducting these investigations early on, we can quickly identify and provide design solutions to provide the most cost effective vertical and horizontal alignment.

Optimization of the Pipeline Design: The 8-inch diameter sewer will be designed not only for minimum cover over the pipeline, but with consideration of the potential for future water crossings and parallel alignment. For new sewer construction it is imperative to include potholing of existing utilities that cross the proposed alignment to minimize the potential for change orders during construction. We have included Underground Solutions on our team who have experience obtaining timely encroachment permits from the City of Elsinore, critical to streamlining the potholing process and keeping the project on schedule.

Hydraulic Verification: During preliminary design, Ardurra will verify the flow depth and dry weather cleansing velocity for the new 8-inch diameter sewer. The evaluation will be limited to calculating the new pipeline velocities using the existing wet and dry weather maximum daily flows provided by the District.

Pipeline Materials: The City and District has assumed the use of PVC pipe material for the project. Gravity PVC pipe material is typically used for new sewer installations between 5' and 15' in depth. Occasionally, alternate pipeline materials are considered due to depth or to satisfy "upgraded material" requirements where the sewer is located within 10-feet of a potable waterline. Ardurra will identify the potential for alternate pipe materials during preliminary design.

Division of Drinking Water (DDW): Existing potable waterlines will be identified within the project corridor. The design will include Title 22 requirements to maintain 10-foot clearance between the new sewer line and existing potable water lines. In the event this minimum clearance cannot be met due to site conditions, Ardurra will assist the City and District in submitting for a waiver from DDW.

UTILITY RESEARCH APPROACH

Utility research and plotting is a critical component of project success. Ardurra will perform utility research and obtain up to date maps at the beginning of design to accurately plot existing utilities. The confidence in the location of the existing utilities is accomplished by strictly adhering to Ardurra's established utility research procedure. Central to our technical approach to any underground or pipeline project is a time-tested, methodical, and detailed utility research and plotting procedure that provides for a high level of confidence with respect to the locations of subsurface utilities. Our data collection and plotting efforts will include in house checklists designed to capture available utility data and provide redundancy to ensure no utilities slip through the cracks. This procedure will be discussed and included as a part of Ardurra's Quality Assurance Plan for the project. Ardurra has designed hundreds of miles of pipeline using these utility research procedures and has an excellent track record of avoiding conflicts with existing utilities.

PROJECT MANAGEMENT AND ADMINISTRATION APPROACH

Key to the success of a well-executed pipeline project is effective project management. Ardurra's management approach is designed to accomplish two ends:

- to ensure vigilant and proactive management of budget, schedule, and work quality
- to make it easy for the City to manage Ardurra

Achieving these goals depends equally on having proven project management procedures in place and diligently executed, and on our 100% commitment to listen actively and understand the City's goals and objectives for this project, focus our work activities accordingly, and deliver on the City's expectations. Ardurra's project management approach provides well-structured procedures to plan, execute, and track the work while communicating effectively within the team, with the City and with the project stakeholders.

QUALITY ANALYSIS/QUALITY CONTROL (QA/QC) APPROACH

Ardurra's thorough and vetted QA/QC process ensures our projects will be reviewed for conformance to District Standards, good design practices, and constructability, that comments will be incorporated, and that QA/QC comments will be backchecked. In addition, we include construction management and inspection professionals with specific knowledge in trenchless rehabilitation in our QA/QC team to perform a constructability review. This review is seamless with the QA/QC process and helps minimize change orders and keep the project on budget and on schedule.

ALL project deliverables will be reviewed through Ardurra's interdepartmental QA/QC process.

SCOPE OF WORK

Ardurra proposes the following exceptions to the scope of work as proposed in the Camino Del Norte Sewer Extension Request for Proposal.

- Eliminate 30% design submittal. In lieu of a full design submittal the PDR will be completed with an figure documenting the proposed preferred alignment.
- Revise Geotechnical borings to three, one at the beginning of the proposed alignment, one at the end, and one at the midway point (approximately every 600').
- Eliminate potholing. The area proposed for improvement is unimproved, and the proposed sewer is expected to be deep compared to dry utilities. If utilities are identified that need potholing during preliminary design Ardurra will make potholing recommendations and provide a scope and fee for potholing.
- Eliminate 60% submittal. The proposed project is expected to comprise two plan and profile sheets at 40 scale. In addition, the District's standards for basic sewer construction is well defined. Proceeding directly to 90% would streamline design cost and schedule while still allowing a robust design submittal approach.

PROJECT SCHEDULE
City of Lake Elsinore
Camino Del Norte Sewer Extension



ID	Task Name	Duration	Qtr 4, 2022			Qtr 1, 2023			Qtr 2, 2023		
			Oct	Nov	Dec	Jan	Feb	Mar	Apr		
1	PROJECT	135 days	[Project Timeline Bar]								
2	Project NTP	0 days	◆ 10/4								
3	Task 1 - Project Review	15 days	[Task 1 Bar]								
4	Task 2 - KO and Progress Meetings	0 days	◆ 10/4								
5	<i>KO Meeting</i>	<i>0 days</i>	◆ KO Meeting								
6	Task 4 - Surveying Services	45 days	[Task 4 Bar] 12/8								
7	Task 5 - Geotechnical	75 days	[Task 5 Bar]								
8	Draft Geotechnical Report	60 days	[Draft Bar] 1/4								
9	<i>City/District Review</i>	<i>3 wks</i>	[Review Bar] 1/25								
10	Final Geotechnical Report	0 days	◆ Final Geotechnical Report 1/25								
11	Task 3 - Preliminary Design and 30% Plan	125 days	[Task 3 Bar]								
12	Data Collection	30 days	[Data Bar] 11/15								
13	Utility Mapping	3 days	[Utility Bar] 12/13								
14	Draft PDR	4 wks	[Draft Bar] 1/11								
15	<i>City/District Review/Progress Meeting</i>	<i>3 wks</i>	[Review Bar] 2/1								
16	Final PDR	3 wks	[Final Bar] 2/22								
17	CEQA Initial Study	30 days	[CEQA Bar] 4/5								
18	Task 8 - 90% Submittal	30 days	[Task 8 Bar]								
19	90% Submittal	3 wks	[90% Bar] 3/15								
20	<i>City/District Review/Progress Meeting</i>	<i>3 wks</i>	[Review Bar] 4/5								
21	90% Design Complete	0 days	◆ 90% Design Complete 4/5								
22	Task 9 - Final Submittal	10 days	[Task 9 Bar]								
23	Final Submittal	2 wks	[Final Bar] 4/19								
24	Design Phase Complete	0 days	◆ Design Phase Complete 4/19								

**FEE SCHEDULE
CITY OF LAKE ELSINORE**

Task/ Subtask	Task/Subtask Description	Principal	QA/QC	Project Manager	Engineer II	Admin	Subtask Labor Hours	Subtask Labor Cost	Direct Cost	Subcontractor Survey Cozad & Fox	Subcontractor Utility Potholing USI	Subcontractor Geotechnical Ninyo & Moore	Total Subcontract incl 5% MU	Total Cost
		A. Czajkowski \$290	D. Salgado \$250	J. Fagnant \$240	A. Silva \$160	H. Hook \$105								
TASK 1 PROJECT REVIEW														
1.1	General			4			4	\$960						\$960
1.2	Permits			2			2	\$480						\$480
1.3	Environmental	1		2			3	\$770						\$770
TASK 2 KICK-OFF AND PROGRESS MEETINGS														
	Kick-Off Meeting	1	1	2			4	\$1,020	\$250					\$1,270
	Progress Meetings (3 total)	3	3	6			12	\$3,060						\$3,060
TASK 3 PRELIMINARY DESIGN AND 30% PLANS														
	Data Collection				4	16	20	\$2,320						\$2,320
	Utility Mapping				10		10	\$1,600						\$1,600
	Pipe Materials Options			2	4		6	\$1,120						\$1,120
	Draft PDR			4	16	4	24	\$3,940	\$200					\$4,140
	Final PDR			4	12	4	20	\$3,300	\$200					\$3,500
TASK 4 SURVEYING SERVICES														
	Surveying and Mapping			2			2	\$480		\$14,680			\$15,414	\$15,894
TASK 5 GEOTECHNICAL														
	Geotechnical Investigations (7 total)			2			2	\$480	\$200			\$26,900	\$28,245	\$28,925
TASK 8 90% SUBMITTAL														
	Permit Coordination			2	12		14	\$2,400						\$2,400
	Plans (2 plan/profile sheets)	1		8	20		29	\$5,410						\$5,410
	Technical Specifications	1		10		8	19	\$3,530						\$3,530
	Cost Estimate			2	4		6	\$1,120						\$1,120
	Calculations				4		4	\$640						\$640
	Deliverable			2		4	6	\$900	\$300					\$1,200
TASK 9 FINAL SUBMITTAL														
	Plans (2 plan/profile sheets)	1		8	16		25	\$4,770						\$4,770
	Technical Specifications	1		8		8	17	\$3,050						\$3,050
	Cost Estimate			1	4		5	\$880						\$880
	Calculations				4		4	\$640						\$640
	Deliverable			2		4	6	\$900	\$300					\$1,200
TASK 10 BIDDING SERVICES														
	Pre-Bid Meeting	1		2			3	\$770						\$770
	RFIs (3 total)							\$0						\$0
	Addenda (1 total)			1			1	\$240						\$240
	Conformed Set			1			1	\$240						\$240
TASK 11 RECORD DRAWINGS														
	Prepare record drawings				16		16	\$2,560						\$2,560
	Deliverable					2	2	\$210	\$200					\$410
TASK 12 ENGINEERING SERVICES DURING CONSTRUCTION														
	Preconstruction meeting	1		2			3	\$770	\$200					\$970
	Submittals (30 total)				30	12	42	\$6,060						\$6,060
	Construction progress meetings (4 total)	4		4			8	\$2,120						\$2,120
	Change orders (2 total)			2	4		6	\$1,120						\$1,120
	Request for Information			2	12		14	\$2,400						\$2,400
TASK 13 QA/QC AND PROJECT ADMINISTRATION														
	QA/QC	4	16	8			28	\$7,080						\$7,080
	Response to Comments			4		2	6	\$1,170						\$1,170
	Monthly Progress Reports			4			4	\$960						\$960
	Project Schedule			4			4	\$960						\$960
	Billing and Invoicing			10		8	18	\$3,240						\$3,240
Subtotal Hours		19	20	117	172	72	400							
Subtotal Fee		\$5,510	\$5,000	\$28,080	\$27,520	\$7,560		\$73,670	\$1,850	\$14,680	\$0	\$26,900	\$43,659	\$119,179

TOTAL NOT-TO-EXCEED FEE: \$119,179