TO: BOARD OF DIRECTORS

REVIEWED: MARIO IGLESIAS
GENERAL MANAGER

FROM: PETER V. SEVCIK, P.E.
DIRECTOR OF
ENGINEERING & OPERATIONS

DATE: JANUARY 19, 2017

AGENDA ITEM
E-2
JANUARY 25, 2017

AUTHORIZE STAFF TO NEGOTIATE CONTRACT FOR ENGINEERING SERVICES FOR THE NIPOMO PALMS LIFT STATION REHABILITATION PROJECT WITH CANNON CORPORATION

ITEM

Authorize Staff to Negotiate Contract for Engineering Services for the Nipomo Palms Lift Station Rehabilitation Project with Cannon Corporation [RECOMMEND APPROVAL].

BACKGROUND

The Nipomo Community Services District (NCSD) operates and maintains the Nipomo Palms Lift Station which is located off Beverly Drive in Nipomo and provides sewer service to mainly single and multi-family residential homes. This lift station also serves some commercial customers, even though it was not originally designed to do so. The existing Nipomo Palms lift station is over 30 years old and in need of immediate attention.

The lift station is the most active in the District's system. It has the highest run times out of all the lift stations, and is a very critical facility in this area. Any extended periods of downtime at this lift station could result in an overflow of the sanitary sewer system. The facility and its components are nearing the end of their useful life, and need to be replaced in the near future to ensure reliability of the station.

A preliminary engineering evaluation of the lift station that was completed by Cannon Corporation (Cannon) in March 2016 identified numerous deficiencies and operational issues. Based on the evaluation, Cannon recommended that the best option for long term operation of the lift station was to construct a new lift station with a larger wet well.

At the October 26, 2016 Board meeting, the Board authorized staff to circulate a Request for Proposals (RFP) for Engineering Services for the Nipomo Palms Lift Station Rehabilitation Project. Staff mailed the RFP to five engineering firms. The District received and opened proposals on December 15, 2016. Three firms submitted proposals (available for review at the District Office).

The proposals were evaluated by staff including the Director of Engineering & Operations, Assistant Engineer, and the Wastewater Supervisor. The evaluation considered responsiveness, work product time, team experience and expertise and references. Staff ranked Cannon's proposal the highest although Michael K. Nunley & Associates' proposal was a very close second in all aspects. Staff's ranking of proposals was as follows:

1. Cannon
2. Michael K. Nunley & Associates (MKN)
3. AECOM

FISCAL IMPACT

The FY 2016-2017 Town Sewer Fund Budget includes $880,000 for the rehabilitation of the Nipomo Palms Lift Station. The estimated cost of the design phase is anticipated to be in the range of $80,000 to $85,000.

STRATEGIC PLAN

Goal 2. FACILITIES THAT ARE RELIABLE, ENVIRONMENTALLY SENSIBLE AND EFFICIENT. Plan, provide for and maintain District facilities and other physical assets to achieve reliable, environmentally sensible, and efficient District operations.

RECOMMENDATION

Staff recommends that the Board authorize staff to negotiate a contract with Cannon for Engineering Services for the Nipomo Palms Lift Station Rehabilitation Project for approval at a subsequent Board meeting.

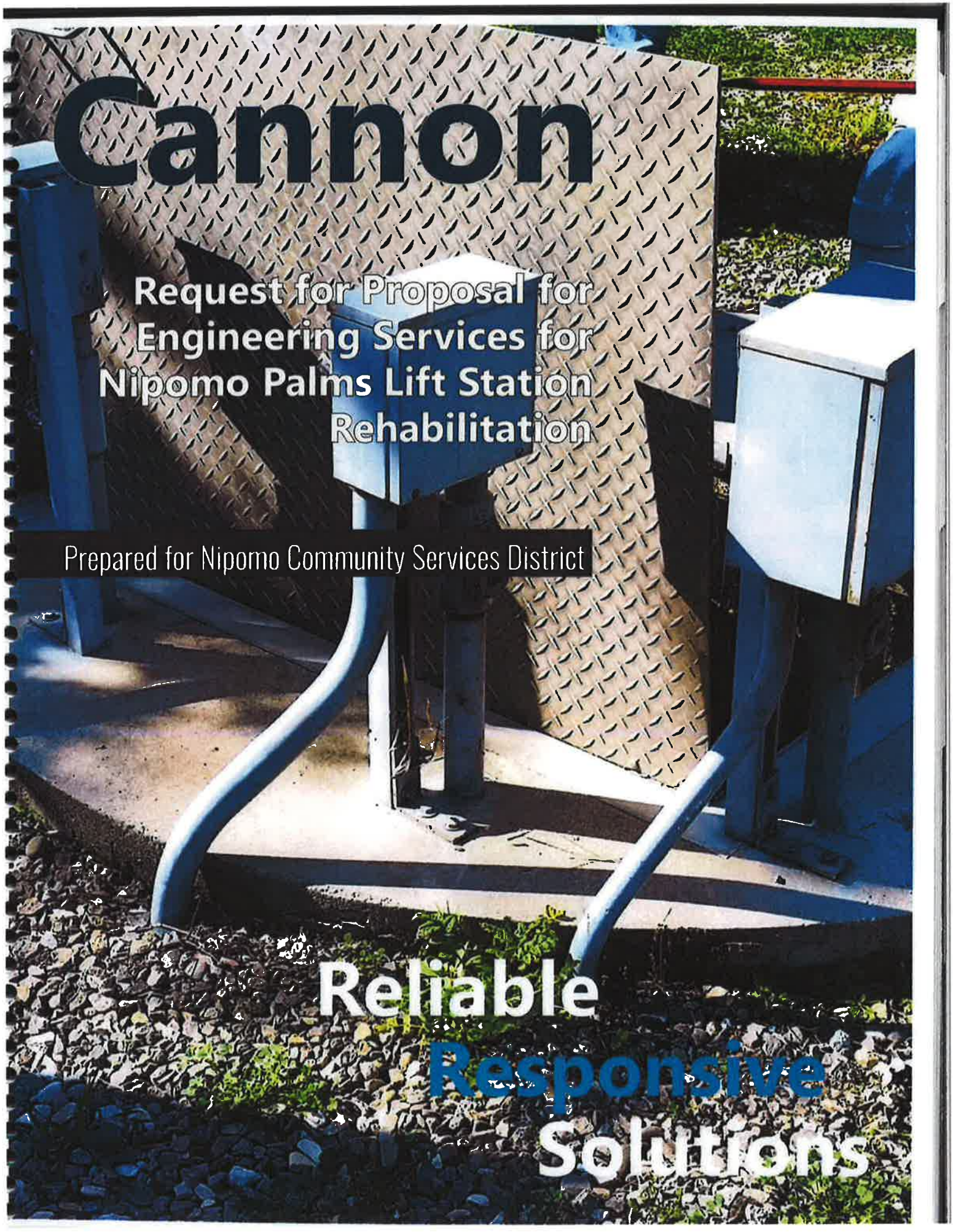
ATTACHMENTS

A. Cannon Proposal dated December 15, 2016

January 25, 2017

ITEM E-2

ATTACHMENT A


Cannon
Request for Proposal for
Engineering Services for
Nipomo Palms Lift Station
Rehabilitation
Prepared for Nipomo Community Services District
Reliable
Responsive
Solutions

December 15, 2016

Mario Iglesias, General Manager
Nipomo Community Services District
148 South Wilson Street
Nipomo, CA 93444

Subject: **Request for Proposals for Engineering Services Nipomo Palms Lift Station Rehabilitation**

Dear Mr. Iglesias:

Several maintenance and operational deficiencies have been identified in the Nipomo Palms Lift Station. The operational sequencing and the volume of flow the lift station handles on a daily basis make it a candidate for rehabilitation. In addition, this lift station has the highest operational run times of all the lift stations owned by the Nipomo Community Services District (District). By rehabilitating this facility, the District stands to renew the service life for many more years to come and reduce the risk for failure.

Having worked on the Nipomo Palms lift station Preliminary Design Report (PDR) and Condition Assessment Memo, we have the background and knowledge to "hit the ground running." In addition, our work with similar rehabilitation and replacement projects for other clients in the last few years, means that we know have what it takes to help you facilitate the upgrade and replacement of your aging infrastructure timely and efficiently.

Our staff has worked side-by-side with your staff for several years on such projects as the Woodgreen Lift Station Rehabilitation Options, Well No. 4, the Standpipe Tank Modifications, and SCADA system upgrades. This experience will significantly benefit the District and allow for the seamless coordination of design services with District staff.

I have a thorough understanding of the critical constraints of each rehabilitation option and experience providing bypass pumping solution options, to reduce costs and bypass pumping. Our team also includes Earth Systems Pacific to provide geotechnical and materials testing engineering and Hamner and Jewell to provide Right-of-Way Services.

On behalf of the Cannon team, I appreciate this opportunity to continue to serve the Nipomo Community Services District and look forward to speaking with you soon.

Sincerely,

Michael J. Kielborn, PE, LEED AP, C70112
Principal Engineer, Cannon Corporation
1050 Southwood Drive, San Luis Obispo, CA 93401
☎805.503.4582 805.503.4446 ✉ MichaelK@CannonCorp.us CannonCorp.us

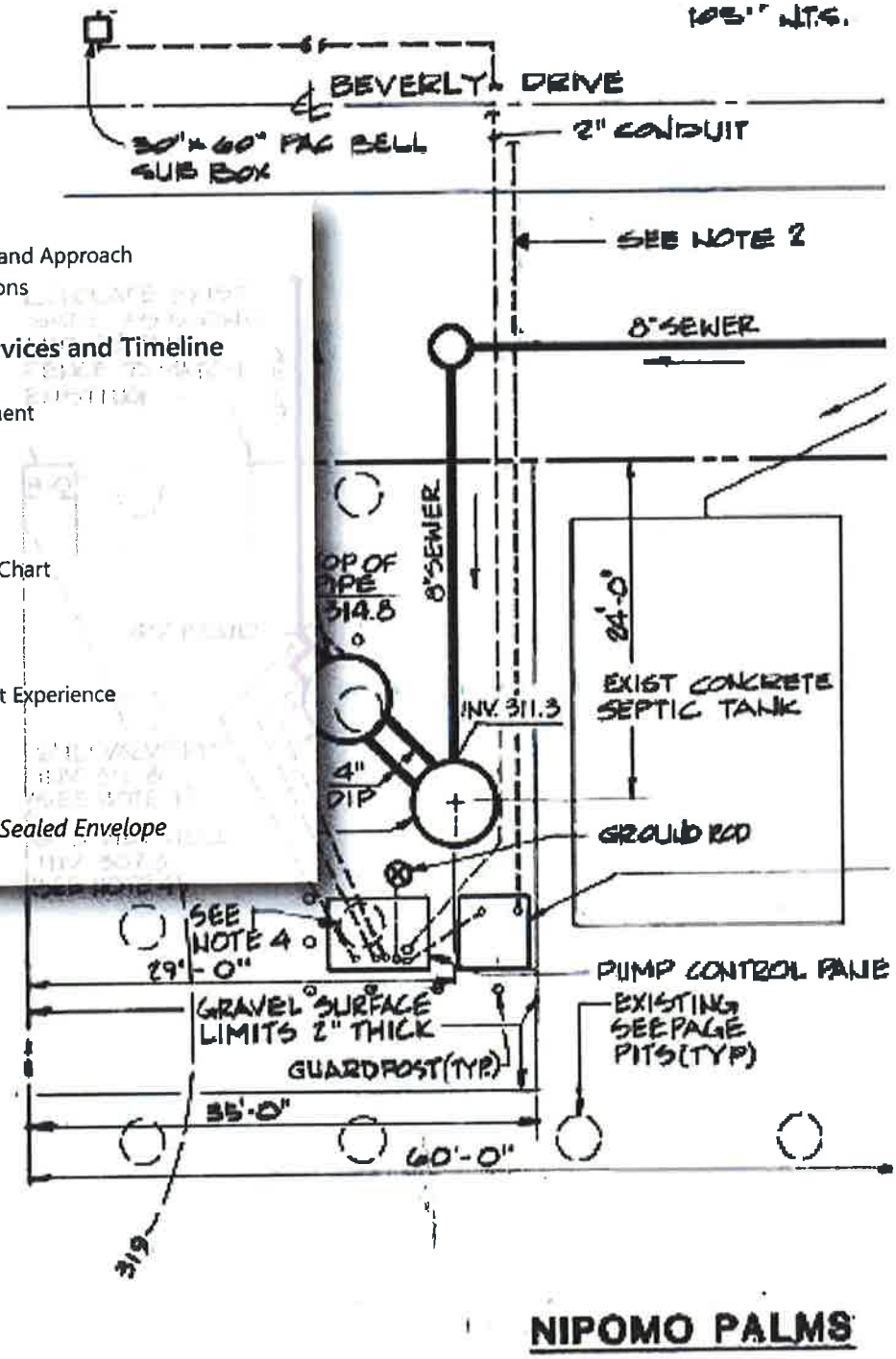
This proposal shall remain valid for a period of 90 days from the submittal date of December 15, 2016.

Michael Kielborn, PE LEED AP is Cannon's Project Manager authorized to negotiate a contract and Larry Kraemer, Cannon's secretary, is authorized to bind the firm with the Nipomo Community Services District on behalf of the project team.

X
Larry P. Kraemer, PE, Secretary

Table of Contents

*Fees Submitted in a Separate Sealed Envelope



Introduction

Understanding

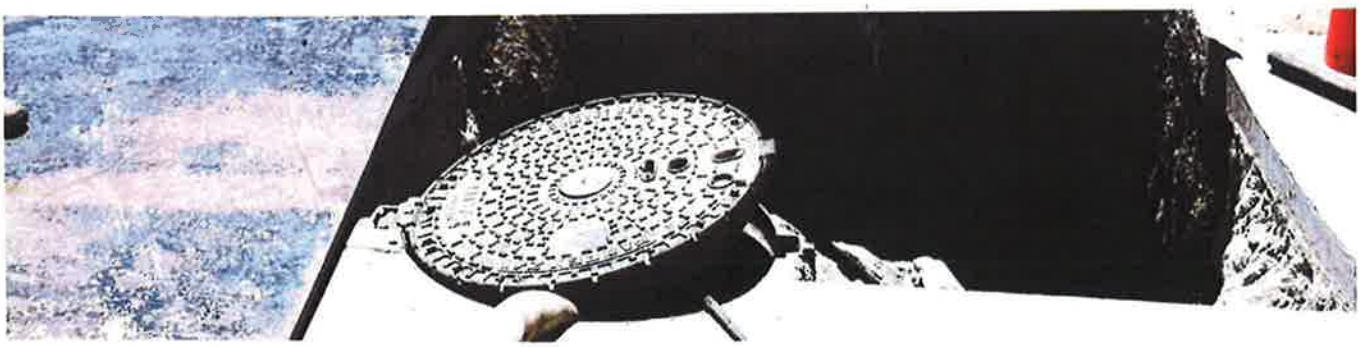
NCSD owns, operates, and maintains the Nipomo Palms Lift Station located off Beverly Drive in Nipomo. Originally designed to serve the nearby residential neighborhoods, the lift station's sewershed (sewer drainage area) has expanded over the years and now includes additional commercial properties. Because of this, sewer flows and loads have increased to the Lift Station and are contributing to long-term wear and tear and the need for extensive replacement and upgrades to maintain a high level of service and reliability.

Built more than 30 years ago, Nipomo Palms LS replaced an existing, failing septic tank and leach field. At that time, the gravity sewer lines in Beverly Drive were reconfigured to divert flows away from the septic tank and into the lift station. Lift station design standards have evolved significantly since that time, and is evident given the inadequate wet-well size and depth and configuration with its flat shallow influent sewer. This results in the inlet pipe being frequently submerged causing the potential for fats, oils, and grease buildup and sewer system overflows.

The Nipomo Palms LS is one of the District's most active and problematic stations and has the highest run times out of all the lift stations. With the facility and its components nearing the end of their useful life, rehabilitation or replacement of this essential facility is critical to protect the public and nearby environment from the hazards of exposure to raw sewage. The District's reasons for pursuing this project now include the following:

- To maintain a high level of sewer service to its customers
- To protect the public and environment from the hazards of exposure to raw sewage
- To eliminate maintenance issues
    - Wet well undersized
    - Backs up into gravity line to Beverly Dr.
    - Valve vault hard to access
    - Interior lining of wet well deteriorating
    - Short pump run times
    - No PLC based operation
    - No backup generator
- To allow the station to run more independently
- To address security and vandalism issues
- Any extended periods of downtime at this lift station could have disastrous implications

As part of Phase I of the Nipomo Palms Lift Station Rehabilitation Project, Cannon conducted a study of the current deficiencies at the lift station and prepared a Technical Memorandum with recommendations and related cost estimates for the upgrades needed to extend the life of this facility. Phase II includes design services for the preferred recommendation chosen by the District.



Approach

Specific Considerations and Critical Design Issues

Through our review of the RFP, conversations with District staff, our field investigation of the existing lift stations, and our past experience designing similar lift stations, we have identified what we consider key elements for successful completion of this project.

Sewer Bypass Strategy/Plan

A very important factor in the successful upgrade of the lift station will be having a fail-proof interim bypass strategy/plan in place to maintain sewer service during construction. The final strategy/plan will need to minimize the amount of downtime experienced in the collection system and prevent the release of wastewater into the environment.

Components of the lift station improvements (such as cutover to the new wet well, connection to the force main, or controls cutover) will require bypass pumping to keep sewage flowing in the collection system. Depending on the work needed to complete these tasks, provisions will likely be necessary to bypass pump during their duration. The final design will include a bypass discharge pipe connection with an isolation valve and camlock fitting for use during these times.

This bypass piping will benefit the contractor for this project and facilitate the long-term maintenance of the lift station by District staff as well. Design of the improvements will focus on allowing construction sequencing to take place with minimal pumping. Extended periods of bypass pumping can be extremely expensive, as well as disruptive to the community. We will work closely with the operations and maintenance crews to organize a plan of attack during the preliminary design phase to address these issues.

Working with the District

Members of the Cannon Team have worked with District staff to develop the Condition Assessment for the Nipomo Palms Lift station. We will streamline our time and expenses by directing our focus immediately on the design features of the project. Our in-depth familiarity with your processes, design standards, criteria, and particularly this project will ensure that the project is managed by an experienced project manager who shares history with the District, and will keep the project on schedule.

In addition, Cannon brings extensive experience with lift station, pipeline, and electrical panel design.. Our specialized engineering expertise gives credibility to the design plans and ensures that important aspects of the project are considered for design standards and permitting requirements, as well as constructability.

Lifecycle Familiarity and Commitment

We have a thorough understanding of the design options for this project and the advantages and disadvantages of each. We will continue to work closely with District operations and maintenance staff to assess the current condition of the existing facility and make an informed decision about which option will best serve the agency. Our team is invested in this project beyond the construction documents.

Cost and Schedule Efficiency

Cannon realizes the importance of providing realistic and accurate cost estimates for use in making decisions about which construction method to use in moving forward with a project. Based on our recent lift station rehabilitation work experience, we have provided preliminary costs for use in making these decisions. As we progress through the design phase, these costs will be updated to reflect the actual design considerations proposed, to allow for proper construction budgeting prior to bidding.

In addition, Our Project Managers use Deltek Vision Management System for budget accounting and as a project management database to produce detailed records of labor for Cannon field crews and office staff, sub-consultants, and other project costs by phase and task code and event milestones.

Local Team and Leadership

Cannon's engineers, surveyors, and construction managers are located less than 25 miles from District facilities, we can provide reliable responsive service.

All of our team members work out of our San Luis Obispo office and are just minutes away from the District's offices, capable of meeting within a moment's notice to assist with any need or request.

By choosing a local provider, the District will benefit from receiving immediate service and response time, lower consulting fees, and the knowledge of your project remaining local. Our accessibility combined with more than 10 years of District experience means Cannon's engineering team have honed our understanding of District functions and expanded our means of providing excellent customer service.

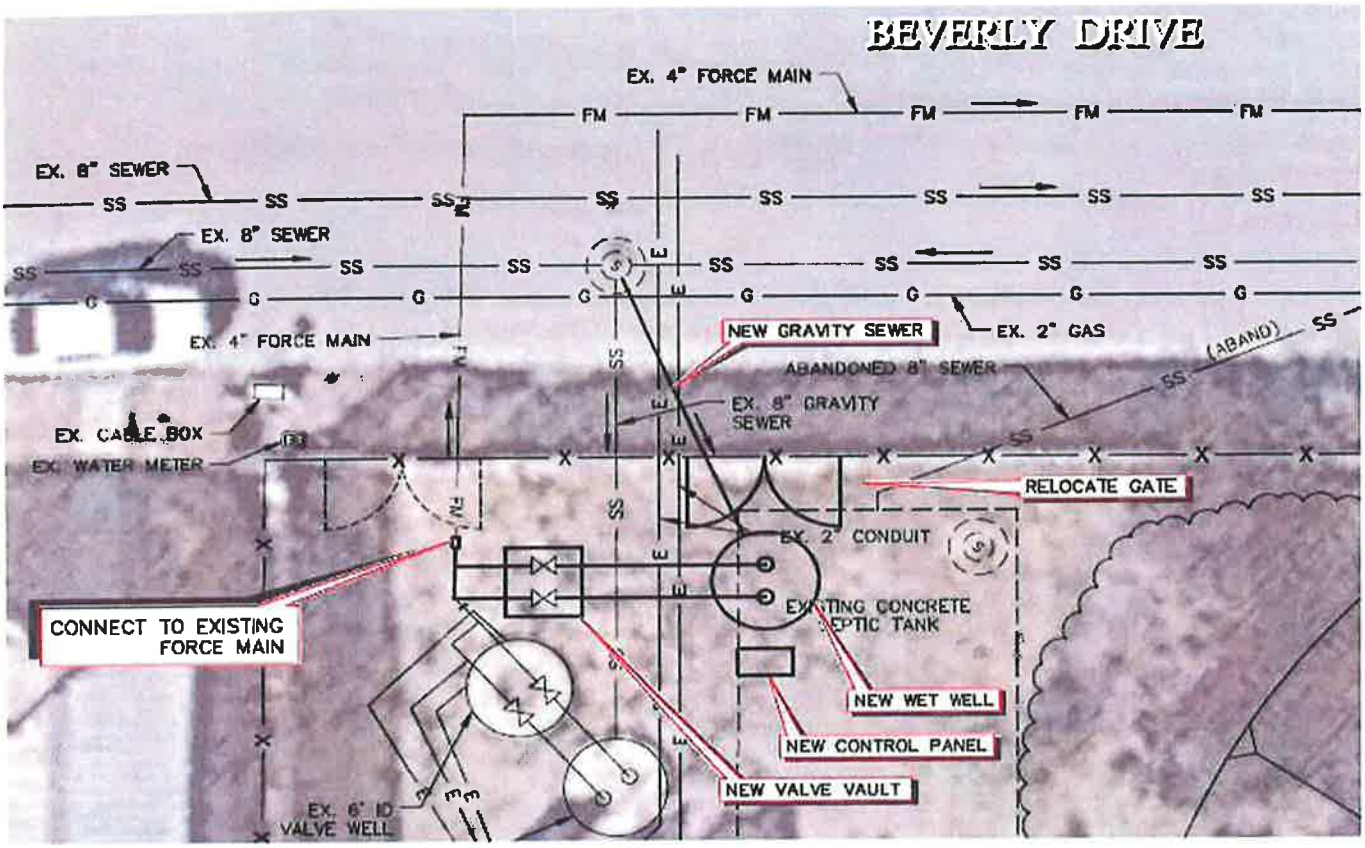
Option Summaries

Based on the information gathered and presented in the Condition Assessment Report, the two preferred options entail replacing the lift station with a new facility. The two options consist of a new lift station either adjacent to the existing wet well, or upstream of it. There is a cost savings for the latter option; however it is uncertain if that configuration can be constructed based on size and space limitations. A detailed survey will be required to make the final determination of the ultimate feasibility of this option. Our input on these two options is summarized in the following exhibits.

Option 3 – Replace Adjacent

Existing Conditions: Existing lift station is located on the northwest corner of the property. An abandoned septic tank is located on the northeast corner of the property.

Objective: To allow for construction of the new wet well and valve vault with sufficient room adjacent to the existing wet well.



Site Considerations/Constraints

- May require installation of an interim manhole to divert flow into the new wet well
- Concrete septic tank may interfere with excavation for the wet well
- Gravity sewer in the street is extremely flat – may create opportunities for diverting flow

Alternative Design Ideas

- Multiple inlet piping configuration options
- Flexibility in siting the new wet well – several configurations possible
- Look at possibility of redirecting flows in gravity lines in street
- Move gate to allow for easier access to the site with large vehicles

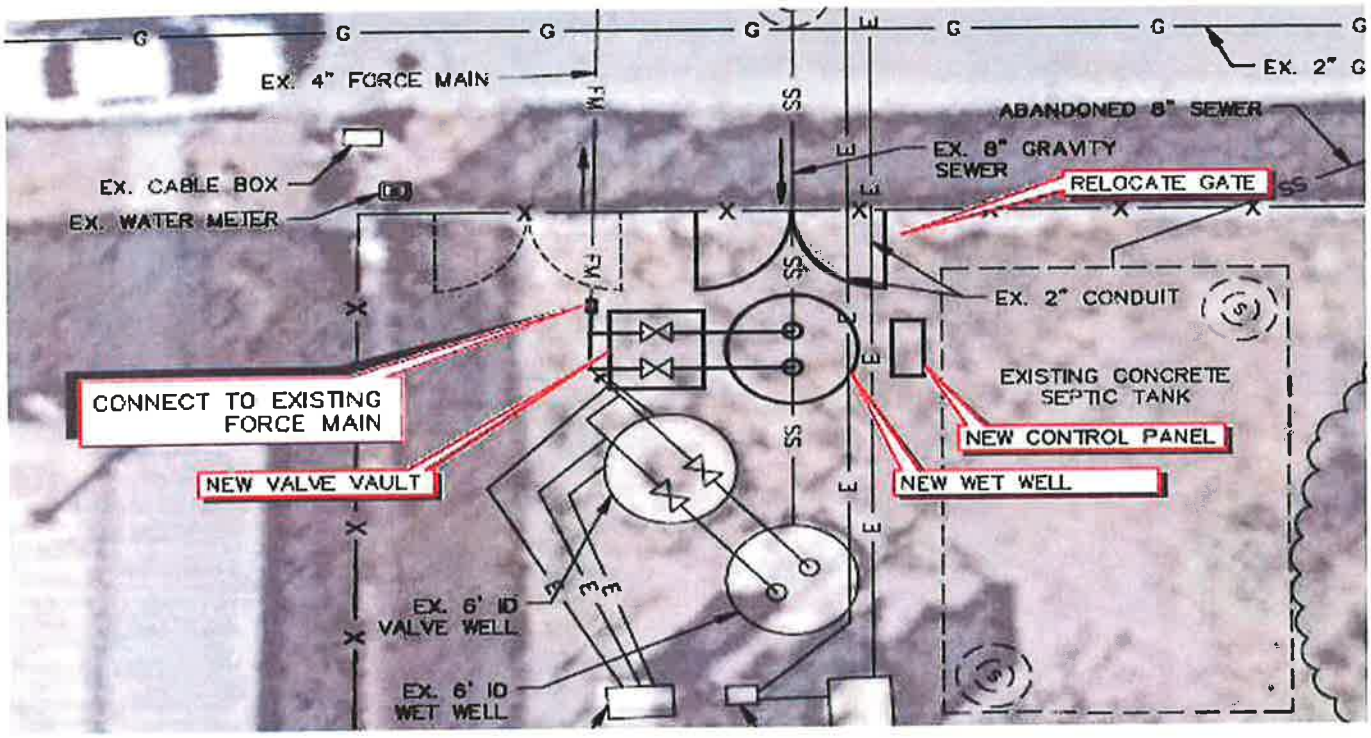
Game Plan / Plan of Attack:

- Gather survey information of existing structures
- Determine the extent of the existing septic tank
- Locate existing underground utilities
- Research/discuss easement rights and restrictions with County
- Determine work space and shoring required for wet well installation
- Position the wet well and valve vault in a location with ample construction area
- Determine best inlet piping configuration

Option 4 – Replace Upstream

Existing Conditions: Existing lift station is located on the northwest corner of the property. An abandoned septic tank is located on the northeast corner of the property. The gravity line comes into the site from the street perpendicular to the wet well.

Objective: To allow for construction of the new wet well on top of the existing inlet gravity line to minimize or eliminate bypass pumping, and avoid the abandoned septic tank.



Site Considerations/Constraints

- Extremely tight working area
- Careful planning and excavation of wet well pit required
- Connections to existing force main will have limited room
- Will have to patch new wet well wall after cutover
- Limited access to existing site for District staff during construction

Alternative Design Ideas

- Construct wet well around incoming gravity line
- Size valve vault to fit into existing space between existing gravity line and force main
- Valve vault may be reduced size, or oversized depending on space requirements
- Move gate to allow for easier access to the site with large vehicles

Game Plan / Plan of Attack:

- Gather survey information of existing structures
- Locate existing underground utilities
- Research/discuss easement rights and restrictions with County
- Determine if there is adequate space for the structures to fit in this area
- Determine work space and shoring required for wet well installation
- Size the valve vault to fit in the space allotted
- Determine best inlet piping configuration

Team Qualifications

Cannon Corporation — Providing Reliable Responsive Solutions since 1976

As a full-service engineering, surveying, landscape architecture, and construction management firm, based in San Luis Obispo, we take pride in our ability to offer clients a broad range of services. Our commitment to providing clients Reliable Responsive Solutions, whether the project scope is expansive or more specialized, spans 40 years.

During that time, we have worked with many cities, counties, and agencies throughout California to maintain secure and dependable wastewater and water systems, make streets safer and more pedestrian and bicycle-friendly, and construct buildings and facilities that are structurally sound. Likewise, we are dedicated to creating sustainable landscapes and providing a high level of technical expertise in areas of low impact development (LID) design.

These characteristics have been an integral part of the many projects we have completed throughout the Central Coast, from the lift stations serving hundreds of residents in Paso Robles, Templeton, Atascadero, and Pismo Beach, to the Woodgreen Lift Station Rehabilitation Options, Well No. 4, Standpipe Tank Modifications, and SCADA system upgrades we designed for the District. This experience gives us tremendous insight on the needed improvements for the Nipomo Palms Lift Station Project.

Since 1976, we have helped clients:

- Rehabilitate and replace sewer lift stations
- Design and manage construction of lift stations, sewer mains, and sewer pipelines
- Design and implement control systems for wastewater and water systems
- Prepare sewer system management plans
- Meet current and future wastewater and water needs
- Prepare energy efficiency studies
- Achieve maintenance cost savings with upgraded wastewater systems and modern SCADA systems
- Coordinate and relocate existing utilities
- Coordinate geotechnical and materials testing services
- Identify and prioritize capital improvement projects

By providing these services in-house, we can provide the Nipomo Community Services District (District) with a streamlined design process and minimize coordination efforts across disciplines.

Firm Contact
Michael Kielborn, PE, LEED AP
1050 Southwood Drive,
San Luis Obispo, CA 93401
☎805.503.4582 805.503.4446
MichaelK@CannonCorp.us

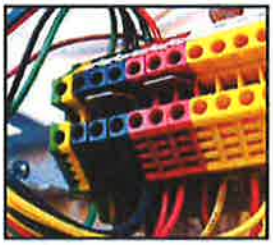
Experience Counts

Our project team offers expertise in the following areas relevant to your project:

Lift Station Replacement and Rehabilitation
see pages 24-27

Piping and Pump Replacement and Rehabilitation
see pages 24-29

Wet/Dry Well Replacement and Rehabilitation
see pages 24, 27



Electrical Repairs and Upgrades
see pages 24-27

Site Repairs
see pages 24-29

Please see the referenced pages to learn more about our experience in these areas similar in nature to those required by the District for the Nipomo Palms Lift Station Rehabilitation.

Subconsultants

Earth Systems Pacific — Geotechnical Engineering

For this project, Earth Systems will provide materials testing in support of construction management and engineering services. The materials testing will be managed from Earth Systems' Santa Maria office, the most comprehensive and most fully certified materials testing laboratory within the Central Coast region. With the capacity to perform hundreds of tests upon soils, concrete, asphalt, steel, masonry, and other building materials, this Caltrans-approved laboratory offers a full staff of field and laboratory technicians who are experienced and certified in Caltrans methods, and experience in the local area and with many similar projects.

Earth Systems maintains Caltrans-approved laboratories in their Santa Maria and Hollister locations and encompasses offices in Paso Robles and Salinas. The redundancy of having three Caltrans-approved laboratories, along with a large, local staff of certified technicians, provides assurance that all materials testing associated with the project can be accomplished in an expeditious and cost-effective manner.

General geotechnical, geologic, and environmental assessment services include the following:

- Geotechnical Engineering Investigations
- Geotechnical Feasibility Studies
- Failure Investigations of Foundations, Retaining Walls, Slopes, and Pavement
- Engineering Analysis of Settlement-Reduction Methods
- Geologic Evaluations, Slope Stability Studies, and Fault Location Studies
- Development of Criteria For Earth Retention Structures
- Groundwater Monitoring and Sampling
- Laboratory Analysis of Soil and Groundwater Samples
- Monitoring Well Installation and Development
- Geophysical Exploration
- Liquefaction and Seismicity Studies
- Seismic Refraction/Rippability Studies

Earth Systems Pacific offers a full spectrum of pre-construction and construction-related services, including construction observation, special inspection, and materials testing, designed to aid the development process. Earth Systems companies have been operating in California since 1969. With offices throughout California, the Earth Systems companies are consistently named in Engineering News Record as being among the top 500 engineering/design firms in the nation.

Hamner and Jewell Firm — ROW Acquisition (optional)

Hamner, Jewell & Associates is a specialized real estate consulting firm that provides right of way and governmental real estate acquisition and relocation services. For over thirty years, Hamner, Jewell and Associates has provided these services to public agencies throughout San Luis Obispo, Ventura, and Santa Barbara Counties, and to select clients in Los Angeles and San Diego Counties. With an office in Pismo Beach, we are better able to service agencies, including municipalities, counties, school districts, special districts, redevelopment agencies, nonprofit housing organizations, private developers, public utilities, and engineering firms along the Central Coast and Central Valley corridors.

Hamner, Jewell & Associates' primary specialization is acquiring real property rights, including easements and other partial interests, and providing mandated relocation assistance to property occupants on behalf of entities with the authority to acquire property by eminent domain. Their services are designed with the specific intent of successfully acquiring property by agreement, minimizing the instances in which eminent domain action would otherwise be required, but preserving the acquiring agency's right to initiate such action should it become a viable necessity.

They have acquired temporary and permanent easements or fee interests for roadways, sewer lines, waterlines, well sites, tank sites, utilities, greenbelts, and construction areas. They have also acquired access rights, air rights, slope easements, drainage easements, and properties for redevelopment projects and capital improvement projects such as parks, public parking lots, and sewer expansion projects.

Scope of Services

This work program is based on the RFP, our previous work in preparing the Condition Assessment for the Nipomo Palms Lift Station, numerous meetings and discussions with District staff about the facility, and our past experience on similar successful projects, Because of this, we can begin design and site specific field work immediately after the Kickoff Meeting.

Our approach to successfully complete the design and bidding of this project is based on providing professional services in two progressive phases: Preliminary Engineering Services and Design and Construction Document Services. The general tasks and detailed descriptions associated with our work program our described below.

PHASE I. PRELIMINARY ENGINEERING SERVICES

Task 1 Project Kick-off Meeting
Cannon will begin this project with a kick-off meeting with District staff. This meeting agenda will focus on project understanding, team involvement, project constraints, and preliminary design criteria. This meeting will also include a project introduction, review of background information and project scope, and an overview of the project schedule. This meeting represents a key opportunity for representatives from the District to direct the project team, identify background information to ensure incorporation of staff suggestions and recommendations, and further clarify critical elements of the project scope.

Task 2 Topographic Survey
We will conduct a topographic survey to be used for the design of the proposed Lift Station. Survey will include, but not limited to, surface structures, data, and elevations, basis of bearing, benchmark, boundary information, and existing utility information.

Task 3 Geotechnical Investigation
Subsurface investigation of the project site will be conducted to determine the conditions of the site. A geotechnical engineering report will be prepared and consist of the following:

- Soil and groundwater conditions encountered
- Grading and suitability of soils as fill and backfill
- Maximum allowable bearing capacity and ultimate lateral capacity
- Earth pressures on buried structures
- 2013 CBC Seismic design criteria
- Temporary backcut and shoring parameters
- Corrosivity, liquefaction, settlement, and drainage issues

Task 4 Project Management
The project requires project setup, scheduling, controlling, and correspondence between staff, the District and utility agencies. Correspondence includes telephone conversations, emails, project status reports, monthly status reports, project memorandums when necessary, and detailed Monthly Progress Billings.

PHASE II: DESIGN AND CONSTRUCTION DOCUMENT SERVICES

Task 5 and 6 Preliminary Design Drawings and Meeting (50%)
With the data and research from the Final Technical Memorandum and our kickoff meeting, we will prepare a Preliminary Design Package for your review and comment. The purpose of the Preliminary design package will be to resolve critical issues necessary to rehabilitate the lift station prior to proceeding with final design. The Preliminary Design Drawings—preliminary list shown in Table 1 on page 11—will include sufficient information to verify that the overall design concept will meet the needs of the District.

Table 1. Preliminary Sheet Count List

Sheet	Description	Sheet	Description
1	Title Sheet, Vicinity Map, and Site Map	10	Structural Notes and Details
2	General Notes and Legend	11	Structural Details
3	Demolition Plan	12	Electrical Legend and Abbreviations
4	Horizontal Control and Site Plan	13	Electrical Demolition Plan
5	Lift Station Layout and Plan	14	Electrical Site Plan
6	Grading, Drainage, and Fencing Plan	15	Electrical Single Line Diagram
7	Lift Station Section and Details	16	Electrical Control Panel Details
8	Lift Station Details	17	Electrical Details
9	Lift Station Piping and Connection Details		

Upon your review of the Preliminary Design Drawings, we will attend a meeting with District staff to review and discuss the submittal. This meeting will allow opportunity for detailed discussion on project issues at the 50% design level. We will receive direction from staff on requested revisions to incorporate prior to the next phase of review.

Task 7 & 8 – Prepare and Submit Design Plans, Bid Specifications and Cost Estimates (90%)
Based on the findings and results of the previous tasks, we will prepare and submit a design plan package at the 90% approximate completion level. The design plan package will include Construction Plans / Exhibits, technical specifications and cost estimate necessary to construct the project. Plans will be prepared in accordance with District standards. Technical specifications shall be prepared using District standard specifications.

We will attend a meeting with District staff to review and discuss the design submittal for the 90% submittal.

Task 9 – Prepare and Submit Design Documents, Bid Specifications and Cost Estimates (Final)
Based on the finalized project design issues resolved during the preceding tasks, we will prepare and submit a Final Construction Documents Bid package. This submittal package will contain complete Construction Plans / Exhibits, technical specifications, known permit conditions, and an Opinion of Probable Construction Costs. The final plans will incorporate comments from the District's reviews of the 90% Design Plan package. Bid documents will be prepared in the District's standard format. We will provide electronic copies and 1 master copy set of the complete bid package on permanent media to the District.

Task 10 – Easement and Permit Assistance
Once the final location of the lift station is established, we will assist tht District with acquiring permanent and temporary construction easements as needed. The site is already dedicated to the District as a "Sewage Disposal Site". We have included time to meet with the County of SLO to discuss the District's rights, restrictions, and easement requirements. Our subconsultant, Hamner and Jewell, will be available to perform any easement updates and tasks as needed once those determinations have been made. A definitive scope has not been detailed out yet, but could include the following:

- Title search and appraisals of all properties encroached by any proposed utility easement
- Preparation of easement acquisition documents
- Acquisition of all easements from owners of property encroached by the proposed project
- Utility easements and negotiations related thereto

(These items are not included in the fee schedule currently – they will need to be estimated once a clear scope has been determined after meeting with the County of SLO.)

Cannon staff will prepare legal descriptions for the proposed lift stations site and utility easements as needed, and will assist in securing any permits needed for the project from the County.

Task 11 – Bidding Support Services
We will attend the pre-bid meeting for the project and answer questions as needed. We will respond to up to four requests for information and prepare and distribute up to two addenda. We will examine bids at the request of the District and make a recommendation regarding award of the contract.

ASSUMPTIONS & EXCLUSIONS

The District will provide copies of applicable documents related to existing utilities within the project site, including record drawings from previous projects in the area.

The following services are excluded from this scope of work at this time; these services may be added to our scope of work on a time and materials basis:

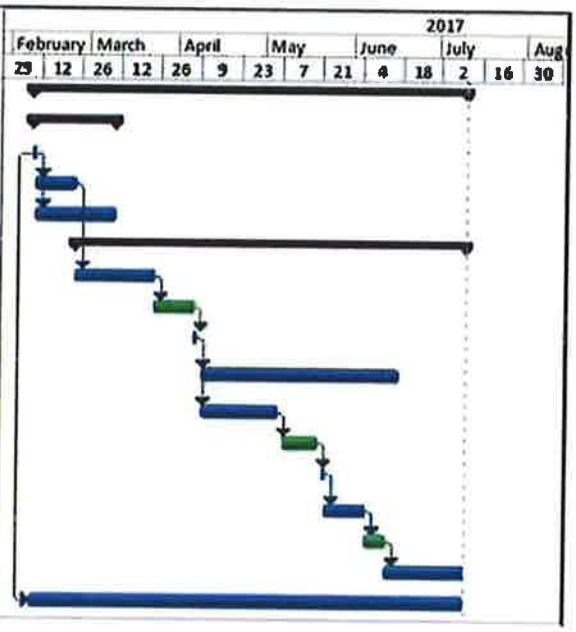
- Survey monumentation, records of survey;
- Construction phase services, including submittal review, RFI's, construction staking, observation, etc.;
- Underground utility relocation designs and utility potholing;
- Project meetings (other than those described in the Scope of Work);
- Application and permit processing fees;
- NPDES compliance reporting, Storm Water Pollution Prevention Plans (SWPPP), and erosion and sediment control drawings;
- Archeological, botanical, biological, landscaping services; and
- Additional property research or field cadastral surveying other than described above.

Additional work will be billed on a time and materials basis or as an addendum to this proposal with prior written authorization.

Scope Amendments

Timeline

ID	Task Name	Duration	Start	Finish
1	Nipomo Palms Lift Station Rehabilitation Project	108 days	Thu 2/9/17	Mon 7/10/17
2	Phase I - Preliminary Engineering	21 days	Thu 2/9/17	Thu 3/9/17
3	Project Kick Off Meeting	1 day	Thu 2/9/17	Thu 2/9/17
4	Topographic Survey	2 wks	Fri 2/10/17	Thu 2/23/17
5	Geotechnical Investigation	4 wks	Fri 2/10/17	Thu 3/9/17
6	Phase II - Final Engineering and Design	97 days	Fri 2/24/17	Mon 7/10/17
7	50% Preliminary Plans	4 wks	Fri 2/24/17	Thu 3/23/17
8	***Client Review***	2 wks	Fri 3/24/17	Thu 4/6/17
9	50% Review Meeting	1 day	Fri 4/7/17	Fri 4/7/17
10	Easement and Permit Assistance	10 wks	Mon 4/10/17	Fri 6/16/17
11	90% Plans, Specifications, and Cost Estimates	4 wks	Mon 4/10/17	Fri 5/5/17
12	***Client Review***	2 wks	Mon 5/8/17	Fri 5/19/17
13	90% Review Meeting	1 day	Mon 5/22/17	Mon 5/22/17
14	Final Plans, Specifications, and Cost Estimates	2 wks	Tue 5/23/17	Mon 6/5/17
15	***Client Approval***	1 wk	Tue 6/6/17	Mon 6/12/17
16	Bidding Support Services	1 mon	Tue 6/13/17	Mon 7/10/17
17	Project Management	108 days	Thu 2/9/17	Mon 7/10/17



Personnel

Key Project Team Members

Michael Kielborn, PE, LEED AP will serve as **Project Manager** for this project. Mr. Kielborn specializes in sewer and wastewater management planning and sewer system engineering. Since 2003, he has served as Project Manager for improvements to water supply and wastewater systems for reservoirs, pump stations, wells, surge tanks, major water transmission mains, and trunk sewers.

Mr. Kielborn has effectively translated his knowledge of construction practices into creating facility designs that are more efficiently constructible.

Mike Kielborn's Contact Information:

☎ 805.544.7407 ✉ MichaelK@CannonCorp.us
1050 Southwood Drive, San Luis Obispo, CA 93401

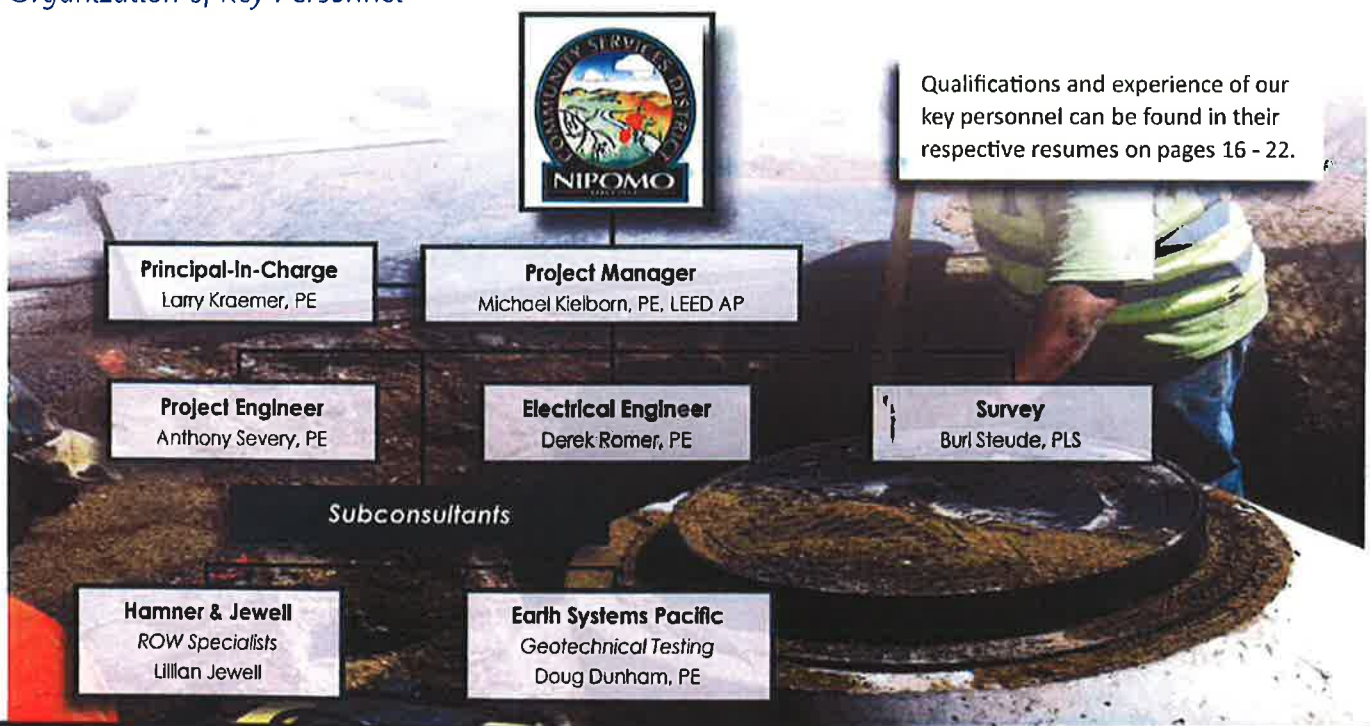
Larry Kraemer, PE will serve as **Principal-in Charge** for this project. With more than 25 years of experience in wastewater and water supply resource engineering and construction management, Mr. Kraemer provides a senior level of technical experience and project understanding to our team. He is known for his quality of work, commitment to customer service, and efficient management of multi-disciplinary project teams.

Having worked with public agencies throughout his career, Mr. Kraemer brings unique insight to the consultant side of the table. His professional experience includes more than 10 years of construction management and resident engineering experience working on multi-million-dollar projects for Caltrans and Orange County Water District and Senior Engineer for five years at Orange County Sanitation District.

Larry Kraemer's Contact Information:

☎ 805.544.7407 ✉ LarryK@CannonCorp.us
1050 Southwood Drive, San Luis Obispo, CA 93401

Organization of Key Personnel



Qualifications and experience of our key personnel can be found in their respective resumes on pages 16 - 22.

Project Team Members

Electrical Engineer, Derek Romer, PE Mr. Romer will provide electrical and controls system design for this project. His design experience involves secondary power distribution, lighting, and instrumentation, including SCADA for pump stations, reservoirs, sewage lift stations, and water treatment plants. He is based out of Cannon San Luis Obispo office.

Project Engineer, Anthony Severy, PE -- Mr. Severy will provide engineering services for this project. His experience includes preparing design plans for sewer and water facility and infrastructure relocations, replacements, and upgrades. He is based out of Cannon San Luis Obispo office.

Lead Surveyor, Burl Steude, PLS -- Mr. Steude will provide survey services for this project. He is proficient in performing property boundary research, right-of-way evidence recovery and analysis, and preparation of Record of Survey Maps. He is based out of Cannon San Luis Obispo office.

Geotechnical Engineer, Doug Dunham, PE - Mr. Dunham will provide geotechnical engineering for this project. His geotechnical engineering investigations, including subsurface exploration programs, data analysis, and development of geotechnical design criteria. During construction, he oversees observation of grading operations, special inspection and materials testing, and provides consultation regarding geotechnical issues. . He is based out of Earth Systems' Santa Maria office.

Right-of-Way Consultant, Lillian Jewell -- Ms. Jewell will provide ROW services for this project, as needed. She has been a Right of Way Consultant and Governmental Real Estate Specialist with initial emphasis in easement acquisition. Ms. Jewell has functioned in a primary role in land negotiations and acquisitions for the numerous municipalities, including easement acquisition for water and wastewater infrastructure. Ms. Jewell is based out of Hamner, Jewell, & Associates' Pismo Beach office.

Team Resumes

Michael J. Kielborn, PE, LEED AP Project Manager

Professional Registration

- Registered Civil Engineer, California, No. 70112
- LEED Accredited Professional

Education

- Bachelor of Science, Civil Engineering, Loyola Marymount University, Los Angeles, California

Professional Affiliations

- American Society of Civil Engineers
- Association of Water Agencies of Ventura County
- California Water Environment Association

Mr. Kielborn specializes in water and wastewater management planning; water supply, storage, and distribution; sewer system engineering. Since 1999, Mr. Kielborn has provided construction management/inspection services, primarily working in underground utility construction and infrastructure design. Mr. Kielborn is a certified Horizontal Directional Drilling Inspector and has developed excellent project management, cost estimation, in-field engineering management, inspection, coordination, and scheduling abilities for multi-million-dollar projects.

Hwy 246 Lift Station, Gravity Sewer, and Manhole Relining Project, Santa Ynez Community Services District, Santa Ynez, California: Cannon provided planning, design, bid support and construction support services throughout the duration of this maintenance project. The District's primary lift station and several critical sections of gravity sewer and manholes were severely deteriorating and in need of repair. Cannon worked closely with operations staff and coating and lining specialists to develop a strategy for rehabilitation. Plans, specifications, warranty requirements, cost estimates and bid documents were prepared to implement the repairs. During construction, careful coordination was needed to keep the existing lift station operational during the re-coating of the existing wet well, gravity sewers, and manholes. Mr. Kielborn served as Project Engineer.

32nd/Park/Riverside Sewer Replacement Project, Paso Robles, California: The City selected Cannon to provide civil and surveying services for the construction of approximately 900 linear feet of replacement sewer and replacement of the subterranean sewer crossing of the railroad right-of-way. Cannon provided professional services in two progressive phases: Preliminary Engineering and Design and Construction Document Services. As Project Manager, Mr. Kielborn was responsible for project oversight and project meetings.

Lift Station No. 5 and 13th Street Sewer Main Upgrades, Paso Robles, California: Cannon's scope of work included a Preliminary Design Report, preparation of plans, technical specifications, and construction cost estimates for upgrading the sewer in 13th Street, installation of a new gravity sewer in Paso Robles Street, and replacement of the existing force main. Cannon's scope of work was expanded to also include plans and specifications for Lift Station No. 5 upgrades, restricted by its requirement to stay within the City's existing sewer easement. Design included removal of the existing wetwell and drywell configuration, replacement with a new wetwell with two 150-gpm submersible pumps, addition of a valve vault, redirection of existing gravity sewer flows into the new wet well, revisions to the sewer bypass piping, removal and replacement of the electrical equipment and controls, replacement of the existing force main, and the addition of a ventilation/natural-odor-scrubbing system. The new wetwell was increased in size to handle additional flows, increase the storage volume, and minimize the pump on-off cycle time. A carefully coordinated bypass pumping plan was imposed to facilitate replacement of the wetwell. Mr. Kielborn served as Project Manager.

Malibu Canyon Sewage Lift Station, Vintage at Rancho Malibu, Malibu, California: Due to the varying terrain and limited public facilities nearby this project site, the sewage lift station was designed to transport the effluent from the lowest elevations of the tract to a wastewater treatment plant being constructed on-site. Cannon was contracted to design and process plans for this lift station with the Los Angeles County Public Works Department. Mr. Kielborn served as Project Manager.

Larry Kraemer, PE Principal-in-Charge

Professional Registration

- Civil Engineer, California, No. 44813

Education

- Master of Science, Civil Engineering, Water Resources, California State University, Long Beach, California
- Bachelor of Science, Agricultural Engineering, California Polytechnic State University, San Luis Obispo, California

Professional Affiliations

- Association of Water Agencies of Ventura County
- American Water Works Association
- American Public Works Association
- WateReuse Association
- Water Environment Federation

Since 1986, Mr. Kraemer has developed extensive civil engineering experience within the public and private sectors. He has served as a senior engineer for complex civil engineering projects dealing with water resources, wastewater, transportation, schools, and land development. As Director of Cannon's Public Infrastructure division, his duties and responsibilities include the technical oversight of program management, master planning, design, and construction management for wastewater treatment plants, bridges, pipelines, dams, wells, and pump stations. Mr. Kraemer is adept at managing challenging or complex projects due to his wide-range of experience, astute troubleshooting skills, keen attention to detail, and innovative approach to efficient program implementation.

Paso Robles/Templeton Interceptor Line Lift Station No. 2 and Sewer Reach 2 & 4, Paso Robles, California: Cannon was retained to provide surveying, designs, construction documents, and construction engineering for a replacement raw sewer lift station and new wastewater mains for the Paso Robles/Templeton Interceptor Sewer project. With a design capacity of 1,924-gpm, the new lift station was designed to replace an undersized existing sewer lift station in the same proximity. The project also called for the replacement of 2 miles of existing undersized 12-inch gravity sewer main with larger-diameter 18–inch piping along the same alignment in two separate reaches using trenchless technology. As project engineer, Mr. Kraemer developed design drawings, specifications, and cost estimates for the project.

Lift Station No. 13, Surge Tank and Odor Control Modifications, Atascadero, California: Cannon was selected to provide plans and specifications for this project. Project scope included replacement of an existing surge tank with a bladder-type to minimize maintenance and have fewer parts exposed to raw wastewater. Cannon also researched and selected an alternative, low-maintenance technology for the new odor control system. Following design, Cannon provided construction engineering support. As Project Manager, Mr. Kraemer was responsible for researching and specifying equipment and alternative odor control technologies. He also provided quality assurance of the plans and specifications.

Lift Station No. 5 and 13th Street Sewer Main Upgrades, Paso Robles, California: Cannon provided surveying and civil engineering services to improve the overall operations and maintenance of the City of Paso Robles' sewer system. The project included a Preliminary Design Report and preparation of plans, technical specifications, and construction cost estimates for upgrading the sewer, installing a new gravity sewer, and replacing the existing force-main. Cannon's scope of work was expanded to include plans and specifications for Lift Station No. 5 upgrades. The new pump station site plan was restricted by its requirement to stay within the existing sewer easement. As Principal-in-Charge, Mr. Kraemer provided quality control and senior level oversight of project.

Tank Farm Road Lift Station and Sewer Main Project, San Luis Obispo, California: The City of San Luis Obispo selected a design-build team with Cannon as a subconsultant to provide professional consulting services for the Tank Farm Road Sewer Project. This project included the abandonment of three existing sewer lift stations and the construction of a new regional lift station and new sewer mains connecting to it. Cannon's scope of work entailed engineering, surveying, and construction observation. Cannon prepared gravity sewer and force main designs, plans, and specifications. Cannon also provided topographic surveying and mapping, boundary surveying and mapping, utility research and coordination, base mapping, legal descriptions, and exhibits. Mr. Kraemer served as Principal-in-Charge, responsible for delivery of engineering deliverables, quality assurance, and coordination of staffing resources to ensure that Cannon fulfilled the City's expectations with regard to schedule and budget.

Anthony Severy, PE Project Engineer

Professional Registration
- Registered Civil Engineer, California, No. 82551

Education
- Bachelor of Science, Civil Engineering, California Polytechnic State University, San Luis Obispo, California
- H2ONET Certified, Water Distribution Modeling

Professional Affiliations
- American Society of Civil Engineers, President

Since 2006, Mr. Severy has provided engineering services for public improvement, energy, survey, and automation and controls projects. His experience includes preparing design plans for water and sewer relocations, replacements, and upgrades. He is also experienced in preparing design plans and reports for commercial and industrial site grading, and automation and communication panels. He brings extensive knowledge in computer-aided design (CAD) software, along with other design software such as Autoturn, StormCAD, and WaterCAD. As a Project Civil Engineer, his responsibilities include establishing and implementing design standards at Cannon. He is also responsible for designing, detailing, and preparing plans and construction documents; construction observation, and utility coordination for waterline improvement, waterline upgrade, and sewer main upgrade and rehabilitation projects.

Tank Farm Road Lift Station, San Luis Obispo, California: This project included the abandonment of three existing sewer lift stations and the construction of a new regional lift station and new sewer mains connecting to it. The scope of work for this project included engineering and surveying. Cannon provided topographic surveying and mapping, boundary surveying and mapping, utility research and coordination, base mapping, legal descriptions, and exhibits. Mr. Severy performed the CAD work for this project, as well as some design work.

Lift Station No. 13, Surge Tank and Odor Control Modifications, Atascadero, California: The City of Atascadero needed to replace an existing surge arrestor at Lift Station No. 13 and address an existing odor control problem. Cannon was selected to provide plans and specifications for this project. The overall project scope included replacement of an existing surge tank with a bladder-type to minimize maintenance expose fewer parts to raw wastewater. Cannon also researched and selected an alternative, low-maintenance technology for the new odor control system. Following design, Cannon provided construction engineering support. Mr. Severy served as Project Engineer.

El Camino Real Gravity Sewer Extension & Replacement, Atascadero, California: Cannon provided engineering and surveying services for the construction of approximately 8,000 feet of 12- and 10-foot gravity sewer main within a major thoroughfare, El Camino Real. The project allowed for the abandonment of two existing lift stations and the expansion of the sewer service area, which alleviated a problem with overloaded septic systems in the area. The improvements included the extension and/or replacement of underground sewer mains, laterals, and related appurtenances. The average pipeline depth exceeded 12 feet, with stretches of pipeline as deep as 19 feet. Mr. Severy assisted in the preparation of the feasibility study as well as final plans, specifications, and construction cost estimates.

Santa Ynez Community Services District (SYCSD) Sewer Main Repairs, Santa Ynez, California: Cannon provided engineering design and oversight of the repair of certain portions of SYCSD's wastewater treatment plant and collection system. Mr. Severy worked with the project manager in setting up sewer main and manhole repair exhibits. This involved CAD and some light design work.

Sewer Main Upgrades – 1st & Vine, 6th & Pine, 26th & Spring, and 13th and Paso Robles St., Paso Robles, California: Cannon provided civil and construction engineering support for this sewer main upgrade project for the City of Paso Robles. Mr. Severy prepared exhibits for the Preliminary Design Report, created construction plans, and will prepare record drawings for each project site.

Water and Sewer Master Plan Update (2007), NCSD, California: Mr. Severy served as the Project Engineer responsible for preparing exhibits using AutoCAD for inclusion in the final report and for use in meetings with District staff and board. He provided engineering support during water and sewer modeling and analysis of future water and sewer regulation evaluations.

Derek E. Romer, PE Electrical Engineer

Professional Registration

- Registered Electrical Engineer, California, No. E16396
- Registered Electrical Engineer, Nevada, No. E15940
- Registered Electrical Engineer, Washington, No. 46296

Education

- Bachelor of Science, Electrical Engineering, California Polytechnic State University, San Luis Obispo, California

Professional Affiliations

- Institute of Electrical and Electronics Engineers
- National Fire Protection Association
- Southern California Water Utilities Association
- National Council of Examiners for Engineers and Surveyors

Mr. Romer has more than 20 years of experience, including electrical and controls system design, in secondary power distribution, lighting, and instrumentation, including SCADA for pump stations, reservoirs, sewage lift stations, and water treatment plants. His expertise includes project management, field investigations, calculations, preparation of design drawings and specifications for bid packages, review of bid packages and construction shop drawings, and construction management, including troubleshooting during project startup and inspection. Mr. Romer is especially recognized for his ability to coordinate with clients and contractors and deliver turnkey, cost effective projects. Mr. Romer's pump station and SCADA designs feature energy-efficient systems and promote off-peak power use.

Sewage Lift Station No. 5 and 13th Street Sewer Main Upgrades, Paso Robles, California: The City of Paso Robles contracted with Cannon to provide the plans and specifications for Lift Station #5 upgrades. Mr. Romer prepared the electrical plans and specifications for this station, which included designing the electrical distribution, controls and instrumentation. The controls design included the integration of an existing Tesco pump controller into the new system and the design of a backup float system to control the pumps in case the pump controller fails.

Golden Valley Road Wastewater Lift Station, Los Angeles County Department of Public Works, Los Angeles County, California: Design of a new 0.17-MGD wastewater lift station was required for a new Sun Cal planned community in the City of Santa Clarita. During the design of this station, the Los Angeles County Department of Public Works - Sewer Maintenance Division was in the process of updating its lift station design guidelines. Mr. Romer worked closely with Sewer Maintenance during this process and at the same time designed the electrical and controls for the new lift station, including an emergency backup power system utilizing a mobile generator and an automatic transfer switch. Mr. Romer also played an integral role in in the construction phase support services, including submittal review, electrical inspections, and the preparation and supervision of an operational testing plan for County acceptance of the lift station.

Rancho Malibu Sewage Lift Station, Malibu, California: The construction of a sewage lift station was required in the new Vintage Communities in the city of Malibu to transport the effluent to a wastewater treatment plant under construction on site. Cannon designed and processed the plans for this lift station in collaboration with the Los Angeles County Public Works Department. Mr. Romer prepared the electrical plans and specifications for this station, including the electrical distribution design, controls, and SCADA system. Incorporating an automatic transfer switch, the electrical design serves as an emergency backup power system with a diesel generator.

Sewage Lift Station Upgrades, San Diego, California: The City of San Diego required the upgrade of its existing sewage lift stations; Mr. Romer was contracted to design the electrical and controls upgrades for 20 of the lift stations. Mr. Romer inspected each lift station to determine the modifications required. Using this information, he prepared plans and specifications for the construction of the lift stations.

Wastewater Treatment Plant, McFarland, California: Facility modifications included migration from the existing Aerated Lagoon system to an Extended Aeration Activated Sludge Plant complete with biological nutrient removal. The projected included both plant replacement and plant expansion from 1.5 mgd to 2.5 mgd. Cannon has been retained to provide the overall preliminary engineering, design, and construction plans and specifications of major upgrades. Improvements included a new master plan, SCADA systems, clarifiers, blowers, dewatering systems, headworks, and an MCC building. Mr. Romer served as Electrical Engineer.

Burl V. Steude, PLS, Survey

Professional Registration

- Licensed Land Surveyor, California, No. 9103

Education

- 40-Hour HAZWOPER Certified
- Project Management Seminar, CE Course, Cannon, San Luis Obispo, California
- CORS Applications & Utilization Seminar, California Land Surveyors Association, Long Beach, California
- Leica, GPS Surveying, Basic Course, Santa Maria, California
- Land Description Systems, CE Course, Land Surveyors Workshops, Los Angeles, California
- CPR Certified

With 18 years of surveying experience, Mr. Steude is proficient in performing property boundary research, field reconnaissance for property boundary and right-of-way evidence recovery and analysis, preparation of Record of Survey Maps, and Parcel Maps. Mr. Steude performs 3D laser scanning and is skilled in the use of AutoCAD Civil 3D and Microsoft applications.

Templeton Interceptor Line Lift Station No. 2 and Sewer Reach 2 & 4, Paso Robles, California: An existing lift station and sewer main reaches were running at or near capacity and therefore were limiting the efficiency and ultimate build-out service of the Templeton Interceptor Line. To solve this problem, the City of Paso Robles decided to upgrade Lift Station No. 2 and Reach 2 & 4 of the Templeton Interceptor Line to increase the flow capacities. Cannon was retained to provide the surveying and engineering design services for the project. Mr. Steude was the Party Chief responsible for the preparation of a topographic survey and aerial topographic surveying, with supplemental design surveying as needed to define the existing surface features and as-built conditions for the lift station and Reach 2.

Lift Station No. 5 and 13th Street Sewer Main Upgrades, Paso Robles, California: The City of Paso Robles conducted this sewer main upgrade project to improve the overall operations and maintenance of the system. Cannon provided surveying and civil engineering services. Survey services included evaluating existing right-of-way, easements, and utilities to determine alignments for new gravity sewers; potholing existing utilities; and conducting a topographic survey of the project area; and tie-out of all surface features, including the existing sewer facilities. As Party Chief, Mr. Steude is responsible for completing a topographic survey and record boundary for this project. As Party Chief, Mr. Steude is responsible for completing a topographic survey and record boundary for this project.

St. Andrews Lift Station Shoreline and MHTL Survey, Pismo Beach, California: Cannon provided shoreline and mean high-tide shoreline surveys for a bluff stabilization engineering review coordinated by the City of Pismo Beach and the Army Corps of Engineers. Mr. Steude provided survey services for this project.

Tank Farm Road Sewer Project, San Luis Obispo, California: Cannon provided professional consulting services for the abandonment of three existing sewer lift stations and the construction of a new regional lift station and new sewer mains connecting to it. Mr. Steude was responsible for the topographic surveying and mapping, boundary surveying and mapping, utility research and coordination, base mapping, legal descriptions, and exhibits.

Final Design of 21st Street Improvements, Paso Robles, California: Problems affecting 21st Street included frequent flooding, poor pavement, and inadequate facilities for bicycle and pedestrian traffic. To remedy this, the City of Paso Robles, in partnership with the Central Coast LID Design Initiative and SvR Design Company, developed a conceptual design for a green/complete street and stormwater enhancement project. Cannon was selected to complete the design and implementation. As Party Chief, Mr. Steude was responsible for completing a topographic survey and record boundary for this project.

Salinas Dam Booster Pump Station – Engineering and Construction Engineering, San Luis Obispo, California: The Salinas Dam Booster Pump Station delivers the primary source of water for the City of San Luis Obispo. The County selected Cannon to provide engineering and construction engineering services for upgrades to the facility. Mr. Steude was responsible for preparing a survey of existing site conditions.

Earth Systems Pacific

Doug Dunham, PE Geotechnical Engineer

Professional Registration

- Registered Geotechnical Engineer, California, No. 2586
- Registered Civil Engineer, California, No. 47238
- Licensed Advanced Nuclear Gauge Operator

Education

- Bachelor of Science, Agricultural Engineering, California Polytechnic State University, San Luis Obispo, California

Professional Affiliations

- American Society of Civil Engineers
- American Public Works Association
- American Society for Testing and Materials

A registered civil and geotechnical engineer with over 30 years of experience in the geotechnical engineering profession, Mr. Dunham is the manager of Earth Systems' Santa Maria office. He supervises geotechnical engineering investigations, including subsurface exploration programs, data analysis, and development of geotechnical design criteria. During construction, he oversees observation of grading operations, special inspection and materials testing, and provides consultation regarding geotechnical issues. During his career, Mr. Dunham has worked on a wide range of projects throughout central and southern California, and has established excellent working relationships with numerous jurisdictions, school districts, and private sector clients. Mr. Dunham has been employed with Earth Systems since 2000.

KEY QUALIFICATIONS

- 32 years of experience in geotechnical engineering and oversight of special inspection and materials testing
- 16 years of experience with projects in central California
- Extensive experience with pavement projects, including new construction, overlays, recycled materials, and stabilization of poor subgrade conditions
- Project manager for such projects as the Goleta Water Treatment Plant, the Old Lompoc Hospital Renovation, the Santa Barbara North County Jail, the Union Valley Parkway Extension, and the Measure A HMA Overlay Project

AREAS OF EXPERTISE

- Geotechnical engineering and analysis
- Interpretation of laboratory and field data
- Evaluation of liquefaction potential
- Settlement analysis
- Assessment of high groundwater conditions and mitigation
- Dewatering and shoring
- Geotechnical parameters for conventional, mat, post-tension and deep foundations
- Ground modification for sites of low soil density, including geotechnical criteria for soil densification, stone columns, and chemical stabilization
- Geotechnical aspects of mass grading
- Mitigation of unstable soil conditions

MAJOR RELEVANT PROJECTS

- City of Pismo Beach 2012 Street Maintenance Project, Pismo Beach, California
- California Fresh Market, Five Cities Drive, Pismo Beach, California

HAMNER JEWELL ASSOCIATES
Government Real Estate Services
A Division Of

Professional Registration

- Licensed Real Estate Broker
- Licensed Notary Public

Education

- Bachelor of Arts,Psychology, University of California, Santa Barbara, California
- International Right of Way Association Courses: 101-Principles of Real Estate Acquisition, 403-Easement Valuation, 501-Relocation Assistance, 802-Legal Aspects of Easements, 901-Interpreting Engineering Drawings

Professional Affiliations

- International Right of Way Association, Chapter 47, Former President and International Director

Professional Recognition

- International Right of Way Association, Professional of the Year, 1993 and 2000.

Lillian D. Jewell, Managing Senior Associate

Commencing in 1986, Lillian Jewell has been a Right of Way Consultant and Governmental Real Estate Specialist with initial emphasis in property acquisition. Ms. Jewell has functioned in a primary role in residential, commercial, and agricultural land negotiations and acquisitions for the Cities or Redevelopment Agencies of Ventura, Thousand Oaks, Port Hueneme, Oxnard, Fillmore, Santa Barbara, Lompoc, and San Luis Obispo, the Calleguas Municipal Water District, Goleta Water District, Central Coast Water Authority, the Conejo Recreation and Park District, and others. Assignments have included fee purchases of vacant and improved properties and easement acquisition for pipelines and street widening involving slope easements, work areas and complex coordination with existing commercial tenant uses. Ms. Jewell has also been instrumental in the drafting of relocation guidelines, plans, and cost estimates and has provided relocation assistance to numerous residential and commercial occupants. Ms. Jewell is familiar with Federal and State guidelines for governmental acquisition and relocation, as well as local real estate practices.

From 1984-1986, Ms. Jewell was a licensed real estate agent and member of the Ventura Board of Realtors, actively involved in all aspects of real estate transactions.

From 1983-1984, she served as an Account Representative for Fidelity National Title Insurance Company, Ventura County, responsible for all contact with real estate, lending and escrow agents. There she gained knowledge of the internal workings of the title insurance industry, along with increased familiarity with public information systems.

From 1979-1983, Ms. Jewell was a licensed real estate agent with extensive involvement in all aspects of residential real estate in the San Gabriel Valley. In addition to handling marketing, sales, escrows, qualifying, and financing, responsibilities included supervision of tradesmen on broker-owned rehabilitation projects.

Lillian Jewell graduated from the University of California, Santa Barbara with a Bachelor of Arts Degree in Psychology. Post graduate studies include courses in Real Estate Law, Business Law, Real Estate Appraisal, Income Taxation, Real Estate Practice, Real Estate Finance, Syndication Basics, Real Estate Economics, and numerous specialized professional courses, including International Right of Way Association Courses 101-Principles of Real Estate Acquisition, 403-Easement Valuation, 501-Relocation Assistance, 802-Legal Aspects of Easements, 901-Interpreting Engineering Drawings, and 214-Skills of Expert Testimony, among others. Additionally, she completed a Comprehensive Rehabilitation Services workshop entitled "All the Right Moves—Tenant Assistance and Relocation in HUD Programs." She completed The Negotiation and Dispute Resolution Course offered by the Ventura Center for Dispute Settlement, and has also attended a two day eminent domain conference presented by CLE International, a State Bar of California approved continuing education provider.

Ms. Jewell is a candidate for registration as a Senior Member of the International Right of Way Association (SR/WA), a licensed Real Estate Broker, Notary Public, and twice past President and International Director of Chapter 47 of the International Right of Way Association, who named her Professional of the Year in 1993 and again in 2000.

Experience

Cannon has been providing lift station rehabilitation solutions for four decades. This table provides an abbreviated list of our most recent projects that represent similar experience, in both nature and need, as you requested in your RFP. The following pages demonstrate in greater detail the services we provided relevant to your project, including those denoted with an asterisk.

Relevant Experience Summary

Project Type, Client
Highway 246 Lift Station Upgrade, Santa Ynez Community Services District*
Lift Station No. 5, City of Paso Robles*
Tank Farm Road Lift Station, City of San Luis Obispo*
Vintage Sewage Lift Station, Los Angeles County Department of Public Works*
Golden Valley Road Wastewater Lift Station, Los Angeles County Department of Public Works*
Lift Station 13, City of Atascadero
32nd/ Park/Riverside Sewer Replacement, City of Paso Robles
Nipomo Palms Lift Station Rehabilitation Condition Assessment, Nipomo Community Services District
Beverly/Bonita Backyard Easement Sewer Replacement, City of Paso Robles
Nipomo Woodgreen Lift Station Rehabilitation Project, Nipomo Community Services District
Golden Inn Lift Station, Santa Ynez Community Services District

Cannon's commitment to providing reliable responsive solutions is evident through the progress of this critical project and efficiency of resources...I recommend Cannon to any in need of similar services.

- Benjamin A. Fine, Director of Public Works/City Engineer, City of Pismo Beach

Project Experience and References

13th Street Sewer Main and Lift Station No. 5 Upgrades, Paso Robles

Cannon provided civil engineering and surveying services to improve the overall operations and maintenance of the City of Paso Robles' sewer system. The scope of work included a preliminary design report, plans, technical specifications, and construction cost estimates for upgrading the sewer in 13th Street, installing a new gravity sewer, and replacing the existing force main as well. Survey services included evaluating existing right-of-way, easements, and utilities to determine alignments for new gravity sewers, potholing existing utilities, and conducting a topographic survey of the project area and tie-out all surface features, including the existing sewer facilities.

The scope of work was expanded to include plans and specifications for Lift Station No. 5 upgrades. The lift station was restricted by its requirement to stay within the City's existing sewer easement. Design included removal of the existing wet well and dry well configuration, replacement with a new wet well with two, 150 gpm submersible pumps, addition of a valve vault, redirecting existing gravity sewer flows into the new wet well, revisions to the sewer bypass piping, removal and replacement of the electrical equipment and controls, replacement of the existing force main, and the addition of a ventilation/natural-odor-scrubbing system.

The new wet well was increased in size to handle additional flows, increase the storage volume, and minimize the pump on-off cycle time. A carefully coordinated bypass pumping plan was imposed to handle flows during the replacement of the wet well. The new force main was designed to redirect flows from the existing Highway 101 crossing to the new trunk sewer in River Road. Design of the new force main utilized an existing 12-inch steel casing within the recently expanded 13th Street Bridge.

This project included removal of existing wet and dry well configurations, a carefully coordinated bypass plan and replacement of electrical equipment and controls.

Meeting project budgets and timelines: The project scope grew from a planning study and re-lining of a sewer siphon, to a lift station and force main replacement project. Several discussions based on our investigations led to the ultimate decision to replace the lift station and re-route flows to a new trunk sewer. Reallocation of Capital Project funds needed to be secured by the City to proceed with the project, so the schedule shifted accordingly. **Final design plans and specifications were completed on time and funds were secured for construction of the project in 2012.**

Client Reference:

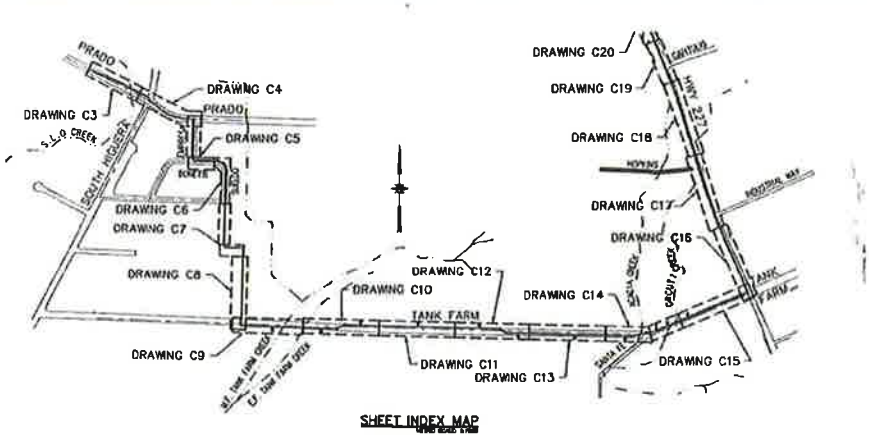
Ditas Esperanza, PE, Capital Projects Engineer, City of Paso Robles
1000 Spring Street, Paso Robles, CA 93446 ☎805.227.7276,
✉DEsperanza@prcity.com

Hwy 246 Lift Station, Upgrade Project
Santa Ynez Community Services District

Cannon completed the design for the removal and replacement of an existing sewage pump station for SYCSD. The lift station is located along Highway 246 at the entrance way to the Chumash Casino in an enclosed block wall surrounding. This location required special consideration to minimize the disruption of guests at the establishment. Replacement included the demolition, removal, and abandonment of various existing pump station components. The District was seeking to eliminate confined space issues presented by the wet well / dry well configuration and opted for the installation of a new Smith & Loveless packaged aboveground pump station. The new lift station utilized the existing wet well and included replacement of the existing piping, vaults, electrical, and controls equipment. Bypass pumping connections were provided for maintenance ease in case the lift station is ever taken out of service. The existing site was also expanded slightly to allow for an aboveground enclosure to house the new pump equipment. Replacement of the block wall and security pickets required careful matching in order to blend it with the site's existing architecture.

Cannon gave careful consideration to the bypass pumping required for the duration of construction. This pump station is the main lift station that serves the entirety of Santa Ynez, so a careful bypass plan and backup strategy had to be in place to prevent overflows. A step-by-step procedure was put in place for the contractor to follow to minimize the duration of bypass pumping required, as well as to avoid disruption in service.

Meeting project budgets and timelines: The project schedule extended because the District put the project on hold in May 2013. After several weeks of discussions, it was decided to have us re-design the lift station to accommodate the use of the existing wet well and a surface mounted end suction lift station. The existing structure was still in good shape, and it was decided to modify the existing wet well to accommodate the new pump station. This ultimately eliminated the need for bypass pumping, and resulted in a cheaper overall construction cost. Some minor delays were also attributed to the District's negotiation for additional land easements for the project site from the Chumash Tribe lands.

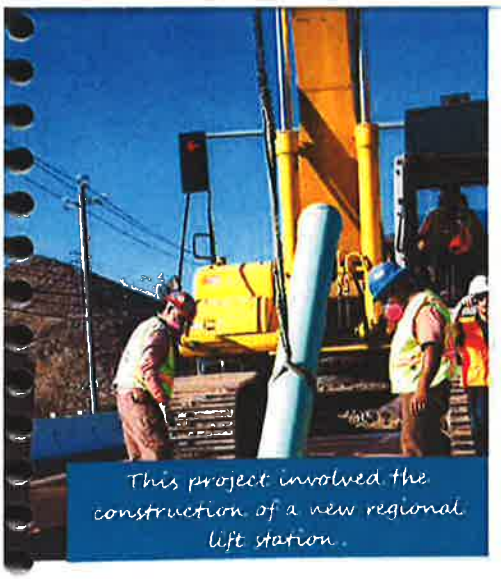


SHEET INDEX MAP

Client Reference:

Shannon Stewart, Operations Superintendent
Santa Ynez Community Services District
1070 Faraday, Santa Ynez, CA 93460
☎805.350.1187
✉ operations@sycsd.com

This project included a carefully coordinated bypass plan and site improvements to blend with the existing architecture.



This project involved the construction of a new regional lift station.

Tank Farm Road Lift Station and Sewer Main Project, San Luis Obispo

Cannon provided professional consulting services required for the Tank Farm Road Sewer Project. This project included the abandonment of three existing sewer lift stations and the construction of a new regional lift station and new sewer mains connecting to it.

Approximate lengths of new sewer main included 6,750 linear feet of 16-inch, 250 linear feet of 12-inch, 4,000 linear feet of 10-inch, and 1,000 linear feet of 8-inch gravity sewer mains and 4,000 linear feet of 16-inch sewer force main. Cannon's scope of work included engineering, surveying, and construction support. Cannon prepared gravity sewer and force-main designs, plans, and specifications. Cannon also provided topographic surveying and mapping, boundary surveying and mapping, utility research and coordination, base mapping, legal descriptions, and exhibits.

Client Reference:

David Hix
Wastewater Division Manager
City of San Luis Obispo
879 Morro Street
San Luis Obispo, CA 93401
☎805.781.7215

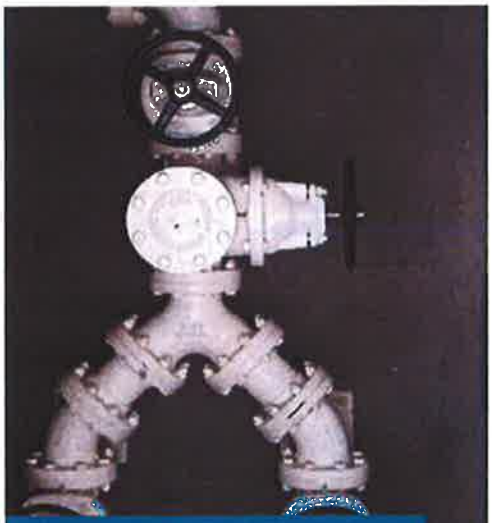
Meeting project budgets and timelines: Final design plans and specifications were completed on time and within budget.

Golden Valley Wastewater Lift Station

Members of Cannon's project team prepared design plans and specifications for this 0.17-MGD wastewater lift station, including wetwell, on-site inlet and outlet piping, pumps, motors, masonry block wall enclosure with gate, on-site asphalt concrete paving, electrical power, controls, and SCADA systems.

Controls, SCADA systems, and telephone service were provided in accordance with Los Angeles County Department of Public Works requirements. The lift station also included an emergency engine-generator set. Cannon staff additionally provided construction phase support services, which included preparing contractor bid evaluations and final recommendations for the construction contract award, providing a shop drawing review, responding to requests for information and deviation, preparing and performing start-up procedures, and preparing final as-built drawings. As a result of this project, Cannon's Project Manager was instrumental in facilitating the development of LACDPW's current Standard Guidelines for Sewage Lift Station Design.

Meeting project budgets and timelines: LACDPW published a design document titled "Guidelines for Sanitary Sewer Pump Station Design and Plan Submittal Procedures" that was being used as the design basis for this project. At the time, the County was in the process of updating this document, releasing several draft iterations of the document to internal staff. During the plan check process, this led to several delays due to conflicting comments based on the ever changing guidelines. Over the course of several months, and several meetings with staff, our team assisted with defining the key elements required to incorporate into the design manual, and implementing those features in our final approved lift station plan documents.



Lift station, wetwell, piping, pump and site improvement design plans and specifications were part of this project.

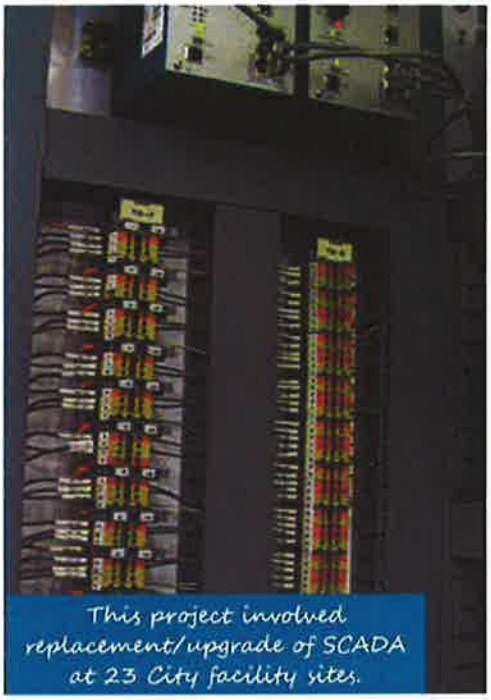
Client Reference:

Jeff Bouse, Senior Civil Engineer,
Public Works
P.O. Box 1460, Alhambra, CA 91801,
☎ 626.300.3373

Wastewater and Water SCADA System Upgrades

The City of Pismo Beach needed to upgrade its existing PLCs and HMI software at 23 of its water distribution and wastewater collection facilities because replacement parts werebecoming difficult and expensive to find. The City initially wished to replace the SCADA system using Allen-Bradley Compactlogix PLCs, which would integrate nicely with the Allen-Bradley Compactlogix PLC in use at the Wastewater Treatment Plant. However, the initial cost of these PLCs, IO Cards, and the need to re-land the instrument loops on the IO Cards was more expensive than the City had anticipated.

Cannon reviewed the City's existing system during the proposal process and proposed an alternative design that significantly reduced the overall project costs by replacing only the CPU of the PLC. The existing Base and IO Cards were reused, and therefore no rewiring was required. The City's existing Think & Do HMI was replaced with Wonderware ArchestrA Platform and now houses all three systems: Water Distribution, Wastewater Collection, and the Wastewater Treatment Plant. Programming of the SCADA software included development of the HMI screens, alarm notifications and priorities, and reports. During the design and integration processes and until the City accepted the new SCADA system, Cannon continued to implement strategies so the existing SCADA system remained in operation. Cannon also developed a training program for City operators.

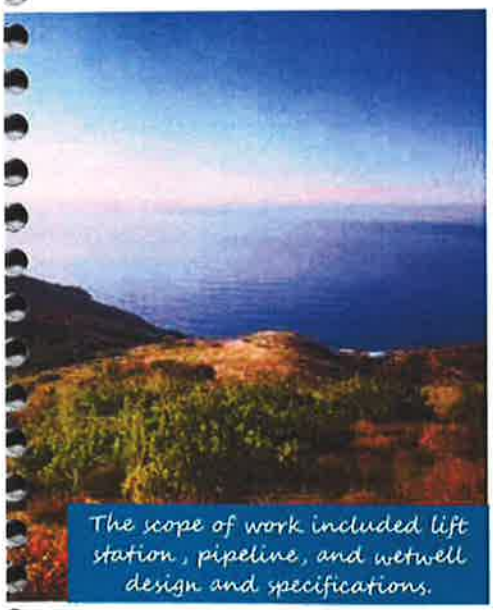


This project involved replacement/upgrade of SCADA at 23 City facility sites.

Meeting project budgets and timelines: Final design plans and specifications were completed on time and within budget.

Client Reference:

Eric Eldridge, PE, Associate Engineer, City of Pismo Beach, 760 Mattie Road, Pismo Beach, CA 93449 ☎805.773.4657



The scope of work included lift station, pipeline, and wetwell design and specifications.

Sewage Lift Station for Vintage Communities

Cannon prepared design plans and specifications for the sewage lift station for the Village at Rancho Malibu. The varying terrain and limited public facilities near the project site required design and construction of a lift station capable of transporting raw sewage from the lowest elevations of the tract to a wastewater treatment plant constructed on-site. The sewage lift station design featured an 8' x 8' x 17.5' concrete wet well and two alternating 136 gpm submersible horizontal pumps with a 4-inch sphere diameter for adequate solid passing. The 6' x 9' x 7' valve vault was designed for placement directly adjacent to the wet well with automatic ventilation activation upon opening of the vault hatches. The piping design featured 4-inch stainless steel and ductile iron pipe. The controls operating the pumps were integrated into the SCADA system for constant monitoring of the system.

The station was design to operate constantly with a compressor and EVC to prevent anaerobic conditions in the wet well and force-main. As with all Los Angeles County Department of Public Works lift stations, a diesel engine emergency generator set with an automatic transfer switch was provided in the design and specifications.

Client Reference:

Bruce Martin, Vintage Communities 1841 Von Karman Ave. #350 Irvine, CA 92612 ☎ 805.227.7276

Meeting project budgets and timelines: Final design plans and specifications were completed on time and within budget.

32nd, Park, and Riverside Streets Sewer Replacement Project, Paso Robles

The City of Paso Robles needed assistance with the sewer main upgrades that were necessary to resolve the capacity problems associated with the sewer along Spring Street, within the Oak Park Development, and under the railroad right-of-way at Riverside Avenue.

The City selected Cannon to provide civil and surveying services for the construction of approximately 900 linear feet of replacement sewer along 32nd Street between Spring Street and Park Street and along Park Street between 32nd and 33rd streets, as well as replacement of the subterranean sewer crossing of the railroad right-of-way between Oak Park frontage road and Riverside Avenue.

Cannon provided professional services in two progressive phases: Preliminary Engineering and Design and Construction Document Services. The preliminary engineering services consisted of five tasks; supplemental topographic survey, record data boundary, and utility research; preliminary alignment review meeting; soils report; preliminary design drawings; and preliminary design submittal review meeting. Phase II, the Design and Construction Document Services, consisted of three tasks: design plans, bid specifications, and cost estimates; assistance in securing permits, design documents, bid specifications, and cost estimates.

Cannon provided construction management services for this project during installation of the facilities. Careful execution was required for installing the casing pipe underneath the UPRR Right of Way. Our on-site personnel kept close track of the jack and bore progress to ensure that the correct pipe grades were met to maintain positive drainage of the sewer. We provided review and approval for submittals, RFIs, RFCs, and progress payments.

Meeting project budgets and timelines: Final design plans and specifications were completed on time and within budget.

This project involved ROW and permitting assistance as well as sewer main upgrades.

Client Reference:

Ditas Esperanza, PE, Capital Projects Engineer, City of Paso Robles
1000 Spring Street, Paso Robles, CA 93446 ☎805.227.7276,
✉DEsperanza@prcity.com

Sewer Main Upgrades, Paso Robles

The City of Paso Robles conducted this sewer main upgrade project to improve the overall operations and maintenance of the system, to consider serving in-fill areas not previously served, and to redistribute flows to less impacted sewer lines. Cannon provided surveying and civil engineering services.

The project consisted of four distinct locations: at First and Vine Street; at 6th and Pine Street; at 26th and Spring Street; and at the Paso Robles On-Ramp and 13th Street. The scope of work included a Preliminary Design Report as well as preparation of plans, technical specifications, and construction cost estimates for 1st & Vine and 6th & Pine locations.

Services also included bidding assistance and construction engineering support (pre-construction job walk, construction staking, review of contract submittals, responding to RFIs and requests for changes, reviewing progress and change order payment requests, attending project meetings, construction observation and record drawings).

Client Reference:

Ditas Esperanza, PE, Capital Projects Engineer, City of Paso Robles
1000 Spring Street, Paso Robles, CA 93446 ☎805.227.7276,
✉DEsperanza@prcity.com

Meeting project budgets and timelines: Final design plans and specifications were completed on time and within budget.

References

- **Ditas Esperanza**, PE, Capital Projects Engineer, City of Paso Robles
  1000 Spring Street, Paso Robles, CA 93446
  ☎805.227.7276, ✉DEsperanza@prcity.com
  Project: *13th Street Sewer Main and Lift Station No.5 Upgrades; 32nd, Park, and Riverside Streets Sewer Replacement Project; Sewer Main Upgrades*

- **Shannon Stewart,** Operations Superintendent
  Santa Ynez Community Services District
  1070 Faraday, Santa Ynez, CA 93460
  ☎805.350.1187 ✉ operations@sycsd.com
  Project: *Highway 246 Lift Station Upgrade Project*

- **David Hix**, Wastewater Division Manager, City of San Luis Obispo
  879 Morro Street, San Luis Obispo, CA 93401
  ☎805.781.7215
  Project: *Tank Farm Road Lift Station and Sewer Main Project*

- **Eric Eldridge,** PE, Associate Engineer, City of Pismo Beach
  760 Mattie Road, Pismo Beach, CA 93449 ☎805.773.4657
  Project: *Wastewater and Water SCADA System Upgrades*

- **Bruce Martin,** Vintage Communities
  1841 Von Karman Ave. #350 Irvine, CA 92612
  ☎805.227.7276
  Project: *Sewage Lift Station for Vintage Communities*

- **Jeff Bouse**, Senior Civil Engineer, Public Works
  P.O. Box 1460, Alhambra, CA 91801 ☎626.300.3373
  Project: *Golden Valley Wastewater Lift Station*

- **Geoff English** (formerly with City of Atascadero), Public Works Director
  City of Arroyo Grande, 300 East Branch Street, Arroyo Grande, CA 93420
  ☎805.473.5436
  Project: *Lift Station 13, City of Atascadero*

- **Matt Thompson**, PE, Wastewater Division Manager, City of Paso Robles
  1000 Spring Street, Paso Robles, CA 93446
  ☎805.227.7276 x7716, ✉mthompson@prcity.com
  Project: *12th Street Improvements*

Why Cannon?

Our success on previous project as indicated in these client testimonials means we are especially qualified to perform the services requested in the RFP and meet our clients needs.

Cannon provided a creative design to overcome potential obstacles while keeping the project on time and within budget. I would recommend Cannon without reservation.

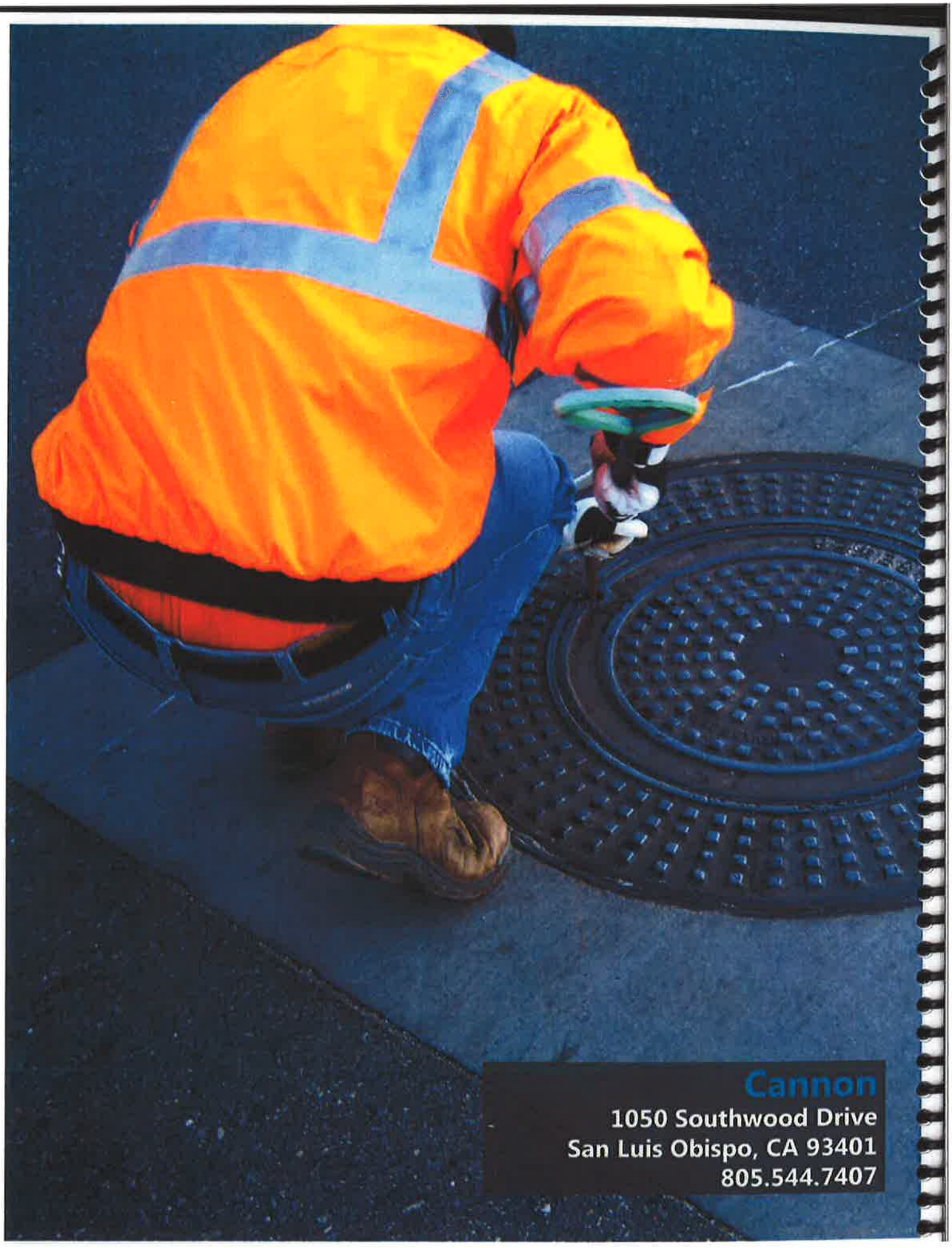
-David Hix, Wastewater Division Manager,
City of San Luis Obispo

[Cannon's] creativity and acute awareness of how the District operates was instrumental in preparing the Water and Sewer Master Plan.

-Bruce Buel, Former General Manager
Nipomo Community Services District

From inception to completion of each project, Cannon's commitment to providing reliable responsive solutions was clear.

- Ditas Esperanza, PE, Capital Projects Engineer,
City of Paso Robles


Cannon
1050 Southwood Drive
San Luis Obispo, CA 93401
805.544.7407