

**AGENDA**  
**FOR THE REGULAR MEETING OF THE**  
**CARPINTERIA SANITARY DISTRICT GOVERNING BOARD**  
**TO BE HELD September 5, 2023**

The regular meeting of the Governing Board will be held commencing at 5:30 p.m. The location of the meeting is at 5300 Sixth Street, Carpinteria, CA.

The public is encouraged to participate in one of the following ways:

1. Submitting a Written Comment. If you wish to submit a written comment, please email your comment to the Board Clerk at [kimg@carpsan.com](mailto:kimg@carpsan.com) by **3:00 P.M. on the day of the meeting**. Every effort will be made to read your comment into the record, but some comments may not be read due to time limitations.
2. Attend the in-person meeting at the Carpinteria Sanitary District Board room.

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**I. CALL TO ORDER**

**II. PLEDGE OF ALLEGIANCE**

**III. BOARD APPROVAL OF AGENDA** AS [SUBMITTED] [MODIFIED]  
Board President asks the Board, public, staff, and legal counsel if there are any additions and/or modifications to the Agenda.

**IV. APPROVAL OF MINUTES** AS [SUBMITTED] [MODIFIED]  
August 15, 2023

**V. PUBLIC FORUM**  
The public may address the Governing Board on items of interest to the public which are not already on this evening's agenda and are within the subject matter jurisdiction of the Board. The time allotted for this discussion shall be pursuant to Board Bylaws.

**VI. MATTERS BEFORE THE BOARD**

**A. GENERAL REPORTS:**

**1. General Manager's Status Report**

(Page 1)

Description: General Manager to review his written report regarding the following issues:

- Recruiting Update
- Team Updates
- Accounting Software Transition
- WateReuse California Central Coast Chapter Meeting
- Operations Update

**2. MKN Associates – Agreement for As-Needed Engineering Services (Pages 2-59)  
Three Year On-Call Services**

Description: The Board to ratify an Agreement for As-Needed Engineering Services between the Carpinteria Sanitary District and MKN Associates for a three year term.

Staff Recommendation: Staff recommends that the Board ratify the Agreement for As-Needed Engineering Services between the Carpinteria Sanitary District and MKN Associates as presented.

**3. Capital Improvement Project Budget Adjustment (Pages 60-61)  
Lift Station No. 2 Rehabilitation (P-212)**

Description: The Board to review and consider approving an amendment to the authorized CIP budget for the Lift Station No. 2 Rehabilitation Project with a not to exceed total of \$265,000.

Staff Recommendation: Staff recommends that the Board amend the authorized budget for the Lift Station No. 2 Rehabilitation Project as presented.

**4. Resolution No. R-367: Declaring an Emergency With Regard to (Pages 62-67)  
Certain District Facilities, Authorizing Remedial Work to be Performed  
Without Competitive Bidding, Declaring the Project to be Exempt From  
The Requirements of the California Environmental Quality Act, and Making  
Necessary Findings Thereof**

Description: The Board to review and consider adopting Resolution No. R-367 which finds that an emergency condition exists related to the District's ocean outfall pipeline, authorizes the General Manager to proceed with emergency work, and determines the work is exempt from the competitive bidding requirements of the Public Contract code and from the California Environmental Quality Act.

Staff Recommendation: Staff recommends that the Board adopt Resolution No. R-367.

**5. Carpinteria Advanced Purification Project (CAPP) Update**

Description: The Board will receive an update status report on the Carpinteria Advanced Purification Project being pursued in conjunction with the Carpinteria Valley Water District. Information on current activities and future tasks or milestones will be presented.

Staff Recommendation: None. Information only.

## **VII. BOARD ITEMS**

### **D. COMMITTEE REPORTS**

Description: Verbal reports by the committee chairperson(s) of the following committees:

- Standing Finance Committee
- Standing Personnel Committee
- Standing Public Relations Committee
- Standing Utilities Committee
- Standing Recycled Water Committee
- Ad-Hoc Summerland Sanitary Coordination Committee

### **E. GENERAL ITEMS**

1. SBCSDA (Santa Barbara – California Special Districts Association) Report
2. Board Member Vacation Dates
3. Future Agenda Items

## **VIII. ADJOURNMENT**

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### **FURTHER INFORMATION AVAILABLE**

A staff report providing more detailed information is available for most agenda items and may be reviewed in the District office during regular hours (Monday - Friday from 8:00 a.m. to 12:00 p.m. and/or 1:00 p.m. to 5:00 p.m.). Copies of individual reports may be requested at this office. Call (805) 684-7214 extension 110 for more information.

In compliance with the Ralph M. Brown Act and the Americans with Disabilities Act, if you need a disability-related modification, accommodation, or other special assistance to participate in this meeting, please contact the District's Board Secretary at (805) 684-7214, extension 111, at least 48 hours prior to the start of the meeting.

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Next Ordinance Available.....#20  
Next Resolution Available.....R-368  
Posting Date.....9/1/23

**MINUTES OF THE REGULAR MEETING OF THE  
CARPINTERIA SANITARY DISTRICT GOVERNING BOARD  
August 15, 2023**

These are the **minutes** of the **regular** meeting of the Governing Board of the Carpinteria Sanitary District in the City of Carpinteria, County of Santa Barbara, and State of California.

The Governing Board of the Carpinteria Sanitary District held a regular meeting on **August 15, 2023**, at 5:30 p.m. at its District administrative office located at 5300 Sixth Street, Carpinteria, California.

The agenda notice for this meeting, including instructions for the public to provide comments, was posted in the front window of the administrative office of the Carpinteria Sanitary District and on the District's website at least 72 hours in advance of the meeting.

**I. CALL TO ORDER**

President Modugno called the meeting to order at 5:30 p.m. and noted that all Directors were present at tonight's meeting.

Directors Present:     Mike Modugno – President  
                               Mike Damron – President Pro-Term  
                               Gerry Velasco - Secretary  
                               Debbie Murphy – Secretary Pro-Tem  
                               Lin Graf - Treasurer

Staff Present:             Craig Murray – General Manager  
                                   Kiley Mora – Administrative Assistant

Legal Counsel  
Present:                     Karl Berger – Burke, Williams & Sorenson (by Zoom video-conference)

Public Present:             Anthony Trembley, Curtis Thornton

**II. PLEDGE OF ALLEGIANCE**

President Modugno led the Pledge of Allegiance.

**III. BOARD APPROVAL OF AGENDA**

President Modugno asked if there were any modifications and/or changes to the agenda. General Manager asked that the Treatment Plant Tour be moved to the first item under General Reports (VI.A). Director Modugno made a motion to approve, followed by Board approval, the change was made and the agenda was approved.

**IV. BOARD APPROVAL OF MINUTES OF THE MEETING OF July 18, 2023**

Director Murphy made a motion, seconded by Director Graf that the Board approve the minutes of the July 18, 2023 Regular Board meeting as presented. The motion carried by the following vote:

AYES:	5	Murphy, Damron, Graf, Velasco, Modugno
NOES:	0	None
ABSENT:	0	None
ABSTAIN:	0	None



## **V. PUBLIC FORUM**

None.

## **VI. MATTERS BEFORE THE BOARD**

### **A. GENERAL REPORTS:**

#### **1. Treatment Plant Tour – Microfiltration/Ultrafiltration Pilot Plant**

President Modugno adjourned the meeting at 5:32 p.m. General Manager led the Board and Public on a walking tour of the microfiltration/ultrafiltration pilot plant. Following the tour, President Modugno reconvened the meeting at 6:05 p.m.

President Modugno opened the public comment on the item. One member of the public was present and asked the Board about increases in property tax and energy costs associated with the project. President Modugno provided feedback and said that more information would be available as the project progresses.

No Board action was taken on this item.

#### **2. General Manager's Status Report**

General Manager reviewed his written report regarding the following items:

- LAFCO Policy Revisions
- CASA Annual Conference Report
- Operations Update

#### **3. Cash Contract No. 500 – Sancon Technologies, Inc. - Lift Station No. 2 Rehabilitation**

General Manager reviewed his staff report related to Cash Contract No. 500 with Sancon Technologies, Inc. related to the Lift Station No. 2 Rehabilitation.

If approved, Cash Contract No. 500 would engage Sancon Technologies, Inc. to perform necessary service related to the rehabilitation of Lift Station No. 2 with a not to exceed total of \$139,200.

Director Damron made a motion, seconded by Director Graf that the Board approve and execute Cash Contract No. 500 between the District and Sancon Technologies, Inc. for the Lift Station No. 2 Rehabilitation. The motion carried by the following roll call vote:

AYES:	5	Damron, Graf, Murphy, Modugno, Velasco
NOES:	0	None
ABSENT:	0	None
ABSTAIN:	0	None

#### **4. Cash Contract No. 513 – Rain For Rent - Lift Station No. 2 Rehabilitation**

General Manager reviewed his staff report related to Cash Contract No. 513 with Rain For Rent related to the Lift Station No. 2 Rehabilitation.

If approved, Cash Contract No. 513 would engage Rain for Rent to provide sewer bypass system of Lift Station No. 2 with a not to exceed total of \$16,349.34.

Director Murphy made a motion, seconded by Director Velasco that the Board approve and execute Cash Contract No. 513 between the District and Rain For Rent for the Lift Station No. 2 Rehabilitation. The motion carried by the following roll call vote:

AYES:	5	Murphy, Velasco, Damron, Graf, Modugno
NOES:	0	None
ABSENT:	0	None
ABSTAIN:	0	None

**5. Summerland Sanitary District Dissolution/Annexation Discussion**

General Manager reviewed his staff report related to the Summerland Sanitary District Dissolution/Annexation. Summerland Sanitary District intends to engage Ridgeline Municipal Strategies to perform a feasibility study on dissolution of SSD and subsequent annexation by CSD.

SSD's committee requested that CSD consider funding half of this study, or approximately \$12,500. Ad-hoc committee members Director Graf and Director Murphy commented on the request, suggesting that costs for this preliminary study should be borne by SSD, as they are the entity pursuing the potential reorganization. There is no clear benefit to CSD ratepayers at this time. The Board concurred with this opinion and directed the General Manager to convey this response to SSD.

No Board action was taken on this item.

**6. Carpinteria Advanced Purification Project**

General Manager provided an update related to the Carpinteria Advanced Purification Project.

No Board action was taken on this item.

**VII. BOARD ITEMS**

**A. COMMITTEE REPORTS**

Standing Finance Committee

None.

Standing Personnel Committee

None.

Standing Public Relations Committee

None.

Standing Utilities Committee

None.

Standing Recycled Water Committee

None.

Summerland Sanitary Coordination Ad-Hoc Committee

Director Murphy reported on the meeting of July 20, 2023

**B. GENERAL ITEMS**

SBCSDA (Santa Barbara California Special Districts Association) Report

None.

CSRMA Report

None.

Board Member Vacation Dates

Director Murphy – will be absent from the September 19<sup>th</sup> meeting.

Future Agenda Items

None

**VIII. ADJOURNMENT**

There being no further items to discuss, President Modugno adjourned the meeting at 6:47p.m.

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Mike Modugno  
President

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Michael Damron  
President Pro-Tem

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Gerald Velasco  
Secretary

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Debbie Murphy  
Secretary Pro-Tem

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Lin Graf  
Treasurer



# Carpinteria Sanitary District

Board of Directors Meeting  
General Manager's Status Report

TO: Board of Directors

FROM: Craig Murray, P.E. – General Manager

**SUBJECT: General Manager's Status Report**

DATE: September 5, 2023

**Recruiting Update.** An open recruitment for two newly authorized Operator in Training (OIT) positions closed on August 31<sup>st</sup>. Compared to prior entry level recruitments, the number of responses was meager. We will be reviewing and considering submitted applications this week. We have continued to post the job announcement for the vacant Operator 2 through 4 position, but have not received applications for this spot.

**Team Updates.** Roberto Luna was promoted to a Grade 2 Collection System Operator position. Congratulations Robert!

**Accounting Software Transition.** Kim Garcia and I participated in a kick-off meeting with a large team from Caselle Software on August 24<sup>th</sup>. We have provided requested historical data and other information over the past several months. The project is now moving into the development phase and we hope to be fully live by the end of 2023.

**WaterReuse California Central Coast Chapter Meeting.** The District hosted a meeting of this group on August 30<sup>th</sup> in the Board room. The hybrid meeting was very well attended, with about 30 people in person. A presentation on CAPP was provided, followed by a tour of the ultrafiltration pilot plant.

## **Operations Update**

System operations updates are as follows:

- The treatment plant is operating in full compliance with our NPDES permit. Effluent quality has been consistently high.
- Operators are now running the UF pilot facility, including daily sampling and detailed inspection reporting to Carollo Engineers.
- Staff has been doing troubleshooting work at Lift Stations 7 and 8 to improve communications and functionality.
- The Operations Manager gave a tour of the WWTP to the Carpinteria Morning Rotary Club on August 16<sup>th</sup>.
- Staff from the SWRCB's ELAP program will be onsite to do a laboratory inspection as part of our certification renewal. Jacob has provided data in advance of the visit, and completed required proficiency testing.
- The collection system is operating well with no reported problems or SSO events.
- Collection staff is nearing completion of the system-wide CCTV inspection effort.



# Carpinteria Sanitary District

Board of Directors Meeting

## STAFF REPORT

TO: Board of Directors

FROM: Craig Murray, P.E. - General Manager

**SUBJECT: Agreement for As-Needed Engineering Services  
Three Year On-Call Services – MKN Associates**

DATE: September 5, 2023

**REQUESTED ACTION:** That the Board ratify an Agreement for As-Needed Engineering Services between the Carpinteria Sanitary District and MKN Associates for a three year term.

**BACKGROUND:** Periodically, the District has capital improvement or repair projects within the wastewater treatment facility that require engineering analysis, planning or design. While we have completed many projects using internal resources, certain projects have technical elements or resource needs that exceed the capacity of District staff. As such, it is beneficial to have a qualified, reliable engineering consultant that can provide support services on an as-needed basis.

The District reached out to several engineering firms that have a local presence and proven experience on complex wastewater engineering projects in a treatment plant setting. For the types of projects we have identified in the near term, our focus was on smaller, regional firms, as compared to national or global engineering companies. In person meetings and facility tours were held with several firms, followed by review of detailed Statements of Qualifications (SOQ).

After careful review, staff believes that MKN Associates (MKN) offers the right combination of experience and expertise to serve the District in an ongoing as-needed capacity. MKN is headquartered in Arroyo Grande with offices throughout central and southern California, including an office in Ventura. A copy of the Statement of Qualifications submitted by MKN is included with this staff report for reference.

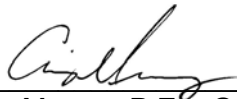
The attached Agreement for As-Needed Engineering Services would engage MKN to provide on-call engineering support for a three year initial term. Exhibit A to the agreement is a proposed rate sheet for on-call services. Mr. Mike Nunley would serve as Principal Engineer and be the primary point of contact for the District. The agreement would utilize a task order approach to engage MKN for specific support needs or identified projects, similar to other as-needed consultant agreements the District has entered into. Task orders with fee estimates exceeding \$15,000 would be brought to the Board for consideration. At this time, we are not proposing issuance of any task orders, but are collaborating with MKN on the proposed belt press replacement project design scope.

**RECOMMENDATION:** Staff recommends that the Board ratify the Agreement for Professional Consulting Services between the Carpinteria Sanitary District and MKN Associates as presented.

**SUGGESTED MOTION:** I move that the Board ratify the Agreement for Professional Consulting Services between the Carpinteria Sanitary District and MKN Associates as presented.

M\_\_\_\_\_ S\_\_\_\_\_

Ayes:\_\_\_\_\_ Nays:\_\_\_\_\_ Abstentions:\_\_\_\_\_

Prepared By: \_\_\_\_\_  
Craig Murray, P.E. - General Manager

Attachments: Statement of Qualifications  
Agreement for Professional Consulting Services

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# STATEMENT OF QUALIFICATIONS



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# CORE PRINCIPLES

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**PARTNERSHIP  
EXCELLENCE  
CREATIVITY  
MASTERY  
AGILITY  
VALUE**



# MKN OVERVIEW

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## MKN's Client-Centric Origins

MKN is a water, wastewater, and recycled water engineering firm located in Central and Southern California. Founded in 2012, the firm comprises more than 45+ employees, including professional engineers, planners, construction managers, inspectors, and support staff. MKN is focused on meeting the growing need of public agencies for responsive, capable consultants. Our use of state-of-the-art technology, along with our many years of experience in providing quality services, ensure the best outcomes for our clients. We are committed to establishing and preserving long-term relationships based on excellent service and clear communication.

We know our clients are looking for a trusted partner to lean on – an engineering firm that can participate and manage every aspect of a project from start to finish. This is what it means to be a client advocate.

Whether we are overseeing a citywide water treatment program or managing a single aspect of a larger project, MKN is available to address client concerns, resolve issues, and deliver exceptional construction management services to our clients.

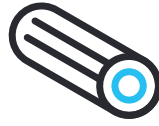
## Water is our Focus

MKN is dedicated to serving clients with all of their water-related projects. We are proud to be leaders in the development of industry standards and best practices. The name MKN is synonymous with innovation, communication, professionalism, and client satisfaction.

# PRACTICE AREAS



## INFRASTRUCTURE



200+ Miles of Pipeline



70+ Pump/Lift Stations



35+ Tanks/Reservoirs



## TREATMENT



35+ Well Projects



50+ WWTP Projects



40+ Water Treatment Projects



## PLANNING & HYDRAULIC MODELING



40+ Master Plans



80+ Hydraulic Modeling Projects



30+ Lift Station Assessments



## PROGRAM MANAGEMENT & ALTERNATIVE DELIVERY



\$200M+ in Program Management



10+ Alternative Delivery Projects



DBIA Certification



## CONSTRUCTION MANAGEMENT



\$750M+ of Construction Management



Inspection Services



Proven Constructability Process

# OUR CLIENTS

## MKN is Delivering Projects for 25+ Agencies Through On-Call Contracts



**EXPERIENCE  
HIGHLIGHT**

**295** Number of projects  
completed by MKN  
since 2012

**\$25.1M**

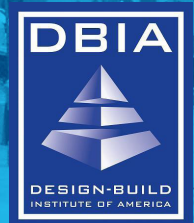
Value of MKN  
project fees  
since 2012



## Licenses and Certifications

MKN has project engineers with the following certifications:

- Inspector Training and Certification Program (ITCP) Manhole Rehabilitation; National Association of Sewer Service Companies (NASSCO)
- ITCP Cured in Place Pipe; (NASSCO)
- Pipeline Assessment Certification Program (PACP); (NASSCO)
- CEQA Collection System Maintenance Grade 3
- Leadership in Energy and Environmental Design (LEED)
- NACE Level 1 Coating Inspector Certification; National Association of Coating Engineers (NACE)
- State Water Resources Control Board Water Treatment Operator Grade T2
- State Water Resources Control Board Water Distribution Operator Grade D2
- State Water Resources Control Board Wastewater Operator Grade V
- Design Build Certification (DBIA)
- Envision Sustainability Professional (ISI)
- Utility Risk & Resilience Certification
- Geographic Information Systems Professional Certification (GISP)
- Project Management Professionals (PMP)
- Certified Construction Manager, CCM (CMAA)



**The following  
map provides an  
overview of MKN's  
office locations and  
regional clients.**

# CENTRAL AND SoCAL FOCUSED

**2012**

Year Founded

**45+**

Number of Employees

**7**

Number of Offices

**100+**

Number of Clients Since 2012



Antelope Valley - East Kern Water Agency  
Arroyo Grande  
Atascadero  
Atascadero MWC  
Atwater  
Bakersfield  
Bear Valley CSD  
Camarillo  
Calleguas MWD  
Cambria CSD  
Camrosa Water District  
Casitas MWD  
Cayucos SD  
Channel Islands Beach CSD  
Coalinga  
Delano  
East Niles CSD  
East Orange County Water District  
Emerald Bay CSD  
Foothill Municipal Water District  
Fresno  
Fresno County  
Goleta Water District  
Gonzales  
Greenfield  
Grover Beach  
Guadalupe  
Heritage Ranch CSD  
Hollister  
Kern County Water Agency  
Kern Sanitation Authority  
Kingsburg  
Laguna Beach County Sanitation District

Las Virgenes MWD  
Lynnwood  
Madera  
Madera County  
Merced  
Monte Vista Water District  
Morro Bay  
Newport Beach  
Nipomo CSD  
North County SD  
North of the River MWD  
District No. 1  
Oceanside  
Oxnard  
Paso Robles  
Pismo Beach  
Port Hueneme Water Agency  
Quartz Hill Water District  
Reedley  
San Luis Obispo

San Luis Obispo County  
San Simeon CSD  
Santa Maria  
Santa Clarita Valley Water District  
Santa Paula  
Santa Barbara  
Santa Nella  
Seaside County SD  
Selma-Kingsburg-Fowler Sanitation District  
Semitropic Water SD  
Soledad  
Solvang  
South Coast Water District  
South San Luis Obispo County Sanitation District

Sunnyslope County Water District  
Taft  
Tehachapi  
Thousand Oaks  
Trabuco Canyon Water District  
Tulare  
Water Replenishment District of Southern California  
Westlands Water District  
Yorba Linda Water District

**WE ARE  
COMMITTED  
TO SERVE  
BEYOND  
THE SCOPE**



# SERVICES



## Infrastructure

- Pipelines, Pump Stations & Reservoirs
- Condition Assessment & Rehabilitation
- Feasibility Studies, Preliminary & Final Design
- Reservoir Siting/Feasibility
- Well Design & Rehab



## Treatment

- Groundwater & Surface Water Treatment
- Chemical System Design
- Facility Rehabilitation
- Water Quality Monitoring & Analysis
- Wastewater Treatment
- Disinfection
- Optimization
- Piloting



## Planning & Hydraulic Modeling

- Master Planning
- Hydraulic Modeling
- GIS Development
- Asset Management
- Urban Water Management Plans
- Alternative Analysis
- Risk and Resilience Assessments
- Surge Analysis
- Water Supply Assessments
- Water Supply Verifications



## Program Management

- Owner's Engineer/Agent
- Alternative Delivery
- Staff Augmentation



## Construction Management

- Constructability Review
- Scheduling
- Document Control
- Resident Engineering and Inspection
- Special Inspections
- Claims Mitigation and Review
- Startup and Operations

# STAFF RESOURCES



## Infrastructure

### PIPELINES

Josh Nord, PE  
Joseph Reichmuth, PE  
Henry Liang, PE  
Parasto Azami, PE  
Becca Bugielski, PE  
Adam Bugielski, PE

### PERMITTING

Gerhard Hubner, PG  
Eileen Shields, PE

### CONDITION ASSESSMENT

Kevin Norgaard, PE  
Becca Bugielski, PE  
(NASSCO, PACP, MACP, LACP)

### RESERVOIRS & WELLS

Jon Hanlon, PE (NACE Certified)  
Josh Nord, PE  
Jason Wilson, PE

### PUMP/LIFT STATIONS

Josh Nord, PE  
Eileen Shields, PE  
Henry Liang, PE  
Joseph Reichmuth, PE

### CAD DESIGNERS

Jim Froelicher  
Mike Thorne  
David Rodriguez  
Megan Adams



## Planning

### MASTER PLANNING

Henry Liang, PE  
Rob Lepore, GISP  
Ryan Gallagher, PE

### HYDRAULIC MODELING

Rob Lepore, GISP  
Adam Bugielski, PE



## Treatment

### WASTEWATER

Michael Nunley, PE  
Jon Hanlon, PE  
Kevin Norgaard, PE  
Eileen Shields, PE

### WATER

Chris Martin, PE  
Ryan Gallagher, PE  
Jon Hanlon, PE  
Stefanos Word, PE



## Program

### PROGRAM MANAGEMENT

Michael Nunley, PE  
(DBIA Certified)  
Eileen Shields, PE  
Ryan Gallagher, PE  
Peter Brennan, PE, CCM  
Adam Bugielski, PE

### ALTERNATE DELIVERY

Jon Hanlon, PE  
Peter Brennan, PE, CCM



## Construction

### CONSTRUCTION MANAGER/ RESIDENT ENGINEER

Peter Brennan, PE, CCM  
Matt Willbanks, PE  
Sol Shiekh

### OPERATIONS/STARTUP

Ron Kettle, Grade 5 Wastewater

### INSPECTION SERVICES

Larry Lewis (Civil, Mech., Struct.)  
Gary Bohnisch (Civil, Mech., Struct.)  
Ed Macias (Elec., Instru.)

### COST ESTIMATING

Joseph Reichmuth, PE  
Sol Shiekh

# KEY STAFF



**Michael  
Nunley, PE**

University of California, Berkeley  
MS Civil and Environmental Engineering

Polytechnic Institute & State University, Blacksburg, VA  
BS Civil Engineering

California Civil Engineer — No. C61801

After over 20 years of serving as project engineer, project manager, branch manager, and ultimately as a senior operations manager and Vice President for a Fortune 500 consulting engineering firm, Michael Nunley started this firm specializing in water, wastewater, and water reuse engineering for public agencies. Mr. Nunley specializes in planning, design, rehabilitation and optimization of wastewater collection and treatment systems. His experience at WWTP ranges from 100,000 gpd to 40 MGD.



**Jon  
Hanlon, PE**

California Polytechnic State University, San Luis Obispo  
BS Mechanical Engineering

California Mechanical Engineer - No. M33232

NACE Certified Coating Inspector Level 1  
No. 10431924

Mr. Hanlon is a Principal with nearly 20 years of experience focused in design, analysis, and management of complex multi-disciplined projects including water and wastewater treatment facilities, pump stations, production wells, piping and valves, hydraulic analysis, master planning, and environmental permitting.

Mr. Hanlon specializes in reservoir evaluation, rehabilitation, planning and design, having been involved with over 10 tank projects, ranging in size from 100,000 gallons to 8 million gallons. He is a certified NACE level 1 inspector with significant experience performing condition assessment of water, wastewater, and recycled water facilities throughout California.



**Eileen  
Shields, PE**

California Polytechnic State University, San Luis Obispo  
MS Civil & Environmental Engineering  
BS Environmental Engineering

California Civil Engineer - No. C74757

Ms. Shields has over 15 years of experience in a wide range of water, wastewater, and recycled water projects. From utility review for CEQA compliance and master planning, to design of conveyance and treatment facilities and construction phase services. Ms. Shields' various water and wastewater projects include preliminary and detailed design, permitting, hydraulic modeling, plant civil design & cost estimation; conveyance facilities; planning and design of recycled water supply and conveyance alternatives; wastewater treatment and collection system conceptual planning, process evaluation and wastewater treatment plant design.



**Joseph  
Reichmuth, PE**

California Polytechnic State University, San Luis Obispo  
BS Civil Engineering

California Civil Engineer - No. C63124

NASSCO ITCP – Cured In Place Pipe

NASSCO ITCP – Manhole Rehabilitation

Mr. Reichmuth is a Principal who brings over 20 years of design experience as a project manager/engineer specializing in wastewater treatment facilities, lift stations, gravity sewers, force mains, water storage facilities, pipeline design, condition assessment and rehabilitation, and performing construction management services. Mr. Reichmuth also has nearly a decade of experience working in the geotechnical engineering discipline specializing in field engineering and construction observation resulting in the ability to produce comprehensive and reliable cost opinions for public work projects.

# KEY STAFF



**Robert  
Lepore, GISP**

Wentworth Institute of Technology, Boston,  
Massachusetts

BS Environmental Engineering

Certified Geographic Information System  
Professional (GISP)

State Water Resources Control Board Water  
Treatment and Distribution Operator Grade T2 and D2

Mr. Lepore has 20 years of experience in developing comprehensive water, wastewater, and recycled water master plans for public utilities with a focus on GIS integration. Rob has served as a project manager and/or Water Resource Planner for more than 40 master planning and hydraulic modeling projects in central and southern California.

He is also a Geographic Information System Professional (GISP) certified by the GIS Certification Institute. Rob has worked for a public utility, GIS consulting firm, and multiple engineering firms, which has allowed him to focus and refine his execution of critical master planning projects for our public infrastructure clients.



**Jason  
Wilson, PE**

University of Central Florida, Orlando, Florida  
BS Civil Engineering

California Civil Engineer - No. C89117

Mr. Wilson is a Project Engineer with 6 years of experience in management, design, and construction engineering of water and wastewater projects including welded steel and prestressed concrete water storage tanks, groundwater wells, booster pump stations, transmission and distribution pipelines, wellhead treatment systems integration, and sewer collection systems condition assessment and rehabilitation.



**Josh  
Nord, PE**

California State University, Fresno  
BS Civil Engineering

California Civil Engineer - No. C61789

Mr. Nord has nearly 20 years of industry experience including design, analysis, and management of major water supply and water resource projects throughout California. Josh Nord is experienced in water supply and distribution systems specifically pumping station design, water resources, surge analyses, hydraulic transient analysis and water system modeling.

Mr. Nord has evaluated, planned or designed over 15 pump stations and up to 300 cfs in pumping capacity. Mr. Nord brings a public agency perspective to his projects, having served as District Engineer for multiple public agencies.



**Chris  
Martin, PE**

University of Washington Seattle, Washington  
BS Chemical Engineering

California Chemical Engineer - No. CH4597

Mr. Martin is a Principal with over 30 years of experience in advanced water treatment processes, such as reverse osmosis, ion exchange, and specialty adsorbents. He is an expert in water quality issues both in the municipal and industrial industries, with over 30 treatment plant designs and dozens of evaluations and feasibility studies. Mr. Martin has presented numerous papers at water industry conferences concerning water quality and treatment topics, and is a recognized expert in these fields.



**Oscar  
Daza, PE, Ph.D.**

Utah State University  
Ph.D. Agricultural and Irrigation Engineering

Wageningen University, The Netherlands  
MS Water Management

Universidad del Valle, Colombia  
BS Agricultural Engineering

California Civil Engineer - No. 79180

Mr. Daza is a qualified Agricultural and Irrigation Engineer registered as a Civil Engineer with a diverse experience. He is driven to devise new solutions and approaches to water resources engineering problems. His areas of expertise include water resources engineering; water resources planning and management; irrigation and drainage engineering; hydraulic systems engineering; groundwater hydrology and hydraulics; groundwater flow and transport modeling and simulation; modeling, simulation/optimization of conjunctive water management systems; and land improvement and reclamation projects for agricultural production.



**Brian  
McCauley, PE**

California Polytechnic State University, San Luis Obispo  
BS BioResource and Agriculture Engineering

California Civil Engineer - No. C92170

Mr. McCauley is a Project Engineer who has experience in planning, compliance, and design engineering for both municipalities and private companies. Brian has led feasibility studies, operational improvement studies, construction management, and permitting efforts. Additionally, he has served as a project controls lead for a large drinking water reservoir program.



**Henry  
Liang, PE**

Craig School of Business, California State University, Fresno

Masters of Business Administration

University of California, Berkeley  
BS Civil and Environmental Engineering

California Civil Engineer - No. C68442

Mr. Liang is a Principal with nearly 20 years of experience in planning and design of municipal water, wastewater and water resources projects ranging from planning to design of major transmission pipelines, pump stations, and wells including raw and treated water projects throughout California. His expertise includes detailed hydraulic modeling and transient analysis for a variety of water supply projects.



**Kevin  
Norgaard, PE**

California State University, Fresno  
BS Mechanical Engineering

California Mechanical Engineer - No. M27654

During his 14 years at the City of Fresno, Kevin worked to develop a CIP program that addressed not only the large master plan projects but also systematically addressed point repairs identified through review of CCTV inspections performed by City staff. Kevin managed in-house and consultants through construction. These projects ranged from the 60" North Avenue rehabilitation project to a 6" sewer replacement project in the back of an apartment building. Working with maintenance staff he developed a plan to rehabilitate the City's 16 lift stations.

# KEY STAFF



**Ryan  
Gallagher, PE**

California Polytechnic State University, San Luis Obispo  
BS Civil Engineering

California Civil Engineer - No. C74805

Over the past 15 years, Ryan has completed over 75 projects with 20 public agencies in Southern California, serving as the Project Manager for the majority. The estimated construction value of the projects that have been planned, designed and/or constructed exceeds \$250 million. Projects include planning through design for water, wastewater and recycled water conveyance, pumping, storage and treatment.



**Parasto  
Azami, PE**

University of California Irvine  
MS Civil Engineering

Tabriz University, Iran  
BS Mechanical Engineering

California Civil Engineer - No. C91468

Ms. Azami has over 10 years of experience in civil engineering as a design engineer delivering project designs in the areas of water, wastewater, and recycled water infrastructure systems. Her interface with clients is multi-faceted - during projects' proposals, design phases, progress reviews, and submittals.



**Adam  
Bugielski, PE**

California State University, Northridge  
BS Civil Engineering

California Civil Engineer - No. C89065

Mr. Bugielski is experienced with water and wastewater system design, system hydraulic modeling and management, and large diameter pipeline design. He has a strong understanding of agencies and municipalities needs and has worked closely with many in the region. Mr. Bugielski is also experienced with water and wastewater infrastructure reviews to determine possible deficiencies and identify capital improvement needs.



**Becca  
Bugielski, PE**

Marquette University, WI  
BS Civil Engineering

California Civil Engineer - No. C93278

Ms. Bugielski is an effective communicator and an experienced Project Engineer and Project Manager for municipal projects. Her technical experience includes alternatives analysis, water and sewer pipeline design, GIS, stormwater design, grading, cost estimating and permitting.

Ms. Bugielski brings unique public sector perspective from her time serving as Village Engineer, where she managed planning, budgeting, design and implementation of capital improvement projects.





**Sarah  
Mathews, PE**

University of Pittsburgh, PA  
BS Civil Engineering, Water Resources  
California Civil Engineer - No. C88471

NASSCO Pipeline, Lateral and Manhole Assessment  
Certified (PACP/LACP/MACP)

Certification No. P0041640-032023

Ms. Mathews is experienced with water and wastewater infrastructure and is a strong project manager. She has over 10 years of experience in design and project management of water and wastewater facilities. Sarah was awarded Young Professional of the Year by the Ventura County APWA and is currently their Membership Committee Co-Chair. Sarah was also named one of Autodesk Construction Solutions' "40 Under 40: Champions of Construction 2021."



**Peter  
Brennan, PE, CCM**

Loyola Marymount University, CA  
MS Civil and Environmental Engineering

Santa Clara University, CA  
BS Civil Engineering

California Civil Engineer - No. C53110

Mr. Brennan brings over 30 years of experience providing construction management and project management in the water resources industry. He worked for over 22 years with the Los Angeles County Sanitation Districts where he administered construction contracts ranging from \$1M to \$190M. In this position, he served as a Project Manager/Senior Resident Engineer for various projects such as wastewater treatment plants, pipelines, pump stations, and landfill construction.



**Solomon  
Sheikh**

California Polytechnic State University, San Luis Obispo  
BS Mechanical Engineering

Solomon has honed his project and construction management experience in both the public and private sectors. His skill sets as a project leader have been an active and respected addition to projects ranging in size from \$25,000 to \$13 Billion. Projects include wastewater treatment plants, pump stations, commercial office spaces, oil refineries, and dams. Solomon specializes in complex construction projects emphasizing a dedication to quality, building well-functioning project teams that act in a partnership from design to project closeout, while ensuring that projects are built on-time & on-budget.

# INFRASTRUCTURE

## Transmission, Collections and Distribution



Our team has designed over 200 miles of pipelines, ranging in size from 6-inch to 96-inches. These pipelines convey raw water, potable water, recycled water, wastewater, storm water and brine. These design projects include both open-cut and trenchless designs such as jack and boring, microtunneling and horizontal directional drilling. Our team is experienced in both highly dense urban settings as well as environmentally sensitive rural areas, and are specialized in utility coordination, easement acquisition and regulatory permitting with federal, state and local agencies. For existing pipelines, our team includes NASSCO certified engineers that can evaluate conditions and determine the best course of rehabilitation.



### NACIMIENTO WATER PROJECT San Luis Obispo County FC & WCD, CA

This regional Project consists of a multi-port sloping intake facility at Lake Nacimiento with a pump station, two intermediate pump stations, three storage tanks, a control system, and approximately 45 miles of transmission pipeline ranging from 36- to 12-inches in diameter, with the ability to deliver 15,750 acre-feet of raw water each year to communities within San Luis Obispo County.

The \$176.1-million Project is owned, managed and operated by the San Luis Obispo County Flood Control and Water Conservation District (District). It is the District's largest project ever constructed by a factor of six and serves as an icon of collaboration between communities within San Luis Obispo County (Key staff with previous firm).



#### HIGHLIGHTS

- 45 miles of pipeline
- Up to 36-inch diameter
- Multi-agency collaboration



# Pipelines

Client	Project Name	Diameter (inches)	Material	Length
Antelope Valley/East Kern WA	95th Street East PS/Turnout	20	Steel	500
Antelope Valley/East Kern WA	South Feeder Parallel Pipeline	24, 36, 48	Steel	34,320
Arvin CSD	Arvin RW Disposal Pipeline	18	PVC	18,480
California Rail Builders	North Kern WSD Canal 9-26	42	Conc/HDPE	400
Casitas MWD	Pipeline Loading Evaluation	33	Steel	NA
Casitas MWD	West Ojai Pipeline Project	8	PVC	5,600
Cayucos Sanitary District	Sewer Pipeline Improvements	8	PVC	3,500
Cayucos Sanitary District	Toro Creek Bridge Pipeline Rehab	8	PVC	100
City of Arroyo Grande	Fair Oaks Waterline Replacement Project	8	PVC	2,025
City of Fresno	Regional Transmission Mains	16-48	WSP, DIP	68,640
City of Fresno	Friant-Kern Canal Pipeline	60	WSP	26,400
City of Grover Beach	CDBG Waterline Replacement	6, 8	PVC	5,500
City of Grover Beach	CDBG Waterline Replacement	8	PVC	2,400
City of Guadalupe	Tognazzini Well Intertie	8	PVC	600
City of Modesto	Ninth Street Storm Drain Replacement	24-96	RCP/CIP	52,800
City of San Luis Obispo	Highland Waterline Replacement	24	DIP	165
East Niles CSD	Redbank Rd Pipeline Project	8, 14	PVC	6,800
East Niles CSD	Pesante Sewer Replacement	8	VCP	500
East Niles CSD	Water Master Plan	12-36	NA	67,500
East Niles CSD	Morning Dr Transmission Pipe	20	Steel	5,500
East Niles CSD	Well 20 Flushing Pipeline Project	12	PVC	1,500
East Niles CSD	Brentwood Sewer Extension	8	VCP,PVC,HDPE	1,000
East Niles CSD	Pioneer Pipeline Project	12	PVC	1,400
East Niles CSD	Morning and 178 Intertie	20	Steel	1,320
Fresno Met Flood CD	Various Flood Control Projects	18-48	RCP/CIP	21,120
Gunner Ranch	Wastewater Improvements	27, 30	PVC	21,120
Kern County Water Agency	Northwest Feeder PS & Pipeline	42	Steel	21,120
Lakeside Union SD	LUUSD Connection to Bakersfield	16	PVC	15,500
Las Virgenes MWD	Westlake Reservoir	30, 36	Steel	2,200
Monterey County WRA	Salinas River Diversion Facility	20, 30	WSP, DIP	10,560
Municipality of Jeddah	Urgent Works Storm Drainage Program	18-96	RCP/CIP	100+ miles
ND State Water Commission	Devils Lake Emergency Outlet	30, 54	Steel, HDPE	3,500
ND State Water Commission	Southwest Pipeline Project and PS	24, 30	Steel	448,800
Nipomo CSD	Supplemental Water Project	12, 18, 24	DIP, HDPE	27,000
Nipomo CSD	Frontage Rd Trunk Sewer Replacement	24	PVC	4,200
Nipomo CSD	Branch St Water Improvements	8	PVC	2,100
Nipomo CSD	Joshua Road Booster Pump Station	24		
North of the River MWD	Highland Park Improvement	8, 12	PVC	27,000
Santa Maria	WWTP Influent Piping Improvements	42, 48	PE	600
SLO County Food Control	Nacimiento Water Pipeline	18-36	PVC, DIP	264,000
South Coast Water District	Via California Replacement	10	PVC	500
United Water CD	Alternatives Analysis	16	PVC	20,000
Valley Children's Hospital	VCH Rio Mesa Well & Pipeline	12	PVC	1,800
Ventura County	Potable Pipeline Project	12	PVC	20,00
Water Replenishment District	208th Street Pipelines	14, 24, 36	HDPE	2,400
Water Replenishment District	GRIP Conveyance Alternatives Analysis	42	Steel	25,000
Water Replenishment District	Brine Pipeline	16	HDPE	2,000
West Basin MWD	Palos Verdes Pipeline	10, 12	PVC	16,000

# STORAGE

Our team has planned, designed or rehabilitated over 35 reservoirs, ranging in size from 80,000 gallons to 5 million gallons. These reservoirs include welded steel, bolted steel, cast-in-place concrete and pre-stressed concrete designs. Our team includes NACE certified coating inspectors for evaluating existing tanks and expertise in planning new tanks, from siting and feasibility to detailed design. For new tanks, our team specializes in optimizing site layout, hydraulic analysis, tank sizing and type selection, and life cycle cost analysis to ensure your agency is making the best long-term investment.



Storage			
Client	Project Name	Volume (MG)	Type
Cambria CSD	Pine Knolls Reservoirs	0.5 (2)	S
Casitas Municipal Water District	Signal Tank and P. S. Replacement	0.3 MG	S
City of Coalinga	Derrick Reservoir Rehabilitation	7.4 MG	S
City of Fresno	T3 Water Storage & Treatment Facility	3 MG	PS
City of Fresno	Recycled Water Storage Tank & Booster PS		
City of Fresno	Shortlist for Well Site Improvements & Wellhead Treatment Design		
City of Fresno	Design of Well 345-1		
City of San Luis Obispo	Reservoir No. 2 Replacement	2.5 MG (2)	PS
City of Ventura	Golf Course Booster PS & Wells Upgrade		
Delano	Well Tank 4 Recoating	2	S
Delano	Plant 2 Tank Recoating	2	S
East Niles CSD	PS Reservoir	1.2	PS
East Niles CSD	Country Club/College Fairfax	0.4 (2), 0.8, 2	S
East Niles CSD	Pepper Drive Tank Project	0.4	S
East Niles CSD	Kern Citrus Tank Project	0.8	S
East Niles CSD	Well 21 Arsenic Treatment	0.4	S
Goleta Water District	Barger Canyon Reservoir	1	C
Guadalupe	Bonita Tank Condition Assessment	0.5	S
Guadalupe	Obispo Water Storage Tank No. 2	0.4	S
Guadalupe	Elevated Tank Rehabilitation	0.1	S
Las Virgnes MWD	Westlake Reservoir	5 MG	PS
Mojave Public Utility District	Cache Creek System Improvements	0.08	S
Nipomo CSD	Supplemental Water Project	.5	PS
Paso Robles	Golden Hill & Merryhill Reservoir	4, 0.5	S
Paso Robles	21st Street Reservoir	3 (2)	PS
Private (City of Beaumont)	Wastewater Treatment	0.1	S
San Luis Obispo	Terrace Hill & Washwater Tank No. 2	.75 (2)	S
Santa Clarita Valley Water District	Earl Schmidt Two 5MG Tanks	5 MG (2)	S
Santa Clarita Valley Water District	Earl Schmidt Tank #1 Improvements	5 MG	S
Santa Barbara	Tunnel Rd PS & Reservoir Rehab	1	S
South Coast Water District	Reservoir 2B and 3B Replacement	0.1 MG (2)	S
Ventura County Water & Sanitation	Meridian Reservoir	1.5	S
Ventura County Water & Sanitation	Stockton Reservoir Replacement	1	S
Water Replenishment District	LVLWTF Storage Analysis	5	C
Water Replenishment District	Storage Analysis (Lynwood)	2	PS

(PS = Pre-Stressed, C = Cast-in-Place Concrete, and S = Steel)

## RESERVOIR NO. 2 REPLACEMENT FEASIBILITY STUDY

City of San Luis Obispo, CA

The City of San Luis Obispo (City) water distribution system includes two reservoirs (Reservoir No. 1 and Reservoir No. 2) that are estimated to be 50 to 60 years old according to City staff. Reservoir No. 2 is a 7.44 million gallon (MG) reservoir equipped with floating covers that were scheduled for replacement in 2015-16. The existing reservoir was constructed in the 1940s as a part of the City's original water treatment facility, which is now abandoned. MKN was retained by the City of San Luis Obispo to prepare a feasibility study to identify the preferred approach to upgrading the City's Reservoir No. 2. The purpose of the study was to evaluate the feasibility, including costs and technical considerations, of reducing overall storage of the reservoir (7.44 MG to 5 MG) by constructing two new storage tanks at the Reservoir No. 2 site.



### HIGHLIGHTS

- **Life Cycle Cost Analysis**
- **Two 2.5 MG Pre-stressed Concrete Tanks**
- **Maintain Operations During Construction**

## DJ FARMS TANK

City of Guadalupe, CA

MKN designed a 700,000 gallon, welded-steel tank at the Obispo Tank Site (Obispo Tank No. 2). Design and construction of the tank was based on the American Waterworks Association Standard for Welded Carbon Steel Tanks for Water Storage (AWWAD100-11). The tank is 66 feet in diameter and matches the height of Obispo Tank No. 1 (30'). The tank includes similar accessories as those on Obispo Tank No. 1 including an external ladder and safety cage, internal ladder, roof railing, roof access hatch, roof vent, two side manways, side mounted level gauge, twelve-inch overflow piping, and a four-inch drain pipe with sample port. The sample port provides City staff with a convenient access point for testing quality of the stored water.

The new tank also includes an automatically controlled, impressed-current cathodic protection system. A tank mixing system manufactured by Tideflex Technologies was installed within the tank to provide mixing while filling. Mixing is accomplished utilizing duckbill-type check valves placed along the inlet pipe within the tank.



### HIGHLIGHTS

- **New 700,000 gallon Steel Tank**
- **Mixing System for Water Quality**
- **Integration with Existing Tank**

# PUMPING AND LIFT STATIONS

Our team has designed over 50 pumping stations, including water, recycled water and wastewater. These pump station designs include both horizontal centrifugal pumps and vertical turbine pumps, and for lift stations both submersible and dry pit configurations. This experience covers both small pump stations and large, complex pumping facilities with capacities reaching 500 cfs. Our approach to each pump station is to deliver a design that meets your project's unique conditions, whether it be capital or operating cost, reliability, public impact, pump sizing for wide ranging demands, minimal space or access, challenging hydraulic conditions, easement acquisition or retrofitting existing systems.



## Pump Stations

Client	Project	Capacity	Type of Work
Bakersfield	Westside Parkway	100 cfs	Preliminary, Design
Burbank Water & Power	RW PS-1 Upgrades	3,000 gpm	Preliminary
Casitas MWD	Running Ridge Improvements	300 gpm	Preliminary, Design
Casitas MWD	Signal PS Replacement	600 gpm	Preliminary
City of Fresno	Recycled Water Storage Tank & Booster PS	TBD	Preliminary, Design
City of Fresno	Design of Booster Pump Replacements at PS 89A, 133, and 150	TBD	Preliminary, Design
City of Oxnard	BS No. 6 PS	2,000 gpm	Preliminary
East Niles CSD	Brentwood PS Relocation	3,000 gpm	Preliminary, Design, CM
East Niles CSD	East Niles PS Replacement	2,000 gpm	Preliminary
East Niles CSD	Kern Citrus PS	5,700 gpm	Preliminary, Design, CM
East Niles CSD	Well 21 PS Phase 2	2,250 gpm	Preliminary, Design, CM
East Orange County Water District	Barrett PS Replacement	1,500 gpm	Preliminary, Design, CM
G.L. Bruno Associates	Freeway Tank PS	2,000 gpm	Preliminary, Design, CM
Guadalupe	Bonita PS Rehabilitation	1,500 gpm	Preliminary, Design
Guadalupe	Obispo Tank #2 PS	1,500 gpm	Preliminary
Hollister	Seasonal Return PS Facility	20 cfs	Preliminary, Design
Kern County Water Agency	23 Corner Tank PS	2,000 gpm	Preliminary, Design, CM
Kern County Water Agency	Cross Valley Canal Expansion	500 cfs	Preliminary, Design
Kern County Water Agency	North & East PS	40 cfs	Preliminary, Design
Kern County Water Agency	Northwest Feeder PS	70 cfs	Preliminary, Design
Monterey County WRA	Salinas River Diversion Facility	35 cfs	Preliminary, Design
Morro Bay	Desal Plant PS Improvements	1,350 gpm	Preliminary, Design, CM
MWD of Salt Lake/Sandy	15000 South PS	150 cfs	Preliminary, Design
ND State Water Commission	Devil's Lake Outlet Project	300 cfs	Preliminary, Design
ND State Water Commission	Southwest Pump Stations	39 cfs	Preliminary, Design
NFV-1 /Cal Water	Millerton Zone 640 BPS	3,000 gpm	Preliminary, Design, CM
Nipomo CSD	Joshua Road BPS	2,000 gpm	Preliminary, Design, CM
Paso Robles	Nacimiento Surface WTP	2,000 gpm	Preliminary, Design, CM
Private Agriculture	Canal Pumping Plant	45 cfs	Preliminary, Design, CM
San Lorenzo Valley WD	Regional Intertie No. 2-4, 6	350 gpm	Preliminary, Design
San Luis Obispo	Arlita BPS Replacement	1,500 gpm	Preliminary, Design
San Luis Obispo	Rosemont BPS Replacement	400 gpm	Preliminary, Design
West Basin MWD	Palos Verdes PS	1,000 gpm	Preliminary
West Stanislaus Irr. District	Pump Station 1A	350 cfs	Preliminary, Design
Westlands WD	Pumping Plant 7-1 Expansion	6,000 gpm	CM



## JOSHUA ROAD BOOSTER PUMP STATION

Nipomo, CA

The Supplemental Water Project consists of over 27,000 linear feet (LF) of pipeline, a 0.5 million gallon (MG) storage tank, a 2,000 gallon per minute (gpm) pump station, and chloramination systems at the pump station and at four existing NCSO production wells, as well as the related back-up power, controls, power supply and instrumentation. MKN staff provided design services for the project including the Joshua Road Booster Pump Station.

The booster pump station consists of three vertical turbine pumps with VFDs, chloramine boosting station, and associated controls. The pumps will draw water from the City of Santa Maria distribution system and deliver it at flows ranging from 600 gallons per minute (gpm) to up to 2,000 gpm. A 24-inch pipeline was designed to connect the pump station to an existing 12-inch waterline. Water will be pumped along Orchard Road (in the existing 12-inch waterline) and branch into new dedicated pipelines that connect to the main District system in several locations. (Key staff with previous firm)



### HIGHLIGHTS

- **Vertical Turbine Pumps**
- **New Pump Station**
- **Backup Power and Disinfection**

## ALRITA BOOSTER PUMP STATION

City of San Luis Obispo, CA

The Alrita Booster Station, originally constructed in 1958, included a 2500-gal hydropneumatic tank and two service pumps. The station had been a maintenance concern for several years so the pump station replacement became a priority project for the City. Furthermore, the pump station did not provide fire protection to the Alrita Pressure Zone.

Because the original pump station was located on a 15' x 30' easement, the Project Team assisted the City in negotiations with the adjacent property owner to acquire additional easement for the new pump station.

In order for the new pump station to blend into the neighborhood, the architectural design incorporated a split-faced block building. The two new vertical bladder-type hydropneumatic tanks were located behind the building to minimize viewshed impacts.

The new bladder tanks reduced required tank maintenance and reduced noise by eliminating the need for an onsite air compressor.

In order to enhance fire protection, a new 75-hp horizontal end-suction centrifugal pump provided a minimum of 1500 gallons per minute of fire flow to the highest elevations in the Alrita Pressure Zone. The design included a recirculating pressure controlled loop to allow continuous fire pump operation and flow availability regardless of hydrant demand. (Key staff with previous firm)



### HIGHLIGHTS

- **Architecture Designed to Blend with Neighborhood**
- **Easement Acquisition**
- **Fire Flow Driven**

MKN is an industry leader in lift station projects, having completed planning, design, condition assessment, hydraulic analysis or construction management on over 20 lift stations and pump stations in the last two years alone.

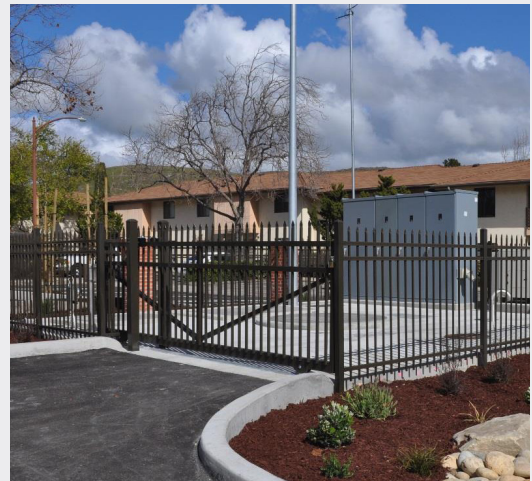
Lift Station		Project Elements						
Project	Client	Rehab. Existing LS	Extensive Corrosion to Existing Facility	Congested or Restricted Work Area	Concrete Rehab and Repair	Environmentally Sensitive High Risk Area for Sewage Spills	New LS	Complex SCADA and Electrical Work
Harbor 3, Roja & Pilgrim Creek (3 Total)	Oceanside	•	•	•	•	•		•
Roja LS Constructability Review	Oceanside	•		•	•	•		
LS Rehabilitations (5 Total)	City of Pismo	•	•	•	•	•		
LS Condition Assessment (7 Total)	Channel Islands Beach CSD	•	•	•	•	•		
LS No. 1 Rehabilitation	Arroyo Grande	•		•		•		
LS No. 3 Rehabilitation	Arroyo Grande	•	•	•	•	•		
No. 5 LS Rehabilitation	Atascadero	•		•	•	•		
Highway 1 LS Rehabilitation	Guadalupe		•	•				
Pioneer LS Replacement	Guadalupe	•	•	•		•	•	
Pasadera LS	Guadalupe						•	
WWTP Influent LS Pump Replacement	Guadalupe	•		•	•			
Castaic Pump Station Rehab	LACSD	•	•	•	•	•		
Southland WWTP Influent LS	Nipomo CSD						•	•
LS No. 3, 8, 11 Replacement (3 Total)	Paso Robles	•		•	•	•		
LS No. 4 Replacement	Paso Robles						•	
LS Rehabilitations (5 total)	Pismo Beach	•	•	•	•	•		
LS 3 Improvements	Port San Luis Harbor District	•		•	•	•		
WWTP Influent LS Assessment	Reedley	•	•		•	•		
18th Street LS Replacement	SKF CSD		•		•		•	•
Avila Ranch LS	San Luis Obispo					•	•	•
Margarita & Foothill LS	San Luis Obispo		•	•	•		•	•
WWRF Influent LS Pump Replacement	San Luis Obispo	•		•	•			
Calle Joaquin LS Replacement	San Luis Obispo			•		•	•	•
Laguna LS Replacement	San Luis Obispo			•			•	•
LS 3 Replacement	Templeton CSD			•		•	•	•
Volpi Ysabel LS	Templeton CSD			•		•	•	•
Westside LS Rehabilitation	Templeton CSD	•	•	•		•		•
Cal Poly Housing South LS (DB)	Webcor Builders			•		•	•	
McCutchen LS Study	Bakersfield	•	•					
District LS Feasibility Study	Bakersfield	•	•		•		•	
24th and Oak LS Feasibility Study	Bakersfield	•	•	•		•	•	

## MARGARITA & FOOTHILL LIFT STATION REPLACEMENT

City of San Luis Obispo, CA

The City owns and operates nine sewer lift stations. Six of these are Smith and Loveless premanufactured steel structures with a dry well/wet well design. The Margarita and Foothill lift stations were placed in service in 1971 and 1986, respectively. Both lift stations were experiencing deterioration of the structures, causing leaks and presenting risk of structural failure. The dry wells are classified as confined spaces, making ongoing repairs and maintenance more difficult to accomplish without requiring multiple staff members, gas monitoring equipment, and power ventilation for even the most basic tasks. Both lift stations are located on constrained sites with limited space and are in very close proximity to residences.

This project addressed a variety of challenges such as property acquisition, proximity to residences, constrained site access, traffic impacts and the need for temporary operations to maintain continuous service throughout the construction duration.



### HIGHLIGHTS

- **New Lift Station**
- **Space Limitations**
- **Maintain Operations During Construction**

## LIFT STATIONS REHABILITATIONS (5)

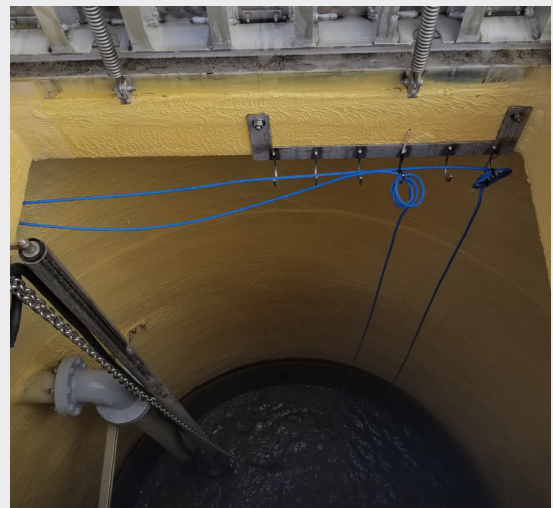
City of Pismo Beach, CA

As recommended in the City's 2010 Wastewater Collection System Master Plan, MKN completed a detailed assessment of the following six City lift stations:

- Vista Del Mar
- Spyglass
- Sunset Palisades
- Freeway Foothills
- PG&E
- Addie Street

MKN was subsequently selected by the City to perform design of civil, mechanical, structural, corrosion control, and electrical improvements at the Spyglass, Sunset Palisades, Freeway Foothills, PG&E, and Addie Street lift stations.

The project includes new backup power, piping improvements, coating repair and replacement, new pumps, pipe replacement, and other work items to extend their design life, reduce risk, and provide redundancy. MKN developed final plans, specifications, and cost opinions for implementation of these improvements.



### HIGHLIGHTS

- **Condition Assessment**
- **Full Rehabilitation at 5 LS**



# TREATMENT

## Water Treatment



Demand for safe, reliable water continues to rise in California. For over three decades MKN's team has been delivering solutions to best utilize this precious resource. MKN's experts are proficient in a full range of water treatment solutions, including treatment of surface water, groundwater, water reuse and seawater. This includes experience in the planning and construction of water reuse programs and facilities.

We are experts in membrane treatment for filtration and desalination, chemical treatment, adsorption processes (i.e. ion exchange), granular activated carbon and contaminant specific media for removal of constituents such as arsenic.

Our groundwater treatment experience includes **35+ wellhead treatment projects**, ranging in size from 20 gpm to 14 MGD. For membrane projects, MKN's experts bring collective experience on **25+ membrane treatment projects**, ranging in size from 0.4 MGD to 25 MGD.

Our water treatment services include the full range of implementation support, from feasibility and planning to final design and construction management. MKN experts are also ready to support pilot testing, equipment procurement, condition assessments, rehabilitation, startup and testing, and operations support.



*MKN's staff has completed several rehabilitation and optimization projects at the Port Hueneme Water Agency's brackish desalination facility.*

## PFAS TREATMENT PLANT

Atascadero Mutual Water Company, CA

*MKN is designing a centralized water treatment facility for reduction of PFAS below notification levels.* The facility will include an operations center, PFAS removal vessels, and connections to existing raw water and distribution system pipelines. MKN is developing a protocol for pilot testing to evaluate different treatment alternatives including activated carbon and ion exchange resins.

### HIGHLIGHTS

- Pilot Testing
- PFAS Treatment System Design
- Permit Support



## WELL 6a ARSENIC TREATMENT INTEGRATION

### Quartz Hill Water District, CA

Quartz Hill Water District (QHWD or District) operates three groundwater wells (Wells 6a, 7, and 8) that are located between 30th and 35th Street West just north of West Avenue L. Water quality testing for Well 6a indicated arsenic concentrations of 34 µg/L which exceeds the State Maximum Contaminant Level of 10 µg/L. The District determined that Well 6a would be equipped with an adsorptive media treatment system. Along with the water treatment system, Well 6a was also to be equipped with flow and pH monitoring, pH adjustment, flow bypassing equipment, and flush to waste provisions.

MKN was retained to review and refine the arsenic treatment system vendor equipment proposals including treatment processes and efficiencies, perform conceptual layouts, prepare draft and final construction document bid packages, and perform construction phase services.



### HIGHLIGHTS

- Adsorption Media System
- Equipment Pre-Procurement
- Arsenic Removal

## FIVE WELLS ARSENIC TREATMENT PROJECT

### City of Bakersfield, CA

The City of Bakersfield (City) potable water system is served by both surface water and groundwater wells. When the maximum contaminant level (MCL) for arsenic was lowered in 2008, the City was forced to take multiple key wells out of service due to elevated levels of arsenic. Based on the City's success with constructing, testing, and commissioning adsorptive treatment at another well site, it was determined that this method should be used at these five key wells. Each well was equipped with dual adsorptive vessels, pH adjustment equipment, flow and pH monitoring, flow bypassing, and flush to waste provisions. MKN was retained to review and refine the arsenic vendor equipment proposals including treatment processes and efficiencies, perform conceptual site layouts, prepare draft & final construction document bid packages, and provide construction support including on-site construction observation.



### HIGHLIGHTS

- Five Well Sites
- Expedited Delivery
- Procurement Support

# Wellhead Treatment

Client	Project	Type	Constituent
Atascadero Mutual Water Company	PFOS/PFOA Treatment	Ion Exchange, GAC, Oxidation-Adsorption	PFOA and PFOS, Iron, Manganese, Hydrogen Sulfide
Atascadero Mutual Water Company	PFAS Remediation Program Management	Various	PFAS and PFOS
Belmont Water Corporation	Well 1 TCP Treatment	Adsorption (GAC)	TCP
Buena Vista Water Storage Dist.	Ag. Drainage Study	Brackish Water Reverse Osmosis (BWRO)	Selenium
California Institution for Men	Chino Prison Water Treatment	Ion Exchange; GAC	Nitrate, Hardness, TCE
Cambria CSD	Seawater Desalination Project	Sea Water Reverse Osmosis (SWRO)	Salinity/Hardness
Camrosa Water District	Conejo Wellfield GAC Treatment Evaluation	Adsorption (GAC)	TCP
Capistrano Beach WD	1.5 MGD/BWRO	Brackish Water Reverse Osmosis (BWRO)	Salinity/Hardness
Capistrano CSD	Capistrano Desalter	Brackish Water Reverse Osmosis (BWRO), Greensand	Salinity/Iron
Capo. Valley CWD	San Juan Capistrano Desalter	Brackish Water Reverse Osmosis (BWRO)	Salinity/Hardness/Iron/Manganese
Channel Islands CSD	Seawater Desal Feasibility Study	Sea Water Reverse Osmosis (SWRO)	Salinity/Hardness
City of Arroyo Grande	Well No. 11	GAC and Greensand	Iron and Arsenic
City of Bakersfield	5 Wells Arsenic Treatment	Adsorption	Arsenic
City of Beverly Hills	Beverly Hills Desalter WTP	Brackish Water Reverse Osmosis (BWRO)	Salinity/Hardness
City of Coalinga	Total Trihalomethanes Reduction Facilities	Carbon Dioxide, Permanganate	TTHM/DBP
City of Coalinga	Surface WTP Upgrades	Raw Water Screening, Conventional Flocculation, Sedimentation, Gravity Filtration, Chlorine Disinfection	Surface Water (Raw Water Organics and Inorganics)
City of Compton	Well 16 and 18 - Planning	Various	PCE/TCE
City of Delano	Well 32 Nitrate Blending Analysis	Ion Exchange	Nitrate
City of Fillmore	Fillmore WTP Treatment Study	Brackish Water Reverse Osmosis (BWRO)	Salinity/Hardness
City of Fresno	Pump Station 177 Wellhead Treatment Improvements	Adsorption (GAC), Airstripping	TCP, Carbon Dioxide
City of Fresno	Pump Station 185 Wellhead Treatment Improvements	Adsorption (GAC), Airstripping	TCP, Carbon Dioxide
City of Fresno	Pump Station 345-1 Wellhead Treatment Improvements	Oxidation-Adsorption	Hydrogen Sulfide, Arsenic, Iron, Manganese
City of Goleta	Anita Well	GAC, Greensand, Arstripping	Fe & Mn, TTHM
City of Grover Beach	Grover Beach Nitrate Removal	Ion Exchange	Nitrate
City of Guadalupe	Well 5	Ion Exchange	Nitrate
City of Lynwood	Well No. 11	GAC	PCE/TCE
City of Lynwood	Well No. 19	GAC and Greensand	PCE/TCE and Fe & Mn
City of McFarland	McFarland Well 2	Ion Exchange	Nitrate
City of McFarland	McFarland Well 4	Ion Exchange	Nitrate
City of Morro Bay	Emergency Ops Plan	Sea Water Reverse Osmosis (SWRO)	Salinity/Hardness
City of Morro Bay	Seawater Desalination Project	Sea Water Reverse Osmosis (SWRO)	Salinity/Hardness
City of Oxnard	GREAT Program Brackish Desalter	Brackish Reverse Osmosis (BWRO)	Salinity/Hardness
City of Oxnard	Water Operations Support Contract	Brackish Reverse Osmosis (BWRO)	Salinity/Hardness
City of Oxnard	Brine Optimization	Brackish Reverse Osmosis (BWRO)	Salinity/Hardness
City of Oxnard	BS No. 3 Brackish Desalter	Brackish Reverse Osmosis (BWRO)	Salinity/Hardness
City of Paso Robles	Sherwood Wells	Adsorption, GAC	Arsenic, Sulfide, Taste & Odor
City of Pismo Beach	Meadow Creek Wells	Oxidation-Filtration	Fe & Mn
City of San Diego	18 MGD/WWRO	WWRO	Wastewater (Indirect Potable Reuse)
City of San Luis Obispo	Disinfection Byproduct Reduction and Water Treatment Plant Pipe Gallery Improvement Project	Surface Water Filtration and Ozonation	TTHM
City of San Luis Obispo	Ozone System Upgrade	Ozone	Surface Water
City of Solvang	Well 22	Oxidation-Filtration	Sulfide, Fe & Mn
Confidential Client	Well	Cl, Greensand, RO	Sulfide, TDS
County of Dare	Skyco Color Removal	Ion Exchange	Color/ TTHM Precursors
Crescenta Valley County WD	Glenwood Treatment Plant	Ion Exchange	Nitrate

# MEMBRANE

Client	Project	Membrane Type	Size (MGD)	Planning	Piloting	Pre-Design	Final Design	Rehabilitation	CM/PM
Buena Vista Water Storage Dist.	Ag. Drainage Study	BWRO	-		•				
Cambria CSD	Seawater Desalination Project	SWRO	0.43	•			•		
Capistrano Beach WD	1.5 MGD/BWRO	BWRO	1.5	•	•	•	•		
Capo. Valley CWD	San Juan Capistrano Desalter	BWRO	5	•	•	•	•		•
Channel Islands CSD	Seawater Desal Feasibility Study	SWRO	2	•					
City of Beverly Hills	Beverly Hills Desalter WTP	BWRO	1	•	•	•			
City of Fillmore	Fillmore WRF Treatment Study	WWRO	4	•	•				
City of Morro Bay	Emergency Ops Plan	SWRO	1					•	
City of Morro Bay	Seawater Desalination Project	SWRO	1						•
City of Oxnard	GREAT Program Brackfish Desalter	BWRO	7.5						•
City of Oxnard	Water Operations Support Contract	BWRO	7.5				•	•	
City of Oxnard	Brine Optimization	BWRO	7.5	•				•	
City of Oxnard	BS No. 3 Brackfish Desalter	BWRO	5	•		•			
City of San Diego	18 MGD/WWRO	WWRO	18	•		•	•		
Irvine Ranch Water District	Deep Aquifer Treatment System	BWNF	8	•		•			
Marin Municipal WD	Marin Desal Pilot Study	SWRO	5	•	•	•	•		
Monterey Peninsula WMD	Seawater Desal Feasibility Study	SWRO	7	•					
North Coast Water District	Seawater Desal Feasibility Study	SWRO	7	•					
Olivenhain MWD	David C. McCollom WTP	UF	25	•	•	•	•		•
Paso Robles	Nacimiento Surface WTP	MF	2.4	•		•	•		
Port Hueneme Water Agency	Brine Optimization	BWRO	3	•		•			
Port Hueneme Water Agency	BWRDF Facility Master Plan	BWRO/NF	3	•				•	
Port Hueneme Water Agency	EDR Replacement	BWNF	1			•	•		•
RJ Donovan Prison	WWTP	WWRO	1	•		•	•		•
Santa Nella CWD	5 MGD MF	MF	5	•	•	•	•		•
Santa Paula	Chloride Reduction Study	WWRO	3.4	•					
Southern California Edison	Catalina Desalter Project	SWRO	<1						•
Sweetwater Authority	Richard A. Reynolds GW Desal Facility	BWRO	4	•	•	•	•		•
Water Replenishment District	ARC AWPf	WWRO	10	•					•

Legend: RO – Reverse Osmosis, NF – Nanofiltration, MF – Microfiltration, UF – Ultrafiltration, WW – Wastewater, BW – Brackish Water, SW – Seawater



# WASTEWATER TREATMENT

**Broad Experience.** MKN staff bring extensive treatment design experience from over 30 wastewater treatment plants, ranging in size from 100 gpm to 140 MGD. This experience includes nearly every aspect of facility planning, design, operation and rehabilitation.

**Integrating Operations.** MKN is often set apart from others by our utilization of operators as part of our assessment teams. We integrate experienced licensed treatment plant operators who can communicate effectively with on-the-ground staff, offer unique perspectives and consider operational impacts to concepts.

**Public Agency Perspective.** Our team includes staff who have operated large wastewater organizations for public works agencies. This is a valuable perspective when providing staff augmentation, development public outreach materials or presenting to public officials regarding large scale projects.



*MKN supported delivery of the Thousand Oaks HCTP Master Plan which included evaluations of the facility's process, energy efficiency and water reuse.*

## SANTA PAULA WATER RECLAMATION FACILITY PROGRAM MANAGEMENT

City of Santa Paula, CA

The City of Santa Paula owns and operates a 3.4 MGD membrane bioreactor Water Reclamation Facility (WRF) that was constructed under a design-build-operate contract in 2009. The City operates with a lean Public Works Department and has preferred to contract out engineering support for the WRF rather provide in-house staff. MKN was selected to provide this service. Since 2015, MKN's services have included managing the contract operator at the WRF, as well as providing engineering support, expense monitoring and authorization, and regulatory assistance.

A sampling includes:

- MBR Rehabilitation
- Reverse Osmosis System Compliance Project
- SCADA Upgrade
- Biofilter Odor Control
- Tank Cleaning
- Chemical Systems Replacement



### HIGHLIGHTS

- Staff Augmentation
- Recycled Water Planning
- Grant and Loan Support
- MBR Rehabilitation

## **SOUTHLAND WASTEWATER TREATMENT FACILITY PHASE 1 DESIGN**

**Nipomo Community Services District, CA**

Nipomo Community Services District owns and operates the Southland Wastewater Treatment Facility, one of two treatment plants providing wastewater treatment to the District's service area. The project included design of a 0.9-MGD extended aeration treatment facility including new influent lift station and flow meter, a new spiral screening system in concrete channels and vortex grit removal system, conversion of existing aerated ponds to an extended aeration system, new secondary clarifiers, blower and control building, gravity belt thickener, and concrete-lined sludge drying beds.

MKN key staff worked closely with the District to develop a construction sequencing plan to complete the work, while maintaining existing wastewater treatment service and minimizing impact to the Plant. The work also included the completion of a Report of Waste Discharge and support during preparation of the Environmental Impact Report for the project.

## **ON-CALL WASTEWATER TREATMENT PLANT MAJOR MAINTENANCE & REPAIR PROGRAM (MMRP)**

**City of Morro Bay/Cayucos Sanitary District, CA**

MKN is the on-call lead engineering consultant for the City of Morro Bay and Cayucos Sanitary District's Wastewater Treatment Facility (WWTF). Services include project management support, design, condition assessment, construction management, and inspection. Over the first year of this multi-year project assignment, MKN has performed the following:

- Selection, design, and procurement support for new headworks screening, compaction and dewatering system
- Development of a detailed project schedule incorporating the near-term MMRP improvements
- Condition assessment of Digester #2, Primary Clarifier #1 & #2 and Secondary Clarifier
- Detailed development of the destructive and non-destructive testing program for Digester #2, Primary Clarifier #1 & #2, Secondary Clarifier, and Chlorine Contact Chamber
- Design of improvements to Digester #2
- Recommendations for replacement and rehabilitation of the heat exchanger
- Construction management of recoating and repair work for Digester #2



### **HIGHLIGHTS**

- **Process Optimization**
- **New Treatment Systems**
- **Complex Construction Sequencing**



### **HIGHLIGHTS**

- **Condition Assessment**
- **Detailed Rehabilitation Design**
- **Full Plant Coverage**



## WWTP IMPROVEMENT & PERFORMANCE EVALUATION

### Valley Children's Healthcare - County of Madera, CA

Since 2010, MKN staff has supported Valley Children's Hospital in evaluating their wastewater treatment plant in order to satisfy the requirements of a Notice of Violation (NOV) issued by Regional Water Quality Control Board (RWQCB) for violations of Waste Discharge Requirements (WDDRs) Order 95-144 and Special Order R5-2005-0065. MKN staff designed improvements to help address the noncompliance issues associated with total nitrogen levels and treatment pass. The improvements consisted of the following:

- New oxidation reduction potential (ORP) sensor in the anoxic tank
- New dissolved oxygen (DO) sensors in the aeration tank
- New mixed liquor suspended solids (MLSS) sensor in the aeration tank
- New flowmeters on the internal recycle (IR) pump discharge and the return activated sludge (RAS) pump discharge line
- New lift station upstream of the Amiad automatic screen filter and UV disinfection system
- Electrical and instrumentation improvements to integrate the new instruments and pump station into the plant's process controls
- Piping modifications to send RAS from the secondary clarifiers to the anoxic tank
- New emergency overflow pipeline to send excess flows to the emergency overflow pond
- Replacement of the existing 125-micron screen with a 25-micron screen in the Amiad filter

Following the improvements, MKN staff conducted a 6-month performance evaluation and worked with VCH staff to identify process adjustments that have brought the VCH wastewater treatment plant into compliance. MKN has also recently designed improvements to the existing plant to provide additional treatment capacity in their system. Design included reconfiguration of the existing equalization, anoxic, and sludge digestion tanks and upgrades to the blower system.



### HIGHLIGHTS

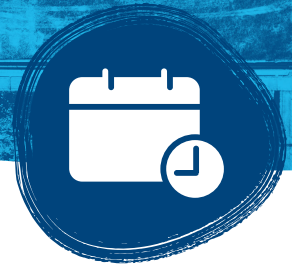
- **Condition Assessment**
- **Regulatory Compliance Driven**



# Wastewater Services Experience

Service Areas	Example MKN Staff Projects
<b>Liquid Treatment</b> <ul style="list-style-type: none"> <li>• Bar Screens</li> <li>• Primary Treatment</li> <li>• Biological Treatment <ul style="list-style-type: none"> <li>• Disinfection</li> </ul> </li> <li>• Advanced Treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Headworks Barscreen, Atascadero</li> <li>• Headworks Barscreen, Morro Bay/ Cayucos SD</li> <li>• Headworks Barscreen, South SLO County SD</li> <li>• Blacklake WWTP Headworks Rehab, Nipomo CSD</li> <li>• Influent Lift Station, Guadalupe</li> <li>• Chemical System Upgrades, Camarillo</li> <li>• Channel Aeration Improvements, LVMWD</li> <li>• Clarifier No. 1 Upgrade, Santa Maria</li> <li>• Biotower Rehab Assessment, City of Oxnard</li> <li>• Primary Clarifier Rehab, LVMWD</li> <li>• Tertiary Treatment System, San Simeon CSD</li> <li>• MBR Replacement, Santa Paula</li> <li>• Advanced Treatment System (Reverse Osmosis), Santa Paula</li> <li>• Palo Alto Secondary Clarifier Upgrades</li> </ul>
<b>Solids Treatment</b> <ul style="list-style-type: none"> <li>• Conditioning</li> <li>• Thickening</li> <li>• Dewatering</li> <li>• Disposal</li> </ul>	<ul style="list-style-type: none"> <li>• Digester 1 Rehab, Morro Bay/ Cayucos SD</li> <li>• Digester 3, 4 and 7 Rehabilitation, Fresno</li> <li>• Southland WWTP Screw Press, Nipomo CSD</li> <li>• Sludge Dewatering Study, Nipomo</li> <li>• HCTP Screw Press, Thousand Oaks</li> <li>• Sludge Thickening System Evaluation, San Luis Obispo</li> <li>• Biosolids Handling Facility, South SLO County SD</li> <li>• Biosolids Drying Feasibility Study, Thousand Oaks</li> <li>• Biosolids Management Plan, City and County of Honolulu</li> <li>• Third Digester, Las Virgenes Digester Rehab, Carmel</li> </ul>
<b>Rehabilitation</b> <ul style="list-style-type: none"> <li>• Condition Assessment</li> <li>• Asset Management <ul style="list-style-type: none"> <li>• CIP Planning</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Major Maintenance and Report Program, Morro Bay/ Cayucos SD</li> <li>• Tapia Condition Assessment and 5-yr CIP, LVMWD</li> <li>• WWTP Master Plan, Thousand Oaks</li> <li>• Southland WWTP Master Plan, Nipomo CSD</li> <li>• WRF Master Plan, Atascadero</li> <li>• WWTP Master Plan, Guadalupe</li> <li>• WWTP Master Plan, King City</li> <li>• San Jose-Santa Clara Regional WWRF Filter Rehabilitation Project</li> </ul>
<b>Renewable Energy</b> <ul style="list-style-type: none"> <li>• Cogen</li> <li>• Solar</li> <li>• FOG</li> </ul>	<ul style="list-style-type: none"> <li>• El Estero FOG Receiving Station, Santa Barbara</li> <li>• FOG Receiving Station, Fresno</li> <li>• Cogeneration System, Santa Maria</li> <li>• Moorpark WWTP 1 MW Solar, Ventura County</li> </ul>
<b>Optimization</b>	<ul style="list-style-type: none"> <li>• WWTF Equipment and Process Evaluation, City of Oxnard</li> <li>• WWTP Upgrade, San Simeon CSD</li> <li>• WRF Operations and Capital Improvements, Santa Paula</li> <li>• Honolulu WWTF Evaluation, City and County of Honolulu</li> <li>• Comprehensive WWTP Audit, Paso Robles</li> <li>• Dual Media Filter Optimization, Palo Alto</li> </ul>
<b>New or Plant Expansion</b>	<ul style="list-style-type: none"> <li>• ARC AWPf (10 MGD), Water Replenishment District of SoCal</li> <li>• WWTP Redundancy Project (5 MGD), South SLO County SD</li> <li>• WWTP Upgrade (2 MGD), Morro Bay/ Cayucos SD</li> <li>• Gunner Ranch MBR WWTP (2 MGD), Madera</li> <li>• Southland WWTP Phase 1 (0.9 MGD), Nipomo CSD</li> <li>• Beale Air Force Base WWTP (0.75 MGD), US Air Force</li> <li>• Fiero Lane WWTP, Fiero Lane Mutual Water Company</li> <li>• Process WWTP, Private Client (Winery)</li> </ul>

# PLANNING AND HYDRAULIC MODELING



MKN's planning experts specialize in Master Planning for public agencies water, wastewater and recycled water systems, treatment facilities and associated infrastructure. Our team can deliver a comprehensive approach that covers condition assessment, hydraulic model development, risk identification and mitigation, optimization and capital project planning.

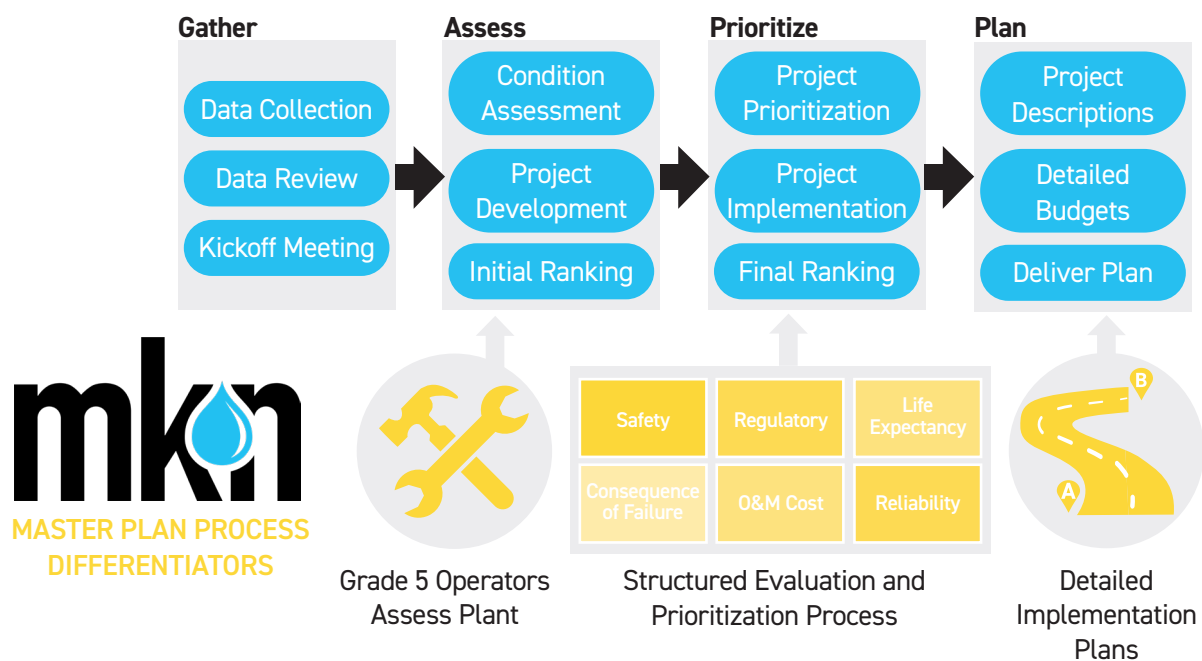
MKN's planning experience includes 40+ Master Plans and 80+ hydraulic model evaluations. Our team is proficient in all major hydraulic modeling software and is capable of building GIS datasets, conducting field surveys and flow tests, flushing studies, water age analysis, extended period simulations and water system optimization. Through various on-call contracts we also provide as-needed infrastructure reviews in support of development reviews.

Additional experience includes feasibility studies and alternatives analysis, asset management, water supply planning, strategic planning, stakeholder facilitation, and Urban Water Management Plans.



MKN completed Water and Wastewater Planning for the City of Tehachapi which included development of an Indirect Potable Use project to help meet future demands.

## MKN's Proven Process to Master Planning Delivers Clear, Well-Defined Projects



The following table provides a summary of key MKN experience related to Master Plans, Condition Assessments and Hydraulic Modeling.

Hydraulic Modeling & Master Planning				
Client	Project Name	Master Planning	Hydraulic Modeling	Condition Assessment
Arcadia	2015 Water Master Plan	•	•	•
Arizona Water Company	2014 Pinetop-Lakeside Water Master Plan	•	•	•
Arvin	2019 Sewer Master Plan	•	•	•
Atascadero	Collection System Master Plan Update	•	•	•
Atascadero	Water Reclamation Facility Master Plan	•		
Atascadero MMC	Water Master Plan Update	•		
Atwater	Sewer and Storm Drain Master Plan	•		
Atwater	Water Master Plan	•	•	
Bakersfield	Downtown Master Sewer Study	•	•	
Camrosa Water District	Non-Potable Hydraulic Model			•
Channel Island BCSD	2020 Wastewater Master Plan	•	•	
Channel Island BCSD	2020 Water Master Plan	•	•	
Channel Island BCSD	Wastewater Infrastructure Report	•	•	
Channel Island BCSD	Water Infrastructure Report	•	•	
Corona	2018 Reclaimed Water Master Plan	•	•	
East Niles CSD	2021 Water Master Plan	•	•	
East Niles CSD	2008 Water Master Plan	•	•	
East Pasadena Water Co.	2008 Water Master Plan	•	•	
El Monte	2021 Water Master Plan	•	•	•
Grover Beach	2018 Sewer Master Plan	•	•	
Grover Beach	2018 Water Master Plan	•	•	•
Guadalupe	2014 Collection System & WWTP Master Plan	•	•	
Guadalupe	2014 Water Master Plan	•		•
Guadalupe	2015 Water Master Plan Supplemental Report	•		
Guadalupe	2021 Water Master Plan Update	•		•
Gunner Ranch	Infrastructure Master Plan	•		
Hawaii County Department of Water Supply	2019 Water Master Plan	•	•	•
Heber Public Utility District	2021 Water and Sewer Master Plan	•	•	•
Heritage Ranch CSD	RW Study & WWTP Master Plan	•		
Hollister	Sanitary Sewer Collection System Master Plan	•		
Jet Propulsion Laboratory	2011 Facility Master Plan	•		
King City	Wastewater Master Plan (staff experience with previous firm)	•		
La Verne	2012 Water Master Plan Update	•	•	
Madera	Madera County IRWMP	•		
Madera	Water System Master Plan Update	•		
Merced	Water Master Plan Update	•	•	
Merced	Water Master Plan	•	•	
Monrovia	2015 Water Master Plan	•	•	•
Morro Bay	Master Water Reclamation Plan	•		
Nipomo CSD	Blacklake Collection System Master Plan	•	•	
Oxnard	Recycled Water Facilities Plan	•		
Oxnard	Recycled Water Master Plan	•	•	
Oxnard	Water Master Plan Update	•	•	



# PROGRAM MANAGEMENT AND ALTERNATE DELIVERY



MKN understands the resources, planning and dedication required to execute large, complex and fast-paced programs. MKN's leaders have delivered millions in capital programs, previously serving in nearly every aspect of implementation from the early stages of program development, to staff augmentation, to quality management during construction. Successful execution requires a broad understanding of the technical challenges, regulatory requirements, resource limitations and industry capabilities.

As an Owner's Advocate, our team will plan and manage your program through project programming, design, construction and commissioning. During the early stages, MKN can assist your agency in defining project elements, conceptual design and cost estimating, alternative delivery analysis, scheduling and resource planning. Leveraging our in-depth industry knowledge and DIBA certified experts, we will guide your agency through a fair and competitive selection process that ensures the best value and minimizes risk to quality, schedule or budget.



*MKN is the Owner's Engineer for the Gunner Ranch West WWTP which includes a new MBR treatment facility and four miles of trunk sewer.*

## Sample of MKN's Team Program Management and Alternative Delivery Experience

**MKN's Program Managers understand all aspects of large-scale program delivery.** Our team members bring expertise from not only the Client/Owner side but also from the delivery side, serving in multiple projects as part of the Design-Build team. This provides our team with a unique perspective to better understand the challenges and capabilities of those responding to our Client's solicitations.

Client	Project	Role
Southland Energy	SLO WTP Upgrades	Design Build Engineer
Southland Energy	Cambria WWTP Improvements	Design Build Engineer
Southland Energy	Santa Maria Cogeneration	Design Build Engineer
San Juan Capistrano	San Juan Basin Desalter	Design Build Engineer
San Lorenzo MWC	Well No. 9	Design Build Engineer
Private Client	WWTP (City of Beaumont)	Owner's Engineer
Irvine Ranch Water District	Deep Aquifer Treatment	Owner's Engineer
Water Replenishment District	ARC AWPF	Owner's Engineer
City of Bakersfield	Emergency Well Treatment	Owner's Engineer
Ventura County	Moorpark WWTP Solar	Owner's Engineer
Ventura County	Todd Road Jail Solar	Owner's Engineer

## WASTEWATER TREATMENT PLANT REDUNDANCY PROJECT PROGRAM MANAGEMENT

South San Luis Obispo County SD - Oceano, CA

As part of a multi-year improvement program, MKN is serving as an extension of District staff to provide Program Management Services. MKN is leading procurement of construction management services and startup and commissioning services, completion of construction bidding documents, coordination of District project consultants, coordination and support for grant and loan applications, review of and support for permitting compliance, and bid and construction phase project management services.

The project includes construction of a redundant 5 MGD secondary treatment system consisting of two activated sludge aeration basins, a secondary clarifier, sludge thickening systems, a new blower and controls building, a return activated sludge pump station, and support systems including piping, electrical, site work, flood proofing, and instrumentation.



### HIGHLIGHTS

- **Staff Augmentation**
- **Program Management for \$22M in Construction**
- **25+ Task Orders Since 2015**

## MORRO BAY WATER RECLAMATION FACILITY

City of Morro Bay, CA

When the City of Morro Bay began the process of undertaking a multi-year, \$150M+ effort to replace their existing wastewater treatment plant with an advanced water purification facility, they selected MKN to assist in program development and preliminary engineering analysis.

During the early stages of this Program, MKN provided critical services related to defining the project, evaluating conceptual alternatives, establishing regulatory requirements and identifying technical challenges. MKN also served in a key role related to program education and communication, providing technical support to Council presentations and workshops, community workshops and website development.



### HIGHLIGHTS

- **Program Manager for Procurement**
- **\$150M+ Construction Value**
- **Multi-year Process (\$2M+ fees)**
- **Grant Funding (SRF, SWRCB, EPA)**



# CONSTRUCTION MANAGEMENT



The MKN construction management team consists of skilled construction managers, resident engineers, schedulers, estimators and inspectors who bring hands-on experience managing the construction of over \$1B in new and renovated water and wastewater infrastructure and treatment facilities. The MKN team brings a thorough understanding of what it takes to get the job done safely, correctly, on time and on budget.

Over the past several years, the MKN team has experienced great success in assisting public owners in identifying and putting in place common-sense, creative solutions and practices across all phases of public infrastructure water and wastewater work with construction management services including:

- Construction Management
- Constructability Reviews
- Operability Reviews
- Quality Assurance for Alternative Delivery
- Risk Identification and Mitigation
- Resident Engineer Services
- Cost Estimating
- Inspection
- Scheduling
- Claims Mitigation
- Startup and Commissioning



## GUNNER RANCH WEST WASTEWATER TREATMENT PLANT AND SEWER TRUNK LINE

**Gunner Ranch Inc. - County of Madera, CA**

MKN is serving as the Owner's Representative, providing construction management services for construction of a membrane bioreactor (MBR) wastewater treatment plant and over four miles of 27- to 30-inch sewer trunk line that will serve the 1,000+ acre Gunner Ranch West mixed-use development. The facilities will become part of a Madera County Community Service Area and will be owned and operated by Madera County. MKN is performing on-going construction observation, materials testing, and inspection services and ensuring construction contract compliance. In addition to managing the construction documents (submittals, RFIs), MKN is also serving as the Owner's Engineer, reviewing technical submittals for compliance with the design and contract documents. To streamline document tracking, MKN developed a custom document tracking system to manage construction document workflows, track submittals (e.g. shop drawings, RFIs, change orders, etc.), develop project construction correspondences, generate reports and logs, and serve as the tool for tracking all construction documents.



### HIGHLIGHTS

- **4 Miles of Pipelines**
- **New MBR WWTP**
- **Custom Document Tracking Tool**

## WESTLAND WATER DISTRICT PP7-1 LOW EFFICIENCY IMPROVEMENTS

**Westland Water District, CA**

MKN provided construction management services, which included construction of a low-flow booster pump at the existing canal lateral 7-1 pump station, to improve pumping efficiency during periods of low demand. The project included expanding the pump station intake structure, adding a new vertical turbine pump, and manifold piping improvements. MKN served as the resident engineer, overseeing construction contract administration and facilitated review, approval, and tracking of technical submittals, RFIs, and change orders. MKN also performed on-going construction observation, materials testing, and inspection services. MKN successfully coordinated with the District, Contractor, and Design Engineer to resolve construction issues throughout the project construction to keep the project on schedule and on budget.



### HIGHLIGHTS

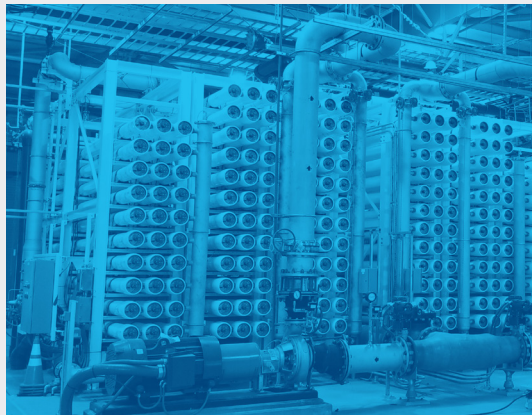
- **Large Flow Pump Construction**
- **Startup and Testing**
- **On Schedule and On Budget**



## ALBERT ROBLES CENTER (ARC) ADVANCED WATER PURIFICATION FACILITY

Water Replenishment District of Southern  
California - Pico Rivera, CA

MKN's Peter Brennan served as the Construction Manager on this design build project. Peter oversaw the construction management team who provided quality assurance to this \$110M Advanced Water Purification Facility. The project included an offsite brine pipeline, injection wells, buried raw water reservoir, two story operations and education building, and treatment building with associated process, chemical systems and pumping. The facility included LEED certification, startup and testing, specialty inspection, and coordination with LACSD, City of Pico Rivera, Southern California Edison and Army Corps of Engineers.



### HIGHLIGHTS

- Complex Process and Startup
- Alternate Delivery Project
- \$110M+ Construction Project
- Multi Agency Stake Holder Coordination

## TEMPLETON COMMUNITY SERVICES DISTRICT, EASTSIDE FORCE MAIN PROJECT

Templeton Community Services District, CA

MKN provided construction management and design for the East Force Main Project. The project included two new lift stations with solids handling pumps ranging in size from 70 Hp to 25 Hp, and rehabilitation of an existing lift station, including installation of 150 Hp solids handling pumps. Associated force mains for the new lift stations have a combined length of over 2.5 miles. **Force main construction included three creek crossings and a crossing under Highway 101 requiring close coordination with Caltrans.** In addition to open cut trenching of the force main, the design included both HDD and jack and bore construction techniques.



### HIGHLIGHTS

- 2.5 Miles of Force Main
- New Lift Station
- Caltrans Crossing and Trenchless Construction

## FIVE WELLS ARSENIC TREATMENT PROJECT

City of Bakersfield, CA

When the maximum contaminant level (MCL) for arsenic was lowered in 2008, the City was forced to take multiple key wells out of service due to elevated levels of arsenic. In order to increase groundwater pumping capacity and system redundancy, the City decided to equip five well sites with dual adsorptive media arsenic treatment systems and associated pH adjustment equipment, flow and pH monitoring, flow bypassing and flush to waste provisions. MKN was retained to review and refine the arsenic vendor equipment proposals including treatment processes and efficiencies, perform conceptual site layouts, prepare draft and final construction document bid packages, and provide construction phase support including on site construction observation.



### HIGHLIGHTS

- **Five Different Locations**
- **Expedited Schedule for Compliance**
- **Pre-Purchase of Equipment**

## VALLEY CHILDREN'S HEALTHCARE, WELL CONVERSION AND TRANSMISSION PIPELINE

Valley Children's Healthcare - Madera County, CA

MKN served as the resident engineer overseeing construction of the well improvements and transmission pipeline, which included construction in challenging site conditions that had to be carefully coordinated with VCH, the golf course, and the emergency transport team that oversees helicopters flying in and out of the hospital. MKN was responsible for construction contract administration and facilitated review, approval, and tracking of technical submittals, RFIs, RFPs, and change orders. MKN also performed on-going construction observation, materials testing, and inspection services.



### HIGHLIGHTS

- **Coordination with On-Site Activities**
- **Well Improvements**
- **2,000+ feet of Pipeline**



## LANCASTER WATER RECLAMATION PLANT

Los Angeles County Sanitation District, CA

MKN's Peter Brennan served as the Senior Resident Engineer on two hydraulic expansion and various upgrades over a fifteen year period including, influent pump station replacement, temporary primary effluent pumping station, primary sedimentation, primary effluent equalization aeration basins, blower building, secondary sedimentation, digesters, sludge thickeners, filters, UV disinfection, chemical systems storage and pumping, emergency generators, effluent storage reservoirs, recycled water pump station, and SCADA controls.



### HIGHLIGHTS

- **Complex Process and Startup**
- **Alternate Delivery Project**
- **\$192M+ Construction Project**
- **Multi Agency Stake Holder Coordination**

## CONSTRUCTION AND INSPECTION SERVICES FOR THREE LIFT STATIONS

City of Oceanside, CA

The three projects with a combined construction value of approximately \$30M have been undertaken by the City of Oceanside to rehabilitate and improve the existing aging lift stations. Harbor Lift Station No. 3, Roja Lift Station and Pilgrim Creek Lift Station had many combined problems resulting in operational and maintenance challenges, potential safety hazards and increased risk of sewage spills. The lift station projects consist of complete rehabilitation of all three lift stations. Work includes, removing and replacing existing submersible pumps, concrete wet well repairs and demolition of existing piping, pumps, valves and appurtenances. Work also involved construction of new manholes, civil site work, new level control devices, various associated electrical and control system improvements, temporary bypass pumping and groundwater dewatering. Electrical improvements include new conduits, conductors and SCADA improvements. MKN's Peter Brennan is leading the MKN team as Construction Manager for the projects. MKN is providing resident engineering and daily inspection including civil, mechanical, electrical and special inspections.



### HIGHLIGHTS

- **\$30M Construction Project**
- **Lift Station Rehabilitations**
- **Three Different Locations**

## PASADERA DEVELOPMENT CONSTRUCTION MANAGEMENT

City of Guadalupe, CA

MKN provided construction observation of water and sewer facilities associated with the Pasadera Development located on the south side of the City. MKN staff observed installation, testing, and commissioning of utilities by developers to ensure conformance with City standards, requirements, and development agreements. New facilities observed included water distribution piping and gravity sewer collection facilities to serve over 300 homes, a new domestic well and over 400 feet of PVC pipe to connect the well to the City's water storage tank, and a 700,000 gallon welded steel water storage tank.



### HIGHLIGHTS

- Potable Distribution System
- Sewer Collection System
- 700,000 gallon steel tank

### Additional Construction Management Experience

Construction Management/Inspection Services	
Client	Project
City of Arroyo Grande	Lift Station #1 Manhole Rehabilitation
City of Arroyo Grande	Creek Sewer Rehabilitation
City of Arroyo Grande	El Camino Real Storm Drain Rehabilitation
City of Arroyo Grande	Sewer and Storm Drain Pipe Lining
City of Arroyo Grande	Lift Station #1 Inlet Pipe Repair
City of Arroyo Grande	Well #11
City of Fresno	Various Recycled Water Pipeline Projects
City of Fresno	Various Sewer System Rehabilitation and Replacement Projects
City of Guadalupe	Trusspro Sewer Repair
City of Guadalupe	Pasadera Development Construction Observation
City of Guadalupe	Tognazzini Waterline
City of Morro Bay	Digester #2 Rehabilitation
City of Paso Robles	Water Treatment Plant
East Niles CSD	Various Projects
East Niles CSD	Office Waterline Project
East Niles CSD	Office Sewer Project
East Niles CSD	Rosewood PS Relocation Project
Nipomo CSD	Various Projects
South San Luis Obispo County Sanitation District	Grit Removal Improvement Project
South San Luis Obispo County Sanitation District	Headworks Improvement
South San Luis Obispo County Sanitation District	Biosolids Handling Slab
South San Luis Obispo County Sanitation District	Digester #1 Cleaning and Rehabilitation
Templeton Community Services District	Eastside Force Main Project
Templeton Community Services District	Meadowbrook WWTP Headworks Improvements

Arroyo Grande

Bakersfield

Fresno

Irvine

Oceanside

San Jose

Santa Clarita

Ventura

**AGREEMENT BETWEEN  
THE CARPINTERIA SANITARY DISTRICT  
AND  
MKN ASSOCIATES  
FOR  
AS-NEEDED ENGINEERING SERVICES**

**THIS AGREEMENT** is entered into this 5th day of September 2023, by and between the CARPINTERIA SANITARY DISTRICT, a public utility district formed under the laws of California ("DISTRICT") and MKN Associates, a California Corporation ("CONSULTANT"). The Parties agree as follows:

**1. CONSIDERATION.**

- A. As partial consideration, CONSULTANT agrees to perform the work listed in the SCOPE OF SERVICES, below;
- B. As additional consideration, CONSULTANT and DISTRICT agree to abide by the terms and conditions contained in this Agreement;
- C. As additional consideration, DISTRICT agrees to pay CONSULTANT for CONSULTANT's services not to exceed sum(s) as set forth in duly executed Task Order(s). DISTRICT will pay this sum(s) on the basis of the hourly rates and cost reimbursement rates as specified in the attached Exhibit "A," which is incorporated herein.

**2. SCOPE OF SERVICES.**

- A. The specific services required of CONSULTANT under this Agreement will consist of the tasks and obligations defined in a Task Order approved by DISTRICT and CONSULTANT, in response to specific project scopes of work and services requested by DISTRICT. Any duly executed and approved Task Order will become a part of this Agreement. The standard form for the Task Order is set forth in Exhibit B.
- B. Consulting services required by DISTRICT will be provided on an as-needed basis with DISTRICT determining and advising CONSULTANT as to when specific services are required to be performed or completed by CONSULTANT.
- C. CONSULTANT will, in a professional manner, furnish all of the labor, technical, administrative, professional and other personnel, all supplies and materials, equipment, printing, vehicles, transportation, office space and facilities, and all tests, testing and analyses, calculation, and all other means whatsoever, except as herein otherwise expressly specified to be furnished by DISTRICT, necessary or proper to perform and complete the work and provide the professional services required of CONSULTANT by this Agreement.

**3. PAYMENTS.**



- A. For DISTRICT to pay CONSULTANT as specified by this Agreement and as set forth in each approved Task Order, CONSULTANT must submit a detailed invoice to DISTRICT which lists the hours worked and hourly rates for each personnel category and reimbursable costs (all as set forth in Exhibit "A"), the tasks performed, the percentage of the task completed during the billing period, and the cumulative percentage completed for each task.
- B. For services involving the preparation of plans and specifications, payment to CONSULTANT, as provided herein, will not exceed ninety percent (90%) of the total amount for the specific Task Order before completing the plans and specifications. The final 10% will be paid within 45 days after DISTRICT accepts the plans and specifications, as determined by the DISTRICT.
- C. DISTRICT's General Manager may make payments up to \$15,000 for special items of work not included in the project scope of work and services as set forth in the Task Order. Payments for special work will only be made after DISTRICT issues a written notice to proceed for the specific special tasks. A written scope of work, an agreed upon additional fee, a schedule for starting and completing the special tasks, and an agreed upon extension of the time for performance, if needed to complete the special work, will be required before DISTRICT issues a notice to proceed for special work. All special work will be subject to all other terms and provisions of this Agreement.

#### **4. FAMILIARITY WITH WORK.**

- A. By executing this Agreement, CONSULTANT agrees that CONSULTANT has
  - i. Carefully investigated and considered the scope of services to be performed;
  - ii. Carefully considered how the services should be performed; and
  - iii. Understands the facilities, difficulties, and restrictions attending performance of the services under this Agreement.
- B. If services involve work upon any site, CONSULTANT agrees that CONSULTANT has or will investigate the site and is or will be fully acquainted with the conditions there existing, before commencing the services hereunder. Should CONSULTANT discover any latent or unknown conditions that may materially affect the performance of the services, CONSULTANT will immediately inform DISTRICT of such fact and will not proceed except at CONSULTANT's own risk until written instructions are received from DISTRICT.

#### **5. TERM.**

- A. The term of this Agreement will be for a period of three years beginning on the date of this Agreement, except that the term will be extended to the completion date of any Task Order in effect at the end of the term of this Agreement.
- B. The term of this Agreement and any Task Order may be extended as determined

by the DISTRICT or by written amendment to the Agreement or any Task Order.

- C. The time allowed for CONSULTANT's completion of the services to be provided in accordance with the provisions of any Task Order will be as set forth in the Task Order.
- D. When services are requested by DISTRICT, CONSULTANT will commence the requested services within a three-week notice period at any time during the term of this Agreement. DISTRICT may terminate this Agreement as stated in Section 13.

**6. COMMENCEMENT OF WORK.** CONSULTANT will not perform any work for specific project scopes of work and services under duly executed and approved Task Orders under this Agreement until:

- A. CONSULTANT furnishes annual proof of insurance as required under Section 21 of this Agreement; and
- B. DISTRICT gives CONSULTANT a written notice to proceed.
- C. Should CONSULTANT begin work on any approved Task Order in advance of receiving written authorization to proceed, any such professional services are at CONSULTANT's own risk.

**7. TIME EXTENSIONS DUE TO DELAY.** Should CONSULTANT be delayed by causes beyond CONSULTANT's control, DISTRICT may grant a time extension for the completion of the contracted services. If delay occurs, CONSULTANT must notify the DISTRICT within forty-eight hours (48 hours), in writing, of the cause and the extent of the delay and how such delay interferes with the Agreement's schedule. The DISTRICT will extend the completion date, when appropriate, for the completion of the contracted services.

**8. CHANGES.** DISTRICT may order changes in the services within the general scope of this Agreement, or in any duly executed Task Order, consisting of additions, deletions, or other revisions, and the contract sum and the contract time will be adjusted accordingly. All such changes must be authorized in writing, executed by CONSULTANT and DISTRICT. The cost or credit to DISTRICT resulting from changes in the services will be determined in accordance with written agreement between the parties. DISTRICT may consider reasonable adjustments to CONSULTANT'S hourly labor and reimbursable rates (Exhibit "A") based on an annual basis to account for inflation.

**9. TAXPAYER IDENTIFICATION NUMBER.** CONSULTANT will provide DISTRICT with a Taxpayer Identification Number.

**10. PERMITS AND LICENSES.** CONSULTANT, at its sole expense, will obtain and maintain during the term of this Agreement, all necessary permits, licenses, and certificates that may be required in connection with the performance of services under this Agreement.

**11. PROJECT COORDINATION AND SUPERVISION.**

- A. CONSULTANT's professional services will be actually performed by, or immediately supervised by Michael Nunley, P.E.

- B. A specific individual employed by CONSULTANT, and approved by the DISTRICT, will be assigned as Project Manager for each specific project defined in the Task Orders. The assigned Project Manager will be responsible for job performance, fee negotiations, and contractual matters, and is personally in charge of and personally supervise or perform the technical execution of the Project on a day-to-day basis on behalf of CONSULTANT, and will maintain direct communication with DISTRICT's Project Manager.
- C. Should the Project Manager be unable to complete his/her respective responsibilities on any specific project assignment as set forth in the Task Order, for any reason, he/she will be replaced by another qualified person approved by the DISTRICT.

**12. WAIVER.** DISTRICT's review or acceptance of, or payment for, work product prepared by CONSULTANT under this Agreement will not be construed to operate as a waiver of any rights DISTRICT may have under this Agreement or of any cause of action arising from CONSULTANT's performance. A waiver by DISTRICT of any breach of any term, covenant, or condition contained in this Agreement will not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained in this Agreement, whether of the same or different character.

### **13. TERMINATION.**

- A. Except as otherwise provided, DISTRICT may terminate this Agreement, or any individual Task Order, at any time with or without cause. Notice will be in writing at least thirty (30) days before the effective termination date.
- B. CONSULTANT may terminate this Agreement, or any individual Task Order, at any time with DISTRICT's mutual consent. Notice will be in writing at least thirty (30) days before the effective termination date.
- C. Should termination occur, all finished or unfinished documents, data, studies, surveys, drawings, maps, reports and other materials prepared by CONSULTANT will, at DISTRICT's option, become DISTRICT's property, and CONSULTANT will receive just and equitable compensation for any work satisfactorily completed up to the effective date of notice of termination, not to exceed the total costs under Section 1(C).
- D. Should the Agreement, or any individual Task Order, be terminated pursuant to this Section, DISTRICT may procure on its own terms services similar to those terminated.
- E. By executing this document, CONSULTANT waives any and all claims for damages that might otherwise arise from DISTRICT's termination under this Section.

**14. NOTICE OF BREACH AND OPPORTUNITY TO CURE.** Neither party will be deemed to be in breach of this Agreement based on a breach that is capable of being cured until it has received written notice of the breach from the other party. The party charged with breach will have fifteen (15) days from the date of receiving such notice in which to cure the breach or otherwise respond.

If the circumstances leading to the charge that the Agreement was breached have not been cured or explained to the satisfaction of the other party within fifteen (15) days from the date on which the party received notice of breach, the non-breaching party may terminate this Agreement.

**15. OWNERSHIP OF DOCUMENTS.** All documents, data, studies, drawings, maps, models, photographs and reports prepared by CONSULTANT under this Agreement are DISTRICT's property. CONSULTANT may retain copies of said documents and materials as desired, but will deliver all original materials to DISTRICT upon DISTRICT's written notice. DISTRICT agrees that use of CONSULTANT's completed work product, for purposes other than identified in this Agreement, or use of incomplete work product, is at DISTRICT's own risk.

**16. PUBLICATION OF DOCUMENTS.** Except as necessary for performance of service under this Agreement, no copies, sketches, or graphs of materials, including graphic art work, prepared pursuant to this Agreement, will be released by CONSULTANT to any other person or City without DISTRICT's prior written approval. All press releases, including graphic display information to be published in newspapers or magazines, will be approved and distributed solely by DISTRICT, unless otherwise provided by written agreement between the parties.

**17. INDEMNIFICATION.**

A. CONSULTANT agrees to the following:

- i. *Indemnification for Professional Services.* CONSULTANT will save harmless and indemnify and at DISTRICT's request reimburse defense costs for DISTRICT and all its officers, volunteers, employees and representatives from and against any and all suits, actions, or claims, of any character whatever, brought for, or on account of, any injuries or damages sustained by any person or property resulting or arising from any negligent or wrongful act, error or omission by CONSULTANT or any of CONSULTANT's officers, agents, employees, or representatives, in the performance of this Agreement, except for such loss or damage arising from DISTRICT's sole negligence or willful misconduct.
- ii. *Indemnification for other Damages.* CONSULTANT indemnifies and holds DISTRICT harmless from and against any claim, action, damages, costs (including, without limitation, attorney's fees), injuries, or liability, arising out of this Agreement, or its performance, except for such loss or damage arising from DISTRICT's sole negligence or willful misconduct. Should DISTRICT be named in any suit, or should any claim be brought against it by suit or otherwise, whether the same be groundless or not, arising out of this Agreement, or its performance, CONSULTANT will defend DISTRICT (at DISTRICT's request and with counsel satisfactory to DISTRICT) and will indemnify DISTRICT for any judgment rendered against it or any sums paid out in settlement or otherwise.

B. For purposes of this section "DISTRICT" includes DISTRICT's officers, officials, employees, agents, representatives, and certified volunteers.

C. It is expressly understood and agreed that the foregoing provisions will survive termination of this Agreement.



- D. The requirements as to the types and limits of insurance coverage to be maintained by CONSULTANT as required by Section 21, and any approval of said insurance by DISTRICT, are not intended to and will not in any manner limit or qualify the liabilities and obligations otherwise assumed by CONSULTANT pursuant to this Agreement, including, without limitation, to the provisions concerning indemnification.

**18. ASSIGNABILITY.** This Agreement is for CONSULTANT's professional services. CONSULTANT's attempts to assign the benefits or burdens of this Agreement without DISTRICT's written approval are prohibited and will be null and void.

**19. INDEPENDENT CONTRACTOR.** DISTRICT and CONSULTANT agree that CONSULTANT will act as an independent contractor and will have control of all work and the manner in which it is performed. CONSULTANT will be free to contract for similar service to be performed for other employers while under contract with DISTRICT. CONSULTANT is not an agent or employee of DISTRICT and is not entitled to participate in any pension plan, insurance, bonus or similar benefits DISTRICT provides for its employees. Any provision in this Agreement that may appear to give DISTRICT the right to direct CONSULTANT as to the details of doing the work or to exercise a measure of control over the work means that CONSULTANT will follow the direction of the DISTRICT as to end results of the work only.

**20. AUDIT OF RECORDS.** CONSULTANT will maintain full and accurate records with respect to all services and matters covered under this Agreement. DISTRICT will have free access at all reasonable times to such records, and the right to examine and audit the same and to make transcript therefrom, and to inspect all program data, documents, proceedings and activities. CONSULTANT will retain such financial and program service records for at least four (4) years after termination or final payment under this Agreement.

## **21. INSURANCE.**

- A. Before commencing performance under this Agreement, and at all other times this Agreement is effective, CONSULTANT must procure and maintain the following types of insurance with coverage limits complying, at a minimum, with the limits set forth below:

<u>Type of Insurance</u>	<u>Limits (combined single)</u>
Commercial general liability:	\$2,000,000
Professional Liability	\$1,000,000
Business automobile liability	\$1,000,000
Workers compensation	Statutory requirement.

- B. Commercial general liability insurance will meet or exceed the requirements of the most recent ISO-CGL Form. The amount of insurance set forth above will be a combined single limit per occurrence for bodily injury, personal injury, and property damage for the policy coverage. Liability policies will be endorsed to name DISTRICT, its officials, and employees as "additional insureds" under said insurance coverage and to state that such insurance will be deemed "primary" such that any other insurance that may be carried by DISTRICT will be excess thereto. Such insurance will be on an "occurrence," not a "claims made," basis and will not be cancelable or subject to reduction except upon thirty (30) days prior written

notice to DISTRICT.

- C. Automobile coverage will be written on ISO Business Auto Coverage Form CA 00 01 06 92, including symbol 1 (Any Auto).
- D. Professional liability coverage will be on an "occurrence basis" if such coverage is available, or on a "claims made" basis if not available. When coverage is provided on a "claims made basis," CONSULTANT will continue to maintain the insurance in effect for a period of three (3) years after this Agreement expires or is terminated ("extended insurance"). Such extended insurance will have the same coverage and limits as the policy that was in effect during the term of this Agreement, and will cover CONSULTANT for all claims made by DISTRICT arising out of any errors or omissions of CONSULTANT, or its officers, employees or agents during the time this Agreement was in effect.
- E. CONSULTANT will furnish to DISTRICT duly authenticated Certificates of Insurance evidencing maintenance of the insurance required under this Agreement, endorsements as required herein, and such other evidence of insurance or copies of policies as may be reasonably required by DISTRICT from time to time. Insurance must be placed with insurers with a current A.M. Best Company Rating equivalent to at least a Rating of "A:VII."
- F. Should CONSULTANT, for any reason, fail to obtain and maintain the insurance required by this Agreement, DISTRICT may obtain such coverage at CONSULTANT's expense and deduct the cost of such insurance from payments due to CONSULTANT under this Agreement or terminate.
- G. Self-Insured Retention/Deductibles. All policies required by this Agreement must allow DISTRICT, as additional insured, to satisfy the self-insured retention ("SIR") and deductible of the policy in lieu of CONSULTANT (as the named insured) should CONSULTANT fail to pay the SIR or deductible requirements. The amount of the SIR or deductible is subject to the approval of the General Counsel and the Finance Director. CONSULTANT understands and agrees that satisfaction of this requirement is an express condition precedent to the effectiveness of this Agreement. Failure by CONSULTANT as primary insured to pay its SIR or deductible constitutes a material breach of this Agreement. Should DISTRICT pay the SIR or deductible on DISTRICT's behalf upon the CONSULTANT'S failure or refusal to do so in order to secure defense and indemnification as an additional insured under the policy, DISTRICT may include such amounts as damages in any action against CONSULTANT for breach of this Agreement in addition to any other damages incurred by DISTRICT due to the breach.

**22. USE OF SUBCONTRACTORS.** CONSULTANT must obtain DISTRICT's prior written approval to use any subcontractor while performing any portion of this Agreement. Such approval must be of the proposed subcontractor and the terms of compensation. The subcontractor for any specific project scopes of work and services will be listed in the Task Order.

**23. INCIDENTAL TASKS.** When required by any Task Order, CONSULTANT will meet with DISTRICT monthly to provide the status on the project, which will include a schedule update and a short narrative description of progress during the past month for each major task, a description of the work remaining and a description of the work to be done before the next schedule update.

**24. NOTICES.** All communications to either party by the other party will be deemed made when received by such party at its respective name and address as follows:

If to CONSULTANT:

Attention: Michael Nunley, P.E.  
MKN Associates  
PO Box 1604  
Arroyo Grande, CA 93421  
(805) 904-6530 x102  
mnunley@mknassociates.us

If to DISTRICT:

Attention: Craig Murray, P.E.  
Carpinteria Sanitary District  
5300 Sixth Street  
Carpinteria, CA 93013  
(805) 684-7214 x112  
craigm@carpsan.com

Any such written communications by mail will be conclusively deemed to have been received by the addressee upon deposit thereof in the United States Mail, postage prepaid and properly addressed as noted above. In all other instances, notices will be deemed given at the time of actual delivery. Changes may be made in the names or addresses of persons to whom notices are to be given by giving notice in the manner prescribed in this paragraph.

**25. SOLICITATION.** CONSULTANT maintains and warrants that it has not employed nor retained any company or person, other than CONSULTANT's bona fide employee, to solicit or secure this Agreement. Further, CONSULTANT warrants that it has not paid nor has it agreed to pay any company or person, other than CONSULTANT's bona fide employee, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. Should CONSULTANT breach or violate this warranty, DISTRICT may rescind this Agreement without liability.

**26. THIRD PARTY BENEFICIARIES.** This Agreement and every provision herein is generally for the exclusive benefit of CONSULTANT and DISTRICT and not for the benefit of any other party. There will be no incidental or other beneficiaries of any of CONSULTANT's or DISTRICT's obligations under this Agreement. Notwithstanding the foregoing provisions, the State of California may exercise the rights reserved for it under this Agreement to ensure compliance with applicable California laws and regulations.

**27. INTERPRETATION.** This Agreement was drafted in, and will be construed in accordance with the laws of the State of California, and exclusive venue for any action involving this agreement will be in Santa Barbara County.

**28. ENTIRE AGREEMENT.** This Agreement, and its Exhibits, sets forth the entire understanding of the Parties. There are no other understandings, terms or other agreements expressed or implied, oral or written. There are two Exhibits to this Agreement. This Agreement will bind and inure to the benefit of the parties to this Agreement and any subsequent successors and assigns.

**29. CONSISTENCY.** In interpreting this Agreement and resolving any ambiguities, the main body of this Agreement takes precedence over the attached Exhibits; this Agreement supersedes any conflicting provisions. Any inconsistency between the Exhibits will be resolved in the order in which the Exhibits appear below:

A. Exhibit A: 2023 Fee Schedule for Professional Services

B. Exhibit B: Sample Task Order

**30. RULES OF CONSTRUCTION.** Each Party had the opportunity to independently review this Agreement with legal counsel. Accordingly, this Agreement will be construed simply, as a whole, and in accordance with its fair meaning; it will not be interpreted strictly for or against either Party.

**31. SEVERABILITY.** If any portion of this Agreement is declared by a court of competent jurisdiction to be invalid or unenforceable, then such portion will be deemed modified to the extent necessary in the opinion of the court to render such portion enforceable and, as so modified, such portion and the balance of this Agreement will continue in full force and effect.

**32. AUTHORITY/MODIFICATION.** The Parties represent and warrant that all necessary action has been taken by the Parties to authorize the undersigned to execute this Agreement and to engage in the actions described herein. This Agreement may be modified by written amendment. DISTRICT's General Manager, or designee, may execute any such amendment on behalf of DISTRICT.

**33. ELECTRONIC SIGNATURES.** This Agreement may be executed by the Parties on any number of separate counterparts, and all such counterparts so executed constitute one Agreement binding on all the Parties notwithstanding that all the Parties are not signatories to the same counterpart. In accordance with Government Code §16.5, the Parties agree that this Agreement, Agreements ancillary to this Agreement, and related documents to be entered into in connection with this Agreement will be considered signed when the signature of a party is delivered by electronic transmission. Such electronic signature will be treated in all respects as having the same effect as an original signature.

**34. COVENANTS AND CONDITIONS.** The parties agree that all of the provisions hereof will be construed as both covenants and conditions, the same as if the words importing such covenants and conditions had been used in each separate paragraph.

**35. CAPTIONS.** The captions of the paragraphs of this Agreement are for convenience of reference only and will not affect the interpretation of this Agreement.

**36. FORCE MAJEURE.** Should performance of this Agreement be prevented due to fire, flood, explosion, war, embargo, government action, civil or military authority, the natural elements, or other similar causes beyond the Parties' control, then the Agreement will immediately terminate without obligation of either party to the other.

**37. TIME IS OF ESSENCE.** Time is of the essence for each and every provision of this Agreement.

**38. STATEMENT OF EXPERIENCE.** By executing this Agreement, CONSULTANT represents that it has demonstrated trustworthiness and possesses the quality, fitness and capacity to perform the Agreement in a manner satisfactory to DISTRICT. CONSULTANT represents that its financial resources, surety and insurance experience, service experience, completion ability, personnel, current workload, experience in dealing with private consultants, and experience in dealing with public agencies all suggest that CONSULTANT is capable of performing the proposed contract and has a demonstrated capacity to deal fairly and effectively with and to satisfy a public agency.



**IN WITNESS WHEREOF**, the parties hereto have executed this Agreement the day and year first hereinabove written.

**CARPINTERIA SANITARY DISTRICT**

**MKN ASSOCIATES**

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**Craig Murray, General Manager**  
**Carpinteria Sanitary District**

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**Michael Nunley, P.E.**  
**President**



**2023 FEE SCHEDULE FOR  
PROFESSIONAL SERVICES**

**ENGINEERS AND TECHNICAL SUPPORT STAFF**

Administrative Assistant	\$105/HR
Engineering Technician	\$114/HR
CAD Technician I	\$137/HR
CAD Design Technician II	\$155/HR
Senior Designer	\$170/HR
Assistant Engineer I	\$151/HR
Assistant Engineer II	\$168/HR
GIS Specialist	\$165/HR
Senior Planner	\$220/HR
Planner II	\$205/HR
Planner I	\$180/HR
Project Engineer I/ Senior Scientist	\$200/HR
Project Engineer II	\$208/HR
Senior Project Engineer I	\$220/HR
Senior Project Engineer II	\$225/HR
Project Manager	\$230/HR
Senior Project Manager	\$240/HR
Principal Engineer	\$260/HR
Project Director	\$280/HR
Senior Project Director	\$300/HR

**CONSTRUCTION MANAGEMENT SERVICES**

Construction Inspector	\$173/HR
Assistant Resident Engineer	\$178/HR
Resident Engineer	\$196/HR
Construction Manager	\$214/HR
Principal Construction Manager	\$252/HR

*Routine office expenses such as computer usage, software licenses and fees, telephone charges, office equipment and supplies, incidental postage, copying, and faxes are included as a 3% fee on labor cost.*

*The foregoing Billing Rate Schedule is effective through December 31, 2023 and will be adjusted each year after at a rate of 2 to 5%.*

**DIRECT PROJECT EXPENSES**

Outside Reproduction	Cost + 10%
Subcontracted or Subconsultant Services	Cost + 10%
Travel & Subsistence (other than mileage)	Cost
Auto Mileage	Current IRS Rate - \$.625/mi.

**CARPINTERIA SANITARY DISTRICT  
TASK ORDER NO. 2023-00X**

**Contract Date: September 5, 2023**  
General Services Agreement

**DATE:**     *Date*

**TO:**         Michael Nunley – MKN Associates

**FROM:**     **Craig Murray, P.E. – General Manager**

In accordance with Paragraph 2, Scope of Services of the Agreement for Professional Consulting Services, between the Carpinteria Sanitary District and

**MKN ASSOCIATES**

covering the period of September 5, 2023 through September 5, 2026, unless otherwise terminated, the undersigned agree that the supplies/services affected by this Task Order Letter are modified as follows:

**Task Order Description**

The scope of work under this task order is as follows:

**Task Cost and Payment**

Payment shall be made on a time and materials reimbursement basis pursuant to the original Agreement. The maximum amount payable by the District for services under this Task Order is **\$XX,XXX**, unless modified in writing by the District General Manager.

**Performance Period**

The Contractor will complete the performance in this Task Order by *Date*. This Task Order is executed pursuant to Paragraph 2 of the original Contract. The parties agree that all work shall be performed according to the standards and terms set forth in the original Agreement. In the event of any conflict or inconsistency between this amendment and the original Agreement, the original Agreement shall govern.

This Task Order is effective as of *Date*. In no event shall it be deemed valid until it shall have been approved by the District General Manager.

**CARPINTERIA SANITARY DISTRICT:**

**MKN ASSOCIATES:**

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**Craig Murray, P.E. – General Manager**

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**Michael Nunley, P.E.**



# Carpinteria Sanitary District

Board of Directors Meeting

## STAFF REPORT

**TO:** Board of Directors

**FROM:** Craig Murray, P.E. - General Manager

**SUBJECT:** Capital Improvement Project Budget Adjustment  
Lift Station No. 2 Rehabilitation (P-212)

**DATE:** September 5, 2023

**REQUESTED ACTION:** That the Board approve an amendment to the authorized CIP budget for the Lift Station No. 2 Rehabilitation Project.

**FUNDING SOURCE:** Authorized CIP Project No. P-212

**BACKGROUND:** The District undertook a competitive bidding process for its Lift Station No. 2 Rehabilitation Project in late 2022. No bids were received and the Board authorized staff to proceed with the project on a negotiated procurement basis at its regular meeting on March 7, 2023. The currently authorized budget for the project is \$195,000.

The table below provides a current estimate of the cost to complete the project. District staff is managing the overall project and assisting with certain aspects of the construction.

Item	Provider	Cost
Engineering	Phoenix Engineering	\$ 11,401.00
Advertisement	Santa Barbara News Press	\$ 1,006.00
Mechanical/Hatch Installation	Cushman Contracting	\$ 49,207.00
Wetwell Rehabilitation	Sancon, Inc.	\$ 139,200.00
Bypass Equipment	Rain for Rent	\$ 16,500.00
Large Bubble Mixer	Pulsed Hydraulics	\$ 28,000.00
Air Compressor	Kaeser	\$ 15,000.00
Miscellaneous Costs		\$ 4,500.00
	<b>TOTAL</b>	<b>\$ 264,814.00</b>

Contracts with Sancon and Rain for Rent have been previously approved by the Board and work is scheduled to commence during the first week of October. District staff issued purchase orders for the large bubble mixing equipment, considered an integral part of this improvement project, in order to coordinate installation.

It is recommended that the budget for the project be augmented by \$70,000, to a total of \$265,000. We believe that this total, although higher than prior budget estimates, represents a substantial savings over the costs that would have been incurred if the project was rebid.




**RECOMMENDATION:** Staff recommends that the Board amend the authorized budget for the Lift Station No. 2 Rehabilitation Project to a total of \$265,000.

**SUGGESTED MOTION:** I move that the Board increase the authorized budget for the Lift Station No. 2 Rehabilitation Project to a total of \$265,000.

M\_\_\_\_\_ S\_\_\_\_\_

Ayes:\_\_\_\_\_ Nays:\_\_\_\_\_ Abstentions:\_\_\_\_\_

Prepared By: \_\_\_\_\_  
Craig Murray, P.E. - General Manager

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# Carpinteria Sanitary District

Board of Directors Meeting

## STAFF REPORT

TO: Board of Directors

FROM: Craig Murray, P.E. - General Manager

**SUBJECT: RESOLUTION No. R-367: Declaring an Emergency With Regard to Certain District Facilities, Authorizing Remedial Work to be Performed Without Competitive Bidding, Declaring the Project to be Exempt From the Requirements of the California Environmental Quality Act, and Making Necessary Findings Thereof**

DATE: September 5, 2023

**REQUESTED ACTION:** That the Board review and adopt Resolution R-367 which finds that an emergency condition exists related to the District's ocean outfall pipeline, authorizes the General Manager to proceed with emergency work, and determines that the work is exempt from the competitive bidding requirements of the Public Contract Code and from the California Environmental Quality Act.

**BACKGROUND:** The District owns and operates a 24-inch diameter ocean outfall pipeline that conveys treated effluent from the wastewater treatment facility to the discharge point approximately 1,100 feet offshore of the mouth of Carpinteria Creek. The outfall has 17 4-inch diameter diffuser ports located in the outermost 100 linear feet of pipeline that are intended to convey peak effluent flows and provide adequate mixing in the receiving waters. The diffusers were originally installed in 1987 and modified in 2020 to include variable length risers, 90 degree elbows and Tideflex diffuser check valves.

On January 9, 2023 a damaging storm event in the Carpinteria Creek watershed resulted in a significant debris flow. There was visible deposition of sediment, trees and other debris offshore, in the vicinity of the District's outfall pipe. However, ocean conditions prevented an underwater inspection of the pipe for several months. Subsequently, dredging of the Carpinteria Salt Marsh by Santa Barbara County Flood Control severely impacted nearshore visibility for a period of several more months. Finally, on August 15<sup>th</sup>, Salty Dog Dive Service (SDDS) performed a comprehensive dive inspection and determined that the outermost 100 linear feet of the District's outfall (the entire diffuser section) was buried in sand, gravel and cobble. They also determined that 13 of 17 diffuser ports were not visible and presumed to be conveying no flow. Four diffuser ports were found to have broken risers with no elbow or check valve attached. These open ports were conveying effluent, although they were well below the static sea floor level at the time of inspection.

With only 4 of 17 diffusers functional, it can be assumed that the hydraulic capacity of the outfall is seriously diminished. This condition could have serious consequences. In a high flow condition, the outfall could potentially surcharge back into the wastewater treatment facility, overflowing the effluent box and flooding the plant. A discharge from the outfall inspection vault, located in the Carpinteria State Beach campground adjacent to Carpinteria Creek, may also result. Either of these conditions could result in a violation of the District's NPDES discharge permit and has the potential to impact water quality.

In my professional engineering opinion, based on the observations made in the recent underwater inspection, an emergency situation exists and it is critical for the District to take action immediately. The compromised condition of the outfall is sudden and unexpected, in the sense that we were unable to assess the condition until the recent investigation was performed. Immediate response measures to restore flow from the buried diffuser ports, repair the damaged diffuser assemblies, and to remove accumulated sand from the interior of the outfall pipe is necessary to restore its hydraulic capacity and reestablish proper effluent mixing in the receiving water column.

Resolution No. R-367, if adopted, would provide the required determination that an emergency condition exists pursuant to Public Contract Code sections 20806 and 1102. This would exempt the district from competitive bidding requirements and allow the District to immediately proceed with construction activities to expose the diffuser ports, add longer risers, repair/replace damaged diffuser assemblies, and to remove the accumulated sand from within the outfall. The resolution would authorize the General Manager to proceed with the project and expend necessary funds. Resolution No. R-367 further finds that the proposed emergency work is statutorily exempt from environmental review under the California Environmental Quality Act and authorizes filing of a Notice of Exemption. The anticipated time to conduct an environmental review of this project would create a risk to public safety, health or welfare.

In January 2023 the District formally notified FEMA of potential damage to the outfall as a result of the debris flow, which was within a State and Federal disaster declaration window. We are now working with FEMA and CalOES staff to pursue disaster assistance grant funding for necessary repairs to the outfall. We will concurrently coordinate with appropriate permitting and resource agencies, including USACE and the California Coastal Commission, to make sure the emergency work meets applicable regulatory requirements.

Proposals were received from two qualified marine contractors, Global Diving and Salvage, Inc. (GDS), and J.F. Brennan Company, Inc. Both companies have done work on the District's outfall in the past. Their proposed scope and unit cost fee estimates are similar and selection may be based on availability


**Section 20806 of the Public Contract Code requires that this resolution pass by a four-fifths majority vote.**

**RECOMMENDATION:** Staff recommends that the Board adopt Resolution R-367 as presented.

**SUGGESTED MOTION:** I move that the Board adopt Resolution No. R-367.

M\_\_\_\_\_ S\_\_\_\_\_

Ayes:\_\_\_\_\_ Nays:\_\_\_\_\_ Abstentions:\_\_\_\_\_

Prepared By: \_\_\_\_\_  
Craig Murray, P.E. - General Manager

Attachments: Resolution No. R-367  
Notice of Exemption

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## **RESOLUTION NO. R-367**

### **RESOLUTION OF THE BOARD OF DIRECTORS OF THE CARPINTERIA SANITARY DISTRICT DECLARING AN EMERGENCY WITH REGARD TO CERTAIN DISTRICT FACILITIES, AUTHORIZING REMEDIAL WORK TO BE PERFORMED WITHOUT COMPETITIVE BIDDING, DECLARING THE PROJECT TO BE EXEMPT FROM THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AND MAKING NECESSARY FINDINGS THEREOF**

**WHEREAS**, the Carpinteria Sanitary District (“District”) owns and operates a 24-inch diameter ocean outfall pipeline that conveys treated effluent from its wastewater treatment facility to the point of discharge to the Pacific Ocean; and

**WHEREAS**, in January 2023 a series of winter storm events resulted in local, State and Federal disaster declarations due to damaging floods, which included a significant debris flow event in Carpinteria Creek on January 9, 2023; and

**WHEREAS**, ocean conditions prevented underwater inspection of the outfall until August 15, 2023, at which point the District’s qualified marine contractor determined that the outermost 100 linear feet of the District’s outfall was completely buried in sand and gravel, effluent was flow emanating only from 4 of 17 diffuser ports, and that those 4 ports were missing the riser, elbow and duckbill check valve; and

**WHEREAS**, hydraulic surcharge of the outfall attributable to blocked diffuser ports or sand accumulation within the outfall pipe could result in a backup of treated effluent into the District’s wastewater treatment facility or cause a discharge to the environment; and

**WHEREAS**, to remain in compliance with requirements contained in its National Pollutant Discharge Elimination System (NPDES) Permit, the District must repair the pipeline so as to ensure release of treated effluent through the diffusers near the end of the outfall pipeline as designed; and

**WHEREAS**, avoiding potential hydraulic surcharge and unauthorized discharges requires immediate corrective action and expenditure of District funds to prevent such failure and to protect water quality, the environment and the provision of essential public services; and

**WHEREAS**, the described occurrence and the existing condition of the pipeline as described herein constitutes an “emergency” for purposes of Public Contract Code Sections 20806 and 1102, respectively, and Public Resources Code Section 21060.3; and

**WHEREAS**, the existing conditions will not permit a delay resulting from a competitive solicitation for bids for the corrective action, which involves installation of new, longer risers on each diffuser assembly to raise the diffuser elbows and check valves above the current sea floor



level and to remove any sand that has deposited inside the outfall pipe reducing its hydraulic capacity (the “Work”), and immediate action is necessary to respond to the emergency, pursuant to Public Contract Code Section 22050; and

**WHEREAS**, the Work to be performed is statutorily exempt from environmental review under the California Environmental Quality Act pursuant to Public Resources Code Sections 21080(a)(2) and 21080(a)(4) and 14 Cal. Regs. Sections 15269(b) and 15269(c);

**NOW, THEREFORE**, based on the staff report concerning the issues set forth above and this resolution, and District staff’s presentation at the September 5, 2023 Board meeting, the Board of Directors hereby resolves as follows:

1. Regarding the existing condition of the outfall pipeline, the Board finds that an "emergency" exists within the meaning of Public Contract Code sections 20806 and 1102, and further finds that the public interest and necessity demand the immediate expenditure of District funds for the Work to safeguard life, health and property.
2. The Board further finds, pursuant to Public Contract Code section 22050(a)(2), that the emergency will not permit a delay resulting from a competitive solicitation for bids, and that immediate commencement of the Work is necessary to respond to the emergency.
3. Pursuant to Public Contract Code Section 22050(b)(1), the Board directs the General Manager to immediately proceed with and expend funds for the Work, without giving notice for competitive bids.
4. The Board further finds that the Work is statutorily exempt from environmental review under the California Quality Act pursuant to Public Resources Code Sections 21080(b)(2) and 21080(b)(4), and 14 Cal. Code of Regs. Section 15269(b) and 15269(c). The Board hereby directs the District staff to file a Notice of Exemption with the Clerk of the Board of Supervisors for the County of Santa Barbara.
5. The above recitals are incorporated herein by reference and adopted as findings.

**PASSED AND ADOPTED** by the Governing Board of the Carpinteria Sanitary District on the 5<sup>th</sup> day of September 2023 by the following vote to wit:

**AYES:**

**NAYS:**

**ABSTENTIONS:**

**ABSENT:**

Resolution No. R-367 was thereupon declared, carried, and adopted.

Dated this 5<sup>th</sup> day of September 2023.

**We certify that the above is a true and correct copy of Resolution No. R-367, adopted by the Board of Directors of the Carpinteria Sanitary District on September 5, 2023.**

**APPROVED:**

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Mike Modugno  
President, Board of Directors

**ATTEST:**

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Gerald Velasco  
Secretary, Board of Directors

## NOTICE OF EXEMPTION

**To:** County Clerk  
County of Santa Barbara  
105 East Anapamu Street  
Santa Barbara, CA 93101

**From:** Carpinteria Sanitary District  
5300 Sixth Street  
Carpinteria, CA 93013

**Project Title:** Emergency Outfall Repair Project

**Project Location-Specific:** Pacific Ocean, approximately 900 to 1000 feet offshore just West of the mouth of Carpinteria Creek.

**Project Location City:** Carpinteria

**Project Location County:** Santa Barbara County

**Description of Nature, Purpose and Beneficiaries of Project:** Emergency

**Name of Public Agency Approving Project:** Carpinteria Sanitary District

**Name of Person or Agency Carrying Out Project:** Carpinteria Sanitary District

**Exempt Status:**

- ☐ Ministerial
- ☐ Declaration Emergency
- ☐ Emergency Project
- ☐ Categorical Exemption
- ☒ Statutory Exemption

**Reason Why Project is Exempt:** Statutory exemption per Public Resources Code Sections 21080(b)(2) and 21080(b)(4) and 14 Cal. Regs. Sections 15269(b) and 15269(b)(c). See Board Resolution No. R-367 (attached).

**Lead Agency Contact Person:** Craig Murray. **Area Code/Telephone Extension:** (805) 684-7214, x112

**If filed by applicant:** (Not Applicable)

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? **YES**

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Craig M. Murray, P.E.  
General Manager  
Carpinteria Sanitary District

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Date