

**NOTICE OF REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
ENGINEERING COMMITTEE**

November 13, 2025

8:30 a.m.

Physical Address	Remote Address
34156 Del Obispo Street Dana Point, CA 92629	El Toro Water District Office: 24251 Los Alisos Blvd. Lake Forest, CA 92630

NOTICE IS HEREBY GIVEN that a Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee was called to be held on **November 13, 2025, at 8:30 a.m.** SOCWA staff will be present and conducting the meeting at the SOCWA Administrative Office located at 34156 Del Obispo Street, Dana Point, California.

THE SOCWA MEETING ROOM IS WHEELCHAIR ACCESSIBLE. IF YOU REQUIRE ANY SPECIAL DISABILITY RELATED ACCOMMODATIONS, PLEASE CONTACT THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY SECRETARY'S OFFICE AT (949) 234-5452 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO THE SCHEDULED MEETING TO REQUEST SUCH ACCOMMODATIONS. THIS AGENDA CAN BE OBTAINED IN ALTERNATE FORMAT UPON REQUEST TO THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY'S SECRETARY AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO THE SCHEDULED MEETING. MEMBERS OF THE PUBLIC HAVE THE OPTION TO PARTICIPATE IN AND MAY JOIN THE MEETING REMOTELY VIA VIDEO CONFERENCE FOR VISUAL INFORMATION ONLY (USE ZOOM LINK BELOW) AND BY TELECONFERENCE FOR AUDIO PARTICIPATION (USE PHONE NUMBERS BELOW). THIS IS A PHONE-CALL MEETING AND NOT A WEB-CAST MEETING, SO PLEASE REFER TO AGENDA MATERIALS AS POSTED ON THE WEBSITE AT WWW.SOCWA.COM. ON YOUR REQUEST, EVERY EFFORT WILL BE MADE TO ACCOMMODATE PARTICIPATION. FOR PARTIES PARTICIPATING REMOTELY, PUBLIC COMMENTS WILL BE TAKEN DURING THE MEETING FOR ORAL COMMUNICATION IN ADDITION TO PUBLIC COMMENTS RECEIVED BY PARTIES PARTICIPATING IN PERSON. COMMENTS MAY BE SUBMITTED PRIOR TO THE MEETING VIA EMAIL TO ASSISTANT SECRETARY LYNDA MAY AT LMAY@SOCWA.COM WITH THE SUBJECT LINE "REQUEST TO PROVIDE PUBLIC COMMENT." IN THE EMAIL, PLEASE INCLUDE YOUR NAME, THE ITEM YOU WISH TO SPEAK ABOUT, AND THE TELEPHONE NUMBER YOU WILL BE CALLING FROM SO THAT THE COORDINATOR CAN UN-MUTE YOUR LINE WHEN YOU ARE CALLED UPON TO SPEAK. THOSE MAKING PUBLIC COMMENT REQUESTS REMOTELY VIA TELEPHONE IN REAL-TIME WILL BE ASKED TO PROVIDE YOUR NAME, THE ITEM YOU WISH TO SPEAK ABOUT, AND THE TELEPHONE NUMBER THAT YOU ARE CALLING FROM SO THE COORDINATOR CAN UN-MUTE YOUR LINE WHEN YOU ARE CALLED UPON TO SPEAK. ONCE THE MEETING HAS COMMENCED, THE CHAIR WILL INVITE YOU TO SPEAK AND ASK THE COORDINATOR TO UN-MUTE YOUR LINE AT THE APPROPRIATE TIME.

AGENDA ATTACHMENTS AND OTHER WRITINGS THAT ARE DISCLOSABLE PUBLIC RECORDS DISTRIBUTED TO ALL, OR A MAJORITY OF, THE MEMBERS OF THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY ENGINEERING COMMITTEE IN CONNECTION WITH A MATTER SUBJECT FOR DISCUSSION OR CONSIDERATION AT AN OPEN MEETING OF THE ENGINEERING COMMITTEE ARE AVAILABLE FOR PUBLIC INSPECTION IN THE AUTHORITY ADMINISTRATIVE OFFICE LOCATED AT 34156 DEL OBISPO STREET, DANA POINT, CA ("AUTHORITY OFFICE") OR BY PHONE REQUEST MADE TO THE AUTHORITY OFFICE AT 949-234-5400. IF SUCH WRITINGS ARE DISTRIBUTED TO MEMBERS OF THE ENGINEERING COMMITTEE LESS THAN SEVENTY-TWO (72) HOURS PRIOR TO THE MEETING, THEY WILL BE AVAILABLE IN THE RECEPTION AREA OF THE AUTHORITY OFFICE AT THE SAME TIME AS THEY ARE DISTRIBUTED TO THE ENGINEERING COMMITTEE AND SENT TO ANY REMOTE PARTICIPANTS REQUESTING EMAIL DELIVERY OR POSTED ON SOCWA'S WEBSITE. IF SUCH WRITINGS ARE DISTRIBUTED IMMEDIATELY PRIOR TO, OR DURING, THE MEETING, THEY WILL BE AVAILABLE IN THE MEETING ROOM OR IMMEDIATELY UPON VERBAL REQUEST TO BE DELIVERED VIA EMAIL TO REQUESTING PARTIES PARTICIPATING REMOTELY.

**THE PUBLIC MAY PARTICIPATE REMOTELY BY VIRTUAL MEANS. FOR AUDIO OF MEETING USE
THE CALL IN PHONE NUMBERS BELOW AND FOR VIDEO USE THE ZOOM LINK BELOW.**

Join Zoom Meeting

<https://socwa.zoom.us/>

Meeting ID: 829 1004 9735

Passcode: 427918

Dial by your location:

+1 669 900 6833 US (San Jose) +1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston) +1 312 626 6799 US (Chicago)

Find your local number: <https://socwa.zoom.us/j/kbFq3Djl03>

AGENDA

1. Call Meeting to Order
2. Public Comments

THOSE WISHING TO ADDRESS THE ENGINEERING COMMITTEE ON ANY ITEM LISTED ON THE AGENDA WILL BE REQUESTED TO IDENTIFY AT THE OPENING OF THE MEETING AND PRIOR TO THE CLOSE OF THE MEETING. THE AUTHORITY REQUESTS THAT YOU STATE YOUR NAME WHEN MAKING THE REQUEST IN ORDER THAT YOUR NAME MAY BE CALLED TO SPEAK ON THE ITEM OF INTEREST. THE CHAIR OF THE MEETING WILL RECOGNIZE SPEAKERS FOR COMMENT AND GENERAL MEETING DECORUM SHOULD BE OBSERVED IN ORDER THAT SPEAKERS ARE NOT TALKING OVER EACH OTHER DURING THE CALL.

3. Approval of Committee Member Request for Remote Participation (Standing Item)

Recommended Action: Committee Discussion/Direction and Action.

PAGE NO.

4. Approval of Minutes..... 1

- Engineering Committee Minutes of September 11, 2025

Recommended Action: Staff requests that the Engineering Committee approve the subject Minutes as submitted.

5. General Manager's Status Report

Recommended Action: Information Item.

6. Operations Report.....

Recommended Action: Information Item.

7. Capital Improvement Construction Projects Progress and Change Order Report (November) [Project Committees 2 and 15] 4

Recommended Action: Information Item

8. JBL Facility Planning Assessment Contract Award 16

Recommended Action: Staff recommends that the Engineering Committee recommend that the PC Board of Directors:

1. Authorize execution of a contract with HDR in the amount of \$545,325 for the JBL FPA contract.
2. Approve a contract contingency of \$54,675, to cover the additional scope item.

9. <u>JBL Old Effluent Pump Station Storage and Staging Area Construction Contract</u> <u>[Project Committee 2]</u>	145
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Recommended Action: Staff recommends that the Engineering Committee recommend that the PC 2 Board of Directors:

3. Approve an increase of \$600,000 to the project budget, resulting in a revised total project budget of \$850,000.
4. Authorize execution of a contract with Pacific Hygrotech in the amount of \$791,700 for the JBL Old Effluent Pump Storage and Staging Area project.
5. Approve a construction contingency of \$39,585 to address any unforeseen conditions encountered during the work.

10. <u>Contract Award for Coastal Treatment Plant West Primary and Secondary Scum Skimming System Construction [Project Committee 15]</u>	192
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Recommended Action: Staff recommends that the Engineering Committee recommend that the PC 15 Board of Directors:

1. Approve an increase of \$500,000 to the project budget, resulting in a revised total project budget of \$1.75 million.
2. Authorize execution of a contract with Filanc in the amount of \$784,000.
3. Approve a construction contingency of \$35,040 to address any unforeseen conditions encountered during the work.

11. <u>Contract Award for Coastal Treatment Plant Personnel Building Phase 2 Upgrades</u> <u>[Project Committee 15]</u>	238
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Recommended Action: Staff recommends that the Engineering Committee recommend that the PC 15 Board of Directors:

1. Reject the bids received on October 23, 2025.
2. Direct SOCWA staff to negotiate directly with T.E. Roberts. The results of the negotiation to be reported back to the December Engineering Committee.

12. <u>SOCWA Laboratory Upgrades Feasibility Study Update</u>	260
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Recommended Action: Engineering Committee Discussion/Direction/Action

13. <u>Adjournment</u>	
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Engineering Committee Meeting
November 13, 2025

I hereby certify that the foregoing Notice was personally emailed or mailed to each member of the SOCWA Engineering Committee at least 72 hours prior to the scheduled time of the Regular Meeting referred to above.

I hereby certify that the foregoing Notice was posted at least 72 hours prior to the time of the above-referenced Engineering Committee meeting at the usual agenda posting location of the South Orange County Wastewater Authority and at www.socwa.com.

Dated this 6th day of November 2025.



Lynda May, Assistant Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

**MINUTES OF REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY**

Engineering Committee

DRAFT

September 11, 2025

The Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee was held on September 11, 2025, at 8:30 a.m. in-person and via teleconferencing from the Administrative Offices located at 34156 Del Obispo Street, Dana Point, California. The following members of the Engineering Committee were present:

MARK McAVOY
MIKE DUNBAR
HANNAH FORD
LINDSAY LEAHY
MARC SERNA

City of Laguna Beach
Emerald Bay Service District
El Toro Water District
Santa Margarita Water District
South Coast Water District

Absent:

DAVE REBENS DORF

City of San Clemente

Staff Present:

AMBER BOONE
RONI GRANT
JIM BURROR
BOB CULVER
ANNA SUTHERLAND
SEAN JARDIN
MATT CLARKE
DANITA HIRSH

General Manager
Capital Improvement Program (CIP) Manager
Deputy GM/Chief Engineer
Environment Service Manager
Staff Accountant
Interim Chief Operator
Chief Technology Officer
Executive Assistant/Clerk of the Board

Also Present:

ROD WOODS
TARYN KJOLSING
CHRIS NEWTON

Moulton Niguel Water District
South Coast Water District
South Coast Water District

1. Call Meeting to Order

Ms. Roni Grant, Capital Improvement Program (CIP) Manager, called the meeting to order at 8:32 a.m.

2. Public Comments

None.

3. Approval of Committee Member Request for Remote Participation (Standing Item)

None.

4. Approval of Minutes

- Engineering Committee Minutes of June 12, 2025.

ACTION TAKEN

A motion was made by Mr. Dunbar and seconded by Ms. Ford to approve the Engineering Committee Minutes for June 12, 2025.

Motion carried:	Aye 5, Nay 0, Abstained 0, Absent 1
Mr. McAvoy	Aye
Ms. Ford	Aye
Mr. Dunbar	Aye
Ms. Leahy	Aye
Mr. Serna	Aye
Mr. Rebensdorf	Absent

5. General Manager's Status Report (Bylaws Update)

An open discussion ensued regarding the consideration of reducing the number of Committee seats from six to four (similar to the Finance Committee) due to most projects being related to PC 2 and PC 15. However, feedback and legal review suggested maintaining the current structure.

The Engineering Committee reached a consensus to maintain the Engineering Committee's existing structure.

6. FY 24-25 Use Audit Flows and Solids

An open discussion ensued regarding a routine review of flows and solids data as part of the audit process. The raw data was shared with agencies to provide transparency and allow them to verify their own figures before being presented to the Board of Directors for consideration and approval.

ACTION TAKEN

A motion was made by Ms. Leahy and seconded by Mr. Dunbar to approve the calculated results of the Use Audit for FY 24-25, including the disbursement or collection of additional funds, with corrections as noted during the discussion.

Motion carried:	Aye 5, Nay 0, Abstained 0, Absent 1
Mr. McAvoy	Aye
Ms. Ford	Aye
Mr. Dunbar	Aye
Ms. Leahy	Aye
Mr. Serna	Aye
Mr. Rebensdorf	Absent

7. Operations Report

Mr. Jim Burror, Deputy GM/Chief Engineer, reported that Operations are currently quiet due to reduced staffing. Despite the lean team, preparations are underway for the upcoming construction activities. A recent overnight shutdown drill was conducted to ensure staff readiness when contractors arrive on site. He gave a special thanks to Roni for supporting the team during this preparation.

This was an information item; no action was taken.

8. Capital Improvement Construction Projects Progress and Change Order Report (September)
[Project Committees 2 and 15]

Ms. Roni Grant updated the Engineering Committee on the status of the following CIP projects:

- JBL Electrical Upgrades - Pre-purchasing activities for the Motor Control Center (MCC) and Plant 1 Generator are currently underway.\
- JBL Old Effluent Pump Station and Energy Building Upgrades – Construction is currently in progress.
- JBL Plant 2 Headworks Rehabilitation – Construction is currently in progress.
- JBL Old Effluent Pump Station Storage and Staging – The project is currently in bidding phase.
- CTP Diffusers Replacement – the Construction has been completed.
- CTP Aeration Deck Grating Replacement – Construction is near completion.
- CTP West Primary and Secondary Scum Skimming System – Pre-purchasing of scum skimmers, launders, and weirs is currently in progress.
- CTP Personnel Building Phase 2 Reconstruction – the project is currently in re-bidding phase.

This was an information item; no action was taken.

9. Regional Lab Feasibility Study

An open discussion ensued on the Laboratory Feasibility Study, a comprehensive study conducted by the Austin Company and a long-term project that was reintroduced to the Engineering Committee on May 9, 2024. As part of the 10-year plan, the study had previously outlined four options for the lab's future. Based on agency feedback, two options were prioritized: 1. Modernizing the existing facility without expansion, and 2. Expanding the lab to separate drinking water and wastewater operations.

Public Speaker: Rod Woods, Moulton Niguel Water District

There was consensus from the Engineering Committee to pause the current study temporarily, with plans to revisit the discussion in the future.

10. Adjournment

There being no further business, Ms. Grant adjourned the meeting at 9:08 a.m.

I HEREBY CERTIFY that the foregoing Minutes are a true and accurate copy of the Minutes of the Regular Meeting of the South Orange County Wastewater Authority Engineering Committee of September 11, 2025, and approved by the Engineering Committee and received and filed by the Board of Directors of the South Orange County Wastewater Authority.

Lynda May, Assistant Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

Agenda Item

7

Engineering Committee Meeting

Meeting Date: November 13, 2025

TO: Engineering Committee

FROM: Roni Grant, Capital Improvement Program Manager

SUBJECT: Capital Improvement Construction Projects Progress and Change Order Report (November) [Project Committees 2 and 15]

Overview

This agenda item provides a status update on active construction projects, including any associated change orders. Updated Capital Improvement Program (CIP) reports are attached for reference.

Project Updates

JBL Electrical Upgrades

Pre-purchasing activities for the Motor Control Center (MCC) and Plant 1 Generator are currently underway. Construction is anticipated to be completed by December 2026, contingent upon the issuance of the AQMD permit to construct for the generator.

JBL Effluent Pump Station and Energy Building Upgrades

Construction is currently in progress. Construction is anticipated to be completed by July 2026.

JBL Plant 2 Headworks Rehabilitation

Construction is currently in progress. Construction is anticipated to be completed by March 2026.

JBL Old Effluent Pump Station Storage and Staging

The bids are currently under review. Construction is anticipated to be completed by March 2026.

CTP Aeration Deck Grating Replacement

Construction is near completion. The contractor is working on punch list items. Construction is anticipated to be completed by December 2025.

CTP West Primary and Secondary Scum Skimming System

The bids are currently under review. Construction is anticipated to be completed by July 2026.

CTP Personnel Building Phase 2 Reconstruction

The bids are currently under review. Construction is anticipated to be completed by July 2026.

CTP Grit Tanks Coating Upgrades

Construction is in progress. Construction is anticipated to be completed by December 2025.

Recommended Action: Information only.

SCAQMD Permit Status Updates for Upcoming CIP Projects

JBL Plant 1 Generator (A/N 654624)				
Application Date	Communication Dates from SCAQMD	Information requested from SCAQMD	Information provided to SCAQMD	Response Dates from SOCWA
08/01/24	9/11/24	CG18 gas engine technical data	Provided technical data	9/25/24
	10/8/24	Serial number and model year	Serial number and model year not available, confirmed flapper type rain cap	10/9/24
	10/17/24	Maintenance and testing requirements	Confirmed requirements	10/18/24
	1/15/25	Confirmed receipt of serial number and model year	Provided serial number and model year	1/13/25
	4/25/25	Requested to confirm EPA family code	Confirmed EPA family code and provided EPA certificate	4/25/25
JBL Flare System (A/N 657267)				
Application Date	Communication Dates from SCAQMD	Information requested from SCAQMD	Information provided to SCAQMD	Response Dates from SOCWA
12/13/24	1/8/25	Requested additional fee	Paid online	1/21/25
	1/24/25	Requested voucher or receipt from the online payment	Provided voucher payment and receipt number	1/24/25
	4/1/25 and 4/18/25	Requested clarification on facility ownership	Clarified the facility ownership	4/23/25
	5/14/25	Additional information needed on the flare Varec 244E unit	Provided additional information	5/19/25
	5/21/25	Requested specifications on the flare retention time and temperature	Provided additional information	5/22/25
	8/7/25	Additional questions regarding the existing flare and proposed flare system	Responses provided	8/14/25

CTP Odor Scrubber System (A/N 656320)				
Application Date	Communication Dates from SCAQMD	Information requested from SCAQMD	Information provided to SCAQMD	Response Dates from SOCWA
10/2/24	11/8/24	Additional information needed	Design intent clarified	11/19/24
	7/15/25	Additional information needed	Additional information provided	7/18/25

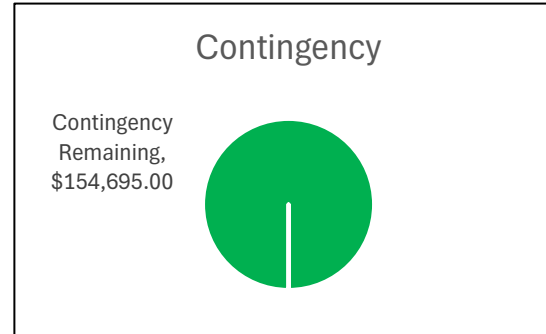
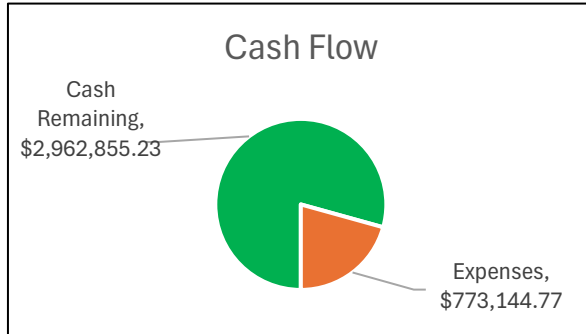
Recommended Action: Information only.

Project Financial Status

Project Committee	2
Project Name	Effluent Pump Station and Energy Building Upgrades
Project Description	Replacement of effluent valves and piping; installation of monorail, roof, safety upgrades and seismic retrofit in the Energy Building

Data Last Updated

November 6, 2025



Cash Flow

Collected	\$ 3,736,000.00
Expenses	\$ 773,144.77

Project Completion

Schedule	20%
Budget	20.69%

Construction Contracts

Company	PO No.	Original	Change Orders	Amendments	Total	Costs to Date
Pacific Hydrotech	21280	\$ 3,093,900.00			\$ 3,093,900.00	\$ 720,386.41
Carollo Engineers	20453	\$ 119,316.00			\$ 119,316.00	\$ 23,684.40
Project Partners	21283	\$ 12,500.00			\$ 12,500.00	
SOCWA Staff Time	32226L/32225S/3216					\$ 29,073.96
		\$ 3,225,716.00	\$ -	\$ -	\$ 3,225,716.00	\$ 773,144.77

Construction Contingency

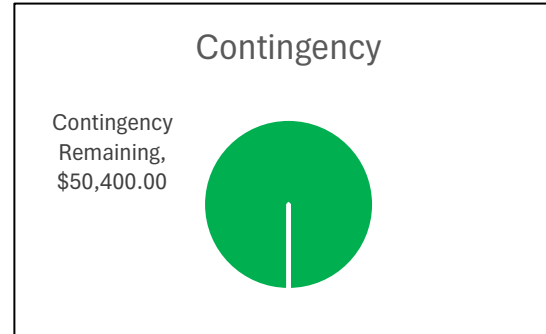
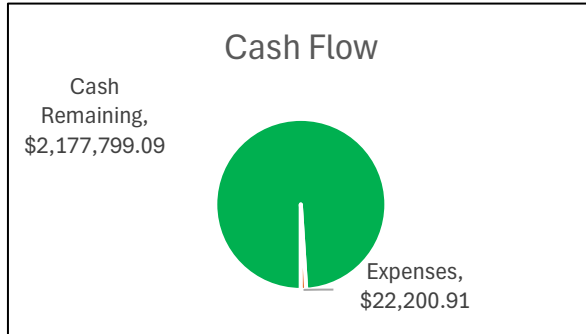
Area	Project Code	Amount	Change Orders	Total Remaining	Percent Used
Liquids/Solids/Common	32226L/32225S/3216	\$ 154,695.00		\$ 154,695.00	0.0%
		\$ 154,695.00	\$ -	\$ 154,695.00	0.0%

Project Financial Status

Project Committee	2
Project Name	Plant 2 Headworks Rehabilitation - 32243L
Project Description	Plant 2 Headworks building roof replacement, channel concrete repair and cover replacement, and electrical modification

Data Last Updated

November 6, 2025



Cash Flow

Collected	\$ 2,200,000.00
Expenses	\$ 22,200.91

Project Completion

Schedule	10%
Budget	1.01%

Construction Contracts

Company	PO No.	Original	Change Orders	Amendments	Total	Costs to Date
Pacific Hydrotech		\$ 2,149,600.00			\$ 2,149,600.00	
Dudek Engineers	20250	\$ 47,858.00			\$ 47,858.00	
Project Partners	21283	\$ 5,000.00			\$ 5,000.00	
SOCWA Staff Time	32243L					\$ 22,200.91
		\$ 2,202,458.00	\$ -	\$ -	\$ 2,202,458.00	\$ 22,200.91

Construction Contingency

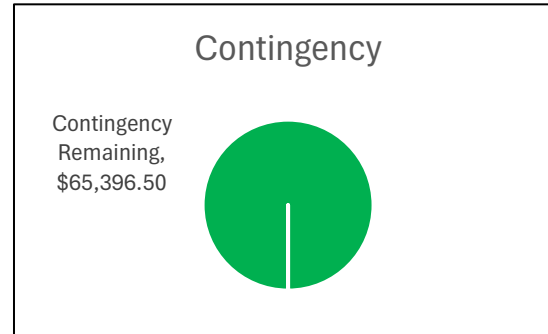
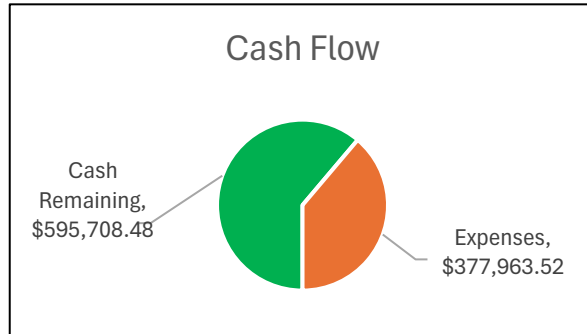
Area	Project Code	Amount	Change Orders	Total Remaining	Percent Used
Liquids	32243L	\$ 50,400.00		\$ 50,400.00	0.0%
		\$ 50,400.00	\$ -	\$ 50,400.00	0.0%

Project Financial Status

Project Committee	2
Project Name	Electrical System Upgrades - 3252
Project Description	Electrical System upgrades including MCC and Plant 1 Generator

Data Last Updated

November 6, 2025



Cash Flow

Collected	\$ 973,672.00
Expenses	\$ 377,963.52

Project Completion

Schedule	40%
Budget	46%

Construction Contracts

Company	PO No.	Original	Change Orders	Amendments	Total	Costs to Date
Quinn Power	20975	\$ 414,940.00			\$ 414,940.00	\$ 264,999.15
Pacific Parts	20561	\$ 239,025.00			\$ 239,025.00	\$ 56,331.22
Hazen	14331	\$ 164,350.00			\$ 164,350.00	\$ 6,140.00
SOCWA Staff Time	3252					\$ 50,493.15
		\$ 818,315.00	\$ -	\$ -	\$ 818,315.00	\$ 377,963.52

Construction Contingency

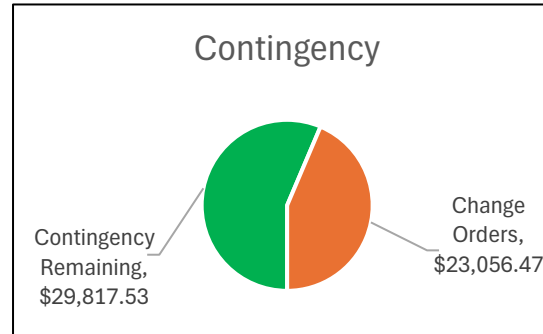
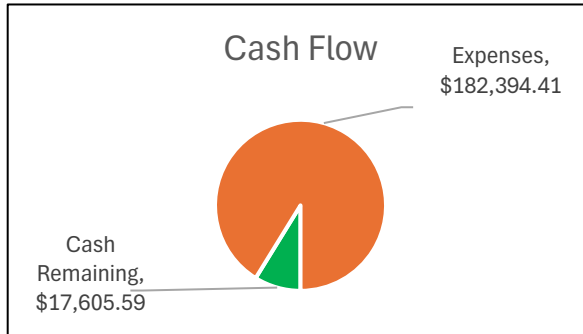
Area	Project Code	Amount	Change Orders	Total Remaining	Percent Used
Liquids	3252	\$ 65,396.50		\$ 65,396.50	0.0%
		\$ 65,396.50	\$ -	\$ 65,396.50	0.0%

Project Financial Status

Project Committee	15
Project Name	Grating Replacement on Aeration/Secondary Deck - 35245L
Project Description	Replacement of grating on west aeration/secondary deck

Data Last Updated

November 6, 2025



Cash Flow

Collected	\$	200,000.00
Expenses	\$	182,394.41

Project Completion

Schedule	95%
Budget	91%

Construction Contracts

Company	PO No.	Original	Change Orders	Amendments	Total	Costs to Date
SS Mechanical	20588	\$ 147,126.00	\$ 23,056.47		\$ 170,182.47	\$ 161,673.35
Project Partners	20877	\$ 25,000.00			\$ 25,000.00	\$ 9,759.00
Steve Andrews	20332	\$ 2,818.00			\$ 2,818.00	\$ 483.00
SOCWA Staff Time	35245L					\$ 10,479.06
		\$ 174,944.00	\$ 23,056.47	\$ -	\$ 198,000.47	\$ 182,394.41

Construction Contingency

Area	Project Code	Amount	Change Orders	Total Remaining	Percent Used
Liquids	35245L	\$ 52,874.00	\$ 23,056.47	\$ 29,817.53	43.6%
		\$ 52,874.00	\$ 23,056.47	\$ 29,817.53	43.6%

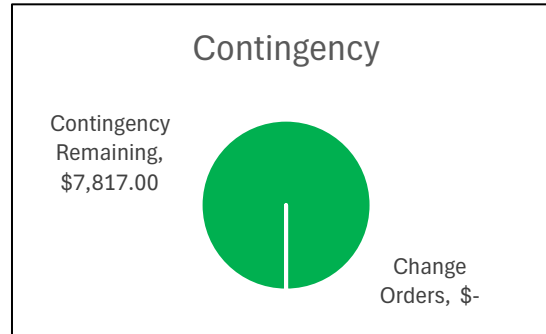
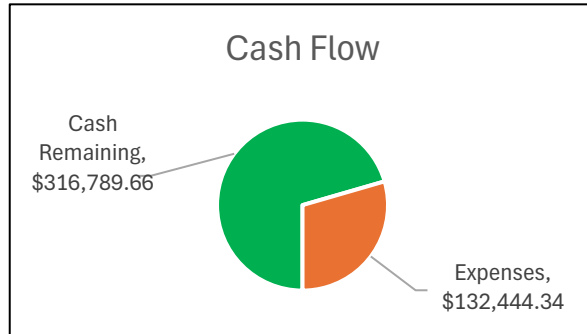
<u>Change Order No.</u>	<u>Vendor Name</u>	<u>Project ID</u>	<u>Description</u>	<u>Status Date</u>	<u>Days</u>	<u>Amount</u>
1	SS Mechanical	35245L	316L SST angle in lieu of 304L SST angle at the Step-Feed Channel	1/8/2025	94	\$ 2,235.25
2	SS Mechanical	35245L	Change Secondary effluent grating from 1-inch to 1.5"	1/31/2025	89	\$ 8,639.53
3	SS Mechanical	35245L	Removal and Replacement of Rebar without proper edge clearances	7/9/2025	90	\$ 12,181.69
						\$ 23,056.47

Project Financial Status

Project Committee	15
Project Name	Personnel Building Reconstruction - 3525
Project Description	Personnel building reconstruction including fixtures, lightings, ceiling, tiles and minor electrical

Data Last Updated

November 6, 2025



Cash Flow

Collected	\$ 449,234.00
Expenses	\$ 132,444.34

Project Completion

Schedule	100%
Budget	29%

Construction Contracts

Company	PO No.	Original	Change Orders	Amendments	Total	Costs to Date
T.E. Roberts	20930	\$ 78,165.00			\$ 78,165.00	\$ 78,165.00
Project Partners	20877	\$ 35,000.00			\$ 35,000.00	\$ 26,633.50
SOCWA Staff Time	3525					\$ 27,645.84
		\$ 113,165.00	\$ -	\$ -	\$ 113,165.00	\$ 132,444.34

Construction Contingency

Area	Project Code	Amount	Change Orders	Total Remaining	Percent Used
Liquids	3525	\$ 7,817.00		\$ 7,817.00	0.0%
		\$ 7,817.00	\$ -	\$ 7,817.00	0.0%

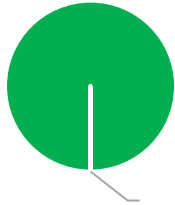
Change Order No.	Vendor Name	Project ID	Description	Status Date	Days	Amount
						\$ -

Project Financial Status

Project Committee	15
Project Name	Grit Tanks Coating Upgrades (35242L)
Project Description	Coating of grit tanks

Data Last Updated

November 6, 2025

Cash FlowCash
Remaining,
\$200,000.00

Expenses, \$-

ContingencyContingency
Remaining,
\$11,390.00Change
Orders, \$-**Cash Flow**

Collected	\$ 200,000.00
Expenses	\$ -

Project Completion

Schedule	50%
Budget	0%

Construction Contracts

Company	PO No.	Original	Change Orders	Amendments	Total	Costs to Date
Murphy Coating	21425	\$ 113,894.00			\$ 113,894.00	
SOCWA Staff Time	35228L					
		\$ 113,894.00	\$ -	\$ -	\$ 113,894.00	\$ -

Construction Contingency

Area	Project Code	Amount	Change Orders	Total Remaining	Percent Used
Liquids	35242L	\$ 11,390.00		\$ 11,390.00	0.0%
		\$ 11,390.00	\$ -	\$ 11,390.00	0.0%

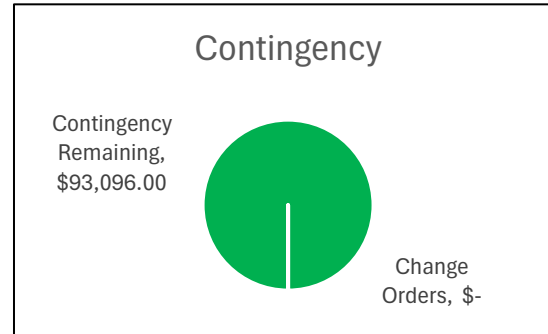
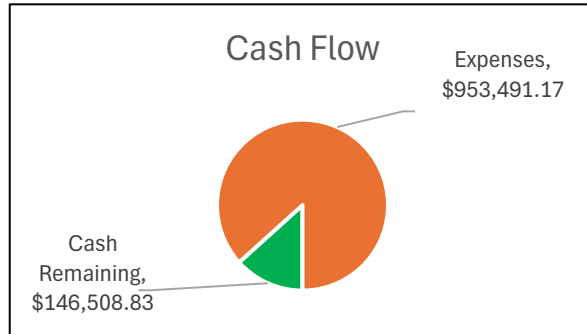
Change Order No.	Vendor Name	Project ID	Description	Status Date	Days	Amount
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Project Financial Status

Project Committee	15
Project Name	West Primary and Secondary Sludge Skimming System - 35246L/35239L
Project Description	Replacement of west primary and secondary sludge skimming system

Data Last Updated

November 6, 2025

**Cash Flow**

Collected	\$ 1,100,000.00
Expenses	\$ 953,491.17

Project Completion

Schedule	50%
Budget	87%

Construction Contracts

Company	PO No.	Original	Change Orders	Amendments	Total	Costs to Date
Brentwood	20496	\$ 930,960.00			\$ 930,960.00	\$ 930,960.00
Z&K/Ardurra	12240	\$ 12,240.00			\$ 12,240.00	\$ 11,031.00
SOCWA Staff Time	35246L/35239L					\$ 11,500.17
		\$ 943,200.00	\$ -	\$ -	\$ 943,200.00	\$ 953,491.17

Construction Contingency

Area	Project Code	Amount	Change Orders	Total Remaining	Percent Used
Liquids	35246L/35239L	\$ 93,096.00	\$ -	\$ 93,096.00	0.0%
		\$ 93,096.00	\$ -	\$ 93,096.00	0.0%

Change Order No.	Vendor Name	Project ID	Description	Status Date	Days	Amount

Agenda Item

8

Engineering Committee Meeting

Meeting Date: November 13, 2025

TO: Engineering Committee

FROM: Roni Grant, Capital Improvement Program Manager

SUBJECT: JBL Facility Planning Assessment Contract Award [Project Committee 2]

Overview

SOCWA has retained Dopudja & Wells Consulting (D&W) to assist in the development of the Request for Proposal (RFP) scope of services for the J.B. Latham Treatment Plant (JBL) and Coastal Treatment Plant (CTP) Master Planning initiative.

In April 2025, D&W facilitated a kickoff meeting with SOCWA and its member agencies to outline the strategic direction and priorities for the master planning effort. The draft Request for Proposal (RFP) was distributed to the PC 2 members on Jun 17, 2025, for comments and feedback. The RFP review meeting was held on July 10th during the PC 2/15 joint meeting. The revised RFP was distributed on July 17th for additional comments and feedback. In August, SOCWA received directions to break the master planning effort into Phase 1 – Facility Planning Assessment, and Phase 2 – Master Planning.

Proposals

SOCWA solicited proposals through PlanetBids on August 15, 2025. Over 15 firms were contacted during this process. Two proposals were received from Carollo and HDR. To better understand the limited response, staff proactively contacted the firms that chose not to submit. The feedback indicated a strong preference among those firms to participate in the subsequent master planning phase, rather than the preliminary effort. This suggests continued interest and engagement from the broader consultant community, positioning SOCWA for a competitive and well-supported master planning process.

The proposals were distributed to the evaluation committee (PC 2 Engineering Committee, members from El Toro Water District and City of San Clemente who were on the interview panel, and SCOWA staff) on October 8, 2025. Interviews with Carollo and HDR were conducted on October 22, 2025 at the SCWD Dana Hills Tennis Center. The proposals and fee proposals from Carollo and HDR are attached for reference.

Staff met with the evaluation committee on November 5, 2025 with a recommendation to award the contract to HDR, with an added scope element to include results from the CTP regional flow study. In addition, staff provided an update at the November 6, 2025 Board of Directors meeting.

A summary of the proposals are in Table 1.

Table 1 – Summary of Proposals

Firm	Carollo	HDR
Project Manager	Jeff Weishaar	Amy Omae
Total Project Fee (Base Scope)	\$644,720.00	\$545,325.00
Total Project Fee (Base + Optional)	\$697,982.00	\$545,325.00
Total Labor Hours (Base Scope)	2,305	2,252
Total Labor Cost (Base Scope)	\$595,925.00	\$548,781.00
Direct Costs / ODCs (Base Scope)	\$48,783.00	\$3,456.00
Average Cost per Labor Hour (Base Scope)	\$259.00	\$244.00

A summary of the panel evaluation average scores are in Table 2.

Evaluation Category	Carollo	HDR
Understanding of the Work (25%)	20	23
Approach to the Project (30%)	25	28
Experience and Technical Competence (25%)	20	22
Completeness of Proposal (20%)	20	19
Total Scores (100 max)	85	92

The evaluation committee recommends HDR due to the following:

- Proven Project Management and Delivery Framework - HDR's approach to project management is robust and well-structured.
- Balanced Technical Expertise - HDR's team composition reflects a thoughtful balance of senior leadership, technical specialists, and support staff.
- Focused Scope with Clear Deliverables - HDR's scope is tightly aligned with SOCWA's needs.
- Efficient Use of Resources - HDR's proposal demonstrates strategic allocation of effort.

A summary of the cost allocation by member agency are in Table

3. Table 3 –Cost Allocation by Member Agency

Agency	PC 2 Common (L)	PC 2 Common (S)	Total
South Coast Water District	\$141,566.37	\$113,482.13	\$255,048.50
Santa Margarita Water District	\$131,096.13	\$159,180.37	\$290,276.50
Total	\$272,662.50	\$272,662.50	\$545,325.00

Budget

The JBL FPA effort will be funded by PC 2 non-cap engineering. In addition, staff recommends the inclusion of a contingency in the amount of \$54,675, to cover the additional scope item. This would bring the total project authorization to \$600,000.

Recommended Action: Staff recommends that the Engineering Committee recommend that the PC Board of Directors:

1. Authorize execution of a contract with HDR in the amount of \$545,325 for the JBL FPA contract.
2. Approve a contract contingency of \$54,675, to cover the additional scope item.

J.B. LATHAM TREATMENT PLANT

FACILITY PLANNING ASSESSMENT EFFORT

PROPOSAL / **ENG-25-04** / OCTOBER 2025





October 7, 2025

Ms. Roni Young Grant
Capital Improvement Program Manager
South Orange County Wastewater Authority
34156 Del Obispo Street
Dana Point, CA 92629

Subject: Proposal for J.B. Latham Treatment Plant Facility Planning Assessment Effort ENG-25-04

Dear Ms. Grant:

Carollo Engineers is uniquely positioned to help South Orange County Wastewater Authority (SOCWA) achieve its goals for the J.B. Latham Treatment Plant (JBLTP) Facility Planning Assessment Effort. With our deep expertise in wastewater treatment facility planning and our established history working with SOCWA facilities, we bring both technical excellence and critical local knowledge to this important project.

Understanding Your Vision. Having previously completed multiple planning and design projects at the JBLTP, Carollo possesses thorough knowledge of your facilities and operational challenges. We understand that SOCWA seeks not just a consultant, but a strategic partner who can navigate the complexities of treatment plant modernization with a comprehensive, data driven approach that includes:

1. **Collaborative Planning Process:** Beginning with a structured Project Control Plan, we'll establish clear communication protocols and decision-making frameworks that keep SOCWA and its member agencies fully engaged throughout the assessment process.
2. **Leveraging Previous Work:** Our team has worked at JBLTP extensively in the past. We will leverage previous modeling and planning efforts to build on past work and develop a future outlook that is economically viable, sustainable and achievable.
3. **Comprehensive Alternatives Development:** We will draw on our industry leading expertise in process and biosolids handling to develop alternatives that complement each other while providing options for disposal and reuse.
4. **The Right Team.** Our proposed project team brings together specialists in treatment process design, hydraulic modeling, facility assessment, regulatory compliance, and financial analysis. The majority of our team has worked on previous JBLTP projects, bringing unparalleled knowledge of your facility from the very beginning.

Our proposal is valid for 120 days after the submission date. For questions or additional information about this proposal, please contact Jeff Weishaar at 858-245-6081 or jweishaar@carollo.com.

Sincerely,

CAROLLO ENGINEERS, INC.

Jeffrey A. Weishaar, PE
Project Manager/Vice President

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ADDENDUM No. 1

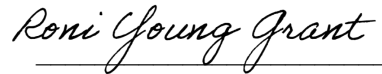
TO: REQUEST FOR PROPOSAL

FOR JBL FACILITY ASSESSMENT PLANNING

THE PROPOSER SHALL EXECUTE THE CERTIFICATION AT THE END OF THE ADDENDUM AND SHALL ATTACH THE ADDENDUM TO THE PROPOSAL (NOT TO BE INCLUDED AS PART OF THE PAGE COUNT).

1. The pre-proposal meeting is MANDATORY; a virtual option is available if firm is unable to attend in person.
 - a. Microsoft Teams
2. The Facility Assessment Planning effort is Phase 1 of the master planning effort.
3. The selected consultants will be expected to complete the effort within 9 months of notice to proceed.

DATED: 9/4/2025



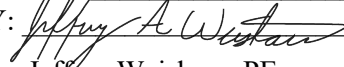
Roni Grant
CIP Manager

BIDDER'S CERTIFICATION

I acknowledge receipt of the foregoing Addendum No. 1 and accept all conditions contained herein.

DATED: 9/4/2025

BIDDER: Carollo Engineers, Inc.

BY: 
Jeffrey Weishaar, PE
Vice President

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ADDENDUM No. 2

TO: REQUEST FOR PROPOSAL

FOR JBL FACILITY ASSESSMENT PLANNING

THE PROPOSER SHALL EXECUTE THE CERTIFICATION AT THE END OF THE ADDENDUM AND SHALL ATTACH THE ADDENDUM TO THE PROPOSAL (NOT TO BE INCLUDED AS PART OF THE PAGE COUNT).

1. See attachment for the pre-proposal meeting sign-in sheet.
2. The proposal page limit is 20 pages, not including the cover, appendices and resumes.
3. Section 2.42 Hydraulic and 2.43 Process Model – This effort should be high level analysis during Phase 1, using the existing studies and models.
4. Section 2.5 Condition Assessment of Major Unit Processes – This is not intended to be an asset management program. Rather, it is intended to help inform the alternatives analysis. Some unit processes will continue to be used. For those processes, it is important to understand if major re-investments are needed.

DATED: 9/11/2025

Roni Young Grant

Roni Grant
CIP Manager

BIDDER'S CERTIFICATION

I acknowledge receipt of the foregoing Addendum No. 1 and accept all conditions contained herein.

DATED: 9/11/2025

BIDDER: Carollo Engineers, Inc.

BY: *Jeffrey A. Weishaar*
Jeffrey Weishaar, PE
Vice President

Identification of Responder

Water - It's all we do! For SOCWA, this means unmatched expertise and experience, and a deep understanding of the key wastewater treatment planning issues that few can match.

Firm Overview

Carollo's targeted expertise in water and wastewater related engineering allows us to focus on developing cost-effective, innovative, and reliable solutions to help clients protect public health. Since our inception in 1933, wastewater treatment plant (WWTP) planning and design has been a hallmark of Carollo's experience. Carollo has partnered with public sector clients across North America to deliver hundreds of thousands of innovative water and wastewater projects, backed by staff dedicated exclusively to their success. Carollo's commitment to technical and client service excellence is demonstrated through longstanding client relationships over the past 92 years.

Water and wastewater treatment is our core business. Our water/wastewater focus and dedication to responsive client service is integral to our success. With a commitment to long-term success, Carollo's wastewater expertise does not stop at the engineering and design stage but continues through ongoing operational support and process performance optimization.

A "Go-To" Local Firm with National Expertise and Superior Client Service

Carollo will deliver your project from our local Costa Mesa, CA, office, conveniently located just 30 minutes away from SOCWA. With over 70 years of history in Southern California, Carollo has built a strong reputation for quality service across the region. We are a trusted partner for many municipal utilities, thanks not only to our innovative approach and extensive experience, but also to the exceptional way we deliver our services.

CAROLLO ENGINEERS CORPORATE ADDRESS

2795 Mitchell Drive
Walnut Creek, California 94598

ADDRESS OF PRINCIPAL PLACE OF BUSINESS

3150 Bristol Street, Suite 500
Costa Mesa, California 92626

FORM OF COMPANY

S-Corporation

PARENT COMPANIES

N/A

CONTACT PERSON

Jeff Weishaar, PE
Vice President/Project Manager
Ph: 858-245-6081
Email: jweishaar@carollo.com

CAROLLO BY THE NUMBERS

 **92**
Year
history

 **1**
Singular focus—
water is all we do!

 **\$7.5B**
in Wastewater Master
Planning and
Condition Assessment

 **52**
North American offices
/ 6 in Southern California

 **400+**
master plans for
more than
200 municipal clients

 **1,700+**
staff nationwide,
169 staff / 98 engineers
in Southern California

Project Understanding and Approach to the Work

The JBLTP Facility Plan will inform SOCWA and its member agencies' long-term decision making and identify project needs that balance cost effectiveness with reliability, redundancy, and environmental sustainability for the next 30 years.

Project Understanding

SOCWA has important decisions to make that will lay the foundation for a resilient, sustainable, and regulatory compliant facility to reliably serve residents and its partner agencies for the next 30 years. The future of liquid and solids treatment at the JBLTP will be determined based on condition regulatory drivers and viable end-use and disposal options. Costs, site restraints and other factors will play a vital role in deciding which options to implement. Immediate and near term process upgrades will be needed to allow the JBLTP to grow into its future over time.

These decisions need to be made as soon as possible so maintenance and process upgrades can begin in earnest. With Carollo's planning and process expertise, as well as our familiarity with the JBLTP and your previous projects, our team is ready to hit the ground running.

Identifying the most viable long-term liquid and biosolids treatment and management solutions is complex, as SOCWA and member agencies well know from its history with facility planning at the JBLTP. Site constraints have long been a hindrance to implementing water reuse facilities or moving beyond Class-B and Sub-Class B biosolids. A lack of distribution network has further prevented the implementation of reuse facilities. The Facility Plan needs to account for numerous variables: increasing capital, chemical and hauling costs, a changing regulatory landscape, challenging influent water quality issues, existing process performance limitations, development of new secondary treatment and solids processing technologies, and availability of potential regional partnership opportunities.

Navigating these variables will require a comprehensive and integrated review of the JBLTP's facilities including a thorough understanding of current conditions, future flows and loads, risks associated with climate change, and pending and future regulations. Engineering analysis can then assess and identify project needs over the next 30 years that will result in a reliable, efficient, and environmentally sound facility.

Our team understands the critical importance of engaging internal and external stakeholders to gain buy in for your decisions. We will work closely with your staff through every step of the planning and decision-making process and provide sound engineering analyses to guide you in selection of defensible projects that meet your treatment needs, while balancing cost effectiveness and environmental sustainability. The following pages describe our team's proposed approach to effectively address these challenges.

SOCWA Experience

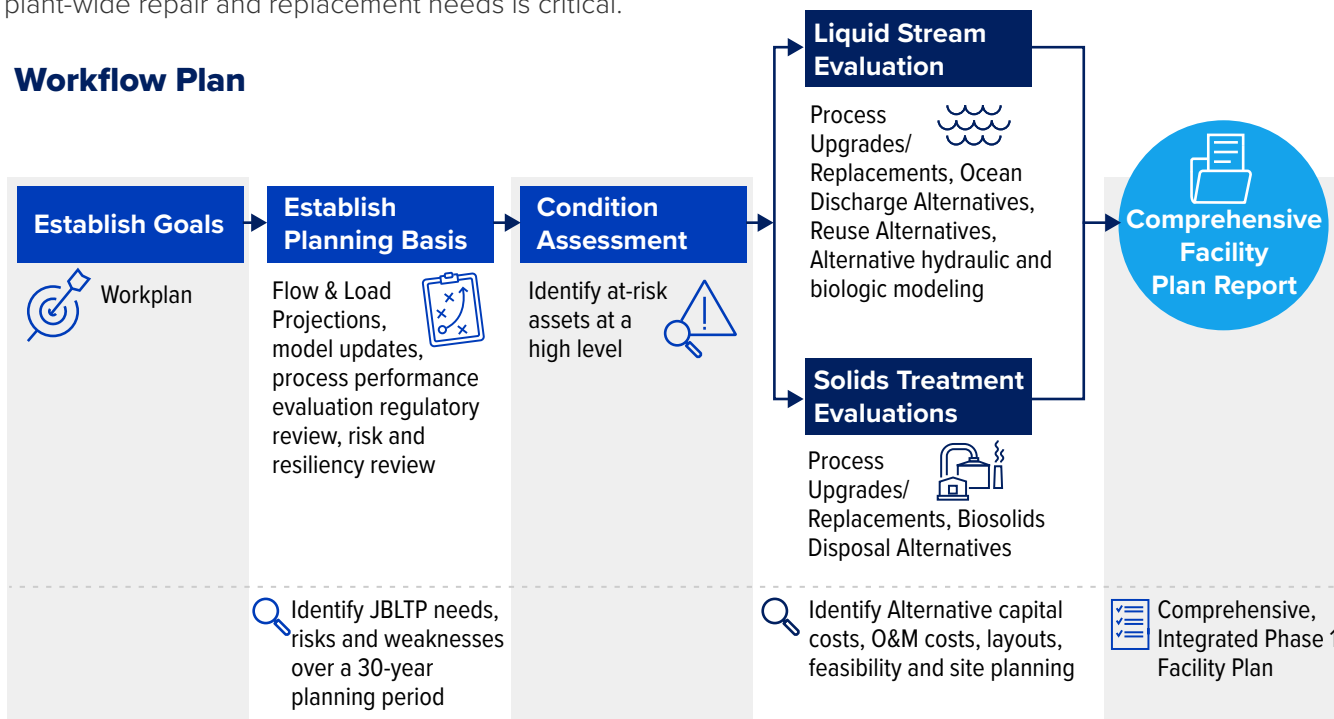
Carollo has a long-standing and diverse history of providing engineering services to SOCWA.

Our relationship with SOCWA dates back to over 25 years ago. Our experience spans planning, design, and construction support for a wide range of projects focused on improving operational efficiency, reliability, and regulatory compliance at SOCWA's facilities.

Identify Current and Future Exposure to Inform Needs and Alternative Development

The first step in developing a roadmap for the JBLTP is understanding where you are today and a clear picture of what the future may bring. A thorough review of current flows and loads, coupled with process by process condition assessment will lay the foundation of this understanding. Getting a thorough understanding of plant-wide repair and replacement needs is critical.

Workflow Plan



Flow & Loading Projections

Projecting flows and loads for the 30-year timeline is complicated by the various agencies sending flows to the JBLTP and their own future plans for wastewater management and reuse. Some agencies may be reducing flows to JBLTP while others plan to increase or redirect flows. Waste streams from upstream facilities further complicate these projections as flows may reduce while loadings remain the same or even increase. Coordinated efforts will be made with the member agencies to clearly understand how their needs will impact hydraulic and solids loadings in the future.

A common trend in WWTP flow and loading reviews is for flows to be dropping while concentrations have stayed steady or increased. The JBLTP must be thought of in terms of loading capacity and not just hydraulic capacity. It will be important to consider how these capacity limits are determined for future scenarios. Population growth estimates, projecting historical trends forward and statistical analysis of current flows

and loadings can all be used for projecting future conditions. Multiple approaches can provide a range of possible outcomes that can be analyzed to select a reasonable outlook for the future.

Condition Assessment

We want to right size the condition assessment and leverage our knowledge of the JBLTP to save time and provide you with a consistent condition assessment and reporting approach. Certain facilities have been updated through the planning efforts completed through the recent Package B Project (DAFTs, clarifiers, mixed liquor channel) as well as previous Package A & C Project (cogeneration, aeration basins, clarifiers). Upgrades to the Plant 2 headworks, effluent pump station, and energy recovery building are currently underway. But other upgrades are likely needed or have become essential since previous planning efforts were completed. Assets such as the biogas flare, digester heat exchangers, and influent pumps require upgrades. Buried utilities have become an increasing challenge and need to be addressed.

We will utilize a multi-discipline team of engineers to conduct a site-wide condition assessment. We understand an asset-by-asset assessment is not required and we can right size the investigation to look at each process area as a whole across all disciplines. Certain assets within the process area may be identified for repair or replacement to identify the process needs for continued or improved performance.

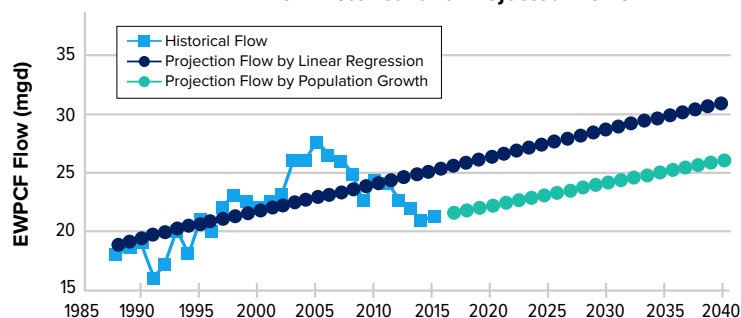
Engaging with and understanding the concerns of your O&M staff is essential to a successful condition assessment. With our depth and breadth of expertise and ability to work concurrently on tasks, we can complete the field condition assessments at times that work best for your staff. This allows your staff to engage at the highest levels, while still maintaining reliable operations.

Identified needs and improvements will be classified according to need. Immediate needs for those items necessary for a process to continue operations that may be at risk of failing today, short term needs in the 3-5 year time frame, intermediate needs in 5-15 year time frame, and long term needs beyond 15 years. While longer term needs will be identified here, they may not be implemented in the final planning needs if the process is identified for replacement in the future.

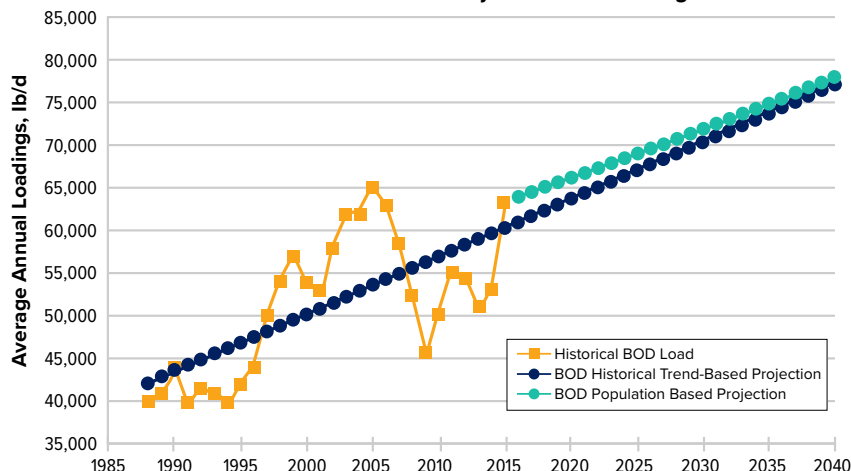
Process Performance Evaluation

The process performance will utilize 3-5 years of process data and the process model that we have already developed for JBLTP to assess plant performance. Our broad process experience enables us to go beyond basic industry guidance and assess performance relative to the latest understanding of process capability and optimization. For example, we can evaluate the potential efficacy of enhanced primary treatment by conducting jar testing to fully optimize the ferric dose and review whether a polymer addition may provide additional settling. Other key areas include performance and capacity assessment of the secondary treatment trains, digester health along with performance, whether thickening could be improved to free up additional digester space, and dewatering performance. Updating our process model with recent data will allow us to identify improvements and intensification

EWPCF Historical and Projected Flows



EWPCF Historical and Projected BOD Loadings



Different methods of projecting flows and loads can provide ranges to consider in planning efforts or even align to point to a common outcome.

opportunities for the biological processes to enable SOCWA and the member agencies to get maximum value from the JBLTP.

Risk and Resiliency Review

Our team understands the evolving utility requirements and threat landscape and will use the AWWA J100 and G430 standards as the guiding frameworks for the risk and resilience assessment (RRA). These standards support a structured, transparent, and repeatable process that aligns with the requirements of AWWA, USEPA, and DHS. The J100 methodology includes key steps such as the following:

1. Asset characterization.
2. Threat characterization.
3. Consequence analysis.
4. Vulnerability analysis.
5. Threat analysis.
6. Risk analysis.
7. Resilience analysis.
8. Risk management.

The G430 standard complements this by establishing minimum requirements for a security program that protects employee safety, public health, and public confidence through 13 distinct security criteria. As part of the proposed project alternatives, we will evaluate hazards, threats, and vulnerabilities to assess uncertain future conditions related to operational disruptions, public health, and regulatory outlooks. These planning elements will be assessed over a 30-year horizon to determine potential impacts and guide the development of resilient and compliant infrastructure strategies.

As a part of this process an assessment will be conducted focusing on potential impacts to the wastewater treatment plant site and operations from extreme natural events (e.g., flooding, wildfires, earthquakes), threats such as ocean level rise, and excessive influent flow peaking due to inflow and infiltration from prolonged precipitation. These scenarios will be analyzed using the J100 risk equation to quantify threat likelihoods, vulnerabilities, and consequences, supporting the prioritization of adaptive measures.

Additional vulnerabilities within the treatment plant will also be analyzed, including aging infrastructure, lack of replacement parts, physical

security, cybersecurity, and exposure to prolonged power outages from wildfires or grid disruptions. Recommendations will be developed to enhance SOCWA's resilience, informed by the G430 security criteria and the resilience analysis component of the J100 framework.

This analysis will include the identification and evaluation of threats, vulnerabilities, and potential consequences to critical infrastructure assets. It will prioritize risk mitigation strategies by assessing their relative effectiveness and cost-benefit value. The insights generated through this process will be reviewed with stakeholders at all levels to verify and prioritize protective measures to implement.

A review of SOCWA's operating and discharge permits will also be completed in the context of regional, state, and federal regulations governing wastewater treatment, ocean discharge, Title 22 recycled water reuse, solids handling, and air quality. Emerging regulatory trends will be identified and prioritized, and compliance strategies will be developed to address future regulatory risks. This analysis will be integrated into the overall risk management plan to make sure long-term operational and regulatory resilience.

Risk Equation

Understanding the risk equation is essential to the RRA process. The equation quantifies the various components of risk as follows:

$$R = C \times V \times T$$

Where:

- **R** = Risk; calculated as a dollar value.
- **C** = Consequence; presented as a dollar value.
- **V** = Vulnerability; presented as a discrete number between 0 (low) and 1.0 (high).
- **T** = Threat Likelihood; presented as a discrete number between 0 (low) and 1.0 (high).

As part of the risk analysis, consequences to infrastructure and utility staff are developed and presented in terms of dollars, based on the vulnerability and likelihood of the event. Calculating risk as a dollar value enables the organization to measure changes in risk using dollars/cost. This is necessary for the risk and resilience management phase of the J100 process, where benefit-cost ratios are calculated to compare the cost of existing consequences against the potential cost of consequences if various risk mitigation measures were implemented.

Likelihood measures the probability of an event occurrence, but not necessarily the success of an attack. Vulnerability is a reflection of the security profile of an organization. Vulnerability assumes the event has occurred and is a measure of how likely it is that the associated security profile will prevent or mitigate the estimated consequences. While the likelihood of an event may be very high, the vulnerability to the event may be very low due to the security measures in place. Conversely, the likelihood of an event may be very low, but the facility may have a very high vulnerability to the event.

Regulatory Review

Regulations are at the heart of the JBLTP’s core function. Regulations drive our industry and are always in flux. Understanding where we are today and what is coming is critical in Facility Planning. We will provide a thorough overview on the state of regulations for both effluent discharge and biosolids disposal. However, there are some more relevant to the JBLTP’s future:

**PFAS**

TODAY

- Statewide sampling orders
- Monitoring and source control added to some permits

FUTURE

- Likely continuation of monitoring programs
- Possible industrial user screening and technology evaluations

**NUTRIENTS**

TODAY

- Narrative objective in Ocean Plan
- Monitoring requirements applied where warranted by Regional Boards

FUTURE

- Regional Boards may adopt nutrient performance targets
- May expand receiving water monitoring initiatives

**WATER REUSE**

TODAY

- Regulatory pathways for recycled water and IPR established
- DPR regulations adopted (Oct 2024)

FUTURE

- Regulations may drive broader reuse, requiring planning for advanced treatment, monitoring, redundancy, staffing, and the flexibility to transition effluent between ocean discharge, IPR, and DPR as needs evolve

Regulatory drivers for JBLTP are evolving, with growing attention to PFAS, nutrients, and water reuse. Facility planning must account for today’s requirements while positioning the plant to adapt to future monitoring, performance targets, and reuse opportunities.

PFAS

In 2020 the State Water Board issued statewide investigative orders that required Publicly Owned Treatment Works (POTW) to sample and analyze influent, effluent, and biosolids for PFAS and to report the results. That program continues to inform permitting and pretreatment expectations, and Regional Boards are increasingly adding PFAS monitoring and source control conditions to NPDES permits consistent with State Board direction and EPA guidance. Expect continued monitoring requirements, data reporting, industrial user screening, and potential technology evaluations where PFAS sources are identified.

Nutrient Limits or Performance Requirements for Ocean Dischargers

The California Ocean Plan already contains a nutrient narrative objective stating that nutrient materials must not cause objectionable aquatic growths or degrade indigenous biota, which Regional Boards translate into permit conditions and monitoring requirements. Recent actions show the Boards

will adopt numeric, performance-based nutrient requirements where warranted. The San Francisco Bay Nutrients Watershed Permit will require POTWs to reduce dry season total inorganic nitrogen loads by 40% compared to 2022 over ten years setting a precedent for future coastal permits and monitoring expectations. SOCWA should plan for strengthened receiving water monitoring, potential nutrient performance targets, and participation in regional ocean monitoring initiatives.

Direct and Indirect Potable Reuse

California adopted Direct Potable Reuse regulations effective October 1, 2024, creating a clear protective framework for DPR projects. Alongside existing Title 22 IPR criteria, this enables a broader effluent utilization portfolio and may over time reduce reliance on ocean discharge. Planning should evaluate DPR and IPR readiness such as advanced treatment, log reduction credits, online monitoring, redundancy, and operations staffing, as well as the infrastructure needed to pivot between ocean discharge and reuse as demands and regulations evolve.

Innovative Wastewater Treatment Addressing Today's Needs and Adaptable to Tomorrow's Goals

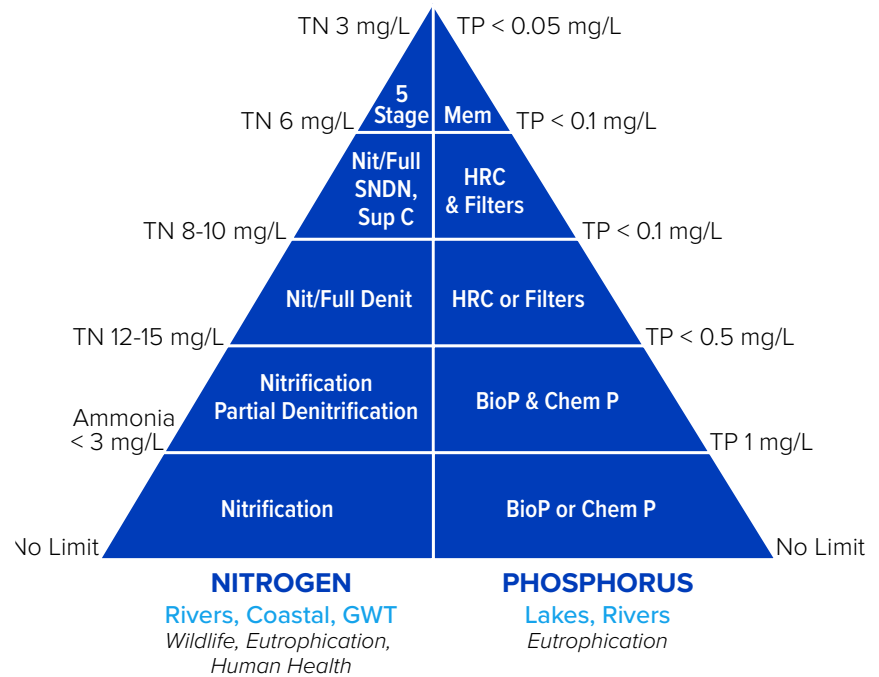
We will frame the liquid train around end uses for effluent. Scenarios will include ocean discharge for existing and future flows and loads, ocean discharge with total inorganic nitrogen limits, recycled water, recycled water with total inorganic nitrogen limits, and potable reuse through IPR or DPR. Where nutrient performance or intensification is the driver we will focus on biological modeling. Where conveyance, storage, or headloss affects feasibility we will confirm hydraulics.

We will hold a focused technology workshop with SOCWA to review a broad menu of options and agree on which merit Phase 1 screening and modeling. Treatment configuration approaches can be related to increasingly stringent nutrient targets.

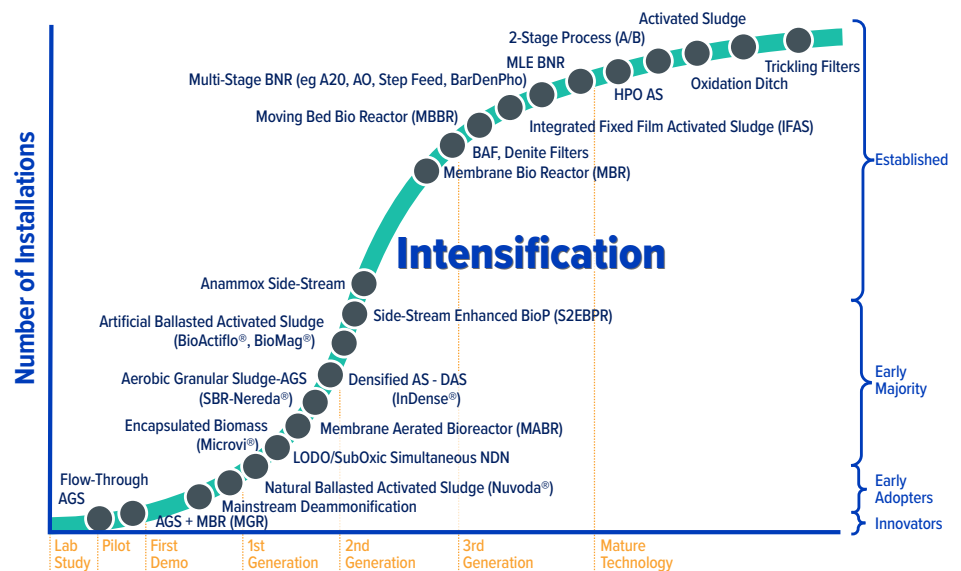
When conventional treatment configurations cannot be accommodated because of footprint, energy, or carbon constraints, teams often consider innovative approaches. Various innovative technologies along a maturity curve frame adoption level, performance certainty, and operations risk.

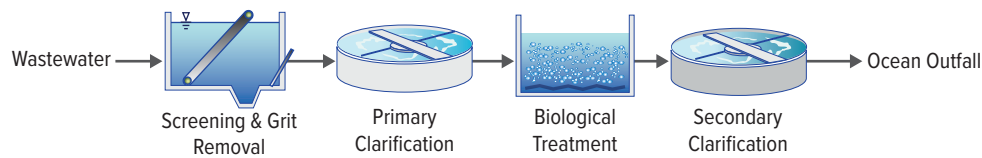
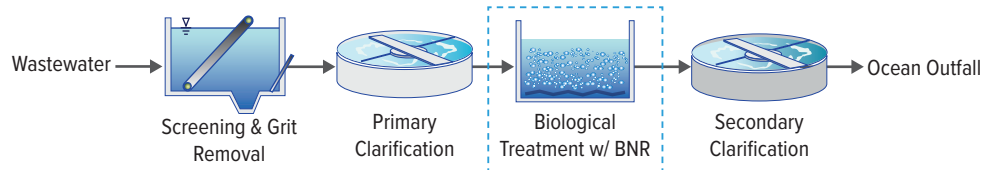
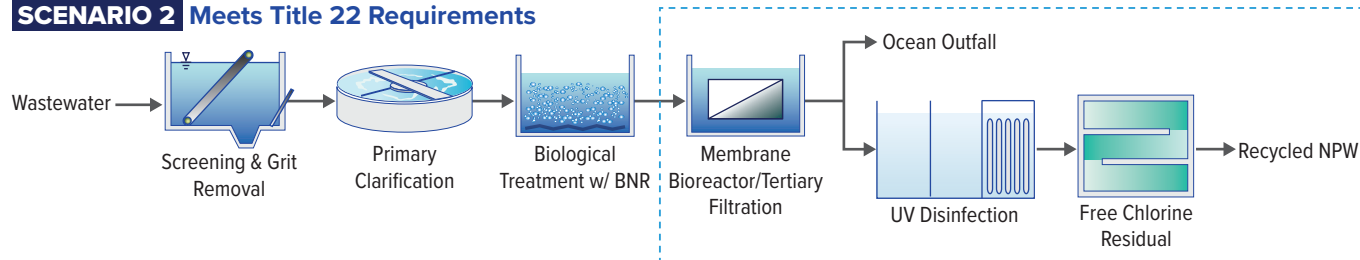
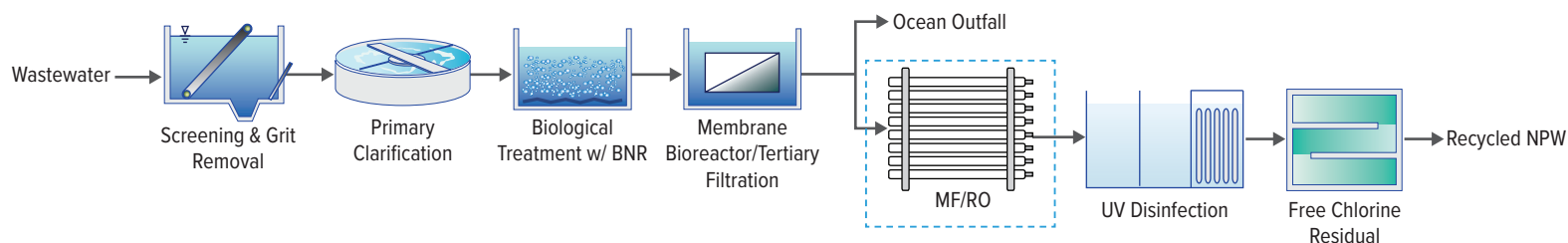
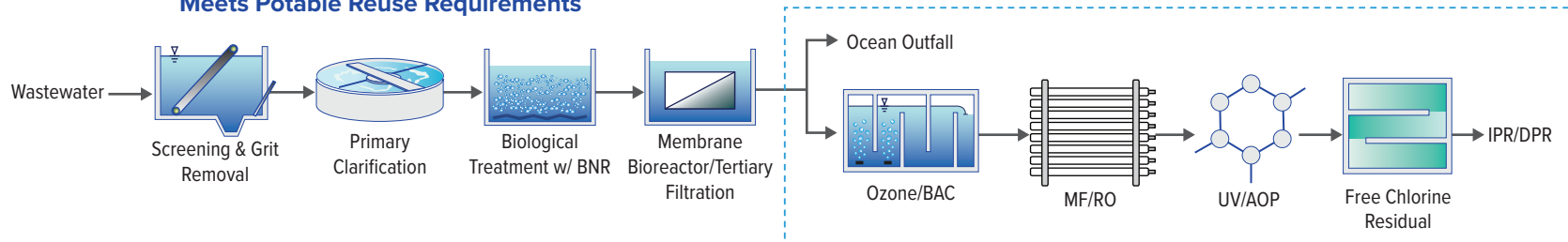
Some examples of technologies and approaches to be considered include BNR optimization and advanced control strategies; membrane bioreactors (MBRs); membrane aerated biofilm reactors (MABR); integrated fixed-film activated sludge (IFAS); densified or aerobic granular sludge; and sidestream deammonification of dewatering returns such as partial nitrification-anammox (PNA). For each option we will summarize footprint fit, expected nitrogen performance range, carbon and alkalinity needs, interactions with digestion and sidestreams, power and operations considerations, and the ability to bridge to recycled water or potable reuse.

Liquid treatment and reuse options at JBLTP are likely to require some form of intensification for anything other than BOD/TSS-only ocean discharge. How novel the approach will depend on the reuse goals, site constraints and other factors that we'll review with you in workshops.



Increasingly stringent discharge limits often require increasingly sophisticated treatment approaches. We will work with you to identify the right target for liquid treatment and effluent use alternative evaluations.



EXISTING SCENARIO Meets Current Ocean Discharge Standards**Liquid Effluent Usage Roadmap****SCENARIO 1** Meets Future TIN Limits (For Ocean Discharge)**SCENARIO 2** Meets Title 22 Requirements**SCENARIO 3** Title 22 + PFAS and TDS Removal**SCENARIO 4** Title 22 + PFAS and TDS Removal
Meets Potable Reuse Requirements

We will develop a roadmap blending secondary treatment alternatives with effluent reuse options that show how the JBLTP can grow from its current state to the most advanced state of DPR. The roadmap will link likely change triggers to actions and will align with the solids handling strategy so the liquid and solids trains advance together.

Sustainable and Cost Effective Biosolids Management

Carollo has supported SOCWA in prior planning efforts. With recent changes to member agencies, flows, and end uses, this is the right time to step back and evaluate the biosolids system as a whole. Our Phase 1 focus is to identify and compare viable pathways that improve reliability and product quality while aligning liquid treatment choices with solids handling so the plant performs as one integrated system.

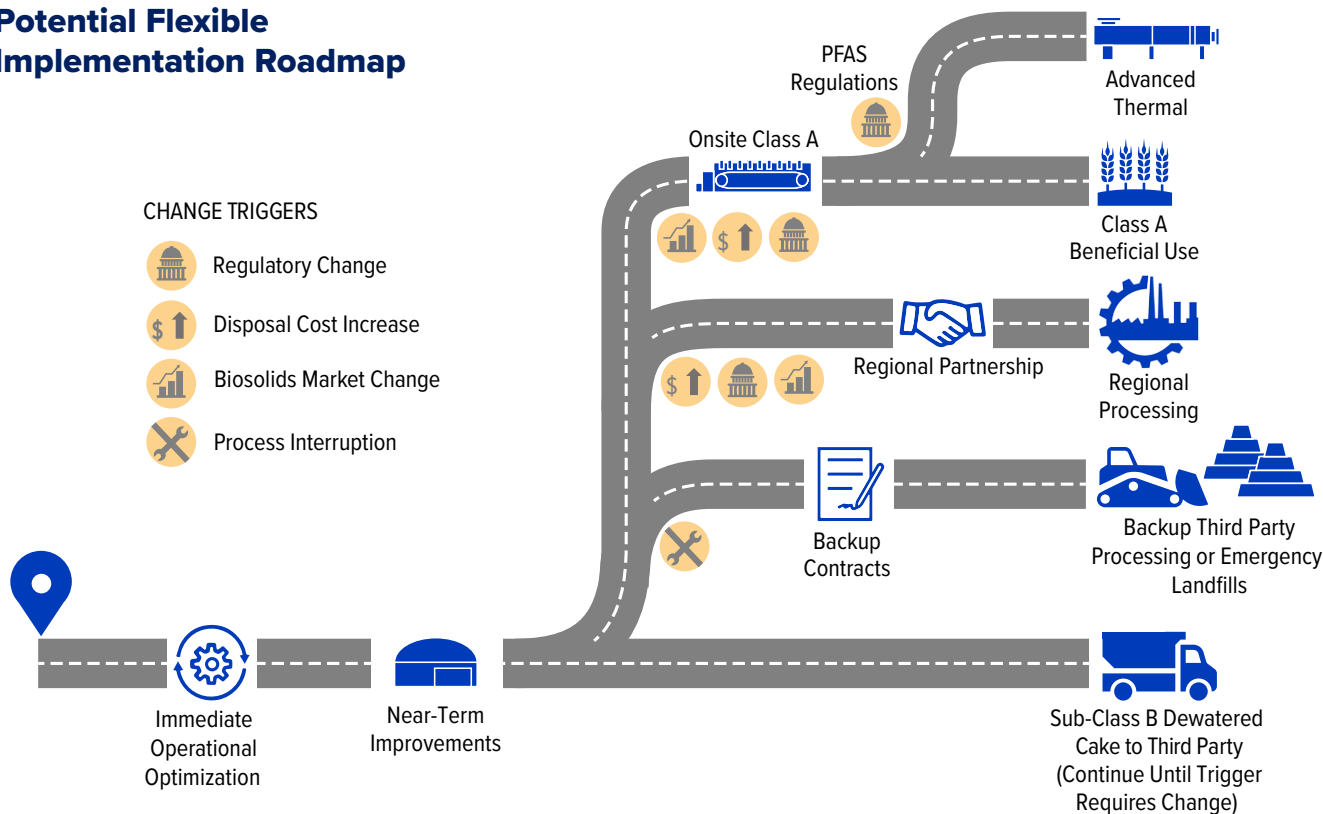
We will begin by evaluating the existing solids and biogas systems, current and projected flows and loads, the level of treatment achievable at baseline, and near-term process optimizations that can improve reliability and product quality.

In Phase 1 we will treat layout ideas as options to test. We will sketch a small set of workable footprints—for example a third digester near the flare area, a digester on the former lab site, or replacing Digesters 3 and 4 with higher volume units—and apply a high level siting and

constructability screen focused on the essentials: zoning and coastal approvals, utility integration and available footprint, and keeping the plant operating during construction. We will also outline practical ways to meet detention time and temperature targets, for example recuperative thickening to increase effective SRT and heat system or Combined Heat and Power (CHP) upgrades.

Our goal is to select space efficient, operable upgrades that secure consistent Class B and define clear paths to Class A, where warranted. Thermophilic digestion can achieve Class A. WAS only Thermal Hydrolysis Process (THP) will not achieve Class A on its own, but it can expand effective digestion capacity, improve volatile solids reduction, produce a drier dewatered cake, and increase digester gas yield, often with a smaller footprint than adding tanks. We will confirm site fit with concept level footprints, size major utilities and heat needs at a planning level, outline construction sequencing and operations considerations, and present clear capacity, dewaterability, energy, and cost tradeoffs for Phase 1 decisions.

Potential Flexible Implementation Roadmap



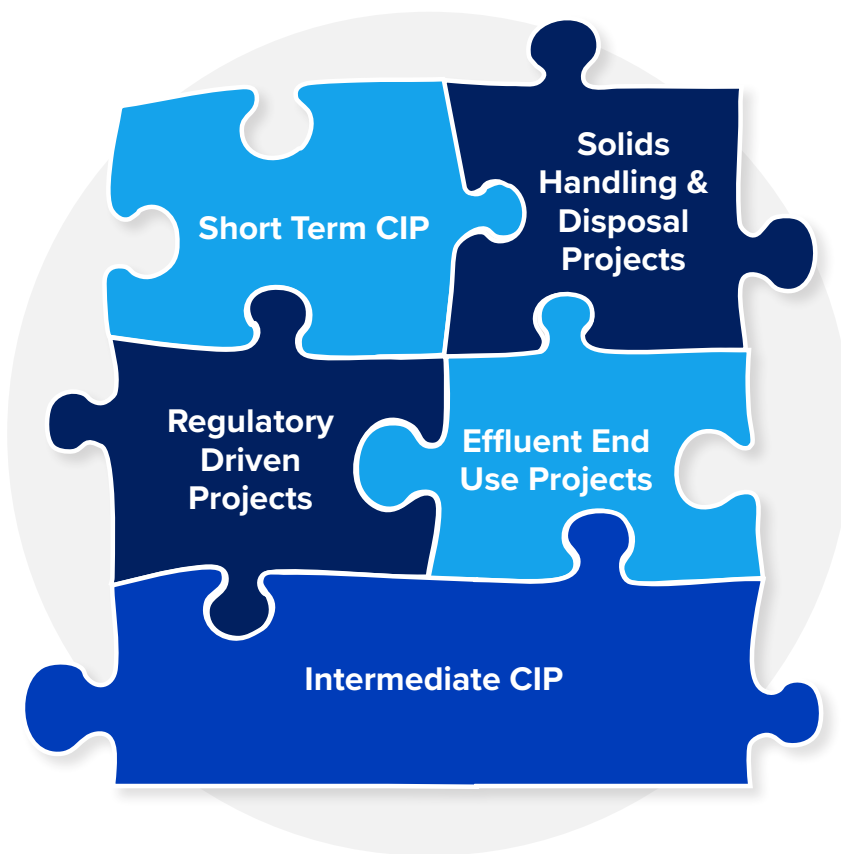
Our implementation roadmap will identify triggers, actions required, and pathways for achieving future requirements under changing conditions.

A Comprehensive and Integrated Facility Plan to Guide Future CIP Efforts

The previous tasks will develop options and alternatives across all of the JBLT. The final step will be a sensitivity analysis to group various options for each area into overall project alternatives. These can be evaluated against each other to determine the alternative that provides a clear pathway for the future of the JBLTP providing a reliable, redundant, and environmentally sustainable facility for the next 30 years.

Suggested Scope Addition – Staffing Analysis to Align with JBLTP Goals

This project will set forth a path for the JBLTP and how it will operate in the future. The project includes significant efforts to understand the state of the plant today. Operation and maintenance of the plant requires a strong and experienced staff dedicated to meeting plant performance goals. Just as important as understanding and planning processes at the plant is making sure you have the staff to execute. We would suggest SOCWA consider an updated staffing plan as part of this project. Along with the process analysis, we can review current staffing for like-minded agencies, and provide suggested modifications for both the current and future plans.

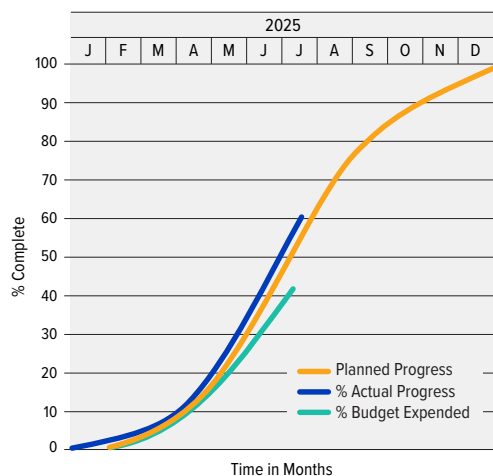


We will assemble and analyze comprehensive project alternatives. As a whole, the assembled pieces will create a reliable and environmentally sustainable JBLTP for the future. We'll then work with you to identify the best JBLTP picture that is both economically and technologically feasible.

Project Management

Carollo uses an engaging management approach to enhance coordination with our clients and foster open communication with all levels of your staff. We will listen and respond to your needs and preferences while simultaneously providing you with our experience. To do this, we will use various forms of communication with your staff as discussed below.

- **Daily Interactions.** During the project, we will have to address numerous "routine" team management and coordination issues. We will use tried-and-true methods of as-needed phone calls, emails, virtual meetings, and in-person meetings to keep the project team on track.
- **Biweekly Coordination.** We propose conducting biweekly virtual meetings to discuss project status and decisions. We will organize these 30- to 60-minute meetings around a standard working agenda, targeting purposeful and efficient discussion and providing a list of actionable items for team project management and engineering coordination.
- **Monthly Progress Reports.** We will prepare monthly project progress reports to summarize the project's current status, schedule, and financial position. These monthly progress reports will summarize our accomplishments and challenges encountered or anticipated.
- **Productive Workshops.** During workshops, we will present meeting topics, facilitate discussion, and solicit input for tasks and resolving issues. For the workshops to be productive, we will 1) clearly define the agenda and objectives; 2) review information and key decisions in advance; 3) make sure key stakeholders/decision makers are in attendance; 4) manage communication to balance progress with consensus; 5) document decisions and action items; and 6) follow through on action items.



Quality Assurance/Quality Control Plan



QUALITY ASSURANCE

- Conducted as the project progresses.
- Independent peer reviews to address critical issues.
- Conducted in early stages to avoid rework.



QUALITY CONTROL

- Internal QC prior to all submittals.
- Independent QC team.
- QA/QC sign-off forms.



RESULT

- Allows team to present highly refined concepts in project workshops.
- Provides high-quality deliverables that save your staff review time.

Quality review of deliverables at all project stages will produce a successful project.

Quality Management

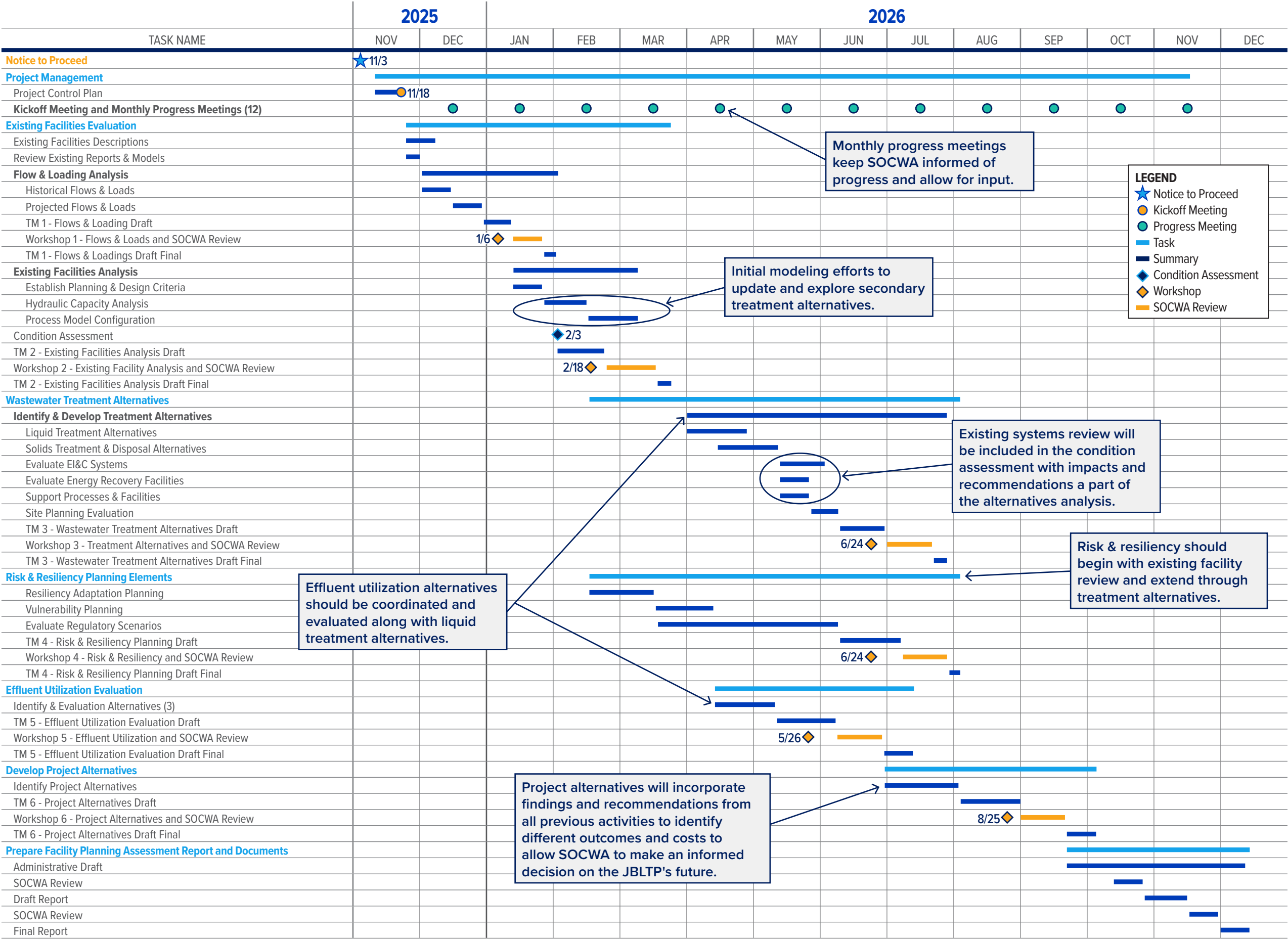
Our team is committed to quality. Our quality assurance/quality control (QA/QC) review process provides proven results and begins with a project plan. We tailor each project plan to specific project needs. Each one includes job-specific procedures and standards, team member roles and responsibilities, report and design checklists, approval processes for project management, procedures for formal and informal reviews, and project deliverable reviews by SOCWA.

Before submitting a single deliverable to SOCWA we will conduct a QA/QC review using senior level engineers with expertise in the appropriate discipline area. We will continually emphasize quality control to our project team by conducting informal reviews of the planning and design deliverables as the work progresses. Examples of deliverables for which we will perform a QA/QC review include:

- **Technical Memorandums.** Review for soundness of logic, justification of conclusions reached, readability, and clarity.
- **Preliminary (10 Percent) Design Submittals for Workspace Concepts.** Review for general conditions, code compliance, cross-reference coordination, detailed checklist compliance, coordination among disciplines, completeness and correctness, clarity, constructability, work sequence and constraints, and other requirements.
- **Condition Assessment Criteria.** Review for assumptions used, accuracy, and completeness.
- **Planning-Level Cost Estimates.** Review for quantity takeoffs, unit prices, contingencies, level of accuracy, and project risk factors.

Schedule

Our work plan is incorporated into the schedule shown here. Multiple tasks will be occurring simultaneously as needed to keep the project moving and to coordinate alternative development, analysis, and to prioritize our comprehensive approach to the project. This way, we can be sure to consider how one process alternative may affect other processes and associated alternatives. We will accomplish this while keeping you informed on all aspects of the project, allowing you have ample input and feedback throughout.



Experience and Technical Competence

Our planning expertise, solid understanding of local planning issues, liquid and biosolids technical expertise, and unparalleled knowledge of your JBLTP will provide SOCWA with confidence in our ability to deliver an integrated and innovative plan that optimizes your future investment.

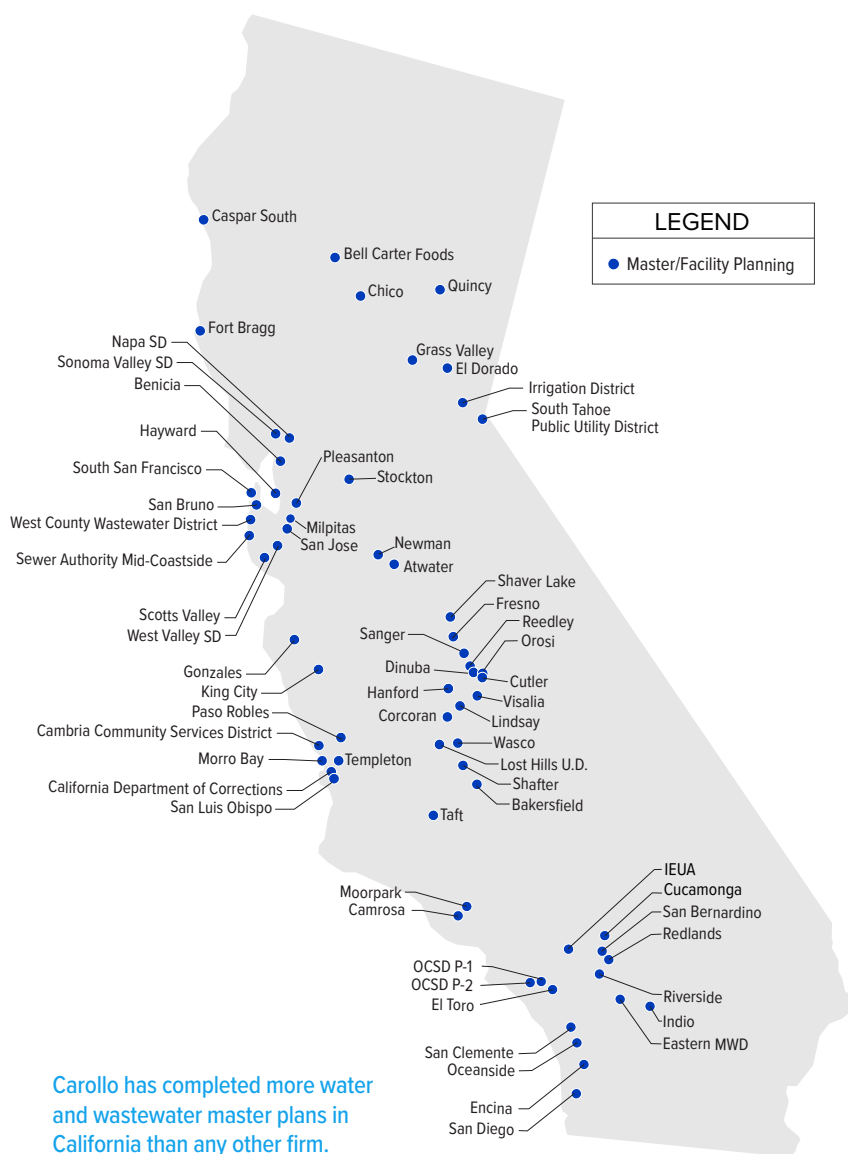
Water is all we do!

Cities, utilities, and special districts of all sizes count on Carollo to help them navigate through the increasingly complex challenges of the cost-effective and sustainable protection of public health while meeting local, state, and federal regulatory requirements; protecting the water environment; and addressing public expectations.

Extensive Planning Experience

The Carollo team brings a proven track record of managing large, complex master and facilities plans in Southern California. Carollo's experience delivering wastewater resources and facility planning projects for cities with similar needs sets us apart. We understand which tasks require close coordination to minimize rework, maintain the schedule, and produce consistent, actionable plans that SOCWA can move forward confidently.

We have demonstrated our ability to successfully address complex technical, regulatory, and institutional issues to produce clear, cost effective, and practical recommendations with a wide variety of stakeholders. This focused planning experience allows us to deliver high-quality reports effectively and efficiently.



Previous Experience on Similar Projects

The table below lists representative facility/master planning projects. These projects have many technical and institutional elements that are comparable to those required for your Facilities Plan Update. We have provided brief summaries for six select projects on the following pages.

Agency/Project

Project Elements

Agency/Project	Capacity	Condition Assessment	Odors/Air Emissions	Discharge Permitting	Plant Hydraulics	Solids Handling	Disinfection	Filtration Enhanced Treatment	Regulatory Compliance	Multi-agency Coordination	Reuse/Recycling
South Orange County Wastewater Authority, Dana Point, California - J.B. Latham Treatment Plant Facility Plan	13		•	•	•	•	•		•		•
City of Oceanside, California - La Salina WWTP Facility Plan	4.5	•	•	•	•	•	•	•			•
City of Colton, California - Water and Wastewater Master Plan Updates (2006 and 2013)	5.6	•		•	•	•			•		•
City of Oceanside, California - Integrated Master Plans	15	•	•	•	•	•	•	•	•		•
City of Barstow, California - Wastewater Treatment Plant Capital Improvements Program Planning	5	•	•	•	•	•			•		
City of Phoenix, Arizona - Three Major Facility/Master Plans	150	•	•	•	•	•			•	•	
City of Benicia, California - Wastewater System Improvement Project	4.5	•	•	•	•	•	•		•	•	•
Fresno/Clovis Wastewater Reclamation Facility, California - Facilities Master Plan	160	•		•	•	•			•		•
Orange County Sanitation District, California - Master Plans	276	•	•	•	•	•			•	•	
City of Riverside, California - Master Plan	47		•	•	•	•	•	•	•		•
Sacramento Regional County Sanitation District, California - 2020 Master Plan	181			•	•		•	•	•	•	•
Sacramento Regional County Sanitation District, California - 20-Year Master Plan	181	•	•	•	•	•	•	•	•	•	•
City of San Bernardino, California - 20-Year Master Plan	30	•	•	•	•	•	•	•	•		
Lower South Platte Regional Group, Denver, Colorado - WW Utility Plan	70			•		•			•	•	
Metro Wastewater Reclamation District, Denver, Colorado - Service Area Utility Plan	80	•							•	•	
City of Carson City, Nevada - 20-Year Master Plan	6.5	•		•	•	•	•	•	•		
City of Davis, California - Strategic Master Plan	7.5			•	•	•	•	•	•		
City of Petaluma, California - Water Recycling Facilities Planning	8			•	•	•	•	•	•	•	•
City of Stockton, California - Master Plan	48		•	•	•	•	•	•	•		•
City & County of San Francisco, California - Master Plan	84	•	•	•	•	•	•	•	•		•

JUST ASK OUR CLIENTS

We invite you to contact the individuals listed as our references on the following pages. They will attest to the quality and responsiveness of our services on their projects.



Plant Process Master Plan
Encina Wastewater Authority, CA

In 2016, Encina Wastewater Authority selected Carollo Engineers to assist in developing a Facility Master Plan for the Encina Water Pollution Control Facility (EWPCF). The EWPCF is a 40 mgd conventional secondary treatment plant with solids handling to produce Class A and B biosolids.

The project included review of historical flows and loadings in order to project future flows and loads for the 25-year planning horizon. Condition assessments were conducted along with process performance evaluations. Jar tests were also conducted.

Process evaluations were conducted at each major process area. Evaluations were based on alternatives developed to reduce energy consumption, improve effluent water quality, and evaluate biosolids disposal options. Secondary treatment alternatives included upgrades to provide nutrient removal while biosolids alternatives explored different Class A treatment technologies as well as options to increase digestion capacity.

The final Facility Master Plan report identified over \$78 million in capital projects, prioritized across nine categories.

CONTACT INFORMATION

James Kearns, Senior Construction Manager
760-268-8843

PROJECT DATES

2016 - 2017



McCollum WTP Condition Assessment and Improvement Recommendations
Olivenhain Municipal Water District, CA

Carollo was selected to assist Olivenhain Municipal Water District in developing a comprehensive facility master plan for the David. C McCollum Water Treatment Plant (DCMWTP). The DCMWTP provides safe drinking water for almost 70,000 connected customers in Northern San Diego County. The project included a review and update of the existing asset database, detailed condition assessment and outage planning, visual condition assessment and a variety of specialty inspection methods. Concrete sounding and sampling, metal thickness measurements, pipe weld x-ray, CCTV, and drones were all used to provide detailed information on the condition of installed assets. The project resulted in a significant capital improvement plan with almost \$20 million in recommended projects over the next 10 years.

CONTACT INFORMATION

Lindsey Stephenson, Engineering Manager
760-632-4640

PROJECT DATES

2023 - 2024



San Elijo Water Reclamation Facility Master Plan
San Elijo Joint Powers Authority, CA

The 2014 Facility Plan Update was prepared to provide SEJPA with a planning document that identified and prioritized potential improvements at the WRF. The condition assessment included visual observation of the installed assets, review of maintenance and replacement records, and known deficiencies identified by staff. Site planning was conducted to preserve space for future improvements, including solar fields, a new administration building, advanced water treatment, stormwater capture, and a resident bike path through the facility to allow access to the San Elijo Conservancy Park. The asset database was used to track asset condition, field notes, photos, maintenance history, and condition rankings, remaining useful life estimates, criticality, vulnerability and overall risk. High risk assets were identified for rehabilitation or replacements and were grouped into larger CIP projects for additional evaluation and project cost estimating. The developed CIP listed nearly \$70 million for development over a 10- year period. As of today, the most critical projects have been completed and Carollo is working to update the Facility Plan for 2023 and beyond.

CONTACT INFORMATION

Michael Thornton, General Manager
760-753-6203 x72

PROJECT DATES

2014 - 2016



RWRF Biosolids Master Plan
Eastern Municipal Water District, CA

The District currently sends all their biosolids to Arizona for beneficial reuse. The risk of regulatory changes in Arizona and local ordinances in California combined with aging facilities, prompted the need for the BMP and a 20-year Capital Improvement Plan (CIP) for all four RWRFs owned and operated by the District.

The team conducted a detailed assessment of all relevant facilities, as well as interviews with plant staff that were collectively instrumental in identifying and prioritizing system deficiencies. Findings were compiled in the BMP to summarize operational constraints and repairs to include with the CIP.

The team developed solids projections for each RWRF, assessed system capacity, and identified upgrades needed. To address potential regulatory risks to biosolids management avenues, the team also identified and evaluated anaerobic digestion, dewatering, and post-dewatering options. Ultimately, a 20-year CIP will be delivered along with an adaptable roadmap that identifies management pathways the District can take upon specific regulatory or cost triggers.

CONTACT INFORMATION

Ken Tagney, Director of Water Reclamation
951-928-3777, ext 6255

PROJECT DATES

2023 - 2024



Water Pollution Control Plant Master Plan and Validation
City of Sunnyvale, CA

Carollo worked with another consultant to prepare a master plan for the City's Water Pollution Control Plant to address immediate deteriorating facility needs and plan for future projects to replace the plant's aging infrastructure. Carollo was responsible for developing liquid and solids treatment process improvements to meet anticipated regulations for a 20-year planning period. Project highlights include:

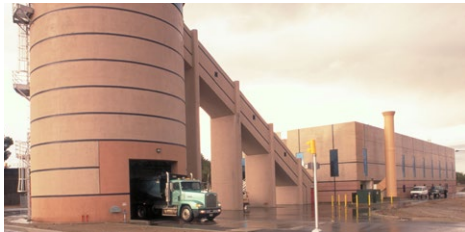
- Developed and validated wastewater flows and loads for the City's 14-mgd Water Pollution Control Plant.
- Performed hydraulic and process modeling of the treatment facilities to evaluate capacity and identify gaps.
- Performed a condition assessment of the plant's infrastructure and treatment processes to evaluate age, condition, and remaining useful life of major plant assets.
- Performed fast-track design of a new 60-mgd headworks facility that includes influent pumping, screening, and grit removal.
- As a follow-up phase, Carollo and another consultant designed the Secondary Treatment and Dewatering Project.

CONTACT INFORMATION

Bhavani Yerrapotu, Former WPCP Division Manager
408-265-2607

PROJECT DATES

2013 - 2024



Regional Wastewater Reclamation Facility Biosolids Master Plan
City of Fresno, CA

Carollo developed a biosolids master plan to outline a 20-year biosolids strategy for the 80-mgd Fresno-Clovis RWRF. Project highlights include:

- Performed a process evaluation involving updating the process model to include the latest operational data and determine future biosolids projections.
- Conducted a capacity and performance assessment to identify limiting components and recommended modifications.
- Evaluated solids processing alternatives, including thermal drying, pyrolysis, thermal hydrolysis, thermo-chemical hydrolysis, and composting.
- Estimated capital, operations and maintenance (O&M), and life-cycle costs and evaluated operational, social, and environmental impacts of biosolids alternatives.
- Partnered with Material Matters to conduct a regional market assessment for biosolids products.
- Engaged stakeholders in an interactive criteria-weighting and alternative-ranking process.
- Developed an implementation plan to diversify the City's biosolids reuse portfolio and mitigate long-term regulatory and financial risks.

CONTACT INFORMATION

Cory Asher, Water/Wastewater Manager
559-621-5170

PROJECT DATES

2018 - 2019

Key Personnel and Sub-Consultants

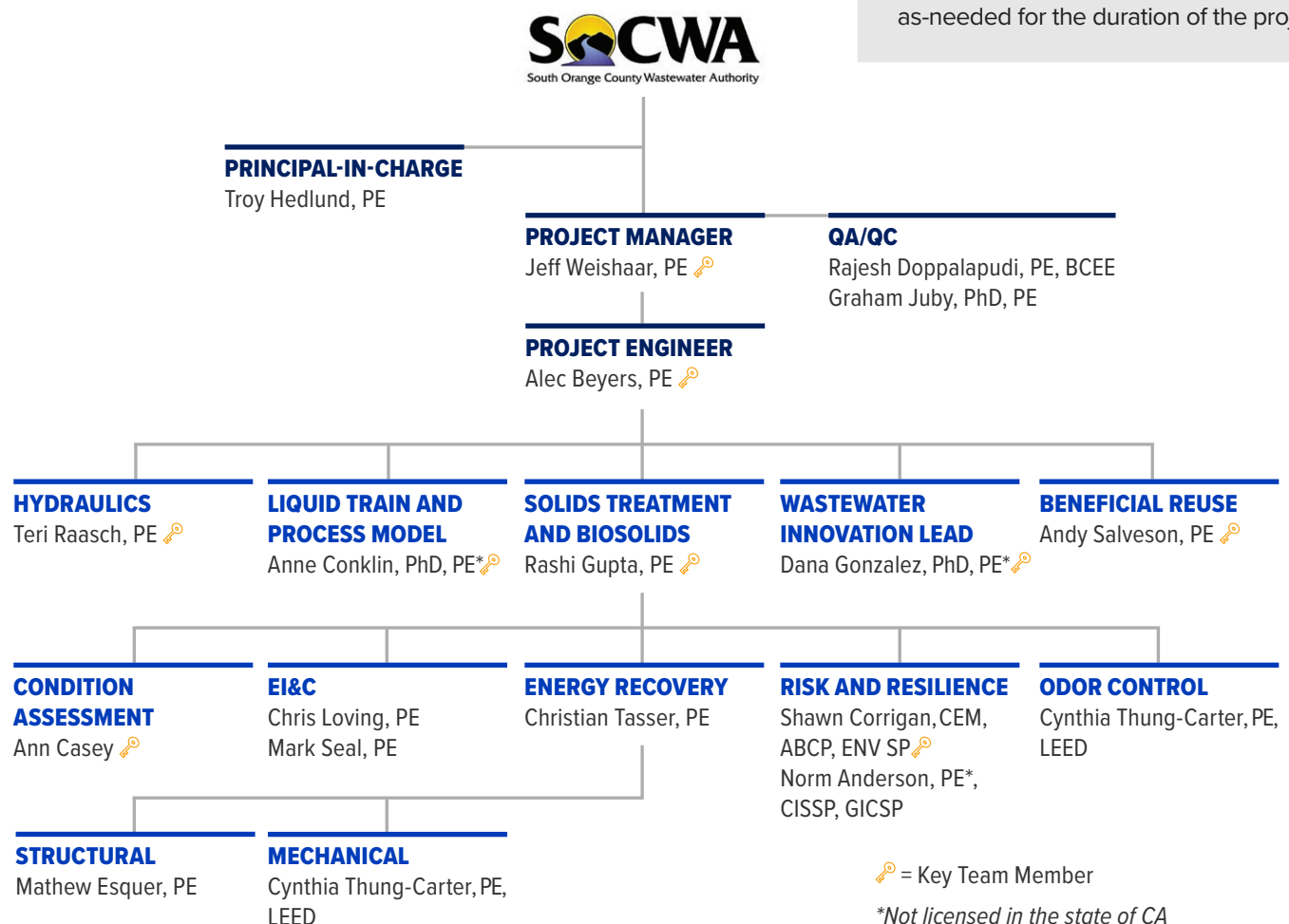
The Carollo team was hand-selected to provide you with a team of experts who know and understand the needs of this project. We do not anticipate the use of subconsultants to complete this work.

The success of the project lies in the experience and abilities of the project team. Carollo has dedicated a team that has completed numerous successful projects together, which provides enhanced abilities to meet your needs. The team is illustrated in the organization chart, with brief introductions on the following pages.

Resumes are provided in the appendix.

Availability

Our team is available for this assignment. Our project manager **Jeff Weishaar's** availability is **25 percent** for this project. Our project engineer, **Alec Beyers** has **50 percent** availability for this project. The other team members are available as-needed for the duration of the project.



Key Team Members



Jeff Weishaar, PE
PROJECT MANAGER

Jeff is a senior project manager with 20 years of experience in wastewater treatment facility planning, assessment, and design. He has led projects involving all aspects of water and wastewater treatment processes, including comprehensive facility evaluations, condition assessments, and capital improvement planning. Jeff’s expertise includes managing multidisciplinary teams, supporting client operations, and delivering actionable recommendations for infrastructure upgrades. He has successfully completed numerous projects throughout California, providing valuable insight into facility operations and regulatory requirements. **Jeff is responsible for providing project management services and will work with other key team members and technical experts to deliver a successful project.**



AVAILABILITY



Troy Hedlund, PE
PRINCIPAL-IN-CHARGE

Troy is Principal-in-Charge with more than 20 years of experience in electrical, instrumentation, and controls engineering for water and wastewater treatment facilities. He has managed all phases of project implementation, including planning, design, and construction, and is recognized for expertise in power distribution, process controls, SCADA, and PLC network design. Troy has led multidisciplinary teams on major facility planning and upgrade projects across California, delivering reliable, cost-effective solutions for municipal clients. His leadership and technical insight support successful project delivery, operational efficiency, and long-term infrastructure resilience. **Troy is responsible for providing technical and managerial insight to the project team.**



AVAILABILITY



Alec Beyers, PE
PROJECT ENGINEER

Alec is a project engineer with more than seven years of experience in the wastewater industry. He has contributed to process and mechanical design for both new and retrofit wastewater treatment facilities, as well as performed facility condition assessments for water and wastewater plants. Alec’s project experience includes leading evaluations, developing asset management systems, and supporting capital improvement planning. **Alec will serve as project engineer to assist Jeff in day to day management of the team. He will work with discipline leads to complete the technical work and assessments.**



AVAILABILITY



Teri Raasch, PE
HYDRAULICS

Teri is a hydraulics engineer with more than 11 years of experience specializing in the planning and design of wastewater treatment facilities. She has led hydraulic analysis and modeling for new and retrofit projects, including headworks, solids handling, and facility master planning. Teri’s expertise includes developing cost-effective hydraulic solutions and optimizing plant operations for municipal clients nationwide. Her project portfolio features major roles on the J.B. Latham Treatment Plant Facility Plan, San Francisco Public Utilities Commission’s Southeast Plant Headworks, and improvements for the Orange County Sanitation District. **Teri was previously responsible for building the JBLTP hydraulic model. She will continue to lead the hydraulic modeling needs for this project.**



AVAILABILITY



Anne Conklin, PhD, PE
LIQUID TRAIN AND
PROCESS MODEL

Anne is a recognized expert in liquid train process modeling and facility planning for wastewater treatment projects. With more than 16 years of experience, she specializes in the evaluation and optimization of secondary and tertiary treatment processes, particularly for facilities facing some of the nation’s most stringent nutrient removal requirements. Anne has developed and calibrated models for planning and design, efficiently identifying data gaps and providing actionable recommendations. Her project portfolio includes master planning and process optimization for major utilities across the Western U.S., supporting clients in achieving regulatory compliance and long-term operational goals. **Anne previously assisting in developing the biological model under the Package B project. She will continue to lead biological modeling and assist with the technical evaluations related to any secondary treatment and effluent reuse alternatives.**

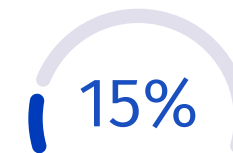


AVAILABILITY



Rashi Gupta, PE
SOLIDS TREATMENT
AND BIOSOLIDS

Rashi is a nationally recognized expert in solids treatment and biosolids management with more than 22 years of experience. As Carollo’s National Wastewater Practice Director, she leads the planning, design, and optimization of solids handling systems, including thickening, dewatering, digestion, and advanced biosolids processing. Rashi has managed projects for major utilities across the U.S., implementing innovative technologies such as hydrothermal liquefaction, gasification, and high solids digestion. Her expertise spans all project phases, from initial planning through startup, and she is known for delivering sustainable, cost-effective solutions that address regulatory requirements and operational goals. **Rashi led the previous Package B planning efforts. She will lead the biosolids alternatives evaluation.**



AVAILABILITY

Key Team Members (Continued)



Dana Gonzalez, PhD, PE
WASTEWATER
INNOVATION LEAD

Dana is a Principal Technologist at Carollo Engineers with over 15 years of experience in wastewater treatment, water quality, biosolids management, water reuse, and PFAS strategy. As Carollo’s Southern California PFAS Lead and Western Region Wastewater Innovation Lead, she integrates advanced technologies with practical operations knowledge to deliver resilient, compliance-ready solutions. Her expertise includes startup and optimization of processes such as thermal hydrolysis, sidestream nutrient removal, struvite recovery, and regional biosolids planning. **Dana will provide wastewater innovation leadership and a holistic perspective, providing integrated planning across both the liquid and solids streams. She will assist Anne and Rashi in the biosolids and liquid stream alternatives analysis and will lead the regulatory review.**



Andy Salvesson, PE
BENEFICIAL REUSE

Andy is Carollo’s Chief Technologist for Water Reuse and a nationally recognized expert in beneficial reuse engineering. With more than 31 years of experience, Andy has led planning, design, and research for potable and nonpotable reuse projects across the U.S. He specializes in advanced treatment technologies, regulatory strategy, and the demonstration of pathogen removal for water and biosolids reuse. He is known for delivering practical, sustainable solutions that advance the beneficial reuse of water resources. **Andy will assist in evaluating reuse alternatives for Title 22, IPR and DPR at the JBLTP.**



Ann Casey
CONDITION ASSESSMENT

Ann is a condition assessment engineer with more than 30 years of experience supporting water, wastewater, and energy utilities. She specializes in asset management and condition assessment. Anne’s expertise includes advanced analysis for long-term capital replacement, operational optimization, and risk management. She is recognized for leveraging industry best practices and innovative techniques to help utilities balance risk and capital investment while maintaining reliable service. Anne serves as a technical advisor and quality reviewer, providing practical solutions for infrastructure planning and asset management. **Ann will assist in developing executing the condition assessment.**



Shawn Corrigan, CEM, ABCP, ENV SP
RISK AND RESILIENCE

Shawn is a Certified Emergency Manager with more than 30 years of experience spanning water utilities, wildfire, public health, nuclear safety, marine search and rescue, education, and consulting. Shawn’s expertise is rooted in the application of planning frameworks, including the BC Emergency Management System (BCEMS), Public Safety Canada’s all-hazards guidance, FEMA’s National Preparedness System, EPA water sector continuity planning principles, and international standards for continuity management. He has worked with utilities and governments across North America to deliver vulnerability assessments, continuity of operations plans, emergency response programs, and scenario-based exercises that strengthen resilience against both natural and malevolent threats. **Shawn will lead tasks associated with risk and resiliency for the JBLTP.**



Carollo is recognized as a leader in wastewater master planning, delivering award-winning, comprehensive plans for municipal utilities. The firm’s experience spans a wide range of projects, from focused planning studies to large-scale regional master plans. Carollo’s approach addresses complex technical, legal, regulatory, and institutional challenges, providing cost-effective solutions that optimize existing assets and prioritize reliable, practical treatment alternatives.

WHAT DOES THIS MEAN TO SOCWA?
Simply this: Direct access to our local, expert team that is committed to you, resulting in practical, cost-effective solutions tailored to SOCWA’s wastewater treatment priorities and needs.

Certifications

1. Carollo certifies that it is not aware of any actual or potential conflict of interest that exists or may arise by executing the contract or performing the work that is the subject of this RFP.
2. Carollo certifies that it is willing and able to obtain all insurance required by the form contract included as Attachment C of the RFP.
3. Carollo certifies that it has conducted a reasonable and diligent inquiry concerning the minimum and/or prevailing wages required to be paid in connection with the performance of the work that is the subject of the RFP and certifies that the proposed pricing includes funds sufficient to allow Carollo to comply with all applicable local, state, and federal laws or regulations governing the labor or services to be provided.
4. Carollo acknowledges and agrees with all terms and conditions stated in the RFP.
5. Carollo certifies that all information provided in connection with its proposal is true, complete, and correct.

Carollo will maintain the required insurance during the life of the project. We agree to the contract language with the changes previously requested and accepted in our most recent contract. We would be happy to re-submit those previously requested changes, if needed, and discuss further with SOCWA.



Jeffrey Weishaar, PE
Project Manager / Vice President

Jeffrey A. Weishaar, PE

Jeff Weishaar, a civil and environmental engineer with Carollo Engineers, has worked on various wastewater projects, including elements of analysis, design, and construction.



RELEVANT EXPERIENCE

> **Project manager for the Encina Wastewater Authority, California, Process Master Plan for the Encina Water Pollution Control Facility.** Carollo prepared a process master plan to evaluate existing process operations, recommend necessary enhancements, and ensure the Encina Wastewater Authority continued operation with up-to-date technologies while maintaining effective reuse of Encina's water, biofuel, and biosolid resources.

> **Project engineer for the Sweetwater Authority, California, Robert A. Perdue Water Treatment Plant Facilities Master Plan Update.** Carollo completed a detailed condition assessment plan and investigation to create an overall asset list for installed equipment at the plant, including structural, mechanical, electrical, and instrumentation assets. The project also includes process improvement evaluations to explore safer use of chemicals on site; replaces the aging clearwell facility; improves chemical handling, conveyance, and mixing; upgrades the intake structure to reduce manpower needed for operational tasks; and assesses potential regulatory requirements that could alter the treatment process at the plant.

> **Project engineer for the Olivenhain Municipal Water District, California, Chemical Tank Replacement project.** Carollo provided Carollo to provide design services for the replacement of the sodium hypochlorite storage tanks at the David C. McCollom Water Treatment Plant and the 4S Ranch Water Recycling Facility.

> **Project manager and process mechanical lead for the San Elijo Joint**

Powers Authority (SEJPA), California, San Elijo Water Reclamation Facility Plan Update. The purpose of this Facility Plan Update was to provide SEJPA with a planning document that identified and prioritized potential improvements at the San Elijo WRF. Projects were identified based on a comprehensive condition assessment of the installed assets, a review of regulatory issues and potential changes, and potential process enhancements. Additional work was performed to update the Wastewater Asset Management database previously prepared for SEJPA.

> **Project engineer for the City of Barstow, California. Wastewater Treatment Plant Improvements Phase 1 Project.** This project covered multiple subtasks including condition assessment of the wastewater treatment plant, project development and ranking, process modeling, preliminary design and final design. The Phase 1 construction project includes rehabilitation of the aeration basins, secondary clarifiers, and gravity thickener, as well as SCADA upgrades, a new dewatering facility and new standby generator and additional miscellaneous site piping, electrical and instrumentation upgrades. The Phase 2 construction project will include upgrades to the primary clarifiers and aerobic digesters as well as a new influent pump station, a new electrical control building and additional SCADA, electrical, and instrumentation upgrades.

> **Project engineer for the Regional Treatment Plant Headworks Upgrade for the South Orange County Wastewater Authority, California.** The project involved production of drawings

and contract documents for replacement of the headworks building roof; rehabilitation of the existing mechanical bar screens; installation of new conveyors, screenings dewatering equipment, level measurement equipment in the existing channels for bar screen controls, and gas analyzers; channel concrete repair; odor control; and electrical and instrumentation modifications and upgrades. Roof replacement also incorporated a temporary odor control system with focus on the contractor's responsibility in capturing odors. He provided construction management services, submittal review, and responses to contractor requests for information.

> **Project manager for the City of San Diego, California, Alvarado Water Treatment Plant Stainless Steel Piping Condition Assessment.** Carollo was asked to perform a condition assessment for the City to determine the condition of all the gallery piping and estimate useful remaining life. However, only the wash water supply piping was assessed due to hydraulic issues with valving not holding flow and limited shutdown time. The wash water supply piping is 30 inches in nominal diameter and is constructed of Type 304L stainless steel. The results of the condition assessment will be used to determine if rehabilitation or replacement of the Type 304L stainless steel piping is recommended. Based on the conclusions of the condition assessment rehabilitation and replacements options considered, rehabilitation of the piping was determined not feasible.

> **Project manager for the City of Oceanside Facility Needs Condition Assessment.** This project provided condition assessment at three treatment plants owned and operated by the City.

Specific duties included coordination and overall lead for the condition assessments, civil and mechanical condition assessment, identification of potential improvement projects; project cost estimating; and report preparation. Recommendations for project implementation, based on criticality and available budget, were provided to assist the City in preparing for their upcoming fiscal year budget and updating the Capital Improvements Program.

> **Project engineer for the J.B. Latham Treatment Plant Facility Plan for the South Orange County Wastewater Authority, California.** The Facility Plan provided a 20-year planning window for liquid and solids treatment, flow analysis, odor control, energy management, site planning, and regulatory issues. Project duties included flow and plant capacity analysis, solids treatment analysis for thickening and digestion, site planning, cost estimating, and report preparation.

> **Project engineer for the La Salina Treatment Plant Facility Plan for the City of Oceanside, California.** His responsibilities included condition assessment of civil, process, and mechanical facilities; identification of potential improvement projects; project cost estimating; and report preparation. Recommendations for project implementation, based on criticality and available budget, were provided to assist the City in preparing for their upcoming fiscal year budget and updating the Capital Improvements Program.

Troy A. Hedlund, PE

Troy Hedlund has 20 years of experience as a project manager and as an electrical and instrumentation engineer in the design of water and wastewater treatment plants, large-scale solar photovoltaic (PV) systems, and cogeneration facilities. His experience encompasses all phases of project implementation (planning, design, and construction) and many facets of EI&C engineering including high-, medium-, and low-voltage power distribution and generation system design, process and motor controls, and SCADA and PLC network design.



RELEVANT EXPERIENCE

> Electrical/I&C engineer for the Sweetwater Authority, California, Robert A. Perdue Water Treatment Plant Facilities Master Plan Update.

Carollo completed a detailed condition assessment plan and investigation to create an overall asset list for installed equipment at the plant, including structural, mechanical, electrical, and instrumentation assets. The project also includes process improvement evaluations to explore safer use of chemicals on site; replaces the aging clearwell facility; improves chemical handling, conveyance, and mixing; upgrades the intake structure to reduce manpower needed for operational tasks; and assesses potential regulatory requirements that could alter the treatment process at the plant.

> Electrical engineer for the San Elijo Joint Powers Authority (SEJPA), California, San Elijo Water Reclamation Facility Plan Update. The purpose of this Facility Plan Update was to provide SEJPA with a planning document that identified and prioritized potential improvements at the San Elijo WRF. Projects were identified based on a comprehensive condition assessment of the installed assets, a review of regulatory issues and potential changes, and potential process enhancements. Additional work was performed to update the Wastewater Asset Management database previously prepared for SEJPA.

> Lead solar feasibility analyst for the City of San Diego, California, North City Pure Water Facility Design Solar PV Evaluation.

As part of the San Diego North City Pure Water Facility design, Carollo performed a detailed technical and economic evaluation to assess the feasibility of including a 1.0MW solar PV system as part of the overall facility construction.

> Lead solar feasibility analyst for the City of Porterville, California, Wastewater Treatment Facility Energy Alternatives Evaluation.

Carollo assessed the feasibility of constructing a 1.0-MW ground-mount solar PV array at the facility.

> Lead solar feasibility analyst for the South Orange County Wastewater Authority (Dana Point, California) J.B. Latham Treatment Facility Energy Building Solar PV Feasibility Evaluation.

As part of a design project to implement various improvements at the J.B. Latham Treatment Facility, Carollo performed a solar PV feasibility evaluation. The evaluation assessed the technical and economic feasibility of three options to offset energy demand with solar PV technology.

> Project manager for the Major Plant Automation Upgrades, City of Oceanside, California.

The facilities and infrastructure covered by the upgrades included two water treatment facilities, two wastewater treatment facilities, the wastewater collection system, water distribution system, and the telemetry

interconnection infrastructure. Troy was responsible for managing this system-wide project, which involved seven separate design teams responsible for developing optimized control strategies, P&IDs, networking replacement, and various control system upgrades through the City's infrastructure. He also worked with the integration subconsultant, TSI, to develop design documents, cutover approaches, and associated costs for the replacement or rehabilitation of more than 100 PLC panels throughout the City.

> **Lead electrical and instrumentation engineer for the San Clemente Water Reclamation Plant Recycled Water System Expansion Project, San Clemente, California.** The project included the replacement of the electrical distribution and process control systems associated with the existing water reclamation facilities. In addition to serving the existing facilities, the new electrical distribution and process control systems also serve new facilities designed to increase the plant capacity from 2.2 mgd to 4.4 mgd. The plant treats secondary effluent from an adjacent wastewater treatment plant for distribution as reclaimed water.

> **Project manager and lead electrical and instrumentation engineer for the City of San Diego Public Utilities District, California, Pump Stations 1 and 2 Electrical Upgrades Project.** The project consisted of replacement of medium- and low-voltage electrical equipment, including 4.16-kV switchgear and motor starters, 480-V switchgear, diesel engine generators, and motor control centers at two of San Diego's most critical raw sewage pump stations, and reconfiguring the facility control systems to monitor and control the new electrical equipment. In addition to the electrical and control

system upgrades, the project also included the design of a new electrical building. The project included extensive coordination with San Diego Gas & Electric related to implementation of the new electric service for the facility.

> **Lead electrical and instrumentation design engineer for the El Estero Wastewater Treatment Plant Influent Screen Improvements Project for the City of Santa Barbara, California.** The project included the design of new influent bar screens, a screenings conveyor, and washer/compactor units and the design of electrical, instrumentation, and controls required to accommodate the new equipment installed with the project.

> **Electrical design engineer for the Sunset View Mobile Home Park Lift Station for Owen Engineering, Englewood, Colorado.** The project consisted of the design of a new sewage lift system, which included a duplex lift pump system, a utility service entrance, and a standby generator.

> **Lead electrical engineer for the P1-105 Headworks Rehabilitation Project for the Orange County Sanitation District (OC San), California.** The project included complete replacement of the existing influent facilities, including influent screening facilities, metering & diversion facilities, grit removal/handling facilities, and odor control, to replace existing equipment at the end of service life and to increase the hydraulic capacity of the overall influent processes to 320 mgd. The project also included extensive upgrades to the electrical and controls systems, including a new 12.47kV power distribution center, and a new 10mW standby power facility.

Graham J.G. Juby, PhD, PE



Dr. Graham Juby, a vice president with Carollo Engineers, has 42 years of experience in planning, testing, and process design for water and wastewater treatment facilities, with an emphasis on water reuse. He has focused on advanced treatment processes such as low- and high-pressure membrane systems (microfiltration and reverse osmosis), nutrient removal, and the application of ozone, granular activated carbon (GAC), biological filtration, ion exchange, and ultraviolet (UV). His background in these technologies includes both pilot plant and full-scale design experience. His experience also includes many planning projects. He has also been involved with several fast-track and alternative delivery projects.

RELEVANT EXPERIENCE

> **Project manager/Principal-in-charge for the 2015 Wastewater Facilities Master Plan Update for the Eastern Municipal Water District (EMWD), California.** This assignment involved demand projections, analysis, development of trigger curves based on plant organic loading, and evaluation of new facilities needs at all four of EMWD's regional water reclamation facilities (RWRFs). Anticipated layouts for each RWRf were developed along with capital costs to take all facilities to their ultimate buildout capacities in 2060.

> **Principal-in-charge for the City of Chino Hills, California, Citywide Wastewater Master Plan Update.** Carollo developed a new wastewater model using the City's latest GIS, developed a flow monitoring plan with detailed maps, installed 13 flow meters at key locations with support from V&A, calibrated the model to provide an accurate representation of the current system, and performed QA/QC at key milestones. The flow factors were updated as part of this effort, and the ongoing water master plan was considered so that planning assumptions aligned between reports. In addition, Carollo completed CCTV on 20 miles of pipeline and performed condition assessments of the City's sewer system to develop a comprehensive understanding of the system condition and propose a

rehabilitation approach to increase the useful life of the current assets.

> **Project manager for the evaluation of membrane bioreactor (MBR) technology as an alternative for expanding the capacity of Plant 3A for the South Orange County Wastewater Authority, California.** Plant 3A is currently operating at around 4 mgd with a capacity of 6 mgd. A technical and economic evaluation was performed to investigate how all or part of the plant could be retrofitted with membranes to increase the capacity to 8 mgd. Both combined aeration/membrane tanks and separate membrane tanks were evaluated and compared with a conventional plant expansion and tertiary filtration, and an expansion involving the *IMANS*® approach.

> **Project engineer for the City of Johannesburg, South Africa, on a team investigating several sludge disposal options for treatment of up to 330,000 pounds per day of dry biosolids from three of the City's largest sewage works.** Specific disposal options evaluated included composting, incineration, high-lime process, land disposal, and palletization. Evaluation was both technical and financial and included life-cycle costing. The final process chosen was composting, after which preliminary design of the sludge blending, dewatering, and dewatering

liquor treatment processes was carried out.

> Project leader for the investigation of options for the use of biogas produced by digesters at the Goudkoppies, South Africa, sewage works and the biogas produced by a nearby landfill.

The project involved the investigation of various use options, including use in power generation, as a chemical feedstock, as fuel for the local industries, hospitals, or power stations, as an energy source for sludge drying, and as a fuel for powering motor vehicles. The investigation involved both technical and economic evaluation.

> Process engineer for evaluating alternatives to expand the milk processing waste treatment facilities for the City of Tulare, California.

Future capacity requirements are 6 mgd of high-strength (2,000 mg/L BOD) milk processing waste. Options investigated included modification of existing pond arrangement and augmentation of anaerobic digester capacity by installing a high rate upflow anaerobic sludge blanket digester followed by polishing in the ponds. The plant also treats 6 mgd of domestic wastewater and consideration of the final blended quality in terms of total dissolved solids, electrical conductivity, and nitrogen content was included in the investigation.

> Principal-in-charge and Project Manager for the 2019 Update of the Integrated Master Plan for the Wastewater Collection and Treatment Facilities for the City of Riverside, California.

This comprehensive master plan has a 20-year outlook and began in 2017. For the collection system, it included a condition assessment of lift stations and sewers, hydraulic modeling, age analysis, and an assessment of future flows to establish the required CIP to

meet repair and replacement (R&R) and growth. The 46-mgd treatment plant evaluation also included condition assessment of selected facilities, process modeling to establish unit process capacity, consideration of potential regulations (including future total nitrogen and total phosphorous limits and salinity reduction), climate change impacts, and requirements for R&R and growth. The master plan also included a comprehensive financial plan and analysis of user rates and fees.

> Project manager for the 2019 Water System Master Plans for East Orange County Water District, California.

The master planning effort included a 20-year outlook for both the wholesale and retail zones for the District. The project also included the preliminary design of a new replacement water treatment plant for the District, and a condition assessment of two existing reservoirs.

> Principal-in-charge for Carollo's portion of the work for the 2015 Wastewater Facilities Master Plan Update Report for the Inland Empire Utilities Agency (IEUA), California.

This assignment involved demand projections, analysis, hydraulic modeling, and evaluation of technology needs and cost estimates for five IEUA treatment facilities through the planning horizon of 2060.

> Principal-in-charge for the 2014 and 2024 Water System Master Plans for Mesa Water District, California.

This assignment involves demand projections, water supply analysis, hydraulic model update and calibration, extensive field condition assessment, and development of an optimization model. As part of the field condition assessment, all water system facilities (8 groundwater wells, 1 treatment plant, 2 reservoirs, 2 booster stations, and imported water connections) were visited

Rajesh B. Doppalapudi, PE, BCEE



Rajesh Doppalapudi is a civil engineer specializing in the analysis and design of water and wastewater projects. With 25 years of experience in project management and process engineering, he has contributed to numerous wastewater treatment, solids handling, and disposal projects. Over the past five years, he has managed projects with a total planned construction value exceeding \$5.5 billion. His expertise in constructability and cost estimating contributes to the efficient and effective delivery of projects.

RELEVANT EXPERIENCE

> **Project manager for the Eastern Municipal Water District, California, Regional Water Reclamation Facilities Master Plan Update.**

The project includes developing trigger curves to identify future facilities expansion requirements and developing annual capital expenditures for the next 30 years for the four RWRFs owned and operated by EMWD.

> **Project manager for the San Jacinto RWRf Plant 1 Rehabilitation project for the Eastern Municipal Water District (EMWD), California.** The project includes the rehabilitation of Plant 1 Aeration Basins, a new Mixed Liquor pump station, demolition of existing abandoned facilities, and other miscellaneous improvements. Rajesh oversaw the design and worked closely with the District staff to ensure the project was on time and proper QA/QC procedures were followed.

> **Master plan lead for the Wastewater Treatment Plant Program Management Services for the City of Santa Maria, California.** The project includes providing program management services for the City's wastewater treatment plant upgrades to support compliance with new effluent requirements and long-term capacity planning. The scope includes development of a 35-year wastewater master plan, analysis of percolation pond capacity and alternatives, coordination with regulatory agencies,

development of a citywide outreach strategy, and oversight of program management, design, construction, and commissioning of new and upgraded facilities.

> **Process lead for the P2-136 Activated Sludge Aeration Basin Rehabilitation Project for Orange County Sanitation District, California.**

The project aims to rehabilitate the existing activated sludge plant, which has been operational for more than 40 years, to extend its useful life and improve operational efficiency. Carollo is leading the rehabilitation efforts. The project involved comprehensive condition assessments and multiple shutdowns during construction to maintain safety and reliable treatment capacity. Project scope includes structural rehabilitation of aeration basins, surface aerator optimization, and improvements to the influent splitter box and purge fan room.

> **Task lead for the Eastern Municipal Water District, California, RWRf Biosolids Master Plan.** The Carollo team conducted a field condition assessment of several RWRFs. Findings were compiled in the Biosolids Master Plan to help EMWD evaluate the process changes and conditions of repairs necessary prior to implementation of a biosolids process and operations program change. The team evaluated different processes and potential impacts to EMWD's biosolids management. The project outcome is a

roadmap to diversify biosolids management, update the CIP for new solids processes, and provide a path to mitigate future biosolids management regulatory risks, including PFAS.

> **Project manager for the ongoing Eastern Municipal Water District, California, Moreno Valley RWRP Plant 2A Rehabilitation project.** The project consists rehabilitation of the Plant 2A aeration basin at MVRWRF that has been in operation for 20-years. In addition, there are other scope items, such as replacement of a portion of the 42-inch stainless steel air header for Plant 2. The project is working towards the 90-percent design deliverable and is expected to go into construction in June 2025.

> **Design manager for the Los Angeles County Sanitation Districts, California, Valencia Water Reclamation Plant North Aeration Process Improvements.** The project includes development of full plant process and hydraulic models to identify the bottlenecks for capacity limitations. As part of final design project, the existing CaRRB tanks are being equipped with new panel diffusers and the existing north aeration blowers are being replaced with new high-speed turbo blowers. The project also includes miscellaneous improvements to optimize energy use and recover the overall secondary treatment capacity.

> **Project engineer for the Los Angeles County Sanitation Districts, California, Facilities Master Plan Update.** The project includes developing Master Facilities Plans (MFP) for treatment plants within the Joint Outfall System (JOS) including the 100-mgd San Jose Creek WRP, Long Beach WRP, Los Coyotes WRP, Pomona WRP and Whittier Narrows WRP. The ultimate goal of the MFP is to identify the CIP

needs for the next 20 years and establish a road map for LACSD to address all future project requirements resulting from changes in population, regulations, aging equipment, and reuse/recycle needs.

> **Project engineer for the City of Riverside, California, Comprehensive Wastewater Master Plan.** Carollo provided an update to the City's 2008 Master Plan, including a visual condition assessment of the collection system and Regional Water Quality Control Plant. The new plan included flow monitoring, flow and process modeling, a Waste Discharge Requirements GAP analysis, development of a CIP for the collection system and treatment plant, and a financial plan.

> **Project engineer for the Orange County Sanitation District, California, 2017 Facilities Master Plan.** Carollo provided a comprehensive update to the 2009 Facilities Master Plan, including the collection system and the two Plants facilities. The project included identifying CIP projects for the next 20 years based on various end of life assessment drivers. The identified projects were then prioritized to meet OCSD's cash flow requirements. The project also included developing an estimate of the replacement value of all of OCSD's facilities.

> **Project engineer responsible for site development and bypass pumping for the Eastern Municipal Water District (EMWD), California, 2020 Warm Springs Lift Station Condition Assessment and Preliminary Design.** This fast track project involved the condition assessment of a 30-year-old active 37-mgd raw wastewater lift station and the two upstream sewers.

Alec Beyers, PE

Alec Beyers is an environmental engineer with over 5 years of experience, largely in the wastewater industry, including process and mechanical design for all areas of wastewater treatment for both new facilities and retrofits of existing facilities. Alec also has experience performing facility condition assessments for both water and wastewater treatment plants.



RELEVANT EXPERIENCE

→ **Project engineer for the David C. McCollom WTP Condition Assessment Olivenhain Municipal Water District, California.** Condition assessment of 35mgd water treatment plant. Coordination with client, staff, and subs for condition assessment. Created condition assessment report and asset condition database. Recommended projects and created project cost estimates.

→ **Project engineer/lead engineer San Elijo JPA NdN Conversion & CCB Upgrades Final Design, San Elijo, California.** San Elijo JPA NdN Conversion & CCB Upgrades Final Design. Upgrades to existing WWTP including modifications to aeration treatment process for nitrification/denitrification and addition of biosolids intensification process. Coordinated with prime consultant during design. Lead mechanical design engineer.

→ **Engineer for the North City Pure Water Facility Final Design, City of San Diego, California.** ESDC for new advanced water treatment plant. Redlines during construction.

→ **Engineer for the PDF Sodium Hypochlorite Storage and Feed.** Startup operations manual for new chlorination facility. Lead creation of energy control procedures for new facility.

→ **Project engineer/lead engineer for the WWTP Water Quality Project.** Upgrades to existing WWTP including modifications to aeration, new dewatering facility and secondary

clarifiers. Coordination with client and subconsultants. Lead process/mechanical engineer. Conducted process modeling using BioWin software.

→ **Construction manager for the Encina WWA Digester Phase II Improvements Construction Management.** Construction Management of digester retrofit, DAFT retrofit. Lead CM meetings. Distributed RFIs/submittals and coordinated with design engineer.

→ **Project engineer for the Solvang Grant Assistance for WWTP Upgrades, City of Solvang, California.** Investigate and secure funding for \$18m WWTP upgrades project. Created engineering report for USDA project funding. Coordinated with client, USDA, and subs.

→ **Owner's Advisor for the East County AWP Owners Advisor Services - Phase 2 FY23-FY26, East County, California.** Owner's advisor during construction of new WWTP, solids handling facility, and advanced water treatment plant. Drone flying to capture construction progress. Change order analysis and negotiation. Construction tracking and analysis.

→ **Project engineer for the Barstow Citywide Wastewater & Sewer Facilities Master Plan, City of Barstow, California.** Master plan for existing WWTP and sewer system. Condition and capacity analysis of existing WWTP's ability to handle future flows. Created project alternatives/solutions and cost estimates.

→ **Engineer for the Water Quality Improvements Project Business Case Evaluation, U.S Environmental Protection Agency.** Business case evaluation for feasibility of upgrading existing WWTP. Worked with discipline engineers to create project cost estimate and feasibility.

→ **Lead engineer for the Solvang Source Water Improvement Study, City of Solvang, California.** Study and provide recommendations for WWTP permit compliance for Regional Water Quality Control Board. Created compliance plan for Regional Water Board which recommended source water study. Coordinated with client and subconsultants to complete compliance activities and write tech memos detailing drinking water system. Compiled historical data and conducted analysis. Created Study Report summarizing findings, outlining project alternatives/costs, and providing recommendations for compliance.

→ **Lead engineer for the Solvang Evaluation of Los Olivos Flows on the Wastewater Treatment Plant, City of Solvang, California.** Study and provide evaluation of feasibility for potential future connection to another city's WWTP. Created study to evaluate feasibility of potential future connection to existing WWTP. Provided recommendations/requirements to do so. Board presentation of findings.

→ **Process engineer for the City of Redlands, California, WWTP Expansion Project.** Responsible for planning and process mechanical design for conversion of existing conventional activated sludge (CAS) process to membrane bioreactor (MBR) activated sludge treatment. The design included reconfiguration of the aeration basins as well as replacement of fine bubble disc diffusers and addition of coarse bubble

air mixing system. Multiple technical memoranda written to address State Water Board concerns, created preliminary design report, and created process models using BioWin software.

> **Project engineer for the City of Redlands, California, WWTP Digester Improvement Project.** Responsible for emergency process mechanical design of digester sludge heater replacement to replace existing equipment that was out of compliance. Created mechanical plans, reviewed equipment submittals, and answered contractor requests for information (RFIs) during project construction.

> **Process engineer for the design of the Regional Water Recycling Plant No. 5 Expansion Project for the Inland Empire Utilities Agency, Chino, California.** Project included expansion of the existing liquids tertiary treatment train from 15 million gallons per day (mgd) to 30 mgd, as well as the addition of a greenfield solids treatment train. As the project engineer during construction, responsibilities included coordinating with design engineers, client, and construction management team to answer RFIs, review submittals, and resolve issues during construction. Led the effort to write the plant's operation and maintenance manual to capture all existing and new facilities.

> **Process engineer for the design of Upgrades and Expansion projects for the Elsinore Valley Municipal Water District Regional Water Reclamation Facility, Elsinore Valley, California.** The Upgrades Project included design of redundancy and reliability upgrades, including new solids handling building equipped with belt filter presses. The Expansion Project included design of treatment expansion from 8 mgd to 12 mgd.

Theresa L. Raasch, PE

Teri Raasch is a design manager with experience leading detailed design of new or retrofit large wastewater treatment facilities. She has provided planning, design, and construction services for clients such as the San Francisco Public Utilities Commission, Orange County Sanitation District, and City of Sunnyvale, California.



As a member of Carollo's Headworks Expert Team, she participates in concept development and technical review for headworks projects across the country. In this role, she is exposed to success stories, lessons learned, and misinterpretations about all types of headworks. She has personally designed several headworks projects with state-of-the-art systems, O&M friendly features, and customized solutions to meet her client's specific needs. She also has expertise in hydraulic analysis, and has developed hydraulic models and cost-saving hydraulic solutions for complex treatment plants across the nation.

RELEVANT EXPERIENCE

→ **Hydraulics Engineer and Assistant Project Engineer for the Primary Treatment Facility Headworks for the City of Sunnyvale, California.** This project replaces aging headworks and primary sedimentation tanks with 60 mgd capacity. She led the design of a new screening facility, grit removal basins, and a grit and screenings handling and loading facility. She also assisted with design of the new influent pump station, performed hydraulic profile calculations, and developed the engineer's construction cost estimate for those areas.

→ **Hydraulics Engineer and Grit System Project Engineer for the Southeast Plant's New 250-mgd Headworks, San Francisco Public Utilities Commission (SFPUC), California.** The project replaces two existing headworks facilities with a single new headworks to significantly increase screening and grit removal and to provide plant staff and the surrounding community with the highest level of standards for reliability, aesthetics, odor control, and noise abatement. The project addresses major challenges including very tight site space, high groundwater, poor soils, heavy urban setting, extremely high influent grit loads from this combined

sewer system, and protecting SFPUC's major investment in state-of-the art solids treatment and handling facilities. Her responsibilities included design of new grit basins, grit handling, and primary influent distribution structures, hydraulic profile development and cost estimation. She also oversaw the computational fluid dynamic (CFD) and physical modeling of various hydraulic structures that confirms the innovative solutions which optimize process performance and hydraulics of the new facilities.

→ **Hydraulics Engineer for 120-Inch Diameter Ocean Outfall Condition Assessment and Scoping Study (PS18-09).** She led low flow hydraulics evaluation of the diffuser and identified mitigation measures for seawater intrusion and marine biofouling.

→ **Hydraulics engineer for the PAR 1225 South Headworks and Grease Processing Facility Improvements Project, Metro Wastewater Reclamation District, Denver.** This work involves extensive modifications to the existing screening, grit removal, and grease processing facilities for the 145-mgd South plant. She analyzed the hydraulics of the existing plant and developed a complete hydraulic profile

for the preliminary design phase of the project.

→ **Hydraulics engineer for the RP-1 Solids and Liquids Capacity Improvements project.** She was responsible for developing hydraulic profile of plant at increased capacity of 80 mgd. She was also responsible for identifying solutions for improving influent plant metering, improving screen capture, achieving primary splitting, and simplifying plant operation.

→ **Hydraulics engineer for Roberto R. Bustamante Wastewater Treatment Plant Headworks Improvements, El Paso Water, Texas.** She developed the hydraulic profile of the treatment plant at increased capacity of 120 mgd. She was also responsible for developing ideas to increase hydraulic flexibility for operations and identify hydraulic risks during construction.

→ **Hydraulics engineer for the J.B. Latham Treatment Plant Facility Plan, South Orange County Wastewater Authority, California.** The Facility Plan provided a 20-year planning window for liquid and solids treatment, flow analysis, odor control, energy management, site planning, and regulatory issues. Project duties included flow and plant capacity analysis, development and calibration of hydraulic profile, and report preparation.

→ **Hydraulics engineer and design**

engineer for the Wastewater Treatment Plant Upgrade Project for the City of Palm Springs and Veolia Water West Operating Services, California. The project's tight budget incorporated necessary upgrades of the plant's headworks screenings and grit removal, primary clarifiers, primary sludge pump station, primary influent pump station, digester dome replacement, odor

control, and sludge dewatering. During predesign, she assisted in developing cost-saving alternatives and configurations for the primary influent pump station, digester dome replacement, odor control, and sludge dewatering facilities.

→ **Hydraulics engineer for Valencia Water Reclamation Plant ECM, Schneider Electric, CA.** She developed plant wide hydraulic model for exploring feasibility to expand plant flow to 48 mgd and manage flow splits to meet process goals under various conditions. She identified hydraulic constraints and developed cost-saving solutions to junction boxes which simplified plant hydraulics and resulted in desired flow splits.

→ **Hydraulics engineer for San Jacinto Valley Water Reclamation Facility Plant 1 Rehabilitation, Eastern Municipal Water District, CA.** Her duties included analyzing influent flow data and developing the 23 mgd plant-wide hydraulic model to evaluate various rehabilitation alternatives.

→ **Hydraulics engineer for Equipping of Plant 2B at Moreno Valley Regional Water Reclamation Facility, Eastern Municipal Water District, CA.** Her duties included analyzing influent flow data and developing the 28 mgd plant-wide hydraulic model to evaluate new splitter box locations and option for upgraded secondary treatment processes.

Anne Conklin, PhD, PE

Dr. Anne Conklin has 28 years of experience and is an established expert in the evaluation and optimization of secondary and tertiary treatment processes, a position gained through work at treatment facilities that have, or are planning for, some of the strictest nutrient removal requirements in the nation. Over the past several years, Anne has led Carollo's process modeling and analyses for planning and improvements projects in the Pacific Northwest Region.



RELEVANT EXPERIENCE

> **Process engineer for the Central Contra Costa County, California, Master Plan.** Worked with the District to determine how to expand their current plant to meet eventual total nitrogen and phosphorous limits. Developed flow and load projections and used a calibrated model to assess the capacity of their current process.

> **Modeling specialist for the Denver Metro Wastewater Reclamation District, Colorado, South Secondary Process Capacity Evaluation.** Worked with the District to calibrate and validate their existing BioWin model. Used the calibrated model to evaluate scenarios to improve plant-wide nitrification stability, denitrification, and phosphorous removal.

> **Modeling for the Casa Grande Wastewater Treatment Plant in Phoenix, Arizona; domestic and industrial plants for Livingston, Arizona; and the Roseville and Visalia Wastewater Treatment Plants in California.** Developed calibrated process models for new and existing plants meeting stringent total nitrogen limits, including

> **Process engineer for the Water System Plan Update (2014) for the Covington Water District, Washington.** This plan included a comprehensive system analysis to evaluate the current and future systems. Identified deficiencies in pipeline, storage, treatment, and pumping capacity

considering the demand changes for the planning year scenarios.

> **Process engineer for the Water System Plan Update for the City of Renton, Washington.** Included development of a 60-year demand forecast and updating and calibrating their InfoWater hydraulic model. The Plan also included a full system analysis with an evaluation of the City's pump stations, water storage tanks, and system capacity needed for both existing and future conditions.

> **Process engineer for the City of Lacey, Washington, Comprehensive Water Plan.** Developed the planning criteria, existing system analysis, and source of supply analysis for the Plan.

> **Process engineer for the City of Auburn, Washington, On-Call Services** contract that included planning, hydraulic modeling, and engineering services associated with water supply analysis, capital improvement program development and implementation, system development expansion and periodic model updates.

> **Process engineer for the City of Gig Harbor, Washington, Water Supply Evaluation.** Conducted the demand analysis for the evaluation of potential groundwater supply sites for the City to meet their long-term water supply needs.

> **Process engineer for the Covington Water District, Washington, proposed M-34 204th Ave SE 660 to 650 Zone Project** to determine the feasibility of

eliminating the failing booster pump station serving the “closed” 650 zone and replacing 650 zone service with a passive connection to their 660-zone allowing a more reliable, redundant water supply. Evaluated the potential storage impacts resulting from connecting the two pressure zones.

> **Project engineer for the City of Auburn, Washington, Comprehensive Water Plan.** Assisted the City with water demand projections, water rights management, and plans for how upgrade their well facilities and coordinate with neighboring utilities to meet their water demands through the planning period.

> **Process engineer for the City of Modesto, California, Wastewater Master Plan.** Developed a plant-wide BioWin model. Worked with the City to determine how best to meet future growth and future nutrient limits.

> **Process engineer for the City of Caldwell, Idaho, Master Plan.** Worked with the City to determine how to meet stringent phosphorous limits of less than 0.1 mg/L total phosphorous.

> **Process engineer for the City of Sunnyvale, California, Wastewater Treatment Master Plan.** Worked with the City to determine how to expand their current plant consisting of ponds and trickling filters to meet eventual total nitrogen and phosphorous limits. Developed flow and load projections along with a model of the future process. Recommended an interim split treatment approach that allowed the City to continue the use of its existing infrastructure while adding a first phase of a conventional activated sludge treatment.

> **Process engineer for the City of Turlock, California Wastewater**

Treatment Master Plan. Worked with the City to determine how to meet eventual total nitrogen limits with a trickling filter / activated sludge plant. Recommended expansion of the aeration basins and clarifiers and modifications to the existing basins to allow for operation in an MLE configuration.

> **Process engineer for the City of Morro Bay, California, Capacity Evaluation for the California Men's Colony Wastewater Treatment Plant.** Evaluated the capacity of the existing California Men's Colony Wastewater Treatment Plant to determine the expansion requirements to treat wastewater from the communities of Morro Bay and Cayucos Sanitary Districts.

> **Process engineer for the Clackamas County Water Environment Services Willamette Master Plan, Oregon.** The facilities master plan included the development of a 20-year capital plan that identifies improvements to the District's Kellogg Creek and Tri-Cities facilities and associated conveyance infrastructure to provide the best value to WES ratepayers by maximizing the use of existing infrastructure and optimizing system operation while continuing to protect water quality and human health and support economic development. This effort will also include resiliency planning.

> **Process engineer for the Wastewater Facility Plan for the City of Wilsonville, Oregon.** The project includes the development of a long-range wastewater master plan for the Wilsonville Wastewater Treatment Plant by completing evaluations and analysis of the existing building and treatment processes and evaluation of long-term expansion needs.

Rashi Gupta, PE

Rashi Gupta, a vice president and project manager with Carollo Engineers, has specialized in delivering sustainable solutions for biosolids management and wastewater treatment throughout her career. Rashi is Carollo's Wastewater Practice Director, which allows her to remain current on leading wastewater technologies including changes within the biosolids management field.

Her responsibilities as project manager and process specialist on solids-related projects across the country have taken her from the initial planning phase through design to start-up after construction. She also leads applied research projects for solids processes to assess the best ways to integrate innovation into facilities. From this experience, Rashi has become a national expert in all things related to solids – from thickening and dewatering to digestion and subsequent practices to beneficially use biogas and biosolids. A summary of her experience includes:

RELEVANT EXPERIENCE

> **Technical advisor for the Process Master Plan for the Encina Wastewater Authority, California.** Assisted team with evaluation of the Omnivore process for increased digester capacity at the plant and reviewed master plan for technical accuracy.

> **Project engineer for the Biosolids Master Plan for the Fresno Clovis Wastewater Reclamation Facilities in Fresno, California.** This project includes a capacity assessment of solids treatment processes, evaluations of technologies to achieve a diverse portfolio of biosolids, investigation of local markets for different classes of biosolids, and determination of potential regulatory changes that could affect the plant. Rashi is responsible for solids system capacity assessment and evaluations of solids processing technologies.

> **Subject matter expert/solids system lead for the WIFIA-funded RP-1 Liquid and Solids Capacity Recovery Project for the Inland Empire Utilities Agency in Chino, California.** Her responsibilities include oversight of the preliminary and final design of the multi-phase digestion system and new solids thickening facilities that will provide solids

treatment capacity for the equivalent of 60-mgd influent flow to the plant. Preliminary design included evaluation of various digester mixing and heating systems, and final design includes incorporation of the new system elements into the plant's existing solids processing systems. Project elements include new acid-phased digesters, rotary drum thickening for separate or co-thickening of primary and waste activated sludge, rehab of dissolved air flotation thickeners for scum thickening, rehabilitation of existing digesters, new boilers and heating system modifications, and acid digester gas treatment for hydrogen sulfide removal.

> **Project engineer for the Co-Digestion and Digester Gas Utilization Feasibility Study for the Inland Empire Utilities Agency, California.** This study included estimation of external feedstock available in the Agency's service area and projections of associated digester gas production. Rashi conducted the evaluation and developed the subsequent report for the City.

> **Project manager for City of Palo Alto Long Range Facilities Plan Update, California.** Wide-ranging project includes assessment of biosolids management options, regulatory risks,

improvements to workspaces, assessments of existing facilities, and development of cost allocation among member cities. Ms. Gupta is managing this work.

> **Alternatives analysis task lead for the 2020 Energy Management Master Plan at the Nine Springs Wastewater Treatment Plant operated by the Madison Metropolitan Sewerage District, Wisconsin.** This project includes assessment of the plant's existing energy baseline within its solids processes, and evaluation of alternatives to reduce energy consumption, increase energy production, and increase resource recovery. Rashi completed a review of the plant's complex heat loops, heat demands, and heat supply systems and recommended improvements for a more reliable, simpler heating system. Rashi led the team responsible for conducting alternatives analyses.

> **Carollo's project manager for the RWRFs Biosolids Master Plan for the Eastern Municipal Water District, California.** The master plan includes assessments of the existing solids systems for the District's four RWRFs, evaluations and recommendations for solids processing and management options to address uncertainty in regulations and land application viability, planning level layouts, consideration of regional processing options, development of capital and operating costs, and production of a Capital Improvements Plan.

> **Technical advisor for the Sacramento Regional County Sanitation District, California, Biosolids Recycling Alternatives Study and Management Plan Update.** Carollo was selected to provide a long-term biosolids management plan for reuse

and recycle of biosolids while reducing Sacramento's risks and costs. In addition to conventional economic and non-economic analyses, project included a market analysis to help the District identify biosolids products that would be acceptable to the market.

> **Technical advisor for the Ironhouse Sanitation District, California, Biosolids Master Plan.** Carollo evaluated various management options for the utility, including consideration of resilience to sea level rise and regulatory uncertainty.

> **Project engineer for the Facilities Master Plan for the Central Marin Sanitation Agency, California.** Rashi is responsible for an assessment of current digester capacity, estimation of additional FOG and food waste that could be accommodated at the facility, projections of additional digester gas production, planning level modifications to add capacity at the existing FOG/Food Waste Receiving Facility, and recommendations for modifications to the current dewatering system.

> **Project manager for the Plant Solids System/Capacity Assessment (Phase 1) project at the Union Sanitary District, California, Alvarado Wastewater Treatment Plant.** This project included a capacity assessment of all solids treatment processes, optimization of existing processes, and planning-level recommendations for additional solids processes required to reach the plant's permitted capacity. The project also included evaluations of technologies to achieve Class A biosolids, investigation of options to achieve energy neutrality, and determination of potential regulatory changes that could affect the plant.

Dana J. Gonzalez, PhD, PE

Dr. Dana Gonzalez is a Principal Technologist at Carollo Engineers with over a decade of experience in wastewater treatment, biosolids management, water reuse, and PFAS strategy. She serves as Carollo's California PFAS Lead and is known for delivering regulatory insight and operationally grounded solutions to complex treatment challenges.



Her expertise spans startup and optimization of advanced technologies including thermal hydrolysis (THP), sidestream nitrogen removal, struvite recovery, FOG receiving, and aerobic biosolids curing. She has supported SCADA strategy development, process control tuning, flow measurement improvements, and regional biosolids planning for utilities across the U.S.

Dana has led PFAS fate and transport studies, regulatory response planning, and public communication efforts. She has authored peer-reviewed research on PFAS behavior in wastewater, biosolids, and potable reuse systems, and has guided utilities in developing cost-effective, compliance-ready approaches to emerging contaminants.

RELEVANT EXPERIENCE

- > **Project engineer for Southern California Regional Biosolids Coalition Feasibility Study Phase I.** Leading Task 3 of a multi-agency regional biosolids feasibility study involving 15 participating utilities. Task focuses on integrating governance structure, public outreach, and alternatives evaluation to identify the top three combinations of location and technology for a potential regional facility. This in-progress effort aims to build consensus among stakeholders to support long-term regional biosolids management solutions.
- > **Process engineer for Water Reclamation Facility Facilities Plan Update, City of Bend, Oregon.** Led solids capacity assessment and alternatives analysis for biosolids and biogas reuse, including Class A biosolids production and beneficial biogas utilization. Helped the facility evaluate strategies for managing high-strength waste and supported optimization of digester flow schemes to enable flexible maintenance and cleaning operations.
- > **Project engineer supporting the Joint Powers Authority, California, East County Advanced Water Purification Program.** The project focused on evaluating biosolids management options and developing an adaptive Biosolids Roadmap that provides flexibility in response to the uncertain regulatory landscape surrounding land application. Conducted a comprehensive assessment of various technologies, considering both capital and operational costs alongside non-economic criteria, with a specific emphasis on PFAS resilience, to enable the facility to fully evaluate and plan for the most suitable management strategies.
- > **Process engineer for Spring Street Wastewater Treatment Plant Upgrades, City of Klamath Falls, Oregon.** Supported process optimization and integration of new treatment systems to improve plant reliability and prepare for potential future nutrient limits. Led sampling strategies to support process modeling and provided process analysis, operator

training, startup assistance, and control system tuning to ensure smooth commissioning and enhanced performance.

> **Process engineering consultant for LA Sanitation & Environment (LASAN), Hyperion Advisory Panel, City of Los Angeles.** Working with LASAN process engineering and operations staff to troubleshoot and optimize treatment processes at the Hyperion Treatment Plant, with current emphasis on primary treatment, thickening, and dewatering. Contributing to overall plant performance improvements and providing informal mentoring to early-career professionals. Hyperion treats approximately 275 MGD on average and has a rated wet weather flow capacity of up to 740 MGD.

> **Struvite technical lead and Plantwide Strategy Advisor, Additional Digester Facility Upgrade Project for the City of San José, California, San José-Santa Clara Regional Wastewater Facility.** Led a plantwide struvite assessment to identify sources of scale formation and develop near- and long-term mitigation strategies across treatment processes. Provided technical guidance during the digester upgrade project, including root cause analysis of heat exchanger fouling and design recommendations to minimize future struvite impacts and enhance operational performance.

> **Project engineer for the preliminary design of a Desalter Complex Bypass Treatment Facility for Eastern Municipal Water District (EMWD) in California,** focused on evaluating the most cost-effective solutions to meet water quality goals and reliably comply with PFAS MCLs.

> **Technical lead for process troubleshooting and optimization at**

Hampton Roads Sanitation District (HRSD), Virginia. Collaborated with operations and maintenance teams to resolve treatment upsets at high-rate and advanced BNR plants. Used SCADA trends, field, and lab analyses to identify root causes across processes such as nitrification, denitrification, phosphorous removal, CEPT, dewatering, anaerobic digestion, sidestream treatment, digester gas reuse, disinfection, and THP. Provided biosolids management guidance and ensured compliance with regulatory and reporting requirements

> **Lead process engineer – Thermal Hydrolysis Process Startup, Hampton Roads Sanitation District (HRSD), Atlantic Treatment Plant (ATP), Virginia.** Led startup of North America's first Cambi B6-4 THP facility, expanding solids handling capacity and enabling reliable Class A biosolids production. This strategic upgrade allowed closure of an older treatment plant constrained by Chesapeake Bay nutrient limits and set the foundation for long-term solids management planning.

> **Lead process engineer – Seasonal Sidestream Nitrification, Boat Harbor Treatment Plant (BHTP), Virginia.** Led seasonal startup and operation of a sidestream nitrification process to aerobically degrade cyanide in scrubber water recycled from the plant's sludge incinerator. This effort supported main plant nitrification during warmer months, when cyanide levels could otherwise inhibit nitrifiers. Coordinated closely with operations, maintenance, and engineering staff to ensure smooth transitions and reliable performance. Developed detailed training materials to support consistent operations across all shifts for this non-standard process configuration.

Andrew T. Salveson, PE



Andrew Salveson is an internationally recognized expert in water reuse treatment and regulations, providing guidance on potable reuse and reclaimed water purification. Since 1998, he has contributed to projects ranging from less than 1 mgd to more than 300 mgd, serving on teams across the United States and offering specialized expertise in Europe, the Middle East, Asia, and Australia. Salveson is a valued contributor to expert potable reuse regulatory panels for NWRI, WHO, and WRF in California, Nevada, New Mexico, and Colorado, as well as international efforts with WHO and Israel and national initiatives with NWRI. With nearly 30 years of experience, he has been involved in every phase of potable reuse projects, including planning, research, design, startup, program management, permitting, and public engagement.

RELEVANT EXPERIENCE

> **Program management technical support and manager of permitting efforts for the City of Morro Bay, California, Our Water Pure Water Project.** This indirect potable reuse system is the first membrane bioreactor (MBR)/RO/UV advanced oxidation process (AOP) system in California. Carollo's is the Owner's Advisor, overseeing the design-build team. Andy's role includes providing direct oversight of technical issues with the DB team, leading the permitting, and providing startup support.

> **Program management technical support and manager of permitting efforts for the City of Morro Bay, California, Owner's Advisory and Permitting Services.** Morro Bay is implementing a 1-mgd indirect potable reuse (IPR) system to secure a sustainable water future while upgrading and relocating critical wastewater infrastructure. Carollo's role is to oversee the AWPf DB team comprised of 10 firms, address surrounding infrastructure and groundwater issues, and permit the future potable reuse facility. The \$126 million project includes construction of a new 1.0-mgd membrane bioreactor, collection system improvements, injection wells for groundwater augmentation, and an IPR system,

making it the first MBR/RO/UV AOP system in California.

> **Project manager for the City of Napa, California, Purified Water Feasibility Study.** Andy has managed the feasibility planning for DPR in Napa, including treatment, infrastructure, regulations, interagency agreements, and NPDES discharge.

> **Project manager for the Laguna County Sanitation District, California, Conversion of the NPR Reclaimed Water System to an Indirect Potable Reuse project.** Work efforts have included treatment analysis, groundwater injection and transport modeling and analysis, interagency partnerships, RO concentrate discharge analysis, and basin plan compliance.

> **Process and regulatory support for the Dublin San Ramon Services District, California, UV System Capacity Evaluation and Bioassay Testing.** Original startup, commissioning, and CA Title 22 engineering report permitting of the UV system and later for the analysis and design upgrades to enhance capacity for that same UV system.

> **Design technical support and project manager for startup and operations for the Las Virgenes Municipal Water District (LVMWD)/Triunfo Joint Powers Authority, California, Pure Water**

Demonstration Project. Looking to a future with surface water augmentation for potable reuse, Las Virgenes hired Carollo to design, permit, operate, and provide public engagement for a permanent 100-gpm demonstration facility. Work also included architectural services (through project partners), and construction support, startup, and training services.

> **Process and regulatory engineer for the City of Pismo Beach and South San Luis Obispo County Sanitation District (SSLOCSD), California, Central Coast Blue Pilot Testing and Predesign.** As a result of recent droughts, Pismo Beach and the SSLOCSD, along with the cities of Grover Beach and Arroyo Grande, and the Oceano Community Services District, initiated this 1-mgd indirect potable reuse project. Its goal is to improve the reliability of the community water supply by capturing wastewater flows from two local WWTPs, purifying the water, and injecting it into the groundwater basin. Carollo is working with a regional partner (WSC) to develop the project, including treatment systems, infrastructure, and regulatory components. Andy's efforts have focused on the design, startup, and testing of a 12+ month demonstration system; assistance with education and outreach and developing a PDR—all of which have significantly advanced the AWPf process design and equipment preferences for this effort.

> **Technical advisor for the San Francisco Public Utilities Commission, California, Treasure Island Recycled Water Plant Expansion.** Carollo was retained to address aging infrastructure, confirm regulatory compliance, and satisfy wastewater and recycled water needs for future development.

> **Process engineer for the City of Ojai, California, Evaluation of UV System Performance and Troubleshooting.** The project included evaluation of flow dynamics, sedimentation of solids with high bacteria counts, upstream filtration performance, UV capacity analysis, sampling protocols, and UV system cleaning protocols.

> **Technical and regulatory lead for the validation of the Aqueduct WaterPod Decentralized Water Reuse Treatment System.**

> **Process design and regulatory lead for the City of Fresno, California, North Fresno WRP UV Design, Startup, Commissioning, and CA Title 22 Engineering Report Permitting.** The project's UV system was used to disinfect water for Title 22 applications.

> **Technical and regulatory lead for the San Francisco Art Institute (with El Dorado Inc.), and the Fort Mason Center for Arts and Culture, San Francisco, California, Rainbow Onsite Non-potable Water Reuse Predesign project.** Evaluation of advanced treatment systems, permitting, and the Basis of Design Report for decentralized non-potable reuse at the Fort Mason Center for Art and Culture.

> **Regulatory and process engineer for the City of San Diego, California, Pure Water Potable Water Reuse Design.** This 35-mgd project represents the first potable water reuse via surface water augmentation in the State of California. The \$400-million North City Pure Water Facility will feature a proven five-step water purification process of ozonation, BAC filters, membrane filtration, RO, and UV disinfection with advanced oxidation.

Ann M. Casey



Ann Casey is the Service Delivery lead for the Strategic Management Group, which includes solutions for Asset Management, Organizational Management, and Technology Optimization. She has over 31 years of experience working with operational, managerial, and financial aspects of water, wastewater, and energy utilities. Her comprehensive expertise leverages industry best practices and advanced techniques to provide utilities the balance of risk and capital while continuing to provide the service expected by their customers.

RELEVANT EXPERIENCE

> Asset management task lead for the Olivenhain Municipal Water District (OMWD), California, David C. McCollom Water Treatment Plant (DCMWTP) Facility Plan.

In addition to projecting future demand to serve the plant, the project included the development of asset management risk criteria, evaluation of the INFOR CMMS system, recommendations for optimization of INFOR, near and long-term risk-based prioritized capital plan, renewal and replacement planning, and electronic master plan tool. The electronic master plan, called Plan-IT will allow OMWD to update the projections annually based on normal asset aging and unanticipated asset replacement. This allows for a "living CIP" that OMWD can continue to use after the project's completion.

> Project manager and asset management lead for the California Water Service Group, California, Strategic Asset Management Plan. Carollo worked collaboratively with Cal Water staff to perform a gap analysis, develop a strategic vision, improve the asset definition and hierarchy, update business risk protocols and capital planning practices, and prepare the SAMP. Additionally, our team worked with Cal Water to pilot condition assessment protocols.

> Task manager and asset management lead for the Tualatin Valley Water District, Oregon,

Willamette Water Supply Program - CMMS Selection Support and Implementation Oversight.

Carollo conducted a gap analysis and, once completed, supported the solicitation of CMMS vendors and implementation partners. Carollo is currently serving as implementation oversight and asset management best-practices subject matter expert while the program is being configured and implemented to coincide with construction. Carollo's role will make sure the software implementation aligns with asset management best practices and delivers on the vendor promise.

> Condition assessment lead and asset management subject matter expert for the Clackamas County Water Environment Services (WES), Oregon, Willamette Facilities Plan. The Plan developed a 20-year capital plan that identifies improvements to the District's Kellogg Creek and Tri-Cities facilities and associated conveyance infrastructure to provide the best value to WES ratepayers by maximizing the use of existing infrastructure and optimizing system operation while continuing to protect water quality and human health and support economic development. Ann led the tasks to complete condition assessment for the Kellogg Creek and Tri-Cities plants, which was incorporated into the overall Facilities Plan in subsequent project tasks.

- > **Technical advisor for the Cape Fear Public Utility Authority, North Carolina, Innovyze® InfoMaster Implementation to manage a large amount of collection system asset and condition data.** The project involves the development of a risk framework to prioritize rehabilitation and replacement projects and the development of business process strategies to manage and integrate the condition assessment data with the organization's other databases.
- > **Asset management technical lead for the City of Houston, Texas, Northeast Water Purification Plant Expansion – Owner's Advisor.** The project involved better understanding the capital and operational needs of the existing facility over the next 20 years. Key tasks included completing a condition assessment and business risk exposure profile for the facility's assets to ensure the ability to meet the established levels of service to the community. The project ultimately will provide the City with information to make better informed long-term decisions on alternatives for treatment plant operations.
- > **Project manager for the City of Aurora, Colorado, Griswold Water Purification Facility Asset Management Plan.** Ann is currently leading a project team to develop a comprehensive Asset Management Plan for the Griswold Plant as part of the system-wide Total Asset Management Plan for the Utility. Key tasks anticipated to complete the project include the condition assessment to understand the current state of the plant, establishing levels of service, developing risk protocol, and understanding business risks, resulting in O&M strategies and a long-term funding strategy.
- > **Project advisor and QA lead for the Union Sanitary District, California, Alvarado Wastewater Treatment Plant Asset Condition Assessment and Update.** Served as Project Advisor to the team to update the asset condition and refine asset replacement costs from the 2006 Master Plan and 2009 Master Plan Update for the Alvarado Wastewater Treatment Plant facilities. The project supported the utility leadership to set the course for managing asset risk and optimizing asset investment into the future.
- > **Program advisor for the Dallas Water Utilities, Texas, Water Delivery Comprehensive System Assessment and Update.** Ann is currently serving as Program Advisor and Condition Assessment Lead to complete a comprehensive system assessment and update for the City of Dallas Water Delivery System. This assessment is expected to address projected water demands; aging infrastructure; service reliability, water quality, security, water loss, and recommendations for applications/procedures to maximize operation efficiency.
- > **Partner-in-charge for the Madera Irrigation District (MID), California, Asset Management Gap Assessment and Capital Improvement Program Development.** In this ongoing project, Carollo will assist MID in the evaluation of its existing practices, technologies, and data, to develop a framework for a robust asset management business practice. The framework will be used to define risk protocols and evaluate the District's critical assets by applying those protocols. Following this evaluation, Carollo will develop a risk-based prioritized capital improvement plan for the next five years to efficiently plan near-term annual funding needs.

Norman E. Anderson, PE, CISSP, GICSP



Norm Anderson is an electrical, instrumentation, and controls (I&C) engineer. With 23 years of experience, he has been providing secure and reliable SCADA, physical and cyber security, I&C, and electrical solutions for water, wastewater, and environmental projects in both the public and private sectors. He is skilled in the planning, design, commissioning, and management of highly technical automation projects and excels at developing innovative solutions to complex challenges. Additionally, Norm specializes in industrial control system network security and has previously served as the SCADA manager for a municipal utility, where he faced the challenges of maintaining/expanding automation and communication systems firsthand.

RELEVANT EXPERIENCE

- > **Instrumentation & controls engineer for Tampa Bay Water, Florida, Lake Bridge Water Treatment Plant Pump No. 4.** Provided project oversight for the I&C design of the addition of pump no. 4 to the Lake Bridge WTP. The design included a new variable frequency drive (VFD), integration of VFD into the existing control system, pump instrumentation, and upgrade of the existing high service pump station PLC.
- > **Project engineer for the City of Delray Beach, Florida, Baffle Walls and 4-log Chemical Feed, ESDC.** This project is for the ESDC for the baffle wall, 4 log chemical system and SCADA.
- > **Electrical and I&C engineer for the JEA, Jacksonville, Florida, Oakridge WTP High Service Pump Replacement.** Carollo provided engineering services to upgrade the Oakridge Water Treatment Plant High Service Pump Station. The project is to provide the design to replace six high-service pumps, motors, and associated suction and discharge valves and piping, electrical system upgrades, piping for Well No. 1, auxiliary generator and transfer switch, high-service pump building renovation, site work, maintenance of operations during construction, and incorporating resiliency requirements. Engineering services include the final detailed design, permitting, bid phase assistance, and engineering support services during construction.
- > **Project engineer for the City of Altamonte Springs, Florida, Process Aeration Evaluation and Gravity Thickener Rehabilitation.** City operations staff observed that the process aeration blowers cannot provide the necessary airflow when the two types of blowers are operated at the same time; however, it was anticipated that this limitation would be resolved on completion of the blower improvements project that was in final design. As the flow and load to the ASRWRF increased to the permitted 12.5mgd there was a need for additional blower capacity. Additionally, the two existing gravity thickeners, constructed over 30 years ago, needed rehabilitation to maintain their functionality.
- > **Project engineer for the City of Boynton Beach, Florida, Oceanfront Park Wastewater Treatment Facility Design.** Carollo provided design and construction management for the upgrades to a packaged rotating biological contactor (RBC) plant.
- > **Project manager for Sarasota County, Florida, Pump Station 1 and 4 Improvements and Water Transmission Main.** Carollo was retained to provide professional engineering services for the electrical and instrumentation and controls (EI&C) improvements to two existing water pump stations: 1) Pump

station #1 located near the intersection of Lockwood Ridge Road and University Parkway 2) Pump station #4 located off Lakewood Ranch Blvd near University Parkway. The EI&C improvements generally consisted of the installation of a new standby generator system, new instrumentation, and improvements to the control and supervisory control and data acquisition (SCADA) system.

> **Network design engineer for the City of San Diego, California, North City Pure Water Facility.** The project involved design of a new 40-mgd direct potable reuse facility consisting of ozone, membrane filtration, reverse osmosis, and BAC filtration major processes. The control system was based on an Emerson Ovation DCS having Allen-Bradley remote programmable logic controller (PLC)s and Ethernet instrumentation networks, and valve networks. The plant network design included a fiber optic ring backbone for control, security, and building management networks connecting into a City-wide network system. The design also included two control rooms with video walls and video and audio switching systems.

> **Lead electrical and I&C engineer for the City of Maitland, Florida, SCADA Upgrades project.** The project involved expanding the City's SCADA system to cover their water treatment plants. Design included the development of piping and instrumentation diagrams (P&IDs) and electrical drawings for the installation of new SCADA Pack-based remote terminal units (RTUs) and cellular communications.

> **Lead I&C engineer for the Central Arkansas Water Authority, Arkansas, Ozark Point Water Treatment Plant (WTP) Rehabilitation Improvements Project.** The project involved upgrading

CAW Ozark Point WTP flocculation and sedimentation systems and upgrading flash mix, filter, and pumping systems. New Allen-Bradley programmable logic controllers (PLCs) and fiber optic communications were added as a part of the project and upgrades to the existing Inductive automation ignition system were incorporated.

> **Lead electrical and I&C engineer for the Polk County Utilities, Florida, Cherry Hill Water Production Facility Design.** The project involved a new regional water production facility design, including raw water wells, storage, high-service pumping, sodium hypochlorite disinfection, and standby generator systems. The electrical design included new utility feed and plant switchgear with power distribution to building and process systems, the design of a new standby generator system, and site lighting and grounding systems. I&C design included instrumentation selection, SCADA system design, CCTV design, network design, control logic development, and construction support and testing services.

> **I&C engineer for the Polk County Utilities, Florida, Central Regional WPF.** Provided I&C design and construction support services for a 4 mgd WPF that included raw water wells, Ozone treatment, GAC filtration, and sodium hypochlorite disinfection processes. I&C systems included instrumentation, control panels, network and communications infrastructure, control logic, SCADA system components, CCTV systems, and interfaces with intelligent paralleling switchgear.

> **Project manager for the City of Plant City, Florida, Hydrosol Water Treatment Plant 5 Electrical Design Improvements.**

Shawn Corrigan, CEM, ABCP, ENV SP

Shawn Corrigan is a certified emergency manager and crisis management professional with 27 years of experience in emergency management and response for numerous industries, including water and wastewater, wildfire, public health, nuclear (firefighting, emergency management, and security), marine search and rescue, education, and consulting.



RELEVANT EXPERIENCE

> **Senior consultant for various US Cities, American Water Infrastructure Act (AWIA), Risk and Resilience Reviews.** Technical support for the following projects requiring Risk and Resilience Assessments (RRA) and Emergency Response Plan (ERP) updates to support compliance with AWIA 2018:

- Central Arkansas Water, Arkansas
- Covington Water District, Washington
- Dallas Water Utilities, Texas
- City of Edmond, Oklahoma
- Eugene Water and Electric Board, Oregon
- Highline Water District, Washington
- Medford Water Commission, Oregon
- Mount Werner Water & Sanitation District, Colorado
- North Harris County Regional Water Authority, Texas
- Orange County Utilities, Florida
- City of Porterville, California
- City of Redlands, California
- City of Round Rock, Texas
- City of San Diego, California
- Sonoma County Water Authority, California
- South Island Public Service District, South Carolina

- Stillwater, Oklahoma
- City of Tempe, Arizona
- Tualatin Valley Water District, Oregon
- Ventura County Waterworks District No. 8, California
- City of Yuma, Arizona

Each project leverages previous experience with security and resilience-related projects, specific AWIA tools, federal agency tools, and local hazard mitigation plans and tools to develop and implement a well-planned, systematic approach—tailored to each organization for efficient completion within the regulatory deadlines for AWIA compliance.

> **Principal-in-charge for the City of Simi Valley, California, RRA & ERP.**

Carollo partnered with the Simi Valley to update its RRA and ERP in compliance with the 2018 AWIA. This effort applied a holistic approach to hazard assessment, risk management, and emergency planning—making sure that the District's water system is prepared for both natural events and malevolent threats.

> **Principal-in-charge for the City of Redlands, California, RRA & ERP Updates.**

Carollo was engaged by the City of Redlands to conduct a comprehensive RRA and ERP update in accordance with the 2018 AWIA. The assessment addressed a full spectrum of physical, operational, and cyber risks to strengthen the reliability and resilience of the City's water system.

> **Senior consultant for the City of San Diego Public Utilities Department, California, Disaster Recovery Plan (DRP).** The DRP offers guidance on transitioning from response to recovery procedures. The plan is designed to complement the Department's Continuity of Operations Plan (COOP) and to set up both short and long-term planning strategies for rebuilding and revitalizing affected assets. Key components of the plan encompass identifying issues and risks, organizing training and exercise activities, specifying personnel and their roles, establishing communication protocols, outlining required resources to support the plan, addressing funding, incorporating risk management principles, and providing a comprehensive concept of operations for recovery actions.

> **Senior consultant for the County of Maui Department of Water Supply (DWS), Hawaii, Damage Assessment.** In August 2023, the Town of Lahaina faced significant devastation due to a fire, resulting in damage to critical infrastructure, including the water delivery system. This project aimed to catalog water system assets and evaluate the extent of the damage. Substantial time was dedicated to on-site activities involving documenting damages and validating GIS representations of the system against real-world conditions. After the assessment, the assets were inventoried, and replacement costs were estimated.

> **Study leader for the DC Water, Washington DC, Hazard and Operability Study (HAZOP).** Employing a "parameter first" approach, this study utilized the HAZOP standard to systematically identify and assess potential hazards and operability issues related to DC Water's Blue Plains Filter

Rehabilitation project. The facilitation process employed a creative process, encouraging team members to anticipate possible scenarios and their consequences. After the facilitation, a comprehensive report was generated, offering recommendations to be incorporated into the design process.

> **Exercise director and lead facilitator for the City of Tempe, Arizona, Water Utility Department, Arizona, Emergency Management Exercise.** Shawn supervised the design and development of an exercise and played a key role in facilitating its execution. The focus of this exercise was on hazards identified in the Utility's vulnerability assessment. It created a realistic, simulated environment for staff, offering them an opportunity to test and navigate through their recently revamped emergency management plans. The exercise served to validate the effectiveness of the plans in addressing the Utility's specific risk profile.

> **Senior consultant for the Capital Regional District (CRD), Victoria, British Columbia, Multi-Stakeholder and First Nations FireSmart Committee (FSC).** The goal of the project was to establish and lead the FSC. Fire Smart emphasizes using seven disciplines to lessen the effects of wildfire, including education, vegetation management, legislation and planning, cross-training, interagency planning, development considerations, and emergency planning. The Regional Fire Smart Committee aims to provide a coordinated landscape-level approach to community wildfire resilience across the CRD.

Christopher L. Loving, PE



Chris Loving is a principal electrical engineer and is Carollo's Community of Practice leader for electrical system studies. He has extensive experience in electrical and instrumentation design and construction management for both water and wastewater treatment facilities. He also has in-depth knowledge of short circuit studies, protective device coordination and arc flash studies and can perform electrical system studies in ETAP, SKM, and EasyPower. His projects typically have involved extensive coordination with other disciplines, understanding and incorporating plant operator input, and wide-ranging integration with existing facilities. Many projects have included detailed and complex construction sequencing plans to minimize plant downtime.

RELEVANT EXPERIENCE

> **Electrical and instrumentation design of Panther Creek Wastewater Treatment Plant for North Texas Municipal Water District.** The project included addition of a primary and secondary clarifier, aeration basins, odor control, sludge pumping, and a UV system. Design included one-lines, motor control center elevations, standby power generation studies, conduit routing, and switchgear.

> **Lead electrical design engineer for the Hancock County Utility Authority, Mississippi, Northern Regional Wastewater Treatment Plant design project.** The plant consisted of multiple electrical rooms to support the septage receiving station, influent/effluent pumping stations, closed vessel UV disinfection, in-line post aeration, and solids processing.

> **Electrical engineer for the City of Prescott, Arizona, Airport Water Reclamation Facility Expansion.** Carollo assisted in approximately 65 percent of the design. This Phase 1 was 3.75 mgd capacity, with the phased expansion of the facility planned for an ultimate capacity of 15 mgd. Because this Phase 1 expansion included a process change (from the existing oxidation ditches to activated sludge BNR) this project was essentially designing the first phase of a new treatment facility.

> **Electrical and I&C engineer for the Hi-Desert Water District, Yucca Valley, California, Collection System Phase 1.** Carollo provided design and construction support for the complete collection system of the \$95 million Phase I Wastewater Reclamation Project. Phase 1 included 77 miles of collection system piping ranging from 6 to 24 inches in diameter, three lift stations, ten separate jack-and-bore installations across Caltrans right of way at SR 62 and 247, and replacement of more than 78 miles of roadway.

> **Lead electrical engineer for the City of Las Vegas, Nevada, WPCF Filtration Building Miscellaneous Improvements.** The project involved preparation of design documents to upgrade the Filtration Building at the WPCF facility. Improvements included a ultrasonic level sensors, pump VFDs, filter level transmitters, flowmeters, butterfly valves, pressure switches, flow transmitters, hoists on the propeller flowmeters, roof modifications, filter control panels, and general filter building paint and window improvements.

> **Electrical engineer for a sludge pump station project at Duck Creek in Garland, Texas.** Project included extensive investigation of existing facilities to re-feed power to existing pump station as well as new pump station as well as integration of new

distributed control system in plant's existing network.

- > **Electrical and instrumentation engineer for the design and construction support of a 1.1-MW cogeneration system for the City of Hayward, California, Wastewater Treatment Facility.** Project consisted of developing construction documents for a 1.1-MW digester gas-fueled reciprocating-engine-based cogeneration system. System included installation of a single engine with space for a second unit, all appurtenant equipment, fuel treatment equipment, emission control equipment, and all electrical interconnection equipment.

- > **Electrical and instrumentation engineer for the design and construction support of a 650 kW cogeneration system for the South Orange County Wastewater Authority Latham treatment plant, California.** Project included extensive coordination with two other consultants performing work on the same construction documents including the service entrance gear being designed by others. Project included utilizing custom standards for the I&C design documents

- > **Electrical and instrumentation engineer for the design of an 846 kW cogeneration system for the South Orange County Wastewater Authority Regional treatment plant, California.** Project includes extensive utility coordination and developing California Rule 21 documentation and assistance with the utility interconnection agreement. The design includes all new switchgear and several other pieces of distribution gear. Extensive integration with the existing electrical distribution system was required and a detailed temporary power plan/construction

sequence was developed as a part of this project.

- > **Construction management during construction of PAR 942 North Secondary Improvements for the Metro Wastewater Reclamation District, Denver, Colorado.** The project included renovation of the secondary aeration basins, secondary clarifiers, new CaRRB basins, and electrical switchgear structures. Construction responsibilities included submittal reviews, design changes, and as-built drawings.

- > **Electrical design engineer for the Upper Trinity Regional Water District, Texas, Riverbend Water Reclamation Plant Improvement project.**

- > **Electrical and instrumentation design engineer for the New UV Facility at Floyd Branch for North Texas Municipal Water District.** Project consisted of three UV channels rated at 5 mgd with two banks each. Design of the UV equipment was specifically engineered to be open to multiple manufacturers with horizontal or vertical systems with alternative bids for other types. A 50KW standby generator was designed to supply the UV equipment in case of plant power failure.

- > **Lead electrical engineer and project engineer for a series of electrical upgrade project at the City of Simi Valley, California that includes pre-design, design, and engineering services during construction associated with the replacement of 480-volt switchgear and motor control centers that comprise the power distribution system at the City of Simi Valley's Water Quality Control Plant.**

Mark Seal, PE

Mark Seal is a versatile and experienced leader of engineering and fabrication teams in the design, build, and commissioning of water treatment systems at all phases of the project life cycle.



RELEVANT EXPERIENCE

- > **Lead I&C Engineer for the SCADA Network Design, Sonoma County Agency.** Evaluate the existing SCADA network and develop standards and recommendations to upgrade the existing SCADA network based on industry best practices.
- > **I&C Support for the Vacuum Station No. 61 and 64 MCC and PLC Replacement, Albuquerque Bernalillo County Water Utility Authority, New Mexico.** Upgrade existing vacuum station MCC, electrical, and controls hardware. Provide an arc flash study on this equipment as part of the upgrade.
- > **I&C Support for the Primary Clarification 14 Odor, Albuquerque Bernalillo County Water Utility Authority, New Mexico.** Worked with the customer to recommission legacy controls wiring for existing VFDs. As needed, markup electrical schematics, recommend additional hardware and software changes to bring desired inputs/outputs into the existing control system.
- > **I&C Support for the North City Pure Water Facility Final Design, City of San Diego, California.** Onsite construction support, submittal review.
- > **Senior engineering manager for Xylem Water Solutions.** Led a multi-discipline project execution team of 11 engineers to successfully create mechanical and electrical deliverables, manufacture custom treatment solutions, and commission them for operation across a variety of industries- power generation, mining, municipal, refining, and chemicals. Achieved record financial performance - FY2023 project

execution team increased EBITDA 185% over target, Orders 215% over target, Revenue 160% over target. Developed engineering estimates for proposals, reviewed contracts, and led procurement processes.

- > **Controls engineer for Enterprise Automation.** Developed HMI screens, PLC code, and custom SSRS reports as part of a control system upgrade

Christian Tasser, PE



Christian Tasser has 23 years of experience in water and wastewater projects as research and design engineer, as well as project manager. Christian Tasser has managed various upgrades and expansions of industrial and municipal water/wastewater and biogas plants. He has experience in Europe and the United States working on food waste to energy facilities. Christian Tasser has served in many roles including project manager, project engineer, and most recently the lead on industrial biogas plants operations and startup of the Inland BioEnergy plant in Chino, which includes a renewable natural gas project for truck fueling funded by California Energy Commission. Christian Tasser has managed various upgrades and expansions of Industrial and Municipal water/wastewater and biogas to RNG upgrading facilities.

RELEVANT EXPERIENCE

> **Senior engineer for the Sweetwater Authority, California, Robert A. Perdue Water Treatment Plant Facilities Master Plan Update.** Carollo completed a detailed condition assessment plan and investigation to create an overall asset list for installed equipment at the plant, including structural, mechanical, electrical, and instrumentation assets. The project also includes process improvement evaluations to explore safer use of chemicals on site; replaces the aging clearwell facility; improves chemical handling, conveyance, and mixing; upgrades the intake structure to reduce manpower needed for operational tasks; and assesses potential regulatory requirements that could alter the treatment process at the plant.

> **Lead engineer for the Inland Empire Utilities Agency RP-1 Liquid & Solids Capacity Recovery Project.** Evaluated mixing technologies for upgrading seven existing digesters and designed the expansion of the boiler system and heat loop upgrades to provide digester heating for a 61-mgd plant, as well as the digestion system expansion with three new acid phase digesters, selecting cost-effective options that met O&M needs.

> **Lead engineer for the Metro Water Recovery PAR 1395 Cogeneration Equipment Replacement.** Carollo led the PAR 1395 Cogeneration Equipment

Replacement project, replacing outdated cogeneration infrastructure with biogas upgrading equipment to remove siloxanes, separate methane, and compress RNG into Xcel Energy's natural gas pipeline. The project involved demolishing the existing cogeneration system and plant boilers, designing and integrating a new boiler facility to provide heating to the plant's 12 digesters, building heat, grease heat loops, and a new amine gas upgrading system. The integration of four new boilers and associated heat loops into the existing system required meticulous planning to maintain continuous heating and ensure operational efficiency during construction.

> **Project manager for the City of San Diego Energy Master Plan including Point Loma, Metropolitan Biosolids Center and pumps station #2.** Selected, developed preliminary design, and life cycle cost analysis for biogas cogeneration up to 5 MW, biogas upgrading to pipeline injection including landfill gas from Miramar at 4000 scfm and hydrogen & battery energy storage. Modeling with solar PV and energy microgrid software tools including HOIMER (by NREL) and Helioscope for solar power generation evaluations.

> **Project engineer for the PICO Energy located in Jerome, Idaho, a dairy manure biogas project designed for Montauk Renewables LLC.** The

project design included two large digesters with a volume of 1.8 million gallon each and associated manure receiving, processing, and digester mixing and heating facilities to upgrade biogas to renewable gas for injection in the existing Intermountain pipeline.

> **Project engineer for the City of Riverside, California, Bio-Methane Utilization, which was part of the City's effort to comply with California's organic waste diversion regulations and provide a plan for future digester gas utilization.** The project evaluated digester gas yields with the addition of food waste in Digester No. 5 and utilization of additional digester gas. Carollo provided recommendations for digester gas handling systems and implementation of digester gas treatment and upgrading for use in fuel cells, vehicle fueling onsite, and injection to the SoCal gas pipeline.

> **Project engineer for the City of Riverside, California, Food Waste Evaluation for Digester No. 5.** Carollo reviewed the condition of Digester No. 5 based on a structural inspection and drone videos to determine the cost for required digester upgrades. Digester capacity was evaluated to accept 100 tons per day of food waste from local waste haulers. Determined overall costs for the receiving station for food waste processing and digester feeding and costs of digester and mixing system retrofits.

> **Lead engineer for the Eastern Municipal Water District, California, Advanced Anaerobic Digestion of Municipal Biosolids, which used a two-stage acid-phase pre-digestion process.** Christian Tasser completed the preliminary design report. This evaluation showed an increased digester gas production and higher volatile solids

destruction with reduced sludge disposal costs.

> **Project manager for evaluation of various digester gas treatment technologies for industrial and municipal digesters, including those for food-waste-to-energy projects.** One instance was for the San Bernardino Municipal Water District: Christian Tasser evaluated digester gas utilization, treatment, and life-cycle costs to determine the ideal digester gas treatment and options for beneficial reuse.

> **Christian Tasser evaluated various food waste pre-treatment technologies from the United States and Europe, including DODA bioseparators, Scott's Machine, and hydropulpers to produce a bio-slurry for anaerobic digestion.** Christian Tasser retrofitted the manure digesters to be operated solely on food waste by upgrading the mixing system from vertical shaft mixing to Landia pump mixing.

> **Lead engineer for the California Energy Commission (CEC) funded project for biogas to CNG upgrading at the Chino Facility to provide fueling for trash hauling trucks.** Christian Tasser selected, designed, and procured the Evonik membrane upgrading system for 100 cfm of digester gas for a demonstration project funded by CEC. He managed the CEC project and additional funding applications through the Marine Spill Response Corporation and Air Quality Management District's Clean Fuel Fund.

> **Lead permitting engineer for the Air Quality Management District and CEQA permits for a CNG upgrading station at the Chino Facility in California to provide truck fueling for trash hauling.**

Mathew Esquer, PE



Mathew Esquer is a structural engineer with Carollo Engineers specializing in wastewater and water treatment plant design and engineering services during construction. He has extensive experience in designing wastewater treatment facility structures in accordance with current standards and building codes. He has also worked on seismic evaluations of structures and design of retrofit and rehabilitation projects. He has reviewed structural shop drawings and responded to requests for information (RFIs) in regard to construction issues. His experience includes:

RELEVANT EXPERIENCE

- > **Design structural engineer for the J. B. Latham Package B rehabilitation project for the South Orange County Wastewater Authority J. B Latham Treatment Plant in Dana Point, California.** The project included rehabilitation of various structures throughout the plant. Design responsibilities included concrete repair and coating of influent and effluent channels and clarifiers, repair of DAF Tanks and replacement of the DAF mechanisms, addition of wall anchorage and replacement of roofing at Digester Control Buildings and various safety improvements throughout the plant.
- > **Design structural engineer for the Terminal Island Water Reclamation Plant Advanced Water Purification Facility (AWPF) Ultimate Expansion Project for the City of Los Angeles, Bureau of Engineering, California.** Carollo teamed with Walsh Construction on this design-build project. The structural design included a rectangular 2.1-million-gallon equalization tank that is elevated above grade and constructed with cast-in-place concrete walls, an elevated slab, columns, and a mat foundation. The tank is constructed over a site that has stone column ground improvements to mitigate the liquefaction potential. The design also included microfiltration and reverse-osmosis process slabs with large steel-framed canopies.
- > **Evaluation engineer for the Seismic Resiliency Program and AK Warren Seismic Evaluation for Los Angeles County Sanitation Districts in Carson, California.** The scope of work included the development of a seismic evaluation program to be applied to the Districts' facilities, including 72 structures at the AK Warren WRF following ASCE 41 and ACI 350 procedures. Structures evaluated included process buildings, basins, digesters, surge towers, and solids storage facilities. The scope of work also includes the development of conceptual mitigation and risk scoring to prioritize identified mitigation projects.
- > **Design structural engineer for the P2-136 Activated Sludge Aeration Basin Rehabilitation Project for the Orange County Sanitation District, California.** The project aims to rehabilitate the existing activated sludge plant, which has been operational for more than 40 years, to extend its useful life and improve operational efficiency. Carollo is leading the rehabilitation efforts. The project involved comprehensive condition assessments and multiple shutdowns during construction to maintain safety and reliable treatment capacity. Project scope includes structural rehabilitation of aeration basins, surface aerator optimization, and improvements to the influent splitter box and purge fan room.
- > **Design structural engineer for the Moreno Valley RWRF Plant 2A**

Rehabilitation project for Eastern Municipal Water District, California.

The project consists of the rehabilitation of the Plant 2A aeration basin at MVRWRF that has been in operation for 20 years. In addition, there are other scope items, such as replacement of a portion of the 42-inch stainless steel air header for Plant 2. The project is working towards the 90-percent design deliverable and is expected to go into construction in June 2025.

> Design structural engineer for the San Jacinto RWRF Plant 1 Rehabilitation project for Eastern Municipal Water District, California.

The project includes the rehabilitation of Plant 1 aeration basins, a new mixed liquor pump station, demolition of existing abandoned facilities, and other miscellaneous improvements.

> Design structural engineer for the Moreno Valley RWRF Plant 2B Equipping Preliminary and Final Design for Eastern Municipal Water District, California. The project consists of preliminary and final design for facilities needed to equip the Plant 2B aeration basin at MVRWRF and included process modeling using a partially calibrated BioWin model to estimate the treatment capacity of the Plant 2B aeration basin. Carollo also completed a condition assessment of Plant 2A and Plant 1 and developed construction sequence and phasing recommendations to reduce impacts to facility operations. Carollo identified improvements to the future operation of Plant 2A and other affected facilities, including secondary clarifiers and RAS pump station, as well as the timing of those improvements.

> Design structural engineer for Hilo Wastewater Treatment Plant Digestion, Solids Handling and Headworks Improvements for the County of

Hawaii, Hawaii. Carollo designed new septage receiving station, headworks and associated support facilities, sludge blending tanks, anaerobic digesters, digester control building, waste gas flare, rehabilitating primary influent channel and primary gallery. The completed project will expand the treatment capacity from 5 to 13 mgd and provide provisions for future expansion to 20 mgd.

> Design structural engineer for the Plant 1 (P1-105) Headworks Rehabilitation and Expansion for Orange County Sanitation District, California. Carollo led the design of a major upgrade for the Plant No. 1 headworks and associated facilities. This project involved repairing, refurbishing, replacing, and upgrading the Plant 1 headworks facilities to an advanced level of service, while also performing a complex retrofit of critical facilities that must remain in service throughout construction. When finished, the Plant 1 Headworks, with a peak capacity of 320-mgd, will operate reliably for at least another 20 years. This will then require only routine maintenance and operator attention.

> Design structural engineer for the 250-mgd San Francisco Public Utilities Commission, California, Southeast Plant Headworks. Design responsibilities included new headworks building with influent junction area, mechanical and electrical rooms, fine screen and screenings handling areas, grit tank and handling buildings. The structure is an above-grade concrete structure two to three stories tall. Some of the structural challenges include irregular shear wall distribution, multiple transfer girder conditions, poor soil conditions, soil structure interaction analysis, and corrosion potential of soil.

Cynthia A. Thung-Carter, PE, LEED

Cynthia Thung-Carter, a LEED-certified mechanical engineer, has provided 20 years of design and construction support services for water and wastewater treatment plant and infrastructure projects. Her experience includes all phases of project implementation and her specialized experience includes pump stations, odor control, HVAC, plumbing, renewable energy, standby power, surge tank systems, air compressor systems, and hot water heating system design.



RELEVANT EXPERIENCE

> **Mechanical engineer for the condition assessment project at the David C. McCollom Water Treatment Plant, owned and operated by Olivenhain Municipal Water District (OMWD).** The Plant is a critical asset to OMWD and the main source of water delivery service to its constituents. This condition assessment project was conducted to manage and plan effectively for this most important asset ensuring that the assets are maintained and planned for rehabilitation and replacement at appropriate times. For data gathering, the project used CarolloAM—which is preconfigured with specific assessment criteria and scoring matrices and preloaded with an export from OMWD's asset management database. Her responsibilities included the assessment of the hydroelectric turbines as well as HVAC and plumbing systems at the plant. In addition to evaluating current field conditions, the condition scoring included asset criticality, historic performance, and replacement value as a measurement for the Plant's overall risk-based capital and operations projections for the next decade.

> **Design engineer for the final design of the San Francisco Public Utilities Commission (SFPUC), California, Southeast Plant Headworks project.** The new \$400 million project replaces two existing headworks facilities with a single new 250-mgd headworks to significantly increase screening and grit removal and to provide plant staff and

the surrounding community with the highest level of standards for reliability, aesthetics, odor control, and noise abatement. The project addresses major challenges including very tight site space, high groundwater, poor soils, heavy urban setting, and extremely high influent grit loads from this combined sewer system. Her responsibilities included the design of the Influent Pump Station including odor control for the facility. The pump station was designed for 51 mgd and required an innovative approach to seismically retrofit the existing deep influent pumping area and convert the existing dry pit pump station to a new submersible pump station to reduce project costs and optimize the use of space on the constrained site. The design employs innovative solutions to optimize process performance and hydraulics, confirmed through computational fluid dynamic (CFD) and surge analysis.

> **Mechanical engineer for the San Bernardino Municipal Water Department's East Lift Station Downscaling project, San Bernardino Municipal Water District, California.** The project evaluated the most efficient operation for managing a reduction in untreated wastewater at the San Bernardino Water Reclamation Plant. The study included flow data analysis and a condition assessment of the existing 36-mgd screw pump lift station.

> **Mechanical engineer for the San Elijo JPA NdN Conversion & CCB**

Upgrades final design project, San Elijo Joint Power Authority, California. This project includes biological upgrades at the San Elijo Water Campus along with the addition of aeration blowers. Her responsibilities included a condition assessment and the design of the HVAC system at the Blower Building, including the blower facility, RAS/WAS pump station, and electrical room to support the planned project modifications.

> **Mechanical engineer for the Trunk Line Odor Control Improvements Project (P1-123) for the Orange County Sanitation District, California.** This project provided an aesthetic solution to increase capacity and residence time of the odor scrubbers treating foul air from influent sewers, lift stations, and a waste hauler facility. The design included two low-profile, horizontal, roughing bioscrubbers, with a capacity of 38,000 cfm, used to pretreat foul air before being conveyed to the plant's chemical scrubber facility. The project also included the design of new plastic air driven pumps for pumping low pH condensate from the air jumpers in the Plant's surrounding community and air jumper manhole modifications.

> **Mechanical engineer for the Arrowhead Pump Station Backup Electrical Pump System Project for the San Bernardino Municipal Water Department, California.** The project replaced the two digester gas and two natural gas fueled internal combustion engines driving the pumps at the Arrowhead Pump Station with electrical motors. The replacement was in response to newer South Coast Air Quality Management District and California Air Resources Board regulations for biogas-fueled internal combustion engines. Her responsibilities included the design of a vertical non-

clog, dry-pit, 200-hp, 13,500 gpm pump at the pump station.

> **Mechanical engineer for the Low Lift Pump Station Security Improvements Project for the City of Yuba City, California.** This project included mechanical and electrical improvements to the pump station. She was responsible for the design of the ventilation system for the pump room/generator room.

> **Mechanical engineer for the Primary Effluent Pump Station as part of the PAR 1085 South Secondary Improvements Project for the Metro Wastewater Reclamation District, Colorado.** The primary effluent pump station is designed to convey a peak wet weather flow of 269 mgd with five pumps in service and one pump as standby. The pump station consists of a splitter structure with two wet wells, vertical non-clog centrifugal pumps with composite drive shafts, 450-hp medium voltage vertical motors with variable frequency drives, and a 15-ton overhead bridge crane system. The design also includes a physical hydraulic model study of the wet well and pump intake piping to verify acceptable hydraulic conditions at the pump and a CFD model study of the wet wells and pump suction. She also designed the HVAC and plumbing systems for various process areas, electrical buildings, control rooms, and wet lab. Her responsibilities included routing utilities throughout the various facilities, natural gas piping layout for the HVAC units, design of an air compressor system including compressed air piping layout throughout the plant, and construction cost estimates.

**ATTACHMENT B
NON-COLLUSION AFFIDAVIT**

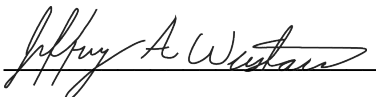
The undersigned declares:

I am the Vice President of Carollo Engineers, Inc., the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on 10/7/2025 [date], at Orange County [city], CA [state].

Signature: 

Title: Jeffrey Weishaar, PE / Vice President

carollo.com



J.B. LATHAM TREATMENT PLANT
**FACILITY PLANNING
ASSESSMENT EFFORT**

FEE PROPOSAL / **ENG-25-04** / OCTOBER 2025



South Orange County Wastewater Authority
J.B. Latham Treatment Plant
Facility Planning Assessment

Carollo Fee Estimate

Hourly Billing Rate		\$335.00	\$335.00	\$310.00	\$357.00	\$245.00	\$205.00	\$185.00	\$160.00	TOTAL HOURS	LABOR FEE	\$16.50	Other Direct Costs (ODCs)	TOTAL PROJECT FEE
Task No.	TASK DESCRIPTION	PIC	Project Manager	Lead Engineer	Senior Engineer	Project Professional	Project Engineer	CAD/Graphic Designer	Clerical			Project Equipment and Communication Expense [PECE] (per labor hour)		
1.0	Project Management and Progress Meetings	29	58	20	22	6	56	0	8	199	\$57,429	\$3,284	\$3,500	\$64,388
1.1	Project Control Plan	1	8				16		8	33	\$7,575	\$545		\$8,120
1.2	Kick-Off Meeting	1	2	2	4		4			13	\$3,873	\$215		\$4,088
1.3	Monthly Progress Meetings (12)		12	6	6	6	12			42	\$11,952	\$693		\$12,645
1.4	Board Meetings (3)	3	12	12	12		24			63	\$17,949	\$1,040	\$3,500	\$22,664
1.4	Project Management and QAQC	24	24							48	\$16,080	\$792		\$16,872
2.0	Existing Facilities Evaluation	6	70	22	26	18	250	36	24	452	\$107,722	\$7,458		\$115,180
2.1	Existing Facilities Descriptions		8				24	24		56	\$12,040	\$924		\$12,964
2.2	Review Existing Reports & Models		4	2	2	2	16			26	\$6,444	\$429		\$6,873
2.3	Flow & Loading Analysis													
2.3.1	Historical Flows & Loads		4				24			28	\$6,260	\$462		\$6,722
2.3.2	Projected Flows & Loads		8				32			40	\$9,240	\$660		\$9,900
2.3.3	Flows & Loads Workshop		2		4		6			12	\$3,328	\$198	\$750	\$4,314
2.3.4	Flows & Loads Tech Memo	2	8				32		12	54	\$11,830	\$891		\$12,721
2.4	Existing Facilities Analysis													
2.4.1	Establish Planning & Design Criteria		4				8			12	\$2,980	\$198		\$3,178
2.4.2	Hydraulic Capacity Analysis		2	4			12			18	\$4,370	\$297		\$4,667
2.4.3	Process Model Configuration		2		4		12			18	\$4,558	\$297		\$4,855
2.5	Condition Assessment		12	8	8	8	36			72	\$18,696	\$1,188	\$4,500	\$24,609
2.6	Existing Facilities Workshop		4		8		8			20	\$5,836	\$330	\$800	\$7,006
2.7	Existing Facilities Tech Memo	4	12	8		8	40	12	12	96	\$22,140	\$1,584		\$23,724
3.0	Wastewater Treatment Alternatives	6	102	132	182	52	346	32	24	876	\$235,504	\$14,454	\$2,750	\$252,846
3.1	Identify Treatment Alternatives													
3.1.1	Liquid Treatment Alternatives (4)		16		24	12	64			116	\$29,988	\$1,914		\$31,902
3.1.2	Solids Treatment & Disposal Alternatives (4)		16		24	12	72			124	\$31,628	\$2,046		\$33,674
3.1.3	Evaluate EI&C Systems		4	12			12			28	\$7,520	\$462		\$7,982
3.1.4	Evaluate Energy recovery Facilities		8	12			12			32	\$8,860	\$528		\$9,388
3.1.5	Support Processes & Facilities		4			8	12			24	\$5,760	\$396		\$6,156
3.1.6	Site Planning Evaluations		12	8			24	24		68	\$15,860	\$1,122		\$16,982
3.1.7	Treatment Alternatives Workshop		4	6	6		16			32	\$8,622	\$528	\$1,250	\$10,463
3.1.8	Treatment Alternatives Tech Memo	4	8	8	8		48	8	16	100	\$23,236	\$1,650		\$24,886
3.2	Risk & Resiliency Planning Elements													
3.2.1	Resiliency Adaptation Planning		8	40	24	8	42			122	\$34,218	\$2,013		\$36,231
3.2.2	Vulnerability Planning		8	40	24	8	32			112	\$32,168	\$1,848		\$34,016
3.2.3	Evaluate Regulatory Scenarios	2	8		40					50	\$17,630	\$825		\$18,455
3.2.4	Risk & Resiliency Workshop		4	4	8	4				20	\$6,416	\$330	\$1,500	\$8,321
3.2.5	Risk & Resiliency Tech Memo		2	2	24		12		8	48	\$13,598	\$792		\$14,390
4.0	Effluent Utilization Evaluation	6	28	36	60	8	126	12	16	292	\$76,540	\$4,818	\$1,500	\$82,933
4.1	Effluent Utilization Evaluation (3)	4	16	24	40		54	12		150	\$41,710	\$2,475		\$44,185
4.2	Effluent Utilization Evaluation Workshop		4	4	8		8			24	\$7,076	\$396	\$1,500	\$9,047
4.3	Effluent Utilization Evaluation Techn Memo	2	8	8	12	8	64		16	118	\$27,754	\$1,947		\$29,701
5.0	Project Alternatives	4	36	44	4	4	128	16	16	252	\$61,208	\$4,158	\$2,500	\$67,991
5.1	Develop Project Alternatives		8	12	4		24			48	\$12,748	\$792		\$13,540
5.2	Evaluate Project Alternatives (4)	2	16	16			40	16		90	\$22,150	\$1,485		\$23,635
5.3	Project Alternatives Workshop		8	8		4	24			44	\$11,060	\$726	\$2,500	\$14,411
5.4	Project Alternatives Tech Memo	2	4	8			40		16	70	\$15,250	\$1,155		\$16,405
6.0	Facility Planning Assessment Report	6	24	40	16	16	96	0	36	234	\$57,522	\$3,861		\$61,383
6.1	Administrative Draft Report	2	4	8			24		12	50	\$11,330	\$825		\$12,155
6.2	Draft Report		16	24	16	16	48		16	136	\$34,832	\$2,244		\$37,076
6.3	Final Report	4	4	8			24		8	48	\$11,360	\$792		\$12,152
TOTAL		57	318	294	310	104	1,002	96	124	2,305	\$595,925	\$38,033	\$10,250	\$644,720
OPTIONAL TASK														
7.0	Staffing Analysis	4	12	64	36	0	40	8	16	180	\$50,292	\$2,970	\$0	\$53,262
7.1	Staffing Analysis	4	12	64	36		40	8	16	180	\$50,292	\$2,970		\$53,262
TOTAL: BASE + OPTIONAL		61	330	358	346	104	1,042	104	140	2,485	\$646,217	\$41,003	\$10,250	\$697,982

Assumptions

- Carollo will update existing hydraulic and process models previously developed.
- Process descriptions will include process. Flow diagrams were necessary P&ID drawings will not be developed.
- Meetings include one (1) kick-off meeting, twelve (12) progress meetings, and six (6) staff workshops. Meetings will be held virtually with workshops in-person.
- Three (3) board meetings, also in-person will be prepared and delivered by Carollo.
- Monthly invoices will include progress reports identifying work completed work expected for the following month and any issues or concerns related to scope, schedule or fee.
- Site plans will be developed utilizing existing site layouts modified to show new facilities.
- Future changes to flow and Lowe's will be provided by SOCWA member agencies.
- Available useful life generated for process areas will be general in nature as a more detailed asset inventory and assessment would be required to provide exact estimates.
- SOCWA will provide previous reports in drawings available.
- SOCWA will provide 3-5 years of process data for evaluation of flows loads and process performance. Data not available will be identified by Carollo for future sampling needs.
- Review of electrical systems will include all implant facilities up to and including the utility transformer. Offsite energy distribution and delivery assessment is not included. The need for upgraded or additional incoming power will be provided.
- Site layouts will be provided for four liquid and solid treatment train evaluations each.
- Up to three (3) effluent utilization alternatives will be developed.
- Up to four (4) combined project alternatives will be developed.
- Technical memoranda final drafts will be combined to develop the administrative draft of the Facility Planning Assessment report.
- The draft Facility Planning Assessment Report will include an executive summary of all chapters.
- No survey is included.
- No geotechnical borings or utility potholing is included.
- No technical specifications or drawings are included.
- Training and or licensing for process or hydraulic modeling software is not included.

carollo.com





TECHNICAL PROPOSAL FOR

J.B. LATHAM TREATMENT

PLANT FACILITY

PLANNING ASSESSMENT

EFFORT

ENG-25-04

South Orange County Wastewater Authority

October 7,
2025



October 7, 2025
South Orange County Wastewater Authority
Administration Building
34156 Del Obispo Street
Dana Point, CA 92629

Attn: Ms. Roni Young Grant, PE, Capital Improvement Program Manager

RE: Technical Proposal for Engineering Services for the J.B. Latham Treatment Plant Facility Planning Assessment Effort, ENG-25-04

Dear Ms. Grant and Selection Committee Members,

The J.B. Latham Treatment Plant (JBLTP) is a critical component of south Orange County wastewater management, and serves as the last line of defense prior to ocean discharge. The plant must reliably treat a range of flows and loadings that vary from normal dry conditions, successive storm events, and discharges/diversions from upstream water recycling plants. With the recent restructuring of South Orange County Wastewater Authority (SOCWA) Project Committee 2 (PC2) Member Agencies, we understand the importance of performing this Facility Planning Assessment (FPA) Effort at the JBLTP to assess the existing plant, analyze current and projected flows and loads, identify possible beneficial reuse opportunities, and evaluate treatment alternatives to develop an optimized and resilient plan for JBLTP's future.

The HDR Engineering, Inc. (HDR) team is excited to propose on this project. We are confident that we will be successful partners with you in executing the FPA because we bring the following key benefits:



A Dedicated, Local Team with Recent and Relevant Experience. Project Manager **Amy Omae** tailored this team to include the same staff that provided similar facility assessments and master planning services for the Santa Margarita Water District, Irvine Ranch Water District, Camarillo Sanitary District, and West Basin Municipal Water District. Task Leads **Gregorio Estrada, Alice Wang, and Jacquelin Mutter** have worked with Amy for years and are committed to helping PC2 Member Agencies achieve your goals for JBLTP.



Collaboration as a Core Value in Project Delivery. We recognize that SOCWA and PC2 Member Agencies may already have some ideas for potential solutions, and we look forward to hearing them. Solutions must be mutually-beneficial for all parties and provide regional benefits. This requires collaboration, open discussions, and partnership to align individual goals. Our Task Leads are masters of their craft in providing and facilitating collaborative approaches for stakeholder engagement and obtaining buy-in.



Technical Experts to Provide Innovation and Facilitate Decisions. Our team will engage industry-leading treatment experts, like Gregorio Estrada, Teigan Gulliver, JB Neethling, Mike Falk, and Tyler Mach, to identify solutions, discuss the benefits and challenges, and guide conversations by providing a realistic gauge on its feasibility and avoid common planning pitfalls. Prompt and informed decision-making is vital to the successful completion of this project, particularly considering the several alternatives evaluations anticipated for treatment (liquids and solids), effluent management, and the overall plant.

We look forward to the opportunity to collaborate with you on this important and challenging project that will shape the future of JBLTP. If you have any questions, please contact our proposed Project Manager Amy Omae at 714.730.2344 or at Amy.Omae@hdrinc.com. She will be your point of contact for this project. We appreciate your consideration and look forward to hearing from you.

Sincerely,

HDR Engineering, Inc.



Anna Lantin, PE

Vice President, Authorized Signatory



Amy Omae, PE

Project Manager

HDR has maintained professional liability insurance in force continually since 1958 for the protection of clients and us. For this project, HDR will maintain the required insurance levels that is needed. We acknowledge receipt of Addendum 1 and 2 of the RFP in the Appendix.



TABLE OF CONTENTS

01

IDENTIFICATION OF RESPONDER

PAGE 01

02

APPROACH TO THE WORK

PAGE 02

03

EXPERIENCE AND TECHNICAL COMPETENCE

PAGE 12

04

KEY PERSONNEL AND SUB-CONSULTANTS

PAGE 16

05

PRICING

PAGE 19

APPENDIX

A

CONFLICTS OF INTEREST

PAGE A-1

NON-COLLUSION AFFIDAVIT

PAGE A-2

CERTIFICATIONS

PAGE A-3

ADDENDUM

PAGE A-4

RESUMES

PAGE A-6

01 Identification of Responder



01 Identification of Responder

Founded in 1917, HDR, an employee-owned firm, has over 14,000 employees in over 225 offices worldwide, making us one of the nation's leading consulting firms. Having expanded to eight Southern California offices since 1959, HDR has become a key player in the business landscape of the area.

Our advanced expertise covers the full cycle of water management, from water supply to treatment; all manners of conveyance and storage; sewer conveyance, water reclamation and biosolids treatment; and end use and outfalls. Our in-depth understanding of and experience with various regulatory, environmental, and geographic conditions enable HDR professionals to plan and design easily operable, cost-effective facilities that meet the needs of our clients and communities and follow local, state, and federal requirements.

The HDR project team is ready and able to hit the ground running.

- Cost Estimation
- Civil Engineering
- Planning Studies
- Water, Recycled Water, and Wastewater Treatment
- Facility Rehabilitation, Replacement, Upgrade, and Expansion
- Hydraulic Modeling
- Regulatory and Permitting
- Asset Management, Condition and Corrosion Assessment

HDR'S SOUTHERN CALIFORNIA OFFICES

Irvine 3220 El Camino Real Suite 200 Irvine, CA 92602	Los Angeles 350 S. Grand Ave. Suite 2900 Los Angeles, CA 90071	San Diego 591 Camino de la Reina, Suite 300 San Diego, CA 92108
Riverside 2280 Market St. Suite 100 Riverside, CA 92501	Long Beach 100 OceanGate Suite 1120 Long Beach, CA 90802	San Diego DT 401 B. Street Suite 1110 San Diego, CA 92101
Claremont 431 W. Baseline Rd. Claremont, CA 91711	Ventura 200 E Santa Clara St., Suite 220 Ventura, CA 93001	

Legal Name and Address of Company:
 HDR Engineering, Inc.
 3220 El Camino Real,
 Suite 200
 Irvine, CA 92602

Legal Form of Company:
 Corporation

Parent Company:
 N/A

Principal Place of Business:
 3220 El Camino Real,
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 Amy Omae, PE
 Design/Project Manager
 3220 El Camino Real,
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 Amy.Omae@hdrinc.com


107+
YEARS
 IN BUSINESS


14,000+ EMPLOYEES
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 NEWS-RECORD


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 MORE THAN
700+
 EMPLOYEES
 THROUGHOUT CA,
 INCLUDING NATIONAL
 EXPERTS


**HDR'S CALIFORNIA
 PRACTICE OPENED IN**
1959
300+
 employees in the
 Southern California area

**YOUR
 PROJECT WILL
 BE MANAGED
 OUT OF OUR
 IRVINE OFFICE.**

02 Approach of the Work



Approach of the Work

UNDERSTANDING

This is HDR’s understanding of the project goals, issues, methodology to be employed in conducting the project, and challenges that may be encountered in the project.

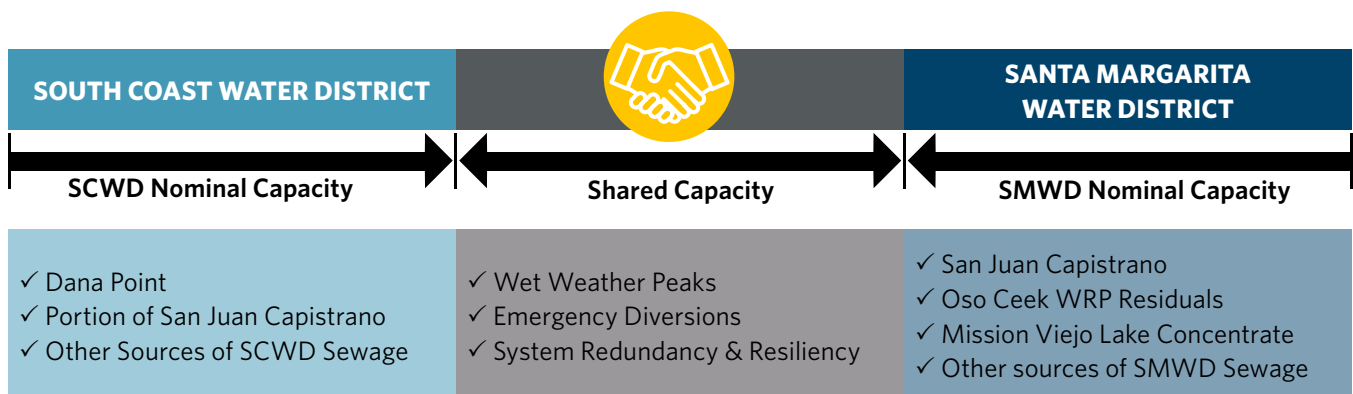
The recent change in Participating Member Agencies that makeup Project Committee 2 (PC2) and govern JBLTP is a monumental milestone that could be interpreted as the start of a new era for JBLTP. In which, the PC2 agencies have an overarching vision to:

- Optimize and right-size JBLTP to meet current needs and requirements
- Incorporate resiliency with flexibility to adapt to potential long-term futures
- Assess feasibility of possible beneficial reuse opportunities; and,
- Be collaborative partners in evaluating shared benefits and mitigating risks.

HDR has been invested in supporting SOCWA and JBLTP for some time starting with the 2000 JBLTP AWT PDR (as CGvL), our involvement in the 2012 JBLTP Facility Plan, the design of the JBLTP Aeration and Cogeneration Upgrades, and several condition assessments and rehabilitation improvements of several SOCWA facilities. Our team is excited to continue our engagement with you by providing HDR’s industry-leading experts and local knowledge to guide JBLTP through this next era of regional optimization and modernization.

The challenge with JBLTP is determining how big is too big. Anticipated average dry flows and loads from PC2 member agencies, Santa Margarita Water District (SMWD) and South Coast Water District (SCWD), are manageable by the current JBLTP configuration, but when high flow events occur that peak influent flows up to 44 mgd (as occurred in December 2021, the combined impacts of climate change, aging collection system infrastructure increasing inflow and infiltration (I&I), and increasing solids loading challenge the space-limited JBLTP to accommodate the potential variations in receiving flows and loads.

With dryer dries and wetter wets being a near certainty and a cloud of impending regulations (for both liquids and solids), JBLTP stakeholders are facing near-term impactful decisions to avoid and mitigate surprises in the long run. The plan must consider current and future flow and loads from a base dry-weather condition for PC2 partners as well as the high-likelihood potential scenarios, including but not limited to, wet weather peaks, emergency diversions, system redundancy and resiliency. Determining this shared capacity will be key to this Phase 1 FPA to right-size JBLTP, particularly because of its interconnectivity with SMWD Oso Creek Water Reclamation Plant (Oso Creek) and Moulton Niguel Water District Plant 3A (3A) and potential interconnectivity to receive flows diverted away from SOCWA Coastal Treatment Plant (CTP) and to send treated effluent to SCWD Doheny Desalination Plant for potable reuse.





Our proposed HDR team successfully completed the 2024 SMWD Master Plan that evaluated over 20 alternatives to establish the basis of design for the Oso Creek WRP. We are committed to doing the same for JBLTP.

This Phase 1 Facility Planning Assessment (FPA) to identify a range of treatment options, shortlist alternatives that are likely more feasible and cost-effective, and evaluate the shortlisted alternatives to identify a recommendation to advance to Phase 2. Our streamlined approach and methodology to perform the Phase 1 FPA effort is described in more detail in the following sections. Following the kick-off meeting, our team will start executing the Existing Facilities Evaluation (Task 2) and Effluent Utilization Evaluation (Task 4) concurrently as they are critical to identifying and shortlisting alternatives (Task 3) for evaluation and ranking (Task 5).

PHASE 1 FACILITY PLANNING ASSESSMENT THIS EFFORT

- ✓ Project alternatives to address current and future needs of JBLTP, with technical assessments and regulatory considerations.

PHASE 2 FACILITY PLANNING ASSESSMENT FUTURE EFFORT

- ✓ Builds upon Phase 1
- ✓ Outlines recommended improvements and implementation strategies for future facility upgrades and improvements.

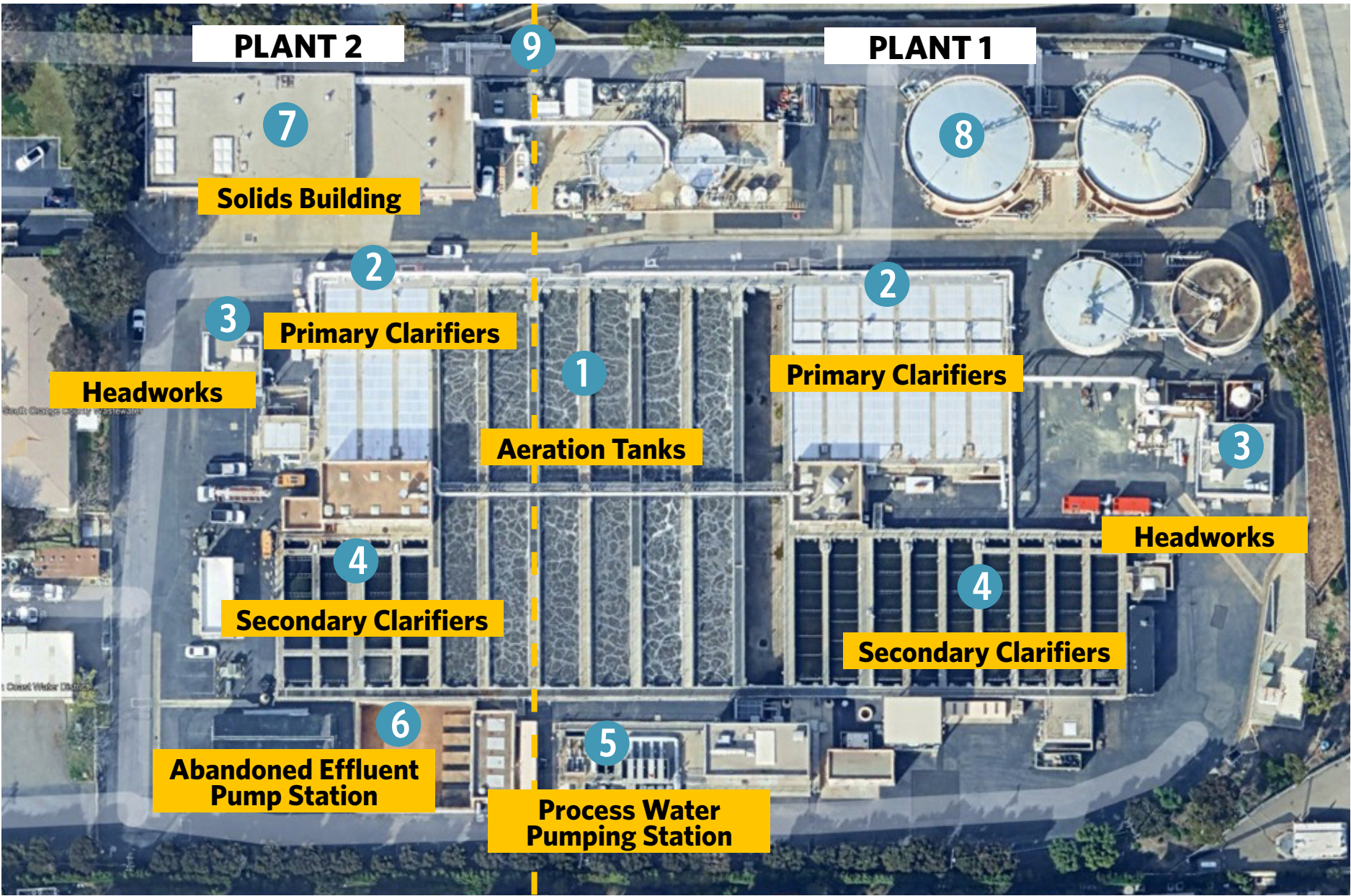
	JAN	FEB	MAR	ARP	MAY	JUN	JUL	AUG	SEPT	OCT
TASK 1 Project Management	◆ Workshop 1 Kick-Off	◆ Workshop 2 -	◆ Workshop 3 -	◆ Workshop 4 -	◆ Workshop 5 -	◆ Workshop 6 -	◆ Workshop 7 -	◆ Workshop 8 -		
TASK 2 Existing Facility Evaluation	Experts of Existing Reports & Models	Existing Facilities Analysis	◆ TASK 2 TM -							
	Flows & Loads	Process Modeling								
	Condition Assessment									
TASK 3 Wastewater Treatment Alternatives		Risk & Resilience Planning Study	Identify Liquid & Solid Technologies	Evaluate Liquid & Solid Alternatives	Shortlist Liquid & Solid Alternatives	◆ Task 3 TM Wastewater Treatment Alternatives				
		Regulatory Assessment		Site Planning Evaluation						
TASK 4 Effluent Utilization Evaluation	Define & Shortlist Effluent Options	Evaluate Effluent Alternatives	Cost-Benefit Analysis	◆ Task 4 TM Effluent Utilization Evaluation						
	Reuse Infrastructure Assessment									
TASK 5 Develop Project Alternatives					Define & Refine Combined Alternatives	Evaluated Combined Alternatives	Identify Recommended Alternatives	◆ TASK 5 TM -		
					Define Evaluation Criteria					
TASK 6 Facility Planning & Assessment							Draft Report ◆		Final Report ◆	
								◆ Draft FPA Report Admin Draft FPA Report -	◆ Final FPA Report -	

LEGEND: Task Time Frames | ■■■■ Project Milestones | ◆◆◆◆◆

TASK 2 GOALS	TASK 3 GOALS	TASK 4 GOALS	TASK 5 GOALS
✓ Complete a 30-year capacity and peaking analysis based on current and projected flows and loads from regional agencies. ✓ Assess existing process capacity, asset condition, and useful life to inform future infrastructure and right-sizing needs.	✓ Develop treatment alternatives that enhance resiliency, reliability, and risk management under variable conditions and regulatory changes. ✓ Evaluate biosolids treatment options to meet current sub-Class B solids processing and future regulatory requirements.	✓ Create an effluent utilization strategy, considering Title 22 production, potable reuse, and ocean discharge.	✓ Identify project alternatives that advance sustainability through energy reduction and resource recovery. ✓ Address long-term regulatory compliance and permitting requirements.

Issues and Opportunities Map

ISSUE	CHALLENGES	OPPORTUNITIES
1 Aeration Basins	Warm water drives nitrification and it is challenging keep the plant in stable operation. Current facilities are not designed to meet potential future nutrient limits. Aeration blowers are challenged at peak flows.	Optimize basin operations to improve current performance while incorporating design flexibility to allow future modifications for nutrient removal. See treatment technology discussion on Page X.
2 Primary Clarifiers	Existing clarifiers have a suboptimal length-to-width ratio and are too shallow. These conditions limit hydraulic performance and capacity. Space is limited to expand capacity.	Implement rehabilitation with hydraulic improvements to increase capacity and performance. Redesign opportunities include optimizing geometry and baffling.
3 Headworks	Lack of redundant screening equipment limits operational reliability. Existing screens are outdated and have low solids capture, impacting downstream processes.	Upgrade to modern screening technologies with redundancy to improve reliability. Evaluate grit chambers for improved grit removal.
4 Secondary Clarifiers	Current clarifiers are too short and shallow, leading to floc carryover into the effluent channel and reduced effluent quality.	Reconfigure and optimize clarifiers with improved geometry and baffling to enhance solids settling and increase hydraulic performance. Consider process intensification approaches, such as densification technologies or combining clarifier tanks, to improve settleability and accommodate future flows and loads.
5 Process Water Pumping Station	Noise enclosure creates tight, constrained spaces that limit maintenance access.	Redesign or reconfigure layout to improve accessibility while maintaining noise control standards.
6 Abandoned Effluent Pump Station	Space is unused and located near residential areas.	Repurpose space for new processes, such as a tertiary or advanced treatment system, while considering community impacts and aesthetics.
7 Solids Building	Inadequate ventilation and air conditioning prevents the boiler and cogeneration system from running simultaneously, limiting operational flexibility.	Improve HVAC systems to allow concurrent operation and evaluate opportunities for heat capture.
8 Digester	Existing tube heat exchangers are inefficient.	Replace remaining tube heat exchangers with spiral heat exchangers to improve efficiency, reduce fouling, and extend equipment life.
9 Separate Treatment Trains	Separate treatment trains requires balancing of flows between the two plants and results in inefficiencies.	As part of overall approach, establish shared capacity opportunities that allow for a single treatment train that can operate more efficiently and more easily allow for short-term treatment capacity in extreme events.



Limited footprint is a major challenge at JBLTP, which makes configuration changes to primary and secondary clarifiers difficult. Our team is helping the Los Angeles County Sanitation Districts at the San Jose Creek and Whittier Narrows Treatment Plants, where we applied Computational Fluid Dynamics (CFD) modeling analysis and settling improvements to evaluate and enhance clarifier performance. Through targeted hydraulic modifications, we achieved a 60% increase in throughput capacity. This approach can be applied to JBLTP to achieve improved performance and greater capacity without structural changes to your clarifiers.



APPROACH

TASK 1 - Project Management

Project Control Plan (PCP)

Our project management approach is built on trust, a clear definition of shared goals, and the mutual understanding of the necessary steps to achieve those goals and deliver the project. Our team is bound together by a commitment to be a true partner to you and your team. At project initiation, we will conduct the Project Kickoff Meeting and a Chartering Workshop to refine goals and objectives as well as commit the project team to their successful realization. We will discuss the tasks, assignments, roles, how to document decisions and comment resolution procedures, required meetings, and communication methods. We will compile this information along with our work plan, budget, schedule, tasks, deliverables, and quality procedures into a Project Control Plan (PCP) that our team will rely on throughout the project.

Trust is achieved through transparency and effective communication. We foster transparency and communication within our team through weekly project team coordination meetings, monthly progress meetings, and workshops. Our project monitoring tools give our project management team a picture of accomplishments, work in progress, milestones, and future activities and allow us to communicate those metrics quickly and easily with the team and with you.

But communication is not one-way. Amy will discuss and review progress with discipline leads to ensure consensus on reported progress and quality as well as hold ourselves accountable for providing a quality deliverable on-time..

The tools and processes we use allow our team to identify variances and plan corrective actions to maintain schedule and budget targets. Our project management approach is reinforced through proven accountability measures, which can include co-location and design task forces to meet commitments and emphasize shared goals. Everything we do will be a coordinated effort on behalf of you to achieve our shared objectives

Throughout the project, HDR will facilitate collaborative workshops with you to identify and define evaluation criteria, identify options, shortlist alternatives, and develop viable alternatives for evaluation and ranking. Success in this area means each stakeholder felt heard in these workshops and their opinions and concerns were valued, so they can be confident in the approach.

TASK 2 - Existing Facilities Evaluation

Description of Existing Facilities

The HDR Team's approach embraces change and seizes the opportunity to do things differently decades later, building on past work rather than starting from scratch. Our Project Manager, Amy Omae, with over 20 years of technical expertise in wastewater treatment plants, will oversee that all reviews of prior work are relevant, focused, and directly supporting the subsequent tasks to prevent a growing expansive scope. The team will keep the scope focused, efficient, and forward-looking through 3 key steps:

Review of Existing Reports	First conduct the desktop review. Extract, organize, and categorize prior facility evaluations into subsequent task areas. This organization exercise prevents reinventing the wheel.
Site Visit & Staff Interview	Conduct one focused site visit and one structured interview with plant staff to document changes since the last record.
Expert Review and Validation	Treatment process experts will perform a high-level review of key past studies and assess whether their recommendations remain valid under current plant conditions and regulations and integrating insights from site visits and staff interviews.

Overall, we will bring a fresh perspective to identify opportunities for improvement while avoiding scope expansion into unnecessary re-study of past issues. For example, past alternatives such as using basins for thickening or combining headworks will be reconsidered in light of updated solids characteristics and plant conditions, based on site visit and staff interview, and knowledge of current regulatory requirements.



The HDR Team will hold conversations with SOCWA's operations and engineering staff for a holistic view of the existing facility's current condition and challenges.

Data Review

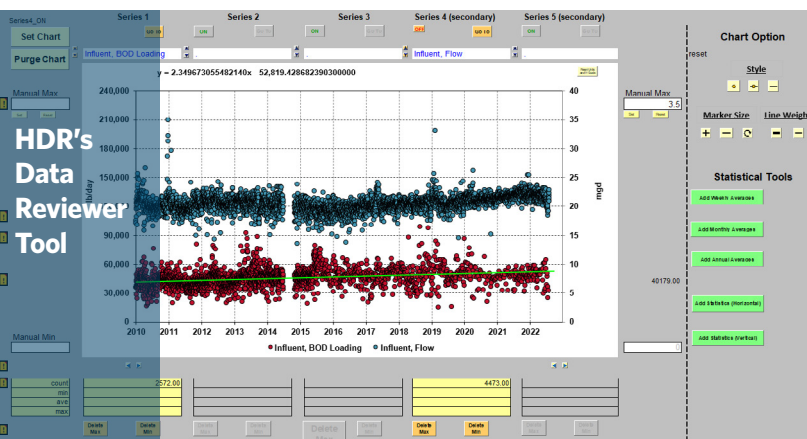
Following Task 2.1, a targeted data request will be developed to address identified gaps, focusing on information needed to update design criteria and unit sizing, including hydraulic and process capacities, plant layouts, hydraulic profiles, mass balance schematics, and P&IDs.

We recognize the importance of keeping the master plan on schedule. The data request to close these gaps will be initiated at the Kickoff Meeting. At this stage, we will also request items including, but not limited to:

- Historical flows and loads and flow projections to support Task 2.3 – Flows and Loading Analysis
- Inter-process water quality data to support Task 2.4 – Existing Facilities Analysis to calibrate process model

Flow and Loading Analysis

What sets us apart is our use of HDR's pre-built tools, including **DataViewer**, which allows us to visualize historical data in a statistically robust and visually compelling way, and the **Log Probability Tool**, which applies advanced log-probability methods for thorough statistical analysis to validate data and calculate peaking factors.



HDR follows a standardized and documented best-practice approach for consistency, efficiency, and high confidence in results. This methodology has been successfully applied to multiple Master Plans, including the IRWD Sewage Treatment Master Plan (2021) with updates in 2023 and 2025, as well as the SMWD Master Plan (2024). Our step-by-step approach includes:

- ✓ Data Preparation
- ✓ Data Validation and Quality Control
- ✓ Historical Load Trends
- ✓ Peaking Factor Calculations
- ✓ Projected Flows and Loads Calculations and Staff Workshop

At minimum, three years of data are analyzed for latest relevancy.



Value to you: these tools **save** time and budget, with consistent, reproducible data plots, and allow staff to **focus** on analysis and decision-making with the flexibility to easily update inputs or scenarios.

The HDR Team will establish planning and design criteria by utilizing Task 2.1, supplemented by industry benchmarks and SOCWA's operational experience. We will evaluate hydraulic capacity to update and refine the existing hydraulic profile, identifying current and future limitations under varying flow conditions. In parallel, Mario Benisch, who has led similar efforts for IRWD, OCSAN, and SMWD, will update and calibrate SOCWA's process loading model using BioWin to evaluate process capacities and support alternatives analysis. HDR will also assess the LOS framework and provide recommendations.

Condition Assessment of Major Unit Processes

The HDR Team understands that the Phase 1 condition assessment will be high-level and primarily desktop-focused. As part of this effort, we will request access to the asset management database and review installation dates to perform an age-based desktop analysis. This provides a baseline assessment of remaining useful life.

HDR has used this approach for projects, including Goleta Water District, performing a rapid condition assessment for the Corona Del Mar Water Treatment Plant.

Staff interviews will then be conducted to refine these assessments, accounting for equipment that may have performed better than expected or received recent upgrades.

Following the desktop assessment, a field verification will be conducted by discipline experts, particularly electrical, structural, and process mechanical staff, to visually assess and validate condition ratings. Staff input will also help inform the criticality of equipment.

HDR has used this approach for projects, including Goleta Water District, performing a desktop rapid condition assessment for the Corona Del Mar Water Treatment Plant. For the Eastern Municipal Water District RWRf Rehabilitation Study, we conducted field site visits to perform high-level condition assessments.

MANAGING AGING INFRASTRUCTURE AND EXTENDING ASSET LIFE
 Condition Assessment and Rehabilitation Guide

We wrote the book! HDR is an industry leader in infrastructure condition assessment!



TASK 3 - Wastewater Treatment Alternatives

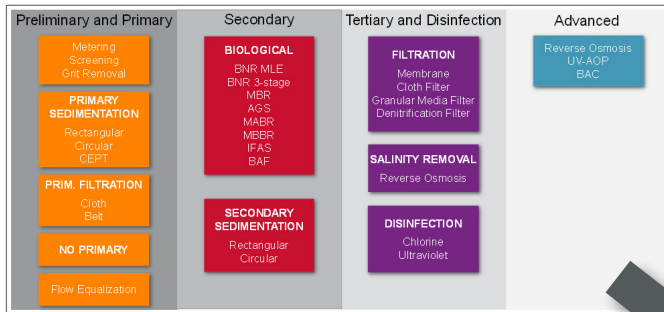
Liquid Treatment Alternatives Development

The process configuration for JBLTP must consider effluent requirements, current and potential end uses, current and future regulatory requirements, risk and uncertainty in projections, and timing/phasing of improvements. We will prepare a technology evaluation that addresses optimization opportunities for the baseline scenario, and more substantial process changes for the alternatives development. The table below provides a sample of potential secondary treatment technologies that will be considered.

TECHNOLOGY	DESCRIPTION	ADVANTAGES	OTHER CONSIDERATIONS
Modified Ludzack-Ettinger (MLE) Process	Proven activated sludge process for nitrogen removal. Can be considered as a future upgrade to address nutrient removal requirements.	- Economical and simple process - Needed only when required to meet an effluent nitrogen limit. - Can be designed with flexible an/aer zones.	MLE can be combined with other optimization options to enhance treatment performance and capacity. The optimization technologies described below are not mutually exclusive.
MLE with membrane aerated biofilm reactors (MABRs)	Modular cassettes installed in anoxic zone outfitted with gas-transfer membranes to deliver oxygen directly to a biofilm layer where bacteria metabolize nutrients, resulting in simultaneous nit/denit.	- Four to six times more efficient aeration. - Energy-efficient process for ammonia and total nitrogen removal. - Facility can be retrofitted in the future.	HDR has completed multiple pilots that demonstrate performance, bringing a strong understanding of the technology.
Densification (hydrocyclones, f/m cycling, selective wasting)	Application of selection pressure on activated sludge to favor denser and fast settling particles that result in improved clarifier performance and the opportunity to increase ML suspended solids in the reactors, thereby increasing capacity.	- Proven approach to increasing capacity with multiple examples in US. - Simple implementation - Improves treatment performance without new structures	Requires full-scale implementation. Beneficial for both near term and long term improvements.
Membrane Bioreactor (MBR)	Combines biological wastewater treatment with membrane filtration to produce high-quality tertiary effluent. Eliminates the need for separate clarifiers and filtration. This innovative process allows for higher concentrations of biomass within a smaller footprint, leading to more efficient, compact, and effective wastewater treatment systems suitable for municipal and industrial applications.	- Proven technology with thousands of installations - Smaller footprint - Provides nutrient removal - Produces high-quality tertiary effluent using UF membranes; can serve as a pre-treatment step to the RO in AWPF.	Technology is a great option when considering reuse (Title 22 and IPR/DPR). Disposal to the outfall would still require treatment to tertiary, which would be more costly than secondary effluent.
Activated Granular Sludge (GrAS)	New technology with granules grown to between 2-5 mm in size for high efficiency treatment for removing ammonia, nitrogen, and phosphorus.	- Ability to support biological nutrient removal within a single tank. - Compact and modular footprint allows smaller footprints and smart expansion when needed.	HDR has completed the design for the largest AGS facility in the US at 50 mgd for the City of Omaha. At JBLTP, new tanks would be needed, but the overall footprint would be reduced. Consider impacts to solids processing due to phosphorus removal.
Sidestream Treatment	Includes proven and innovative technologies such as pre-nitrification, deammonification, with anammox, and phosphorus sequestration or harvesting as struvite or brushite.	- Ability to treat recycle loads, in particular nutrient recycle, emanating from solids processing. - Potential costs are 50% less than the cost to remove nutrients in the mainstream.	This technology can be considered in the solids evaluation, but will have an impact on liquids treatment.



The development of alternatives begins with identification of all treatment technologies that will be considered. **Gregorio Estrada will bring national experience** in the application of different treatment technologies so that SOCWA and the PC2 member agencies can select technologies for consideration based on their distinct advantages and applicability to JBLTP. This exercise will shortlist potential technologies so that the evaluation is focused and efficient.



Liquids Treatment Alternatives Identification in 3-Steps

- 1 Identification and shortlisting of treatment technologies
- 2 Development of process treatment trains
- 3 Ranking and shortlisting of liquids treatment alternatives

Solids Treatment and Disposal Alternatives Development

The heart of the solids system is the digestion process, which reduces the amount of solids and stabilizes solids into a beneficially reused product. With a 15-day solids retention time and adequate heating and mixing in the digesters, a Class B product is produced. Thickening processes before digestion reduces the size and capacity requirement of the digestion process. At the JBLTP, the digestion process is producing a sub-class B product, which cannot be beneficially reused and is required to be disposed of at the landfill. With SB 1383, organics, including biosolids, are largely prohibited from continuing to dispose in landfills. This limits the end use options for the plant.

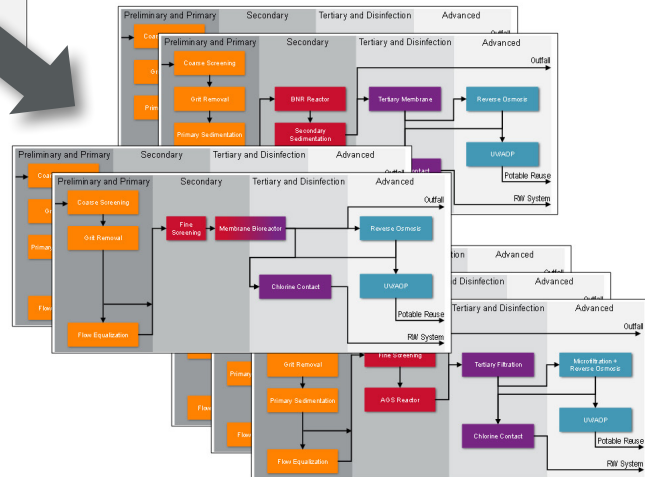
HDR has provided dozens of Master Plan evaluating solids processes.

Ways to meet Class B: Meet the time and Temperature Requirement for Class B in the digesters by providing more storage capacity. More storage can be provided in several ways:

- a. Build another digester: This is an expensive option, with limited space on the site.
- b. Improvement system for thicker solids, which reduces the capacity:
 - i. Co-thickening
 - ii. Recuperative thickening
 - iii. Primary Sludge Thickening
- c. Provide a Sludge Conditioning Step (e.g., thermal hydrolysis) to allow for more solids to be fed.



Gregorio's approach to building consensus on project elements supporting critical decision making.



Site Planning Evaluation

Site planning will integrate the evaluation performed for liquids and solids treatment, electrical systems, energy recovery systems, and support facilities. The evaluation will include consideration for site access, staging, and phasing of improvements. In addition, consideration for the resiliency and vulnerability of the site layouts for each treatment approach will inform the evaluation of the alternative.

Regulatory considerations include future nutrient limits for discharge to the outfall, regulatory requirements for end uses, AQMD requirements and impacts, and potential PFAS regulations for biosolids disposal. Key members of our team (Gregorio Estrada and Mike Falk) have been directly involved in discussion and evaluation of impacts of discharges to the SoCal Bight, and bring watershed perspectives that will provide valuable insight on the potential regulatory limits on nutrients, and the likely timing of those regulations.

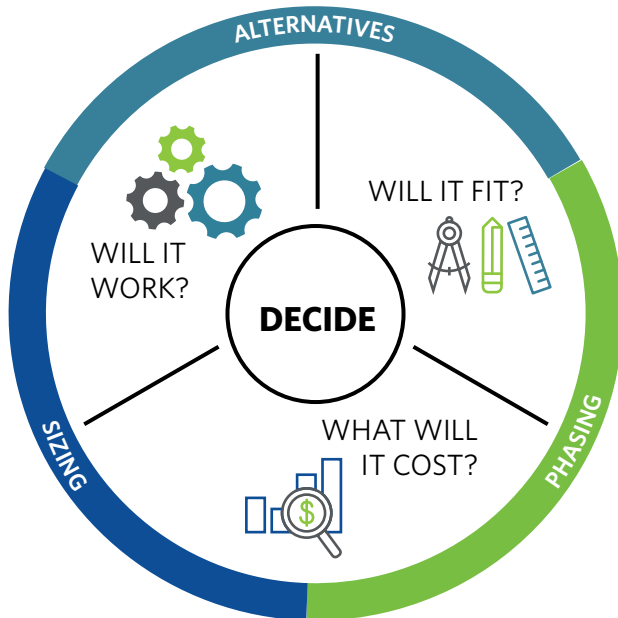


We have successfully used this approach on various Master Plans throughout Southern California, including West Basin Municipal Water District, Irvine Ranch Water District, and Santa Margarita Water District.

TASK 4 - Effluent Utilization Evaluation

Define and Shortlist Effluent Management Options

HDR recognizes the criticality of open conversations and in-person workshops to build consensus and align priorities across SOCWA and PC2 Member Agencies. To support this, the HDR Team will facilitate collaborative workshops to identify and define potential effluent management criteria and alternatives. DecisionSPACE will be used throughout the process, systematically applying pairwise comparisons to define and weight criteria and capture evolving priorities.



Evaluation of Alternatives

The shortlisted effluent management alternatives will be assessed and ranked in detail, with consideration to:

Technical feasibility	Evaluate compatibility with existing plant operations and any required upgrades.
Regulatory requirements	Identify necessary permits, compliance measures, and implementation timelines.
Environmental impacts	Identify effects on local ecosystems, community health, and water quality.
Cost-effectiveness	Determine capital, operational and maintenance, and life-cycle costs.

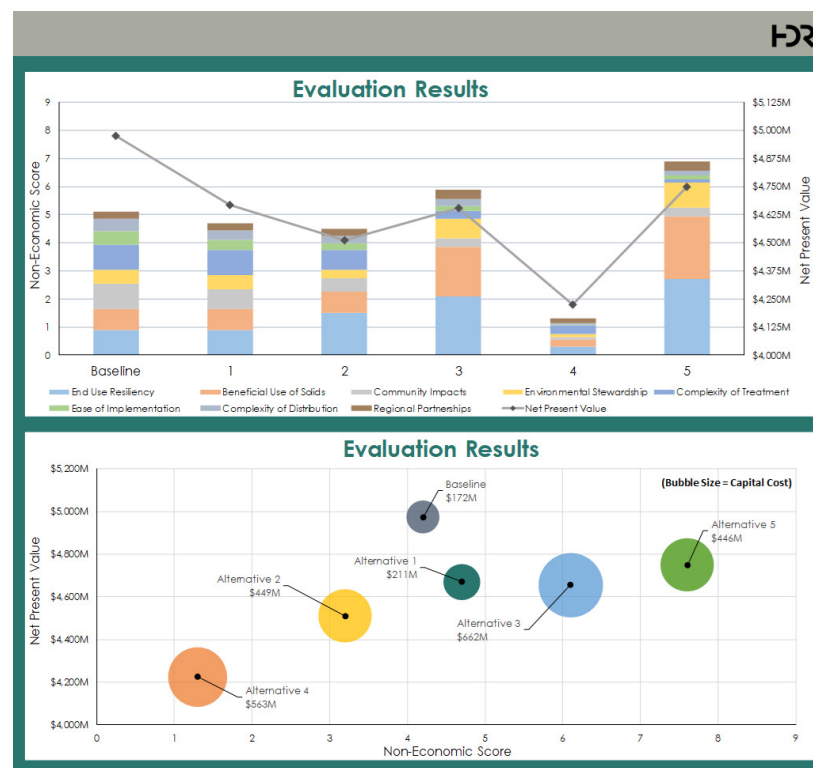
The HDR Team will document findings in a structured evaluation multi-criteria decision matrix to support transparent comparison across all alternatives.

Offsite Reuse and Infrastructure Assessment

For alternatives involving offsite effluent utilization, the HDR Team will perform a high-level assessment of potential offsite applications, such as advanced water purification facilities (AWPF), indirect potable reuse (IPR), or other regional reuse opportunities. This task will include identification of necessary offsite infrastructure improvements, and evaluation of associated operational or regulatory considerations. The assessment will provide early-stage guidance to inform SOCWA's planning process, without undertaking detailed design engineering.

Cost-Benefit Analysis and Alternatives Ranking

The HDR Team will perform a high-level cost analysis for each alternative using tools such as HDR's cost estimate tool, **CostSPACE**, to develop Level 5 estimates. Benefits, including water savings, environmental improvements, and regulatory compliance, will be quantified where feasible. We will also conduct a cost-benefit analysis to evaluate the relative merits of each option and produce a ranked list of recommended effluent management strategies. This deliverable will provide SOCWA with a clear, actionable foundation for long-term planning and decision-making regarding effluent utilization. The outcome will be a long-term, integrated strategy that maximizes limited space, improves beneficial use, and explores creative opportunities like re-purposing underutilized or abandoned sites.

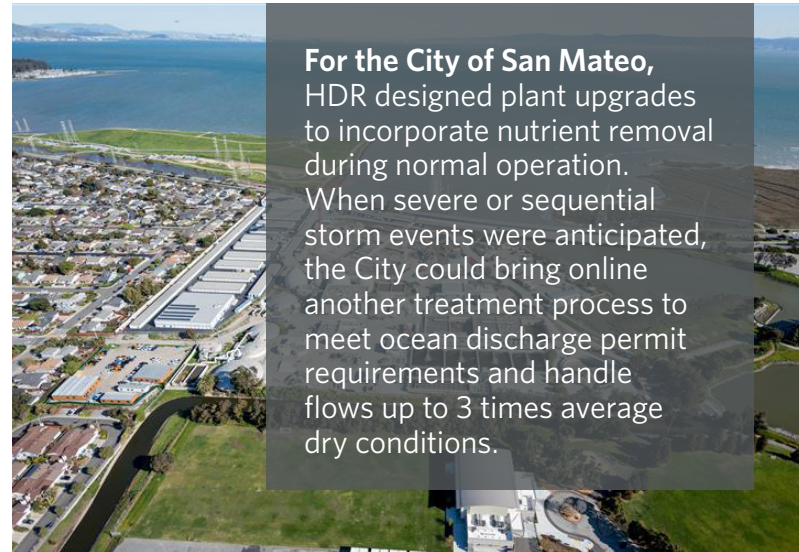


3 Liquid Treatment Processes to Meet your Effluent Management Needs

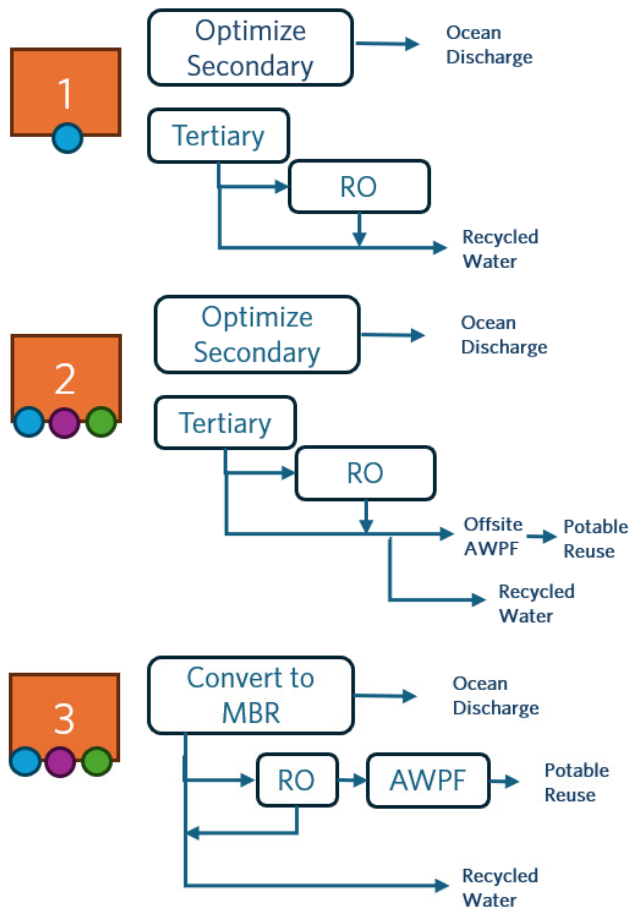
We can do more with our water. By moving beyond ocean discharge, cost-effective and sustainable reuse alternatives can deliver community and environmental benefits. Below are 3 effluent management strategies to be discussed with SOCWA and PC2 member agencies.

Our team will explore innovative ideas of potential regional, inter-agency solutions. JBLTP is site constrained, leaving little space available for treatment processes and upgrades. Potential improvements at a nearby facility could be more cost-effective (capital or life-cycle) or be easier to implement during construction.

Additionally, HDR's SMWD Master Plan analysis considered routing secondary and tertiary effluent from JBLTP to new facilities at Chiquita WRP, which would provide access to regional storage but require a longer pipeline.



SCWD's Doheny Desalination Plant offers a partnership opportunity for IPR or DPR. Advanced-treated water from JBLTP could be sent to Doheny for distribution, or **JBLTP tertiary effluent could be conveyed to a new advanced treatment facility at Doheny**, freeing space at JBLTP for improvements.



Legend: ● Title 22 Recycled Water District Use

● Indirect Potable Reuse

● Direct Potable Reuse

BENEFITS	CHALLENGES
✓ Lowest capital cost ✓ Lower disposal cost of secondary effluent ✓ Less major demolition	▪ Limited footprint flexibility ▪ No potable reuse onsite

BENEFITS	CHALLENGES
✓ Lower capital cost than MBR ✓ Lower disposal cost of secondary effluent ✓ Onsite footprint less constrained	▪ Additional operational interagency coordination ▪ Requires conveyance infrastructure

BENEFITS	CHALLENGES
✓ Reduces footprint ✓ Higher quality effluent ✓ More efficient treatment train (e.g., MBR as pretreatment to AWP)	▪ Higher capital cost and more specialized operation needs ▪ Increased demolition and noise impacts

TASK 5 - Develop Project Alternatives

Identify Proposed Project Alternatives

A logical progression of analyses and decisions to rank the preferred end use strategies and treatment concepts. From the efforts of Tasks 3 and 4, the HDR team will have four liquids treatment alternatives and four solids treatment alternatives that will be assessed and shortlisted based on its ability to accommodate defined evaluation criteria. In Task 5, we will use these shortlisted liquids and solids alternatives as the basis for identifying up to four combined alternatives that meet the base level of service standards for JBLTP and the overall project goals for optimization of a resilient, long-term treatment facility incorporating reasonably available beneficial reuse opportunities.

With SOCWA and PC2 Member Agencies, we will refine the development of each combined alternative, define overall project evaluation criteria, and rank the combined project alternatives. **Our team will facilitate collaborative inter-agency workshops to achieve the support and buy-in so each stakeholder is confident in the recommended combined project alternative to be advanced to the Phase 2 Facility Master Plan.**

We will implement a standard decision-making process will provide general consistency throughout the project, but it can be tailored towards providing you with the information needed. A yardstick or pair-wise (or both) approach can be used to establish a relative weight to evaluation criteria to score each alternative objectively.



TASK 6 - Prepare Facility Planning Assessment Report and Documents

List of Deliverables

HDR shall prepare the following deliverables under Phase 1, including but not limited to the following list, based upon the Consultants' experience and expertise in FPA processes.

A Comprehensive FPA Report with an Optimized, Recommended Long-Term Alternative backed by Full Organizational Support. Our team will compile the TMs from Tasks 2 through 5 into a comprehensive Facility Planning Assessment Report that meets goals of this project, documents the approach to assess existing facilities, identify end uses, develop alternatives, define evaluation criteria, and make defensible decisions.

TASK NO.	TASK DESCRIPTION	DELIVERABLE
1	Project Management	Project Control Plan with schedule of workshops and Board presentations.
1	Project Management	Facility Planning Assessment (FPA) Table of Contents and corresponding schedule of deliverables.
1	Project Management	Monthly progress reports.
2	Existing Facilities Eval.	Conditional Assessment Report.
2	Existing Facilities Eval.	Process Flow Diagram for liquid and solids.
2	Existing Facilities Eval.	Hydraulic model output files.

2	Existing Facilities Eval.	Hydraulic profile.
2	Existing Facilities Eval.	Process model output files.
2	Existing Facilities Eval.	Task 2 technical summary of findings. Material to be incorporated with the corresponding Chapter of the FPA Report.
3	Wastewater Treatment Alternatives	Task 3 technical summary of findings and project alternatives. Material to be incorporated with the corresponding Chapter of the FPA Report.
4	Effluent Utilization Evaluation	Task 4 technical summary of findings. Material to be incorporated with the corresponding Chapter of the FPA Report.
5	Develop Project Alts.	Project alternative evaluation matrix.
5	Develop Project Alternatives	Task 5 technical summary of findings of proposed treatment alternatives and corresponding project alternative. Material to be incorporated with the corresponding Chapter of the FPA Report.
6	Prepare Facility Planning Assessment Report	Administrative Draft, Draft, and Final version of each Chapter included in the Facility Planning Assessment Report. Each Chapter shall be developed and submitted according to the deliverable schedule under Task 1.
6	Prepare Facility Planning Assessment Report	Administrative Draft, Draft, and Final version of the Facility Planning Assessment Report with Exhibits.
6	Prepare Facility Planning Assessment Report	Administrative Draft, Draft, and Final versions of the Executive Summary that succinctly presents key findings, conclusions, and recommendations.

03 Experience and Technical Competence



Experience and Technical Competence

We have the experience to deliver. The following projects demonstrate our experience developing both innovative and feasible solutions that will be applied to your program's challenges. In these case studies, we employed cost-effective strategies, similar to those required in your scope of work. These project represent successful partnerships with our clients – reaching performance goals and delivering within the required schedule.

Agency & Project	Year	Master Planning	Facility and Site Planning	Flow and Loading Analysis and Projections	Process Modeling	Plant Hydraulic Modeling	Treatment Plant Capacity Evaluation	Planning and Design Criteria Development	Liquid Treatment Alternatives Evaluation	Solids Treatment Alternatives Evaluation	Electrical Systems Evaluation and Planning	Resilience Planning	Regulatory Drivers and Scenarios	Effluent and Nutrient Management	End Use Evaluations	Collections System Analysis	Plant Optimization	Condition Assessment	Project and Capital Improvement	Project Development	Implementation Strategies
SOCWA Aeration and Cogeneration Improvements	2018				●																
SOCWA Digester 1 & Clarifiers 7-9 Condition Assessments	2024																	●			
SOCWA JB Latham Plant Strategic Plan	2012	●	●	●	●	●	●	●	●	●			●					●	●	●	
Irvine Ranch Water District Sewage Treatment Master Plan	2021	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	
Central Contra Costa Sanitary District Treatment Plant of the Future Conceptual Plan	2011	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	
Sacramento Region EchoWater Program	2025		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	
West Basin Municipal Water District Recycled Water Master Plan	2021	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	
Camarillo Sanitary District Wastewater Master Plan	2021	●	●	●	●	●		●	●		●	●						●			
Santa Margarita Water District Wastewater and Recycled Water Master Plan Update	2024	●	●	●	●		●						●	●	●	●			●	●	
Santa Margarita Water District Oso Creek Water Reclamation Plant Design Validation Study	2024		●	●	●	●		●	●		●			●	●	●					
City of San Mateo Preliminary and Primary Treatment Improvements Conceptual Design	2017		●		●	●			●			●	●		●						
Eastern Municipal Water District Regional Wastewater Reclamation Facility Rehab Study	2025		●								●	●						●	●	●	
Water Research Foundation Efficient, Cost-Effective Nutrient Removal from Wastewater, Project 4827	2019	●							●				●								
Goleta Water District Corona Del Mar Water Treatment Plant Asset Inventory	2019																	●			



SOCWA JB LATHAM TREATMENT PLANT AERATION AND COGENERATION IMPROVEMENTS

REFERENCE: MR. BRIAN PECK, RETIRED, (949) 246-8338

MR. JOSEPH ZIMMERMAN, SOCWA, PLANT MANAGER, JZIMMERMAN@SOCWA.COM

HDR served as SOCWA's partner from the facility planning phase through final design and construction phase services. HDR designed an efficient and flexible aeration system that meets current demands and can accommodate anticipated changes in influent loadings. HDR designed an efficient and flexible aeration system that meets current demands and can accommodate anticipated changes in influent loadings. HDR served as SOCWA's partner from the facility planning phase through final design and construction phase services.

As part of the Facility Plan, our Team developed a Biotran process model for the JBLTP. The team used this model to determine aeration demands for various scenarios. It also included diffuser characteristics that provided the required number of diffusers per zone, and also allows design of selector zones and their impact on aeration demands.

The new aeration system consisted of new fine bubble air diffusers, high efficiency turbo blowers, and full automation through upgrades to control valves, air flow meters, and DO sensors to efficiently control air flow based on dissolved oxygen in the aeration basin influent and effluent zones.

Key elements of the project included the following:

- Development of a construction sequencing plan to ensure that the plant had sufficient available aeration capacity throughout construction

- Structural repair of basin walls, walkways, and supports.
- Safety improvements throughout the site including repair of existing and installation of new guardrail at the aeration basins.
- Repair and replacement of existing equipment, including basin isolation gates.
- An aggressive schedule to complete improvements.

The same design team that delivered the JBLTP aeration system upgrades is being proposed for this project.

This provides SOCWA with a dedicated local staff that has recent experience working on your largest treatment plant.

Date initiated: March 2015

Date completed: August 2018

HDR Team involved: Amy Omae, Gregorio Estrada, & Mario Benisch

IRVINE RANCH WATER DISTRICT SEWAGE TREATMENT MASTER PLAN

REFERENCE: MR. JACOB MOEDER, PE,
IRWD, ENGINEERING MANAGER,
MOEDER@IRWD.COM
949-453-5554



HDR prepared the Sewage Treatment Master Plan, which characterized historical sewage flows and loading to IRWD's two water recycling plants, projected future flows and loading through build-out, evaluated existing treatment capabilities and identified deficiencies, identified current and future end uses, and developed treatment process upgrades and expansion requirements for the 28 mgd Michelson Water Recycling Plant (WRP) and the 7.8 mgd Los Alisos WRP.

The master planning effort aimed to maximize the beneficial reuse of sewage, minimize diversion of sewage to Orange County Sanitation District, and identifies ways of managing the sewage collection and treatment systems in the most cost-effective manner while balancing the projected sewage flows with projected recycled water demands. The master plan outlined capital improvement projects necessary to implement the recommendations and a corresponding implementation program for those improvements. Changes that are being addressed in the master plan include the new biosolids and energy recovery facilities at the Michelson WRP, potable reuse program, increased loading concentrations, water conservation and increased developments, Michelson WRP diversion to San Diego Creek, and Orange County Water District's Green Acres Project. The project included updates of the existing sewer collection hydraulic model to generate options for sewage conveyance to better optimize the management of flows throughout the collection system and their ultimate end use.

Technical Memos were provided throughout the duration of the project with Draft and Final Report deliverables submitted. Board approved the Final Report in February 2021 and the project was completed May 20, 2021.

The HDR planning team completed complex alternative evaluations for an operational treatment plant under an aggressive schedule. Key staff of our proposed SOCWA JBLTP team served as team members of this Master Plan.

This experience is directly pertinent to this project because it includes the same major elements, and demonstrates that the team is capable to effective project delivery.

Date initiated: July 2018
Date completed: May 2021

HDR Team involved: Amy Omae, Gregorio Estrada, Alice Wang, JB Neethling, & Mario Benisch



West Basin MWD Recycled Water Master Plan

REFERENCE: MR. ORLANDO RODRIGUEZ, PE, ENV SP, SENIOR ENGINEER, WBMWD, (310) 660-6213, ORLANDOR@WESTBASIN.ORG

In early 2020, HDR was selected to update the West Basin Recycled Water Master Plan. The Master Plan includes an updated recycled water demand analysis, aimed at increasing recycled water production from 34 mgd to 70 mgd, an evaluation of the existing treatment plant performance and condition, an update and calibration of the distribution system hydraulic model in InfoWater, evaluation of expansion alternatives and development of a capital improvement program.

Expansion alternatives included interagency opportunities with neighboring cities and districts, including Metropolitan Water District of Southern California, Los Angeles Department of Public Works, LA Sanitation District and Long Beach Water Department. Workshops were held with local purveyors to identify opportunities to expand non potable irrigation and industrial uses, as well as groundwater recharge.

The recycled water distribution system hydraulic model was calibrated using pressure loggers and SCADA data, to assess capacity, velocity and pressures.

Date initiated: January 2020
Date completed: December 2022

HDR Team involved: Amy Omae, Gregorio Estrada, Alice Wang, Mario Benisch, & Joe Nye



Santa Margarita Water District Wastewater and Recycled Water Master Plan Update

REFERENCE: MS. TRICIA BUTLER, PE, CHIEF ENGINEER, SMWD, (949) 459-6554, TRICIAB@SMWD.COM

HDR prepared an update to the Wastewater and Recycled Water Master Plan (Master Plan) for SMWD, refining the approaches identified in the previous Master Plan. The updated Master Plan outlines an implementation strategy that balances projected sewage flows with recycled water demands, emphasizing the optimization of SMWD's wastewater treatment processes and maximizing the reuse of recycled water. We evaluated six system-wide alternatives, utilizing a methodology to define options, model economic costs, and compare alternatives based on life-cycle costs. The economic analysis considered capital and operational costs, alongside non-economic factors such as facility impacts, complexity of improvements, ease of implementation, and regional partnerships. HDR facilitated this comprehensive evaluation by leveraging HDR's costSPACE, estimating software and historical cost data to certify consistency and accuracy in the cost estimates. This Master Plan update provides a framework for the District to assess the feasibility of these improvements and guide future decisions.

Date initiated: July 2024
Date completed: December 2024

HDR Team involved: Amy Omae, Gregorio Estrada, Mario Benisch, Karina Sandoval, Joe Nye, & Curtis Gauthier



EMWD Recycled Water Reclamation Facility Rehab Study

REFERENCE: MR. WILLIAM CHEN, PE, ASSOCIATED CIVIL ENGINEER II, EMWD, (951) 928-3777 EXT. 6208, CHENW@EMWD.ORG

HDR is performing a high-level operation and condition assessment for four regional wastewater reclamation facilities (RWRF) located in Moreno Valley, Perris, San Jacinto, Temecula. This project develops a strategy to address possible rehabilitation and system improvements needed to maintain reliable service at each facility. HDR developed forms using the Survey123 ArcGIS program to conduct the condition assessment and collect field data. Assessment data collection includes asset type (Civil, Structural, Mechanical, Electrical, I&C), physical parameters, visual parameters, and condition ranking.

HDR staff worked closely with district staff to complete inspections of their facilities, and gathered data which supported the analysis of the overall condition of each asset. Through this effort, the HDR team was able to assess, identify and prioritize rehabilitation and replacement needs and documented the results in 5 reports, one R&R report for each RWRF and one final report for overall district CIP program, and present the results to various stakeholders.

Date initiated: March 2023
Date completed: July 2025

HDR Team involved: Gregorio Estrada, Teigan Gulliver, Alice Wang, Sean Hoss, & Kirk Johnson,

04 Key Personnel and Sub-Consultants





PROJECT MANAGER KEY QUALIFICATIONS

COORDINATOR

Amy has demonstrated the ability to bring focus and excellence to her role as project manager and day-to-day liaison, coordinating task leaders and managing project budget and schedule, through her experience complex, multi-faceted projects.

TECHNICAL EXCELLENCE

In her 21 year career delivering projects throughout California, Amy is a utility player and highly qualified to lead wastewater and water master planning, design, and engineering services during construction projects.

LOCAL COMMITMENT

Amy was born and raised in Orange County and an OC resident for the better part of her professional career. She is readily available and able to meet as frequently as needed and is committed to the project from facilitating discussions so the overall goals of the project are reinforced

COMMUNICATOR

Amy is a passionate engineer, dedicated to delivering a quality product that accomplishes the project's goals and meets or exceeds client expectations. Amy promotes a collaborative and transparent environment to receive stakeholder input and understand project drivers.

STRONG LEADERSHIP

Amy Omae, PE, LEED AP, is a recognized wastewater leader throughout Orange County based on her over 20 years of experience delivering client-focused solutions for complex projects and for her industry engagement in leadership roles of professional organizations, including CWEA, SARBS, and CASA. Amy has the technical expertise, collaborative communication approach, and commitment centered on your best interests. She will deliver innovative solutions that cost-effectively mitigate project challenges. Amy's relevant project experience includes:

- **IRWD Sewage Treatment Master Plan**
- **SMWD Chiquita Water Reclamation Plant Influent Screening and Lift Station Upgrades**
- **OC San P1-140, Activated Sludge-1 Rehabilitation at Plant No. 1**
- **IRWD Water Supply Reliability Study**

Amy Omae has a proven team who have successfully collaborated on various projects together in the recent years. Amy will leverage the experience of her team, specifically with the support of Alice Wang, Gregorio Estrada, and Jacquelin Mutter in managing and overseeing the project, monitoring progress, reinforcing quality, and facilitating discussions so the overall goals of the project are reinforced for consistent and effective project execution.

Amy will be supported by a team of experts who:

- Have proven technical expertise that will facilitate the development of innovative solutions to cost-effectively address site planning, resiliency, and sequencing challenges
- Possess unparalleled knowledge of key issues that would directly affect your project, allowing our team to anticipate and minimize potential risks.
- Have successfully delivered several projects with similar scope elements as a team.

PROJECT MANAGER

Amy has the proven management, leadership, and communication skills to effectively coordinate the needs of SOCWA, PC2 Member Agencies, and the HDR technical team to set JBLTP on the right path towards its future. During her 20 years, she has worked onsite at plants like yours and has acquired extensive knowledge and relevant experience of what it takes to rehabilitate, update, and improve treatment processes, and reuse practices. Amy has the experience needed to manage the scope, schedule, and individual experts and is the perfect Project Manager for this important project.

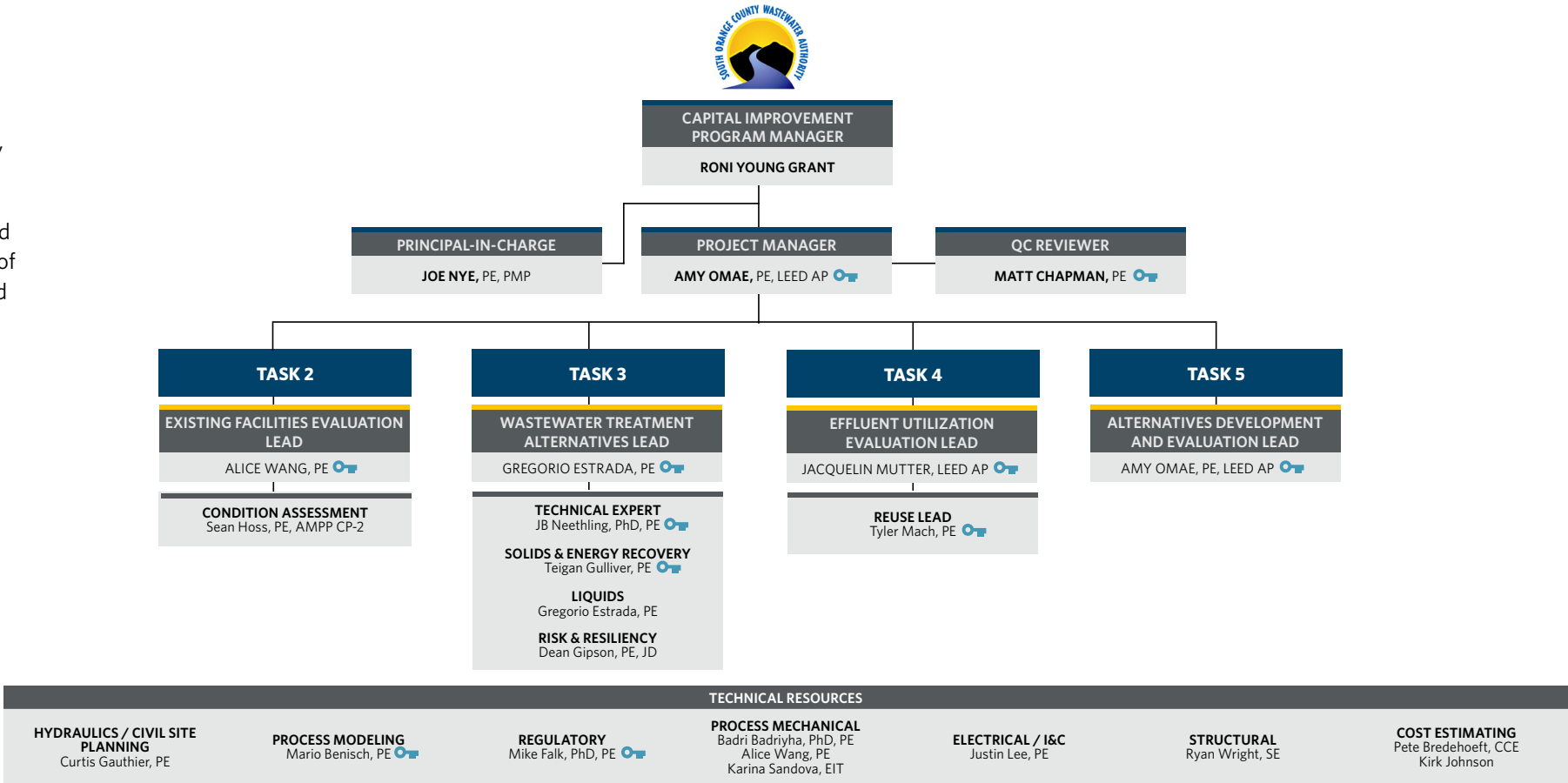
Amy is dedicated to being the Project Manager for the JBLTP Facility Planning Assessment Effort.



"Managing complex projects and tasks necessitates the use of both hard engineering technical skills and the soft communication people skills. Both are equally important, but the latter can be even more so to build consensus effectively. The challenge with this project is to find that balance between technically-feasible, cost-effectiveness, and equitable to all parties. My passion for this work is not just professional; it's a personal passion. I share your belief that discharging secondary effluent to the ocean is a wasted resource that could be applied towards more beneficial reuse, as long as it can be done reasonably and cost-effectively. JBLTP has a long and well-established history, and I would be honored to play a key part in identifying its role in this next phase of resource recovery and help usher it forward." -Amy Omae

Amy brings the following benefits to SOCWA:

- Over 20 years of continuous experience working directly with Southern California water and wastewater agencies, including SOCWA on the Plant 3A Aeration Header Reroute project.
- Well-rounded experience as a Project Manager, Task Lead, and Engineer for a variety of planning, design, and construction projects.
- Deep knowledge of collections, treatment, and reuse systems.
- Proven ability to work collectively and productively with SOCWA staff to make sure the project is completed correctly and efficiently.
- The leadership and management skills to provide cohesion to the entire team.



LEGEND
Key Staff:

DELIVERY FOCUSED TEAM

By taking advantage of a team that has worked together on the same types of projects you leverage existing knowledge to plan for effective solutions. Our team includes people you know and trust, including Amy Omae and Gregorio Estrada. **The team is excited and dedicated to continue working with SOCWA and the success of this project.**

BENEFITS THE HDR TEAM BRINGS TO SOCWA AND THE PROJECT

Proactive Communication, collaborative approach and responsive team

Knowledge and familiarity with JBLTP and SOCWA PC2 Member Agencies

Expertise in process design, hydraulic modeling, and electrical work

Commitment to cost-effective, streamlined decision making and SOCWA's long-term vision



Amy Omae, PE

Project & Design Manager

Amy's role will be Project Manager for the Treatment Plant Facility Planning Assessment Effort. As a project manager, Amy will be involved in all aspects of the project.

Related Experience Benefiting SOCWA:

- IRWD Sewage Treatment Master Plan
- SMWD Chiquita Water Reclamation Plant Influent Screening and Lift Station Upgrades
- OC San P1-140 Activated Sludge Rehab
- IRWD Water Reliability Study



Matt Chapman, PE

QC Reviewer

Matt has specialized in delivering high-level programmatic management services. His 33 years of experience has been largely focused on delivering large-scale water and wastewater programs and spans every phase of project development and delivery.

Related Experience Benefiting SOCWA:

- IRWD Sewage Treatment Plant Master Plan
- City of San Luis Obispo, Program Management for WRF Upgrade



Alice Wang, PE

Existing Facilities Evaluation

Alice is experienced in master planning, flows and loads projections, condition assessments, and life-cycle cost analysis. She translates complex datasets into actionable insights that drives decision-making and helps teams deliver practical, resilient solutions through her attention to detail.

Related Experience Benefiting SOCWA:

- IRWD Sewage Treatment Master Plan
- WBMWD Recycled Water Master Plan
- GWD, Corona Del Mar Water



Gregorio Estrada, PE

Treatment Technology

Gregorio is an experienced treatment plant designer with numerous successful projects, including a recent SOCWA project and multiple Master Plans across Southern California.

Gregorio is particularly adept at delivering complex design projects.

Related Experience Benefiting SOCWA:

- SOCWA JBLTP Aeration and Cogeneration Improvements



Jacquelin Mutter, LEED AP
Effluent Utilization Evaluation
Jacquelin includes 18 years of experience in design focusing on potable reuse plans and projects. Some of the keys to Jacquelin's success is her aptness in organization, communication and attention to detail.

Related Experience Benefiting SOCWA:

- OWD & Sweetwater Authority Recycled Water Intertie Planning Study
- LASAN & LADWP, DCTWRP AWP Program and Construction Services Support



JB Neethling, PhD, PE
Technical Expert
JB is considered HDR's top wastewater process engineer, with more than 42 years of wastewater engineering experience ranging from master planning, process evaluation, and modeling to design and startup of wastewater treatment plants.

Related Experience Benefiting SOCWA:

- SOCWA JBLTP Aeration System Upgrades
- IRWD Michelson Phase 2 Expansion
- OCSan WTP No. 1 Activated Sludge Rehab



Teigan Gulliver, PE
Solids & Energy Recovery
Teigan is a water and wastewater professional engineer with 16 years of experience with a focus in solids treatment processes and biosolids. She enjoys discussing operational challenges with the plant staff to problem solve daily operational issues and incorporate them into design.

Related Experience Benefiting SOCWA:

- EMWD Regional WRF Rehab Study
- Union Sanitary District, Solids System Evaluation



Tyler Mach, PE
Reuse
Tyler offers over 12 years of experience in master planning, design, project management, and construction oversight. Her experience includes planning, engineering, lime softening, ion exchange, plant hydraulics, and chemical system processes.

Related Experience Benefiting SOCWA:

- City of Las Vegas WTP Facility Plan/PER
- Town of Gilbert, North WTP Technical Advisor & Construction Management Services
- MCSE, Westfield Center WTP Technical Evaluation



Mario Benisch, PE
Process Modeling
Mario is our go-to Process modeler and designer for SOCWA projects. He has developed and reviewed models for the Plant 3A, JBLTP, and CTP. He delivers a common sense approach to modeling.

Related Experience Benefiting SOCWA:

- SOCWA Wastewater Authority Plant 3A Aeration System Evaluation Report
- SOCWA JBLTP Aeration System Upgrades
- IRWD Michelson Phase 2 Expansion



Mike Falk, PhD, PE
Regulatory
Mike has more than 17 years of water and wastewater engineering experience, with specialized expertise in nutrient removal process design, nutrient regulations, and energy optimization at wastewater treatment facilities.

Related Experience Benefiting SOCWA:

- EMWD Hemet/San Jacinto WWTF
- Camarillo Sanitary District, Wastewater Master Plan Update
- CCCSD, Recycled Water Feasibility Study

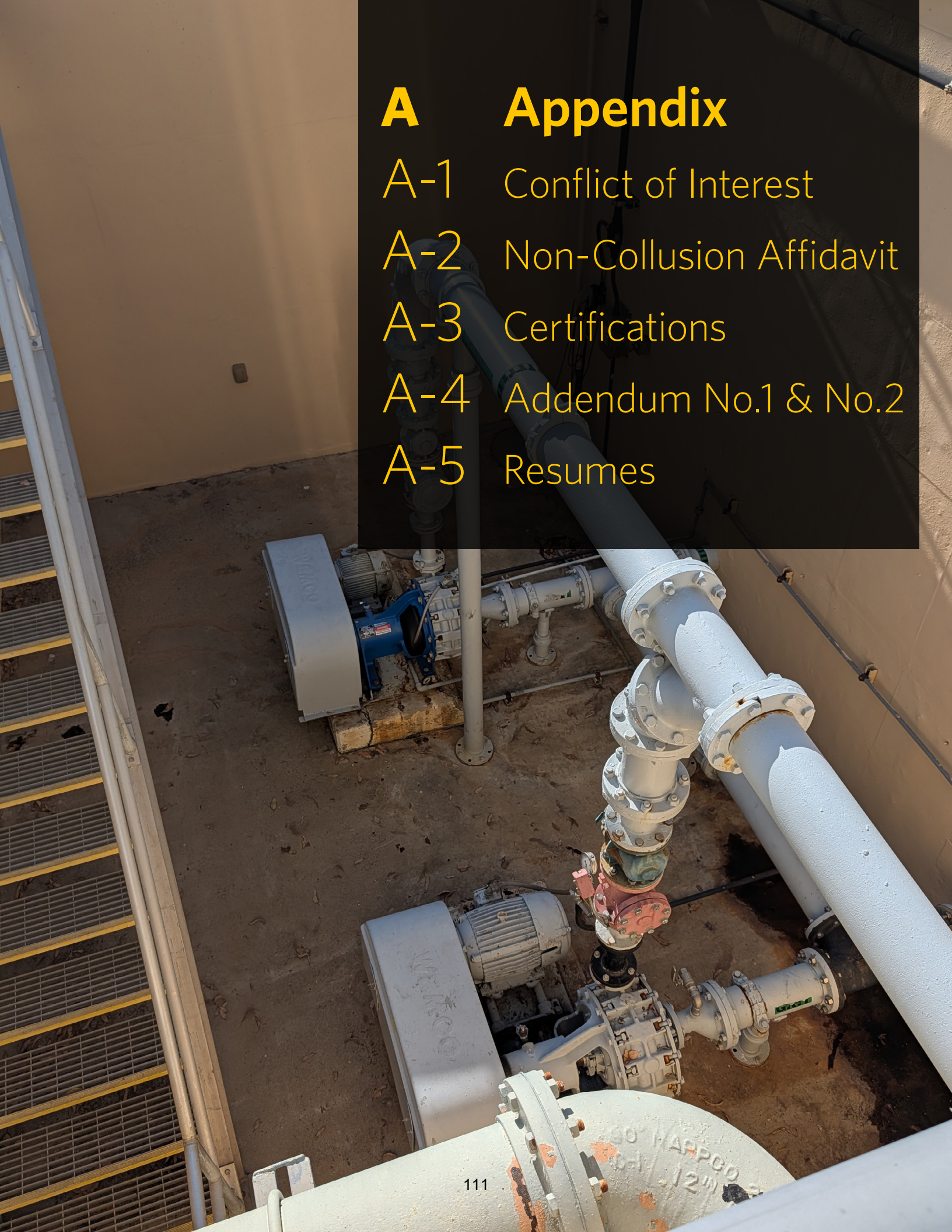
05 Pricing



05 Pricing



HDR has provided the fee for the project in separately submitted Fee Proposal as indicated in the RFP.



A Appendix

A-1 Conflict of Interest

A-2 Non-Collusion Affidavit

A-3 Certifications

A-4 Addendum No.1 & No.2

A-5 Resumes

A-1 Conflicts of Interest



Conflicts of Interest

HDR has determined that our participation and the participation of our employees, agents and subcontractors in the J.B. Latha, Treatment Plant Facility Assessment Effort contract does not constitute a conflict of interest or a potential conflict of interest pursuant to California Government Code Sections 1090 *et seq.*, the Political Reform Act, and other applicable laws.

A-2 Non-Collusion Affidavit



**ATTACHMENT B
NON-COLLUSION AFFIDAVIT**

The undersigned declares:

I am the Vice of HDR, the party making the foregoing bid.
President

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on Oct 7[date], at Irvine[city], CA[state].
2025

Signature: Anna Y. Blount

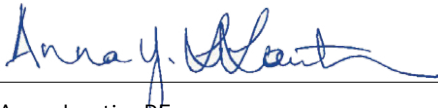
Title: Vice President

A-3 Certifications



Certifications

1. HDR certifies that it is not aware of any actual or potential conflict of interest that exists or may arise by executing the contract or performing the work that is the subject of this RFP.
2. HDR certifies that it is willing and able to obtain all insurance required by the form contract included as Attachment C.
3. HDR certifies that it has conducted a reasonable and diligent inquiry concerning the minimum and/or prevailing wages required to be paid in connection with the performance of the work that is the subject of this RFP and certifies that the proposed pricing includes funds sufficient to allow respondent to comply with all applicable local, state, and federal laws or regulations governing the labor or services to be provided.
4. HDR acknowledges and agrees with all terms and conditions stated in the RFP. **Following selection, we would appreciate the opportunity to discuss the terms in the Contract.*
5. HDR certifies that all information provided in connection with its proposal is true, complete, and correct.



Anna Lantin, PE
Vice President, Authorized Signatory

A-4 Addendum No.1 & No.2



SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ADDENDUM No. 1

TO: REQUEST FOR PROPOSAL

FOR JBL FACILITY ASSESSMENT PLANNING

THE PROPOSER SHALL EXECUTE THE CERTIFICATION AT THE END OF THE ADDENDUM AND SHALL ATTACH THE ADDENDUM TO THE PROPOSAL (NOT TO BE INCLUDED AS PART OF THE PAGE COUNT).

1. The pre-proposal meeting is MANDATORY; a virtual option is available if firm is unable to attend in person.
 - a. Microsoft Teams
2. The Facility Assessment Planning effort is Phase 1 of the master planning effort.
3. The selected consultants will be expected to complete the effort within 9 months of notice to proceed.

DATED: 9/4/2025

Roni Young Grant

Roni Grant
CIP Manager

BIDDER'S CERTIFICATION

I acknowledge receipt of the foregoing Addendum No. 1 and accept all conditions contained herein.

DATED: 9/04/2025

BIDDER: HDR Engineering, Inc.
BY: Anna Lantin, PE

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ADDENDUM No. 2

TO: REQUEST FOR PROPOSAL

FOR JBL FACILITY ASSESSMENT PLANNING

**THE PROPOSER SHALL EXECUTE THE CERTIFICATION AT THE END OF THE
ADDENDUM AND SHALL ATTACH THE ADDENDUM TO THE PROPOSAL (NOT TO BE
INCLUDED AS PART OF THE PAGE COUNT).**

1. See attachment for the pre-proposal meeting sign-in sheet.
2. The proposal page limit is 20 pages, not including the cover, appendices and resumes.
3. Section 2.42 Hydraulic and 2.43 Process Model – This effort should be high level analysis during Phase 1, using the existing studies and models.
4. Section 2.5 Condition Assessment of Major Unit Processes – This is not intended to be an asset management program. Rather, it is intended to help inform the alternatives analysis. Some unit processes will continue to be used. For those processes, it is important to understand if major re-investments are needed.

DATED: 9/11/2025

Roni Young Grant

Roni Grant
CIP Manager

BIDDER'S CERTIFICATION

I acknowledge receipt of the foregoing Addendum No. 1 and accept all conditions contained herein.

DATED: 9/11/2025

BIDDER: HDR Engineering, Inc.

BY: Anna Lantin, PE

A-5 Resumes





Amy Omae, PE (CA), LEED AP

Project Manager, Alternatives Development and Evaluation Lead

Amy is a project manager with two decades of experience in wastewater and water master planning, design, and engineering services for construction projects throughout California. She is a passionate engineer, dedicated to delivering a quality product that accomplishes the project's goals and meets or exceeds client expectations. Amy promotes a collaborative and transparent environment to receive stakeholder input and understand project drivers. She recognizes that the institutional knowledge retained by her clients' planning, engineering, operations, and maintenance staff is extensive and invaluable.

EDUCATION

Master of Science,
Environmental
Engineering, University
of Miami

Bachelor of Science,
Chemistry, University
of Miami

REGISTRATIONS

California Water
Environment
Association, Board
Member and Southern
Regional Committee
Chair

Professional Engineer
CA, #76824

LEED Accredited
Professional,
#10328834

PROFESSIONAL MEMBERSHIPS

Water Environment
Federation, Member

Orange County Water
Association, Member

WaterReuse Association,
Orange County

INDUSTRY TENURE

21 years

RELEVANT EXPERIENCE

Irvine Ranch Water District, Sewage Treatment Plant Master Plan Irvine, CA Basis of Planning Effort. Amy was task lead for the basis of planning effort to understand and evaluate sewage generation, end-use opportunities, water quality requirements, treatment capabilities, and interagency agreements to communicate comprehensive information to facilitate the identification and evaluation of potential future system-wide and treatment alternatives. HDR is developing a master plan, which characterizes sewage constituents, determines future sewage conveyance requirements, identifies future treatment processes and associated capacities at the 28 mgd Michelson Water Recycling Plant and 7.8 mgd Los Alisos Water Recycling Plant, identifies beneficial uses of sewage, minimizes diversion of sewage, and identifies ways of managing the collection and treatment systems in the most cost-effective manner while balancing the projected sewage flows and recycled water demands. The master plan will identify capital improvement projects based on the recommendations and an implementation program. The project considers the new biosolids and energy recovery facilities, potable reuse program, potential tributary sewer flows, increased loading, water conservation, and additional end users. The project updates the existing sewer collection model to generate options for sewage conveyance to better optimize the management of flows throughout the collection system and their ultimate end use.

Santa Margarita Water District, Chiquita Water Reclamation Plant Influent Screening and Lift Station Upgrades,

Rancho Santa Margarita, CA

Alternatives Analysis. The Chiquita WRP Influent Screening and Lift Station Upgrades project included major facility modifications and equipment upgrades to address deficiencies to the screening and influent pumping facilities for SMWD's largest treatment plant. The project included analysis of historical influent flows and projections of future flows, and analysis of peak storm conditions to establish design criteria. Amy was responsible for identifying and evaluating screen and screenings handling alternatives and advising on the technical design.

Orange County Sanitation District, Activated Sludge - 1 and Secondary Clarifiers Rehabilitation (P1-140),

Fountain Valley, CA

Process Lead and HDR Project Manager.

Amy was responsible for the technical leadership, oversight, and management for the process mechanical design team, as well as coordination with other disciplines and development of the construction sequence. Amy also monitored the project budget, subconsultants, resources, scope progression, and schedule. P1-140 was a comprehensive rehabilitation of the Activated Sludge-1 (AS-1) and Secondary Clarifiers at Plant No. 1 and addressed multiple components of the facility that were nearing the end of useful life in coordination with other projects under construction in the vicinity.

AMY OMAE, PE (CA), LEED AP (CONTINUED)

Irvine Ranch Water District, Water Reliability Study, Irvine, CA
Project Manager and Principal-in-Charge. As the principal-in-charge, Amy was responsible for monitoring project execution, team performance, and client satisfaction. Amy stepped in to advance the project, manage the team, and regain client confidence in the team's performance to deliver a quality product. HDR was re-selected to update the previous 2015 Water Reliability Study whereby we provided modeling and evaluation of local and imported water supply reliability under a variety of emergency scenarios based on a rigorous and transparent probability of risk analysis. This update incorporated recent climate change research and projected the reliability of local and imported water resources into the scenario analysis. Level of service expectations were established and mitigation strategies developed based on risk of modeled shortages.

West Basin Municipal Water District, Recycled Water Master Plan, Carson, CA
Flows and Loads Analysis and Treatment Alternatives Evaluation. The recycled water master planning efforts include a comprehensive analysis of West Basin's recycled water facilities (treatment and distribution), and identification of capital improvement projects through the year 2040.

Irvine Ranch Water District, Michelson Water Recycling Plant Tertiary Filters Improvements, Irvine, CA
Project Manager. Amy was responsible for managing the project team, developing the rehabilitation design for the most complex design area, which had limited access, unknown conditions, and required multiple shutdowns. She also developed the construction sequence for the project. IRWD contracted HDR to perform the preliminary and final design for the rehabilitation of the tertiary filtration system, which consisted of the tertiary filters, backwash supply, spent backwash, air scour blower, and air compressor. An investigation into the poor performance of Filter No. 7 and a condition assessment of the concrete backwash supply and spent backwash tanks were also performed

to better inform the extent of the rehab design and make modifications to potentially improve filter performance.

Irvine Ranch Water District, Recycled Water Salt Management Plan, Irvine, CA
Project Manager. Assisted the management of project work, schedule, and team. Identified and assigned tasks to the project team, coordinated and collaborated with IRWD, other utility agencies and subconsultants, performed data collection and analysis, provided direction to develop the model and resolve data gaps, evaluated alternative mitigation strategies, and wrote reports. To better understand the contributing sources of salt in IRWD's recycled water product, IRWD selected HDR to prepare a Salt Management Plan that contains a comprehensive historic, present day and future salt balance analysis, quantifies salt concentration limits for recycled water customers and identifies costs and benefits of mitigation strategies to control salts in the recycled water product. Solutions from both the potable water and wastewater perspective were evaluated to determine the most cost-effective approach to reducing salinity. IRWD requested additional model development in two subsequent projects to incorporate boron and chloride impact due to changing groundwater quality at Dyer Road Well Field.



Matt Chapman, PE (CA, NV, GU, HI)

QC Reviewer

Matt has specialized in delivering high-level programmatic management services and implementing programs that achieved 100% compliance with the consent decree numerous requirements. His 33 years of experience has been largely focused on delivering large-scale wastewater programs and spans every phase of project development and delivery. From program management, facility planning, to design, resident engineering, process optimization, asset management and renewal, Matt's broad familiarity with every phase of the utility business leads to more comprehensive solutions and creative approaches for the Board.

EDUCATION

Bachelor of Science,
Mechanical
Engineering, University
of California, Irvine

REGISTRATIONS

Professional Engineer,
Civil, NV, #014795

Professional Engineer,
Civil, GU, #CE1803

Professional Engineer,
Civil, HI, #PE-14715

Professional Engineer,
Civil, CA, #C-59422

INDUSTRY TENURE

33 years

RELEVANT EXPERIENCE

Clark County Water Reclamation District, Fleming Water Resource Center Preliminary and Primary Treatment Improvements, Las Vegas, NV

Design Manager. Matt lead the design team in developing final construction documents for the \$150M expansion of the plant headworks and primary treatment facilities. Provided preliminary design, final design, bidding, engineering services during construction, and project commissioning services for expansion of the preliminary and primary treatment process area. The new preliminary treatment facilities consist of three channels, two bar screens, rock catcher, three inlet gates, a dual hydraulic sluiceway, two washer/ compactors, screening storage building and bins, four aerated grit basins, 12 grit pumps, 12 grit hoppers, grit storage building and bins, interceptor split structure, and a flow metering vault. At the inflow, the new facilities required a tie into the existing splitter structure and three 96-inch-diameter pipes, approximately 365 linear feet in length, and a flow metering vault. At the inflow, the new facilities required a tie into the existing splitter structure and three 96-inch-diameter pipes, approximately 365 linear feet in length.

Southern Nevada Water Authority, Garnet Valley Water System Preliminary Design, Las Vegas, NV

Pipeline Lead. Matt was responsible for overseeing the construction and for managing day-to-day operations, making sure that all employees are working effectively and efficiently toward common goals. The 16-parcel industrial park includes more than 11,000 acres and is attracting technology and manufacturing-

based businesses in need of a new water system. When completed, the Garnet Valley Water System will support the water needs of the Apex Industrial Park. The Garnet Valley Water System will consist of facilities to support supplying 20 mgd at full build-out and includes: 18 miles of pipeline, 16 inches to 36 inches in diameter; 1 reservoir (4 million gallons); 3 pumping stations with a capacity of 5 mgd; 2 forebays; and 2 rate-of-flow control stations (20 mgd total).

City of San Luis Obispo, Program Management for Water Reclamation Facility Upgrade, San Luis Obispo, CA

Program Manager. Matt managed activities, resource capability, schedules, budgets, and worked with engineering management to identify and improve process and program efficiencies. The Program management services included upgrades to the city's 5.1 mgd dry weather (22 mgd wet weather) water reclamation facility. Upgrades were needed to meet discharge limits, replace aged facilities, and meet General Plan buildout. The revised discharge limits required the city to remove nutrients and disinfection by-products before discharging water to San Luis Obispo Creek. Program management services provided included: (1) setting a framework to how to approach sustainability; (2) procuring web-based program management information system (PMIS) to manage project documentation, status, controls, and correspondence; (3) preparing a waste characterization study; (4) performing a disinfection system; (5) performing an asset planning and rehabilitation study; (6) performing a regulatory compliance study; (7) performing a capacity consideration study;

MATT CHAPMAN, PE (CA, NV, GU, HI) (CONTINUED)

(8) providing infrastructure planning; (9) providing environmental documentation and permitting assistance; (10) preparing a master plan; and (11) providing support for review of the system-wide conceptual alternatives study, site planning study, and energy efficiency and renewable generation study.

Irvine Ranch Water District, Sewage Treatment Plant Master Plan, Irvine, CA Senior Advisor. Matt was responsible for providing guidance to the master plan team. HDR assisted with the preparation of a master plan, which characterized sewage for such constituents as organic content and nutrients, determined future sewage conveyance requirements to each of the recycling plants, identified future treatment processes and their associated capacities at both the 28 mgd Michelson Water Recycling Plant and 7.8 mgd Los Alisos Water Recycling Plant, identified beneficial uses of sewage, minimized diversion of sewage to Orange County Sanitation District, and identified ways of managing the sewage collection and treatment systems in the most cost-effective manner while balancing the projected sewage flows with projected recycled water demands. The master plan identified capital improvement projects necessary to implement the recommendations and a corresponding implementation program for those improvements. Changes that were addressed in the master plan included the new biosolids and energy recovery facilities at the Michelson plant, potable reuse program, sewer flows from the Irvine Business Complex, increased loading concentrations, water conservation and increased developments, Michelson plant diversion to San Diego Creek, and Orange County Water District's Green Acres Project.

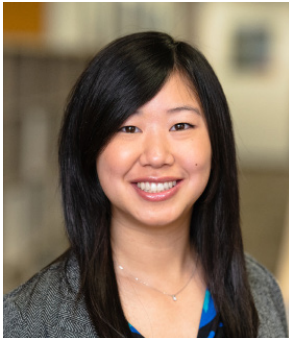
Clark County Water Reclamation District, Flamingo Water Resource Center Expansion Master Plan and Pre-Design, Las Vegas, NV

Solids System Lead Engineer. Matt led the teams in developing treatment approaches for the BRN secondary treatments facilities and the primary sludge screening and thickening facilities. HDR provided master plan and predesign

services for expansion of the Flamingo Water Resource Center from 130 mgd to 150 mgd (180 mgd build out). Master planning efforts included evaluation of the current situation (including regulatory drivers, and flows and loads), evaluation of projected future conditions, plant hydraulic modeling, and recommendations for preliminary treatment (bar screens, grit basins, and washer compacter units), primary treatment (gravity thickeners, primary clarifiers, and primary effluent pumping station), secondary treatment (aeration basins, secondary clarifiers, and filter influent pumping station), tertiary treatment (filtration and ultraviolet disinfection), solids handling (dissolved air floatation, waste activated sludge and scum piping, and centrifuge, rotary drum, and gravity belt technologies), interconnection of facilities, side stream management, odor management and control, electrical/instrumentation and controls, site utilities, chemical feed systems, sustainability, transportation corridors and plant access, project delivery, construction packing and schedule, and startup considerations.

City of Las Vegas, Water Pollution Control Facility Stress Testing and Effluent Dechlorination Improvements, Las Vegas, NV

Project Manager. Matt provided leadership and oversaw the success of the project. Performed a three-part suite of services at the 91 mgd water pollution control facility. In addition to stress testing at the plant to determine the hydraulic and process capacity of the plant in various scenarios, this project included study and design of improvements to the effluent dechlorination system and preparation of an online and live eight-week operator training course on the plant's denitrification and BNR process trains.



Alice Wang, PE (CA)

Existing Facilities Evaluation Lead, Process Mechanical

With 9 years of experience in the water and wastewater industry, Alice has supported complex master planning efforts for multiple utilities. She brings expertise across flows and loads projections, treatment alternatives evaluation, condition assessments, and life-cycle cost estimation to guide both near-term and long-term capital improvement strategies. Highly proficient in Excel, she synthesizes large, complex datasets into clear, actionable planning insights that drive data-based decision-making. As a project manager, she proactively takes initiative and actively listens to clients to understand their priorities and to align technical work with utility goals. She helps teams deliver practical solutions that strengthen resilient water systems with her organization, meticulous attention to detail, and consistently positive attitude. In the broader water community, Alice currently serves on the CWEA SARBS Board as President and presents at AWWA and WateReuse conferences.

EDUCATION

Master of Science,
Environmental and
Water Resources
Engineering, University
of Texas

Bachelor of Science,
Chemical Engineering
(Environmental
Engineering),
University of Southern
California

REGISTRATIONS

AWWA Utility Risk and
Resilience Certificate,
California

Professional Engineer,
Civil, CA, #95440

INDUSTRY TENURE

9 years

RELEVANT EXPERIENCE

Irvine Ranch Water District, Sewage Treatment Master Plan, Irvine, CA Staff Engineer. The Sewage Treatment Master Plan developed a sewage management strategy to optimize sewage handling through build-out of the IRWD service area. Alice played an integral role to characterize the IRWD sewage through flows and loads analysis, perform calculations and developed conceptual site layouts for future treatment process upgrades at Michelson Water Recycling Plant and Los Alisos Recycling Plant, and to prepare the opinion of probable cost using HDR's cost estimating tool, CostSPACE. She also organized the capital improvement projects and respective phasing for implementation.

West Basin Municipal Water District, Recycled Water Master Plan, Carson, CA Staff Engineer. The Recycled Water Master Plan conducted a comprehensive analysis of West Basin's recycled water facilities (treatment and distribution), and identification of capital improvement projects through the year 2040. Alice played an integral role to analyze the wastewater quality at West Basin's multiple facilities, to prepare the treatment alternatives and conceptual site layouts, and to develop the opinion of probable cost. She also organized the summary of capital improvement projects and project description forms.

Goleta Water District, Corona Del Mar Water Treatment Plant, Asset Inventory, Corona Del Mar, CA

Staff Engineer. For the Corona Del Mar Water Treatment Plant Asset Inventory, Alice performed a preliminary desktop rapid condition assessment based on age and documented observations. She also collected rehabilitation and replacement cost estimates from HDR's 20 Year Forecast Tool Table and from vendors for critical assets. From this rapid condition assessment, she organized capital improvement projects in 5-year planning cycles, based upon remaining useful life.

Eastern Municipal Water District, Regional Wastewater Reclamation Facilities Rehab Study, Riverside County, CA

Staff Engineer. The Regional Wastewater Reclamation Facilities Rehab Study conducted a high-level operation and condition assessment for four regional wastewater reclamation facilities located in Moreno Valley, Perris, San Jacinto, Temecula. Alice assisted in the strategy to address possible rehabilitation and system improvements needed to maintain reliable service at each facility by developing the Survey123 ArcGIS field forms and post-processing field data. Assessment data collection included asset type (Civil, Structural, Mechanical, Electrical, I&C), physical parameters, visual parameters, and condition ranking. Through this effort, the HDR team identified and prioritized rehabilitation and replacement needs and developed the overall capital improvement program.



Gregorio Estrada, PE (CA), LEED AP

Wastewater Treatment Alternatives Lead, Liquids

Gregorio has extensive experience in the planning, design, construction, and management of wastewater, water, and stormwater projects throughout Southern California. He is an adept leader in wastewater treatment processes and has particular interest in advanced treatment solutions including nutrient removal, filtration, membranes, and disinfection. He is also highly skilled in building group consensus amongst key stakeholders with differing agendas, performing economic evaluations and risk assessments and assisting in negotiations with regulatory agencies.

EDUCATION

Bachelors, Civil Engineering and Environmental Engineering, Stanford University

REGISTRATIONS

Professional Engineer, CA, #67066

LEED Accredited Professional

INDUSTRY TENURE

24 years

RELEVANT EXPERIENCE

Santa Margarita Water District, Chiquita Water Reclamation Plant Influent Screening and Lift Station Upgrades, Rancho Santa Margarita, CA

Project Manager. This project included major facility modifications and equipment upgrades to address deficiencies to the screening and influent pumping facilities for SMWD's largest treatment plant. The project included analysis of historical influent flows and projections of future flows, as well as analysis of peak storm conditions to establish design criteria. The preliminary design included an evaluation of screening technologies and development of configuration alternatives that addressed the physical limitations of the existing structure relative to modern screening technologies and mitigated the hydraulic impacts to the downstream pumping systems.

Santa Margarita Water District, Oso Creek Water Reclamation Plant, Design and Construction Services, Rancho Santa Margarita, CA

Project Manager. Design of new treatment plant to replace the Oso Creek WRP. The design is partially completed by SMWD staff, and HDR will take over the design and complete it. The design will be done in several packages and issued for construction in a logical sequence. The design includes a new headworks and influent lift station, fine screening, MBR, chlorine contact basin, and effluent pump station. The work includes coordination with the City of MV architect for a co-located office building and community event space.

Eastern Municipal Water District, Regional Wastewater Reclamation Facilities Rehab Study, Riverside County, CA

CIP Packaging Lead. Following a high-level operation and condition assessment for four regional wastewater reclamation facilities (RWRF) located in Moreno Valley, Perris, San Jacinto, and Temecula, Gregorio served as the CIP packaging lead to group the plant-wide improvements into distinguishable improvements and rehabilitation packages to inform the capital improvement program. This project developed a strategy to address possible rehabilitation and system improvements needed to maintain reliable service at each facility. HDR developed forms using the Survey123 ArcGIS program to conduct the condition assessment and collect field data. The HDR team worked closely with District staff to complete inspections of their facilities, and gathered data which supported the analysis of the overall condition of each asset. Through this effort, the HDR team was able to assess, identify and prioritize rehabilitation and replacement needs and documented the results in five reports—one R&R report for each RWRF and one final report for the overall district CIP program—and presented the results to various stakeholders.

GREGORIO ESTRADA, PE, LEED AP (CONTINUED)**Irvine Ranch Water District, Michelson Water Recycling Plant Phase 2 Expansion, Irvine, CA**

Project Manager. Gregorio was responsible for the conceptual design, preliminary design, and final design phases, and resident engineer during construction of the award-winning \$87.5 million Phase 2 expansion of the Michelson Water Recycling Plant to 33 mgd. Improvements included influent sewers, headworks, expansion of the primary sedimentation tanks, new primary effluent pumping station and flow control, modified flow equalization basins and other ancillary facilities, and electrical modifications. Two MBR trains were installed with a maximum-month capacity of 11.2 mgd (including recycle flows from the sludge fermentation process). The new MBR facility also included fine screening, permeate pumps, membrane scour blowers, process air blowers, and chemical feed and storage facilities for membrane cleaning.

Irvine Ranch Water District, Michelson Water Recycling Plant Tertiary Filters Improvements, Irvine, CA

Project Manager. As technical advisor and construction sequencing lead for this project, Gregorio provided guidance on the preliminary design and final design of improvements to the tertiary filters, backwash supply system, air scour blower, and relevant electrical and instrumentation systems at the Michelson Water Reclamation Plant to improve treatment efficiency and system reliability. This multidisciplinary effort required close coordination to deliver a design in a cost-effective manner, utilizing as-builts and photos for design work. A detailed construction sequence and temporary bypass pumping system were designed to keep the tertiary filters operational during construction, to minimize impacts to plant operations and maintain permit compliance. Gregorio assumed the project manager role during construction.

City of Thousand Oaks, Digesters 1, 2, and 3 Rehabilitation, Thousand Oaks, CA

Technical Advisor. Gregorio served as a technical advisor for this project, which included condition assessment, preliminary design, final design, and operational assistance for Digester No. 3. This was the first of three digesters rehabilitated by the City of Thousand Oaks. HDR was selected after a competitive process and was awarded the other two projects based on performance. Work completed by the HDR team included external and internal assessments of structural and mechanical systems and involved sampling concrete for degradation tests. The digester rehabilitation included replacement of piping and corroded steel components and lining of the interior surfaces above the water line.



JB Neethling, PhD, PE (CA)

Technical Expert

JB is considered HDR's top wastewater process engineer, with more than 42 years of wastewater engineering experience ranging from master planning, process evaluation, and modeling to design and startup of wastewater treatment plants. He is the lead process engineer for HDR's largest and most complex wastewater treatment plant projects nationwide. He has specialized expertise in nutrient removal and has been involved in more than 75 biological nutrient removal (BNR) projects nationwide. He is also experienced in evaluating system capacity and bottlenecks, and in developing alternatives for improvements that save costs and produce effective and efficient results.

EDUCATION

Doctor of Philosophy,
Civil Engineering,
University of California,
Berkeley

Master of Science, Civil
Engineering, University
of California, Berkeley

Bachelor of Science,
Civil Engineering,
Universiteit Stellenbosch

REGISTRATIONS

Professional Engineer,
Civil, CA, #C-44101

INDUSTRY TENURE

48 years

RELEVANT EXPERIENCE

Irvine Ranch Water District, Master Plans for Michelson and Los Alisos Water Reclamation Plants, Irvine, CA

Process Engineer. JB was the process engineer for preparation of a 20-year master plan that identifies proposed improvements to expand the 18 mgd Michelson Water Reclamation Plant to 33 mgd and the 5.5 mgd Los Alisos Water Reclamation Plant to 7.5 mgd to meet wastewater treatment and water reclamation demands. BioLac process was evaluated for the Los Alisos plant. Key issues involved the integration of the treatment and reclaimed water distribution facilities, potential addition of satellite plants, anticipation of future water quality requirements for reuse and ocean discharge practices, and timing of capacity expansions to meet reclaimed water demand. Preliminary designs were prepared for the expansion of both plants.

Irvine Ranch Water District, Biosolids/Energy Management Plan, Irvine, CA

Process Engineer. JB was the process engineer in preparation for the biosolids master plan for Michelson Water Reclamation Plant and Los Alisos Water Reclamation Plant. Identified goals and objectives for solids digesters, dryer, and the energy efficiency plan. Determined solids production estimates and mass balance models. Reviewed and verified current and proposed solids handling costs for discharging solids to Orange County Sanitation District. Developed and evaluated alternatives to optimize solids digestion and drying at Michelson plant and solids handling at Los Alisos plant. Explored public/private partnerships solids handling

opportunities, requirements, costs, and benefits. Completed preliminary design of selected solids handling recommendation and carbon footprint analysis.

Orange County Sanitation District, Wastewater Treatment Plant No. 1 Activated Sludge Rehabilitation (Job P1-82), Fountain Valley, CA

Lead Process Engineer. JB is the lead process engineer to convert an existing 91-mgd activated sludge plant from BOD removal mode to nitrification-denitrification maintaining 91 mgd capacity within the existing tankage. Improvements included reconfiguring aeration basins to step feed, secondary clarifiers, fine and coarse bubble diffusers, and WAS system.

Orange County Sanitation District, Activated Sludge 1 and Secondary Clarifier Rehabilitations (P1-140), Fountain Valley, CA

Process Engineer. JB was a process engineer for a comprehensive rehabilitation of the activated sludge facility 1 at Plant No. 1. This project included process modification to enhance effluent quality and overcome issues with sludge rising in the secondary clarifiers, replacement/rehabilitation of major mechanical equipment in Blower Building 1, aeration basins, secondary clarifiers, return activated sludge (RAS)/drain pumping station and all associated electrical and instrumentation and controls. New mixed liquor recycle pumps and associated piping were added to the aeration basins to improve secondary effluent quality.

JB NEETHLING, PhD, PE (CA) (CONTINUED)**City of San Buenaventura, Ventura-Aeration Blower Project, San Buenaventura, CA**

Technical Advisor. In 2008, the City of San Buenaventura completed a design for the Ventura Water Reclamation Facility to replace the existing single-stage aeration blowers, which was not executed. In 2016, the City contracted with HDR to evaluate the existing and future air demands and design a more efficient aeration system. The project involved demolition of the existing aeration blowers and building, construction of a new blower building and electrical room, installation of more efficient high-speed turbo blowers that utilize a lower-voltage (480V) power supply. HDR developed a biological process model using BioWin to determine current and future aeration requirements in consideration of the City's plan to evaluate the simultaneous nitrification denitrification for increased nitrogen removal. HDR designed modifications to the existing aeration droplegs to accommodate flow control valves and meters to facilitate this evaluation and allow the City more automated control and operational flexibility.

Bay Area Clean Water Agencies, Nutrient Removal Optimization and Upgrade Study, San Francisco, CA

Project Manager. JB was the project manager for a groundbreaking study that will shape the future of wastewater treatment for 39 publicly owned treatment plants, with a combined capacity of approximately 900 mgd, serving 6.5 million people, and to protect the health of the San Francisco Bay. Collaborated with BACWA and its member agencies to help shape the nutrient removal regulatory framework and strategy for all San Francisco Bay dischargers. Visited each of BACWA's 39 member agencies' plants to make recommendations on optimization strategies and/or facility upgrades to meet the new regulations, delivering to each agency a customized roadmap for future improvements that could easily total \$5 to \$9 billion of upgrades over the coming decade.

City of San Jose, Process Optimization Study Peer Review and Subject Matter Expert Services, San Jose, CA

Subject Matter Expert/Technical Advisor. Served as a subject matter expert on the San José-Santa Clara Regional Wastewater Facility process optimization study. The purpose of the process optimization study is to identify and evaluate options for optimizing the Regional Wastewater Facility unit treatment processes, individually or in combination, to improve wastewater and solids process treatment efficiencies while accounting for future regulations and future flows and loads. Attended meetings and workshops to provide technical input to the flow and loads/regulatory projections, screening criteria and issues identification, early review of alternatives, alternatives analysis, and implementation strategy. Provided peer review and provided comments on the following documents/memoranda: (1) Regional Wastewater Facility background review and performance evaluation summary; (2) screenings criteria and issues identification; (3) selected alternatives for process optimization; (4) identified process optimization solution(s); (5) implementation strategy and opinion of probable construction costs; and (6) Final summary document.

Central Contra Costa Sanitary District, Steam and Aeration Blower Systems Renovations and Evaluation Predesign, Blowers Improvements, Basin Diffuser Replacement, and Seismic Upgrades, Contra Costa, CA

Process QA/QC. Provided quality assurance/quality control review of the testing and sampling performed for the secondary treatment facilities, computational fluid dynamic modeling, future nutrient removal impacts evaluation, and development of design criteria and feasible alternatives for use in business case evaluations and predesign development. Secondary treatment facilities testing and sampling included optimization of anaerobic selector, wastewater characterization, micro-organisms growth rate, and field oxygen transfer efficiency testing and sampling.



Teigan Gulliver, PE (CA, CO)

Solids & Energy Recovery

Teigan is a water and wastewater professional engineer with 16 years of experience with a focus in solids treatment processes and biosolids. After attaining a B.S. degree in Civil Engineering at the University of Minnesota, she spent six months hiking the Appalachian Trail and then two and a half years in Peru as a Water and Sanitation Peace Corps Volunteer. After the Peace Corps, she pursued a Master's degree at the Colorado School of Mines studying microplastics in wastewater. These independent experiences continue to shape Teigan's leadership, followership, teamwork and communication skills, which she uses in and outside of her profession. She enjoys discussing operational challenges with the plant staff to problem solve daily operational issues and incorporate them into design.

EDUCATION

Master of Science,
Civil & Environmental
Engineering, Colorado
School of Mines

Bachelor of Science,
Civil Engineering,
University of
Minnesota - Twin Cities

REGISTRATIONS & CERTIFICATIONS

Professional Engineer,
Civil, CO #0049979

Professional Engineer,
Civil, CA #95859

INDUSTRY TENURE

16 years

RELEVANT EXPERIENCE

Eastern Municipal Water District, Regional Water Reclamation Facilities Rehab Study, Riverside County, CA Project Engineer.

Teigan served as a project engineer for the condition assessment of EMWD's five Regional Water Reclamation Facilities, from headworks to tertiary effluent pumps, to provide recommendations to package higher priority issues and potentially modify CIP.

Union Sanitary District, Solids System Evaluation, Union City, CA

Project Engineer. Developed a master plan or strategic roadmap for sequencing future solids process improvements at the Alvarado Wastewater Treatment Plant, which included identifying an evaluating methods of optimizing and improving the existing solids treatment processes, evaluating the operational and construction constraints for the list of recommended projects and developing the ideal construction sequence in which these projects should be constructed, providing planning-level construction costs and schedules for each project, and developing short- and long-term recommendations for the solids treatment processes.

Irvine Ranch Water District, Sewage Treatment Plant Master Plan, Irvine, CA

Project Engineer. HDR prepared the Sewage Treatment Master Plan, which characterized historical sewage flows and loading to IRWD's two water recycling plants, projected future flows and loading through build-out, evaluated existing treatment capabilities and identified deficiencies, identified current and future end uses, and developed treatment

process upgrades and expansion requirements for the 28 mgd Michelson Water Recycling Plant (WRP) and the 7.8 mgd Los Alisos WRP. The master planning effort aimed to maximize the beneficial reuse of sewage, minimize diversion of sewage to Orange County Sanitation District, and identifies ways of managing the sewage collection and treatment systems in the most cost-effective manner while balancing the projected sewage flows with projected recycled water demands.

Pima County Wastewater, Biosolids Masterplan Tucson, AZ

Deputy PM and Senior Engineer. This project is to update the last master plan, addressing county primary concerns with biosolids disposal, including, PFAS/PFOA pending regulations, disposal and biosolids quality, change in solids process with struvite recovery equipment, land and disposal availability, public perception and concern. The Master Plan provides a long-term, sustainable work plan for the County's solids processing and residuals regional management for the main plant (Tres Rios with 50 mgd capacity), and five subregional WRFs with combined flow of 40 mgd capacity in the Tucson area. Teigan's role includes assisting project manager and task leads in project management, evaluating existing biosolids management strategy, conduct a risk analysis of biosolids management, identify potential technologies, develop alternatives, recommend bench or pilot testing.

TEIGAN GULLIVER, PE (CA, CO) (CONTINUED)**Parker Water and Sanitation District, South Water Reclamation Facility Master Plan, Parker, CO****Deputy Project Manager / Lead**

Engineer. Parker Water & Sanitation District requested engineering services for the development of a South Water Reclamation Facility (SWRF) Treatment Master Plan. The District's long term goal for water reclamation previously included the decommissioning of the SWRF upon completion of any one of the ongoing and/or planned expansions of the North Water Reclamation Facility (NWRF). During the permitting phase of the current NWRF expansion, revised permitting requirements were documented by the Colorado Department of Public Health and Environment. Since the District's discharge permits for the NWRF and the SWRF are combined, continued operation of the SWRF must be evaluated. This assessment shall include an evaluation of existing regulatory requirements, evaluation of permit compliance based on current and future flows, and an alternatives analysis to identify potential treatment process upgrades to maintain continued operation. Reevaluating the District's long term goal for water reclamation is being driven by regulatory conditions along with a rapid increase in service area development, which requires non-interruptible treatment of wastewater.

St. Vrain Sanitation District, Master Plan, Expansion Design, and Construction Services Firestone, CO

Lead Solids Engineer. HDR developed a master plan that provides a roadmap for the District to meeting stringent effluent discharge permit limits, address future growth, and renewing aging plant infrastructure. An optimization/plant capacity study was conducted to identify bottlenecks and problems needing resolution. Teigan evaluated the existing solids stream processes and potential new technologies for solids processing, stabilization, and hauling. She presented alternatives in workshops to the District staff to facilitate a collaborative decision on the path forward, documented in the final Master Plan Report. After our responsive, quality work, HDR is now providing the

design and construction services liquids and solids stream improvements that were defined in the Master Plan, where Teigan is the Solids Process Project Lead. Expansion includes construction of a new solids handling facility with additional solids stabilization, new dewatering, new solids loadout, additional biofilter, retrofitted secondary treatment, new aeration and solids blowers.

Town of Erie, Colorado, North Water Reclamation Facility Expansion Plan, Erie, CO

Project Engineer. The primary purpose of this Expansion Plan was to summarize the anticipated growth and capacity needs for the Erie NWRF over the next 20 years, and to develop a set of recommendations for improvements and expansions at the NWRF to be included in the plant's next expansion project. The projected growth evaluation resulted in a ten-year maximum month influent flow value of 3.03 mgd, and a ten-year maximum month solids load of 11,700 dry lb/day. The twenty year maximum month influent flow is 4.95 mgd, and the twenty-year maximum month solids load is 18,300 dry lb/day. These values will serve as the design basis for the NWRF's next expansion design project. The complete set of recommendations for expansions and improvements at the NWRF were all incorporated into a CIP, which provides the Town with a roadmap for implementing future improvements that will help the plant to reliably treat and process wastewater flows for the next 20 years. As a result of this Expansion Plan, the Erie NWRF will be well-prepared to effectively address any impending changes affecting the plant in the future, including rapid population growth and regulatory changes.



Jacquelin Mutter

Effluent Utilization Evaluation Lead

Jacquelin is an experienced project manager focusing on recycled water plans and projects. Her reuse expertise spans the full project lifecycle, from planning and feasibility to demonstration design and regulatory support, capital program development, and implementation. She has led major efforts for LASAN and LADWP, including recommending \$13B inclusive of new water supply projects creating the initial planning foundation for DCTWRP AWPf and Pure Water LA, stormwater, and climate resilience and rehabilitation projects. She is a recognized One Water thought leader in the industry, and has co-authored Water Research Foundation projects, including the One Water Cities Rating Framework (4969), One Water Planning Guidance (5175), and One Water Program Management (5196). Jacquelin's collaborative and people-first style brings a human-oriented perspective to all work she manages or advises. She remains active with the Southern California WaterReuse chapters and CA Potable Reuse Permitting & Compliance Committee, US Water Alliance One Water Council, and the SCWC Recycled Water Task Force.

EDUCATION

Master of Business Administration, Hult International Business School

Bachelor of Science, Civil Engineering, University of Southern California

PROFESSIONAL AFFILIATIONS

WaterReuse: Potable Reuse Permitting & Compliance Committee, Orange County Chapter Officer, LA Chapter Member

Southern California Water Coalition: Board Member, Recycled Water Task Force

US Water Alliance: One Water Council Member, One Water Resources Advisory Group, Los Angeles Delegation Member

INDUSTRY TENURE

18 years

RELEVANT EXPERIENCE

Otay Water District and Sweetwater Authority, Recycled Water Intertie Planning Study, San Diego, CA

Project Manager. Assess potable reuse options indirect and direct potable reuse as well as water supply augmentation sources to expand non-potable or potable reuse options. The client received a USBR grant for the effort and the report meets and exceeds the stated grant requirements.

Amazon Web Services Data Centers: Evaluation of Potential Source Waters, Various US Locations

Project Manager and Reviewer. Provide project management services to support purchase orders for water consultancy services. Review source water evaluations at various data center locations across the United States.

Tucson Water, Tres Rios Advanced Water Purification Facility, Tucson, AZ

Potable Reuse Advisor. Provide the program management team with CA potable reuse expertise and experience. Requests include and are not limited to advising on involvement of NWRI, membrane technology advancements, and treatment process requirements including equalization and brine disposal.

Los Angeles Sanitation and Department of Water and Power, Donald C. Tillman Water Reclamation Plant, Advanced Water Purification Facility Program and Construction Services Support, Los Angeles, CA

Program Advisor. Attend and ask questions in the design and construction review meetings lead by the progressive design build team.

South Coast Water District, Lower Lagunita Sewer Discharge Study, Dana Point, CA

Project Manager. The South Coast Water District (SCWD) evaluated a gravity sewer system installed along the beach in the Lower Lagunita area of South Laguna. The existing system is vulnerable to high tide and wave events. The proposed study assessed the potential rerouting of residential sewage flow through the installation of vacuum pumps for each residence with connections to a sewer line located at a higher elevation.

Los Angeles County Department of Public Works, Malibu Mesa Water Reclamation Plant Climate Change Vulnerability Assessment and Mitigation Plan, Los Angeles, CA

Resilience Planning Lead. Updated the climate change vulnerability assessment of the Malibu Mesa Water Reclamation Plant. Assessed wildfire, storm surge, temperature rise, and their impacts on water quality. Developed a mitigation plan with cost estimates to address new risks.

JACQUELIN MUTTER (CONTINUED)

**Los Angeles Sanitation & Environment,
Los Angeles-Glendale Water Reclamation
Plant Water Technology Center &
Urban Riverway Direct Potable Reuse
Demonstration, Los Angeles, CA**

Project Manager. Managed an integrated team of engineers, architects, and urban planners from concept to final design of a DPR demonstration facility and urban riverway features. The project was intended to revitalize property along the LA River on the LA-Glendale Water Reclamation Plant (LAGWRP) campus, creating an accessible public open space and demonstrating the value of renewed water with interactive water features. The water features are sustainably supplied by a 60-gpm AWPDP that is housed in a celebratory structure doubled with educational and public education platforms. Finally, a water tasting water bar was designed for communal discussions raising the awareness level of Angelinos regarding water scarcity. The DPR demonstration facility will be multi-functional and multi-beneficial by providing opportunities for public engagement as well as training for operations staff in advanced treatment technologies and processes used for potable reuse, including: Ozone, BAF, UF, RO, UV, and Calcite Contactor.

**King County, Clean Water Plan,
Seattle, WA**

Scenario and Strategic Utility Planning

Lead. Co-lead both the Scenario Planning and Strategic Utility Planning with various engagement streams including: the client planning team, Steering Committee, and client Subject Matter Experts; as well as supporting the Regional Engagement Consultant to engage the community through broad pushes, focused workshops, and an Advisory Group. This plan will propose comprehensive actions (policies, programs, and projects) to address the County's challenges such as compliance with EPA's consent decree, climate change, environmental and social justice, and affordability. The actions will be evaluated using Action Description Sheets (similar to Business Case Evaluation forms) and scored against priority-based evaluation criteria (similar

to a TBL analysis) and ranked such that the highest scoring actions will be bundled as a preferred strategy.

**Otay Water District, Ralph W. Chapman
Water Reclamation Facility Master Plan,
San Diego, CA**

Assistant Project Manager. Jacquelin evaluated existing systems at the Ralph W. Chapman Reclamation Facility. Developed and prioritized capital improvements with planning-level cost estimates for over 30 projects.

**City of Buda, Wastewater System Master
Plan and CIP, Buda, TX**

Assistant Project Manager. Analyzed the City's existing wastewater system and planned for future growth. Provided consultation to develop capital improvement projects for collection, treatment, and disposal. Delivered a CIP aligned with population growth projections.



Tyler Mach, PE (CA, FL, AZ)

Reuse Lead

Tyler offers over 13 years of experience in master planning, design, project management, permitting, and construction oversight of existing and new water treatment facilities. She has experience managing and executing design projects with CMAR delivery methods and providing engineering services during construction, as well as detailed design and optimization of various water treatment processes. She has multifaceted experience, ideal for on-call services execution. She's focused on many aspects of water treatment including coagulation, filtration, chemical systems, disinfection, bench and pilot scale testing, water chemistry optimization and more.

EDUCATION

Master of Science,
Environmental
Engineering, University
of Central Florida

Bachelor of Science,
Environmental
Engineering, University
of Central Florida

REGISTRATIONS

Professional Engineer,
Civil, CA #97317

Professional Engineer,
Civil, FL #87503

Professional Engineer,
Civil, AZ #7728

INDUSTRY TENURE

13 years

RELEVANT EXPERIENCE

City of Las Vegas Water Treatment Plant Facility Plan/Preliminary Engineering Report, Las Vegas, NM

Lead Treatment Engineer. HDR is providing professional engineering services to the City of Las Vegas for a new water treatment plant in Montezuma, NM. In the spring of 2022, wildfires directly impacted the watershed of the Gallinas River which is the City's main drinking water supply source. HDR is completing development of a preliminary design for the new WTP which includes evaluation of treatment technologies for effective removal of contaminants including ash, debris, and other dissolved constituents in the raw water supply. Responsibilities included preliminary design development for a 3.5 mgd facility comprised of coagulation, membrane filtration, pressure vessel GAC, UV disinfection, and developing an Engineer's Opinion of Probable Construction Costs for the new facility.

Town of Gilbert, North Water Treatment Plant Technical Advisor and Construction Management Services, Gilbert, AR

Senior Engineer. The Town of Gilbert currently operates an existing 40 mgd North Water Treatment Plant (NWTP) that is in poor physical condition with difficulty treating changing source water quality. The Town is constructing a new 65 mgd water treatment plant co-located at the existing site in 5 phases while maintaining operations. The treatment process selected includes presedimentation, ballasted flocculation, ozone, biofiltration, GAC contractors, and reservoir aeration, and is intended to treat a wide range of water quality conditions,

provide operating flexibility, and reduce life cycle costs. As the technical advisor, HDR is performing design reviews, operations planning and support, cost and schedule reviews, and supports pilot testing for the project. In addition, HDR is providing third party project management/construction management support, including construction inspections and construction management for electrical, solids handling and chemical facilities.

Medina County Sanitary Engineer, Westfield Center Water Treatment Plant Technical Evaluation, Medina County, OH

Lead Treatment Engineer. HDR was contracted to evaluate alternative technologies for a 1.0 mgd plant expansion. Responsibilities included evaluation of Ion Exchange (IX) technologies including pressure vessel ion exchange and suspend ion exchange to achieve water treatment goals, preliminary design of alternatives including layouts and cost estimates, and development of a summary technical memorandum with recommendations.

Medina County Sanitary Engineer, Westfield Center Water Treatment Plant Design, Medina County, OH

Lead Process Engineer. HDR was contracted to perform design services for a new 1.0 mgd WTP, including new filter vessels, ion exchange vessels, soda ash feed and dosing, sodium hypochlorite feed and dosing, clearwell and pumping. Specific responsibilities include preliminary design development, basis of design report writing, creation of drawings and specifications for final design, mentorship

TYLER MACH, PE (CA, FL, AZ) (CONTINUED)

of EITs, and interdisciplinary coordination.

Arizona Department of Environmental Quality PFAS Mitigation Assistance, On-Call Services, Arizona

Project Engineer. HDR is providing on-call services to ADEQ for PFAS mitigation assistance to small and disadvantaged public water systems in Arizona. Scoped work could include PFAS specific training, bench and pilot scale testing, feasibility studies, design services, construction administration services, permitting, startup and commissioning support, and general assistance.

Tucson Water Planning On-Call Services, Tucson, AZ

Project Engineer. HDR is providing on-call services to Tucson Water providing general assistance, staff augmentation, feasibility studies, design, owner's advisor services, compliance assistance, permitting assistance, and the like. Specific on-call projects that Tyler has lead include multi-year assistance to Tucson Water for LCRR/LCRI compliance. She's also serving as Tucson's advisor for implementation of an Advanced Water Purification Project. Responsibilities include project management, interdisciplinary coordination, report writing, data analysis, conceptual treatment design, and regulatory support.

Water Infrastructure Finance Authority of Arizona, Funding Programs Management Consult, Arizona

Project Engineer. HDR is providing WIFA as-needed support for funding programs management. Specific responsibilities include assistance in developing solicitation documents, evaluation manuals, staff augmentation, and programmatic support for WIFA long term water augmentation fund.

Confidential Client, Hawaii

Senior Engineer. HDR previously prepared a design concept, DD1391 programming document and a utilities study for a water treatment plant. This task order include preparation of a design-bid-build construction package for a temporary and permanent water treatment facility and associated infrastructure improvements. The project includes vertical turbine well

pumps, packed tower aerator system with blowers and transfer pumps, granular activated carbon (GAC) systems, clear wells and transfer pumps, and chemical treatment systems. Responsibilities included development of sizing criteria to achieve adequate disinfection, development of preliminary and final design drawings and specifications, process and instrumentation diagrams, control narratives, and technical write up for basis of design report.

City of Las Vegas, Water Treatment Plant Emergency Response Support, Las Vegas, NM

Process Engineer. HDR is providing as-needed engineering services in support of the City's emergency fire response for the City's WTP facility. In spring of 2022, area wildfires directly impacted the watershed of the Gallinas River which is the primary source of surface water supply for the City's WTP. As a part of this project, HDR is providing engineering and technical support as requested by the City to determine what measures will need to be implemented to allow the WTP to continue providing reliable water supply for the City. Responsibilities include review of historical and recent water quality data and changes as a result of the fire, jar testing for treatment optimization, extensive review of current coagulation processes, and guidance on full scale optimization.



Mario Benisch, PE (OR)

Process Modeling

Mario is a senior process engineer who has been involved in the evaluation and/or design of more than 70 wastewater treatment plants across the U.S. His primary focus is on biological and chemical process design of wastewater treatment systems, process modeling, hydraulic modeling, facility and master planning, and emerging treatment technologies. Mario's experience with BioWin modeling spans more than 16 years and over 100 wastewater treatment individual projects. He has had a key role in several studies related to nutrient removal reliability, optimization, and limit of treatment. Over the years, Mario contributed as chapter lead, coauthor, and/or reviewer for HDR's internal guidelines for aeration system design, flows and loads, facility planning, and hydraulic modeling, as well as for industry reference books.

EDUCATION

Master of Science,
Environmental
Engineering,
Stuttgart University

REGISTRATIONS

Professional Engineer,
OR, #58988PE

INDUSTRY TENURE

35 years

RELEVANT EXPERIENCE

Irvine Ranch Water District, Michelson Wastewater Treatment Plant Phosphorus Recovery Feasibility Analysis, Irvine, CA Project Lead.

Mario was the project lead for feasibility study evaluating the potential for phosphorus recovery based on implementation of Ostara's Crystal Green process at the Michelson WWTP. The analysis considered all major economic factors and conducted process simulations to predict future product yield under different scenarios. Durham AWWTP Phosphorus Recovery Implementation, Clean Water Services, Hillsboro, OR. Technical Adviser. Provided technical support from the early stages of piloting through full-scale implementation and startup for the first full-scale phosphorus recovery facility in the U.S. at the Durham AWWTP.

East Bay Municipal Water District, Side Stream Nitrogen Removal, San Francisco, CA Lead Process Engineer.

Mario was the lead process engineer for sidestream nitrogen removal studies that evaluated different technology options to remove very high ammonia loads at EMMUDs main facility in San Francisco. Due to significant industrial load receiving, the recycle ammonia was double that of a typical facility. Part of the delivery was spreads based model to size all reviewed sidestream treatment processes.

Goleta Sanitation District, Goleta Wastewater Treatment Plant Facility Expansion and Upgrade, Goleta, CA Lead Process Engineer and Process Modeler.

Provided process modeling and design for facility upgrade to full secondary treatment of this 11.5-MGD facility which incorporates trickling-filter technology, convention-activated sludge, anaerobic digestion, screw-press dewatering, sludge storage lagoons, beneficial reuse of biosolids, and tertiary membrane filtration for effluent reuse.

Orange County Sanitary District, Wastewater Treatment Plant Facility Upgrade, Fountain Valley, CA Process Engineer and Process Modeler.

Provided process modeling and process design for the Activated Sludge Plant Rehabilitation project which included upgrades to the activated-sludge system to provide filament control, increased aeration-blower capacity, increased oxygen-transfer capacity, improved air distribution, and increased WAS-pumping capacity.

City of Victor Valley, Wastewater Treatment Plant Nitrogen Removal Upgrade, Victor Valley, CA Lead Process Engineer and Process Modeler.

Provided process modeling and process design for conversion of existing conventional activated-sludge facility to 23-MGD NDN MBR facility capable of producing effluent with less than 6 mg/L of total nitrogen. Process design included 4-Stage NDN MBR process, primary sludge fermentation, anaerobic digestion, and new sludge dewatering.



Michael Falk, PhD, PE (CA)

Regulatory

Mike is HDR's West Region Wastewater Market Sector Leader and has more than 16 years of water and wastewater engineering experience, with specialized expertise in nutrient removal process design, nutrient regulations, and energy optimization at wastewater treatment facilities. His experience is exceptionally broad with background on master planning, nutrient regulations, process design, energy audits and optimization, plant wide modeling, emerging technologies evaluation, and developing strategies for meeting low level nutrient discharge permits.

EDUCATION

Doctor of Philosophy,
Civil & Environmental
Engineering, University
of California, Davis

Master of Science,
Environmental
Engineering, University
of Massachusetts

Bachelor of Science,
Civil Engineering,
Virginia Polytechnic
Institute and State
University

REGISTRATION

Professional Engineer,
Civil, CA, #C-77787

CERTIFICATION

Institute for Sustainable
Infrastructure (ISI)
Envision Sustainability
Professional

INDUSTRY TENURE

23 years

RELEVANT EXPERIENCE

Central Contra Costa Sanitary District, Recycled Water Feasibility Study, Martinez, CA

Process Design. Mike provided process design services for three separate engineering projects that included recycled water study, nitrification, and biological nutrient removal. The recycled water study report evaluated a module approach to take secondary treated wastewater and apply biological treatment to nitrify ammonia by way of a moving bed biofilm reactor (MBBR), followed by reverse osmosis to remove TDS. As for the nitrification and biological nutrient removal reports, the studies considered re-configuration and basin expansion required at the existing BOD removal facility to achieve a wide range of treatment objectives. The biological configurations considered included A2O, 4-stage and 5-stage Bardenpho, integrated fixed-film attached sludge, MBBR, and biologically active filter.

California Association of Sanitation Agencies, Nutrient Management Support in Southern California, Sacramento, CA

Nutrient Management. Mike provided consulting services related to nutrient management in Southern California, which focused on nitrogen species, with particular attention to wastewater treatment plants with ocean discharges. He presented an overview on nutrient management stories across the country (emphasis on the Bay Area, Puget Sound, Delaware River Watershed, and Montana River), as well as shared technical white papers that HDR developed for the BACWA.

Eastern Municipal Water District, Hemet/ San Jacinto Wastewater Treatment Facility, Riverside County, CA

Project Manager. Mike provided support in assessing the current capacity of the existing wastewater reclamation facility. The evaluation was composed of modeling the biological process and supplying the municipality with a list of alternatives to promote meeting the permit requirements until the anticipated plant upgrade in 2014.

Dublin San Ramon Services District, Wastewater Treatment and Biosolids Facilities Master Plan, Dublin, CA

Project Manager. Mike was the project manager for the master plan. He provided liquid process evaluation and input to the regulatory requirements technical memorandum (TM) to include Bay Area Clean Water Agencies (BACWA) activities and potential future nutrient requirements, as well as risk factors and probabilities associated with each future nutrient requirement identified. Mike assisted with emergency analysis of the energy and cogeneration systems as well as possible energy generation expansion alternatives. He participated in a review panel (visioning panel workshop) to evaluate new developments and technologies in wastewater resource recovery facilities and recommended which of these technologies should be considered for the district future. Mike identified and evaluated nutrient removal alternatives to achieve nutrient reduction goals consistent with the nutrient control study being completed for BACWA. He also assisted in identifying and evaluating biosolids management alternatives and

MICHAEL FALK, PhD, PE (CA) (CONTINUED)

assessing recycled water treatment alternatives. Mike provided QA/QC review of the existing facilities and capacity TM. Resource recovery technologies that were evaluated for the visioning panel workshop included nutrient recovery, biosolids recovery, and beneficial usage, and water recovery for reuse, including indirect and direct potable reuse applications.

**Dublin San Ramon Services District,
Unit Process Succession Planning
Documentation, Dublin, CA**

Project Manager. Mike was the project manager for identification of opportunities to optimize existing unit processes, as well as provided guidance in evaluating planning process changes or expansions and troubleshoot immediate issues.

**Camarillo Sanitary District, Wastewater
Master Plan Update, Camarillo, CA**

Process Engineer. Mike served as a process engineer during preparation of the wastewater system master plan update, which was needed to address future population and flow projections, evaluate the treatment processes from an efficiency and regulatory compliance standpoint, and determine required infrastructure improvements. He provided preliminary wastewater characterization. Mike prepared a plant-wide steady-state mass balance to size facilities based on projected flows and loads. He evaluated treatment plant alternatives, including liquid stream and sidestreams. Treatment plant alternatives that were evaluated included:

- (1) rehabilitate and expand Plant 3;
- (2) rehabilitate Plant 1 and Plant 3;
- (3) new treatment process at existing site, and
- (4) new treatment process near Lift Station 3.

Mike also assisted with preparing a 10-year capital improvement plan of treatment plant project using pairwise analysis, costs, budgets, and risk reduction considerations.



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We practice increased use of sustainable
materials and reduction of material use.

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FEE PROPOSAL FOR

**J.B. LATHAM TREATMENT
PLANT FACILITY
PLANNING ASSESSMENT
EFFORT**

ENG-25-04

South Orange County Wastewater Authority

October 7,
2025



October 7, 2025
South Orange County Wastewater Authority
Administration Building
34156 Del Obispo Street
Dana Point, CA 92629

Attn: Ms. Roni Young Grant, PE, Capital Improvement Program Manager

RE: Fee Proposal for Engineering Services for the J.B. Latham Treatment Plant Facility Planning Assessment Effort, ENG-25-04

Dear Ms. Grant and Selection Committee Members, ,

HDR Engineering, Inc. (HDR) has developed a fee proposal for the services being requested by the South Orange County Wastewater Authority (SOCWA). SOCWA desires to retain professional and technical expertise to execute the facility planning assessment effort. The professional services associated with the work are described in our technical proposal and are further detailed in our scope of work. This fee proposal includes a breakdown of our proposed hours and fee.

We are excited about this opportunity to collaborate with you and your staff. If you have any questions, please contact our proposed Project Manager Amy Omae at 714.730.2344 or at Amy.Omae@hdrinc.com. She will be your point of contact for this project. We appreciate your consideration and look forward to hearing from you.

Sincerely,

HDR Engineering, Inc.

Anna Lantin, PE
Vice President, Authorized Signatory

Amy Omae, PE
Project Manager

South Orange County Wastewater Authority

J.B. Latham Treatment Plant Facility Planning Assessment Effort, ENG-25-04

Estimated Level of Effort and Fee

		TASKS													FEE				
No.	Description	Principal	Project Manager	Quality Reviewer	Sr Technical Expert	Senior Engineer	Project Engineer	Staff Engineer	Cost Estimator	BIM Technician	Document Specialist	Project Coordinator	Accountant	Total Labor	Labor	Subs	Direct Costs	Total	Rounded Total
Client Billing Rates		\$390	\$360	\$380	\$390	\$300	\$235	\$150	\$275	\$160	\$140	\$120	\$170	\$242					
1	Project Management																		
1.1	Project Control Plan		14				26							40	\$11,150	\$0	\$56	\$11,206	
1.2	Project Management, Admin, QMS, and Invoicing	6	76	5	1	1	2	2				32	32	156	\$42,195	\$0	\$211	\$42,406	
1.3	Meetings		29																
1.3.1	Kick-Off Meeting (1, 1 hour each)		1		1	1	1	1						5	\$1,435	\$0	\$64	\$1,499	
1.3.2	Progress Meetings (12, 1 hour each)		12		6	6	12	12						48	\$13,080	\$0	\$65	\$13,145	
1.3.3	Staff Workshops (5, 2 hours each)		10		4	2	20	20						56	\$13,460	\$0	\$322	\$13,782	
1.3.4	Board Presentations (3, 2 hours each)		6		6		6	6						24	\$6,810	\$0	\$193	\$7,003	
Subtotal 1 Project Management		6	119	5	18	10	67	41	0	0	0	32	32	329	\$88,130	\$0	\$911	\$89,041	\$89,000
2	Existing Facilities Evaluation																		
2.1	Description of Existing Facilities		1			6	8	16						31	\$6,440	\$0	\$32	\$6,472	
2.2	Review Existing Reports and Models				1	6	8	20						35	\$7,070	\$0	\$35	\$7,105	
2.3	Flows and Loads Analysis													0	\$0	\$0	\$0	\$0	
2.3.1	Historical Wastewater Flows and Loading		2		5		12	44						63	\$12,090	\$0	\$60	\$12,150	
2.3.2	Projected Wastewater Flows and Loads		2		5		16	44						67	\$13,030	\$0	\$65	\$13,095	
2.4	Existing Facilities Analysis													0	\$0	\$0	\$0	\$0	
2.4.1	Establish Planning and Design Criteria		2		8		24	36						70	\$14,880	\$0	\$74	\$14,954	
2.4.2	Hydraulic Capacity Evaluation		2		8	24	12	40						86	\$19,860	\$0	\$99	\$19,959	
2.4.3	Process Model Configuration		2		8	40	12	40						102	\$24,660	\$0	\$123	\$24,783	
2.5	Condition Assessment of Major Unit Processes		4		4	48	32	40						128	\$30,920	\$0	\$413	\$31,333	
2.6	Technical Memorandum		6	13	8	13	28	44		5	9			126	\$29,360	\$0	\$147	\$29,507	
Subtotal 2 Existing Facilities Evaluation		0	21	13	47	137	152	324	0	5	9	0	0	140,901	\$158,310	\$0	\$1,048	\$159,358	\$159,400
3	Wastewater Treatment Alternatives																		
3.1	Identify and Develop Treatment Alternatives													0	\$0	\$0	\$0	\$0	
3.1.1	Liquid Treatment Alternatives		2		32	40	2	24	24					124	\$35,870	\$0	\$179	\$36,049	
3.1.2	Solids Treatment and Disposal Alternatives		2			72	2	24	24					124	\$32,990	\$0	\$165	\$33,155	
	Evaluate Electrical Distribution, Instrumentation, and Control																		
3.1.3	Systems		2				40	24	8					74	\$15,920	\$0	\$80	\$16,000	
3.1.4	Evaluate Energy Recovery Facilities		2			20		12						34	\$8,520	\$0	\$43	\$8,563	
3.1.5	Support Processes and Facilities		3		7	20	16	24		17				87	\$19,890	\$0	\$99	\$19,989	
3.1.6	Site Planning Evaluation		4		4	4	8	16	7					43	\$10,405	\$0	\$52	\$10,457	
3.2	Risk and Resilience Planning Elements		4		8	8	16	20						56	\$13,720	\$0	\$69	\$13,789	
3.3	Technical Memorandum			4	8	8	32	48		4	8			112	\$23,520	\$0	\$118	\$23,638	
Subtotal 3 Wastewater Treatment Alternatives		0	19	0	51	164	84	144	63	17	0	0	0	654	\$160,835	\$0	\$805	\$161,640	\$161,600
4	Effluent Utilization Evaluation																		
4.1	Multi-Criteria Decision Matrix		2		4	4	8							18	\$5,360	\$0	\$27	\$5,387	
4.2	Identify and Evaluate Effluent Management Options		3		5	35	23	24						90	\$22,535	\$0	\$113	\$22,648	
4.3	Technical Memorandum			5		16	20	18		7	7			73	\$16,200	\$0	\$81	\$16,281	
Subtotal 4 Effluent Utilization Evaluation		0	5	5	9	55	51	42	0	7	7	0	0	181	\$44,095	\$0	\$221	\$44,316	\$44,300
5	Develop Project Alternatives																		
5.1	Develop and Evaluate Combined Alternatives (up to 4)		12		22	40	44	24	26	17				185	\$48,710	\$0	\$244	\$48,954	
5.2	Define Evaluation Criteria		4		4	2	8	8						26	\$6,680	\$0	\$33	\$6,713	
5.3	Technical Memorandum		5	5	6		20	23		4	7			70	\$15,810	\$0	\$79	\$15,889	
Subtotal 5 Develop Project Alternatives		0	21	5	32	42	72	55	26	21	7	0	0	281	\$71,200	\$0	\$356	\$71,556	\$71,600
6	Prepare Facility Planning Assessment Report and Documents																		
6.1	Administrative Draft Report		2	5	3		8	16		5	9			48	\$10,130	\$0	\$51	\$10,181	
6.2	Draft Report		2	4	2		8	8		4	4			32	\$7,300	\$0	\$37	\$7,337	
6.3	Final Report		2	2			2	2			2			10	\$2,530	\$0	\$13	\$2,543	
6.4	Executive Summary		2	2	2		1	2						9	\$2,795	\$0	\$14	\$2,809	
ubtotal 6 Prepare Facility Planning Assessment Report and Documents		0	8	13	7	0	19	28	0	9	15	0	0	99	\$22,755	\$0	\$115	\$22,870	\$22,900
TOTAL, hours		6	193	45	172	416	477	682	89	63	46	32	32	2,252					
TOTAL, dollars															\$545,325	\$0	\$3,456	\$548,781	\$548,800



3230 El Camino Real, Suite 200
Irvine, California 92602-1377
714.730.2300
hdrinc.com

We practice increased use of sustainable
materials and reduction of material use.

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Agenda Item

9

Engineering Committee Meeting

Meeting Date: November 13, 2025

TO: Engineering Committee

FROM: Roni Grant, Capital Improvement Program Manager

SUBJECT: J.B. Latham Treatment Plant Old Effluent Pump Station Storage and Staging Area Construction Contract Award [Project Committee 2]

Overview

The Old Effluent Pump Station, originally constructed in the 1970s, has remained abandoned since the commissioning of the current Effluent Pump Station in the early 1990s. Over the decades, the unused facility has deteriorated and now presents several operational and public health concerns. Most notably, the abandoned wet well lacks adequate staging and storage space, creating stagnant conditions that attract mosquitoes and pose a potential health hazard to the surrounding community.

To mitigate these risks and improve site functionality, it is recommended that the Old Effluent Pump Station be demolished. The scope of work includes backfilling the existing wet well and restoring the surface with asphaltic concrete. This action will eliminate the health hazard, enhance site safety, and support future operational needs.

Bids

On August 21, 2025, SOCWA issued a formal solicitation for bids via the PlanetBids platform, inviting qualified contractors to participate in the procurement process for the demolition of the Old Effluent Pump Station. A site walk was conducted to provide interested parties with an opportunity to assess existing conditions and ask questions.

Bid submissions were due by October 9, 2025. SOCWA received two bids: one from Pacific Hydrotech and another from SS Mechanical. The Engineer's cost estimate for the project was \$250,000. Based on the bid evaluations, Pacific Hydrotech was identified as the apparent responsible low bidder. A summary of the bid results is provided in Table 1 below. For reference, the complete bid packages submitted by Pacific Hydrotech and SS Mechanical are attached. Staff contacted Pacific Hydrotech for clarification on Bid Item A8 and successfully negotiated a cost reduction of \$70,000, leveraging the fact that Pacific Hydrotech is currently performing two other construction projects at JBL.

Table 1- Summary of Bids

Item No.	Description	Pacific Hydrotech	SS Mechanical
A1	Mobilization/Demobilization	\$80,000	\$43,000
A2	Excavation Safety Measures	\$500	\$12,000
A3	Drilling of Concrete Slab	\$9,100	\$35,000
A4	Demolition of the Old Effluent PS	\$73,600	\$235,000
A5	Hazardous Material Disposal	\$32,000	\$70,000
A6	Misc. Demolition	\$45,500	\$125,000
A7	Removal of Natural Gas Piping	\$8,200	\$5,000
A8	Other Misc. Site Work	\$49,280	\$310,000
A9	Field Order Allowance	\$50,000	\$50,000
	Total	\$791,700	\$885,000

Cost Allocation

Table 1 shows the allocation of costs by member agencies.

Table 1 – Cost Allocation by Member Agency (32241L)

Agency	Cost
South Coast Water District	\$411,050.64
Santa Margarita Water District	\$380,649.36
Total	\$791,700.00

Budget

The current approved budget for the JBL Old Effluent Pump Station Storage and Staging Area is \$250,000. Staff is requesting an additional allocation of \$600,000, bringing the revised total project budget to \$850,000.

In addition, staff recommends the inclusion of a 5% contingency in the amount of \$39,585, to address any unforeseen conditions or issues that may arise during the construction phase. This would bring the total project authorization to \$831,285.

Recommended Action: Staff recommends that the Engineering Committee recommend that the PC 2 Board of Directors:

1. Approve an increase of \$600,000 to the project budget, resulting in a revised total project budget of \$850,000.
2. Authorize execution of a contract with Pacific Hydrotech in the amount of \$791,700 for the JBL Old Effluent Pump Storage and Staging Area project.
3. Approve a construction contingency of \$39,585 to address any unforeseen conditions encountered during the work.

BID FORM
PROPOSAL TO

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

**FOR THE J.B. LATHAM TREATMENT PLANT -
OLD EFFLUENT PUMP STATION DEMOLITION**

Name of Bidder: Pacific Hydrotech Corporation

Business Address: 314 E. 3rd Street, Perris CA 92570

Phone No.: 951-943-8803

**TO THE BOARD OF DIRECTORS OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY (SOCWA)**

The undersigned, as Bidder, hereby certifies and declares that:

Pursuant to, and in compliance with, the Notice Inviting Bids and the other documents relating thereto, the undersigned bidder, being fully familiar with the terms of the Contract Documents, local conditions affecting the performance of the Contract, the character, quality, quantities, and scope of the Work, and the cost of the Work at the place where the Work is to be done, hereby proposes and agrees to perform within the time stipulated in the Contract, including all of its component parts and everything required to be performed, and to furnish any and all of the labor, materials, tools, equipment, transportation, services, permits, utilities, and all other items necessary to perform the Contract and complete, in a workmanlike manner, all of the Work required in connection with the construction of said Work all in strict conformity with the Plans and Specifications and other Contract Documents, for the prices hereinafter set forth.

The only persons or parties interested in this Proposal as principals are those named herein and that this Proposal is made without collusion with any person, firm, or corporation as set forth in more detail in the Noncollusion Affidavit executed herewith. Further, the undersigned proposes and agrees, if the Proposal is accepted, that he/she will execute a Contract with the SOCWA in the form set forth in the Contract Documents and that he/she will accept in full payment thereof the following prices to with:

SCHEDULE OF WORK ITEMS

BID SCHEDULE A

Furnish all labor, materials, equipment, applicable taxes, and incidentals necessary for the accomplishment of the following specific work items, each being the LUMP SUM PRICE, LINEAR FOOT PRICE, STIPULATED DOLLAR AMOUNT, ALLOWANCE PRICE, OR EACH PRICE for the specific item:

Item No.	Description	Size-Quantity	Unit	Unit Price	Item Total
BID SCHEDULE A – J.B. LATHAM OLD EFFLUENT PUMP STATION DEMOLITION PROJECT					
1	Mobilization/Demobilization	1	LS	\$80,000	\$80,000
2	Excavation Safety Measures	1	LS	\$500	\$500
3	Drilling of Concrete Slab Penetrations	1	LS	\$9,100	\$9,100
4	Demolition of the Old Effluent Pump Station	1	LS	\$73,600	\$73,600
5	Hazardous Material Disposal and Chain of Custody Documentation	1	LS	32,000 \$	32,000 \$
6	Miscellaneous Demolition	1	LS	\$45,500	\$45,500
7	Removal of Natural Gas Piping	1	LS	\$8,200	\$8,200
8	Other Miscellaneous Site Work	1	LS	\$562,800	\$562,800
9	Field Order Allowance	1	Allowance	\$50,000	\$50,000
SUBTOTAL BID SCHEDULE A					\$861,700.00

ADD/DEDUCT (List Bid Items Affected and Amount*):

Item No.	Add (+) Amount	Deduct (-) Amount
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____

ADD/DEDUCT – List Bid Items Affected and Amount*:

Item No.	Add (+) Amount	Deduct (-) Amount
_____	\$ _____	\$ _____

_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____

SUBTOTAL ADD (+)/DEDUCT(-) ITEMS:

(\$ 0.00)

*Provision is made here for the bidder to include an addition or deduction in their Bid, if bidder wishes, to reflect any last-minute adjustments in price. The addition or deduction, if made, will be applied to the listed bid item.

TOTAL CONTRACT PRICE (Sum of Subtotal Lump Sum Price and Subtotal Add/Deduct Items):

(\$ 861,700)

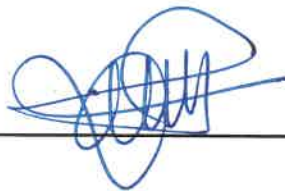
Total amount of bid (written in words):

Eight Hundred Sixty-One ~~Thousand~~ Seven Hundred Dollars

Award of contract will be made to the lowest responsive, responsible bidder on the basis of the TOTAL CONTRACT PRICE.

Award of contract is based on the Total Contract Price noted above and is not impacted by the proposed cost of any additive bid item. Owner retains the right to include any additive bid item value in the overall project at the time of contract award.

Signature of Bidder: _____



Date: 10-9-2025

LIST OF SUBCONTRACTORS

The name, California Contractor's license number, registration number issued pursuant to Labor Code Section 1725.5, and location of place of business of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the work or improvements in an amount in excess of one-half of one percent (.5%) of the Bidder's Total Contract Price, and the portion of the Work which will be done by each subcontractor is set forth as follows (attach additional sheets as necessary). Circumvention by the Bidder of the requirement to list subcontractors by the device of listing one subcontractor who will in turn sublet portions constituting the majority of the Work covered by this Contract shall be considered a violation of Chapter

4 of the California Public Contract Code and shall subject the Bidder to the penalties set forth in Sections 4110 and 4111 of said Code. Bidder shall conduct substitutions of subcontractors in compliance with Public Contract Code Sections 4106 et seq. detailing the process and conditions under which a public agency may consent to a subcontractor substitution. Except as hereinabove provided, bidder acknowledges and agrees that bidder will perform all required Work in accordance with Section 4106 of the Public Contract Code.

<u>Contractor's Name</u>	<u>Contractor's License & Registration Number</u>	<u>Place of Business</u>	<u>Type of Work</u>
Standard Demolition	CSLB - 1020712 DIR - 1000047290	1905 Lirio Ave., Ventura CA 93004	Demolition and Hazardous Disposal
Reliance Paving	CSLB - 1052328 DIR - 1001074019	3751 Merced Dr. Suite J, Riverside CA 92503	AC Paving

LIST OF EQUIPMENT MANUFACTURERS (Not Used)

COMPANY DATA

Legal name of Bidder: Pacific Hydrotech Corporation

Primary Contact: Joselito Guintu

Business address: 314 E. 3rd Street,

Perris CA 92570

Telephone:

951-943-8803

Facsimile:

951-943-1093

Email:

lito@pachydro.com

California Contractor's License:

Primary

Class:

A

License

No.:

518355

Expiration

Date:

9-30-2027

Supplemental Classification held, if any: B

The full names of all persons and parties interested in the foregoing Bid Form as principals are as follows (*NOTICE: Give first and last names in full; in case of corporation, give names of President, Secretary, Treasurer, and Manager, and in case of partnerships and joint ventures, give names of all the individual members, attached additional sheets as necessary*):

See Attached Resolution

PROPOSED CONSTRUCTION PROJECT SCHEDULE

Bidder has attached hereto a proposed construction progress schedule showing the sequence of activities for completion of the Work, in bar chart format. The proposed construction progress schedule includes major construction activities, major equipment procurement and delivery activities, working time limits imposed by permits, and substantial and final completion milestones, and identifies critical path tasks. The schedule is displayed in elapsed numerical days rather than calendar dates and equals the Contract Time.

PACIFIC HYDROTECH CORPORATION
a California Corporation

CORPORATE RESOLUTION

August 7, 2025

RESOLVED, that **James Kirk Harns** – CEO, **Sean Harns** – President, **Joselito Quintu** – Vice President, **Christopher Harns** – Vice President, **June Diaz** – CFO; each has the authority to sign contracts on behalf of the corporation.

BE IT FURTHER RESOLVED that these resolutions may be executed in any number of counterparts and delivered by facsimile, e-mail PDF or other electronic means, each of which shall be deemed an original and all of which when taken together shall constitute one and the same instrument.



James Kirk Harns, CEO



Sean J. Harns, President



Christopher Harns, Vice President



Greg Chehey, Vice President



Joselito M. Quintu, Vice President



David Power, Vice President



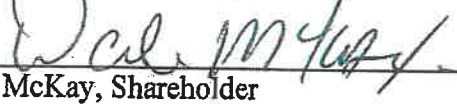
Kyle Bremer, Vice President



June Diaz, Chief Financial Officer



Usbaldo Garibaldo, Shareholder



Dale McKay, Shareholder



CHRISTY L. HARNs, SECRETARY

CLOSING STATEMENT & CERTIFICATIONS

The undersigned Bidder further certifies as follows:

The Total Bid Price requests sufficient funds to allow Contractor to comply with all applicable laws or regulations governing the labor or services to be provided under the Contract. Furthermore, Bidder hereby agrees to indemnify SOCWA for liabilities and penalties for violations of Labor Code Section 2810.

The cost for all labor, materials, equipment, taxes, freight, insurance and incidentals necessary for the Work is included in the Total Bid Price, including but not limited to sheeting, shoring, and bracing, or equivalent method for the protection of life and limb in trenches and open excavation in conformance with applicable safety orders.

The Bidder is, at the time of bidding, and shall be, throughout the period of the Contract, licensed by the State of California to do the type of Work required under the terms of the Contract Documents. Bidder further certifies that Bidder is skilled and regularly engaged in the general class and type of Work called for in the Contract Documents.

Bidder is not an ineligible contractor for the purposes of California Labor Code Section 1777.1 or 1777.7, and no subcontractor to be used for the performance of the Work is an ineligible contractor for the purposes of Labor Code Section 1777.1 or 1777.7.

Bidder is competent, knowledgeable and has special skills regarding the nature, extent and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work which may create, during the construction program, unusual or peculiar unsafe conditions hazardous to persons and property. Bidder expressly acknowledges that Bidder is aware of such peculiar risks and that Bidder has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the construction Work with respect to such hazards.

Bidder acknowledges receipt of the following Addenda: ^{1, 2} _____

Bidder has attached hereto Bid security, in the form of a bond, cashier's check, or certified check, in an amount which is equal to (at least) ten percent (10%) of the total amount of the Bid, payable in lawful money of the United States to the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY.

Bidder is aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for worker's compensation or undertake self-insurance in accordance with the provisions of that code, and will comply with such provisions before commencing the performance of the Work.

Bidder has inspected the site of the Work prior to submitting this Bid.

By signing below, the undersigned certifies that he/she has the legal authority to bind the Bidder and that all representations, certifications, and statements made by Bidder, as set forth in this Bid, are true and correct and are made under penalty of perjury.

Signature:



Clearly printed name:

Sean J. Harns

Position:

President

Date/Location:

October 9, 2025, at Perris, CA

Seal (if any):



Co-Signature:

Clearly printed name:

Joselito Quintu

Position:

Vice President

Date/Location:

October 9, 2025, at Perris, CA

NOTICE: Pursuant to the requirements of California Business and Professions Code, Section 7028.15(e), a bid submitted to the SOCWA by a contractor who is not licensed pursuant to Chapter 9, of Division 3, of the Business and Professions Code, shall be considered nonresponsive and shall be rejected as provided for by law.

NONCOLLUSION AFFIDAVIT
To Be Executed by Bidder and Submitted with Bid
(Public Contract Code § 7106)

The undersigned declares:

I am the Vice President of Pacific Hydrotech Corporation, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

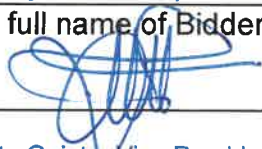
Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on 10-9-2025 [date], at Perris [city], CA [state].

BIDDER:

Pacific Hydrotech Corporation

[Type full name of Bidder]

By: 

Joselito Guintu, Vice President

[Print name and title]

CALIFORNIA JURAT WITH AFFIANT STATEMENT**GOVERNMENT CODE § 8202**

- ☒ See Attached Document (Notary to cross out lines 1–6 below)
☐ See Statement Below (Lines 1–6 to be completed only by document signer[s], *not* Notary)

x

x

x

x

x

x

Signature of Document Signer No. 1

Signature of Document Signer No. 2 (if any)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of Riverside

Subscribed and sworn to (or affirmed) before me

on this 9 day of October, 2025,
 by Date Month Year

(1) Joselito Guintu

(and (2) _____),

Name(s) of Signer(s)

proved to me on the basis of satisfactory evidence
 to be the person(s) who appeared before me.



Signature

Signature of Notary Public

Seal
 Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached DocumentTitle or Type of Document: Non-Collusion Affidavit Document Date: October 9, 2025Number of Pages: 1 Signer(s) Other Than Named Above: _____

BIDDER'S BOND

(At Least 10 Percent of the Total Contract Price)

We Pacific Hydrotech Corporation, as
Principal,

and Liberty Mutual Insurance Company _____, as Surety,

jointly and severally, bind ourselves, our heirs, representatives, successors, and assigns, as set forth herein, to the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY ("SOCWA") for payment of the penal sum of

Ten Percent of Bid Amount

_____ Dollars (\$ _____ 10%),

lawful money of the United States, such amount representing at least ten percent (10%) of the amount of the Total Bid Price to obtain the award of a contract for JBL Old Effluent Pump Station Demolition Project and to be paid to SOCWA, its successors and assigns, for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly hereby.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal shall not withdraw said Bid within the period of time set forth in the Contract Documents, and shall within fifteen (15) calendar days after the prescribed forms are presented to the Principal for signature enter into a written contract with SOCWA in accordance with the Bid as accepted, and if the Principal shall give the required bonds with good and sufficient sureties for the faithful performance and proper fulfillment of such contract, and for the protection of laborers and materialmen, or in the event of the withdrawal of the Bid within the period specified, or the failure to enter into the Contract, and give such bonds within the time specified, if the Principal shall within sixty (60) days after request by SOCWA pay to SOCWA the difference between the amount specified in the Bid and the amount for which SOCWA may procure the required work, if the latter amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise if shall remain in full force and effect.

Forfeiture of this bond, or any deposit made in lieu thereof, shall not preclude the SOCWA from seeking all other remedies provided by law to cover losses sustained as a result of the Principal's failure to do any of the foregoing and this bond shall not be a limitation on Principals' liability therefor.

Principal and Surety agree that if the SOCWA is required to engage the services of an attorney(s) in connection with the enforcement of this bond, each shall pay SOCWA's costs and reasonable attorney fees incurred with or without suit.

IN WITNESS WHEREOF,

Executed on September 30, 25.

[CORPORATE SEAL]

Pacific Hydrotech Corporation

Principal

By

Joselito Guinzu, Vice President

Title

(ATTACH NOTARY ACKNOWLEDGMENT OF AUTHORIZED REPRESENTATIVE OF PRINCIPAL)

Any claims under this bond may be addressed to:

Liberty Mutual Insurance Company

(Name and address of Surety)

790 The City Drive South, Suite 200

Orange, CA 92868

Alliant Insurance Services, Inc.
701 B Street, 6th Floor, San Diego, CA 92101

(Name and address of Surety's agent for service of process in California, if different from above)

Surety: (714) 634-5722 / Agent: (619) 238-1828

(Telephone number of Surety's agent
in California)

(ATTACH NOTARY ACKNOWLEDGMENT)

Liberty Mutual Insurance Company

Surety

By

(Attorney-in-Fact) Lawrence F. McMahon

NOTICE

No substitution or revision to this bond form will be accepted. Sureties must be authorized to do business, and have an agent for service of process, in California. A certified copy of Power of Attorney must be attached.

See attached California All-Purpose Acknowledgment for Surety

CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
) ss:
COUNTY OF _____)

On _____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Notary Public

NOTE:

- (a) Signature of those executing for Surety must be properly acknowledged.
- (b) The Attorney-in-fact must attach a certified copy of the Power of Attorney.

****END OF REQUIRED FORMS****

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

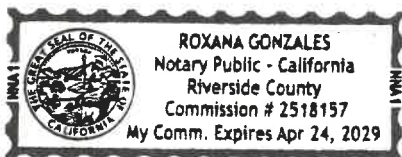
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
 County of Riverside)
 On September 30, 2025 before me, Roxana Gonzales, Notary Public,
Date Here Insert Name and Title of the Officer
 personally appeared Joselito Guintu
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature [Signature]
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: BIDDERS BOND Document Date: September 30, 2025
 Number of Pages: 2 Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: Joselito Guintu
☒ Corporate Officer — Title(s): Vice President
☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
 Signer Is Representing: _____

Signer's Name: _____
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
 Signer Is Representing: _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of San Diego)

On SEP 30 2025 before me, Maria Guise, Notary Public,
Date Here Insert Name and Title of the Officer
personally appeared Lawrence F. McMahon
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature [Signature]
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

☐ Corporate Officer — Title(s): _____

☐ Partner — ☐ Limited ☐ General

☐ Individual ☒ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: _____

Signer Is Representing: Surety Company

Signer's Name: _____

☐ Corporate Officer — Title(s): _____

☐ Partner — ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: _____

Signer Is Representing: _____



POWER OF ATTORNEY

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: **8213991 - 024019**

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Christopher Conte, Dale G. Harshaw, Geoffrey Shelton, John R. Qualin, Lawrence F. McMahon, Lilia De Loera, Maria Hallmark, Minna Huovila, Natassia Kirk-Smith, Ryan Wamock, Sarah Myers, Tara Bacon

all of the city of San Diego state of CA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 6th day of May, 2025.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By:

Nathan J. Zangerle
Nathan J. Zangerle, Assistant Secretary

State of PENNSYLVANIA ss
County of MONTGOMERY

On this 6th day of May, 2025 before me personally appeared Nathan J. Zangerle, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2029
Commission number 1126044
Member, Pennsylvania Association of Notaries

By:

Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Nathan J. Zangerle, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 30th day of September, 2025.



By:

Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

California Environmental Protection Agency
Air Resources Board

January 1, 2025

**CERTIFICATE OF REPORTED COMPLIANCE
OFF-ROAD DIESEL VEHICLE REGULATION**

is issued to

PACIFIC HYDROTECH CORPORATION

This certificate indicates that the fleet listed above has reported off-road diesel vehicles to the California Air Resources Board and has certified they are in compliance with title 13 CCR, section 2449. All applicable vehicles owned by the individual, company, or agency must be reported and labeled as specified in Section 2449 with all possible completeness, else this certificate is null and void. **Certificate expires 2/28/2026**



Jack Kinnick
Chief, Mobile Source Control Division
California Air Resources Board

Off-road Diesel Fleet Identification

5364

To verify the authenticity of this certificate, enter this number at
http://www.arb.ca.gov/doors/compliance_cert1.html



CONTRACTORS
STATE LICENSE BOARD
ACTIVE LICENSE



License Number **518355**

Entity **CORP**

Business Name **PACIFIC HYDROTECH
CORPORATION**

Classification(s) **A HAZ B**

Expiration Date **09/30/2027**

www.cslb.ca.gov



1000002987 - PACIFIC HYDROTECH CORPORATION

Customer Account Lookup

PWCR

1000002987

Contractor Status

DIR Approved

CSLB

518355

Business Phone

9519438803

Ext

Registration Start Date

2025-07-01

Legal Entity Name

PACIFIC HYDROTECH CORPORATION

Doing Business As (DBA)

PACIFIC HYDROTECH CORPORATION

Business Structure

-- None --

President

James K. Harns

Email

ERIVERO@PACHYDRO.COM

Registration End Date

2028-06-30

Crafts

Laborer and Related Classifications Carpenter and Related Trades Cranes, Pile Driving and Hoisting Equipment (Operating Engineer)
Bricklayer/Brick Tender Iron Worker Cement Mason Operating Engineer (Heavy and Highway Work)

Address

Mailing Address

314 E. 3RD STREET

Mailing Address - City

PERRIS

Mailing Address - State

CA

Mailing Address - Zip

92570

Mailing Address - Country

United States

Physical Address

Physical Address - City

Physical Address - State

Physical Address - Zip

Physical Address - Country

Related Lists

Registration Dates (8)

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SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ADDENDUM No. 1

TO INVITATION FOR BID

FOR J.B. LATHAM TREATMENT PLANT OLD EFFLUENT PUMP STATION REPURPOSING

**THE PROPOSER SHALL EXECUTE THE CERTIFICATION AT THE END OF THE
ADDENDUM AND SHALL ATTACH THE ADDENDUM TO THE PROPOSAL (NOT TO BE
INCLUDED AS PART OF THE PAGE COUNT).**

Q&A:

1. What is the existing thickness of the AC Paving?

The asphalt is 3 inches thick approximately.

2. For the 8" inch fill. Is the native fill suitable material? Or would we need import fill? If we do need import fill, what would the requirements for the material be.

Excavated on-site soils may be reused as compacted fill provided it is free of organics, deleterious materials, debris, and particles over 3 inches in largest dimension. This soil must be used above the ground water level.

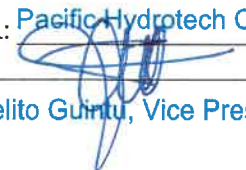
DATED: 9/30/2025

Roni Young Grant
Roni Young Grant

BIDDER'S CERTIFICATION

I acknowledge receipt of the foregoing Addendum No. 1 and accept all conditions contained herein.

DATED: 9-30-2025

BIDDER: Pacific Hydrotech Corporation
BY: 
Joselito Quintu, Vice President

Appendix B

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ADDENDUM No. 2

TO INVITATION FOR BID

FOR J.B. LATHAM TREATMENT PLANT OLD EFFLUENT PUMP STATION REPURPOSING

**THE PROPOSER SHALL EXECUTE THE CERTIFICATION AT THE END OF THE
ADDENDUM AND SHALL ATTACH THE ADDENDUM TO THE PROPOSAL (NOT TO BE
INCLUDED AS PART OF THE PAGE COUNT).**

- 1. In order to come up with an accurate quantity to backfill, we would need existing elevations and or as-built drawings**

The attached picture has some helpful dimensions. The basin has outer dimensions of 59' x 63'. The bottom slopes from east to west, with a 4.5' difference. One other thing to consider is that the contractors can use the concrete walls as backfill above the water line if the contractors crush it to less than 3 inches in any direction.

- 2. See the attached 2021 report which provides additional information.**

DATED: 9/30/2025

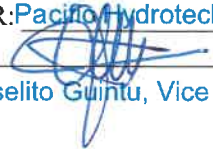
Roni Young Grant

Roni Young Grant

BIDDER'S CERTIFICATION

I acknowledge receipt of the foregoing Addendum No. 2 and accept all conditions contained herein.

DATED: 9-30-2025

BIDDER: Pacific Hydrotech Corporation
BY: 
Joselito Guinu, Vice President

[Public Works Support](#)[eCPR Search](#)[Knowledge](#)[Log
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1000047290 - STANDARD DEMOLITION, INC.

Customer Account Lookup

PWCR

1000047290

Contractor Status

DIR Approved

CSLB

1020712

Business Phone

805-643-6669

Ext

Registration Start Date

2025-07-01

Legal Entity Name

STANDARD DEMOLITION, INC.

Doing Business As (DBA)

STANDARD DEMOLITION, INC.

Business Structure

-- None --

President

John Scheck

Email

demo@standard1.com

Registration End Date

2026-06-30

Crafts

LABORER Operating Engineer

Address

Mailing Address

1905 LIRIO AVENUE

Mailing Address - City

VENTURA

Mailing Address - State

CA

Mailing Address - Zip

93004

Mailing Address - Country

Ventura

Physical Address

Physical Address - City

Physical Address - State

Physical Address - Zip

Physical Address - Country

Related Lists

Registration Dates (10)

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1001074019 - Reliance Paving Inc

Customer Account Lookup

PWCR

Contractor Status

CSLB

Business Phone

Ext

Registration Start Date

Legal Entity Name

Doing Business As (DBA)

Reliance Paving Inc

Business Structure

Corporation

President

Brandon Lopez

Email

reliancepaving@gmail.com

Registration End Date

2026-06-30

Crafts

Laborer and Related Classifications

Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)

Cement Mason

Driver (On/Off-Hauling to/from Construction Site)

Operating Engineer

Other

Address

Mailing Address

3751 Merced Dr. Suite J

Mailing Address - City

Riverside

Mailing Address - State

California

Mailing Address - Zip

92503

Mailing Address - Country

United States of America

Physical Address

3751 Merced Dr. Suite J

173

Physical Address - City

Riverside

Physical Address - State

California

Physical Address - Zip

92503

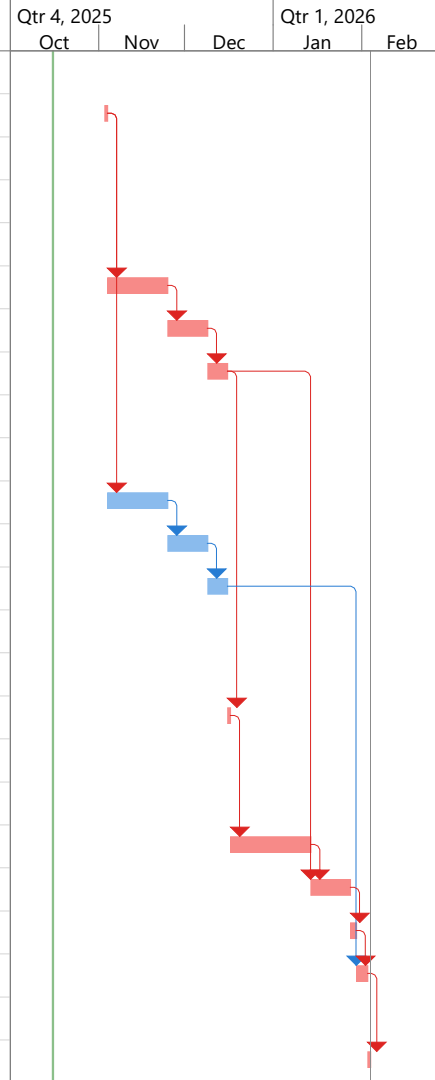
Physical Address - Country

United States of America

Related Lists

Registration Dates 3

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Qtr 4, 2025			Qtr 1, 2026	
							Oct	Nov	Dec	Jan	Feb
1	BID SCHEDULE	67 days	Mon 11/3/25	Tue 2/3/26							
2	NTP	1 day	Mon 11/3/25	Mon 11/3/25		6,11					
3											
4	CRITICAL SUBMITTALS	30 days	Tue 11/4/25	Mon 12/15/25							
5	BACKFILL MATERIALS	30 days	Tue 11/4/25	Mon 12/15/25							
6	Submittal	15 days	Tue 11/4/25	Mon 11/24/25	2	7					
7	Review and Approve	10 days	Tue 11/25/25	Mon 12/8/25	6	8					
8	Lead Time	5 days	Tue 12/9/25	Mon 12/15/25	7	20,16					
9											
10	AC PAVING	30 days	Tue 11/4/25	Mon 12/15/25							
11	Submittal	15 days	Tue 11/4/25	Mon 11/24/25	2	12					
12	Review and Approve	10 days	Tue 11/25/25	Mon 12/8/25	11	13					
13	Lead Time	5 days	Tue 12/9/25	Mon 12/15/25	12	22					
14											
15	CONSTRUCTION	35 days	Tue 12/16/25	Mon 2/2/26							
16	Mobilization	1 day	Tue 12/16/25	Tue 12/16/25	8	19					
17											
18	BUILDING WORK	34 days	Wed 12/17/25	Mon 2/2/26							
19	Demo existing structures	20 days	Wed 12/17/25	Tue 1/13/26	16	20					
20	Backfill With Rock	10 days	Wed 1/14/26	Tue 1/27/26	19,8	21					
21	Backfill with Native	2 days	Wed 1/28/26	Thu 1/29/26	20	22					
22	AC Paving	2 days	Fri 1/30/26	Mon 2/2/26	21,13	24					
23											
24	Project Completion	1 day	Tue 2/3/26	Tue 2/3/26	22						



Project: Bid Schedule Date:10/2/25	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	
	Milestone		Duration-only		Deadline	
	Summary		Manual Summary Rollup		Critical	
	Project Summary		Manual Summary		Critical Split	
	Inactive Task		Start-only		Progress	
	Inactive Milestone		Finish-only		Manual Progress	

BID FORM
PROPOSAL TO

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

**FOR THE J.B. LATHAM TREATMENT PLANT -
OLD EFFLUENT PUMP STATION DEMOLITION**

Name of Bidder: SS Mechanical Construction Corp.

Business Address: 33208 Paseo Cerveza Unit D San Juan Capistrano, CA 92675

Phone No.: 714-847-1317

**TO THE BOARD OF DIRECTORS OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY (SOCWA)**

The undersigned, as Bidder, hereby certifies and declares that:

Pursuant to, and in compliance with, the Notice Inviting Bids and the other documents relating thereto, the undersigned bidder, being fully familiar with the terms of the Contract Documents, local conditions affecting the performance of the Contract, the character, quality, quantities, and scope of the Work, and the cost of the Work at the place where the Work is to be done, hereby proposes and agrees to perform within the time stipulated in the Contract, including all of its component parts and everything required to be performed, and to furnish any and all of the labor, materials, tools, equipment, transportation, services, permits, utilities, and all other items necessary to perform the Contract and complete, in a workmanlike manner, all of the Work required in connection with the construction of said Work all in strict conformity with the Plans and Specifications and other Contract Documents, for the prices hereinafter set forth.

The only persons or parties interested in this Proposal as principals are those named herein and that this Proposal is made without collusion with any person, firm, or corporation as set forth in more detail in the Noncollusion Affidavit executed herewith. Further, the undersigned proposes and agrees, if the Proposal is accepted, that he/she will execute a Contract with the SOCWA in the form set forth in the Contract Documents and that he/she will accept in full payment thereof the following prices to with:

SCHEDULE OF WORK ITEMS

BID SCHEDULE A

Furnish all labor, materials, equipment, applicable taxes, and incidentals necessary for the accomplishment of the following specific work items, each being the LUMP SUM PRICE, LINEAR FOOT PRICE, STIPULATED DOLLAR AMOUNT, ALLOWANCE PRICE, OR EACH PRICE for the specific item:

Item No.	Description	Size-Quantity	Unit	Unit Price	Item Total
BID SCHEDULE A – J.B. LATHAM OLD EFFLUENT PUMP STATION DEMOLITION PROJECT					
1	Mobilization/Demobilization	1	LS	\$43,000.00	\$43,000.00
2	Excavation Safety Measures	1	LS	\$12,000.00	\$12,000.00
3	Drilling of Concrete Slab Penetrations	1	LS	\$35,000.00	\$35,000.00
4	Demolition of the Old Effluent Pump Station	1	LS	\$235,000.00	\$235,000.00
5	Hazardous Material Disposal and Chain of Custody Documentation	1	LS	\$70,000.00	\$70,000.00
6	Miscellaneous Demolition	1	LS	\$125,000.00	\$125,000.00
7	Removal of Natural Gas Piping	1	LS	\$5,000.00	\$5,000.00
8	Other Miscellaneous Site Work	1	LS	\$310,000.00	\$310,000.00
9	Field Order Allowance	1	Allowance	\$50,000	\$50,000
SUBTOTAL BID SCHEDULE A					885,000.00

ADD/DEDUCT (List Bid Items Affected and Amount*):

Item No.	Add (+) Amount	Deduct (-) Amount
_____	\$ _____	\$ <u>0</u>
_____	\$ _____	\$ _____

ADD/DEDUCT – List Bid Items Affected and Amount*:

Item No.	Add (+) Amount	Deduct (-) Amount
_____	\$ _____	\$ <u>0</u>

_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____

SUBTOTAL ADD (+)/DEDUCT(-) ITEMS:

(\$ _____ 0 _____)

*Provision is made here for the bidder to include an addition or deduction in their Bid, if bidder wishes, to reflect any last-minute adjustments in price. The addition or deduction, if made, will be applied to the listed bid item.

TOTAL CONTRACT PRICE (Sum of Subtotal Lump Sum Price and Subtotal Add/Deduct Items):

(\$ 885,000.⁰⁰ _____)

Total amount of bid (written in words):

Eight Hundred Eighty-five Thousand ⁰⁰/₁₀₀ _____ Dollars

Award of contract will be made to the lowest responsive, responsible bidder on the basis of the TOTAL CONTRACT PRICE.

Award of contract is based on the Total Contract Price noted above and is not impacted by the proposed cost of any additive bid item. Owner retains the right to include any additive bid item value in the overall project at the time of contract award.

Signature of Bidder: _____

John Whelan

John Whelan, President

Date: October 2, 2025



LIST OF SUBCONTRACTORS

The name, California Contractor's license number, registration number issued pursuant to Labor Code Section 1725.5, and location of place of business of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the work or improvements in an amount in excess of one-half of one percent (.5%) of the Bidder's Total Contract Price, and the portion of the Work which will be done by each subcontractor is set forth as follows (attach additional sheets as necessary). Circumvention by the Bidder of the requirement to list subcontractors by the device of listing one subcontractor who will in turn sublet portions constituting the majority of the Work covered by this Contract shall be considered a violation of Chapter

4 of the California Public Contract Code and shall subject the Bidder to the penalties set forth in Sections 4110 and 4111 of said Code. Bidder shall conduct substitutions of subcontractors in compliance with Public Contract Code Sections 4106 et seq. detailing the process and conditions under which a public agency may consent to a subcontractor substitution. Except as hereinabove provided, bidder acknowledges and agrees that bidder will perform all required Work in accordance with Section 4106 of the Public Contract Code.

<u>Contractor's Name</u>	<u>Contractor's License & Registration Number</u>	<u>Place of Business</u>	<u>Type of Work</u>
Beach Paving	597202 1000009033	Placentia, CA	Asphalt Paving
Brickley Environmental	610411 1000000951	San Bernardino, CA	Hazardous Abatement
Graham Crackers Demo	745828 1000016734	Menifee, CA	DEMO
Behrens & Assoc.	1120955 1000018695	El Segundo, CA	Environmental Controls

LIST OF EQUIPMENT MANUFACTURERS (Not Used)

COMPANY DATA

Legal name of Bidder: SS Mechanical Construction Corp.

Primary Contact: John Whelan

33208 Paseo Cerveza Unit D

San Juan Capistrano, CA 92675

Business address:

Telephone:

714-847-1317

Facsimile:

N/A

Email:

john@ssmechanical.com

California Contractor's License:

Primary A

Class:

License 1027264

No.:

Expiration May 31, 2027

Date:

Supplemental Classification held, if any: HAZ

The full names of all persons and parties interested in the foregoing Bid Form as principals are as follows (*NOTICE: Give first and last names in full; in case of corporation, give names of President, Secretary, Treasurer, and Manager, and in case of partnerships and joint ventures, give names of all the individual members, attached additional sheets as necessary*):

John Whelan - President

Chris Powers - Secretary

Javier Lopez - Treasurer

PROPOSED CONSTRUCTION PROJECT SCHEDULE

Bidder has attached hereto a proposed construction progress schedule showing the sequence of activities for completion of the Work, in bar chart format. The proposed construction progress schedule includes major construction activities, major equipment procurement and delivery activities, working time limits imposed by permits, and substantial and final completion milestones, and identifies critical path tasks. The schedule is displayed in elapsed numerical days rather than calendar dates and equals the Contract Time.

CLOSING STATEMENT & CERTIFICATIONS

The undersigned Bidder further certifies as follows:

The Total Bid Price requests sufficient funds to allow Contractor to comply with all applicable laws or regulations governing the labor or services to be provided under the Contract. Furthermore, Bidder hereby agrees to indemnify SOCWA for liabilities and penalties for violations of Labor Code Section 2810.

The cost for all labor, materials, equipment, taxes, freight, insurance and incidentals necessary for the Work is included in the Total Bid Price, including but not limited to sheeting, shoring, and bracing, or equivalent method for the protection of life and limb in trenches and open excavation in conformance with applicable safety orders.

The Bidder is, at the time of bidding, and shall be, throughout the period of the Contract, licensed by the State of California to do the type of Work required under the terms of the Contract Documents. Bidder further certifies that Bidder is skilled and regularly engaged in the general class and type of Work called for in the Contract Documents.

Bidder is not an ineligible contractor for the purposes of California Labor Code Section 1777.1 or 1777.7, and no subcontractor to be used for the performance of the Work is an ineligible contractor for the purposes of Labor Code Section 1777.1 or 1777.7.

Bidder is competent, knowledgeable and has special skills regarding the nature, extent and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work which may create, during the construction program, unusual or peculiar unsafe conditions hazardous to persons and property. Bidder expressly acknowledges that Bidder is aware of such peculiar risks and that Bidder has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the construction Work with respect to such hazards.

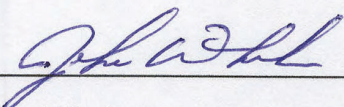
Bidder acknowledges receipt of the following Addenda: 1, 2

Bidder has attached hereto Bid security, in the form of a bond, cashier's check, or certified check, in an amount which is equal to (at least) ten percent (10%) of the total amount of the Bid, payable in lawful money of the United States to the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY.

Bidder is aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for worker's compensation or undertake self-insurance in accordance with the provisions of that code, and will comply with such provisions before commencing the performance of the Work.

Bidder has inspected the site of the Work prior to submitting this Bid.

By signing below, the undersigned certifies that he/she has the legal authority to bind the Bidder and that all representations, certifications, and statements made by Bidder, as set forth in this Bid, are true and correct and are made under penalty of perjury.

Signature: 
Clearly printed name: John Whelan
Position: President
Date/Location: October 2, 2025, at San Juan Capistrano, CA
Seal (if any):
Co-Signature: N/A
Clearly printed name: _____
Position: _____
Date/Location: _____, 20____, at _____

NOTICE: Pursuant to the requirements of California Business and Professions Code, Section 7028.15(e), a bid submitted to the SOCWA by a contractor who is not licensed pursuant to Chapter 9, of Division 3, of the Business and Professions Code, shall be considered nonresponsive and shall be rejected as provided for by law.

NONCOLLUSION AFFIDAVIT

To Be Executed by Bidder and Submitted with Bid
(Public Contract Code § 7106)

The undersigned declares:

I am the President of SS Mechanical Construction Corp., the party making the foregoing bid.

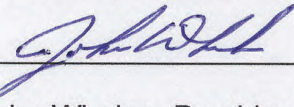
The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on October 2, 2025 [date], at San Juan Capistrano [city], CA [state].

BIDDER:

SS Mechanical Construction Corp.
[Type full name of Bidder]

By: 
John Whelan, President
[Print name and title]

BIDDER'S BOND

(At Least 10 Percent of the Total Contract Price)

We SS Mechanical Construction Corp, as
Principal,

and Swiss Re Corporate Solutions America Insurance Corporation, as Surety,

jointly and severally, bind ourselves, our heirs, representatives, successors, and assigns, as set forth herein, to the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY ("SOCWA") for payment of the penal sum of

Ten Percent of Bid Amount

_____ Dollars (\$ 10% of Bid _____),

lawful money of the United States, such amount representing at least ten percent (10%) of the amount of the Total Bid Price to obtain the award of a contract for JBL Old Effluent Pump Station Demolition Project and to be paid to SOCWA, its successors and assigns, for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly hereby.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal shall not withdraw said Bid within the period of time set forth in the Contract Documents, and shall within fifteen (15) calendar days after the prescribed forms are presented to the Principal for signature enter into a written contract with SOCWA in accordance with the Bid as accepted, and if the Principal shall give the required bonds with good and sufficient sureties for the faithful performance and proper fulfillment of such contract, and for the protection of laborers and materialmen, or in the event of the withdrawal of the Bid within the period specified, or the failure to enter into the Contract, and give such bonds within the time specified, if the Principal shall within sixty (60) days after request by SOCWA pay to SOCWA the difference between the amount specified in the Bid and the amount for which SOCWA may procure the required work, if the latter amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise it shall remain in full force and effect.

Forfeiture of this bond, or any deposit made in lieu thereof, shall not preclude the SOCWA from seeking all other remedies provided by law to cover losses sustained as a result of the Principal's failure to do any of the foregoing and this bond shall not be a limitation on Principals' liability therefor.

Principal and Surety agree that if the SOCWA is required to engage the services of an attorney(s) in connection with the enforcement of this bond, each shall pay SOCWA's costs and reasonable attorney fees incurred with or without suit.

IN WITNESS WHEREOF,

Executed on September 29, 2025.

[CORPORATE SEAL]

SS Mechanical Construction Corp

Principal

By

John Whelan

John Whelan

President

Title



(ATTACH NOTARY ACKNOWLEDGMENT OF AUTHORIZED REPRESENTATIVE OF PRINCIPAL)

Any claims under this bond may be addressed to:

Swiss Re Corporate Solutions

(Name and address of Surety)

1200 Main St., Suite 800

Kansas City, Mo 64105

Acrisure of California, LLC

DBA: Rohm Insurance Agency, LLC

(Name and address of Surety's agent for service of process in California, if different from above)

611 Anton Blvd. Suite 1500
Costa Mesa, CA 92626

(714) 516-2960

(Telephone number of Surety's agent
In California)

(ATTACH NOTARY ACKNOWLEDGMENT)

Swiss Re Corporate Solution
America Insurance Corporation
Surety

By

Cheryl L. Thomas

(Attorney-in-Fact) Cheryl L. Thomas

NOTICE

No substitution or revision to this bond form will be accepted. Sureties must be authorized to do business, and have an agent for service of process, in California. A certified copy of Power of Attorney must be attached.

CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)

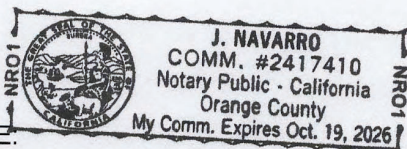
) ss:

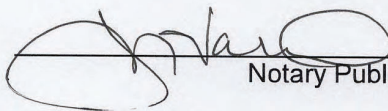
COUNTY OF Orange)

On 9-29-25, before me, J. Navarro, Notary Public, personally appeared John Whelan, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(ies), and that by his/~~her/their~~ signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.




Notary Public

NOTE:

- (a) Signature of those executing for Surety must be properly acknowledged.
- (b) The Attorney-in-fact must attach a certified copy of the Power of Attorney.

****END OF REQUIRED FORMS****

ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }

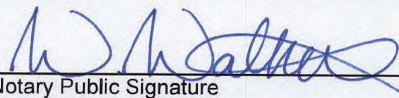
County of Orange }

On September 29, 2025 before me, W. Walker, Notary Public,
(Here insert name and title of the officer)

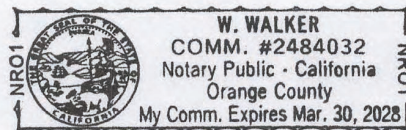
personally appeared Cheryl L. Thomas,
who proved to me on the basis of satisfactory evidence to be the person(s) whose
name(s) is/are subscribed to the within instrument and acknowledged to me that
~~he/she/they~~ executed the same in ~~his/her/their~~ authorized capacity(ies), and that by
~~his/her/their~~ signature(s) on the instrument the person(s), or the entity upon behalf of
which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that
the foregoing paragraph is true and correct.

WITNESS my hand and official seal.


Notary Public Signature

(Notary Public Seal)



ADDITIONAL OPTIONAL INFORMATION

DESCRIPTION OF THE ATTACHED DOCUMENT

Bid Bond

(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages 2 Document Date 9/29/25

CAPACITY CLAIMED BY THE SIGNER

- ☐ Individual (s)
☐ Corporate Officer

(Title)

- ☐ Partner(s)
☒ Attorney-in-Fact
☐ Trustee(s)
☐ Other _____

INSTRUCTIONS FOR COMPLETING THIS FORM

This form complies with current California statutes regarding notary wording and, if needed, should be completed and attached to the document. Acknowledgments from other states may be completed for documents being sent to that state so long as the wording does not require the California notary to violate California notary law.

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. ~~he/she/they~~, is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
 - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
 - ❖ Indicate title or type of attached document, number of pages and date.
 - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document with a staple.

SWISS RE CORPORATE SOLUTIONS

SWISS RE CORPORATE SOLUTIONS AMERICA INSURANCE CORPORATION ("SRCSAIC")
SWISS RE CORPORATE SOLUTIONS PREMIER INSURANCE CORPORATION ("SRCSPIC")
WESTPORT INSURANCE CORPORATION ("WIC")

GENERAL POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, THAT SRCSAIC, a corporation duly organized and existing under laws of the State of Missouri, and having its principal office in the City of Kansas City, Missouri, and SRCSPIC, a corporation organized and existing under the laws of the State of Missouri and having its principal office in the City of Kansas City, Missouri, and WIC, organized under the laws of the State of Missouri, and having its principal office in the City of Kansas City, Missouri, each does hereby make, constitute and appoint:

TODD M. ROHM, CATHY S. KENNEDY, BEATA A. SENSI, CHERYL L. THOMAS, WRENETTA WALKER, and SHANE WOLF

JOINTLY OR SEVERALLY

Its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver, for and on its behalf and as its act and deed, bonds or other writings obligatory in the nature of a bond on behalf of each of said Companies, as surety, on contracts of suretyship as are or may be required or permitted by law, regulation, contract or otherwise, provided that no bond or undertaking or contract or suretyship executed under this authority shall exceed the amount of:

FIFTY MILLION (\$50,000,000.00) DOLLARS

This Power of Attorney is granted and is signed by facsimile under and by the authority of the following Resolutions adopted by the Boards of Directors of both SRCSAIC and SRCSPIC at meetings duly called and held on the 18th of November 2021 and WIC by written consent of its Executive Committee dated July 18, 2011.

"RESOLVED, that any two of the President, any Managing Director, any Senior Vice President, any Vice President, the Secretary or any Assistant Secretary be, and each or any of them hereby is, authorized to execute a Power of Attorney qualifying the attorney named in the given Power of Attorney to execute on behalf of the Corporation bonds, undertakings and all contracts of surety, and that each or any of them hereby is authorized to attest to the execution of any such Power of Attorney and to attach therein the seal of the Corporation; and it is

FURTHER RESOLVED, that the signature of such officers and the seal of the Corporation may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be binding upon the Corporation when so affixed and in the future with regard to any bond, undertaking or contract of surety to which it is attached."



By Erik Janssens
Erik Janssens, Senior Vice President of SRCSAIC & Senior Vice President
of SRCSPIC & Senior Vice President of WIC

By Gerald Jagrowski
Gerald Jagrowski, Vice President of SRCSAIC & Vice President of SRCSPIC
& Vice President of WIC



IN WITNESS WHEREOF, SRCSAIC, SRCSPIC, and WIC have caused their official seals to be hereunto affixed, and these presents to be signed by their authorized officers

this 10 day of NOVEMBER, 20 22

State of Illinois
County of Cook

SS

Swiss Re Corporate Solutions America Insurance Corporation
Swiss Re Corporate Solutions Premier Insurance Corporation
Westport Insurance Corporation

On this 10 day of NOVEMBER, 20 22, before me, a Notary Public personally appeared Erik Janssens, Senior Vice President of SRCSAIC and Senior Vice President of SRCSPIC and Senior Vice President of WIC and Gerald Jagrowski, Vice President of SRCSAIC and Vice President of SRCSPIC and Vice President of WIC, personally known to me, who being by me duly sworn, acknowledged that they signed the above Power of Attorney as officers of and acknowledged said instrument to be the voluntary act and deed of their respective companies.



Christina Manisco
Christina Manisco, Notary

I, Jeffrey Goldberg, the duly elected Senior Vice President and Assistant Secretary of SRCSAIC and SRCSPIC and WIC, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney given by said SRCSAIC and SRCSPIC and WIC, which is still in full force and effect.

IN WITNESS WHEREOF, I have set my hand and affixed the seals of the Companies this 29 day of SEPTEMBER, 20 25.

Jeffrey Goldberg
Jeffrey Goldberg, Senior Vice President &
Assistant Secretary of SRCSAIC and
SRCSPIC and WIC

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ADDENDUM No. 1

TO INVITATION FOR BID

FOR J.B. LATHAM TREATMENT PLANT OLD EFFLUENT PUMP STATION REPURPOSING

**THE PROPOSER SHALL EXECUTE THE CERTIFICATION AT THE END OF THE
ADDENDUM AND SHALL ATTACH THE ADDENDUM TO THE PROPOSAL (NOT TO BE
INCLUDED AS PART OF THE PAGE COUNT).**

Q&A:

1. What is the existing thickness of the AC Paving?

The asphalt is 3 inches thick approximately.

**2. For the 8" inch fill. Is the native fill suitable material? Or would we need import
fill? If we do need import fill, what would the requirements for the material be.**

Excavated on-site soils may be reused as compacted fill provided it is free of organics,
deleterious materials, debris, and particles over 3 inches in largest dimension. This soil must
be used above the ground water level.

DATED: 9/30/2025

Roni Young Grant
Roni Young Grant

BIDDER'S CERTIFICATION

I acknowledge receipt of the foregoing Addendum No. 1 and accept all conditions contained herein.

DATED: September 30, 2025

BIDDER: SS Mechanical Construction Corp.

BY: John Whelan
John Whelan, President

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ADDENDUM No. 2

TO INVITATION FOR BID

FOR J.B. LATHAM TREATMENT PLANT OLD EFFLUENT PUMP STATION REPURPOSING

**THE PROPOSER SHALL EXECUTE THE CERTIFICATION AT THE END OF THE
ADDENDUM AND SHALL ATTACH THE ADDENDUM TO THE PROPOSAL (NOT TO BE
INCLUDED AS PART OF THE PAGE COUNT).**

- 1. In order to come up with an accurate quantity to backfill, we would need existing elevations and or as-built drawings**

The attached picture has some helpful dimensions. The basin has outer dimensions of 59' x 63'. The bottom slopes from east to west, with a 4.5' difference. One other thing to consider is that the contractors can use the concrete walls as backfill above the water line if the contractors crush it to less than 3 inches in any direction.

- 2. See the attached 2021 report which provides additional information.**

DATED: 9/30/2025

Roni Young Grant

Roni Young Grant

BIDDER'S CERTIFICATION

I acknowledge receipt of the foregoing Addendum No. 2 and accept all conditions contained herein.

DATED: 10/06/2025

BIDDER: SS Mechanical Construction Corp.

BY: *John Whelan*
John Whelan, President

Old Effluent Pump Station Demolition - Bid Schedule

Activity ID - Bid Schedule

07-Oct-25 15:40

Activity ID	Activity Name	Original Duration	Remaining Duration	Early Start	Start	Early Finish	Finish	Total Float	Calendar	2025			2026				
										Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
📁 SOCWA JBLTP-3 Old Effluent Pump Station Demolition - Bid Schedule		169	169	09-Oct-25	09-Oct-25	26-Mar-26	26-Mar-26	5		</							

■ Actual Level of Effort
 ■ Critical Remaining Work
 ■ Actual Work
 ■ Remaining Work
 ◆ Milestone
 — summary

Page 1 of 1

TASK filter: All Activities

SS Mechanical Construction Corp

© Oracle Corporation

Agenda Item

10

Engineering Committee Meeting

Meeting Date: November 13, 2025

TO: Engineering Committee

FROM: Roni Grant, Capital Improvement Program Manager

SUBJECT: Contract Award for Coastal Treatment Plant West Primary and Secondary Scum Skimming System Construction [Project Committee 15]

Overview

The Coastal Treatment Plant (CTP), originally constructed in 1982, includes three west primary sedimentation basins and three west secondary sedimentation basins. The scum skimming systems serving these basins—comprising skimmers, troughs, and beaches—have reached the end of their useful life and are no longer functioning reliably. Their replacement is essential to maintain effective solids removal and prevent operational inefficiencies.

To expedite the replacement process and minimize potential delays, SOCWA staff proactively pre-purchased the new scum skimming equipment in September 2024. The equipment was successfully delivered to CTP in Fall 2025 and is ready for installation.

Bids

On August 25, 2025, SOCWA issued a formal solicitation for bids via the PlanetBids platform, inviting qualified contractors to participate in the procurement process for the installation of the pre-purchased scum skimming system. A site walk was conducted to provide interested parties with an opportunity to assess existing conditions and ask questions.

Bid submissions were due by October 16, 2025. SOCWA received two bids: one from Filanc and another from Pacific Hydrotech. The Engineer's cost estimate for the project was \$300,000. Based on the bid evaluations, Filanc was identified as the apparent responsible low bidder. A summary of the bid results is provided in Table 1 below. For reference, the complete bid packages submitted by Filanc and Pacific Hydrotech are attached.

Table 1 - Summary of Bids

Item No.	Description	Filanc	Pacific Hydotech
A1	Mobilization/Demobilization	\$40,000	\$145,300
A2	Confined Space Safety Measures	\$73,400	\$30,000
A3	Non-destructive Testing	\$23,100	\$29,800
A4	Concrete Rehabilitation	\$21,100	\$22,000
A5	Demolition of Existing Scum Skimming Equipment	\$56,900	\$130,000
A6	Full Depth Concrete Crack Repair	\$50,100	\$53,500
A7	Miscellaneous Demolition	\$15,800	\$10,600
A8	Installation of New Skimmer System	\$248,700	\$524,100
A9	Protective Coating Repair	\$166,000	\$180,000
A10	Testing of New Skimming System with Manufacturer	\$24,700	\$13,500
A11	Field Order Allowance	\$50,000	\$50,000
	Item A Total	\$769,800	\$1,188,800
B1	Solids Removal	\$7,400	\$27,200
B2	Access Hatch Rehabilitation	\$6,800	\$6,400
	Item B Total	\$14,200	\$33,600
	Total Bid	\$784,000	\$1,222,400

Cost Allocation

Table 2 presents the cost allocation for the construction project.

Table 2 – Cost allocation by member agency

Agency	West Primary Scum Skimming System (35246L/35239L)
City of Laguna Beach	\$468,048.00
Emerald Bay Service District	\$23,441.60
South Coast Water District	\$29,2510.40
Total	\$784,000.00

Budget

The currently approved budget for the CTP West Primary and Secondary Scum Skimming Systems is \$1.25 million, of which \$930,960 has been expended for equipment pre-purchase. Staff is requesting an additional \$500,000 to support the remaining project needs, resulting in a revised total project budget of \$1.75 million.

Additionally, staff recommends the inclusion of a contingency amount of \$35,040 to address any unforeseen conditions or issues that may arise during the construction phase. This would bring the total project authorization to \$819,040.

Recommended Action: Staff recommends that the Engineering Committee recommend that the PC 15 Board of Directors:

1. Approve an increase of \$500,000 to the project budget, resulting in a revised total project budget of \$1.75 million.
2. Authorize execution of a contract with Filanc in the amount of \$784,000.
3. Approve a construction contingency of \$35,040 to address any unforeseen conditions encountered during the work.

REQUIRED FORMS

BID FORM
PROPOSAL TO

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

**FOR THE CONSTRUCTION OF COASTAL TREATMENT PLANT WEST PRIMARY
AND SECONDARY SCUM SKIMMING SYSTEM REPLACEMENT**

Name of Bidder: Filanc

Business Address: 740 N Andreasen Drive, Escondido, CA 92029

Phone No.: 760-941-7130

**TO THE BOARD OF DIRECTORS OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY (SOCWA)**

The undersigned, as Bidder, hereby certifies and declares that:

Pursuant to, and in compliance with, the Notice Inviting Bids and the other documents relating thereto, the undersigned bidder, being fully familiar with the terms of the Contract Documents, local conditions affecting the performance of the Contract, the character, quality, quantities, and scope of the Work, and the cost of the Work at the place where the Work is to be done, hereby proposes and agrees to perform within the time stipulated in the Contract, including all of its component parts and everything required to be performed, and to furnish any and all of the labor, materials, tools, equipment, transportation, services, permits, utilities, and all other items necessary to perform the Contract and complete, in a workmanlike manner, all of the Work required in connection with the construction of said Work all in strict conformity with the Plans and Specifications and other Contract Documents, for the prices hereinafter set forth.

The only persons or parties interested in this Proposal as principals are those named herein and that this Proposal is made without collusion with any person, firm, or corporation as set forth in more detail in the Noncollusion Affidavit executed herewith. Further, the undersigned proposes and agrees, if the Proposal is accepted, that he/she will execute a Contract with the SOCWA in the form set forth in the Contract Documents and that he/she will accept in full payment thereof the following prices to with:

SCHEDULE OF WORK ITEMS

SCHEDULE OF WORK ITEMS

BID SCHEDULE A

Furnish all labor, materials, equipment, applicable taxes, and incidentals necessary for the accomplishment of the following specific work items, each being the LUMP SUM PRICE, LINEAR FOOT PRICE, STIPULATED DOLLAR AMOUNT, ALLOWANCE PRICE, OR EACH PRICE for the specific item:

Item No.	Description	Size-Quantity	Unit	Unit Price	Item Total
BID SCHEDULE A – COASTAL TREATMENT PLANT SCUM SKIMMERS REPLACEMENT PROJECT – WEST BASINS					
1	Mobilization/Demobilization	1	LS	\$40,000	\$40,000
2	Confined Space Safety Measures	1	LS	\$73,400	\$73,400
3	Non-destructive Testing	LS	EA	\$23,100	\$23,100
4	Concrete Rehabilitation (patching of spalling areas at a size of 6 inches by 6 inches by 2 inches deep, includes rehabilitation of exposed rebar)	20	EA	\$1,055	\$21,100
5	Demolition of Existing Scum Skimmer Equipment (to be performed basin by basin)	1	LS	\$56,900	\$56,900
6	Full Depth Concrete Crack Repair	5	EA	\$10,020	\$50,100
7	Miscellaneous Demolition	1	LS	\$15,800	\$15,800
8	Installation of New Skimmer System including a workshop with equipment manufacturer for installation protocols	1	LS	\$248,700	\$248,700
9	Protective Coating Repair	1000	SQ-FT	\$166	\$166,000
10	Testing of New Skimmer System with the Equipment Manufacturer present	1	LS	\$24,700	\$24,700
11	Field Order Allowance	1	Allowance	\$50,000	\$50,000
SUBTOTAL BID SCHEDULE A					\$769,800

BID SCHEDULE B

Furnish all labor, materials, equipment, applicable taxes, and incidentals necessary for the accomplishment of the following specific work items, each being the LUMP SUM PRICE, LINEAR FOOT PRICE, STIPULATED DOLLAR AMOUNT, ALLOWANCE PRICE, OR EACH PRICE for the specific item:

Item No.	Description	Size-Quantity	Unit	Unit Price	Item Total
BID SCHEDULE B – OPTIONAL FOR BID SCHEDULES A					
1	Solids Removal (2-man crew/8 hours)	4	EA	\$ 1,850	\$ 7,400
2	Access Hatch Rehabilitation (replacement of all hardware and rust removal)	2	EA	\$ 3,400	\$ 6,800
SUBTOTAL SCHEDULE B					BID 14,200

ADD/DEDUCT – List Bid Items Affected and Amount*:

Item No.	Add (+) Amount	Deduct (-) Amount
N/A	\$ N/A	\$ N/A
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____

SUBTOTAL ADD (+)/DEDUCT(-) ITEMS:

(\$ N/A)

*Provision is made here for the bidder to include an addition or deduction in their Bid, if bidder wishes, to reflect any last-minute adjustments in price. The addition or deduction, if made, will be applied to the listed bid item.

TOTAL CONTRACT PRICE (Sum of Subtotal Lump Sum Price and Subtotal Add/Deduct Items):

(\$ 784,000)

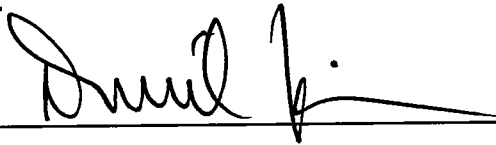
Total amount of bid (written in words):

SEVEN HUNDRED EIGHTY FOUR THOUSAND Dollars

Award of contract will be made to the lowest responsive, responsible bidder on the basis of the TOTAL CONTRACT PRICE.

Award of contract is based on the Total Contract Price noted above and is not impacted by the proposed cost of any additive bid item. Owner retains the right to include any additive bid item value in the overall project at the time of contract award.

Signature of Bidder:



Date:

10/13/2025

LIST OF SUBCONTRACTORS

The name, California Contractor's license number, registration number issued pursuant to Labor Code Section 1725.5, and location of place of business of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the work or improvements in an amount in excess of one-half of one percent (.5%) of the Bidder's Total Contract Price, and the portion of the Work which will be done by each subcontractor is set forth as follows (attach additional sheets as necessary). Circumvention by the Bidder of the requirement to list subcontractors by the device of listing one subcontractor who will in turn sublet portions constituting the majority of the Work covered by this Contract shall be considered a violation of Chapter

4 of the California Public Contract Code and shall subject the Bidder to the penalties set forth in Sections 4110 and 4111 of said Code. Bidder shall conduct substitutions of subcontractors in compliance with Public Contract Code Sections 4106 et seq. detailing the process and conditions under which a public agency may consent to a subcontractor substitution. Except as hereinabove provided, bidder acknowledges and agrees that bidder will perform all required Work in accordance with Section 4106 of the Public Contract Code.

<u>Contractor's Name</u>	<u>Contractor's License & Registration Number</u>	<u>Place of Business</u>	<u>Type of Work</u>
TECHNO COATINGS	286517 1000005841	ANATHEIM, CA.	COATINGS

LIST OF EQUIPMENT MANUFACTURERS (Not Used)

COMPANY DATA

Legal name of Bidder: Filanc

Primary Contact: David Kiess, Vice President

Business address: 740 N Andreasen Drive, Escondido, CA 92029

Telephone:

760-941-7130

Facsimile:

n/a

Email:

DKiess@filanc.com

California Contractor's License:

Primary
A

Class:

License
134877

No.:

Expiration
09/30/2027

Date:

Supplemental Classification held, if any: B, C10ww

The full names of all persons and parties interested in the foregoing Bid Form as principals are as follows (*NOTICE: Give first and last names in full; in case of corporation, give names of President, Secretary, Treasurer, and Manager, and in case of partnerships and joint ventures, give names of all the individual members, attached additional sheets as necessary*):

Omar Rodea, President

Christine Moore, CFO

David Kiess, Vice President

PROPOSED CONSTRUCTION PROJECT SCHEDULE

Bidder has attached hereto a proposed construction progress schedule showing the sequence of activities for completion of the Work, in bar chart format. The proposed construction progress schedule includes major construction activities, major equipment procurement and delivery activities, working time limits imposed by permits, and substantial and final completion milestones, and identifies critical path tasks. The schedule is displayed in elapsed numerical days rather than calendar dates and equals the Contract Time.

CLOSING STATEMENT & CERTIFICATIONS

The undersigned Bidder further certifies as follows:

The Total Bid Price requests sufficient funds to allow Contractor to comply with all applicable laws or regulations governing the labor or services to be provided under the Contract. Furthermore, Bidder hereby agrees to indemnify SOCWA for liabilities and penalties for violations of Labor Code Section 2810.

The cost for all labor, materials, equipment, taxes, freight, insurance and incidentals necessary for the Work is included in the Total Bid Price, including but not limited to sheeting, shoring, and bracing, or equivalent method for the protection of life and limb in trenches and open excavation in conformance with applicable safety orders.

The Bidder is, at the time of bidding, and shall be, throughout the period of the Contract, licensed by the State of California to do the type of Work required under the terms of the Contract Documents. Bidder further certifies that Bidder is skilled and regularly engaged in the general class and type of Work called for in the Contract Documents.

Bidder is not an ineligible contractor for the purposes of California Labor Code Section 1777.1 or 1777.7, and no subcontractor to be used for the performance of the Work is an ineligible contractor for the purposes of Labor Code Section 1777.1 or 1777.7.

Bidder is competent, knowledgeable and has special skills regarding the nature, extent and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work which may create, during the construction program, unusual or peculiar unsafe conditions hazardous to persons and property. Bidder expressly acknowledges that Bidder is aware of such peculiar risks and that Bidder has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the construction Work with respect to such hazards.

Bidder acknowledges receipt of the following Addenda: 1

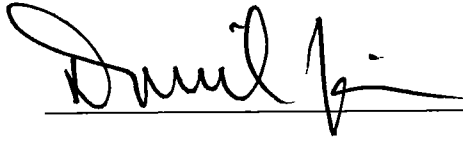
Bidder has attached hereto Bid security, in the form of a bond, cashier's check, or certified check, in an amount which is equal to (at least) ten percent (10%) of the total amount of the Bid, payable in lawful money of the United States to the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY.

Bidder is aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for worker's compensation or undertake self-insurance in accordance with the provisions of that code, and will comply with such provisions before commencing the performance of the Work.

Bidder has inspected the site of the Work prior to submitting this Bid.

By signing below, the undersigned certifies that he/she has the legal authority to bind the Bidder and that all representations, certifications, and statements made by Bidder, as set forth in this Bid, are true and correct and are made under penalty of perjury.

Signature:



Clearly printed name:

David Kiess

Position:

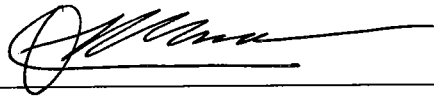
Vice President

Date/Location:

OCTOBER 13, 2025 at Escondido, CA

Seal (if any):

Co-Signature:



Clearly printed name:

Omar Rodea

Position:

President

Date/Location:

_____, 20____, at Escondido, CA

NOTICE: Pursuant to the requirements of California Business and Professions Code, Section 7028.15(e), a bid submitted to the SOCWA by a contractor who is not licensed pursuant to Chapter 9, of Division 3, of the Business and Professions Code, shall be considered nonresponsive and shall be rejected as provided for by law.

NONCOLLUSION AFFIDAVIT

To Be Executed by Bidder and Submitted with Bid
(Public Contract Code § 7106)

The undersigned declares:

I am the Vice President of Filanc, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

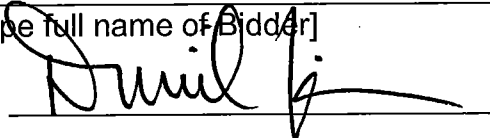
Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on 10/13/2025 [date], at Escondido [city], CA [state].

BIDDER:

Filanc

[Type full name of Bidder]

By: 

David Kiess, Vice President

[Print name and title]

BIDDER'S BOND

(At Least 10 Percent of the Total Contract Price)

We Filanc, as
Principal,

and Travelers Casualty and Surety Company of America, as Surety,

jointly and severally, bind ourselves, our heirs, representatives, successors, and assigns, as set forth herein, to the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY ("SOCWA") for payment of the penal sum of

Ten percent of bid amount ----

Dollars (\$ 10% of bid amount ----),

lawful money of the United States, such amount representing at least ten percent (10%) of the amount of the Total Bid Price to obtain the award of a contract for the Coastal Treatment Plant West Primary and Secondary Basins Scum Skimming System Replacement and to be paid to SOCWA, its successors and assigns, for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly hereby.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal shall not withdraw said Bid within the period of time set forth in the Contract Documents, and shall within fifteen (15) calendar days after the prescribed forms are presented to the Principal for signature enter into a written contract with SOCWA in accordance with the Bid as accepted, and if the Principal shall give the required bonds with good and sufficient sureties for the faithful performance and proper fulfillment of such contract, and for the protection of laborers and materialmen, or in the event of the withdrawal of the Bid within the period specified, or the failure to enter into the Contract, and give such bonds within the time specified, if the Principal shall within sixty (60) days after request by SOCWA pay to SOCWA the difference between the amount specified in the Bid and the amount for which SOCWA may procure the required work, if the latter amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise it shall remain in full force and effect.

Forfeiture of this bond, or any deposit made in lieu thereof, shall not preclude the SOCWA from seeking all other remedies provided by law to cover losses sustained as a result of the Principal's failure to do any of the foregoing and this bond shall not be a limitation on Principals' liability therefor.

Principal and Surety agree that if the SOCWA is required to engage the services of an attorney(s) in connection with the enforcement of this bond, each shall pay SOCWA's costs and reasonable attorney fees incurred with or without suit.

IN WITNESS WHEREOF,

Executed on October 16, 2025.

[CORPORATE SEAL]

Filanc
Principal

By Melinda Young
VP of Risk Mgmt
Title

(ATTACH NOTARY ACKNOWLEDGMENT OF AUTHORIZED REPRESENTATIVE OF PRINCIPAL)

Any claims under this bond may be addressed to:

Travelers Casualty and Surety Company
of America

(Name and address of Surety)

One Tower Square

Hartford, CT 06183

Scott Barshop/Travelers Casualty and
Surety Company of America

(Name and address of Surety's agent for
service of process in California, if different from
above)

100 California St., Ste 725, San Francisco, CA 94111

415-732-1490

(Telephone number of Surety's agent
in California)

(ATTACH NOTARY ACKNOWLEDGMENT)

Travelers Casualty and Surety Company of America
Surety

By Cheryl L McAleenan
(Attorney-in-Fact) Cheryl L McAleenan

NOTICE

No substitution or revision to this bond form will be accepted. Sureties must be authorized to do business, and have an agent for service of process, in California. A certified copy of Power of Attorney must be attached.



Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and the Companies do hereby make, constitute and appoint **Cheryl L McAleenan** of **Maryland Heights**, **Missouri**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **16th** day of **February, 2024**.



State of Connecticut

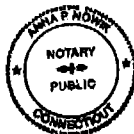
City of Hartford ss.

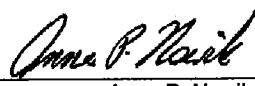
By: 
 Bryce Grissom, Senior Vice President

On this the **16th** day of **February, 2024**, before me personally appeared **Bryce Grissom**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June, 2026**




 Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

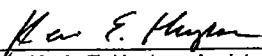
FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **16th** day of **October**, **2025**

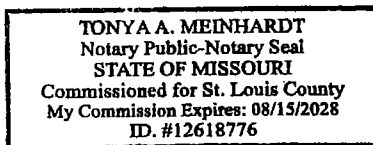



 Kevin E. Hughes, Assistant Secretary

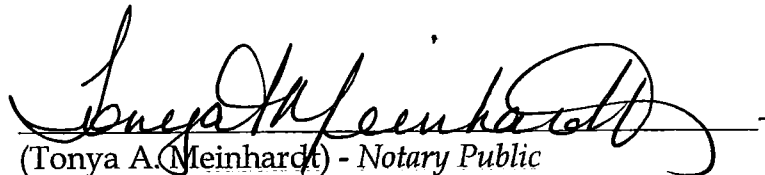
To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

STATE OF Missouri
COUNTY OF St. Louis

On this 11th day of October, 2025, before me personally appeared
Cheryl L. McAleenan, with whom I am personally acquainted, who,
being by me duly sworn, said: That she is Attorney-in-Fact of Travelers Casualty and Surety
Company of America, the corporation described in and which executed the foregoing
instrument; that she knows the corporate seal of said Company; that said seal affixed to said
instrument is such corporate seal; that it was so affixed by authority of the Board of Directors
thereof and of her office under the Standing Resolutions of said Company; and that she signed
his/her name thereto as Attorney- in-Fact by like authority.



NOTARY STAMP


(Tonya A. Meinhardt) - Notary Public
Commission Number: 12618776
My Commission Expires: August 15th, 2028.

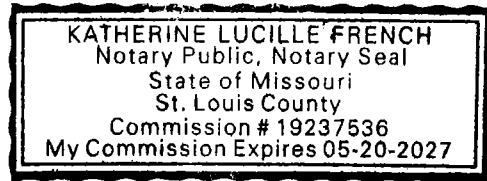
MISSOURI NOTARY ACKNOWLEDGMENT

State of Missouri)
County of St. Louis) ss.

On this 16th day of October, 2025, before me, the undersigned Notary Public, personally appeared Melinda Young, known to me to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he/she signed it voluntarily for its stated purpose.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal in the County and State aforesaid on the day and year above written.

Katherine Lucille French
Notary Public Signature
Printed Name: Katherine Lucille French
My Commission Expires: 5-20-2027



(Seal)

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ADDENDUM No. 1

TO REQUEST FOR PROPOSALS

FOR COASTAL TREATMENT PLANT

WEST PRIMARY AND SECONDARY SCUM SKIMMING SYSTEM

**THE PROPOSER SHALL EXECUTE THE CERTIFICATION AT THE END OF THE
ADDENDUM AND SHALL ATTACH THE ADDENDUM TO THE PROPOSAL (NOT TO BE
INCLUDED AS PART OF THE PAGE COUNT).**

In the BID FORM:

Schedule of Work Items, Bid Schedule A:

Item 3: Non-destructive testing per basin, the quantity should be 1, and the unit should be LS,
for all six basins.

DATED: 9/11/2025

Roni Young Grant
CIP Manager

Roni Young Grant

BIDDER'S CERTIFICATION

I acknowledge receipt of the foregoing Addendum No. 1 and accept all conditions contained herein.

DATED: 10/15/2025

BIDDER: FIQ INC.
BY: [Signature]

BID FORM

PROPOSAL TO

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

**FOR THE CONSTRUCTION OF COASTAL TREATMENT PLANT WEST PRIMARY
AND SECONDARY SCUM SKIMMING SYSTEM REPLACEMENT**

Name of Bidder: Pacific Hydrotech Corporation

Business Address: 314 E 3rd Street Perris, CA 92570

Phone No.: 951-943-8803

**TO THE BOARD OF DIRECTORS OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY (SOCWA)**

The undersigned, as Bidder, hereby certifies and declares that:

Pursuant to, and in compliance with, the Notice Inviting Bids and the other documents relating thereto, the undersigned bidder, being fully familiar with the terms of the Contract Documents, local conditions affecting the performance of the Contract, the character, quality, quantities, and scope of the Work, and the cost of the Work at the place where the Work is to be done, hereby proposes and agrees to perform within the time stipulated in the Contract, including all of its component parts and everything required to be performed, and to furnish any and all of the labor, materials, tools, equipment, transportation, services, permits, utilities, and all other items necessary to perform the Contract and complete, in a workmanlike manner, all of the Work required in connection with the construction of said Work all in strict conformity with the Plans and Specifications and other Contract Documents, for the prices hereinafter set forth.

The only persons or parties interested in this Proposal as principals are those named herein and that this Proposal is made without collusion with any person, firm, or corporation as set forth in more detail in the Noncollusion Affidavit executed herewith. Further, the undersigned proposes and agrees, if the Proposal is accepted, that he/she will execute a Contract with the SOCWA in the form set forth in the Contract Documents and that he/she will accept in full payment thereof the following prices to with:

SCHEDULE OF WORK ITEMS

SCHEDULE OF WORK ITEMS

BID SCHEDULE A

Furnish all labor, materials, equipment, applicable taxes, and incidentals necessary for the accomplishment of the following specific work items, each being the LUMP SUM PRICE, LINEAR FOOT PRICE, STIPULATED DOLLAR AMOUNT, ALLOWANCE PRICE, OR EACH PRICE for the specific item:

Item No.	Description	Size-Quantity	Unit	Unit Price	Item Total
BID SCHEDULE A – COASTAL TREATMENT PLANT SCUM SKIMMERS REPLACEMENT PROJECT – WEST BASINS					
1	Mobilization/Demobilization	1	LS	\$145,300	\$145,300
2	Confined Space Safety Measures	1	LS	\$30,000	\$30,000
3	Non-destructive Testing	LS	EA	\$29,800	\$29,800
4	Concrete Rehabilitation (patching of spalling areas at a size of 6 inches by 6 inches by 2 inches deep, includes rehabilitation of exposed rebar)	20	EA	\$1,100	\$22,000
5	Demolition of Existing Scum Skimmer Equipment (to be performed basin by basin)	1	LS	\$130,000	\$130,000
6	Full Depth Concrete Crack Repair	5	EA	\$10,700	\$53,500
7	Miscellaneous Demolition	1	LS	\$10,600	\$10,600
8	Installation of New Skimmer System including a workshop with equipment manufacturer for installation protocols	1	LS	\$524,100	\$524,100
9	Protective Coating Repair	1000	SQ-FT	\$180	\$180,000
10	Testing of New Skimmer System with the Equipment Manufacturer present	1	LS	\$13,500	\$13,500
11	Field Order Allowance	1	Allowance	\$50,000	\$50,000
SUBTOTAL BID SCHEDULE A					

BID SCHEDULE B

Furnish all labor, materials, equipment, applicable taxes, and incidentals necessary for the accomplishment of the following specific work items, each being the LUMP SUM PRICE, LINEAR FOOT PRICE, STIPULATED DOLLAR AMOUNT, ALLOWANCE PRICE, OR EACH PRICE for the specific item:

Item No.	Description	Size-Quantity	Unit	Unit Price	Item Total
BID SCHEDULE B – OPTIONAL FOR BID SCHEDULES A					
1	Solids Removal (2-man crew/8 hours)	4	EA	\$ 6,800	\$ 27,200
2	Access Hatch Rehabilitation (replacement of all hardware and rust removal)	2	EA	\$ 3,200	\$ 6,400
SUBTOTAL SCHEDULE B BID					1,222,400

ADD/DEDUCT – List Bid Items Affected and Amount*:

Item No.	Add (+) Amount	Deduct (-) Amount
<u>0</u>	\$ <u>0</u>	\$ <u>0</u>
<u> </u>	\$ <u> </u>	\$ <u> </u>
<u> </u>	\$ <u> </u>	\$ <u> </u>
<u> </u>	\$ <u> </u>	\$ <u> </u>
<u> </u>	\$ <u> </u>	\$ <u> </u>

SUBTOTAL ADD (+)/DEDUCT(-) ITEMS:

(\$ 0)

*Provision is made here for the bidder to include an addition or deduction in their Bid, if bidder wishes, to reflect any last-minute adjustments in price. The addition or deduction, if made, will be applied to the listed bid item.

TOTAL CONTRACT PRICE (Sum of Subtotal Lump Sum Price and Subtotal Add/Deduct Items):

(\$ 1,222,400-)

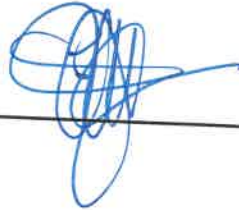
Total amount of bid (written in words):

One Million Two Hundred Twenty Two Thousand Dollars
Four Hundred dollars and Zero cents.

Award of contract will be made to the lowest responsive, responsible bidder on the basis of the TOTAL CONTRACT PRICE.

Award of contract is based on the Total Contract Price noted above and is not impacted by the proposed cost of any additive bid item. Owner retains the right to include any additive bid item value in the overall project at the time of contract award.

Signature of Bidder:



Date: 10/10/2025

LIST OF SUBCONTRACTORS

The name, California Contractor's license number, registration number issued pursuant to Labor Code Section 1725.5, and location of place of business of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the work or improvements in an amount in excess of one-half of one percent (.5%) of the Bidder's Total Contract Price, and the portion of the Work which will be done by each subcontractor is set forth as follows (attach additional sheets as necessary). Circumvention by the Bidder of the requirement to list subcontractors by the device of listing one subcontractor who will in turn sublet portions constituting the majority of the Work covered by this Contract shall be considered a violation of Chapter

4 of the California Public Contract Code and shall subject the Bidder to the penalties set forth in Sections 4110 and 4111 of said Code. Bidder shall conduct substitutions of subcontractors in compliance with Public Contract Code Sections 4106 et seq. detailing the process and conditions under which a public agency may consent to a subcontractor substitution. Except as hereinabove provided, bidder acknowledges and agrees that bidder will perform all required Work in accordance with Section 4106 of the Public Contract Code.

<u>Contractor's Name</u>	<u>Contractor's License & Registration Number</u>	<u>Place of Business</u>	<u>Type of Work</u>
Techno Coatings	296577 #1000005841	Anaheim, CA	CRACK / concrete repair
Hydrotech Electric	977838 #1000001266	Winchester, CA	Electrical & instrumentation

LIST OF EQUIPMENT MANUFACTURERS (Not Used)

COMPANY DATA

Legal name of Bidder: Pacific Hydrotech Corporation

Primary Contact: Joselito Guintu

Business address: 314 E 3rd Street Perris, CA 92570

Telephone:

951-943-8803

Facsimile:

951-943-1093

Email:

Lito@pachydro.com

California Contractor's License:

Primary

Class:

A

License

No.:

518355

Expiration

Date:

9-30-2027

Supplemental Classification held, if any: B

The full names of all persons and parties interested in the foregoing Bid Form as principals are as follows (*NOTICE: Give first and last names in full; in case of corporation, give names of President, Secretary, Treasurer, and Manager, and in case of partnerships and joint ventures, give names of all the individual members, attached additional sheets as necessary*):

*See attached corporate resolution.

PROPOSED CONSTRUCTION PROJECT SCHEDULE

Bidder has attached hereto a proposed construction progress schedule showing the sequence of activities for completion of the Work, in bar chart format. The proposed construction progress schedule includes major construction activities, major equipment procurement and delivery activities, working time limits imposed by permits, and substantial and final completion milestones, and identifies critical path tasks. The schedule is displayed in elapsed numerical days rather than calendar dates and equals the Contract Time.

**SEE ATTACHED*

Pacific Hydrotech Bid Schedule Primary/Secondary Scum Skimming

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names	Nov	Dec	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter				
							Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	CONTRACT TIME (WORKING DAYS)	166 days	Mon 11/10/25	Thu 7/9/26												
2	Notice to Proceed	1 day	Mon 11/10/25	Mon 11/10/25												
3	Critical Submittals	13 days	Wed 11/12/25	Tue 12/2/25												
4																
5	Concrete Repair Material Submittals	5 days	Wed 11/12/25	Tue 11/18/25	2											
6	Submittal Review & Approval	3 days	Wed 11/19/25	Fri 11/21/25	5											
7	Material Lead Time	5 days	Mon 11/24/25	Tue 12/2/25	6											
8																
9	Construction Of West Lift Station	157 days	Mon 11/24/25	Thu 7/9/26												
10	Mobilize	1 day	Mon 11/24/25	Mon 11/24/25	6											
11	Inspect owner's Material	1 day	Tue 11/25/25	Tue 11/25/25	10											
12	Drain Primary Tank W-1	2 days	Wed 11/26/25	Mon 12/1/25	11											
13	NDT on Concrete	2 days	Tue 12/2/25	Wed 12/3/25	12											
14	Demolition Work	2 days	Thu 12/4/25	Fri 12/5/25	13											
15	Concrete Repairs	7 days	Mon 12/8/25	Tue 12/16/25	14											
16	Install New Equipments	6 days	Wed 12/17/25	Wed 12/24/25	15											
17	Testing	2 days	Fri 12/26/25	Mon 12/29/25	16											
18	Approval of Installation and Testing	1 day	Tue 12/30/25	Tue 12/30/25	17											
19																
20	Drain Primary Sed. Tank W-1	2 days	Wed 12/31/25	Fri 1/2/26	18											
21	NDT on Concrete	2 days	Mon 1/5/26	Tue 1/6/26	20											
22	Demolition Work	2 days	Wed 1/7/26	Thu 1/8/26	21											
23	Concrete Repairs	7 days	Fri 1/9/26	Mon 1/19/26	22											
24	Install New Equipments	6 days	Tue 1/20/26	Tue 1/27/26	23											
25	Testing	2 days	Wed 1/28/26	Thu 1/29/26	24											
26	Approval of Installation and Testing	1 day	Fri 1/30/26	Fri 1/30/26	25											
27																
28	Drain Primary Sed. Tank W-2	2 days	Mon 2/2/26	Tue 2/3/26	26											
29	NDT on Concrete	2 days	Wed 2/4/26	Thu 2/5/26	28											
30	Demolition Work	2 days	Fri 2/6/26	Mon 2/9/26	29											
31	Concrete Repairs	7 days	Tue 2/10/26	Thu 2/19/26	30											
32	Install New Equipments	6 days	Fri 2/20/26	Fri 2/27/26	31											
33	Testing	2 days	Mon 3/2/26	Tue 3/3/26	32											
34	Approval of Installation and Testing	1 day	Wed 3/4/26	Wed 3/4/26	33											
35																
36	Drain Primary Sed. Tank W-3	2 days	Thu 3/5/26	Fri 3/6/26	34											
37	NDT on Concrete	2 days	Mon 3/9/26	Tue 3/10/26	36											
38	Demolition Work	2 days	Wed 3/11/26	Thu 3/12/26	37											
39	Concrete Repairs	7 days	Fri 3/13/26	Mon 3/23/26	38											

Project: SOCWA	Task		Inactive Task	Manual Summary Rollup		External Milestone		Manual Progress	
	Split		Inactive Milestone	Manual Summary		Deadline			
	Milestone		Inactive Summary	Start-only		Critical			
	Summary		Manual Task	Finish-only		Critical Split			
	Project Summary		Duration-only	External Tasks		Progress			

Pacific Hydrotech Bid Schedule Primary/Secondary Scum Skimming

ID	Task Name	Duration	Start	Finish	Predecessor	Resource Names	Calendar															
							Nov	Dec	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter							
							Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct						
40	Install New Equipments	6 days	Tue 3/24/26	Tue 3/31/26	39																	
41	Testing	2 days	Wed 4/1/26	Thu 4/2/26	40																	
42	Approval of Installation and Testing	1 day	Fri 4/3/26	Fri 4/3/26	41																	
43																						
44	Drain Secondary Sed. Tank W-1	2 days	Mon 4/6/26	Tue 4/7/26	42																	
45	NDT on Concrete	2 days	Wed 4/8/26	Thu 4/9/26	44																	
46	Demolition Work	2 days	Fri 4/10/26	Mon 4/13/26	45																	
47	Concrete Repairs	7 days	Tue 4/14/26	Wed 4/22/26	46																	
48	Install New Equipments	6 days	Thu 4/23/26	Thu 4/30/26	47																	
49	Testing	2 days	Fri 5/1/26	Mon 5/4/26	48																	
50	Approval of Installation and Testing	1 day	Tue 5/5/26	Tue 5/5/26	49																	
51																						
52	Drain Secondary Sed Tank W-2	2 days	Wed 5/6/26	Thu 5/7/26	50																	
53	NDT on Concrete	2 days	Fri 5/8/26	Mon 5/11/26	52																	
54	Demolition Work	2 days	Tue 5/12/26	Wed 5/13/26	53																	
55	Concrete Repairs	7 days	Thu 5/14/26	Fri 5/22/26	54																	
56	Install New Equipments	6 days	Tue 5/26/26	Tue 6/2/26	55																	
57	Testing	2 days	Wed 6/3/26	Thu 6/4/26	56																	
58	Approval of Installation and Testing	1 day	Fri 6/5/26	Fri 6/5/26	57																	
59																						
60	Drain Secondary Sed Tank W-3	2 days	Mon 6/8/26	Tue 6/9/26	58																	
61	NDT on Concrete	2 days	Wed 6/10/26	Thu 6/11/26	60																	
62	Demolition Work	2 days	Fri 6/12/26	Mon 6/15/26	61																	
63	Concrete Repairs	7 days	Tue 6/16/26	Wed 6/24/26	62																	
64	Install New Equipments	6 days	Thu 6/25/26	Thu 7/2/26	63																	
65	Testing	2 days	Mon 7/6/26	Tue 7/7/26	64																	
66	Approval of Installation and Testing	1 day	Wed 7/8/26	Wed 7/8/26	65																	
67																						
68	DEMOBILIZE	1 day	Thu 7/9/26	Thu 7/9/26	66																	

Project: SOCWA

Task		Inactive Task		Manual Summary Rollup		External Milestone		Manual Progress	
Split		Inactive Milestone		Manual Summary		Deadline			
Milestone		Inactive Summary		Start-only		Critical			
Summary		Manual Task		Finish-only		Critical Split			
Project Summary		Duration-only		External Tasks		Progress			

CLOSING STATEMENT & CERTIFICATIONS

The undersigned Bidder further certifies as follows:

The Total Bid Price requests sufficient funds to allow Contractor to comply with all applicable laws or regulations governing the labor or services to be provided under the Contract. Furthermore, Bidder hereby agrees to indemnify SOCWA for liabilities and penalties for violations of Labor Code Section 2810.

The cost for all labor, materials, equipment, taxes, freight, insurance and incidentals necessary for the Work is included in the Total Bid Price, including but not limited to sheeting, shoring, and bracing, or equivalent method for the protection of life and limb in trenches and open excavation in conformance with applicable safety orders.

The Bidder is, at the time of bidding, and shall be, throughout the period of the Contract, licensed by the State of California to do the type of Work required under the terms of the Contract Documents. Bidder further certifies that Bidder is skilled and regularly engaged in the general class and type of Work called for in the Contract Documents.

Bidder is not an ineligible contractor for the purposes of California Labor Code Section 1777.1 or 1777.7, and no subcontractor to be used for the performance of the Work is an ineligible contractor for the purposes of Labor Code Section 1777.1 or 1777.7.

Bidder is competent, knowledgeable and has special skills regarding the nature, extent and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work which may create, during the construction program, unusual or peculiar unsafe conditions hazardous to persons and property. Bidder expressly acknowledges that Bidder is aware of such peculiar risks and that Bidder has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the construction Work with respect to such hazards.

Bidder acknowledges receipt of the following Addenda: 1

_____.

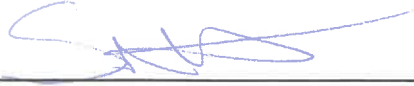
Bidder has attached hereto Bid security, in the form of a bond, cashier's check, or certified check, in an amount which is equal to (at least) ten percent (10%) of the total amount of the Bid, payable in lawful money of the United States to the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY.

Bidder is aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for worker's compensation or undertake self-insurance in accordance with the provisions of that code, and will comply with such provisions before commencing the performance of the Work.

Bidder has inspected the site of the Work prior to submitting this Bid.

By signing below, the undersigned certifies that he/she has the legal authority to bind the Bidder and that all representations, certifications, and statements made by Bidder, as set forth in this Bid, are true and correct and are made under penalty of perjury.

Signature:



Clearly printed name:

Sean J. Harns

Position:

President

Date/Location:

October 10, 2025, at Perris, CA

Seal (if any):

Co-Signature:



Clearly printed name:

Joselito Guintu

Position:

Vice President

Date/Location:

October 10, 2025, at Perris, CA

NOTICE: Pursuant to the requirements of California Business and Professions Code, Section 7028.15(e), a bid submitted to the SOCWA by a contractor who is not licensed pursuant to Chapter 9, of Division 3, of the Business and Professions Code, shall be considered nonresponsive and shall be rejected as provided for by law.

NONCOLLUSION AFFIDAVIT

To Be Executed by Bidder and Submitted with Bid
(Public Contract Code § 7106)

The undersigned declares:

I am the Vice President of Pacific Hydrotech Corporation, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

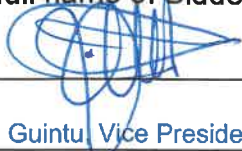
Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on 10-10-2025 [date], at Perris [city], CA [state].

BIDDER:

Pacific Hydrotech Corporation

[Type full name of Bidder]

By: 

Joselito Guintu, Vice President

[Print name and title]

CALIFORNIA ACKNOWLEDGMENT**CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of RiversideOn October 15, 2025 before me, Mezhy Ramirez, Notary Public.
Date Here Insert Name and Title of the Officer

personally appeared

Joselito Guinto
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Place Notary Seal and/or Stamp Above

Signature

[Signature]

Signature of Notary Public

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

☐ Corporate Officer – Title(s): _____☐ Partner – ☐ Limited ☐ General☐ Individual ☐ Attorney in Fact☐ Trustee ☐ Guardian or Conservator☐ Other: _____

Signer is Representing: _____

Signer's Name: _____

☐ Corporate Officer – Title(s): _____☐ Partner – ☐ Limited ☐ General☐ Individual ☐ Attorney in Fact☐ Trustee ☐ Guardian or Conservator☐ Other: _____

Signer is Representing: _____

BIDDER'S BOND

(At Least 10 Percent of the Total Contract Price)

We Pacific Hydrotech Corporation, as
Principal,

and Liberty Mutual Insurance Company, as Surety,

jointly and severally, bind ourselves, our heirs, representatives, successors, and assigns, as set forth herein, to the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY ("SOCWA") for payment of the penal sum of

Ten Percent of Bid Amount

_____ Dollars (\$ 10%),

lawful money of the United States, such amount representing at least ten percent (10%) of the amount of the Total Bid Price to obtain the award of a contract for the Coastal Treatment Plant West Primary and Secondary Basins Scum Skimming System Replacement and to be paid to SOCWA, its successors and assigns, for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly hereby.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal shall not withdraw said Bid within the period of time set forth in the Contract Documents, and shall within fifteen (15) calendar days after the prescribed forms are presented to the Principal for signature enter into a written contract with SOCWA in accordance with the Bid as accepted, and if the Principal shall give the required bonds with good and sufficient sureties for the faithful performance and proper fulfillment of such contract, and for the protection of laborers and materialmen, or in the event of the withdrawal of the Bid within the period specified, or the failure to enter into the Contract, and give such bonds within the time specified, if the Principal shall within sixty (60) days after request by SOCWA pay to SOCWA the difference between the amount specified in the Bid and the amount for which SOCWA may procure the required work, if the latter amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise it shall remain in full force and effect.

Forfeiture of this bond, or any deposit made in lieu thereof, shall not preclude the SOCWA from seeking all other remedies provided by law to cover losses sustained as a result of the Principal's failure to do any of the foregoing and this bond shall not be a limitation on Principals' liability therefor.

Principal and Surety agree that if the SOCWA is required to engage the services of an attorney(s) in connection with the enforcement of this bond, each shall pay SOCWA's costs and reasonable attorney fees incurred with or without suit.

IN WITNESS WHEREOF,

Executed on October 9, 25.

[CORPORATE SEAL]

Pacific Hydrotech Corporation

Principal

By 

Joselito Guinto Vice President
Title

(ATTACH NOTARY ACKNOWLEDGMENT OF AUTHORIZED REPRESENTATIVE OF PRINCIPAL)

Any claims under this bond may be addressed to:

Liberty Mutual Insurance Company

(Name and address of Surety)

790 The City Drive South, Suite 200

Orange, CA 92868

Alliant Insurance Services, Inc.

(Name and address of Surety's agent for service of process in California, if different from above)

701 B Street, 6th Floor
San Diego, CA 92101

(619) 238-1828

(Telephone number of Surety's agent
in California)

(ATTACH NOTARY ACKNOWLEDGMENT)

Liberty Mutual Insurance Company

Surety

By 

(Attorney-in-Fact) Lawrence F. McMahon

NOTICE

No substitution or revision to this bond form will be accepted. Sureties must be authorized to do business, and have an agent for service of process, in California. A certified copy of Power of Attorney must be attached.

See attached California All-Purpose Acknowledgment

CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
)
) **SS:**
COUNTY OF _____)

On _____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Notary Public

NOTE:

- (a) Signature of those executing for Surety must be properly acknowledged.
(b) The Attorney-in-fact must attach a certified copy of the Power of Attorney.

****END OF REQUIRED FORMS****

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

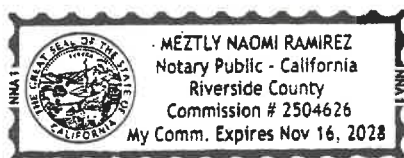
State of California)

County of Riverside)On October 15, 2025 before me, Meztly Ramirez, Notary Public,
Date Here Insert Name and Title of the Officerpersonally appeared Joselito Guintu
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature [Signature]
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____ Document Date: _____

Number of Pages: _____ Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

☐ Corporate Officer — Title(s): _____☐ Partner — ☐ Limited ☐ General☐ Individual ☐ Attorney in Fact☐ Trustee ☐ Guardian or Conservator☐ Other: _____

Signer Is Representing: _____

Signer's Name: _____

☐ Corporate Officer — Title(s): _____☐ Partner — ☐ Limited ☐ General☐ Individual ☐ Attorney in Fact☐ Trustee ☐ Guardian or Conservator☐ Other: _____

Signer Is Representing: _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of San Diego)

On October 9, 2025 before me, Maria Guise, Notary Public,
Date Here Insert Name and Title of the Officer
personally appeared Lawrence F. McMahon
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature *Maria Guise*
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____
Document Date: _____ Number of Pages: _____
Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Individual ☒ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: Surety Company

Signer's Name: _____
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: _____



POWER OF ATTORNEY

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: **8213991 - 024019**

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Christopher Conte, Dale G. Harshaw, Geoffrey Shelton, John R. Qualin, Lawrence F. McMahon, Lilia De Loera, Maria Hallmark, Minna Huovila, Natassia Kirk-Smith, Ryan Warnock, Sarah Myers, Tara Bacon

all of the city of San Diego state of CA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 6th day of May, 2025.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By:

Nathan J. Zangerle
Nathan J. Zangerle, Assistant Secretary

State of PENNSYLVANIA ss
County of MONTGOMERY

On this 6th day of May, 2025 before me personally appeared Nathan J. Zangerle, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2029
Commission number 1126044
Member, Pennsylvania Association of Notaries

By:

Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Nathan J. Zangerle, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 9th day of October, 2025.



By:

Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ADDENDUM No. 1

TO REQUEST FOR PROPOSALS

FOR COASTAL TREATMENT PLANT

WEST PRIMARY AND SECONDARY SCUM SKIMMING SYSTEM

**THE PROPOSER SHALL EXECUTE THE CERTIFICATION AT THE END OF THE
ADDENDUM AND SHALL ATTACH THE ADDENDUM TO THE PROPOSAL (NOT TO BE
INCLUDED AS PART OF THE PAGE COUNT).**

In the BID FORM:

Schedule of Work Items, Bid Schedule A:

Item 3: Non-destructive testing per basin, the quantity should be 1, and the unit should be LS,
for all six basins.

DATED: 9/11/2025

Roni Young Grant
CIP Manager

Roni Young Grant

BIDDER'S CERTIFICATION

I acknowledge receipt of the foregoing Addendum No. 1 and accept all conditions contained herein.

DATED: 9-11-2025

BIDDER: Pacific Hydrotech Corporation
BY: 
Joselito Cuinta, Vice President

PACIFIC HYDROTECH CORPORATION
a California Corporation

CORPORATE RESOLUTION
August 7, 2025

RESOLVED, that **James Kirk Harns** – CEO, **Sean Harns** – President, **Joselito Guintu** – Vice President, **Christopher Harns** – Vice President, **June Diaz** – CFO; each has the authority to sign contracts on behalf of the corporation.

BE IT FURTHER RESOLVED that these resolutions may be executed in any number of counterparts and delivered by facsimile, e-mail PDF or other electronic means, each of which shall be deemed an original and all of which when taken together shall constitute one and the same instrument.



James Kirk Harns, CEO



Sean J. Harns, President



Christopher Harns, Vice President



Greg Chehey, Vice President



Joselito M. Guintu, Vice President



David Power, Vice President



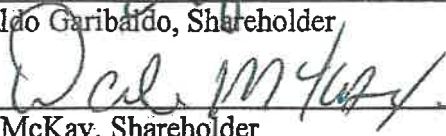
Kyle Bremer, Vice President



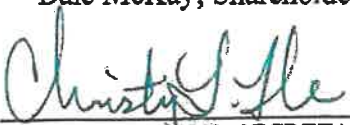
June Diaz, Chief Financial Officer



Usbaldo Garibaldo, Shareholder



Dale McKay, Shareholder



CHRISTY L. HARNs, SECRETARY



CONTRACTORS
STATE LICENSE BOARD
ACTIVE LICENSE



License Number **518355**

Entity **CORP**

Business Name **PACIFIC HYDROTECH
CORPORATION**

Classification(s) **A HAZ B**

Expiration Date **09/30/2027**

www.cslb.ca.gov



California Environmental Protection Agency
Air Resources Board

January 1, 2025

**CERTIFICATE OF REPORTED COMPLIANCE
OFF-ROAD DIESEL VEHICLE REGULATION**

is issued to

PACIFIC HYDROTECH CORPORATION

This certificate indicates that the fleet listed above has reported off-road diesel vehicles to the California Air Resources Board and has certified they are in compliance with title 13 CCR, section 2449. All applicable vehicles owned by the individual, company, or agency must be reported and labeled, as specified in Section 2449, with all possible completeness, else this certificate is null and void. **Certificate expires 2/28/2026**



Jack Krawiec
Chief, Mobile Source Control Division
California Air Resources Board

Off-road Diesel Fleet Identification

5364

To verify the authenticity of this certificate, enter this number at
http://www.arb.ca.gov/doors/compliance_cert1.html



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[Project Registration Search](#)

[Register](#)

[Home](#) > [Customer Account Lookup](#) > 1000002987 - PACIFIC HYDROTECH CORPORATION

1000002987 - PACIFIC HYDROTECH CORPORATION

Customer Account Lookup

PWCR

1000002987

Contractor Status

DIR Approved

CSLB

518355

Business Phone

9519438803

Ext

Registration Start Date

2025-07-01

Legal Entity Name

PACIFIC HYDROTECH CORPORATION

Doing Business As (DBA)

PACIFIC HYDROTECH CORPORATION

Business Structure

-- None --

President

James K. Harns

Email

ERIVERO@PACHYDRO.COM

Registration End Date

2028-06-30

Crafts

| Laborer and Related Classifications | Carpenter and Related Trades | Cranes, Pile Driving and Hoisting Equipment (Operating Engineer) |
 | Bricklayer/Brick Tender | Iron Worker | Cement Mason | Operating Engineer (Heavy and Highway Work) |

Address

Mailing Address

314 E. 3RD STREET

Mailing Address - City

PERRIS

Mailing Address - State

CA

Mailing Address - Zip

92570

Mailing Address - Country

United States

Physical Address

Physical Address - City

Physical Address - State

Physical Address - Zip

Physical Address - Country

Related Lists

Registration Dates 

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[dir.ca.gov](#)

Copyright 2024 State of California

Pacific Hydrotech Project Resume

Job #	Project Name	Location	Owner	Engineer	Construction Manager	Description of Project	Award Value	Total Value of Construction	Original Completion Date M/20XX	Actual Completion Date M/20XX	Project Type (WTP, WWTP, Reservoir, Pump Station, Lift Station, Well)	PM/PC
2204	ESFP Washwater Return and Sludge Collection	Santa Clarita, CA	Santa Clarita Valley Water Agency - Shadi Bader (661) 607-8186 sbader@scvwa.org	Lee & Roy	Santa Clarita Valley Water Agency - Shadi Bader (661) 607-8186 sbader@scvwa.org	Wast Water Treatment Plant	\$17,526,700.00	\$ 17,865,510.97	Jul-24	Jul-24	WWTP	Sean Harms
2018	Sedimentation Basin Screw Conveyor Replacement	Upland, CA	Water Facilities Authority Terry Caltin (909)981-9454 tcaltin@Wajpa.org	N/A	Water Facilities Authority Terry Caltin (909)981-9454 tcaltin@Wajpa.org	Installation of two 18" diameter screw conveyors for East & West Sedimentation Basins. Rehabilitation of spalled concrete with Sika Armatex. Repair failed sealant with Sika Duo Flex.	\$1,315,200.00	\$1,136,821.10	Mar-21	August-21	WWTP	Carlos Aguilar / Tonya Gonzalez
1919	Rosemond WWTP Rehabilitation	Rosemond, CA	Rosemond Community Services District - Bruch Smith (661) 816-5729 bsmith@rosemondcsd.com	Kennedy Jenks - Rachel Rodriguez (858) 676-7532 racheldruffel-rodriguez@kennedyjenks.com	Kennedy Jenks - David Mosher (626) 710-6727 dmohd1000@gmail.com	This is an expansion of Rosemond's Wastewater Treatment Plant. The project includes the following: new extended aeration basin, replacement of blowers, new secondary clarifier, expansion of sludge pump station, new scum pump station, expansion of sludge drying beds, expansion of utility water pump station, expansion of utility water distribution system, new percolation ponds with geoweb, new emergency overflow pond, sewage holding pond, new mixing channel and distribution box, new back up generator, and SCADA upgrades. Also, installing piping for raw wastewater, sewer, sludge, secondary effluent, chemical feed and utility water. Pipe sizes range from 2"-30".	\$13,227,284.00	\$13,535,319.00	Mar-21	August-21	WWTP	Sean Harms / Francisco Alvarez
1916	Water Reclamation Plant Phase 4 Expansion	Corona, CA	Temescal Valley Water District - Jeff Pape (951) 667-6323 jeff@temescalvwd.com	Dexter Wilson Engineering - Steve Nielson (760) 438-4422 jeff@temescalvwd.com	Murow Development Consultants - Bryon Barker (949) 689-9252 bbarker@murowdc.com	Major expansion to increase the plant capacity from 1.575 MGD to 2.25 MGD. Construction includes new tankage, new process equipment procurement and installation, electrical, site piping, precise grading, drainage, and asphalt paving improvements. The major improvements to the plant include the addition of primary sedimentation tanks, three new sequencing batch reactors, two new filters, waste activated sludge thickening, new aerobic digesters, and removal of existing grit facilities.	\$16,444,500.00	\$16,591,902.00	Apr-21	October-21	WWTP	Bob Owens / Jonathan Hillman

Pacific Hydrotech Project Resume

1906	Plant 10 Water Reclamation Plant Secondary Effluent Pump Station and Ponds	Palmd Desert, CA	Coachella Valley Water District - Diego Colorado (760) 398-2661 diego.colorado@cvwd.org	Starzec - Christopher Mote (626) 568-6042 christopher.mote@starzec.com	Coachella Valley Water District - Diego Colorado (760) 398-2661 diego.colorado@cvwd.org	Project consists of installation of new pipeline running 10" to 30" in (9) existing percolation ponds and (5) effluent storage ponds with associated inlet / outlet structures, pipelines, construction of new pump station and electrical masonry building.	\$25,450,400.00	\$27,552,272.00	Dec-20	November-21	Lift Station / WWTP	Kyle Brenner / James Rouse
1827	North Shore WRP No. 2	Coachella, CA	Coachella Valley Water District - Nasrin Maleki (760) 398-2661 nmaleki@cvwd.org	Lee / Ro - Jay Jung 626-667-5342 jay.jung@lee-ro.com	Coachella Valley Water District - Nasrin Maleki (760) 398-2661 nmaleki@cvwd.org	Removal and replacement of liner, site grading, replacement and installation of submersible pumps, site modifications.		\$2,352,164.00		September-19	WWTP	Greg Chehey / Dustin Chehey
1825	Water Reclamation Plants No. 4, 7 and 10 Chemical Systems Upgrades	Coachella, CA	Coachella Valley Water District - Jignesh Ladhwala (760) 398-2661 jladhwala@cvwd.org	Krieger / Stewart - Phil Strom 951-684-6900 pstrom@kriegerandstewart.com	Coachella Valley Water District - Jignesh Ladhwala (760) 398-2661 jladhwala@cvwd.org	Major upgrades to 3 existing wastewater treatment plants including installation of one-ton emergency chlorine gas scrubber systems, emergency chlorine gas-to-container shutoff systems, fire protection system with aerosol fire-extinguishing system. New video surveillance system with PTZ cameras and building access control system. New ventilation system roof access exhaust fans, roof gravity ventilators and louvers. Outdoor motor control center, programmable logic controller and surge protector. Manual winch for davit crane at existing chlorine gas and sulfur dioxide induction units. Installation of new high capacity potable water pump station, including horizontal end suction pumping units, piping, valves, flow meter and connection to above grade storage tank.	\$11,055,600.00	\$11,578,417.00	Jun-21	September-21	WWTP	Greg Chehey / Dustin Chehey
1717	Digester 1 Rehabilitation	Calabasas, CA	Las Virgenes Municipal Water District - Coleman Olinger (818) 251-2163 colinger@lvwmwd.com	Pace Advanced Water Engineering - Robert Murphy (714) 481-7226 rmurphy@pacewater.com	Pace Advanced Water Engineering - Robert Murphy (714) 481-7226 rmurphy@pacewater.com	Removed existing piping inside and outside of digester and replacement with new piping	\$1,272,240.00	\$1,278,240.00	Mar-18	August-18	WWTP	Dale McKay / Kyle Brenner
1713	Raw Sludge Wet Well	Calabasas, CA	Las Virgenes Municipal Water District - Coleman Olinger (818) 251-2163 colinger@lvwmwd.com	Pacific Advanced Civil Engineering - Thomas Mihara (714) 514-8825 tmihara@pacewater.com	Las Virgenes Municipal Water District - Coleman Olinger (818) 251-2163 colinger@lvwmwd.com	Demo of existing pumps, piping, and appurtenances. Installation of one 20 HP progressive cavity pump, in-line grinder, electric actuated valves, electromagnetic flowmeters, other misc. valves and glass lined ductile iron pipe and fittings, and associated electrical work. Piping and valve sizes were 8" and smaller.	\$355,900.00	\$355,950.00	Oct-17	March-18	WWTP	Jonathan Hilburn / Krista Avila
1618	Regional Treatment Plant misc. Improvements	Laguna Niguel, CA	Soawa - Brian Peck - bpeck@soawa.com 949-234-5411	Tetra Tech - Thomas Epperson 949-809-5000	Burier - Mark Brunenicks (949) 309-8215 mbunenicks@burier.com	Miscellaneous improvements to existing wastewater treatment plant including rehabilitation of sewer / manhole. Replacements of slide gates at influent junction structure and stop / weir gates at grit tanks. Removal of deteriorated portions of the existing digester roof coatings on all four (4) existing anaerobic digesters and installation of new coatings on the roofs of each of the existing digesters. Replacement of water quality instrumentation in the Advanced Water Treatment (AWT) No. 2 facility including existing chlorine residual analyzers / controllers and appurtenances, turbidity meters and controllers.	\$1,451,200.00	\$1,499,441.00	Sep-17	February-18	WWTP	Sean Harris / Francisco Alvarez
1614	CVWD WRP 7 Clarifier and Filter Improvements	Indio, CA	Coachella Valley Water District - Jignesh Ladhwala (760) 398-2661 jladhwala@cvwd.org	Krieger / Stewart - Phil Strom 951-684-6900 pstrom@kriegerandstewart.com	Coachella Valley Water District - Jignesh Ladhwala (760) 398-2661 jladhwala@cvwd.org	Removal and Replacement of (2) secondary clarifier mechanisms and modifications to (3) existing tertiary filters and (1) tertiary filter effluent channel. Replacement of air piping of existing system. Installed clarifiers treatment of 2.5 MGD.	\$2,210,170.00	\$2,303,579.00	Jan-18	May-18	WWTP	Dale McKay / Heath Chehey
1607	Plant 7 Biosolids Upgrades	Indio, CA	Coachella Valley Water District - Diego Colorado (760) 398-2661 diego.colorado@cvwd.org	Dudek - Paul Wilson (760) 479-4151 pwilson@dudek.com	Dudek - Paul Wilson (760) 479-4151 pwilson@dudek.com	Modification to existing waste activated sludge pumping facility by removing the existing piping and installing new 2-16" piping to the new Biosolids processing facility. Revision of scum piping by installing a new piping from existing scum collection pit to new Biosolids processing facility. Construction of new Biosolids Processing Facility capable of processing the sludge wasted from the existing water reclamation facility. New submersible pumps installed with 1760 RPM, 540 GPM. Jet aeration system and odor control blowers. Sludge dewatering, gravity thickener, conveyors.	\$12,107,601.00	\$12,842,821.00	Jan-18	September-19	WWTP	Dale McKay / Heath Chehey
1514	South Bay International WWTP	San Ysidro, CA	International Boundary / Water Commission - Laura Baker laura.baker@ibwc.gov 915-832-4119	URS Corporation - Paul Rydzynski - paul.rydzynski@urs.com 619-428-2383	Aracdis - Arnold Winger - arnold.winger@aracdis.com 760-602-3805	Construction of new equalization basin and 3 new secondary sedimentation tanks including misc. Replacement of air piping of existing system. Piping and electrical building addition. Installation of (6) submersible pumps with 1160 RPM, capacity of 3000GPM each.	\$15,756,800.00	\$18,188,712.00	Jul-17	April-18	WWTP	Bob Owens / Jonathan Hilburn
1510	Imperial Wastewater Treatment Plant Headworks Upgrade	Imperial, CA	City of Imperial - Debra Jackson (760) 355-4371 djackson@imperial.ca.gov	The Holt Group - Jerry Mermolejo (951) 320-3383 jmermo@theholtgroup.com	Albert A. Webb / Associates - Reed Chilton (951) 320-6031 reed.chilton@webbassociates.com	Headworks system upgrades at the Imperial wastewater treatment plant	\$1,301,000.00	\$1,308,800.00	Jun-16	June-16	WWTP	
1507	Holtville Wastewater Treatment Plant	Holtville, CA	City of Holtville - Nicholas Wells - 760-356-4374 - nwells@holtville.ca.gov	Lee / Ro - Rick Liskow - 626-912-3391 - rick.liskow@lee-ro.com	HDR Engineering - Dave Bachtel (951) 320-7322 david.bachtel@hdrinc.com	Major improvements to existing facility include construction of a new secondary clarifier aeration basin, drying beds, new operations building, and retrofitting of existing primary clarifier. New major water treatment equipment installations include headworks system (2.0MGD), aeration blowers (54SCFM), polymer, as well as underground and above ground piping (PVC, Stainless Steel, Ductile Iron and Copper). Installation of chopper, centrifugal and submersible pumps	\$11,733,600.00	\$12,238,163.66	Oct-16	June-17	WWTP	Greg Chehey / Robert Bocalan

Pacific Hydrotech Project Resume

1502	Regional Treatment Plant Cogen and Switchgear Upgrade	Laguna Niguel, CA	Sowse - Brian Peck - bpeck@socwa.com 949-234-5411	Carollo Engineers - Jeff Weishaar - jweishaar@carollo.com	Butler Engineering - Casey Harris - charris@butler.com 714-832-7222	This project consisted of demolition of the following: portions of Digester Control Building and piping and related accessories to be abandoned. The project included the procurement and installation of a complex Cogeneration Engine Generator. The generator's fuel was a blend of natural gas and clean digester gas. The project included the installation of a digester gas cleaning system with H2S and Siloxane treatment. The project included piping ranging from 4 inch to 12 inch. Materials were black steel pipe, ductile iron, and stainless steel. The project included multiple electrical switchgears, PLC's, and other SCADA related equipment. A hot water boiler was also installed to provide heat to the digester heat exchangers. Multiple small horsepower pumps were installed to support the hot water boiler and the heat exchange equipment of the cogeneration engine generator. HVAC equipment was also installed to maintain the electrical rooms to specified temperatures. The project also included the Recoating of an existing Digester. A new steel curtain wall was installed prior to cleaning and recoating with solids epoxy coating system.	\$8,925,217.00	\$9,404,301.00	Jul-16	January-18	WWTP	Sean Harris / Francisco Alvarez
1414	Wastewater Treatment Plant Headworks Expansion	Cabazon, CA	Morongo Band of Mission Indians - John Covington	Albert A. Webb and Associates - Shane Bloomingfield 951-248-4293	Albert A. Webb and Associates - Shane Bloomingfield 951-248-4293	Construction of a new reinforced concrete headworks structure and the installation of owner supplied screens, washpactor, grit separator and grit classifier with piping, valving, and associated mechanical equipment; installation of new SCADA equipment, general site work, and electrical work, demolition and legal disposal of existing headworks structure and equipment, construction of new sludge drying beds to match existing beds with associated piping. Capacity of new facility 2.35MGD		\$698,035.00		April-16	WWTP	

Agenda Item

11

Engineering Committee Meeting

Meeting Date: November 13, 2025

TO: Engineering Committee

FROM: Roni Young Grant, Capital Improvement Program Manager

SUBJECT: Contract Award for Coastal Treatment Plant Personnel Building Phase 2 Upgrades [Project Committee 15]

Overview

The existing Coastal Treatment Plant (CTP) Personnel Building has deteriorated and is in need of upgrades. This agenda item addresses the third attempt to secure bids/proposals for the construction of the second phase of upgrades.

Background

The Personnel Building was originally constructed in the late 1960's as the Control Building for the Coastal Treatment Plant. The building included laboratory and chlorination facilities. The building is a single-story wood and brick frame building set on a concrete slab foundation. The building was modified to its current form during a plant expansion project in the late 1980's. The proposed project is largely based on a condition assessment completed by V&A Consulting Engineers in 2019. Phase 1 of the project entailed the installation of new underground sewer piping and was completed in 2024.

Project Scope

The Phase 2 upgrades include the following items:

- Backfill and repair of concrete floors slabs associated with Phase 1 sewer improvements
- Rehabilitation of concrete flooring in Workshop and Utility Rooms
- Demolition and reconstruction of walls in Restrooms and Shower Rooms
- Replacement of interior doors, frames and associated appurtenances
- Replacement of plumbing fixtures
- Demolition and improvements of the floor, ceiling and lighting system
- Electrical system improvements
- Sewer and vent system demolition and improvements
- Cold and hot water system demolition and improvements
- Power and lighting system improvements.

Bids

SOCWA sought bids for the Coastal Treatment Plant Phase 2 – Reconstruction in the fall of 2025. Bidding documents were transmitted to ten general contractors on August 28, 2025. Two bids

were received on October 23, 2025. This followed a prior attempt to procure bids in April 2025, via the PlanetBids platform. No bids were received through this attempted effort. SOCWA subsequently attempted to get quotes from two contractors familiar with the project site: T.E. Roberts, who successfully completed Phase 1 of the project, and S.S. Mechanical, a general contractor that had also been performing work at the Coastal Plant at that time. T. E. Roberts submitted a quote of \$497,908.00, participated in the pre-bid site walk. S.S. Mechanical declined to submit a quote due to their workload.

The two bids received on October 23, 2025 are presented in Table 1 and compared with the previous quote submitted by T.E. Roberts provided a quote, the details of which are summarized in Table 1 below. The Engineer's cost estimate for the Phase 2 project is \$300,000.

Table 1- Summary of Quote

Item No.	Description	Bids Received October 2025		Quote Received April 2025
		Salient LLC	T.E. Roberts	T.E. Roberts
1	Mobilization/Demobilization	\$ 102,538	\$ 33,469	\$ 79,350
2	Demolition and disposal per the plan	\$ 36,000	\$ 52,022	\$ 39,624
3	Replacement of plumbing fixtures ¹	\$ 26,000	\$ 50,000	\$ 60,000
4	Replacement of floor, wall tiling, and baseboard ¹	\$ 52,500	\$ 99,912	\$ 90,598
5	Replacement of vinyl flooring and molding ¹	\$ 7,588	\$ 10,600	\$ 15,000
6	Rehabilitation of concrete flooring in Workshop and Utility Room ²	\$ 9,975	\$ 7,422	\$ -
7	Backfill and repair of concrete floor slabs ²	\$ 8,800	\$ 75,473	\$ -
8	Demolition and reconstruction of walls in Restrooms and Shower Rooms ²	\$ 52,925	\$ 53,172	\$ -
9	Replacement of interior doors ²	\$ 16,000	\$ 17,960	\$ -
10	Refurbishment of bench and lockers and replacement of partitions ¹	\$ 8,000	\$ 91,017	\$ 70,000
11	Reconstruction of suspended ceiling	\$ 15,501	\$ 12,278	\$ 30,064

		Bids Received October 2025	Bids Received October 2025	Quote Received April 2025
Item No.	Description	Salient LLC	T.E. Roberts	T.E. Roberts
12	Replacement of lighting and power supply systems	\$ 111,767	\$ 78,463	\$ 65,320
13	Modification of the sewer and vent system	\$ 16,000	\$ 2,500	\$ 13,973
14	Modification of the cold and hot water systems	\$ 11,000	\$ 63,750	\$ 33,490
15	All other items necessary to complete the work	\$ -	\$ 23,409	\$ 500
16	Repair of structural deficiencies ²	\$ 5,000	\$ 5,000	\$ -
17	Modifications of ventilation system ²	\$ 15,000	\$ 15,000	\$ -
	Total Bid	\$ 594,594	\$ 751,447	\$ 497,919

Notes:

1. These items were included in a single line item in April 2025, quoted by T. E. Roberts.
2. These line items were not included in the April 2025 quote.

Salient LLC (Bruce King Services) was unable to obtain a bid bond. T.E. Roberts submitted the only fully responsive bid.

There is a significant difference between the October 2025 bid and the April 2025 quote by T. E. Roberts. Part of the deviation is as shown in Table 2. This table shows that \$174,027 of the \$253,528 difference between the October bid and the April quote is related to changes in project scope. It is assumed that the remaining difference is related to changed market conditions.

Table 2 - Differences in T.E. Roberts April Quote and October Bid

Item No.	Description	Increase In T.E. Roberts Pricing
6	Rehabilitation of concrete flooring in Workshop and Utility Room - not included in April quote although noted in condition assessment	\$ 7,422
7	Backfill and repair of concrete floor slabs – not included in April quote – necessary for functionality of building	\$ 75,473
8	Demolition and reconstruction of walls in Restrooms and Shower Rooms – not included in April quote although noted in condition assessment	\$ 53,172

Item No.	Description	Increase In T.E. Roberts Pricing
9	Replacement of interior doors – added in October bid – deterioration of doors and frames noted at Pre-Bid Meeting – postponing replacement would entail damage to tile and dryboard installed as part of this project	\$ 17,960
16	Repair of structural deficiencies – contingency added in October bid	\$ 5,000
17	Modifications of ventilation system – contingency in October bid	\$ 15,000
Pricing Differences Related to Added Scope		\$ 174,027

Options For Proceeding with Project

The following actions are proposed:

1. Reject the bids and direct SOCWA staff to negotiate directly with T.E. Roberts. SOCWA staff believes that the T.E. Roberts bid might be reduced by \$50,000 to \$100,000. In the event that SOCWA staff is unable to secure a satisfactory negotiated price the action below could be pursued.
2. Repackage Phase 2 of the Personnel Building Upgrades with another Coastal Treatment Plant capital project in early 2026. Potential packaging projects include Foul Air System Upgrade and the Drainage Pump Station Upgrade. Including the Personnel Building in a larger bid package might encourage more competitive bidding.

Cost Allocation

The cost allocation for the associated with awarding the construction contract at October 2025, T.E. Roberts bid price is presented in Table 3.

Table 3 – Cost Allocation by Member Agency

Agency	Personnel Building Rehabilitation – Phase II
City of Laguna Beach	\$408,035.72
Emerald Bay Service District	\$22,543.41
South Coast Water District	\$320,867.87
Total	\$751,447.00

Budget

The current approved budget for the CTP Personnel Building Reconstruction Phase 2 is \$449,234. Staff will make a request for additional budget to support the project based on either a negotiated price with T. E. Roberts or repackaging of the project.

Recommended Action: Staff recommends that the Engineering Committee recommend that the PC 15 Board of Directors:

1. Reject the bids received on October 23, 2025.
2. Direct SOCWA staff to negotiate directly with T.E. Roberts. The results of the negotiation to be reported back to the December Engineering Committee.

BID FORM
PROPOSAL TO
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
FOR THE CONSTRUCTION OF: COASTAL TREATMENT PLANT PERSONNEL
BUILDING PHASE 2 RECONSTRUCTION

Name of Bidder: SALIENT LLC DBA BRUCE KING SERVICES
Business Address: P.O. Box 3413 Costa Mesa CA 92628
Phone No.: 562 321 7577

TO THE BOARD OF DIRECTORS OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY (SOCWA)

The undersigned, as Bidder, hereby certifies and declares that:

Pursuant to, and in compliance with, the Notice Inviting Bids and the other documents relating thereto, the undersigned bidder, being fully familiar with the terms of the Contract Documents, local conditions affecting the performance of the Contract, the character, quality, quantities, and scope of the Work, and the cost of the Work at the place where the Work is to be done, hereby proposes and agrees to perform within the time stipulated in the Contract, including all of its component parts and everything required to be performed, and to furnish any and all of the labor, materials, tools, equipment, transportation, services, permits, utilities, and all other items necessary to perform the Contract and complete, in a workmanlike manner, all of the Work required in connection with the construction of said Work all in strict conformity with the Plans and Specifications and other Contract Documents, for the prices hereinafter set forth.

The only persons or parties interested in this Proposal as principals are those named herein and that this Proposal is made without collusion with any person, firm, or corporation as set forth in more detail in the Noncollusion Affidavit executed herewith. Further, the undersigned proposes and agrees, if the Proposal is accepted, that he/she will execute a Contract with the SOCWA in the form set forth in the Contract Documents and that he/she will accept in full payment thereof the following prices to with:

SCHEDULE OF WORK ITEMS

PLEASE LOOK AT ADDENDUM 3

BID ITEMS: For the work associated with the Coastal Treatment Plant (CTP) Personnel Building Phase 2 Reconstruction Project:

BID ITEM 1: Mobilization and demobilization, for the sum of

(\$ _____)

BID ITEM 2: Demolition and disposal, per the plan, for the sum of

(\$ _____)

BID ITEM 3: Replacement of plumbing fixtures, for the sum of

(\$ _____)

BID ITEM 4: Replacement of floor and wall tiling, for the sum of

(\$ _____)

BID ITEM 5: Refurbishment of bench and lockers and replacement of partitions, for the sum of

(\$ _____)

BID ITEM 6: Reconstruction of suspended ceiling, for the sum of

(\$ _____)

BID ITEM 7: Replacement of lighting and power supply systems, for the sum of

(\$ _____)

BID ITEM 8: Modification of the sewer and vent system, for the sum of

(\$ _____)

BID ITEM 9: Modification of the cold and hot water systems, for the sum of

(\$ _____)

BID ITEM 10: All other items necessary to complete the work, that are not described in Bid Items 1 through 9, for the sum of

SCHEDULE OF WORK ITEMS (Revised by Addendum No.3)

BID ITEMS: For the work associated with the Coastal Treatment Plant (CTP)
Personnel Building Phase 2 Reconstruction Project

BID ITEM 1. Mobilization and demobilization, for the sum of

(\$ 102 538.00)

BID ITEM 2: Demolition and disposal, per the plan, for the sum of

(\$ 36 000.00)

BID ITEM 3: Replacement of plumbing fixtures, for the sum of

(\$ 126 000.00)

BID ITEM 4: Replacement of floor, wall tiling, and baseboard for the sum of

(\$ 52 500.00)

BID ITEM 5: Replacement of vinyl flooring and moulding for the sum of

(\$ 75 88.00)

BID ITEM 6: Rehabilitation of concrete flooring in Workshop and Utility Room
for the sum of

(\$ 99 75.00)

BID ITEM 7: Backfill and repair of concrete floor slabs for the sum of

(\$ 88 00.00)

BID ITEM 8: Demolition and reconstruction of walls in Restrooms and Shower
Rooms for the sum of

(\$ 52 925.00)

BID ITEM 9: Replacement of interior doors, for the sum of

(\$ 16 000.00)

BID ITEM 10: Refurbishment of bench and lockers and replacement of partitions, for the sum of

(\$ 8 000.00)

BID ITEM 11: Reconstruction of suspended ceiling, for the sum of

(\$ 15 500.00)

BID ITEM 12: Replacement of lighting and power supply systems, for the sum of

(\$ 111 767.00)

BID ITEM 13: Modification of the sewer and vent system, for the sum of

(\$ 16 000.00)

BID ITEM 14: Modification of the cold and hot water systems, for the sum of

(\$ 11 000.00)

BID ITEM 15: All other items necessary to complete the work, that are not described in Bid Items 1 through 14, for the sum of

(\$ _____)

BID ITEM 16: Repair of structural deficiencies as identified by the Owner for the Not to Exceed Price of

(\$ 5,000.00)

BID ITEM 17: Modifications of ventilation system as identified by the Owner for the Not to Exceed Price of

(\$ 15,000.00)

SUBTOTAL (the sum of Items 1 through 17):

(\$ 589 593.50)

ADD/DEDUCT (List Bid Items Affected and Amount*):

Item No.	Add (+) Amount	Deduct (.) Amount
<u> </u>	\$ <u> </u>	\$ <u> </u>
<u> </u>	\$ <u> </u>	\$ <u> </u>
<u> </u>	\$ <u> </u>	\$ <u> </u>
<u> </u>	\$ <u> </u>	\$ <u> </u>
<u> </u>	\$ <u> </u>	\$ <u> </u>

SUBTOTAL ADD (+)/DEDUCT(-) ITEMS:

(\$)

*Provision is made here for the bidder to include an addition or deduction in their Bid, if bidder wishes, to reflect any last-minute adjustments in price. The addition or deduction, if made, will be applied to the listed bid item.

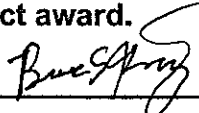
TOTAL CONTRACT PRICE (Sum of Subtotal Sum Price and Subtotal Add/Deduct Items):

(\$ 589 593.50)

Total amount of bid (written in words):

FIVE HUNDRED & EIGHTY NINE THOUSAND FIVE HUNDRED & NINETY THREE DOLLARS & FIFTY
Dollars

Award of contract is based on the Total Contract Price noted above and is not impacted by the proposed cost of any additive bid item. SOCWA retains the right to include any additive bid item value in the overall project at the time of contract award.

Signature of Bidder: 

Date: 10/22/25

LIST OF SUBCONTRACTORS

The name, California Contractor's license number, registration number issued pursuant to Labor Code Section 1725.5, and location of place of business of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the work or improvements in an amount in excess of one-half of one percent (.5%) of the Bidder's Total Contract Price, and the portion of the Work which will be done by each subcontractor is set forth as follows (attach additional sheets as necessary). Circumvention by the Bidder of the requirement to list subcontractors by the device of listing one subcontractor who will in turn sublet portions constituting the majority of the Work covered by this Contract shall be considered a violation of Chapter

4 of the California Public Contract Code and shall subject the Bidder to the penalties set forth in Sections 4110 and 4111 of said Code. Bidder shall conduct substitutions of subcontractors in compliance with Public Contract Code Sections 4106 et seq. detailing the process and conditions under which a public agency may consent to a subcontractor substitution. Except as hereinabove provided, bidder acknowledges and agrees that bidder will perform all required Work in accordance with Section 4106 of the Public Contract Code.

<u>Contractor's Name</u>	<u>Contractor's License & Registration Number</u>	<u>Place of Business</u>	<u>Type of Work</u>

LIST OF EQUIPMENT MANUFACTURERS (Not Used)

COMPANY DATA

Legal name of Bidder: SALIENT LLC

Primary Contact: MR. MOHAMMAD

Business address: P.O. Box 3413 COSTA MESA, CA 92628

Telephone:

714 733 3641 (562) 321 7577

Facsimile:

Email:

jerry@bruceking.com onis@bruceking.com

California Contractor's License:

Primary

Class:

B

License

No.:

787982

Expiration

Date:

3/31/2026

Supplemental Classification held, if any:

The full names of all persons and parties interested in the foregoing Bid Form as principals are as follows (NOTICE: Give first and last names in full; in case of corporation, give names of President, Secretary, Treasurer, and Manager, and in case of partnerships and joint ventures, give names of all the individual members, attached additional sheets as necessary):

Bruce S. King - President

Eugene King - Secretary

PROPOSED CONSTRUCTION PROJECT SCHEDULE

Bidder has attached hereto a proposed construction progress schedule showing the sequence of activities for completion of the Work, in bar chart format. The proposed construction progress schedule includes major construction activities, major equipment procurement and delivery activities, working time limits imposed by permits, and substantial and final completion milestones, and identifies critical path tasks. The schedule is displayed in elapsed numerical days rather than calendar dates and equals the Contract Time.

CLOSING STATEMENT & CERTIFICATIONS

The undersigned Bidder further certifies as follows:

The Total Bid Price requests sufficient funds to allow Contractor to comply with all applicable laws or regulations governing the labor or services to be provided under the Contract. Furthermore, Bidder hereby agrees to indemnify SOCWA for liabilities and penalties for violations of Labor Code Section 2810.

The cost for all labor, materials, equipment, taxes, freight, insurance and incidentals necessary for the Work is included in the Total Bid Price, including but not limited to sheeting, shoring, and bracing, or equivalent method for the protection of life and limb in trenches and open excavation in conformance with applicable safety orders.

The Bidder is, at the time of bidding, and shall be, throughout the period of the Contract, licensed by the State of California to do the type of Work required under the terms of the Contract Documents. Bidder further certifies that Bidder is skilled and regularly engaged in the general class and type of Work called for in the Contract Documents.

Bidder is not an ineligible contractor for the purposes of California Labor Code Section 1777.1 or 1777.7, and no subcontractor to be used for the performance of the Work is an ineligible contractor for the purposes of Labor Code Section 1777.1 or 1777.7.

Bidder is competent, knowledgeable and has special skills regarding the nature, extent and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work which may create, during the construction program, unusual or peculiar unsafe conditions hazardous to persons and property. Bidder expressly acknowledges that Bidder is aware of such peculiar risks and that Bidder has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the construction Work with respect to such hazards.

Bidder acknowledges receipt of the following Addenda: 1 2 3 & 4

Anis MOHAMMAD

Bidder has attached hereto Bid security, in the form of a bond, cashier's check, or certified check, in an amount which is equal to (at least) ten percent (10%) of the total amount of the Bid, payable in lawful money of the United States to the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY.

Bidder is aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for worker's compensation or undertake self-insurance in accordance with the provisions of that code, and will comply with such provisions before commencing the performance of the Work.

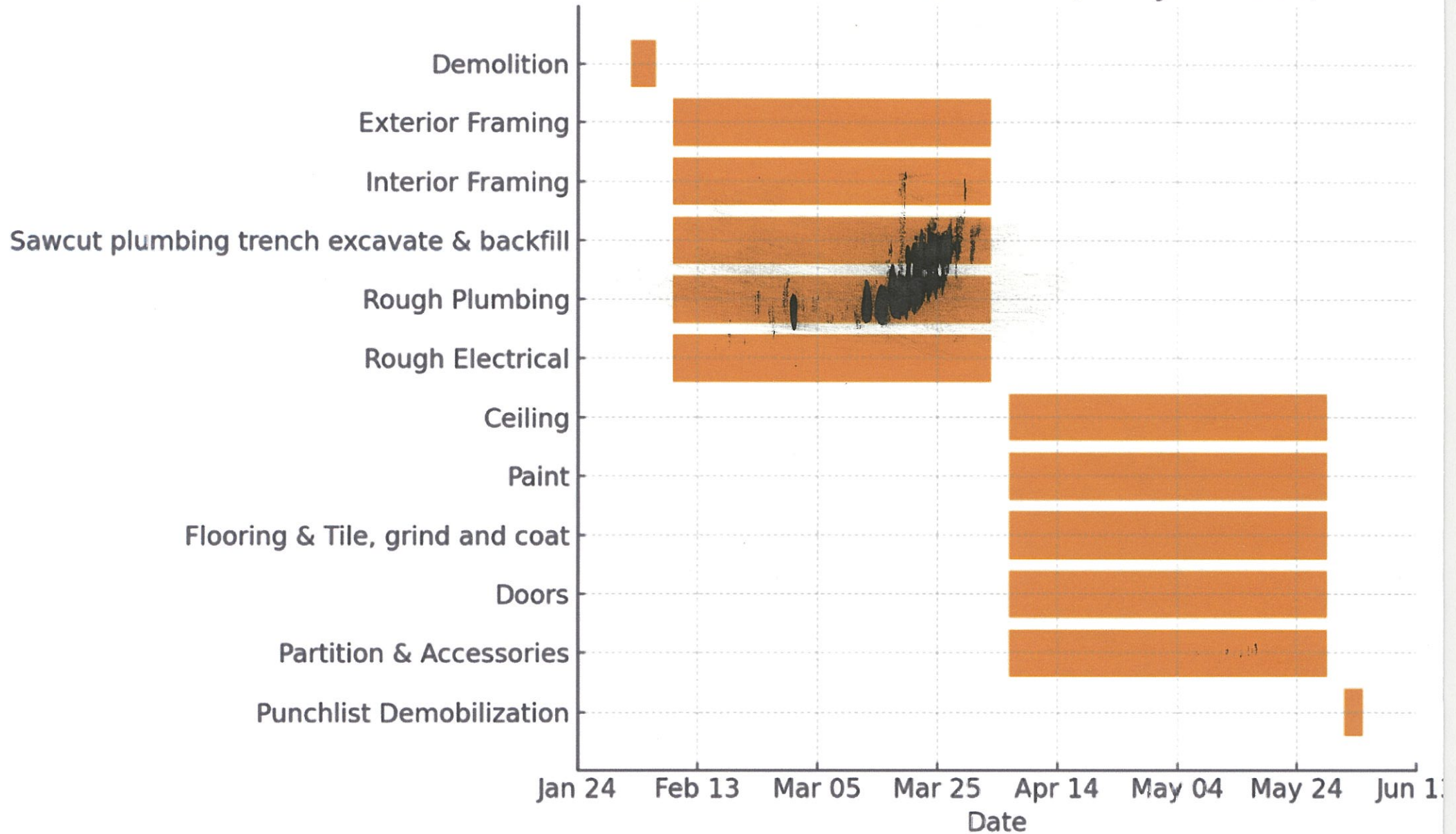
Bidder has inspected the site of the Work prior to submitting this Bid.

By signing below, the undersigned certifies that he/she has the legal authority to bind the Bidder and that all representations, certifications, and statements made by Bidder, as set forth in this Bid, are true and correct and are made under penalty of perjury.

Signature: Bruce S. King
Clearly printed name: Bruce S. King
Position: Pres.
Date/Location: 10-22, 2025, at Costa Mesa
Seal (if any): _____
Co-Signature: _____
Clearly printed name: _____
Position: _____
Date/Location: _____, 20____, at _____

NOTICE: Pursuant to the requirements of California Business and Professions Code, Section 7028.15(e), a bid submitted to the SOCWA by a contractor who is not licensed pursuant to Chapter 9, of Division 3, of the Business and Professions Code, shall be considered nonresponsive and shall be rejected as provided for by law.

Construction Schedule (Feb-Jun 2026)



SCHEDULE OF WORK ITEMS (Revised by Addendum No.3)

BID ITEMS: For the work associated with the Coastal Treatment Plant (CTP)
Personnel Building Phase 2 Reconstruction Project

BID ITEM 1: Mobilization and demobilization, for the sum of

(\$ 33,469.-)

BID ITEM 2: Demolition and disposal, per the plan, for the sum of

(\$ 52,022.-)

BID ITEM 3: Replacement of plumbing fixtures, for the sum of

(\$ 50,000.-)

BID ITEM 4: Replacement of floor, wall tiling, and baseboard for the sum of

(\$ 99,912.-)

BID ITEM 5: Replacement of vinyl flooring and moulding for the sum of

(\$ 10,600.-)

BID ITEM 6: Rehabilitation of concrete flooring in Workshop and Utility Room
for the sum of

(\$ 7,422.-)

BID ITEM 7: Backfill and repair of concrete floor slabs for the sum of

(\$ 75,473.-)

BID ITEM 8: Demolition and reconstruction of walls in Restrooms and Shower
Rooms for the sum of

(\$ 53,172.-)

BID ITEM 9: Replacement of interior doors, for the sum of

(\$ 11,960.-)

BID ITEM 10: Refurbishment of bench and lockers and replacement of partitions, for the sum of

(\$ 91,017.-)

BID ITEM 11: Reconstruction of suspended ceiling, for the sum of

(\$ 12,278.-)

BID ITEM 12: Replacement of lighting and power supply systems, for the sum of

(\$ 78,463.-)

BID ITEM 13: Modification of the sewer and vent system, for the sum of

(\$ 62,500.-)

BID ITEM 14: Modification of the cold and hot water systems, for the sum of

(\$ 63,750.-)

BID ITEM 15: All other items necessary to complete the work, that are not described in Bid Items 1 through 14, for the sum of

(\$ 23,409.-)

BID ITEM 16: Repair of structural deficiencies as identified by the Owner for the Not to Exceed Price of

(\$ 5,000.00)

BID ITEM 17: Modifications of ventilation system as identified by the Owner for the Not to Exceed Price of

(\$ 15,000.00)

SUBTOTAL (the sum of Items 1 through 17):

(\$ 751,447.5)

ADD/DEDUCT (List Bid Items Affected and Amount*):

Item No.	Add (+) Amount	Deduct (-) Amount
<u> </u>	\$ <u>N/A</u>	\$ <u> </u>
<u> </u>	\$ <u> </u>	\$ <u> </u>
<u> </u>	\$ <u> </u>	\$ <u> </u>
<u> </u>	\$ <u> </u>	\$ <u> </u>
<u> </u>	\$ <u> </u>	\$ <u> </u>

SUBTOTAL ADD (+)/DEDUCT(-) ITEMS:

(\$ 0)

*Provision is made here for the bidder to include an addition or deduction in their Bid, if bidder wishes, to reflect any last-minute adjustments in price. The addition or deduction, if made, will be applied to the listed bid item.

TOTAL CONTRACT PRICE (Sum of Subtotal Sum Price and Subtotal Add/Deduct Items):

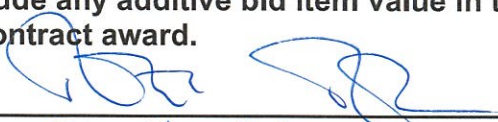
(\$ 751,447.5)

Total amount of bid (written in words):

Seven hundred fifty-one thousand, four hundred
Dollars forty-seven dollars

Award of contract is based on the Total Contract Price noted above and is not impacted by the proposed cost of any additive bid item. SOCWA retains the right to include any additive bid item value in the overall project at the time of contract award.

Signature of Bidder:


Timothy Roberts

Date: 10-23-25

LIST OF SUBCONTRACTORS

The name, California Contractor's license number, registration number issued pursuant to Labor Code Section 1725.5, and location of place of business of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the work or improvements in an amount in excess of one-half of one percent (.5%) of the Bidder's Total Contract Price, and the portion of the Work which will be done by each subcontractor is set forth as follows (attach additional sheets as necessary). Circumvention by the Bidder of the requirement to list subcontractors by the device of listing one subcontractor who will in turn sublet portions constituting the majority of the Work covered by this Contract shall be considered a violation of Chapter

4 of the California Public Contract Code and shall subject the Bidder to the penalties set forth in Sections 4110 and 4111 of said Code. Bidder shall conduct substitutions of subcontractors in compliance with Public Contract Code Sections 4106 et seq. detailing the process and conditions under which a public agency may consent to a subcontractor substitution. Except as hereinabove provided, bidder acknowledges and agrees that bidder will perform all required Work in accordance with Section 4106 of the Public Contract Code.

<u>Contractor's Name</u>	<u>Contractor's License & Registration Number</u>	<u>Place of Business</u>	<u>Type of Work</u>
Standard Demolition	1020712 1000041290	1905 Lirio Ave. Ventura, CA 93004	Demolition
Farwest Insulation Contracting	845682 1000004102	1220 S. Sherman St. Anaheim, CA 92805	Painting
Anderson Air Conditioning L.P.	107533 1000765095	2100 E. Walnut Ave. Fullerton, CA 92831	HVAC
Tikal Acoustic, Inc.	903499 1000735927	19145 Parthenia St. #E Northridge, CA 91324	Suspended Ceiling
Moore Flooring, Inc.	472436 1000001027	15116 Sierra Bonita Ln. Chino, CA 91710	Tile/Flooring

LIST OF EQUIPMENT MANUFACTURERS (Not Used)

COMPANY DATA

Legal name of Bidder: T.E. Roberts, Inc.

Primary Contact: Timothy Roberts

Business address: 17771 Mitchell North
Irvine, CA 92614

LIST OF SUBCONTRACTORS

The name, California Contractor's license number, registration number issued pursuant to Labor Code Section 1725.5, and location of place of business of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the work or improvements in an amount in excess of one-half of one percent (.5%) of the Bidder's Total Contract Price, and the portion of the Work which will be done by each subcontractor is set forth as follows (attach additional sheets as necessary). Circumvention by the Bidder of the requirement to list subcontractors by the device of listing one subcontractor who will in turn sublet portions constituting the majority of the Work covered by this Contract shall be considered a violation of Chapter

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<u>Contractor's Name</u>	<u>Contractor's License & Registration Number</u>	<u>Place of Business</u>	<u>Type of Work</u>
Jbm Electrical	863933 1000428231	2834 Hammer Ave #272 Morco, CA 92860	Electrical
Endo Plumbing	953488 1001107670	8848 Main St. Riverside CA 92509	Plumbing

LIST OF EQUIPMENT MANUFACTURERS (Not Used)

COMPANY DATA

Legal name of Bidder: T.E. Roberts, Inc.

Primary Contact: Timothy Roberts

Business address: 17771 Mitchell North

Irvine, CA 92614

Telephone:

714-669-0072

Facsimile:

714-200-0241

Email:

troberts@teroberts.com

California Contractor's License:

Primary

A

Class:

License

603008

No.:

Expiration

October 31, 2026

Date:

Supplemental Classification held, if any: C34

The full names of all persons and parties interested in the foregoing Bid Form as principals are as follows (NOTICE: Give first and last names in full; in case of corporation, give names of President, Secretary, Treasurer, and Manager, and in case of partnerships and joint ventures, give names of all the individual members, attached additional sheets as necessary):

President/manager - Timothy Roberts

Secretary - Justin Roberts

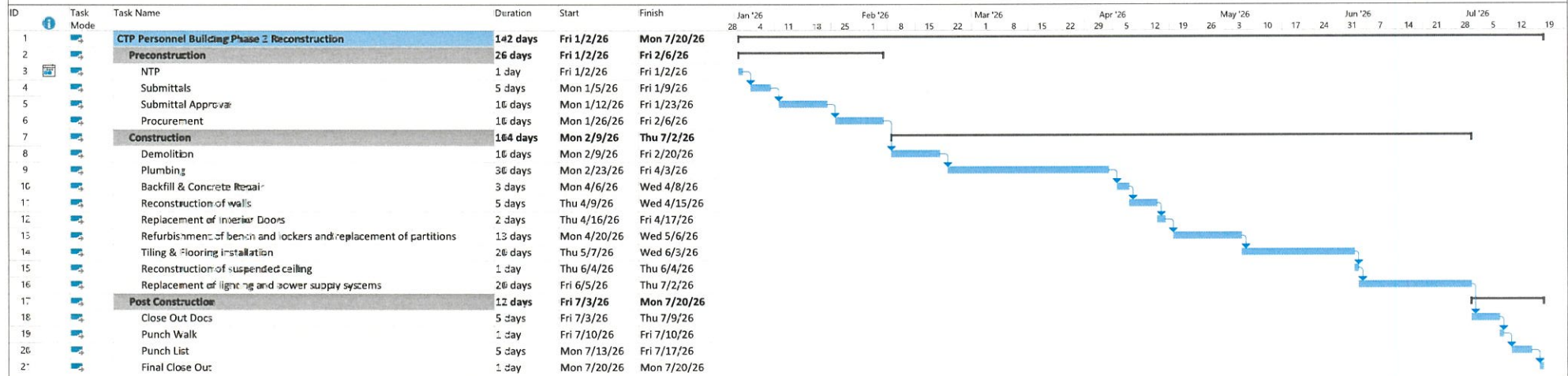
Treasurer - Kimberlee Roberts

PROPOSED CONSTRUCTION PROJECT SCHEDULE

Bidder has attached hereto a proposed construction progress schedule showing the sequence of activities for completion of the Work, in bar chart format. The proposed construction progress schedule includes major construction activities, major equipment procurement and delivery activities, working time limits imposed by permits, and substantial and final completion milestones, and identifies critical path tasks. The schedule is displayed in elapsed numerical days rather than calendar dates and equals the Contract Time.



GSWC - CTP Personnel Building Phase 2 Reconstruction
TER Preliminary Schedule



Agenda Item

12

Engineering Committee Meeting

Meeting Date: November 13, 2025

TO: Engineering Committee

STAFF CONTACT: Bob Culver, Environmental Service Manager

SUBJECT: SOCWA Laboratory Upgrades Feasibility Study Update

Background

The SOCWA Laboratory (Laboratory) provides NPDES and drinking water compliance monitoring services for member and non-member agencies in South Orange County. A feasibility study to assess the Laboratory “as-is services” (Option 1) and providing a separate space for the Drinking Water Laboratory (Option 2) were presented to the Engineering Committee on September 11, 2025. Subsequent discussion have requested additional information for more information on additional options which are presented for reference and discussion.

Summary

On April 24, 2024, SOCWA staff met with member agency staff to discuss the Laboratory feasibility proposals. The proposals all included the requested options to be assessed:

- Laboratory “as-is services” (Option 1)
- Providing a separate space for the Drinking Water Laboratory (Option 2)
- Regional Laboratory Consolidation (Option 3)
- Incorporating an Indirect/Direct Potable Reuse and Desal Lab (Option 4)

At the time, the agencies decided to focus on Options 1 and 2 modernization scenarios with the Austin Company and not include options 3 and 4 in the feasibility study. The Austin Company’s report concluded the following:

- Option 1 involved interior upgrades to the 1,806 square foot facility without expansion, including demolition, new flooring, ceilings, cabinetry, fume hoods, ventilation, equipment relocation, and an exterior shed for chemical waste, at an estimated cost of \$2,561,000 (\$1,418 per square foot) and a 186-day timeline.
- Option 2 would add a 1,235 square foot expansion for a separate drinking water and microbiology lab plus storage, alongside similar renovations to the existing space (totaling 3,041 square feet), incorporating sitework, structural elements, an additional fume hood, enhanced utilities, and a rooftop heat pump, at a cost of \$5,212,000 (\$1,714 per square foot) and a 242-day schedule.

The Lab Feasibility Study does not have remaining budget to complete options 3 & 4.

Recommended Action: Engineering Committee Discussion/Direction/Action