



BOARD OF DIRECTORS REGULAR MEETING

DATE :
OCTOBER 1, 2025

TIME:
8:00 A.M.



1021 E. Miramar Avenue | Claremont, CA 91711



www.threevalleys.com



909.621.5568

The mission of Three Valleys Municipal Water District is to supplement and enhance local water supplies
to meet our region's needs in a reliable and cost-effective manner.



THREE VALLEYS MUNICIPAL WATER DISTRICT REGULAR BOARD MEETING AGENDA

1021 E. Miramar Avenue, Claremont, CA 91711

October 1, 2025 – 8:00 AM

The mission of Three Valleys Municipal Water District is to supplement and enhance local water supplies to meet our region's needs in a reliable and cost-effective manner.

NOTICE OF VIDEOCONFERENCE/TELECONFERENCE ACCESSIBILITY

Three Valleys MWD will hold this meeting of its Board of Directors on the date and time, and at the location set forth above. The public may participate in the meeting by physical attendance at the meeting or by videoconference or teleconference utilizing the following links:

Link to join webinar: <https://tvmwd.zoom.us/j/89379819714>

OR

Dial in: (669) 900-9128, Webinar ID: 893 7981 9714

Any member of the public wishing to participate in public comment may do so in any of the following manners: (1) by using the "Raise Hand" feature on the Zoom platform and when prompted by the Board President during the public comment period, (2) by filling out the electronic speaker's card at the following link <https://arcg.is/0z5GqO> prior to the close of public comment, (3) by sending an email to PublicComment@tvmwd.com prior to the close of public comment, or (4) those attending the meeting in person may complete a speaker's card and provide it to the Executive Board Secretary prior to the close of public comment.

1. CALL TO ORDER

TI

2. ROLL CALL

AGUIRRE

Mike Ti, President

Carlos Goytia, Vice President

Jeff Hanlon, Secretary/Treasurer

David De Jesus, Director

Bob Kuhn, Director

Jorge Marquez, Director

Jody Roberto, Director

3. FLAG SALUTE

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4. DIRECTOR REMOTE PARTICIPATION PURSUANT TO AB 2449 [Government Code Section 54953(f)]

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4.A NOTIFICATION DUE TO JUST CAUSE

4.B REQUEST DUE TO EMERGENCY CIRCUMSTANCES

BOARD ACTION REQUIRED ITEM 4.B

Staff Recommendation: None

5. AGENDA REORDER/ADDITIONS [Government Code Section 54954.2(b)(2)]

TI

Additions to the agenda may be considered when two-thirds of the board members present determine a need for immediate action, and the need to act came to the attention of TVMWD after the agenda was posted; this exception requires a degree of urgency. If fewer than two-thirds of the board members are present, all must affirm the action to add an item to the agenda. The Board shall call for public comment prior to voting to add any item to the agenda after posting.

6. PUBLIC COMMENT (Government Code Section 54954.3)

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Opportunity for members of the public to directly address the Board on items of public interest within its jurisdiction. The public may also address the Board on items being considered on this agenda. TVMWD requests that all public speakers complete a speaker's card and provide it to the Executive Board Secretary.

We request that remarks be limited to three minutes or less. Pursuant to Government Code Section 54954.3, if speaker is utilizing a translator, the total allotted time will be doubled.

7. ACTION AGENDA

LITCHFIELD

The following items on the Action Agenda call for discussion and action by the Board. All items are placed on the agenda so that the Board may discuss and take action on the item if the Board is so inclined.

7.A AWARD MIRAMAR ADMINISTRATION AND OPERATIONS BUILDINGS ROOFING UPGRADES PROJECT

LEE

BOARD ACTION REQUIRED ITEM 7.A

Staff Recommendation: Approve as Presented

8. REPORTS

LITCHFIELD

The Executive Leadership Team will provide brief updates on existing matters under their purview and will be available to respond to any questions thereof.

8.A PROFESSIONAL SERVICES AGREEMENT FOR ON-CALL PIPELINE
CONDITION AND INSPECTION SERVICES

LEE

8.B PROFESSIONAL SERVICES AGREEMENT AWARD FOR PROGRAMMABLE
LOGIC CONTROLLERS AND RADIO UPGRADES

LANG

9. DIRECTORS'/GENERAL MANAGER'S ORAL REPORTS

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Directors may report on activities for meetings to which they are assigned to serve as the representative or alternate of TVMWD and on other areas of interest.

9.A METROPOLITAN WATER DISTRICT

DE JESUS

9.B CHINO BASIN WATERMASTER

KUHN

9.C SAN GABRIEL BASIN WATER QUALITY AUTHORITY

KUHN

9.D MAIN SAN GABRIEL BASIN WATERMASTER

HANLON

9.E SIX BASINS WATERMASTER

HANLON

9.F ADDITIONAL BOARD MEMBER REPORTS

ALL

9.G GENERAL MANAGER'S COMMENTS

LITCHFIELD

10. CLOSED SESSION

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10.A CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
[Government Code Section 54956.9(d)(1)]

Name of Case: Chino Basin Municipal Water District v. City of Chino, et al.,
San Bernardino County Superior Court Case No. RCV RS 51010

10.B CONFERENCE WITH REAL PROPERTY NEGOTIATORS (Government Code Section 54956.8)

Property: DD64045-01-01, North of Rte. 210 Fwy., East of Padua Ave., Claremont, California

District Negotiator: Matthew Litchfield, General Manager

Negotiating Parties: State of California Department of Transportation

Under Negotiation: Purchase and Sale Agreement

10.C CONFERENCE WITH REAL PROPERTY NEGOTIATORS (Government Code Section 54956.8)

Property: 1021 E. Miramar Avenue, Well No. 3, Claremont, California

District Negotiator: Matthew Litchfield, General Manager

Negotiating Parties: Golden State Water Company

Under Negotiation: Price and Terms of Acquisition

10.D CONFERENCE WITH REAL PROPERTY NEGOTIATORS (Government Code Section 54956.8)

Property: 2105 Oxford Avenue, Claremont, California

District Negotiator: Matthew H. Litchfield, General Manager

Negotiating Parties: Property Owner

Under Negotiation: Price and terms of payment

11. FUTURE AGENDA ITEMS

TI

12. ADJOURNMENT AND NEXT MEETING

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The Board will adjourn to a regular Board of Directors meeting on October 15, 2025 at 8:00 AM.


In compliance with the Americans with Disabilities Act Government Code Section 54954.2(a), if special assistance is needed to participate in this public meeting, please contact the Executive Board Secretary at (909) 621-5568 at least 24 hours prior to the meeting.

Pursuant to Government Code Section 54957.5, materials related to an item on this agenda submitted after distribution of the agenda packet will be posted on the TVMWD website at.

Three Valleys MWD Board meeting packets and agendas are available for review at www.threevalleys.com

**BOARD ACTION****BOARD OF DIRECTORS
STAFF REPORT**

To: TVMWD Board of Directors

From: Matthew H. Litchfield, General Manager 

Date: October 1, 2025

Subject: Miramar Administration and Operations Buildings Roofing Upgrades Project

☒ **Funds Budgeted: \$ 1.7 Million**

☐ **Fiscal Impact: \$**

Staff Recommendation

Staff recommends that the Board of Directors:

1. Award the Miramar Administration and Operations Buildings Roofing Upgrades Project Construction Contract to Southland Roofing, and
2. Authorize General Manager to enter into agreement with Southland Roofing for construction services in the amount not to exceed \$484,422.

Background

Staff requests Board authorization for the General Manager to enter into an agreement for construction services for the Miramar Roofing Upgrades Project. The Project scope of work includes removal of the existing clay tile roof, installation of seismic structural upgrades, and placement of new metal roofing for the administrative and operations buildings.

Discussion

The roofing systems on the Miramar Treatment Plant buildings were installed in the late 1980s. Over time, the clay tile roofing has deteriorated due to foot traffic associated with maintenance, severe weather, and prolonged sun exposure. Visual inspections have confirmed that many tiles are damaged, resulting in significant water leaks within the buildings.

The proposed upgrades will replace the existing tile with a modern metal roofing system, which will reduce the overall roof weight and decrease seismic forces. In addition, the new metal roofing system offers increased protection against wildfire exposure. The system is designed to match the color of the existing tile, minimizing visual changes to the buildings.

The project was advertised through the District's PlanetBids portal, resulting in ten (10) responsive bids. A summary of the bids received is included below.

1	Southland Roofing	\$484,422
2	Titans Group Corp	\$652,366
3	Rainy Day Roofing	\$652,825
4	AMBIT Construction	\$733,489
5	Golden Gate	\$737,880
6	Ankor Associates	\$750,484
7	Best Contracting	\$764,345
8	AME Builders	\$773,934
9	Kal Best	\$818,888
10	Premier Roofing of California	\$860,743

Staff has reviewed the documentation and experience of the apparent responsive low bidder and determined that all requirements have been met. Accordingly, staff recommends awarding the Miramar Roofing Upgrades Project construction services contract to Southland Roofing in the amount of \$484,422.00.

Environmental Impact

None

Strategic Plan Objective(s)

1.3 – Infrastructure Reliability

1.4 – Operational Efficiency

3.4 – Operational Integrity

Attachment(s)

Exhibit A – Miramar Administration and Operations Building Roofing Upgrades Project Contract

Meeting History

Board of Directors Meeting, September 15, 2025, Informational Item Only

NA/KP

SECTION D - CONTRACT AND RELEVANT DOCUMENTS**1.0 CONTRACT**

THIS CONTRACT, made and entered into this ____ day of _____, 20__, by and between Southland Roofing Inc, hereinafter referred to as "CONTRACTOR," and Three Valleys Municipal Water District located in Los Angeles, California, hereinafter referred to as "TVMWD".

WITNESSETH:

That for and in consideration of the promises and agreements hereinafter made and exchanged, TVMWD and the CONTRACTOR agree as follows:

- A.** CONTRACTOR agrees to perform and complete in a workmanlike manner, all Work required under these Bid Documents FOR MIRAMAR ADMINISTRATION AND OPERATION BUILDINGS ROOFING UPGRADES, in accordance with the Bid Documents, and to furnish at their own expense, all labor, materials, equipment, tools, and services necessary, except such materials, equipment, and services as may be stipulated in said Bid Documents to be furnished by TVMWD, and to do everything required by this Contract and the said Bid Documents.
- B.** For furnishing all said labor, materials, equipment, tools, and services, furnishing and removing all plant, temporary structures, tools and equipment, and doing everything required by this Contract and said Bid Documents; also for all loss and damage arising out of the nature of the Work aforesaid, or from the action of the elements, or from any unforeseen difficulties which may arise during the prosecution of the Work until its acceptance by TVMWD, and for all risks of every description connected with the Work; also for all expenses resulting from the suspension or discontinuance of Work, except as in the said Bid Documents are expressly stipulated to be borne by TVMWD; and for completing the Work in accordance with the requirements of said Bid Documents, TVMWD will pay and said CONTRACTOR shall receive, in full compensation therefore, the price(s) set forth in this Contract.
- C.** That TVMWD will pay the CONTRACTOR progress payments and the final payment, in accordance with the provisions of the Contract Documents, with warrants drawn on the appropriate fund or funds as required, at the prices bid in the Bidding and Contract Requirements, Section C – BID FORMS and accepted by TVMWD, and set forth in this below.

Total Bid Price \$Four Hundred Eighty Four Thousand Four Hundred Twenty Two (\$484,422) Dollars.

and zero Cents.

If this is not a lump sum bid and the Contract Price is dependent upon the quantities constructed, TVMWD will pay and said CONTRACTOR shall receive, in full compensation for the Work the prices named in the Bidding and Contract Requirements, Section C – BID FORMS.

- D. TVMWD hereby employs the CONTRACTOR to perform the Work according to the terms of this Contract for the above-mentioned price(s), and agrees to pay the same at the time, in the manner, and upon the conditions stipulated in the said Bid Documents; and the said parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to the full performance of the covenants herein contained.
- E. The Notice Inviting Bids, Instructions to Bidders, Bid Forms, Information Required of Bidder, Performance Bond, Payment Bond, Contractor's License Declaration, Specifications, Drawings, all General Conditions, Special Conditions and all Project Requirements, and all Addenda issued by TVMWD with respect to the foregoing prior to the opening of bids, are hereby incorporated in and made part of this Contract, as if fully set forth.
- F. The CONTRACTOR agrees to commence Work under this Contract on or before the date to be specified in a written "Notice To Proceed" and to complete said Work to the satisfaction of TVMWD **One hundred Eighty (180) calendar days** after Award of the Contract. All Work shall be completed before final payment is made.
- G. Time is of the essence on this Contract.
- H. CONTRACTOR agrees that in case the Work is not completed before or upon the expiration of the Contract Time, damage will be sustained by TVMWD, and that it is and will be impracticable to determine the actual damage which TVMWD will sustain in the event and by reason of such delay, and it is therefore agreed that the CONTRACTOR shall pay to TVMWD the amounts as set forth in General Conditions, Section C – CHANGES TO THE CONTRACT for each day of delay, which shall be the period between the expiration of the Contract Time and the date of final acceptance by TVMWD, as liquidated damages and not as a penalty. It is further agreed that the amount stipulated for liquidated damages per day of delay is a reasonable estimate of the damages that would be sustained by TVMWD, and the CONTRACTOR agrees to pay such liquidated damages as herein provided. In case the liquidated damages are not paid, the CONTRACTOR agrees that TVMWD may deduct the amount thereof from any money due or that may become due to the CONTRACTOR by progress payments or otherwise under the Contract, or if said amount is not sufficient, recover the total amount.
- I. In addition to the liquidated damages, which may be imposed if the CONTRACTOR fails to complete the Work within the time agreed upon, TVMWD may also deduct from any sums due or to become due to the CONTRACTOR, penalties and fines for violations of applicable local, state, and federal law.

- J.** That the CONTRACTOR shall carry Workers' Compensation Insurance and require all subcontractors to carry Workers' Compensation Insurance as required by the California Labor Code.
- K.** That the CONTRACTOR shall have furnished, prior to execution of the Contract, two bonds approved by TVMWD, one in the amount of one hundred (100) percent of the Contract Price, to guarantee the faithful performance of the Work, and one in the amount of one hundred (100) percent of the Contract Price to guarantee payment of all claims for labor and materials furnished.
- L.** The CONTRACTOR hereby agrees to protect, defend, indemnify and hold TVMWD and its employees, Engineer, agents, officers, directors, servants and volunteers free and harmless from any and all liability, claims, judgments, costs and demands, including demands arising from injuries or death of persons (including employees of TVMWD and the CONTRACTOR) and damage to property, arising directly or indirectly out of the obligation herein undertaken or out of the operations conducted by the CONTRACTOR, its employees agents, representatives or subcontractors under or in connection with this Contract to the fullest extent permitted by law.

The CONTRACTOR further agrees to investigate, handle, respond to, provide defense for and defend any such claims, demands or suit at the sole expense of the CONTRACTOR.


IN WITNESS WHEREOF, The CONTRACTOR and the General Manager of Three Valleys Municipal Water District*, thereunto duly authorized, have caused the names of said parties to be affixed hereto, each in duplicate, the day and year first above written.

- M.** The CONTRACTOR, by signing the contract does swear under penalty of perjury that no more than one final unappeasable finding of contempt of court by a Federal court has been issued against the CONTRACTOR within the immediately preceding two year period because of the CONTRACTOR's failure to comply with an order of a Federal court which orders the CONTRACTOR to comply with an order of the National Labor Relations Board (Public Contract Code 10296).

Three Valleys Municipal Water District,
Los Angeles County, California.

CONTRACTOR


By _____
General Manager

By Pier Pjerin Prenga 
President

Title

**BOARD INFORMATION****BOARD OF DIRECTORS
STAFF REPORT**

To: TVMWD Board of Directors

From: Matthew H. Litchfield, General Manager 

Date: October 1, 2025

Subject: Professional Services Agreement for On-Call Pipeline Condition and Inspection Services

☐ **Funds Budgeted:** ☐ **Fiscal Impact: \$**

Staff Recommendation

No Action Necessary – Informational Item Only

Background

Staff requests Board authorization to award a professional services agreement for on-call services for pipeline condition assessments and inspections services. The agreements will streamline inspections and develop recommendations for the priority of repairs and replacements of existing infrastructure.

Discussion

A portion of the District's existing infrastructure is approaching seventy-five (75) years of service, which is nearing the end of the expected service life for pipelines. Regular inspection services are necessary to verify current conditions and to estimate the remaining useful life of this infrastructure. The proposed agreements will allow staff to engage pre-qualified consultants and employ the most appropriate technology for each unique pipeline situation on an as-needed basis.

A Request for Proposal (RFP) was advertised through industry-standard platforms, with submittals received via the District's PlanetBids portal. A total of four (4) proposals were submitted, covering a range of disciplines sufficient to meet all District needs.

Staff have reviewed the qualifications and experience of each proposer and determined that all four firms met the requirements outlined in the RFP. The proposed on-call agreements will

be for an initial term of three (3) years, with the option to renew annually for up to two (2) additional years, for a total potential term of five (5) years. The establishment of the On-Call Professional Technical Services Agreements (Agreements) itself does not establish a project budget or consume fiscal year budget. When project needs arise, the project with its approved budget will be the funding source for the task order. Staff recommends establishing a maximum threshold of \$250,000 per task order to be approved by the General Manager for the duration of the Agreements. If task orders exceed the threshold, the task order will be presented to the Board of Directors for their consideration before awarding such task order.

This item will be presented for the Board of Directors' consideration on October 15, 2025.

Environmental Impact

None

Strategic Plan Objective(s)

1.3 – Infrastructure Reliability

1.4 – Operational Efficiency

2.5 – Operational Strategies

3.3 – Emerging Technology

Attachment(s)

Exhibit A – Draft Professional Services Agreement with Pure Water Technologies for On-Call Condition Assessment and Inspection Services

Exhibit B – Professional Services Agreement with PICA for On-Call Condition Assessment and Inspection Services

Exhibit C – Professional Services Agreement with Insight Technologies for On-Call Condition Assessment and Inspection Services

Exhibit D – Draft Professional Services Agreement with Hazen and Sawyer for On-Call Condition Assessment and Inspection Services

Meeting History

None

NA/KP



**MASTER ON-CALL PROFESSIONAL SERVICES AGREEMENT
BETWEEN
THREE VALLEYS MUNICIPAL WATER DISTRICT
AND
PURE TECHNOLOGIES US INC.**

This Professional Services Agreement ("AGREEMENT") is made and entered into this 7th day of August, 2025 ("EFFECTIVE DATE"), by and between Three Valleys Municipal Water District, a municipal water district organized and operating pursuant to California Water Code Section 71000 et seq. (hereinafter referred to as "DISTRICT"), and **PURE TECHNOLOGIES US INC.**, (hereinafter referred to as "CONSULTANT"). DISTRICT and CONSULTANT are sometimes individually referred to as "PARTY" and collectively as "PARTIES" in this AGREEMENT.

RECITALS

WHEREAS, DISTRICT desires to contract with CONSULTANT as an independent CONSULTANT to provide professional services for the Master On-Call Professional Services on an "as-needed" TASK ORDER assignment basis; and

WHEREAS, CONSULTANT represents that it is duly licensed, qualified and capable to perform such services by virtue of its experience and the training, education and expertise of its principals and employees, and that CONSULTANT is customarily engaged in an independently established trade, profession, occupation, and/or business of the same nature as the work to be performed for herein; and

WHEREAS, DISTRICT desires to retain CONSULTANT and CONSULTANT desires to serve the DISTRICT to perform the services described herein in accordance with the terms and conditions of this AGREEMENT.

COVENANTS

NOW, therefore, in consideration of the faithful performance of the terms and conditions set forth herein, the PARTIES hereto agree as follows:

ARTICLE I

SERVICES OF CONSULTANT

1. **SCOPE OF SERVICES:** The scope of services to be performed by the CONSULTANT under this AGREEMENT are described in Exhibit "A" attached hereto and incorporated herein by this reference ("PROPOSAL"), and shall, where not specifically addressed, include all related services ordinarily provided by the CONSULTANT under same or similar circumstances. The DISTRICT may request, in writing, changes in the PROPOSAL or services to be performed. Any changes mutually agreed upon by the PARTIES, and any increase or decrease in compensation or time, shall be incorporated by written amendments to this AGREEMENT. Individual "TASK ORDERS" will be issued based on the services and rates provided in the PROPOSAL.
2. **PREVAILING WAGES:** CONSULTANT shall comply with all applicable provisions of labor law relating to employment for the performance of services on the TASK ORDER. In accordance with



the provisions of the California Labor Code, CONSULTANT shall secure the payment of compensation to employees. To the extent required by the California Labor Code, CONSULTANT shall pay not less than the prevailing rate of per diem wages as determined by the Director, Department of Industrial Relations, State of California ("DIR"). Copies of such prevailing rate of per diem wages are on file at the DISTRICT's office, which copies will be made available to any interested party upon request. CONSULTANT shall post a copy of such determination at each job site. If applicable, CONSULTANT shall forfeit to the DISTRICT the amount of the penalty set forth in California Labor Code Section 1777.7(b), or any subsequent amendments thereto, for each calendar day, or portion thereof, for each worker paid less than the specified prevailing rates for such work or craft in which such worker is employed, whether paid by CONSULTANT or by any SUBCONTRACTOR. CONSULTANT shall submit certified payroll records to the Labor Commissioner using DIR's electronic certified reporting system and provide with their invoice certified payroll records verifying that CONSULTANT has paid prevailing wage in accordance with the DIR requirements as stipulated in California Senate Bills 854 and 96, <https://www.dir.ca.gov/public-works/certified-payroll-reporting.html>

ARTICLE II

ENGAGEMENT OF CONSULTANT AND AUTHORIZATION TO PROCEED

1. **ENGAGEMENT:** The DISTRICT hereby engages CONSULTANT, and CONSULTANT hereby accepts the engagement, to perform the services described in Section I.1 of this AGREEMENT.
2. **AUTHORIZATION TO PROCEED:** Authorization for CONSULTANT to proceed with the work described in Section I.1 of this AGREEMENT will be granted in writing by the DISTRICT as soon as both PARTIES sign this AGREEMENT and all applicable insurance and security documents required pursuant to Section VI.5 of this AGREEMENT are received and approved by the DISTRICT. CONSULTANT shall not proceed with said work until so authorized by the DISTRICT and shall commence work immediately upon receipt of the executed TASK ORDER.
3. **INDEPENDENT CONSULTANT:** The TASK ORDER services to be performed by CONSULTANT under this AGREEMENT are outside the usual course of the DISTRICT's business. CONSULTANT is, and shall at all times remain as to DISTRICT, a wholly independent CONSULTANT. The personnel performing the services under this AGREEMENT on behalf of CONSULTANT shall at all times be under CONSULTANT's exclusive direction and control. CONSULTANT shall have no power to incur any debt, obligation, or liability on behalf of the DISTRICT. Neither DISTRICT nor any of its agents shall have control over the conduct of CONSULTANT or any of CONSULTANT's employees, except as set forth in this AGREEMENT. CONSULTANT shall not, at any time, or in any manner, represent that it or any of its officers, agents or employees are in any manner employees of the DISTRICT. No employee benefits shall be available to CONSULTANT in connection with the performance of this AGREEMENT. Except for the fees paid to CONSULTANT as provided in this AGREEMENT, the DISTRICT shall not pay salaries, wages, or other compensation to CONSULTANT for performing services hereunder for the DISTRICT. The DISTRICT shall not be liable for compensation or indemnification to CONSULTANT for injury or sickness arising out of performing services hereunder.



ARTICLE III

RESPONSIBILITIES OF DISTRICT AND OF CONSULTANT

1. **DUTIES OF THE DISTRICT:** The DISTRICT, without cost to CONSULTANT, will provide all pertinent information necessary for CONSULTANT's performance of its obligations under this AGREEMENT that is reasonably available to the DISTRICT unless otherwise specified in the TASK ORDER in which case the CONSULTANT is to acquire such information. The DISTRICT does not guarantee or ensure the accuracy of any reports, information, and/or data so provided however, in performing its services hereunder, CONSULTANT shall be entitled to act in reasonable reliance upon all such reports, information, and /or data so provided by the DISTRICT. To the extent that any reports, information, and/or other data so provided was supplied to CONSULTANT by persons who are not employees of DISTRICT, any liability resulting from inaccuracies and/or omissions contained in said information shall be limited to liability on behalf of the entity who prepared the information for CONSULTANT.
2. **REPRESENTATIVE OF DISTRICT:** The DISTRICT will designate **Kevin Panzer** as the person to act as the DISTRICT's representative with respect to the PROPOSAL services to be performed under this AGREEMENT. Such person will have complete authority to receive information and interpret and define the DISTRICT's policies pertinent to the TASK ORDER, although such person will not control or direct CONSULTANT's work.
3. **DUTIES OF CONSULTANT:** CONSULTANT shall perform TASK ORDER work in such a manner as to fully comply with all applicable professional standards of care, including professional quality, technical accuracy, timely completion, and other services furnished and/or work undertaken by CONSULTANT pursuant to this AGREEMENT. The CONSULTANT shall cause all work and deliverables to conform to all applicable federal, state, and local laws and regulations.
4. **APPROVAL OF WORK:** The DISTRICT's approval of work or materials furnished hereunder shall not in any way relieve CONSULTANT of responsibility for the technical adequacy of its work. Neither the DISTRICT's review, approval or acceptance of, nor payment for any of the services shall be construed to operate as a waiver of any rights under this AGREEMENT or of any cause of action arising out of the performance of this AGREEMENT.

ARTICLE IV

PAYMENTS TO CONSULTANT

1. **PAYMENT:** The DISTRICT will pay CONSULTANT for work performed under this AGREEMENT, which work can be verified by the DISTRICT, on the basis of the following:

During the term of this AGREEMENT, the DISTRICT will pay CONSULTANT for services performed in accordance with the rates and estimated hours and costs set forth in the PROPOSAL and individual TASK ORDERS. The amount set forth in Section IV.3 of this AGREEMENT is the maximum compensation to which CONSULTANT may be entitled for the performance of services to complete the work for each TASK ORDER, unless the TASK ORDER or time to complete the work is changed by the DISTRICT in writing in advance of



the work to be performed thereunder. Adjustments in the total payment amount shall only be allowed pursuant to Section VI.15 of this AGREEMENT. In no event shall CONSULTANT be entitled to compensation greater than the amount set forth in Section IV.3 of this AGREEMENT where changes in each TASK ORDER or the time for performance are necessitated by the negligence of CONSULTANT or any SUBCONTRACTOR performing work on each TASK ORDER.

2. **PAYMENT TO CONSULTANT:** Payment will be made by the DISTRICT within thirty (30) calendar days after receipt of an invoice from CONSULTANT, provided that all invoices are complete, and product and services are determined to be of sufficient quality by the DISTRICT. Each invoice shall itemize the services rendered during the billing period, hourly rates charged, if applicable, and the amount due. If the DISTRICT disputes any of CONSULTANT'S fees, it shall give written notice to CONSULTANT within thirty (30) days of receipt of an invoice of any disputed fees set forth on the invoice. In such case, the PARTIES shall work to find a reasonable resolution of any such dispute in good faith and in a timely manner.
3. **ESTIMATED CHARGES:** The total estimated charges for all work under this AGREEMENT will be determined by each executed TASK ORDER and such amount is the cost ceiling described herein. The total estimated charges stated herein constitute the total amount agreed to. All rates and charges are subject to the terms set in the PROPOSAL and TASK ORDERS.
4. **COST FOR REWORK:** CONSULTANT shall, at no cost to the DISTRICT, prepare any necessary rework occasioned by CONSULTANT CONSULTANT'S negligent act or omission or otherwise due substantially to CONSULTANT'S fault.

ARTICLE V

COMPLETION SCHEDULE

1. **TERM:** The term of this AGREEMENT shall begin on the EFFECTIVE DATE, and shall continue until August 7th, 2028, unless this AGREEMENT is earlier terminated pursuant to the provisions of Section VI.8 below. Notwithstanding the above, the provisions of Sections I.2, II.3, III.3, and III.4, and Articles IV, V, and VI herein shall survive the expiration and/or termination of this AGREEMENT.
2. **TASK SCHEDULE:** The work is anticipated to be completed in accordance with Exhibit "A" as agreed upon by DISTRICT and CONSULTANT at the time that a TASK ORDER is issued by DISTRICT except as may from time-to-time be adjusted by amendment hereto as provided herein.
3. **TIME OF ESSENCE:** CONSULTANT shall perform all services required by this AGREEMENT in a prompt, timely, and professional manner in accordance with the agreed upon schedule. Time is of the essence in this AGREEMENT.



ARTICLE VI GENERAL PROVISIONS

1. **COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS:** CONSULTANT shall at all times observe all applicable provisions of Federal, State, and Local laws and regulations including, but not limited to, those related to Equal Opportunity Employment.
2. **SUBCONTRACTORS AND OUTSIDE CONSULTANT:** No subcontract shall be awarded by CONSULTANT if not identified as a SUBCONTRACTORS to PROPOSAL unless prior written approval is obtained from the DISTRICT. CONSULTANT shall be responsible for payment to SUBCONTRACTORS used by them to perform the services under this AGREEMENT. If CONSULTANT subcontracts any of the work to be performed, CONSULTANT shall be as fully responsible to the DISTRICT for the performance of the work, including errors and omissions of CONSULTANT's SUBCONTRACTORS and of the persons employed by the SUBCONTRACTORS, as CONSULTANT is for the acts and omissions of persons directly employed by the CONSULTANT. Nothing contained in this AGREEMENT shall create any contractual relationship between any SUBCONTRACTOR of CONSULTANT and the DISTRICT. CONSULTANT shall bind every SUBCONTRACTOR and every SUBCONTRACTOR of a SUBCONTRACTOR to the terms of this AGREEMENT that are applicable to CONSULTANT's work unless specifically noted to the contrary in the subcontract in question and approved in writing by the DISTRICT.
3. **OWNERSHIP OF DOCUMENTS:** Upon completion of, or in the event of termination or suspension of this AGREEMENT, all original documents, designs, drawings, maps, models, computer files containing data generated for the work, surveys, notes, and other documents prepared in the course of providing the services to be performed ("WRITTEN PRODUCTS") pursuant to this AGREEMENT shall become the sole property of the DISTRICT without restriction or limitation upon its use and may be used, reused, disseminated or otherwise disposed of by the DISTRICT without the permission of the CONSULTANT except that any use of the documents produced in service of this AGREEMENT shall be at DISTRICT's sole risk when used for any purpose or project other than the TASK ORDER specified herein. With respect to computer files containing data generated for the work, CONSULTANT shall make available to the DISTRICT, upon reasonable written request by the DISTRICT, the necessary computer software and hardware for purposes of accessing, compiling, transferring and printing computer files. CONSULTANT may take and retain copies of WRITTEN PRODUCTS as desired, but WRITTEN PRODUCTS shall not be the subject of a copyright application by CONSULTANT.
4. **INDEMNIFICATION:**
 - A. **Indemnity for Design Professional Services:** To the fullest extent permitted by law, CONSULTANT shall, at its sole cost and expense, protect, indemnify and hold harmless DISTRICT and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those DISTRICT agents serving as independent contractors in the role of DISTRICT officials (collectively "INDEMNITEES"), from and against any and all third-party damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens and losses of any nature whatsoever, including fees of



accountants, attorneys or other professionals, and all costs associated therewith, and reimbursement of attorney's fees and costs of defense, whether actual, alleged or threatened, ~~which arise out of, are claimed to arise out of, pertain to, or relate to, in whole or in part, to the extent caused by~~ the negligence, recklessness or willful misconduct of CONSULTANT, its officers, agents, servants, employees, SUBCONTRACTOR, material men, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT shall bear the legal liability thereof) in the performance of design professional services under this AGREEMENT. It is the intent of the PARTIES to this AGREEMENT that the defense, indemnity, and hold harmless obligations of CONSULTANT under this AGREEMENT shall be as broad and inclusive as may be allowed under California Civil Code §2778 through §2784.5, or other similar state or federal law.

B. Other Indemnities:

- i. Other than in the performance of design professional services, and to the fullest extent permitted by law, CONSULTANT shall, at its sole cost and expense, defend, hold harmless and indemnify the INDEMNITEES from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens and losses of any nature whatsoever, including fees of accountants, attorneys or other professionals, and all costs associated therewith, ~~and the payment of all consequential damages, in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to to the extent caused by~~ the ~~negligent~~ acts or omissions of CONSULTANT, its officers, agents, servants, employees, SUBCONTRACTORS, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT shall bear the legal liability thereof) in the performance of this AGREEMENT, including the INDEMNITEES' active or passive negligence, except for claims arising from the ~~sole-primary~~ negligence or willful misconduct of the INDEMNITEES, as determined by final arbitration or court decision or by the agreement of the PARTIES. CONSULTANT shall defend the INDEMNITEES in any action or actions filed in connection with any claim with counsel of the INDEMNITEES' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. CONSULTANT shall reimburse the INDEMNITEES for any and all legal expenses and costs incurred by the INDEMNITEES in connection therewith.
- ii. CONSULTANT shall pay all required taxes on amounts paid to CONSULTANT under this AGREEMENT and indemnify and hold DISTRICT harmless from any and all taxes, assessments, penalties, and interest asserted against DISTRICT by reason of the independent contractor relationship created by this AGREEMENT. CONSULTANT shall fully comply with the workers' compensation law regarding CONSULTANT and CONSULTANT's employees. CONSULTANT shall indemnify and hold DISTRICT harmless from any failure of CONSULTANT to comply with applicable workers' compensation laws. DISTRICT may offset against the



amount of any fees due to CONSULTANT under this AGREEMENT any amount due to DISTRICT from CONSULTANT as a result of CONSULTANT's failure to promptly pay to DISTRICT any reimbursement or indemnification arising under this Subparagraph.

- iii. CONSULTANT shall obtain executed indemnity agreements provisions identical to those in this Section VI.4 from each and every SUBCONTRACTOR or any other person or entity involved by, for, with or on behalf of CONSULTANT in the performance of this AGREEMENT. If CONSULTANT fails to obtain such indemnities, CONSULTANT shall be fully responsible and indemnify, hold harmless and defend the INDEMNITEES from and against any and all claims in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of CONSULTANT's SUBCONTRACTORS, its officers, agents, servants, employees, SUBCONTRACTOR, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT's SUBCONTRACTOR shall bear the legal liability thereof) in the performance of this AGREEMENT, including the INDEMNITEES' active or passive negligence, except for claims arising from the sole negligence or willful misconduct of the INDEMNITEES, as determined by final arbitration or court decision or by the agreement of the PARTIES.

A. **Workers' Compensation Acts not Limiting:** CONSULTANT's obligations under this Section VI.4, or any other provision of this AGREEMENT, shall not be limited by the provisions of any workers' compensation act or similar act. CONSULTANT expressly waives its statutory immunity under such statutes or laws as to DISTRICT, its officers, agents, employees and volunteers.

B. **Insurance Requirements not Limiting:** DISTRICT does not, and shall not, waive any rights that it may possess against CONSULTANT because of the acceptance by DISTRICT, or the deposit with DISTRICT, of any insurance policy or certificate required pursuant to this AGREEMENT. This hold harmless and indemnification provisions in this Section VI.4 shall apply regardless of whether or not any insurance policies are determined to be applicable to the liability, claim, tax, assessment, penalty or interest asserted against DISTRICT.

C. **Survival of Terms:** The indemnification in this Section VI.4 shall survive the expiration or termination of this AGREEMENT.

Notwithstanding anything herein to the contrary, neither party hereto will be liable to the other for any consequential, indirect, incidental, or special loss or damage suffered by the other party or any third party, or for any punitive damages, even if advised of the possibility thereof and notwithstanding the failure of essential purpose of any remedy. Each party's cumulative liability hereunder, whether in contract, tort, or otherwise, will in

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no event exceed the greater of (i) the aggregate consideration paid by the DISTRICT to CONSULTANT for the portion of the Services that gave rise to the liability, or (ii) \$250,000; provided, however, that this clause shall not limit CONSULTANT's indemnification obligations hereunder.

5. INSURANCE:

A. Minimum Scope and Limits of Insurance: CONSULTANT shall secure and maintain in full force and effect, until the satisfactory completion and acceptance of AGREEMENT by DISTRICT, such insurance as will protect it and the DISTRICT in such a manner and in such amounts as set forth below. The premiums for said insurance coverage shall be paid by the CONSULTANT. The failure to comply with these insurance requirements may constitute a material breach of this AGREEMENT, at the sole discretion of the DISTRICT.

- i. **Workers' Compensation:** CONSULTANT shall maintain Workers' Compensation insurance, as required by the State of California, with Statutory Limits and Employers' Liability Insurance in an amount not less than \$1,000,000 per accident for bodily injury or disease. This insurance shall also waive all right to subrogation against the DISTRICT, its Board of Directors, officers, employees, representatives, and guests.
- ii. **General Liability:** CONSULTANT shall maintain Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 00 01) including products and completed operations, property damage, bodily injury, personal and advertising injury with limit of at least \$2,000,000 per occurrence or the full per occurrence limits of the policies available, whichever is greater. If a general aggregate limit applies, the general aggregate limit shall be twice the required occurrence limit. DISTRICT shall be named as an additional insured.
- iii. **Automobile Liability:** CONSULTANT shall maintain Insurance Services Office (ISO) Business Auto Coverage (Form CA 00 01), covering Symbol 1 (any auto) or if CONSULTANT has no owned autos, Symbol 8 (hired) and 9 (non-owned) with limit of \$1,000,000 for bodily injury and property damage each accident. This insurance shall have an endorsement naming the DISTRICT as an additional insured.
- iv. **Professional Liability:** CONSULTANT shall maintain professional liability insurance with coverage for wrongful acts, errors, or omissions committed by CONSULTANT in the course of work performed for the DISTRICT under this AGREEMENT. This insurance shall include coverage for liability assumed under this AGREEMENT when CONSULTANT's wrongful acts, errors, or omissions cause such liability. The limit for this insurance shall be not less than \$1,000,000 per occurrence or claim and \$2,000,000 policy aggregate.

B. Acceptability of Insurers: The insurance policies required under this Section VI.5 shall be issued by an insurer admitted to write insurance in the State of California with



a rating of AA:VII or better in the latest edition of the A.M. Best Insurance Rating Guide. Self-insurance shall not be considered to comply with the insurance requirements under this Section VI.5.

- C. Primary and Non-Contributing:** The insurance policies required under this Section VI.5 shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to DISTRICT. Any insurance or self-insurance maintained by DISTRICT, its officers, employees, agents or volunteers, shall be in excess of CONSULTANT's insurance and shall not contribute with it.
- D. Consultant's Waiver of Subrogation:** The insurance policies required under this Section VI.5 shall not prohibit CONSULTANT and CONSULTANT's employees, agents or SUBCONTRACTORS from waiving the right to subrogation prior to loss. CONSULTANT hereby waives all rights of subrogation against DISTRICT.
- E. Deductibles and Self-Insured Retentions:** Any deductibles or self-insured retentions must be approved by DISTRICT. At DISTRICT's option, CONSULTANT shall either reduce or eliminate the deductibles or self-insured retentions with respect to DISTRICT, or CONSULTANT shall procure a bond guaranteeing payment of losses and expenses.
- F. Cancellations or Modifications to Coverage:** CONSULTANT shall not cancel, reduce or otherwise modify the insurance policies required by this Section VI.5 during the term of this AGREEMENT. The commercial general and automobile liability policies required under this AGREEMENT shall be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail thirty (30) calendar days' prior written notice to DISTRICT. If any insurance policy required under this Section VI.5 is canceled or reduced in coverage or limits, CONSULTANT shall, within two (2) business days of notice from the insurer, phone, fax or notify DISTRICT via certified mail, return receipt requested, of the cancellation of or changes to the policy.
- G. District Remedy for Noncompliance:** If CONSULTANT does not maintain the policies of insurance required under this Section VI.5 in full force and effect during the term of this AGREEMENT, or in the event any of CONSULTANT's policies do not comply with the requirements under this Section VI.5, DISTRICT may either immediately terminate this AGREEMENT or, if insurance is available at a reasonable cost, DISTRICT may, but has no duty to, take out the necessary insurance and pay, at CONSULTANT's expense, the premium thereon. CONSULTANT shall promptly reimburse DISTRICT for any premium paid by DISTRICT or DISTRICT may withhold amounts sufficient to pay the premiums from payments due to CONSULTANT.
- H. Evidence of Insurance:** Prior to the performance of services under this AGREEMENT, CONSULTANT shall furnish DISTRICT representative with a certificate or certificates of insurance and all original endorsements demonstrating the DISTRICT as additionally insured, evidencing and effecting the coverages required under this Section VI.5. The endorsements are subject to DISTRICT's approval. CONSULTANT may provide complete, certified copies of all required insurance



policies to DISTRICT. CONSULTANT shall maintain current endorsements on file with DISTRICT's representative. CONSULTANT shall provide proof to DISTRICT representative that insurance policies expiring during the term of this AGREEMENT have been renewed or replaced with other policies providing at least the same coverage. CONSULTANT shall furnish such proof at least two (2) weeks prior to the expiration of the coverages.

- I. Indemnity Requirement not Limiting:** Procurement of insurance by CONSULTANT shall not be construed as a limitation of CONSULTANT's liability or as full performance of CONSULTANT's duty to indemnify DISTRICT under Section VI.4 of this AGREEMENT.
- J. Subcontractor's Insurance Requirements:** CONSULTANT shall require each of its SUBCONTRACTORS that perform services under this AGREEMENT to maintain insurance coverage that meets all of the requirements of this Section VI.5.
- K. Claim Reporting:** CONSULTANT shall not fail to comply with the claim reporting provisions or cause any breach of a policy condition or warranty of the insurance policies required by this AGREEMENT that would affect the coverage afforded under the policies to the DISTRICT.
- L. Broader Coverage/Higher Limits:** If CONSULTANT maintains broader coverage and/or higher limits than the minimums shown above, the DISTRICT requires and shall be entitled to the broader coverage and/or higher limits maintained by CONSULTANT. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the DISTRICT.

6. MUTUAL COOPERATION

- A. District's Cooperation:** DISTRICT shall provide CONSULTANT with all pertinent data, documents and other requested information as is reasonably available for CONSULTANT's proper performance of the services required under this AGREEMENT.
- B. Consultant's Cooperation:** In the event any claim or action is brought against the DISTRICT relating to CONSULTANT's performance or services rendered under this AGREEMENT, CONSULTANT shall render any reasonable assistance that DISTRICT requires.

- 7. EXAMINATION OF RECORDS:** All original drawings, specifications, reports, calculations, and other documents or electronic data developed by CONSULTANT for this TASK ORDER shall be furnished to and become the property of the DISTRICT. CONSULTANT agrees that the DISTRICT will have access to and the right to examine any directly pertinent books, documents, papers, and records of any and all of the transactions relating to this AGREEMENT at CONSULTANT's office, during normal business hours and following a reasonable advance notice to CONSULTANT from DISTRICT. The DISTRICT shall not be limited in any way in its use of the work materials at any time except as otherwise provided herein.



8. TERMINATION OR SUSPENSION OF AGREEMENT

A. Right to Terminate or Suspend: DISTRICT may terminate or suspend this AGREEMENT at any time, at will, for any reason or no reason, after giving written notice to CONSULTANT at least ten (10) calendar days before the termination or suspension is to be effective. CONSULTANT may terminate this AGREEMENT at any time, at will, for any reason or no reason, after giving written notice to DISTRICT at least thirty (30) calendar days before the termination is to be effective.

B. Obligations upon Termination: CONSULTANT shall cease all work under this AGREEMENT on or before the effective date of termination specified in the notice of termination. In the event of DISTRICT's termination of this AGREEMENT due to no fault or failure of performance by CONSULTANT, DISTRICT shall pay CONSULTANT based on the percentage of work satisfactorily performed up to the effective date of termination. In no event shall CONSULTANT be entitled to receive more than the amount that would be paid to CONSULTANT for the full performance of the services required by this AGREEMENT.

9. NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY: In the performance of this AGREEMENT, CONSULTANT shall not discriminate against any employee, SUBCONTRACTOR or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation or other basis prohibited by law. CONSULTANT will take affirmative action to ensure that SUBCONTRACTORS and applicants are employed, and that employees are treated during employment, without regard to their race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information or sexual orientation.

10. PROHIBITION OF ASSIGNMENT AND DELEGATION: CONSULTANT shall not assign any of its rights or delegate any of its duties under this AGREEMENT, either in whole or in part, without DISTRICT's prior written consent. DISTRICT's consent to an assignment of rights under this AGREEMENT shall not release CONSULTANT from any of its obligations or alter any of its primary obligations to be performed under this AGREEMENT. Any attempted assignment or delegation in violation of this section shall be void and of no effect and shall entitle DISTRICT to terminate this AGREEMENT. As used in this section, "assignment" and "delegation" means any sale, gift, pledge, hypothecation, encumbrance or other transfer of all or any portion of the rights, obligations, or liabilities in or arising from this AGREEMENT to any person or entity, whether by operation of law or otherwise, and regardless of the legal form of the transaction in which the attempted transfer occurs.

11. NO THIRD-PARTY BENEFICIARIES INTENDED: Except as otherwise provided in Section VI.4, this AGREEMENT is made solely for the benefit of the PARTIES to this AGREEMENT and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this AGREEMENT.



12. WAIVER: No delay or omission to exercise any right, power or remedy accruing to DISTRICT under this AGREEMENT shall impair any right, power or remedy of DISTRICT, nor shall it be construed as a waiver of, or consent to, any breach or default. No waiver of any breach, any failure of a condition, or any right or remedy under this AGREEMENT shall be (1) effective unless it is in writing and signed by PARTY making the waiver, (2) deemed to be a waiver of, or consent to, any other breach, failure of a condition, or right or remedy, or (3) deemed to constitute a continuing waiver unless the writing expressly so states.

13. ENTIRE AGREEMENT: This AGREEMENT and all exhibits referred to in this AGREEMENT constitute the final, complete and exclusive statement of the terms of this AGREEMENT between the PARTIES pertaining to the subject matter of this AGREEMENT and supersede all other prior or contemporaneous oral or written understandings and agreements of the PARTIES. No PARTY has been induced to enter into this AGREEMENT by, nor is any PARTY relying on, any representation or warranty except those expressly set forth in this AGREEMENT.

14. HEADINGS: Article and Section headings in this AGREEMENT are for convenience only and are not intended to be used in interpreting or construing the terms, covenants, and conditions of this AGREEMENT.

15. AMENDMENT OF AGREEMENT: This AGREEMENT may be amended only by a writing signed by both PARTIES. The DISTRICT representative is authorized to sign an amendment to this AGREEMENT on the DISTRICT's behalf to make the following non-substantive modifications to the AGREEMENT: (a) name changes; (b) extensions of time; (c) non-monetary changes in TASK ORDER; and (d) termination of this AGREEMENT.

16. GOVERNING LAW AND CHOICE OF FORUM: This AGREEMENT, and any dispute arising from the relationship between the PARTIES to this AGREEMENT, shall be governed by and construed in accordance with the laws of the State of California, except that any rule of construction to the effect that ambiguities are to be resolved against the drafting PARTY shall not be applied in interpreting this AGREEMENT. Any dispute that arises under or relates to this AGREEMENT (whether contract, tort or both) shall be resolved in a municipal, superior or federal court with geographic jurisdiction over the DISTRICT.

17. ATTORNEYS' FEES: In any litigation or other proceeding by which a PARTY seeks to enforce its rights under this AGREEMENT (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this AGREEMENT, the prevailing PARTY shall be awarded reasonable attorneys' fees together with any costs and expenses, to resolve the dispute and to enforce the final judgment.

18. SEVERABILITY: If a court of competent jurisdiction holds any provision of this AGREEMENT to be illegal, invalid or unenforceable for any reason, the validity of and enforceability of the remaining provisions of this AGREEMENT shall not be affected and continue in full force and effect.

19. SAFETY: CONSULTANT shall perform the work in full compliance with applicable State and Federal safety requirements including, but not limited to, Occupational Safety and Health Administration requirements. CONSULTANT shall take all precautions necessary for the



safety of, and prevention of damage to, property on or adjacent to TASK ORDER site, and for the safety of, and prevention of injury to, persons, including DISTRICT's employees, CONSULTANT's employees, and third persons. All work shall be performed entirely at CONSULTANT's risk. CONSULTANT shall comply with the insurance requirements set forth in Section VI.5 of this AGREEMENT. CONSULTANT shall also furnish the DISTRICT with a copy of any injury prevention program established for the CONSULTANT's employees pursuant to Labor Code Section 6401.7, including any necessary documentation regarding implementation of the program. CONSULTANT hereby certifies that its employees have been trained in the program, and procedures are in place to train employees whenever new substances, processes, procedures, or equipment are introduced. CONSULTANT shall demonstrate compliance with Labor Code Section 6401.7 by maintaining a copy of its Injury and Illness Prevention Plan at TASK ORDER site and making it available to the DISTRICT.

20. USE OF NAMES: CONSULTANT shall not employ or use the name of the DISTRICT in any promotional materials, advertising, or in any other manner without prior express written permission of the DISTRICT. The foregoing notwithstanding, nothing herein shall prohibit or exclude CONSULTANT from referencing the work for DISTRICT on the TASK ORDER in response to a Request for Proposal or other similar professional solicitations.

21. NOTICES: All notices to either PARTY by the other shall be made in writing and delivered or mailed to such PARTY at their respective addresses as follows, or to other such address as either PARTY may designate and said notices shall be deemed to have been made when delivered or, if mailed, five (5) days after mailing.

To DISTRICT:

Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, CA 91711
Attn: General Manager

To CONSULTANT:

Pure Technologies US Inc
1830 Air Lane Dr. Suite 2
Dallas, TX 75006
Attn: Farah Singer

22. AUTHORITY TO EXECUTE AGREEMENT: The individuals executing this AGREEMENT represent and warrant that they have the legal capacity and authority to sign this AGREEMENT on behalf of and to so bind their respective legal entities.

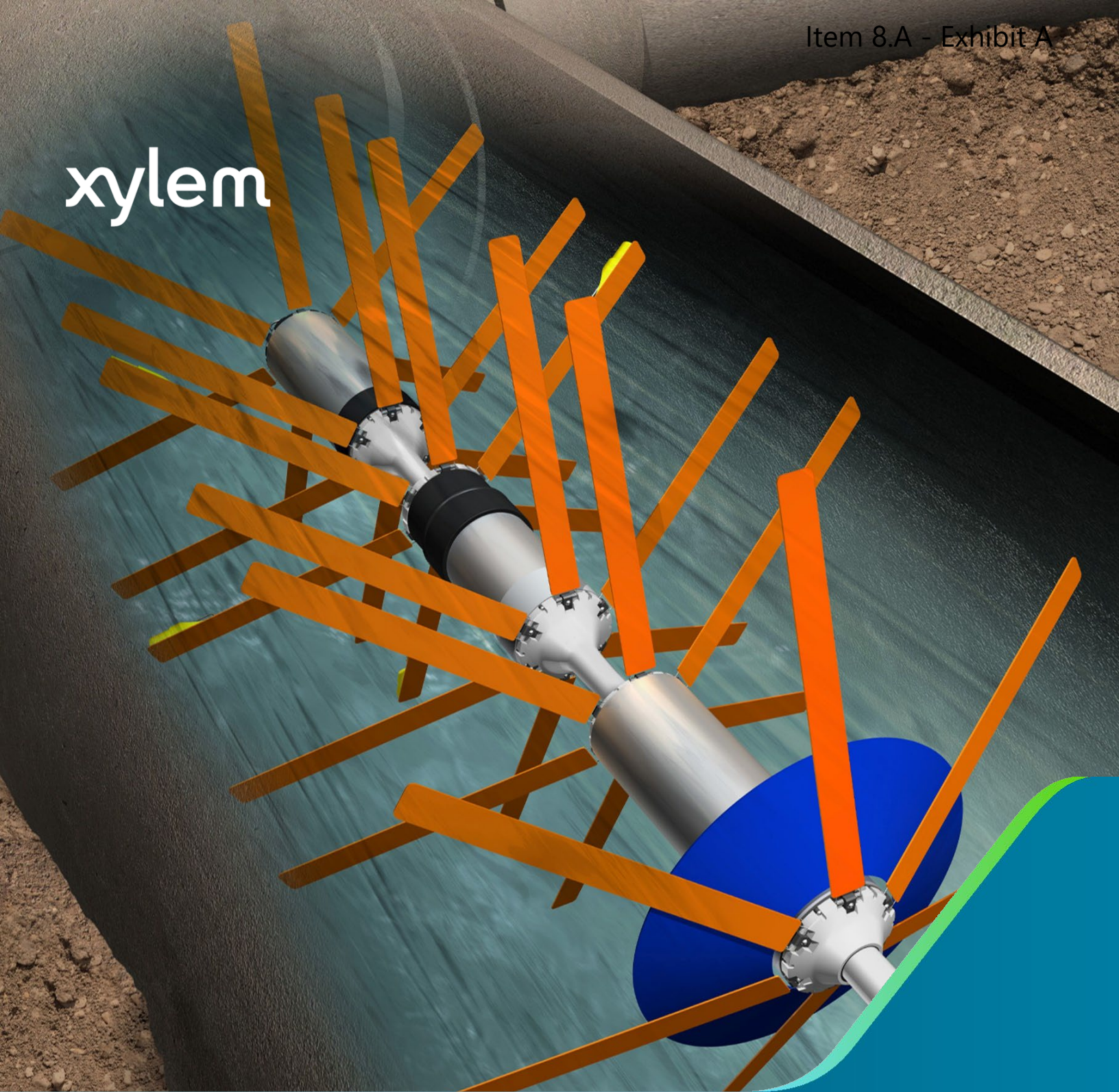


IN WITNESS WHEREOF, the PARTIES hereto have executed this AGREEMENT as of the date opposite their respective signatures.

Name:	_____	Matthew H. Litchfield
Title:	_____	General Manager
Organization:	_____	Three Valleys Municipal Water District
Signature:	_____	_____
Date:	_____	Date: _____

DRAFT

xylem



THREE VALLEYS MUNICIPAL WATER DISTRICT
REQUEST FOR QUALIFICATIONS
ON-CALL DESIGN AND INSPECTION SERVICES FOR PIPELINE
CONDITION ASSESMENT PROGRAM

Exhibit B**SUBMITTAL CHECK OFF LIST**

Enclosed below is checklist of required documents to be submitted as the Consultant's proposal. Items may be submitted on the same page and not required to be submitted separately.

Item	Required Submittals Checklist	Check off
1	Cover Letter	
2	Trade Experience	
3	Personnel Resumes	
4	Cost/ Fee Proposal	
5	Acknowledgment of Standard Agreement (or redline provisions)	
6	Insurance Affidavit	
7	Public Works Consultant Registration Certification (CADIR)	
8	Additions, Deletions, and/or Exceptions	

July 22, 2025

Attention: Kevin Panzer
Three Valleys Municipal Water District
1021 E. Miramar Avenue,
Claremont, CA

RE: Request for Qualifications, On-Call Design and Inspection Services for Pipeline Condition Assessment Program

Dear Kevin,

Pure Technologies US Inc., a Xylem Brand, (Pure Technologies) is a recognized industry leader with decades of experience in the inspection, assessment, and management of pressurized water pipelines. We are pleased to submit our proposal to Three Valleys Municipal Water District (Three Valleys/District) for on-call design and inspection services for your pipeline condition assessment program. Pure Technologies is submitting on all four categories: pipeline & soil corrosion analysis, internal/external pipe condition assessment, pipeline structural/remaining life modeling analysis and rehabilitation and replacement plan.

Pure Technologies offers multiple inline wall inspection platforms to inspect and evaluate a variety of pipe material and diameters. Our assessments can be conducted under "live" operating conditions, providing actionable data. Pure Technologies pipe wall condition assessment solutions, for inspections in either an operational mode or out of services modes, are effective on a variety of pipe materials and can locate distressed sections along a pipeline, allowing for proactive, scheduled repairs with minimal service disruption. Pure Technologies has also developed several advanced pipe structural and statistical analyses that go hand in hand with the data collection and are part of the suite of services provided. Examples of our analytical methods include Finite Element Model Analysis (FEA), Remaining Useful Life (RUL) analysis, also referred to as Probability of Exceedance (POE), and Pipe Performance Curves, also known as "Risk Curves." The purpose of these analytical methods is to provide data-driven decision support to Three Valleys/District when evaluating pipeline alternatives associated with whole life management of these assets.

We have assembled a seasoned team of professionals to fulfill the scope of this project. This team has extensive experience in condition assessment on a wide variety of pipe material and sizes. In addition, we have the capacity, expertise, and knowledge of the required standards to safely deliver this project to Three Valleys/District. We acknowledge receipt of Addendum #01.

Best regards,



Eber Serrano
Business Development
619-335-9667
eber.serrano@xylem.com



Bryon Boyd
Regional Sales Manager, Business Development
458-201-0452
bryon.boyd@xylem.com

Table of Contents

Experience in Applicable Trades.....	1
Pure Technologies.....	1
Farwest Corrosion Control Company.....	1
Our Experience and Expertise	1
Reference Matrix.....	2
Personnel	12
Resumes.....	14
Addendums	15

List of Tables

Table 1: Reference Matrix	3
Table 2: Pure Technologies Supplemental Condition Assessment Program Experience Matrix	11
Table 3: Personnel Matrix.....	13

Experience in Applicable Trades

Pure Technologies

Established in 1993 Pure Technologies US Inc. (Pure Technologies) is a recognized industry leader in the inspection, assessment, and management of pressurized pipelines. Pure Technologies has provided inspection, condition assessment, monitoring, and management solutions for owners and operators of critical infrastructure around the world. Our innovative technologies provide clients with actionable data allowing them to proactively manage critical assets. This approach has significantly extended the useful life of assets resulting in capital improvement/replacement dollar savings, avoidance of high emergency repair costs, and improved public confidence and utility reputation. Our extensive patent portfolio, which includes over 80 patents or patents pending worldwide, is a testament to our innovation and commitment to excellence. Pure Technologies develops pipeline inspection solutions with drinking water safety in mind. Our fleet of in-service condition assessment platforms are designed and manufactured with materials that are safe for use in potable water and are the only pipeline inspection tools that are NSF/ANSI/CAN 61-certified.

Farwest Corrosion Control Company

Pure Technologies will team with Farwest Corrosion Control Company (Farwest) to characterize soil corrosivity along pipeline corridors and assess the current state of corrosion affecting the pipeline. Farwest Corrosion Control Company, established in 1962, brings over 60 years of specialized experience in cathodic protection design, testing, installation, and material supply. Their approach is grounded in technical excellence, operational efficiency, and a deep understanding of corrosion challenges in municipal water and wastewater infrastructure.

Our Experience and Expertise

Pipeline & Soil Corrosion Analysis

Farwest provides turnkey engineering and field services for the design, testing, installation, and maintenance of cathodic protection systems. With licensed professional engineers and AMPP-certified technicians on staff, they deliver practical, solutions that protect critical infrastructure and meet client-specific requirements. Their services support a wide range of facilities including municipal water and wastewater pipelines, tanks, pump stations, and appurtenances. Specializing in both impressed current and galvanic systems, they maintain in-house construction and QA/QC oversight to ensure reliability and longevity of all installations. Farwest has successfully delivered corrosion control programs across the oil and gas, water, wastewater, power, telecommunications, and marine sectors.

Internal and External Pipe Condition Assessment

Pure Technologies' inline leak and gas pocket detection tools help utilities make informed management decisions on a pipe-by-pipe basis. Our SmartBall and Sahara platforms collect precise, actionable data while minimizing the operational effort required by utilities. Both tools inspect pipelines of any material, without disrupting service, and they are easily deployed through existing features and hydrants. Together, these tools give utilities more flexibility to reduce real water loss and address problem areas before they result in larger failures.

For large, critical pipelines, preventing even one failure can lead to a positive return on investment. When utilities avoid unnecessary replacement and manage pipeline assets to their full useful life, they can realize

significant capital savings. Our PipeDiver platform is a free-swimming tool that operates while the pipeline remains in service. The PureRobotics platform is a modular, multi-sensor crawler for depressurized water pipelines. The lightweight PipeWalker platform is operated in dewatered pipelines to inspect large-diameter, concrete pipelines that can be removed from service to achieve maximum data quality.

Pipeline Condition Assessment

Condition data is key to making smart pipeline management decisions today and in the future. Condition assessment identifies which pipes to renew and which can continue operating safely. Pure Technologies' pipeline condition assessment services can shed more light on the health of your most critical pipe infrastructure.

Structural analysis can evaluate the associated risk of each pipe section with reduced structural capacity. A design review can determine the appropriateness of the pipeline's design relative to the actual current loads that act on the pipeline. Finite Element Modeling can then be selectively used to further evaluate individual defects, providing increased confidence in pipeline management and repair decisions.

Rehabilitation and Replacement Plan

Leveraging advanced sensing tools and tailored inspection platforms for water and wastewater infrastructure, Pure Technologies' extensive project implementations across the world allow us to accurately identify leaks and potential structural weaknesses and to continuously monitor your critical pipes and mains. We leverage inspection data as well as structural analysis and risk analysis to help our clients make intelligent asset management decisions and effectively reduce your annual investment plan towards pipe renovation and rehabilitation.

Reference Matrix

Below we identify those references which correspond to the four categories.

Table 1: Reference Matrix

Reference	Pipeline & Soil Corrosion Analysis	Internal/ External Pipe Condition Assessment	Pipeline Structural/ Remaining Life Modeling Analysis	Rehabilitation and Replacement Plan
1. Metropolitan Water District of Southern California		✓	✓	✓
2. Santa Clara Valley Water District		✓	✓	✓
3. San Francisco Public Utilities Commission (SFPUC)		✓	✓	✓
4. City of Baltimore		✓	✓	✓
5. North Texas NTMWD		✓	✓	✓
6. Region of Peel		✓	✓	✓
7. RHL Fire Protection	✓			
8. ARM Energy	✓			
9. Black & Veatch	✓			

1. Metropolitan Water District of Southern California



Name of Client: Metropolitan Water District of Southern California

Reference: Jay Pastor, Tel: 909-392-5417, email: jpastor@mwdh2o.com

Value: ~\$280,000.00

Type of work performed: Metropolitan Water District of Southern California (MWD) is a public agency and regional wholesaler as well as the largest supplier of treated water in the United States. MWD is a voluntary cooperative of 26 member agencies that purchase some (or all) of their water from Metropolitan. These member agencies and their sub-agencies provide water for 19 million people across six Southern California counties. Pure and MWD have a long-lasting partnership that spans many years. In 2022, Pure Technologies entered into a multi-year agreement to perform large diameter concrete and metallic pipeline inspection services valued at \$7,000,000. Following results from an October 2023 Pure electromagnetic inspection where 82 pipes became newly distressed (up to 130 wire breaks) since Pure's previous 2018 electromagnetic inspection in which only 8 pipes were distressed, Pure provided immediate emergency support. This support included trouble shooting causation as well as performing twenty-two (22) structural risk curves. These curves were turned around in a priority order on a weekly basis for MWD to gauge the extent of the damage to support rehabilitation decisions. This partnership with Pure will allow MWD to plan a long-term management approach to their critical assets.

Relevance to the Project:

- Engineering and Program Management Services
- Structural Engineering and Analysis using Electromagnetic Inspection Data
- Emergency Engineering Support Services
- Data Analysis and Condition Assessment
- Repair and Rehabilitation Strategies
- Repair and Rehabilitation Oversight
- Long-Term Asset Management

2. Santa Clara Valley Water District



Name of Client: Santa Clara Valley Water District (Valley Water)

Reference: Joel Jenkins, P.E., Utility Maintenance Engineering Manager, Tel: 408-265-3600, email: jjenkins@valleywater.org

Value: ~\$500,000.00

Type of work performed: In 2021, the Santa Clara Valley Water District (Valley Water) retained the services of Pure Technologies to perform an inspection of the 66-inch Central Pipeline. Pure Technologies conducted a non-destructive evaluation of prestressed concrete cylinder pipe (PCCP), bar wrapped pipe (BWP), and reinforced concrete cylinder pipe (RCCP) utilizing Pure Technologies' proprietary PipeWalker platform. The purpose of the inspection was to locate and identify pipes that had broken prestressing wire wraps in the PCCP and electromagnetic anomalies in the BWP and RCCP. The inspection covered a cumulative distance of 12.6 miles and spanned a total of 2,797 pipes. Analysis of the data obtained during the inspection determined that 72 pipes of the Central Pipeline displayed electromagnetic anomalies consistent with prestressing wire damage, ranging from 5 to 15 broken wire wraps. Additionally, three bar wrapped pipes were identified with electromagnetic anomalies.

Pure Technologies had previously inspected Central Pipeline in December 2001 and again in January 2005. To facilitate direct comparison between the 2005 and 2021 PCCP inspection results, the previous data was reviewed to ensure the 2005 analysis complied with current data analysis methodologies. To summarize, these comparison results showed that a total of 12 PCCPs had become newly distressed since the 2005 inspection, 2 PCCPs exhibited an increase in broken wire wraps due to distress growth since the 2005 inspection, 2 PCCPs previously reported distress and 3 regions previously reported with distress were re-classified as not distressed, and the distress position on 4 previously identified distressed pipes was revised under current analysis methodology.

Relevance to the Project:

- Engineering and Program Management Services
- Structural Engineering and Analysis using Electromagnetic Inspection Data
- Emergency Engineering Support Services
- Data Analysis and Condition Assessment
- Repair and Rehabilitation Strategies
- Repair and Rehabilitation Oversight
- Long-Term Asset Management

3. San Francisco Public Utilities Commission (SFPUC)



Name of Client: San Francisco Public Utilities Commission (SFPUC)

Reference: Eric Choi, P.E., Civil Engineer, Tel: 650-872-5908, email: echoi@sfgwater.org

Value: ~\$500,000.00

Type of work performed: In 2024, the San Francisco Public Utilities Commission (SFPUC) enlisted the services of Pure Technologies' PipeDiver Ultra platform to inspect their 36-inch steel Palo Alto Pipeline. This inline wall inspection technology is used to identify and locate areas of wall loss and out-of-roundness. The 90-year-old pipeline had no prior inspections and is part of the SFPUC network that provides 100% of the City of Palo Alto's potable drinking water. Providing a critical understanding of the pipe's current state of degradation was a crucial driver in this project. Additionally, the cost benefit to perform an inspection compared to total pipe replacement proved favorable. Ultimately, the inspection found minimal wall loss and out-of-roundness given the pipeline's age, location, and inspection history. Condition assessment engineering analysis such as degradation modeling and Remaining Useful Life calculations allowed Pure Technologies to turn the inspection data into actionable recommendations for SFPUC to ensure safe future pipeline operation.

Relevance to the Project:

- Engineering and Program Management Services
- Structural Engineering and Analysis using Electromagnetic Inspection Data
- Emergency Engineering Support Services
- Data Analysis and Condition Assessment
- Repair and Rehabilitation Strategies
- Repair and Rehabilitation Oversight
- Long-Term Asset Management

4. City of Baltimore



Name of Client: City of Baltimore

Reference: Harpreet Singh, 410-627-4531,

Value: ~2,000,000+

Type of work performed:

Pure Technologies is working with the City of Baltimore on a multi-year program providing services related to the management of large-diameter water transmission pipelines. Pure is providing turn-key services including multi- technology condition assessment, decision support analytics through advanced structural analysis and remaining service life analysis as well as long-term operational and conditional monitoring services for large-diameter water transmission pipelines.

Relevance to the Project:

- Visual and sounding of all pipe types, where applicable
- Electromagnetic Inspection Utilizing Various Free-swimming and Tethered Tools Under Various Operating Conditions including: out of service and dewatered, out of service and de-pressurized, and fully in service (using Pure Technologies tools as well as through a subcontractor);
- Acoustic leak detection
- Pipe Wall Thickness Testing by Means of Electromagnetic Technologies
- Structural Stiffness Testing by Means of Acoustic Technologies (through a subcontractor)
- Structural Stress Testing by Means of SmartBall® and/or Sahara® Technologies
- Establishing Baseline Condition for Every Pipe Segment and Identify Pipe Segments in Advanced State of Deterioration
- Determining and Verifying the Pipe Lay Schedule During the Inspections
- Performing Non-linear, Three-dimensional Finite Element Analysis (advanced structural analysis of all pipe materials)
- Remaining Service life analysis
- Design and Coordination of pipeline Repairs and Replacement Projects, and Design of Appurtenances Necessary for Accessing the Pipeline such as Taps and Launching and Retrieval Ports
- Permanent Monitoring Systems for Large Diameter Pipes, Including Installation, Operation, Maintenance, and Advance Event Notification

5. North Texas Municipal Water District



Name of Client: North Texas Municipal Water District (NTMWD)

Reference: Jayson Melcher, P.E., Project Engineer for Condition Assessment, 469-626-4446, jmelcher@ntmwd.com

Value: ~\$700,000.00

Type of work performed:

Comprehensive condition assessment of the Kaufman Treated Water Supply Pipeline. The Kaufman water main is a 20-inch diameter bar wrapped pipeline installed in 1975 that runs approximately 15 miles from the NTMWD Forney Pump Station south to the Kaufman aboveground storage tanks. The Kaufman water supply line is deemed critical as it represents the only source of treated water for the City of Kaufman. Subsequently, any condition assessment approach needed to accommodate minimal downtime for inspections. Pure Technologies utilized its free-swimming suite of technologies, utilizing SmartBall to inspect for leaks and air pockets in the pipeline as well as electromagnetic (EM) inspection technologies on the free-swimming PipeDiver delivery platform to identify broken reinforcing bars and wall loss on the steel cylinder.

Pure Technologies identified pipes with leaks, reinforcing bar breaks and wall loss on the steel cylinder. Pure Technologies utilized 3D finite element analysis to develop Pipe Performance Risk Curves that allowed NTMWD to identify pipes of concern (i.e., having leaks, significant number of reinforcing bar breaks and/or significant wall loss on the steel cylinder). Pure Technologies provided NTMWD with detailed “dig sheets” denoting the location of said pipes followed by physically marking their locations. Pure Technologies assisted the repair contractor by verifying the exposed pipes prior to the contractor proceeding with corrective actions to repair or replace a pipe. Pure Technologies provided NTMWD with a pipe-by-pipe geospatial deliverable that allows them to better evaluate the potential CoF associated with each distressed pipe.

Relevance to the Project:

- Engineering and Program Management Services
- Structural Engineering and Analysis using Electromagnetic Inspection Data
- Emergency Engineering Support Services
- Data Analysis and Condition Assessment
- Repair and Rehabilitation Strategies
- Repair and Rehabilitation Oversight
- Long-Term Asset Management

6. Region of Peel



Name of Client: Region of Peel

Reference: Heather Jefferson, Project Manager, 905-791-7800 x 7881, heather.jefferson@peelregion.ca

Value: ~\$1,200,000 annually

Type of work performed:

The Region of Peel (Peel) has water transmission mains of sizes ranging from 750mm to 2400mm dating from the early 1960's, the majority of which were inherited from the provincial government without any knowledge of their condition. Since 2005, Pure has inspected approximately 75km of the Region's transmission mains. Additionally, Pure Technologies has provided leak detection, internal mapping, AFO, structural analysis and remaining useful life calculations for the transmission mains. In the summer of 2019, the Region also initiated a project with Pure Technologies to assess 15 chambers and all associated valves and appurtenances within those chambers. The resulting report detailed deficiencies and recommended rehabilitative actions as necessary.

Relevance to the Project:

- Engineering and Program Management Services
- Structural Engineering and Analysis using Electromagnetic Inspection Data
- Emergency Engineering Support Services
- Data Analysis and Condition Assessment
- Repair and Rehabilitation Strategies
- Repair and Rehabilitation Oversight
- Long-Term Asset Management

Pipeline and Soil Corrosion Analysis References

Below please find three references for Farwest Corrosion Control Company.

7. Name of Client: RHL Fire Protection

Client Contact: Ken, Owen | 661-427-7893 | kowen@rlhfp.com|

Contract Value: \$6,890.00

Relevance to RFP: Field soil resistivity testing with pipe depth soil resistivity analysis

8. Name of Client: ARM Energy

Client Contact: Matt Stratmann | 703-672-5780 | matt.stratmann@armenergy.com

Contract Value: \$143,450.00

Relevance to RFP: ECDA direct examination and corrosion analysis of pipeline

9. Name of Client: Black & Veatch

Client Contact: Andrew Fuller, FullerA@bv.com

Contract Value: \$7,320.00

Relevance to RFP: Soil Resistivity and Pipeline Corrosion Assessment

Table 2: Pure Technologies Supplemental Condition Assessment Program Experience Matrix

		Project Management	Customized Work Plan	Risk Prioritization & Inspection Schedule	Design & Construction of Access Ports	Pipeline Condition Assessment	FEA Curves	Remaining Useful Life Analysis	Project Completion Report	Prioritized Recommendations	Estimated Costs for Recommended Action	Post-Repair Support	Long-Term Monitoring	Large Valve Assessment & Repair	Terms of Service (Yrs.)
Client	Programs														
Baltimore	Large Diameter Transmission Main Condition Assessment, Analysis, and Monitoring	•	•	•	•	•	•		•	•	•	•	•		10
Baltimore County	On-Call PCCP Inspection	•	•			•	•		•	•					4
California Department of Water Resources	Pipeline Condition Assessment and Leak Detection Services	•	•					•	•	•			•	•	13
Region of Peel	PCCP Feedermain Condition Assessment Program	•	•	•		•	•		•	•				•	18
Middlesex County Utilities Authority	Force main Condition Assessment Program	•	•			•	•	•	•	•		•	•		30
Miami-Dade County	Pipeline Inspection Program (36" to 102")	•	•	•		•	•		•	•		•	•		12
North Texas Municipal Water District	Condition Assessment and Engineering Services for Large Diameter Water Mains and Force Mains	•	•		•	•	•		•	•	•	•			4
WSSC Water	PCCP Condition Assessment and Monitoring Services	•	•			•	•		•				•		14
Dallas Water Utilities	Condition Assessment and Engineering Services for Transmission and Distribution Mains	•	•	•		•	•		•	•	•	•			20+
Austin Water	Condition Assessment and Engineering Services for Transmission and Distribution Mains	•	•			•	•		•			•		•	13

Personnel

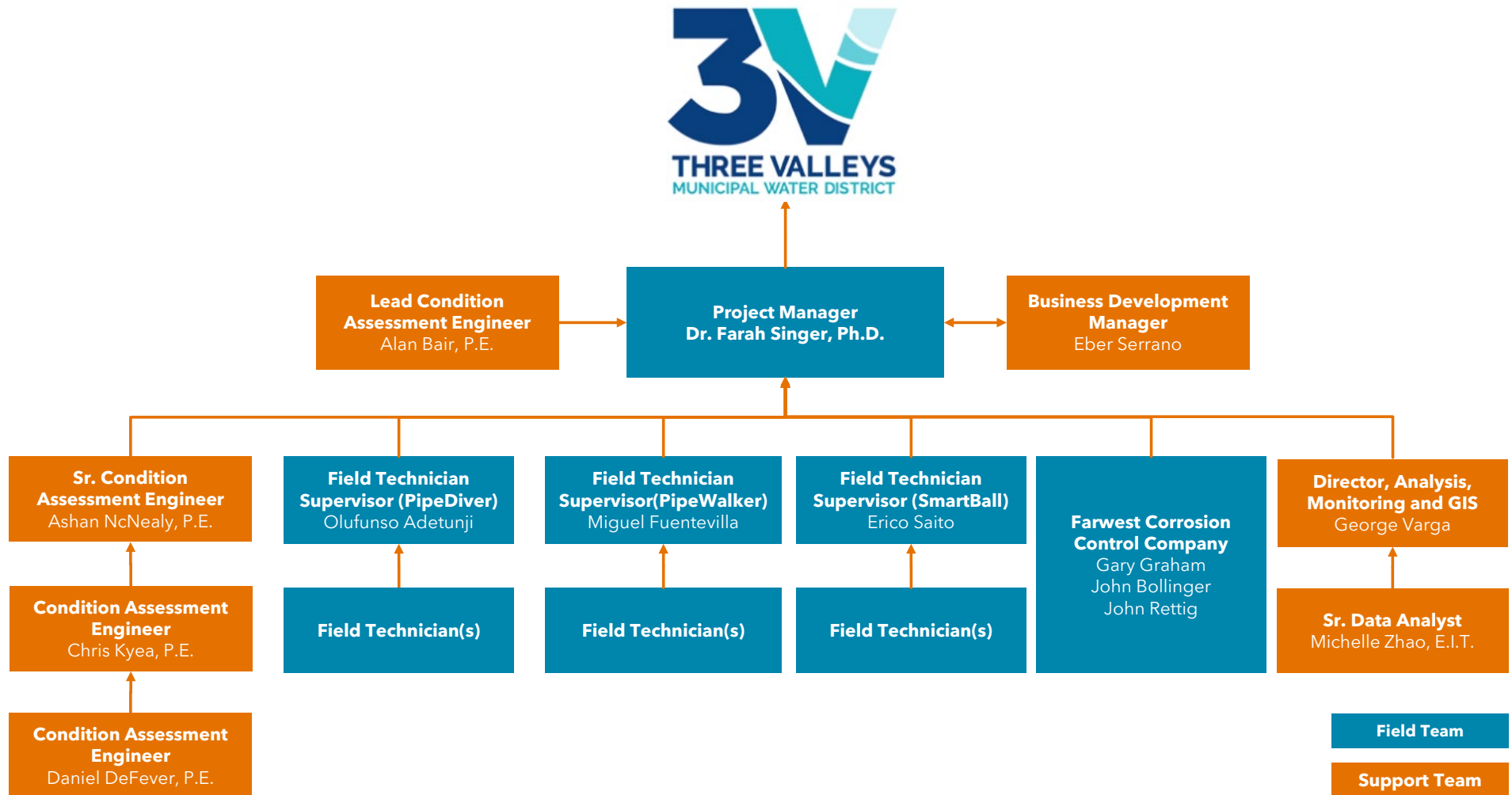


Table 3: Personnel Matrix

Personnel	Pipeline & Soil Corrosion Analysis	Internal/ External Pipe Condition Assessment	Pipeline Structural/ Remaining Life Modeling Analysis	Rehabilitation and Replacement Plan
Dr. Farah Singer		✓	✓	✓
Alain Bair, P.E.		✓	✓	✓
Ashan McNealy, P.E.		✓	✓	✓
Daniel DeFever, P.E.		✓	✓	✓
Chris Kyea, P.E.		✓	✓	✓
Olufunso Adetunji		✓	✓	✓
Miguel Fuentevilla		✓	✓	✓
Erico Saito		✓	✓	✓
George Varga		✓	✓	✓
Michelle Zhao, E.I.T.		✓	✓	✓
Gary Graham, P.E.	✓			
John Bollinger	✓			
John Rettig	✓			

Resumes



DR. FARAH SINGER, PH.D.

PROJECT MANAGER

EDUCATION

- Ph.D. in Engineering Sciences from the University of Poitiers, France, 2015.
- M.S. in Fundamental Physics from the Lebanese National University, Lebanon, 2011.

PROFESSIONAL SUMMARY

Dr. Singer joined Pure Technologies, a Xylem brand in May 2022 as a Project Manager, with 6+ years of experience owning all stages of project lifecycle from inception through monitoring and closing to deliver projects that exceed expectations on time and on budget. Dr. Singer managed projects across a number of different fields and disciplines, including oil and gas, power-plants, aerospace, HVAC, and automotive. Some of Dr. Singer's projects aimed to develop innovative robotic tools for inspecting and rehabilitating hazardous and gas pipelines.

PROJECT EXPERIENCE

At Pure Technologies, Dr. Singer is managing multiple projects aiming to inspect and assess water pipelines using Pure's different technologies. Below are a few select project references.

Fairchild Air Force Base's Water Main Condition Assessment, WA

SmartBall acoustic air pocket and leak detection. Distance: 4.9 miles. Diameter: 16". Material: Cement mortar lined steel.

Calleguas Oxnard-Santa Rosa Feeder Condition Assessment, CA

SmartBall acoustic air pocket and leak detection. Distance: 2.83 miles. Diameter: 39". Material: CCP.

Metropolitan Water District of Southern California Sepulveda Feeder Condition Assessment, CA

PipeWalker electromagnetic assessment. Distance: 4.4 miles. Diameter(s): 96" Material(s): PCCP.

Metropolitan Water District of Southern California Yorba Linda Feeder Condition Assessment, CA

PipeWalker electromagnetic assessment. Distance: 3.29 miles. Diameter(s): 96" Material(s): PCCP.

Metropolitan Water District of Southern California Sepulveda Feeder Condition Assessment, CA

PipeDiver electromagnetic assessment. Distance: 10.28 miles. Diameter(s): 96" Material(s): PCCP.



OLUFUNSO ADETUNJI, PMP, MBA

FIELD TECHNICIAN SUPERVISOR

EDUCATION

MBA in Business Administration/Management, Texas A&M University - Corpus Christi, Texas, 2016

Master's in Environmental/Environmental Health Engineering, Texas A&M University - Kingsville, Texas, 2015

Master's in Civil Engineering, University of Ibadan, Ibadan, Nigeria, 2008

Bachelor's in Civil Engineering, Obafemi Awolowo University, Ile-Ife, Nigeria, 2004

CERTIFICATIONS/REGISTRATIONS

PipeDiver® Level 2 (Team Lead) certification: Obtained 10/09/2021

PipeDiver® Level 1 certification: Obtained 03/30/2021

First Aid/CPR AED: Expires 02/2023

Confined Space Entry OSHA 1910.146(K): Expires 06/05/2023

DOT Certification/Driving Card: Expires 12/20/2023

Pipeline Training Program Certificate, Del Mar College, 2019

Corrosion Control and Regulatory Compliance, Del Mar College, 2019

Pipeline Construction and Operation, Del Mar College, 2019

Introduction to Pipelines and the Petrochemical Industry, Del Mar College, 2019

Class A Water Operator License (WS0012559) - Texas Commission on Environmental Quality (TCEQ): 3/10/2020 - 5/30/2023

Project Management Professional, PMP - Project Management Institute, USA - Since 2012

PROFESSIONAL SUMMARY

Mr. Adetunji has over 13 years of experience as a Civil/Environmental Engineer, with professional experience as a Project Engineer/Project Planner. Mr. Adetunji is a dynamic resources person with good knowledge of Project Management methodologies to enhance productivity within an organization. He is highly proficient in developing technical and project



management reports.

PROJECT EXPERIENCE

Mr. Adetunji has experience as a Project Engineer/Project Planner for many projects and programs. Below are a few select projects and program references.

J & T Consulting, Inc, Colorado – Standley Lake (6.5 miles, 48-inch PCCP and Steel Pipe Potable Water)*

Mid Peninsula Water District, California – (1.13 miles, 24-inch Potable Water Transmission Main)*

North Texas Municipal Water District, Texas - McKinney Parallel (7.3 miles, 42-inch and 60-inch Potable Water)*

DFW Airport, Texas – (6.96 miles, 21-inch, 24-inch, and 30-inch Distribution System – PCCP and D.I. Potable Water)*

North Texas Municipal Water District, Texas - Preston Forcemain (2.84 miles, 27-inch D.I. Wastewater)*

The City of Kenner, Louisiana - Forcemain Inspection (24-inch and 30-inch PCCP Wastewater)*

North Texas Municipal Water District, Texas - Beck Forcemain (PCCP Wastewater)

North Texas Municipal Water District, Texas – N. Plano Pipeline (42-inch Potable Water)

DFW Airport, Texas (21-inch, 24-inch, and 30-inch Distribution System – PCCP and Ductile Iron Potable Water)

Denver Water, Colorado - Conduit 44 (30-inch and 36-inch CI Potable Water Pipeline)

Denver Water, Colorado - Conduit 85 (36-inch Potable Water Pipeline)

The City of Ventura - Casitas Pipeline c/o Black & Veatch (54-inch Potable Water Pipeline)

Byron Bethany Irrigation District, California - Mountain House Pipeline (30-inch Raw Water)

North Texas Municipal Water District, Texas - BG&E Plano/McKinney Pipeline (84-inch Potable Water)

Metropolitan Water District of Southern California, California - Santa Monica Feeder (32-inch Potable Water)

City of Oceanside, California - Land Outfall and Gravity Line Force mains (24-inch Wastewater)



Portland Water, Oregon - Guilds Lake and Ankeny Pipelines (20-inch, 30-inch, 42-inch Wastewater)

North Richland Hills, Texas, c/o Garver Construction (16-inch Potable Water Pipeline)

Austin Water, Texas - Slaughter Lane Pipeline (36-inch Potable Water)

United States Bureau of Reclamation - Dolores Pipeline (78-inch and 96-inch Raw Water)

*Mr. Adetunji served as the Team Lead for this project, responsible for project planning and execution.

Other project experiences (technologies such as SoundPrint® AFO, SmartBall®, PureRobotics®, and others) are available upon request.



MIGUEL FUENTEVILLA, MECHATRONICS ENGINEER

FIELD TECHNICIAN SUPERVISOR

EDUCATION

Bachelor's degree in Mechatronics Engineer, Universidad Politecnica Del Valle de Mexico, 2007-2011

CERTIFICATIONS/REGISTRATIONS

- Professional Engineer license given by the Mexican Public Education Department

PROFESSIONAL SUMMARY

- Solidworks certified professional from Dassault systems
- Oil pipeline design from NeoPetrol

PROFESSIONAL SUMMARY

For the past 11 years Mr. Fuentevilla has served as a Team Lead for several manned Electromagnetic PCCP inspections for City of Phoenix (B&V), Los Angeles (MWDSC), Santa Clara (Valley Water), City of Denver, City of Dallas (DWU), among others. He also has worked in the role of a Field Technician for Acoustic Fiber Optics (AFO) installation and maintenance for Santa Clara, Los Angeles, San Diego (SDCWA), Maryland (WSSC), Denver.

PROJECT EXPERIENCE

Calero Pipeline AFO Installation, San Jose, California

Field Technician for the AFO monitoring system for Valley Water

Santa Clara Conduit AFO Installation, San Jose, California

Field Technician for the AFO monitoring system for Valley Water

Almaden Valley Pipeline AFO Installation, San Jose, California

Field Technician for the AFO monitoring system for Valley Water

Cutzamala Pipeline AFO Installation phases 2-4, Toluca, Mexico

Field Technician for the AFO monitoring system for Valley Water

Several AFO Maintenance and interventions, San Diego, California

Field Technician performing maintenance to the multiple AFO monitoring systems owned by SDCWA.

Several manned EM Inspections, Phoenix, Arizona

Team Lead for multiple manned electro-magnetic (EM) inspections in multiple PCCP water mains managed by Black & Veatch.



[Several manned EM Inspections, Los Angeles, California](#)

Team Lead for multiple manned EM in multiple PCCP water mains owned by the Metropolitan Water District of Southern California (MWDSC).

[Several AFO Maintenance and interventions, Phoenix, Arizona](#)

Field Technician performing maintenance to the multiple AFO monitoring systems owned by the Central Arizona Project.

[Magnetic Flux Leakage inspections, San Diego, California](#)

Field Technician Assisting with the multiple metallic pipeline inspections performed for SDCWA.



ERICO SAITO

FIELD TECHNICIAN SUPERVISOR

CERTIFICATIONS/REGISTRATIONS

- Confined Space Entry Certified
- Lockout and Tagout Safety Certified
- First Aid/CPR Certified
- OSHA 10-hour Construction Safety and Health
- H2S Alive
- Forklift Operator

PROFESSIONAL SUMMARY

As the SmartBall inspection team lead and field supervisor, Mr. Saito will make decisions regarding operational requirements necessary to perform the SmartBall Inspection. Mr. Saito began employment with Pure Technologies in 2012, as a Production Technologist. Duties included mechanical assembly, warehouse management, shipping and receiving logistics and procurement of raw materials necessary for the in-house manufacturing of Pure Technologies' MFL inspection tools. Within a year and a half, Erico was moved into a Field Technologist role. As a part of Pure Technologies' operations team involved in preparing, executing and post-processing inspections, Erico began his experience with the various technologies within the company, soon specializing in Pure Technologies' SmartBall technology, followed by MFL and then EM technologies.

PROJECT EXPERIENCE

Mr. Saito has been involved with a number of pipe inspection projects. Below are a few select projects and program references.

- Little Rock Wastewater (LRW) – Field Support - Inspection of 42-inch force main comprised of 42-inch PCCP, with an overall length of approximately .9 miles) including approximately 800 feet of DI.
- San Jacinto River Authority (SJRA) – Field Support - SmartBall leak, gas pocket, and pipe wall assessment (PWA) of 12- and 24-inch DI force main, covering a cumulative distance of 2.46 miles
- City of Austin Water Authority (Austin Water) – Field Support - SmartBall leak, gas pocket, and pipe wall assessment (PWA) of 42- and 36-inch PCCP transmission mains, covering a cumulative distance of 3.1 miles
- Trinity River Authority (TRA) – Field Support - SmartBall leak and gas pocket detection of 33- and 36-inch BWP mains
- City of Irving & Grand Prairie – Field Support and Team Lead - SmartBall leak and gas pocket detection of 48- and 36-inch PCCP and BWP transmission mains
- San Diego County Water Agency (SDCWA) – Project Team Lead and Field Support - SmartBall leak and gas pocket detection of 12- and 18-inch DI, PVC and CML mains, total of 9.44 miles



- Little Rock Wastewater (LRW) – Field Support - SmartBall leak and gas pocket detection of 12- and 18-inch DI mains
- City of Santa Margarita – Team Lead - SmartBall leak and gas pocket detection of 33- and 36-inch BWP mains
- City of West Lynn – Field Support - SmartBall leak and gas pocket detection of 48- and 36-inch PCCP

ALAN L. BAIR, P.E.

LEAD CONDITION ASSESSMENT ENGINEER

EDUCATION

- Bachelor of Science in Mechanical Engineering, Rutgers University, New Jersey, 2003
- Master of Science in Engineering Management, New Jersey Institute of Technology, 2011

CERTIFICATIONS/REGISTRATIONS

- Professional Engineer - Florida (74731), Georgia (PE046328), South Carolina (39017)

PROFESSIONAL SUMMARY

Mr. Bair is an engineer with experience in civil engineering, including the condition assessment and proactive management of water and wastewater pressure pipes of multiple materials. He joined Pure Technologies in 2008. Before joining Pure Technologies, Alan worked as a resident civil engineer on various large projects. During this time he had been exposed to a wide variety of aspects of civil engineering such as on-site observations and consultation as well as, project analysis, report preparation, geotechnical investigations, soil analysis, and foundation design. Mr. Bair's experience includes pipeline evaluations ranging in diameter from 8- to 144-inches, involving internal pipeline inspections, pipe dissection, material sampling, external examinations, structural and finite element analysis, and calculating the remaining useful life of pressure pipelines. His work has also included project management, involving budgeting, cost estimating, scheduling and project control, report preparation and client relations, in regard to these types of engineering evaluations. Mr. Bair served as Program Manager for the Miami-Dade Water and Sewer Department's large diameter pipeline management program, which included condition assessment of its of large diameter water transmission and sewer force mains. He served as the Area General Manager of the Southeast US, responsible for all large condition assessment programs in the Southeast. Mr. Bair now serves as the National Practice Leader in the Condition Assessment Engineering group where he ensures condition assessment engineering best practice is carried out nationally.

PROJECT EXPERIENCE

[Pipeline Management Program, Miami-Dade Water and Sewer Department, Miami, FL \(2011-ongoing\)](#)

Program Manager for Miami-Dade Water and Sewer Department's pipeline management program that included inspection, condition assessment, and development of long-term management solutions for more than 250 miles of large diameter PCCP water and wastewater pipelines. The program is frequently regarded as one of the most innovative and successful buried pipeline management programs in the world. The inspection and condition assessment program has found less than 2.5% of all pipe segments inspected have any deterioration while less than 1% require repair or replacement.

Condition Assessment Program for PCCP, Tampa Bay Water, Clearwater, FL

Program Manager for Tampa Bay Water's PCCP management program that includes inspection, condition assessment, and development of management solutions for raw water supply mains. Tampa Bay Water is responsible for delivering wholesale water safely and effectively via several methods; including groundwater and surface water collection, and reverse osmosis seawater desalination.

Pipeline Inspection and Engineering Services, City of Miami Beach, Miami Beach, FL

Program Manager for Miami Beach's PCCP management program that includes inspection, condition assessment, and development of management solutions for large diameter PCCP potable water transmission mains and sewer force mains. Leak detection and electromagnetic evaluations with structural performance analysis to pinpoint distressed areas for rehabilitation. Provides rehabilitation strategies and remaining capacity and useful life evaluations. The program has allowed Miami Beach to better understand the serviceable life of their mains and stay connected to Miami-Dade County, successfully transmitting potable water and sewer effluent.

Condition Assessment Program for DIP Force Mains and PCCP Reclaimed Water Mains, Toho Water Authority, Kissimmee, FL (2015-ongoing)

Program Manager for inspection and management of 30 miles of ductile iron force mains and one 36-inch diameter reclaimed water main. Toho Water Authority operates potable, reclaimed, and sewer transmission and collection systems. The program has allowed Toho Water Authority to effectively and efficiently manage its pipeline assets.

Condition Assessment Program for PCCP Force Main, City of West Palm Beach, FL

Program Manager for inspection and management of 42- and 48-inch diameter prestressed concrete cylinder pipe force main that travels from the Town of Palm Beach to the City of West Palm Beach. WPB manages aging force mains that have been impacted by numerous above ground capital improvement and expansion projects over the City's years of development. Several of their force mains travel through highly sensitive residential, commercial and environmental areas.

Condition Assessment Program for Steel and DIP, Florida Keys Aqueduct Authority, Key West, FL

Senior Project Manager for inspection and management of 24-, 30-, and 36-inch diameter steel and ductile iron potable water transmission main that travels from Florida City to Key West. FCAA manages a unique, high-pressure system with advanced monitoring technologies to safely deliver potable water within a highly protected ecosystem to a functional population that includes permanent residents, seasonal and daily visitors.

PCCP Inspection and Engineering Services, Washington Suburban Sanitary Commission, Laurel, MD (2009-2010)

Project Engineer for WSSC's PCCP management program that includes inspection, condition assessment, and development of pipeline management solutions. Experience includes internal visual and sounding of PCCP, assessment of leak detection, electromagnetic, and sonic/ultrasonic inspections; combined with finite element performance analysis to provide engineering recommendations and acoustic fiber optic management solutions. The program has managed several hundred miles of PCCP and DIP, allowing WSSC to effectively allocate funding and prolong the useful life of their transmission and collection systems.



ASHAN MCNEALY, P.E.

SENIOR CONDITION ASSESSMENT ENGINEERING

EDUCATION

Bachelor of Science in Civil Engineering, United States Military Academy, West Point, New York

CERTIFICATIONS/REGISTRATIONS

Professional Engineer:

Colorado (0052061)

Hawaii (17470)

Utah (10268254-2202)

PROFESSIONAL SUMMARY

After graduation from the United States Military Academy, Mr. McNealy served more than 5 years in the Pacific Theater as an engineer officer, leading combat, construction, and topographic engineering organizations in the United States military. Building on this experience, he spent the last 15 years developing knowledge specific to pipeline assessment and asset management; leading projects, programs, and advancing state-of-the-art technologies across the globe. Mr. McNealy has extensive hands-on experience and a detailed understanding of the principal technologies used to evaluate and monitor pressurized pipelines. More critically, his experience includes how to integrate disparate assessment techniques and results into comprehensive asset management programs.

Specific areas of expertise include acoustic and electromagnetic inspection technologies, precision inertial pipe mapping and GIS, forensic studies, pressure pipe failure mechanisms and modes, risk model development, team leadership, personal coaching, and strategic problem solving.

Due to the success of the programs he has led, Mr. McNealy started an engineering service support group in 2018 within Assessment Services' western regional business unit. This group supported the development and delivery of critical projects across the region by enhancing and standardizing engineering deliverables. The immediate and profound impact of this group led to its transformation and expansion into a global engineering services team just a year later, where Mr. McNealy's team of professional assessment engineers support and advise all regional business units in Assessment Services.

PROJECT EXPERIENCE

Mr. McNealy has managed and been a principal advisor for numerous major assessment programs, water master plans, and projects involving industry-first technical developments.



Below are a few select project and program references.

[Water Research Foundation Project # 5069: Managing Prestressed Concrete Cylinder Pipe \(PCCP\) to Extend Asset Life, Project Manager, 2020-2021](#)

Leading the Xylem team for this tailored collaboration research project to update and expand the findings of WRF #4034 (Romer, et al., 2008). The three primary objectives of the research are:

Quantify the impact of condition assessment programs and technology implementation on failure/deterioration rates of Prestressed Concrete Cylinder Pipe (PCCP) since WRF#4034.

Collect successful transmission main program approaches as a roadmap for large-diameter, linear asset management programs.

Review lessons learned from PCCP management to determine applicability to large diameter pipe constructed with other pipe materials.

[Spokane Ray Street Transmission Main Assessment, Spokane, WA, Principal Advisor, 2020 - 2021](#)

The City of Spokane elected to proactively assess the condition of their 36-inch Ray Street Transmission Main to determine its condition and remaining useful life. To accomplish this goal, a comprehensive condition assessment approach was developed to provide actionable information pertaining to each individual pipe section along 1.2 miles of the water main. This is the first-ever assessment to directly utilize inline ultrasonic wall thickness data to drive both structural analysis and remaining useful life analysis.

[Dallas Water Master Plan, Dallas, TX, System Assessment Leader, 2018 - 2020](#)

System assessment leader for a water master plan of the Dallas, TX water system. The system assessment includes over 4,000 miles of water mains, the largest evaluation of this type conducted at Xylem to date. Primary responsibilities include risk framework and model development, infrastructure evaluation, strategy trade-offs analysis, and operational support framework development for plan implementation (2018 - 2020).

[Portland Water Bureau Conduit Assessment Program, Portland, OR, Manager, 2017 - 2019](#)

Condition assessment program for the three steel conduits that provide a majority of Portland Water Bureau's potable water to the city. Industry first comprehensive assessment of lock-bar steel pipe with riveted joints.

[Tacoma Steel Pipeline 1 Condition Assessment Project, Tacoma, WA, Manager, 2014 - 2015](#)

Pure Technologies' first comprehensive condition assessment of a large diameter steel main with visual, enhanced electromagnetic and ultrasonic surveys, leading to a structural engineering evaluation, including M11 analysis, level-one corrosion analysis, finite element analysis, and a state-of-the-art remaining useful life evaluation.

[HBWS Water System Master Plan, Honolulu, HI, System Assessment Leader, 2013 - 2015](#)



Pipeline asset management and condition assessment for over 2,100 miles of water mains, including root cause analysis, risk model development, soil, water, mortar and ferrous wall sampling, transient pressure monitoring and development of a leak detection and pipe wall assessment program.

[Phoenix Water PCCP Inspection Program, Phoenix, AZ, Manager, then Advisor, 2014 - Current](#)

Electromagnetic inspection program of the City of Phoenix's large-diameter PCCP water mains.

[SFPUC AWSS Asset Management Program, San Francisco, CA, Manager, 2014 - 2016](#)

Asset management program development including leak detection, pipe wall analysis, field forensic evaluation, and engineering evaluation of heavy gauge cast iron pipelines within the auxiliary system.

[MWDSC PCCP Assessment and Monitoring Program, Los Angeles, CA, Manager, then Advisor, 2014 - Current](#)

Pipeline condition assessment program including electromagnetic inspections with manned, robotic, and free-swimming platforms, acoustic fiber optic monitoring, and pipeline structural performance evaluations, covering 165 miles of large-diameter PCCP.

[WSSC PCCP Assessment and Monitoring Program, Montgomery and Prince George's Counties, MD, Project Manager, then Program Manager, 2010 - 2013](#)

Comprehensive condition assessment of multiple transmission mains, including visual and sounding, soil, water, mortar and wire sampling, structural performance analysis, acoustic leak detection, sonic/ultrasonic testing, electromagnetic inspection, finite element analysis, high-resolution 3-D inertial mapping, and acoustic fiber optic installation and management of PCCP monitoring system. Covered 77 miles of large-diameter transmission mains, including two pipeline repair interventions, maintenance, upgrade, and expansion of the monitoring system, trend analysis, and 24/7 engineering support.

CHRISTOPHER KYEA, P.E.

CONDITION ASSESSMENT ENGINEER

EDUCATION

B.S. Mechanical Engineering, Rensselaer Polytechnic Institute, Troy New York, 2008

CERTIFICATIONS/REGISTRATIONS

Professional Engineer, Civil:

- California, 89078
- Hawaii, PE-18493
- Colorado, PE.0061934

PROFESSIONAL SUMMARY

Mr. Kyea has over nine years of experience providing condition assessment solutions and engineering analyses for buried water and wastewater pipelines. He is a Senior Condition Assessment Engineer, working together with clients in Xylem's West Region to evaluate inspection data and make management recommendations that are informed and defensible.

Prior to his current role, Mr. Kyea was Xylem's Global Product Manager for Inline Leak Detection. In this role he was responsible for the management, development, and overall vision of the free-swimming SmartBall® and tethered Sahara® pipeline inspection platforms. These technologies helped utilities around the world pinpoint buried leaks to prevent failures and reduce water loss.

From 2014 through 2019, Mr. Kyea worked as a Senior Project Manager overseeing inspection and condition assessment projects for large diameter water and wastewater pipelines. During this period, he managed every project contracted with the San Diego County Water Authority becoming intimately familiar with the Water Authority's pipeline network, facilities, and responsibility to the community and member agencies.

PROJECT EXPERIENCE

Mr. Kyea has been involved in managing, planning, and reporting of comprehensive condition assessment projects. He has successfully maintained project scope, budget and schedule. Below is a list of projects and programs he has managed. Projects involving the Water Authority are preceded by an asterisk (*).

PipeWalker™ Electromagnetic Inspection Projects

*Non-Destructive Condition Assessment of Pipeline 1 54-inch Reinforced Concrete Pipe Non-Cylinder, Lilac Siphon and Red Mountain Siphon, Task Order 01-CA1. San Diego County Water Authority. San Diego County, California. May 2019.

*Non-Destructive Condition Assessment of Pipeline 1 54-inch Reinforced Concrete Cylinder Pipe, Lilac Siphon, Task Order 02-CA2. San Diego County Water Authority. San Diego County, California. May 2019.

78-Inch Cross Valley Pipeline. Santa Clara Valley Water District. Morgan Hill, California. January 2018.

72/78 Inch Almaden Valley Pipeline and 72-Inch Santa Teresa Force Main. Santa Clara Valley Water District. San Jose, California. November 2017.

120-Inch Pacheco Conduit and 96-Inch Santa Clara Conduit. Santa Clara Valley Water District. Gilroy, California. October 2017.

84-Inch Bay Division Pipeline No. 4D. San Francisco Public Utilities Commission. Menlo Park, California. May 2017.

210-Inch West Kutz, 210-Inch Horn, 189-Inch East Gallegos, and 189-Inch West Gallegos Siphons. Navajo Agricultural Products Industry. Farmington, New Mexico. January 2017.

66-Inch Penitencia Force Main and 60-Inch Penitencia Delivery Main. Santa Clara Valley Water District. San Jose, California. November 2016.

144-Inch Peace Valley Pipeline. California Department of Water Resources. Lebec, California. November 2016.

60-Inch San Antonio Pipeline. San Francisco Public Utilities Commission. Sunol, California. August 2016.

210-Inch Kutz Siphon. Navajo Agricultural Products Industry. Farmington, New Mexico. May 2016.

60-Inch Snell Prestressed Concrete Cylinder Pipeline. Santa Clara Valley Water District. San Jose, California. February 2016.

60-Inch Snell Prestressed Concrete Cylinder Pipeline. Santa Clara Valley Water District. San Jose, California. February 2015.

[Magnetic Flux Leakage Inspection Projects](#)

*Comprehensive Nondestructive Condition Assessment of Welded Steel Pipe and Pipe Liners Pipeline 3 from San Marcos to Rancho Peñasquitos. San Diego County Water Authority. San Marcos, California. March 2016.

*Steel Pipeline Condition Assessment of Pipeline 3 from the Metropolitan Water District Point of Delivery to Twin Oaks Diversion Structure. San Diego County Water Authority. Fallbrook, California. November 2014.

[SmartBall® Leak Detection Inspections](#)

Henderson Mine Dewatering Lines. Climax Molybdenum. Clear Creek County, Colorado. September 2017.

Pacheco Conduit and Santa Clara Conduit. Santa Clara Valley Water District. Gilroy, California. October 2016.

*Tri-Agencies Pipeline. San Diego County Water Authority. Vista, California May 2015.

[Robotic Electromagnetic Inspection Projects](#)

Robotic Inspection of the 48-inch Miramar Pump Station Inlet and Outlet Pipelines. City of San Diego. San Diego, California. October 2018.

Robotic Electromagnetic Inspection of the 54-Inch Discharge Line. Bella Vista Water District. Reading, California. February 2017.

Acoustic Fiber Optic Program Manager for Installation and Ongoing Maintenance and Monitoring Valley Water District, Santa Clara County California.

San Francisco Public Utilities, Oakdale California.

*San Diego County Water Authority, San Diego County California.

Engineering Analysis and Condition Assessment Projects

On-Call Engineering and Analysis Services for Large Diameter Pipelines. Risk Analysis, Structural Analysis, Forensic Investigation, and Emergency Response Planning. Santa Clara Valley Water District. Santa Clara County, California. 2017 to 2020.

Condition Assessment of the 24-Inch Manito and 18/24/30-Inch 57th Avenue Transmission Mains. SmartBall® Leak Detection, PipeDiver® Electromagnetic Inspection, Transient Pressure Analysis, Structural Analysis, Remaining Useful Life, and Test Pits. City of Spokane. Spokane, Washington. October 2016.

Condition Assessment of the Green Oaks Potable Water Main and the John Kubala Raw Water Main. Robotic and PipeDiver® Electromagnetic Inspection and Structural Analysis. City of Arlington. Arlington, Texas. September 2016

Condition Assessment and Repair of the 54-Inch Central Intertie Pipeline. Magnetic Flux Leakage Inspection, Structural Analysis, Risk Analysis, and Remaining Useful Life. Moulton Niguel Water District. Mission Viejo, California. November 2015.

Condition Assessment of the Ortega, San Juan, Coto, Trabuco, Ladera, and Horno 12 inch to 18-inch Force Mains. SmartBall® Leak and Gas Pocket Inspection, Test Pits, and Structural Analysis. Santa Margarita Water District. Rancho Santa Margarita, California. December 2014.



DANIEL DEFEVER, P.E.

CONDITION ASSESSMENT ENGINEER

EDUCATION

- Bachelor of Science degree in Environmental Engineering with Entrepreneurship Minor, San Diego State University (2018)

CERTIFICATIONS/REGISTRATIONS

- Professional Civil Engineer (P.E.) Certification (Water Resources and Environmental)
 - California
 - Arizona

PROFESSIONAL SUMMARY

Mr. DeFever joined Pure Technologies, a Xylem brand, as a Project Engineer, shortly after graduation from San Diego State University. While working across a number of different fields, and gaining knowledge across a number of disciplines within the company, he transitioned into a Condition Assessment Engineer role at Xylem based in San Diego.

He has acted as an engineer in various projects across the globe. His responsibilities include pipe design analysis, live load analysis, visual and sounding investigations, hydraulic analyses, support in execution of pipeline inspections, pipe forensics, predictive deterioration analysis, final deliverables, QA/QC, and working with clients on recommended actions for pipeline management.

Mr. DeFever's experience includes data analysis, GIS, QA/QC, AutoCAD, visual and sounding investigations, condition assessment report writing, field investigations, and pipeline drawings review.

PROJECT EXPERIENCE

Mr. DeFever has served as an engineer on numerous projects globally. Below are a few select project references with responsibilities.

San Diego County Water Authority P4 Pipeline, San Diego, CA (2022)

Structural analysis (AWWA C301 & C304; Finite Element Analysis (FEA)-based pipe performance curve) on Pipe Class 14-450.

- Diameter(s): 90"
- Material(s): PCCP

San Diego County Water Authority P4, P5, XOVR Pipelines, San Diego, CA (2024)

Acoustic fiber optic monitoring condition assessment engineer.

- Diameter(s): 90"/96"/66"
- Distance: 10.5; 10.5; 7.5 miles



- Material(s): PCCP

Metropolitan Water District of Southern California Allen McColloch Condition Assessment, Los Angeles, CA (2024)

PipeWalker electromagnetic assessment and FEA-based pipe performance curve development.

- Distance: 8.67 miles
- Diameter(s): 54"/66"/69"/78"
- Material(s): PCCP

Metropolitan Water District of Southern California West Valley and Calabasas Feeder 2 Condition Assessment, Los Angeles, CA (2024)

PipeWalker electromagnetic assessment.

- Distance: ~12 miles.
- Diameter(s): 54"/96"
- Material(s): PCCP.

Metropolitan Water District of Southern California South Coast Feeder Condition Assessment, Los Angeles, CA (2023)

PipeWalker electromagnetic assessment.

- Distance: 3.25 miles
- Diameter(s): 96"
- Material(s): PCCP

Metropolitan Water District of Southern California Sepulveda Feeder Condition Assessment, Los Angeles, CA (2022)

PipeWalker electromagnetic assessment.

- Distance: 14.67 miles
- Diameter(s): 96"; 120"; 150"
- Material(s): PCCP

Metropolitan Water District of Southern California Calabasas, Foothill and Sepulveda Feeder Condition Assessment, Los Angeles, CA (2019)

FEA-based pipe performance curve report for 33 pipe classes.

- Diameter(s): 54"; 201"
- Material(s): PCCP



Department of Water Resources – Santa Ana Valley Pipeline, Santa Ana, CA

Conducted 50+ AWWA C301 and C304 pipe design analyses and a hydraulic analysis. Compiled and presented risk and structural report consisting of finite element analysis risk curves and remaining useful life, and provided recommendations, including pipe repair and pipeline management.

San Francisco Public Utilities Commission – Bay Division Pipeline No.4A, Fremont, CA

Utilized existing structural evaluation to develop a predictive model focused on 96-inch PCCP. Compiled and presented a condition assessment report consisting of electromagnetic inspection, predictive model results, structural evaluation, and short/long term recommendation for pipeline management.

Valley Water – Central Pipeline, San Jose, CA

Conducted Bar-Wrapped Pipe AWWA C303 design checks to help understand and determine root causes of failing inner coating. Included document review, geotechnical review, structural evaluation, and compilation of structural report.

Valley Water – Santa Clara Conduit and Calaveras Fault Crossing, Santa Clara, CA

Compiled condition assessment report, including visual and sounding, likelihood and consequence of failure, risk ratings, and structural analysis. Recommended repair of a pipe joint, monitoring of expandable pipe joints, reassessment timeline, and no rehabilitation or repair.



GEORGE VARGA

DIRECTOR OF ANALYSIS, MONITORING AND GIS

EDUCATION

- Bachelor of Science (B.Sc.): Pure & Applied Physics, York University, Toronto, ON, Canada

PROFESSIONAL SUMMARY

Mr. Varga has over 24 years of experience providing analysis, inspections, and management in non-destructive acoustic and electromagnetic-based technologies used in pressurized pipe condition assessment programs. Extensive fieldwork in conjunction with project management expertise has led Mr. Varga to become a technical expert on Pure Technologies' inline condition assessment technologies. Since 2017, Mr. Varga has been leading the Department of Data Analysis, Monitoring and GIS (AMG), which provides enterprise-wide analysis, monitoring and mapping services within Utilities Services (formerly Assessemnt Services) Business Unit.

Mr. Varga joined The Pressure Pipe Inspection Company, a new start-up in 2000, at the data analyst level, right after graduating from college with a Bachelor's degree in Pure and Applied Physics from York University.

Mr. Varga has worked extensively in the United States, Canada, and around the world.

Over the years, and through several acquisitions (2010 by Pure Technologies, and 2017 by Xylem), Mr. Varga has grown with the company, and today leads a consolidated department of 65 staff in Data Analysis, Systems Monitoring, and GIS.

PROJECT EXPERIENCE

PureEM Electromagnetic Inspection, Validation, and Data Analysis

- Mr. Varga worked as a Data Analyst for two years (2000-2002, ~400km of data analyzed) and helped to advance our understanding of EM analysis methodology through onsite calibrations.
- Mr. Varga has also worked extensively as a Field Technician (2002-2010), and has been invovled in 80+ projects including the company's biggest projects around the world.
- As Director of Analysis, Monitoring, and GIS, Mr Varga still participates in high profile PureEM Electromagnetic Inspections, Validations, and Data Analysis.

A few selected projects include:

Libya – EM Inspection and Onsite Analysis

For the Great Man-Made River Authority, for 4 kilometers of 4-meter diameter PCCP (September 2022) following a catastrophic failure.



MICHELLE ZHAO, E.I.T.

SENIOR DATA ANALYST

EDUCATION

Bachelor's of Science in Electrical Engineering, University of Toronto, Toronto, Ontario, Canada

CERTIFICATIONS/REGISTRATIONS

Engineer-In-Training (Ontario, 100129508)

Confined Space Entry Certified

PROFESSIONAL SUMMARY

Ms. Zhao has 18 years of experience in assessing electromagnetic data for water management utilities worldwide. Since joining Pure Technologies in 2007, Ms. Zhao's experience includes comprehensive training, field testing, and data analysis for data collected from the electromagnetic platform of Pure Technologies, a Xylem brand. Since 2011, Ms. Zhao has been assigned the role of supervising the data analysis group in charge of managing all projects for Pure Technologies that use electromagnetic inspection platforms. Her current role involves administrative and technical oversight of data collected from projects for all Pure Technologies' clients worldwide, management of quality control measures, and serving as the primary contact for project teams.

PROJECT EXPERIENCE

Ms. Zhao currently serves as a Senior Data Analysis and has been involved in many inspection projects and programs. Below are a few select project references.

Condition Assessment Program, Baltimore County, Maryland

Baltimore County is a steady repeat client for Pure Technologies. As a Data Analysis Manager, Ms. Zhao analyzes and coaches the data analysis team delivering the annual inspection projects. Inspections utilize the PureRobotics® and PipeDiver® platforms to deliver electromagnetic technologies, and analysis has examined 30+ miles of data to date.

Condition Assessment Program, Washington Suburban Sanitary Commission, Laurel, Maryland

Washington Suburban Sanitary Commission is a steady repeat client for Pure Technologies. As a Data Analysis Manager, Ms. Zhao analyzes and coaches the data analysis team delivering the annual inspection projects. Inspections utilize the PipeWalker®, PureRobotics®, and PipeDiver® platforms to deliver electromagnetic technologies, and analysis has examined 100+ miles of data to date.



Condition Assessment Program, Miami-Dade Water and Wastewater Department, Miami-Dade, Florida

Miami-Dade Water and Wastewater Department is a steady repeat client for Pure Technologies. As a Data Analysis Manager, Ms. Zhao analyzes and coaches the data analysis team delivering the annual inspection projects. Inspections utilize the PipeDiver® platform to deliver electromagnetic technologies, and analysis has examined 350+ miles of data to date.

Condition Assessment Program, Tarrant Regional Water District, Tarrant County, Texas

Tarrant Regional Water District is a steady repeat client for Pure Technologies. As a Data Analysis Manager, Ms. Zhao analyzes and coaches the data analysis team delivering the annual inspection projects. Inspections utilize the PipeWalker® platform to deliver electromagnetic technologies, and analysis has examined 250+ miles of data to date.

Condition Assessment Program, Metropolitan Water District of Southern California, California

Metropolitan District of Southern California is a steady repeat client for Pure Technologies. As a Data Analysis Manager, Ms. Zhao analyzes and coaches the data analysis team delivering the annual inspection projects. Inspections utilize the PipeWalker® and PipeDiver® platforms to deliver electromagnetic technologies, and analysis has examined 500+ miles of data to date.

Robotic EM Inspections, Calgary, Alberta

The City of Calgary is a steady client for Pure Technologies. As a Data Analysis Manager, Ms. Zhao analyzes and coaches the data analysis team delivering the annual inspection projects. Inspections utilize the PureRobotics® platform to deliver electromagnetic technologies, and analysis has examined 30+ miles of data to date.

PipeDiver EM, Robotic Inspections, Ottawa, Ontario

The City of Ottawa is a steady repeat client for Pure Technologies. As a Data Analysis Manager, Ms. Zhao analyzes and coaches the data analysis team delivering the annual inspection projects. Inspections utilize the PureRobotics® and PipeDiver® platforms to deliver electromagnetic technologies, and analysis has examined 15+ miles of data to date.

Robotic EM Inspections, Montreal, Quebec

As a Data Analysis Manager, Ms. Zhao analyzes and coaches the data analysis team delivering the annual inspection projects. Inspections utilize the PureRobotics® platform to deliver electromagnetic technologies, and analysis has examined 30+ miles of data to date.



City of Tucson – EM Inspection, Validation, and Onsite Analysis

For 16 kilometers of 1-meter diameter BWP (August, 2023 and June, 2024).

City of Ottawa – EM Inspection, Validation, and Onsite Analysis

For 25 kilometers of 1.2-mile diameter PCCP (October 2023 and June 2024).

City of Ottawa – EM Validation and Remote Analysis

For 3 kilometers of 2-meter diameter PCCP (June 2024) following a catastrophic failure.

PROJECT EXPERIENCE

Sahara Leak and Gas Pocket Detection Surveys

- While working as a Field Technician, Mr. Varga was selected as one of the first employees to train in Sahara, the company's leak detection technology, acquired from WRc (2004). He played a critical role as a Team Lead in leak detections inspection throughout the United States.
- Mr. Varga was the Corporate Technical Trainer for the Sahara technology (as well as PureEM), and trained eight engineers in Manila, Philippines in 2010.

A few selected projects include:

HRSD – Leak and Gas Pocket Detection Survey

For force main inspection pilot project for 1.99 miles (10,500 linear feet) of 16- to 36-inch diameter force mains (April 2008).

HRSD – Leak and Gas Pocket Detection Survey

For force main inspection pilot project for 0.61 miles (3,200 linear feet) of 16- to 36-inch diameter force mains (September 2008).

Dallas Water Utilities – Leak and Gas Pocket Detection Survey

For 0.98 mile (5,174 linear feet) of 60-inch diameter force main (July 2008).

Sault Sainte Marie (Michigan) – Leak and Gas Pocket Detection Survey

For 1.2 mile (6,336 linear feet) of 36-inch force main (October 2008).

Region of Halton (Ontario) – Leak and Gas Pocket Detection Survey

For 0.50 mile (2,640 linear feet) of 24-inch diameter force main (February 2009).

Client (Kentucky) – Leak and Gas Pocket Detection Survey

For 1.56 mile (8,236 linear feet) of 6- and 12-inch diameter force main (March 2009).



Gary Graham, P.E.
Director of Engineering

Education

BS, Civil Engineering, Oregon Institute of Technology, 2005

Professional Registrations

State of Nevada Professional Civil Engineer - #20954

State of Texas Professional Civil Engineer - #111995

State of Colorado Professional Engineer - #0065619

NACE Certified CP Specialist #47544

CIPP Pipe Inspector, #CIPP-612-0813

AMPP Fundamentals of Protective Coatings for Industrial Structures - C1

Pipe, Lateral and Manhole Assessment Certification (MCAP), #U-412-15273

Certified Confined Space Entry

Professional Affiliations/Accomplishments

- Appalachian Underground Corrosion Short Course Instructor, 2024
- Provide cathodic protection training courses to multiple water agencies
- AMPP Member

Mr. Graham has had the responsibilities of cathodic protection design, testing and project management for pipelines, water treatment facilities, plant sites, refineries, process facilities, buried underground structures, internal vessel surfaces, water distribution systems, marine structures, and steel in concrete. He has oversaw comprehensive corrosion and cathodic protection test programs, designs turnkey installations, material selection, coatings and comprehensive corrosion studies.

Work History

2024 To Present	Farwest Corrosion Control, Director of Engineering
2021 To 2024	Freese & Nichols, Senior Corrosion Engineer
2019 To 2021	PureHM, Senior Corrosion Integrity Engineer
2017 To 2019	HDR, Engineering Section Manager
2015 To 2017	Corrpro Companies, Operations Manager
2001 To 2015	V&A Consulting Engineers, Project Manager
2007 To 2011	Manhard Consulting, Project Engineer
2005 To 2007	Shaw Engineering, Project Engineer

Relevant Experience

Gary has over nineteen years of experience in the design, corrosion control, condition assessment, evaluation and construction of a variety of water and wastewater infrastructure, federal DoD projects, and petroleum projects including: water booster pumps, tank and transmission main projects, sewer collection (gravity, lift station and force main) projects, wastewater treatment and others. Duties include management and coordination of construction and engineering staff, cathodic protection surveyors, and



CAD technicians in order to complete projects within a specified schedule and budget, preparation of plans and specifications, permitting, bid assistance, and construction management.

Professional Accomplishments

- Provided corrosion control design and construction support services for Raw Water Intake Structure and Pump Station, Surface Water Treatment Plant, Finished Water Storage and High Service Pumping Facilities, 54 miles of pipe in 11 separate contracts ranging in size from 12 inch to 60 inch (San Jacinto River Authority)
- Provided design services and condition assessment on the internal and external shell and components of the Canutillo #2 ground storage tank (El Paso Water)
- Performed cathodic protection survey analysis, existing pipeline assessments, and recommendations for improvements on multiple water transmission lines (North Texas Municipal Water District)
- Provided construction phase services and resident project representation for the replacement of an existing caustic scrubber and a replacement of the existing wash press (El Paso Water)
- Performed estimating, material takeoffs, provided catalog cutsheets, ordered and scheduled materials, developed deep well installation drawings, coordinated permitting and managed field personnel and contractors on 11 ICCP deep wells (Hess Tioga Gas Plant)
- Conducted CP survey of plant piping and other plant structures located inside the Tioga Gas Plant, performed as-needed repairs to existing CP systems, and gathering necessary data required for future design of new CP systems and the rehabilitation of existing CP systems (Hess Tioga Gas Plant)
- Installed 11 Remote monitoring units on 9 oil cooled and 3 air cooled rectifiers to allow for interruption control and web based interface (Hess Tioga Gas Plant)
- Installed ICCP systems and deep well to protect existing underground structures at 15 Missile Alert Facilities and 7 Launch Facilities (Malmstrom Air Force Base)

Project Commitment:

Mr. Graham is a current Farwest Corrosion Control employee. Gary will be available upon notice to proceed and will remain a vital team member for the duration of the project.

References:

Ron Deal – Freese and Nichols

Email: Ron.Deal@Freese.com

Telephone: +1 (832) 914-8030

Kristine Michels – K2 Corrosion

Email: Kristine@K2Corrosion.com

Telephone: +1 (217) 994-0203

Randy Galisky – Kinder Morgan

Email: Randygalisky@KinderMorgan.com

Telephone: +1 (520) 631-2925



John Bollinger
Principal Corrosion Engineer

Education

Mechanical Engineering, El Camino College

Professional Registrations

State of California Corrosion Engineer - #937

Professional Affiliations/Accomplishments

- Designed and produced a series of new generation Switch mode power supplies for cathodic protection.
- Designed and patented industry's first "automatic potential controlled" magnesium anode CP system that requires no external power or batteries
- Design of high precision electronic measuring instruments for the corrosion control industry
- Author of technical papers published in Society of Petroleum Engineers, World Pipelines and NACE Materials Protection magazines.
- Instructor for NACE approved cathodic protection power supply troubleshooting class.
- AMPP Member

As Principal Corrosion Engineer, Bollinger is responsible for cathodic protection design, consulting, troubleshooting, materials evaluation, and research and development. Major projects include completing design packages and field surveys, troubleshooting projects, and providing consultation to many industry clients. He has designed and evaluated new generation Switch mode power supplies, as well as numerous cathodic protection systems and custom materials and custom instrumentation for a variety of projects.

Work History

1975 To Present: Farwest Corrosion Control, Principal Corrosion Engineer
1971 To 1975: Farwest Corrosion Control, Consultant, Field Engineer
1967 To 1971: United States Air Force; Electronic Technician Specialist EC121. C130 and B52 Aircraft
1965 To 1967: Corrosion Engineering Consulting Firm, Field Technician

Relevant Experience

Since 1965, Bollinger has been in the cathodic protection industry. He specializes in surveys and designs of corrosion control systems, which include passive, sacrificial, and grid powered as well as solar and wind powered cathodic protection systems for underground and submarine pipe, and well and tank structures. Bollinger designed quality assurance and production inspection programs. He has also acted as a design engineer and technical consultant for nuclear and military grade cathodic protection installations.



Professional Accomplishments

- Corrosion Engineer -North of the River project - designed, conducted installation inspection and performed system commissioning of automatic potential controlled cathodic protection systems on 2-million-gallon water storage reservoirs.
- Conducted electrical continuity tests and evaluation of mortar coated water pipeline system (Orange County Water District)
- Performed field investigation and data acquisition for failure analysis of pre-stressed cylinder water pipeline (San Francisco Water Department)
- Reviewed and evaluated corrosion control program for buried pipelines, pumping facilities, and water storage reservoirs (Humboldt Bay Municipal Water District)
- Designed cathodic protection systems for 36 final clarifiers at Hiperion Treatment Plant (City of Los Angeles)
- Project Manager and principal consultant for multiple large cathodic protection projects at nuclear power plants, domestic and overseas oil production facilities
- Designed, provided oversight of QC of production materials and electrical test equipment.
- Conducted installation inspection, and performed system commissioning of CP systems for cross country petroleum pipelines, offshore platforms, oil well, and gas well casings, process plants, power plants and water storage facilities
- Designed subsea anode systems for offshore petroleum platforms.
- Served as Project Manager and Principal Engineer for the design and installation of site specific grounding systems for the military, NOAA, and aerospace industry.
- Performed field investigation and data acquisition for failure analysis of pre-stressed cylinder water pipelines.
- In-house company resource (Subject Matter Expert)

Project Commitment:

Mr. Bollinger is a current Farwest Corrosion Control employee. John will be available upon notice to proceed and will remain a vital team member for the duration of the project.

References:

Robert Cannon – California Resources Corporation

Email: robert.cannon2@crc.com

Telephone: +1 (562) 999-8435

Marcos Garcia - Southern California Gas Company

Email: magarcia6@semprautilities.com

Telephone: +1 (626) 222-1255

Gary Barton – ARK Engineering & Technical Services, Inc.

Email: gbarton@arkengineering.com

Telephone: +1 (213) 718-7759



John Rettig Vice President of Services

Education

BS, Electrical Engineering, San Diego State University, 2009

Professional Registrations

NACE International Cathodic Protection Specialist #42020

California Contractor License: Class A General Engineering Contractor

Professional Affiliations/Accomplishments

- Western States Corrosion Seminar Instructor
- AMPP Member

As Vice President of Services for Farwest, Mr. Rettig is responsible for the overall management of the technical teams and setting standardization across Farwest operations. In addition to management responsibilities, Mr. Rettig is also active as a Principal Engineer. John has extensive experience in cathodic protection systems, design, evaluation, installation and maintenance. Relevant facilities include cathodic protection design for pipelines, water treatment facilities, plant sites, refineries, marine facilities, concrete and foundation piles, cathodic protection testing includes potential surveys, continuity surveys, ECDA surveys, and corrosion integrity studies and investigation.

Work History

2019 To Present Farwest Corrosion Control, Vice President of Services

2017 To 2019 Pond and Company, Program Manager - Corrosion

2009 To 2017 Corpro Companies Inc., DoD Operations Manager

Relevant Experience

Mr. Rettig has held a significant role in a wide variety of projects relating to all facets of corrosion detection and corrosion control for water/wastewater facilities, regulated oil and natural gas pipelines, and other metallic structures. John has been responsible for the development of project-specific procedures and evaluation plans to assess existing corrosion conditions and formulate cost-effective corrosion control measures. He has a strong working knowledge of current state-of-the-art in virtually all corrosion detection methods and corrosion control technologies. Areas of expertise include AC and DC stray current interference, pipeline and storage tank condition appraisals, non-destructive testing and inspection procedures, regulatory compliance issues, cathodic protection design and maintenance and corrosion control construction management.

Professional Accomplishments

- Quarterly Rectifier and Annual CP System Surveys for the North Fort Bend Water Authority, 2022-2023. These surveys covered the evaluation of the Bellaire Pump Station and (17) seventeen-line segments. QA/QC support for quarterly rectifier surveys with report, complete annual CP System survey.



- Naval Air Station Corpus Christy NASCC Powertrain Facility Project. 2022, Designed galvanic CP system for water piping and specialized fittings. Managed field installation of CP system and post construction testing.
- Lower Bois d'Arc Raw Water Project. 2022, Project Manager for installation of nine impressed CP systems for a 90-inch raw water line, routing 33 miles. Project includes post construction award testing and enhanced CP surveys. The enhanced CP surveys consisted of native and polarized close interval surveys of the 33 miles of piping.
- AFCEC A/E POL TO-0037 CP SURVEYS- Subcontracted Repair Support. 2023, Project Manager for subcontracted CP system repair and installation work. Managed Farwest's installation teams to perform maintenance, repair, and installation of CP systems at 10 sites in 2023. Efforts included installation of both galvanic and impressed current CP systems, pipeline excavation for direct assessment, CP test and monitoring station installation.
- Cathodic Protection of POL Systems Worldwide, NAVFAC EXWC. 2010-2019, managed contract work for both AE POL and GPOL MACC contracts. Managed and performed CP and Enhanced Survey efforts at Navy and Marine establishments across the globe. Specialized in program management, subcontractor management, contract management, conducting high level CP field services and design.
- USAF Buckley Recap 3 Project- Buckley Air Force Base Aurora, CA. 2022, Managed subcontract for CP system design, material procurement and installation oversight for buried piping and underground storage tank.

Project Commitment:

Mr. Rettig is a current Farwest Corrosion Control employee. John will be available upon notice to proceed and will remain a vital team member for the duration of the project.

References:

Jason Galati- Pond and Company
Email: GalatiJ@pondco.com
Telephone: 619-681-4679

Andrew Beck- Garney Construction- Water
Email: abeck@garney.com
Telephone: 816.741.4600

Randy Galisky – Kinder Morgan
Email: Randygalisky@KinderMorgan.com
Telephone: +1 (520) 631-2925

THIS CERTIFIES THAT

Farwest Corrosion Control Company* Nationally certified by the: **EASTERN MINORITY SUPPLIER DEVELOPMENT COUNCIL***NAICS Code(s): 335999; 238210

* Description of their product/services as defined by the North American Industry Classification System (NAICS)

02/07/2025

Issued Date

PT235103

Certificate Number

03/01/2026

Expiration Date**Ying McGuire
NMSDC CEO and President****Brian K. Oglesby, President/CEO**By using your password (NMSDC issued only), authorized users may log into NMSDC Central to view the entire profile: <http://nmsdc.org>*Certify, Develop, Connect, Advocate.*

* MBEs certified by an Affiliate of the National Minority Supplier Development Council, Inc.®

Addendums

THREE VALLEYS MUNICIPAL WATERT DISTRICT
ADDENDUM NO. 01
for the
ON-CALL DESIGN AND INSPECTION SERVICES FOR
PIPELINE CONDITION ASSESMENT PROGRAM

July 15, 2025

Three Valleys hereby issues Addendum No.1. The proposal due time remains unchanged.

Acknowledge receipt of this Addendum by signing and inserting its number and date on the acknowledgement below.

The purpose of the addendum is to provide the following clarifications to questions regarding the Request for Proposals:

- Response to Proposers' Question

QUESTION:

The evaluation criteria says "evaluation will be based on the understanding of the District needs, project approach, established experience and performance for each of the four categories as detailed in the scope of work," but the proposal format does not include an approach section. Should an approach be included in the proposal, and if so, is it included in the 15-page limit?

ANSWER:

The RFP is for on-call service and specific projects have not been assigned. Thus, the project approach can be removed from the proposal package and will not impact the evaluation process.

QUESTION:

Can more than three projects be included in the proposal given the range of activities in the scope of work

ANSWER:

As long as the 15-page maximum is not exceeded

QUESTION:

Can we include subcontractors on our team if we believe their services will provide value to the district and they do not have the capacity to bid on this work as a prime?

ANSWER:

Yes, as stated in the Executive Summary, it is preferred that consultants perform tasks without relying on subconsultants. TVMWD recognizes that some coordination may be necessary between field data collection and the overall planning process. While preferred subconsultants may be included, evaluations will focus on whether the task can be self-performed or requires a subconsultant.

THREE VALLEYS MUNICIPAL WATERT DISTRICT
ADDENDUM NO. 01
for the
ON-CALL DESIGN AND INSPECTION SERVICES FOR
PIPELINE CONDITION ASSESMENT PROGRAM

QUESTION:

is the use of 11x17 pages permitted and if so does the use of a 11x17 page impact the page limit?

ANSWER:

11 x 17 sheet will be considered (1) page as only electronic submissions are being accepted

QUESTION:

Can the District provide a rough estimate of total number of pipeline miles under its operation?

ANSWER:

Refer to the introduction approximately 8 miles of pipe. Pipe sizes ranges from 42in to 18in transmission mains. Primarily PCCP or CML&C Steel Pipe.

QUESTION:

Are all services to be provided in one, 15-page response or is it 15 pages per response section

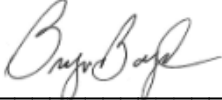
ANSWER:

The intent of the 15-page limit is to expedite the review process. Ideally, much of the consultant's core information should overlap between response sections limiting the need to add a substantial number of pages to the proposal. However, to provide a uniform reviewing process, consultants may submit up to 15 pages per response section.

ADDENDUM NO.01 ACKNOWLEDGEMENT

The Bidder hereby acknowledges the receipt of Addendum No. 1 and the incorporation thereof in the Bid Proposal for the **ON-CALL DESIGN AND INSPECTION SERVICES FOR PIPELINE CONDITION ASSESMENT PROGRAM**

Bidder: Pure Technologies US Inc.

By: 

(Bidder's Authorized Representative)

Date: July 22, 2025

Title: Regional Sales Manager, Business Development

Thank You

Pure Technologies is excited to partner with Three Valleys Municipal Water District on this inspection and condition assessment project. We are pleased to provide you with our proposal, and we thank you for this opportunity.

**MASTER ON-CALL PROFESSIONAL SERVICES AGREEMENT
BETWEEN
THREE VALLEYS MUNICIPAL WATER DISTRICT
AND
PIPELINE INSPECTION AND CONDITION ANALYSIS CORPORATION**

This Professional Services Agreement ("AGREEMENT") is made and entered into this 7th day of August, 2025 ("EFFECTIVE DATE"), by and between Three Valleys Municipal Water District, a municipal water district organized and operating pursuant to California Water Code Section 71000 et seq. (hereinafter referred to as "DISTRICT"), and **PIPELINE INSPECTION AND CONDITION ANALYSIS CORPORATION**, (hereinafter referred to as "CONSULTANT"). DISTRICT and CONSULTANT are sometimes individually referred to as "PARTY" and collectively as "PARTIES" in this AGREEMENT.

RECITALS

WHEREAS, DISTRICT desires to contract with CONSULTANT as an independent CONSULTANT to provide professional services for the Master On-Call Professional Services on an "as-needed" TASK ORDER assignment basis; and

WHEREAS, CONSULTANT represents that it is duly licensed, qualified and capable to perform such services by virtue of its experience and the training, education and expertise of its principals and employees, and that CONSULTANT is customarily engaged in an independently established trade, profession, occupation, and/or business of the same nature as the work to be performed for herein; and

WHEREAS, DISTRICT desires to retain CONSULTANT and CONSULTANT desires to serve the DISTRICT to perform the services described herein in accordance with the terms and conditions of this AGREEMENT.

COVENANTS

NOW, therefore, in consideration of the faithful performance of the terms and conditions set forth herein, the PARTIES hereto agree as follows:

**ARTICLE I
SERVICES OF CONSULTANT**

1. **SCOPE OF SERVICES:** The scope of services to be performed by the CONSULTANT under this AGREEMENT are described in Exhibit "A" attached hereto and incorporated herein by this reference ("PROPOSAL"), and shall, where not specifically addressed, include all related services ordinarily provided by the CONSULTANT under same or similar circumstances. The DISTRICT may request, in writing, changes in the PROPOSAL or services to be performed. Any changes mutually agreed upon by the PARTIES, and any increase or decrease in compensation or time, shall be incorporated by written amendments to this AGREEMENT. Individual "TASK ORDERS" will be issued based on the services and rates provided in the PROPOSAL.
2. **PREVAILING WAGES:** CONSULTANT shall comply with all applicable provisions of labor law

relating to employment for the performance of services on the TASK ORDER. In accordance with the provisions of the California Labor Code, CONSULTANT shall secure the payment of compensation to employees. To the extent required by the California Labor Code, CONSULTANT shall pay not less than the prevailing rate of per diem wages as determined by the Director, Department of Industrial Relations, State of California ("DIR"). Copies of such prevailing rate of per diem wages are on file at the DISTRICT's office, which copies will be made available to any interested party upon request. CONSULTANT shall post a copy of such determination at each job site. If applicable, CONSULTANT shall forfeit to the DISTRICT the amount of the penalty set forth in California Labor Code Section 1777.7(b), or any subsequent amendments thereto, for each calendar day, or portion thereof, for each worker paid less than the specified prevailing rates for such work or craft in which such worker is employed, whether paid by CONSULTANT or by any SUBCONTRACTOR. CONSULTANT shall submit certified payroll records to the Labor Commissioner using DIR's electronic certified reporting system and provide with their invoice certified payroll records verifying that CONSULTANT has paid prevailing wage in accordance with the DIR requirements as stipulated in California Senate Bills 854 and 96, <https://www.dir.ca.gov/public-works/certified-payroll-reporting.html>

ARTICLE II

ENGAGEMENT OF CONSULTANT AND AUTHORIZATION TO PROCEED

1. **ENGAGEMENT:** The DISTRICT hereby engages CONSULTANT, and CONSULTANT hereby accepts the engagement, to perform the services described in Section I.I of this AGREEMENT.
2. **AUTHORIZATION TO PROCEED:** Authorization for CONSULTANT to proceed with the work described in Section I.I of this AGREEMENT will be granted in writing by the DISTRICT as soon as both PARTIES sign this AGREEMENT and all applicable insurance and security documents required pursuant to Section VI.5 of this AGREEMENT are received and approved by the DISTRICT. CONSULTANT shall not proceed with said work until so authorized by the DISTRICT and shall commence work immediately upon receipt of the executed TASK ORDER.
3. **INDEPENDENT CONSULTANT:** The TASK ORDER services to be performed by CONSULTANT under this AGREEMENT are outside the usual course of the DISTRICT's business. CONSULTANT is, and shall at all times remain as to DISTRICT, a wholly independent CONSULTANT. The personnel performing the services under this AGREEMENT on behalf of CONSULTANT shall at all times be under CONSULTANT's exclusive direction and control. CONSULTANT shall have no power to incur any debt, obligation, or liability on behalf of the DISTRICT. Neither DISTRICT nor any of its agents shall have control over the conduct of CONSULTANT or any of CONSULTANT's employees, except as set forth in this AGREEMENT. CONSULTANT shall not, at any time, or in any manner, represent that it or any of its officers, agents or employees are in any manner employees of the DISTRICT. No employee benefits shall be available to CONSULTANT in connection with the performance of this AGREEMENT. Except for the fees paid to CONSULTANT as provided in this AGREEMENT, the DISTRICT shall not pay salaries, wages, or other compensation to CONSULTANT for performing services hereunder for the DISTRICT. The DISTRICT shall not be liable for compensation or indemnification to CONSULTANT for injury or sickness arising out of performing services hereunder.

ARTICLE III

RESPONSIBILITIES OF DISTRICT AND OF CONSULTANT

- 1. DUTIES OF THE DISTRICT:** The DISTRICT, without cost to CONSULTANT, will provide all pertinent information necessary for CONSULTANT's performance of its obligations under this AGREEMENT that is reasonably available to the DISTRICT unless otherwise specified in the TASK ORDER in which case the CONSULTANT is to acquire such information. The DISTRICT does not guarantee or ensure the accuracy of any reports, information, and/or data so provided however, in performing its services hereunder, CONSULTANT shall be entitled to act in reasonable reliance upon all such reports, information, and /or data so provided by the DISTRICT. To the extent that any reports, information, and/or other data so provided was supplied to CONSULTANT by persons who are not employees of DISTRICT, any liability resulting from inaccuracies and/or omissions contained in said information shall be limited to liability on behalf of the entity who prepared the information for CONSULTANT.
- 2. REPRESENTATIVE OF DISTRICT:** The DISTRICT will designate **Kevin Panzer** as the person to act as the DISTRICT's representative with respect to the PROPOSAL services to be performed under this AGREEMENT. Such person will have complete authority to receive information and interpret and define the DISTRICT's policies pertinent to the TASK ORDER, although such person will not control or direct CONSULTANT's work.
- 3. DUTIES OF CONSULTANT:** CONSULTANT shall perform TASK ORDER work in such a manner as to fully comply with all applicable professional standards of care, including professional quality, technical accuracy, timely completion, and other services furnished and/or work undertaken by CONSULTANT pursuant to this AGREEMENT. The CONSULTANT shall cause all work and deliverables to conform to all applicable federal, state, and local laws and regulations.
- 4. APPROVAL OF WORK:** The DISTRICT's approval of work or materials furnished hereunder shall not in any way relieve CONSULTANT of responsibility for the technical adequacy of its work. Neither the DISTRICT's review, approval or acceptance of, nor payment for any of the services shall be construed to operate as a waiver of any rights under this AGREEMENT or of any cause of action arising out of the performance of this AGREEMENT.

ARTICLE IV

PAYMENTS TO CONSULTANT

- 1. PAYMENT:** The DISTRICT will pay CONSULTANT for work performed under this AGREEMENT, which work can be verified by the DISTRICT, on the basis of the following:

During the term of this AGREEMENT, the DISTRICT will pay CONSULTANT for services performed in accordance with the rates and estimated hours and costs set forth in the PROPOSAL and individual TASK ORDERS. The amount set forth in Section IV.3 of this AGREEMENT is the maximum compensation to which CONSULTANT may be entitled for the performance of services to complete the work for each TASK ORDER, unless the TASK ORDER or time to complete the work is changed by the DISTRICT in writing in advance of

the work to be performed thereunder. Adjustments in the total payment amount shall only be allowed pursuant to Section VI.15 of this AGREEMENT. In no event shall CONSULTANT be entitled to compensation greater than the amount set forth in Section IV.3 of this AGREEMENT where changes in each TASK ORDER or the time for performance are necessitated by the negligence of CONSULTANT or any SUBCONTRACTOR performing work on each TASK ORDER.

2. **PAYMENT TO CONSULTANT:** Payment will be made by the DISTRICT within thirty (30) calendar days after receipt of an invoice from CONSULTANT, provided that all invoices are complete, and product and services are determined to be of sufficient quality by the DISTRICT. Each invoice shall itemize the services rendered during the billing period, hourly rates charged, if applicable, and the amount due. If the DISTRICT disputes any of CONSULTANT'S fees, it shall give written notice to CONSULTANT within thirty (30) days of receipt of an invoice of any disputed fees set forth on the invoice. In such case, the PARTIES shall work to find a reasonable resolution of any such dispute in good faith and in a timely manner.
3. **ESTIMATED CHARGES:** The total estimated charges for all work under this AGREEMENT will be determined by each executed TASK ORDER and such amount is the cost ceiling described herein. The total estimated charges stated herein constitute the total amount agreed to. All rates and charges are subject to the terms set in the PROPOSAL and TASK ORDERS.
4. **COST FOR REWORK:** CONSULTANT shall, at no cost to the DISTRICT, prepare any necessary rework occasioned by CONSULTANT CONSULTANT's negligent act or omission or otherwise due substantially to CONSULTANT's fault.

ARTICLE V

COMPLETION SCHEDULE

1. **TERM:** The term of this AGREEMENT shall begin on the EFFECTIVE DATE, and shall continue until August 7, 2028, unless this AGREEMENT is earlier terminated pursuant to the provisions of Section VI.8 below. Notwithstanding the above, the provisions of Sections I.2, II.3, III.3, and III.4, and Articles IV, V, and VI herein shall survive the expiration and/or termination of this AGREEMENT.
2. **TASK SCHEDULE:** The work is anticipated to be completed in accordance with Exhibit "A" as agreed upon by DISTRICT and CONSULTANT at the time that a TASK ORDER is issued by DISTRICT except as may from time-to-time be adjusted by amendment hereto as provided herein.
3. **TIME OF ESSENCE:** CONSULTANT shall perform all services required by this AGREEMENT in a prompt, timely, and professional manner in accordance with the agreed upon schedule. Time is of the essence in this AGREEMENT.

ARTICLE VI

GENERAL PROVISIONS

- 1. COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS:** CONSULTANT shall at all times observe all applicable provisions of Federal, State, and Local laws and regulations including, but not limited to, those related to Equal Opportunity Employment.
- 2. SUBCONTRACTORS AND OUTSIDE CONSULTANT:** No subcontract shall be awarded by CONSULTANT if not identified as a SUBCONTRACTORS to PROPOSAL unless prior written approval is obtained from the DISTRICT. CONSULTANT shall be responsible for payment to SUBCONTRACTORS used by them to perform the services under this AGREEMENT. If CONSULTANT subcontracts any of the work to be performed, CONSULTANT shall be as fully responsible to the DISTRICT for the performance of the work, including errors and omissions of CONSULTANT's SUBCONTRACTORS and of the persons employed by the SUBCONTRACTORS, as CONSULTANT is for the acts and omissions of persons directly employed by the CONSULTANT. Nothing contained in this AGREEMENT shall create any contractual relationship between any SUBCONTRACTOR of CONSULTANT and the DISTRICT. CONSULTANT shall bind every SUBCONTRACTOR and every SUBCONTRACTOR of a SUBCONTRACTOR to the terms of this AGREEMENT that are applicable to CONSULTANT's work unless specifically noted to the contrary in the subcontract in question and approved in writing by the DISTRICT.
- 3. OWNERSHIP OF DOCUMENTS:** Upon completion of, or in the event of termination or suspension of this AGREEMENT, all original documents, designs, drawings, maps, models, computer files containing data generated for the work, surveys, notes, and other documents prepared in the course of providing the services to be performed ("WRITTEN PRODUCTS") pursuant to this AGREEMENT shall become the sole property of the DISTRICT without restriction or limitation upon its use and may be used, reused, disseminated or otherwise disposed of by the DISTRICT without the permission of the CONSULTANT except that any use of the documents produced in service of this AGREEMENT shall be at DISTRICT's sole risk when used for any purpose or project other than the TASK ORDER specified herein. With respect to computer files containing data generated for the work, CONSULTANT shall make available to the DISTRICT, upon reasonable written request by the DISTRICT, the necessary computer software and hardware for purposes of accessing, compiling, transferring and printing computer files. CONSULTANT may take and retain copies of WRITTEN PRODUCTS as desired, but WRITTEN PRODUCTS shall not be the subject of a copyright application by CONSULTANT.
- 4. INDEMNIFICATION:**
 - A. Indemnity for Design Professional Services:** To the fullest extent permitted by law, CONSULTANT shall, at its sole cost and expense, protect, indemnify and hold harmless DISTRICT and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those DISTRICT agents serving as independent contractors in the role of DISTRICT officials (collectively "INDEMNITEES"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens and

losses of any nature whatsoever, including fees of accountants, attorneys or other professionals, and all costs associated therewith, and reimbursement of attorney's fees and costs of defense, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to, in whole or in part, the negligence, recklessness or willful misconduct of CONSULTANT, its officers, agents, servants, employees, SUBCONTRACTOR, material men, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT shall bear the legal liability thereof) in the performance of design professional services under this AGREEMENT. It is the intent of the PARTIES to this AGREEMENT that the defense, indemnity, and hold harmless obligations of CONSULTANT under this AGREEMENT shall be as broad and inclusive as may be allowed under California Civil Code §2778 through §2784.5, or other similar state or federal law.

B. Other Indemnities:

- i. Other than in the performance of design professional services, and to the fullest extent permitted by law, CONSULTANT shall, at its sole cost and expense, defend, hold harmless and indemnify the INDEMNITEES from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens and losses of any nature whatsoever, including fees of accountants, attorneys or other professionals, and all costs associated therewith, and the payment of all consequential damages, in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of CONSULTANT, its officers, agents, servants, employees, SUBCONTRACTORS, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT shall bear the legal liability thereof) in the performance of this AGREEMENT, including the INDEMNITEES' active or passive negligence, except for claims arising from the sole negligence or willful misconduct of the INDEMNITEES, as determined by final arbitration or court decision or by the agreement of the PARTIES. CONSULTANT shall defend the INDEMNITEES in any action or actions filed in connection with any claim with counsel of the INDEMNITEES' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. CONSULTANT shall reimburse the INDEMNITEES for any and all legal expenses and costs incurred by the INDEMNITEES in connection therewith.
- ii. CONSULTANT shall pay all required taxes on amounts paid to CONSULTANT under this AGREEMENT and indemnify and hold DISTRICT harmless from any and all taxes, assessments, penalties, and interest asserted against DISTRICT by reason of the independent contractor relationship created by this AGREEMENT. CONSULTANT shall fully comply with the workers' compensation law regarding CONSULTANT and CONSULTANT's employees. CONSULTANT shall indemnify and hold DISTRICT harmless from any failure of CONSULTANT to comply with

applicable workers' compensation laws. DISTRICT may offset against the amount of any fees due to CONSULTANT under this AGREEMENT any amount due to DISTRICT from CONSULTANT as a result of CONSULTANT's failure to promptly pay to DISTRICT any reimbursement or indemnification arising under this Subparagraph.

- iii. CONSULTANT shall obtain executed indemnity agreements provisions identical to those in this Section VI.4 from each and every SUBCONTRACTOR or any other person or entity involved by, for, with or on behalf of CONSULTANT in the performance of this AGREEMENT. If CONSULTANT fails to obtain such indemnities, CONSULTANT shall be fully responsible and indemnify, hold harmless and defend the INDEMNITEES from and against any and all claims in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of CONSULTANT's SUBCONTRACTORS, its officers, agents, servants, employees, SUBCONTRACTOR, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT's SUBCONTRACTOR shall bear the legal liability thereof) in the performance of this AGREEMENT, including the INDEMNITEES' active or passive negligence, except for claims arising from the sole negligence or willful misconduct of the INDEMNITEES, as determined by final arbitration or court decision or by the agreement of the PARTIES.
 - A. **Workers' Compensation Acts not Limiting:** CONSULTANT's obligations under this Section VI.4, or any other provision of this AGREEMENT, shall not be limited by the provisions of any workers' compensation act or similar act. CONSULTANT expressly waives its statutory immunity under such statutes or laws as to DISTRICT, its officers, agents, employees and volunteers.
 - B. **Insurance Requirements not Limiting:** DISTRICT does not, and shall not, waive any rights that it may possess against CONSULTANT because of the acceptance by DISTRICT, or the deposit with DISTRICT, of any insurance policy or certificate required pursuant to this AGREEMENT. This hold harmless and indemnification provisions in this Section VI.4 shall apply regardless of whether or not any insurance policies are determined to be applicable to the liability, claim, tax, assessment, penalty or interest asserted against DISTRICT.
 - C. **Survival of Terms:** The indemnification in this Section VI.4 shall survive the expiration or termination of this AGREEMENT.

5. INSURANCE:

A. Minimum Scope and Limits of Insurance: CONSULTANT shall secure and maintain in full force and effect, until the satisfactory completion and acceptance of AGREEMENT by DISTRICT, such insurance as will protect it and the DISTRICT in such a manner and in such amounts as set forth below. The premiums for said insurance coverage shall be paid by the CONSULTANT. The failure to comply with these insurance requirements may constitute a material breach of this AGREEMENT, at the sole discretion of the DISTRICT.

- i. **Workers' Compensation:** CONSULTANT shall maintain Workers' Compensation insurance, as required by the State of California, with Statutory Limits and Employers' Liability Insurance in an amount not less than \$1,000,000 per accident for bodily injury or disease. This insurance shall also waive all right to subrogation against the DISTRICT, its Board of Directors, officers, employees, representatives, and guests.
- ii. **General Liability:** CONSULTANT shall maintain Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 00 01) including products and completed operations, property damage, bodily injury, personal and advertising injury with limit of at least \$2,000,000 per occurrence or the full per occurrence limits of the policies available, whichever is greater. If a general aggregate limit applies, the general aggregate limit shall be twice the required occurrence limit. DISTRICT shall be named as an additional insured.
- iii. **Automobile Liability:** CONSULTANT shall maintain Insurance Services Office (ISO) Business Auto Coverage (Form CA 00 01), covering Symbol 1 (any auto) or if CONSULTANT has no owned autos, Symbol 8 (hired) and 9 (non-owned) with limit of \$1,000,000 for bodily injury and property damage each accident. This insurance shall have an endorsement naming the DISTRICT as an additional insured.
- iv. **Professional Liability:** CONSULTANT shall maintain professional liability insurance with coverage for wrongful acts, errors, or omissions committed by CONSULTANT in the course of work performed for the DISTRICT under this AGREEMENT. This insurance shall include coverage for liability assumed under this AGREEMENT when CONSULTANT's wrongful acts, errors, or omissions cause such liability. The limit for this insurance shall be not less than \$1,000,000 per occurrence or claim and \$2,000,000 policy aggregate.

B. Acceptability of Insurers: The insurance policies required under this Section VI.5 shall be issued by an insurer admitted to write insurance in the State of California with a rating of AA:VII or better in the latest edition of the A.M. Best Insurance Rating Guide. Self-insurance shall not be considered to comply with the insurance requirements under this Section VI.5.

C. Primary and Non-Contributing: The insurance policies required under this

Section VI.5 shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to DISTRICT. Any insurance or self-insurance maintained by DISTRICT, its officers, employees, agents or volunteers, shall be in excess of CONSULTANT's insurance and shall not contribute with it.

- D. *Consultant's Waiver of Subrogation:*** The insurance policies required under this Section VI.5 shall not prohibit CONSULTANT and CONSULTANT's employees, agents or SUBCONTRACTORS from waiving the right to subrogation prior to loss. CONSULTANT hereby waives all rights of subrogation against DISTRICT.
- E. *Deductibles and Self-Insured Retentions:*** Any deductibles or self-insured retentions must be approved by DISTRICT. At DISTRICT's option, CONSULTANT shall either reduce or eliminate the deductibles or self-insured retentions with respect to DISTRICT, or CONSULTANT shall procure a bond guaranteeing payment of losses and expenses.
- F. *Cancellations or Modifications to Coverage:*** CONSULTANT shall not cancel, reduce or otherwise modify the insurance policies required by this Section VI.5 during the term of this AGREEMENT. The commercial general and automobile liability policies required under this AGREEMENT shall be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail thirty (30) calendar days' prior written notice to DISTRICT. If any insurance policy required under this Section VI.5 is canceled or reduced in coverage or limits, CONSULTANT shall, within two (2) business days of notice from the insurer, phone, fax or notify DISTRICT via certified mail, return receipt requested, of the cancellation of or changes to the policy.
- G. *District Remedy for Noncompliance:*** If CONSULTANT does not maintain the policies of insurance required under this Section VI.5 in full force and effect during the term of this AGREEMENT, or in the event any of CONSULTANT's policies do not comply with the requirements under this Section VI.5, DISTRICT may either immediately terminate this AGREEMENT or, if insurance is available at a reasonable cost, DISTRICT may, but has no duty to, take out the necessary insurance and pay, at CONSULTANT's expense, the premium thereon. CONSULTANT shall promptly reimburse DISTRICT for any premium paid by DISTRICT or DISTRICT may withhold amounts sufficient to pay the premiums from payments due to CONSULTANT.
- H. *Evidence of Insurance:*** Prior to the performance of services under this AGREEMENT, CONSULTANT shall furnish DISTRICT representative with a certificate or certificates of insurance and all original endorsements demonstrating the DISTRICT as additionally insured, evidencing and effecting the coverages required under this Section VI.5. The endorsements are subject to DISTRICT's approval. CONSULTANT may provide complete, certified copies of all required insurance policies to DISTRICT. CONSULTANT shall maintain current endorsements on file with DISTRICT's representative. CONSULTANT shall provide proof to DISTRICT representative that insurance policies expiring during the term of this AGREEMENT have been renewed or replaced with other policies providing at least the same coverage. CONSULTANT shall furnish such proof at least two (2) weeks prior to

the expiration of the coverages.

- I. Indemnity Requirement not Limiting:** Procurement of insurance by CONSULTANT shall not be construed as a limitation of CONSULTANT's liability or as full performance of CONSULTANT's duty to indemnify DISTRICT under Section VI.4 of this AGREEMENT.
- J. Subcontractor's Insurance Requirements:** CONSULTANT shall require each of its SUBCONTRACTORS that perform services under this AGREEMENT to maintain insurance coverage that meets all of the requirements of this Section VI.5.
- K. Claim Reporting:** CONSULTANT shall not fail to comply with the claim reporting provisions or cause any breach of a policy condition or warranty of the insurance policies required by this AGREEMENT that would affect the coverage afforded under the policies to the DISTRICT.
- L. Broader Coverage/Higher Limits:** If CONSULTANT maintains broader coverage and/or higher limits than the minimums shown above, the DISTRICT requires and shall be entitled to the broader coverage and/or higher limits maintained by CONSULTANT. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the DISTRICT.

6. MUTUAL COOPERATION

- A. District's Cooperation:** DISTRICT shall provide CONSULTANT with all pertinent data, documents and other requested information as is reasonably available for CONSULTANT's proper performance of the services required under this AGREEMENT.
- B. Consultant's Cooperation:** In the event any claim or action is brought against the DISTRICT relating to CONSULTANT's performance or services rendered under this AGREEMENT, CONSULTANT shall render any reasonable assistance that DISTRICT requires.

- 7. EXAMINATION OF RECORDS:** All original drawings, specifications, reports, calculations, and other documents or electronic data developed by CONSULTANT for this TASK ORDER shall be furnished to and become the property of the DISTRICT. CONSULTANT agrees that the DISTRICT will have access to and the right to examine any directly pertinent books, documents, papers, and records of any and all of the transactions relating to this AGREEMENT at CONSULTANT's office, during normal business hours and following a reasonable advance notice to CONSULTANT from DISTRICT. The DISTRICT shall not be limited in any way in its use of the work materials at any time except as otherwise provided herein.

8. TERMINATION OR SUSPENSION OF AGREEMENT

- A. Right to Terminate or Suspend:** DISTRICT may terminate or suspend this AGREEMENT at any time, at will, for any reason or no reason, after giving written

notice to CONSULTANT at least ten (10) calendar days before the termination or suspension is to be effective. CONSULTANT may terminate this AGREEMENT at any time, at will, for any reason or no reason, after giving written notice to DISTRICT at least thirty (30) calendar days before the termination is to be effective.

B. *Obligations upon Termination:* CONSULTANT shall cease all work under this AGREEMENT on or before the effective date of termination specified in the notice of termination. In the event of DISTRICT's termination of this AGREEMENT due to no fault or failure of performance by CONSULTANT, DISTRICT shall pay CONSULTANT based on the percentage of work satisfactorily performed up to the effective date of termination. In no event shall CONSULTANT be entitled to receive more than the amount that would be paid to CONSULTANT for the full performance of the services required by this AGREEMENT.

9. NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY: In the performance of this AGREEMENT, CONSULTANT shall not discriminate against any employee, SUBCONTRACTOR or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation or other basis prohibited by law. CONSULTANT will take affirmative action to ensure that SUBCONTRACTORS and applicants are employed, and that employees are treated during employment, without regard to their race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information or sexual orientation.

10. PROHIBITION OF ASSIGNMENT AND DELEGATION: CONSULTANT shall not assign any of its rights or delegate any of its duties under this AGREEMENT, either in whole or in part, without DISTRICT's prior written consent. DISTRICT's consent to an assignment of rights under this AGREEMENT shall not release CONSULTANT from any of its obligations or alter any of its primary obligations to be performed under this AGREEMENT. Any attempted assignment or delegation in violation of this section shall be void and of no effect and shall entitle DISTRICT to terminate this AGREEMENT. As used in this section, "assignment" and "delegation" means any sale, gift, pledge, hypothecation, encumbrance or other transfer of all or any portion of the rights, obligations, or liabilities in or arising from this AGREEMENT to any person or entity, whether by operation of law or otherwise, and regardless of the legal form of the transaction in which the attempted transfer occurs.

11. NO THIRD-PARTY BENEFICIARIES INTENDED: Except as otherwise provided in Section VI.4, this AGREEMENT is made solely for the benefit of the PARTIES to this AGREEMENT and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this AGREEMENT.

12. WAIVER: No delay or omission to exercise any right, power or remedy accruing to DISTRICT under this AGREEMENT shall impair any right, power or remedy of DISTRICT, nor shall it be construed as a waiver of, or consent to, any breach or default. No waiver of any breach, any failure of a condition, or any right or remedy under this AGREEMENT shall

be (1) effective unless it is in writing and signed by PARTY making the waiver, (2) deemed to be a waiver of, or consent to, any other breach, failure of a condition, or right or remedy, or (3) deemed to constitute a continuing waiver unless the writing expressly so states.

13. ENTIRE AGREEMENT: This AGREEMENT and all exhibits referred to in this AGREEMENT constitute the final, complete and exclusive statement of the terms of this AGREEMENT between the PARTIES pertaining to the subject matter of this AGREEMENT and supersede all other prior or contemporaneous oral or written understandings and agreements of the PARTIES. No PARTY has been induced to enter into this AGREEMENT by, nor is any PARTY relying on, any representation or warranty except those expressly set forth in this AGREEMENT.

14. HEADINGS: Article and Section headings in this AGREEMENT are for convenience only and are not intended to be used in interpreting or construing the terms, covenants, and conditions of this AGREEMENT.

15. AMENDMENT OF AGREEMENT: This AGREEMENT may be amended only by a writing signed by both PARTIES. The DISTRICT representative is authorized to sign an amendment to this AGREEMENT on the DISTRICT's behalf to make the following non-substantive modifications to the AGREEMENT: (a) name changes; (b) extensions of time; (c) non-monetary changes in TASK ORDER; and (d) termination of this AGREEMENT.

16. GOVERNING LAW AND CHOICE OF FORUM: This AGREEMENT, and any dispute arising from the relationship between the PARTIES to this AGREEMENT, shall be governed by and construed in accordance with the laws of the State of California, except that any rule of construction to the effect that ambiguities are to be resolved against the drafting PARTY shall not be applied in interpreting this AGREEMENT. Any dispute that arises under or relates to this AGREEMENT (whether contract, tort or both) shall be resolved in a municipal, superior or federal court with geographic jurisdiction over the DISTRICT.

17. ATTORNEYS' FEES: In any litigation or other proceeding by which a PARTY seeks to enforce its rights under this AGREEMENT (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this AGREEMENT, the prevailing PARTY shall be awarded reasonable attorneys' fees together with any costs and expenses, to resolve the dispute and to enforce the final judgment.

18. SEVERABILITY: If a court of competent jurisdiction holds any provision of this AGREEMENT to be illegal, invalid or unenforceable for any reason, the validity of and enforceability of the remaining provisions of this AGREEMENT shall not be affected and continue in full force and effect.

19. SAFETY: CONSULTANT shall perform the work in full compliance with applicable State and Federal safety requirements including, but not limited to, Occupational Safety and Health Administration requirements. CONSULTANT shall take all precautions necessary for the safety of, and prevention of damage to, property on or adjacent to TASK ORDER site, and for the safety of, and prevention of injury to, persons, including DISTRICT's employees, CONSULTANT's employees, and third persons. All work shall be performed entirely at CONSULTANT's risk. CONSULTANT shall comply with the insurance requirements set

forth in Section VI.5 of this AGREEMENT. CONSULTANT shall also furnish the DISTRICT with a copy of any injury prevention program established for the CONSULTANT's employees pursuant to Labor Code Section 6401.7, including any necessary documentation regarding implementation of the program. CONSULTANT hereby certifies that its employees have been trained in the program, and procedures are in place to train employees whenever new substances, processes, procedures, or equipment are introduced. CONSULTANT shall demonstrate compliance with Labor Code Section 6401.7 by maintaining a copy of its Injury and Illness Prevention Plan at TASK ORDER site and making it available to the DISTRICT.

20. USE OF NAMES: CONSULTANT shall not employ or use the name of the DISTRICT in any promotional materials, advertising, or in any other manner without prior express written permission of the DISTRICT. The foregoing notwithstanding, nothing herein shall prohibit or exclude CONSULTANT from referencing the work for DISTRICT on the TASK ORDER in response to a Request for Proposal or other similar professional solicitations.

21. NOTICES: All notices to either PARTY by the other shall be made in writing and delivered or mailed to such PARTY at their respective addresses as follows, or to other such address as either PARTY may designate and said notices shall be deemed to have been made when delivered or, if mailed, five (5) days after mailing.

To DISTRICT:

Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, CA 91711
Attn: General Manager

To CONSULTANT:

Pipeline Inspection and Condition Analysis Corporation
2801 Youngfield Street, Suite 370
Golden, CO 80401
Attn: Kevin Weeks

22. AUTHORITY TO EXECUTE AGREEMENT: The individuals executing this AGREEMENT represent and warrant that they have the legal capacity and authority to sign this AGREEMENT on behalf of and to so bind their respective legal entities.



IN WITNESS WHEREOF, the PARTIES hereto have executed this AGREEMENT as of the date opposite their respective signatures.

Name: Kevin Weeks

Matthew H. Litchfield

Title: VP Sales & Marketing

General Manager

Organization: PICA Corp.

Three Valleys Municipal Water District

Signature: 

Date: August 12, 2025

Date: _____

PICA RFQ Response

On-Call Design & Inspection Services for pipeline Condition Assessment Program

Three Valleys Municipal Water District



Submitted To:

Kevin Panzer
Three Valleys Municipal Water District
kpanzer@tvmwd.com

Submitted By:

Kevin Weeks
VP Sales & Marketing
PICA Corp.
kweeks@picacorp.com

July 22, 2025

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Pipeline Inspection and Condition Analysis Corp.
Toll-Free: 1-800-661-0127 (North America)
E-mail: info@picacorp.com





Three Valleys Municipal Water District
Attn: Selection Committee

July 22, 2025

RE: On-Call Design & Inspection Services for Pipeline Condition Assessment Program

Dear Selection Committee,

PICA Corp is pleased to submit our proposal to Three Valleys Municipal Water District (TVMWD) for Category 2: Internal/External Pipe Condition Assessment services. With extensive experience delivering high-resolution pipeline condition assessments throughout California and North America, we are confident in our ability to support your proactive asset management strategies effectively.

Our industry-leading Remote Field Testing (RFT) technology provide the most detailed and accurate pipeline assessments available, ensuring comprehensive corrosion detection, defect sizing in depth, length and axial position of the pipe. By integrating high-definition CCTV inspection, including PACP coding, into our RFT platform PICA offers simultaneous electromagnetic and visual inspections in a single pass minimizing downtime and maximizing actionable data. For external condition assessment PICA proposes use of the bracelet probe with UT verifications for exposed pipe inspections.

PICA is considered by many a world leader in the non-destructive electromagnetic testing of critical pipeline infrastructure, and we have performed inspections on many miles of small, medium, and large-diameter water pipelines all over the world. Our technology is also deployed in oil & gas and in nuclear lines where the demand for precision (in location and depth prediction) is high. Excavations of pipe sections identified as problematic through PICA inspection methodologies have validated our technologies and capabilities.

The tools employ Eddy Current read in the Remote Field zone (RFT), which is recognized by several standardization bodies (ASTM E2096.05, ASME Section V, ASNT TC-1A). PICA has the tools, auxiliary equipment (winches), personnel, and experience to provide the highest quality inspection service to TVMWD.

We are excited about the opportunity to submit our proposal for your consideration. If you have any questions regarding the contents of our proposal, please feel free to contact me using the contact information below.

Very truly yours,

A handwritten signature in black ink, appearing to read "Kevin Weeks".

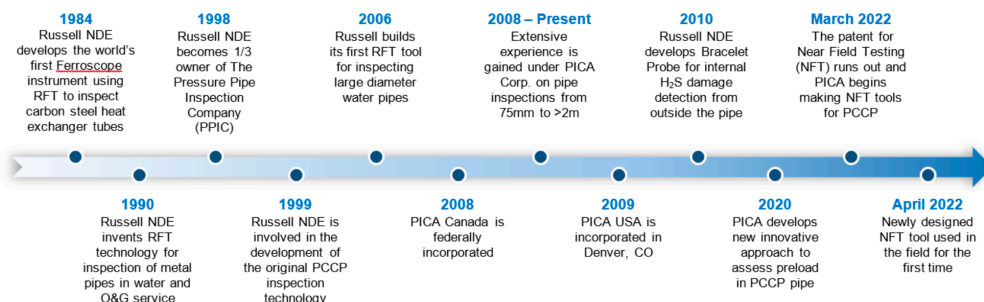
Kevin Weeks
E: kweeks@picacorp.com
C: 619-354-5522



II. Experience and Project References

PICA was incorporated in 2008 to provide world-class In-Line Inspection services for the municipal water market, the municipal wastewater market, and the power generation market. To accomplish this goal, PICA has borrowed years of experience gained from its parent company, Russell NDE (Non-Destructive Evaluation) Systems Inc. (founded in 1972), which designs and manufactures the In-Line Inspection Tools that PICA uses.

PICA's History of Leadership in Pipeline Inspection Technologies

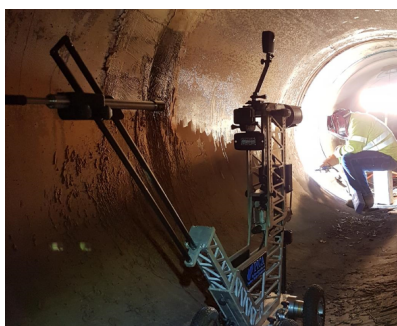


PICA has a dedicated team of scientists, analysts, and engineers who have advanced the science of Remote Field Testing (RFT) for pipeline condition analysis further than any other EM technique available today. As a result, our high-resolution technology provides accurate and reliable information that pipeline owners can use to make repair, rehabilitation, or replacement decisions. If our tools find that a water or wastewater main is in good condition, you can rest assured that it is in good condition. If there is corrosion, our Tools will tell you how deep the corrosion is and report the axial and clock locations of the thinning, including length for burst pressure calculations. Our commitment is that after our inspection you will thoroughly understand the condition of your pipeline infrastructure.

For TVMWD's consideration, PICA Corp is recommending utilizing three of our five services for pipeline conditions assessment:



Internal Condition Assessment
Advanced NDT
Remote Field Testing (RFT)



Internal Condition Assessment
HD CCTV with PACP Coding
Laser/Lidar Profiling



External Condition Assessment
Bracelet Probe including
Ultrasonic Testing (UT)

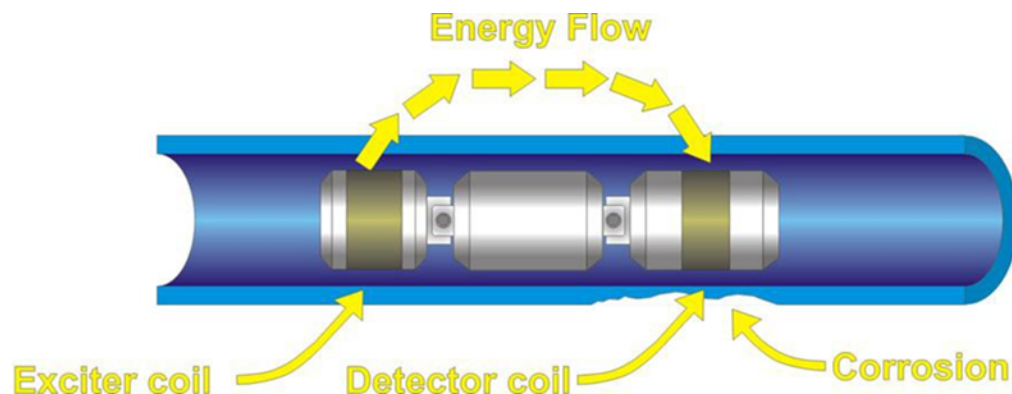
PICA strives to deliver quality management and deliverables throughout each project undertaken. The PICA QA/QC process involves detailed planning during the beginning of a project, fieldwork oversight by a qualified Senior Field Technician, technical review of data analysis findings, and deliverable review by management staff for formatting, grammar, accuracy, and consistency.

Inspection projects will include:

- Creation of a project team with formalized roles and responsibilities.
- Kick-off meeting and site visit to ensure that all stakeholders understand the requirements.
- Necessary project requirement documentation sharing to define the responsibilities of each party.
- Detailed project scheduling shared with all parties.
- Formalization of detailed plans in a Work Plan shared with all parties involved in the project.
- Frequent (weekly) project check-in meetings with all team members.
- Data acquisition (field inspection) with field analyst review after each scan to confirm data quality.
- Data QC report and preliminary findings report delivered to the client post-inspection.
- Final report drafted, reviewed internally, and delivered to the client. Any comments received from the client review will be documented and used in the final deliverable.

PICA is well known for its deployment of high-resolution EM (Electromagnetic) mapping tools for the inspection of metallic cylinders. Remote Field Testing (RFT) works well for cast iron, ductile iron, steel, PCCP (C301), and BWP (C303) pipelines. RFT is recognized by several standardization bodies (ASTM E2096.05, ASME Section V, ASNT TC-1A) and PICA is the only company in the world that has truly implemented RFT as a high-resolution technology; some of its tools have hundreds of detectors.

In the RFT probe shown in the figure below, there is one exciter coil and one detector coil. Both coils are wound co-axially to the examined pipe and are separated by a distance greater than two times the pipe diameter. The actual separation depends on the application but will always be a minimum of two pipe diameters. It is this separation that gives RFT its name: the detector measures the electromagnetic field remotely from the exciter. Although the fields have become very small at this distance from the exciter, they contain information on the full thickness of the pipe wall.



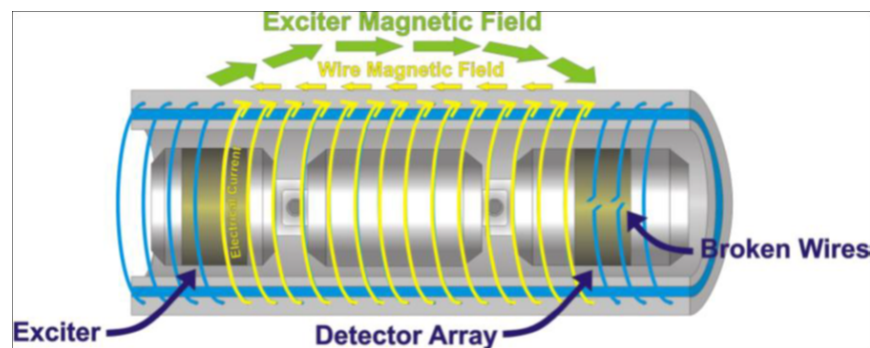
RFT Tools work by measuring the “time of flight” (phase shift) and the signal strength (amplitude) of a signal emitted by an exciter coil and detected by an array of receivers. The receivers are positioned circumferentially so that each one is sensitive to one of the many clock locations of the pipe circumference.



For each cycle of the exciter frequency, a clock is started and the arrival time of the signal at the detector is used to reset the clock. The time interval is a measurement of the time of flight, and indirectly, the wall thickness of the pipe.

When the above RFT setup is introduced into a BWP or PCCP pipe the external electromagnetic coupling path also interacts with the external pre-tensioning wire. As such, the RFT detector signal contains information on both the cylinder and the helical wire wrap. This is schematically illustrated in the figure below.

While the electromagnetic field of the Advanced NDT tool is most significantly impacted by the metallic components of concrete pressure pipe (steel cylinder and pre-stressing wires or bars), PICA has also identified that the tool can detect changes in the amount of "preload" or tensile strength keeping the cylinder in compression provide by the pre-stressing wires in PCCP (C301).



The final inspection report will be formatted in two parts: a written report with details explaining the inspection process and discussing major findings in detail, and an Excel-based results table which will document all inspection findings correlated to client records.

The report deliverables include:

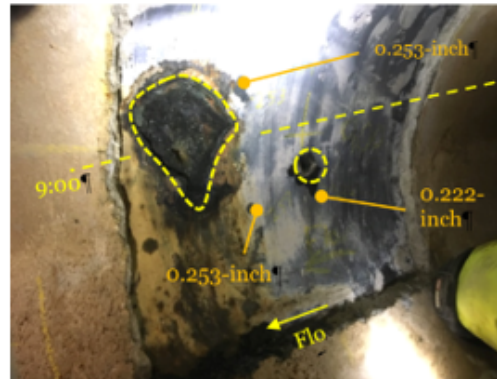
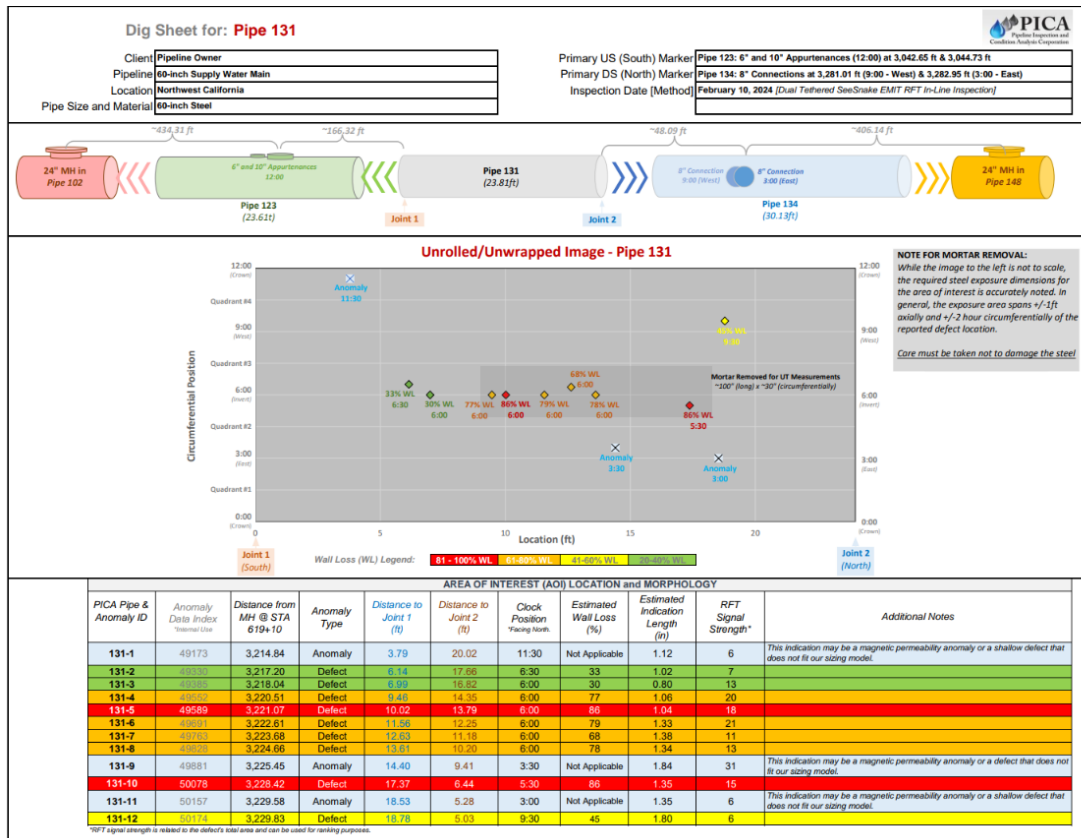
- Axial and radial (clock) position of wall loss indications and their respective remaining wall values.
- A table of all the construction-related features and their location along the length of the pipeline will also be provided.
- Any undocumented external metal objects will be noted as well as pipe wall gain anomalies and indications pointing to third-party disturbance.
- Stress anomalies.
- A pipe tally detailing the number of pipe segments and fittings and their respective lengths.
- Count of broken wires/bars (in PCCP/BWP inspections).
- Loss of preload (PCCP)

Location Accuracy

- The axial sampling resolution of the See Snake tools is 0.1 inch, and the distance traveled along the length of a pipeline is measured by up to three redundant on-board odometers (in addition to the wireline odometers on the winches). The accuracy of the reported location for any wall loss is:
- Axial accuracy: +/-4-inch from the nearest joint, and +/-0.3% from the nearest Above Ground reference.
- Circumferential accuracy: +/-23 degrees.



The figure below illustrates verification work being conducted within a pipeline. The dig sheet (top) is provided by PICA to assist pipeline owners in locating reported corrosion within the pipeline (bottom).





PICA has implemented RFT inspections around North America and the world on pipeline sizes ranging from 2" to 96". The list below are reference projects where RFT, and in some instances, coupled with CCTV have been implemented to provide high resolution condition of pipelines for asset owners.

1. San Francisco Public Utilities Commission – San Francisco, CA.

Eric Choi echoi@sfwater.org

Contract Amount: \$1.2 million

In 2025 PICA was contracted to inspect 6.6 miles of 60" steel potable water supply line for SFPUC. Utilizing PICA's RFT tool combined with CCTV imagery PICA was able to identify defects that were field validated meeting SFPUC's outage timeline. PICA has developed defects that feed into additional analysis such as fitness-for-service calculations. Additional pipelines have been identified for inspection through 2026.

2. San Diego Water Authority – Escondido, CA

Martin Coghill 619-301-7836 mcoghill@sdewa.org

Contract Amount: \$1.95 million

Over several years, PICA has inspected approximately 29 miles of larger diameter (48"-66") water transmission mains with Advanced NDT RFT EM See Snake technology. To assess the structural integrity of CMLC Steel, Bar-Wrapped, and PCCP pipelines. In addition to RFT Scans, PICA also offered CCTV, LiDAR and leak detection ancillary services.

3. Helix Water District – El Cajon, CA

Tim Ross 619-596-1323 tim.ross@helixwater.org

Helix contracted PICA in February 2017 to inspect 5.7 miles of Aqueduct #2. This raw water main consists of a 36-inch concrete steel cylinder pipe with reinforcing wire (CMLC) and was inspected using the PICA Advanced NDT RFT EM See Snake Technology. Helix had estimated a pipeline replacement at \$20-\$25 million. However, the Advanced NDT RFT See Snake inspection showed that 98% of the pipeline was in good condition. Helix repaired 7 sections and replaced 5 sections flagged by PICA. Total rehabilitation costs were less than \$700,000.00. PICA returned to inspect an additional pipeline in 2021, the results of which were used to guide surgical/selective repairs.

4. Mesa Water District – Mesa, AZ.

Murat Engindeniz, Ph.D. 404-610-6163, mengindeniz@sgh.com

Contract Amount: \$1 million

In December 2024 and into January 2025 PICA inspected pipelines ranging in size from 12" to 36" spanning over 9.1 miles of pipeline. Immediately following the delivery of PICA field reports, validation investigations were carried out and confirmed reported localized wall loss indications and stress anomalies.

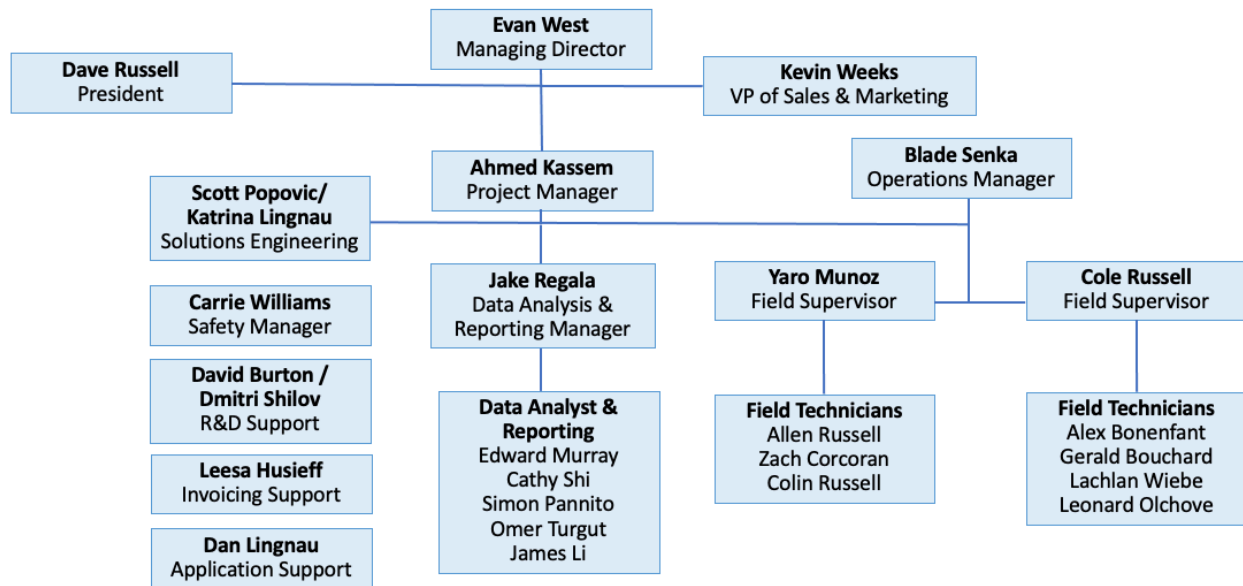
5. Denver Water – Denver, CO

Laura Dennis 303-628-6058 laura.dennis@denverwater.org

Contract Amount: \$300,000

PICA has previously inspected a 66" diameter Riveted Steel Pipe for Denver Water with our Advanced NDT RFT EM See Snake tool. In 2021, we also inspected 3,932 feet of 57-inch welded steel, treated water main with LiDAR and HD CCTV. We documented defects and out of round conditions with a potable water certified, CCTV/LiDAR skid platform that was custom designed for this unique pipe.

III. Personnel



Project Manager: Ahmed Kassem

Ahmed is the first point of contact and responsible for scheduling planning meetings, electromagnetic inspections, and presentations. Ahmed is also the primary reviewer of critical application information (lay sheets, plan and profile drawings, fabrication details, failure history) and the deliverables from PICA. Ahmed will guide all departments in the execution of their work. Ahmed has years of experience in project management of pipeline inspection.



Education and Certifications:

- Bachelor of Science (Civil Engineering) - Alexandria University
- IBAK certified operation and installation
- MSCC5 (OS19X)
- BKP CIPP certified installer
- ISO9001 Auditor

Expertise

- Project Management
- Business development and CRM.
- CCTV Condition assessment and laser profiling.
- Trenchless Pipeline Rehabilitation.
- Infrastructure planning and construction.
- Flood emergency response management during rainy season.

Highlights

- Co-founder of pipeline inspection and rehabilitation company in Qatar.
- +9 million USD of annual revenues.
- Managed +150 employees
- Participate in the planning of flood prevention scheme for FIFA 2022 in Qatar.

Ahmed Kassem

Project Manager

✉ akassem@picacorp.com

☎ 1(438) 814 5201



Experience Summary

Accomplished professional with over 17 years of expertise in pipeline condition assessment, trenchless pipeline rehabilitation and civil engineering, spanning projects in Canada, USA, UAE, Qatar, Saudi Arabia, Oman and Malaysia. Demonstrates a robust skill set in project management, business development, and leadership of multidisciplinary teams. As a co-founder of Pipeline inspection and Rehabilitation in MACE Qatar, played a pivotal role in establishing and managing large-scale sewer rehabilitation projects. Adept at troubleshooting complex technical issues, developing innovative methodologies, and providing strategic solutions to enhance operational efficiency. Proven track record in securing new business, overseeing financial activities, and driving project success in high-stakes environments.

Joined PICA Corporation in February 2024.

Projects

Ahmed is eager to leverage his extensive project management skills to support non-destructive testing services at PICA. With a strong background in infrastructure and civil engineering, he excels in managing complex projects, coordinating multidisciplinary teams, and ensuring projects are completed on time and within budget. Ahmed's focus on proactive inspections, maintenance, and precise repairs aims to extend the reliability and service life of critical pipeline infrastructure.

42-inch RAS line condition assessment at Robert W. Hite Treatment Facility, CO, USA - 2024

Ahmed assisted with planning the inspection of the 42-inch diameter RAS welded steel pipe, covering approximately 540 linear feet, using Automated Ultrasonic Testing (AUT) technology. He coordinated efforts between the consultant and subcontractors to successfully complete the project and later followed up to ensure the deliverables were met.

36-inch DIP/BWP Transmission Main, Mesa, AZ, USA – 2024

Ahmed reviewed client records and oversaw the inspection of 3000 feet of a 36-inch DIP/BWP transmission main. The inspection length was divided into five smaller segments, through which the Chimera RFT tool was winched. Several areas of wall loss were identified in the transmission main. Ahmed assisted the team by compiling client records and field documentation.



Operations Manager: Blade Senka

Blade supports the main project manager and the rest of the team with the preparation of inspection plans, as well as the coordination of secondary contractors like Confined Space Teams, Traffic Control Crews, lifting equipment, generators & light masts, etc. Depending on the complexity of the inspection works, the Operations Manager may be on-site to assist. Other responsibilities include logistics and procurement (like travel, vehicle rentals, crew accommodations, consumables, etc.). Blade has over 10 years' experience with PICA as a field operator before transitioning to Operations Manager.




Education and Certifications:

- RFT Testing Technician (2015)
- RFT Testing Technician (2020)
- Enform Gas Production Operator Certification (2018)

Expertise

- 12 years pipeline construction and inspection
- Condition assessment of pipeline infrastructure using Remote Field Testing
- Inline Inspection Project Planning and Execution
- Project Plan Execution
- Free Swimming ILI Tool Inspections
- Tethered ILI Tool Inspections
- Proficient skill set in the execution of progressive pipeline pigging programs and preparing pipelines for RFT inspection programs.



Blade Senka

Operations Manager

✉ bsenka@picacorp.com ☎ 1 (204)250-6604

Experience Summary

Blade had over 10 years' experience as a field operator and field supervisor before transitioning to operations manager overseeing the field operations department. He specializes in free swimming and tethered RFT field inspection projects, condition assessment of pipelines, particularly those that are deemed *unpiggable*. He is holistically involved in the execution of successful inline inspection projects, from scope planning to technical maintenance and assembly of tools, to project management and field execution of projects.

Through his tenure at PICA Blade has executed 100+ successful inspection projects in the Nuclear, Oil&Gas and Municipal sectors, and collaborated to develop field execution plans for our suite of Inline Inspection Tools. Chief amongst these is the SeeSnake, Chimera, RAFT and EMIT high resolution Remote Field-Testing tools.

Notable Projects

PCCP/BWP Concrete Pipe Inspection, Jordan Valley, UT – 2022
Project Manager/Field Supervisor:
 Planned and executed a 4 weeklong, 25,000ft tethered inspection schedule with sizes from 20"-30". Executed field inspections and supervised the data acquisition, pre and post field performance responsibilities.

4"/6"/8" Steel HPDE Lined Pipe Inspection, Waterton, AB – 2017-2023
Project Manager/Field Supervisor:
 Created work plans and coordinated with multiple contractors to establish procedures. Executed 20+ free swimming RFT tool runs for a major Oil and Gas producer through yearly repeat inspections. Responsible for total life cycle of the project from planning, execution, and post project responsibilities.

24",30",36" BWP/PCCP Potable Water, City of Mesa, 2022
Project Manager/Field Supervisor:
 Planned and executed a 3 weeklong 22,000ft tethered inspection schedule with sizes ranging 24",30" and 36". Executed field inspections and supervised the data acquisition, pre and post field performance responsibilities.

24" Ductile Iron, City of Phoenix, – 2020/2021
Project Manager/Field Supervisor:
 Executed and planned a twin barrel free swimming RFT inspection on a critical set of pipelines that cross the Salt River. Responsible for overall field performance and execution of twin 17,000ft Ductile Iron Forcemain inspections.

18",20",24", 30", 36", City of Mesa, – 2024
Project Manager/Field Supervisor:
 Planned and executed a 4 weeklong 30,000ft tethered inspection schedule with sizes ranging 18"- 36". Executed field inspections and supervised the data acquisition, pre and post field performance responsibilities.

8" Madang, Papua New Guinea, – 2019
Project Manager/Field Supervisor:
 Executed field inspections and supervised the data acquisition, pre and post field performance responsibilities of a 4-kilometre critical free swimming inspection from terminal to wharf.



Solutions Engineering: Scott Popovic

Scott has over 10 years of pipeline inspection experience working with PICA. Scott, as the Solutions Engineer is responsible for reviewing specifications, documents and details to ensure the proper procedures and tools are utilized for each task. He has performed several projects in the field with the See Snake and NFT suite of tethered and free-swimming tools. Scott has previously served PICA as data analyst utilizing software and data from inspections to determine condition assessments of pipelines.




Education and Certifications:

- B. Eng (Chemical Engineering)
McMaster University, ON

Expertise

- Project Planning & Execution
- Project Management
- Remote Field Testing (RFT) Data Analysis
- RFT – Field Support and On-site Data Analysis



Scott Popovic

Solutions Engineering Specialist

✉ spopovic@picacorp.com ☎ (905) 920-4113

Experience Summary

Scott Popovic has over 10 years of experience with PICA, with significant involvement in all aspects of PICA's pipeline inspection projects. Scott has supported inspection projects from the initial planning stage, through execution, analysis and reporting. In his role as Solutions Engineering Specialist, Scott works to facilitate electromagnetic inspections projects, interfacing between asset owners and PICA's technical services teams to develop detailed condition assessment strategies.

Major Projects

24-inch Steel Pipeline Inspection, K+S Potash – 2023 – 2024
Scott was involved in all aspects of PICA's condition assessment of 20,000 ft of 24-inch lined steel pipelines. This project involved the use of PICA's Advanced NDT and Visual NDT services (LiDAR, CCTV).

78-inch and 84-inch PCCP Pipeline Inspection, Ak-Chin Farms – 2022 - 2024
Scott was involved in the planning, execution, analysis, and reporting for PICA's inspection of approximately 8.5 miles of PCCP using both Standard and Advanced NDT solutions.

Various Ductile Iron Water Main Inspections, M.U.D Omaha – 2022-2024
Scott worked with the client to plan and execute the Advanced NDT inspections of various ductile iron water mains ranging from 6-inches to 12-inches in diameter. PICA's Advanced NDT tools were deployed in both free-swimming and tethered configurations in order to complete the inspections.

66-inch Steel Water Main Inspection, DC Water – 2019-2020
Scott interfaced with PICA's inspection and analysis teams to provide the client comprehensive condition assessment results following the inspection of 8,200 ft of a 66-inch steel water main. This project utilized PICA's Visual, Standard, Intermediate, and Advanced NDT service solutions, providing a complete assessment of the pipelines condition.

Metallic Pipe Inspections, Bruce Power Nuclear Generating Station – 2017-2021
Scott worked with the client to plan and execute the Advanced NDT inspections of a number of metallic pipelines at a nuclear generating station. Each inspection required a unique approach, with PICA's inspection tools deployed in various ways to accommodate the specific limitations of working at a nuclear facility.

Reinforced Concrete Pipe Inspection, San Diego County – 2019-2020
Scott was on-site for the duration of the inspection, interfacing with PICA's inspection and analysis teams and the client to ensure the successful execution of the project. Scott worked with the client to understand the condition assessment results and assisted in coordinating any validation efforts.



Field Supervisor: Cole Russell

Cole is the on-site point of contact and responsible for the successful execution of the data acquisition and tool deployment in the pipeline. Cole has over four years of field experience and ensures the equipment is in good working condition and leads the inspection team conducting the fieldwork. Cole also acts as the safety supervisor onsite and ensures that all technicians are qualified and have appropriate safety tickets. During inspection activities the field inspectors operate equipment and monitor progress as the inspection tools convey through the pipeline. At the end of each shift, they perform quality control on the recorded data and upload to PICA servers.





Education and Certifications:

- Highschool diploma
- Certificates
 - MSHA Mine safety
 - Canadian Mine safety
 - Numerous Equipment Operator and Task Specific Training Courses.

Expertise

- Condition assessment of pipeline infrastructure using Remote Field Testing and Near Field Testing
- Inline Inspection Project Planning and Execution
- 3 years welding instruction

Cole Russell

Field Supervisor

✉ Colerussell@picacorp.co
☎ 1 (587) 588 8323



Experience Summary

Cole Russell has 4 years' experience as a Non-Destructive Testing Technician. He specializes in Remote Field Technology (RFT) for condition assessment of pipelines

Major Projects

Reinforced Concrete Pipe Inspection, San Diego, CA –2024
Field Supervisor
 Supervisor of the data collection and condition assessment of 16 miles of 48-inch potable water reinforced concrete pipe with the R.A.F.T suite of PICA's RFT tools.

36" Ductile Iron Pipe Inspection, Mesa, AZ - 2024
Field Supervisor
 Oversaw the data collection and field execution process of 3500ft of critical raw water infrastructure inspection via advanced RFT inline inspection.

120" Bar Wrapped Near Field Technology Inspection (NFT), Detroit, MI - 2022
Field Supervisor
 Performed the in-pipe inspection portion of a critical water main, under strict time constraints. Asset managers were in an emergency state and had stringent time allocations to complete the data acquisition phase of the project.

36" Reinforced Concrete Pipe inspection, Singapore - 2023
Senior Field Technician:
 Oversaw planning and execution of a 36-inch potable water pipeline inline inspection consisting of 3 weeks of advanced RFT inspection with PICA's custom R.A.F.T line of



Lead Analyst & Data Manager: Jake Regala

Jake has 25 years of experience of electromagnetic experience and started his career with the inspections of PCCP pipelines using NFT. As the Lead Analyst, Jake is the third point of contact and responsible for correlating inspection data with pipeline features extracted from critical application information, and for thoroughly reporting characteristics of distressed areas in the pipeline. Jake leads the analysis group and will be working on this project directly from data collection to analysis and reporting to generate tabular and editorial reports which describe the results from the inspections, and project execution details. Jake will also present data and act as a liaison for questions regarding inspection results.





Education and Certifications:

- B.Sc. Environmental Science, University of Guelph, ON
- Confined Space Entry
- Fall Arrest
- First Aid/CPR
- WHMIS

Highlights:

- NFT (Near Field Testing) – Inspection Team Lead and Field Support
- RFT (Remote Field Testing) – Field Support
- NFT Data Analysis
- RFT Data Analysis
- Project Management
- Managerial Duties

Expertise

- Near Field Testing (NFT)
- Remote Field Testing (RFT)
- Data Analysis
- Condition Assessment Reports




Jake Regala

Manager, Data Analysis and Reporting at PICA Corp

✉ jregala@picacorp.com
☎ 1 (800) 661 0127

Experience Summary

Jake Regala has nearly 25 years of experience with the use of advanced non-destructive testing (NDT) technologies for pipeline inspections. His NDT career started with the inspection of prestressed concrete cylinder pipes (PCCP) using Near Field Testing (NFT) technology, as field support and crew leader. Eventually, his role and responsibilities shifted to data analysis and reporting, project management and analysis resource management.

Midway through his career, Jake transitioned to the condition assessment of ferromagnetic pipes (ductile iron, cast iron and steel) using Remote Field Testing (RFT) technology. His initial role was focused on the analysis of RFT data and generating condition assessment reports before transitioning to a managerial role. Jake is one of PICA's front-line personnel and is responsible for assisting utility owners and engineering consultants with interpreting PICA's condition assessment results.

Major Projects

48" RCCP, RCP – San Diego County Water Authority, San Diego, CA - 2024
Senior Reviewer:
PICA inspected ~14 miles of 48" RCCP and RCP (Pipeline 2) line that is a part of the Southern First Aqueduct using Remote-Field Testing (RFT). Jake managed the data analysis process, quality control and reporting for the project. Numerous locations with cylinder defects and anomalies were reported.

12", 16" CI – Metropolitan Utilities District, Omaha, NE - 2023
Senior Reviewer:
PICA inspected two cast iron water mains using Remote-Field Testing (RFT). Jake managed the data analysis process, quality control and reporting for the project. A total of 4,375 pitting indications were reported.

108" PCCP - Omaha Public Power District, Nebraska City, NE - 2022
Field Support/Senior Reviewer:
PICA inspected the 108-inch PCCP Circulating Water System at the Nebraska City Power Station using Near-Field Testing (NFT), Digital 360° imaging, and LiDAR. Jake was directly involved with the manned inspection, data analysis and quality control of the reported findings. Numerous wire breaks regions were reported.

Metropolitan Water District of Southern California, PCCP Inspections – 2000 to 2011
Various roles from to Field Support to Project Manager, PPIC/Pure Technologies:
Directly involved with annual PCCP pipeline inspections for MWD in various capacities (field support/team lead – 2000 to 2003; lead data analyst – 2003 to 2005; Project Manager – 2005 to 2011).



IV. Cost/Fee Proposal

PICA Corp. Cost/Fee Proposal provided in separate file.

V. Acknowledgment of Standard Agreement and Insurance Requirements

PICA Corp. has read and agrees to meeting TVMWD's standard agreement and insurance requirements.

VI. Public Works Consultant Registration Certification

PICA Corp. is registered and in good standing with Public Works DIR of California.

PICA's CA. DIR number is: 1000037709

VII. Addendum Acknowledgement

PICA acknowledges that we have received the original RFQ and "250714 On-Call Pipeline Condition Assessment Addendum No.1" dated July 15, 2025.

**THREE VALLEYS MUNICIPAL WATERT DISTRICT
ADDENDUM NO. 01
for the
ON-CALL DESIGN AND INSPECTION SERVICES FOR
PIPELINE CONDITION ASSESMENT PROGRAM**

July 15, 2025

Three Valleys hereby issues Addendum No.1. The proposal due time remains unchanged.

Acknowledge receipt of this Addendum by signing and inserting its number and date on the acknowledgement below.

The purpose of the addendum is to provide the following clarifications to questions regarding the Request for Proposals:

- Response to Proposers' Question

QUESTION:

The evaluation criteria says "evaluation will be based on the understanding of the District needs, project approach, established experience and performance for each of the four categories as detailed in the scope of work," but the proposal format does not include an approach section. Should an approach be included in the proposal, and if so, is it included in the 15-page limit?

ANSWER:

The RFP is for on-call service and specific projects have not been assigned. Thus, the project approach can be removed from the proposal package and will not impact the evaluation process.

QUESTION:

Can more than three projects be included in the proposal given the range of activities in the scope of work

ANSWER:

As long as the 15-page maximum is not exceeded

QUESTION:

Can we include subcontractors on our team if we believe their services will provide value to the district and they do not have the capacity to bid on this work as a prime?

ANSWER:

Yes, as stated in the Executive Summary, it is preferred that consultants perform tasks without relying on subconsultants. TVMWD recognizes that some coordination may be necessary between field data collection and the overall planning process. While preferred subconsultants may be included, evaluations will focus on whether the task can be self-performed or requires a subconsultant.



**THREE VALLEYS MUNICIPAL WATERT DISTRICT
ADDENDUM NO. 01**
for the
**ON-CALL DESIGN AND INSPECTION SERVICES FOR
PIPELINE CONDITION ASSESMENT PROGRAM**

QUESTION:

is the use of 11x17 pages permitted and if so does the use of a 11x17 page impact the page limit?

ANSWER:

11 x 17 sheet will be considered (1) page as only electronic submissions are being accepted

QUESTION:

Can the District provide a rough estimate of total number of pipeline miles under its operation?

ANSWER:

Refer to the introduction approximately 8 miles of pipe. Pipe sizes ranges from 42in to 18in transmission mains. Primarily PCCP or CML&C Steel Pipe.

QUESTION:

Are all services to be provided in one, 15-page response or is it 15 pages per response section

ANSWER:

The intent of the 15-page limit is to expedite the review process. Ideally, much of the consultant's core information should overlap between response sections limiting the need to add a substantial number of pages to the proposal. However, to provide a uniform reviewing process, consultants may submit up to 15 pages per response section.

ADDENDUM NO.01 ACKNOWLEDGEMENT

The Bidder hereby acknowledges the receipt of Addendum No. 1 and the incorporation thereof in the Bid Proposal for the **ON-CALL DESIGN AND INSPECTION SERVICES FOR PIPELINE CONDITION ASSESMENT PROGRAM**

Bidder: PICA Corp.

By: Kevin Weeks

(Bidder's Authorized Representative)

Date: July 22, 2025

Title: VP Sales & Marketing



VIII. Submittal Check Off List

Exhibit B

SUBMITTAL CHECK OFF LIST

Enclosed below is checklist of required documents to be submitted as the Consultant's proposal. Items may be submitted on the same page and not required to be submitted separately.

Item	Required Submittals Checklist	Check off
1	Cover Letter	<input checked="" type="checkbox"/>
2	Trade Experience	<input checked="" type="checkbox"/>
3	Personnel Resumes	<input checked="" type="checkbox"/>
4	Cost/ Fee Proposal	<input checked="" type="checkbox"/>
5	Acknowledgment of Standard Agreement (or redline provisions)	<input checked="" type="checkbox"/>
6	Insurance Affidavit	<input checked="" type="checkbox"/>
7	Public Works Consultant Registration Certification (CADIR)	<input checked="" type="checkbox"/>
8	Additions, Deletions, and/or Exceptions	<input checked="" type="checkbox"/>



**MASTER ON-CALL PROFESSIONAL SERVICES AGREEMENT
BETWEEN
THREE VALLEYS MUNICIPAL WATER DISTRICT
AND
INSIGHT WATER TECHNOLOGIES**

This Professional Services Agreement ("AGREEMENT") is made and entered into this 7th day of August, 2025 ("EFFECTIVE DATE"), by and between Three Valleys Municipal Water District, a municipal water district organized and operating pursuant to California Water Code Section 71000 et seq. (hereinafter referred to as "DISTRICT"), and **INSIGHT WATER TECHNOLOGIES**, (hereinafter referred to as "CONSULTANT"). DISTRICT and CONSULTANT are sometimes individually referred to as "PARTY" and collectively as "PARTIES" in this AGREEMENT.

RECITALS

WHEREAS, DISTRICT desires to contract with CONSULTANT as an independent CONSULTANT to provide professional services for the Master On-Call Professional Services on an "as-needed" TASK ORDER assignment basis; and

WHEREAS, CONSULTANT represents that it is duly licensed, qualified and capable to perform such services by virtue of its experience and the training, education and expertise of its principals and employees, and that CONSULTANT is customarily engaged in an independently established trade, profession, occupation, and/or business of the same nature as the work to be performed for herein; and

WHEREAS, DISTRICT desires to retain CONSULTANT and CONSULTANT desires to serve the DISTRICT to perform the services described herein in accordance with the terms and conditions of this AGREEMENT.

COVENANTS

NOW, therefore, in consideration of the faithful performance of the terms and conditions set forth herein, the PARTIES hereto agree as follows:

ARTICLE I

SERVICES OF CONSULTANT

1. **SCOPE OF SERVICES:** The scope of services to be performed by the CONSULTANT under this AGREEMENT are described in Exhibit "A" attached hereto and incorporated herein by this reference ("PROPOSAL"), and shall, where not specifically addressed, include all related services ordinarily provided by the CONSULTANT under same or similar circumstances. The DISTRICT may request, in writing, changes in the PROPOSAL or services to be performed. Any changes mutually agreed upon by the PARTIES, and any increase or decrease in compensation or time, shall be incorporated by written amendments to this AGREEMENT. Individual "TASK ORDERS" will be issued based on the services and rates provided in the PROPOSAL.
2. **PREVAILING WAGES:** CONSULTANT shall comply with all applicable provisions of labor law relating to employment for the performance of services on the TASK ORDER. In accordance with



the provisions of the California Labor Code, CONSULTANT shall secure the payment of compensation to employees. To the extent required by the California Labor Code, CONSULTANT shall pay not less than the prevailing rate of per diem wages as determined by the Director, Department of Industrial Relations, State of California ("DIR"). Copies of such prevailing rate of per diem wages are on file at the DISTRICT's office, which copies will be made available to any interested party upon request. CONSULTANT shall post a copy of such determination at each job site. If applicable, CONSULTANT shall forfeit to the DISTRICT the amount of the penalty set forth in California Labor Code Section 1777.7(b), or any subsequent amendments thereto, for each calendar day, or portion thereof, for each worker paid less than the specified prevailing rates for such work or craft in which such worker is employed, whether paid by CONSULTANT or by any SUBCONTRACTOR. CONSULTANT shall submit certified payroll records to the Labor Commissioner using DIR's electronic certified reporting system and provide with their invoice certified payroll records verifying that CONSULTANT has paid prevailing wage in accordance with the DIR requirements as stipulated in California Senate Bills 854 and 96, <https://www.dir.ca.gov/public-works/certified-payroll-reporting.html>

ARTICLE II

ENGAGEMENT OF CONSULTANT AND AUTHORIZATION TO PROCEED

1. **ENGAGEMENT:** The DISTRICT hereby engages CONSULTANT, and CONSULTANT hereby accepts the engagement, to perform the services described in Section I.1 of this AGREEMENT.
2. **AUTHORIZATION TO PROCEED:** Authorization for CONSULTANT to proceed with the work described in Section I.1 of this AGREEMENT will be granted in writing by the DISTRICT as soon as both PARTIES sign this AGREEMENT and all applicable insurance and security documents required pursuant to Section VI.5 of this AGREEMENT are received and approved by the DISTRICT. CONSULTANT shall not proceed with said work until so authorized by the DISTRICT and shall commence work immediately upon receipt of the executed TASK ORDER.
3. **INDEPENDENT CONSULTANT:** The TASK ORDER services to be performed by CONSULTANT under this AGREEMENT are outside the usual course of the DISTRICT's business. CONSULTANT is, and shall at all times remain as to DISTRICT, a wholly independent CONSULTANT. The personnel performing the services under this AGREEMENT on behalf of CONSULTANT shall at all times be under CONSULTANT's exclusive direction and control. CONSULTANT shall have no power to incur any debt, obligation, or liability on behalf of the DISTRICT. Neither DISTRICT nor any of its agents shall have control over the conduct of CONSULTANT or any of CONSULTANT's employees, except as set forth in this AGREEMENT. CONSULTANT shall not, at any time, or in any manner, represent that it or any of its officers, agents or employees are in any manner employees of the DISTRICT. No employee benefits shall be available to CONSULTANT in connection with the performance of this AGREEMENT. Except for the fees paid to CONSULTANT as provided in this AGREEMENT, the DISTRICT shall not pay salaries, wages, or other compensation to CONSULTANT for performing services hereunder for the DISTRICT. The DISTRICT shall not be liable for compensation or indemnification to CONSULTANT for injury or sickness arising out of performing services hereunder.



ARTICLE III

RESPONSIBILITIES OF DISTRICT AND OF CONSULTANT

1. **DUTIES OF THE DISTRICT:** The DISTRICT, without cost to CONSULTANT, will provide all pertinent information necessary for CONSULTANT's performance of its obligations under this AGREEMENT that is reasonably available to the DISTRICT unless otherwise specified in the TASK ORDER in which case the CONSULTANT is to acquire such information. The DISTRICT does not guarantee or ensure the accuracy of any reports, information, and/or data so provided however, in performing its services hereunder, CONSULTANT shall be entitled to act in reasonable reliance upon all such reports, information, and /or data so provided by the DISTRICT. To the extent that any reports, information, and/or other data so provided was supplied to CONSULTANT by persons who are not employees of DISTRICT, any liability resulting from inaccuracies and/or omissions contained in said information shall be limited to liability on behalf of the entity who prepared the information for CONSULTANT.
2. **REPRESENTATIVE OF DISTRICT:** The DISTRICT will designate *Kevin Panzer* as the person to act as the DISTRICT's representative with respect to the PROPOSAL services to be performed under this AGREEMENT. Such person will have complete authority to receive information and interpret and define the DISTRICT's policies pertinent to the TASK ORDER, although such person will not control or direct CONSULTANT's work.
3. **DUTIES OF CONSULTANT:** CONSULTANT shall perform TASK ORDER work in such a manner as to fully comply with all applicable professional standards of care, including professional quality, technical accuracy, timely completion, and other services furnished and/or work undertaken by CONSULTANT pursuant to this AGREEMENT. The CONSULTANT shall cause all work and deliverables to conform to all applicable federal, state, and local laws and regulations.
4. **APPROVAL OF WORK:** The DISTRICT's approval of work or materials furnished hereunder shall not in any way relieve CONSULTANT of responsibility for the technical adequacy of its work. Neither the DISTRICT's review, approval or acceptance of, nor payment for any of the services shall be construed to operate as a waiver of any rights under this AGREEMENT or of any cause of action arising out of the performance of this AGREEMENT.

ARTICLE IV

PAYMENTS TO CONSULTANT

1. **PAYMENT:** The DISTRICT will pay CONSULTANT for work performed under this AGREEMENT, which work can be verified by the DISTRICT, on the basis of the following:

During the term of this AGREEMENT, the DISTRICT will pay CONSULTANT for services performed in accordance with the rates and estimated hours and costs set forth in the PROPOSAL and individual TASK ORDERS. The amount set forth in Section IV.3 of this AGREEMENT is the maximum compensation to which CONSULTANT may be entitled for the performance of services to complete the work for each TASK ORDER, unless the TASK ORDER or time to complete the work is changed by the DISTRICT in writing in advance of



the work to be performed thereunder. Adjustments in the total payment amount shall only be allowed pursuant to Section VI.15 of this AGREEMENT. In no event shall CONSULTANT be entitled to compensation greater than the amount set forth in Section IV.3 of this AGREEMENT where changes in each TASK ORDER or the time for performance are necessitated by the negligence of CONSULTANT or any SUBCONTRACTOR performing work on each TASK ORDER.

2. **PAYMENT TO CONSULTANT:** Payment will be made by the DISTRICT within thirty (30) calendar days after receipt of an invoice from CONSULTANT, provided that all invoices are complete, and product and services are determined to be of sufficient quality by the DISTRICT. Each invoice shall itemize the services rendered during the billing period, hourly rates charged, if applicable, and the amount due. If the DISTRICT disputes any of CONSULTANT'S fees, it shall give written notice to CONSULTANT within thirty (30) days of receipt of an invoice of any disputed fees set forth on the invoice. In such case, the PARTIES shall work to find a reasonable resolution of any such dispute in good faith and in a timely manner.
3. **ESTIMATED CHARGES:** The total estimated charges for all work under this AGREEMENT will be determined by each executed TASK ORDER and such amount is the cost ceiling described herein. The total estimated charges stated herein constitute the total amount agreed to. All rates and charges are subject to the terms set in the PROPOSAL and TASK ORDERS.
4. **COST FOR REWORK:** CONSULTANT shall, at no cost to the DISTRICT, prepare any necessary rework occasioned by CONSULTANT CONSULTANT's negligent act or omission or otherwise due substantially to CONSULTANT's fault.

ARTICLE V

COMPLETION SCHEDULE

1. **TERM:** The term of this AGREEMENT shall begin on the EFFECTIVE DATE, and shall continue until August 7th, 2028, unless this AGREEMENT is earlier terminated pursuant to the provisions of Section VI.8 below. Notwithstanding the above, the provisions of Sections I.2, II.3, III.3, and III.4, and Articles IV, V, and VI herein shall survive the expiration and/or termination of this AGREEMENT.
2. **TASK SCHEDULE:** The work is anticipated to be completed in accordance with Exhibit "A" as agreed upon by DISTRICT and CONSULTANT at the time that a TASK ORDER is issued by DISTRICT except as may from time-to-time be adjusted by amendment hereto as provided herein.
3. **TIME OF ESSENCE:** CONSULTANT shall perform all services required by this AGREEMENT in a prompt, timely, and professional manner in accordance with the agreed upon schedule. Time is of the essence in this AGREEMENT.



ARTICLE VI

GENERAL PROVISIONS

1. **COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS:** CONSULTANT shall at all times observe all applicable provisions of Federal, State, and Local laws and regulations including, but not limited to, those related to Equal Opportunity Employment.
2. **SUBCONTRACTORS AND OUTSIDE CONSULTANT:** No subcontract shall be awarded by CONSULTANT if not identified as a SUBCONTRACTORS to PROPOSAL unless prior written approval is obtained from the DISTRICT. CONSULTANT shall be responsible for payment to SUBCONTRACTORS used by them to perform the services under this AGREEMENT. If CONSULTANT subcontracts any of the work to be performed, CONSULTANT shall be as fully responsible to the DISTRICT for the performance of the work, including errors and omissions of CONSULTANT's SUBCONTRACTORS and of the persons employed by the SUBCONTRACTORS, as CONSULTANT is for the acts and omissions of persons directly employed by the CONSULTANT. Nothing contained in this AGREEMENT shall create any contractual relationship between any SUBCONTRACTOR of CONSULTANT and the DISTRICT. CONSULTANT shall bind every SUBCONTRACTOR and every SUBCONTRACTOR of a SUBCONTRACTOR to the terms of this AGREEMENT that are applicable to CONSULTANT's work unless specifically noted to the contrary in the subcontract in question and approved in writing by the DISTRICT.
3. **OWNERSHIP OF DOCUMENTS:** Upon completion of, or in the event of termination or suspension of this AGREEMENT, all original documents, designs, drawings, maps, models, computer files containing data generated for the work, surveys, notes, and other documents prepared in the course of providing the services to be performed ("WRITTEN PRODUCTS") pursuant to this AGREEMENT shall become the sole property of the DISTRICT without restriction or limitation upon its use and may be used, reused, disseminated or otherwise disposed of by the DISTRICT without the permission of the CONSULTANT except that any use of the documents produced in service of this AGREEMENT shall be at DISTRICT's sole risk when used for any purpose or project other than the TASK ORDER specified herein. With respect to computer files containing data generated for the work, CONSULTANT shall make available to the DISTRICT, upon reasonable written request by the DISTRICT, the necessary computer software and hardware for purposes of accessing, compiling, transferring and printing computer files. CONSULTANT may take and retain copies of WRITTEN PRODUCTS as desired, but WRITTEN PRODUCTS shall not be the subject of a copyright application by CONSULTANT.
4. **INDEMNIFICATION:**
 - A. **Indemnity for Design Professional Services:** To the fullest extent permitted by law, CONSULTANT shall, at its sole cost and expense, protect, indemnify and hold harmless DISTRICT and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those DISTRICT agents serving as independent contractors in the role of DISTRICT officials (collectively "INDEMNITEES"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens and



losses of any nature whatsoever, including fees of accountants, attorneys or other professionals, and all costs associated therewith, and reimbursement of attorney's fees and costs of defense, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to, in whole or in part, the negligence, recklessness or willful misconduct of CONSULTANT, its officers, agents, servants, employees, SUBCONTRACTOR, material men, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT shall bear the legal liability thereof) in the performance of design professional services under this AGREEMENT. It is the intent of the PARTIES to this AGREEMENT that the defense, indemnity, and hold harmless obligations of CONSULTANT under this AGREEMENT shall be as broad and inclusive as may be allowed under California Civil Code §2778 through §2784.5, or other similar state or federal law.

B. Other Indemnities:

- i. Other than in the performance of design professional services, and to the fullest extent permitted by law, CONSULTANT shall, at its sole cost and expense, defend, hold harmless and indemnify the INDEMNITEES from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens and losses of any nature whatsoever, including fees of accountants, attorneys or other professionals, and all costs associated therewith, and the payment of all consequential damages, in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of CONSULTANT, its officers, agents, servants, employees, SUBCONTRACTORS, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT shall bear the legal liability thereof) in the performance of this AGREEMENT, including the INDEMNITEES' active or passive negligence, except for claims arising from the sole negligence or willful misconduct of the INDEMNITEES, as determined by final arbitration or court decision or by the agreement of the PARTIES. CONSULTANT shall defend the INDEMNITEES in any action or actions filed in connection with any claim with counsel of the INDEMNITEES' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. CONSULTANT shall reimburse the INDEMNITEES for any and all legal expenses and costs incurred by the INDEMNITEES in connection therewith.
- ii. CONSULTANT shall pay all required taxes on amounts paid to CONSULTANT under this AGREEMENT and indemnify and hold DISTRICT harmless from any and all taxes, assessments, penalties, and interest asserted against DISTRICT by reason of the independent contractor relationship created by this AGREEMENT. CONSULTANT shall fully comply with the workers' compensation law regarding CONSULTANT and CONSULTANT's employees. CONSULTANT shall indemnify and hold DISTRICT harmless from any failure of CONSULTANT to comply with



applicable workers' compensation laws. DISTRICT may offset against the amount of any fees due to CONSULTANT under this AGREEMENT any amount due to DISTRICT from CONSULTANT as a result of CONSULTANT's failure to promptly pay to DISTRICT any reimbursement or indemnification arising under this Subparagraph.

- iii. CONSULTANT shall obtain executed indemnity agreements provisions identical to those in this Section VI.4 from each and every SUBCONTRACTOR or any other person or entity involved by, for, with or on behalf of CONSULTANT in the performance of this AGREEMENT. If CONSULTANT fails to obtain such indemnities, CONSULTANT shall be fully responsible and indemnify, hold harmless and defend the INDEMNITEES from and against any and all claims in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of CONSULTANT's SUBCONTRACTORS, its officers, agents, servants, employees, SUBCONTRACTOR, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT's SUBCONTRACTOR shall bear the legal liability thereof) in the performance of this AGREEMENT, including the INDEMNITEES' active or passive negligence, except for claims arising from the sole negligence or willful misconduct of the INDEMNITEES, as determined by final arbitration or court decision or by the agreement of the PARTIES.

- A. **Workers' Compensation Acts not Limiting:** CONSULTANT's obligations under this Section VI.4, or any other provision of this AGREEMENT, shall not be limited by the provisions of any workers' compensation act or similar act. CONSULTANT expressly waives its statutory immunity under such statutes or laws as to DISTRICT, its officers, agents, employees and volunteers.
- B. **Insurance Requirements not Limiting:** DISTRICT does not, and shall not, waive any rights that it may possess against CONSULTANT because of the acceptance by DISTRICT, or the deposit with DISTRICT, of any insurance policy or certificate required pursuant to this AGREEMENT. This hold harmless and indemnification provisions in this Section VI.4 shall apply regardless of whether or not any insurance policies are determined to be applicable to the liability, claim, tax, assessment, penalty or interest asserted against DISTRICT.
- C. **Survival of Terms:** The indemnification in this Section VI.4 shall survive the expiration or termination of this AGREEMENT.



5. INSURANCE:

A. Minimum Scope and Limits of Insurance: CONSULTANT shall secure and maintain in full force and effect, until the satisfactory completion and acceptance of AGREEMENT by DISTRICT, such insurance as will protect it and the DISTRICT in such a manner and in such amounts as set forth below. The premiums for said insurance coverage shall be paid by the CONSULTANT. The failure to comply with these insurance requirements may constitute a material breach of this AGREEMENT, at the sole discretion of the DISTRICT.

i. **Workers' Compensation:** CONSULTANT shall maintain Workers' Compensation insurance, as required by the State of California, with Statutory Limits and Employers' Liability Insurance in an amount not less than \$1,000,000 per accident for bodily injury or disease. This insurance shall also waive all right to subrogation against the DISTRICT, its Board of Directors, officers, employees, representatives, and guests.

ii. **General Liability:** CONSULTANT shall maintain Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 00 01) including products and completed operations, property damage, bodily injury, personal and advertising injury with limit of at least \$2,000,000 per occurrence or the full per occurrence limits of the policies available, whichever is greater. If a general aggregate limit applies, the general aggregate limit shall be twice the required occurrence limit. DISTRICT shall be named as an additional insured.

iii. **Automobile Liability:** CONSULTANT shall maintain Insurance Services Office (ISO) Business Auto Coverage (Form CA 00 01), covering Symbol 1 (any auto) or if CONSULTANT has no owned autos, Symbol 8 (hired) and 9 (non-owned) with limit of \$1,000,000 for bodily injury and property damage each accident. This insurance shall have an endorsement naming the DISTRICT as an additional insured.

iv. **Professional Liability:** CONSULTANT shall maintain professional liability insurance with coverage for wrongful acts, errors, or omissions committed by CONSULTANT in the course of work performed for the DISTRICT under this AGREEMENT. This insurance shall include coverage for liability assumed under this AGREEMENT when CONSULTANT's wrongful acts, errors, or omissions cause such liability. The limit for this insurance shall be not less than \$1,000,000 per occurrence or claim and \$2,000,000 policy aggregate.

B. Acceptability of Insurers: The insurance policies required under this Section VI.5 shall be issued by an insurer admitted to write insurance in the State of California with a rating of AA:VII or better in the latest edition of the A.M. Best Insurance Rating Guide. Self-insurance shall not be considered to comply with the insurance requirements under this Section VI.5.

C. Primary and Non-Contributing: The insurance policies required under this



Section VI.5 shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to DISTRICT. Any insurance or self-insurance maintained by DISTRICT, its officers, employees, agents or volunteers, shall be in excess of CONSULTANT's insurance and shall not contribute with it.

- D. Consultant's Waiver of Subrogation:** The insurance policies required under this Section VI.5 shall not prohibit CONSULTANT and CONSULTANT's employees, agents or SUBCONTRACTORS from waiving the right to subrogation prior to loss. CONSULTANT hereby waives all rights of subrogation against DISTRICT.
- E. Deductibles and Self-Insured Retentions:** Any deductibles or self-insured retentions must be approved by DISTRICT. At DISTRICT's option, CONSULTANT shall either reduce or eliminate the deductibles or self-insured retentions with respect to DISTRICT, or CONSULTANT shall procure a bond guaranteeing payment of losses and expenses.
- F. Cancellations or Modifications to Coverage:** CONSULTANT shall not cancel, reduce or otherwise modify the insurance policies required by this Section VI.5 during the term of this AGREEMENT. The commercial general and automobile liability policies required under this AGREEMENT shall be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail thirty (30) calendar days' prior written notice to DISTRICT. If any insurance policy required under this Section VI.5 is canceled or reduced in coverage or limits, CONSULTANT shall, within two (2) business days of notice from the insurer, phone, fax or notify DISTRICT via certified mail, return receipt requested, of the cancellation of or changes to the policy.
- G. District Remedy for Noncompliance:** If CONSULTANT does not maintain the policies of insurance required under this Section VI.5 in full force and effect during the term of this AGREEMENT, or in the event any of CONSULTANT's policies do not comply with the requirements under this Section VI.5, DISTRICT may either immediately terminate this AGREEMENT or, if insurance is available at a reasonable cost, DISTRICT may, but has no duty to, take out the necessary insurance and pay, at CONSULTANT's expense, the premium thereon. CONSULTANT shall promptly reimburse DISTRICT for any premium paid by DISTRICT or DISTRICT may withhold amounts sufficient to pay the premiums from payments due to CONSULTANT.
- H. Evidence of Insurance:** Prior to the performance of services under this AGREEMENT, CONSULTANT shall furnish DISTRICT representative with a certificate or certificates of insurance and all original endorsements demonstrating the DISTRICT as additionally insured, evidencing and effecting the coverages required under this Section VI.5. The endorsements are subject to DISTRICT's approval. CONSULTANT may provide complete, certified copies of all required insurance policies to DISTRICT. CONSULTANT shall maintain current endorsements on file with DISTRICT's representative. CONSULTANT shall provide proof to DISTRICT representative that insurance policies expiring during the term of this AGREEMENT have been renewed or replaced with other policies providing at least the same coverage. CONSULTANT shall furnish such proof at least two (2) weeks prior to



the expiration of the coverages.

- I. **Indemnity Requirement not Limiting:** Procurement of insurance by CONSULTANT shall not be construed as a limitation of CONSULTANT's liability or as full performance of CONSULTANT's duty to indemnify DISTRICT under Section VI.4 of this AGREEMENT.
- J. **Subcontractor's Insurance Requirements:** CONSULTANT shall require each of its SUBCONTRACTORS that perform services under this AGREEMENT to maintain insurance coverage that meets all of the requirements of this Section VI.5.
- K. **Claim Reporting:** CONSULTANT shall not fail to comply with the claim reporting provisions or cause any breach of a policy condition or warranty of the insurance policies required by this AGREEMENT that would affect the coverage afforded under the policies to the DISTRICT.
- L. **Broader Coverage/Higher Limits:** If CONSULTANT maintains broader coverage and/or higher limits than the minimums shown above, the DISTRICT requires and shall be entitled to the broader coverage and/or higher limits maintained by CONSULTANT. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the DISTRICT.

6. MUTUAL COOPERATION

- A. **District's Cooperation:** DISTRICT shall provide CONSULTANT with all pertinent data, documents and other requested information as is reasonably available for CONSULTANT's proper performance of the services required under this AGREEMENT.
- B. **Consultant's Cooperation:** In the event any claim or action is brought against the DISTRICT relating to CONSULTANT's performance or services rendered under this AGREEMENT, CONSULTANT shall render any reasonable assistance that DISTRICT requires.

- 7. **EXAMINATION OF RECORDS:** All original drawings, specifications, reports, calculations, and other documents or electronic data developed by CONSULTANT for this TASK ORDER shall be furnished to and become the property of the DISTRICT. CONSULTANT agrees that the DISTRICT will have access to and the right to examine any directly pertinent books, documents, papers, and records of any and all of the transactions relating to this AGREEMENT at CONSULTANT's office, during normal business hours and following a reasonable advance notice to CONSULTANT from DISTRICT. The DISTRICT shall not be limited in any way in its use of the work materials at any time except as otherwise provided herein.

8. TERMINATION OR SUSPENSION OF AGREEMENT

- A. **Right to Terminate or Suspend:** DISTRICT may terminate or suspend this AGREEMENT at any time, at will, for any reason or no reason, after giving written



notice to CONSULTANT at least ten (10) calendar days before the termination or suspension is to be effective. CONSULTANT may terminate this AGREEMENT at any time, at will, for any reason or no reason, after giving written notice to DISTRICT at least thirty (30) calendar days before the termination is to be effective.

B. Obligations upon Termination: CONSULTANT shall cease all work under this AGREEMENT on or before the effective date of termination specified in the notice of termination. In the event of DISTRICT's termination of this AGREEMENT due to no fault or failure of performance by CONSULTANT, DISTRICT shall pay CONSULTANT based on the percentage of work satisfactorily performed up to the effective date of termination. In no event shall CONSULTANT be entitled to receive more than the amount that would be paid to CONSULTANT for the full performance of the services required by this AGREEMENT.

9. NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY: In the performance of this AGREEMENT, CONSULTANT shall not discriminate against any employee, SUBCONTRACTOR or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation or other basis prohibited by law. CONSULTANT will take affirmative action to ensure that SUBCONTRACTORS and applicants are employed, and that employees are treated during employment, without regard to their race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information or sexual orientation.

10. PROHIBITION OF ASSIGNMENT AND DELEGATION: CONSULTANT shall not assign any of its rights or delegate any of its duties under this AGREEMENT, either in whole or in part, without DISTRICT's prior written consent. DISTRICT's consent to an assignment of rights under this AGREEMENT shall not release CONSULTANT from any of its obligations or alter any of its primary obligations to be performed under this AGREEMENT. Any attempted assignment or delegation in violation of this section shall be void and of no effect and shall entitle DISTRICT to terminate this AGREEMENT. As used in this section, "assignment" and "delegation" means any sale, gift, pledge, hypothecation, encumbrance or other transfer of all or any portion of the rights, obligations, or liabilities in or arising from this AGREEMENT to any person or entity, whether by operation of law or otherwise, and regardless of the legal form of the transaction in which the attempted transfer occurs.

11. NO THIRD-PARTY BENEFICIARIES INTENDED: Except as otherwise provided in Section VI.4, this AGREEMENT is made solely for the benefit of the PARTIES to this AGREEMENT and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this AGREEMENT.

12. WAIVER: No delay or omission to exercise any right, power or remedy accruing to DISTRICT under this AGREEMENT shall impair any right, power or remedy of DISTRICT, nor shall it be construed as a waiver of, or consent to, any breach or default. No waiver of any breach, any failure of a condition, or any right or remedy under this AGREEMENT shall



be (1) effective unless it is in writing and signed by PARTY making the waiver, (2) deemed to be a waiver of, or consent to, any other breach, failure of a condition, or right or remedy, or (3) deemed to constitute a continuing waiver unless the writing expressly so states.

13. ENTIRE AGREEMENT: This AGREEMENT and all exhibits referred to in this AGREEMENT constitute the final, complete and exclusive statement of the terms of this AGREEMENT between the PARTIES pertaining to the subject matter of this AGREEMENT and supersede all other prior or contemporaneous oral or written understandings and agreements of the PARTIES. No PARTY has been induced to enter into this AGREEMENT by, nor is any PARTY relying on, any representation or warranty except those expressly set forth in this AGREEMENT.

14. HEADINGS: Article and Section headings in this AGREEMENT are for convenience only and are not intended to be used in interpreting or construing the terms, covenants, and conditions of this AGREEMENT.

15. AMENDMENT OF AGREEMENT: This AGREEMENT may be amended only by a writing signed by both PARTIES. The DISTRICT representative is authorized to sign an amendment to this AGREEMENT on the DISTRICT's behalf to make the following non-substantive modifications to the AGREEMENT: (a) name changes; (b) extensions of time; (c) non-monetary changes in TASK ORDER; and (d) termination of this AGREEMENT.

16. GOVERNING LAW AND CHOICE OF FORUM: This AGREEMENT, and any dispute arising from the relationship between the PARTIES to this AGREEMENT, shall be governed by and construed in accordance with the laws of the State of California, except that any rule of construction to the effect that ambiguities are to be resolved against the drafting PARTY shall not be applied in interpreting this AGREEMENT. Any dispute that arises under or relates to this AGREEMENT (whether contract, tort or both) shall be resolved in a municipal, superior or federal court with geographic jurisdiction over the DISTRICT.

17. ATTORNEYS' FEES: In any litigation or other proceeding by which a PARTY seeks to enforce its rights under this AGREEMENT (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this AGREEMENT, the prevailing PARTY shall be awarded reasonable attorneys' fees together with any costs and expenses, to resolve the dispute and to enforce the final judgment.

18. SEVERABILITY: If a court of competent jurisdiction holds any provision of this AGREEMENT to be illegal, invalid or unenforceable for any reason, the validity of and enforceability of the remaining provisions of this AGREEMENT shall not be affected and continue in full force and effect.

19. SAFETY: CONSULTANT shall perform the work in full compliance with applicable State and Federal safety requirements including, but not limited to, Occupational Safety and Health Administration requirements. CONSULTANT shall take all precautions necessary for the safety of, and prevention of damage to, property on or adjacent to TASK ORDER site, and for the safety of, and prevention of injury to, persons, including DISTRICT's employees, CONSULTANT's employees, and third persons. All work shall be performed entirely at CONSULTANT's risk. CONSULTANT shall comply with the insurance requirements set



forth in Section VI.5 of this AGREEMENT. CONSULTANT shall also furnish the DISTRICT with a copy of any injury prevention program established for the CONSULTANT's employees pursuant to Labor Code Section 6401.7, including any necessary documentation regarding implementation of the program. CONSULTANT hereby certifies that its employees have been trained in the program, and procedures are in place to train employees whenever new substances, processes, procedures, or equipment are introduced. CONSULTANT shall demonstrate compliance with Labor Code Section 6401.7 by maintaining a copy of its Injury and Illness Prevention Plan at TASK ORDER site and making it available to the DISTRICT.

20. USE OF NAMES: CONSULTANT shall not employ or use the name of the DISTRICT in any promotional materials, advertising, or in any other manner without prior express written permission of the DISTRICT. The foregoing notwithstanding, nothing herein shall prohibit or exclude CONSULTANT from referencing the work for DISTRICT on the TASK ORDER in response to a Request for Proposal or other similar professional solicitations.

21. NOTICES: All notices to either PARTY by the other shall be made in writing and delivered or mailed to such PARTY at their respective addresses as follows, or to other such address as either PARTY may designate and said notices shall be deemed to have been made when delivered or, if mailed, five (5) days after mailing.

To DISTRICT:

Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, CA 91711
Attn: General Manager

To CONSULTANT:

Insight Water Technologies
12931 Caminito De Las Olas
Del Mar, CA 92014
Attn: Myron Shenkiryk

22. AUTHORITY TO EXECUTE AGREEMENT: The individuals executing this AGREEMENT represent and warrant that they have the legal capacity and authority to sign this AGREEMENT on behalf of and to so bind their respective legal entities.

Name:	<u>MYRON SHENKIRYK</u>	Matthew H. Litchfield
Title:	<u>CEO</u>	General Manager
Organization:	<u>INSIGHT WATER TECHNOLOGY</u>	Three Valleys Municipal Water District
Signature:	<u>[Handwritten Signature]</u>	
Date:	<u>8/14/25.</u>	Date:

INSIGHT WATER TECHNOLOGIES

12931 Caminito De Las Olas
Del Mar, CA 92014

July 21, 2025

**Three Valley Municipal Water District
1021 E. Miramar Avenue
Claremont, CA 91711**

Dear Evaluation Committee,

Insight Water Technologies (Insight) is pleased to submit this proposal in response to the **On-Call Design and Inspection Services and Pipeline Condition Assessment Program** Request for Qualifications (RFQ) issued by Three Valleys Municipal Water District (Three Valleys/District). We appreciate the opportunity to support the District's mission to maintain and renew its critical water infrastructure through a structured, technology-driven condition assessment program.

It is our understanding that the scope of work identified in the RFQ will be separated into several phases/sections listed below to meet the scheduling and budget priorities of the District.

1. Pipeline & Soil Corrosion Analysis
- 2. Internal/ External Pipe Condition Assessment**
3. Pipeline Structural/ Remaining Life Modeling Analysis
4. Rehabilitation and Replacement Plan

Insight will only be responding to the **Internal/External Pipe Condition Assessment** phase.

The District's intent to apply industry-leading practices and utilize state-of-the-art technologies reflects a commitment to proactive infrastructure management. Insight is well-positioned to support this initiative. We own and operate proprietary electromagnetic inspection technologies, deployable via both free-swimming tools for in-service inspections and ROV systems for out-of-service inspections. Both platforms are ideally suited for evaluating Prestressed Concrete Cylinder Pipe (PCCP). Our technologies have been rigorously validated and are currently in use on projects throughout North America and globally.

What sets Insight apart is not only our advanced tools but also our experienced team—professionals often referred to as "pipe physicians" due to their deep understanding of pipeline deterioration, inspection techniques, and condition assessment strategy. We bring decades of hands-on experience in planning and executing condition assessment programs that lead to confident, data-driven decision-making.

We are enthusiastic about the opportunity to partner with the District on this important program and are confident in our ability to deliver high-quality results for the **Internal/External Pipe Condition Assessment** phase. Our proposal outlines how our technologies, expertise, and collaborative approach align directly with the District's objectives.

Should you have any questions or require further information, please feel free to contact me directly at 602-868-0311. We look forward to the opportunity to support the District and contribute to the long-term reliability of its pipeline assets.

Yours Truly,

INSIGHT WATER TECHNOLOGIES

A handwritten signature in cursive script, reading 'Myron Shenkiryk'.

Myron Shenkiryk
Client Relations Officer



Proposal for:

On-Call Design and Inspection Services and Pipeline Condition Assessment Program

Prepared for:

**Three Valley Municipal Water District
Claremont, CA**

July 21, 2025

INSIGHT
WATER TECHNOLOGIES

12931 Caminito De Las Olas
Del Mar, CA 92014

Contents

SECTION 1: Cover Letter	1
SECTION 2: Trade Experience.....	3
SECTION 3: Personnel Resumes	5
Team Organization Chart.....	5
Key Team members Bios.....	6
Ed Padewski, Project Manager.....	6
Xiangjie Kong (aka “Kong”), Lead Inspector	6
Hongwei Zhang - Data Analysis Lead.....	6
David Humphrey - Field Operation Lead.....	6
SECTION 5: Acknowledgement of Standard Agreement Including Insurance Affidavit	7
SECTION 6: Public Works Consultant Registration Certification	7
SECTION 7: Additions, Deletions, and/or Exceptions	7
SECTION 8: Submittal Checkoff List	7
Appendix	

SECTION 1: Cover Letter

Insight Water Technologies (Insight) was founded by three industry leaders with each over 25 years of proven experience in the inspection and assessment of composite steel and concrete cylinder structures, particularly Prestress Concrete Cylinder Pipe (PCCP) water mains. **Based in San Diego, California**, the company is staffed by a team of engineers and scientists committed to advancing state-of-the-art technologies for pipeline condition assessment. Insight was established to foster intellectual freedom and innovation, focusing specifically on pipe wall distress evaluation and leak detection for PCCP assets. Its founders are pioneers in electromagnetic inspection technology. They played a central role in developing the industry-standard for in-service and out-of-service electromagnetic inspection tools, as well as visual and sounding inspections. Through Insight, the industry benefits from the most refined version of the electromagnetic platform currently available in the market. These tools have been validated by several major utilities, including the Great Lakes Water Authority (GLWA), the largest PCCP asset owner in North America. **Table 1** summarizes Insight profile in line with the RFQ requirements.

Table 1 Identification of Proposer

RFQ Requirement	Insight Water Technologies
Legal name and address of company	Insight Water Technologies 12931 Caminito De Las Olas Del Mar, CA 92014
Legal status of Proposer	Corporation

RFQ Requirement	Insight Water Technologies
	State of incorporation: Delaware, USA
Subsidiary of a parent company	N/A
Name, title, address, telephone number, and email address of person to contact concerning the Proposal	Contact Person: Myron Shenkiryk Role: Client Relations Officer Address: 12931 Caminito De Las Olas Del Mar, CA 92014 T: +1 602-686-0311 E: mshenkiryk@insightwt.com Website: www.insightwatertechnologies.com

A fundamental requirement for effective long-term asset management is a thorough understanding of the water mains' condition, achieved through advanced, state-of-the-art inspection and assessment methods. Pipeline condition assessments deliver critical information needed to evaluate the physical state and functional integrity of pipeline assets, enabling accurate estimation of their current structural condition and prediction of remaining service life.

Insight has extensive experience in the inspection and assessment of large-diameter water transmission mains, focusing on Prestressed Concrete Cylinder Pipe (PCCP) but also includes Bar-Wrapped Pipe (BWP), and Cylinder and Non-Cylinder Reinforced Concrete Pressure Pipe (RCP). Insight offers proven technologies and industry-leading expertise to support proactive pipeline asset management.

Our proposed solution is built around high-resolution electromagnetic (EM) and acoustic technologies capable of detecting broken prestressing wires/bars, steel cylinder defects, active leaks with exceptional accuracy. Insight's EM technology is based on Near-Field Electromagnetic principles and can detect medium to large steel cylinder defects ($\geq 20\%$ wall loss), validated across multiple pipe sizes (up to 120") through calibration and field implementation. Acoustic leak detection is fully integrated and capable of identifying leaks with a minimum rate of 80 gpm, with a location accuracy of ± 3 feet supported by over 30 years of field validation.

Our equipment can be deployed via two main platforms that will be attractive to the District:

- Free-Swimming Tool for in-service inspections includes EM inspection, acoustic leak detection, visual imaging, and pipeline mapping in a single pass. Designed to traverse butterfly valves and operate within a velocity range of 1.5–3.0 ft/s, with live tracking and extended battery life.
- The Cues Mud Master large diameter robotic crawler Multi-Sensor Technology Platform will be utilized in conjunction with the Insight WT EM Sensor for all applicable out-of-service pipelines. In addition to the EM sensor results the Multi-Sensor Platform will also collect in-pipe CCTV video along with 2D/3D-LiDAR and (if needed) digital Sonar as part of the pipelines condition assessment.

Our approach enables detailed risk interpretation of inspection findings to evaluate the risk of failure and estimate the remaining service life. With a proven track record in delivering

actionable pipeline condition data, a commitment to safety and quality, and a flexible deployment model, Insight is well-positioned to support the District's inspection objectives and long-term infrastructure reliability goals.

SECTION 2: Trade Experience

Insight is more than a technology provider, it is a comprehensive pipe solutions partner, offering end-to-end expertise from inspection planning and execution through to actionable assessment.

Insight has applied advanced non-destructive testing (NDT) techniques in numerous assessment projects involving large-diameter pressurized pipelines around the world. Each team member has played a direct role in, or overseen, the planning and execution of field inspections, data analysis and management, and condition assessment reporting to detect pipe wall distress and identify leaks. Their collective experience spans a broad spectrum of pipe types, configurations, and operating conditions, including:

- **Over thousands of miles of transmission mains** ranging in diameter from 16" to 120", including pipe sizes exceeding 10 feet in diameter.
- **A wide variety of PCCP designs**, including embedded cylinder with shorting straps, embedded cylinder without shorting straps, lined cylinder pipe, and non-cylinder prestressed concrete pipe.
- **Operating pressures ranging from 0 psi to 400 psi**, covering a full spectrum of hydraulic conditions.

The following section highlights Insight recent experience with directly related projects, including the inspection and assessment of PCCP water mains. Insight brings extensive expertise across a broad spectrum of water main condition assessment services, leveraging advanced technologies to deliver accurate and actionable insights.

Our experience includes the deployment of various electromagnetic inspection tools to detect broken prestressing wires, reinforcing bars, and steel cylinder defects, as well as the use of acoustic technologies to accurately identify and locate leaks.

This diverse toolkit allows us to tailor our approach to the unique characteristics of each pipeline system, ensuring a comprehensive evaluation of asset condition and performance.

Project Reference No. 1: Eagle Farms Twin Riser Mains

Client Name: Urban Utilities

Prime Contractor: Scape Consulting

Reference (client): ben@scapeconsulting.com.au, T: 0419 792 100

Date of Work: August 2024
Final project cost: \$540,463

Involvement of Staff Proposed for this Project: Ed Padewski, Xiangjie Kong, David Humphrey Hongwel Zhang, and Myron Shenkiryk

Description

In August 2024, Insight Water Technologies conducted a free-swimming electromagnetic, acoustic and sonar inspection of Urban Utilities Eagle Farms Twin Rising Mains in Brisbane Queensland. Using its XK1 technology, Insight assessed the condition of two parallel 52-inch prestressed concrete pressure pipe force mains, each approximately 3.5 mile long, under live operating conditions.

The inspection compared electromagnetic data with gas pocket and sonar profiling results. The XK1 device was remotely tracked using sensors placed at known appurtenances and exposed sections of the pipeline. It was inserted through 16 inchx18 inch boilerplate type entry ports and tethered in place through a 50mm threaded outlet until the flow reached approximately 2.2 feet per second. The inspection successfully identified several concerns, including broken wire wraps, significant gas pockets and debris buildup within the force mains.

Project Reference No. 2: NJWSA 66- & 72- inch EM Inspection

Client name: New Jersey Water Supply Authority (NJWSA)

Prime Contractor: Insight

Reference (client): Marc Brooks, nickw@cctexas.com, T: 908-638-6121

Date of Work: May 2024

Final project cost: pilot project

Involvement of Staff Proposed for this Project: Ed Padewski, Xiangjie Kong, Rick Warren, Hongwel Zhang, and Myron Shenkiryk

Description

Insight Water Technologies performed a combined internal acoustic leak detection, air pocket identification, and near-field electromagnetic inspection on a critical section of the New Jersey Water Authority's Manasquan Reservoir System. The inspected pipeline included 66- and 72-inch PCCP segments supplying the Allenwood Pump Station. The assessment was conducted using Insight's advanced free-swimming XK1 inspection platform, which allowed for comprehensive, in-service evaluation during a single mobilization.

Throughout the inspection, the tool's movement was tracked remotely using strategically placed sensors at known appurtenances. Real-time tracking was made available via Insight WT's secure web portal, allowing utility personnel to monitor progress and ensure precise tool navigation. This approach enabled a complete and efficient inspection with minimal operational disruption, delivering high-resolution data on both structural integrity and hydraulic anomalies within the PCCP transmission main.

Project Reference No. 3: Great Lake Water Authority- 24 Mile Road Transmission Main

Client Name: Great Lakes Water Authority

Prime Contractor: HDR

Reference (client): Susan Donnally, Susan.Donnally@hdrinc.com; mobile: 443-240-0852

Date of Work: March-July 2024

Final project cost: \$316,500

Involvement of Staff Proposed for this Project: Involvement of Staff Proposed for this Project: Ed Padewski, Xiangjie Kong, Rick Warren, David Humphry, Hongwei Zhang, and Myron Shenkiryk

Description

Insight Water Technologies performed electromagnetic calibrations on 120, 48, and 36-inch PCCP mains to quantify and validate broken wire wrap damage. Following the calibration, Insight Water inspected 8.0 miles of a 36-inch diameter PCCP main to detect and report location of broken wire wrap zones. The inspection was performed in collaboration with HDR who performed visual and sounding inspections. In the summer of 2024, Insight WT mobilized to perform the second phase of work, another 3.5 miles of inspection.

Before individual pipe sections were repaired Insight's EM tool was configured to scan the pipe from the exterior to conform the wire break damage.

SECTION 3: Personnel Resumes

Insight's proposed project team provides the right mix of technical expertise, practical experience, and project management skills to successfully complete any inspection and assessment project on schedule, within budget, and to your overall satisfaction.

Team Organization Chart

Our staff will be dedicated for each project duration and will maintain availability and accessibility for the Water Authority throughout the course of work. We confirm that each project team member has the available time required to execute their specific role and responsibilities and that Insight WT can meet contractual requirements of concurrent projects during this project's timeline. If necessary, changes of key personnel will follow the Water Authority protocol, and any substitutions required will only be completed with Water Authority full approval.

Our team has a strong knowledge base across all aspects of pipeline condition assessment. The staff we propose have a proven track record of completed projects similar in nature and magnitude and beyond. Our methodology is rooted in experience and is meticulously crafted in line with industry best practices. **In fact, key project staff helped write industry guidelines.**

This Insight team is fully familiar with the Districts needs and objectives based on previous experience working on similar scope of work for a variety of asset owners, enabling us to meet and exceed your expectations. Moreover, this team has experience working together and delivering similar scopes of work for many pipe owners, including working with in-service and out-of-service tools and associated health and safety, traffic control planning and implementing, and inspection enabling mechanical and civil work's needs. We will implement our usual best practices

and our directly relevant lessons-learned to team with the District aiming to further improve the information delivered under this work.

Key Team members Bios

Ed Padewski, Project Manager

Since the late 1990s, Ed has been helping water utilities apply innovative technologies and engineering concepts to proactively manage large diameter transmission mains with a specialty on composite steel and concrete assets such as PCCP, BWP, and RCP. Ed is an industry leader in inspection and assessment management and has literally walked or crawled through more than 1000 miles of PCCP assets. His experience spans over a project lifecycle from inspection, implementing fieldwork, and managing data processing and analysis.

Ed's role on this project is the Project Manager as well as lead Pipeline Engineer, and he will be responsible for the overall planning and execution and field operations of the project from start to finish. This includes developing the Planning Document and ensuring adequate safety provisions, oversee data processing and analysis, and prepare inspection findings and assessment reports. For additional information, please refer to **Appendix B – Resumes**.

Xiangjie Kong (aka “Kong”), Lead Inspector

Kong has developed numerous non-destructive testing technologies currently used around the world to manage large diameter water mains. Kong possesses both the theoretical understanding of how to quantify pipeline deterioration and the practical understanding to reduce operational demands. Kong started working on remote field electromagnetic testing of PCCP in the late 1990s and the application of in-service electromagnetic testing since the mid-2000s.

Kong's role on the project will be to lead all electromagnetic inspection aspects, including leading the inspection to collect electromagnetic data. He will perform qualitative assessment of the data to verify data quality and provide an early list of pipes with wire break damage. This means that the District will have direct access to Kong's expertise, both in the field and during data analysis. For additional information, please refer to **Appendix B – Resumes**.

Hongwei Zhang - Data Analysis Lead

For more than a decade, Hongwei has been designing near non-destructive tools and analyzing the data from these tools. Working with Kong, he has recently advanced data analysis associated with PCCP inspection. For this project, he will evaluate all electromagnetic inspection data and make sure it receives proper QA/QC. For additional information, please refer to **Appendix B – Resumes**.

David Humphrey - Field Operation Lead

Dave has been implementing electromagnetic inspections of PCCP since the early 2000s. He has designed many of the inspection platforms in use today and managed their implementation on PCCP ranging from diameters of 30 to 150 inches. He has performed hundreds of PCCP calibrations, leading to a deep understanding of the field variables that impact data quality. For this project, Dave will be responsible for

setup of the inspection platforms for inspection and supporting data analysis. For additional information, please refer to **Appendix B – Resumes**.

SECTION 5: Acknowledgement of Standard Agreement Including Insurance Affidavit

The Proposer hereby acknowledges that it has reviewed the Standard Professional Services Agreement including the insurance requirements as set forth in the solicitation documents (Exhibit “C”) and hereby accepts the contract terms and conditions as stated, without exception. The Proposer further confirms that it has reviewed these requirements with its insurance agent or broker and affirms its ability to obtain the required coverage, if awarded the contract.

SECTION 6: Public Works Consultant Registration Certification

In accordance with the RFQ requirements, Insight is registered with DIR for field work and will provide a copy CADIR registration.

SECTION 7: Additions, Deletions, and/or Exceptions

Insight hereby confirms receipt of Addendum No. 1 issued in connection with this RFQ. We have reviewed and incorporated the content of the addendum into our proposal, as required.

For reference, a copy of the addendum has been signed and included in **Appendix C** of this submission.

SECTION 8: Submittal Checkoff List

The submittal Check Off List attached as Exhibit “B” has been completed and is listed in **Appendix D** of this submission.

Appendix A – Resumes



Edward Padewski III, P.E.

Project Manager

Ed is an industry leading civil engineer and one of the nation's foremost experts in concrete, metallic and plastic pipeline deterioration, evaluation and repair with over 30 years of experience in all aspects of the water and wastewater transmission industry. He has conducted over 500 condition assessment projects, forensic inspections, and/or repairs for more than 1,000 miles of large diameter water and wastewater pipelines and provided technical leadership for several successful companies, including Openaka Corporation, Pure Technologies, Xylem, and HDR Engineering, Inc. Ed has developed into one of the foremost experts in concrete pipeline deterioration providing pipeline operators efficient, comprehensive assessment programs.

EDUCATION

Villanova University,
Villanova, PA
Bachelor of Science, Civil
Engineering

LOCATION

New Jersey, USA

Texas: Project Manager
for a leak detection
project on a 102 miles,
64-inch diameter bar
wrapped pipe. The
optimal solution for the
project included the
custom design and
manufacture of a long
distance leak detection
device and remote

Region of Peel, Ontario: Visual and sounding inspections, electromagnetic inspections, design checks and structural evaluations, acoustic monitoring, structural repair review and consultant regarding the condition assessment form multiple PCCP water mains ranging from 600 mm to 2100mm.

Dallas Water Utilities, Texas: Electromagnetic inspections, leak detection, external verifications, forensic evaluations, design checks, structural evaluations and condition assessment of the utility's PCCP water main system.

Tulsa Metropolitan Utility Authority, Oklahoma: Internal visual and sounding inspections, electromagnetic surveys, external evaluations, condition assessments, forensic evaluations, design checks and structural evaluations of multiple PCCP pipelines.

El Paso Water, Texas: External evaluation of a 54 and 60-inch prestressed concrete water main including prestressing wire, cement mortar, soil and groundwater sampling.

El Paso Water, Texas: External evaluation and material sampling of the Upper Valley Outfall Sewer Facilities and Related Interceptors Evaluation consisting of a 36-inch bar-wrapped force main.

City of Tucson Water Department, Arizona: Internal inspections visual, sounding and electromagnetic inspections, 2D and 3D structural modeling of deteriorating pipe, acoustic monitoring, forensic evaluations and external repair design and installation.

Metropolitan Water District of Southern California, California: Consultant and advisor on multiple visual, sounding and electromagnetic inspections, design checks and structural evaluations.

Washington Suburban Sanitary Commission, Maryland: Consultant managing the engineering evaluations of multiple large diameter pipelines that make up their potable water system. Specific examples of pipelines and level of service provided include, but not limited to:

- 60-inch Adelphi Line, internal visual and sounding inspections, design analysis and structural evaluations, rehabilitation plan and specification development for replacement, impact echo evaluation, electromagnetic inspection, acoustic fiber optic monitoring installation and engineering consulting.
- 96-inch Project 80 Line, management of dewatering and access preparation, visual and sounding internal inspection, impact echo evaluation, electromagnetic inspection, external sampling and evaluations acoustic fiber optic monitoring installation and structural design analysis.
- 96, 72, 66 and 60-inch Potomac Line, and sounding internal inspection, Impact echo evaluation, electromagnetic inspection, external forensic evaluations, acoustic fiber optic monitoring installation and structural design analysis.

City of Tampa, Florida: Repair of 90-inch PCCP Force Main including replacement of 25 prestressing wires.

Newport News, Virginia: Design specifications and drawings for rehabilitation of 54-inch prestressed pipeline via steel liner pipe, including field verification.

Greater Lawrence Sanitary District, Massachusetts: Internal inspection, structural analysis of wire breakage impact, condition assessment, and tendon reinforcement design for 2,700 feet of 72-inch PCCP sewage force main.

Water District No. 1 of Johnson County, Kansas: Leak detection, visual and sounding with electromagnetic internal inspections, structural evaluations of multiple pipelines within WaterOne's large diameter system.

City of Baltimore, Maryland: Internal inspections, forensic evaluations, design checks, structural evaluations, leak surveys, condition assessment and remaining useful service life calculations of multiple pipelines, ranging from 24 to 108-inch diameter, within the water utilities system.

Louisville Water, Kentucky: Electromagnetic inspections, leak detection, external verifications, forensic evaluations, design checks, structural evaluations and remaining useful life calculations.

Great Lakes Water Authority, Michigan: Internal inspections, forensic evaluations, design checks, structural evaluations, condition assessment of multiple large diameter PCCP mains in the water authority's system. Involved with the AWWAWRF report on the status of PCCP, primarily sponsored by GLWA, with the University of Tennessee and HDR.

Public Service Electric and Gas Company, New Jersey: Hope Creek 144-inch PCCP rehabilitation. Replacement of 210 prestressing wires on above ground circulating water main on two independent repair contracts.

Middlesex County Utilities Authority, New Jersey: Following the failure of a 102-inch PCCP force main, performed internal visual and sounding inspections, electromagnetic inspection, and acoustic monitoring of a critical force main. Evaluated all condition data and recommended repair and management strategies. Designed more than 20 structural repairs including carbon fiber repair, external tendon repairs, and open cut replacement.



Xiangjie Kong, MEng

Condition Assessment Lead

Kong is a water industry leader with more than 25 years of experience designing, building, and implementing non-destructive condition assessment tools that provide water utilities with the data they need to manage their large diameter pressurized pipe. He is an expert in applying the principles of electromagnetics, acoustics, magnetic flux, and ultrasound to develop practical tools that provide the data needed to make sound pipeline management decisions. His professional accomplishments include the following.

EDUCATION

Masters Engineering Physics;
Queens University, Kingston,
Ont., Canada

Bachelors in Physics; Peking
University, Beijing, China

LOCATION

Toronto, Ontario

PARTIAL LIST OF TECHNICAL PAPERS

- Practical Engineering Considerations for developing a free-swimming tool for RFEC/TC inspection of PCCP transmission mains in a live operating environment- 2007 ASCE Pipelines
- Electromagnetic Inspection of Prestressed Concrete Pressure Pipe- 2001 AWWA Research Foundation
- Live PCCP Inspection Using a Free-Swimming Tool- 2009 International No-Dig
- Condition Assessment of Small Diameter Water Transmission Mains- 2005 ASCE Pipelines

RESEARCH AND DEVELOPMENT

Led research and development teams including physicists/scientists, mechanical engineers, electronics engineers, software/firmware engineers for overall technology development.

Free Swimming Ultrasonic Tool: Designed and developed a suite of free-swimming ultrasonic testing tools that provide high resolution wall thickness data for ductile, cast iron and steel pipe.

Free Swimming Near Field Testing: Designed and developed a free-swimming near field testing tool to detect and estimate the number of broken wire wraps on PCCP transmission mains. This suite of tools has been used assess of 1000s of kilometers of PCCP mains while remaining in service.

Free Swimming Acoustic Assessments: Oversaw improvements and research on a free-swimming acoustic assessment tools to detect leaks and provide pipeline mapping coordinates.

Manual Near Field Testing of PCCP: Designed and developed a suite of manual near field testing tools for PCCP mains to detect and estimate the number of broken wire wraps. This suite of tools has been used to assess 1000s of miles of dewatered PCCP mains.

Live Tethered Pipeline Inspection: Designed and developed a tethered acoustic and video assessment tool that is inserted into operation mains to identify leaks and visual defects.

Robotic Near Field Testing of PCCP: Worked on an integrated team to develop a tethered robotic platform that utilizes near field testing to detect and estimate the number of broken wire wraps on PCCP mains.

Analytical Software Development: Developed software and processes to interpret electromagnetic and acoustic data.

Long Distance Leak Detection: Designed the development of a custom leak detection device that resulted in a free swimming leak detection devices with more than 200 hours of batter device.

Appendix B – Copy of the Issued Addendum

THREE VALLEYS MUNICIPAL WATERT DISTRICT
ADDENDUM NO. 01
for the
ON-CALL DESIGN AND INSPECTION SERVICES FOR
PIPELINE CONDITION ASSESMENT PROGRAM

QUESTION:

is the use of 11x17 pages permitted and if so does the use of a 11x17 page impact the page limit?

ANSWER:

11 x 17 sheet will be considered (1) page as only electronic submissions are being accepted

QUESTION:

Can the District provide a rough estimate of total number of pipeline miles under its operation?

ANSWER:

Refer to the introduction approximately 8 miles of pipe. Pipe sizes ranges from 42in to 18in transmission mains. Primarily PCCP or CML&C Steel Pipe

QUESTION:

Are all services to be provided in one, 15-page response or is it 15 pages per response section

ANSWER:

The intent of the 15-page limit is to expedite the review process. Ideally, much of the consultant's core information should overlap between response sections limiting the need to add a substantial number of pages to the proposal. However, to provide a uniform reviewing process, consultants may submit up to 15 pages per response section.

ADDENDUM NO.01 ACKNOWLEDGEMENT

The Bidder hereby acknowledges the receipt of Addendum No. 1 and the incorporation thereof in the Bid Proposal for the **ON-CALL DESIGN AND INSPECTION SERVICES FOR PIPELINE CONDITION ASSESMENT PROGRAM**

Bidder: Insight Water Technologies

By: Mynon Shenkmyk

(Bidder's Authorized Representative)

Date: 7/21/25

Title: Client Services Officer

Appendix C – Checkoff List

Exhibit B**SUBMITTAL CHECK OFF LIST**

Enclosed below is checklist of required documents to be submitted as the Consultant's proposal. Items may be submitted on the same page and not required to be submitted separately.

Item	Required Submittals Checklist	Check off
1	Cover Letter	✓
2	Trade Experience	✓
3	Personnel Resumes	✓
4	Cost/ Fee Proposal	✓
5	Acknowledgment of Standard Agreement (or redline provisions)	✓
6	Insurance Affidavit	✓
7	Public Works Consultant Registration Certification (CADIR)	✓
8	Additions, Deletions, and/or Exceptions	✓



**MASTER ON-CALL PROFESSIONAL SERVICES AGREEMENT
BETWEEN
THREE VALLEYS MUNICIPAL WATER DISTRICT
AND
HAZEN AND SAWYER**

This Professional Services Agreement ("AGREEMENT") is made and entered into this 7th day of August, 2025 ("EFFECTIVE DATE"), by and between Three Valleys Municipal Water District, a municipal water district organized and operating pursuant to California Water Code Section 71000 et seq. (hereinafter referred to as "DISTRICT"), and **HAZEN AND SAWYER**, (hereinafter referred to as "CONSULTANT"). DISTRICT and CONSULTANT are sometimes individually referred to as "PARTY" and collectively as "PARTIES" in this AGREEMENT.

RECITALS

WHEREAS, DISTRICT desires to contract with CONSULTANT as an independent CONSULTANT to provide professional services for the Master On-Call Professional Services on an "as-needed" TASK ORDER assignment basis; and

WHEREAS, CONSULTANT represents that it is duly licensed, qualified and capable to perform such services by virtue of its experience and the training, education and expertise of its principals and employees, and that CONSULTANT is customarily engaged in an independently established trade, profession, occupation, and/or business of the same nature as the work to be performed for herein; and

WHEREAS, DISTRICT desires to retain CONSULTANT and CONSULTANT desires to serve the DISTRICT to perform the services described herein in accordance with the terms and conditions of this AGREEMENT.

COVENANTS

NOW, therefore, in consideration of the faithful performance of the terms and conditions set forth herein, the PARTIES hereto agree as follows:

ARTICLE I

SERVICES OF CONSULTANT

1. **SCOPE OF SERVICES:** The scope of services to be performed by the CONSULTANT under this AGREEMENT are described in Exhibit "A" attached hereto and incorporated herein by this reference ("PROPOSAL"), and shall, where not specifically addressed, include all related services ordinarily provided by the CONSULTANT under same or similar circumstances. The DISTRICT may request, in writing, changes in the PROPOSAL or services to be performed. Any changes mutually agreed upon by the PARTIES, and any increase or decrease in compensation or time, shall be incorporated by written amendments to this AGREEMENT. Individual "TASK ORDERS" will be issued based on the services and rates provided in the PROPOSAL.
2. **PREVAILING WAGES:** CONSULTANT shall comply with all applicable provisions of labor law relating to employment for the performance of services on the TASK ORDER. In accordance with



the provisions of the California Labor Code, CONSULTANT shall secure the payment of compensation to employees. To the extent required by the California Labor Code, CONSULTANT shall pay not less than the prevailing rate of per diem wages as determined by the Director, Department of Industrial Relations, State of California ("DIR"). Copies of such prevailing rate of per diem wages are on file at the DISTRICT's office, which copies will be made available to any interested party upon request. CONSULTANT shall post a copy of such determination at each job site. If applicable, CONSULTANT shall forfeit to the DISTRICT the amount of the penalty set forth in California Labor Code Section 1777.7(b), or any subsequent amendments thereto, for each calendar day, or portion thereof, for each worker paid less than the specified prevailing rates for such work or craft in which such worker is employed, whether paid by CONSULTANT or by any SUBCONTRACTOR. CONSULTANT shall submit certified payroll records to the Labor Commissioner using DIR's electronic certified reporting system and provide with their invoice certified payroll records verifying that CONSULTANT has paid prevailing wage in accordance with the DIR requirements as stipulated in California Senate Bills 854 and 96, <https://www.dir.ca.gov/public-works/certified-payroll-reporting.html>

ARTICLE II

ENGAGEMENT OF CONSULTANT AND AUTHORIZATION TO PROCEED

1. **ENGAGEMENT:** The DISTRICT hereby engages CONSULTANT, and CONSULTANT hereby accepts the engagement, to perform the services described in Section I.1 of this AGREEMENT.
2. **AUTHORIZATION TO PROCEED:** Authorization for CONSULTANT to proceed with the work described in Section I.1 of this AGREEMENT will be granted in writing by the DISTRICT as soon as both PARTIES sign this AGREEMENT and all applicable insurance and security documents required pursuant to Section VI.5 of this AGREEMENT are received and approved by the DISTRICT. CONSULTANT shall not proceed with said work until so authorized by the DISTRICT and shall commence work immediately upon receipt of the executed TASK ORDER.
3. **INDEPENDENT CONSULTANT:** The TASK ORDER services to be performed by CONSULTANT under this AGREEMENT are outside the usual course of the DISTRICT's business. CONSULTANT is, and shall at all times remain as to DISTRICT, a wholly independent CONSULTANT. The personnel performing the services under this AGREEMENT on behalf of CONSULTANT shall at all times be under CONSULTANT's exclusive direction and control. CONSULTANT shall have no power to incur any debt, obligation, or liability on behalf of the DISTRICT. Neither DISTRICT nor any of its agents shall have control over the conduct of CONSULTANT or any of CONSULTANT's employees, except as set forth in this AGREEMENT. CONSULTANT shall not, at any time, or in any manner, represent that it or any of its officers, agents or employees are in any manner employees of the DISTRICT. No employee benefits shall be available to CONSULTANT in connection with the performance of this AGREEMENT. Except for the fees paid to CONSULTANT as provided in this AGREEMENT, the DISTRICT shall not pay salaries, wages, or other compensation to CONSULTANT for performing services hereunder for the DISTRICT. The DISTRICT shall not be liable for compensation or indemnification to CONSULTANT for injury or sickness arising out of performing services hereunder.



ARTICLE III

RESPONSIBILITIES OF DISTRICT AND OF CONSULTANT

1. **DUTIES OF THE DISTRICT:** The DISTRICT, without cost to CONSULTANT, will provide all pertinent information necessary for CONSULTANT's performance of its obligations under this AGREEMENT that is reasonably available to the DISTRICT unless otherwise specified in the TASK ORDER in which case the CONSULTANT is to acquire such information. The DISTRICT does not guarantee or ensure the accuracy of any reports, information, and/or data so provided however, in performing its services hereunder, CONSULTANT shall be entitled to act in reasonable reliance upon all such reports, information, and /or data so provided by the DISTRICT. To the extent that any reports, information, and/or other data so provided was supplied to CONSULTANT by persons who are not employees of DISTRICT, any liability resulting from inaccuracies and/or omissions contained in said information shall be limited to liability on behalf of the entity who prepared the information for CONSULTANT.
2. **REPRESENTATIVE OF DISTRICT:** The DISTRICT will designate **Kevin Panzer** as the person to act as the DISTRICT's representative with respect to the PROPOSAL services to be performed under this AGREEMENT. Such person will have complete authority to receive information and interpret and define the DISTRICT's policies pertinent to the TASK ORDER, although such person will not control or direct CONSULTANT's work.
3. **DUTIES OF CONSULTANT:** CONSULTANT shall perform TASK ORDER work in such a manner as to fully comply with all applicable professional standards of care, including professional quality, technical accuracy, timely completion, and other services furnished and/or work undertaken by CONSULTANT pursuant to this AGREEMENT. The CONSULTANT shall cause all work and deliverables to conform to all applicable federal, state, and local laws and regulations.
4. **APPROVAL OF WORK:** The DISTRICT's approval of work or materials furnished hereunder shall not in any way relieve CONSULTANT of responsibility for the technical adequacy of its work. Neither the DISTRICT's review, approval or acceptance of, nor payment for any of the services shall be construed to operate as a waiver of any rights under this AGREEMENT or of any cause of action arising out of the performance of this AGREEMENT.

ARTICLE IV

PAYMENTS TO CONSULTANT

1. **PAYMENT:** The DISTRICT will pay CONSULTANT for work performed under this AGREEMENT, which work can be verified by the DISTRICT, on the basis of the following:

During the term of this AGREEMENT, the DISTRICT will pay CONSULTANT for services performed in accordance with the rates and estimated hours and costs set forth in the PROPOSAL and individual TASK ORDERS. The amount set forth in Section IV.3 of this AGREEMENT is the maximum compensation to which CONSULTANT may be entitled for the performance of services to complete the work for each TASK ORDER, unless the TASK ORDER or time to complete the work is changed by the DISTRICT in writing in advance of



the work to be performed thereunder. Adjustments in the total payment amount shall only be allowed pursuant to Section VI.15 of this AGREEMENT. In no event shall CONSULTANT be entitled to compensation greater than the amount set forth in Section IV.3 of this AGREEMENT where changes in each TASK ORDER or the time for performance are necessitated by the negligence of CONSULTANT or any SUBCONTRACTOR performing work on each TASK ORDER.

2. **PAYMENT TO CONSULTANT:** Payment will be made by the DISTRICT within thirty (30) calendar days after receipt of an invoice from CONSULTANT, provided that all invoices are complete, and product and services are determined to be of sufficient quality by the DISTRICT. Each invoice shall itemize the services rendered during the billing period, hourly rates charged, if applicable, and the amount due. If the DISTRICT disputes any of CONSULTANT'S fees, it shall give written notice to CONSULTANT within thirty (30) days of receipt of an invoice of any disputed fees set forth on the invoice. In such case, the PARTIES shall work to find a reasonable resolution of any such dispute in good faith and in a timely manner.
3. **ESTIMATED CHARGES:** The total estimated charges for all work under this AGREEMENT will be determined by each executed TASK ORDER and such amount is the cost ceiling described herein. The total estimated charges stated herein constitute the total amount agreed to. All rates and charges are subject to the terms set in the PROPOSAL and TASK ORDERS.
4. **COST FOR REWORK:** CONSULTANT shall, at no cost to the DISTRICT, prepare any necessary rework occasioned by CONSULTANT CONSULTANT's negligent act or omission or otherwise due substantially to CONSULTANT's fault.

ARTICLE V

COMPLETION SCHEDULE

1. **TERM:** The term of this AGREEMENT shall begin on the EFFECTIVE DATE, and shall continue until **August 7, 2028**, unless this AGREEMENT is earlier terminated pursuant to the provisions of Section VI.8 below. Notwithstanding the above, the provisions of Sections I.2, II.3, III.3, and III.4, and Articles IV, V, and VI herein shall survive the expiration and/or termination of this AGREEMENT.
2. **TASK SCHEDULE:** The work is anticipated to be completed in accordance with Exhibit "A" as agreed upon by DISTRICT and CONSULTANT at the time that a TASK ORDER is issued by DISTRICT except as may from time-to-time be adjusted by amendment hereto as provided herein.
3. **TIME OF ESSENCE:** CONSULTANT shall perform all services required by this AGREEMENT in a prompt, timely, and professional manner in accordance with the agreed upon schedule. Time is of the essence in this AGREEMENT.
4. **FORCE MAJURE:** Neither Party shall be liable to the other for any delay or failure to perform under this Agreement caused by events or circumstances beyond its reasonable control, including without limitation, an act of God, war, riot, civil commotion, explosion,



fire, government action, court order, epidemic, or pandemic

ARTICLE VI GENERAL PROVISIONS

- 1. COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS:** CONSULTANT shall at all times observe all applicable provisions of Federal, State, and Local laws and regulations including, but not limited to, those related to Equal Opportunity Employment.
- 2. SUBCONTRACTORS AND OUTSIDE CONSULTANT:** No subcontract shall be awarded by CONSULTANT if not identified as a SUBCONTRACTORS to PROPOSAL unless prior written approval is obtained from the DISTRICT. CONSULTANT shall be responsible for payment to SUBCONTRACTORS used by them to perform the services under this AGREEMENT. If CONSULTANT subcontracts any of the work to be performed, CONSULTANT shall be as fully responsible to the DISTRICT for the performance of the work, including errors and omissions of CONSULTANT's SUBCONTRACTORS and of the persons employed by the SUBCONTRACTORS, as CONSULTANT is for the negligent acts and omissions of persons directly employed by the CONSULTANT. Nothing contained in this AGREEMENT shall create any contractual relationship between any SUBCONTRACTOR of CONSULTANT and the DISTRICT. CONSULTANT shall bind every SUBCONTRACTOR and every SUBCONTRACTOR of a SUBCONTRACTOR to the terms of this AGREEMENT that are applicable to CONSULTANT's work unless specifically noted to the contrary in the subcontract in question and approved in writing by the DISTRICT.

OWNERSHIP OF DOCUMENTS: Upon completion of, or in the event of termination or suspension of this AGREEMENT, all original documents, designs, drawings, maps, models, computer files containing data generated for the work, surveys, notes, and other documents prepared in the course of providing the services to be performed ("WRITTEN PRODUCTS") pursuant to this AGREEMENT shall become the sole property of the DISTRICT without restriction or limitation upon its use and may be used, reused, disseminated or otherwise disposed of by the DISTRICT without the permission of the CONSULTANT except that any use of the documents produced in service of this AGREEMENT shall be at DISTRICT's sole risk when used for any purpose or project other than the TASK ORDER specified herein. With respect to computer files containing data generated for the work, CONSULTANT shall make available to the DISTRICT, upon reasonable written request by the DISTRICT, the necessary computer software and hardware for purposes of accessing, compiling, transferring and printing computer files. CONSULTANT may take and retain copies of WRITTEN PRODUCTS as desired, but WRITTEN PRODUCTS shall not be the subject of a copyright application by CONSULTANT.

Notwithstanding anything to the contrary in this Agreement:

- a. Upon Client's payment in full, Client owns the Deliverables, except to the extent the Deliverables include Consultant IP. Consultant owns the Consultant IP. Hazen grants Client a limited, non-exclusive, non-transferable, non-sublicensable, non-assignable license under Consultant's intellectual property rights to use the applicable Consultant IP solely to the extent necessary for Client to use the Deliverables for the purposes contemplated by this Agreement.**



b. "Consultant IP" means the intellectual property, and derivatives thereof; (a) Consultant owned prior to the Effective Date; (b) Consultant created separate from this Agreement; (c) Consultant created pursuant to suggestions or other feedback from Client and/or third parties of Client; (d) in the tools, programs, templates, dashboards except if created expressly for the Client as a deliverable, models, software or other systems used or created by Hazen hereunder.

a-

INDEMNIFICATION:

Formatted: No bullets or numbering

A. Indemnity for Design Professional Services: To the fullest extent permitted by law, CONSULTANT shall, at its sole cost and expense, protect, indemnify and hold harmless DISTRICT and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those DISTRICT agents serving as independent contractors in the role of DISTRICT officials (collectively "INDEMNITEES"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens and losses of any nature whatsoever, including fees of accountants, attorneys or other professionals, and all costs associated therewith, and reimbursement of attorney's fees and costs of defense, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to, in whole or in part, the negligence, recklessness or willful misconduct of CONSULTANT, its officers, agents, servants, employees, SUBCONTRACTOR, material men, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT shall bear the legal liability thereof) in the performance of design professional services under this AGREEMENT. It is the intent of the PARTIES to this AGREEMENT that the defense, indemnity, and hold harmless obligations of CONSULTANT under this AGREEMENT shall be as broad and inclusive as may be allowed under California Civil Code §2778 through §2784.5, or other similar state or federal law.

B. Other Indemnities:

- i. Other than in the performance of design professional services, and to the fullest extent permitted by law, CONSULTANT shall, at its sole cost and expense, defend, hold harmless and indemnify the INDEMNITEES from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens and losses of any nature whatsoever, including reasonable fees of accountants, attorneys or other professionals, and all costs associated therewith, and the payment of all consequential damages, in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of CONSULTANT, its officers, agents, servants, employees, SUBCONTRACTORS, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT shall bear the legal liability thereof) in the performance of this AGREEMENT, including the INDEMNITEES' active or passive negligence, except for claims arising from the sole negligence or willful misconduct of the INDEMNITEES,



as determined by final arbitration or court decision or by the agreement of the PARTIES. CONSULTANT shall defend the INDEMNITEES in any action or actions filed in connection with any claim with counsel of the INDEMNITEES' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. CONSULTANT shall reimburse the INDEMNITEES for any and all legal expenses and costs incurred by the INDEMNITEES in connection therewith.

- ii. CONSULTANT shall pay all required taxes on amounts paid to CONSULTANT under this AGREEMENT and indemnify and hold DISTRICT harmless from any and all taxes, assessments, penalties, and interest asserted against DISTRICT by reason of the independent contractor relationship created by this AGREEMENT. CONSULTANT shall fully comply with the workers' compensation law regarding CONSULTANT and CONSULTANT's employees. CONSULTANT shall indemnify and hold DISTRICT harmless from any failure of CONSULTANT to comply with applicable workers' compensation laws. DISTRICT may offset against the amount of any fees due to CONSULTANT under this AGREEMENT any amount due to DISTRICT from CONSULTANT as a result of CONSULTANT's failure to promptly pay to DISTRICT any reimbursement or indemnification arising under this Subparagraph.
- iii. CONSULTANT shall obtain executed indemnity agreements provisions identical to those in this Section VI.4 from each and every SUBCONTRACTOR or any other person or entity involved by, for, with or on behalf of CONSULTANT in the performance of this AGREEMENT. If CONSULTANT fails to obtain such indemnities, CONSULTANT shall be fully responsible and indemnify, hold harmless and defend the INDEMNITEES from and against any and all claims in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of CONSULTANT's SUBCONTRACTORS, its officers, agents, servants, employees, SUBCONTRACTOR, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT's SUBCONTRACTOR shall bear the legal liability thereof) in the performance of this AGREEMENT, including the INDEMNITEES' active or passive negligence, except for claims arising from the sole negligence or willful misconduct of the INDEMNITEES, as determined by final arbitration or court decision or by the agreement of the PARTIES.
 - A. **Workers' Compensation Acts not Limiting:** CONSULTANT's obligations under this Section VI.4, or any other provision of this AGREEMENT, shall not be limited by the provisions of any workers' compensation act or similar act. CONSULTANT expressly waives its statutory immunity under such statutes or laws as to DISTRICT, its officers, agents, employees and volunteers.



- B. **Insurance Requirements not Limiting:** DISTRICT does not, and shall not, waive any rights that it may possess against CONSULTANT because of the acceptance by DISTRICT, or the deposit with DISTRICT, of any insurance policy or certificate required pursuant to this AGREEMENT. This hold harmless and indemnification provisions in this Section VI.4 shall apply regardless of whether or not any insurance policies are determined to be applicable to the liability, claim, tax, assessment, penalty or interest asserted against DISTRICT.
- C. **Survival of Terms:** The indemnification in this Section VI.4 shall survive the expiration or termination of this AGREEMENT.



3. INSURANCE:

A. Minimum Scope and Limits of Insurance: CONSULTANT shall secure and maintain in full force and effect, until the satisfactory completion and acceptance of AGREEMENT by DISTRICT, such insurance as will protect it and the DISTRICT in such a manner and in such amounts as set forth below. The premiums for said insurance coverage shall be paid by the CONSULTANT. The failure to comply with these insurance requirements may constitute a material breach of this AGREEMENT, at the sole discretion of the DISTRICT.

i. **Workers' Compensation:** CONSULTANT shall maintain Workers' Compensation insurance, as required by the State of California, with Statutory Limits and Employers' Liability Insurance in an amount not less than \$1,000,000 per accident for bodily injury or disease. This insurance shall also waive all right to subrogation against the DISTRICT, its Board of Directors, officers, employees, representatives, and guests.

ii. **General Liability:** CONSULTANT shall maintain Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 00 01) including products and completed operations, property damage, bodily injury, personal and advertising injury with limit of at least \$2,000,000 per occurrence or the full per occurrence limits of the policies available, whichever is greater. If a general aggregate limit applies, the general aggregate limit shall be twice the required occurrence limit. DISTRICT shall be named as an additional insured.

iii. **Automobile Liability:** CONSULTANT shall maintain Insurance Services Office (ISO) Business Auto Coverage (Form CA 00 01), covering Symbol 1 (any auto) or if CONSULTANT has no owned autos, Symbol 8 (hired) and 9 (non-owned) with limit of \$1,000,000 for bodily injury and property damage each accident. This insurance shall have an endorsement naming the DISTRICT as an additional insured.

iv. **Professional Liability:** CONSULTANT shall maintain professional liability insurance with coverage for wrongful acts, errors, or omissions committed by CONSULTANT in the course of work performed for the DISTRICT under this AGREEMENT. This insurance shall include coverage for liability assumed under this AGREEMENT when CONSULTANT's wrongful acts, errors, or omissions cause such liability. The limit for this insurance shall be not less than \$1,000,000 per occurrence or claim and \$2,000,000 policy aggregate.

B. Acceptability of Insurers: The insurance policies required under this Section VI.5 shall be issued by an insurer admitted to write insurance in the State of California with a rating of AA:VII or better in the latest edition of the A.M. Best Insurance Rating Guide. Self-insurance shall not be considered to comply with the insurance requirements under this Section VI.5.

C. Primary and Non-Contributing: The insurance policies required under this



Section VI.5 shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to DISTRICT. Any insurance or self-insurance maintained by DISTRICT, its officers, employees, agents or volunteers, shall be in excess of CONSULTANT's insurance and shall not contribute with it.

- D. Consultant's Waiver of Subrogation:** The insurance policies required under this Section VI.5 shall not prohibit CONSULTANT and CONSULTANT's employees, agents or SUBCONTRACTORS from waiving the right to subrogation prior to loss. CONSULTANT hereby waives all rights of subrogation against DISTRICT.
- E. Deductibles and Self-Insured Retentions:** Any deductibles or self-insured retentions must be approved by DISTRICT. At DISTRICT's option, CONSULTANT shall either reduce or eliminate the deductibles or self-insured retentions with respect to DISTRICT, or CONSULTANT shall procure a bond guaranteeing payment of losses and expenses.
- F. Cancellations or Modifications to Coverage:** CONSULTANT shall not cancel, reduce or otherwise modify the insurance policies required by this Section VI.5 during the term of this AGREEMENT. The commercial general and automobile liability policies required under this AGREEMENT shall be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail thirty (30) calendar days' prior written notice to DISTRICT. If any insurance policy required under this Section VI.5 is canceled or reduced in coverage or limits, CONSULTANT shall, within two (2) business days of notice from the insurer, phone, fax or notify DISTRICT via certified mail, return receipt requested, of the cancellation or of changes to the policy.
- G. District Remedy for Noncompliance:** If CONSULTANT does not maintain the policies of insurance required under this Section VI.5 in full force and effect during the term of this AGREEMENT, or in the event any of CONSULTANT's policies do not comply with the requirements under this Section VI.5, DISTRICT may either immediately terminate this AGREEMENT or, if insurance is available at a reasonable cost, DISTRICT may, but has no duty to, take out the necessary insurance and pay, at CONSULTANT's expense, the premium thereon. CONSULTANT shall promptly reimburse DISTRICT for any premium paid by DISTRICT or DISTRICT may withhold amounts sufficient to pay the premiums from payments due to CONSULTANT.
- H. Evidence of Insurance:** Prior to the performance of services under this AGREEMENT, CONSULTANT shall furnish DISTRICT representative with a certificate or certificates of insurance and all original endorsements demonstrating the DISTRICT as additionally insured, evidencing and effecting the coverages required under this Section VI.5. The endorsements are subject to DISTRICT's approval. CONSULTANT may provide complete, certified copies of all required insurance policies to DISTRICT. CONSULTANT shall maintain current endorsements on file with DISTRICT's representative. CONSULTANT shall provide proof to DISTRICT representative that insurance policies expiring during the term of this AGREEMENT have been renewed or replaced with other policies providing at least the same coverage. CONSULTANT shall furnish such proof at least two (2) weeks prior to



the expiration of the coverages.

- I. Indemnity Requirement not Limiting:** Procurement of insurance by CONSULTANT shall not be construed as a limitation of CONSULTANT's liability or as full performance of CONSULTANT's duty to indemnify DISTRICT under Section VI.4 of this AGREEMENT.
- J. Subcontractor's Insurance Requirements:** CONSULTANT shall require each of its SUBCONTRACTORS that perform services under this AGREEMENT to maintain insurance coverage that meets all of the requirements of this Section VI.5.
- K. Claim Reporting:** CONSULTANT shall not fail to comply with the claim reporting provisions or cause any breach of a policy condition or warranty of the insurance policies required by this AGREEMENT that would affect the coverage afforded under the policies to the DISTRICT.
- L. Broader Coverage/Higher Limits:** If CONSULTANT maintains broader coverage and/or higher limits than the minimums shown above, the DISTRICT requires and shall be entitled to the broader coverage and/or higher limits maintained by CONSULTANT. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the DISTRICT.

4. MUTUAL COOPERATION

- A. District's Cooperation:** DISTRICT shall provide CONSULTANT with all pertinent data, documents and other requested information as is reasonably available for CONSULTANT's proper performance of the services required under this AGREEMENT.
- B. Consultant's Cooperation:** In the event any claim or action is brought against the DISTRICT relating to CONSULTANT's performance or services rendered under this AGREEMENT, CONSULTANT shall render any reasonable assistance that DISTRICT requires.

- 5. EXAMINATION OF RECORDS:** All original drawings, specifications, reports, calculations, and other documents or electronic data developed by CONSULTANT for this TASK ORDER shall be furnished to and become the property of the DISTRICT. CONSULTANT agrees that the DISTRICT will have access to and the right to examine any directly pertinent books, documents, papers, and records of any and all of the transactions relating to this AGREEMENT at CONSULTANT's office, during normal business hours and following a reasonable advance notice to CONSULTANT from DISTRICT. The DISTRICT shall not be limited in any way in its use of the work materials at any time except as otherwise provided herein.

6. TERMINATION OR SUSPENSION OF AGREEMENT

- A. Right to Terminate or Suspend:** DISTRICT may terminate or suspend this AGREEMENT at any time, at will, for any reason or no reason, after giving written



notice to CONSULTANT at least ten (10) calendar days before the termination or suspension is to be effective. CONSULTANT may terminate this AGREEMENT at any time, at will, for any reason or no reason, after giving written notice to DISTRICT at least thirty (30) calendar days before the termination is to be effective.

B. Obligations upon Termination: CONSULTANT shall cease all work under this AGREEMENT on or before the effective date of termination specified in the notice of termination. In the event of DISTRICT's termination of this AGREEMENT due to no fault or failure of performance by CONSULTANT, DISTRICT shall pay CONSULTANT based on the percentage of work satisfactorily performed up to the effective date of termination. In no event shall CONSULTANT be entitled to receive more than the amount that would be paid to CONSULTANT for the full performance of the services required by this AGREEMENT.

7. NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY: In the performance of this AGREEMENT, CONSULTANT shall not discriminate against any employee, SUBCONTRACTOR or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation or other basis prohibited by law. CONSULTANT will take affirmative action to ensure that SUBCONTRACTORS and applicants are employed, and that employees are treated during employment, without regard to their race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information or sexual orientation.

8. PROHIBITION OF ASSIGNMENT AND DELEGATION: CONSULTANT shall not assign any of its rights or delegate any of its duties under this AGREEMENT, either in whole or in part, without DISTRICT's prior written consent. DISTRICT's consent to an assignment of rights under this AGREEMENT shall not release CONSULTANT from any of its obligations or alter any of its primary obligations to be performed under this AGREEMENT. Any attempted assignment or delegation in violation of this section shall be void and of no effect and shall entitle DISTRICT to terminate this AGREEMENT. As used in this section, "assignment" and "delegation" means any sale, gift, pledge, hypothecation, encumbrance or other transfer of all or any portion of the rights, obligations, or liabilities in or arising from this AGREEMENT to any person or entity, whether by operation of law or otherwise, and regardless of the legal form of the transaction in which the attempted transfer occurs.

9. NO THIRD-PARTY BENEFICIARIES INTENDED: Except as otherwise provided in Section VI.4, this AGREEMENT is made solely for the benefit of the PARTIES to this AGREEMENT and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this AGREEMENT.

10. WAIVER: No delay or omission to exercise any right, power or remedy accruing to DISTRICT under this AGREEMENT shall impair any right, power or remedy of DISTRICT, nor shall it be construed as a waiver of, or consent to, any breach or default. No waiver of any breach, any failure of a condition, or any right or remedy under this AGREEMENT shall



be (1) effective unless it is in writing and signed by PARTY making the waiver, (2) deemed to be a waiver of, or consent to, any other breach, failure of a condition, or right or remedy, or (3) deemed to constitute a continuing waiver unless the writing expressly so states.

11. ENTIRE AGREEMENT: This AGREEMENT and all exhibits referred to in this AGREEMENT constitute the final, complete and exclusive statement of the terms of this AGREEMENT between the PARTIES pertaining to the subject matter of this AGREEMENT and supersede all other prior or contemporaneous oral or written understandings and agreements of the PARTIES. No PARTY has been induced to enter into this AGREEMENT by, nor is any PARTY relying on, any representation or warranty except those expressly set forth in this AGREEMENT.

12. HEADINGS: Article and Section headings in this AGREEMENT are for convenience only and are not intended to be used in interpreting or construing the terms, covenants, and conditions of this AGREEMENT.

13. AMENDMENT OF AGREEMENT: This AGREEMENT may be amended only by a writing signed by both PARTIES. The DISTRICT representative is authorized to sign an amendment to this AGREEMENT on the DISTRICT's behalf to make the following non-substantive modifications to the AGREEMENT: (a) name changes; (b) extensions of time; (c) non-monetary changes in TASK ORDER; and (d) termination of this AGREEMENT.

14. GOVERNING LAW AND CHOICE OF FORUM: This AGREEMENT, and any dispute arising from the relationship between the PARTIES to this AGREEMENT, shall be governed by and construed in accordance with the laws of the State of California, except that any rule of construction to the effect that ambiguities are to be resolved against the drafting PARTY shall not be applied in interpreting this AGREEMENT. Any dispute that arises under or relates to this AGREEMENT (whether contract, tort or both) shall be resolved in a municipal, superior or federal court with geographic jurisdiction over the DISTRICT.

15. ATTORNEYS' FEES: In any litigation or other proceeding by which a PARTY seeks to enforce its rights under this AGREEMENT (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this AGREEMENT, the prevailing PARTY shall be awarded reasonable attorneys' fees together with any costs and expenses, to resolve the dispute and to enforce the final judgment.

16. SEVERABILITY: If a court of competent jurisdiction holds any provision of this AGREEMENT to be illegal, invalid or unenforceable for any reason, the validity of and enforceability of the remaining provisions of this AGREEMENT shall not be affected and continue in full force and effect.

17. SAFETY: CONSULTANT shall perform the work in full compliance with applicable State and Federal safety requirements including, but not limited to, Occupational Safety and Health Administration requirements. CONSULTANT shall take all precautions necessary for the safety of, and prevention of damage to, property on or adjacent to TASK ORDER site, and for the safety of, and prevention of injury to, persons, including DISTRICT's employees, CONSULTANT's employees, and third persons. All work shall be performed entirely at CONSULTANT's risk. CONSULTANT shall comply with the insurance requirements set



forth in Section VI.5 of this AGREEMENT. CONSULTANT shall also furnish the DISTRICT with a copy of any injury prevention program established for the CONSULTANT's employees pursuant to Labor Code Section 6401.7, including any necessary documentation regarding implementation of the program. CONSULTANT hereby certifies that its employees have been trained in the program, and procedures are in place to train employees whenever new substances, processes, procedures, or equipment are introduced. CONSULTANT shall demonstrate compliance with Labor Code Section 6401.7 by maintaining a copy of its Injury and Illness Prevention Plan at TASK ORDER site and making it available to the DISTRICT.

18. USE OF NAMES: CONSULTANT shall not employ or use the name of the DISTRICT in any promotional materials, advertising, or in any other manner without prior express written permission of the DISTRICT. The foregoing notwithstanding, nothing herein shall prohibit or exclude CONSULTANT from referencing the work for DISTRICT on the TASK ORDER in response to a Request for Proposal or other similar professional solicitations.

19. NOTICES: All notices to either PARTY by the other shall be made in writing and delivered or mailed to such PARTY at their respective addresses as follows, or to other such address as either PARTY may designate and said notices shall be deemed to have been made when delivered or, if mailed, five (5) days after mailing.

To DISTRICT:

Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, CA 91711
Attn: General Manager

To CONSULTANT:

Hazen and Sawyer
11260 El Camino Real, Suite 102
San Diego, CA 92130
Attn: Jack Adam

20. AUTHORITY TO EXECUTE AGREEMENT: The individuals executing this AGREEMENT represent and warrant that they have the legal capacity and authority to sign this AGREEMENT on behalf of and to so bind their respective legal entities.



IN WITNESS WHEREOF, the PARTIES hereto have executed this AGREEMENT as of the date opposite their respective signatures.

Name:	_____	Matthew H. Litchfield
Title:	_____	General Manager
Organization:	_____	Three Valleys Municipal Water District
Signature:	_____	_____
Date:	_____	Date: _____

DRAFT

PREPARED FOR:



Hazen

Statement of Qualifications for

On-Call Design and Inspection Services for Pipeline Condition Assessment Program

July 22, 2025



Section I:	Cover Letter
Section II:	Experience in Applicable Trades
Section III:	Personnel
Section V:	Exceptions to Standard Agreement and Insurance Requirements
Section VI:	Public Works Consultant Registration Certification
Section VII:	Addendum Acknowledgment
Section VIII:	Submittal Check Off List
Appendix A:	Resumes
Appendix B:	Additions, Deletions, and/or Exceptions

Section No. I

Cover Letter



Hazen and Sawyer
Local Office Address
11260 El Camino Real, Suite 102
San Diego, CA 92130 • 858.764.5520

Corporate Office Address
498 Seventh Ave, 11th Floor
New York, NY 10018

July 22, 2025

Kevin Panzer, Engineer
Three Valleys Municipal Water District
1021 E Miramar Ave
Claremont, CA 91711

RE: On-Call Design and Inspection Services for Pipeline Condition Assessment Program

Dear Mr. Panzer,

Hazen and Sawyer (Hazen) is pleased to submit this proposal in response to Three Valley Municipal Water District's (TVMWD) On-Call Design and Inspection Services for Pipeline Condition Assessment Program RFP. We recognize the importance of supporting TVMWD in ensuring safe, reliable, and sustainable water infrastructure. Our team brings the following key differentiators to help TVMWD manage their critical pipelines:

DIR Registration Number
1000018843



Supporting and Augmenting TVMWD's Team: TVMWD will benefit from our network of both local and national specialists in pipeline assessment, corrosion, risk management, design engineering, and asset planning, providing industry-leading guidance on every project phase.



Pipeline Condition Assessment and Repair Experience: Hazen's team has experience in all aspects of pipeline condition assessment. From Hazen's project manager Chris Aronitz working on PCCP condition assessment programs across the Western United States to Hazen's partner Simpson Gumpertz & Heger (SGH) developing the first Finite Element Analysis (FEA) of Prestressed Concrete Cylinder Pipe (PCCP) in the industry and refining the technique over decades.



Realizing Efficiencies Using Digital Tools: Hazen's team utilizes digital tools such as GIS to more efficiently manage inspection data and geolocate it. This allows Hazen's team to more effectively use project time, better understand degradation rates, and feed data directly into a CIP dashboard using Esri ArcGIS, or PowerBI tools. Sean Pour, Hazen's asset management lead has utilized this approach with utilities throughout California to help them better understand and visualize their condition assessment data. This provides TVMWD the dual benefit of more effectively utilized time during the project, reducing project cost, as well as providing a living deliverable that can be easily referenced internally and can house all inspection data.

We appreciate the opportunity to support TVMWD in advancing its utility toward excellence. Our team is ready to begin immediately and deliver the responsive, data-informed, and grounded expertise this effort deserves. Our team is proposing on all four categories of the RFP. If you have any questions regarding our proposal please feel free to contact me at caronitz@hazenandsawyer.com or call me at 619-514-9140.

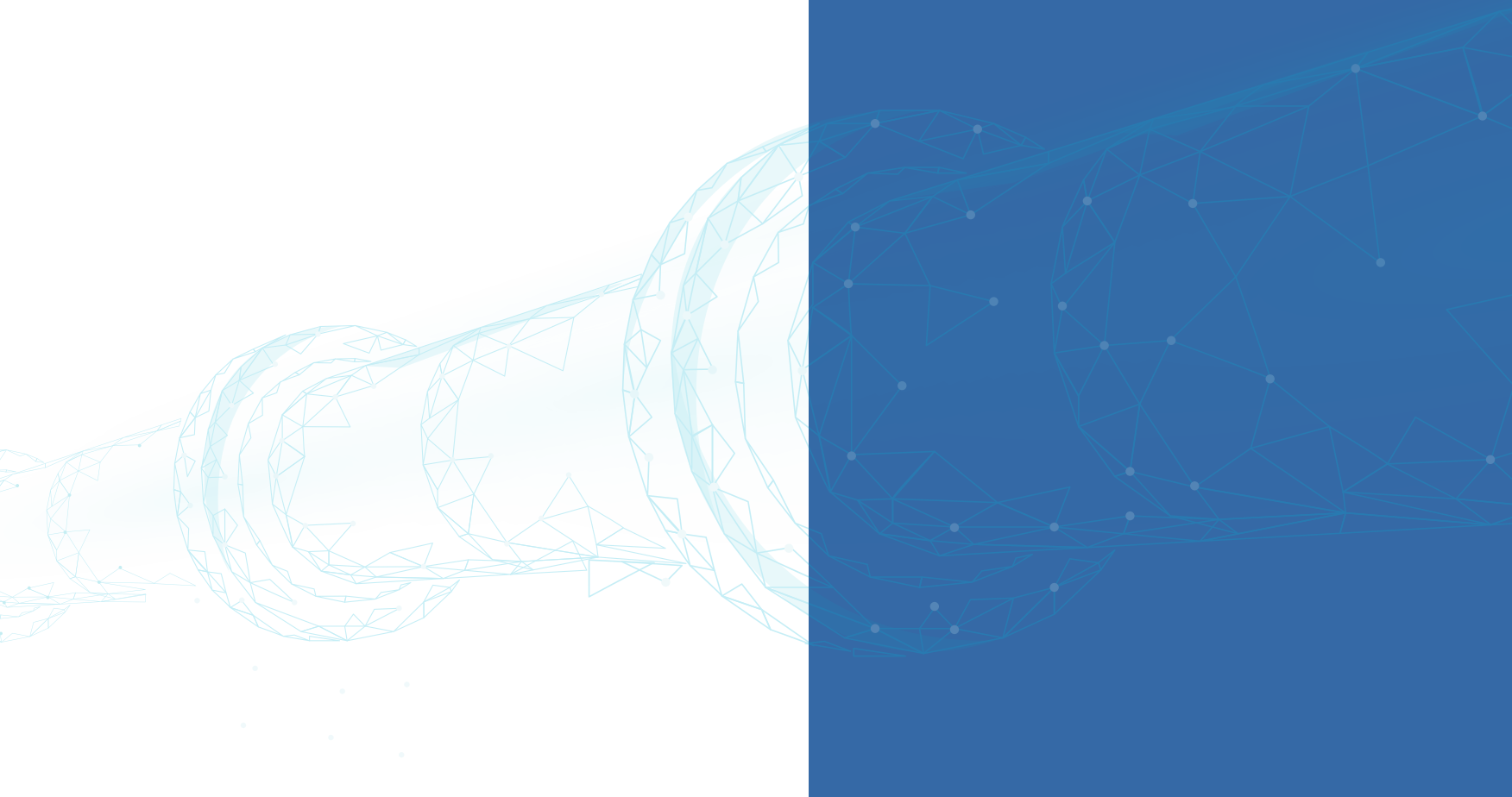
Sincerely,

Christopher Aronitz, PE, PMP
Project Manager | Associate

Jack Adam, PE
Principal-in-Charge | Associate Vice President

Section No. II

Experience in Applicable Trades



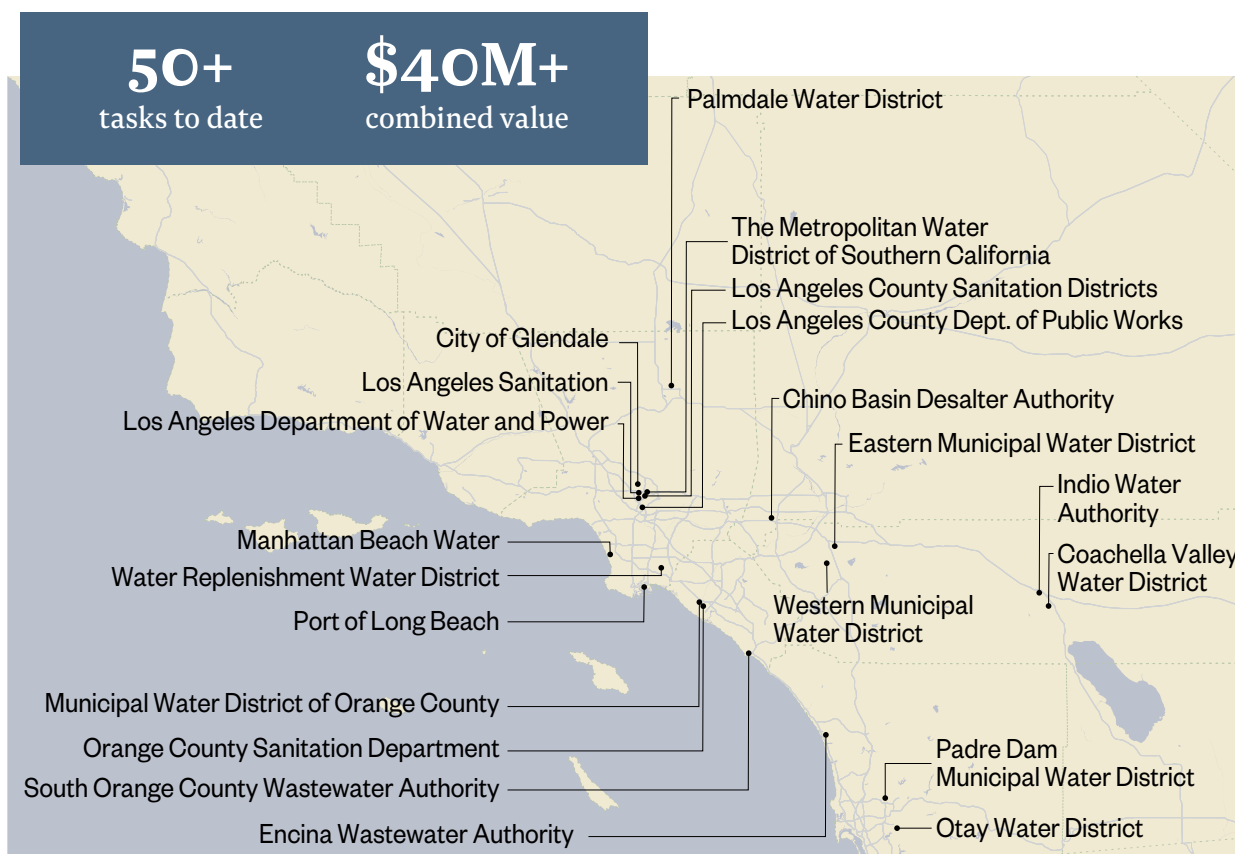
Section No. II

Experience in Applicable Trades

Hazen is a full-service engineering firm specializing in the engineering and management of water related infrastructure. Hazen's water specific focus and SGH's structural expertise combined enable our team to find innovative solutions to address TVMWD's needs.



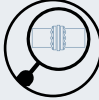

Hazen has a proven track record of successfully completing numerous assignments across the United States for various governmental bodies, utilities, and industries. Hazen's experience with on-call contracting allows us to efficiently respond to TVMWD's needs and provide exceptional levels of service. Hazen's on-call experience is complemented by our and our partner firm SGH's conveyance experience, specifically in pipeline condition assessment, structural/remaining useful life analysis, and rehabilitation. Finally, Hazen and SGH have partnered on numerous projects and have a strong history of working together to seamlessly deliver our respective services.

Hazen's Southern California On-Call Experience



Hazen's team brings a deep bench of technical expertise and responsive service to support TVMWD's needs. Our team has a proven track record of delivering innovative, cost-effective solutions for pipeline condition assessment, rehabilitation, and emergency response.

Hazen is prepared to serve as a trusted partner delivering timely insights, resilient infrastructure strategies, and a commitment to protecting community water systems. The table below provides our experience summary keyed to your RFP categories. Project descriptions with category references are provided on the following pages.

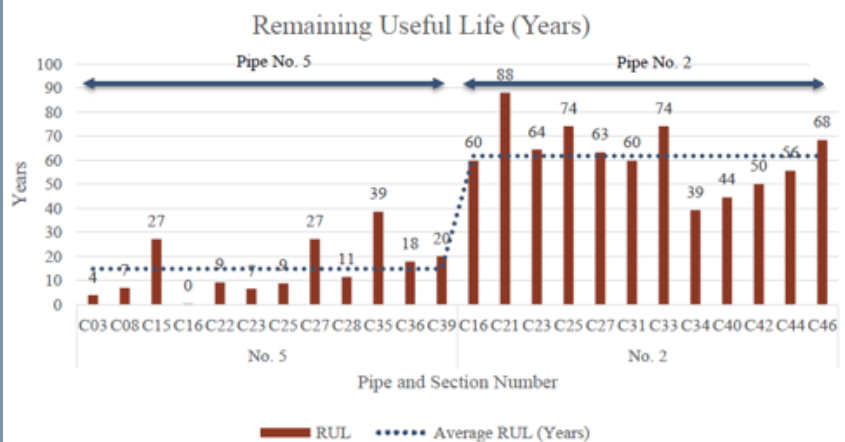
RFP Categories	 Pipeline & Soil Corrosion Analysis	 Internal/External Pipe Condition Assessment	 Pipeline Structural/Remaining Life Modeling Analysis	 Rehabilitation and Replacement Plan
Projects				
Mountain House Raw Water Pipeline, Byron, CA		■	■	■
West Basin CNTF Influent and Effluent Pipelines, El Segundo, CA		■	■	■
Moosa Canyon, SDCWA, CA	■	■	■	■
US Bureau of Reclamation PCCP Inspection Program, CO, WA, CA		■	■	■
San Diego County Water Authority PCOP Monitoring Program, CA	■	■	■	■
Northern and Easter Pipeline Inspection, Moulton Niguel Water District, CA		■		■
Investigation of Impressed CP System Impact on Structural Integrity of Pipe, Valley Water, CA	■	■	■	■
Second Aqueduct Leak and Thrust Design, San Diego County Water Authority, CA		■	■	■
Second Aqueduct Structural Evaluation, San Diego County Water Authority, CA		■	■	
CFRP Lining of Highly Critical Joint Transmission Main, South Coast Water District, CA		■	■	■
TOSA Ocean Outfall Condition Assessment and Rehabilitation, NJ		■		■
Water Main Evaluation Program and Asset Management Program, Virginia Beach, VA		■		
Aqueduct A, Las Vegas Valley Water District, NV		■		
Honouliuli Wastewater Treatment Facility Galvanic CP System Design, SSFM International, HI	■			■
Newtown Creek Wastewater Treatment Plant Corrosion Investigation and Lab Testing, NY	■	■		
Galvanic CP for WW & Cooling Water Pipelines To Mitigate Pipeline Corrosion, Miller Electric Company, FL	■			
Condition Assessments, Failure Risk and Other Analyses, and Repair Prioritization, City of Mesa, AZ	■	■	■	■
CFRP Repair of Reinforced Concrete Interceptor Under IH-35, Dallas Water Utilities, TX		■		■
Evaluation of Rehabilitation Options for Leaking in 36 in. Diameter PCCP Water Transmission Main, City of Cloquet, MN			■	■

Contact Name

Susanna Li
 Manager of Engineering I
 West Basin MWD
 (310) 660-6238
 susanna@westbasin.org

Project Size

\$50k



1 Chevron Nitrification Treatment Plant Influent and Effluent Pipelines

West Basin Municipal Water District, El Segundo, CA

The Chevron Nitrification Treatment Plant (CNTP) has a number of underground pipes, some of them already failed and some of them close to the end of their useful life. Hazen developed a comprehensive inventory and risk-based prioritization methodology and model to prioritize the condition assessment of the most critical or likely to fail pipelines first.

Hazen performed an evaluation of available condition assessment technologies and scored them based on their applicability, level of intrusiveness, resolution and total cost. A comprehensive RFP was developed, and Hazen supported the District through the vendor selection process. Three non-destructive testing methods were successfully applied to high risk 18-inch welded steel pipelines: Manual Ultrasonic Testing, Pocket Ultrasonic Testing, and Large Structure Inspection. The Large Structure Inspection was applied to the straight pipe segments and Manual Ultrasonic Testing and Pocket Ultrasonic Testing was applied on the bends, elbows, and reducers. The results of the condition assessment identified multiple areas along the effluent pipeline that required immediate repair or replacement. Using the condition assessment results and determination of remaining useful, Hazen identified the pipe segments that required rehabilitation or replacement, recommended rehabilitation methods and the timing for the rehabilitation.



External Pipe Condition Assessment



Deterioration and Remaining Life Modeling



Condition Assessment and Risk Evaluation, Technology Evaluation and Rehabilitation Strategy, Prioritization and Financial Planning, Plan Development and Stakeholder Engagement

**Contact Name**

David Vaz
Operations/Maintenance
Supervisor | BBID
(209) 835-0375
d.vaz@bbid.org

Project Size

\$77k

2 Mountain House Raw Water Pipeline – Hydraulic Evaluation and Condition Assessment Project

Byron-Bethany Irrigation District (BBID), Bryon, CA

BBID conveys raw water via 3.75 miles of a 30" diameter steel pipeline to a local community water treatment plant (WTP) which treats and delivers potable water to 30,000 residents. BBID had concerns related to the condition, abnormal operating pressures and sediment buildup in the pipeline.

Hazen performed a desktop condition assessment and hydraulic evaluation of the steel pipeline that included documenting the real-time pipeline system pressures, establishing a baseline condition of the current hydraulic grade line (HGL), and estimating design HGL for comparison with the real-time data.

An evaluation of commercially available, appropriate in-pipe inspection technologies was performed in collaboration with BBID staff. A comprehensive RFP for a short-list of vendors was developed by Hazen for BBID to solicit and select a vendor to complete a visual and structural inspection of the steel pipeline.

Hazen managed all activities for the internal condition assessment of the pipeline, which was completed using a non-destructive tool which provided visual and electromagnetic data of the pipeline. Overall results indicated that the pipe is in good condition; only three locations showed measurable pipe wall loss, and minimal sediment buildup was observed.



Internal Pipe Condition Assessment, Hydraulic Performance Evaluation, Data Analysis and Condition Rating



Deterioration and Remaining Life Modeling, Risk Assessment and CIP Development



Condition Assessment and Risk Evaluation, Technology Evaluation and Rehabilitation Strategy, Plan Development and Stakeholder Engagement

Contact Name

Colin Kemper
Senior Engineer | SDCWA
(858) 522-6892
ckemper@sdwca.org

Project Size

\$5.8 M



3 Moosa Canyon Pipeline Replacement

San Diego County Water Authority, Escondido, San Diego, CA

The San Diego County Water Authority's Second Aqueduct, crossing Moosa Canyon in Bonsall, is critical to the region's water supply but faces long-term risks from environmental and seismic hazards. It includes Pipelines 3, 4, and 5, built between the 1950s and 1980s. Pipeline 4, a prestressed concrete cylinder pipe (PCCP), has suffered erosion, with storms exposing joints to stress and failure. Despite stabilization efforts since 2009—including carbon fiber reinforcement designed by our teaming partner SGH in 2019–2020—ongoing erosion, unbalanced thrust forces, and seismic threats from liquefiable soils continue to endanger Pipelines 4 and 5.

Hazen was retained to design a tunnel to relocate the pipelines, but geotechnical studies revealed deeper-than-expected alluvium, prompting a reevaluation. Hazen developed four alternatives to address vulnerabilities like seismic activity, corrosion, scour, slope instability, and weak soils. Options included relining the PCCP with welded steel pipe retrofitted to be supported on deep pile foundations, open-cut replacement with concrete-encased steel pipe below the 500-year scour zone also supported on deep pile foundations, a shallow microtunnel through grouted alluvium, and a deep rock tunnel in granitic bedrock to avoid liquefaction.

Challenges evaluated and mitigation strategy include evaluation of extended PCCP relining projects to mitigate thrust challenges at bends associated with connection of steel pipelines to existing PCCP, evaluating deep pipe foundations and for open cut pipelines and retrofitting existing pipelines to include pile supports, mitigating operation risks due to construction of pile supports and open cut pipelines in the vicinity of high-pressure operating pipelines, sequencing construction to mitigate operational risk and minimize pipeline shutdown requirements, and evaluating bypass systems to allow for longer shutdowns or individual pipelines.



Field Investigation and Sampling



Hydraulic Performance Evaluation



Plan Development and Stakeholder Engagement

Contact Name

William Schmeling
Executive Director | TOSA
(732) 531-2213
executivedirector@tosa-nj.org

Project Size

\$374k



4 Outfall Condition Assessment and Rehabilitation Recommendations

Township of Ocean Sewerage Authority (TOSA), Oakhurst, NJ

Hazen conducted a very challenging condition assessment on an ocean outfall pipe with multiple diameters and materials using electromagnetic techniques. The assessment was used to estimate the remaining useful life of the pipeline and to make cost-effective repair recommendations.

Hazen assisted TOSA in evaluating the physical condition of its outfall pipeline and in the evaluation of cost-effective measures for the rehabilitation of both on and offshore portions. TOSA's ocean outfall is a conduit for conveying treated effluent from the wastewater treatment plant's chlorine contact tank to its discharge point in the Atlantic Ocean. The original 36-inch diameter outfall pipeline was constructed between 1966 and 1968. In light of the deteriorating conditions found through the various inspections of its offshore outfall pipe, TOSA retained Hazen to assist in evaluating options for its entire outfall.

With the assistance of Pure Technologies, a technology vendor, Hazen performed a condition assessment of the entire pipeline using its PipeDiver technology. Following completion of the inspection and condition assessment, and considering the key evaluation criteria, Hazen developed a rehabilitation program as the most cost-effective solution to maintain long-term reliability.



Internal Pipe Condition Assessment, Data Analysis and Condition Rating



Condition Assessment and Risk Evaluation, Technology Evaluation and Rehabilitation Strategy, Prioritization and Financial Planning, Plan Development and Stakeholder Engagement

Water Main Evaluation Program and Asset Management Program

5 Virginia Beach Department of Public Utilities, Virginia Beach, VA

As part of the ongoing Asset Management Program, Hazen and Sawyer is supporting the City of Virginia Beach Department of Public Utilities (DPU) with the development and implementation of condition assessments of the City's water transmission and distribution pipe network to enable the City to adequately plan and schedule future water rehabilitation and replacement capital improvement program projects. Hazen team evaluated the relevant technologies that had minimal disruption to service and selected ePulse and p-CAT for the assessment of two critical pipelines.

Lake Gaston Pipeline Condition Assessment

Hazen managed a collaborative effort with the condition assessment of 5,450 linear feet of 60-inch DIP and 60-inch PCCP using Echologics ePulse technology. Specific project related activities included:

- Evaluated soil corrosivity, stray DC/AC voltage effects, and performed continuity tests and close interval surveys for corrosion control planning
- Conducted environmental impact analysis for natural and cultural resource presence
- Installed permanent monitoring points (by TA Sheets)
- Measured pressure transients over a 30-day period
- Performed leak detection (Echowave) and acoustic stiffness testing (Echologics ePulse)
- Assessed structural adequacy of DIP and PCCP, including failure risk analysis

- Delivered a comprehensive assessment and recommendations report

Rosemont Road Water Main Condition Assessment

Hazen managed a collaborative effort with the condition assessment of 5,111 linear feet of 20-inch cast iron water main using p-CAT technology. This innovative method provided a non-invasive diagnosis of pipeline condition over long distances along pipelines with a minimal disruption to service. Specific project related activities included:

- Condition assessment of the 20-inch cast iron water main using p-CAT
- Remaining useful life estimation
- Construction activities (traffic control, selective excavation to the top of pipe)
- Provided assessment and recommendations report



Internal Pipe Condition Assessment, Data Analysis and Condition Rating

6 Aqueduct A inspection

Las Vegas Valley Water Department, Las Vegas, NV

Contact Name

Chris Augustine
Senior Maintenance Engineer
LVVWD
(702) 218-7697
christopher.augustine@lvwd.com

Project Size

\$150k



Internal Pipe Condition Assessment, Data Analysis and Condition Rating

Las Vegas Valley Water District (LVVWD), upon recommendation from the Metropolitan Water District, engaged Mr. Aronitz to assist in assess the Aqueduct A pipeline. Aqueduct A is a 96-inch pre-stressed concrete cylinder pipe (PCCP) that had not been inspected for over 15 years. Prior to Hazen, Mr. Aronitz collaborated with the LVVWD to select the appropriate condition assessment technology based on LVVWD's operational limitations and inspection preferences. The project involved a manned EM inspection which occurred over the course of a day. Results from the inspection were compared to inspection results from 15 years earlier which helped to understand degradation rates and areas of concern. Based on the inspection results areas of the pipe were identified for external post tensioning. This successful assessment directly formed the basis of the paper "No gambling with critical infrastructure in Las Vegas" by Chris Augustine and Chris Aronitz, which was presented at UESI Pipelines in 2022.

7 PCCP Program

US Bureau of Reclamation, CO, WA, CA

Contact Name

Lowell Pimley
Project Manager
Stantec
(702) 218-7697
lowell.pimley@stantec.com

Project Size

\$1.3M



External Pipe Condition Assessment, Internal Pipe Condition Assessment, Data Analysis and Condition Rating

Pipeline Structural Analysis, Deterioration and Remaining Life Modeling, Risk Assessment and CIP Development

Condition Assessment and Risk Evaluation, Plan Development and Stakeholder Engagement

As part of the US Bureau of Reclamation's (Reclamation) goal to assess all their prestressed concrete cylinder pipe (PCCP) assets, prior to Hazen, Mr. Aronitz worked with Reclamation and its engineering contractor (Stantec) to develop a pipeline risk criteria and classification system based on the results of the pipeline Electromagnetic inspection results, visual pipeline assessment, and finite element analysis of individual pipe sticks. The pipeline risk criteria was composed of two components, likelihood of failure and consequence of failure for each pipe stick. Consequence of failure was based on loss of life potential which aligned with the Bureau of Reclamation canal safety and Dam safety program. Consequence of failure values were provided by Reclamation. Likelihood of failure values were determined based on the number of reported wire breaks from condition assessment data and the availability of structural curves performed via finite element analysis (FEA). Mr. Aronitz also acted as Pure's program manager for the inspection work, ensuring consistency of project quality and deliverables for projects across the Western States. As most utilities in charge of operating Reclamation's pipelines had never previously inspected, or even shutdown, these pipelines Mr. Aronitz worked with the utilities to determine the appropriate inspection method and technologies based on their operational limitations; all while ensuring the data collected met the objectives of

8 PCCP Monitoring

San Diego County Water Authority, Escondido, San Diego

Contact Name

Martin Coghill
Maintenance Manager | SDCWA
(619) 301-7836
mooghill@sdewa.org

Project Size

\$300k/yr



Field Investigation and Sampling, Laboratory Testing



External Pipe Condition Assessment, Internal Pipe Condition Assessment, Data Analysis and Condition Rating



Risk Assessment and CIP Development



Condition Assessment and Risk Evaluation

Prior to Hazen, Mr. Aronitz acted as the point of contact for SDCW for their acoustic fiber optic monitoring system (AFO) for their prestressed concrete cylinder pipe (PCCP) from 2019 to 2024. Mr. Aronitz worked with SDCWA on how to interpret the results of their AFO system, let SDCWA know if there were multiple wires breaks, and worked with SDCWA to plan maintenance of the system including navigating contracting. Mr. Aronitz's involvement ranged from visually assessing PCCP pipe segments, coordinating upkeep of the AFO system, and discussion of other electromagnetic inspection technologies for inspection of other pipe types in SDCWA. This included providing guidance on whether one of SDCWA's PCCPs should be replaced due to an increased degradation rate, the pipe was ultimately replaced and damage was confirmed on the old pipe.

9 Northern and Eastern Pipeline Inspection

Moulton Niguel Water District, Laguna Hills, CA

Contact Name

Bryan Hong, PE
Assistant City Engineer | City of
Brea (formerly with MNWD)
(714) 990-7657
bryanh@cityofbrea.gov

Project Size

\$750k



Internal Pipe Condition Assessment, Hydraulic Performance Evaluation



Condition Assessment and Risk Evaluation

Prior to Hazen, Chris Aronitz worked with Moulton Niguel on inspecting both their Eastern and Northern Transmission Line. The Eastern transmission main inspection involved the use of free-swimming and tethered remote field electromagnetic inspection tools to inspect 5.37 miles of 33 to 30in steel pipe. The inspection also included inline leak detection for same inspection distance. The Northern transmission main inspection was a 2.35 mile inspection of 36in BWP and 30in steel pipe using a free-swimming electromagnetic tool. Six runs were completed through 5 butterfly valves emphasizing the up front planning which was required to complete this inspection. Mr. Aronitz worked closely with Bryan Hong, the PM from Moulton Niguel, on both projects to navigate unexpected last-minute obstacles including operational challenges at neighboring utilities and equipment malfunctions.

Evaluation of Rehabilitation Options for Leaking in 36 in. Diameter PCCP Water Transmission Main

City of Cloquet, MN

Contact Name

Paul Pasko
(952) 912.2600
paul.pasko@arcadis.com

Project Size

\$22k



Pipeline Structural Analysis

Condition Assessment and Risk Evaluation, Technology Evaluation and Rehabilitation Strategy, Plan Development and Stakeholder Engagement

SGH provided engineering services to evaluate the impact of an impressed current cathodic protection (ICCP) system operation and other events on the structural integrity of PCCP in the Almaden Valley Pipeline (AVP) Unit II using failure risk analysis methodology. AVP Unit II, was designed and constructed in 1983 for Santa Clara Valley Water District in CA, and the District installed a CP system on the pipeline in 2001. After several pipe-to-soil, close-interval potential surveys conducted over several years revealed a range of potentials dangerous to PCCP, the pipeline was reinspected and data analysis showed a high risk of failure; subsequently, the District embarked on an emergency repair of the pipeline. In 2019, SGH performed a forensic study, site inspection, petrographic analysis of mortar coating from one pipe, laboratory testing of prestressing wire samples, failure risk analysis of distressed pipes, and determination of their repair priorities. Our forensic study of wire breaks indicated that the root causes were from the combined effects hydrogen embrittlement sensitivity of some of the wires and malfunction of the CP system. SGH developed emergency remediation designs and provided engineering support during CFRP repair of the distressed pipes.

CFRP Lining of Highly Critical Joint Transmission Main

South Coast Water District, Laguna Beach, CA

Contact Name

Roman Obzejta
(949) 342-2314
robzejta@scwd.org

Project Size

\$186,671



Internal Pipe Condition Assessment, Data Analysis and Condition Rating

Pipeline Structural Analysis, Risk Assessment and CIP Development

Condition Assessment and Risk Evaluation, Technology Evaluation and Rehabilitation Strategy, Plan Development and Stakeholder Engagement

The joint transmission main (JTM) is part of the 38-mile-long Joint Regional Water Supply System, operated and maintained by the South Coast Water District (SCWD). The pipeline, made of 60 in. diameter PCCP manufactured in early 1960s, transports potable water to several service areas with limited redundancy. SCWD retained SGH and started a condition assessment and repair program by performing an electromagnetic (EM) inspection of a 3-mi-long section, of which a 1.5-mi-long section was re-inspected in 2016. The EM inspections identified seven distressed pipes, one of which was underneath a major highway (SR 133) with 19 ft of soil cover. SGH designed a CFRP liner for the distressed pipe at this highly critical location according to American Water Works Association (AWWA) C305 and provided field inspection and laboratory testing services for quality assurance of the repairs. Subsequent inspections several years later showed continuing performance of the CFRP liner without issues.

City of Mesa Condition Assessments, Failure Risk Analyses, and Repair Prioritization

City of Mesa, Mesa, AZ

Contact Name

Troy Bontrager
(480) 644-4207
troy.bontrager@mesaaz.gov

Project Size
\$2M



Field Investigation and Sampling, Laboratory Testing



External Pipe Condition Assessment, Internal Pipe Condition Assessment, Data Analysis and Condition Rating



Pipeline Structural Analysis, Deterioration and Remaining Life Modeling



Condition Assessment and Risk Evaluation, Technology Evaluation and Rehabilitation Strategy, Plan Development and Stakeholder Engagement

SGH has worked on City of Mesa (COM), AZ, projects since 2008, and more frequently since 2016. SGH has been performing condition assessments of numerous water mains for the COM, including internal visual and sounding inspections, external inspections of selected pipes, leak detection, acoustic pipe stiffness testing, independent review and analysis of electromagnetic inspection results, failure risk analysis, repair prioritization, thrust restraint analysis, petrographic analysis and laboratory testing of concrete and mortar lining samples collected from the pipelines. We also provide recommendations to COM regarding future inspections and maintenance. Since 2016, more than fifty miles of pipe have been inspected, ranging from 16 in. to 72 in. in diameter and including various pipe types such as PCCP, concrete cylinder bar-wrapped pipe, steel pipe, ductile iron pipe, and HDPE.

CFRP Repair of Reinforced Concrete Interceptor Under IH-35

Dallas Water Utilities, Dallas, TX

Contact Name

Mike Larsen
(972) 210-9511
mlarsen@structuraltec.com

Project Size
\$200K



Data Analysis and Condition Rating



Condition Assessment and Risk Evaluation, Technology Evaluation and Rehabilitation Strategy, Plan Development and Stakeholder Engagement

A leaking 80-year-old 60 in. diameter reinforced concrete wastewater force main under the embankment of IH-35 near downtown Dallas presented a difficult challenge. With wastewater service and the freeway both in jeopardy, Dallas Water Utilities (DWU) collaborated with SGH and contractor to devise an innovative in situ repair methodology. The team performed a forensic analysis that pointed to an original installation transition point near the suspected leak location. Running out of options and needing an internal rehabilitation construction option that could avoid surface impacts and excavation, the team investigated a CFRP construction repair solution. CFRP offered an internal rehabilitation method unconstrained by pipe geometry or surface constraints and formed a pipe that is now capable of handling higher surface loads than its original design capacity. SGH's role involved internal inspections and analyses to determine the probable location and cause of the leak, designing the CFRP liner, field engineering support throughout the repair construction, and laboratory testing for quality assurance.

Second Aqueduct Leak and Thrust Design

San Diego County Water Authority, CA

Contact Name

Brent Fountain
(858) 522-6806
bfountain@sdewa.org

Project Size

\$564,185



Internal Pipe Condition Assessment, Hydraulic Performance Evaluation, Data Analysis and Condition Rating

Pipeline Structural Analysis, Deterioration and Remaining Life Modeling

Condition Assessment and Risk Evaluation, Technology Evaluation and Rehabilitation Strategy, Plan Development and Stakeholder Engagement

SGH's relationship with SDCWA began in 2019 when a leakage at a horizontal bend in Pipeline 4 at the bottom of the Moosa Canyon prompted an emergency declaration. SDCWA contacted SGH to investigate the failure, assess the condition of PCCPs in Pipeline 4, and perform an independent review, inspection, and testing of CFRP strengthening of the bend and several adjacent PCCPs. Investigations included both field inspections and finite element analyses. Shortly thereafter, SDCWA contracted SGH again to perform similar inspections and analyses on the adjacent Pipelines 3 and 5, which indicated inadequacy of thrust restraint in Pipeline 5 as well and resulted in CFRP strengthening to avoid failure. SGH served as Engineer of Record and provided quality assurance inspection and testing for strengthening. SGH worked closely with SDCWA throughout both projects and collaborated with the selected contractors to ensure effective implementation within short shutdown windows. As a result, SDCWA and SGH were awarded the 2021 Award of Excellence, Water Project, by the ASCE San Diego Section.

Second Aqueduct Structural Evaluation

San Diego County Water Authority, CA

Contact Name

Martin Coghill
(619) 301-7836
mcoghill@sdewa.org

Project Size

\$500k



Data Analysis and Condition Rating

Pipeline Structural Analysis

In 2022, following a rapid increase in prestressing wire breakage in an area of Pipeline 4, which an emergency project for pipe replacement, SDCWA retained SGH to perform structural evaluation and failure margin analysis of all PCCPs in SDCWA's transmission system (i.e., more than 6,000 pipe segments). The purpose of this project was to supplement SDCWA's condition assessment program and allow them to make risk-based decisions for future inspections, investigations, repairs, and potential operational changes to maintain the reliability of three essential pipelines that provide water to three million people through twenty-four member agencies. The project involved structural evaluation and development of failure risk curves for all PCCP classes, analysis of data from previous EM inspections and continuous acoustic monitoring, repair prioritization of distressed pipes, and development of recommendations for future actions to maintain pipeline reliability. This project constitutes the largest failure margin analysis project performed using SGH's proprietary failure risk curves technology, a methodology widely accepted by water, wastewater, and energy utilities for PCCP and used in hundreds of other projects to date.

Honouliuli Wastewater Treatment Facility Galvanic CP System Design

SSFM International, HI

Contact Name

Corey Matsuoka
(808) 531-1308
cmatsuoka@ssfm.com

Project Size

\$50k



Field Investigation and Sampling, Laboratory Testing



During repair and replacement of various buried pipelines, several waterlines comprised of ductile iron pipe were also being installed. The porous, high chloride soil conditions in Hawaii required a CP system on the DIP to prevent corrosion.

Dr. Pailles designed a galvanic system, including performing calculations to determine the quantity and size of the anodes, developing design drawings and specifications, and verifying that the design met the applicable Hawaii Water Board Standards. He completed this work prior to joining SGH in 2024.

Newtown Creek Wastewater Treatment Plant Corrosion Investigation and Lab Testing

NYCDEP, New York, NY

Contact Name

Bryan Ingram
(508) 435.0090
bingram@corrtech-inc.com

Project Size

\$6,700



External Pipe Condition Assessment, Data Analysis and Condition Rating



Pipeline Structural Analysis, Deterioration and Remaining Life Modeling



Newtown Creek Wastewater Treatment Plant is Brooklyn, NY's largest plant with eight stainless steel, egg-shaped digesters. SGH examined specimens of pipe and tubercles from a digester to determine the cause of reported corrosion. We used a scanning electron microscope equipped with an energy dispersive x-ray spectrometer detector for element analysis and determined corrosion on the exterior of the pipe was likely caused by a combination of chloride-induced corrosion and aqueous corrosion with dissolved oxygen and noted that the acidic environment can accelerate corrosion rates. We also conducted metallurgical analyses at our in-house laboratory on a portion of a cast-iron impeller removed due to section loss. Our analyses included visual inspection, microscopic observations, and chemical analyses on the impeller to determine its composition and the likely causes of corrosion and section loss. We concluded that the impeller is composed of soft ductile iron that does not provide sufficient resistance to the combination of cavitation, erosion, and corrosion, particularly acidic pH and microbial-induced corrosion resulting from the environmental exposure.

Investigation of Impressed CP System Impact on Structural Integrity of Pipe

Santa Clara Valley Water District, San Jose, CA

Contact Name

Joel Jenkins
(408) 630.2609
jjenkins@valleywater.org

Project Size

\$138,750



Field Investigation and Sampling, Laboratory Testing



External Pipe Condition Assessment, Data Analysis and Condition Rating



Pipeline Structural Analysis, Deterioration and Remaining Life Modeling



Technology Evaluation and Rehabilitation Strategy, Plan Development and Stakeholder Engagement

SGH provided engineering services to evaluate the impact of an impressed current cathodic protection (ICCP) system operation and other events on the structural integrity of PCCP in the Almaden Valley Pipeline (AVP) Unit II using failure risk analysis methodology. AVP Unit II, was designed and constructed in 1983 for Santa Clara Valley Water District in CA, and the District installed a CP system on the pipeline in 2001. After several pipe-to-soil, close-interval potential surveys conducted over several years revealed a range of potentials dangerous to PCCP, the pipeline was reinspected and data analysis showed a high risk of failure; subsequently, the District embarked on an emergency repair of the pipeline. In 2019, SGH performed a forensic study, site inspection, petrographic analysis of mortar coating from one pipe, laboratory testing of prestressing wire samples, failure risk analysis of distressed pipes, and determination of their repair priorities. Our forensic study of wire breaks indicated that the root causes were from the combined effects hydrogen embrittlement sensitivity of some of the wires and malfunction of the CP system. SGH developed emergency remediation designs and provided engineering support during CFRP repair of the distressed pipes.

Sanford Power Plant, Galvanic CP for WW & Cooling Water Pipelines To Mitigate Pipeline Corrosion

Miller Electric Company, FL

Contact Name

Deron Logan
(351) 246-1939
dlogan@mecojax.com

Project Size

\$40k



Field Investigation and Sampling, Laboratory Testing



Sanford Power Plant is owned and operated by Florida Power and Light. At the power generation facility there are various buried steel pipelines that transport cooling water and wastewater, and to protect these pipelines from corrosion, the plant has a galvanic CP system. The CP system is comprised of magnesium anodes attached to the pipelines throughout the facility. The plant's staff use numerous test stations throughout the facility to regularly monitor the CP system's performance. It was recently determined that many of the anodes were depleted, so replacement was necessary. Dr. Pailes performed quality control and commissioning of the CP system repairs and during testing, identified that several of the test stations were also damaged and the wiring was not properly labeled or connected. He guided the contractor to perform proper repairs, including ensuring that all the wiring was properly labeled and that all test stations were consistently installed. Dr. Pailes also performed potential and current measurements of the new anodes to verify that the new system was providing protection per AMPP standards, and commissioned the system, providing the plant with a detailed commissioning report. He completed this work prior to joining SGH in 2024.

Section No. III

Personnel

Section III.

Personnel

Our team has been assembled to provide the best quality and value to Three Valleys by leveraging firm-wide condition assessment expertise. The Hazen team has a long track record of successful delivery of similar projects.

Project Manager

Chris Aronitz, PE, PMP

Chris has 10 years of experience in pipeline condition assessment and asset management. He has spent the last five years specializing in asset management focused on linear assets, specifically large diameter transmission mains, and the application and selection of pipeline condition assessment technologies in Southern California and Nevada. He has a wide variety of experience in identifying, scoping, and executing linear asset focused asset management projects.



Chris has successfully delivered condition assessment projects throughout Southern California

1. Arvin-Edison WSD

2. Wheeler Ridge-Maricopa WSD

3. Calleguas MWD

4. City of Carlsbad

5. Casitas MWD

6. Foothill MWD

7. Los Angeles DWP

8. City of Long Beach

9. Moulton Niguel WD

10. Olivenhain MWD

11. City of Poway

12. City of San Diego
13. San Diego County Water Authority

14. San Bernardino Valley MWD

15. San Luis Obispo County

16. South Coast WD

17. Metropolitan WD of Southern California

18. Western MWD

“I look forward to the opportunity to continue working with TVMWD on the proactive management of the Miramar Pipeline. My career has focused on inspecting and managing pressure pipes and it’s great to see TVMWD taking additional steps to maintain these critical assets. I am excited to bring the depth of expertise of the Hazen and SGH team to TVMWD.”

- Chris Aronitz, PE, PMP



Principal In Charge

Jack Adam, PE

Project Manager

Chris Aronitz, PE, PMP

QA/QC

Sean Fitzgerald, PE

Jorge Rodriguez, PE

Subconsultant
Key Personnel

Support Staff

Rehab & Replacement Plan

Sean O’Rourke, PE
Chris Portner, PE
Murat Engindeniz, PhD, PE
David Villarta, PE, PSP, OCM, CPE

Pipeline & Soil Corrosion Analysis

Becky Andrus, PE, NACE CP-1
Brian Pailles, PhD, PE, NACE CP-4

Internal/External Pipe Condition Assessment

Chris Aronitz, PE, PMP
Katie Nguyen, PE
Jason Stegemann, PE
Murat Engindeniz, PhD, PE, P.Eng.

Pipeline Structural/Remaining Life Modeling Analysis

Sean Pour, PE, PhD
Ashley Mitchell, MPA, CRL
Claire Waller

Strategic Leadership Team



Jack Adam, PE

Jack served as principal-in-charge, project manager, and design engineer on a multitude of major water resources projects throughout the United States. Career accomplishments total more than 100 miles of pipeline ranging in diameters from 8 to 102 inches with pressures up to 500 pounds per square inch (psi) and pump stations up to 10,000 hp.



Sean Pour, PE, PhD

Sean is the asset management practice lead for Hazen’s West Region with a wide range of experience helping more than 40 utilities to be more proactive in planning maintenance, rehabilitation, and replacement activities. In the practical application of tools, he leads teams specialized in analyzing condition data to improve the accuracy of estimating remaining effective life and risk.



Jorge Rodriguez, PE

Jorge has over 20 years of experience in utility operations, asset management, and infrastructure assessment. He has led major initiatives at WSSC and Pure Technologies, managing large teams, multimillion-dollar budgets, and innovative pipeline programs. Jorge holds a B.S. in Civil Engineering, is a licensed Professional Engineer in Maryland, and is active in AWWA and ASCE.



Murat Engindeniz, PhD, PE

Murat’s experience includes more than 500 pipeline projects for water/wastewater and power utilities in the U.S., Canada, and abroad, some of which are listed below. He is the Chair of AWWA Subcommittee M81 - Rehabilitation of Large Diameter Water Mains and member of several other committees, including AWWA Water Main Condition Assessment Committee.



**Ashley Mitchell,****MPA, CRL**Pipeline Structural/Remaining
Life Modeling Analysis

Ashley has over 11 years of experience in water and wastewater asset management. She specializes in condition assessment, capital planning, and reliability strategies, with a strong background in data-driven tools like InfoAsset Planner and Power BI. Ashley has led major programs at GLWA and contributed to national conferences on infrastructure management and diversity in engineering.

**David Villarta,****PE, CCM, CEP, PSP**

Rehab & Replacement Plan

David has the unique ability to provide his clients multiple services with expertise that is hard to match. He has worked as an inspector, resident engineer, construction manager, cost estimator, and schedule reviewer on water and wastewater treatment plants, pump stations, conveyance systems, and reservoirs across the country. He has developed document management plans and trained inspectors in their implementation.

**Becky Andrus,****PE, NACE CP-1**Pipeline & Soil
Corrosion Analysis

Becky has experience in both public and private roles, specializing in transmission mains and water storage facilities. As a utility employee, she established and managed corrosion programs. These programs have been far reaching, covering buried pipelines, treatment plant piping, and storage tanks. She currently serves as co-chair on the Water Track at Appalachian Underground Corrosion Short Course.

**Brian Pailles, PhD,****PE, NACE CP-4**Pipeline & Soil
Corrosion Analysis

Brian is an expert in cathodic protection, nondestructive testing, and concrete durability. He has worked globally on structures like buried infrastructure, bridges, and ports. His focus is on solving infrastructure durability issues, developing rehab strategies, and extending service life. He has conducted material testing and evaluations across the U.S.

The Right Team for TVMWD's Pipeline Condition Assessment Program

The combined team of Hazen and Simpson Gumpertz & Heger (SGH) brings unmatched technical excellence, regional experience, and proven innovation to support TVMWD's Pipeline Condition Assessment Program across all four requested service categories.



Pipeline & Soil Corrosion Analysis

The Hazen and SGH team brings deep corrosion engineering expertise to support TVMWD in evaluating external and internal pipeline corrosion risks. SGH has decades of experience conducting soil corrosivity studies, cathodic protection system evaluations, and metallurgical testing. Their engineers are AMPP-certified corrosion specialists and routinely design and troubleshoot CP systems for pipelines and water infrastructure. Hazen complements this with utility-side corrosion management experience including developing corrosion prevention programs and integrating corrosion risk data into asset management systems. The team's approach combines field investigations, laboratory analyses, and GIS-based mapping to identify high-risk segments and recommend effective, standards-compliant mitigation strategies.



Internal/External Pipe Condition Assessment

Hazen and SGH offer an industry-leading approach to condition assessment, incorporating both traditional and advanced inspection technologies. Hazen has successfully planned and managed electromagnetic, ultrasonic, acoustic, and robotic inspections throughout California, ensuring compatibility with local infrastructure and operational constraints. SGH's experience includes third party interpretation of complex inspection data, verifying EM results, and using nondestructive testing and forensic evaluations to assess structural integrity. Together, the team can assess pipe materials ranging from mortar-lined steel to PCCP, provide actionable defect characterization, and translate findings into condition ratings. These assessments can be documented through reports, annotated visuals, and GIS-integrated deliverables—supporting TVMWD's strategic planning efforts.



Pipeline Structural / Remaining Life Modeling Analysis

SGH is an industry pioneer in structural modeling for buried pipelines, including finite element modeling, risk curve generation, and remaining life prediction. Their work formed the technical basis of AWWA standards and includes patented approaches to failure risk analysis for PCCP and steel pipelines. Hazen complements this with extensive experience analyzing inspection data to develop degradation models, estimate remaining useful life, and prioritize segments for renewal. The team will use field data, historical trends, and probabilistic models (e.g., Monte Carlo simulation) to support defensible decision-making and optimize the timing of rehabilitation or replacement. Deliverables will include GIS-based failure risk maps, life expectancy forecasts, and recommendations calibrated to TVMWD's risk tolerance and CIP goals.



Rehabilitation and Replacement Plan

The Hazen and SGH team specializes in developing cost-effective and constructible repair and rehabilitation strategies based on pipeline condition and risk. SGH brings expertise in internal rehabilitation design, including CFRP, sliplining, segmental linings, and post-tensioning, while Hazen's design team has designed conveyance projects across California and brings industry leading tunneling and directional drilling expertise. The team can evaluate alternatives using structural modeling and cost-benefit analysis to select the most suitable rehabilitation techniques. Our team can also support TVMWD in preparing phasing plans, construction packages, and risk-based prioritization matrices. By aligning technical recommendations with budget, service criticality, and long-term performance goals, our team will deliver a robust and implementable R&R plan.

Section No. V

Acknowledgment of Standard Agreement and Insurance Requirements

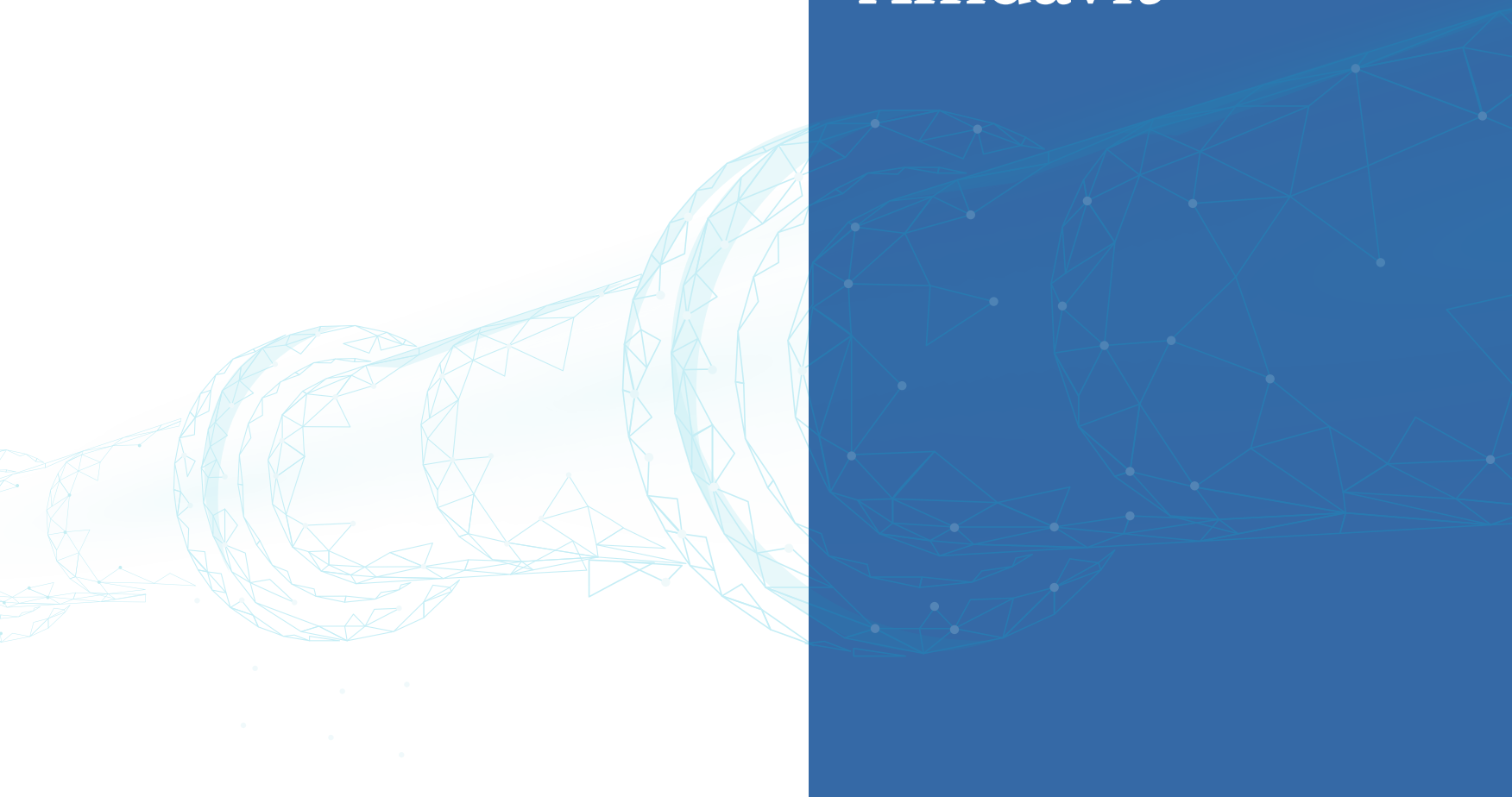
Section V.

Acknowledgment of Standard Agreement and Insurance Requirements

Hazen has received and reviewed the Standard Agreement and Insurance Requirements. Additions, Deletions, and/or Exceptions can be found in Appendix B



Insurance Affidavit



Acknowledgment of Insurance Affidavit

Hazen has reviewed the insurance requirements and can confirm there are no issues with the limits and coverage required.



Section No. VI

Public Works Consultant Registration Certification

Customer Account Lookup

PWCR

1000018843

Contractor Status

DIR.Approved

CSLB

Business Phone

2125397000

Ext

Registration Start Date

2025-07-01

Crafts

Other

Legal Entity Name

HAZEN AND SAWYER, D.P.C.

Doing Business As (DBA)

HAZEN AND SAWYER

Business Structure

-- None --

President

Alan Stone

Email

wcrayon@hazenandsawyer.com

Registration End Date

2028-06-30

Address

Mailing Address

800 West Sixth Street, Suite 400

Mailing Address - City

LOS ANGELES

Mailing Address - State

CA

Mailing Address - Zip

90017

Mailing Address - Country

United States

Physical Address

498 SEVENTH AVENUE, 11TH FLOOR

Physical Address - City

NEW YORK

Physical Address - State

NY

Physical Address - Zip

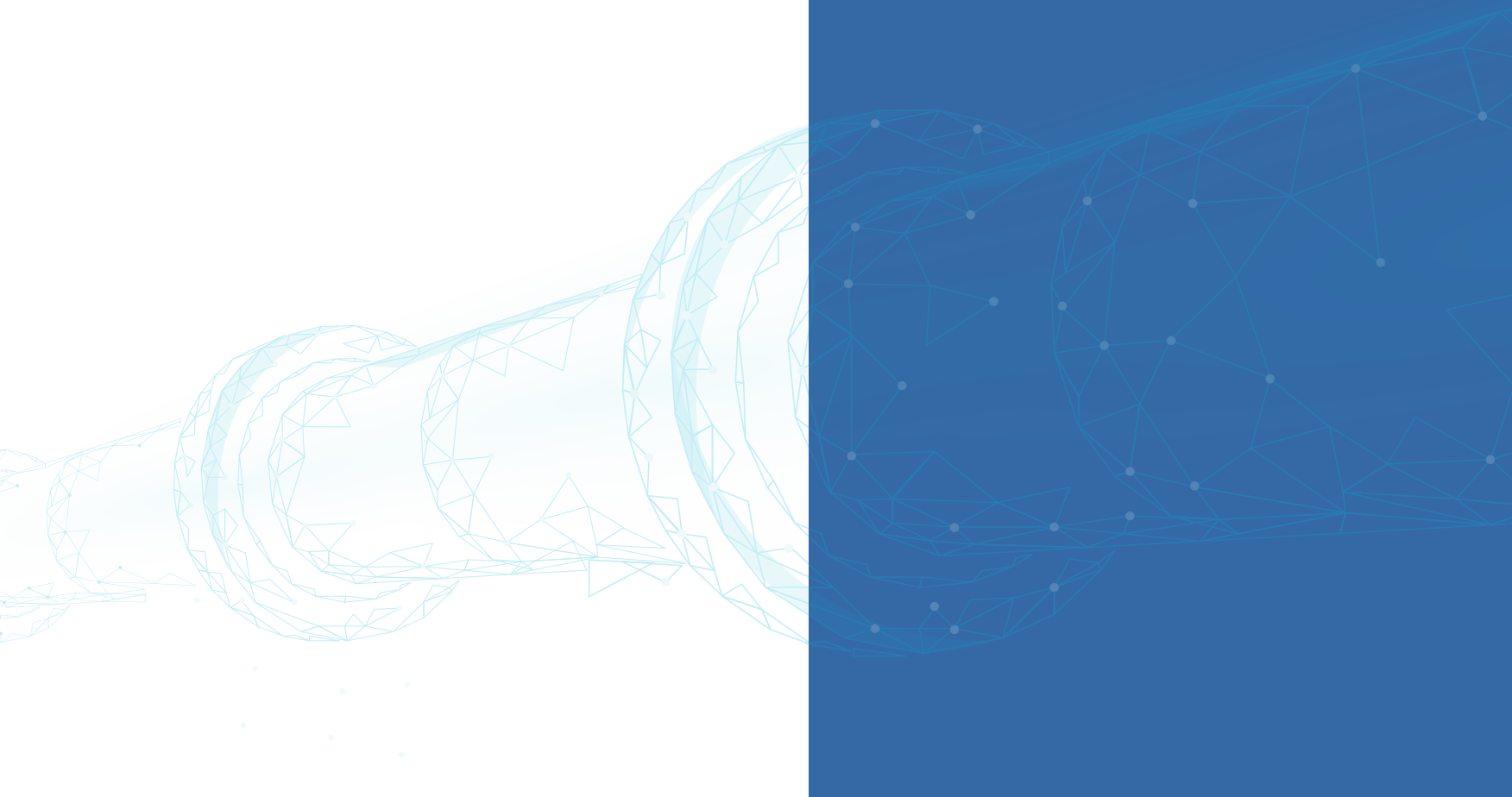
10018

Physical Address - Country

United States

Section No. VII

Addendum Acknowledgment



THREE VALLEYS MUNICIPAL WATERT DISTRICT
ADDENDUM NO. 01
for the
ON-CALL DESIGN AND INSPECTION SERVICES FOR
PIPELINE CONDITION ASSESMENT PROGRAM

July 15, 2025

Three Valleys hereby issues Addendum No.1. The proposal due time remains unchanged.

Acknowledge receipt of this Addendum by signing and inserting its number and date on the acknowledgement below.

The purpose of the addendum is to provide the following clarifications to questions regarding the Request for Proposals:

- Response to Proposers' Question

QUESTION:

The evaluation criteria says "evaluation will be based on the understanding of the District needs, project approach, established experience and performance for each of the four categories as detailed in the scope of work," but the proposal format does not include an approach section. Should an approach be included in the proposal, and if so, is it included in the 15-page limit?

ANSWER:

The RFP is for on-call service and specific projects have not been assigned. Thus, the project approach can be removed from the proposal package and will not impact the evaluation process.

QUESTION:

Can more than three projects be included in the proposal given the range of activities in the scope of work

ANSWER:

As long as the 15-page maximum is not exceeded

QUESTION:

Can we include subcontractors on our team if we believe their services will provide value to the district and they do not have the capacity to bid on this work as a prime?

ANSWER:

Yes, as stated in the Executive Summary, it is preferred that consultants perform tasks without relying on subconsultants. TVMWD recognizes that some coordination may be necessary between field data collection and the overall planning process. While preferred subconsultants may be included, evaluations will focus on whether the task can be self-performed or requires a subconsultant.

THREE VALLEYS MUNICIPAL WATERT DISTRICT
ADDENDUM NO. 01
for the
ON-CALL DESIGN AND INSPECTION SERVICES FOR
PIPELINE CONDITION ASSESMENT PROGRAM

QUESTION:

is the use of 11x17 pages permitted and if so does the use of a 11x17 page impact the page limit?

ANSWER:

11 x 17 sheet will be considered (1) page as only electronic submissions are being accepted

QUESTION:

Can the District provide a rough estimate of total number of pipeline miles under its operation?

ANSWER:

Refer to the introduction approximately 8 miles of pipe. Pipe sizes ranges from 42in to 18in transmission mains. Primarily PCCP or CML&C Steel Pipe.

QUESTION:

Are all services to be provided in one, 15-page response or is it 15 pages per response section

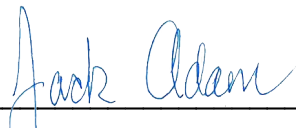
ANSWER:

The intent of the 15-page limit is to expedite the review process. Ideally, much of the consultant's core information should overlap between response sections limiting the need to add a substantial number of pages to the proposal. However, to provide a uniform reviewing process, consultants may submit up to 15 pages per response section.

ADDENDUM NO.01 ACKNOWLEDGEMENT

The Bidder hereby acknowledges the receipt of Addendum No. 1 and the incorporation thereof in the Bid Proposal for the **ON-CALL DESIGN AND INSPECTION SERVICES FOR PIPELINE CONDITION ASSESMENT PROGRAM**

Bidder: Hazen and Sawyer

By: 
(Bidder's Authorized Representative)

Date: July 16, 2025

Title: Associate Vice President

Section No. VIII

Submittal Check Off List

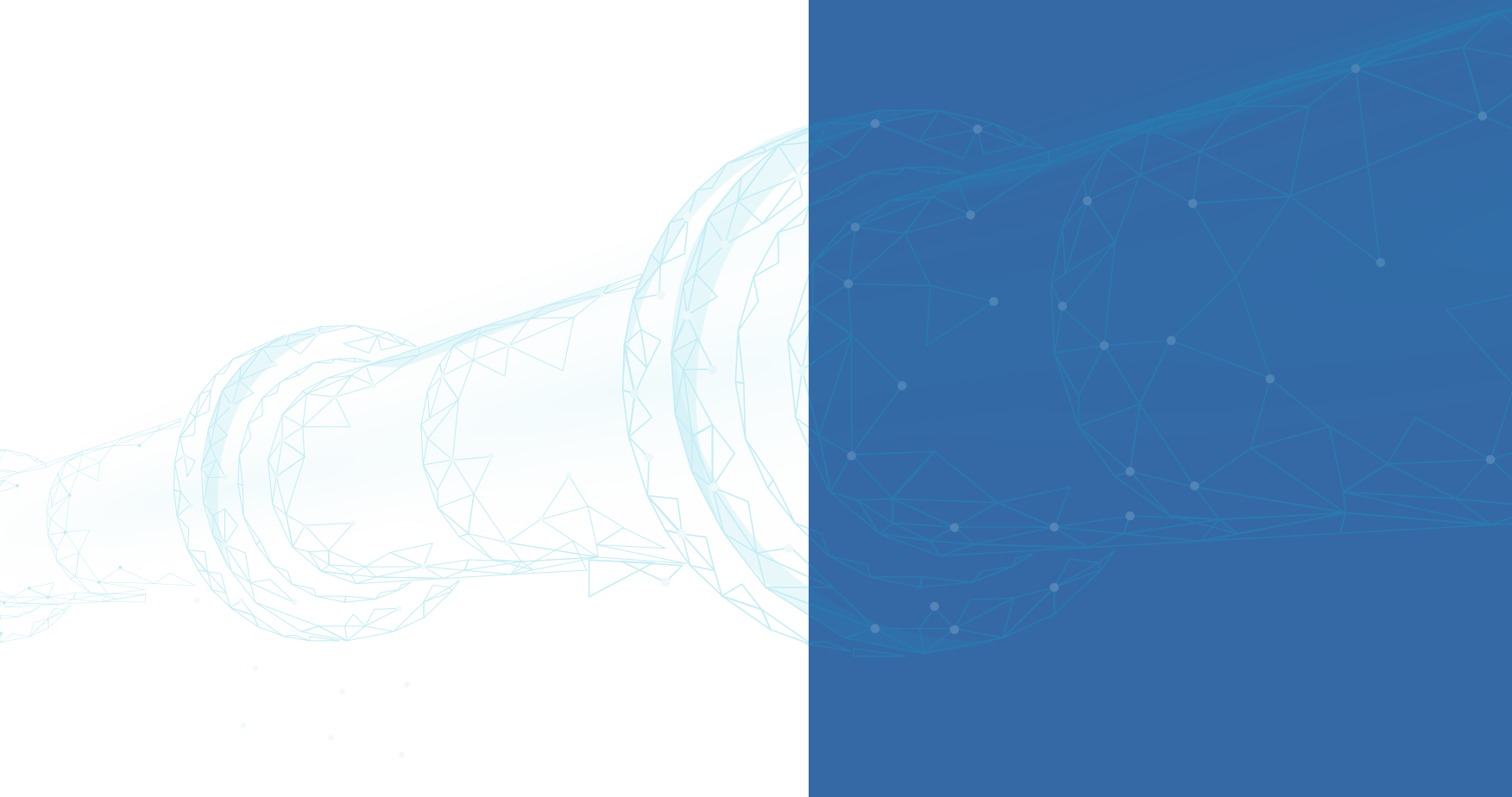


Exhibit B**SUBMITTAL CHECK OFF LIST**

Enclosed below is checklist of required documents to be submitted as the Consultant's proposal. Items may be submitted on the same page and not required to be submitted separately.

Item	Required Submittals Checklist	Check off
1	Cover Letter	✓
2	Trade Experience	✓
3	Personnel Resumes	✓
4	Cost/ Fee Proposal	✓
5	Acknowledgment of Standard Agreement (or redline provisions)	✓
6	Insurance Affidavit	✓
7	Public Works Consultant Registration Certification (CADIR)	✓
8	Additions, Deletions, and/or Exceptions	✓

Appendix A

Resumes



Chris Aronitz, PE, PMP

Project Manager

Chris has over ten years of experience in pipeline condition assessment and asset management.

Education

BS, Mechanical Engineering,
University of Utah, Salt Lake City,
UT

Certification/License

Professional Engineer
Project Management
Professional

Areas of Expertise

- Pipeline Condition Assessment
- Asset Management
- Capital Improvement Plan Development
- Workshop Facilitation

PCCP Inspection Program, US Bureau of Reclamation; Western US

As part of the US Bureau of Reclamation's (Reclamation) goal to assess all their prestressed concrete cylinder pipe (PCCP) assets Mr. Aronitz worked with Reclamation and its engineering contractor (Stantec) to develop a pipeline risk criteria and classification system based on the results of the pipeline Electromagnetic inspection results, visual pipeline assessment, and finite element analysis of individual pipe sticks. Mr. Aronitz also acted as Pure's program manager for the inspection work, ensuring consistency of project quality and deliverables for projects across the Western States. As most utilities in charge of operating Reclamation's pipelines had never previously inspected, or even shutdown, these pipelines Mr. Aronitz worked with the utilities to determine the appropriate inspection method and technologies based on their operational limitations; all while ensuring the data collected met the objectives of Reclamation.

Pacheco Acoustic Fiber Optic Install, Valley Water, San Jose, CA

After a prestressed concrete pressure pipe (PCCP) failure 3 years prior Valley Water chose to install acoustic fiber optic monitoring in all PCCP segments within their system. Mr. Aronitz acted as design engineer on the first phase of the project, the Pacheco installation. Mr. Aronitz determined where the fiber optic cable should enter and exit the pipe, where to install protection hardware to avoid cable wear and appropriate mounting location/details for data acquisition equipment. As part of the installation team Mr. Aronitz provided quality control and managed the install team in conjunction with the project manager.

Westwood Inspection – Los Angeles Department of Water and Power, Los Angeles, CA

After the large diameter pipe failure near UCLA Los Angeles Department of Water and Power (LADWP) became interested in assessing their large diameter pipelines. Mr. Aronitz worked with LADWP to prioritize their Prestressed Concrete Cylinder Pipelines for assessment using consequence of failure methodologies and assisted in selecting a small cohort of pipelines for inspection.

San Bernardino Edison Asset Acquisition, San Bernardino Valley Municipal Water District, San Bernardino, CA

Mr. Aronitz worked with San Bernardino Valley Municipal Water District (SBVMWD) to develop a comprehensive linear asset inspection plan as part of an agreement between SBVMWD and Southern California Edison (SCE) for SBVMWD to purchase water conveyance assets, power generating facilities, and water rights from SCE. Mr. Aronitz worked closely with both parties to develop a plan that would allow SBVMWD to understand the condition of the linear assets being purchased while working within a very tight timeline under difficult operating conditions. Mr. Aronitz monitored and insured successful project delivery during the project execution stage and insured all deliverables met client requirements.

Aqueduct A inspection – Las Vegas Valley Water Department, Las Vegas, NV

Las Vegas Valley Water Department (LVVWD) approached Mr. Aronitz (through recommendation of Metropolitan Water District) regarding the assessment of their Aqueduct A pipeline. The Aqueduct A pipeline is made up of large diameter PCCP and had not been inspected in over 15 years. Mr. Aronitz worked with LVVWD to select the appropriate inspection platform and technology and to plan and execute the inspection. Start Date: 09/2021; Completion Date: 12/2021; Construction Cost: NA; Fee: \$150,000

Miramar Inlet Pipe Inspection, City of San Diego; San Diego, CA

As part of the San Diego Pure Water Project Mr. Aronitz worked with local consultant Kleinfelder to plan and execute an inspection of the Bar-wrapped pipe inlet pipe at the Miramar reservoir. With the insertion point being in the middle of the reservoir, at the bottom of an intake tower, Mr. Aronitz developed the inspection plan which involved multiple subcontractors (crane, barge, and dive team) as well as co-ordination with multiple divisions within the city of San Diego.

High Pressure Dynamic Sealing Equipment, Pure Technologies

Mr. Aronitz created a business case for, and co-designed, Pure Technologies' high-pressure equipment used with its SmartBall technology. This equipment was primarily designed to address a demand for high pressure inspections by a partner in South Africa. Part of product commercialization involved complete documentation for manufacturing and assembly of equipment by third party with internal QC. Mr. Aronitz also deployed to site in South Africa to train partner's field personnel and to assist with initial inspections.

Robotic Inspection Tool Metallic Inspection Upgrades, Pure Technologies

As part of a strategic initiative to develop metallic pipe focused condition assessment tools Mr. Aronitz upgraded Pure Technologies' robotic inspection platform to carry a new sensor array for the remote field inspection of metallic pipe. As part of the upgrades Mr. Aronitz developed new weights, shielding, camera housings, and lights (all for use in a pressurized environment), as well as a cart to carry the sensor array. An entirely reconfigured version of the entire robotics platform was also created so it could operate in smaller pipes (16in to 24in).



Jack Adam, PE

Principal-in-Charge

Jack is a Project Manager with extensive civil engineering experience in the water, wastewater, and recycled-water distribution, conveyance, storage, and treatment fields.

Education

BS, Civil Engineering, University of Massachusetts

Certification/License

Professional Engineer

Areas of Expertise

- Project Management
- Large Diameter Pipeline Design
- Water Conveyance System Planning and Design
- Water Distribution Systems Planning and Design
- Condition Assessment

Professional Affiliations

American Water Works Association (AWWA)

American Society of Civil Engineers (ASCE)

ASCE Pressure Pipeline Condition Assessment Task Force

ASCE Pipeline Risk Committee Blue Ribbon Task Force

Golden Key International Honor Society

Chi Epsilon Honor Society

Potable Water Reservoir Assessment Project, City of San Diego, San Diego, CA

As Project Engineer, performed condition assessments of 12 concrete and steel reservoirs, ranging from 1.5 mgd to 15 mgd in capacity, between 30 and 60 years old. The scope of work included structural, corrosion, mechanical, and electrical systems investigations. The results were documented in comprehensive condition assessment reports, which included recommendations for each item deemed in need of repair or replacement.

Twin Oaks WTP Improvements, San Diego County Water Authority, San Diego, CA

Project Manager on this design-build project that included review of 1,500 feet of welded steel pipe, connection to an existing 75-inch aqueduct, clear-well improvements, flow-control facility capacity improvements, metering and valving facilities, and chemical feed facilities to allow the mixing of desalinated water from the Carlsbad Desalination Plant with water treated at the Twin Oaks WTP. Managed the overall planning review of design-builder's detailed design drawings, specifications, and calculations to make certain the work conformed with agency and industry standards.

Distribution System Maintenance and Rehabilitation Assessment, City of Poway, CA

As Project Manager, oversaw a maintenance and rehabilitation assessment of the City's water distribution system. The scope of work included a detailed condition assessment, estimate of remaining useful life, risk-based rehabilitation and replacement (R&R) analysis, and capital planning evaluation and maintenance program for the City's 289 miles of pipe, 12 pump stations, 20 pressure-reducing stations, and 18 reservoirs.

Jack Adam, PE

Various Water-Related Projects, San Diego County Water Authority (SDCWA), San Diego, CA

As Project Manager, administered the as-needed design and design review services for the SDCWA on a variety of projects. Responsibilities included oversight of a multidiscipline team of in-house personnel and subconsultants including site civil and drainage; mechanical, electrical, and plumbing (MEP); structural, architectural, instrumentation and control (I&C); trenchless construction; large-diameter pipeline design; and heating, ventilation, and air-conditioning (HVAC). Task orders included the following:

- **San Vicente Marina Expansion.** Third-party review and evaluation of civil, structural, architectural, water distribution, and stormwater collection design.
- **Fatal-Flaw Review for the Carlsbad Conveyance Facilities.** These conveyance facilities had 10 miles of high-pressure, 54-inch steel pipe. The review included constructability, operability, and maintainability; conformance to Department of Drinking Water regulations; and conformance to the SDCWA design standard.
- **SDCWA Assistance for the Carlsbad Conveyance Facilities.** Development of steel pipe design criteria to include linings and coatings, shell-thickness design, joint design, and seismic evaluation.
- **Twin Oaks WTP Improvements Project.** Performed conceptual design of the treatment plant improvements.
- **Second Aqueduct Relocation Project.** Performed conceptual design and cost estimating to accommodate the California Department of Transportation (Caltrans) realignment of Highway 76, including relocation of 300 feet of each of three aqueducts ranging from 72 inches to 108 inches in diameter. Developed detail construction schedule and aqueduct shutdown criteria.

Preliminary Design of the Folsom South Canal Connection, East Bay Municipal Utility District, Folsom, CA

As Project Engineer, developed system operations, hydraulics, and optimization studies for 30 miles of 108-inch pipe, a 7 Mgal reservoir, and two 400-cubic-feet-per-second (cfs) pumping facilities to deliver water from the existing Folsom South Canal to the Mokelumne Aqueduct in Northern California. Developed strategies for flow-matching between pumping facilities; methods for hydraulic grade-line matching for blending of flows from different sources in the existing aqueduct system; and communications and control strategies for integrating the operations of the new facilities into an existing network of canals, pipelines, pumping plants, and storage reservoirs.

East and West Spot Pond Supply Mains Early Valve Replacement Contract, Massachusetts Water Resources Authority, Boston, MA

Construction Administrator on this project consisting of valve installations (butterfly valves and appurtenances) on existing 48-inch to 60-inch cast-iron mains to facilitate inspections and future shutdowns of the mains for rehabilitation.

Design-Build of the Carlsbad Conveyance System, San Diego County Water Authority, Carlsbad, CA

Project Manager helping this work that included 52,000 feet of 54-inch welded steel pipe with pressure up to 600 psi for compliance with industry and client standards. The scope of work involved development and review of pipeline structural design, compliance with California Department of Public Health (CDPH) guidelines, evaluation of surge analysis, geotechnical studies, and operations and maintenance issues. Managed the overall design review effort including review of design drawings, specifications, and calculations to make certain the work conformed with agency and industry standards.



Sean Pour, PhD

Pipeline Structural/Remaining Life Modeling Analysis

Sean is the asset management practice lead for Hazen's West Region with a wide range of experience helping clients to be more proactive in planning rehabilitation and replacement activities.

Education

Ph.D., Civil and Environmental Engineering, concentration in Const. Eng. and Mgmt., Oklahoma State University

MS, Civil and Environmental Engineering, concentration in Const. Eng. and Mgmt., Amirkabir University of Technology (Tehran Polytechnic)

BS, Civil and Environmental Engineering, concentration in Const. Eng. and Mgmt., Amirkabir University of Technology (Tehran Polytechnic)

Areas of Expertise

- Asset Inventory / Condition Assessment
- Asset Management
- Life Cycle Cost Analysis
- Risk Assessment
- Capital Improvement Project Validation

Professional Activities

American Society of Civil Engineers (ASCE)

American Water Works Association (AWWA)

Orange County Water Authority Association (OCWA)

Chi Epsilon (The civil engineering honor society)

Yard Piping Condition Assessment, West Basin Municipal Water District, El Segundo, CA

Project Manager. The project entailed development of a risk-based condition assessment program for yard piping at Edward C. Little Water Recycling Facility, Carson and Chevron Treatment Facilities. Facilitated workshops to identify the problematic areas within the facilities and guided the District during the asset inventory and data consolidation. Developed a risk assessment framework for underground assets and quantified consequence and probability of failure for prioritization of assets. Led the team in developing recommended condition assessment methods for each pipe segment and estimating the budgetary cost of the condition assessment program. The next step includes developing a scope of work for condition assessment of critical pipes. Developed an RFP to acquire a condition assessment technology vendor and oversaw the assessment and provided the District with short-, medium- and long-term R&R recommendations.

Mountain House Raw Water Pipeline – Hydraulic Evaluation and Condition Assessment Project, Byron-Bethany Irrigation District, Bryon, CA

Technical QC. The project involved a field investigation, hydraulic evaluation and condition assessment for 3.75 miles of a 30-inch diameter bar-wrapped welded-steel pipeline that delivered raw water to a local community WTP. Hazen team members completed the hydraulic investigation and evaluation of the existing pipeline to document the real-time system pressures, establish the baseline HGL condition and estimate the design HGL for comparison with the real-time data to confirm whether the pipeline pressure were within normal operating parameters for the flow deliveries to the WTP. After a market analysis of viable non-destructive condition assessment technologies, Hazen developed a comprehensive Request for Proposal for solicitation of bids and selection of a vendor to complete a visual (CCTV) and structural inspection of the pipeline to confirm and baseline the pipeline's current condition and identify any repairs that may be necessary including sediment removal. The next phase includes overseeing the field condition assessment and providing rehabilitation and/or replacement recommendations.

10-Year CIP Plan, Goleta Sanitary District, Goleta, CA

Asset Management Specialist. Assisted with development of 10-year CIP for the wastewater treatment plant, sewer collection system and lift stations based on the results of the asset management model. Worked with the District in business case evaluation to rank replacement and rehabilitation projects for the wastewater treatment plant and the collection system. Developed a Microsoft PowerBI dashboard to streamline CIP project validation and visualization of the 10-Year CIP.

Asset Management Plan for Pump Stations, Rancho California Water District, Temecula, CA

Project Manager. Led the development of an Asset Management Plan (AMP) for 38 pump stations at Rancho California Water District, focusing on increasing reliability and minimizing risk exposure. Managed asset inventory, visual condition assessments across civil, mechanical, structural, electrical, and I&C disciplines, and developed a structured, repeatable condition scoring system. Using condition assessment results, determined remaining useful life, probability of failure, and risk prioritization for rehabilitation and replacement projects. Developed a digital AMP using Microsoft Power BI, integrating real-time field data through Survey123 forms. The AMP BI application provided dynamic updates, automatically adjusting condition scores and accounting for asset deterioration, enabling proactive lifecycle planning and maintenance strategies.

Digital Asset Management Plan, Water Replenishment District, Torrance, CA

Project Manager. Led the development of a custom Asset Management Planning (AMP) BI application for WRD using Microsoft Power BI. Managed the project through a phased approach, conducting condition and risk assessments across WRD's treatment plants. The solution integrated data from multiple sources, automating updates from field activities and enhancing decision-making through real-time insights. This project optimized WRD's asset management, reducing manual processes, improving data accuracy, and enabling predictive asset lifecycle strategies.

Sewage Lift Station Condition and Risk Assessment, Eastern Municipal Water District, Perris, CA

Asset Management Lead. EMWD identified 38 of the 47 lift stations for complete at grade visual condition assessment. Led the team in performing field condition assessment and risk assessment (i.e., Likelihood of Failure and Consequence of Failure) rating for each lift station asset and each lift station district-wide, to determine appropriate maintenance activities and rehabilitation or repair alternatives and cost estimates. The outcome of this Project was EMWD was provided with the data and tools, including an interactive Dashboard to confidently make decisions that will ensure the long-term functionality and reliability of each lift station for EMWD's future needs.

Water Resource Recovery Facility (WRRF) Asset Management Plan & 10-Year CIP, Goleta Sanitary District, Goleta, CA

Asset Management Specialist. Hazen developed a 10-Year CIP for the District WRRF. Hazen conducted a condition assessment of all WRRF assets and utilized the results of the condition assessment to calculate remaining useful life and determine the probability of failure. The criticality of all assets, including an administration building, were assessed and a prioritized list of rehabilitation and replacement needs for existing assets was developed.



Jorge Rodriguez, PE

QAQC

Jorge is a licensed professional civil engineer and former utility manager with 20 years of experience in utility management, condition assessment, asset management and project management.

Education

BS, Civil Engineering, University of Puerto Rico Mayagüez Campus

Certification/License

Professional Engineer

Areas of Expertise

- Utility Management
- Operations Management
- Condition Assessment
- PCCP Management
- Program/Project Management

Project 1201 – Large Diameter Transmission Main Condition Assessment, Analysis and Long-Term Monitoring, City of Baltimore, MD

Program Manager. Responsible for overseeing and managing a multidisciplinary group of engineers, technicians and administrative staff, all working to implement the City's approach to large-diameter infrastructure management. Key responsibilities included the complete lifecycle of project and program management, from scope development, strategic planning, resource allocation and personnel scheduling.

Pure Technologies, Various Locations

Program Manager. Developed, executed, and managed Pure Technologies' largest and most comprehensive water infrastructure condition assessment programs that use a variety of state-of-the-art technologies to assess and monitor major utilities' large diameter transmission mains. Provided engineering services, project management, and overall coordination of two of the largest and most comprehensive PCCP condition assessment programs in the country. Managed a group of engineers, technicians, and administrative staff with different experience levels. Responsible for overseeing project and program cycle including RFI, RFP, contract negotiation and execution, program financials, strategic contract planning, resources, and personnel scheduling. Established program tracking and P&L reporting for all Mid-Atlantic projects, cost control and project dashboards with the finance department for quick and accessible reporting. Continuously worked with the management team in defining, adjusting, implementing, and monitoring the company's growth strategies. Supported and developed PMGO best practices for project management. Initiated recurring internal and external outreach activities for employees and clients.

Jorge Rodriguez, PE

Washington Suburban Sanitary Commission, Laurel, MD

Acting Director Utility Services. Lead the overall operations of WSSC Water's Utility Services Department. Plan, organize, and direct the activities of over 500 employees with duties including the operation and maintenance of nearly 6,000 miles of water pipeline, over 5,600 miles of sewer pipeline, and over 500,000 water meters spanning across a service area of 1,000 square miles. This vast infrastructure is managed by nine divisions including water distribution maintenance & emergency repairs, meter operations, collection system assessment & regulatory compliance, emergency calls & dispatch operations and training & development. Duties include preparing and administering a \$120M departmental budget in a fiscally responsible manner. Effectively communicate and engage internal and external stakeholder groups on behalf of the Utility Services Department and WSSC Water. Provide input and resolution to customer concerns. Develop and implement policies, processes, and procedures to drive operational efficiencies. Negotiate collective bargaining agreements and manage all aspects related to the department staff.

Washington Suburban Sanitary Commission, Laurel, MD

Deputy Director Utility Services. Provided leadership, assistance, and support for planning, directing, coordinating, and supervising the repair and maintenance of water distribution and wastewater collection systems assets as well as meter operations. As the Deputy, I served as the principal assistant to the Department's Director and oversaw six of the nine divisions of the Utility Service Department. Provided 24-hour on-call and technical support to critical matters as needed. Managed, tracked, and balanced the departmental budget. Provided technical assistance and coordination for complex infrastructure projects and customer concerns. De-escalated, resolved, and closed customer, employee, and other concerns/matters to minimize executive team involvement. Developed standardized reports and dashboards across several divisions that provided access to otherwise unavailable information in those divisions. Developed division-specific Key Performance Indicators to provide visibility, accountability, and drive efficiencies across the different teams. Tracked and optimized overtime and additional regular pay use to areas where the business required it. Led change management initiatives to transform reactive into proactive operations. Explored and drove innovative technologies, methods, and strategies to keep the department at the leading edge in the industry. Initiated a regional supervisor program/collaboration with other water utilities to provide insight and exchange information across mid-level managers within our region. Proposed and championed an initiative to develop a centralized training facility first of its kind in the water sector that will position WSSC Water ahead of any other utility in the region. Served as co-chair for the "New Normal Task Force" during the COVID-19 pandemic. Developed emergency preparedness and response plans for general WSSC Water operations. Maintained all field operations throughout the COVID-19 pandemic with minimal operational impact while keeping our front-line workforce safe.



Murat Engindeniz

Ph.D., P.E., P.Eng.

Principal, VP

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REGISTRATIONS

Professional Engineer

AR	AZ	CA
CO	DC	FL
GA	KY	LA
MA	MD	MI
MN	MO	NC
NJ	NM	NV
NY	OH	OK
SC	TN	TX
UT	VA	WA
WY		

AB	BC	ON
SK		

OTHER

NCEES

EDUCATION

Georgia Institute of Technology, Atlanta, GA

Ph.D. in Structural Engineering, 2008

M.S. in Structural Engineering,
Mechanics and Materials, 2002

Middle East Technical University, Ankara, Turkey

B.S. in Civil Engineering, 2000

Dr. Engindeniz specializes in analysis, condition assessment, and rehabilitation of pipelines using state-of-the-art technologies. His experience includes more than 500 pipeline projects for water/wastewater and power utilities in the U.S., Canada, and abroad, some of which are listed below. He is the Chair of American Water Works Association (AWWA) Subcommittee M81 - Rehabilitation of Large Diameter Water Mains and managed the Water Research Foundation Projects that form the technical basis of AWWA Standard C305 – CFRP Renewal and Strengthening of PCCP.

Experience

- | Simpson Gumpertz & Heger Inc. From 2008 to present.
- | Georgia Institute of Technology. From 2000 to 2008.

Representative pipeline-related assignments

- | **San Diego County Water Authority, San Diego, CA.**
 - | As-needed design, construction monitoring and testing services for CFRP repair of PCCP (ongoing).
 - | Structural evaluation and finite element analysis of failure risk of all (i.e., over 6,000 pipe segments of 66 in. to 96 in.) prestressed concrete cylinder pipe (PCCP) in Pipeline 4 and Pipeline 5 of the Second Aqueduct and in the Crossover Pipeline.
 - | Finite element analysis of thrust restraint, failure investigation, and CFRP strengthening for horizontal bends in Pipeline 4 and Pipeline 5 at Moosa Canyon.
- | **Metropolitan Water District of Southern California, Los Angeles, CA.** Multiple projects, including CFRP repair of 54 in. to 201 in. PCCP in Calabasas, San Diego #4, San Diego #5, Auld Valley, Lake Skinner, AMP, Sepulveda, Foothill, and Second Lower Feeder Pipelines.
- | **Santa Margarita Water District, Rancho Santa Margarita, CA.** Condition assessment of 42 in. steel suction header at Lakeside Pump Station.
- | **Calleguas Municipal Water District, Thousand Oaks, CA.** Engineering services for setting vibration criteria and designing CFRP liner for 51 in. CCSB pipeline.
- | **South Coast Water District, Laguna Beach, CA.** Multiple projects involving condition assessment, failure risk analysis, thrust restraint analysis, and repair of 60 in. PCCP in Joint Transmission Main.
- | **Orange County Sanitation District, Fountain Valley, CA.** Multiple projects, including CFRP repair of 36 in. FRP pipe in Newport Trunk Sewer and Force Main; CFRP repair of 24 in. and 42 in. risers in 120 in. concrete pipe, OOBs Phase 2; CFRP repair of 78 in. and 84 in. RCP in Interplant Effluent Pipeline.
- | **Silicon Valley Clean Water Treatment Plant, Redwood City, CA.** CFRP repair of 42 in. and 60 in. steel influent pipes.
- | **City of Mesa, AZ.** Multiple projects including condition assessment of PCCP, BWP and DIP, and thrust restraint analysis and failure risk analysis of PCCP in several transmission mains. (50 miles of condition assessment since 2016.)

- **City of Tucson Water Department, AZ.** Multiple projects including failure risk analysis and CFRP repair of 54 in. to 96 in. PCCP in transmission mains.
- **City of Houston, TX.** Finite element analysis of large-diameter interconnection to an existing 96 in. PCCP while in service.
- **North Texas Municipal Water District, Wylie, TX.** Multiple projects, including condition assessment, failure risk analysis, and CFRP repair of 72 in. PCCP in Texoma Pipeline.
- **Trinity River Authority of Texas, TX.** CFRP repair of 96 in. HOBAS tee in Elm Fork Relief Interceptor.
- **Tarrant Regional Water District, TX.** CFRP repair of 72 in. PCCP in Cedar Creek Pipeline.
- **City of Wichita Falls, Wichita Falls, TX.** Failure risk analysis of 54 in. PCCP in 13 mi-long Lake Arrowhead raw water transmission main.
- **City of Austin, TX.** CFRP repair of 54 in. PCCP in Bryker Woods Pipeline.
- **Comision de Agua del Valle de México, Tlahuac, México.** Failure risk analysis of 48 in. PCCP in 17 km long Tlahuac Aqueduct.
- **Dallas Water Utility, TX.** Multiple projects, including CFRP repair of 36 in. PCCP under Expressway U.S. 77; CFRP repair of 96 in. PCCP in the Jim Miller Transmission Main.
- **Denver Water Department, Denver, CO.** Failure risk analysis of 66 in. and 72 in. PCCP in 10.9 mi-long Conduit 94.

Professional activities

- **American Water Works Association (AWWA):** Member.
 - AWWA M81 – Rehabilitation of Large-Diameter Water Mains: Chair
 - AWWA M77 – Condition Assessment: Member.
 - AWWA C305 – CFRP Renewal and Strengthening of PCCP: Member.
 - AWWA Water Main Rehabilitation Committee: Member.
 - AWWA Standards Committee on Pipe Rehabilitation: Member.
- **ASTM International:** Member.
 - ASTM D30.10 Subcommittee on “Standard Specification for Inspection of Fiber-Reinforced Polymer (FRP) Systems and Application for Repair and Strengthening of Civil Structures”: Member and Secretary.

Recent publications and presentations

Forty publications and presentations on pipeline engineering available upon request, including the following:

- **Engindeniz, M., and C. Rohlman,** "Systematic Condition Assessment and Repair of City of Mesa's Transmission Main Network," AZ Water Association Conference, 2024.
- **Engindeniz, M., R. Kumar, S. Hsieh, and T. Bontrager,** "Bringing Multiple Assessment Methods to Bear to Manage a 1970s PCCP Transmission Main Susceptible to Continuing Wire Breakage," ASCE Pipelines Conference, 2024.
- **Engindeniz, M., and A. Addisho,** "Independent Comparison of Electromagnetic Inspection Tools for AWWA C303 Bar-Wrapped Pipe by Blind Verification Testing," ASCE Pipelines Conference, 2024.
- **Kuruva, P., G. Henry, and M. Engindeniz,** "Evaluation of Large-Diameter Interconnection to an Existing 96-in. PCCP," ASCE Pipelines Conference, 2023 – **Best Paper Award.**
- **Fountain, B., M.R. Coghill and M. Engindeniz,** "San Diego County Water Authority's Rapid Response to Thrust Restraint Issues in the Second Aqueduct at Moosa Canyon," ASCE Pipelines Conference 2021 – **Project awarded the ASCE San Diego Section 2021 Award of Excellence.**
- **Engindeniz, M.,** "Lessons Learned from 100+ Projects on CFRP Repair of Pipelines," North American Society for Trenchless Technology No-Dig Show, Washington, DC, 2017.



Ashley Mitchell, MPA, CRL

Pipeline Structural/Remaining Life Modeling Analysis

Ashley has 11 years of experience in the water and wastewater field. She specializes in pipeline condition assessment, risk modeling, capital planning, and asset management best practices.

Education

BA, Communication and Sociology, Saginaw Valley State University

Master of Public Administration, Saginaw Valley State University

Certification/License

Certified Reliability Leader

NASSCO PACP & MACO

TAMC PASER

Areas of Expertise

- Asset Management
- Condition Assessment
- Maintenance and Reliability Best Practices
- Capital Improvement Planning

AM CMOM Implementation, Sarasota, FL

ROLE. Helped develop condition assessment templates and applications for the detailed condition assessment of approximately 450 of the county's lift stations, including the development of dashboards for analysis and presentation tools. Supported the development of risk framework development, asset inventory refinement and process, and overall maintenance programs.

Organizational Assessment and Strategic Plan, Columbus DPU, Columbus, OH

ROLE. Developed PESTELO assessment for organizational self-assessment, analyzed results, and presented findings. Led interviews with the Executive Team, Directors, and Key Leaders of the DPU to understand past, existing, and future elements of the organizational mission, vision, and core values, as well as identified key issues facing the organization. Developed technical reports providing analysis and action plans for the overall assessment and strategic plan.

Lake Huron WTP, High Lift Pumping, Metering and Yard Piping Improvements, GLWA, Detroit, MI

Asset Management Lead. Completed GLWA's asset turnover form (ATF) for asset onboarding, and coordinating with subconsultants and GLWA to ensure all documentation is aligned. Assets were identified as being new (added), modified, or retired/decommissioned. Identification of O&M tasks, OEM spare parts, warranty information, and any other relevant elements that need to be input into GLWA's CMMS system was completed.

Ashley Mitchell, MPA, CRL

Linear System Integrity Program (LSIP), GLWA, Detroit, MI

Program Manager. Served as the asset management subject matter expert on the linear system which included the management of a \$29 million contract. GLWA has over 800 miles of large diameter transmission main and over 200 miles of trunk sewers that fall under the LSIP. This program included the development of asset management frameworks for both the water and wastewater systems, along with planning, designing, and executing condition assessments on water transmission mains. As program manager, she was required to be nimble in accommodating the utility's needs and acting proactively at opportunistic assessments and renewals.

Strategic Asset Management Plan (SAMP), GLWA, Detroit, MI

Linear System AM Lead. Led the data and technology team. She has a strong background in data management and utilizing emerging technologies through intelligent means. Ms. Jacqmain was also the linear system asset management subject matter expert for this program and on the core team that developed and ultimately approved the final version of the SAMP.

Wastewater Asset Management Plan (WWAMP), GLWA, Detroit, MI

Linear System AM Lead. Led the linear system component of this plan throughout the project. This included coordinating with the consultant regarding their proprietary risk model (SCREAM), and GLWA's wastewater linear risk model using Innovyze InfoAsset Planner. Other components of the WWAMP included asset risk, risk treatment, O&M of linear assets, asset profile, and risk tolerance. The development of the WWAMP directly guided GLWA into the wastewater component of the LSIP, including life cycle modeling and projections of future renewal needs.

Sewer Inspections and NASSCO Alignment, GLWA, Detroit, MI

Project Manager. Developed standards and specifications for sewer inspections to align with NASSCO PACP and MACP guidelines for GLWA. She acted as the QA/QC officer for GLWA for all data received in all condition assessments, as well as the program manager for all Linear System Asset Management dashboarding through ArcGIS online.

AMSO LSIPT, GLWA, Detroit, MI

Team Lead. Led GLWA's Asset Management Strategic Organization (AMSO)'s Linear System Integrity Program Team (LSIPT). This team was created to provide oversight and governance for GLWA's linear system assets, which encompass both water and wastewater. Ms. Jacqmain ensured that the team is truly cross-functional and represents competing interests.

Yard Waste and Recycling Program, City of Saginaw, MI

Deputy Lead. Helped lead the development of an internal proposal to bring recycling and yard waste services back in-house as an alternative to contracting the work for a 10-year period, resulting in an estimated \$3 million savings over the entire contract length. She also prepared bidding and contract documents, press releases, council communications, and various technical reports.



David Villarta, PE, CMM, PSP, CEP

Rehab & Replacement Plan

David has extensive experience in construction management, having been involved in construction projects ranging from \$1 million to \$264 million.

Education

BS, Virginia Polytechnic Institute and State University, Mechanical Engineering

Certification/License

Professional Engineer: CO, MD

Planning and Scheduling Professional (PSP)

Certified Construction Manager (CCM)

Certified Estimating Professional

Areas of Expertise

- Construction Management
- Project Controls
- Scheduling
- Cost Estimating
- Asset Management

He has been involved in capital programs of over \$800 million and up. He's provided comprehensive, on-site condition assessments of numerous water and wastewater facilities throughout the country, including flocculation & sedimentation basins, aeration tanks, clarifiers, and digesters.

Treatment Plan Facility Improvement Master Plan, Long Beach Water District, Long Beach, CA

Mechanical/Electrical/Structural Assessment. Performed on-site electrical, mechanical, and structural condition assessments of facility asset inventory, including flocculation & sedimentation basins, chlorine contactors, clarifiers, and pump station.

Lakeside Valve Station Replacement, City of San Diego, CA

Resident Engineer. This project was a \$43 million replacement of the existing 1947 vintage Lakeside Valve Station and associated pipeline upgrade and realignments. The existing and proposed stations are critical infrastructure for the City to control the transfer of water from San Vicente and El Capitan Reservoirs to the Alvarado Water Treatment Plant. Replacement of the station and reconfiguration of large diameter inlet piping is required for the City to reliably maintain access to local water supply and emergency backup supplies. Hazen is providing full construction management and inspection services including project administration, inspection, special inspection, material testing, start-up and commissioning along with schedule and budget control.

Little Patuxent Water Reclamation Facility, Howard County, MD

Resident Engineer. Providing full-time, on-site construction management and inspection services, including monthly construction progress schedule update reviews for this \$9 million upgrade to the plant's back up power system. Project includes the installation of back up gensets, controls, switchgear and significant civil design and construction.

David Villarta, PE, CMM, PSP, CEP

ENR Process at Back River WWTP, City of Baltimore DPW, MD

Project Controls & Inspector. Provided full time, on-site document management and inspection services for a comprehensive ENR process upgrade, including rehabilitation of clarifiers and new filters, and a new 108" welded steel interceptor pipe for this critical \$264 million project. Trained inspectors in the new construction document management system, and reviewed RFIs and submittals. Also helped in developing web-based tools for managing submittals.

Frederick Wastewater Treatment Plant ENR, City of Frederick, MD

Scheduling and Controls, Office Engineering, and Inspection. Provided a number of CM services on this \$40 million enhanced nutrient removal upgrade for the City of Frederick. The overall project includes the construction of emergency generator and substation structures, truck unloading, mechanical screen installation, modifications to equalization basins, bioreactor construction, RAS pumping, denitrification filter pumping station and UV facility, denitrification filters, chlorine contact tank modifications, primary scum removal, ferric chloride system, waste sludge thickening, dewatering, and general building additions and modifications to the admin building and other structures.

On-Call Services, City of Glendale, CA

Inspector. Provided inspection services for new water main installation and pump station upgrades. The \$3.6 million project installed a new force main, control valves, and connections in an urban and suburban setting. On another Task, inspection services for electrical and mechanical pump station improvements were provided.

On-Call Services, Byron-Bethany Irrigation District, Byron, CA

Inspector. Provided inspection services for installation of 4200 LF of new 42" stormwater culverts system for a \$2.2 million project.

Northeast River AWWTP ENR Expansion, Cecil County, MD

Project Controls. Provided schedule reviews and project controls for the \$26 million upgrade of the Northeast River Advanced Wastewater Treatment facility from BNR to ENR processes, includes the expansion of the plant's existing influent pump station, modifications to existing oxidation ditches and yard piping, and construction of a new supplemental carbon facility and MBR facility.

Guilford Reservoir Improvements, City of Baltimore, MD.

Resident Engineer. On-site Engineering and QA services for this \$55 million project, including submittal and change order reviews during construction of 2 underground finished water storage tanks with capacity of 13 million gallons and new underground control vaults.

ENR Process at Back River Wastewater Treatment Plant, City of Baltimore DPW, MD

Project Controls. Also provided document management using Primavera Contract Management. Trained inspectors in the City's new Daily Reports system, provided occasional site inspection, and reviewed RFIs and submittals. Also helped in developing web-based tools for managing submittals.

Rehabilitation of Fort Reno Pump Station, DC Water, DC

Project Controls. Performed document management using Primavera Contract Management. Also provided cost estimates and change orders, project close-out, inspection, and submittal review.



Becky Andrus, PE, NACE CP-1

Pipeline & Soil Corrosion Analysis

Becky has created, implemented, and run corrosion programs for water utilities that address external corrosion for water treatment plant piping, water storage tanks/towers and buried pipelines.

Education

BS, Civil Engineering, Cornell University

Certification/License

Professional Engineer

Areas of Expertise

- Project Management
- Ground and elevated water storage design, maintenance inspection
- Corrosion program development and management
- Site security
- Public Bidding and Construction administration
- Development of utility design standards for water mains, inspection and corrosion

Kirtland Crib Rehabilitation, Cleveland Water, Cleveland, O

Project Manager. Responsible for all CWD project management including ensuring CWD standards were applied, CWD plant management requirements were fulfilled, and internal coordination. This project's goal is to rehabilitate the Kirtland Crib located in Lake Erie. The Crib is a 100-foot diameter steel structure protecting the intake for the Baldwin Water Treatment Plant.

Corrosion Prevention and Control Program (CPC), Cleveland Water, Cleveland, OH

Program Manager. Developed CWD's CPC Program to address corrosion on buried pipelines, on tanks and towers, and exposed piping inside plants. Used AMPP (formerly NACE) standards and industry best practices to create standards, specifications, and a program philosophy. This effort included the creation of the Corrosion Prevention and Control Design Manual, which outlines when cathodic protection is merited and to what level.

Corrosion Construction Indefinite Delivery Indefinite Quantity (IDIQ) Construction Contract, WSSC, Laurel, MD

Contract Manager. Managed Corrosion Construction on-call contract including coordinating tasks, reviewing and approving pay requests, and keeping all stakeholders informed.

Specification Development and Maintenance, Cleveland Water, Cleveland, OH

Author/SME. Developed (fire hydrants, large gate valves) and maintained (valve boxes and lids, small valves, repair clamps and couplings) specifications for the Pipe Repair section of Cleveland Water. After bids were received, evaluated previously unapproved products for compliance with Cleveland Water specifications. Evaluated new products for inclusion in Cleveland Water specifications.

Loan & Grant Management, Cleveland Water, Cleveland, OH and City of Rockville, MD

Loan Applicant & Manager. Applied for and was awarded \$11.8M loan for the Richfield Water Tower and \$9.8 M loan for the Richfield Pump Station through Ohio's SRF program. Responsible for ensuring that all 2023 loan requirements were met (Davis-Bacon, American Iron & Steel, EEO, Small Businesses in Rural Areas (SBRA), Debarment & Suspension, DBE) and for processing payments and change orders through OEPA. In Maryland, applied for and received over \$1M of MD SRF funding (grant for Water Treatment Upgrades and loan for Stream Restoration). Managed the funded projects (Water Treatment Plant Upgrades & Stream Restoration), included all SRF required paperwork.

Security Improvements, Phase II, Cleveland Water, Cleveland Water Pollution Control & Office of Radio Communication, Various, OH

Project Manager. Responsible for all CWD project management including ensuring DPU (City of Cleveland, Department of Utilities) security and safety standards were applied, internal coordination, drawing and specification review, bidding, bid evaluation, construction management, inspection, project close-out. This project installed perimeter detection at various water treatment plants, water tower sites, radio towers, and administrative buildings. Perimeter detection included TIR (thermal radar), microwave detection and various cameras. Interior security measures included installation of cameras and door access control. This project also repaired or replaced damaged exterior doors to further harden the perimeter.

Systems Enhancement Unit Small Diameter Water Main Replacement, WSSC, Various, MD

Program Manager & Project Manager. Managed in-house program which produced 12 miles water main replacement design annually. This included management of a team of CAD drafters and design engineers. Also, managed each project that was created thru this program including survey coordination, drawing and specifications review and approval, construction coordination activities. This program produced design drawings for the Systems Enhancement Unit (SEU) of WSSC to install during the summer months.

Kirtland Pump Station Raw Water Main Lining, Cleveland Water, Cleveland, OH

Project Manager. Responsible for all CWD project management including ensuring CWD design standards were applied, potential liner research, internal coordination, drawing and specification review, bidding, and bid evaluation. This project was for SIPP (spray-in-place pipe) lining of 48" Steel Raw Water Main at Kirtland Raw Water Pump Station.

Ridge Road Transmission Main Renewal, Cleveland Water, Brooklyn, OH

Project Manager. Responsible for all CWD project management including ensuring CWD design and corrosion standards were applied, internal coordination, drawing and specification review. This project consisted of lining Ridge Road 36" Steel Transmission Main with close-fit HDPE.



Brian M. Pailes

Ph.D., P.E., NACE CP-4

Associate Principal

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REGISTRATIONS

Professional Engineer

AZ	DC	FL
LA	MN	MS
NH	NJ	NY
PA	RI	TX

CERTIFICATIONS

OSHA 30-Hour

OSHA Aerial Lift Operator

OSHA Fall Protection

EDUCATION

Rutgers University, Piscataway, NJ

Ph.D. in Civil Engineering, 2014

University of Virginia, Charlottesville, VA

M.S. in Civil Engineering, 2009

Northeastern University, Boston, MA

B.S. in Civil Engineering, 2007

Brian specializes in cathodic protection (CP), nondestructive testing, concrete deterioration, reinforced concrete corrosion, and concrete materials. He has worked on a wide variety of structures worldwide, with an emphasis on buried infrastructure, bridges, and port facilities. Brian's expertise includes solving durability challenges for infrastructure, developing rehabilitation strategies for ailing structures, and extending their service life. He has performed material testing and nondestructive evaluations on structures all over the U.S.

Experience

- | Simpson Gumpertz & Heger Inc. (SGH). From 2024 to present.
- | VCS Engineering, Inc. (VCS). From 2014 to 2024.
- | Transportation Infrastructure Systems (TIS). From 2010 to 2014.

Selected corrosion-related assignments

- | **Southwest Florida Water Management District, Tampa, FL.** CP specialist services during concrete repairs and CP installation for Structure 160, including reviewing contractor submittals and performing installation quality control.
- | **Confidential Condominium, Sarasota, FL.** Testing and evaluation of domestic water pipe deterioration issues.
- | **Honouliuli Wastewater Treatment Facility, Honouliuli, HI.** Designed a galvanic CP system to provide corrosion protection to ductile cast iron water pipelines. Design included the development of drawings and specifications. (With VCS.)
- | **Pipeline, Old Dowd Road, Charlotte, NC.** A new pipeline was installed along the road at the Charlotte International Airport. Due to the corrosivity of the soil, a galvanic CP system was installed on the pipeline to provide corrosion mitigation. Performed quality control and commissioning on the new galvanic anodes using various test stations to ensure that the anodes were properly installed. (With VCS.)
- | **Chalk Point Generating Station, Cooling Tower 3, Aquasco, MD.** The power station uses water from the Chesapeake Bay, which is brackish and contains chlorides. Severe corrosion of the reinforced concrete parabolic cooling tower occurred due to prolonged exposure to chlorides. Designed and installed a CP system with remote monitoring to prevent further corrosion activity of the structure. (With VCS.)
- | **Wastewater Pipeline, Archer Daniels Midland, Decatur, IL.** The facility has a wastewater pipeline made of ductile cast iron. Performed a corrosion assessment to determine the current risk along the pipeline and identify areas requiring further investigation using excavations to assess section loss. (With VCS.)
- | **Pipeline, Long Island Railroad, Queens, NY.** Installed a CP system for steel casing on a pipeline running under the Long Island Railroad tracks to protect it from soil and stray-current corrosion. Performed testing and inspection of the CP system and test stations to verify proper installation. Identified required corrections and verified that the contractor performed those corrections and commissioned the system. (With VCS.)
- | **Sanford Power Plant, Sanford, FL.** Various buried pipelines throughout the facility had galvanic anodes with test stations. As part of repairs to the facility, installed new galvanic anodes and performed quality control and commissioning using the test stations to ensure proper installation of the CP system. (With VCS.)

- **New Waterline, Roosevelt High School, Honolulu, HI.** Upgrades and extensions at the school included installing new waterlines to the primary city connection. Due to Hawaii's soil corrosivity, a galvanic CP system was required. Designed the system, including drawings and specifications. (With VCS.)
- **MacDill Air Force Base (AFB), Fire Protection Systems, Tampa, FL.** MacDill AFB utilizes CP to prevent corrosion on their water storage tanks and buried pipes. Regularly performed inspection and testing of the CP systems to ensure they are properly protecting the fire protection systems from corrosion. (With VCS.)
- **Tyndall Air Force Base, Panama City, FL.** A significant expansion of base facilities was under a design-build contract. Designed a CP system for the buried steel pipelines and water storage tanks. (With VCS.)
- **Schofield Barracks, O'ahu, HI.** Designed a galvanic CP system to provide corrosion protection to various buried waterlines. (With VCS.)
- **Brooklyn Queens Expressway (BQE), New York, NY.** 1.2 mi of the BQE is undergoing a major restoration in a congested part of New York City. Performed concrete sampling, laboratory testing, durability analysis, and nondestructive testing of various structural elements along the BQE to understand the structure's remaining service life. (With VCS.)
- **Reservoir Tank, Burley, ID.** The below-grade reservoir has an unbonded monostrand post-tensioned roof slab. Water infiltrated the sheathing, causing corrosion and failure of the tendons. Developed repairs for the roof slab to prevent further corrosion and deterioration. (With VCS.)
- **Pine Grove Dam, Oxford, PA.** Performed an investigation to determine the cause of corrosion to the lift gate chains of the dam. The chains were corroded to such a degree that the links were seized, preventing the chain from moving over the gears and reducing the range of motion for the gate. Performed a corrosion assessment of the water behind the dam and found it to be very corrosive. Designed a trial CP system with monitoring to determine if new chains could be kept from corroding. (With VCS.)
- **Florida Department of Transportation (FDOT), Monitoring and Maintenance of Impressed Current Cathodic Protection (ICCP), Statewide, FL.** Monitored and maintained every ICCP system on FDOT-owned bridges throughout the state of FL. Regularly tested each system to ensure it was protecting FDOT structures from corrosion per applicable standards. (With VCS.)
- **Western Canal Culvert Under I-10, Phoenix, AZ.** Performed an investigation on a buried reinforced concrete culvert that was experiencing corrosion deterioration to determine the extent and severity of the corrosion. Using the findings from the investigation, designed galvanic CP for the culvert to mitigate corrosion. Performed onsite quality control during installation of the CP system to ensure it was installed per design and commissioned the system for the owner. (With VCS.)
- **Western Canal Culvert under I-10, Phoenix, AZ.** A buried reinforced concrete culvert was experiencing corrosion deterioration. Performed an investigation of the culvert to determine the extent and severity of the corrosion. From the findings of the corrosion investigation, designed galvanic cathodic protection for the culvert to mitigate corrosion. Performed on-site quality control during installation of the cathodic protection system to ensure the system was installed per design and commission the system for the owner. (With VCS.)

Professional activities

- **Association for Materials Protection and Performance (AMPP) (Formerly NACE).** Cathodic Protection Specialist CP-4.
- **AMPP Standards Committee - SC 12 - Concrete Infrastructure.** Chairman.
- **Transportation Research Board Corrosion Committee AHD45.** Active Technical Committee Member.
- **American Society of Nondestructive Testing Infrastructure Committee.** Active Technical Committee Member.
- **American Association of Port Authorities Facilities Engineering Committee.** Active Committee Member.

Recent publications and presentations

- **Ball, J.C., Miltenberger, M., and Pails, B.M.,** "Distributed Galvanic Anode Performance on Bridges in the U.S.," *Materials Performance Magazine*, March 2024.
- **Pailes, B.M.,** "Corrosion Mitigation and Prevention of Port Infrastructure," *ASCE Ports*, Honolulu, HI, September 2022.
- **Pailes, B.M.,** "Reinforced Concrete Damage Identification through Fusion of Multi-Modal Non-Destructive Testing Data," *Transportation Research Board 99th Annual Meeting*, Washington, DC, January 2020.

Appendix B

Additions, Deletions, and/or Exceptions

Exceptions

Hazen has reviewed the Request for Proposals (RFP) and Exhibit C entitled “Standard Construction Agreement” and offers the following exceptions for the City’s consideration and as a starting point for negotiations to develop acceptable terms and conditions for both parties.

Suggest Adding Paragraph V.4 Force Majeure:

Neither Party shall not be liable to the other for any delay or failure to perform under this Agreement caused by events or circumstances beyond its reasonable control, including without limitation, an act of God, war, riot, civil commotion, explosion, fire, government action, court order, epidemic, or pandemic. The CONSULTANT shall have an additional amount of time to be agreed upon in writing between the Parties in which to complete the work.

Paragraph VI.2 Subcontractors and Outside Consultant – Suggest replacing language:

“as CONSULTANT is for the acts and omissions of persons directly employed by the CONSULTANT”

with

*“as CONSULTANT is for the **negligent** acts and omissions of persons directly employed by the CONSULTANT”.*

Paragraph VI.3 Ownership of Documents - Suggest adding the following language:

“Notwithstanding anything in this AGREEMENT to the contrary, CONSULTANT shall retain ownership of all intellectual property, including work papers, templates, details, designs, drawings, plans, renderings, analyses, calculations, models, software, macros, applications, specifications, processes, procedures, interim or draft documents, methodologies, know-how, and any other instruments of service: (a) belonging to CONSULTANT prior to the effective date of this AGREEMENT; (b) developed by CONSULTANT outside the scope of, or not exclusively pursuant to this AGREEMENT; (c) licensed by CONSULTANT from a third-party; and (d) developed by CONSULTANT under this AGREEMENT, but which are generic, generally applicable to or standard in CONSULTANT’S business (collectively, “Existing IP”). To the extent the DISTRICT’S receipt of any services under this AGREEMENT requires the use of CONSULTANT’S Existing IP, to the extent of CONSULTANT’S ownership and control thereof, CONSULTANT hereby grants to the DISTRICT, upon full payment due under this

AGREEMENT, subject to any dispute rights herein, a limited, non-sublicensable, non-transferable, royalty-free license to use said Existing IP solely and to the extent necessary to achieve the purposes of providing the services under this AGREEMENT.”

Paragraph VI.4.A Indemnification for Design Professional Services – Suggest adding the following after “SUBCONTRACTOR, material men, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT shall bear the legal liability thereof) in the performance of design professional services under this AGREEMENT”:

“, but only to the extent caused in whole or in part by the negligence, recklessness, or willful misconduct of CONSULTANT.”

Paragraph VI.4.B.i Other Indemnities – suggest replacing the current paragraph with:

Other than in the performance of design professional services, and to the fullest extent permitted by law, CONSULTANT shall, at its sole cost and expense, defend, hold harmless and indemnify the INDEMNITEES from and against any and all third-party damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens and losses of any nature whatsoever, including reasonable fees of accountants, attorneys or other professionals, and all costs associated therewith, ~~and the payment of all consequential damages,~~ in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of CONSULTANT, its officers, agents, servants, employees, SUBCONTRACTORS, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT shall bear the legal liability thereof) in the performance of this AGREEMENT, but only to the extent caused in whole or in part by the negligence, recklessness, or willful misconduct of CONSULTANT. ~~including the INDEMNITEES’ active or passive negligence, except for claims arising from the sole negligence or willful misconduct of the INDEMNITEES, as determined by final arbitration or court decision or by the agreement of the PARTIES. CONSULTANT shall defend the INDEMNITEES in any action or actions filed in connection with any claim with counsel of the INDEMNITEES’ choice, and shall pay all costs and expenses, including all attorneys’ fees and experts’ costs actually incurred in connection with such defense. CONSULTANT shall reimburse the INDEMNITEES for any and all legal expenses and costs incurred by the INDEMNITEES in connection therewith.~~

Paragraph VI.4.B.iii Other Indemnities - suggest replacing the current paragraph with:

CONSULTANT shall obtain executed indemnity agreements provisions identical to those in this Section VI.4 from each and every SUBCONTRACTOR or any other person or entity involved by, for, with or on behalf of CONSULTANT in the performance of this AGREEMENT. If CONSULTANT fails to obtain such indemnities, CONSULTANT shall be fully responsible and indemnify hold harmless and defend the INDEMNITEES from and against any and all claims in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of CONSULTANT’s SUBCONTRACTORS,

*its officers, agents, servants, employees, SUBCONTRACTOR, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that CONSULTANT's SUBCONTRACTOR shall bear the legal liability thereof) **(collectively, the "SUBCONTRACTOR PARTIES")** in the performance of this AGREEMENT, **but only to the extent caused in whole or in part by the negligence, recklessness, or willful misconduct of the SUBCONTRACTOR PARTIES.** ~~including the INDEMNITEES' active or passive negligence, except for claims arising from the sole negligence or willful misconduct of the INDEMNITEES, as determined by final arbitration or court decision or by the agreement of the PARTIES.~~*

Suggest Adding Paragraph VI.4.C Limitation of Liability:

In recognition of the relative risks and benefits of the services to the DISTRICT and CONSULTANT, the risks have been allocated such that the DISTRICT agrees, to the fullest extent permitted by law, to limit the liability of CONSULTANT, its principals, owners, agents, and consultants (if any), to the DISTRICT, the INDEMNITEES, or any other third party with regard to the services performed under this AGREEMENT, for any and all liability, claims, demands, damages, expenses (including attorney, expert and administrative fees) (hereinafter "Liability") from any cause or causes, such that the total aggregate Liability of CONSULTANT, and its subconsultants, to all those named above shall not exceed the aggregate total fees paid to CONSULTANT hereunder for the services in the twelve (12) months preceding any such claim of Liability. This limitation of liability includes, but is not limited to, allegations or findings of negligence, indemnity, breach of contract, strict liability, breach of warranty or any other claim or cause of action. It is further expressly understood that the DISTRICT is retaining CONSULTANT and that CONSULTANT owes no duty of care to any third party.

Paragraph VI.5.L Broader Coverage/Higher Limits – Suggest removing this paragraph


Paragraph VI.7 Examination of Records – Suggest excluding consultant's existing IP from Examination of Records.

Hazen

11260 El Camino Real, Suite 102
San Diego, CA 92130 | (858) 764-5520

**BOARD INFORMATION****BOARD OF DIRECTORS
STAFF REPORT**

To: TVMWD Board of Directors

From: Matthew H. Litchfield, General Manager 

Date: October 1, 2025

Subject: Professional Services Agreement Award for the Programmable Logic Controllers and Radio Upgrades

☒ **Funds Budgeted: \$ 294,000**

☐ **Fiscal Impact: \$**

Staff Recommendation

No Action Necessary – Informational Item Only

Background

Staff requests Board authorization to award a sole source contract to Prime Systems Industrial Automation, Inc. for the replacement of outdated SCADA infrastructure, including multiple end-of-life PLCs and radios. These upgrades are necessary to ensure continued operational reliability, compatibility with future system modernization, and improved readiness against potential cyber intrusions.

Discussion

The District's Supervisory Control and Data Acquisition (SCADA) system is central to operating and monitoring water distribution and treatment facilities. Many existing Programmable Logic Controllers (PLCs) and radios are based on the obsolete Momentum platform, which is no longer supported by the manufacturer. This creates operational risks, supply chain challenges, and cybersecurity vulnerabilities.

Upgrading the network platform with redundant power supplies will provide a supported, modern, and secure control environment. Prime Systems, the District's SCADA integrator of record, has provided detailed quotations to complete the necessary work.

The project will remove existing PLCs, radios and display panels and will be replaced with new upgraded PLCs, power supplies, radios, convert the programs and update the SCADA

communications. The following table provides the sites and the level of effort for the scope of work.

Site	Cost
PLC Replacement	
Spreading Grounds	\$40,800
Indian Hills, Mills, Mountain & Padua	\$55,500
Fulton	\$55,000
Dewatering – Belt Filter Press	\$30,500
Radios for all sites	\$112,200
Total	\$294,000

Prime Systems has designed, programmed, and maintained the District's SCADA system for more than 20 years. Their unique knowledge of the system ensures continuity, reduces risk, and eliminates the need for reprogramming or reverse engineering. The upgrades involve direct integration with existing PLCs, radios, and SCADA software. Use of another vendor would create risks of incompatibility, increased project costs, and extended downtime. Therefore, Staff has determined that Prime Systems will provide the best value to complete these upgrades.

This item will be presented for the Board of Directors' consideration on October 15, 2025.

Environmental Impact

None

Strategic Plan Objective(s)

2.2 – Accountability

3.3 – Emerging Technology

3.4 – Operational Integrity

Attachment(s)

Exhibit A – Professional Service Agreement with Prime Systems

Meeting History

None

NA/SL

**PROFESSIONAL SERVICES AGREEMENT
BETWEEN
THREE VALLEYS MUNICIPAL WATER DISTRICT
AND
PRIME SYSTEMS INDUSTRIAL AUTOMATION, INC.**

This Professional Services Agreement ("AGREEMENT") is made and entered into this 15th day of October, 2025 ("EFFECTIVE DATE"), by and between Three Valleys Municipal Water District, a municipal water district organized and operating pursuant to California Water Code Section 71000 et seq. (hereinafter referred to as "DISTRICT"), and **Prime Systems Industrial Automation, Inc.**, (hereinafter referred to as "CONTRACTOR"). DISTRICT and CONTRACTOR are sometimes individually referred to as "PARTY" and collectively as "PARTIES" in this AGREEMENT.

RECITALS

WHEREAS, DISTRICT desires to contract with CONTRACTOR as an independent CONTRACTOR to provide professional services for the **PLC and Radio Upgrades**; and

WHEREAS, CONTRACTOR represents that it is duly licensed, qualified and capable to perform such services by virtue of its experience and the training, education and expertise of its principals and employees, and that CONTRACTOR is customarily engaged in an independently established trade, profession, occupation, and/or business of the same nature as the work to be performed for herein; and

WHEREAS, DISTRICT desires to retain CONTRACTOR and CONTRACTOR desires to serve the DISTRICT to perform the services described herein in accordance with the terms and conditions of this AGREEMENT.

COVENANTS

NOW, therefore, in consideration of the faithful performance of the terms and conditions set forth herein, the PARTIES hereto agree as follows:

ARTICLE I

SERVICES OF CONTRACTOR

1. **SCOPE OF SERVICES:** The scope of services to be performed by the CONTRACTOR under this AGREEMENT are described in Exhibit "A" attached hereto and incorporated herein by this reference ("PROJECT"), and shall, where not specifically addressed, include all related services ordinarily provided by the CONTRACTOR under same or similar circumstances. The DISTRICT may request, in writing, changes in the PROJECT or services to be performed. Any changes mutually agreed upon by the PARTIES, and any increase or decrease in compensation or time, shall be incorporated by written amendments to this AGREEMENT.
2. **PREVAILING WAGES:** CONTRACTOR shall comply with all applicable provisions of labor law relating to employment for the performance of services on the PROJECT. In accordance with the provisions of the California Labor Code, CONTRACTOR shall secure the payment of compensation to employees. To the extent required by the California Labor Code, CONTRACTOR shall pay not

less than the prevailing rate of per diem wages as determined by the Director, Department of Industrial Relations, State of California ("DIR"). Copies of such prevailing rate of per diem wages are on file at the DISTRICT's office, which copies will be made available to any interested party upon request. CONTRACTOR shall post a copy of such determination at each job site. If applicable, CONTRACTOR shall forfeit to the DISTRICT the amount of the penalty set forth in California Labor Code Section 1777.7(b), or any subsequent amendments thereto, for each calendar day, or portion thereof, for each worker paid less than the specified prevailing rates for such work or craft in which such worker is employed, whether paid by CONTRACTOR or by any SUBCONTRACTOR. CONTRACTOR shall submit certified payroll records to the Labor Commissioner using DIR's electronic certified reporting system and provide with their invoice certified payroll records verifying that CONTRACTOR has paid prevailing wage in accordance with the DIR requirements as stipulated in California Senate Bills 854 and 96, <https://www.dir.ca.gov/public-works/certified-payroll-reporting.html>

ARTICLE II

ENGAGEMENT OF CONTRACTOR AND AUTHORIZATION TO PROCEED

1. **ENGAGEMENT:** The DISTRICT hereby engages CONTRACTOR, and CONTRACTOR hereby accepts the engagement, to perform the services described in Section I.1 of this AGREEMENT.
2. **AUTHORIZATION TO PROCEED:** Authorization for CONTRACTOR to proceed with the work described in Section I.1 of this AGREEMENT will be granted in writing by the DISTRICT as soon as both PARTIES sign this AGREEMENT and all applicable insurance and security documents required pursuant to Section VI.5 of this AGREEMENT are received and approved by the DISTRICT. CONTRACTOR shall not proceed with said work until so authorized by the DISTRICT and shall commence work immediately upon receipt of the executed AGREEMENT.
3. **INDEPENDENT CONTRACTOR:** The PROJECT services to be performed by CONTRACTOR under this AGREEMENT are outside the usual course of the DISTRICT's business. CONTRACTOR is, and shall at all times remain as to DISTRICT, a wholly independent CONTRACTOR. The personnel performing the services under this AGREEMENT on behalf of CONTRACTOR shall at all times be under CONTRACTOR's exclusive direction and control. CONTRACTOR shall have no power to incur any debt, obligation, or liability on behalf of the DISTRICT. Neither DISTRICT nor any of its agents shall have control over the conduct of CONTRACTOR or any of CONTRACTOR's employees, except as set forth in this AGREEMENT. CONTRACTOR shall not, at any time, or in any manner, represent that it or any of its officers, agents or employees are in any manner employees of the DISTRICT. No employee benefits shall be available to CONTRACTOR in connection with the performance of this AGREEMENT. Except for the fees paid to CONTRACTOR as provided in this AGREEMENT, the DISTRICT shall not pay salaries, wages, or other compensation to CONTRACTOR for performing services hereunder for the DISTRICT. The DISTRICT shall not be liable for compensation or indemnification to CONTRACTOR for injury or sickness arising out of performing services hereunder.

ARTICLE III

RESPONSIBILITIES OF DISTRICT AND OF CONTRACTOR

- 1. DUTIES OF THE DISTRICT:** The DISTRICT, without cost to CONTRACTOR, will provide all pertinent information necessary for CONTRACTOR's performance of its obligations under this AGREEMENT that is reasonably available to the DISTRICT unless otherwise specified in the PROJECT in which case the CONTRACTOR is to acquire such information. The DISTRICT does not guarantee or ensure the accuracy of any reports, information, and/or data so provided however, in performing its services hereunder, CONTRACTOR shall be entitled to act in reasonable reliance upon all such reports, information, and /or data so provided by the DISTRICT. To the extent that any reports, information, and/or other data so provided was supplied to CONTRACTOR by persons who are not employees of DISTRICT, any liability resulting from inaccuracies and/or omissions contained in said information shall be limited to liability on behalf of the entity who prepared the information for CONTRACTOR.
- 2. REPRESENTATIVE OF DISTRICT:** The DISTRICT will designate *Kevin Panzer* as the person to act as the DISTRICT's representative with respect to the PROJECT services to be performed under this AGREEMENT. Such person will have complete authority to receive information and interpret and define the DISTRICT's policies pertinent to the PROJECT, although such person will not control or direct CONTRACTOR's work.
- 3. DUTIES OF CONTRACTOR:** CONTRACTOR shall perform PROJECT work in such a manner as to fully comply with all applicable professional standards of care, including professional quality, technical accuracy, timely completion, and other services furnished and/or work undertaken by CONTRACTOR pursuant to this AGREEMENT. The CONTRACTOR shall cause all work and deliverables to conform to all applicable federal, state, and local laws and regulations.
- 4. APPROVAL OF WORK:** The DISTRICT's approval of work or materials furnished hereunder shall not in any way relieve CONTRACTOR of responsibility for the technical adequacy of its work. Neither the DISTRICT's review, approval or acceptance of, nor payment for any of the services shall be construed to operate as a waiver of any rights under this AGREEMENT or of any cause of action arising out of the performance of this AGREEMENT.

ARTICLE IV

PAYMENTS TO CONTRACTOR

- 1. PAYMENT:** The DISTRICT will pay CONTRACTOR for work performed under this AGREEMENT, which work can be verified by the DISTRICT, on the basis of the following:

During the term of this AGREEMENT, the DISTRICT will pay CONTRACTOR for services performed in accordance with the rates and estimated hours and costs set forth in the EXHIBIT "A". The amount set forth in Section IV.3 of this AGREEMENT is the maximum compensation to which CONTRACTOR may be entitled for the performance of services to complete the PROJECT or time to complete the work, unless changed by the DISTRICT in writing in advance of the work to be performed thereunder. Adjustments in the total

payment amount shall only be allowed pursuant to Section VI.15 of this AGREEMENT. In no event shall CONTRACTOR be entitled to compensation greater than the amount set forth in Section IV.3 of this AGREEMENT where changes in PROJECT or the time for performance are necessitated by the negligence of CONTRACTOR or any SUBCONTRACTOR performing work.

2. **PAYMENT TO CONTRACTOR:** Payment will be made by the DISTRICT within thirty (30) calendar days after receipt of an invoice from CONTRACTOR, provided that all invoices are complete, and product and services are determined to be of sufficient quality by the DISTRICT. Each invoice shall itemize the services rendered during the billing period, hourly rates charged, if applicable, and the amount due. If the DISTRICT disputes any of CONTRACTOR'S fees, it shall give written notice to CONTRACTOR within thirty (30) days of receipt of an invoice of any disputed fees set forth on the invoice. In such case, the PARTIES shall work to find a reasonable resolution of any such dispute in good faith and in a timely manner.
3. **ESTIMATED CHARGES:** The total estimated charges for all work under this AGREEMENT are \$294,000 and such amount is the cost ceiling described herein. The total estimated charges stated herein constitute the total amount agreed to. All rates and charges are subject to the terms set in Exhibit "A".
4. **COST FOR REWORK:** CONTRACTOR shall, at no cost to the DISTRICT, prepare any necessary rework occasioned by CONTRACTOR CONTRACTOR's negligent act or omission or otherwise due substantially to CONTRACTOR's fault.

ARTICLE V

COMPLETION SCHEDULE

1. **TERM:** The term of this AGREEMENT shall begin on the EFFECTIVE DATE, and shall continue until 258 CALENDAR DAYS, unless this AGREEMENT is earlier terminated pursuant to the provisions of Section VI.8 below. Notwithstanding the above, the provisions of Sections I.2, II.3, III.3, and III.4, and Articles IV, V, and VI herein shall survive the expiration and/or termination of this AGREEMENT.
2. **SCOPE OF WORK:** The work is anticipated to be completed in accordance with Exhibit "A" as agreed upon by DISTRICT and CONTRACTOR at the time is the AGREEMENT is issued by DISTRICT except as may from time-to-time be adjusted by amendment hereto as provided herein.
3. **TIME OF ESSENCE:** CONTRACTOR shall perform all services required by this AGREEMENT in a prompt, timely, and professional manner in accordance with the agreed upon schedule. Time is of the essence in this AGREEMENT.

ARTICLE VI

GENERAL PROVISIONS

- 1. COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS:** CONTRACTOR shall at all times observe all applicable provisions of Federal, State, and Local laws and regulations including, but not limited to, those related to Equal Opportunity Employment.
- 2. SUBCONTRACTORS AND OUTSIDE CONTRACTOR:** No subcontract shall be awarded by CONTRACTOR if not identified as a SUBCONTRACTORS to PROJECT unless prior written approval is obtained from the DISTRICT. CONTRACTOR shall be responsible for payment to SUBCONTRACTORS used by them to perform the services under this AGREEMENT. If CONTRACTOR subcontracts any of the work to be performed, CONTRACTOR shall be as fully responsible to the DISTRICT for the performance of the work, including errors and omissions of CONTRACTOR's SUBCONTRACTORS and of the persons employed by the SUBCONTRACTORS, as CONTRACTOR is for the acts and omissions of persons directly employed by the CONTRACTOR. Nothing contained in this AGREEMENT shall create any contractual relationship between any SUBCONTRACTOR of CONTRACTOR and the DISTRICT. CONTRACTOR shall bind every SUBCONTRACTOR and every SUBCONTRACTOR of a SUBCONTRACTOR to the terms of this AGREEMENT that are applicable to CONTRACTOR's work unless specifically noted to the contrary in the subcontract in question and approved in writing by the DISTRICT.
- 3. OWNERSHIP OF DOCUMENTS:** Upon completion of, or in the event of termination or suspension of this AGREEMENT, all original documents, designs, drawings, maps, models, computer files containing data generated for the work, surveys, notes, and other documents prepared in the course of providing the services to be performed ("WRITTEN PRODUCTS") pursuant to this AGREEMENT shall become the sole property of the DISTRICT without restriction or limitation upon its use and may be used, reused, disseminated or otherwise disposed of by the DISTRICT without the permission of the CONTRACTOR except that any use of the documents produced in service of this AGREEMENT shall be at DISTRICT's sole risk when used for any purpose or project other than the PROJECT specified herein. With respect to computer files containing data generated for the work, CONTRACTOR shall make available to the DISTRICT, upon reasonable written request by the DISTRICT, the necessary computer software and hardware for purposes of accessing, compiling, transferring and printing computer files. CONTRACTOR may take and retain copies of WRITTEN PRODUCTS as desired, but WRITTEN PRODUCTS shall not be the subject of a copyright application by CONTRACTOR.
- 4. INDEMNIFICATION:**
 - A. Indemnity for Design Professional Services:** To the fullest extent permitted by law, CONTRACTOR shall, at its sole cost and expense, protect, indemnify and hold harmless DISTRICT and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those DISTRICT agents serving as independent contractors in the role of DISTRICT officials (collectively "INDEMNITEES"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens and

losses of any nature whatsoever, including fees of accountants, attorneys or other professionals, and all costs associated therewith, and reimbursement of attorney's fees and costs of defense, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to, in whole or in part, the negligence, recklessness or willful misconduct of CONTRACTOR, its officers, agents, servants, employees, SUBCONTRACTOR, material men, contractors or their officers, agents, servants or employees (or any entity or individual that CONTRACTOR shall bear the legal liability thereof) in the performance of design professional services under this AGREEMENT. It is the intent of the PARTIES to this AGREEMENT that the defense, indemnity, and hold harmless obligations of CONTRACTOR under this AGREEMENT shall be as broad and inclusive as may be allowed under California Civil Code §2778 through §2784.5, or other similar state or federal law.

B. Other Indemnities:

- i. Other than in the performance of design professional services, and to the fullest extent permitted by law, CONTRACTOR shall, at its sole cost and expense, defend, hold harmless and indemnify the INDEMNITEES from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens and losses of any nature whatsoever, including fees of accountants, attorneys or other professionals, and all costs associated therewith, and the payment of all consequential damages, in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of CONTRACTOR, its officers, agents, servants, employees, SUBCONTRACTORS, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that CONTRACTOR shall bear the legal liability thereof) in the performance of this AGREEMENT, including the INDEMNITEES' active or passive negligence, except for claims arising from the sole negligence or willful misconduct of the INDEMNITEES, as determined by final arbitration or court decision or by the agreement of the PARTIES. CONTRACTOR shall defend the INDEMNITEES in any action or actions filed in connection with any claim with counsel of the INDEMNITEES' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. CONTRACTOR shall reimburse the INDEMNITEES for any and all legal expenses and costs incurred by the INDEMNITEES in connection therewith.
- ii. CONTRACTOR shall pay all required taxes on amounts paid to CONTRACTOR under this AGREEMENT and indemnify and hold DISTRICT harmless from any and all taxes, assessments, penalties, and interest asserted against DISTRICT by reason of the independent contractor relationship created by this AGREEMENT. CONTRACTOR shall fully comply with the workers' compensation law regarding CONTRACTOR and CONTRACTOR's employees. CONTRACTOR shall indemnify and hold DISTRICT harmless from any failure of CONTRACTOR to comply with

applicable workers' compensation laws. DISTRICT may offset against the amount of any fees due to CONTRACTOR under this AGREEMENT any amount due to DISTRICT from CONTRACTOR as a result of CONTRACTOR's failure to promptly pay to DISTRICT any reimbursement or indemnification arising under this Subparagraph.

- iii. CONTRACTOR shall obtain executed indemnity agreements provisions identical to those in this Section VI.4 from each and every SUBCONTRACTOR or any other person or entity involved by, for, with or on behalf of CONTRACTOR in the performance of this AGREEMENT. If CONTRACTOR fails to obtain such indemnities, CONTRACTOR shall be fully responsible and indemnify, hold harmless and defend the INDEMNITEES from and against any and all claims in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of CONTRACTOR's SUBCONTRACTORS, its officers, agents, servants, employees, SUBCONTRACTOR, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that CONTRACTOR's SUBCONTRACTOR shall bear the legal liability thereof) in the performance of this AGREEMENT, including the INDEMNITEES' active or passive negligence, except for claims arising from the sole negligence or willful misconduct of the INDEMNITEES, as determined by final arbitration or court decision or by the agreement of the PARTIES.
 - A. **Workers' Compensation Acts not Limiting:** CONTRACTOR's obligations under this Section VI.4, or any other provision of this AGREEMENT, shall not be limited by the provisions of any workers' compensation act or similar act. CONTRACTOR expressly waives its statutory immunity under such statutes or laws as to DISTRICT, its officers, agents, employees and volunteers.
 - B. **Insurance Requirements not Limiting:** DISTRICT does not, and shall not, waive any rights that it may possess against CONTRACTOR because of the acceptance by DISTRICT, or the deposit with DISTRICT, of any insurance policy or certificate required pursuant to this AGREEMENT. This hold harmless and indemnification provisions in this Section VI.4 shall apply regardless of whether or not any insurance policies are determined to be applicable to the liability, claim, tax, assessment, penalty or interest asserted against DISTRICT.
 - C. **Survival of Terms:** The indemnification in this Section VI.4 shall survive the expiration or termination of this AGREEMENT.

5. INSURANCE:

A. Minimum Scope and Limits of Insurance: CONTRACTOR shall secure and maintain in full force and effect, until the satisfactory completion and acceptance of AGREEMENT by DISTRICT, such insurance as will protect it and the DISTRICT in such a manner and in such amounts as set forth below. The premiums for said insurance coverage shall be paid by the CONTRACTOR. The failure to comply with these insurance requirements may constitute a material breach of this AGREEMENT, at the sole discretion of the DISTRICT.

- i. **Workers' Compensation:** CONTRACTOR shall maintain Workers' Compensation insurance, as required by the State of California, with Statutory Limits and Employers' Liability Insurance in an amount not less than \$1,000,000 per accident for bodily injury or disease. This insurance shall also waive all right to subrogation against the DISTRICT, its Board of Directors, officers, employees, representatives, and guests.
- ii. **General Liability:** CONTRACTOR shall maintain Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 00 01) including products and completed operations, property damage, bodily injury, personal and advertising injury with limit of at least \$2,000,000 per occurrence or the full per occurrence limits of the policies available, whichever is greater. If a general aggregate limit applies, the general aggregate limit shall be twice the required occurrence limit. DISTRICT shall be named as an additional insured.
- iii. **Automobile Liability:** CONTRACTOR shall maintain Insurance Services Office (ISO) Business Auto Coverage (Form CA 00 01), covering Symbol 1 (any auto) or if CONTRACTOR has no owned autos, Symbol 8 (hired) and 9 (non-owned) with limit of \$1,000,000 for bodily injury and property damage each accident. This insurance shall have an endorsement naming the DISTRICT as an additional insured.
- iv. **Professional Liability:** CONTRACTOR shall maintain professional liability insurance with coverage for wrongful acts, errors, or omissions committed by CONTRACTOR in the course of work performed for the DISTRICT under this AGREEMENT. This insurance shall include coverage for liability assumed under this AGREEMENT when CONTRACTOR's wrongful acts, errors, or omissions cause such liability. The limit for this insurance shall be not less than \$1,000,000 per occurrence or claim and \$2,000,000 policy aggregate.

B. Acceptability of Insurers: The insurance policies required under this Section VI.5 shall be issued by an insurer admitted to write insurance in the State of California with a rating of AA:VII or better in the latest edition of the A.M. Best Insurance Rating Guide. Self-insurance shall not be considered to comply with the insurance requirements under this Section VI.5.

C. Primary and Non-Contributing: The insurance policies required under this

Section VI.5 shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to DISTRICT. Any insurance or self-insurance maintained by DISTRICT, its officers, employees, agents or volunteers, shall be in excess of CONTRACTOR's insurance and shall not contribute with it.

- D. *CONTRACTOR's Waiver of Subrogation:*** The insurance policies required under this Section VI.5 shall not prohibit CONTRACTOR and CONTRACTOR's employees, agents or SUBCONTRACTORS from waiving the right to subrogation prior to loss. CONTRACTOR hereby waives all rights of subrogation against DISTRICT.
- E. *Deductibles and Self-Insured Retentions:*** Any deductibles or self-insured retentions must be approved by DISTRICT. At DISTRICT's option, CONTRACTOR shall either reduce or eliminate the deductibles or self-insured retentions with respect to DISTRICT, or CONTRACTOR shall procure a bond guaranteeing payment of losses and expenses.
- F. *Cancellations or Modifications to Coverage:*** CONTRACTOR shall not cancel, reduce or otherwise modify the insurance policies required by this Section VI.5 during the term of this AGREEMENT. The commercial general and automobile liability policies required under this AGREEMENT shall be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail thirty (30) calendar days' prior written notice to DISTRICT. If any insurance policy required under this Section VI.5 is canceled or reduced in coverage or limits, CONTRACTOR shall, within two (2) business days of notice from the insurer, phone, fax or notify DISTRICT via certified mail, return receipt requested, of the cancellation of or changes to the policy.
- G. *District Remedy for Noncompliance:*** If CONTRACTOR does not maintain the policies of insurance required under this Section VI.5 in full force and effect during the term of this AGREEMENT, or in the event any of CONTRACTOR's policies do not comply with the requirements under this Section VI.5, DISTRICT may either immediately terminate this AGREEMENT or, if insurance is available at a reasonable cost, DISTRICT may, but has no duty to, take out the necessary insurance and pay, at CONTRACTOR's expense, the premium thereon. CONTRACTOR shall promptly reimburse DISTRICT for any premium paid by DISTRICT or DISTRICT may withhold amounts sufficient to pay the premiums from payments due to CONTRACTOR.
- H. *Evidence of Insurance:*** Prior to the performance of services under this AGREEMENT, CONTRACTOR shall furnish DISTRICT representative with a certificate or certificates of insurance and all original endorsements demonstrating the DISTRICT as additionally insured, evidencing and effecting the coverages required under this Section VI.5. The endorsements are subject to DISTRICT's approval. CONTRACTOR may provide complete, certified copies of all required insurance policies to DISTRICT. CONTRACTOR shall maintain current endorsements on file with DISTRICT's representative. CONTRACTOR shall provide proof to DISTRICT representative that insurance policies expiring during the term of this AGREEMENT have been renewed or replaced with other policies providing at least the same

coverage. CONTRACTOR shall furnish such proof at least two (2) weeks prior to the expiration of the coverages.

- I. Indemnity Requirement not Limiting:** Procurement of insurance by CONTRACTOR shall not be construed as a limitation of CONTRACTOR's liability or as full performance of CONTRACTOR's duty to indemnify DISTRICT under Section VI.4 of this AGREEMENT.
- J. Subcontractor's Insurance Requirements:** CONTRACTOR shall require each of its SUBCONTRACTORS that perform services under this AGREEMENT to maintain insurance coverage that meets all of the requirements of this Section VI.5.
- K. Claim Reporting:** CONTRACTOR shall not fail to comply with the claim reporting provisions or cause any breach of a policy condition or warranty of the insurance policies required by this AGREEMENT that would affect the coverage afforded under the policies to the DISTRICT.
- L. Broader Coverage/Higher Limits:** If CONTRACTOR maintains broader coverage and/or higher limits than the minimums shown above, the DISTRICT requires and shall be entitled to the broader coverage and/or higher limits maintained by CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the DISTRICT.

6. MUTUAL COOPERATION

- A. District's Cooperation:** DISTRICT shall provide CONTRACTOR with all pertinent data, documents and other requested information as is reasonably available for CONTRACTOR's proper performance of the services required under this AGREEMENT.
- B. CONTRACTOR's Cooperation:** In the event any claim or action is brought against the DISTRICT relating to CONTRACTOR's performance or services rendered under this AGREEMENT, CONTRACTOR shall render any reasonable assistance that DISTRICT requires.

- 7. EXAMINATION OF RECORDS:** All original drawings, specifications, reports, calculations, and other documents or electronic data developed by CONTRACTOR for this AGREEMENT shall be furnished to and become the property of the DISTRICT. CONTRACTOR agrees that the DISTRICT will have access to and the right to examine any directly pertinent books, documents, papers, and records of any and all of the transactions relating to this AGREEMENT at CONTRACTOR's office, during normal business hours and following a reasonable advance notice to CONTRACTOR from DISTRICT. The DISTRICT shall not be limited in any way in its use of the work materials at any time except as otherwise provided herein.

8. TERMINATION OR SUSPENSION OF AGREEMENT

- A. Right to Terminate or Suspend:** DISTRICT may terminate or suspend this

AGREEMENT at any time, at will, for any reason or no reason, after giving written notice to CONTRACTOR at least ten (10) calendar days before the termination or suspension is to be effective. CONTRACTOR may terminate this AGREEMENT at any time, at will, for any reason or no reason, after giving written notice to DISTRICT at least thirty (30) calendar days before the termination is to be effective.

B. *Obligations upon Termination:* CONTRACTOR shall cease all work under this AGREEMENT on or before the effective date of termination specified in the notice of termination. In the event of DISTRICT's termination of this AGREEMENT due to no fault or failure of performance by CONTRACTOR, DISTRICT shall pay CONTRACTOR based on the percentage of work satisfactorily performed up to the effective date of termination. In no event shall CONTRACTOR be entitled to receive more than the amount that would be paid to CONTRACTOR for the full performance of the services required by this AGREEMENT.

9. NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY: In the performance of this AGREEMENT, CONTRACTOR shall not discriminate against any employee, SUBCONTRACTOR or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation or other basis prohibited by law. CONTRACTOR will take affirmative action to ensure that SUBCONTRACTORS and applicants are employed, and that employees are treated during employment, without regard to their race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information or sexual orientation.

10. PROHIBITION OF ASSIGNMENT AND DELEGATION: CONTRACTOR shall not assign any of its rights or delegate any of its duties under this AGREEMENT, either in whole or in part, without DISTRICT's prior written consent. DISTRICT's consent to an assignment of rights under this AGREEMENT shall not release CONTRACTOR from any of its obligations or alter any of its primary obligations to be performed under this AGREEMENT. Any attempted assignment or delegation in violation of this section shall be void and of no effect and shall entitle DISTRICT to terminate this AGREEMENT. As used in this section, "assignment" and "delegation" means any sale, gift, pledge, hypothecation, encumbrance or other transfer of all or any portion of the rights, obligations, or liabilities in or arising from this AGREEMENT to any person or entity, whether by operation of law or otherwise, and regardless of the legal form of the transaction in which the attempted transfer occurs.

11. NO THIRD-PARTY BENEFICIARIES INTENDED: Except as otherwise provided in Section VI.4, this AGREEMENT is made solely for the benefit of the PARTIES to this AGREEMENT and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this AGREEMENT.

12. WAIVER: No delay or omission to exercise any right, power or remedy accruing to DISTRICT under this AGREEMENT shall impair any right, power or remedy of DISTRICT,

nor shall it be construed as a waiver of, or consent to, any breach or default. No waiver of any breach, any failure of a condition, or any right or remedy under this AGREEMENT shall be (1) effective unless it is in writing and signed by PARTY making the waiver, (2) deemed to be a waiver of, or consent to, any other breach, failure of a condition, or right or remedy, or (3) deemed to constitute a continuing waiver unless the writing expressly so states.

13. ENTIRE AGREEMENT: This AGREEMENT and all exhibits referred to in this AGREEMENT constitute the final, complete and exclusive statement of the terms of this AGREEMENT between the PARTIES pertaining to the subject matter of this AGREEMENT and supersede all other prior or contemporaneous oral or written understandings and agreements of the PARTIES. No PARTY has been induced to enter into this AGREEMENT by, nor is any PARTY relying on, any representation or warranty except those expressly set forth in this AGREEMENT.

14. HEADINGS: Article and Section headings in this AGREEMENT are for convenience only and are not intended to be used in interpreting or construing the terms, covenants, and conditions of this AGREEMENT.

15. AMENDMENT OF AGREEMENT: This AGREEMENT may be amended only by a writing signed by both PARTIES. The DISTRICT representative is authorized to sign an amendment to this AGREEMENT on the DISTRICT's behalf to make the following non-substantive modifications to the AGREEMENT: (a) name changes; (b) extensions of time; (c) non-monetary changes in AGREEMENT; and (d) termination of this AGREEMENT.

16. GOVERNING LAW AND CHOICE OF FORUM: This AGREEMENT, and any dispute arising from the relationship between the PARTIES to this AGREEMENT, shall be governed by and construed in accordance with the laws of the State of California, except that any rule of construction to the effect that ambiguities are to be resolved against the drafting PARTY shall not be applied in interpreting this AGREEMENT. Any dispute that arises under or relates to this AGREEMENT (whether contract, tort or both) shall be resolved in a municipal, superior or federal court with geographic jurisdiction over the DISTRICT.

17. ATTORNEYS' FEES: In any litigation or other proceeding by which a PARTY seeks to enforce its rights under this AGREEMENT (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this AGREEMENT, the prevailing PARTY shall be awarded reasonable attorneys' fees together with any costs and expenses, to resolve the dispute and to enforce the final judgment.

18. SEVERABILITY: If a court of competent jurisdiction holds any provision of this AGREEMENT to be illegal, invalid or unenforceable for any reason, the validity of and enforceability of the remaining provisions of this AGREEMENT shall not be affected and continue in full force and effect.

19. SAFETY: CONTRACTOR shall perform the work in full compliance with applicable State and Federal safety requirements including, but not limited to, Occupational Safety and Health Administration requirements. CONTRACTOR shall take all precautions necessary for the safety of, and prevention of damage to, property on or adjacent to PROJECT site, and for the safety of, and prevention of injury to, persons, including DISTRICT's employees,

CONTRACTOR's employees, and third persons. All work shall be performed entirely at CONTRACTOR's risk. CONTRACTOR shall comply with the insurance requirements set forth in Section VI.5 of this AGREEMENT. CONTRACTOR shall also furnish the DISTRICT with a copy of any injury prevention program established for the CONTRACTOR's employees pursuant to Labor Code Section 6401.7, including any necessary documentation regarding implementation of the program. CONTRACTOR hereby certifies that its employees have been trained in the program, and procedures are in place to train employees whenever new substances, processes, procedures, or equipment are introduced. CONTRACTOR shall demonstrate compliance with Labor Code Section 6401.7 by maintaining a copy of its Injury and Illness Prevention Plan at PROJECT site and making it available to the DISTRICT.

20. USE OF NAMES: CONTRACTOR shall not employ or use the name of the DISTRICT in any promotional materials, advertising, or in any other manner without prior express written permission of the DISTRICT. The foregoing notwithstanding, nothing herein shall prohibit or exclude CONTRACTOR from referencing the work for DISTRICT on the PROJECT in response to a Request for Proposal or other similar professional solicitations.

21. NOTICES: All notices to either PARTY by the other shall be made in writing and delivered or mailed to such PARTY at their respective addresses as follows, or to other such address as either PARTY may designate and said notices shall be deemed to have been made when delivered or, if mailed, five (5) days after mailing.

To DISTRICT:

Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, CA 91711
Attn: General Manager

To CONTRACTOR:

Prime Systems Industrial Automation, Inc.
6236 River Crest Drive, Suite B
Riverside, CA 92507
Attn: Marc Smith

22. AUTHORITY TO EXECUTE AGREEMENT: The individuals executing this AGREEMENT represent and warrant that they have the legal capacity and authority to sign this AGREEMENT on behalf of and to so bind their respective legal entities.



IN WITNESS WHEREOF, the PARTIES hereto have executed this AGREEMENT as of the date opposite their respective signatures.

Name: _____

Matthew H. Litchfield, P.E.

Title: _____

General Manager/ Chief Engineer

Organization: _____

Three Valleys Municipal Water District

Signature: _____

Date: _____

Date: _____



September 22, 2025

Letter: 2025-09 RADIO AND MOMENTUM PLC
Upgrades.docx

Steve Lang
Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, CA 91711-2052

Phone: 909-621-5568
FAX: 909-625-5470
E-Mail: slang@TVMWD.com

Subject: **Three Valleys Municipal Water District (TVMWD)**
iNET-II Radio and Momentum PLC Upgrades

Steve,

Thank you for this opportunity for *Prime Systems Industrial Automation, Inc.* to present the following quotation for the iNET-II Radio and Momentum PLC Upgrades.

Prime Systems Industrial Automation, Inc. prides itself on being responsive to our customer's needs. With no formal marketing or sales force, Prime Systems relies completely on customer repeat business and "word of mouth" recommendations. With this marketing strategy, we have continued to grow our customer base and support our existing customers with the high-quality work standards they have come to expect from our professional services.

Prime Systems Industrial Automation, Inc. has a proven track record for many installed PLC based control systems, similar to your systems. If there is any interest in seeing one of these installations, or contacting a current client, please let us know.

We appreciate the opportunity to support you in your Control System and Automation needs and we look forward to demonstrating our reputation for quality work done in a timely manner. If there is anything we can do to assist you, please don't hesitate to contact me at our office.

Sincerely,

Justin Smith
Project Engineer
Prime Systems Industrial Automation, Inc.

September 22, 2025

Letter: 2025-09 RADIO AND Momentum PLC Upgrades.docx
PAGE: 2 of 3**Scope of Work:**

This quotation is submitted to summarize the cost associated with upgrading all the MDS iNET-II radios to GE Orbit MCRs and Momentum PLCs to M340s. The new MCR radios will be programmed to communicate over cellular data as the primary communication method and fail over to 900MHz if cellular data goes down. The Momentum programs will be converted for use with the new M340s and the main PLC and SCADA will be updated to communicate with the new PLCs. We will also be installing new redundant 24VDC power supplies with the new M340 PLCs.

The following sites have Momentum PLC and iNET-II Radios to replace are:

- Fulton
- Pauda
- SASG 1
- SASG 2
- SASG 3
- Indian Hill - currently has a MCR but needs a second one to act as a repeater in a cellular failover scenario

The following sites have a MDS iNET-II Radio to be replaced:

- 5th & White
- 6th & White
- Backwash
- Emerald
- Leroy's
- Live Oak
- MiraGrand Well
- San Dimas
- SASG 4
- SASG 5
- SASG 6
- Traveling Bridge
- Well 2
- Wheeler
- Williams

The following sites have a Momentum PLC to be replaced:

- Mills
- Mountain
- BFP CP02 - the quick touch HMI will be upgraded to a Magelis

The radio and/or PLC will be installed in the existing PLC panel for all the sites except for Fulton where we will be replacing the 3 small PLC, radio, and pressure display panels with 1 new panel.

The project cost is quoted as a Fixed Fee:

\$294,000

Prime Systems Industrial Automation, Inc.

6236 River Crest Dr., Suite B | Riverside, CA 92507 | Tel: 951.656.7139 | FAX: 951.656.8139

September 22, 2025

Letter: 2025-09 RADIO AND Momentum PLC Upgrades.docx
PAGE: 3 of 3**All invoices are due and payable on net 30-day terms.**

This quotation is good for 30 days at which time we will requote as necessary.

Prime Systems Industrial Automation, Inc. billing rates are as follows:

➤ In-office Labor	\$218/hour
➤ Out-of-office Labor (4-hour minimum)	\$218/hour
➤ Overtime/After-Hours/Saturday/Sundays/Holidays	1.5 Times Standard Rates
➤ Travel Time	Travel time is billed at the rates above
➤ Travel Mileage	Current IRS business mileage travel rate

Billing rates are based on Net 30 Day payment terms.***Terms and Conditions:***

1. This quotation does not include instruments/sensor purchasing, installation, and/or calibration.
2. The removal of the Valencia Heights iNET-II radio is not included in this quote and should be removed by TVMWD.
3. This quotation assumes that all work will be done during normal work hours (no weekend, holidays, or after hours).
4. Any clarifications, modifications and/or additions to the Scope of Work as detailed in the above referenced documents will be evaluated for cost impact. Additional effort will be quoted separately and must be approved prior to *Prime Systems Industrial Automation, Inc.* commencing work.
5. *Prime Systems Industrial Automation, Inc.* standard work hours are Monday – Friday 8:00 AM – 5:00 PM. Any work outside these standard work hours is considered overtime/after-hours/weekend/holiday and is billed at the appropriate rate as identified above.

I hope this quotation is responsive to your needs and I look forward to demonstrating our reputation for quality work done in a timely manner. We appreciate the opportunity to work with you on this project and to support you in your automation and control system needs. If you have any questions, please don't hesitate to call me at our office, 951-656-7139.

Sincerely,

Justin Smith
Project Engineer
Prime Systems Industrial Automation, Inc.