



moulton niguel water district

**TECHNICAL COMMITTEE MEETING
MOULTON NIGUEL WATER DISTRICT
BOARD OF DIRECTORS**

26880 Aliso Viejo Pkwy, Suite 150, Aliso Viejo

April 6, 2020

7:30 AM

Approximate Meeting Time: 1 Hour

IN AN EFFORT TO PREVENT THE SPREAD OF COVID-19 (CORONAVIRUS), AND IN ACCORDANCE WITH THE GOVERNOR'S EXECUTIVE ORDER N-29-20, THERE WILL BE NO PUBLIC LOCATION FOR ATTENDING THIS BOARD MEETING IN PERSON. MEMBERS OF THE PUBLIC MAY LISTEN AND PROVIDE PUBLIC COMMENT TELEPHONICALLY BY CALLING THE FOLLOWING NUMBER:

DIAL: 1-669-900-9128

MEETING ID: 826-548-044#

1. CALL MEETING TO ORDER
2. APPROVE THE MINUTES OF THE MARCH 2, 2020 TECHNICAL COMMITTEE MEETING (**ROLL CALL VOTE**)
3. PUBLIC COMMENTS
Persons wishing to address the Board of Directors on matters not listed on the Agenda may do so at this time. "Request To Be Heard" forms are available at the entrance to the Board Room. Comments are limited to five minutes unless further time is granted by the Presiding Officer. Submit form to the Recording Secretary prior to the beginning of the meeting.

Those wishing to address the Board of Directors on any item listed on the Agenda should submit a "Request To Be Heard" form to the Recording Secretary before the Presiding Officer announces that agenda item. Your name will be called to speak at that time.

DISCUSSION ITEMS

4. Professional Services Agreement for Eastern Transmission Main Condition Assessment

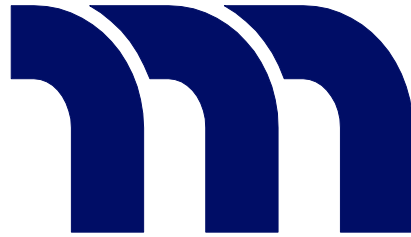
INFORMATION ITEMS

5. America's Water Infrastructure Act Update

ADJOURNMENT

The Board of Directors' Meeting Room is wheelchair accessible. If you require any special disability related accommodations (i.e., access to an amplified sound system, etc.), please contact the Moulton Niguel Water District Secretary's office at (949) 831-2500 at least forty-eight (48) hours prior to the scheduled meeting. This agenda can be obtained in alternate format upon written request to the Moulton Niguel Water District Secretary at least forty-eight (48) hours prior to the scheduled meeting.

Agenda exhibits and other writings that are disclosable public records distributed to all, or a majority of, the members of the Moulton Niguel Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection at the District Office, 26880 Aliso Viejo Parkway, Suite 150, Aliso Viejo, CA ("District Office"). If such writings are distributed to members of the Board less than seventy-two (72) hours prior to the meeting, they will be available in the reception area of the District Office at the same time as they are distributed except that, if such writings are distributed immediately prior to, or during the meeting, they will be available in the Board meeting room and on the District website at www.mnwd.com.



moulton niguel water district

DRAFT
MINUTES OF THE TECHNICAL COMMITTEE MEETING
MOULTON NIGUEL WATER DISTRICT
BOARD OF DIRECTORS

March 2, 2020

A Regular Meeting of the Technical Committee of the Moulton Niguel Water District was held at the District offices, 26880 Aliso Viejo Pkwy, Suite 150, Aliso Viejo, California, at 7:30 AM on March 2, 2020. There were present and participating:

DIRECTORS

Duane Cave	Vice President/Chair
Donald Froelich	Vice President
Bill Moorhead	Director

Also present and participating were:

STAFF MEMBERS, LEGAL COUNSEL, AND MEMBERS OF THE PUBLIC

Joone Lopez	General Manager
Matt Collings	Assistant General Manager
Rod Woods	Director of Engineering
Drew Atwater	Director of Finance & Water Resources
Todd Novacek	Director of Operations
Jose Solorio	Government Affairs Officer
Jeff Ferre	Best, Best, & Krieger (General Counsel)
Paige Gulck	Board Secretary
Tim Bonita	Recording Secretary
Trevor Agrelius	MNWD
Matt Brown	MNWD
Todd Dmytryshyn	MNWD
Bryan Hong	MNWD
David Larsen	MNWD
Steve Merk	MNWD
Mark Mountford	MNWD
Medha Patel	MNWD
Sheldon Yu	MNWD

#2.

1. CALL MEETING TO ORDER

The meeting was called to order by Duane Cave at 7:30 a.m.

2. APPROVE THE MINUTES OF THE FEBRUARY 3, 2020 TECHNICAL COMMITTEE MEETING

MOTION DULY MADE BY DONALD FROELICH AND SECONDED BY BILL MOORHEAD, MINUTES OF THE FEBRUARY 3, 2020 TECHNICAL COMMITTEE MEETING WERE APPROVED AS PRESENTED. THE VOTE WAS UNANIMOUS WITH DIRECTORS DUANE CAVE, DONALD FROELICH AND BILL MOORHEAD ALL VOTING 'AYE'.

3. PUBLIC COMMENTS

None.

DISCUSSION ITEMS

4. Construction Contract Award for Regional Lift Station Enhancements

David Larsen provided information on the item. Discussion ensued regarding the project. The Board recommended sending this item to the Board for approval.

5. Agreements for On-Call Professional Engineering Consulting Services

Rod Woods provided details on the item. Discussion ensued regarding the process for selecting recommended firms. The Board recommended sending this item to the Board for approval.

6. Agreements for On-Call Construction Management and Inspection Support Services

Rod Woods provided information on the item. Discussion ensued regarding the agreements. The committee recommended sending this item to the Board for consideration once all information has been received.

7. Amendment No. 2 to the Spoils Removal Service Agreement

Steve Merk provided details on the item. Discussion ensued regarding the amendment. The Board recommended sending this item to the Board for approval.

8. Amendment No. 3 to the Discharge Agreement with the County of Orange

Mark Mountford provided information on the item. The Board recommended sending this item to the Board for approval.

9. Construction Contract Time Extension for Valencia Lift Station Rehabilitation

David Larsen provided details on the item. Discussion ensued regarding the project. The Board recommended sending this item to the Board for approval.

INFORMATION ITEMS

10. Pipeline Replacements at I-5 and Oso Creek Project Update

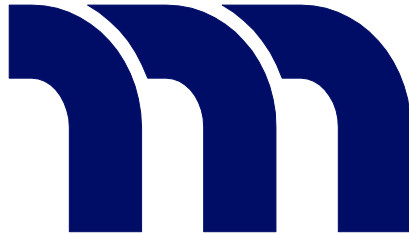
Todd Dmytryshyn provided an update on the pipeline replacements project at I-5 and Oso Creek.

ADJOURNMENT

The meeting was adjourned at 8:08 a.m.

Respectfully submitted,

Tim Bonita
Recording Secretary



moulton niguel water district

STAFF REPORT

TO: Technical Committee Members **MEETING DATE:** April 6, 2020

FROM: Rod Woods, Director of Engineering
Bryan Hong, Senior Engineer

SUBJECT: Professional Services Agreement for Eastern Transmission Main Condition Assessment

SUMMARY:

Issue: Board action is required to execute a professional services agreement for the Eastern Transmission Main Condition Assessment, Contract OM19-20.065.

Recommendation: It is recommended that the Board of Directors approve the Professional Services Agreement with Black & Veatch in the amount of \$194,105; authorize the General Manager or Assistant General Manager to execute the agreement; and to approve amendments up to 10% of the contract value.

Fiscal Impact: Sufficient funds will be included in the FY 2020-21 Operating Budget to support the project. The City of San Juan Capistrano has approximately 70% capacity share ownership of the Eastern Transmission Main and will reimburse the District accordingly.

Reviewed by Legal: Yes

BACKGROUND:

The Eastern Transmission Main (Eastern TM) is one of the District’s main potable water transmission pipelines. It supplies water from the Joint Regional Water Supply System’s (JRWSS’s) Joint Transmission Main (JTM) that is operated by South Coast Water District. The Eastern TM is a 30-inch and 33-inch steel pipeline that was installed in 1962, beginning as a branch off the JTM near Moulton Parkway and Laguna Hills Drive in the City of Laguna Woods. As shown in Exhibit A, the remaining alignment of the pipeline traverses the Cities of Laguna Hills, Mission Viejo, Laguna Niguel, and San Juan Capistrano. The Eastern TM is approximately 5.6 miles in length and consists of five take-outs. The District is the operator of the Eastern TM by agreement with the City of San Juan Capistrano, who owns approximately 70% capacity share in the pipeline.

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The ultimate objective of this project is to conduct a condition assessment of the pipeline and identify any recommended improvements. Engineering services under this proposed contract include: a detailed evaluation of available condition assessment technologies, a recommendation of the most appropriate condition assessment technology, assistance with the vendor solicitation and selection process, permit acquisition and field investigation support, and preparation of a comprehensive final report that includes recommendations for any necessary pipeline repairs, rehabilitation, and/or replacement following the condition assessment. The physical condition assessment of the Eastern TM is anticipated to be performed in FY 2021-22. A separate contract with the recommended technology vendor will be presented to the Board for consideration at a later date.

DISCUSSION:

On February 12, 2020, staff issued a request for proposals for engineering services to five qualified engineering consulting firms. Three proposals were received, and the fee estimates are summarized below:

Firm	Proposal Fee
V&A Consulting Engineers	\$172,069
Black & Veatch	\$194,105
Hazen & Sawyer	\$403,534


Staff performed a comprehensive review of the proposals received to determine the overall best value for the professional services required. Based on the consultants' specific project understanding and approach, overall proposal quality, project specific experience, proposed project team, and fee, staff recommends that the Board approve the professional services agreement with Black & Veatch.


Attachments:

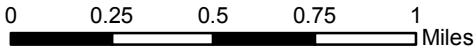
1. Exhibit A – Location Map
2. Exhibit B – Professional Services Agreement for Eastern Transmission Main Condition Assessment
3. Exhibit C – Vendor Contact List

Eastern Transmission Main



 Eastern Transmission Main

 District Boundary



Scale = 1:30,000

Exhibit "A" Location Map
Eastern Transmission Main Condition Assessment
Contract OM19-20.065

**PROFESSIONAL SERVICES AGREEMENT BETWEEN
MOULTON NIGUEL WATER DISTRICT AND
BLACK & VEATCH CORPORATION
MNWD PROJECT: EASTERN TRANSMISSION MAIN CONDITION ASSESSMENT
CONTRACT NO. OM19-20.065**

This Agreement (the "Agreement") is made and entered into on _____ ("Effective Date") by and between the Moulton Niguel WATER DISTRICT ("MNWD") and Black & Veatch Corporation, a corporation with its principal place of business at 800 Wilshire Blvd., Suite 600, Los Angeles, CA 90017 ("Consultant"). MNWD and Consultant are sometimes individually referred to as "Party" and collectively as "Parties" in this Agreement.

SECTION I – PURPOSE

Consultant shall provide certain professional services required by MNWD on the terms and conditions set forth in this Agreement. Consultant represents that it has the qualifications, experience, licenses, and facilities necessary to properly perform professional engineering services in a competent and professional manner.

SECTION II – TERM

The term of this Agreement shall be from the Effective Date to **December 31, 2022**, unless earlier terminated as provided herein.

SECTION III – SCOPE OF SERVICES

Section 3.1. Scope of Services. The scope of services to be provided by Consultant is set forth on Exhibit "A" attached hereto and by this reference incorporated herein ("Services"). Consultant warrants that it will perform the Services as set forth herein in a competent, professional and satisfactory manner. All Services shall be subject to, and performed in accordance with, this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules, and regulations.

Section 3.2. Schedule of Services. Consultant shall complete the Services within the term of this Agreement and shall meet any other established schedules and deadlines, including any schedule of services set forth in Exhibit "A."

Section 3.3. Permits, Licenses, Fees and Other Charges. Consultant shall, in accordance with applicable laws and ordinances, obtain at his/her/its expense all permits and licenses necessary to accomplish the Services. Failure to maintain a required license or permit may result in immediate termination of this Agreement.

SECTION IV – COMPENSATION

Section 4.1. Payment for Services Rendered. Consultant shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement at the rates set forth in Exhibit "B" attached hereto and incorporated herein by reference. The total compensation shall not exceed **One Hundred Ninety-Four Thousand One Hundred Five Dollars (\$194,105)** without written approval by MNWD. Extra Work may be authorized, as described below, and if authorized, will be compensated at the rates and manner set forth in this Agreement.

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Section 4.2. Invoices. Consultant shall submit to MNWD a monthly itemized statement which indicates work completed and hours of Services rendered by Consultant. The statement shall describe the Services and supplies provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. MNWD shall, within 45 days of receiving such statement, review the statement and pay all approved charges thereon.

- A. Payment shall not constitute acceptance of any work completed by Consultant.
- B. The making of final payment shall not constitute a waiver of any claims by MNWD for any reason whatsoever.

Section 4.3. Reimbursement for Expenses. Consultant shall not be reimbursed for any expenses unless authorized in writing by MNWD.

Section 4.4. Extra Work. At any time during the term of this Agreement, MNWD may request that Consultant perform Extra Work. As used herein, "Extra Work" means any work which is determined by MNWD to be necessary for the proper completion of the Project, but which the parties did not reasonably anticipate would be necessary at the execution of this Agreement. Consultant shall not perform, nor be compensated for, Extra Work without written authorization by MNWD.

SECTION V – REPRESENTATIVES OF THE PARTIES

Section 5.1. MNWD's Representative. MNWD hereby designates its Director of Engineering, or his or her designee, to act as its representative for the performance of this Agreement ("MNWD's Representative"). Consultant shall not accept direction or orders from any person other than MNWD's Representative or his or her designee.

Section 5.2. Consultant's Representative. Consultant hereby designates Jeff Neemann, or his designee, to act as its representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to represent and act on behalf of the Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences, and procedures and for the satisfactory coordination of all portions of the Services under this Agreement.

SECTION VI – RESPONSIBILITIES OF CONSULTANT

Section 6.1. Control and Payment of Subordinates; Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. MNWD retains Consultant on an independent contractor basis and not as an employee. Consultant retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall also not be employees of MNWD and shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Consultant shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income

tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

Section 6.2. Standard of Care; Performance of Employees. Consultant shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Consultant represents and maintains that it is skilled in the professional calling necessary to perform the Services. Consultant warrants that all employees and subconsultants shall have sufficient skill and experience to perform the Services assigned to them. Finally, Consultant represents that it, its employees and subconsultants have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Consultant shall perform, at its own cost and expense and without reimbursement from MNWD, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein.

Section 6.3. Conformance to Applicable Requirements. All work prepared by Consultant shall be subject to the approval of MNWD.

Section 6.4. Substitution of Key Personnel. Consultant has represented to MNWD that certain key personnel will perform and coordinate the Services under this Agreement. The key personnel for performance of this Agreement are as follows: Jeff Neemann, Matt Thomas, Bethany McDonald, Clint McAdams. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence upon written approval of MNWD. In the event that MNWD and Consultant cannot agree as to the substitution of key personnel, MNWD shall be entitled to terminate this Agreement for cause. Furthermore, any personnel who fail or refuse to perform the Services in a manner acceptable to MNWD, or who are determined by MNWD to be uncooperative, incompetent, a threat to the adequate or timely completion of the Services or a threat to the safety of persons or property, shall be promptly removed from performing Services by the Consultant at the request of MNWD.

Section 6.5. Coordination of Services. Consultant agrees to work closely with MNWD staff in the performance of Services and shall be available to MNWD's staff, consultants and other staff at all reasonable times.

Section 6.6. Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. Consultant shall be liable for all violations of such laws and regulations in connection with Services. If the Consultant performs any work knowing it to be contrary to such laws, rules and regulations, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold MNWD, its officials, directors, officers, employees, and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

SECTION VII – LABOR CODE PROVISIONS

Section 7.1. Prevailing Wages. Consultant is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8,

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Section 16000, et seq., (“Prevailing Wage Laws”), which require the payment of prevailing wage rates and the performance of other requirements on “public works” and “maintenance” projects. If the Services are being performed as part of an applicable “public works” or “maintenance” project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. A copy of these prevailing wage rates are on file with the Department of Industrial Relations and can be found online with the State of California at <http://www.dir.ca.gov/dlsr/pwd>. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Consultant’s principal place of business and at the project site. It is the intent of the parties to effectuate the requirements of sections 1771, 1774, 1775, 1776, 1777.5, 1813, and 1815 of the Labor Code within this Agreement, and Consultant shall therefore comply with such Labor Code sections to the fullest extent required by law. Consultant shall defend, indemnify and hold MNWD, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

Section 7.2. Registration and Labor Compliance. If the services are being performed as part of an applicable “public works” or “maintenance” project, then, in addition to the foregoing, pursuant to Labor Code sections 1725.5 and 1771.1, the Consultant and all subconsultants must be registered with the Department of Industrial Relations (“DIR”). Consultant shall maintain registration for the duration of the project and require the same of any subconsultants. This project may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant’s sole responsibility to comply with all applicable registration and labor compliance requirements, including the submission of payroll records directly to the DIR.

Section 7.3. Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker’s Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

SECTION VIII – INDEMNIFICATION

To the fullest extent permitted by law, Consultant shall immediately indemnify, defend, and hold MNWD, its directors, officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any alleged acts, errors or omissions of Consultant, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Consultant’s Services or this Agreement, including without limitation the payment of all consequential damages, expert witness fees and attorneys’ fees and other related costs and expenses. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against MNWD or its directors, officials, officers, employees, volunteers and agents as part of any such claim, suit, action or other proceeding. Consultant shall also reimburse MNWD for the cost of any settlement paid by MNWD or its directors, officials, officers, employees, agents or volunteers as part of any such claim, suit, action or other proceeding. Such reimbursement shall include payment for MNWD’s attorneys’ fees and costs, including expert witness fees. Consultant shall reimburse MNWD and its directors, officials, officers, employees, agents, and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Consultant’s obligation to indemnify shall

survive expiration or termination of this Agreement, and shall not be restricted to insurance proceeds, if any, received by MNWD, its directors, officials, officers, employees, agents, or volunteers. Notwithstanding the foregoing, to the extent Consultant's Services are subject to Civil Code Section 2782.8, the above indemnity shall be limited, to the extent required by Civil Code Section 2782.8, to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant.

SECTION IX – INSURANCE

Section 9.1. Time for Compliance. Consultant shall not commence Work under this Agreement until it has provided evidence satisfactory to MNWD that it has secured all insurance required under this section. In addition, Consultant shall not allow any subconsultant to commence work on any subcontract until it has provided evidence satisfactory to MNWD that the subconsultant has secured all insurance required under this section. Failure to provide and maintain all required insurance shall be grounds for MNWD to terminate this Agreement for cause.

Section 9.2. Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by the Consultant, its agents, representatives, employees or subconsultants. Consultant shall also require all of its subconsultants to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

A. Commercial General Liability. Coverage for commercial general liability insurance shall be at least as broad as Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 0001). Consultant shall maintain limits no less than \$1,000,000 per occurrence, or the full per occurrence limits of the policies available, whichever is greater, for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit or product-completed operations aggregate limit is used, including but not limited to form CG 2503, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit. The general liability policy shall include or be endorsed (amended) to state that: (1) MNWD, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insured with respect to the Work or operations performed by or on behalf of the Consultant, including materials, parts or equipment furnished in connection with such work using as broad a form as CG 20 10 11 85 or the latest versions of both CG 20 10 and CG 20 37; and (2) the insurance coverage shall be primary insurance as respects MNWD, its directors, officials, officers, employees, agents, and volunteers using as broad a form as CG 20 01 04 13, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by MNWD, its directors, officials, officers, employees, agents, and volunteers shall be excess of the Consultant's insurance and shall not be called upon to contribute with it in any way.

B. Automobile Liability. Coverage shall be at least as broad as the latest version of the Insurance Services Office Business Auto Coverage form number CA 0001, code 1 (any auto). Consultant shall maintain limits no less than \$1,000,000 per accident for bodily injury and property damage. The automobile liability policy shall include or be endorsed (amended) to state that: (1) MNWD, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insureds with respect to the ownership,

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operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Consultant or for which the Consultant is responsible; and (2) the insurance coverage shall be primary insurance as respects MNWD, its directors, officials, officers, employees, agents, and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by MNWD, its directors, officials, officers, employees, agents, and volunteers shall be excess of the Consultant's insurance and shall not be called upon to contribute with it in any way. The automobile liability policy shall cover all owned, non-owned, and hired automobiles.

C. Workers' Compensation and Employer's Liability Insurance. Consultant shall maintain Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance in an amount no less than \$1,000,000 per accident for bodily injury or disease. The insurer shall agree to waive all rights of subrogation against MNWD, its directors, officials, officers, employees, agents, and volunteers for losses paid under the terms of the insurance policy which arise from work performed by the Consultant.

D. Professional Liability. Consultant shall procure and maintain, and require its subconsultants to procure and maintain, for a period of five (5) years following completion of the Project, errors and omissions liability insurance appropriate to their profession covering Consultant's wrongful acts, negligent actions, errors or omissions. The retroactive date (if any) is to be no later than the effective date of this agreement. Consultant shall purchase a one-year extended reporting period: i) if the retroactive date is advanced past the effective date of this Agreement; ii) if the policy is canceled or not renewed; or iii) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement. Such insurance shall be in an amount not less than \$2,000,000 per claim.

E. Excess Liability (if necessary). The limits of Insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess coverage shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of MNWD (if agreed to in a written contract or agreement) before MNWD's own primary or self-Insurance shall be called upon to protect it as a named insured. The policy shall be endorsed to state that MNWD, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insured at least as broad a form as CG 20 10 11 85 or the latest versions of both CG 20 10 and CG 20 37. The coverage shall contain no special limitations on the scope of protection afforded to MNWD, its directors, officials, officers, employees, agents, and volunteers.

Section 9.3. All Coverages. The Consultant is required by this Agreement to state that: (i) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to MNWD; If any of the required coverages expire or cancel during the term of this agreement, the Consultant shall deliver the renewal certificate(s) including the general liability additional insured endorsement to MNWD at least ten (10) days prior to the cancellation or expiration date; and (ii) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to MNWD, its directors, officials, officers, employees, agents, and volunteers.

Section 9.4. Separation of Insureds; No Special Limitations. All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to MNWD, its directors, officials, officers, employees, agents, and volunteers.

Section 9.5. Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to MNWD.

Section 9.6. Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A-:VII or equivalent, or as otherwise approved by MNWD.

Section 9.7. Verification of Coverage. Consultant shall furnish MNWD with certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to MNWD. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms provided by MNWD if requested. All certificates and endorsements must be received and approved by MNWD before work commences. In the event that the Consultant employs other consultants (sub-consultants) as part of the services covered by this agreement, it shall be the Consultant's responsibility to require and confirm that each sub-consultant meets the minimum insurance requirements specified above.

Section 9.8. Reporting of Claims. Consultant shall report to MNWD, in addition to Consultant's insurer, any and all insurance claims submitted by Consultant in connection with the Services under this Agreement.

SECTION X – TERMINATION

Section 10.1. Grounds for Termination. MNWD may, by written notice to Consultant, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Consultant of such termination, and specifying the effective date thereof, at least seven (7) days before the effective date of such termination. Upon termination, Consultant shall be compensated only for those services which have been adequately rendered to MNWD, and Consultant shall be entitled to no further compensation. Consultant may not terminate this Agreement except for cause.

Section 10.2. Effect of Termination. If this Agreement is terminated as provided herein, MNWD may require Consultant to provide all finished or unfinished Documents and Data and other information of any kind prepared by Consultant in connection with the performance of Services under this Agreement. Consultant shall be required to provide such document and other information within fifteen (15) days of the request.

Section 10.3. Additional Services. In the event this Agreement is terminated in whole or in part as provided herein, MNWD may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

SECTION XI – OWNERSHIP OF MATERIALS AND CONFIDENTIALITY

Section 11.1. Documents & Data; Licensing of Intellectual Property. This Agreement creates a non-exclusive and perpetual license for MNWD to copy, use, modify, reuse, or sublicense any and all copyrights, designs, and other intellectual property embodied in plans, specifications, studies, drawings, estimates, and other documents or works of authorship fixed in any tangible

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medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement (“Documents & Data”). All Documents & Data shall be and remain the property of MNWD, and shall not be used in whole or in substantial part by Consultant on other projects without MNWD’s express written permission. Within thirty (30) days following the completion, suspension, abandonment or termination of this Agreement, Consultant shall provide to MNWD reproducible copies of all Documents & Data, in a form and amount required by MNWD. MNWD reserves the right to select the method of document reproduction and to establish where the reproduction will be accomplished. The reproduction expense shall be borne by MNWD at the actual cost of duplication. In the event of a dispute regarding the amount of compensation to which the Consultant is entitled under the termination provisions of this Agreement, Consultant shall provide all Documents & Data to MNWD upon payment of the undisputed amount. Consultant shall have no right to retain or fail to provide to MNWD any such documents pending resolution of the dispute. In addition, Consultant shall retain copies of all Documents & Data on file for a minimum of fifteen (15) years following completion of the Project, and shall make copies available to MNWD upon the payment of actual reasonable duplication costs. Before destroying the Documents & Data following this retention period, Consultant shall make a reasonable effort to notify MNWD and provide MNWD with the opportunity to obtain the documents.

Section 11.2. Subconsultants. Consultant shall require all subconsultants to agree in writing that MNWD is granted a non-exclusive and perpetual license for any Documents & Data the subconsultant prepares under this Agreement. Consultant represents and warrants that Consultant has the legal right to license any and all Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were prepared by design professionals other than Consultant or its subconsultants, or those provided to Consultant by MNWD.

Section 11.3. Right to Use. MNWD shall not be limited in any way in its use or reuse of the Documents and Data or any part of them at any time for purposes of this Project or another project, provided that any such use not within the purposes intended by this Agreement or on a project other than this Project without employing the services of Consultant shall be at MNWD’s sole risk. If MNWD uses or reuses the Documents & Data on any project other than this Project, it shall remove the Consultant’s seal from the Documents & Data and indemnify and hold harmless Consultant and its officers, directors, agents and employees from claims arising out of the negligent use or re-use of the Documents & Data on such other project. Consultant shall be responsible and liable for its Documents & Data, pursuant to the terms of this Agreement, only with respect to the condition of the Documents & Data at the time they are provided to MNWD upon completion, suspension, abandonment or termination. Consultant shall not be responsible or liable for any revisions to the Documents & Data made by any party other than Consultant, a party for whom the Consultant is legally responsible or liable, or anyone approved by the Consultant.

Section 11.4. Intellectual Property Indemnification. Consultant shall defend, indemnify and hold MNWD, its directors, officials, officers, employees, volunteers and agents free and harmless, pursuant to the indemnification provisions of this Agreement, for any alleged infringement of any patent, copyright, trade secret, trade name, trademark, or any other proprietary right of any person or entity in consequence of the use on the Project by MNWD of the Documents & Data, including any method, process, product, or concept specified or depicted.

Section 11.5. Confidentiality. All Documents & Data, either created by or provided to Consultant in connection with the performance of this Agreement, shall be held confidential by Consultant. All Documents & Data shall not, without the prior written consent of MNWD, be used or reproduced by Consultant for any purposes other than the performance of the Services. Consultant shall not disclose, cause or facilitate the disclosure of the Documents & Data to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant that is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use MNWD's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of MNWD.

SECTION XII – ACCOUNTING, INSPECTION AND AUDIT

Section 12.1. Records. Consultant shall keep and shall preserve for four (4) years after final completion of the services, accurate and detailed records of all ledgers, books of account, invoices, vouchers, cancelled checks, and other documents or records evidencing or relating to the work, services and disbursements charged to MNWD under this Agreement (collectively, "Books and Records"). Any and all Books and Records must be maintained in accordance with generally accepted accounting principles and must be sufficiently complete and detailed so as to permit an accurate evaluation of the services provided by Consultant under this Agreement. During such four (4) year period, Consultant shall give MNWD and its agents, during normal business hours, access to such Books and Records. MNWD and its agents shall have the right to make copies of any of the said Books and Records.

Section 12.2. Custody. Where MNWD has reason to believe that any of the Books and Records required to be maintained by this Article may be lost or discarded due to dissolution or termination of Consultant's business, MNWD may, by written request, require that custody of such Books and Records be given to a person or entity mutually agreed upon and such Books and Records thereafter shall be maintained by such person or entity at Consultant's expense. Access to the Books and Records shall be granted to MNWD and its Representatives.

SECTION XIII – GENERAL PROVISIONS

Section 13.1. Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

MNWD:

Moulton Niguel Water District
P.O. Box 30203
Laguna Niguel, CA 92607
Attn: Director of Engineering

CONSULTANT:

Black & Veatch Corporation
5 Peters Canyon Rd., Suite 300
Irvine, CA 92606
Attn: Jeff Neemann

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

Section 13.2. Subcontracting/Subconsulting. Consultant shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval

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of MNWD. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

Section 13.3. Equal Opportunity Employment. Consultant represents that it is an equal opportunity employer and it shall not discriminate against any subconsultant, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination. Consultant shall also comply with all relevant provisions of MNWD's Minority Business Enterprise program, Affirmative Action Plan or other related programs or guidelines currently in effect or hereinafter enacted.

Section 13.4. Time of Essence. Time is of the essence for each and every provision of this Agreement.

Section 13.5. MNWD's Right to Employ Other Consultants. MNWD reserves right to employ other consultants in connection with this Project.

Section 13.6. Successors and Assigns. This Agreement shall be binding on the successors and assigns of the parties.

Section 13.7. Assignment or Transfer. Consultant shall not assign, hypothecate or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of MNWD. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

Section 13.8. Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Consultant include all personnel, employees, agents, and subconsultants of Consultant, except as otherwise specified in this Agreement. All references to MNWD include its elected officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content or intent of this Agreement.

Section 13.9. Amendment; Modification. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

Section 13.10. Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.

Section 13.11. No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

Section 13.12. Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

Section 13.13. Prohibited Interests. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. Consultant further agrees to file, or shall cause its employees or subconsultants to file, a Statement of Economic Interest with MNWD's Filing Officer as required under state law in the performance of the Services. For breach or violation of this warranty, MNWD shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, officer or employee of MNWD, during the term of his or her service with MNWD, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

Section 13.14. Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.

Section 13.15. Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in Orange County.

Section 13.16. Government Code Claim Compliance. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, claims and/or changed conditions, Consultant must comply with the claim procedures set forth in Government Code sections 900 et seq. prior to filing any lawsuit against MNWD. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, claims, and/or changed conditions have been followed by Consultant. If no such Government Code claim is submitted, or if any prerequisite contractual requirements are not otherwise satisfied as specified herein, Consultant shall be barred from bringing and maintaining a valid lawsuit against MNWD.

Section 13.17. Attorneys' Fees. If either party commences an action against the other party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing party in such litigation shall be entitled to have and recover from the losing party reasonable attorneys' fees and all other costs of such action.

Section 13.18. Authority to Enter Agreement. Consultant has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

Section 13.19. Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

Section 13.20. Entire Agreement. This Agreement contains the entire Agreement of the parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings

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or agreements. This Agreement may only be modified by a written amendment signed by both parties.

MOULTON NIGUEL WATER DISTRICT:

BLACK & VEATCH CORPORATION:

By: _____

By: _____

(Authorized Representative of
Consultant)

Printed Name: _____

Printed Name: _____

Title: _____




Title: _____

Dated: _____

Dated: _____

Exhibit A Scope of Services

We Understand your Goals and have an Approach to Deliver Results. True goal of the effort is to evaluate the pipeline for developing a life extension plan, identifying what do we need to inspect and what are our acceptance criteria. Using the approach shown in the table below, our inspection goals will collect data of maximum use, sufficient accuracy, and relevant to the evaluation method. We will have the ability to state whether an asset can be put back in service based on inspection results based on developed acceptance criteria and communications regarding defects.

	GOAL	ISSUES	KEY APPROACH ITEMS	HOW WE EXECUTE	BENEFITS TO MNWD
ASSESSMENT PLANNING 	Understand the market for inspection and pick the best assessment approach for the Eastern TM	<ul style="list-style-type: none"> There are many different technologies and platforms in the market Limited access to the pipeline could dictate the approach and platform You can spend a lot of money inspecting for not a lot of return 	<ul style="list-style-type: none"> Perform a market assessment and produce one-page technology summaries that MNWD can reuse Systematically narrow the field to the right technology and then pick the right platform Create a competitive RFP process that gets MNWD the right platform at the right price 	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;">Kickoff & Review Data & History</div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;"> Select Viable Platforms: Pipe Access, Operational Requirements, and Inspection Resolution Needs </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;"> Coordinate with MNWD to Identify and Mitigate Operational & City Impacts </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;"> Cost Estimates & Schedule for Inspection </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;"> Develop Inspection Plan & Vendor RFP </div>	<ul style="list-style-type: none"> MNWD has re-usable information on technologies that can be applied to other pipelines in their system MNWD gets the right balance of cost and risk to assess the condition of the pipeline MNWD saves money through a competitive procurement process
ASSESSMENT EXECUTION 	Execute a clear and concise plan for field inspection that is best for MNWD operations and all stakeholders	<ul style="list-style-type: none"> Need extensive coordination between cities and potentially railroad, Caltrans, and MWD Damage, shutdown, or other impact to system during inspection Potential for traffic disruption and noise impacts to local communities 	<ul style="list-style-type: none"> Develop a clear and concise plan for access that considers building permanent access locations Understanding of permitting process to develop packages that expedite review by cities Experienced field staff that know how to oversee technology vendors and inspections to get things right 	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center; color: white;"> Kickoff Condition Assessment Vendor </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center; color: white;"> Support Permits & Licenses </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center; color: white;"> Conduct Cathodic Protection Inspection (if required) </div> <div style="text-align: center;">↓</div> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center; color: white; width: 60%;"> Field Support Shutdown, Inspection, Vendor Oversight </div> <div style="text-align: center; font-size: 0.8em;"> As Needed → </div> <div style="border: 1px dashed black; border-radius: 10px; padding: 5px; text-align: center; color: white; width: 30%;"> Design Emergency repairs </div> </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center; color: white;"> Support Return to Service </div>	<ul style="list-style-type: none"> MNWD will end up with better access for future inspection or maintenance Permitting process goes smoothly and maintains project schedule Inspection gets the right data and is done with minimal impacts to the community
ANALYSIS/ RECOMMENDATIONS 	Remaining life estimation and life extension plan development (if needed) that can be worked into the CIP	<ul style="list-style-type: none"> Cathodic protection system may not be performing as intended Data from inspection might not be conclusive for recommendation Rehab methods for the size and pipe material of the Eastern TM are not extensive 	<ul style="list-style-type: none"> Detailed analysis of data to determine if concern is localized or systematic issue Evaluate options to extend useful life that balances risk and cost 	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center; color: white;"> Pressure & Operating Analysis </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center; color: white;"> Detailed Condition Data Analysis </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center; color: white;"> Develop Recommendations: Re-inspect/No Action Repair Rehab Replace </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center; color: white;"> Update Owner Systems: GIS, Asset Management, CMSS </div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center; color: white;"> Develop Condition Assessment Report </div>	<ul style="list-style-type: none"> Predictable renewal budget MNWD can feel confident that Eastern TM risk is understood and mitigated

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ASSESSMENT PLANNING - Giving you the best market information to pick the best platform for the Eastern TM inspection

DEVELOP TECHNOLOGY SUMMARY

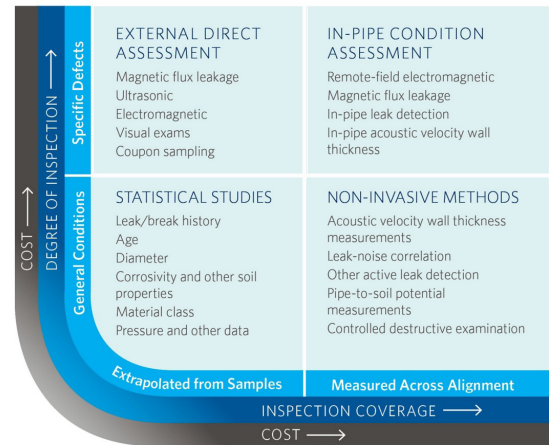
No approach can eliminate breaks. The key is to understand and mitigate risk. Our approach is to build a market understanding that will help MNWD reduce the risk of breaks occurring and respond as effectively as possible when breaks do occur. Inspection technology, technology vendor, and technology deployment platform selection are important challenges to any condition assessment project. We will give you a picture of the market and MNWD understand what can be done with statistical studies, non-invasive methods, external direct assessment, and in-pipe condition assessment.

The technology is the basis for excitation and response of the pipe material. The deployment platform is the means for inserting the technology into the pipe and extracting the data from the pipe. Technologies must be selected based on the pipe material being inspected. The deployment platform is selected based on pipeline diameter and access availability.

Value Added Idea: One Page Technology Summaries



There are many different technologies, platforms, and vendors in the market that make it difficult to know what really applies and what doesn't. Our value-added idea is to take our market assessment information and prepare one-page technology summaries that can be used by MNWD after this project to make decisions about future condition assessment projects and to communicate with various stakeholders. We have included a mock-up one-page technology summary in the appendix, main objectives of the summary will be:

- Overview of the fundamental technology, the different platforms available, and the potential vendors, including a representative photo
- Applicability to pipe size and material
- Key advantages and disadvantages
- Access and logistic requirements
- Resolution and data produced
- Relative costs in \$/ft or similar metric



Selecting the right assessment method is a balance of risks and costs. Our market assessment will focus on giving MNWD a complete picture of all their options.

Technology Summary

Technology:	Remote Field Electromagnetics	
Platform:	Tethered or Free-swimming	
Vendor:	Pica	Pure
Model:	 SeeSnake	 PipeDiver
Applicable Pipe Types:	PCCP, BWP, STL, CIP, DIP	PCCP, BWP, STL
Pipe Size:	3" - 36"	36" - 72"
Pressure Rating:	0 - 300 psig	0 - 250 psi
Allowable Flow Rate:	0.17 - 0.50 fps	0.50 - 3.00 fps
Run Time:	5 - 12 hours	25 hours
Logistics:	Insertion Tool: Pig launcher at cut end, rider, flange, or hot tap Min. Access Dia: full bore Length: 7' - 12' Weight: 600 lbs Pipe Wall Clearance: 0.250" - 2" Traversable Features: 90°-bends Tracking: internal kit	Insertion Tool: Pig launcher at cut end, rider, flange, or hot tap Min. Access Dia: 12" Length: 9.5' Weight: 200 lbs Pipe Wall Clearance: 1" Traversable Features: B/FV, Ball Valves, Gate Valves, Vertical Sections, Reducers, 90°-bends Tracking: internal kit
Advantages:	Internal and external flaw detection Lined and unlined pipe Semi automatic reporting	Lined and unlined pipe
Disadvantages:	Limited/costly interior access to pipeline Requires pigging	
Resolution:	Very high resolution May detect localized, deep pitting 10% wall loss in a 1'x1' area	Medium resolution May not detect localized, deep pitting 30% wall loss over a 3'x3' area
Relative Cost:	\$32/ft	\$35/ft

Our one page technology summaries will be structured to be used by MNWD for any pipeline assessment project and to even communicate the technology to outside stakeholders or the board of directors.

PROJECT LOGISTICS & COLLABORATION

After market assessment we will turn our focus to finding what is the **best condition assessment solution** for the Eastern TM. What will drive that evaluation are **logistics, access, and partner collaboration**. This figure captures our initial understanding and ideas to go from right technology to right platform for your project.

- 1 Air vacs may require little modification to be potential insertion points for internal leak detection tools, such as the Pure Sahara
- 2 Outlets will require modification to be potential insertion points for internal inspection tools, such as the Pure PipeDiver
- 3 Inline valve will impede internal inspection tools, such as the Pica SeeSnake
- 4 Vertical and/or horizontal bends can be navigated by internal inspection tools, such as the Pica SeeSnake and Pure PipeDiver
- 5 Potential new access point location to provide greater inspection coverage
- 6 Effective partner collaboration for successful project execution and outcomes

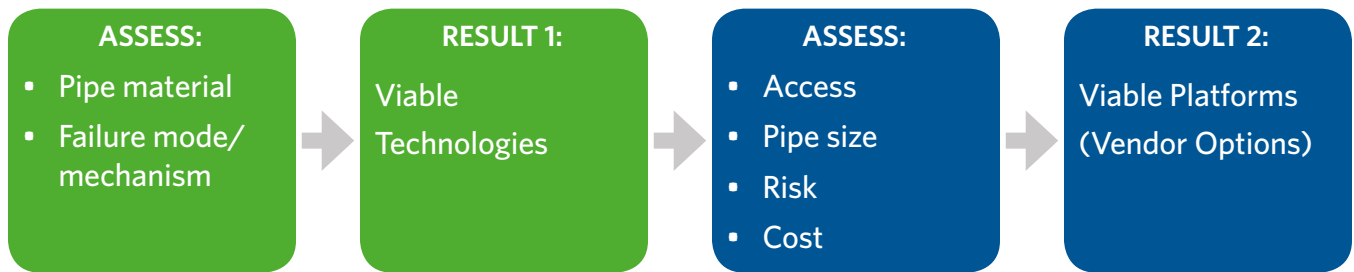
LEGEND: 33" CMLC 30" CMLC Railroads City Boundaries



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NARROW THE FIELD TO THE RIGHT TECHNOLOGY AND THE RIGHT PLATFORM FOR EASTERN TM

Our approach is to utilize a repeatable, defensible, transparent process that identifies and mitigates risk. To detect and mitigate transmission main deterioration, it is critical to understand the pipe material and its damage mechanisms. Steel pipe fails when localized corrosion reduces pipe wall thickness and stress accumulates in the pipe wall, ultimately exceeding the pressure capacity of the pipe. Fully understanding failure risk requires employing technologies which can locate and quantify wall loss. Technologies which report generalized wall loss over long reaches of pipe are unlikely to find the localized pitting which causes pipes to leak and fail. However, platforms, or means of implementing the technology may limit viable vendor options. Selecting the right assessment technology requires balancing the quantity of pipe assessed and degree of inspection against available budget. Obtaining a clear understanding of the damage mechanism may allow MNWD to mitigate the damage mechanism to reduce further wear on the pipe and identify viable rehabilitation methods.



PROCUREMENT PRICING - CAPTURE MAXIMUM VALUE OF ASSESSMENTS WITH BUDGET AVAILABLE.

Our approach is to competitively bid assessment services and maximize the use of technologies with multiple providers.

We will maximize the use of technologies with multiple providers to allow the City greater flexibility in negotiations.

Steel pipe’s failure modes can be detected by leak detection and visual assessment. We propose maximizing the use of these techniques for which multiple vendors are available.

We will competitively bid assessment services to drive down costs while still meeting MNWD’s needs. Multiple vendors are available to provide leak detection or electromagnetic inspection of your pipe. For example, free-swimming leak detection now has four vendors supplying the transmission main market (Pure’s SmartBall, Hydromax’s Nautilus, PICA’s Recon+, and Aquam’s Bullet), while tethered leak detection has two (Pure’s Sahara and Aquam’s Investigator). Our knowledge of competitive market conditions will result in reduced costs without reducing level of service.

SAMPLE BID DOCUMENT IN-PIPE LEAK DETECTION			
	Mobilization Cost	Inspection Cost per foot	Reporting Cost
BASIC SERVICES:			
Leak detection (free-swimming)			
Leak detection (tethered)			
ADD-ONS:			
Joint detection			
Pipe location			
CCTV files			
Other			

TO BE FILLED OUT BY VENDOR

We know how to negotiate with subcontractors and technology vendors to get lower prices from vendors.

Our proposed Technical Director, Bethany McDonald, has previously negotiated rates with Pure Technologies’ inspection services for the City of Phoenix’s Transmission Main Inspection & Assessment Program that were approximately half of what the next major municipal client was paying.



ASSESSMENT EXECUTION - Giving you the best market information to pick the best platform for the Eastern TM inspection.

THINKING THROUGH THE LOGISTICS TO GET THE BEST PLAN

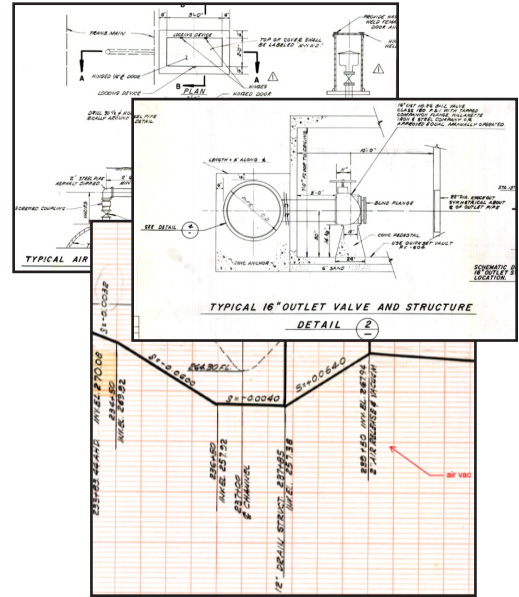
Approach: Identify or create access points for maximum inspection coverage.

Limited access and pipeline configuration present unique challenges to internally inspect the Eastern Transmission Main. **Air vacs** provide sufficient access for certain inspection technologies, such as acoustic leak detection, yet these 2-inch access points are too small for pipe wall inspection technologies and would need to be modified to gain access. The three existing air vacs along the alignment may allow distributed coverage of the entire pipeline if an internal leak detection technology was deployed. Other potential access points are outlets which are located on the southern reach of the alignment, however, these access points would only provide localized inspection coverage.

Potential hazards are still present once internal inspection technologies are within the pipeline. If **inline valves** do not already impede tools to pass, they will need to be exercised and confirmed able to fully open to prevent blockage while conducting internal inspections. There are three locations where the pipeline horizontally **bends** 90-degrees, which may be difficult for tethered technologies to pass and return without issue after already traversing vertical bends due to channel and canyon crossings.

Installing new access points is a viable alternative that will alleviate current limited access constraints and benefit future operation and maintenance or inspection and monitoring activities. Strategically placing these new access points will allow greater coverage using internal inspection technologies, such as electromagnetics to evaluate steel cylinder wall thickness. These access points will also be needed when the lining will eventually require replacement.

A potential location to install an access point is at a horizontal 90-degree bend at the intersection of Paseo De Valencia and Cabot Road. Pipe size changes from 33-inch to 30-inch diameter at this location which may require different sized internal inspection tools.



PROVEN RESULTS:

BV has designed and overseen access point installations for the Washington Suburban Sanitation Commission and will leverage this experience for this project. Access points were installed approximately 1,500 to 2,000 feet apart and considered existing access points that are difficult to utilize due to traffic issues.

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COLLABORATIVE PACKAGE FOR PARTNERS

Approach: Mitigate partner impacts by planning inspections far in advance.

Coordination with partners, such as cities will be crucial to facilitate a successful inspection. We will involve the City of San Juan Capistrano, majority owner of the Eastern Transmission Main, and other partners in the inspection plan discussions to ensure buy-in and limit public impacts.

A team of Black & Veatch professionals has already begun leveraging permitting experience from similar projects, researching the necessary regulatory entities for this Project, and populating a permit matrix with the information required to obtain each permit. Upon Project Notice to Proceed, Black & Veatch will contact the governing local, regional, state, and federal regulatory entities to determine all permitting and licensing requirements to finish populating the permit matrix with permit requirements within the first 30 days of the project.

The permit matrix will be used to manage permits and licenses during inspection and will contain a description of the permit or license, reference to the specific conditions or constraints of the permit, the term of the permit, and the costs or conditions to renew the permit.

PERMIT	MAJOR REQUIREMENTS	TIMELINE
Metrolink Encroachment Permit	<ul style="list-style-type: none">ApplicationSet of Plan & Profile DrawingsWritten Scope of Work and Work PlanTraffic Control Plans	30-90 Days
BNSF Railway Pipeline Crossing Permit	<ul style="list-style-type: none">ApplicationSet of Plan & Profile DrawingsEnvironmental Compliance Plan (if applicable)	30-60 Days
OC Flood Control District Encroachment Permit	<ul style="list-style-type: none">ApplicationComplete Set of PlansTraffic Control PlanNPDES Compliance Form (if applicable)Geotechnical Reports (if applicable)Hydraulic & Hydrology (if applicable)Calculations/Reports (if applicable)SWPPP (if applicable)	<ul style="list-style-type: none">1st submittal -Max 3 weeksAll following submittals - Max 2 weeks
OC Public Works Encroachment Permit	<ul style="list-style-type: none">ApplicationComplete Set of PlansTraffic Control PlanNPDES Compliance Form (if applicable)	
City Encroachment Permit	<ul style="list-style-type: none">ApplicationFull set of Plans (including traffic control)Water Quality Management Plan (if applicable)	Varies

THE RIGHT PROJECT, DONE RIGHT

Extensive inspection and monitoring (I&M) plan experience will ensure a well-orchestrated inspection is completed on time and within budget. An I&M Plan serves as a playbook, reducing costs for planning future inspections and even serving as an emergency response plan if a future failure were to occur. Our key team members will leverage experience from developing I&M Plans for 30 of the City of Phoenix's 51 scenarios to oversee vendor inspection plans and execution. When the right project is done right not only will a safe working environment be established, proper data management practices will be fulfilled. Data management is key during all project phases, so before vendors or contractors demobilize, they will be required to verify whether there are immediate defects that need attention.

Vendor Field Checklist to Ensure an Effective Inspection

- Inspection plan
 - Data management plan
 - Activities to be performed
 - Access location and method
 - Flow regulation or shutdown coordination plan
 - Daily field log and debrief
- Field safety plan
 - Site hazard identification and mitigation
 - Certification check
 - PPE check
 - MSDS check
 - Equipment check
 - Emergency action plan
- Traffic control
 - Permits
 - Engineered plans

PROVEN RESULTS:

Our team has extensive experience overseeing field inspections, including over 22,000 field hours for inspections at the Coachella Valley Water District which involved zero recordable or stop work injuries. Clinton McAdams, Project Engineer, has provided engineering oversight of vendors and contractors on over 20 projects and will leverage his experience from the Coachella Valley Water District field inspections, maintaining crew safety and data quality.



#4.



ANALYSIS/RECOMMENDATIONS - Develop a plan for rehab or replacement (if needed) that can be worked into the CIP.

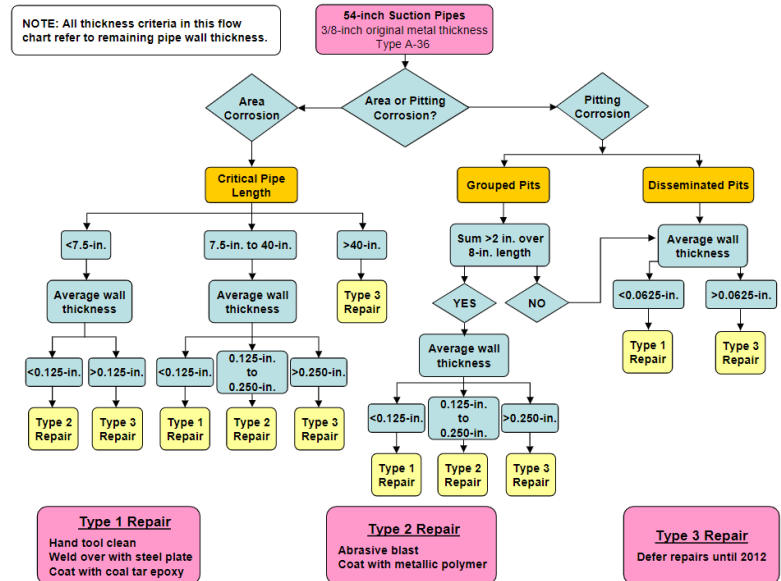
TURN DATA INTO ACTIONABLE OUTCOMES

Approach: Create protocols for repair and rehabilitation efforts.

Develop consistent guidelines to recommend repairs based on assessment results.

Similar to the decision tool we recommend for streamlining the selection of inspection technology, we also suggest the District develop a standardized decision process for assigning the recommendations category. Our Engineering Reports will provide a recommendation to reinspect, repair, rehab, or replace. With a standard decision tree, the District can be confident that recommendations are also consistent, transparent, and defensible.

The matrix will consider hydraulic and operational impacts, logistic and construction feasibility, improvements to structural integrity, and lifespan of the corrective action to plan maintenance requirements. Standards such as from AWWA and ASME along with implementation timeframes will be used to develop decision points to appropriate corrective actions. The decision matrix will prioritize types of concerns, such as corrosion due to degradation vs. cracks in welds, and determine the minimum thickness required for sections of the pipeline. We would identify the depth and size of pitting that needs to be detected and the criteria where the pipe would have to be repaired before return to service. The stress on the pipe varies thus so does wall loss tolerance per pipeline section.



PROVEN RESULTS:

The shown decision matrix for the OCSO outfall project identified appropriate correction actions based on steel thickness inspection results. This prioritization allocated repair resources for the current project and future projects.

Detailed documentation of recommendations, tracking progress of assessments and repairs performed—illustrating MNWD’s return on investment.

Condition analysis requires determining what actions are required based on existing condition to restore the needed level of service.

- Re-inspect. This category applies when no defects require intervening action. The pipe will be re-inspected at an interval consistent with its risk category.
- Repair. These types of repairs generally include localized repairs which could be performed by District staff, or possibly contracted in the case of more significant localized repairs.
- Rehab. Generally, this category applies to pipe which need a full rehabilitation to restore level of service. Our analysis will determine whether sufficient capacity remains in the host pipe to allow a semi-structural rehabilitation, or if a fully structural rehabilitation is needed. We will also recommend a timeframe to complete the work based on existing conditions and the District’s risk tolerance.
- Replace. This category is reserved for pipes which do not meet a minimum level of service and cannot be restored using any available rehabilitation method.
- Estimation of remaining useful life either with or without mitigating activities, at the District’s preference.
- Risk and condition mitigation activities. In some cases, it may be possible to hinder deterioration or damage to the pipe over time. Our analysis will seek to identify such situations and propose mitigating activities. For example, when soils-related corrosion has impacted a pipeline to the point where wall loss that has occurred is not structurally concerning, but is expected to continue and ultimately cause through-wall pipe corrosion. In this case, it is sometimes possible to retrofit pipelines with anodes to greatly limit future wall loss.
- Budgets for each recommendation in the Engineering Report

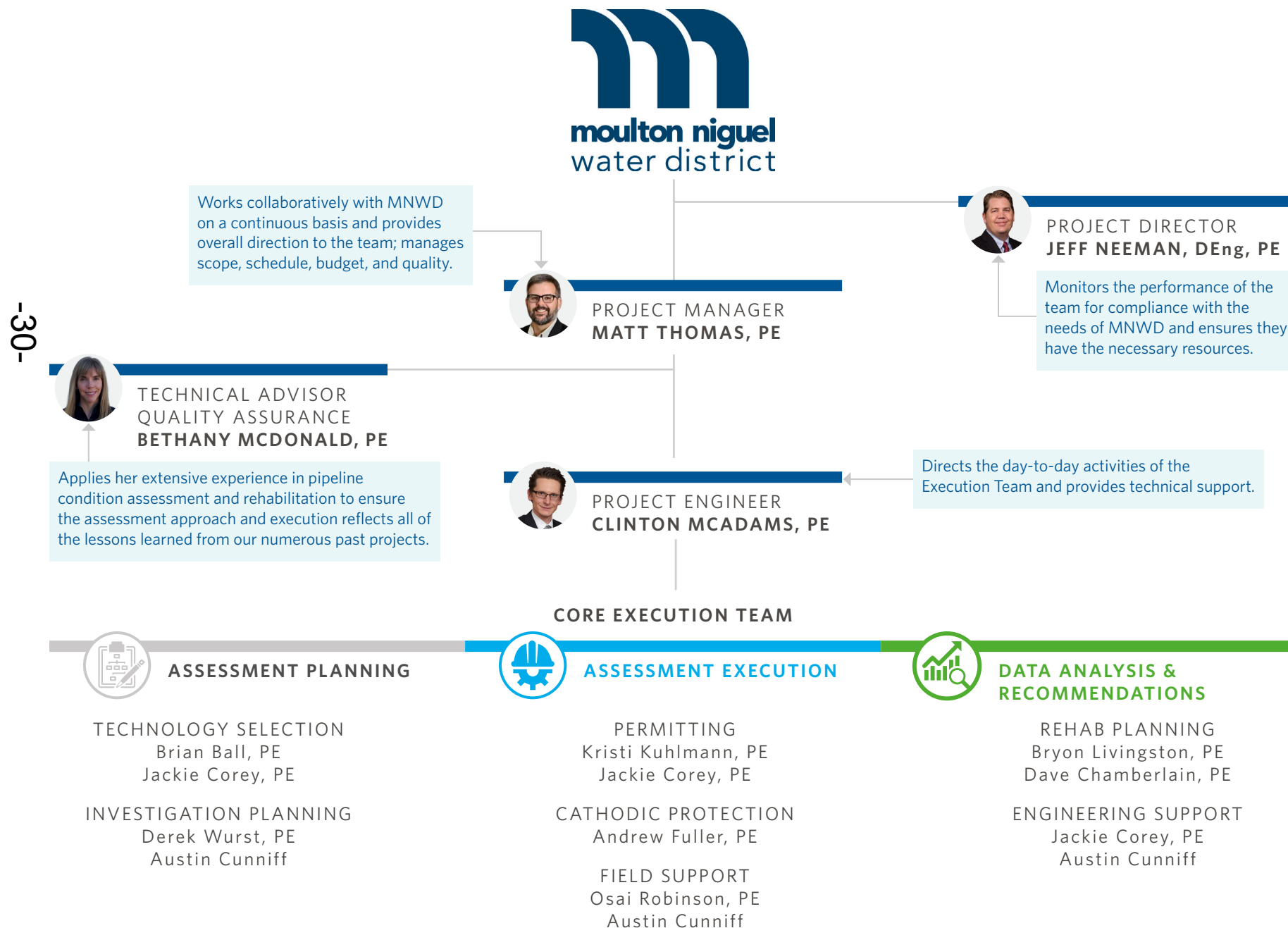
PROVEN RESULTS:

During an inspection in the City of San Diego’s Transmission Mains, our team identified a leak signature. We directed the contractor to excavate this pipe and confirmed presence of the leak. We recommended repairs and avoided an imminent failure.



Team

Black & Veatch has assembled a project team tailored specifically to the goals and objectives of your Project. Our unmatched experience in pipeline condition assessment planning, execution, and interpretation align us perfectly to execute this work. We have assembled a talented local team that will be backed by a team of subject matter experts who have executed pipeline condition assessment and rehabilitation projects similar to yours. The team brings the depth and practical project experience to place the right people in the right roles. As shown in the organizational chart below, Black & Veatch has pulled together a team that will efficiently execute this Project and deliver the recommendations that meet MNWD's priorities.



SUBJECT MATTER EXPERTS

Our subject matter experts are not just names on an org chart. While their hours are not extensive, they come in, work with the team and bring value from the years of lesson learned. The following highlights why we added them to our team to help us deliver on your goals.



REHABILITATION PLANNING EXPERT **BRIAN BALL, PE**

Will contribute to condition assessment technology evaluation and Vendor selection/ RFP development support using his 7 years of experience working for an inspection vendor and 10 years experience planning pipeline rehabilitation projects.



PIPELINE INSPECTION EXPERT **DEREK WURST, PE**

Derek is a crawl-in-the-pipe guy and will use his extensive pipeline inspection experience to provide inspection methodology recommendations as well as help identify the safest and most effective inspection access locations.



PIPELINE CIVIL EXPERT **KRISTI KUHLMANN, PE**

Living and working in South County, Kristi knows the area and how to get linear projects done. She will provide oversight for permit acquisition support, inspection location selection, and inspection access logistics.



PIPELINE REHABILITATION EXPERT **BRYON LIVINGSTON, PE**

Interprets assessment results and facilitates determination of the remaining useful life of the pipeline using his 39 years of experience in pipeline condition assessment and rehabilitation.

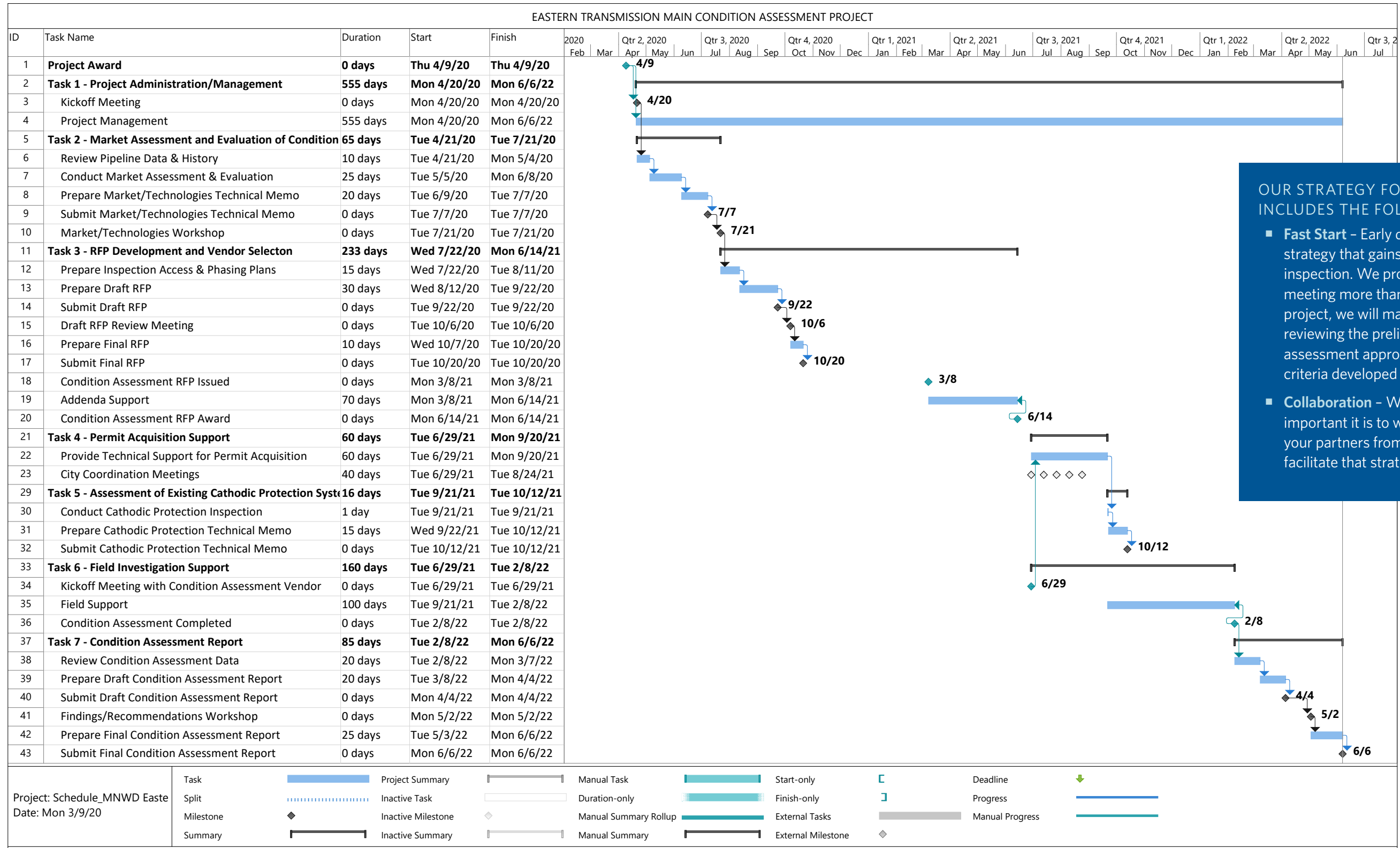


PIPELINE CONDITION ASSESSMENT EXPERT **DAVE CHAMBERLAIN, PE**

Dave has experience working on condition assessment in a utility and as a consultant, he will contribute to condition assessment results review and report recommendations.

Schedule

Our approach will meet all your schedule objectives and 100% vendor contract documents by October 2020. We understand the importance of hitting your schedule deadlines and are committed to delivering for you. Our team is poised to begin work immediately, stay focused throughout the project delivery, and collaborate with you as any issues arise. We developed a detailed schedule that is summarized below to demonstrate some of our most important steps. We look forward to going through this with you to gain mutual buy-in to the process that will result in on-time delivery.



OUR STRATEGY FOR ON-TIME DELIVERY INCLUDES THE FOLLOWING:

- Fast Start** - Early decision making requires a strategy that gains consensus and optimizes inspection. We propose to make the kickoff meeting more than just an overview of the project, we will make it a working meeting reviewing the preliminary technology and assessment approach decision matrix and criteria developed for the proposal.
- Collaboration** - We understand how important it is to work closely with you and your partners from start to finish and will facilitate that strategy throughout the project.

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#4.

#4.

The objective of this project is to conduct a condition assessment of the Eastern TM to determine the pipeline's structural condition and estimate remaining useful life. Results of this assessment will be used to determine appropriate pipeline rehabilitation, replacement, or repairs (if any).

Task 1 - Project Administration/Management

Task 1.1 - The Consultant shall include in the scope of work sufficient time and budget to administer the services provided. Administration shall include, but not be limited to, project kick-off meeting with District staff, workshops, coordination meetings, and preparation of meeting agendas and minutes for each meeting. Project administration shall also include preparation and maintenance of the project schedule. Consultant shall assume the following two (2) workshops and eight (8) meetings:

1. Kick-off Meeting – **Task 1.3**
2. Market/Technologies Workshop (*see Task 2.2*)
3. Draft RFP Review Meeting (*See Task 3.2*)
4. Coordination Meetings with each of the five (5) Cities (*See Task 4.1*)
5. Kick-off Meeting with Condition Assessment Vendor (*See Task 6.1*)
6. Findings/Recommendations Workshop (*See Task 7.3*)

Task 1.2 – Consultant will maintain appropriate quality control. The QC process will be documented in the standard B&V QC review spreadsheet. The QC reviewer will provide comments in the QC review spreadsheet. Each QC comment will require a response from the team. In addition, the QC reviewer will sign-off that the response is acceptable, and the team will assure the QC comments have been adequately addressed.

Deliverables: *Agendas and minutes for all meetings; biweekly schedule updates.*

Task 2 - Market Assessment and Evaluation of Condition Assessment Technologies

Task 2.1 - Pipeline condition assessment is a shifting marketplace with new technologies and frequent updates. The Consultant shall develop a market assessment of all currently available condition assessment technologies. A detailed summary of condition assessment technologies for pressure water pipelines shall include, but is not limited to the following:

- A. Description
- B. Advantages / benefits
- C. Disadvantages / limitations

- D. Pipe size and material suitability
- E. Logistics (e.g. pipe access, sensors, in-service vs. depressurized/dewatered)
- F. Resolution
- G. Relative cost

The Consultant shall perform a thorough review of all available District records and use this information to evaluate the various condition assessment technologies. The evaluation shall consider site conditions, site constraints, logistics, and potential impacts to District operations. Consultant shall conduct a screening process that will result in two (or three) shortlisted technologies most appropriate for the Eastern TM.

A detailed comparison of the shortlisted technologies that includes a comprehensive evaluation, cost, logistics, and operational impacts, shall be provided. Costs shall address mobilization/demobilization, installation and traffic control for sensors, pipe access, etc.

Task 2.2 - Consultant shall conduct a workshop with District staff to present findings and recommendations. During this workshop, the District intends on selecting one of the shortlisted technologies to move forward with.

Task 2.3 – Consultant shall develop a Technical memorandum summarizing evaluation and recommendation. Depending on the recommendations, potential existing or future access point installations will be identified. A draft version of the TM shall be submitted for District review. After District review, the final version of the TM shall incorporate all District comments (or an explanation of why the comment was dismissed).

Deliverables: Draft and Final technical memorandum summarizing evaluation and recommendation.

Task 2.4 – Consultant shall prepare access point installation design package to prepare for inspections. **Assumption** – effort is based on adding one permanent access manway with launch piping and a precast manhole for access.

Assumption - For the purpose of estimating level of effort for Tasks 3, 4, 6, 7, and 8, Consultant assumes electromagnetic inspection as the selected technology from Task 2.

Task 3 - RFP Development and Vendor Selection Support

Task 3.1 - The Consultant shall prepare an RFP to solicit a Vendor to perform the condition assessment. The Consultant shall prepare performance criteria, objectives, scope of work, reporting requirements, work restrictions, and other requirements needed to make decisions based on the assessment. Consultant shall prepare inspection access plans and phasing plans to support development of the RFP.

#4.

Task 3.2 - After completion of the Draft RFP, Consultant will be required to attend a coordination meeting with the District for review and comment. Consultant shall then incorporate the District's comments and prepare the Final RFP.

Task 3.3 - During the solicitation process, the Consultant shall assist with providing information and clarification of the RFP documents to prospective vendors as requested. Consultant shall assist with vendor rate negotiation.

Deliverables: Draft and Final RFP with supporting documents, and any required addenda.

Task 4 - Permit Acquisition Support

The awarded Vendor will be required to prepare all permit applications and pay applicable fees. The Consultant shall provide permit acquisition support services, including, but not necessarily limited to the following:

Task 4.1 - Attendance at coordination meeting with each of the five (5) Cities.

Task 4.2 - Providing technical support for application materials and acquisition efforts. Consultant shall prepare and provide permit matrix including requirements for entities within project site limits. **Assumption** - Assumed nine entities total.

Task 5 – Review Cathodic Protection Testing and Inspection Report

The Consultant shall review Cathodic Protection Testing and Inspection Report prepared by San Juan Capistrano's consultant. Consultant will review the findings and recommendations and advise if they are applicable to the District.

Deliverables: Letter summarizing comments.

Task 6 – Concrete Vault Condition Assessment

Task 6.1 – The Consultant shall review existing documentation to plan for field activities. Upon review of the documentation and meetings with District staff, the Consultant shall prepare a field inspection plan documenting the assessment approach and safety plan.

Task 6.2 – The Consultant shall conduct confined space entries into the accessible manholes and structures to perform a visual assessment. **Assumption** – since the awarded Vendor will access the same vaults, the RFP will include scope for the Vendor to provide traffic control and confined space entry setup and support. **Assumption** - vault condition assessments will be coordinated with Task 7 - Field Investigation Support and Vendor field investigation schedule. The Consultant will provide a 2-person field crew and necessary assessment

equipment for up to two days onsite. Visual observations of concrete and metal surfaces, such as cracking and corrosion, will be documented with notes and photographs. Locations of observations will be documented by circumferential clock position and their locations will be recorded by distance from the entry points. Observations will be documented and analyzed using standards such as American Concrete Institute (ACI) and National Association of Sanitary Sewer Companies (NASSCO) Manhole Assessment and Certification Program (MACP) along with the Consultant's experience.

Task 6.3 – The Consultant will prepare a summary of the field data collection activities, the results of the condition analysis, and recommended actions including planning level opinions of probable costs per American Association of Cost Engineering International (AACE). The information will be included in the Condition Assessment Report.

Task 7 - Field Investigation Support

Task 7.1 – Consultant shall attend a Kick-off Meeting with the selected Condition Assessment Vendor.

Task 7.2 - The Consultant shall act as technical advisor during field investigation to ensure condition assessment work is completed by the Vendor in compliance with the contract documents. The Consultant is expected to attend site visits and review vendor compliance with the contract documents.

Task 7.3 – Consultant is expected to review submittals, shop drawings, respond to requests for information (RFIs), and resolve field issues as needed.

Assumption – Consultant has assumed 5 submittals/shop drawings and 10 RFIs.

Task 7.4 – Consultant will develop an urgent repair plan that would define how to address defects identified during inspection such as repairs to the pipeline or lining. The plan will be based on MNWD repair specifications.

Task 8 - Condition Assessment Report

Task 8.1 - The Consultant shall analyze the data collected from the assessment to evaluate the physical condition of the pipeline, the estimated remaining service life of the pipeline, and possible causes of corrosion and/or pipe wall loss. Consultant shall then make recommendations for how to proceed with rehabilitation, replacement, or repairs of the pipeline in its entirety or by segments, if needed. Recommended actions shall consider:

- A. Logistical and operational impacts (e.g. hydraulics, access, etc.)
- B. Method of rehabilitation (i.e. slipline, CIPP, etc.) and/or replacement (i.e. open cut, trenchless, etc.)
- C. Conceptual costs

#4.

D. Relative priority

The goal is for the Consultant to establish future capital improvement project(s), if needed.

Task 8.2 - The results of the condition assessment of the Eastern TM and vaults shall be documented in a formal report with sections describing the methods, findings, conclusions, and recommendations. A draft version of the report shall be submitted for District review. The final version of the report shall incorporate all District comments (or an explanation of why the comment was dismissed).

Task 8.3 - Consultant shall conduct a workshop with District staff to present findings and recommendations.

Deliverables:

- Draft Report: three hard copies and one electronic pdf.
- Final Report: five hard copies and one electronic pdf.

Exhibit B Fee Schedule

STAFF TITLE	Jeff Neemann, PD	Matt Thomas, PM	Clinton McAdams, PE	Bethany McDonald, Tech Adv	Brian Ball	Jackie Corey	Derek Wurst	Kristi Kuhlmann	Andrew Fuller	Osai Robinson/Austin Cunniff	Bryon Livingston/Dave Chamberlain	Project Controls/Finance	Admin	Total Labor	Labor Fee	Direct Expenses	Total Expenses	Total Fee	Notes	
BILLING RATE	\$270	\$265	\$160	\$230	\$185	\$160	\$220	\$220	\$180	\$130	\$220	\$110	\$85							
TASK																				
Task 1 Project Management														112	\$19,030	\$500	\$500	\$19,530		
Task 1.1 Project Mangement		24										24	24	72	\$11,040	\$500	\$500	\$11,540		
Task 1.2 Quality Control				16										16	\$3,680		\$0	\$3,680		
Task 1.3 Kickoff Meeting	2	2	8	4						8				24	\$4,310		\$0	\$4,310		
Task 2 Market Assessment and Evaluation of Condition Assessment Technologies														216	\$35,880	\$500	\$500	\$36,380		
Task 2.1 Market Assessment		4	24		16	16	8				8			76	\$13,940		\$0	\$13,940		
Task 2.2 Market Assessment Workshop	2	2	8	8										20	\$4,190	\$500	\$500	\$4,690		
Task 2.3 Market Assessment Technical Memorandum		4	16			16				40			4	80	\$11,720		\$0	\$11,720		
Task 2.4 Access Point Installation Design		2	8	2		4				24				40	\$6,030		\$0	\$6,030	One access manway with precast manhole	
Task 3 RFP Development and Vendor Selection Support														96	\$15,870	\$500	\$500	\$16,370		
Task 3.1 Develop Draft and Final Vendor RFP		2	16	4		16				20			4	62	\$9,510		\$0	\$9,510		
Task 3.2 Vendor RFP Workshop	2	2	4	2										10	\$2,170	\$500	\$500	\$2,670		
Task 3.3 Support During Vendor Solicitation Process		2	16	2		4								24	\$4,190		\$0	\$4,190		
Task 4 Permit Acquisition Support														92	\$16,265	\$0	\$0	\$16,265		
Task 4.1 Attend 5 Coordination Meetings		5	10					5						20	\$4,025		\$0	\$4,025		
Task 4.2 Technical Support Materials		4	16			8		20		20			4	72	\$12,240		\$0	\$12,240		
Task 5 Review Cathodic Protection Report														10	\$2,030	\$0	\$0	\$2,030		
Task 5 Review Cathodic Protection Report		2	2	2					4					10	\$2,030		\$0	\$2,030		
Task 6 Concrete Vault Condition Assessment														130	\$20,140	\$1,000	\$1,000	\$21,140		
Task 6.1 Develop Plan		2	8				4			16				30	\$4,770		\$0	\$4,770		
Task 6.2 Perform Inspection			16							16				32	\$4,640	\$1,000	\$1,000	\$5,640		
Task 6.3 Develop Recommendations		2	16	6						32	8		4	68	\$10,730		\$0	\$10,730		
Task 7 Field Investigation Support														242	\$35,840	\$1,000	\$1,000	\$36,840		
Task 7.1 Kick-off Meeting with Condition Assessment Vendor		2	4											6	\$1,170		\$0	\$1,170		
Task 7.2 Site Visits and Vendor Oversight		2	40							40				82	\$12,130	\$1,000	\$1,000	\$13,130		
Task 7.3 Review Shop Drawings, RFIs, and other issues		4	20	4		4	4			80			4	120	\$17,440		\$0	\$17,440		
Task 7.4 Urgent Repair Plan			8	2		8				16				34	\$5,100		\$0	\$5,100		
Task 8 Condition Assessment Report														272	\$45,050	\$500	\$500	\$45,550		
Task 8.1 Data Review and Develop Recommendations		4	40	8		16				20	20			108	\$18,860		\$0	\$18,860		
Task 8.2 Prepare Draft and Final Report		8	40	4		8				60	8		8	136	\$20,960		\$0	\$20,960		
Task 8.3 Findings & Recommendations Workshop	2	2	8	8						8				28	\$5,230	\$500	\$500	\$5,730		
Total Hours	8	81	328	72	16	100	16	25	4	400	44	24	52	1,170						
Total Fee	\$2,160	\$21,465	\$52,480	\$16,560	\$2,960	\$16,000	\$3,520	\$5,500	\$720	\$52,000	\$9,680	\$2,640	\$4,420		\$190,105		\$4,000	\$194,105		

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Exhibit "C" Vendor Contact List

Company Name	Company Address	Contact Person	Telephone #	E-Mail
Black & Veatch	5 Peters Canyon Rd., Suite 300 Irvine, CA 92606	Jeff Neemann	(949) 788-4233	neemannjj@bv.com
Hazen & Sawyer	7700 Irvine Center Dr., Suite 200 Irvine, CA 92618	Sean Pour	(949) 557-8553	spour@hazenandsawyer.com
V&A Consulting Engineers	11011 Via Frontera, Suite C San Diego, CA 92127	Debra Kaye	(619) 436-5789	dkaye@vaengineering.com



moulton niguel water district

America's Water Infrastructure Act Update

Technical Committee Meeting
April 6, 2020

Risk & Resilience Assessment (RRA)

Emergency Response Plan (ERP)

Signed into law – October 23, 2018

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Each community water system serving a population of greater than 3,300 persons shall assess the risks to, and resilience of, its system.

Risk & Resilience Assessment

- Malevolent Acts and Natural Hazards
- Conveyance and Treatment
- System Monitoring
- Financial Systems
- Chemical
- Operation and Maintenance

Certification Deadlines

Assessments	Deadline*	Next 5-Year Cycle Date
Risk & Resilience Assessment	March 31, 2020	March 31, 2025
Emergency Response Plan	September 30, 2020	September 30, 2025

* Deadlines vary based on the size of the population served by the agency; the District deadline is based on a population greater than 100,000