

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT, MADE AS OF THIS ____ day of _____, 2025, by and between the City of Joliet, Illinois, an Illinois Municipal Corporation, (hereinafter called the "City") and Cavanaugh & Associates, P.A., (hereinafter called the "Consultant"), collectively referred to as the "Parties" herein, is an AGREEMENT for professional services.

NOW, THEREFORE, the City and the Consultant in consideration of the mutual covenants hereinafter set forth agree as follows:

SECTION 1 – SERVICES OF THE CONSULTANT

- 1.1 The Project scope of work is defined in the attached Letter Proposal dated February 12, 2025.
- 1.2 The City and the Consultant, by mutual agreement, shall determine the final schedule.
- 1.3 The Consultant shall perform its services consistent with the professional skill and care ordinarily provided by Consultants in their line of work. The Consultant will use their best professional judgment in the course of the work. Design criteria, guidelines and other standards shall be supplemented by the professional judgment of the Consultant. Deviations from design criteria, guidelines and other standards shall be called to the attention of the City's representative.

SECTION 2 – THE CITY'S RESPONSIBILITIES

The City will:

- 2.1 Provide full information as to the requirements for the Project in a timely manner in which the Consultant may reasonably rely on with regard to its completeness and accuracy.
- 2.2 Designate in writing a person to act as the City's representative with respect to the work to be performed under this Agreement; and such person shall have complete authority to transmit instructions, receive information, interpret, and define the City's policies and decisions with respect to materials, equipment elements and systems pertinent to the work covered by this Agreement.
- 2.3 Guarantee access to and make all provisions for the Consultant to enter upon the City's facilities as required for the Consultant to perform their work under this Agreement.
- 2.4 Examine all studies, reports and other documents presented by the Consultant and shall render decisions pertaining thereto within seven (7) calendar days from receipt so as not to delay the work of the Consultant.
- 2.5 Obtain approval of all governmental authorities having jurisdiction over the Project and such approvals and consents from such other individuals or bodies as may be necessary for completion of the Project.

SECTION 3 – PAYMENTS TO THE CONSULTANT

3.1 The City will pay the Consultant for the professional services performed under SECTION 1, in an amount not to exceed \$511,140.00

3.2 Invoices for payment shall be submitted by Consultant to the City, together with reasonable supporting documentation. The City may require such additional supporting documentation as City reasonably deems necessary or desirable. Payment to Consultant shall be made in accordance with the Illinois Local Government Prompt Payment Act, after City's receipt of an invoice and all such supporting documentation.

3.3 Payment to the Consultant for expenses associated with direct costs or reimbursable expenses, as dictated by the Agreement and/or Scope of Services, shall be made upon presentation of receipts for costs or expenses.

SECTION 4 – TIME OF COMPLETION

4.1 The Consultant shall complete the project within 365 days of the date of execution of this Agreement, subject to time extensions to such schedule arising from delays beyond Consultant's control. To the extent Consultant is impacted by such delays, Consultant shall be entitled to an adjustment to its schedule for performance.

4.2 Time is of the essence for this Agreement.

4.3 The Consultant shall commence work within ten (10) calendar days of the date of execution of this Agreement or such other time mutually agreed to by the Parties in writing.

4.4 The Consultant may request an extension to complete the scope of work, and the City may grant such extension in a subsequent contract amendment.

SECTION 5 – RIGHTS TO DELIVERABLES

5.1 Deliverables, as defined in the Scope of Work, shall become the City's permanent property upon payment by the City to the Consultant.

5.2 Consultant shall not use photographs of the Deliverables for project competition, awards of any nature, project testimonials, presentations, advertising, proposals, professional papers, public display, or any other use without obtaining prior written approval from the City's representative. Any photographs taken of City property in the execution of the Consultant's work may not be re-used by the Consultant for project competition, awards of any nature, project testimonials, advertising, proposals, presentations, professional papers, public display, or any other use without obtaining prior written approval from the City's representative.

SECTION 6 – REMOVAL AND REPLACEMENT OF PERSONNEL

6.1 Consultant (for the duration of the term of the Agreement) will not, without obtaining the City's prior written consent not to be unreasonably withheld, replace, or alter the assignment of its lead personnel, to the extent their respective availability is reasonably within the Consultant's control.

6.2 Consultant shall promptly remove any person assigned to perform the Services in the event of notification by the City that he/she is no longer acceptable, irrespective of any prior City consent. Replacement of lead personnel, prior to assignment, will be subject to the City's approval, which shall not be unreasonably withheld.

6.3 A violation by Consultant of paragraph 6.1 and/or 6.2 may be considered a substantial and material breach of Agreement, for which termination and damages otherwise provided by Law or the Agreement may be claimed.

6.4 The City's right to request the removal of Consultant's personnel from the Services as set forth in paragraph 6.2 does not expressly or implicitly create an employer-employee relationship between the City and personnel assigned by Consultant. Such a relationship is expressly denied herein by Consultant and the City.

SECTION 7 – INSURANCE

The Consultant shall maintain for the duration of the Agreement, insurance purchased from a company, or companies lawfully authorized to do business in the State of Illinois and having a rating of at least A-minus as rated by A.M. Best Ratings. Such insurance will protect the Consultant from claims set forth below which may arise out of or result from the Consultant's operations under the agreement and for which the Consultant may be legally liable, whether such operations be by the Consultant or by a SubConsultant or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

Worker's Compensation Insurance covering all liability of the Consultant arising under the Workers' Compensation Act and Occupational Diseases Act; limits of liability not less than statutory requirements.

Employers Liability covering all liability of Consultant as employer, with limits not less than: \$1,000,000 per injury – per occurrence; \$1,000,000 per disease – per employee; and \$1,000,000 per disease – policy limit.

Comprehensive General Liability in a broad form on an occurrence basis, to include but not be limited to, coverage for the following where exposure exists; Premises/Operations, Contractual Liability, Products/Completed Operations for 2 years following final payment, Independent Consultant's coverage to respond to claims for damages because of bodily injury, sickness or disease, or death of any person other than the successful proposers employees as well as claims for damages insured by usual personal injury liability coverage which are sustained (1) by a person as a result of an offense directly or indirectly related to employment of such person by the Consultant, or (2) by another person and claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use there from; Broad Form Property Damage Endorsement;

General Aggregate Limit \$ 2,000,000
Each Occurrence Limit \$ 1,000,000

Automobile Liability Insurance shall be maintained to respond to claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance, or use of a motor vehicle. This policy shall be written to cover any auto whether owned, leased, hired, or borrowed.

Each Occurrence Limit \$1,000,000

Professional Liability Insurance shall be maintained to respond to claims for damages due to the Consultant's errors and omissions.

Errors and Omissions \$1,000,000

Consultant agrees that with respect to the above required insurance:

1. The CGL policy shall be endorsed for the general aggregate to apply on an annual basis.
2. To provide separate endorsements: to name the City of Joliet and its officers and employees as additional insured as their interest may appear, and to provide 30 days' notice, in writing, of cancellation or material change.
3. The Consultant's insurance shall be primary in the event of a claim.
4. The City of Joliet shall be provided with Certificates of Insurance and endorsements evidencing the above-required insurance, prior to commencement of an agreement and thereafter with certificates evidencing renewals or replacements of said policies of insurance at least thirty (30) days prior to the expiration of cancellation of any such policies.
5. A Certificate of Insurance that states the City of Joliet and its officers and employees have been endorsed as an "additional insured" by the Consultant's general liability and automobile liability insurance carrier. Specifically, this Certificate must include the following language: "The City of Joliet and its officers and employees are, and have been endorsed, as an additional insured under the above reference policy number S 2003177 on a primary and non-contributory basis for general liability and automobile liability coverage for the duration of the contract term."

Failure to Comply: In the event the Consultant fails to obtain or maintain any insurance coverage required under this Agreement, the City of Joliet may purchase such insurance coverage and charge the expense thereof to the Consultant. Such insurance shall be maintained in full force and effect during the life of the Agreement and shall protect the Consultant, its employees, agents and representatives from claims for damages, for personal injury and death and for damage to property arising in any manner from the negligent or wrongful acts or failures to act by the Consultant, its employees, agents and representatives in the performance of the work covered by the Agreement.

The Consultant shall also indemnify and save harmless the City from any claims against, or liabilities incurred by the Consultant of any type or nature to any person, firm or corporation arising from the Consultant's wrongful or negligent performance of the work covered by the Agreement.

SECTION 8 – SUCCESSORS AND ASSIGNS

The City and the Consultant each binds himself and his partners, successors, executors, administrators and assigns to the other party of this Agreement and to the partners, successors, executors, administrators and assigns of such other party, in respect to all covenants of this Agreement; except as above, neither the City nor the Consultant shall assign, sublet or transfer his interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating any personal liability on the part of any employee, officer or agent of any public body or the Consultant which may be a party hereto, nor shall it be construed as giving any rights or benefits hereunder to anyone other than the City and the Consultant.

SECTION 9 – NON-DISCRIMINATION

In all hiring or employment made possible or resulting from this Agreement, there shall be no discrimination against any employee or applicant for employment because of sex, age, race, color, creed, national origin, marital status or the presence of any sensory, mental or physical handicap, unless based upon a bona fide occupational qualification, and this requirement shall apply to, but not be limited to, the following: employment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. No person shall be denied or be subjected to discrimination in receipt of the benefit of any services of activities made possible by or resulting from this Agreement on the grounds of sex, race, color, creed, national origin, age except minimum age and retirement provisions, marital status, or the presence of any sensory, mental, or physical handicap. Any violation of this provision shall be considered a violation of a material provision of this Agreement and shall be grounds for cancellation, termination, or suspension, in whole or in part, of the Agreement by the City.

SECTION 10 – MODIFICATION OR AMENDMENT

This Agreement constitutes the entire Agreement of the Parties on the subject matter hereof and may not be changed, modified, discharged, or extended except by written amendment duly executed by the Parties. The Consultant agrees that no representations or warranties shall be binding upon the City unless expressed in writing herein or in a duly executed amendment hereof, or authorized or approved Change Order as herein provided.

SECTION 11 – APPLICABLE LAW AND DISPUTE RESOLUTION

11.1 This Agreement shall be deemed to have been made in and shall be construed in accordance with the laws of State of Illinois.

11.2 Any controversy, claim or dispute arising out of or relating to the interpretation, construction, or performance of this Agreement, or breach thereof, shall be referred to the American Arbitration Association (the "AAA") for a voluntary, non-binding mediation in the municipality where the Services are provided and to be conducted by a mutually acceptable single

mediator, in accordance with then applicable Construction Industry Mediation Rules, prior to resorting to litigation to any State or Federal Court located nearest to where the Services are provided. Neither party shall be liable for any indirect, incidental, or consequential damages of any nature or kind resulting from or arising in connection with this Agreement. The Parties shall share the cost of the mediator's services equally.

WITH RESPECT TO ANY SUCH LITIGATION, EACH PARTY HEREBY KNOWINGLY, VOLUNTARILY AND WILLINGLY WAIVES ALL RIGHTS TO TRIAL BY JURY IN ANY ACTION, SUIT, OR PROCEEDING BROUGHT TO RESOLVE ANY DISPUTE BETWEEN OR AMONG ANY OF THE PARTIES HERETO, WHETHER ARISING IN CONTRACT, TORT, OR OTHERWISE, ARISING OUT OF, CONNECTED WITH, RELATED OR INCIDENTAL TO THIS AGREEMENT, THE TRANSACTION(S) CONTEMPLATED HEREBY AND/OR THE RELATIONSHIP ESTABLISHED AMONG THE PARTIES HEREUNDER.

SECTION 12 – TERMINATION OF THE CONTRACT

12.1 TERMINATION BY THE CONSULTANT

If the Work is stopped for a period of thirty days under an order of any court or other public authority having jurisdiction, through no fault of the Consultant, or if the City has not made timely Payment thereon as set forth in this Agreement, then the Consultant may upon twenty-one (21) days written notice (from postmark) to the City, terminate the Agreement.

12.2 TERMINATION BY THE CITY

In the event of any breach of this Agreement by the Consultant, the City may, at its option, serve the Consultant with a written seven (7) day notice (from postmark) with the Consultant's option to cure the breach, or the City may engage the services of another Consultant to complete the work and deduct the cost of such completion from any amount due the Consultant hereunder, or the City may either pause or terminate the contract.

IN WITNESS WHEREOF, the undersigned have placed their hands and seals upon and executed this Agreement in triplicate as though each copy hereof were an original and that there are no other oral agreements that have not been reduced to writing in this statement.

CITY OF JOLIET

By: _____

H. Elizabeth Beatty

City Manager

Date: _____

By: Will Jernigan

Name: Will Jernigan, P.E.

Title: Chief Operations Officer

Date: 02/12/2025

ATTEST:

By: _____

Lauren O'Hara

City Clerk

Date: _____



February 12, 2025

Mr. Tony Anczer, P.E.
Department of Public Utilities, City of Joliet
150 W. Jefferson Street
Joliet, IL 60432

Subject: Professional Services – NRW/Water Loss Technical Assistance Program – 2025 Program Management

Dear Tony,

Cavanaugh is pleased to present the enclosed proposal for professional services for the subject project. Below are the proposed scope of services, fee budget and estimated schedule. We look forward to working with you and the Joliet team.

Best regards,

Will Jernigan, P.E.
COO/Principal

Tory Wagoner, P.E., P.L.S.
CFO/Principal/Project Manager

Steve Cavanaugh, P.E.
CEO/Principal

SCOPE OF SERVICES

City of Joliet – NRW/Water Loss Technical Assistance Program – 2025 Program Management

Cavanaugh will provide NRW Program Management for the City of Joliet, to include the scope described below, for calendar year 2025.

1. Management of Recommended Actions from the 2024 Water System Improvements Plan (WSIP)
 - a. See matrix on the following page. Where Cavanaugh is identified as the scope item lead, Cavanaugh will perform the work directly, with support from City staff and/or City 3rd party contractors where needed. Where the City is identified as the scope item lead, Cavanaugh will provide direction and support for City staff and/or City 3rd party contractors to perform the work directly. Scope-specific notes are included in the matrix for further clarification. As NRW Program Manager, Cavanaugh will provide program oversight and accountability review pursuant to program goals as agreed upon by Cavanaugh and the City.



City of Joliet
NRW/Water Loss Technical Assistance Program



ID	Scope of Area	Recommended Action from 2024 WSIP	Cav Lead	City Lead	3rd Party Contracts Involved	Cavanaugh 2025 Scoping Notes
D-1	Each DMA and total system	Annual water loss audit completion, including Real Loss Component Analysis	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Each DMA and total system = 7 audits, 7 RLCAs.
D-2	All finished water supply meters	Continue annual testing of production meters at City's water treatment plants, with results incorporated into WY25	<input type="checkbox"/>	<input checked="" type="checkbox"/>	yes	3rd Party performs scope under its existing contract. Cavanaugh performs analysis with supply meter test results to incorporate into water audits.
D-3	a) Each DMA and total system b-i) Total system	Data management enhancements:				
		a) Monthly water balance using supply data from Sensus, consumption data from Munis. Use a dummy billing cycle in Munis to time-align consumption to supply data.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Each DMA and total system = 7 monthly water balances. Cavanaugh provides instruction to City staff for Sensus and Munis data pulls. This will not involve CMEP reports. Cavanaugh performs validation review and compilation of data into monthly report.
		b) Run/review negative consumption report from Munis monthly	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Cavanaugh provides instruction and oversight. City staff setup monthly report in Munis.
		c) Run/review consumption volume report, sorted largest to smallest from Munis monthly	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Cavanaugh provides instruction and oversight. City staff setup monthly report in Munis.
		d) Remove "nometer" accounts, update "carrier" meters in Munis data; disaggregate "3199" rate code to 3 sub-codes (actual sewer, sewer only, deduct)	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Cavanaugh provides instruction and oversight. City staff make setting adjustments in Munis.
		e) Update protocol for adjusting Sensus anomalous reads; resolve remaining Sensus meter mis-programming issues	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	yes	Cavanaugh provides specification of outcomes. Cavanaugh and City staff meet with 3rd Parties to determine actions needed. City staff facilitate 3rd parties' actions. Cavanaugh provides review and oversight.
		f) Complete upgrade of remaining manual reads to Sensus endpoints	<input type="checkbox"/>	<input checked="" type="checkbox"/>		No specific Cavanaugh action, apart from availability to support the City as needed.
		g) Establish workflow for private-side service line breaks, where a work order is created in VUE Works to confirm the repair 5 days after resident notice letter is sent	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Cavanaugh writes the workflow. City staff set it up in VUE Works.
		h) Integrate break work orders to GIS for visual display	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Cavanaugh provides specification of outcomes. City staff link work order asset data to GIS for creation of layers accessible to the internal water loss team.
		i) Establish billing procedure to convert all Unbilled Authorized Consumption to Billed Authorized Consumption	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Cavanaugh writes the procedure. City implements.
A-1	Total system	Continue Customer Meter Change-out Program, targeting 10,000 meter replacements				
		a) Small meters per established plan (Section 4.2.3)	<input type="checkbox"/>	<input checked="" type="checkbox"/>		No specific Cavanaugh action, apart from availability to support the City as needed.
		b) Large meters per ongoing results of annual meter testing program	<input type="checkbox"/>	<input checked="" type="checkbox"/>		No specific Cavanaugh action, apart from availability to support the City as needed.
		c) Conduct pre- and post- meter replacement consumption comparison for all replaced meters	<input checked="" type="checkbox"/>	<input type="checkbox"/>		City provides pertinent consumption data. Cavanaugh performs analysis and provides memo of results and any recommendations for future replacements.



City of Joliet
NRW/Water Loss Technical Assistance Program



ID	Scope of Area	Recommended Action from 2024 WSIP	Cav Lead	City Lead	3rd Party Contracts Involved	Cavanaugh 2025 Scoping Notes
A-2	a-b) Low DMA first; then central area of I-55E DMA c) Total system d) Low & Southeast DMA	Field Audits:				
		a) GIS analysis of aerial imagery against service connections	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Cavanaugh performs analysis and provides memo of sites warranting field investigation.
		b) Point to point customer meter inspection and inventory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	yes	Cavanaugh provides instruction and oversight. City or a 3rd party contractor perform field work. If RFP step becomes necessary, Cavanaugh writes the RFP scope. Cavanaugh provides review and support to City as needed.
		c) Inspection of all interconnections for non-closed valves and/or leaks	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Cavanaugh provides context and goal for the inspections. City performs field inspections. Cavanaugh present for inspections if practical.
		d) Inspection / re-establishment of all boundary valves between Low and Southeast DMAs	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Cavanaugh provides context and goal for the inspections. City performs field inspections. Cavanaugh present for inspections if practical.
R-1	a) All DMAs b) I-55W, I-55E DMAs c) Finalize DMA Roadmap d) Implement Year 1 of the DMA Roadmap	DMA buildout:				
		a) Data calculation adjustments, enhancements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	yes	Cavanaugh provides instruction and oversight for changes required from 3rd Party to existing CMEP DMA reports.
		i. Integrate distribution storage tank adjustments to daily supply formula				
		ii. Remove ABS from supply formulas				
		iii. Smooth lag-time impacts from non-daily supply meter readings				
		iv. Smooth lag-time impacts from non-daily consumption meter readings				
		v. Aggregate data for common plotting with rolling monthly averaging				
vi. Integrate night-flow analysis using hourly data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	yes	Cavanaugh supports the City in evaluating the best technical option for centralized DMA data visualization. In the short-term, this is expected to be done via modification to the existing CMEP reports.		
b) Re-establish Caton Farm Rd and Black Rd insertion meter data feeds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	yes	Cavanaugh provides specification of outcomes. Cavanaugh and City staff meet with 3rd Party to determine feasibility of modification to existing McCrometer FPI meter installations. Cavanaugh and City staff meet with 3rd Party to scope installation of alternate meter installations. Cavanaugh provides recommendation for the fastest pathway to re-establish meter data feeds, and provides facilitation and oversight of vendor implementation.		
c) Finalize DMA Roadmap	<input checked="" type="checkbox"/>	<input type="checkbox"/>		This work is under way from the prior scope authorized in 2024, and will be released in Q1 2025. The DMA Roadmap will include recommended metering and data acquisition technology, recommended schematic subdivision of existing DMAs, budgetary costs, and recommended sequencing of new DMA installations.		
c) All DMAs	d) Implement Year 1 of the DMA Roadmap	<input checked="" type="checkbox"/>	<input type="checkbox"/>	yes	Release of DMA Roadmap is pending February 2025. Year 1 activities will include Action R-1.a.vi and R-1.b above. Year 1 activities will also include: -Cavanaugh facilitates getting all six existing DMAs functional for informing ongoing leak detection efforts. -Cavanaugh supports the City's sole source procurement of Xylem Vue, and work with Xylem to support their integration of the City's DMA data into its data visualization tools. Subsequent scoping for Cavanaugh's support of the DMA Roadmap implementation is described in scope item 4 of this proposal.	



City of Joliet
NRW/Water Loss Technical Assistance Program



ID	Scope of Area	Recommended Action from 2024 WSIP	Cav Lead	City Lead	3rd Party Contracts Involved	Cavanaugh 2025 Scoping Notes
R-2	a) Low DMA b) Low DMA, central area of I-55E DMA c) Southeast, I-55W, Fairmont, Ridgewood DMAs	Focused active leak detection:				
		a) Evaluate and deploy permanent leak sensor & correlation equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	yes	Cavanaugh facilitates vendor demonstrations, provides memo of capabilities and limitations for leak sensor & correlation equipment. Cavanaugh provides recommendation for equipment acquisition and supports City in procurement.
		b) Increase frequency of manual leak surveys, with addition of all services as listening points	<input type="checkbox"/>	<input checked="" type="checkbox"/>	yes	Cavanaugh provides scope language and specification of outcomes, for City's use in its direction of work with 3rd Party.
R-3	Concentrated in Low DMA and central area of I-55E DMA	c) Decrease frequency of manual leak surveys, until and unless DMA data indicates otherwise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	yes	Cavanaugh provides scope language and specification of outcomes, for City's use in its direction of work with 3rd Party.
		Perform water main replacement/abandonment/lining based on the defined Water Main Replacement Program	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Cavanaugh supports the City in evaluating the Water Main Replacement Program efficacy at the end of 2025 to inform adjustments warranted in 2026.
R-4	Low DMA first; then central area of I-55E DMA	Public-side service line replacement analysis:	<input type="checkbox"/>	<input checked="" type="checkbox"/>		No specific Cavanaugh action, apart from availability to support the City as needed.
		a) Establish inventory of all service connections, including age, material and location				
		b) Filter off service lines slated for replacement as part of Action R-3				
		c) Analyze remaining service lines based on material and age				
		d) Cross reference field results from leak survey (Action R-2-b)				
		e) Identify priority group of public-side service lines for replacement				
R-5	Total system	Work with fire department to minimize hydrant leaks resulting from hydrant operations; where practical sequence annual leak detection to occur closely behind the fire department's hydrant flushing and testing activities	<input type="checkbox"/>	<input checked="" type="checkbox"/>		No specific Cavanaugh action, apart from availability to support the City as needed.



2. NRW Program Administration
 - a. Build a new monthly water loss report that incorporates the data management enhancements described in the 2024 WSIP recommendation D-3. Cavanaugh will also work with Great Pyrenees Technology, LLC to make any modifications to the existing daily reports necessary to comply with recommendation D-3.
 - b. Material preparation and facilitation of monthly internal water loss team meetings to manage program progress.
 - c. Material preparation and facilitation of quarterly Water Loss Task Force meetings with City and other consultant representatives.
 - d. Material preparation and facilitation of presentations with City Council and leadership, as needed and requested by the City. This shall include but not be limited to Councilmember briefings, media briefings, staff leadership briefings, Public Service Commission meetings, and Council meetings.
 - e. Annual IDNR Water Audit & Water System Improvement Plan for WY2025.
3. IDNR Alternative Reporting Exploration
 - a. Write position memo on Joliet-specific limitations and considerations of the current reporting metric (percent NRW) and performance threshold (10%).
 - b. Material preparation and facilitation of meetings and communications with City leadership to establish proposed alternatives for reporting metric and performance threshold.
 - c. Material preparation and facilitation of meetings and communications with City and ISAWWA representatives to build industry support for proposed alternatives.
 - d. Material preparation and facilitation of meetings and communications with IDNR representatives to lobby proposed alternatives for reporting metric and performance threshold.
4. DMA Detailed Design – Future Scope, Not Included in Current Proposal
 - a. Following the release of DMA Roadmap in Q1 2025, Cavanaugh will present a subsequent scope of work to provide detailed design of the next rational DMA subdivision(s).
 - b. The subsequent scope will include:
 - i. Instruction and oversight for City staff to perform field valve closures and hydrant drop tests to validate proposed DMA boundaries.
 - ii. Meter siting and meter chamber specifications.
 - iii. Bid & construction package for contractor installation of meter chambers.
 - iv. Written scope for the City to utilize a local engineering firm to administer the bid & construction of meter chambers.
 - v. Written scope and specifications for the City to utilize McKim & Creed for installation of metering equipment and provision data-as-a-service (DaaS) for flow and pressure data at new DMA metering points, with integration to Xylem Vue.
 - vi. Oversight and support of chamber and metering equipment installations.



FEE BUDGET AND ESTIMATED SCHEDULE

Scope Sections 1-3 above are presented as a not-to-exceed fee of \$ 511,140.00, to be invoiced to the City on a composite hourly rate basis each month. Cavanaugh’s composite hourly rate shall be \$225.00, and is inclusive of direct and indirect costs. Direct cost reimbursement is not applicable for this project.

Scope Section 4 above shall be confirmed and presented for subsequent approval in Q1 of 2025.

Estimated Phase 1 Schedule:

Scope ID	Action ID	Action	2025			
			Q1	Q2	Q3	Q4
1	D-1	Annual Water Audits & Real Loss Component Analyses				
1	D-2	Annual Production Meter Testing & Analysis				
1	D-3	Data Management Enhancements				
1	A-1	Annual Customer Meter Changeouts				
1	A-1	Annual Customer Meter Changeout Analysis				
1	A-2.a	Field Audit - GIS Analysis				
1	A-2.b	Field Audit - Meter Inspection & Inventory				
1	A-2.c	Field Audit - Field Inspection of Interconnections				
1	A-2.d	Field Audit - Field Inspection of Boundary Valves				
1	R-1.a	DMA Data Calculation Adjustments, Enhancements				
1	R-1.b	DMA Re-establish Caton Farm Rd & Black Rd data feeds				
1	R-1.c	DMA Finalize Roadmap				
1	R-1.d	DMA Year 1 Roadmap Implementation				
1	R-2.a	Focused Leak Detection - Evaluate Permanent Sensors				
1	R-2.b,c	Perform Focused Field Leak Surveys				
1	R-3	Annual Water Main Replacement Program				
1	R-4	Public-side Service Line Replacement Analysis				
1	R-5	Fire-Department Hydrant Operations Coordination				
2		NRW Program Administration				
3		IDNR Alternative Reporting Exploration				
4		DMA Detailed Design				